ABERFOYLE RESOURCES LIMITED
ACN 004 664 108
Exploration Division

EXPLORATION LICENCE 9493 (PUZZLE CREEK)

(Walhallow & Calvert Hills 1:250,000 sheets)

PARTIAL RELINQUISHMENT REPORT

November 15, 1997

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1. SUMMARY:

Exploration Licences 9493 was granted to Aberfoyle Resources Ltd on May 30, 1996. The tenement was pegged to explore for Zn-Pb-Cu mineralisation in the Middle Proterozoic lithologies of the McArthur Basin. A voluntary reduction of 40% of sub-blocks from 277 to 166 sub-blocks was proposed to satisfy NT DME requirements, this report describes activity completed in the relinquished portions of EL 9493 since granting.

Areas targeted in EL 9493 are covered by Palaeozoic, Mesozoic and Cainozoic rocks of variable thickness, well to the south of the exposed portions of the McArthur Basin. Aeromagnetics (public domain data) interpretations suggest continuation of regionally important structures into these tenements. If these structures come into contact with favourable lithologies, such as sediments of the McArthur Group, the main ingredients for a SEDEX style base metal deposit are present. Aberfoyle's strategy has been to explore high priority areas areas under cover where these ingredients are thought to occur by airborne EM.

Work completed on the relinquished portions of EL 9493 has centred around a major airborne EM survey. Selected areas within EL 9493 were covered, at the inferred intersection of two regional structures. No highly rated EM conductors were interpreted from the data, and no follow-up was completed within the ground relinquished.

2. INTRODUCTION

2.1 Location and Access:

EL 9493 is located approximately 350 kilometres northeast of Tennant Creek and 150 kilometres south southeast of Booraloola in the Northern Territory (see Figure 1). Access to the tenement is by sealed road (Barkly or Carpentaria Highways then the Tablelands Highway) then by station dirt road through Creswell Downs and on to Calvert Hills homestead. Wet weather prevents access once off the bitumen.

2.2 Tenure

Exploration Licence 9493 - Puzzle Creek (277 sub-blocks) was granted to Aberfoyle Resources Ltd on May 30, 1996 for a period of six years. A reduction of 50% of sub-blocks is required at the end of the second year of tenure, and each and every year after that date. A reduction of 40% (i.e. from 277 to 166 sub-blocks) was voluntarily brought forward by 8 months to reduce the size of the tenement to match the program and budget proposed in the first Annual Report for the tenement. Sub-block details illustrating this reduction are shown on Figure 2.

2.3 Regional Geology

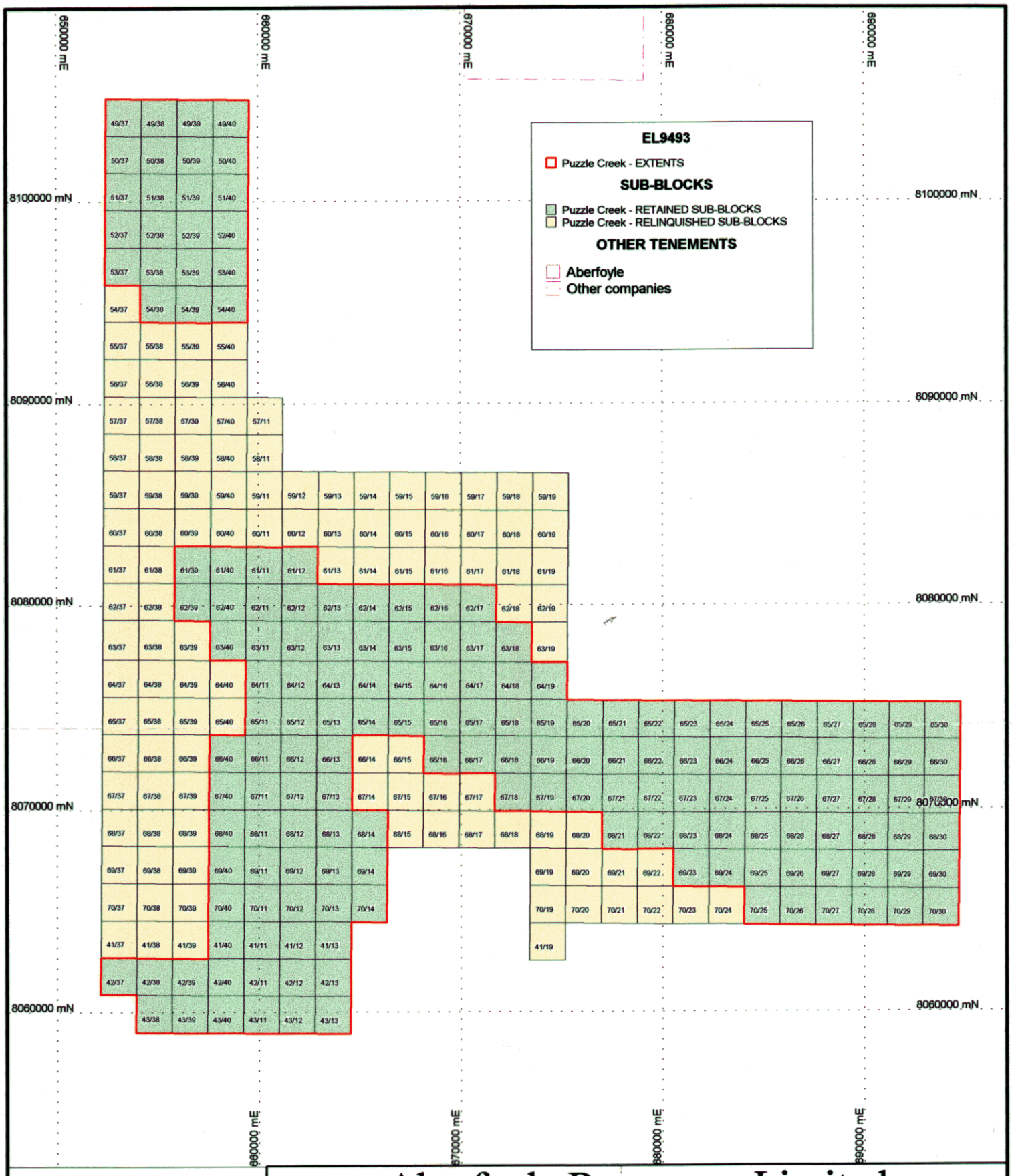
The tenement lies on covered portions of the southeastern McArthur Basin. Interpolations of mapped geology to the north and northwest of EL 9493 suggest buried Proterozoic lithologies would probably be McArthur Group and Talwallah Group. Extrapolations from the nearest outcrop to this tenement are unreliable, and water bore data indicate a mix of

sediments and volcanics, suggesting Talwallah Group is the likely to be common in this area.

2.4 Mineralisation

The McArthur Basin is host to numerous mineral occurrences both large and small. These range in style from replacement copper to vein-style lead-zinc to SEDEX style stratiform mineralisation. The best example of this latter style is the HYC deposit, situated approximately 100 kilometres north-northwest of EL 9493.

A number of papers have been published describing all aspects of HYC geology, genesis, mineralisation, sedimentology and so on, but the most pertinent reference for exploration in EL 9493 is by Shalley and Harvey (1992). This paper deals with the geophysical response of the HYC deposit, providing useful data to compare to what is expected to be generated from the delayed geophysically driven exploration program for these two tenements. A general reference to the HYC deposit is given in Logan, et al. (1990).



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Aberfoyle Resources Limited

EXPLORATION DIVISION

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Init	Date	Init	Date
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EL9493 "Puzzle Creek"
Relinquishment - August 1997

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3. WORK COMPLETED

A 3333 line-kilometre airborne EM survey was completed over Aberfoyle's tenement package in the McArthur Basin in the first week of June, 1996. Approximately 358 line kilometres of data were collected over this tenement, the location of flight lines for this survey are shown on Plate McA020.

Operational statistics for this survey are detailed in Appendix 1 This data is summarised below:

- Contracted operator = Geoterrex Pty Ltd, based in Perth, W.A.
- Date of Survey = May 30 - June 4, 1996
- Field Base = McArthur River Mine airstrip, HYC.
- Line spacing = 500 metres
- Data collected = EM, Magnetics
- Mean terrain clearance = 105 metres
- Orientation of flight lines = 045°-225°
- Tie lines = orthogonal, 5 kilometre spacing.

The Geotem signature of data for EL 9493 contains a continuous spread of high amplitude early time responses (Plate McA22c) that typically extend well into the late time channels. Anomalies are closely spaced which indicates the presence of a significant amount of conductive material. Decay of the Geotem signal is rapid and the response throughout the early to mid times is noisy indicating shallow sources of poor to moderate conductivity.

A number of poorly conductive single line features were identified within more extensive conductivity variations observed within EL 9493. These were typically small in width (less than 500m) and attributable to conductors within the cover sequence, and therefore not considered to be anomalous.

The position of the inferred faults can be seen in the magnetic image for this block (Plate McA022d), along with several strongly magnetic features

associated with magnetic members of the Tawallah Group. The preferred position of the Emu Fault from the magnetics is a 340^0 trend, while the Mallapunyah has an orientation of around 300^0. Unfortunately, no bedrock conductors can be recognised in the vicinity of these faults, or elsewhere in this block.

4. INTERPRETATIONS AND CONCLUSIONS

Exploration completed on the relinquished portion of the tenement has centred around the Geotem survey as discussed above. No features of immediate interest were identified in the relinquished sub-blocks of EL 9493, and no follow-up was completed.

5. REFERENCES:

Logan, R. G., Murray, W. J., and Williams, N. (1990). 'HYC Silver-Lead-Zinc Deposit, McArthur River.' *in* 'Geology of the Mineral Deposits of Australia and Papua New Guinea' Vol 1 (F. E. Hughes ed.). Aust. Inst. of Mining and Metallurgy, 907-911

Shalley, M. J. & Harvey, T. V. (1992). 'Geophysical Responses of the HYC Deposit.' *Exploration Geophysics.* **23**, 299-304.

APPENDIX 1:

GEOTEM-25Hz [illegible] specifications - Geotenex Pty Ltd

Proposal to conduct an

airborne geophysical survey

over the Barkly tenement block

for Aberfoyle Resources Limited

by

Geoterrex Pty Ltd

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Artarmon NSW 2064
Telephone: (02) 418-8077
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CONTENTS

PART A
Survey specifications

1) General Flying Specifications

a) Specifications

Survey type:	GEOTEM/Magnetic (Towed Bird optional)
Survey area:	Barkly Block, McArthur Basin, N.T.
Approximate survey size:	3,000 line kilometres
Flight line direction:	Variable, as specified
Line spacing:	500 metres
Tie line direction:	Orthogonal to flight lines
Tie line spacing:	5 kilometres
Minimum line length:	8 kilometres
Average line length:	10 kilometres
Mean terrain clearance:	105 metres
Navigation:	Doppler/GPS

b) Survey Area

i) The term "survey area" means the total area shown on the location map, provided or defined by the specified co-ordinates.

ii) Changes to the survey area and/or specifications may only be effected with the agreement of both parties.

2) Personnel

a)	**Field Crew:**	2 Pilot-navigators 1 Electronics technician 1 Geophysicist 1 Data processor 1 CASA aircraft engineer (as required)
b)	**Data Processing:**	The GEOTEM data processing will be performed at GEOTERREX' office in Sydney.
c)	**Overall Project Supervisor:**	The overall project will be supervised by the Manager, Airborne Geophysics.

GEOTERREX will provide at its sole expense all accommodation that may be necessary in respect of its personnel and shall further ensure that qualified personnel are in charge of all aspects of the work.

3) Navigation Methodology - Doppler/GPS

GEOTERREX has installed a Sercel NR103 10 channel GPS receiver with pilot steering and a Singer Kearfott AN/ASN 128 Doppler system on all of its aircraft. The short periods of high PDOP, or poor satellite coverage which occur on occasion due to shielding of a satellite by a topographic feature, are bridged by the Doppler system.

When Selective Availability is turned off GEOTERREX has found that GPS differential corrections are unnecessary since the size of the corrections are never more than a few metres. However, when Selective Availability is turned on, the GPS base station data provide information to monitor and to correct for the degradation of quality in the single receiver solution.

Flight Path recovery will be performed in the field from the Doppler data merged with the GPS data, differentially corrected as necessary. For verification, the flight path will be plotted progressively during the survey using the field computer/plotting system.

4) Reflight Specifications

Data will be reflown at the sole expense of GEOTERREX under the following conditions:

- Electronic navigation data is not available.
- GEOTEM data is not interpretable. To ensure this, the average RMS noise over 1 kilometre of the raw digital data in a channel located about 1 msec after turn off at 75 Hz must be less than 70 ppm in resistive areas devoid of any external interference (eg. cultural sources etc.) Also, the GEOTERREX field geophysicist will examine all anomalous regions on the analogues to determine if the character and shape of the significant geophysical anomalies can be properly separated from the noise, and refly any sections of lines where the noise levels irreparably distort the significant geophysical anomalies.
- The actual flight line spacing exceeds 50 percent of the nominal spacing over a continuous distance exceeding 2 kilometres or where lines cross. The line spacing measurements to be used in determining such reflights will be made from the field flight path recovery.
- The terrain clearance continuously exceeds the nominal terrain clearance by plus or minus 20 metres over a distance of 2 kilometres or more unless to do so would, in the sole opinion of the pilot, jeopardise the safety of the aircraft or the crew or the equipment or would be in contravention of the Civil Aviation Authority regulations such as those pertaining to built up areas.
- The magnetometer noise envelope of ± 0.5 nT is exceeded intermittently over a cumulative total of 10% or more of any flight line or continuously over 2 kilometre or more.
- The departure of the diurnal magnetic field from a straight line chord, 5 minutes in length, exceeds 5 nT.

Optionally, data can be reflown at the sole expense of THE COMPANY under the following conditions:

- The GEOTERREX field geophysicist will recommend to THE SITE GEOLOGIST to refly any sections of lines where the data is considered too difficult to interpret even though the noise specification has been satisfied. Subject to THE SITE GEOLOGIST's approval, this data will be reflown at THE COMPANY's expense and the total chargeable line kilometres will be adjusted accordingly.

PART B
Equipment specifications

5) Aircraft

Type/Manufacture: CASA C212-200 turbo prop STOL aircraft.
Survey Speed: 220 kilometres per hour
Type of fuel: JET A1

6) GEOTEM System

Model: GEOTEM III

Transmitter Height: 105 metres agl

Receiver Bird Height: 54 metres

Tx-Rx Separation: 100 metres behind aircraft

Base Frequency: 25 Hz

Tx Pulse Width: 4 milliseconds

Channels: 20 channels of each of the X and Z components at 4 hz sample rate of which 4 channels are located inside the pulse for each coil.

The GEOTEM transient decay will be measured at these channels, as specified by GEOTERREX to cover the transmitter 'off time'. Measurements are also recorded during the transmitter pulse or 'on time'. Details of gate positions for each of the 'off-time' and 'on-time' channels will be made in consultation with Aberfoyle.

Transmitter: The primary field electromagnetic pulses are created by a series of discontinuous sinusoidal current pulses fed into a three turn shielded transmitting loop surrounding the aircraft with a vertical axis.

Receiver: High speed digital receiver which digitises the voltage produced by the receiver coil without prior smoothing. Points along the waveform are sampled independently with no active filtering being applied during acquisition. Since the system is digital, there is no base level drift attributable to the functioning of the receiver. Normalisation is effected in real time with reference to the measured primary field half peak voltage.

Calibration Tests: The aircraft transient compensation of the GEOTEM system will be checked prior to, and at the end of, each flight at 600 metres terrain clearance. This calibration system produces a reference waveform (or series of coefficients) which is used to establish the compensation algorithm within the GEOTEM receiver itself. This therefore allows automatic compensation to take place at survey altitude. Zero levels of the GEOTEM channels will be verified at the beginning and end of each flight.

Quality control will be maintained in the field by the GEOTERREX geophysicist/data processor in consultation with THE SITE GEOLOGIST/GEOPHYSICIST.

7) Airborne Magnetometer

Model:	Scintrex Cesium vapour optical absorption magnetometer sensor mounted in a Stinger or optionally in a bird
Resolution:	0.1 nanoTesla
Sampling Rate:	1.0 second (optionally 0.1 seconds)
Recording:	Digital to tape and displayed on aircraft chart recorder.

8) Altimeters

Radio Altimeter

Type:	Sperry Stars AA200
Accuracy:	+/- 1.5%
Sampling Rate:	1.0 second

Barometric Altimeter

Type:	Rosemount 1241 A or equivalent
Sensitivity:	5 mv per foot
Range:	0 - 20,000 feet
Sampling Rate:	1.0 second

The aircraft radio altitude will be recorded on digital tape as well as displayed on the aircraft chart recorder. The recorded value will be the average of the altimeter output during the previous second.

9) Video Tracking System

Equipment:	Sony DXP 101P Camera with wide angle lens Panasonic AG6400 VCR Sony PVM 6030ME Monitor

The video tape is synchronised with the geophysical record by a digital fiducial display which is recorded on the video tape and displayed on the bottom left of the video screen. Times are recorded from the digital information provided by the data acquisition system. Video is recorded in PAL format.

10) Positioning / Navigation Equipment - Doppler/GPS

Doppler Equipment:	Singer Kearfott AN/ASN 128 Sperry VG-14 Vertical Gyroscope Sperry C-12 Compass
GPS Equipment:	Sercel NR 103 GPS Receiver and antennae Pilot Steering indicators.
Recording:	Digital to tape, once per second for both systems.
GPS Base Station:	Sercel NR103 GPS Receiver and antennae Lap top data logger

11) Data Acquisition System

Model: GEOTERREX PTY LTD GEODAS
Equipment: 486 PC computer
Recording Mode: QIC150 Mb cartridge tape drive

The GEODAS is a computer based software system using a 486DX /25 field PC. It runs multiple DOS programs in a multi-tasking environment. The modular design of the GEODAS allows for reconfiguring the system to record different types of surveys by adding, removing or changing task modules.

The GEODAS is currently installed on a rugged, totally enclosed, moisture and dust proof system, originally designed for military use. Currently it uses a 486DX CPU on a plug-in module card which can be upgraded. Data is recorded on 220 Mb hard disks.

12) Analogue Chart Recorder

Model: RMS GR33 Thermal Dot Matrix Printer
Chart Speed: Selectable
Chart Width: 12 inches (31 cm)
Recorded data:

- Radar altitude
- Fiducial
- Chan 3 noise monitor
- Chan 12 noise monitor
- Primary field monitor
- GEOTEM channels
- Powerline monitor
- Total magnetic field (fine and coarse scales)
- Magnetic field fourth difference - noise monitor

Scales: Selectable

13) Base Station

a) Magnetometer

Sensor: Proton Precession magnetometer.
Recording: Internal memory (backed up daily)
Sensitivity: 0.1 nanoTeslas
Sampling Rate: 5.0 seconds

The base station magnetometer will be run during flying hours to monitor the diurnal field. The sensor will be placed in a suitable position which minimises the effects of high magnetic gradients and man-made interference. The base station location will be documented in the survey logistics report. The data will be presented as profiles which will be annotated with date, flight number, vertical scale, time marks and the start and end of flight.

b) GPS

Sercel NR103 GPS Receiver and antennae
Laptop Data Logger

14) Field Processing System

Hardware:	UNIX workstation with mass storage and tape subsystems PC 486 computer A0/A1 plotter A4 colour printer/plotter
Software:	GEOTERREX developed GMAPS software ERMapper image processing software VISION PC Image Processing software

15) Office Processing System

Hardware:	UNIX workstation network and peripherals (SUN and DEC equipment) Multi density 9 track tape transports Exabyte/DAT/QIC150 tape transports High speed printers Calcomp AO Colour Electrostatic and Thermal Plotters HP A0 Colour Designjet Plotter AO Digitizer tablet
Software:	GEOTERREX developed GMAPS software ERMapper image processing software VISION PC image processing software

PART C
Data processing and product specifications

16) Data Processing

GEOTERREX will provide the data processing products as described in the following sections unless otherwise requested by THE COMPANY and agreed by GEOTERREX. The survey data will be properly edited so that it corresponds to the recovered flight paths.

17) In-Field Processing

The in-field processing system is used to verify all recorded data on a progressive basis during the field project:

Flight path: The electronic navigation data will be edited, corrected, merged and checked, such that the flight path can be plotted and inspected prior to demobilisation of the survey aircraft and crew.

GEOTEM Plan Maps: A selected GEOTEM parameter will be plotted in plan map form. Parameters that can be plotted include any GEOTEM channel, ADI or time constant. The plan map can be in either stacked profile or contour format, but since plotting is the slowest computer process, **the type and number of maps and/or plotting scales may have to be carefully selected to allow completion of plotting during the field project.**

Image Processing: An image processing facility compatible with the industry standard ERMapper system will be operational in the field for data viewing and quality control.

Base Station Data: These data are read into the field computer on a daily basis for verification, plotting and processing, as required.

Digital Data: These data are backed up onto tape for return to the GEOTERREX office processing centre. Back-ups are consigned separately from the aircraft-generated raw data tapes.

The digital data will be processed in the field to produce preliminary products, but it should be noted that the filters applied in the field are designed to be simple and quick to run, and do not conform to the tight filtering specifications that apply to the final processing.

18) Flight Path Processing and Products

The flight path will be recovered from the electronic positioning data recorded on the digital field tapes. An aircraft speed report will be produced to determine any necessary corrections to the flight path prior to geophysical data processing.

Flight path will be presented on separate maps and will show:

- labelling of the longitude and latitude
- AMG intersections labelled with their northing and easting along orthogonal borders
- line numbering for each flight line
- the recovered fiducials which will be labelled and joined by straight lines.

Final flight path maps will be plotted at 1:25,000 scale.

19) GEOTEM Data Processing and Products

Data Processing

One of the more important aspects of the GEOTEM system is that the electromagnetic data recorded in the field is already compensated, calibrated and corrected for receiver base level drift. To take advantage of the discrete digitisation of the electromagnetic field, data processing utilises a multi-step adaptive signal processing structure designed to identify various types of noise according to their character as measured and remove them. The late channel noise levels in the final processed data are dependent on the type and severity of the filtering that has been applied. GEOTERREX has developed a series of very tightly constrained filters that minimise the degradation of the anomalies while removing most of the noise.

The final processed GEOTEM data will be used to generate the following presentation products:

a) Multi-parameter profiles of X and Z components

The final processed data is plotted as multi-parameter profiles on paper. Up to four linear scale ranges are employed and the appropriate scales are designated by colour coding the traces to the scale annotations. The aircraft terrain clearance (radar altitude) data is also presented on these profiles along with both coarse and fine scale magnetic data. These profiles are the standard presentation product since interpretation of GEOTEM data always requires a certain degree of analysis of the data on a profile basis.

One set of multi-parameter profiles (ie for every traverse line) will be plotted at 1:25,000 scale.

b) Amplitude Decay Index (ADI) of X and Z components

To aid interpretation of the data, time constants can be calculated to quantify the rate of decay of the electromagnetic response. The Amplitude Decay Index (ADI) measures this rate of decay and weighs it for the relative amplitude of the electromagnetic response. In this respect, the Amplitude Decay Index is more equivalent to the area under the decay curve rather than only an estimate of the rate of decay. The index is derived from the best fitting exponential to the decay curve using data from selected GEOTEM channels (minimum of four). The Amplitude Decay Index is plotted on the multi-parameter profiles as well as recorded on the final located data tape.

c) Amplitude Decay Index (ADI) maps for X and Z components

To provide an overview of the GEOTEM response over an area, the computed ADI for each of the X and Z components can be selected for the production of a plan map.

The most effective means of presentation, and hence the most common, is to produce full colour maps on paper which can be laminated. Standard contour maps on either paper or stable film could also be produced. It should be noted however, that the asymmetry of the GEOTEM system (in the X component) produces offset responses which is typified by a "herringbone" pattern when viewed in plan map form. Since GEOTEM data is always lagged for the alignment of responses over narrow vertical conductors, this characteristic pattern is diagnostic for the interpretation of conductors that are either flat lying or exhibit horizontal width. GEOTERREX has developed a routine to remove this herringbone effect, and the deherringboned data is well suited for geological mapping applications and ideal for image processing applications.

Standard ADI maps, as well as maps without herringbone for the X component, will be produced at 1:25,000 scale.

The following optional products could also be considered (but would incur an additional charge) after evaluation of the GEOTEM data:

I) Data Interpretation

A team of geophysicists experienced in the interpretation of GEOTEM data will be made available to undertake interpretation of the GEOTEM data. The interpretation will make use of all data derived from the GEOTEM survey, including field and final processed data. All data will be analysed in detail and correlated along and between survey lines over the survey area to produce a coherent and comprehensive account of the targets and the geology within the survey area. Significant responses will be specifically analysed in relation to the targets being directly or indirectly sought. This information will be used to select and prioritise the significant GEOTEM responses detected by the survey. Due reference will also be made to other available data, such as geological and other geophysical maps. In addition, close consultation with THE COMPANY's geologist/geophysicist will ensure that the stated objectives of the survey were upheld.

The interpretation of the data will be presented as plan maps accompanied by an explanatory report.

ii) Stacked Profile Maps

This style of presentation depicts the profile data of an individual parameter for every survey line in plan form. The horizontal scale is generally chosen to correspond to other plan products and the vertical scale is selected to ensure sufficient sensitivity. This style of presentation does not require gridding of the data and is therefore not affected by any smoothing or averaging effects introduced by the gridding algorithm.

iii) Shaded Colour Profile Maps

This presentation is based on the stacked profile style of presentation, as described above. In addition, the area between each profile and its base line is coloured to reflect the value of a selected parameter. The combination of parameters displayed can be varied to produce the most diagnostic plan map. As an example, stacked profiles of GEOTEM channel amplitude data can be colour-shaded with time constant or apparent conductivity information. In this way, the measured amplitude response, as well as the derived variable, is displayed on the single plan map.

iv) Modelling

There are a variety of options available that utilise computer modelling of the GEOTEM data. Any of the derived parameters from the computer modelling can be presented in profile and/or plan presentation form. The GEOTEM data is selected at one second intervals and matched to theoretical data for the designated model using a least squares fitting method. Any number of GEOTEM channels can be used in the fitting, however a minimum of three channels must exceed a pre-determined threshold before a conductivity/depth interpretation is made at any point. When this conditions is not met, a null value is produced.

The following models can be used to produce the parameters listed below:

Model		Program Output
Homogeneous Half Space (HHS)	-	Apparent HHS Conductivity
	-	Apparent depth to the HHS
	-	Confidence of fit
Two Layer Model	-	Apparent Conductive Layer Conductivity
(typically conductive layer	-	Apparent Depth to top of upper layer
overlying resistive basement	-	Apparent Depth to bottom of upper layer
but the reverse model can be used)	-	Confidence of fit

Although other computer modelling can be undertaken, our experience has shown that these models have produced the best results.

v) Imaging

GEOTERREX PTY LTD has an ERMapper image processing facility which can be used either on an interactive basis with a representative of THE COMPANY or under instruction from THE COMPANY to produce selected images.

vi) Conductivity Depth Sections

Apparent conductivity and depth information can be derived from a series of algorithms applied directly to the GEOTEM data. The output of this process can be displayed as colour sections analogous to cross sections of the earth for each of the survey lines. The formulae used in this process are proprietary and cannot be disclosed.

vii) In-Pulse Data

In addition to the standard receiver channels that record the GEOTEM response after transmitter turn-off, there are selected channels recording information during the transmitter pulse. These channels are not routinely processed and presented, but can, depending on the geologic environment, contain significant information. These channels can often prove helpful when investigating near surface and/or highly resistive terrains where the off-time channels are less applicable. Depending on the specific requirements, these channels of data can be processed and presented in addition to the conventional GEOTEM data.

20) Magnetic Data Processing and Products

a) Processing

The raw magnetic data will be read from the field tapes and edited for spike removal. The magnetic data will be levelled by computer and corrected for the magnetic regional gradient, updated in accordance with the current version of the IGRF. The levelled magnetic data will be image processed to verify the quality of the data prior to the production of any final products.

b) Gridding and Contouring

The levelled magnetic data will be gridded and contoured by computer. The contour interval will be suitable with respect to the magnetic gradient over the area and will be determined by GEOTERREX unless otherwise specified by THE COMPANY. Similarly, GEOTERREX will select a grid mesh size that is appropriate for the survey line spacing unless otherwise specified by THE COMPANY. The contour plot program will employ variable line thickness and/or different coloured lines to define the minor and major contour intervals.

Final magnetic contour maps will be plotted at 1:25,000 scale.

21) Digital Data Tape(s)

GEOTERREX will provide final located data tape(s) containing the following data:

- line number
- flight number
- date
- fiducial number
- easting
- northing
- GEOTEM readings
- altimeter readings (metres)
- magnetic readings (raw)

The data will be recorded in ASCII code onto Exabyte cartridges in tar format. The specific format for this data tape will be specified by GEOTERREX unless otherwise agreed between GEOTERREX and THE COMPANY.

22) General Plotting Specifications

Final Maps: Plastic stable base material will be used for final maps unless otherwise specified. The title block will be at the southern end or eastern border of each sheet. All data plotted on each sheet will be plotted such that it can be read from the southern or eastern edge of the sheet. For each pair of geophysical and flight path maps, the corners of the sheet area will align exactly when the sheet borders are aligned.

Final Profiles: All final profiles will be plotted in colour on paper. The title block will appear at the right hand end of the profile which will be either north or east depending on the survey line direction.

23) Deliverable Items

23.1) GEOTERREX shall deliver to THE COMPANY **data derived from the survey including:**

- tracking video
- flight logs and flight index
- logistics report summarising the survey operations and incorporating the results of all test procedures performed and descriptive documentation of the formats used for all data tapes
- recovered line listing
- mileage listing
- all material supplied by THE COMPANY

23.2) GEOTERREX shall deliver to THE COMPANY **in-field services and processed data, including:**

- flight path maps on paper at suitable scale
- a GEOTEM plan map of a selected parameter (one channel amplitude or ADI) in either stacked profile or contoured form at a scale that can be handled in the time frame of the field project
- edited aircraft analogue records

23.3) GEOTERREX shall deliver to THE COMPANY final processed data including:

- located data tape(s) with computer printouts for verification
- a multiplot of each flight line displaying the channels of processed EM data, the calculated ADI, the 50 Hz noise monitor, magnetics (coarse and fine scales) and altimeter trace
- final flight path maps
- colour ADI maps with and without herringbone, for each of the X and Z components
- residual magnetic contour maps

All deliverable items will be correctly annotated and clearly labelled. The digital field tapes will remain the property of GEOTERREX.

PART D
General matters pertaining to the survey

24) Progress Reports

GEOTERREX will provide regular progress reports outlining the progress of all phases of the survey including flying progress and the status of data processing. Such reports shall be made to the specified representative of THE COMPANY.

25) Site Geologist

At its own cost and expense THE COMPANY may arrange for a geologist or geophysicist (THE SITE GEOLOGIST) to be available with respect to the survey. Although it is understood that GEOTERREX is an independent contractor and shall have full right to direct the performance of the survey, THE SITE GEOLOGIST shall have the right to inspect and review the data as and when collected and GEOTERREX and THE COMPANY shall have the right to vary the survey within the terms of the variations provided for herein.

26) Good Standard Practice

GEOTERREX will carry out and complete the survey in a diligent and workmanlike manner in accordance with the details specified in this Agreement and in accordance with good standard practice appropriate to the airborne geophysical survey industry and by taking advantage so far as is reasonably practicable of the latest development of techniques in the industry.

27) Flight Permits

GEOTERREX shall ensure that all necessary flight licences and permits have been obtained as may be required to authorise the survey to be conducted. However where inhabited areas exist within or adjacent to the survey areas the specifications regarding line spacing and terrain clearance may be disregarded by GEOTERREX unless special dispensation has been granted to enable low flying over the inhabited areas.

THE COMPANY shall ensure that all requirements of the relevant government exploration regulations have been fulfilled in particular those pertaining to notification of landowners and custodians of the area for the intended airborne survey.

28) Safety

The survey will be conducted in strict accordance with the safety procedures specified in GEOTERREX' Safety Policy. All GEOTERREX personnel engaged in any aspect of the survey will have achieved at least the minimum training levels as specified in the GEOTERREX Safety Policy. Air crew will be completely familiar with SAR procedures. GEOTERREX will ensure that pilot hours are continuously monitored and legal limitations rigidly adhered to. GEOTERREX' Safety Co-ordinator makes random visits to all GEOTERREX field crews and he has the mandate to immediately suspend all survey operations if, in his opinion, any safety procedure specified in the Safety Policy is not being followed.

It is the responsibility of THE COMPANY to make every attempt to not knowingly place any GEOTERREX crew member in a potentially dangerous situation. In the event of a dangerous situation developing, THE COMPANY must, within reason, endeavour to assist GEOTERREX to alleviate the danger. Any support provided by THE COMPANY will be required to meet GEOTERREX Safety Policy standards. Should any requirement of the contract for work between THE COMPANY and GEOTERREX be found to be in violation of GEOTERREX' standard safety procedures, GEOTERREX retains the right to suspend any further work under the contract without penalty until an acceptable solution is negotiated.

A copy of the GEOTERREX Safety Policy can be made available to THE COMPANY upon request prior to the commencement of the survey program.

ABERFOYLE
☐ Current/Applications

EL9494
Three Knobs

BLOCK 3

BLOCK 5

EL9486
Mallapunyah

BLOCK 1

ELA 9895
Possum Point

EL9495
Dingo Creek

EL9497
Kiana

BLOCK 4

BLOCK A

EL8134
Kilgour Gorge

EL9068
Matchbox

BLOCK 2

EL9493
Puzzle Creek

EL9415
Goonadans

BLOCK B

EL9105
Creswell Downs

LOCALITY MAP (1:20,000,000)

1:250,000 MAP SHEET INDEX (1:5,000,000)

0 10 20
Kilometres
Scale 1:250 000
DATUM: AGD66
PROJECTION: AMG ZONE 53

N

CR97/729

Aberfoyle Resources Limited
EXPLORATION DIVISION

REVISIONS				
Init	Date	Init	Date	

Northern Territory
McArthur Basin Project
Barkly Property Block
Geoterm Flight Lines and Current Tenure

Compiled: KM
Printed: DA756C
Office: TSV
Date : 1/10/1998
Plate No MCA-020

Template mca250kaOp
Workspace: \\HAL\Digis\AUSNT\DOMAINS\mca\PLATES\MCA-020.wor

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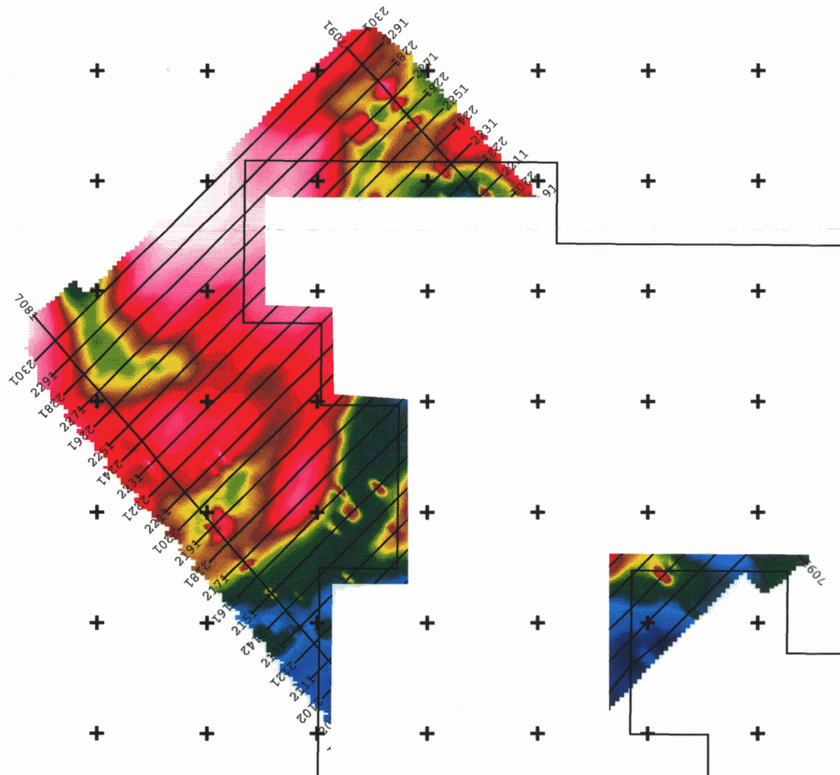
8105000N 8102500N 8100000N 8097500N 8095000N 8092500N 8090000N 8087500N 8085000N 8082500N 8080000N 8077500N 8075000N 8072500N 8070000N 8067500N 8065000N 8062500N 8060000N



N

16300
13000
9770
6500
3220
-53
ppm

ABERFOYLE RESOURCES LIMITED
EXPLORATION DIVISION

REVISIONS			
Init.	Date	Init.	Date

Map Projection:TMAMG53
Geodetic Datum:AGD66
Location Code:

Northern Territory
McArthur River Geotem 25Hz
McArthur River Survey - Block 2
Geotem 25Hz z adi
MCAR_gtem_zadi_b2_el9493clip_100k

Scale: 1:100 000 | Date: 12/11/97

Compiled: DJH
Printed: DJ650
Traced:
Checked:
Plate No. McA022c

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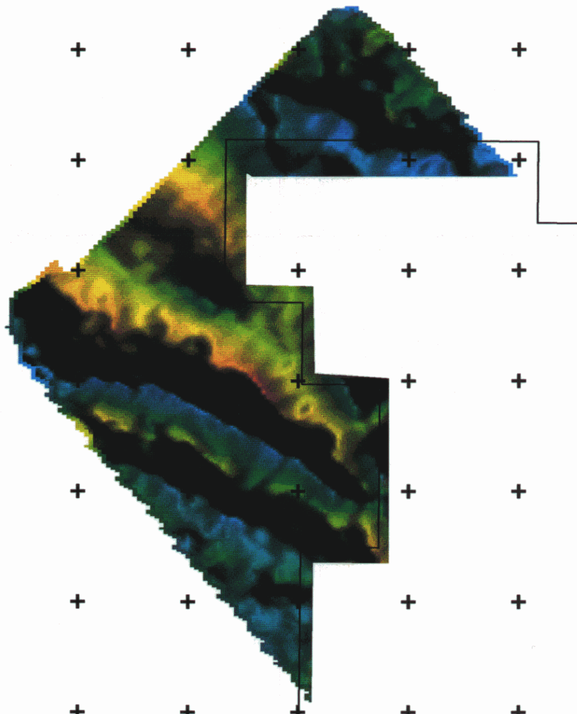
8105000N 8102500N 8100000N 8097500N 8095000N 8092500N 8090000N 8087500N 8085000N 8082500N 8080000N 8077500N 8075000N 8072500N 8070000N 8067500N 8065000N 8062500N 8060000N

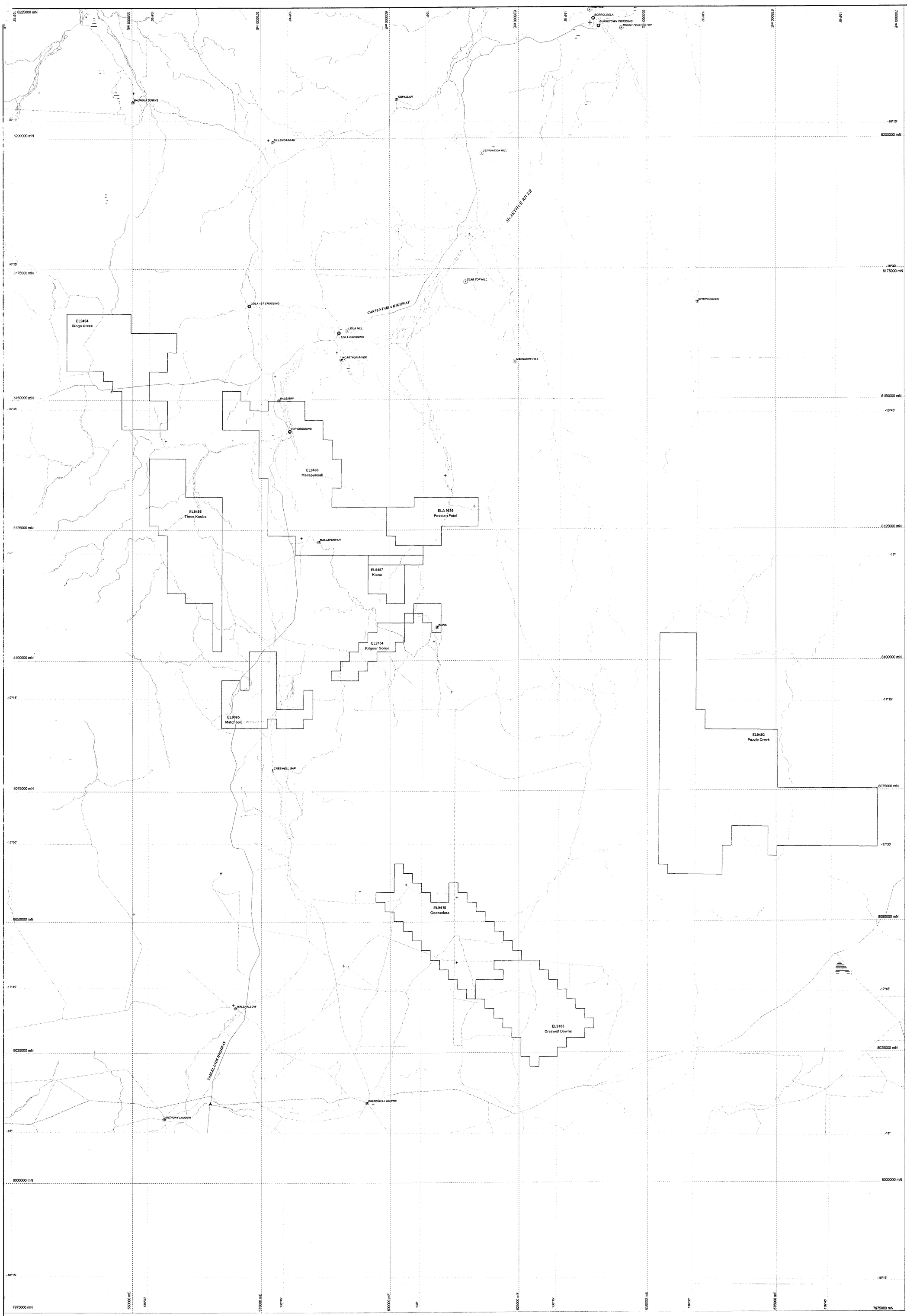


N

CR97/729

ABERFOYLE RESOURCES LIMITED EXPLORATION DIVISION		
REVISIONS Init. Date Init. Date	Northern Territory McArthur River Geotem 25Hz **McArthur River Survey - Block 2** **Geotem 25Hz mag intensity / TMI pseudocolour** MCAR_gtem_mag_b2_ei9493clip_100k	Compiled: DJH Printed: DJ650 Traced: Checked:
Map Projection:TMAMG53 Geodetic Datum:AGD66		
Location Code:	Scale: 1:100 000 Date: 12/11/97	Plate No. McA022d

1890
1840
1800
1750
1710
1660
ppm



ABERFOYLE TENURE

- Current/Applications

INFRASTRUCTURE

AIRCRAFT

- Airport
- Landing ground
- Heliport

LOCALITY

- Homestead
- Mountain-peak-hill
- Pass
- Populated place

ROADS

- Dual carriageway
- Principal road
- Secondary road
- Minor road
- Track

HYDROLOGY

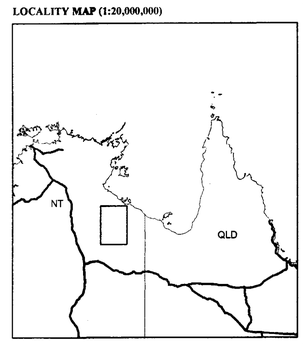
DRAINAGE

- Major watercourse
- Other watercourse
- Canal

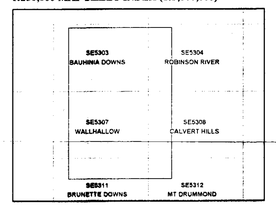
WATER BODY

- Lake/reservoir/watercourse
- Swamp

LOCALITY MAP (1:20,000,000)



1:250,000 MAP SHEET INDEX (1:5,000,000)



CR97/729

0 10 20

Kilometres
Scale 1:250 000

DATUM: AGD66
PROJECTION: AMG ZONE 53

N

FIGURE 1

Aberfoyle Resources Limited
EXPLORATION DIVISION

REVISIONS			
Int.	Date	Int.	Date

Northern Territory
McArthur Basin Project
Barkly Property Block
Culture/drainage base sheet

Compiled: RHL
Printed: DJ-755C
Office: TSV
Date : 19/08/1997
Plate No : MCA-040

Template: mca250ka0b_AMG Workspace : HAL\D:\gis\AUS\NT\DOMAINS\mca\PLATES\MCA-040.wor