

Operations Report for CANDORADO OPERATING COMPANY LTD.

High Resolution Tri-Sensor Magnetic & XDS VLF-EM Airborne Survey

Detour Lake Area Project Cochrane, Ontario

December 29, 2007

Report #: B-223

Requested by: **Rene Bernard President & CEO** CANDORADO OPERATING COMPANY LTD.

> Prepared by: Charles Barrie, Managing Partner **Terraquest Ltd.**

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1. Introduction

1.1. Executive Summary

This report describes the specifications and parameters of an airborne geophysical survey carried out for:

CANDORADO OPERATING COMPANY LTD.

305 – 478 Bernard Avenue Kelowna, BC V1Y 6N7

Attention: Mr. Rene Bernard Phone: 250-878-8593 Fax: 250-979-2790

The survey was performed by:

Terraquest Ltd.,

2-2800 John Street, Markham ON, Canada L3R 0E2

Phone: 905-477-2800 ext. 22 Email: howard@terraquest.ca.

The purpose of the survey of this type is to collect geophysical data that can be used to prospect directly for economic minerals that may be characterized by anomalous magnetic or conductive responses. Secondly, the geophysical patterns can be used indirectly for exploration by mapping the geology in detail, including faults shear zones, folding, alteration zones and other structures.

To obtain this data, the area was systematically traversed along parallel flight lines by aircraft, carrying geophysical sensors and recording equipment. The lines are spaced and oriented to intersect the geology and structure so as to provide optimum contour patterns of the geophysical data.

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1.2. Survey Location

The survey is located in northern Ontario approximately 120 kilometres northeast of the town of Cochrane, ON just west of the Quebec border. The Detour River passes through the western and southern portions of the survey area. The survey area would be rectangular except that the western edge is not orthogonal. The maximum east west dimension is 5.7 kilometers and the maximum north south dimension is 3.3 kilometers. The average centre of the survey area is approximately 49 degrees 55 minutes north and 79 degrees 40 minutes west.



2. SURVEY SPECIFICATIONS

2.1. LINES AND DATA

Parameter	Specification	Instrument Precision
Mean Aircraft Speed	66.5 m/sec 240 km/hr	
Sampling Interval	6-8m (10Hz)	
Flight-line Interval	50 metres	+/- 3m
Flight-line Direction	150/330 degrees	
Control-line Interval	500 metres	+/- 3m
Control-line Direction	060/240 degrees	
Aircraft MTC	70 metres	+/- 5m
Mag Sensor MTC	70 metres	+/- 5m

2.2. SURVEY KILOMETRAGE

Survey Kilometers:	
Survey Lines	309 km
Tie (Control) Lines	31 km
Total	340 km

2.3. NAVIGATION SPECIFICATIONS

The client provided a poly file with a survey outline. The following file is the navigation parameter file for each block, and includes the survey corner coordinates (in NAD83 projection zone 17), line spacing, line direction, master line and other navigational parameters.

```
0
  NEW AREA FILE B-223_L.NME
1
  Z 17
2
     594282.0
                5529960.0
                                 AREA CORNER 1
2
                                 AREA CORNER 2
     592664.0
                5533220.0
2
     598412.0
                5533220.0
                                 AREA CORNER 3
2
     598474.0
                5530804.0
                                 AREA CORNER 4
2
     598474.0
                5530804.0
                                 AREA CORNER 5
3
     594282.0
                5529960.0
                                 WAYPOINTS 1
4
                                 NUMBER OF LINES
           104
5
          50.0
                                 SPACING, m.
     597738.9
6
                5515339.8
                                 MASTER LINE BL
7
     588477.8
                5531380.4
                                 MASTER LINE TL
8
            75
                                 MAX CROSS TRACK, m.
9
             0
       0
                   0
                                 DELTA X/Y/Z
10
             1
                                 LOG FPR EVERY 1 SECS
11 0.9996000000
                      0.0
                                 0.0 KO, X/Y SHIFT
14
           200
                                 LINES EXTENDED BEYOND AREA
16
            10
                                 FIRST LINE NUMBER
17
     596248.0
               5517922.0 330.00 MASTER POINT, HEADING
20 WGS-84
               6378137.0 298.257223563 22
                                                   ELLIPSOID
            0
21
                                 NO EQUATORIAL CROSSING
30
           20
                 9600 N 1 8 RS-232 PORT 2 INCOMING FORMAT
31
           20
                 9600 N 1 8 RS-232 PORT 1 OUTGOING FORMAT
38
            0
                                 METRIC SYSTEM
39
            5
                                 RACE TRACK
         0.00
41
                                 SYSTEM LAG, Sec.
         0.00
80
                                 PLANNED ALTITUDE, units
83
            0
                                 GPS ALTITUDE FOR VERTICAL BAR
85
          100
                                 MAX VERTICAL BAR SCALE
102
    UTM
                                 UTM X/Y SCALE
```

2.4. FLIGHT PLAN



2.5. TOLERANCES - REFLIGHT

1. Traverse Line Interval

Re-flights would take place if the flight line separation of the final differentially corrected flight path is greater than 25 metres from the intended flight path over a distance greater than 1 kilometre.

2. Terrain Clearance:

The aircraft mean terrain clearance was to be smoothly maintained at 70 metres MTC in a drape mode. Re-flights were done if the final differentially corrected altitude deviated from the specified flight altitude by +/-10m over a distance of 3 kilometres or more if, in the pilot's opinion, it was safe to do so.

3. Diurnal Variation:

Diurnal activity during the survey was limited to 10 nT deviation from a 5 minute chord.

4. GPS Data:

GPS data included at least four satellites for accurate navigation and flight path recovery. There were no significant gaps in any of the digital data including GPS and magnetic data.

5. Radio Transmission:

The aircraft pilot makes no radio transmission that interferes with the magnetic response.

6. Sample Density:

A reflight is required if the sample density along one or more of the survey lines exceeds 10 metres over a cumulative total of 1,000 metres for the magnetic survey, and 100 metres over a cumulative total of 1,000 metres for the radiometric survey.

2.6. NAVIGATION AND RECOVERY

The satellite navigation system was used to ferry to the survey sites and to survey along each line. The survey outline was supplied by the client and was used to establish the survey boundaries and the flight lines.

The flight path guidance accuracy is variable depending upon the number and condition (health) of the satellites employed. The selective availability normally imposed by the military was at a minimum during this period and consequently the accuracy was for the most part better than 10 metres. Real-time GPS correction service provided by Omnistar for South America improves the accuracy to less than 3 metres.

A digital camera recorded the ground image along the flight path with CD-ROM media. A video display screen in the cockpit enabled the operator to monitor the flight path during the survey. The GPS information is displayed along the top of the video image.

3. AIRBORNE GEOPHYSICAL EQUIPMENT

The primary airborne geophysical equipment includes three high sensitivity cesium vapour magnetometers, XDS VLF-EM and a gamma ray spectrometer system. Ancillary support equipment includes a tri-axial fluxgate magnetometer, digital camera, CD recorder, radar altimeter, barometric altimeter, GPS receiver with a real-time correction service, and a navigation system. The navigation system comprises a left/right indicator for the pilot and a screen showing the survey area, planned flight lines, and the real time flight path. All data were collected and stored by the data acquisition system. The following provides summary and detailed equipment specifications:

Aircraft	King Air 90
Equipment:	
Magnetometers	CS-2 Cesium Vapour
3-axis Magnetometer	Billingsley Magnetics TFM100-LN
Gamma Ray Spectrometer	ASIS / IRIS 256 channel
Gamma Ray Detector Packs	2048 in ³ (33.6 litres) Down (8.4 litres) Up
GPS Receiver	Trimble AG132
Radar Altimeter	King KRA 10A
Barometric Altimeter	Sensym Model 256 or equivalent
Navigation	AgNav Inc. P151
Tracking Camera	NTSC video recorded in AVI format
Magnetic Specifications:	
Lateral Sensor separation	16.12 metres
Longitudinal Sensor	10.78 metres
separation	10.78 metres
Mag Output Sample Rate	10 Hz (20 hz available with noise increase)
4 th difference noise envelope	0.10 from tail stinger
FOM index (Tail)	<1.5 nT
Sensitivity	0.001 nT

3.1. EQUIPMENT SUMMARY

3.2. SURVEY AIRCRAFT

Horizontal Gradiometer Equipped King Air 90



The Beech King Air 90 is an ideal platform for carrying out an airborne geophysical survey in these demanding environmental conditions. It is IFR equipped with twin PT6-20 turbines that will ensure reliability at both high ferry speed and slow survey speed. It is equipped with the long-range tanks capable of carrying approximately six hours of fuel.

·	
Manufacturer	Beechcraft
Model	King Air 90
Registration	N87V
Ownership	Dynamic Aviation.
Range	5.4 hours / 1100 n miles
Cruise Speed	200 Knots, 370 Km/hr
Survey Speed	288 Km/hr
Climb	1,220 ft/min
Climb sustained	~ 500 ft/min
Fuel	Jet A with cold weather additive
Fuel Consumption	60 us gal/hr 227 litres/hr
Oil Consumption	3 liter/hr

1. Aircraft Specifications

2. Aircraft Modifications

The aircraft has three seats to accommodate the pilot, co-pilot and operator, the rest have been removed. It is equipped with long-range tanks, heavy-duty tires, cargo door and full avionics.

The aircraft has been extensively modified to support a tail stinger and two wing tip extensions. The transverse separation between the wing tip magnetic sensors is 16.12 meters and the longitudinal separation to the tail sensor is 10.78 meters. Considerable effort has been made to remove all ferruginous materials near the sensors and to ensure that the aircraft electrical system does not create any noise.

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3.3. Survey Equipment and Specifications:

Data Acquisition System	Records digital data from all sensors (including GPS,
Data Acquisition System	MAG, and altimeter)
Model	2410 Pocket PC or laptop
Manufacturer	HP Ipaq
Serial Number	071-1114-00 or equivalent
Memory Card	512 M CF card
Software	SDAS by Kroum VS Instruments Ltd.
Video acquisition	Uses DIVX compression software
Video recording Via laptop PC via USB capture device	

1. Data Acquisition System

2. Magnetics:

Three high resolution cesium vapour magnetometers, manufactured by Scintrex, mounted in a tail stinger and two wing tips extensions; transverse separation of 16.12 metres and a longitudinal separation of 10.78 metres. The magnetic system is fully compensated post flight for aircraft manoeuvre noise

Sensor Type	Cesium Vapour
Model	CS-2 or CS-3
Manufacturer	Scintrex Ltd.
Resolution	0.001 nT counting at 0.1 per second
Sensitivity	+/- 0.005 nT
Dynamic Range	20,000 to 100,000 nT
Fourth Difference	0.02 nT
Recorded Sample Rate	0.1 seconds
Noise Envelope	0.10nT (Tail Mag)

3. Compensation Sensor

The fluxgate tri-axial magnetometer (which is used for compensation of aircraft motion) is mounted in midsection of the tail stinger and monitors aircraft manoeuvre and magnetic interference.

Sensor Type	Fluxgate
Model	TFM100-LN or equivalent
Manufacturer	Billingsley Magnetics
Description	Low noise miniature triaxial fluxgate magnetometer
Axial Alignment	> Orthogonality $>$ +/- 0.5 degree
Accuracy	< +/- 0.75% of full scale (0.5% typical)
Field Measurement	+/- 100,000 nanotesla
Linearity	< +/- 0.0035% of full scale
Sensitivity	100 microvolt/nanotesla
Noise	< 14 picotesla RMS/–Hz @ 1 Hz

4. Radiometrics System

Radiometrics	Gamma Ray Spectrometer
Model	GRS 410
Manufacturer	Pico Envirotec Ltd.
Crystal Manufacturer	Alpha Spectra
Downwards Volume	2048 in ³ (33.6 litres) Downward
Upwards Volume	(8.4 litres) Upward
Software	Real Time Data Collection
Energy Detection Range	50KeV to 3 MeV
Count Rate	Up to 1000,000 pps communication
Collected Spectrum	256 Channels

5. Flight Path Camera

Туре	Video (mounted in belly of aircraft)
Model	VCC-5774
Manufacturer	Sanyo

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Element	1/3 inch CCD
Lens	wide angle adaptor typically 4 mm, $\sim 60^{\circ}$ field of view

6. Digital Imaging System

Digital Imaging System	NTSC image logged onto laptop PC		
Model	USB 2000 video capture		
Manufacturer	Avermedia		
Software	DIVX		
Format	AVI multimedia format 640x480 pixel		
	Images can be captured in JPEG.		
Media	CD or DVD Disks		

7. Radar Altimeter

Туре	Radar	
Model	KRA-10A	
Manufacturer	King	
Serial Number	071-1114-00	
Accuracy	Plus or Minus 5% at 50 to 2,500 feet	
Radar Output	Analog for pilot, converted to digital for data acquisition	

8. Barometric Altimeter

Туре	Barometric	
Model	LX18001AN	
Manufacturer	Sensym	
Source	coupled to aircraft barometric system	

9. Data Acquisition

Data Acquisition	Recording only	
Model	IPAQ 2410 Pocket PC	
Manufacturer	Hewlett Packard	
Operating System	Microsoft Windows Mobile 2003	
Processor	Intel PXA270 520 MHz, 128 MB memory	
Ports	Serial communication	
Display	3.5" transflective colour, Up to 4 fields	
Recording Media	removable memory cards Compact Flash type II	
Recording Program	SDAS software by Kroum VS Instruments	

Magnetometer Processor	Stand alone unit	
Model	KMAG4	
Manufacturer	Kroum VS Instruments	
Input Range	3 ms – 10,000 ms	
Sampling	10 ms - 1,000ms	
Bandwidth	No input filtering	
Resolution	0.005 nT	
Ports	Two R232; one to GPS, one to DAS instrument time	
Output	Instrument time, GPS and up to 4 magnetic fields in pT	

10. Magnetometer Processor

11. Analogue Processor

Analogue Processor	Stand alone module – 2 modules per system	
Model	KANA 8	
Manufacturer	Kroum VS Instruments	
Channels	Each module has 8 differential channels, 24 bit ADC	
Video	Video overlay board	
Serial Ports	CPU and GPS interfaces	
Video Ports	In/out ports	
Sampling	Selectable sampling for each input type as required	
Analog Inputs	Radar & barometric altimeters, temp, VLF-EM, video	

12. Navigation System

Navigation System		
Model	P151	
Manufacturer	AgNav Inc.	
Operating System	Windows	
Microprocessor	CPU Pentium based	
Ports	RS232 for all devices	
Graphic Display	Colour Screen	
Pilot Display	P202: position, left/right, navigational info	

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GPS Differential Receiver		
Model	AG 132	
Manufacturer	Trimble	
Antenna	L1/L2	
Channels	12	
Position Update	0.2 second for navigation	
Correction Service	Real time correction service subscription – Omnistar	
Sample Rate	1 second	
Accuracy	~ 3 meters	

13. GPS Differential Receiver

14. XDS VLF-EM System

The XDS VLF-EM System is currently being developed by Terraquest Ltd. and is included along with commercial surveys primarily to test and further develop the system but also to assist the client in their exploration program. It uses 3 orthogonal air-core coils mounted in the pod of the tail stinger, and coupled with a receiver-console, tuned to a range of 22.0 to 26.0 kHz thereby including both Cutler Maine NAA frequency 24 kHz and Seattle WA NLK frequency 24.8 kHz. Recorded parameters are the unfiltered X, Y and Z directions of the VLF-EM field.

VLF / EM		
Model	XDS	
Manufacturer	Terraquest Ltd.	
Primary Source	Electro-Magnetic field component radiated from	
	government VLF radio transmitter	
Parameters Measured	X, Y and Z components, absolute field	
Frequency Range	22.0 - 26.0 kHz	
Gain	Constant gain setting	
Filtering	No filtering	

4. Base Station Equipment

4.1. BASE STATION MAGNETOMETER

High sensitivity magnetic base station data was provided by a cesium vapour magnetometer logging onto a computer and with time synchronization from the GPS base station receiver.

The magnetometer was the same as used in the aircraft, a CS-2 magnetometer manufactured by Scintrex. The magnetometer processor was a KMAG manufactured by Kroum VS Instruments and the data logger was an iPAQ PDA by Hewlett Packard. The counter was powered by a 10VAC 50/60hz to 30VDC 3.0 amp power supply with an internal 12VDC fan. The logging software SDAS-1 was written by Kroum VS Instrument Ltd. specifically for the pocket pc hardware. It supports real time graphics with selectable windows (uses two user selectable scales, coarse and fine). Time recorded was taken from the base GPS receiver. Magnetic data was logged at 2Hz. Data collection was by RS232 recording ASCII string and stored on flash card.

Magnetometer Type	Cesium Vapour
Model	CS – 2
Manufacturer	Scintrex
Sensitivity	0.01 nT
Noise Envelope	0.05 nT
Sampling Interval	1 second
Minimum Range	50 -3,500 ft

4.2. BASE STATION GPS RECEIVER

Model	12 channel GPS	
Manufacturer	Deluo	
Туре	L1, C/A code	
Antenna	Built in patch	
Logging Rate	1 per second	
Power	5 VCD taken from iPAQ power supply	

5. TESTS AND CALIBRATIONS

5.1. MAGNETIC FIGURE OF MERIT

Compensation calibration tests were performed to determine the magnetic influence of aircraft maneuvers and the effectiveness of the aircraft compensation method. The aircraft flew a square pattern in the four survey directions at a high altitude over a magnetically quiet area and perform pitches (\pm 5°), rolls (\pm 10°) and yaws (\pm 5°). The sum of the maximum peak-to-peak residual noise amplitudes in the total compensated signal resulting from the twelve maneuvers is referred to as the Figure of Merit (FOM) index.

5.2. RADAR ALTIMETER CALIBRATION

A radar altimeter calibration was done over the runway.

6. LOGISTICS

6.1. PERSONNEL

The contractor supplied the following properly qualified and experienced personnel to carry out the survey and to reduce, compile and report on the data:

Field:	Pilots Operator	Jordan Yeo, Weston Thomas Phil Mikkonen
Office:	Senior Geophysicist Manager	Allen Duffy Charles Barrie

6.2. FIELD REPORTING

The aircraft arrived in Cochrane, ON on February 28, 2007. The base station was set up and the FOM and calibration flight was on March 1^{st} . The survey was flown concurrently with another survey to the south such that the traverse lines continued from one survey to the next. The data were separated later for each client.

A gamma ray spectrometer was also on board during this survey; although it was not requested by contract, the data are available for purchase.

The survey was completed successfully in 8 flights N87V200-2007 over a total of 17 days from March 1^{st} to 17^{th} including all tests and calibrations. Poor weather prohibited survey on 7 full days and a few half days. Downtime for aircraft maintenance included 1 full day and for equipment malfunction 2 days.

6.3. BASE OF OPERATIONS

The main base of operations was at Cochrane airport; the ferry distance is 120 kilometres. The base station (combined high sensitivity magnetic and GPS) was set up at the airport as far away from cultural interference as possible. Gear was stored in Wayne's hanger

6.4. ACCOMMODATION

Accommodations for the crew were the responsibility and cost of Terraquest. The crew was housed initially at Thriftlodge but changed to Best Western on March 4th. High speed internet was available and most of the time it was reliable.

7. Data Processing

7.1. DATA QUALITY CONTROL & PRELIMINARY PROCESSING

Throughout the data acquisition period, the data were monitored and reviewed thoroughly for quality control and tolerances on all channels. This included any corrections to the flight path, making flight path plots, importing the base station data, creating a database on a flight-by-flight basis, and posting the data. All data were checked for continuity and integrity. Any errors or omission or data beyond tolerances were flagged for re-flight and the crew was notified, ready for their flight in the morning.

Although not requested by contract, Terraquest Ltd. had a gamma ray spectrometer on board during this survey. Despite the presence of snow coverage, preliminary processing of the radiometric data indicates that the results have some integrity. These data are available to purchase.

7.2. FINAL MAGNETIC DATA PROCESSING

In the first step the raw magnetic data was compensated for aircraft motion effects using data from the fluxgate sensor. The lateral magnetic gradient was calculated by subtracting the left wing sensor reading from the right wing sensor reading and dividing the resulting value by the tip-to-tip separation (16.12 metres), yielding the measurement expressed as nT/m. The longitudinal gradient was similarly calculated by subtracting the tail sensor measurement from the average of the wing-tip values normalized by the wing-centre to tail sensor separation (10.78 metres). Both gradients were "DC shifted" by subtracting the median value on a line-by-line basis and converted from aircraft-centric to survey grid orientation by selectively inverting (multiplying by -1) in the south and westbound directions. The gradient data was subsequently verified by generating a Reconstructed Total Field (RTF) grid using the Lateral and Longitudinal data grids as input. The RTF is a coherent, detailed and well leveled product but does not contain the low to lower-mid wavelength components; because the units are pseudo nT it should not be used for quantitative modelling.

In the final correction process, the compensated tail sensor magnetic data were initially corrected with standard tie-line intersection leveling. Tie line leveled Total Field Magnetic data from the Left Wing, Right Wing and Tail Sensors were subsequently subjected to an enhanced micro-leveling procedure, operating on the regional magnetic component (isolated by removal of the reconstructed Total Field). Leveling in this manner minimizes "damage" to higher frequency geologic anomalies and improves upon residual errors left by traditional tie-line leveling. The vertical magnetic gradient was subsequently calculated from the final processed total magnetic field data grid (originating from the Tail Sensor). The finalized datasets were gridded with minimum curvature procedure with a cell size of 10 metres.



7.3. XDS VLF-EM DATA PROCESSING

The Terraquest XDS system produced relatively consistent line-to-line and flight-to-flight results. The Terraquest XDS-VLF system is currently in the developmental stage and as such only basic processing has been performed on this data. The x, y and z components of the XDS-VLF-EM data in the range of 22.0 to 26.0 kHz (which include Cutler and Seattle transmitter signals), were inverted, normalized, mean leveled and micro-leveled. A 5 point positive Fraser Filter was applied to the vertical field. The data were presented as contour plots with a grid cell size of 10 metres of the a) Line Field (Vcx) coil, b) Ortho Field (Vcp) coil, and c) Vertical Field (Hcp) coil.

The following maps show the Line, Ortho and Vertical components respectively.







7.4. LIST OF FINAL PRODUCTS

Three copies of the following colour maps and two copies of black and white were produced at a scale of 1:10,000 projection NAD 83 UTM zone 17:

- Map 1: Flight Path
- Map 2: Total Magnetic Intensity of Tail Sensor (nT)
- Map 3: Calculated Vertical Derivative of Tail Sensor (nT/m)
- Map 4: Measured Lateral Magnetic Gradient (nT/m)
- Map 5: Measured Longitudinal Gradient (nT/m)
- Map 6: XDS VLF-EM Line Component
- Map 7: XDS VLF-EM Ortho Component
- Map 8: XDS VLF-EM Vertical Component
- Map 9: Digital Terrain Map (metres)
- Digital grid archives on CD-ROM in GEOSOFT
- All GEOSOFT MAP files used to generate the above listed final maps
- Digital Profile Archives on CD-ROM in GEOSOFT GDB format (compatible with 4.1 or higher)

8. SUMMARY

An airborne tri-sensor, high sensitivity magnetic and XDS VLF-EM survey was performed at 70 metre mean terrain clearance, 50 metre line intervals, 500 metre tie line interval, with data sample points at 6-8 metres along the flight lines. A high sensitivity magnetic base station located at the airport in Cochrane, ON recorded the diurnal magnetic activity and reference GPS time during the survey for adherence to survey tolerances.

The data were subjected to final processing to produce the following 1:10,000 scale colour maps with projection NAD83 UTM zone 17: a) total magnetic intensity and calculated first vertical derivative of tail sensor, b) measured lateral and longitudinal magnetic gradients, c) XDS VLF-EM Line, Ortho and Vertical components, d) flight path and e) digital terrain model.

All data have been archived as Geosoft database (GDB) plus all MAP and GRID files used to make the maps.

Respectfully Submitted,

Charles Barrie, M.Sc. Vice President Terraquest Ltd.

9. APPENDICES

9.1. APPENDIX I - CERTIFICATE OF QUALIFICATION

I, Charles Barrie, certify that I:

- 1) am registered as a Fellow with the Geological Association of Canada and work professionally as a geologist,
- 2) hold an Honours degree in Geology from McMaster University, Canada, obtained in 1977,
- 3) hold an M.Sc. in Geology from Dalhousie University, Canada, obtained in 1980,
- 4) am a member of the Prospectors and Developers Association of Canada,
- 5) am a member of the Canadian Institute of Mining, Metallurgy and Petroleum,
- 6) have worked as a geologist for over twenty five years,
- 7) am employed by and am an owner of Terraquest Ltd., specializing in high sensitivity airborne geophysical surveys, and
- 8) have prepared this operations and specifications report pertaining to airborne data collected by Terraquest Ltd..

Markham, Ontario, Canada

Signed

Charles Q. Barrie, M.Sc. Vice President, Terraquest Ltd.

9.2. APPENDIX II – DAILY LOG

Date: Weather: Flight numbers: Lines Flown: Notes:	February 28, 2007 Flyable
	Mobilizing Crew arrived in Cochrane Rental truck picked up in Timmins Accommodations secured, moving on Sunday March 4
Date: Weather: Flight numbers: Lines Flown:	March 1, 2007 Flyable N87V200
Notes:	Wayne's hanger used for base station and storing gear FOM and RAT completed Base station will not lock Tried two sensors each with two cables, Changed sensor location six times
Date: Weather: Flight numbers: Lines Flown:	March 2, 2007 Snow storm
Notes:	Base station Testing completed Sensors suspect, both base station and spare Two sensors shipped from office to Cochrane
Date: Weather: Flight numbers: Lines Flown:	March 3, 2007 Snow storm
Notes:	Replacement sensors arrived CS3 S/N 0311047, H8 CS3 S/N 0311047 installed into base station Base station tested, Seems to be working OK, Suspect sensors shipped from Cochrane to office
Date: Weather: Flight numbers: Lines Flown: Notes:	March 4, 2007 Flyable N87V201 1 to 58 Inclusive Morning flight aborted due too dead battery Changed hotels, Best Western is better then Thriftlodge Informed first FOM was no good

Date: Weather: Flight numbers: Lines Flown:	March 5, 2007 High winds, low visibility
Notes:	H8 tested and is not functioning properly (base station spare)
Date: Weather: Flight numbers: Lines Flown: Notes:	March 6, 2007 Flyable N87V202 AND N87V203 59 to 94 Inclusive N87V202 aborted tail magnetometer did not lock Most likely due to -35°c Temperatures Second FOM completed N87V203
Date: Weather: Flight numbers: Lines Flown: Notes:	March 7, 2007 Flyable N87V204 95 to 105 Inclusive Morning flight not possible due too right engine not starting Afternoon flight aborted due too turbulence and low visibility
Date: Weather: Flight numbers: Lines Flown: Notes:	March 8, 2007 Flyable N87V205 106 to 144 Inclusive Plane grounded in morning due too faulty enunciator panel Enunciator panel repaired in morning
Date: Weather: Flight numbers: Lines Flown:	March 9, 2007 Precipitation over grid, high winds and low ceiling
Notes:	Ground test of control surfaces completed Arc from behind instruments observed Test aborted Crew informed that fourth difference noise is extremely high
Date: Weather: Flight numbers: Lines Flown:	March 10, 2007 Freezing rain, snow, hail
Notes:	Arcing problem investigated, no solution Magnetometer noise investigated, no solution Cleared to continue production Third FOM required

Date: Weather: Flight numbers: Lines Flown: Notes:	March 11, 2007 Flyable N87V206 Lines 145 Too 190 inclusive, Ties 710 Too 785 inclusive Arcing problem resolved, no morning flight Large power cable routed behind instrument panel frayed behind engine power control cluster by elevator controls Moderate turbulence during flight Generators and Inverters flight tested for noise
Date: Weather: Flight numbers: Lines Flown:	March 12, 2007 Flyable
Notes:	Grounded, Enunciators U/S Testing continuing on enunciator system PCB used to control lights likely cause
Date: Weather: Flight numbers: Lines Flown:	March 13, 2007 Not Flyable
Date: Weather: Flight numbers: Lines Flown:	March 14, 2007 Not Flyable
Date: Weather: Flight numbers: Lines Flown:	March 15, 2007 not flyable
Date: Weather: Flight numbers: Lines Flown:	March 16, 2007 not flyable
Date: Weather: Flight numbers: Lines Flown:	March 17, 2007 Flyable N87207 tie lines finished, survey finished