AIRBORNE GEOPHYSICAL SURVEY PROPOSAL

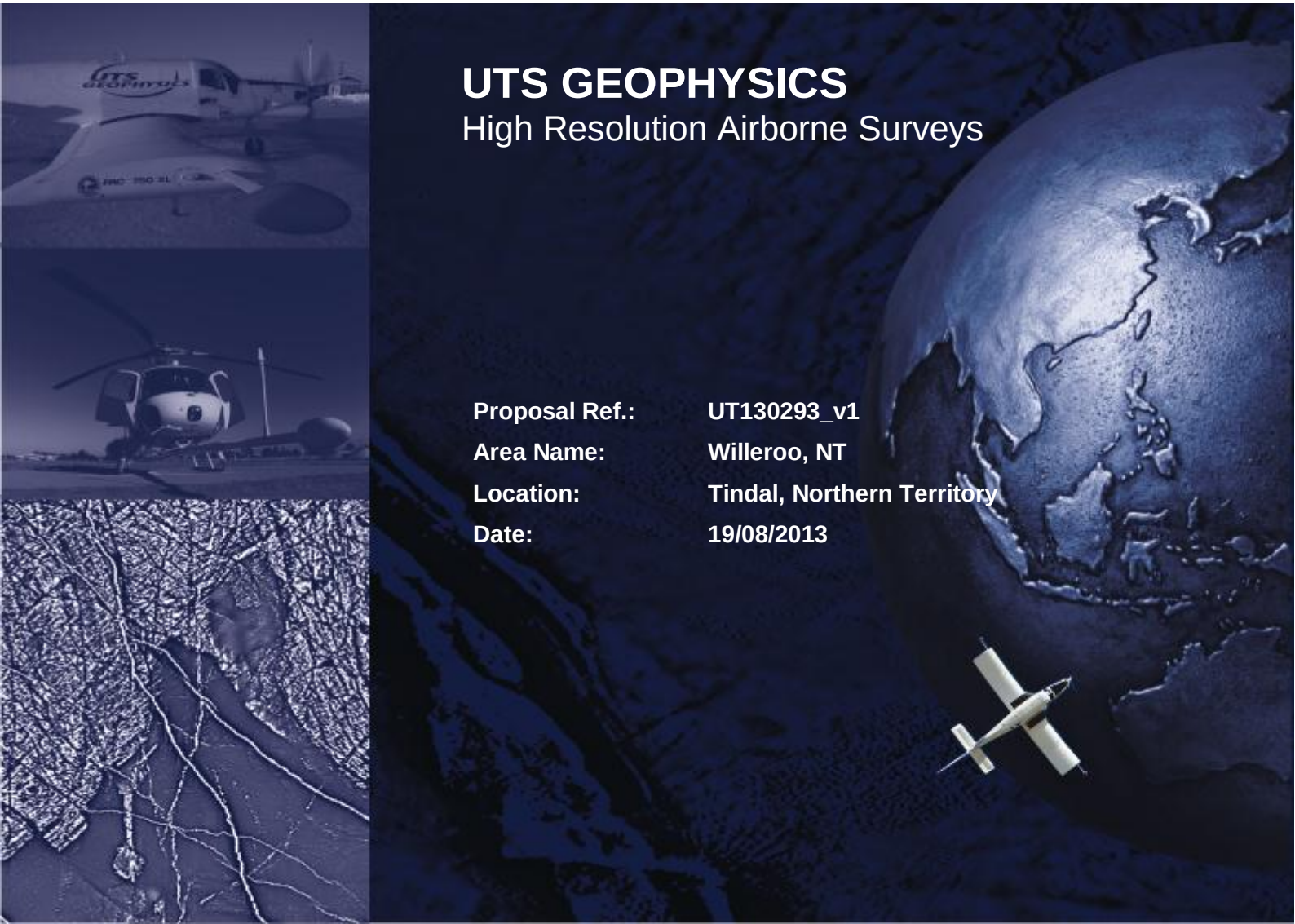
to

EUPENE EXPLORATION ENTERPRISES

from

UTS GEOPHYSICS PTY LTD
(ABN 31 058 054 603)

("UTS")



19 August 2013 UT130293

Unit 33/1 Buffalo Crt
Darwin NT 5911

Attention: Geoff Eupene

Dear Geoff,

RE: Willeroo Project - Airborne Geophysical Survey

Thank you for requesting UTS Geophysics ("UTS") on behalf of your client to provide a quotation to conduct an airborne geophysical survey over your Willeroo project area in NT. This quotation covers the flying and data processing of high resolution fixed-wing airborne magnetic and radiometric data over a single block.

The proposed aircraft is a single engine Cessna 206, currently available from September 2013, flying at 40m above the terrain. The flying is expected to take approximately 1 week.

Please do not hesitate to contact me if you would like to discuss any aspects of this airborne survey proposal.

Yours sincerely,

Peter McBride
Sales & Marketing Manager

UTS Geophysics Pty Ltd - a Geotech Ltd company

Perth Office
116 Fauntleroy Ave
Perth Airport WA
Australia 6105

Postal Address
PO Box 126
Belmont WA
Australia 6984

Phone +61 8 9479 4232
Fax +61 8 9479 7361
ABN 31 058 054 603

CONTENTS

SCHEDULE A - PRICING AND PAYMENTS

A1. Responsibilities

UTS will provide:

- survey aircraft and geophysical equipment
- experienced pilot(s) and operator;
- positioned fuel for the aircraft at the survey site;
- accommodation and meals for the survey crew at the survey base;
- local transportation for crew in and around the survey base;
- field quality control of the geophysical data, with final data processing at a UTS processing centre

The Client will provide:

- acquisition of all local licenses and landowner permission required to carry out the survey;
- detailed final location co-ordinates in WGS84 UTM of the survey area

A2. Charges

All survey charges are quoted in Australian dollars, are valid for 30 days from the date of quotation and are exclusive of applicable Goods and Services Tax.

1.	Mobilisation & Demobilisation*:		**$6,900.00**
2.	Data Acquisition and Data Processing:		
	Total approximately 2,928 kms	@ $8.50km	**$24,888.00**
3.	Standby Charges*:		**$2,750.00/day**

Estimated total price (excluding taxes and charges and applicable standby): **$31,788.00**

*Based on a shared mobilisation, costs are current with agreed timing/schedule

***A standby charge will apply for any days after the commencement of the survey where less than 400 kms of flying is achieved due to, but not limited to, poor flying conditions including bad weather, magnetic diurnal storms, bushfires, major satellite failure affecting GPS navigation or other causes beyond the control of UTS.*

Further, this standby charge will be charged to the Client where no flying is achieved due to civil unrest, riots, hostilities or labour disturbances where the performance of survey operations would be considered by UTS to place its personnel or equipment in unreasonable danger.

Standby charges will also apply when survey acquisition is suspended by the Client (or its authorised representative) for any reason including, but not limited to, the altering, amending or renegotiating of survey specifications, survey boundaries and contractual conditions , or for any required company audits, training or inductions.

This standby charge will not apply for UTS equipment or aircraft problems or breakdowns.

A3. Payments

The minimum charge is defined as the number of estimated survey kilometres multiplied by the survey price per kilometre. The final survey charge is calculated on the basis of actual kilometres flown calculated by flight path.

The invoices shall be payable to the account, which will be provided on each invoice.

A3.1 Standard Preliminary Deliverables (no digital data released during course of survey)

Field preliminary images will be prepared progressively throughout the actual survey flying. These maps will be provided in .jpg format only. The data will only be released upon receipt of payments as indicated below:

- 50% minimum payment before mobilisation.
- 40% minimum payment when completion of flying
- 10% payment before delivery of final products.

A3.2 Optional Preliminary Deliverables (digital data released during course of survey)

If necessary, it can be arranged for digital data to be provided during the course of the survey. Digital data will be provided as long as the Client's account remains in good standing. All invoices, with the exception of the mobilisation invoice are due on receipt.

- 50% minimum payment before mobilization
- 20% minimum payment when flying begins.
- 20% minimum payment when completion of 50% of total flying.
- 10% billing/payment before delivery of final products.

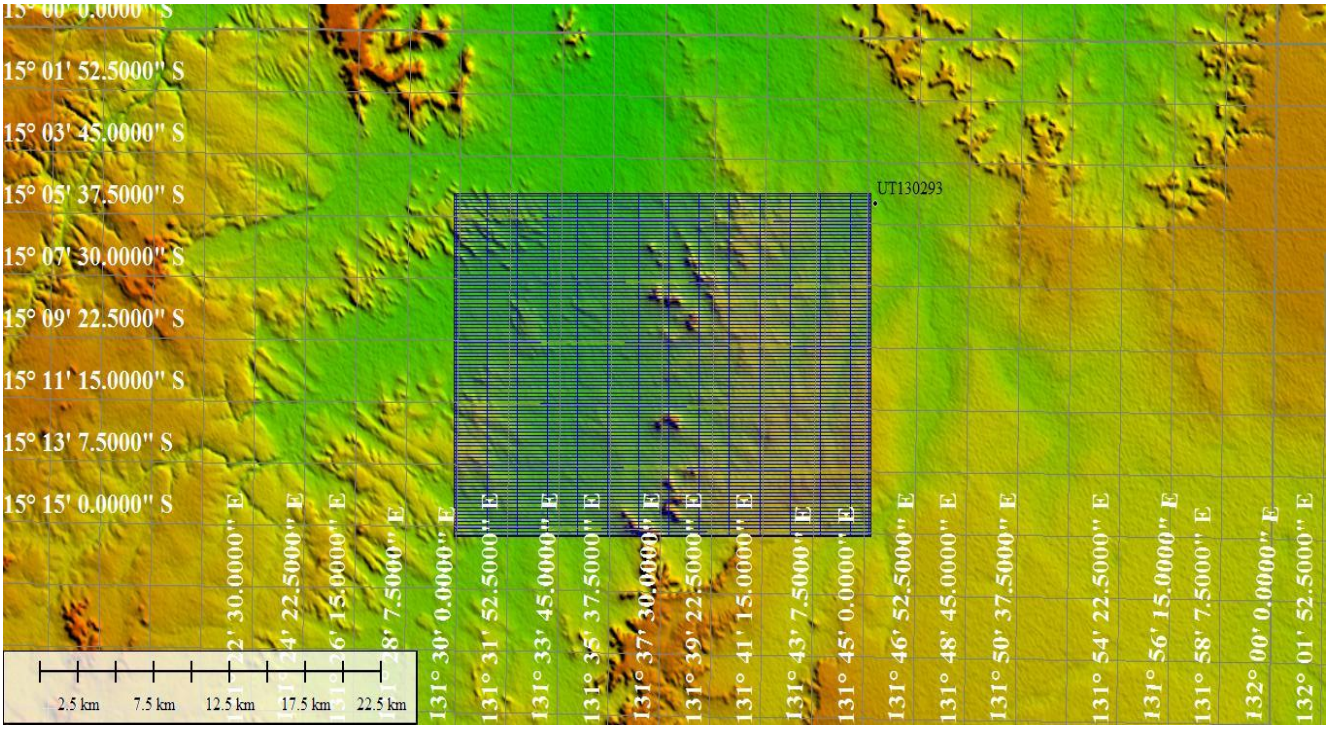
A4. Terms of Payment

UTS will issue invoices for payment as required, as per Section A3 above. These invoices will be due 14 days from receipt by the Client. Payments should be made by telegraphic bank transfer to UTS's bank. Instructions will be posted on all invoices. Late payments will be subject to a 1.5% per month late payment charge on 14 days overdue.

SCHEDULE B – SURVEY AREA

B1. Outline of the Survey Area

The coordinate boundaries for the survey area to be flown are specified below. It is the absolute responsibility of the Client to ensure that the coordinate boundaries cover the intended area to be surveyed. Final survey co-ordinates must be agreed upon in writing prior to commencement of survey operations.



Area Name: Willeroo
Coordinates in WGS84
Grid Zone: 52

Easting	Northing
768328	8331133
795830	8331133
795830	8311954
768328	8311954
768328	8331133

Notes:

- *Survey aircraft may extend up to 1km outside of the boundary to accommodate turns.*
- *The Client shall inform affected landowners within the survey area and to a minimum buffer distance of 5km outside the boundary.*

B2. Flight line Specifications

Quote Reference	Traverse Line Spacing (m)	Traverse Direction (deg)	Tie Line Spacing (m)	Tie Direction (deg)	Sensor Height (m) - TBC	Line Kms (est.)
Willeroo	200m	090-270	2000m	000-180	40m	2928
Total	**-**	**-**	**-**	**-**	**-**	**2928**

Survey Height

A reconnaissance flight of the project area will be conducted prior to commencement of the survey to determine the safest minimum survey height.

The required survey height above the terrain, as stated in the table above, may be varied where topographic relief, vegetation, or laws pertaining to built-up areas do not allow this altitude to be maintained; or where the safety of the aircraft and equipment is endangered. The pilot's decision regarding minimum safe terrain clearance will be conclusive and binding.

The survey height above the terrain may be increased to 50m for minimum safe terrain clearance requirements following consultation with the Client. The revised height will be adopted for the total survey area, unless otherwise requested.

If the determined survey height above the terrain exceeds 50m, the survey will be suspended and the Client Contact will be notified. The survey will resume following agreement of the amended survey height by the Client Contact and UTS.

If a safe minimum survey height cannot be agreed upon, the Client has the absolute right to terminate the survey with immediate effect. If the survey is so terminated, then only costs incurred to the time of termination will be payable plus the mobilisation/demobilisation charge as specified in Section A2.

SCHEDULE C - DATA ACQUISITION

UTS will provide the aircraft and all equipment, personnel and supplies required to complete the survey to the specifications required; ensuring that all equipment used is adequately insured, is in safe and working condition and complies with all Government regulations and laws.

C1. Aircraft

UTS will fly the survey with a Cessna 206 fixed wing aircraft.

C2. Survey Crew

The survey crew will consist of at least the following personnel:

1. Experienced survey pilot(s), having demonstrated the ability to fly the geophysical instrumentation safely and within survey specifications.
2. Geophysical survey operator(s) to supervise the survey operations, perform quality control of the data and to assist in arranging the survey logistics and field operations.
3. An experienced engineer available on standby; ready to be on the survey site with minimal delay if required.

C3. Survey Instruments

Airborne Magnetic Sensor

- fixed tail stinger attachment to the survey aircraft
- cesium vapour magnetometer
- 0.1 nT resolution, 0.01 nT sensitivity
- 10 Hz magnetic sampling rate
- Vector magnetometer (XYZ Components)

Base Station Diurnal Magnetometer

- Proton precession magnetometer
- 0.1 nT resolution, 0.1 nT sensitivity
- 0.2 Hz magnetic sampling rate

Gamma Ray Spectrometer

- 256 channel spectrometer
- 2x 16.8 litre detector packs (33.6 litres total volume)
- 1 Hz sampling rate
- Digital temperature

Altimeters

- Radar altimeter
- 0.3 m resolution, 3% accuracy

- Range: 0-760 m
- 10 Hz sampling rate

- Barometric pressure sensor
- 0.15 hPa accuracy, 0.01 hPa resolution
- 500 - 1100 hPa range
- 3 Hz recording rate

Navigation and Data Positioning System

- 12 channel precision GPS system
- 2 Hz recording rate
- Cockpit survey navigation and guidance system

Data Acquisition System

- Digital Data Acquisition System (DAS)
- Field processing and quality control system

C5. Calibrations

Aircraft Magnetic Compensation

Prior to commencement of the survey, the system is calibrated for reduction of magnetic heading error. The heading and manoeuvre effects of the aircraft on the magnetic data is removed using an Automatic Airborne Digital Compensator.

Calibration of the aircraft heading effects is measured by flying a series of pitch, roll and yaw manoeuvres at high altitude while monitoring changes in the three axis vector magnetometer and the effect on the total field readings.

A 26 term model of the aircraft magnetic noise covering permanent, induced and eddy current fields is determined. These coefficients are then applied to the magnetic data in real-time. Static compensation techniques are also employed to reduce the initial magnetic effects of the aircraft upon the magnetic data.

Radiometrics

The radiometric system undergoes the following calibration checks:-

Annually

Periodically, usually annually or following major equipment or aircraft changes, the system will undergo a series of calibration flights and tests including: over-ocean high level stacks, pad calibrations, dynamic test range stacks and associated hand-held ground concentration readings. These tests produce the necessary correction coefficients and stripping ratios for correct data processing of the survey data.

Daily

The thorium source tests (performed at the start and end of each survey day) will be monitored to confirm system sensitivity, resolution and peak position of the Thorium window. These outputs are

recorded on the daily progress reports. The spectrum of each survey line will be checked for spectral drift.

A survey test line of at least 4 kilometres will be flown each day at the nominal survey height to determine the effect of soil moisture and to ensure the equipment is functioning correctly. The test line will preferably be located close to the survey area. The same test line will be flown each day and after recommencement of operations following a period of rain.

Altimeter

Where the survey location permits, a series of over water swoop tests will be performed to calibrate the radar (and/or laser) altimeter. If the survey is over dry land, an altimeter "stack" will be flown over the airstrip at incremental heights to determine the validity of the instruments at these different heights. If necessary, a scaling factor is derived for correct processing of the acquired data.

C6. Reflight Specifications

Unless otherwise specified by the Client, data will be re-flown under the following conditions at the expense of UTS. All re-flown sections of survey lines must cross at least two tie lines.

- When flight path deviates by half the line spacing or greater over a distance of 3,000 metres or more (except in areas including obstacles such as towers etc).
- The terrain clearance exceeds the planned survey terrain clearance by +/- 10 metres over a continuous distance exceeding 3,000 metres, commensurate with the safety of the aircraft and equipment. Terrain clearance deviation will be dependent upon tree canopy height, GPS satellite signal acquisition, topographic relief, aviation regulations, and commensurate with the safety of the aircraft and equipment. The pilot's decision regarding minimum safe terrain clearance will be conclusive and binding.
- The magnetometer instrument noise level (measured as an 8^{th} difference) of +/-0.1 is exceeded over a distance of 3,000 metres or more of one survey flight line.
- The sample density along one or more survey lines exceeds 9 metres for a total of 3,000 metres.
- The departures of the diurnal magnetic field from a straight line chord 10 minutes in length, exceeds 10 nT.
- The daily spectrometer system sensitivity check varies by more than 5% from the Calibration Reference value.
- After live time, background, and height correction, the average thorium window count rate over the test line exceeds 10% of the 'dry conditions' count rate.
- The overall spectrometer sensor resolution is greater than 7% for the thorium peak.

C7. Survey Scheduling

Data Acquisition

Flying is expected to commence in mid July 2013 unless supplies of aviation fuel or other essential field supplies are limited or restricted, access to the survey area is prevented due to poor weather conditions or where other factors beyond the control of UTS prevent or delay mobilisation or commencement of the survey. The survey will have an expected data acquisition duration of approximately 7 days.

The proposed survey base of operations is Tindal.

Data Processing

Delivery of all items as defined in Schedule E will be made within approximately twenty (20) working days of receipt of all data in the UTS processing office in Perth after completion of the data acquisition stage.

Note: Survey scheduling is current at the date of quotation.

SCHEDULE D - DATA PROCESSING / QUALITY CONTROL

D1. In-field Data Verification and Processing

All geophysical, positional and ancillary sensor data measured during the survey will be recorded digitally using a custom, high speed, precision data acquisition system. During the survey flight, the acquisition system automatically monitors data quality and data integrity and alerts the operator and/or pilot of any system failures through warning lights situated on the cockpit mounted display screen.

Survey data quality for all instruments is also monitored on a number of operator selectable and configurable instrument traces. Instrument synchronisation is measured and recorded by the data acquisition system for removal of parallax in both real-time and during post processing.

At the conclusion of each survey day, the acquired survey data are transferred from the survey aircraft to the in-field processing system. Highest priority is given to the quality control of the survey data through the use of computer software packages and quality assurance procedures. A digital flight path is produced from the GPS positions for flight path verification.

Field data are uploaded via FTP to the processing office on a regular basis for further quality control and identification of potential reflight requirements prior to surey completion.

D2. Final Processing

Magnetic Data Processing

Diurnal base station data will be edited and suitably filtered for application to the aircraft magnetic data. The diurnal measurements will be subtracted from a diurnal base field value and the corrections removed from the survey data by synchronising the diurnal data time and the aircraft survey time. The data will then be corrected to remove any residual parallax errors.

The regional magnetic gradient will be subtracted from the data by application of the IGRF model calculated at the date of the survey and interpolated on position and time.

Tie-line levelling will be applied to the data by measuring tie line crossover points with the survey traverse line data. Final microlevelling techniques will then be applied to the data (if required) to remove minor residual variations in profile intensities.

Radiometric Data Processing

The radiometric data will have the following processing methods applied:-

If sufficient statistical data are available and the radiometric data collected are suitable for the process, spectral noise reduction techniques will be applied to the 256 channel data (e.g. NASVD).

The energy spectrum will be recalibrated with respect to the potassium and thorium peaks. Dead time corrections will then be applied to the data. Cosmic and aircraft background corrections will be applied. The 256 channel data will then be reduced to the 5 primary channels of total count, potassium, uranium, thorium and low-uranium.

The altimeter data will be converted to standard temperature and pressure altitude. Height corrected stripping coefficients will then be applied to the windowed counts and the data corrected to the target STP altitude.

Radon background removal will be performed using the Spectral Ratio method (Minty 1992).

The data will be tie-line levelled, with final microlevelling of the total count, potassium, uranium and thorium data applied (if required) to remove minor residual variations in profile intensities.

Conversions to equivalent ground concentrations will be applied.

Digital Terrain Model

A raw terrain height channel (WGS84 datum) will be calculated by subtraction of the radar altimeter height measurements from the GPS height measurements.

Levelling techniques will then be applied (if required) to the data to remove minor residual variations in profile intensities.

SCHEDULE E - PRODUCTS FOR DELIVERY

E1. Preliminary maps

Preliminary, unlevelled images can be provided if requested, during and following completion of flying. Preliminary (not fully processed) located or gridded data can be provided if required, subject to the payment conditions of Schedule A3.2.

E2. Final standard products

Digital maps (.pdf) will be produced containing the following magnetic and radiometric images:

- Total magnetic Intensity (TMI)
- First Vertical Derivative of TMI (1VD)
- Total Count
- Ternary radiometrics (K, Th, U)
- Digital terrain Model (DTM)

Located Data File #1 (contains 0.1 second final magnetic, altitude and ancillary data)

Located magnetic data will be supplied in ASCII format on DVD with the following fields being supplied at each reading:

- Line number
- Survey area number and flight number
- Date (YYYYMMDD)
- Time of reading (local time in seconds after midnight)
- Fiducial number
- MGA zone number
- Latitude WGS84 (decimal degrees)
- Longitude WGS84 (decimal degrees)
- Easting MGA94 (metres)
- Northing MGA94 (metres)
- Radar altimeter height (metres)
- GPS height (metres)
- Digital Terrain Model (metres)*
- Raw total magnetic intensity reading (nT)
- Diurnally corrected total magnetic intensity (nT)
- IGRF and diurnally corrected total magnetic intensity (nT)
- Tie-line levelled total magnetic intensity (nT)
- Micro levelled total magnetic intensity (nT)

Gridded data in ERMapper format will be provided for:

- Total Magnetic Intensity (TMI)
- First Vertical Derivative TMI (1VD)
- Digital Terrain Model (DTM)*

**The accuracy of the derived digital terrain model is dependent on the accuracy of the two input parameters, radar altimeter height (terrain clearance) and GPS height. The radar altimeter height may be less accurate in areas of heavy vegetation, where the altimeter reflects the distance to the tree canopy rather than the ground. The accuracy of the GPS height is primarily dependent on the number of available satellites. Because of the inherent inaccuracies in both channels, no guarantee is made or implied that the derived digital terrain model is a true representation of the height above sea level. Although this channel may be used as a general reference it must not be used for navigation purposes.*

Located Data File #2 (contains 1.0 second final radiometric and ancillary data)

Located radiometric data will be supplied in ASCII format on DVD with the following fields being supplied at each reading:

- Line number
- Survey area number and flight number
- Date (YYYYMMDD)
- Time of reading (local time in seconds after midnight)
- Fiducial number
- MGA zone number
- Latitude WGS84 (decimal degrees)
- Longitude WGS84 (decimal degrees)
- Easting MGA94 (metres)
- Northing MGA94 (metres)
- Radar altimeter height (metres)
- GPS height (metres)
- Live-time (msec)
- Barometric pressure (HPa)
- Air temperature (degrees Celsius)
- Raw total count (cps)
- Raw potassium (cps)
- Raw uranium (cps)
- Raw thorium (cps)
- Raw cosmic (cps)
- Corrected and levelled total count (cps)
- Corrected and levelled potassium (cps)
- Corrected and levelled uranium (cps)
- Corrected and levelled thorium (cps)
- Dose Rate (nGy/hr)
- Potassium Concentration (equivalent percent)
- Uranium Concentration (equivalent ppm)
- Thorium Concentration (equivalent ppm)

Gridded data in ERMapper format will be provided for:

- Total Count
- Potassium Count
- Uranium Count
- Thorium Count
- Dose Rate
- Potassium Concentration
- Uranium Concentration
- Thorium Concentration

Logistics and Processing Report

UTS will provide an airborne survey logistics and processing report (one hard copy and one digital copy) with the final survey data. This report will cover the parameters and techniques utilised on the survey including the base of operation, aircraft details, equipment used, personnel, flight information, processing details and data descriptions.

E3. Additional Products

The following additional products are examples of what can also be provided, at additional cost:-

Gridded Data ($200 per grid)

- Reduction to the Pole of Total Magnetic Intensity (RTP)
- Automatic Gain Control (AGC)
- Analytic Signal (AS)

Digital Maps (.pdf) ($250 per sheet)

- Colour image of Total Magnetic Intensity (TMI) with sun angle
- Greyscale image of first vertical derivative TMI (1VD)
- Contours of TMI with flight path
- Stacked Profiles of TMI with flight path

Hardcopy Maps (laminated paper) ($250 per sheet)

- Colour image of Total Magnetic Intensity (TMI) with sun angle
- Greyscale image of first vertical derivative TMI (1VD)
- Contours of TMI with flight path
- Stacked Profiles of TMI with flight path

SCHEDULE F - ACKNOWLEDGEMENTS

1. The Client agrees to acknowledge in all press releases and other publications that the survey was flown with the UTS magnetic system. The Client also agrees that UTS may advertise that the system was used by the Client in the event that news articles are published purporting to a discovery in the Survey area, providing that the Client approves the advertisement, which approval will not be unreasonably withheld.

2. UTS will not divulge any information with respect to the Survey to third parties.

3. Until payment is received in full, the information, documents and data pertaining to the Survey shall remain the property of UTS.

Proposal Accepted, SIGNED for and on behalf of Eupene Exploration Services	SIGNED for and on behalf of UTS Geophysics Pty Ltd
Name:	Name:
Title:	Title:
Date:	Date: