BRITISH COLUMBIA
The Best Place on Earth

Ministry of Energy and Mines
BC Geological Survey

Assessment Report
Title Page and Summary

TYPE OF REPORT [type of survey(s)]: Geophysical

TOTAL COST: 102046.96

AUTHOR(S): Eleanor Black

SIGNATURE(S): Eleanor Black

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): n/a

YEAR OF WORK: 2011

STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S): 4868255/10-Jun-2011
(Please put un-applied assessment dollars into PAC account: GFEExploration)

PROPERTY NAME: Eldorado

CLAIM NAME(S) (on which the work was done): 502809 502818 502828 502835 502853 502887 502929 506719 513822 520689
525464 809822 809842 809862 809882 809902 810362 817502 817542 817562 825342 825362 825382 514957

COMMODITIES SOUGHT: Au

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN: 092O:017, 018, 020, 023, 026, 027. 092JNE:032, 037, 041, 045, 095, 100, 105

MINING DIVISION: Lilloet

NTS/BCGS: 092O/006; 092O/007

LATITUDE: 51 ° 02 ' 30 " LONGITUDE: 122 ° 49 ' 00 " (at centre of work)

OWNER(S):
1) R. M. Durfeld
2) J. M. Stewart

MAILING ADDRESS:
Box 4438
Williams Lake, BC, V2G 2V5

1840 Larson Rd
North Vancouver, BC, V7M 2Z6

OPERATOR(S) [who paid for the work]:
1) GFE Exploration Corporation
2)

MAILING ADDRESS:
400 - 1155 Robson St
Vancouver, BC, V6E 1B5

PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):
Eldorado, epizonal orogenic deposit, Au mineralization, Bridge River-Bralorne,

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: 10676, 18056, 28124, 28825, 10948, 12763, 09545, 09324, 30065, 14932, 13709, 12496, 13666, 19686, 06002, 14428, 05659, 11930, 11931, 27866, 21076, 26126, 14812, 18373

Next Page

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)			
Ground, mapping			
Photo interpretation			
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic	Airmag: 825342 825362 825382 514957	810362 817502 817542 817562	
Other	mag: 502809 502818 502828 502835 50285[illegible]	502887 502929 506719 513822	
Airborne	Magnetics, 8119.3 ha; 525464 809822 809842	520689 809862 809882 809902	102046.96
GEOCHEMICAL (number of samples analysed for...)			
Soil			
Silt			
Rock			
Other			
DRILLING (total metres; number of holes, size)			
Core			
Non-core			
RELATED TECHNICAL			
Sampling/assaying			
Petrographic			
Mineralographic			
Metallurgic			
PROSPECTING (scale, area)			
PREPARATORY / PHYSICAL			
Line/grid (kilometres)			
Topographic/Photogrammetric (scale, area)			
Legal surveys (scale, area)			
Road, local access (kilometres)/trail			
Trench (metres)			
Underground dev. (metres)			
Other			
		TOTAL COST:	102046.96

2011 Geophysical Assessment Report on the Eldorado Property

Lillooet Mining Division
British Columbia
NTS: 0932O/006, 092O/007
Latitude 51^{0} 02' N, Longitude 122^{0} 49' W

Prepared for:

RM Durfeld & Mel Stewart
Tenure Owners

and

GFE Exploration Corporation
Operator

By:

Eleanor Black,
B.Sc., GIT (BC)
Gold Fields Canada Exploration BV

August 3, 2011

Table of Contents

Table of Tables

Table of Figures

Appendices

1.0 SUMMARY

This Report describes the CND$102000 geophysical exploration program that was carried out from April 5th to 13th, 2011 on the Eldorado Property (Property). A total of 1321.2 line km were surveyed by New-Sense Geophysics Ltd. The Property was covered with a 100 m spaced helicopter borne magnetic survey and an internal area of interest was covered in greater detail with 50 m spaced lines. The objective of the 2011 geophysical program was to provide magnetic coverage over the entire Property to delineate anomalies and facilitate the structural interpretation of the area. Results of 2011 program included the identification of several magnetic anomalies that warrant further follow-up and drilling.

The Eldorado Property is located approximately 17 km north of Gold Bridge, BC and 11 km northwest of Tyaughton Lake, in the Lillooet Mining Division. The Property consists of 23 mineral claims encompassing an area of 7664.86 hectares (ha). The tenures are owned by JM Stewart, RM Durfeld and K Shannon. In February 2011, GFE Exploration Corporation (Gold Fields), a member of the Gold Fields Limited group of companies, signed an Option and Joint Venture Exploration Agreement granting Gold Fields an option to earn up to 70% interest in the Eldorado Property.

The region surrounding Eldorado has been actively explored at various times since the 1900s. The Eldorado property and surrounding area has undergone extensive historical surface exploration.

2.0 PROPERTY DESCRIPTION AND LOCATION, SIZE, ACCESS AND PHYSIOGRAPHY

Eldorado is located in the Lillooet Mining Division, of British Columbia, on NTS map sheets 092O/006 and 092O/007, (BCGS 1:20000) at geographic coordinates Latitude 51^0 2'30" N, Longitude 122^0 49'00" W as shown on *FIGURE 1*. The Property is located north of the village of Gold Bridge, situated approximately 100 km, by road, northwest of the City of Lillooet.

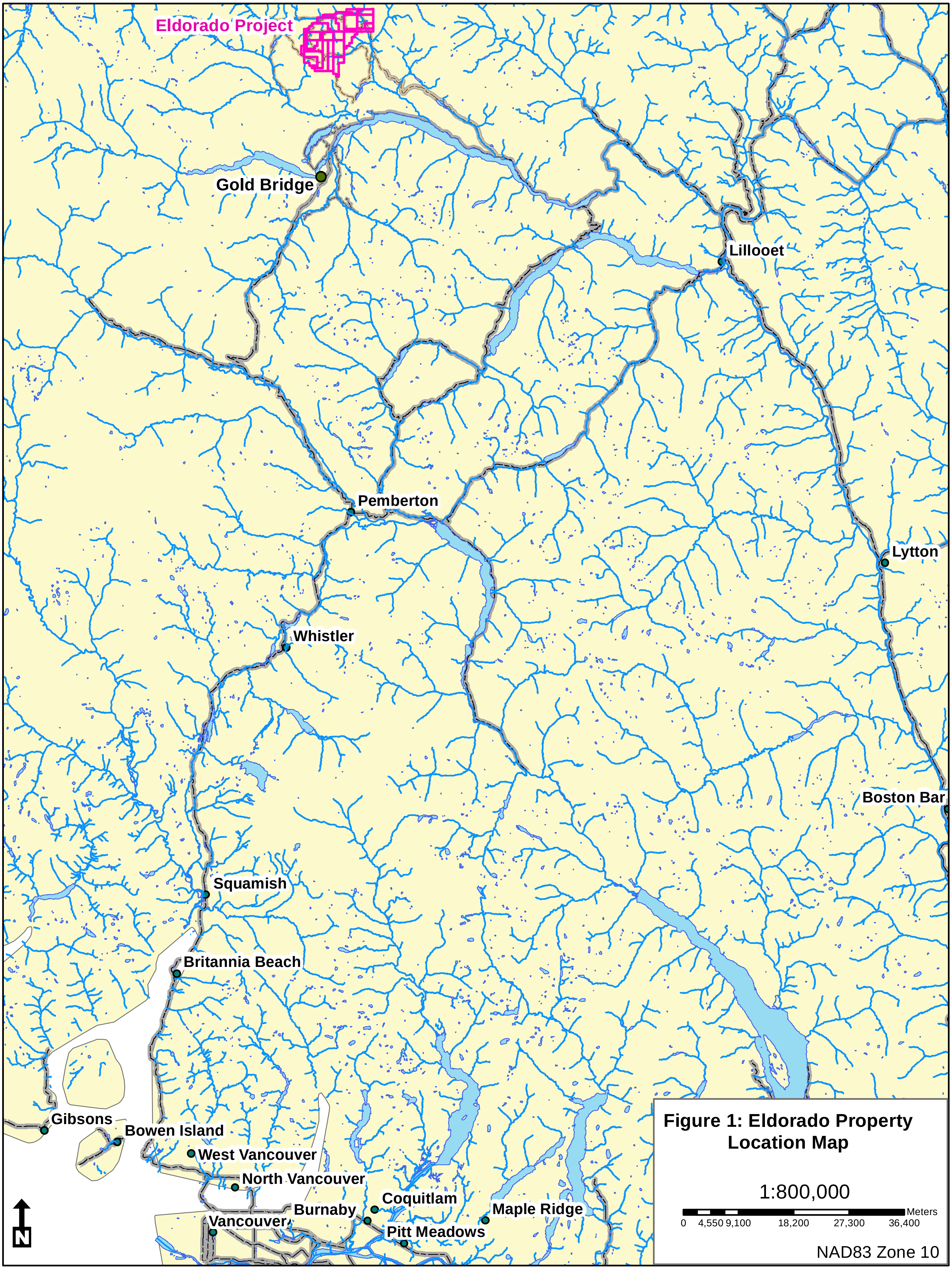
Eldorado consists of 23 mineral claims with a total area of 7664.86 ha. Surface rights are not included as part of mineral claim ownership under British Columbia mining regulations. Claim information, as taken from Mineral Titles Online on June 13, 2011, is listed in *TABLE 1* and Property outlines are shown in *FIGURE 2*. The claims are owned by Mel Stewart (125752), Rudi Durfeld (107306), and Ken Shannon (124369) and are valid and in good standing.

The Property is composed of mountainous terrain with narrow immature glacial valleys and interconnected basins. The lower reaches of the property is vegetated by pine and fir forests that give way to a transition zone from alpine coniferous (pine-spruce-fir) to low lying alders and alpine grasses and flowers which, on the steeper side hills, give way to rusty outcrops and scree slopes. Elevations vary from approximately 1,100 to 2,400 m above sea level. Small creeks and drainage systems are scattered across the Property. Outcrop and subcrop exposure across the Property is variable and is typically limited to steeper hillsides, ridge tops and areas disrupted by industrial activity such as logging, road building and historical exploration sites.

The Property is accessible by a network of maintained arterial and Forest Service roads as well as unmaintained logging roads, skid trails, deactivated roads and various other historic roads. The Property is accessed from Gold Bridge, BC by travelling northeast via the Gold Bridge Highway 40 to Marshall Main, up Marshall Main a further 35 km. Late in 2005, Ainsworth Lumber extended the Bonanza Main logging road 5 km west, terminating in the Nea basin. With less than 200 m of trail, this road was linked to the historic mining trail/road network. Once to the Bonanza Main logging road, quads are used to provide access throughout the tenures. Helicopter access is available from Tyaughton Lake or Lillooet.

Climatic conditions are typical of the eastern portion of the coastal mountains of British Columbia. Average minimum low temperatures for January are -6°C and average maximum highs for July are +28°C. There is an average of 60 frost free days a year, with snow expected anytime after September 15th. Mean annual precipitation is 150 to 250 cm per year.

Although the village of Gold Bridge is a small supply center, it has numerous services available such as lodging, fuel, groceries and other supply outlets. Gold Bridge is also a source for skilled labour. The City of Lillooet, 100 km by road southeast (~100 minute drive) of Gold Bridge, is the closest major center and contains facilities such as a hospital, and supply stores not available in Gold Bridge. Ground surveys are most effective from mid-May to mid-October and are limited by snow accumulation or spring melt, whereas drilling can be conducted year round with the extra expense of snow removal.



Eldorado Project
Gold Bridge
Lillooet
Pemberton
Lytton
Whistler
Boston Bar
Squamish
Britannia Beach
Gibsons
Bowen Island
West Vancouver
North Vancouver
Coquitlam
Burnaby
Maple Ridge
Vancouver
Pitt Meadows
N
Figure 1: Eldorado Property Location Map
1:800,000
0 4,550 9,100 18,200 27,300 36,400 Meters
NAD83 Zone 10

TABLE 1: LIST OF THE ELDORADO PROPERTY MINERAL TENURES

Tenure_ID	Tenure_Name	Tenure_Status	Issue_Date	Good_To_Date	Owner	Area (ha)	Notes
502809	NEA-A	Good	13/01/2005	30/09/2013	107306	508.159	Rudy Durfeld
502818	NEA-B	Good	13/01/2005	30/09/2013	107306	508.056	Rudy Durfeld
502828		Good	13/01/2005	30/09/2013	107306	507.994	Rudy Durfeld
502835		Good	13/01/2005	30/09/2013	107306	487.668	Rudy Durfeld
502853	Neast	Good	13/01/2005	30/09/2013	125752	507.987	Mel Stewart
502887	Spades	Good	13/01/2005	30/09/2013	125752	182.929	Mel Stewart
502929	MUDWEST	Good	13/01/2005	30/09/2013	125752	60.943	Mel Stewart
506719	Relay	Good	10/02/2005	30/09/2013	125752	142.192	Mel Stewart
513822		Good	02/06/2005	30/09/2013	125752	223.703	Mel Stewart
520689	QUEEN	Good	01/10/2005	30/09/2013	125752	121.943	Mel Stewart
525464	MAN	Good	14/01/2006	30/09/2013	125752	223.457	Mel Stewart
809822		Good	05/07/2010	30/09/2013	125752	264.49	Mel Stewart
809842		Good	05/07/2010	30/09/2013	125752	427.07	Mel Stewart
809862		Good	05/07/2010	30/09/2013	125752	447.56	Mel Stewart
809882		Good	05/07/2010	30/09/2013	125752	508.6	Mel Stewart
809902		Good	05/07/2010	30/09/2013	125752	40.7	Mel Stewart
810362		Good	06/07/2010	30/09/2013	125752	61.02	Mel Stewart
817502		Good	13/07/2010	30/09/2013	125752	243.97	Mel Stewart
817542		Good	13/07/2010	30/09/2013	125752	447.55	Mel Stewart
817562		Good	13/07/2010	30/09/2013	125752	243.95	Mel Stewart
825342		Good	23/07/2010	30/09/2013	125752	365.94	Mel Stewart
825362		Good	23/07/2010	30/09/2013	125752	488.09	Mel Stewart
825382		Good	23/07/2010	30/09/2013	125752	345.92	Mel Stewart
514957		Good	22/06/2005	27/02/2015	124369	304.97	Ken Shannon

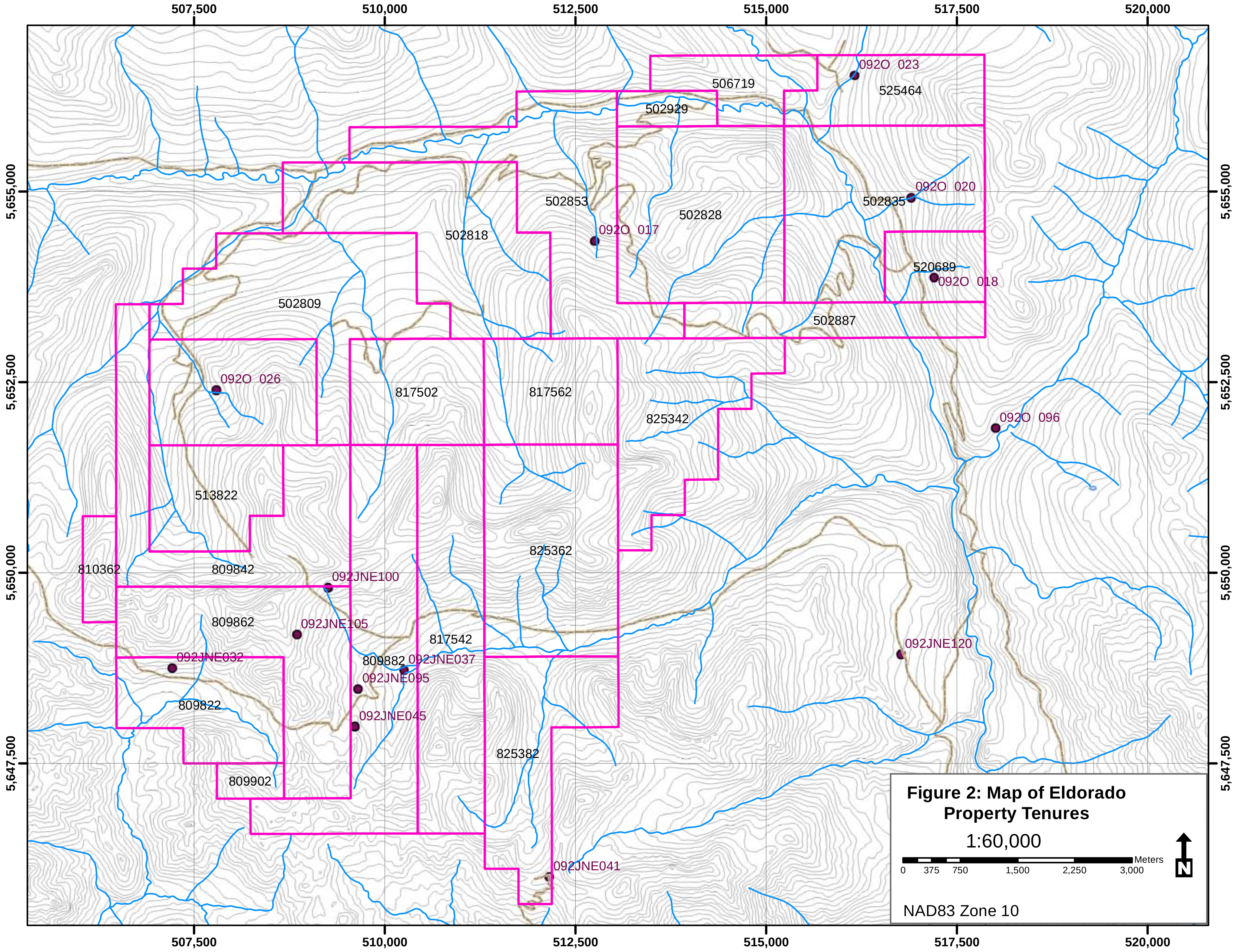


Figure 2: Map of Eldorado Property Tenures

3.0 HISTORY

The region surrounding Eldorado has been actively explored at various times since the 1900s with five past producers covering the property from west to east (Robson, Silver Quick, Tungsten King, Tungsten Queen and Manitou, respectively), documenting a long history of prospecting, exploration and development.

Robson Deposit

Latitude 51° 01' 23" N Longitude 122° 53' 20" W

UTM z10 (NAD 83) Northing 5652395 Easting 507793

Early exploration identified the Robson deposit as a southwest trending and steeply dipping shear zone composed of seams and veins of predominantly quartz and auriferous arsenopyrite. Other metallic minerals identified were pyrite, jamesonite, sphalerite, chalcopyrite, stibnite, boulangerite, pyrrhotite and pyrargyrite. Silica, carbonate and chlorite alteration are associated with the mine.

The Robson deposit, mined in 1939 and 1940, produced a total of 34 tonnes of ore which yielded 18 kg of silver, 2.2 kg of gold, 193 kg of copper and 2640 kg of lead. In 1986, a 0.79 m diamond drill interval of the vein structure assayed 468.95 grams per tonne silver and 45.24 grams per tonne gold.

Silver Quick Deposit

Latitude 51° 02' 26" N Longitude 122° 49' 05" W

UTM z10 (NAD 83) Northing 5654351 Easting 512756

The Silverquick mercury deposit, is hosted in extremely fractured and sheared chert pebble conglomerate and interbedded sandstone-shale and chert lithic quartz arenite of the Upper Cretaceous Silverquick Formation. Cinnabar is present as disseminated grains, streaks and small lenses within the brecciated conglomerate and accompanied by quartz, calcite, limonite and clay.

The mine produced most of its ore in the early to mid 1960's and yielded about 3180 kg of mercury. About 34 kg of mercury were produced in 1955.

Tungsten King, Cinnabar King, Lorntzsen

Latitude 51° 02' 44" N Longitude 122° 45' 32" W

UTM z10 (NAD 83) Northing 5654919 Easting 516902

The Tungsten King deposit is hosted within quartz-carbonate-mariposite rock, or listwanite and dolomite which is intensely brecciated, recrystallized and sheared. Feldspar porphyry dykes intrude listwanite, although not immediately adjacent to the significant metal concentrations. Quartz veins with scheelite and stibnite were first discovered within a two-metre wide fracture zone in brecciated recrystallized and sheared dolomite. Stibnite veins and disseminations also occur within listwanite. Cinnabar (for which the area was first prospected) occurs as films along shear planes as well as disseminations within foliated greenstone and listwanite, peripheral to the main scheelite-stibnite showings.

In 1942 and 1952, about 34 tonnes of ore were mined grading about 5% tungsten trioxide (WO_3).

Tungsten Queen, Phillips' Tungsten, Phillips' Cinnabar

Latitude 51° 02' 10" N Longitude 122° 45' 17" W

UTM z10 (NAD 83) Northing 5653869Easting 517198

The Tungsten Queen deposit occurs near the south end of a large fault-bound body of quartz-carbonate altered serpentinite (quartz-carbonate-mariposite rock, or listwanite) assigned to the Shulaps Ultramafic Complex. All these rocks are cut by irregular bodies and dykes of (Tertiary?) feldspar porphyry. The Tungsten Queen deposit consists of eight scheelite-bearing veins of variable thickness and continuity. Almost all of the veins strike northeast with most terminated by faults and adjacent tectonically emplaced Bridge River rocks. The principal vein, number 6, which yielded most of the high grade ore, was up to 18 cm thick and continuous for 21 m. Other scheelite-bearing veins are much smaller. The veins consist of massive, almost pure white scheelite, with stibnite, quartz and carbonate. It is reported that between 1940 and 1953, 7,896 kg of tungsten trioxide WO_3 were recovered from 55 tonnes of ore; 41 tonnes had been mined by 1943 with the remainder being mined in 1952 and 1953. Virtually all scheelite-bearing material has been mined out.

Manitou, Empire, Rose Group

Latitude 51° 03' 36" N Longitude 122° 46' 10" W

UTM z10 (NAD 83) Northing 5656522 Easting 516157

The Manitou mercury deposit, 800 m northeast of the confluence of Relay and Tyaughton creeks, is hosted by a foliated greenstone and along contacts between greenstone and ribboned chert of the Mississippian to Jurassic Bridge River Complex (Group). The rocks are extremely faulted and principal shear zones trend north and northwest. Mercury occurs as cinnabar, chiefly with foliated green and purple volcanic rocks (greenstone) along foliation and shear places. Recorded production, from 1938 to 1939, is 141.5 tonnes of ore which yielded 542.5 kg of mercury (National Mineral Inventory 092O2 Hg1).

There was not a lot of exploration conducted in the area after the closure of the Silver Quick Mine until the late 1970's. Much of the property area was explored until mid 1980's. The last drilling was on the Robson in 1986. Durfeld and Stewart acquired their tenure in the area since 2003 by staking.

4.0 GEOLOGICAL SETTING

The geological setting of the Eldorado area has been well documented in numerous papers and reports written by various companies and organizations and is summarized from Durfeld, 2010. The geology is shown in *Figure 3* with the geology layer for the Massey compilation (2005), released by the BC government with the stratigraphic rocks shown in *Table 2*.

4.1 Regional Geology

The Coast geomorphological belt, an area of rugged mountainous terrain underlain by Late Jurassic to Early Tertiary granitic rocks of the Coast Plutonic Complex, covers the Project area. Specifically, the project is in the southeastern portion of the Coast Belt, and contains a small percentage of granitic rocks that are mid-Cretaceous to early Tertiary in age. The supracrustal rocks include rocks of the Bridge River, Cadwallader and Methow terranes that originated in ocean basins, volcanic arc and clastic basin environments. These late Paleozoic to Cretaceous age units are juxtaposed across a complex system of contractional, strike-slip and extensional faults of mainly Cretaceous and Tertiary Age.

The imbricated chert, clastics, limestone, greenstone and serpentinite, in the southern project area, belong to the Mississippian to mid Jurassic age Bridge River Complex (MmJBgs). The central to eastern project area documents sedimentary basinal deposition from Upper Triassic to Cretaceous time. The siltstones and shales of the Hurley Formation (uTrCHs) belong to the Upper Triassic clastic deposition of the Cadwallader Terrane. The Upper Triassic Tyaughton Group (uTrTy) to the northwest of the Hurley represents a non-marine to shallow marine facies equivalent of the Hurley Formation. The lower Cretaceous age sandstones, siltstones and conglomerates of Taylor Creek Group; Dash (lKTD) and Lizard (lKTL) Formations form the west and east limbs of a core non-marine conglomerate and finer clastics of the Cretaceous age Silverquick Formation (KSq). The Silverquick formation, the youngest unit underlies the central property area.

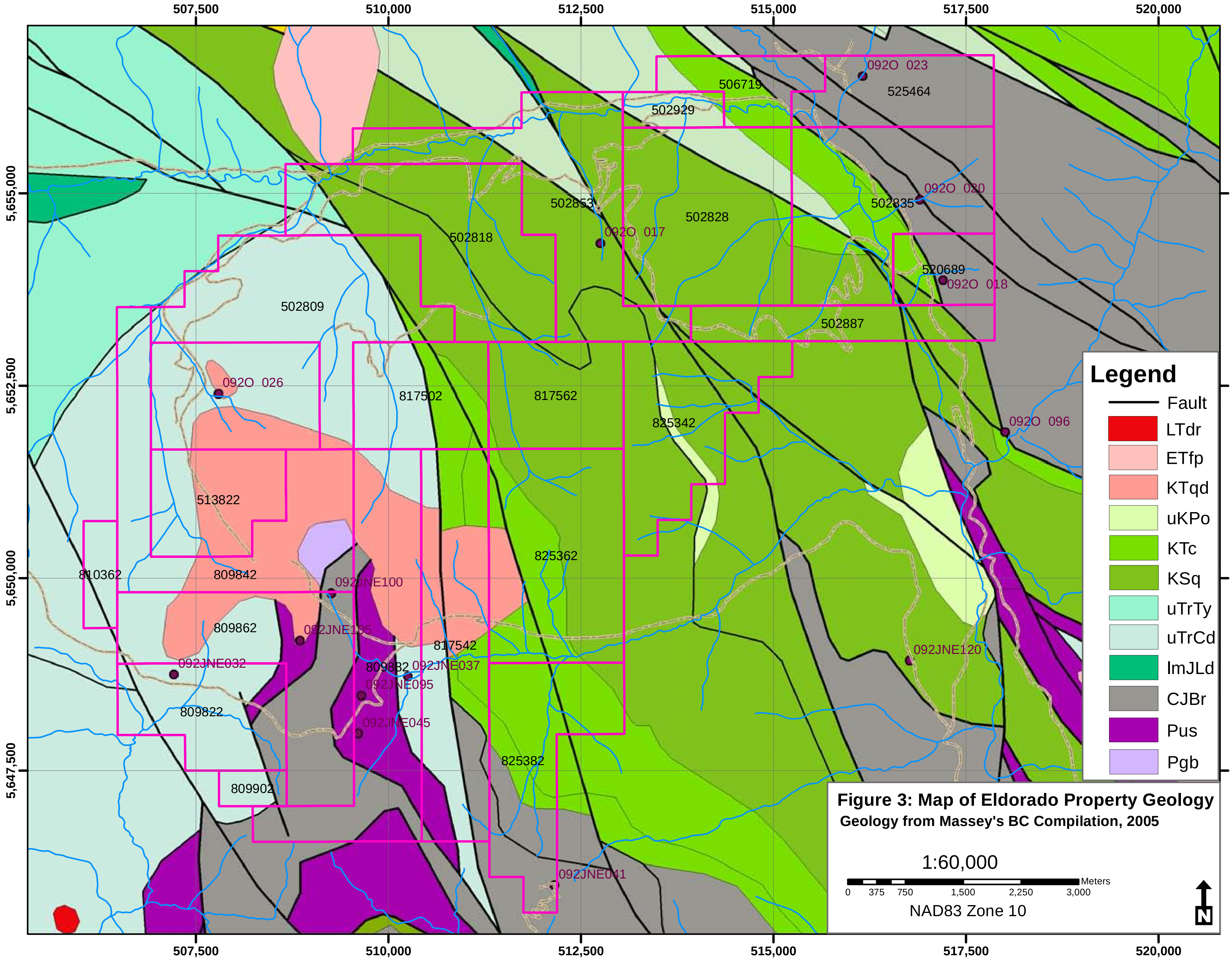

507,500
510,000
512,500
515,000
517,500
520,000
5,655,000
5,652,500
5,650,000
5,647,500
092O 023
525464
506719
502929
092O 020
502835
502853
502828
092O 017
502818
520689
092O 018
502809
502887
092O 026
817502
817562
825342
092O 096
513822
825362
810362
809842
092JNE100
809862
092JNE105
817542
092JNE120
092JNE032
809882
092JNE037
092JNE095
809822
092JNE045
825382
809902
092JNE041
Legend
Fault
LTdr
ETfp
KTqd
uKPo
KTc
KSq
uTrTy
uTrCd
lmJLd
CJBr
Pus
Pgb
Figure 3: Map of Eldorado Property Geology
Geology from Massey's BC Compilation, 2005
1:60,000
Meters
0
375
750
1,500
2,250
3,000
NAD83 Zone 10
N

TABLE 2: TABLE OF STATIGRAPHIC ROCK CODES (CODES FROM MASSEY'S BC COMPILATION, 2005)

Unit Description	Strat Unit	Map Colour
Midr - Cenozoic - Unnamed dioritic intrusive rocks	LTdr	red
Efp - Cenozoic - Unnamed feldspar porphyritic intrusive rocks	ETfp	pink
LKTqd - Mesozoic to Cenozoic - Unnamed quartz dioritic intrusive rocks	KTqd	coral
uKPovc - Mesozoic - Powell Creek Formation volcaniclastic rocks	uKPo	lt green
lKTL - Mesozoic - Taylor Creek Group - Lizard Formation undivided sedimentary rocks lKTD - Mesozoic - Taylor Creek Group - Dash Formation undivided sedimentary rocks lKTLsc - Mesozoic - Taylor Creek Group - Lizard Formation coarse clastic sedimentary rocks	KTc	bright green
KSq - Mesozoic - Silverquick Formation conglomerate, coarse clastic sedimentary rocks	KSq	green
uTrTy - Mesozoic - Tyaughton Group conglomerate, coarse clastic sedimentary rocks	uTrTy	aqua
uTrCHsc - Mesozoic - Cadwallader Group - Hurley Formation coarse clastic sedimentary rocks uTrCHs - Mesozoic - Cadwallader Group - Hurley Formation undivided sedimentary rocks	uTrCd	lt grey
lmJLC - Mesozoic - Last Creek Formation undivided sedimentary rocks	lmJLd	dk green
MmJBgs - Paleozoic to Mesozoic - Bridge River Complex greenstone, greenschist metamorphic rocks MmJBsv - Paleozoic to Mesozoic - Bridge River Complex marine sedimentary and volcanic rocks	CKBr	grey
PBEus - Paleozoic - Bralorne-East Liza Complex serpentinite ultramafic rocks	Pus	magenta
PBEgb - Paleozoic - Bralorne-East Liza Complex gabbroic to dioritic intrusive rocks	Pgb	lilac

In the central Project area, the biotite hornblende quartz diorite and granodiorite Eldorado stock (LKTgd) occupies the upper Nea basin. At the northern margin of the tenures lies a north-south elongate Eocene feldspar porphyry (Efp).

Complex Cretaceous to Tertiary Age north to northwesterly trending faults and thrusts juxtapose the clastic rocks. These structures are often healed with quartz carbonate sulphide veins.

A one kilometre zone of hornfels (biotite, pyrite) envelopes the Eldorado stock contact, developing a strong gossan in the Nea Basin. A narrower zone of clay alteration is noted as bleaching close to the stock contact. Clay alteration was also noted in the area of the Silverquick, Tungsten King and Tungsten Queen. Quartz carbonate alteration occurs as matrix flooding, vein breccia and veining throughout the Nea Basin and at the Silverquick, Tungsten Queen and Tungsten King prospects. The Robson and Drabble vein structures occur in strong hornfels and sheared sediments immediately north of the intrusive contact.

5.0 2011 EXPLORATION PROGRAM

The geophysical exploration program consisted of airborne magnetics flown over the entire tenure package between April 13th and 15th 2011. A total of 1321.3 line km of airborne magnetic data was collected by New-Sense Geophysics of Markham, Ontario. The Property was covered with a 100 m spaced helicopter borne magnetic survey (*Figure 4*) and an internal area of interest was covered in greater detail with 50 m spaced lines (*Figure 5*). This information was obtained to delineate anomalies and facilitate the structural interpretation of the area. A complete logistical report with the data prepared by New-Sense is included in Appendix A.

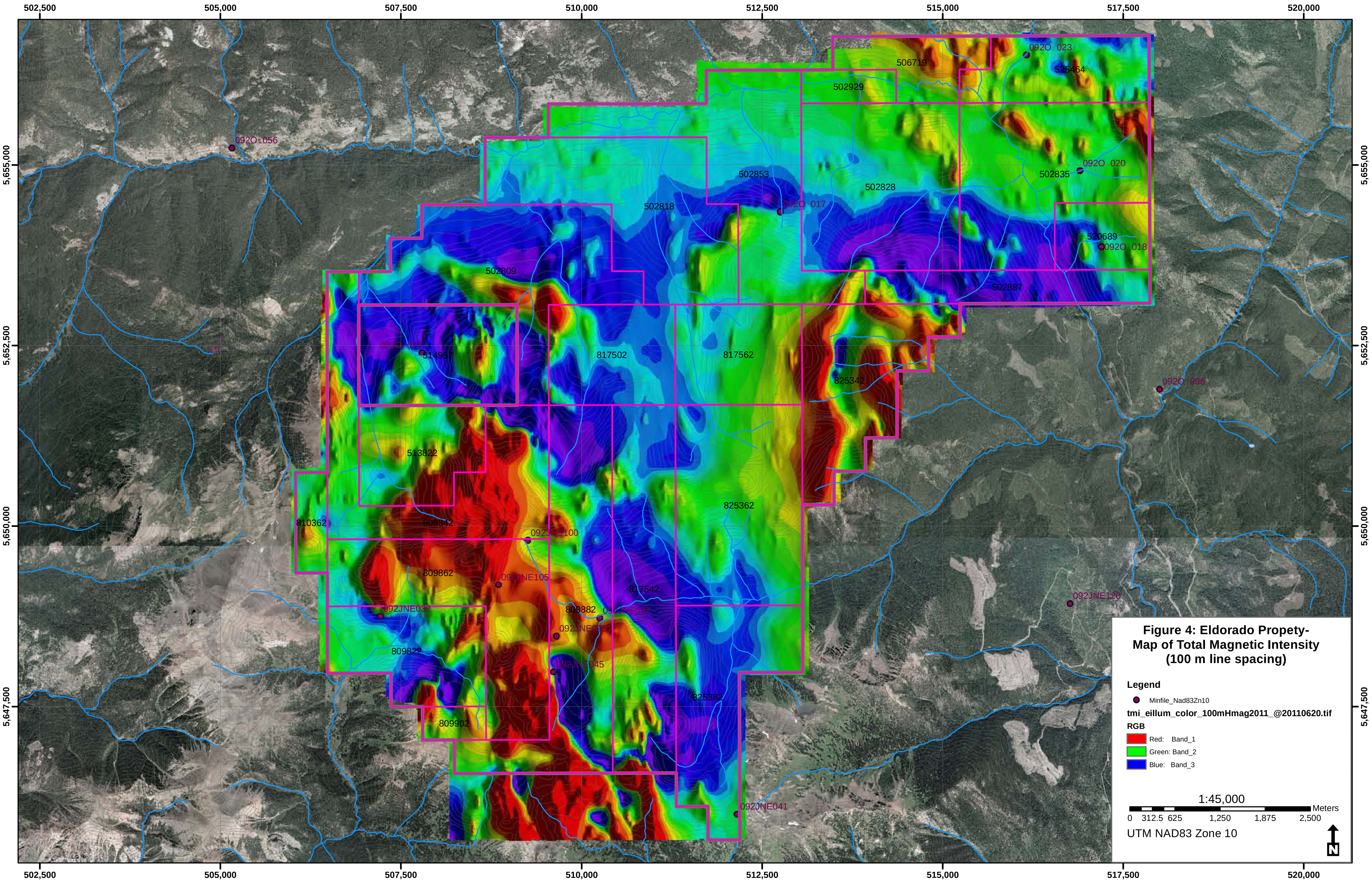


Figure 4: Eldorado Propety- Map of Total Magnetic Intensity (100 m line spacing)

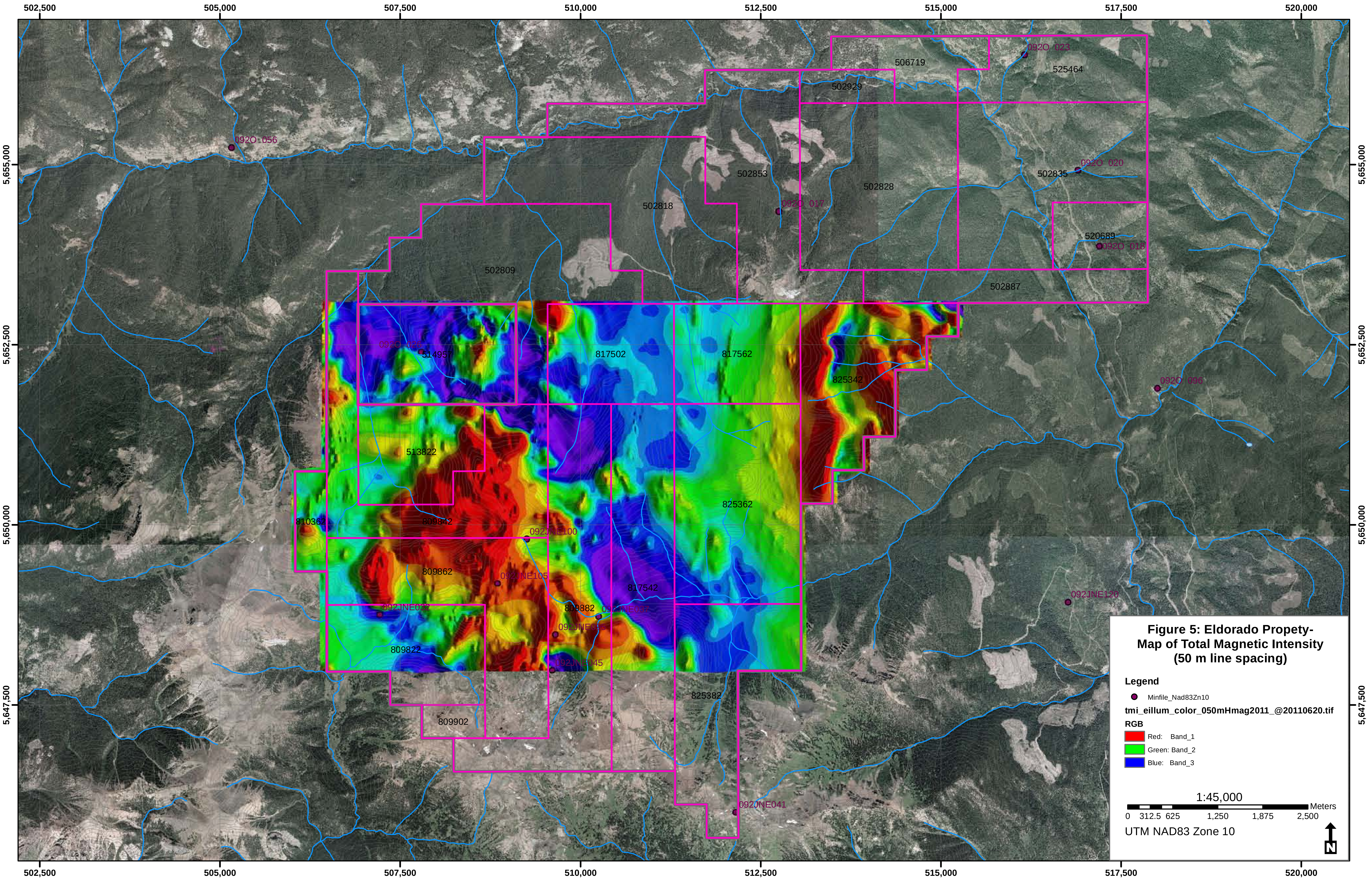


**Figure 5: Eldorado Propety-
Map of Total Magnetic Intensity
(50 m line spacing)**

6.0 CONCLUSIONS

The geophysical survey produced several magnetic anomalies of interest. The main anomaly of is approximately 2.5 by 2.5 km magnetic high coincident with the Eldorado stock. There are also smaller, ~150 m isolated magnetic highs that may be of interest but will require further follow up on the ground. Detailed interpretations of the structure were not completed due to the data not having been finalized at the time this report was written.

7.0 RECOMMENDATIONS

Additional follow up of magnetic anomalies is recommended including geochemical sampling and geological mapping. The anomalies should be examined for coincident geochemical anomalous zones and favorable geology or structure. Diamond drilling is recommended once a complete evaluation of the surface and geophysical data has been completed.

8.0 STATEMENT OF EXPENDITURES

The 2011 Exploration Program expenditures are detailed in *Table 3*.

TABLE 3: 2011 STATEMENT OF EXPENDITURES

Exploration Work type	**Comments**	**Line km**			**Totals**
Airborne Exploration Surveys	**Line Kilometres / Enter total invoiced amount**				
Aeromagnetics- Total	Total 1321.2 line km		$0.00	$0.00	
Aeromagnetics- 100 m spacing	898.1 line km	898.1	$75.80	$68,075.98	
Aeromagnetics- 50 m spacing	423.1 line km	423.1	$75.80	$32,070.98	
Standby	2 days of low ceiling	2.0	$950.00	$1,900.00	
			$0.00	$0.00	
Other (specify)			$0.00	$0.00	
				$102,046.96	**$102,046.96**
TOTAL Expenditures					**$102,046.96**

9.0 REFERENCES

Durfeld, RM, 2010: Geological/ Geochemical Report of the Eldorado Gold Project.

New Sense Geophysics Ltd., 2011: Logistics Report for the High Resolution Helicopter Magnetic Airborne Geophysical Survey.

10.0 STATEMENT OF QUALIFICATIONS

I, Eleanor Black (nee Alesi) of Vancouver in the province of British Columbia, certify that:

1. I am a graduate of the University of British Columbia (2004) with a Bachelor of Science in the field of Geological Sciences.
2. I am a contract geologist employed by Gold Fields Canada Exploration BV.
3. I have been employed in my profession as a geologist since my graduation in 2004.
4. I am a Geoscientist in Training (GIT) in good standing under the regulation of the Association of Professional Engineers and Geoscientists of British Columbia (APEGBC).
5. This report is based data collected on by New Sense Geophysics Ltd. on JM Stewart, RM Durfeld and K Shannon's Eldorado Project mineral tenures during April 2011.
6. I hold no interest in the Eldorado Project tenures.

Dated this 3rd day of August, 2011 at Vancouver, BC.

Eleanor Black

Eleanor Black

Appendix A

Geophysical Logistics Report

(New Sense Geophysical Ltd.)

Logistics
Report

For the

High Resolution Helicopter Magnetic Airborne Geophysical Survey

Flown over

ELDORADO, WOODJAM 1, AND WOODJAM 2 BLOCKS

From

Goldbridge (Eldorado) and **Horsefly** (Woodjam 1 and Woodjam 2)**, BC, Canada**

Carried out on behalf of

GOLD FIELDS HORSEFLY EXPLORATION CORP. and GFE EXPLORATION CORP.

By

New-Sense Geophysics Limited

Toronto, Canada
June 11th, 2011
(HM100325_1 – Eldorado block)
(HM100325_2 – Woodjam blocks)

TABLE OF CONTENTS

AMENDMENT RECORD

Rev	Date	Description	Report Section	Prepared by

DOCUMENT RECORD

Document Identification	HM100325_1 – Eldorado block; HM100325_2 – Woodjam blocks
Document Custodian	Field Operations Manager
Relates To	Final Deliverables
Original Date Issued	June 11th, 2011

1. INTRODUCTION

A high sensitivity helicopter magnetic airborne survey was carried out for GFE Exploration Corp. & Gold Fields Horsefly Exploration Corp. (Client) over three (3) project areas known as Eldorado, Woodjam 1 and Woodjam 2 blocks. The Eldorado block was flown from the town of Goldbridge, BC; and the Woodjam blocks were flown from the town of Horsefly, BC, Canada.

New-Sense Geophysics (NSG) flew the survey under the terms of an agreement with Client dated March 25, 2011 (see Appendix G).

The survey was flown between April 5th and April 15th, 2011. A total of 1,907 line kilometres of field magnetic data was flown, collected, processed and plotted. These lines were flown in three (3) separate blocks listed below:

Eldorado Block:
100m (traverse)/1000m (control) lines: 898.1 Line Km
50m (traverse)/500m (control) infill lines: 423.2 Line Km

Woodjam 1 Block: 394.7 Line Km

Woodjam 2 Block: 191.2 Line Km

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

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

This report describes the acquisition, processing, and presentation of data for the Eldorado block and Woodjam blocks 1 and 2 airborne survey

2. SURVEY LOCATION

Datum: NAD83
Projection: Universal Transverse Mercator Zone 10N
Local Datum Transform: North America (all Canada and USA subunits)

Table 2.1: Eldorado Block Coordinates

UTM Zone 10N			
WGS84_X	WGS84_Y	NAD83_X	NAD83_Y
514793	5656784	514793	5656784
517859	5656794	517859	5656794
517872	5653087	517872	5653087
515242	5653079	515242	5653079
515243	5652615	515243	5652615
514805	5652614	514805	5652614
514806	5652151	514806	5652151
514368	5652149	514368	5652149
514370	5651223	514370	5651223
513932	5651221	513932	5651221
513933	5650758	513933	5650758
513495	5650757	513495	5650757
513496	5650293	513496	5650293
513057	5650292	513057	5650292
513063	5647975	513063	5647975
512186	5647973	512186	5647973
512191	5645656	512191	5645656
508238	5645656	508238	5645656
508238	5647038	508238	5647038
507799	5647037	507799	5647037
507799	5647501	507799	5647501
507360	5647500	507360	5647500
507359	5647963	507359	5647963
506482	5647962	506482	5647962
506480	5649352	506480	5649352
506041	5649352	506041	5649352
506040	5650742	506040	5650742
506478	5650742	506478	5650742
506475	5653523	506475	5653523
507351	5653524	507351	5653524
507351	5653987	507351	5653987
507789	5653988	507789	5653988

507788	5654451	507788	5654451
508665	5654453	508665	5654453
508663	5655380	508663	5655380
509539	5655381	509539	5655381
509538	5655845	509538	5655845
511729	5655849	511729	5655849
511728	5656313	511728	5656313
511728	5656313	511728	5656313
511728	5656313	511728	5656313

Table 2.2 Eldorado Block Infill Area Coordinates

UTM Zone 10N			
WGS84_X	WGS84_Y	NAD83_X	NAD83_Y
515242	5653079	515242	5653079
515243	5652615	515243	5652615
514805	5652614	514805	5652614
514806	5652151	514806	5652151
514368	5652149	514368	5652149
514370	5651223	514370	5651223
513932	5651221	513932	5651221
513933	5650758	513933	5650758
513495	5650757	513495	5650757
513496	5650293	513496	5650293
513057	5650292	513057	5650292
513063	5647975	513063	5647975
512186	5647973	512186	5647973
512187	5647900	512187	5647900
506482	5647962	506482	5647962
506480	5649352	506480	5649352
506041	5649352	506041	5649352
506040	5650742	506040	5650742
506478	5650742	506478	5650742
506475	5653523	506475	5653523

Table 2.3: Woodjam 1 Block Coordinates

UTM Zone 10N			
WGS84_X	WGS84_Y	NAD83_X	NAD83_Y
611379	5784808	611379	5784808
617839	5784777	617839	5784777
617962	5779902	617962	5779902
614963	5779917	614963	5779917
614993	5778563	614993	5778563
611425	5778548	611425	5778548
611394	5784808	611394	5784808

Table 2.4: Woodjam 2 Block Coordinates

UTM Zone 10N			
WGS84_X	WGS84_Y	NAD83_X	NAD83_Y
600766	5777610	600766	5777610
609487	5777625	609487	5777625
609487	5775441	609487	5775441
600812	5775441	600812	5775441
600781	5777610	600781	5777610

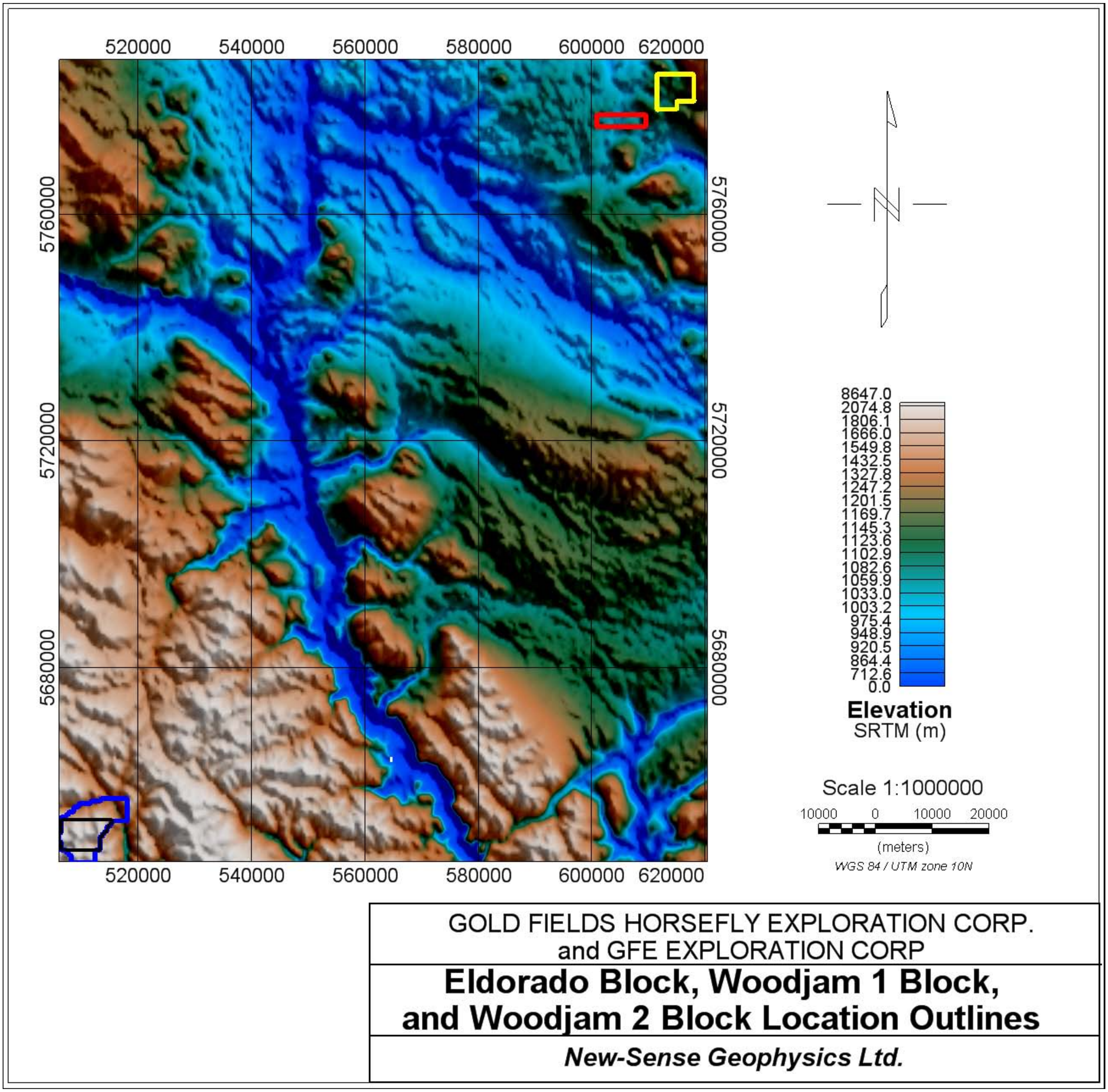


Figure 2.1 Map depicting the three survey block outlines: Woodjam Block 1 (yellow); Woodjam Block 2 (red); and Eldorado block (blue) with 50m in-fill area (black). Depicted over Shuttle Radar Topography Mission (SRTM) grid with 90m resolution. Coordinate System: WGS84, UTM Zone 10N.

3. PERSONNEL

3.1 FIELD OPERATIONS

New-Sense Geophysics Ltd., Geophysicist:	Sean Plener
Northern Air Support, Pilot:	Mark Thurstin
Northern Air Support, Pilot:	Mark McGowan

3.2 OFFICE DATA PROCESSING AND OFFSITE QA/QC

QA/QC (NSG):	Andrei Yakovenko
QA/QC (client):	Andrew Foley, Chief Geophysicist, Denver
Data Processing and Grids (NSG):	Andrei Yakovenko Sean Plener
Maps (NSG):	Andrei Yakovenko Sean Plener
Logistics Report (NSG):	Andrei Yakovenko Sean Plener

3.3 PROJECT MANAGEMENT

New-Sense Geophysics Ltd.:	Andrei Yakovenko
Client:	Andrew Foley, Chief Geophysicist, Denver

4. SURVEY PARAMETERS

Property Name	Eldorado	Eldorado Infill	Woodjam 1	Woodjam 2
Traverse Line Spacing (m)	100	50	100	100
Control Line Spacing (m)	1000	500	1000	1000
Nominal Terrain Clearance (m)	30	30	30	30
Observed Terrain Clearance (average m)	50.44	51.78	32.62	33.55
Navigation	GPS	GPS	GPS	GPS
Traverse Line Direction (deg)	90, 270	90, 270	90, 270	90, 270
Control Line Direction (deg)	0, 180	0, 180	0, 180	0, 180
Magnetic Data Measurement Interval (sec)	0.1	0.1	0.1	0.1
Ground Speed (Average km/h)	82.8	82.8	93.6	104.4
Magnetic Data Measurement Spacing (Average m/0.1sec)	2.3	2.3	2.6	2.9

Airborne Digital Record:

- Line Number
- Flight Number
- Radar Altimeter
- Total Field Magnetics
- Time (System and GPS)
- Raw Global Positioning System (GPS) data
- Magnetic compensation parameters (fluxgate mag.)

Base Station Record:

- Ambient Total Field Magnetics
- Raw Global Positioning System (GPS) data
- Time (System and GPS)

5. AIRCRAFT AND EQUIPMENT

5.1 AIRCRAFT

The aircraft used was a Eurocopter Astar B3 (C-GSLY) for Eldorado and a Bell 206B3 helicopter (C-GMPS) for the Woodjam blocks equipped with a Cesium magnetometer mounted in a fixed stinger. The aviation company providing the aircraft service was Northern Air Support based in Kelowna, BC, Canada.

5.2 AIRBORNE GEOPHYSICAL SYSTEM

5.2.1 MAGNETOMETER

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

5.2.2 MAGNETIC COMPENSATION

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

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

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

5.2.3 GPS NAVIGATION

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

5.2.4 ALTIMETER

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

5.2.5 GEOPHYSICAL FLIGHT CONTROL SYSTEM

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

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

5.2.6 IDAS DIGITAL RECORDING

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

5.3 GROUND MONITORING SYSTEM

5.3.1 BASE STATION MAGNETOMETER

An Overhauser* magnetometer (GSM-19) was used at the base of operations an area of low magnetic gradient and relatively free from cultural electric & magnetic noise sources. The sensitivity and absolute accuracy of the ground magnetometer is +/- 0.1nT. Data was recorded continuously at least every one second throughout the survey operations in digital form on a TC-10 data acquisition system. Both the ground and airborne magnetic readings were synchronized based on the GPS clock.

*In contrast to a standard proton magnetometer sensor that uses a proton-rich liquid, an Overhauser Effect sensor has a free radical added. This free radical ensures the presence of free, unbound electrons that couple with protons, producing a two-spin system. A strong RF magnetic field is used to disturb the electron-proton coupling. By saturating free electron resonance lines, the polarization of protons in the sensor liquid is greatly increased. The Overhauser effect offers a more powerful method of proton polarization than standard DC polarization (i.e. stronger signals are achieved from smaller sensors, and with less power.)

5.3.2 RECORDING

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

5.4 FIELD COMPILATION SYSTEM

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

6. OPERATIONS AND PROCEDURES

6.1 FLIGHT PLANNING AND FLIGHT PATH

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

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

6.2 BASE STATION

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

Goldbridge: Eldorado block at Latitude: 50.857930; Longitude: -122.833894

Horsefly: Woodjam blocks at Latitude: 51.076143; Longitude: -122.054270

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

6.3 AIRBORNE MAGNETOMETERS

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

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

The following ranges were used:

Pitch: 10-15^o
Roll: 10-15^o
Yaw: 10-15^o

See Appendix A for the FOM results as flown on April 7th and April 14th, 2011 and were used to compensate the magnetic data.

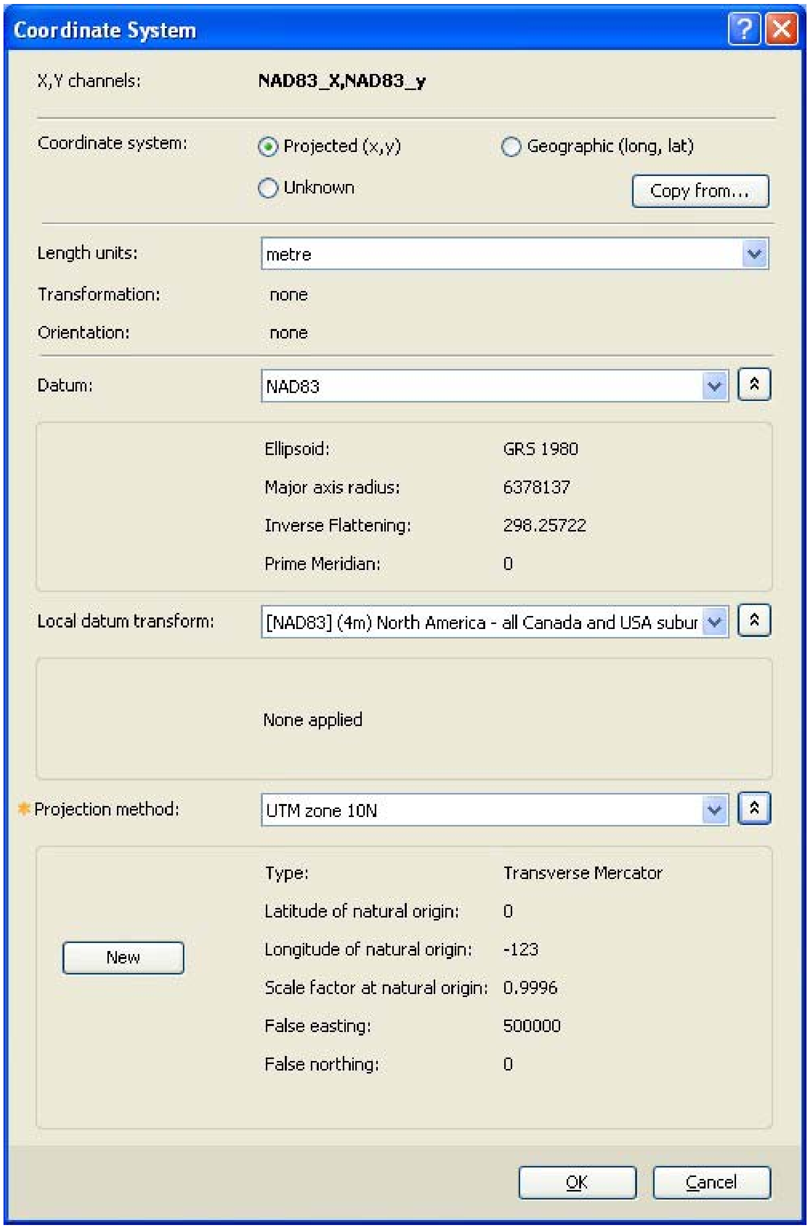
6.4 DATA COMPILATION

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

6.4.1 FLIGHT PATH CORRECTIONS

The navigational correction process yields a flight path expressed in WGS84, World and transformed to correspond to NAD83 UTM ZONE 10N, North America.

The following projection parameters were used for Eldorado, Woodjam 1, and Woodjam 2 blocks:



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

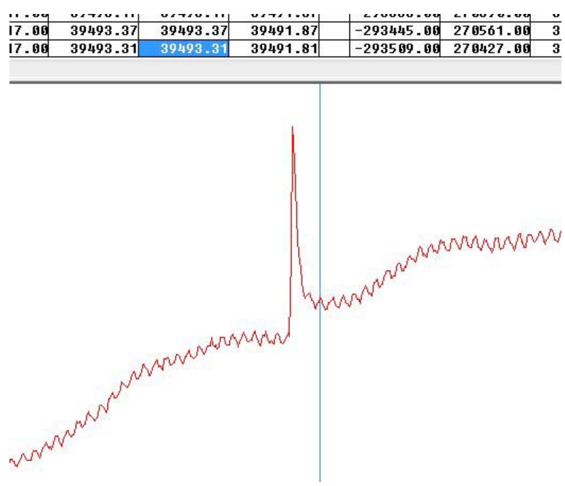
6.4.2 MAGNETIC CORRECTIONS: ELDORADO BLOCK

The following magnetic corrections were performed on the Eldorado 100m traverse line spacing block database and Eldorado 50m traverse line spacing database.

6.4.2.1 REMOVING OF STEPS

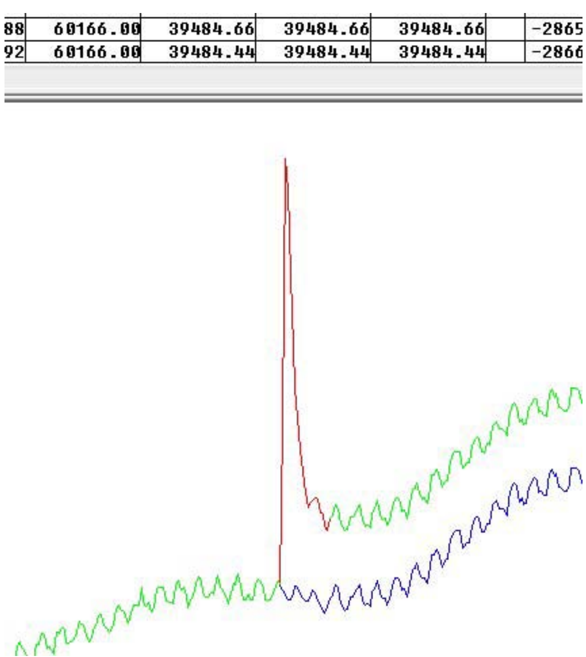
First the 50 Hz Cesium 3 raw data (MAG_RAW) was visually inspected for induced magnetic steps in the data. The magnetic steps were observed in the data most frequently when the helicopter was in an extremely steep decent for more 30 seconds, but occasionally on steep accents as well.

The magnitude of the typical step was approximately 2-6 nT, and would either step up or down the observed magnetic signal for a period usually 30 sec – 120 sec. Shown to the right is an image of a typical step in the signal.



The source of the magnetic steps is suspected to be a power change in the AS-350 B3 automated engine control unit. The unit would adjust engine power output to varying flying condition. Only after a prolonged period (rapid decent >30 sec) would the adjustment be made, before returning to the normal base.

To remove the step and restore the data to the normal baseline, the 50 Hz data was vital, as the steps (rise or fall) occur in approximately 2-4 records. First the start and end points of the stepped data were identified and removed (1-5 records). Next the magnitude of the step was measured, and a copy of the profile was made in the affected area. This copy was then shifted up/down to the appropriate base level and the removed gaps were



interpolated using prediction interpolation method.

The process is illustrated to the left. The red profile shows the removed spike where the signal steps up. The green profile shows the original signal with the spike and step removed. Finally the blue profile shows the adjusted and interpolated magnetic signal, which is used for the remainder of the processing steps.

The steps corrected data were stored under MAG_STEPS_CORR channel.

6.4.2.2 FILTERING AND COMPENSATION

After the magnetic data were corrected for steps it were filtered, along with the fluxgate magnetometer data, with a 51 cosine anti-aliasing algorithm and re-sampled at 10 Hz.

The filtered and re-sampled data were stored in the MAG_FILT channel.

Then the MAG_FILT data were compensated for permanent, induced, and eddy current magnetic noise generated by the aircraft using data from the fluxgate magnetometer (see Appendix A).

The compensated magnetic data were then stored in the MAG_COMP channel.

6.4.2.3 DIURNAL CORRECTIONS

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

Diurnal variations recorded by the base station were filtered with a 31-point low pass filter. The filtered data was then subtracted directly from the aeromagnetic measurements to provide a first order diurnal correction.

After base station removal, the total magnetic field values become very small. To bring the total magnetic measurements back to ‘normal’ values, project averages (i.e., 55,577.97) from the base station readings were added back to the magnetic data.

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

6.4.2.4 LAG CORRECTIONS

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

NSG insures that there is no time lag in the data acquisition system by recording unique markers every 1-second based on the GPS time stamp (associated with the EXACT change in GPS positioning). This information is used to realign (if necessary) the individual data records.

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

$$5.2m/2.3m=2.3$$

The magnetic data were lagged by -2 records.

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

6.4.2.5 HEADING CORRECTIONS

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

A heading test flight was flown at magnetically quite area at 10,000+ ft above sea level altitude on April 7th, 2011 with the following results:

Table 6.1 Heading Test Flight Results: April 7, 2011

<table>
<tr><th>Direction (deg.)</th><th>Mean on line (nT)</th><th>Mean in direction (nT)</th><th>Mean on heading (nT)</th><th>Error (nT)</th></tr>
<tr><td>0</td><td>55381.27</td><td rowspan="2">55381.20</td><td rowspan="4">55374.47</td><td rowspan="2">-6.73</td></tr>
<tr><td>0</td><td>55381.13</td></tr>
<tr><td>180</td><td>55368.04</td><td rowspan="2">55367.74</td><td rowspan="2">6.73</td></tr>
<tr><td>180</td><td>55367.44</td></tr>
<tr><td>90</td><td>55393.57</td><td rowspan="2">55392.48</td><td rowspan="4">55378.53</td><td rowspan="2">-13.95</td></tr>
<tr><td>90</td><td>55391.39</td></tr>
<tr><td>270</td><td>55365.11</td><td rowspan="2">55364.58</td><td rowspan="2">13.95</td></tr>
<tr><td>270</td><td>55364.04</td></tr>
</table>

The heading corrected magnetic data were stored in MAG_HEADING_CORR channel.

6.4.2.6 IGRF CORRECTIONS

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

After IGRF correction the total magnetic field values become negative. To bring the total magnetic measurements back to 'normal' values an average of IGRF values (i.e., 55,654.04) based on the whole project were added back to the magnetic data.

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

6.4.2.7 LEVELING CORRECTIONS

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

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

In order to further level magnetic data, it was decided to:

1) separate the master database into one database that would only be composed of 100m line spacing traverse lines and 1000m line spacing control lines (i.e., Eldorado 100m lines.gdb); and a separate database that would only be composed of 50m lines spacing traverse lines and 500m line spacing control lines (i.e., Eldorado 50m lines.grd).
2) microlevel the conventionally leveled magnetic data (i.e., MAG_SimpleLVL channel) using the following key parameters (see Appendix D for full description of the microleveling technique)

Table 6.2 Total Magnetic Intensity (TMI) microlevelling parameters

Block Name	Line Spacing (m)	Line Direction (deg.)	Grid Cell Size (m)	Decorrugation Cutoff (m)	Amplitude Limit (nT)	Amplitude Limit Mode	Naudy Filter Limit
Eldorado 100m lines	100	90	10	400	NA	zero	NA
Eldorado 50 lines	50	90	5	200	NA	zero	NA

The resulting data were stored in TMI_FINAL channel.

6.4.3 VERTICAL DERIVATIVE

A 1-st Order Vertical Derivative (VDV) data were calculated using 2D FFT2 algorithm based on final TMI grid. The resulting VDV grid was then slightly filtered with a Hanning 3x3, with 2 passes, filter and sampled back to the database.

The VDV data were stored under VDV channel.

6.4.4 MAGNETIC CORRECTIONS: WOODJAM BLOCKS

6.4.4.1 FILTERING AND COMPENSATION

The raw magnetic data (i.e., MAG_RAW) were filtered, along with the fluxgate magnetometer data, with a 51 cosine anti-aliasing algorithm and re-sampled at 10 Hz.

The filtered and re-sampled data were stored in the MAG_FILT channel.

Then the MAG_FILT data were compensated for permanent, induced, and eddy current magnetic noise generated by the aircraft using data from the fluxgate magnetometer (see Appendix A).

The compensated magnetic data were then stored in the MAG_COMP channel.

6.4.4.2 DIURNAL CORRECTIONS

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

Diurnal variations recorded by the base station were filtered with a 31-point low pass filter. The filtered data was then subtracted directly from the aeromagnetic measurements to provide a first order diurnal correction.

After base station removal, the total magnetic field values become very small. To bring the total magnetic measurements back to ‘normal’ values, project averages (i.e., BK 1: 57,169.32; BK 2 57,176.72) from the base station readings were added back to the magnetic data.

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

6.4.4.3 LAG CORRECTIONS

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

NSG insures that there is no time lag in the data acquisition system by recording unique markers every 1-second based on the GPS time stamp (associated with the EXACT change in GPS positioning). This information is used to realign (if necessary) the individual data records.

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

$$5.6m/2.3m=2.4$$

The magnetic data were lagged by -2 records.

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

6.4.4.4 HEADING CORRECTIONS

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

A heading test flight was flown at magnetically quite area at 10,000+ ft above sea level altitude on April 14th, 2011 with the following results:

Table 6.3 Heading Test Flight Results: April 14th, 2011

Direction (deg.)	Mean on line (nT)	Mean in direction (nT)	Mean on heading (nT)	Error (nT)
0	56067.9	56066.79	56062.56	-4.23
0	56065.67			
180	56056.35	56058.33		4.23
180	56060.3			
90	56042.81	56042.99	56043.38	0.40
90	56043.16			
270	56043.55	56043.78		-0.39
270	56044			

The heading corrected magnetic data were stored in MAG_HEADING_CORR channel.

6.4.4.5 IGRF CORRECTIONS

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

After IGRF correction the total magnetic field values become negative. To bring the total magnetic measurements back to 'normal' values an average of IGRF values i.e., BK 1: 56,336.56; BK 2 56,302.64) based on the whole project were added back to the magnetic data.

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

6.4.4.6 LEVELING CORRECTIONS

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

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

In order to further level magnetic data, it was decided to microlevel the conventionally leveled magnetic data (i.e., MAG_SimpleLVL channel) using the following key parameters (see Appendix D for full description of the microleveling technique)

Table 6.4 Total Magnetic Intensity (TMI) microlevelling parameters

Block Name	Line Spacing (m)	Line Direction (deg.)	Grid Cell Size (m)	Decorrugation Cutoff (m)	Amplitude Limit (nT)	Amplitude Limit Mode	Naudy Filter Limit
Woodjam BK 1 and BK 2	100	90	10	400	NA	zero	NA

The resulting data were stored in TMI_FINAL channel.

6.4.5 VERTICAL DERIVATIVE

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

The VDV data were stored under VDV channel.

7. MAP PRODUCTS AND DIGITAL DATA DELIVERABLES

The following is the list of items delivered to **GOLD FIELDS HORSEFLY EXPLORATION CORP. and GFE EXPLORATION CORP.**

Hard Copy Maps for All Properties @ 1:20,000 scale (x2):

- Maps of Total Magnetic Intensity at 1:20,000 scale

Hard Copy Logistics Report (x2):

Digital Copy Maps for All Properties @ 1:20,000 scale (x2):

- Maps of Total Magnetic Intensity at 1:20,000 scale

Digital Copy Grids for All Properties (x2):

- Grids of Total Magnetic Intensity (nT)

Digital Copy Databases for All Properties (x2):

- Magnetics data databases: WOODJAM BK1.gdb, WOODJAM BK2.gdb, ELDORADO 100m lines.gdb, and ELDORADO 50m lines.gdb (See Appendix B for details)

Digital Copy Logistics Report (x2):

Digital Copy Weekly and Line Report (x2):

8. SUMMARY

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

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

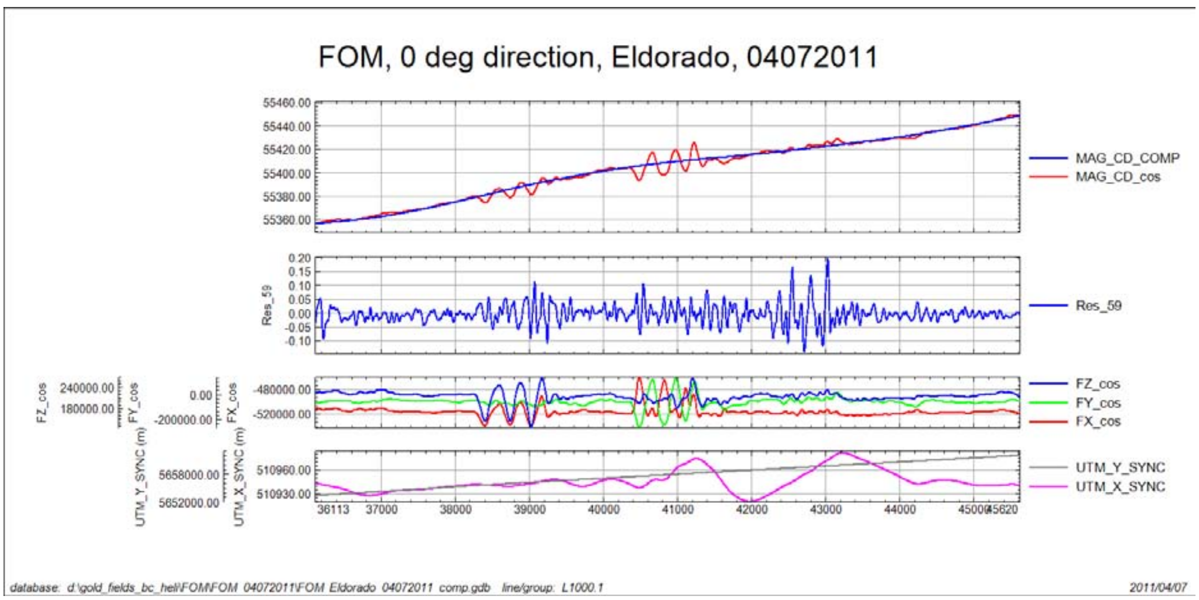
Further processing of the data may enhance subtle features that can be of importance for exploration purposes.

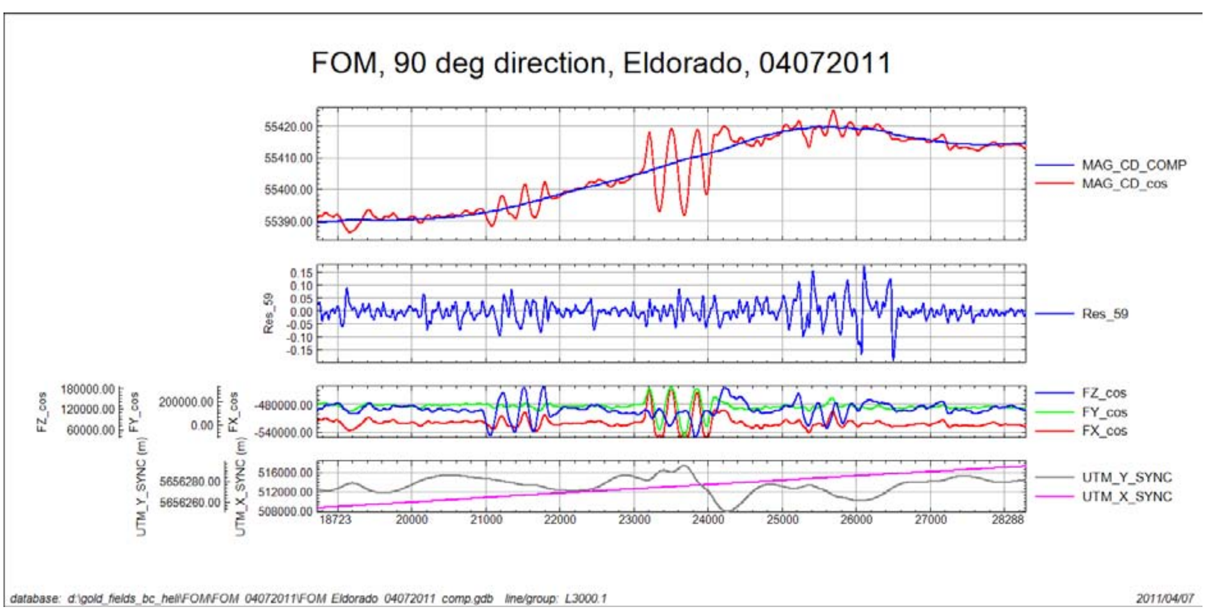
Respectfully submitted,

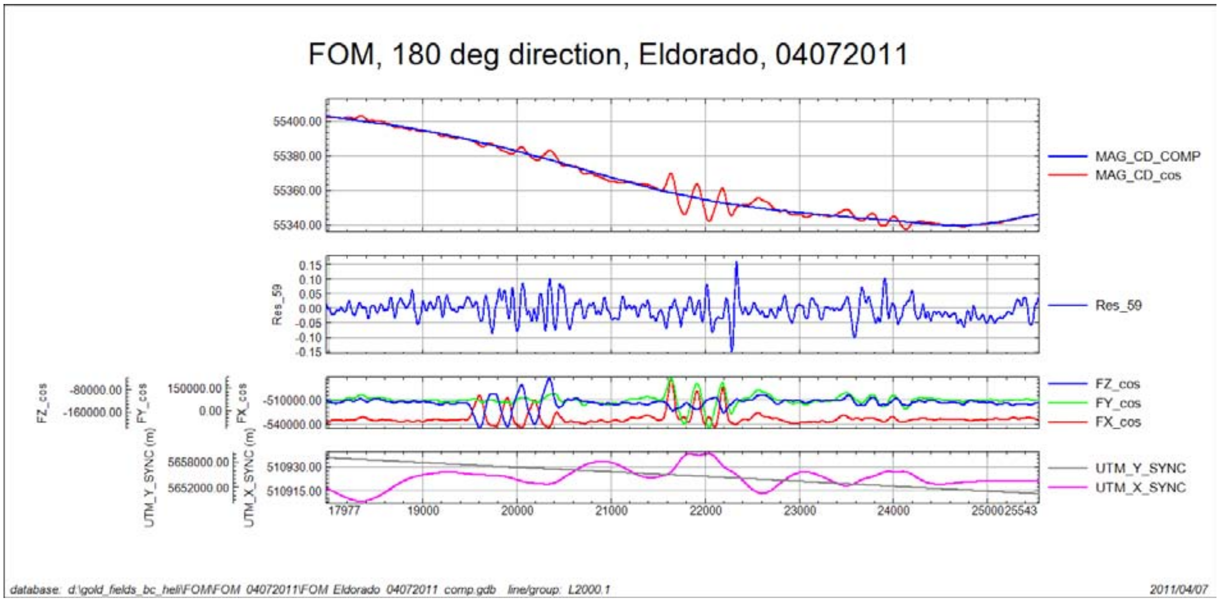
Andrei Yakovenko
New-Sense Geophysics Ltd.
Date: June 11, 2011

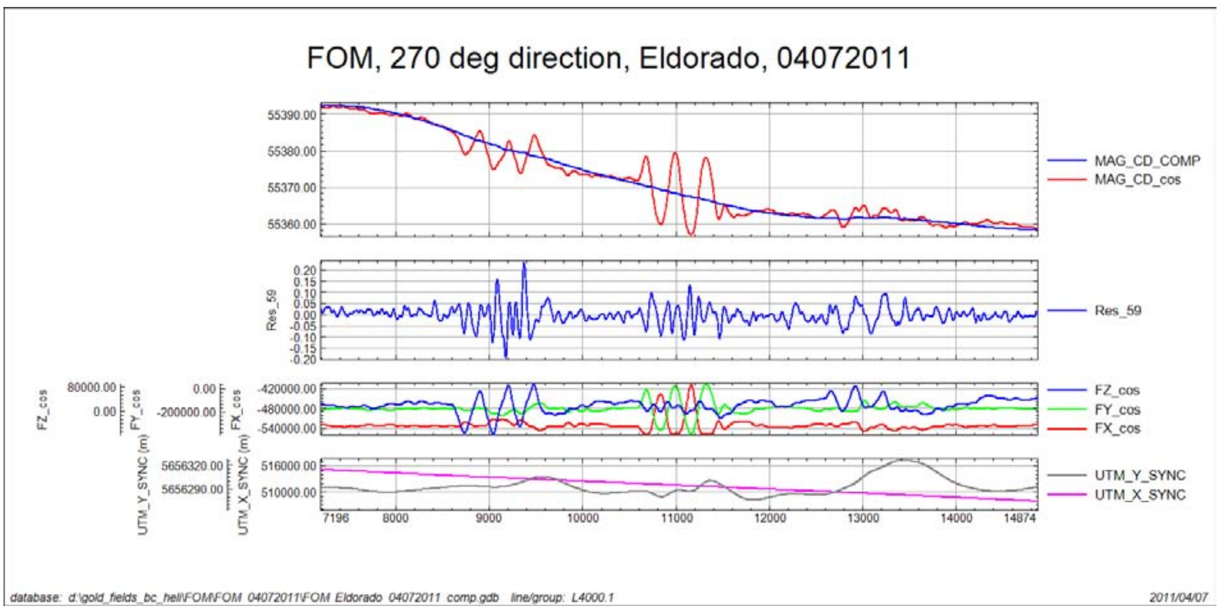
APPENDIX A: FOM RESULTS

Eldorado FOM April 7th, 2011					
line	**direction**	**pitch**	**roll**	**yaw**	**total**
1000	**0**	0.17	0.17	0.30	0.63
2000	**180**	0.17	0.30	0.15	0.62
3000	**90**	0.15	0.15	0.25	0.55
4000	**270**	0.33	0.23	0.18	0.73
	total	0.81	0.84	0.88	**2.53**

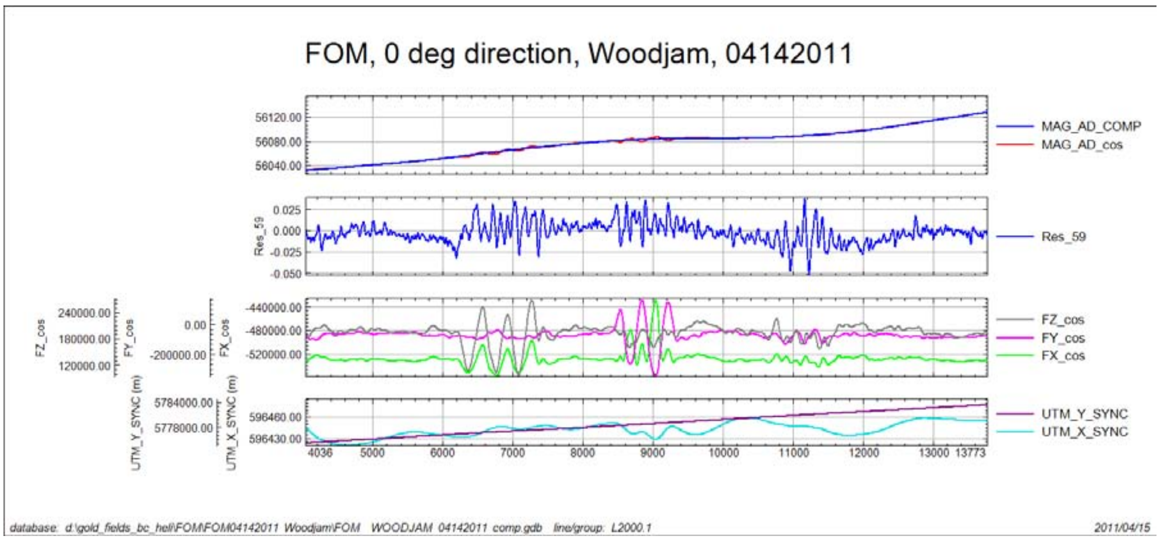


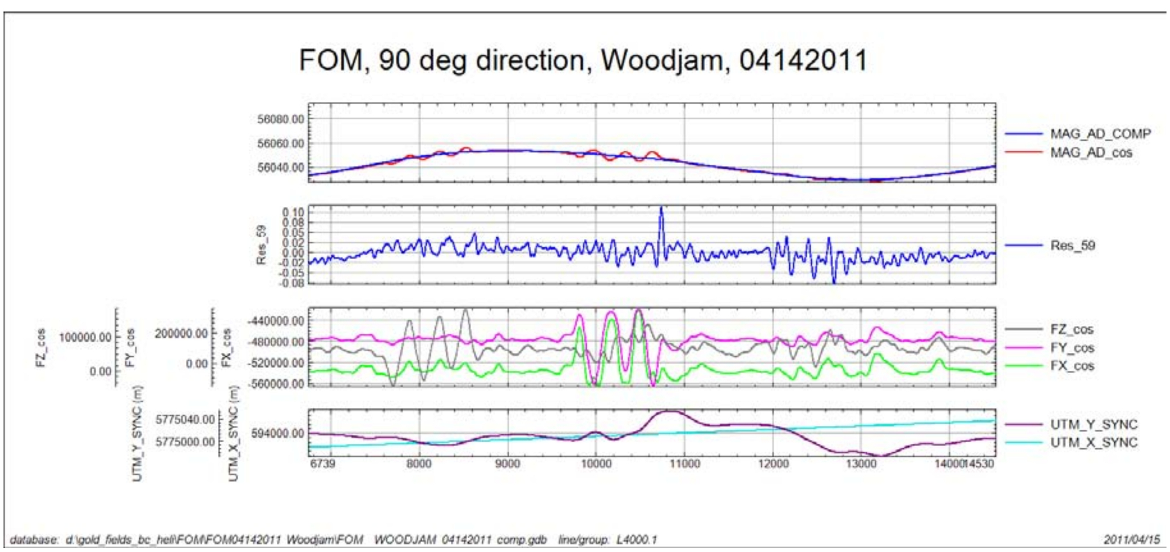


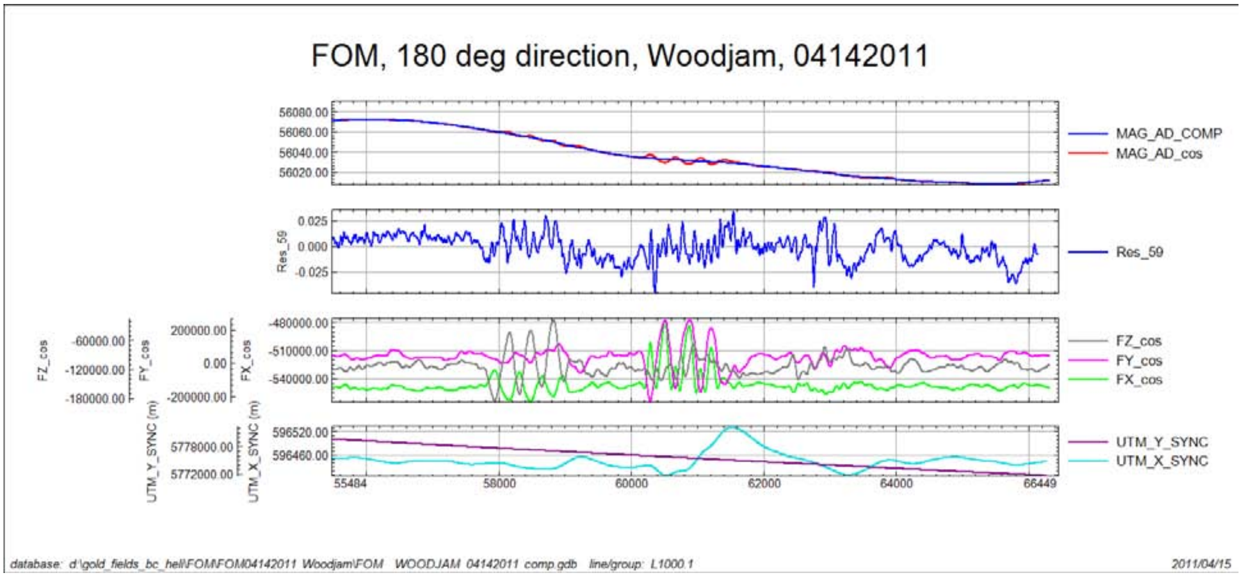

FOM, 180 deg direction, Eldorado, 04072011
55400.00
55380.00
55360.00
55340.00
MAG_CD_COMP
MAG_CD_cos
Res_59
FZ_cos
FY_cos
FX_cos
-80000.00
-160000.00
150000.00
0.00
-510000.00
-540000.00
UTM_Y_SYNC (m)
UTM_X_SYNC (m)
5658000.00
5652000.00
510930.00
510915.00
UTM_Y_SYNC
UTM_X_SYNC
17977
19000
20000
21000
22000
23000
24000
2500025543
database: d:\gold_fields_bc_heli\FOM\FOM 04072011\FOM Eldorado 04072011 comp.gdb line/group: L2000.1
2011/04/07

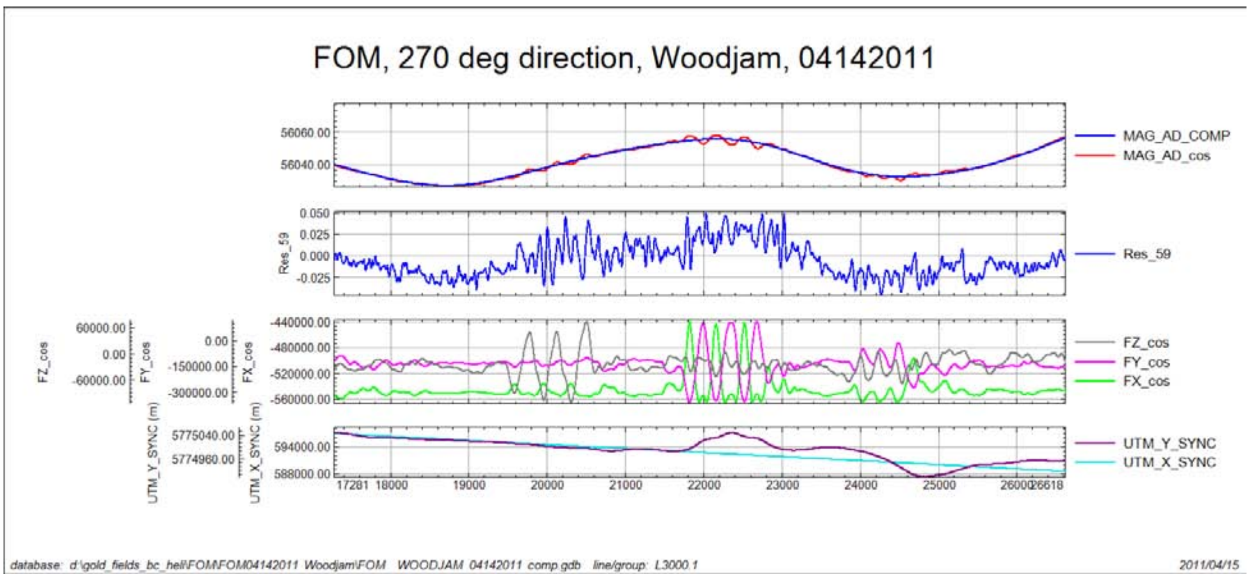

FOM, 270 deg direction, Eldorado, 04072011
55390.00
55380.00
55370.00
55360.00
MAG_CD_COMP
MAG_CD_cos
Res_59
FZ_cos
FY_cos
FX_cos
80000.00
0.00
0.00
-200000.00
-420000.00
-480000.00
-540000.00
UTM_Y_SYNC (m)
UTM_X_SYNC (m)
5656320.00
5656290.00
516000.00
510000.00
UTM_Y_SYNC
UTM_X_SYNC
7196
8000
9000
10000
11000
12000
13000
14000
14874
database: d:\gold_fields_bc_heli\FOM\FOM 04072011\FOM Eldorado 04072011 comp.gdb line/group: L4000.1
2011/04/07

Woodjam FOM April 14th, 2011					
line	**direction**	**pitch**	**roll**	**yaw**	**total**
1000	**180**	0.05	0.06	0.05	0.16
2000	**0**	0.06	0.05	0.09	0.20
3000	**270**	0.05	0.05	0.05	0.16
4000	**90**	0.05	0.15	0.11	0.31
	total	0.21	0.32	0.29	**0.82**






FOM, 180 deg direction, Woodjam, 04142011
MAG_AD_COMP
MAG_AD_cos
Res_59
FZ_cos
FY_cos
FX_cos
UTM_Y_SYNC
UTM_X_SYNC
database: d:\gold_fields_bc_heli\FOM\FOM04142011 Woodjam\FOM WOODJAM 04142011 comp.gdb line/group: L1000.1
2011/04/15


FOM, 270 deg direction, Woodjam, 04142011
MAG_AD_COMP
MAG_AD_cos
Res_59
FZ_cos
FY_cos
FX_cos
UTM_Y_SYNC
UTM_X_SYNC
database: d:\gold_fields_bc_heli\FOM\FOM04142011 Woodjam\FOM WOODJAM 04142011 comp.gdb line/group: L3000.1
2011/04/15

APPENDIX B: DATABASE DESCRIPTIONS

Magnetic Databases for Woodjam 1 and Woodjam 2 blocks

Database Name: WOODJAM BK#.gdb
Format: Geosoft .gdb
Number of Channels: 27

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

Channel Name	Units	Description
LINE	number	Line number
FLIGHT	number	Flight number
DATE	Date	Date flown (YYMMDD)
FIDUCIAL	number	Fiducial count (flight specific)
SYSTEM_CLOCK	milsec	KANA8 (A/D converter) counter
UTM_X_NAD83	meters	UTM East in NAD83, North America, Zone 10N
UTM_Y_NAD83	meters	UTM North in NAD83, North America, Zone 10N
LATITUDE	degrees	GPS latitude, WGS 84, World
LONGITUDE	degrees	GPS longitude, WGS 84, World
GPS_HEIGHT	meters	GPS height (orthometric) above MSL, WGS 84, World
UTC_DAYSEC	decimal seconds	UTC daily second counter (0-86399)
RAD_ALT_m	meters	Radar altimeter, height above ground
FLUX_X	Volts	Fluxgate x-axis
FLUX_Y	Volts	Fluxgate y-axis
FLUX_Z	Volts	Fluxgate z-axis
MAG_RAW	nT	Raw magnetometer data
MAG_FILT	nT	Raw magnetometer filtered with cosine 51 at 50Hz
MAG_COMP	nT	Compensated magnetometer data
DIURNAL	nT	Base station magnetometer data (filtered with 31 point low pass filter)
MAG_DIURNAL_CORR	nT	Base station (diurnal) corrected magnetometer data
MAG_LAG_CORR	nT	Lag corrected magnetometer data
MAG_HEADING_CORR	nT	Heading corrected magnetometer data
IGRF	nT	Calculated IGRF, using 2010 model
MAG_IGRF_CORR	nT	IGRF corrected magnetometer data
MAG_SIMPLE_LVL	nT	Conventionally (simple) leveled magnetometer data
TMI_FINAL	nT	Final Microleveled magnetometer data
VDV	nT/m	1^{st} order Vertical Derivative (VDV)

Magnetic Database for Eldorado block

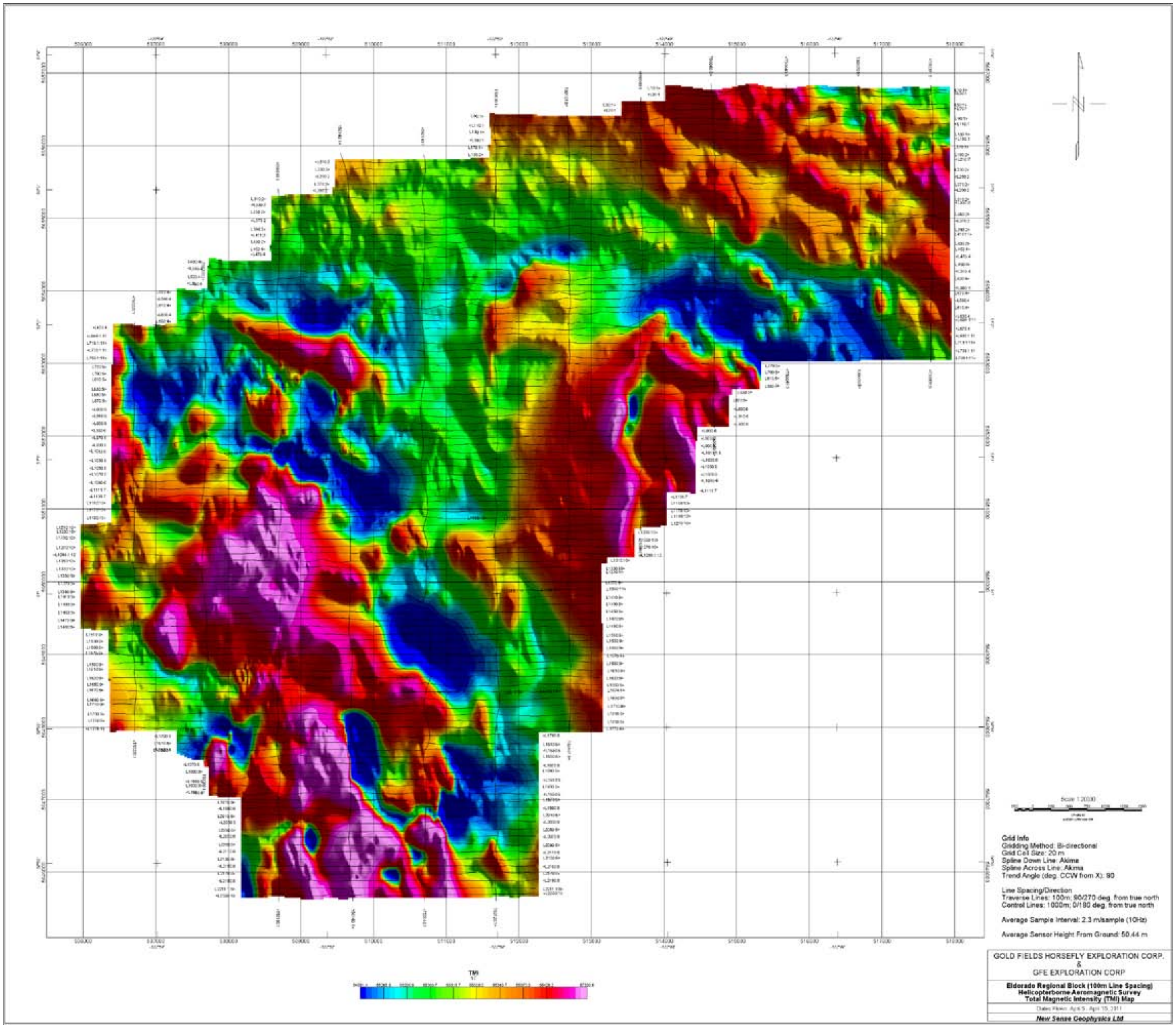
Database Name: ELDORADO *XX*m lines.gdb
Format: Geosoft .gdb
Number of Channels: 28

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

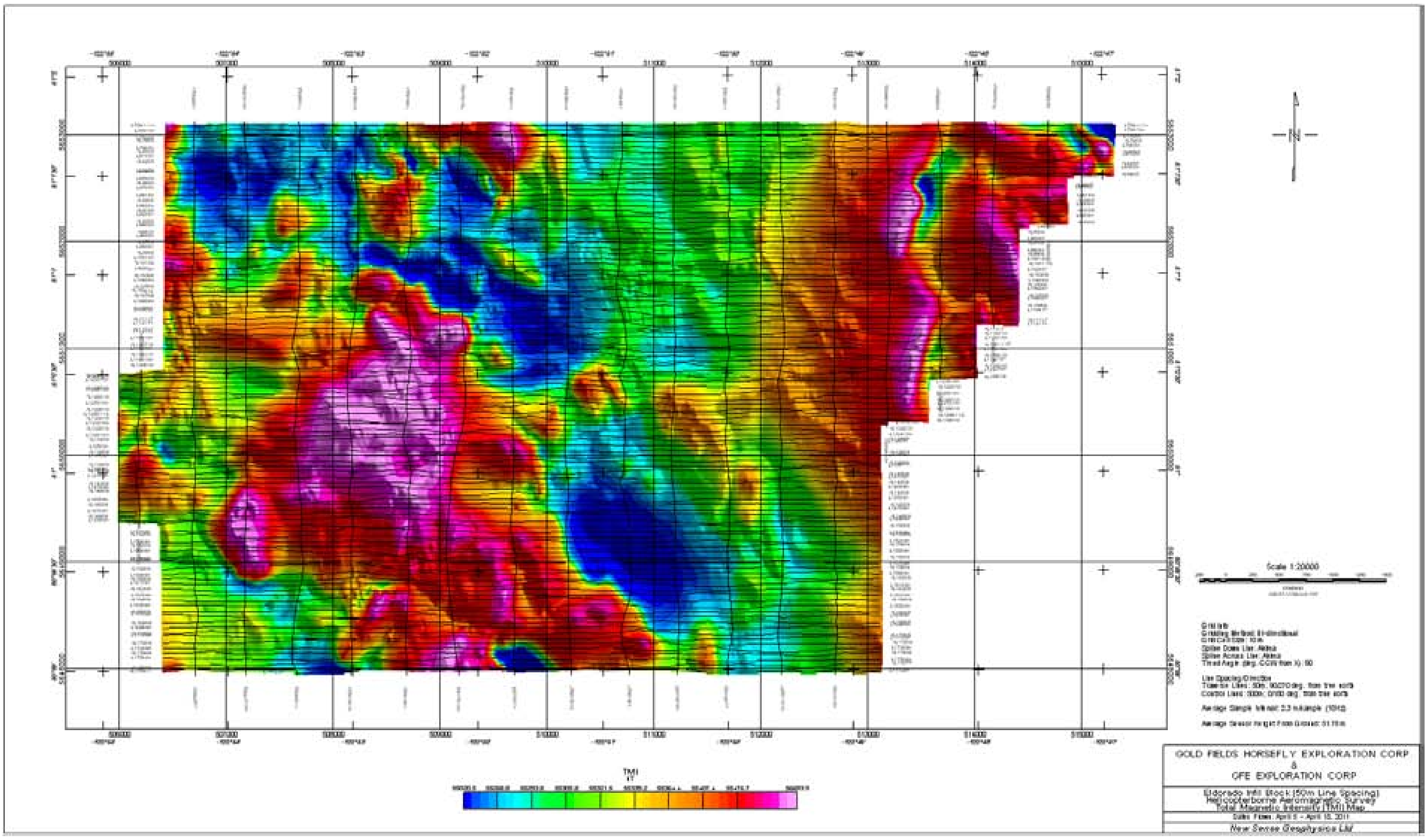
Channel Name	Units	Description
LINE	number	Line number
FLIGHT	number	Flight number
DATE	Date	Date flown (YYMMDD)
FIDUCIAL	number	Fiducial count (flight specific)
SYSTEM_CLOCK	milsec	KANA8 (A/D converter) counter
UTM_X_NAD83	meters	UTM East in NAD83, North America, Zone 10N
UTM_Y_NAD83	meters	UTM North in NAD83, North America, Zone 10N
LATITUDE	degrees	GPS latitude, WGS 84, World
LONGITUDE	degrees	GPS longitude, WGS 84, World
GPS_HEIGHT	meters	GPS height (orthometric) above MSL, WGS 84, World
UTC_DAYSEC	decimal seconds	UTC daily second counter (0-86399)
RAD_ALT_m	meter	Radar altimeter, height above ground
FLUX_X	Volts	Fluxgate x-axis
FLUX_Y	Volts	Fluxgate y-axis
FLUX_Z	Volts	Fluxgate z-axis
MAG_RAW	nT	Raw magnetometer data
MAG_STEPS_CORR	nT	Raw magnetometer data adjusted for helicopter noise
MAG_FILT	nT	Raw magnetometer filtered with cosine 51 at 50Hz
MAG_COMP	nT	Compensated magnetometer data
DIURNAL	nT	Base station magnetometer data (filtered with 31point low pass filter)
MAG_DIURNAL_CORR	nT	Base station (diurnal) corrected magnetometer data
MAG_LAG_CORR	nT	Lag corrected magnetometer data
MAG_HEADING_CORR	nT	Heading corrected magnetometer data
IGRF	nT	Calculated IGRF, using 2010 model
MAG_IGRF_CORR	nT	IGRF corrected magnetometer data
MAG_SIMPLE_LVL	nT	Conventionally (simple) leveled magnetometer data
TMI_FINAL	nT	Final Microleveled magnetometer data
VDV	nT/m	1^{st} order Vertical Derivative (VDV)

APPENDIX C: IMAGES OF FINAL MAPS

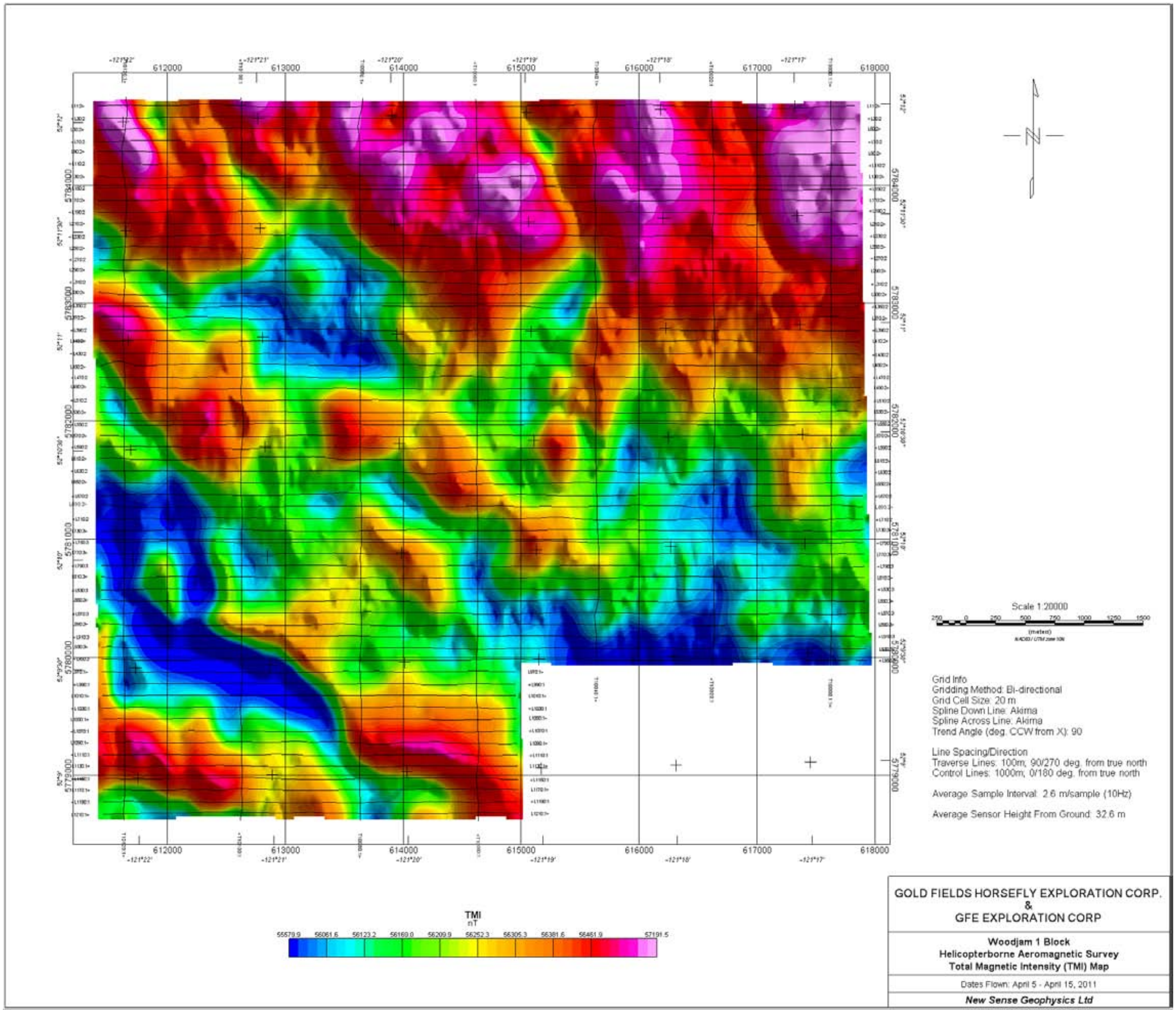
Eldorado Regional Block Image of TMI FINAL Map



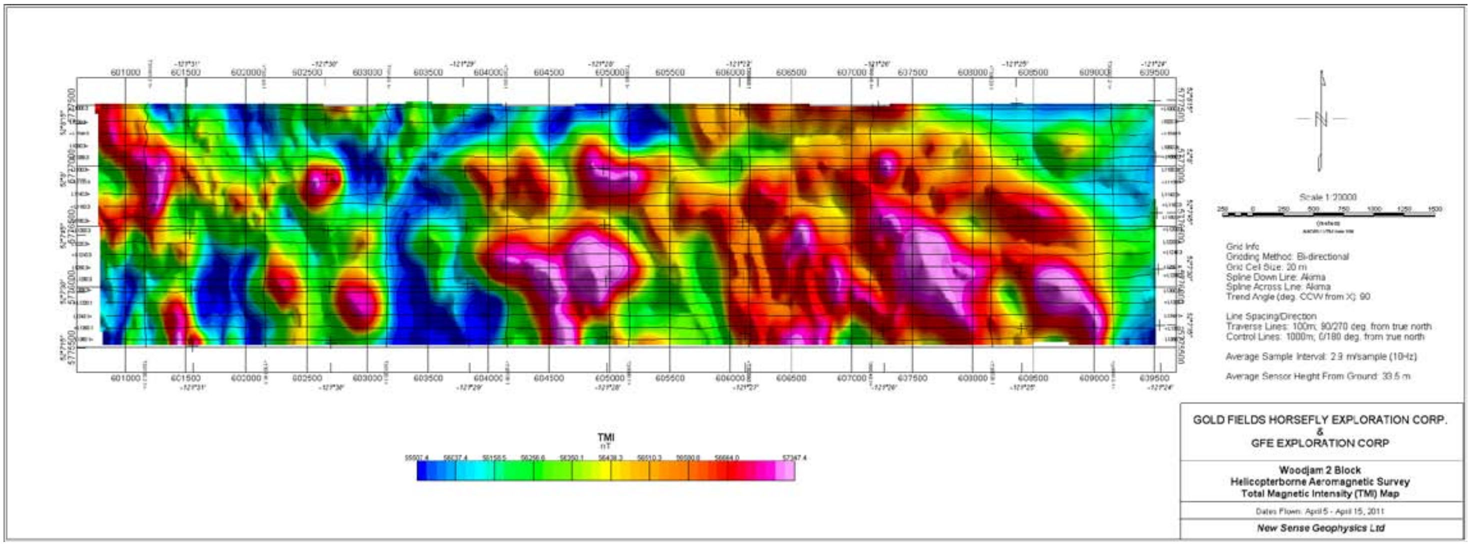
Eldorado Infill Block Image of TMI FINAL Map



Woodjam 1 Block Image of TMI FINAL Map



Woodjam 2 Block Image of TMI FINAL Map



APPENDIX D: MICROLEVELLING DESCRIPTION

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

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

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

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

DESCRIPTION:

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

To microlevel data, first run decorr.gx, then miclev.gx. decorr.gx offers two options for the grid of the channel to be microlevelled. If a grid prepared from this channel already exists, it may be specified, and when prompted to overwrite, the user should answer no. If the user wishes to prepare a new grid of the channel to be microlevelled, the minimum curvature gridding algorithm (rangrid.gx) is applied. The advanced button provides access to the standard minimum curvature gridding parameters. Once the gridding is completed, decorr.gx applies a directional high-pass filter (see end note) perpendicular to the flight line direction, in order to produce a decorrugation noise grid. (The default grid cell size is 1/5 of the line spacing. The user may specify a different cell size if desired. A smaller cell size will give a more accurate result, but a larger cell size will make the gx run faster and use less disk space.) The noise grid is then extracted as a new channel in the database (default name is "dcor_noise"). This channel contains the line level drift component of the data, but it also contains some residual high-frequency components of the geological signal. miclev.gx applies amplitude limiting and low-pass filtering to the noise channel in order to remove this residual geological signal and leave only the component of line level drift, which is then subtracted from the original data to produce a levelled output channel named "miclev".

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

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

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

1) Copy the tie line values to the microlevelled channel.

2) Use intersct.gx to find cross-difference values for the microlevelled data.

3) Use xlevel.gx to load these cross-difference values to the tie lines.

4) Apply fulllev.gx to the tie lines. The output will be a set of tie lines that matches the microlevelled traverse lines at all inter-

sections.

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

Decorrugation Filter:

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

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

APPENDIX E: COPY OF THE CONTRACT

CONTRACT
FOR
A HELICOPTERBORNE AEROMAGNETIC SURVEY FOR GOLDFIELDS HORSEFLY EXPLORATION CORP. OVER WOODDJAM BLOCKS 1 AND 2 AND GFE EXPLORATION CORP. OVER ELDORADO BLOCK, BC, CANADA.

NEW-SENSE GEOPHYSICS LTD. ("NSG"), with its corporate offices at

195 Clayton Drive, Unit 11
Markham, ON, Canada
L3R 7P3

Telephone: (905) 480-1107/ (905) 480-9989
Fax: (905) 480-1207

Offers to carry out airborne geophysical services on behalf of

GOLD FIELDS HORSEFLY EXPLORATION CORP. and GFE EXPLORATION CORP. ("Client"), with its offices at:

400-1155 Robson Street
Vancouver, BC
V6E 1B5

Telephone: (604) 605-8735
Fax: (604) 605-8615

Contact: Andrew Foley, Chief Geophysicist, Denver
Telephone: (303) 796-8683

in accordance with the following description, terms and conditions.

TABLE OF CONTESTS

1. COMPANY DESCRIPTION

New-Sense Geophysics (NSG) traces its history through its current founder and president Dr. W.E.S. (Ted) Urquhart. First as Urquhart-Dvorak, which specialized in processing airborne geophysical data, to High-Sense Geophysics, which became one of the largest airborne survey companies in the world, until it was purchased by Fugro of Holland in 2000, and then to Geoexplo Limitada., which specialized in airborne geophysical consulting and quality control. This sequence spans over 30 years and leads us to NSG, continuing on in the tradition of airborne survey innovation and quality airborne data acquisition.

NSG has established its HQ office in Markham, Ontario where it operates out of a new purpose-designed and constructed 3000 square foot facility. Here it designs and manufactures its own operator-less systems made 'field-bullet-proof' by engineer Glenn Slover.

The facility itself is more advanced than what may be found in leading high tech companies anywhere. It is completely wired for production with any processing station able to share information on the internal network and processors and field people in direct voice and data communication anywhere in the world. Highly secure firewall features prevent unauthorized access and fail-safe systems prevent any potential data loss through accident, intent or act of God. Clients with authorization can view the progress of their survey on a 24/7 basis.

The company has five data processing workstations with capacity to expand to twice that. A large inventory of systems and components provides for rapid remediation of field problems with the hardware should any occur. All this equipment is rigorously tested, using the built-in network and permanently installed sensors including GPS antenna signals available to each workbench.

The company works world-wide and presently has a second office of operation in Santiago Chile where equipment is maintained and processing takes place.

The company and its personnel through its many years in airborne surveying, airborne software and hardware development, and airborne survey data processing, has dealt with literally millions of kilometres of airborne data acquired in perhaps 80 countries. NSG itself has flown, processed and interpreted more than three quarters of a million line kilometres since 2005. These have been for multi-national companies (like Rio Tinto, Barrick, Teck, and BHP), to junior mining exploration companies, to governments. All have received their data on time and to their satisfaction. And in all of its history dating back 30 years, the companies owned and run by Dr. Urquhart, who developed the concept and practice of operatorless surveying, have not had a single accident …a perfect safety record.

2. SURVEY AREA

A helicopterborne magnetic survey is to be carried out on the Clients's project areas referred as Woodjam 1, Woodjam 2 (Gold Fields Horsefly Exploration Corp.), and Eldorado blocks (GFE Exploration Corp.). The Woodjam 1 and 2 blocks are located approximately 20 Km south of Horsefly, BC, Canada. The Eldorado Block is located approximately 20 Km north of Gold Bridge, BC, Canada.

The Woodjam survey blocks are to be flown from the town of Horsefly, or another local community in the vicinity of the survey block, (see Tables 2.1 and 2.2 and Figure 2.1 for the blocks' coordinates and their location).

The Eldorado survey block is to be flown from the town of Gold Bridge or another local community in the vicinity of the survey block (see Tables 2.3 and Figure 2.1 for the block's coordinates and its location).

Table 2.1: Woodjam Block 1 Coordinates

UTM Zone 10N			
NAD83_X	**NAD83_Y**	**WGS84_X**	**WGS84_Y**
617909	5779969	617909	5779969
614928	5779969	614928	5779969
614949	5778581	614949	5778581
614521	5778571	614521	5778571
614510	5779035	614510	5779035
614083	5779025	614083	5779025
614061	5779952	614061	5779952
613634	5779942	613634	5779942
613623	5780357	613623	5780357
611486	5780357	611486	5780357
611434	5784676	611434	5784676
617799	5784676	617799	5784676

Table 2.2: Woodjam Block 2 Coordinates

UTM Zone 10N			
NAD83_X	NAD83_Y	WGS84_X	WGS84_Y
609413	5777367	609413	5777367
609451	5775500	609451	5775500
600893	5775500	600893	5775500

600855	5777368	600855	5777368

Table 2.3: Eldorado Block Coordinates

UTM Zone 10N			
NAD83_X	NAD83_Y	WGS84_X	WGS84_Y
514793	5656784	514793	5656784
517859	5656794	517859	5656794
517872	5653087	517872	5653087
515242	5653079	515242	5653079
515243	5652615	515243	5652615
514805	5652614	514805	5652614
514806	5652151	514806	5652151
514368	5652149	514368	5652149
514370	5651223	514370	5651223
513932	5651221	513932	5651221
513933	5650758	513933	5650758
513495	5650757	513495	5650757
513496	5650293	513496	5650293
513057	5650292	513057	5650292
513063	5647975	513063	5647975
512186	5647973	512186	5647973
512191	5645656	512191	5645656
508238	5645656	508238	5645656
508238	5647038	508238	5647038
507799	5647037	507799	5647037
507799	5647501	507799	5647501
507360	5647500	507360	5647500
507359	5647963	507359	5647963
506482	5647962	506482	5647962
506480	5649352	506480	5649352
506041	5649352	506041	5649352
506040	5650742	506040	5650742
506478	5650742	506478	5650742
506475	5653523	506475	5653523

507351	5653524	507351	5653524
507351	5653987	507351	5653987
507789	5653988	507789	5653988
507788	5654451	507788	5654451
508665	5654453	508665	5654453
508663	5655380	508663	5655380
509539	5655381	509539	5655381
509538	5655845	509538	5655845
511729	5655849	511729	5655849
511728	5656313	511728	5656313
513480	5656317	513480	5656317
513479	5656781	513479	5656781

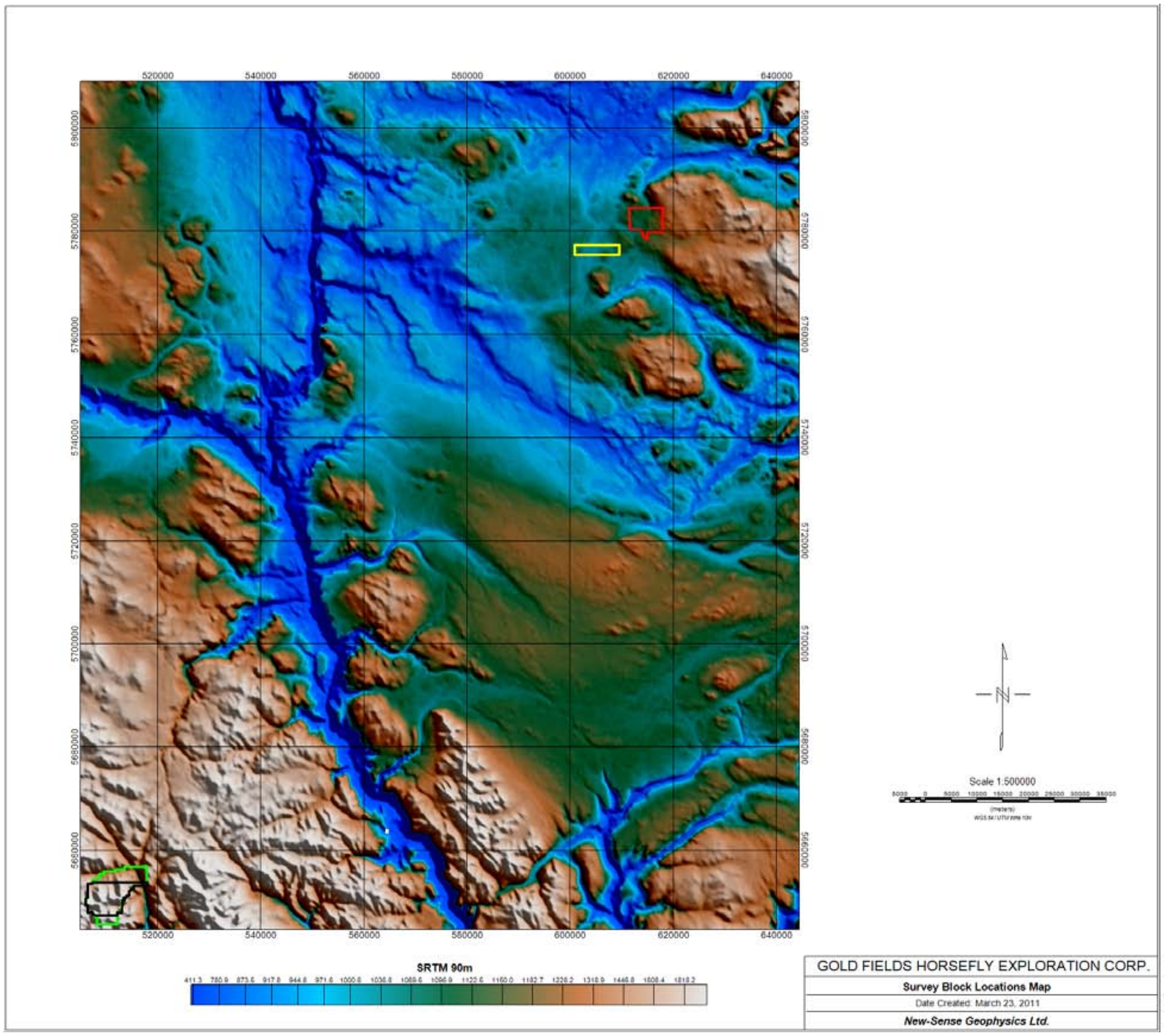


Figure 2.1 Map depicting the three survey block outlines: Woodjam Block 1 (red); Woodjam Block 2 (yellow); and Eldorado block (green) with 50m in-fill area (black). Depicted over Shuttle Radar Topography Mission (SRTM) grid with 90m resolution. Coordinate System: WGS84, UTM Zone 10N.

3. TECHNICAL SPECIFICATIONS FOR AIRBORNE SURVEY

3.1 Woodjam Block 1 Traverse and Control Lines Statistics

Traverse Line Direction:	$90^0/270^0$ from true North
Traverse Line Interval:	100m
Control Line Direction:	$180^0/0^0$ from true North
Control Line Interval:	1000m
Estimated Traverse Line KM*:	304 L/Km
Estimated Control Line KM*:	35 L/Km
Estimated Total Line KM*:	339 L/Km
Mean Terrain Clearance**:	30m nominal
Sampling Interval:	Magnetics 50 Hz/10Hz
Minimum Line Length:	3 Km

3.2 Woodjam Block 2 Traverse and Control Lines Statistics

Traverse Line Direction:	$90^0/270^0$ from true North
Traverse Line Interval:	100m
Control Line Direction:	$180^0/0^0$ from true North
Control Line Interval:	1000m
Estimated Traverse Line KM*:	163 L/Km
Estimated Control Line KM*:	17 L/Km
Estimated Total Line KM*:	180 L/Km
Mean Terrain Clearance**:	30m nominal
Sampling Interval:	Magnetics 50 Hz/10Hz
Minimum Line Length:	3 Km

3.3 Eldorado Traverse and Control Lines Statistics

Traverse Line Direction:	$90^0/270^0$ from true North
Traverse Line Interval:	mix of 100m and 50m
Control Line Direction:	$180^0/0^0$ from true North
Control Line Interval:	mix of 1000m and 500m
Estimated Traverse Line KM*:	1273 L/Km
Estimated Control Line KM*:	130 L/Km
Estimated Total Line KM*:	1403 L/Km
Mean Terrain Clearance**:	30m nominal
Sampling Interval:	Magnetics 50 Hz/10Hz
Minimum Line Length:	3 Km

*Note: The estimated Line Km distances mentioned above are estimates based on preliminary specifications provided by the client. The actual number of Line Km may vary and will be presented to the client for an approval.

**Note: The 30 meter flight height will be subject to an on-sight safety audit. In any event, the flight height will be subject to pilot safety concerns.

3.4 Tolerances

3.4.1 Traverse line separation

The pilot will fly to the best of his ability to stay within no more the 50% on either side of the theoretical flight path for a distance of 1000 meters unless obstructions or topography require greater deviations for reasons of safety. If flight-line path deviations are the result of safety concerns, local aviation authority regulations, or military requirements, NSG will not be required to fly fill-in lines.

3.4.2 Control line spacing

Control lines will be surveyed at an average interval as specified, but may be located to avoid, where possible, areas of strong magnetic gradient.

3.4.3 Flight Height

The terrain clearance will be maintained at the planned altitude of 30 meters, subject to the safety requirements, local aviation authority regulations, and/or military requirements.

3.4.4 Missing or Substandard Data

Data will be recorded digitally in the aircraft and at the ground station. Isolated errors, spikes, and short non-sequential gaps consisting of a few points, will be corrected by interpolation.

3.4.5 GPS

GPS will be used for navigation.

3.4.6 Diurnal

Magnetic diurnal activity will be monitored at the base station. If the magnetic activity exceeds 20 nT per 2 minute period, a flight will not depart until the activity has returned to levels below this rate. Once a flight has started it will not be aborted due to diurnal activity.

3.4.7 Speed

The aircraft will maintain a constant airspeed during the survey, with the exceptions where wind direction and/or intensity, or topography will make it impossible to do, while keeping the aircraft safely on line.

3.4.8 Re-flights

Any flight lines or parts of flight lines with data outside the above tolerances will be considered for re-flights. All re-flown lines or portions of lines will be tied to the closest control lines at both ends.

4. PAST PERFORMANCE OR EXPERIENCE AND QUALIFICATIONS

4.1 Organizational experience

NSG provides high quality airborne magnetic/gradiometer and spectrometer surveys using fixed-wing and helicopter platforms. The company is owned and operated by W. E. S (Ted) Urquhart Ph.D. who was the founder and President of High-Sense Geophysics Limited that was sold to Fugro in 2000. After a five-year non-compete period, NSG was inaugurated to re-enter the airborne survey industry to carry on the tradition of providing innovative technologies focusing on collecting the highest quality airborne geophysical data in the safest possible manner.

NSG operates from two offices, one in Markham, Canada where its equipment is manufactured, tested and dispatched throughout the world; the other is in Santiago, Chile where NSG offers airborne geophysical services in Spanish to its South American clients.

NSG has performed airborne geophysical surveys in Africa, North America, Europe, the Middle East and South America. NSG has flown in excess of 700,000 line km in the last 3 years for clients such as major companies like: USGS, BHP Billiton, PG&E, Kennecott, Teck Cominco, Barrick Gold, Kinross, Gold Field, etc.

4.2 References of previous surveys

Dr. V. J. S. (Tien) Grauch, Scientist in charge, *U.S. Geological Survey*
Phone: +1 (303) 236-1393
Email: tien@usgs.gov

Donald Hinks, Project Geophysicist, *Kennecott Exploration Company*
Tel +1 (801) 204 3404
Cell +1 (801) 638 8528
Email: donald.hinks@riotinto.com

Peter Mills, BHP Billiton Ltd.
Tel: + (976) 11 323033 x103
Email: peter.j.mills@bhpbilliton.com

4.3 Qualifications of the personnel and pilots

4.3.1 NSG representative

NSG conducts surveys with an operatorless system and as a result typically sends only one field geophysicist on the job site who possesses good knowledge in not only QC/QA, data processing but in the equipment maintenance as well. At this stage it is planed that NSG representative on the job site would be Mr. Sean Plener with Mr. Andrei Yakovenko being the general project manager under the oversight of Dr. William E. S. (Ted) Urquhart

Field:

Mr. Sean Plener is detail oriented specialist with international and domestic survey and mapping experience and a background in Physical Geography and Earth and Atmospheric Science. Sean has been working with New-Sense since 2007 on both airborne FW and Helicopter total field magnetic and radiometric surveys in different parts of North America and South America.

Geophysicist:

Mr. Yakovenko, Andrei, has been responsible for fixed wing and helicopter airborne operations including permanent, contract, and air crew supervision, logistics, data QA/QC, data processing, and reporting.

He is a tri-lingual, solutions oriented specialist with international and domestic survey and mapping experience, with a background in geology, underwater, land-based archaeology, and geophysics. Currently a Masters candidate in geophysics at McMaster University, Andrei obtained his B.Sc. (Honors) from the University of Toronto. He is skilled in geophysical data processing using Oasis Montaj and coordinating multiple airborne projects. Andrei has authored multiple scientific publications.

Office supervision:

Dr. Urquhart has over 40 years of experience in geophysics, during which time he has been involved in field surveys, operations, management, data quality, safety, data enhancement, compilation and interpretation for various projects throughout the world. Ted was an owner and president of High-Sense Geophysics Ltd. (the third largest geophysical airborne survey company in the world). He has participated in projects as diverse as oil basin studies, mineral and diamond exploration and radioactive satellite fragment recovery. Academically, Ted has conducted research (M.Sc., Ph.D., and professionally) into the correlation of magnetic anomalies with geological factors on both a large and small scale.

5. NSG'S QUALITY CONTROL

During data acquisition, the system will be monitored by the field QA/QC personnel to ensure that the equipment is secure and unchanged. If equipment has been noted to shift or a mechanical part of the aircraft has changed, another FOM will be flown.

Base station and survey flight data is collected immediately after each flight and duplicate copies made. Field staff verify completeness of flown lines, note and log any deviations from the flight path, identify (manual & 4th difference algorithm) and remove noise spikes (note: raw data is maintained), magnetic compensated channels created, daily progress report updated and posted for client, complete data set sent to NSG.

The iNAV V3 system, used for both flight and base station systems, store real time data on two independent storage media (hard disk, and a flash memory device). In the event that one of the devices fails or data were corrupted, a backup remains intact.

Post field production is done on a day-by-day basis. After the field data QA/QC process described in sections 7.4.1 and section 7.4.2, the data is sent to NSG's secure FTP. The post field QA/QC and leveling will be done by either Andrei Yakovenko or Dr. Ted Urquhart. The field staff is in contact with the in-house processor every evening to ensure data was received and to discuss previous flights. If there is an issue, the field staff can be reached by cell or satellite phone to make the necessary corrections before production continues. This immediate processing of the data to pre-final stages, benefits the client in three very important ways: First, there are multiple levels of personnel monitoring the survey data in a short period. If something is missed by the field staff, it will be caught by our in-house personnel before the survey progresses much further; second, we can update the client with current pre-final maps so areas of interest can be discussed and in-fills or re-flights can be planned before the survey lines are completed, thereby minimizing standby days; finally, the pre-final maps are ready the day after flying is completed and can be submitted for the clients approval.

The final products will be prepared as to the contract's obligations, section 8, and with Client's consent on all the data processing steps and procedures. A first version of the final products will be delivered to Client or other client representative for a review and approval.

For additional Data Processing and QA/QC information refer to the following sections regarding:

- Procedures including measures for aircraft's aeromagnetic system calibration (refer to sections 7.2.)
- Inflight data acquisition (sections 7.1 (except 7.1.4, 7.1.9, 7.1.10), 7.2, and 7.3)
- Flight path location (section 7.1.7)

- Ground magnetometer data acquisition (section 7.1.4)
- Data processing and map preparation (sections 7.4 and 8)

6. EQUIPMENT SUITABILITY AND CONTINGENCY PLAN

6.1 Availability and quality of proposed data acquisition and processing equipment

Aircraft:

A Bell 206B or similar helicopter provided by Northern Air Support based in Kelowna, BC, Canada will be used*.

*Note: the helicopter operator may be changed depending on helicopter availability, costs and other considerations.

The aircraft with its field crew will operate from the town of Horsefly for the Woodjam blocks and from the town of Gold Bridge for the Eldorado block (see section 2) and be using a certified fuel truck or fuel drums for refueling.

The aircraft will be limited to VFR flying conditions. All other conditions will be left to the discretion of the pilot in command.

Data Acquisition:

NSG builds and maintains its own proprietary data acquisition systems known as iDAS. The iDAS system features the KroumVS Instraments KMAG4 magnetometer counter and the KANA8 analog to digital converter. The systems are built with a wide range voltage input (9V to 36V) to accommodate a variety of aircraft power supplies.

The iDAS system uses sophisticated software to provide an autonomous "Operatorless" system resulting in a SAFER survey environments by removing the need for an operator on board the aircraft.

The systems will be available within two weeks of the signing of the contract.

For the data processing NSG is using Geosoft Oasis montaj with a number of build in GX scripts.

6.2 Electronic navigation

Pilot Friendly Navigation display (PI) delivers all the navigation and control features necessary for the pilot to safely maintain the highest quality flight line specifications without additional safety risk of having an operator on board the aircraft (see also section 7.1.7).

6.3 Safety Plan

Safety is the number one priority at NSG. NSG is an active member of the International Airborne Geophysics Safety Association (IAGSA)

Prior to mobilizing to the job site, IAGSA Risk Analysis and NSG Job Safety Plan will be prepared in the Markham office. There are areas of the report that require a physical presence on the job site (i.e. reconnaissance flight, identifying local hazards, etc.). At the job site, before each departure, the pilot will contact the local air traffic controller.

Prior to flying the first production line, a safety meeting is held by a NSG representative where each of the reports is explained to all members of the survey crew. A reconnaissance flight will then take place and the IAGSA Risk Analysis and NSG Job Safety Plan will be completed.

Every Sunday, a weekly safety meeting takes place where any and all the safety concerns and issues during the past week are brought to attention and logged to a weekly safety report.

Pilot safety is enhanced by the use of a flight following system that provides updates at 2-minute intervals on the GPS location of the aircraft. This information is monitored in real time on the internet by authorized personnel. In case of an emergency the pilot could press a “Panic Button” connected to the Flight Following and the signal will be transmitted at around 10 sec. intervals or less, which would drastically reduce the search area in a case of emergency landing.

The client will be provided with a login for real time monitoring of aircraft activities through this Flight Following System.

In addition, the Flight Following has an integrated satellite phone that is connected directly to the pilot’s headset. This minimizes any distraction to the pilot when sending or answering a call.

Prior to the flight’s departure, a NSG representative records all the information regarding the aircraft status, such as time of departure, endurance, fuel level, etc.

Once in the air, NSG representative monitors the aircraft at least once every half hour. In case of internet problems, a call will be given right away to the satellite phone integrated to the pilot’s headset and once every hour.

If the flight following signal is lost and the pilot cannot be reached by satellite phone, then NSG’s emergency response procedure is initiated (detailed in the NSG Job Safety Plan).

The aviation company will adhere to all the standards and requirements for local approved air operators.

In summary:

- NSG is active members of International Airborne Geophysics Safety association (IAGSA)
- On each job NSG completes both IAGSA Risk Analysis and NSGs Job Safety Plan forms.

- NSG conducts daily safety meetings with the crew before any flying takes place.
- A Flight Following system will accompany NSG iDAS system that provides updates on every 2 minute intervals, which could be monitored through internet access.
- In addition, the Flight Following has an integrated satellite phone that is connected directly to pilot’s headset. Thus minimizing any distraction if pilot decides to send or receive a call.
- The client will be provided with a login for real time monitoring of the helicopter activities through the flight following system.

6.4 Safety Record

No accidents or near accidents have ever occurred at NSG. Since its inception, the company has flown over 45 magnetic and/or radiometric surveys totaling well over half a million line kilometers without an accident.

In addition, High-Sense Geophysics formed in 1993, owned by NSG president Dr. Ted Urquhart, also had an accident-free history. High-Sense rose to become one of the world’s largest airborne survey contractors and had met and exceeded the rigorous safety standards of BHP, Shell, and Phillips, among others. It had performed surveys without incident or accident in difficult areas including Vietnam, China, Mongolia, Mauritania, Democratic Republic of the Congo, Brazil, and Sudan.

7. *TECHNICAL APPROACH*

7.1 AIRBORNE AND GROUND INSTRUMENTATION

7.1.1 Aircraft Type

The aircraft/s allocated to conduct this survey is a Jet Ranger Bell 206B helicopter (or different see Section 6.1) with a fix mount stinger assembly with a Cesium magnetometer mounted in it.

7.1.2 Geophysical Flight Control System

A geophysical flight control system, designed and built by NSG will be provided. This system will control, monitor and record the operation of all the geophysical and ancillary sensors.

7.1.3 Airborne Magnetometer

The magnetometers will be cesium sensors, operated in strap down stinger mount. The orientation of the sensor is adjustable, to provide optimum coupling with the earth's field on reciprocal headings. The magnetometer has a sensitivity of better than 0.01 nT at a sampling interval of 0.1 s. The magnetometer has the capability to measure ambient magnetic fields in the range of about 100 to more than 100,000 nT.

The airborne magnetometer is supplemented with an 18-term digital compensation system that uses the input from a 3-axis fluxgate to determine the aircraft's attitude and rate of change with respect to the earth's magnetic field. The compensation system identifies the permanent, induced and eddy current magnetic contributions of the aircraft and provides a correction to be applied to the raw magnetic data to remove the maneuver noise.

A FOM will be calculated by summing the absolute errors of each of the 12 maneuvers and will be less than 3 nT.

7.1.4 Ground Magnetometer

Scintrex Cesium CS3 or GSM19 Overhauser magnetometers will be operated at the base of operations within or near the survey area in an area of low magnetic gradient and free from cultural noise. The sensitivity of the ground magnetometer will be equal to better than 0.1 nT. Data will be recorded continuously every 1 second (or a rate defined by the client) throughout the survey operations in digital form. Both the ground and airborne magnetic readings are automatically time stamped with GPS time to within 0.005 seconds ensuring a very high degree of correlation based on broadcast GPS satellite time.

7.1.5 Radar Altimeter

A Terra 3500 radar altimeter will be operated in the aircraft throughout the survey to provide ground clearance information. The altitude will be recorded every 0.1 second or better. This instrument has a linear performance over the range of 0 to 2500 feet.

7.1.6 Fluxgate Magnetometer

To achieve quality compensation NSG uses a Bartington Mag-03 Three Axis Magnetic Field Sensors. These compact, high performance fluxgate magnetometers with integral electronics provide reliable precision measurements of static and non-static magnetic fields in three orthogonal axes. The magnetometer is mounted inside the stinger assembly.

7.1.7 GPS Navigation

A 16-channel GPS navigation system will be used for navigation and flight path recovery. The Ublox RCB-LJ GPS receiver board is powered by the ANTARIS® positioning engine.

The leading ANTARIS® GPS Engine provides excellent navigation performance under dynamic conditions in areas with limited sky view like urban canyons, high sensitivity for weak signal operation without compromising accuracy, and support of DGPS and multiple SBAS systems like WAAS and EGNOS. The 16 parallel channels and 8192 search bins provide fast start-up times. The aiding functionality accelerates start-up times even further. The low power consumption and FixNow™ power saving mode make this product suitable for handheld and battery-operated devices.

7.1.8 Field Data Verification System

NSG will provide a complete PC based magnetic map compilation facility, to serve as a field verification system The PC computer based system is equipped with all the software necessary to produce preliminary data images in the field. Data will be provided to the client in a Geosoft format.

The digital data records will be verified at the project site to confirm that data recording has taken place within specifications. All raw digital data recorded in flight and on the ground station magnetometer will be duplicated on site to prevent loss, and stored in separate locations.

In the base where there is e-mail connection, data will be sent on a daily basis for further examination in the head office where areas of infill will be chosen.

7.1.9 Flight Following System

NSG places the highest priority on safety and uses satellite tracking and communication technology to monitor all its survey flights. The aircraft will be equipped with Latitude Technologies Skynode S200, a system that includes satellite phone, flight tracking, and messaging transceiver. This system uses the Iridium satellite network, which provides both voice and data communications between the aircraft and ground stations.

The S200 system can be set up for different time frames; it now automatically updates its position at least once every 2 minutes allowing NSG's field or office staff to monitor the progress of the survey flights. All flight staff are trained in the use and the operation of the S200 system.

During the survey, if the pilot experiences any problems with operation of the survey equipment or encounters any other difficulties, he/she can call the field or office staff for support through the satellite phone, which is integrated into the pilots head set. In the event of flight operations problems, field staff can often troubleshoot and correct difficulties allowing survey flights to continue uninterrupted.

In the event of an emergency the pilot may press the "Panic Button" which will cause the system to immediately transmit the location and heading of the aircraft and will continue to transmit the current position of the aircraft continuously at around 10 sec. intervals until the emergency system is turned off.

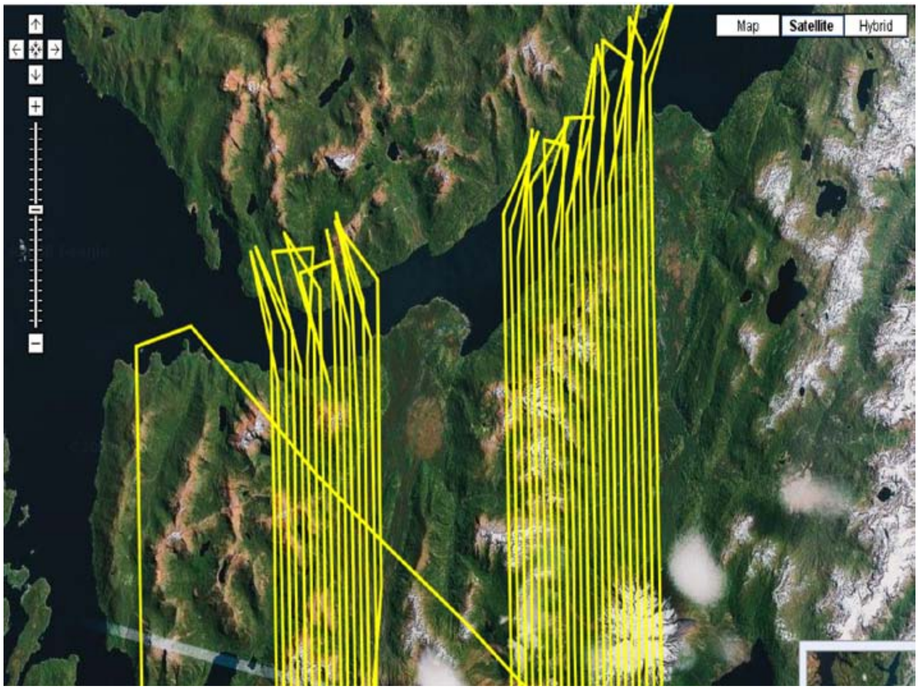


Figure 7.1 Screenshot of Flight Following Through Internet Web Browser

7.2 INSTRUMENT CHECKS AND CALIBRATIONS

Failure to meet the specifications in any check or calibration test will be cause for corrective action by NSG or approval of the Client before survey operations can be undertaken.

7.2.1 Magnetometer

Figure of Merit (FOM)

A test will be flown on-site prior to the survey to determine the FOM of the installed magnetometer. The system will be flown on the four cardinal headings doing a pitch, roll, and yaw, maneuver on each. The FOM will be calculated by summing the absolute errors of each of the 12 maneuvers and will be less than 3 nT.

7.2.2 Altimeter

Checks of the radar altimeter calibration will be undertaken above the base airstrip or some other suitable location with known elevation and flat terrain.

7.3 DATA RECORDS

7.3.1 Digital Records

The airborne data acquisition system will record the following information digitally in a format that enables the recording of each variable over its full dynamic range:

Fiducial count
GPS UTC time
GPS latitude, longitude, UTM easting, northing and elevation above ellipsoid
Raw magnetic total field
Calibrated radar altimeter output
Three Fluxgate channels

The base station will record the following information digitally in a format that enables the recording of each variable over its full dynamic range.

GPS time (used as fiducial number)
GPS raw satellite range information
Raw magnetic total field

All survey parameters including raw magnetic total field, electronic positioning, radar altimeter, and time and fiducial markers will be recorded digitally during data acquisition in flight. The magnetic base station will record total magnetic field and GPS time.

The data acquisition system organizes the data in a form directly suited to building the processing database. This digital file structure has for each traverse and control line a unique line number and segment number. The base station magnetic profile and GPS coordinates are added to the database using GPS time for alignment.

7.4 DATA COMPILATION AND MAP PRESENTATIONS

The NSG Field-Mapper PC based computer compilation system will be used to process the collected geophysical data on-site as the survey progresses. The 'on-site' processing will enable the Client to review the magnetic data to evaluate targets to make a qualified decision regarding any changes to the survey quantity and size. This will allow the selection of “in-fill” or area extensions. The preliminary data will be sent via FTP site (assuming reasonable speed internet connection is available) for the client's review at least once a week (more often should the client require).

7.4.1 Magnetic

7.4.1.1 Field Data Processing

After collecting flight and base station data, flight data will be imported to Oasis montaj using a NSG template that includes all project data channels. Next flight data will be windowed to only include flight path data within the survey block using custom NSG script that will be developed for the survey area.

Magnetic flight data be duplicated to ensure original raw data is not modified in any way. Profiles for the duplicated channels are then checked for visible noise spikes. Any noise spikes are then cleaned manually and interpolated. From there, field staff will run an automated script that will look for any missed noise spikes. This automated script employs a 4th difference algorithm to identify noise spikes in magnetic data. After other channels (radio altimeter, flux gate profiles etc.) are inspected for normal behavior that database is prepared for magnetic compensation. Using QC Tools, compensation coefficients are applied to the cleaned magnetometer channel and the database is saved.

From here, NSG staff will import base station data into Oasis montaj using a NSG template. Base station data is duplicated to maintain a raw channel and then checked for visible noise spikes. After noise spikes have been removed and interpolated, a 101 (or other job specific) low pass filter is applied to base station magnetic channel and the database is saved.

Next, the flight and base station databases are merged, synchronized (using the GPS clock channel recorded by both systems), compressed, encrypted and sent to NSG's secure server in Toronto, for in-office QA/QC and processing procedure.

NSG field staff from there will updated and complete all daily logs (weekly progress report, daily procedures checklist, weekly summary meeting etc.).

7.4.1.2 Post-Field

As the data being received from the field on day-to-day basis it is reviewed for QA/QC once again to insure that nothing got missed in the field. The data is checked for quality of magnetic signal from all sensors, including the base station magnetometer, fluxgate magnetometer, radar altimeter, line deviations etc. The profiles of the above data are plotted and checked on line-by-line basis. Algorithms like 4th-difference are used to check the CS3 signal.

After the data has been QA/QC checked it is merged with an ongoing master database. Where the following data processing steps take place:

1) Diurnal correction - subtracted directly from the aeromagnetic measurements to provide a first order diurnal correction. The mean of base station readings is added back to the data.
2) Heading error correction - using pre-constructed heading table.
3) Lag correction – to correct for sensor-to-GPS offset.
4) Simple Leveling - a survey line/control line network will be created in order to determine differences in magnetic field at the line intercepts. The differences will be calculated and tabulated, then used to guide subsequent manual leveling on any lines or line segments which required adjustments. See image below for an example of contour Total Magnetic Intensity (TMI) map produced after Simple Leveling was applied.
5) Microleveling – depending on the Simple Leveling results a Microleveling might be needed in order to further correct the data for linear line-to-line noise. The technique used will be the one developed by Paterson, Grant & Watson Limited and available through Geosoft Oasis montaj with the mutually accepted parameters.
6) IGRF correction - The total field strength of the International Geomagnetic Reference Field (IGRF) 2005 model will be calculated for every data point, based on the spot values of latitude, longitude and GPS altitude, using the 2005 model. This IGRF will be removed from the measured survey data on a point-by-point basis. The mean of IGRF readings is added back to the data.

7.4.1.3 Magnetic data filtering and gridding

An appropriate cosine filter (e.g., 21-51 points) will be applied to 50Hz raw data in order to anti-alias relatively constant frequency magnetic signal introduced by the helicopter (e.g., rotor blades). Such data will then be samples at 10Hz.

The TMI grid will be produced using bi-directional gridding technique, with 20 m cell size (or other suitable size depending on liner spacing) and Akima spline across and down lines.

7.4.1.4 Office Data Processing

All of the above calibration procedures, tests and corrections applied in the field will be reviewed for QA/QC by assigned office QA/QC and data processing person.

8. FINAL PRODUCTS

The following is the list of items that will be delivered to the Client for each block flown:

Hard copies (2 copies):

- Map of Total Magnetic Intensity (1:50,000 scale)
- Final Logistics Report

Soft copies (2 copies):

- Grid and map of Total Magnetic Intensity at 1:50,000 scale
- Final Logistics Report
- Magnetics data database in Geosoft gdb format including raw data, base station, compensated, base station corrected, IGRF corrected, heading corrected, lag corrected, simple leveled, and microleveled (optional) total field.
- Weekly and Line Progress report

9. TIME SCHEDULE

The project is scheduled to start in April-May 2011. In any event, NSG will require up to three weeks after the signing of the contract in order to make equipment and people available for the project.

.

10. TERMINATION

In the event that the geophysical platform or equipment becomes inoperable, NSG will proceed with diligence to rectify the problem within a reasonable period of time. If within the aforementioned period of time NSG fails to rectify the problem, the Client may, at their discretion, terminate the work under this Proposal in full or in part. In the event of such termination, the Client shall be obliged to pay NSG for services rendered only up to the date of receipt of a written notice of such termination and for documented expenses incurred by NSG prior to the date of receipt of termination notice, and for reasonable cancellation and demobilization costs.

11. LOCAL LICENSES, PERMITS AND CUSTOMS

Client will take the responsibility for obtaining all local licenses and permits required to perform the services on Client's name. Out of pocket costs for permitting will be reimbursed by the client.

12. GENERAL CONDITIONS

NSG will carry out the agreed services in a proper and workmanlike manner with a high standard of safety and in accordance with the laws, rules and regulations applicable to the project location.

At all times during the term of this Proposal, the NSG or its subcontractors shall carry and maintain at its own expense, work insurance protection of the kinds and in the minimum amounts set forth below:

12.1 NSG Liability Insurance

- Employer's Liability and Workmen's Compensation insurance to cover employees furnished by NSG including:

  (a) Statutory Workmen's Compensation benefits in compliance with the laws of the state, province or country in which the aircraft operations under this Proposal will be performed;

  (b) Employer's Liability to have limits of not less than $5,000,000 per person, and $5,000,000 per accident;

  (c) Employer's Liability applicable to all provisions outlined above with limits not less than $5,000,000 each person, $5,000,000 each occurrence.

- Comprehensive General Liability Insurance. Such insurance shall cover all operations in all provinces, states and countries in which the aircraft operation or services may be performed by NSG hereunder and shall include the following:

  (a) Limits of liability: not less than $5,000,000 for death or injury of any one person, $5,000,000 in the aggregate for all persons injured or killed as the result of any one accident, and $5,000,000 for loss of or damage to property resulting from any one accident.

  (b) Contractual liability coverage for NSG's obligations hereunder;

13. CHARGES AND PAYMENT TERMS

Total estimated cost for Survey and Map Production

<table>
<tr><th>Block Name/s</th><th>Line Spacing (Traverse/Control)</th><th>Estimated Total Line Km*</th><th>Price per Line Km ($CAD)</th><th>Estimated Total **/***</th><th>Mob/Demob ($CAD)</th></tr>
<tr><td>Woodjam Block 1</td><td>100m/1000m</td><td>339</td><td>$89.84</td><td><b>$ 30,455.76</td><td rowspan="3">$ 7,000.00</td></tr>
<tr><td>Woodjam Block 2</td><td>100m/1000m</td><td>180</td><td>$93.79</td><td><b>$ 16,882.20</td></tr>
<tr><td>Eldorado</td><td>100m/1000m
and
50m/500m</td><td>1,403</td><td>$75.80</td><td><b>$ 106,347.40</td></tr>
<tr><td colspan="6">Estimated Grand Total: $ 160,685.36 CAD</td></tr>
</table>

Stand-by: A $950 CAD/day will be charged if flying is not possible due to inclement weather, atmospheric conditions, labor unrest, government intervention or other stoppages beyond the control of the contractor.

The daily stand-by charge will be prorated based on the following formula:

0Km/day = $950

100Km/day = $0

It is understood that additional survey blocks might be flown for other clients at the same time as Gold Fields survey areas. For that reason, the responsibilities of the final stand-by charges would be discussed at the end of the project and ultimately would be prorated in accordance of the status of the block/s at a time of a stand-by day, total line km, and the total number of survey days per each client.

*Note: The actual total Line Km distances may be slightly less or more than estimated.

**Note: These prices are net of all local taxes.

***Note: The above quote is valid for 30 days.

Payment Schedule

An initial payment, due on signing:	**30% of selected survey Plan price**
A second payment, due on mobilization:	**30% of selected survey Plan price**
A third payment, due on completion of flying:	**30% of selected survey Plan price**
Final payment, due on delivery of final products:	**balance**

All invoices are due and payable upon submission at the Client's address indicated in Section 1 of this Survey Agreement. A service charge of 0.4 % per week on unpaid balance is payable on all overdue accounts.

The payment schedule is subject to negotiation should the proposed schedule not conform to the client's norms and regulations.

Funds will be paid by wire transfer to:

In CAD Funds

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

NEW-SENSE GEOPHYSICS LTD.	GOLD FIELDS HORSEFLY EXPLORATION CORP. AND GFE EXPLORATION CORP.
Name (print): Andrei Yakovenko	Name (print): NATHAN H. BREWER
Title: V.P. Operations	Title: Director
Date: March 25, 2011	Date: 25 March 2011
Signature: [signature]	Signature: [signature]

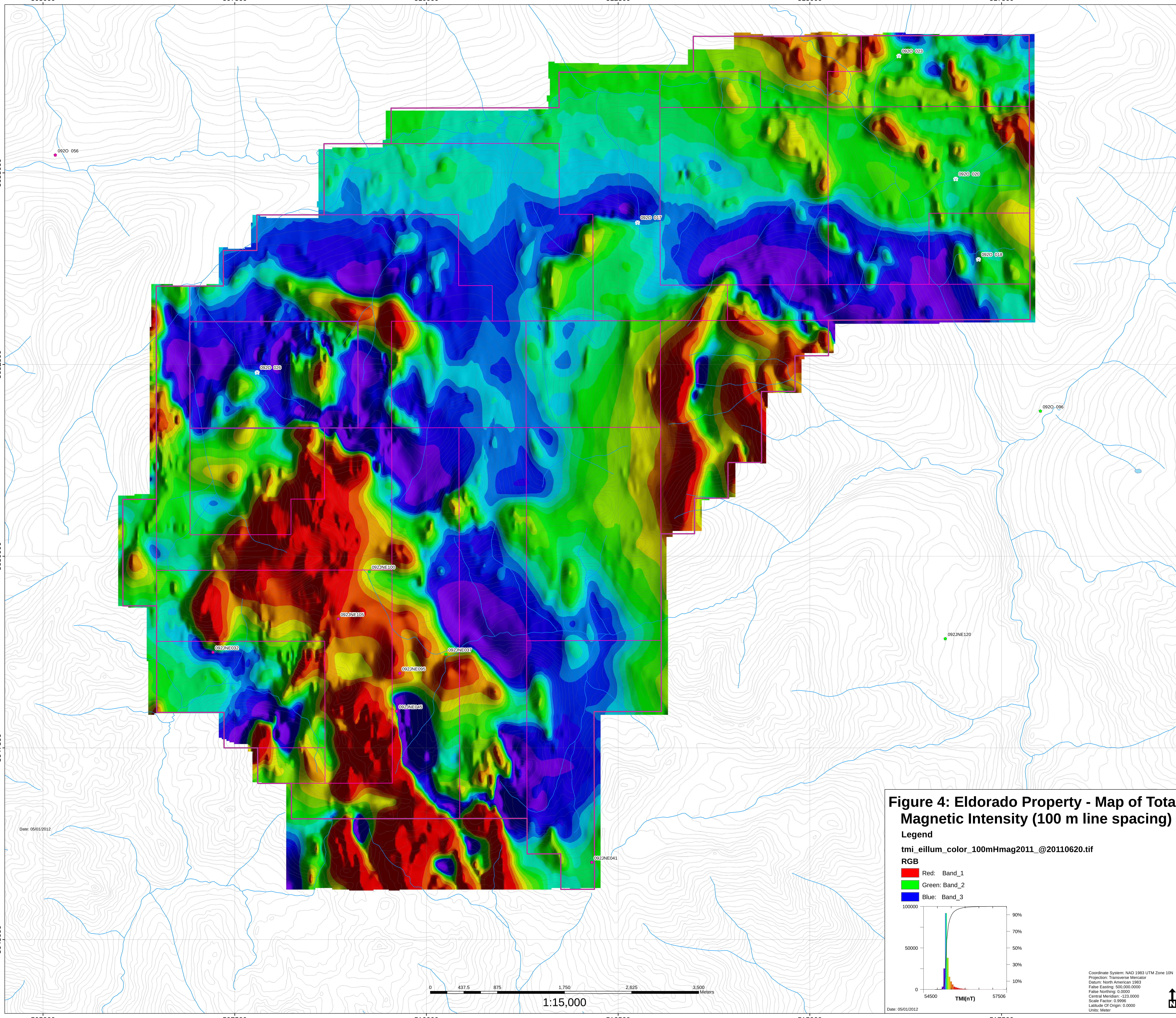


Figure 4: Eldorado Property - Map of Total Magnetic Intensity (100 m line spacing)

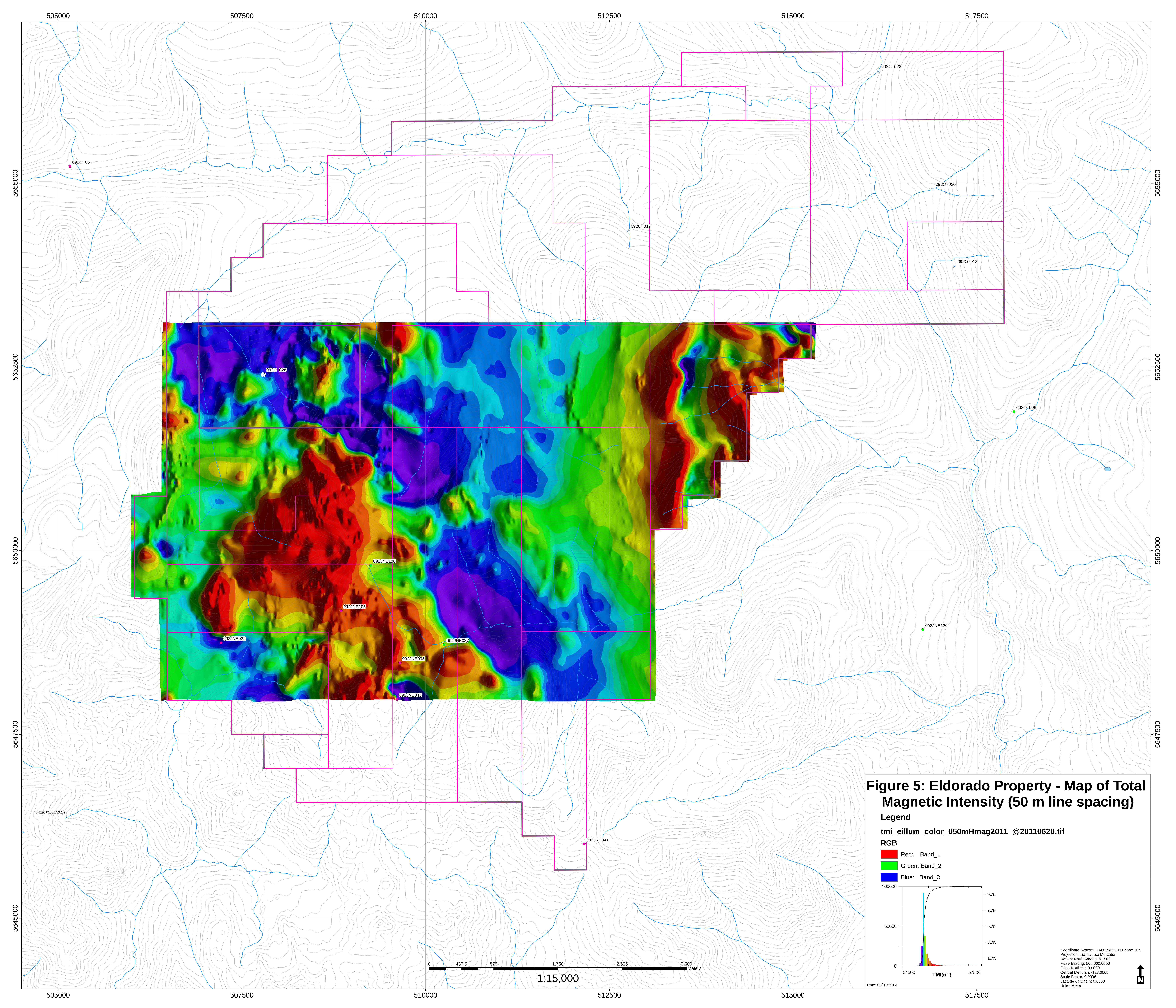


Figure 5: Eldorado Property - Map of Total Magnetic Intensity (50 m line spacing)