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EL 3498

COCKABIDNIE NORTH

ANNUAL REPORTS TO LICENCE EXPIRY/SURRENDER FOR THE PERIOD 18/1/2006 TO 17/1/2010

Submitted by
Lincoln Minerals Ltd
2010

Enquiries: Customer Services Branch
Minerals and Energy Resources
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101 Grenfell Street, Adelaide 5000

Telephone: (08) 8463 3000
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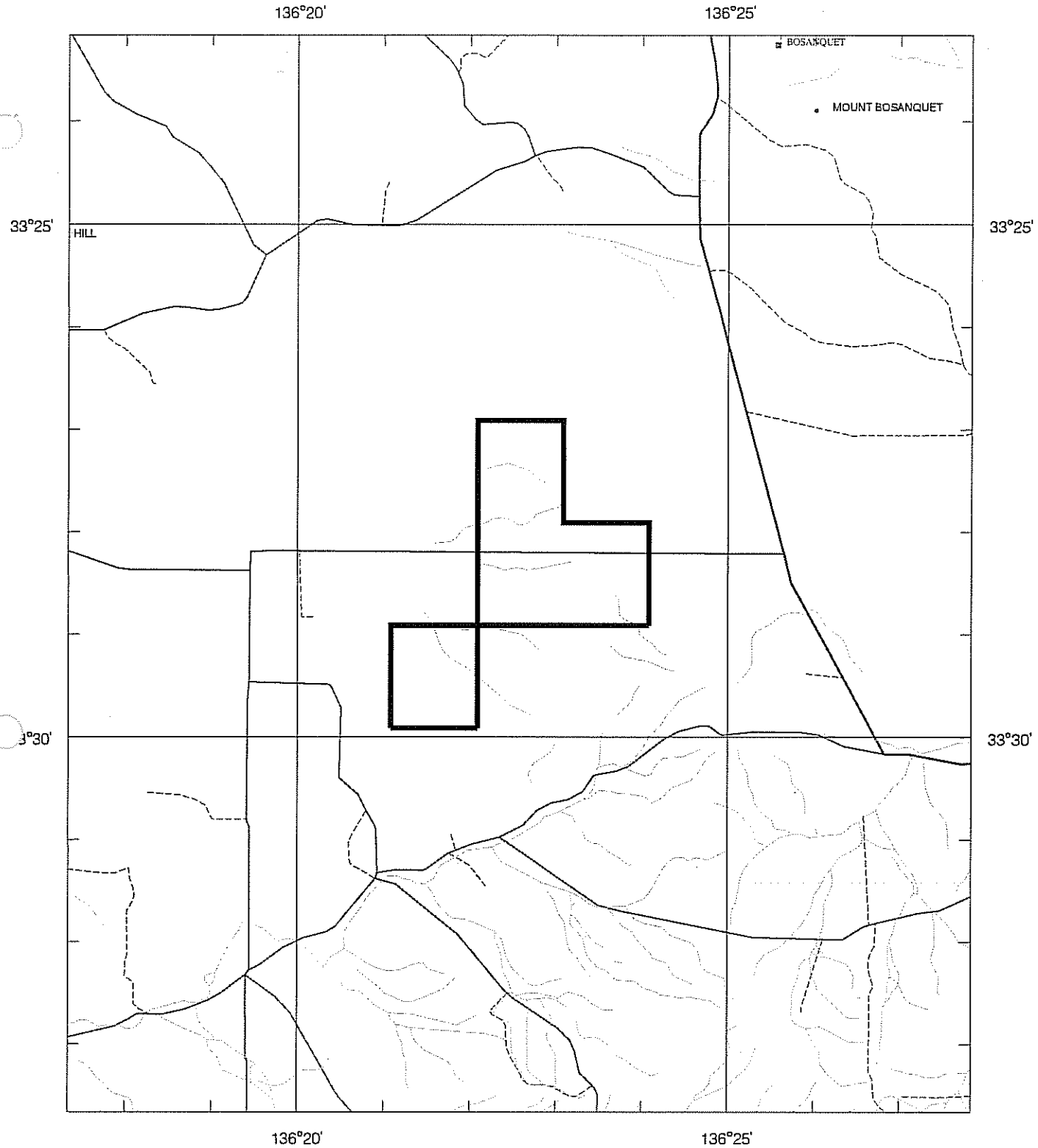
Government of South Australia
Primary Industries and Resources SA

SCHEDULE A



SCALE 1 : 100 000

METRES 2000 0 2 4 6 8 10 KILOMETRES

LICENCE GRANTED IN : DATUM AGD66

APPLICANT : **CENTREX EXPLORATION LTD**

FILE REF : **275/05** TYPE : **MINERAL ONLY** AREA : **11** km² (approx.)

1:250000 MAPSHEETS : **KIMBA**

LOCALITY : **COCKABIDNEE NORTH AREA - Approximately 40 km south of Kimba**

DATE GRANTED : **18-Jan-2006** DATE EXPIRED : **17-Jan-2007** EL NO : **3498**

LINCOLN *MINERALS* LIMITED
ABN 50 050 117 023

28 Greenhill Road Wayville South Australia 5034 Australia
Phone: **618 8274 0243** Facsimile: 618 8373 1496

Website: www.lincolnminerals.com.au
Email: info@lincolnminerals.com.au

15 March 2007

Mr George Kwitco
Mineral Exploration Division
Department of Primary Industries and Resources, SA
GPO Box 1671
Adelaide SA 5001

Dear George,

Re: EL 3498, Cockabidnie North, Annual Technical Report, 18th Jan 2006 - 17th Jan 2007

No field exploration activities were undertaken on Cockabidnie North EL 3498 during the reporting period. However, all existing data were reviewed and collated in ArcView format (see attached map) for preparation of Lincoln Minerals' Prospectus which was published in early February 2007.

A low level (50m agl), 100m line-spaced aeromagnetic and radiometric survey was planned during the year but flying by UTS was not scheduled until early February 2007. That survey was completed on 23 February 2007 and data are being processed by UTS.

Because we haven't undertaken any field activities in the last year and the aeromagnetic survey was completed after 17 January, there is no new technical data to include in the annual technical report. We therefore seek to waive the requirement to produce a detailed technical report for the year ending 17 January 2007.

Yours sincerely,

Dr A. John Parker
Managing Director

LINCOLN *MINERALS* LIMITED
ABN 50 050 117 023

28 Greenhill Road Wayville South Australia 5034 Australia
Phone: **618 8274 0243** Facsimile: 618 8373 1496

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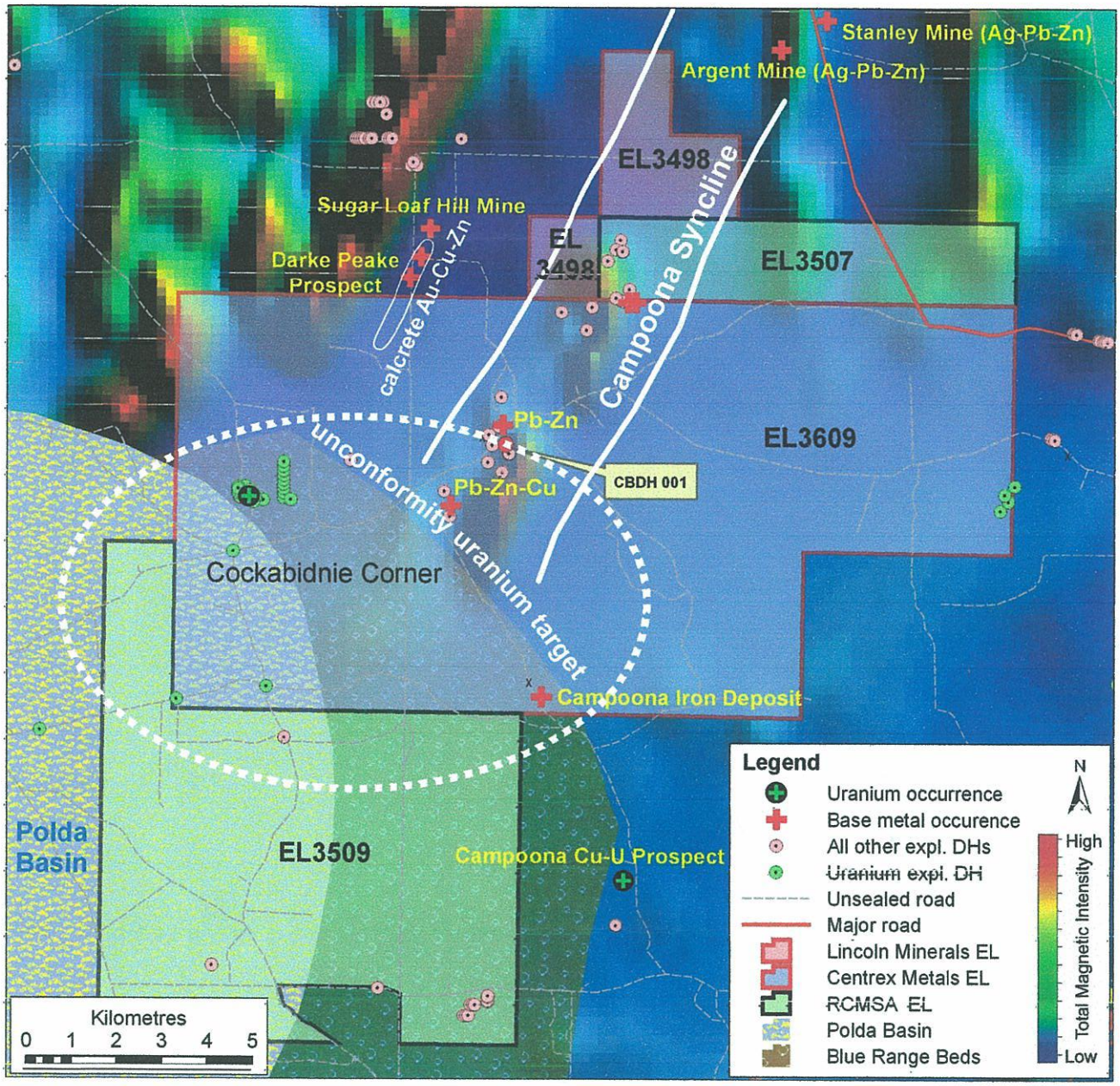
Email: info@lincolnminerals.com.au



LINCOLN MINERALS LIMITED

ABN 50 050 117 023

EL3498 (Cockabidnie North) Eyre Peninsula

First Annual Technical Report for Period
18th January 2007 to 17th January 2008

For Twelve Months Ending:	17/01/2008	**Licensee:**	Lincoln Minerals Limited
		Operator:	Lincoln Minerals Limited
Mineral(s) Sought:	Uranium, gold, base metals and all minerals other than opal	**Prepared by:**	D A Povey
		Date:	7 March 2008
		Phone No:	08 8274 0243
Map Sheets:	KIMBA VERRAN	**Fax No:**	08 8274 0242
Key Words:	Gawler Craton, Hutchison Group, Campoona Syncline, calcrete.		

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"Information in this report that relates to exploration targets and results was compiled by Dr A J Parker who is a Member of the Australasian Institute of Geoscientists. Dr Parker is Managing Director of Lincoln Minerals Limited and has sufficient experience relevant to the styles of mineralisation and to the activities which are being reported to qualify as a Competent Person as defined by the JORC code, 2004. Dr Parker consents to the release of the information compiled in this report in the form and context in which it appears."

1 Introduction

This report is for the period 18th January 2007 to 17th January 2008.

The Cockabidnie North Project, EL 3498, was first granted on the 18th January 2007. Cockabidnie North is located approximately 25km northwest of Cleve (Figure 1).

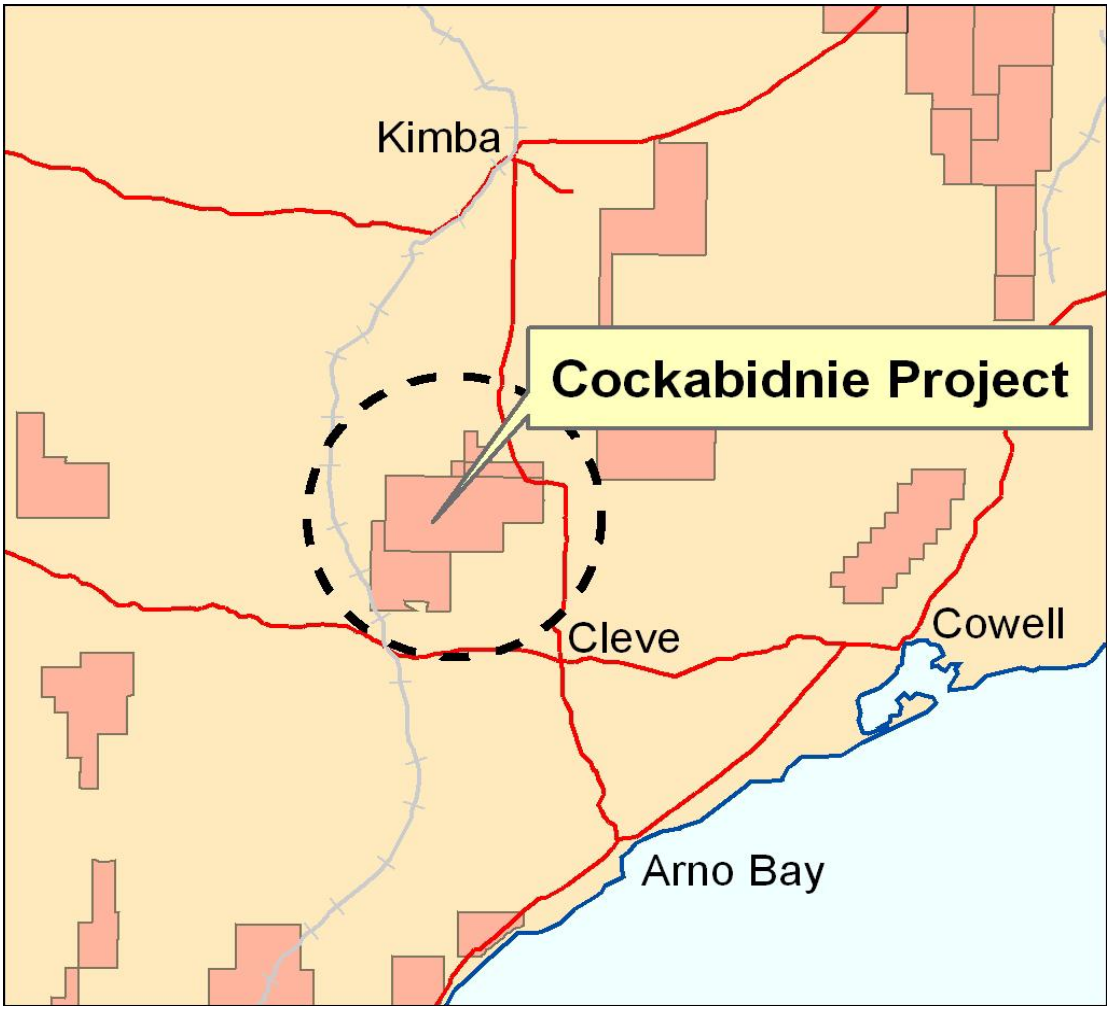

Figure 1: Locality map showing the Cockabidnie project and tenement boundaries held jointly with Centrex Metals.

The project area is prospective for a large range of polymetallic minerals including Menninnie Dam style Pb-Zn-Ag (Cu-Au) mineralisation and U mineralisation.

During the reporting year exploration activities included:

- Notices of Entry prepared and delivered to farmers;
- Regional calcrete sampling over selected areas (total 82 samples)
- Airborne Geophysics in collaboration with Centrex Metals Ltd.

2 Regional Geology

The regional geological setting of southern Eyre Peninsula straddles the boundaries between the Archaean Coulta Subdomain, Palaeoproterozoic Cleve Subdomain and Palaeoproterozoic Spencer Subdomain (Figure 2).

The majority of Lincoln Minerals tenements are located within the Cleve Subdomain where the Palaeoproterozoic Hutchison Group metasedimentary sequence was highly metamorphosed to upper amphibolite facies and multiply deformed during the Kimban Orogeny about 1840-1700 Ma (Drexel *et al*., 1993). This deformation folded the rocks into a series of tight, often refolded synclines and anticlines sandwiched between major faults and shear zones. The Hutchison Group was intruded by a series of granites, the Lincoln Complex, and mafic intrusions, the Tourneforte Dyke Swarm, prior to and during the Kimban Orogeny and many of these granites and dykes are now strongly deformed themselves.

The Hutchison Group on southern Eyre Peninsula was formed from a sequence of platformal mixed carbonate and clastic sediments. The basal Warrow Quartzite progrades from west to east and contains quartz-pebble conglomerate with potential for Elliot Lake style uranium mineralisation. Warrow Quartzite is overlain by a platformal carbonate sequence now represented by dolomitic marble, calcsilicate gneiss and BIF. This is prospective for base metals, iron ore and uranium. The carbonate/BIF sequence is overlain by a thick sequence of fine grained clastic sediments now represented by garnetiferous schist, gneiss and amphibolite. The latter may have a mafic volcanic component.

The boundary between the Cleve and Spencer subdomains is a major crustal shear zone, the Kalinjala Mylonite Zone, that has had a long history of movement and associated alteration, fluid flow and mineralisation.

Exposure of the Hutchison Group and associated rocks on southern Eyre Peninsula is poor and much of the region is covered by Cainozoic sediments ranging from thin lateritic sand and gravel on the uplands west of Port Lincoln to thicker sand, gravel and clay of the Tertiary Lincoln and Uley-Wanilla basins (Schwarz 2002). A thin veneer of Quaternary to Recent alluvial sand, aeolian calcarenite and soil covers most of the region so that there are only scattered outcrops of older mineralised basement exposed on hills and in creeks and gullies.

The Cockabidnie area has been the focus of both base metal and uranium exploration sporadically since the late 1960's. It has potential for unconformity uranium mineralisation associated with the base of the Blue Range Beds and also both base metal and iron ore mineralisation associated with the BIF-marble-calcsilicate sequence extending south and southwest from the Stanley Mine.

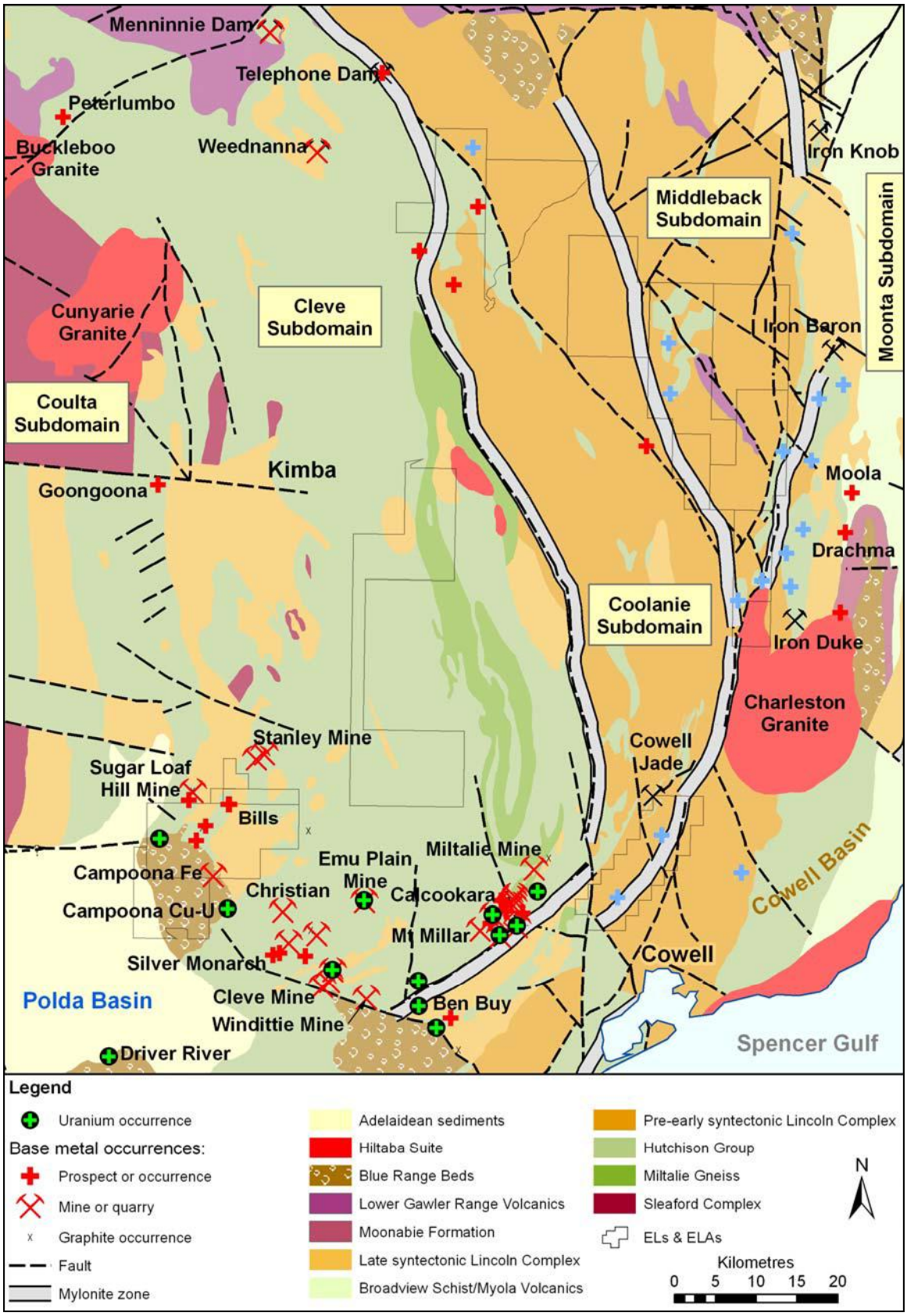

Figure 2: Regional Geological setting for Northern Eyre Peninsula

3 Previous Exploration

Exploration by CRA Exploration and Shell Metals/Billiton (Env 3573) centred on the Campoona Syncline where there is high background base metal geochemistry (up to 0.9% Pb in outcrop samples) and Sirotem anomalies associated with BIFs. Many Sirotem anomalies were attributed to graphitic schist and uranium anomalies were mainly in surficial sands. One drillhole 5km ENE of Cockabidnie Corner intersected 6.1m @ 0.51% Pb and 18.3m @ 0.21% Zn. Drilling by Western Mining in the same general area intersected intervals up to 5m @ 1.14% Zn and 0.11% Pb (Env 6566).

A 10 x background gas-in-soil radon anomaly was located by the Pancontinental Mining-PNC-Afmeco Joint Venture 1.5km north-northeast of Cockabidnie Corner with coincident uranium in borehole water and hematite alteration in both the Mesoproterozoic cover and underlying graphitic schist basement (Env. 3551). Neither the source of the radon nor uranium anomalies were identified from RAB and core drilling but the anomaly highlights the potential in this region for unconformity-related uranium mineralisation.

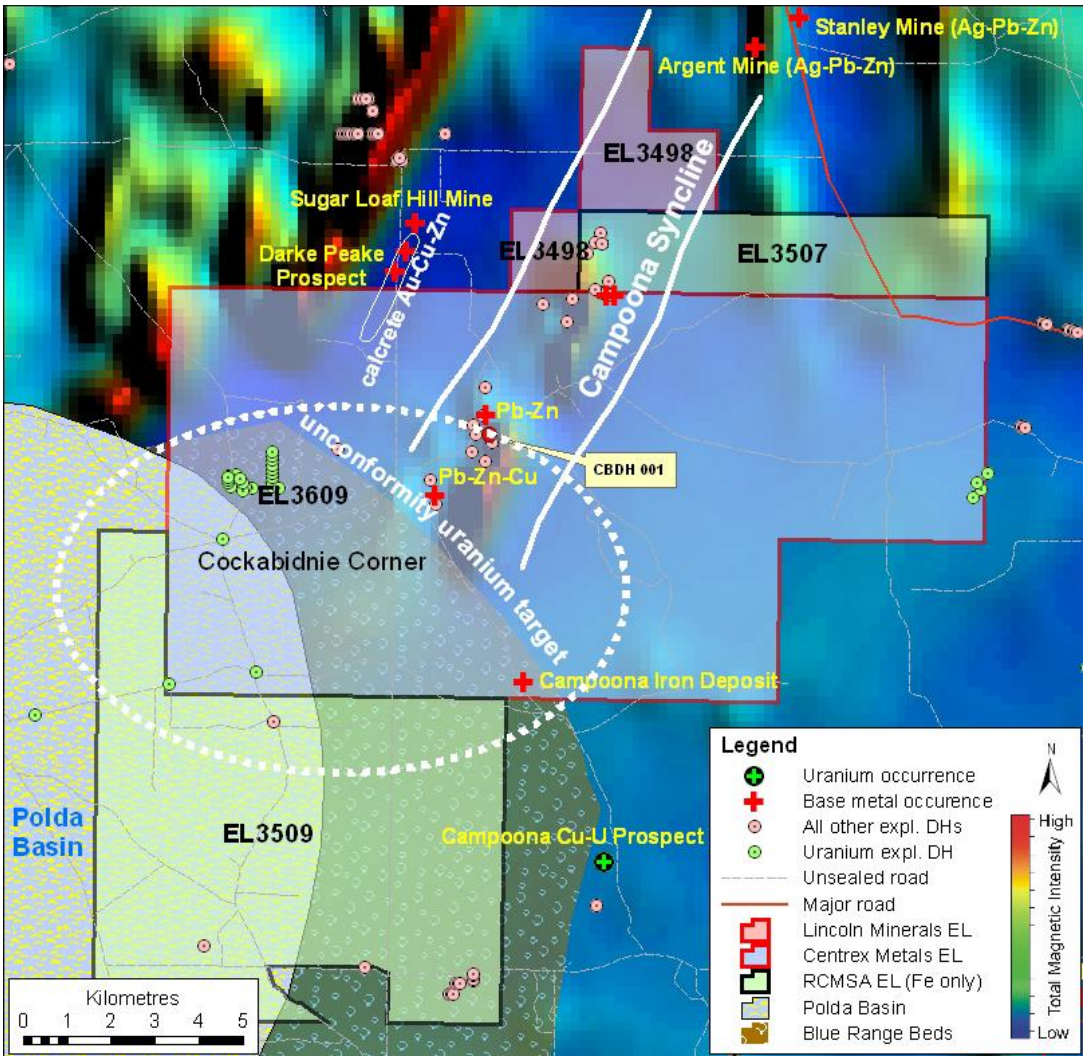

Figure 3: Cockabidnie project, water wells, drillholes and tenement boundaries.

A surface geochemical calcrete survey by Goldstream Mining to the north of Cockabidnie (Env 9269) identified a 62ppb Au anomaly just southwest of Sugarloaf Hill Mine. Follow-up RAB drilling (not in ELs 3609 or 3498) intersected 1m @ 1.35g/t Au, 9m @ 0.27% Zn, 13m @ 12g/t Ag and 2m @ 0.17% Cu. Further calcrete sampling by Goldstream extended the >10ppb Au calcrete anomaly southwest for ca. 1km into EL 3609. There is a >100ppm Cu and >100ppm Zn anomaly coincident with the calcrete gold anomaly.

Peninsula Minerals Limited undertook a detailed gravity survey over a section of the Campoona Syncline and drilled one hole (CBDH 001) to 502m test the gravity model. The hole intersected mixed calcsilicate gneiss, BIF and schist with minor pyrite but failed to account for the source of the gravity anomaly.

4 Geophysics

A low level airborne geophysical survey was undertaken in February 2007 for 1,934 line kilometres at a line spacing of 100m. Geophysical data and expenses were shared between Centrex Metals and Lincoln Minerals. A comprehensive report on the geophysics of Cockabidnie North was included in the first annual report for EL3609 Cockabidnie (Centrex Metals, 2007).

5 Results

5.1 Calcrete Sampling

An initial program of near-surface regional calcrete sampling (500m spaced – shovel and crowbar) was undertaken to identify exploration targets. Lincoln Minerals pathfinder suit of elements includes Ag, As, Au, Bi, Ca, Co, Cu, Fe, Mg, Mo, Ni, Pb, Th, U and Zn. Analytical results of 82 samples to date (Figure 4 and 5) have not indicated any anomalous values above background. Specific sample collection data and associated assay techniques can be found in Appendix 1.

5.2 Drilling

No drilling was undertaken during the reporting period.

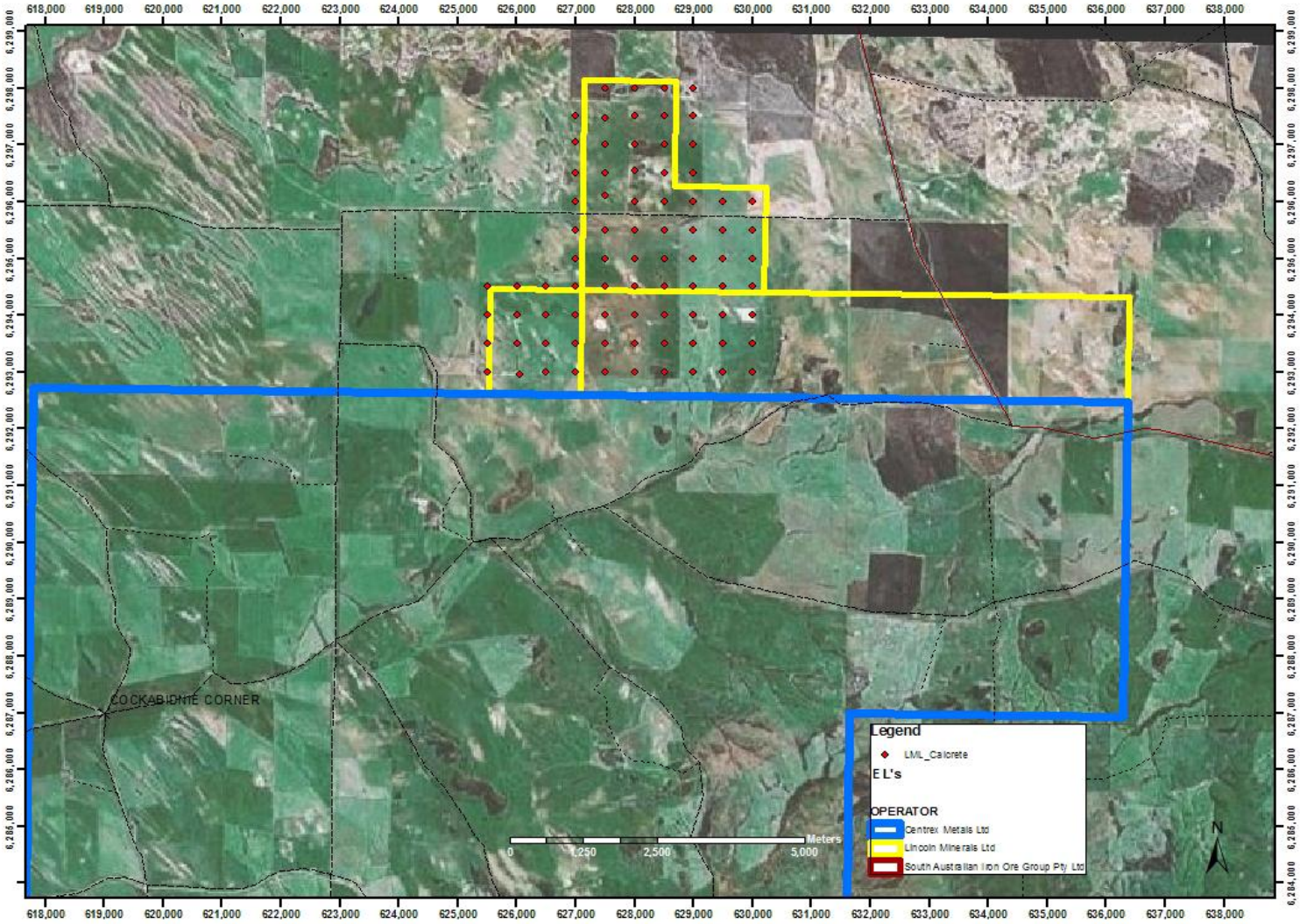

Figure 4: Location of LML calcrete sampling, EL 3498

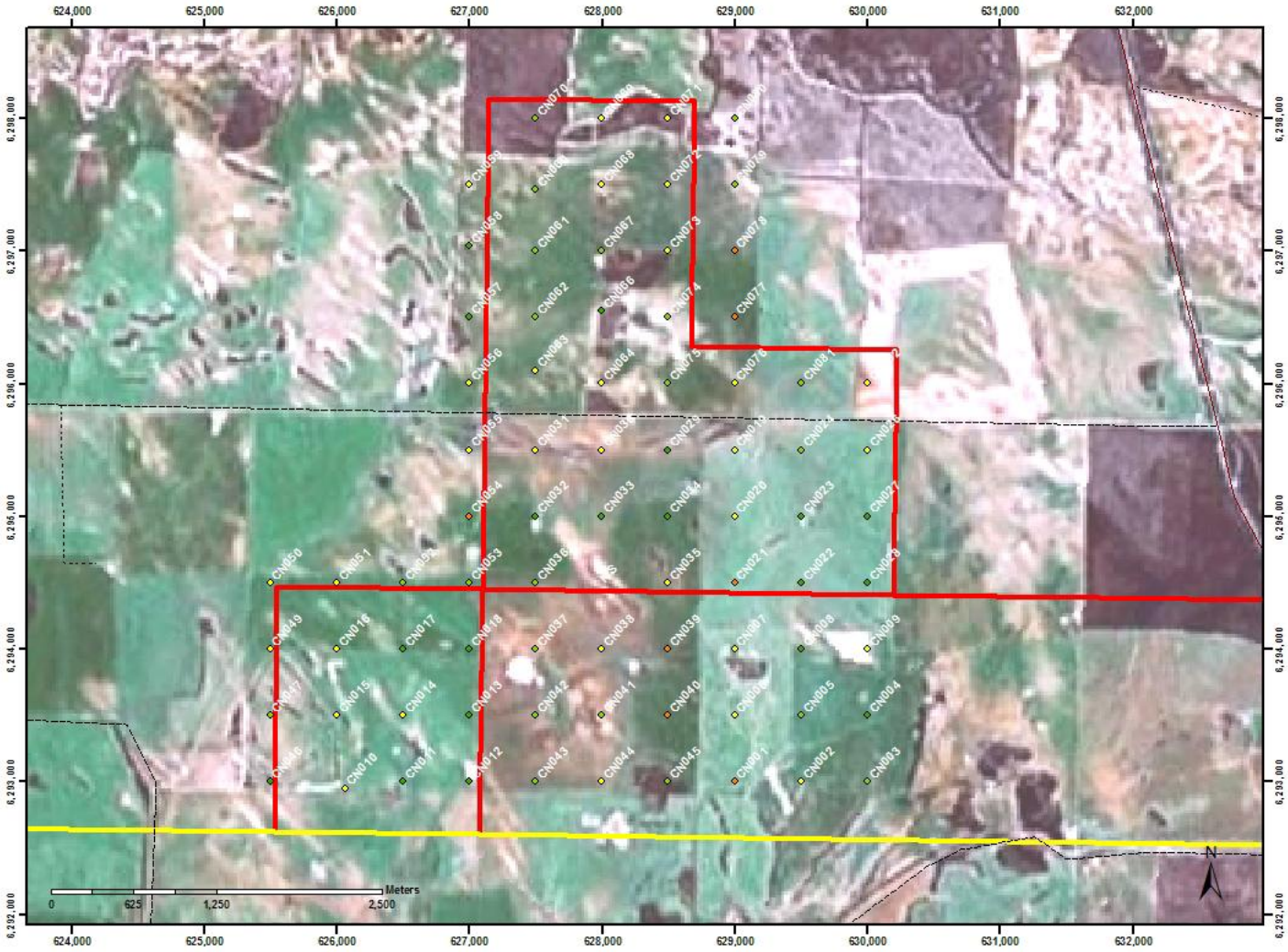

Figure 5: Numbered Calcrete samples, EL3498.

6 Expenditure

Expenditure Details 18 January 2007 to 17 January 2008

Expenditure	
Geology - salaries	6,772.66
Geology - materials, freight	252.66
Geology - consumables	8.83
Geology - communications	14.16
Geology - field office, genera	1,146.96
Geophysics - o/s contractors	450.00
Surveys - airborne contractors	642.85
Depreciation of equipment	87.95
Tenement rents & fees	79.50
Access - o/s contractors	32.50
Drill & sampling - travel	248.72
Drill & sampling - vehicle	679.83
Drill & sampling - hire plant	250.00
Total Expenditure for Period	**10,666.62**

Note: Calcrete analytical costs and Geophysical costs incurred on EL3498 have been attributed to EL3609 – Cockabidnie.

7 References

Centrex Metals, 2007. First Annual Technical Report 2007 EL3609 Cockabidnie.

Drexel, J.F., Preiss, W.V. and Parker, A.J., 1993. *The geology of South Australia, Vol. 1*, The Precambrian, South Australia. *Department of Primary Industry and Resources. Geological Survey, Bulletin*, 54.

Open File Envelop ENV 3551 – Pancontinental Mining PNC - Afmeco

Open File Envelop ENV 3573 – CRA Exploration and Shell Metals/Billiton.

Open File Envelop ENV 6566 – WMC.

Open File Envelop ENV 9269 – Goldstream.

Schwarz, M.P., 2002**.** LINCOLN map sheet. South Australia. *Geological Survey. Geological Atlas 1:250,000 Series, sheet SI53-11*.

8 Appendix 1: Cockabidnie North EL3498 Calcrete sample assays and locations

LINCOLN MINERALS LIMITED

ABN 50 050 117 023

EL3498 (Cockabidnie North) Eyre Peninsula

Second Annual Technical Report for Period
18th January 2008 to 17th January 2009

For Twelve Months Ending:	17/01/2009	**Licensee:**	Centrex Metals Limited
		Operator:	Lincoln Minerals Limited
Mineral(s) Sought:	Iron ore with Centrex Metals. Gold and base metals All minerals other than opal	**Prepared by:**	D A Povey
		Date:	12 March 2009
		Phone No:	08 8274 0243
Map Sheets:	KIMBA VERRAN	**Fax No:**	08 8274 0242
Key Words:	Gawler Craton, Hutchison Group, Campoona Syncline, RAB, re-assaying.		

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Figure No.

1 Introduction

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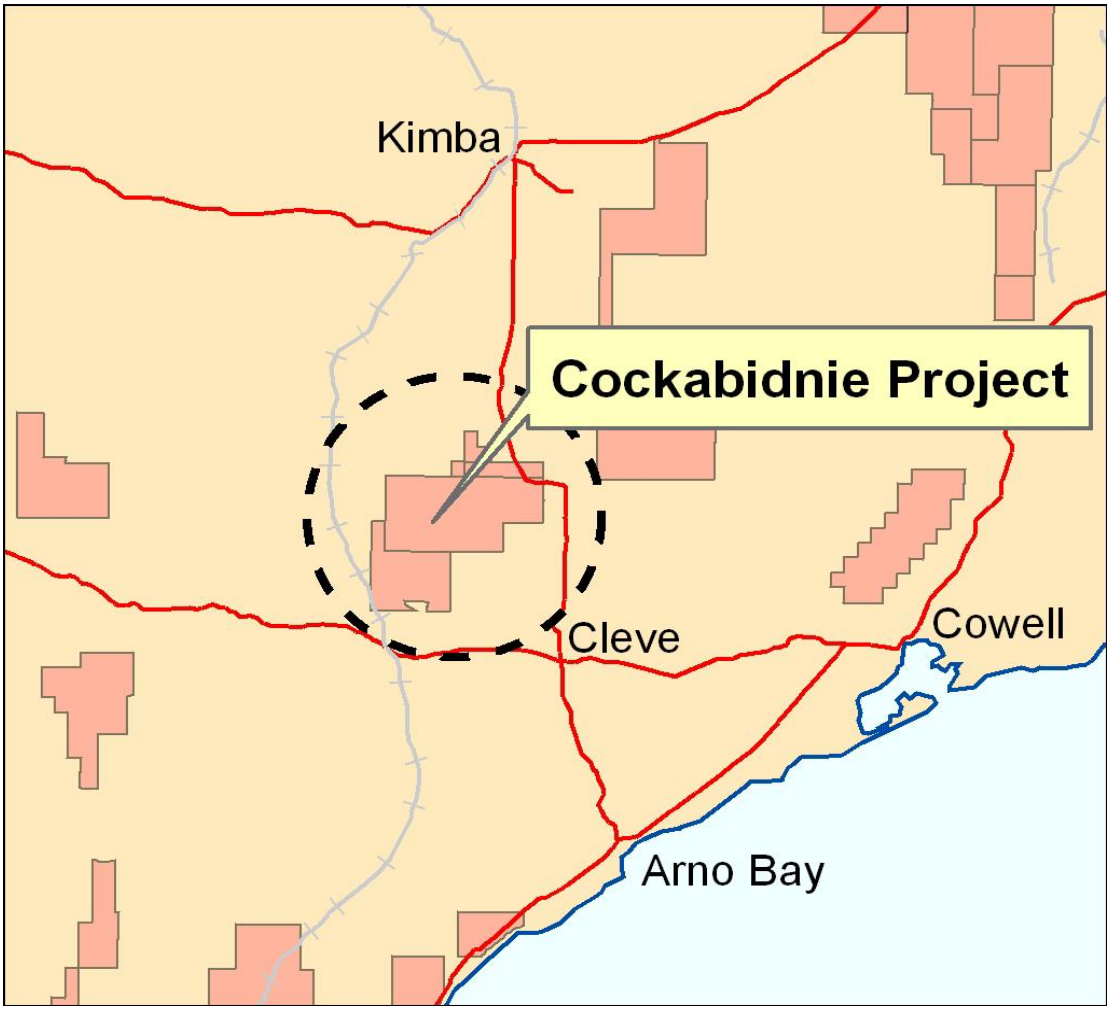

Figure 1: Locality map showing the Cockabidnie project and tenement boundaries held jointly with Centrex Metals.

The project area is prospective for a large range of polymetallic minerals including Menninnie Dam style Pb-Zn-Ag (Cu-Au) mineralisation and U mineralisation.

During the reporting year exploration activities included:

- Ongoing review and interpretation of geological, geophysical and surface geochemical data;
- Re-assaying old bottom of hole samples from the region.
- Planning for airborne gravity survey.

2 Regional Geology

The regional geological setting of southern Eyre Peninsula straddles the boundaries between the Archaean Coulta Subdomain, Palaeoproterozoic Cleve Subdomain and Palaeoproterozoic Spencer Subdomain (Figure 2).

The majority of Lincoln Minerals tenements are located within the Cleve Subdomain where the Palaeoproterozoic Hutchison Group metasedimentary sequence was highly metamorphosed to upper amphibolite facies and multiply deformed during the Kimban Orogeny about 1840-1700 Ma (Drexel *et al*., 1993). This deformation folded the rocks into a series of tight, often refolded synclines and anticlines sandwiched between major faults and shear zones. The Hutchison Group was intruded by a series of granites, the Lincoln Complex, and mafic intrusions, the Tourneforte Dyke Swarm, prior to and during the Kimban Orogeny and many of these granites and dykes are now strongly deformed themselves.

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The Cockabidnie area has been the focus of both base metal and uranium exploration sporadically since the late 1960's. It has potential for unconformity uranium mineralisation associated with the base of the Blue Range Beds and also both base metal and iron ore mineralisation associated with the BIF-marble-calcsilicate sequence extending south and southwest from the Stanley Mine.

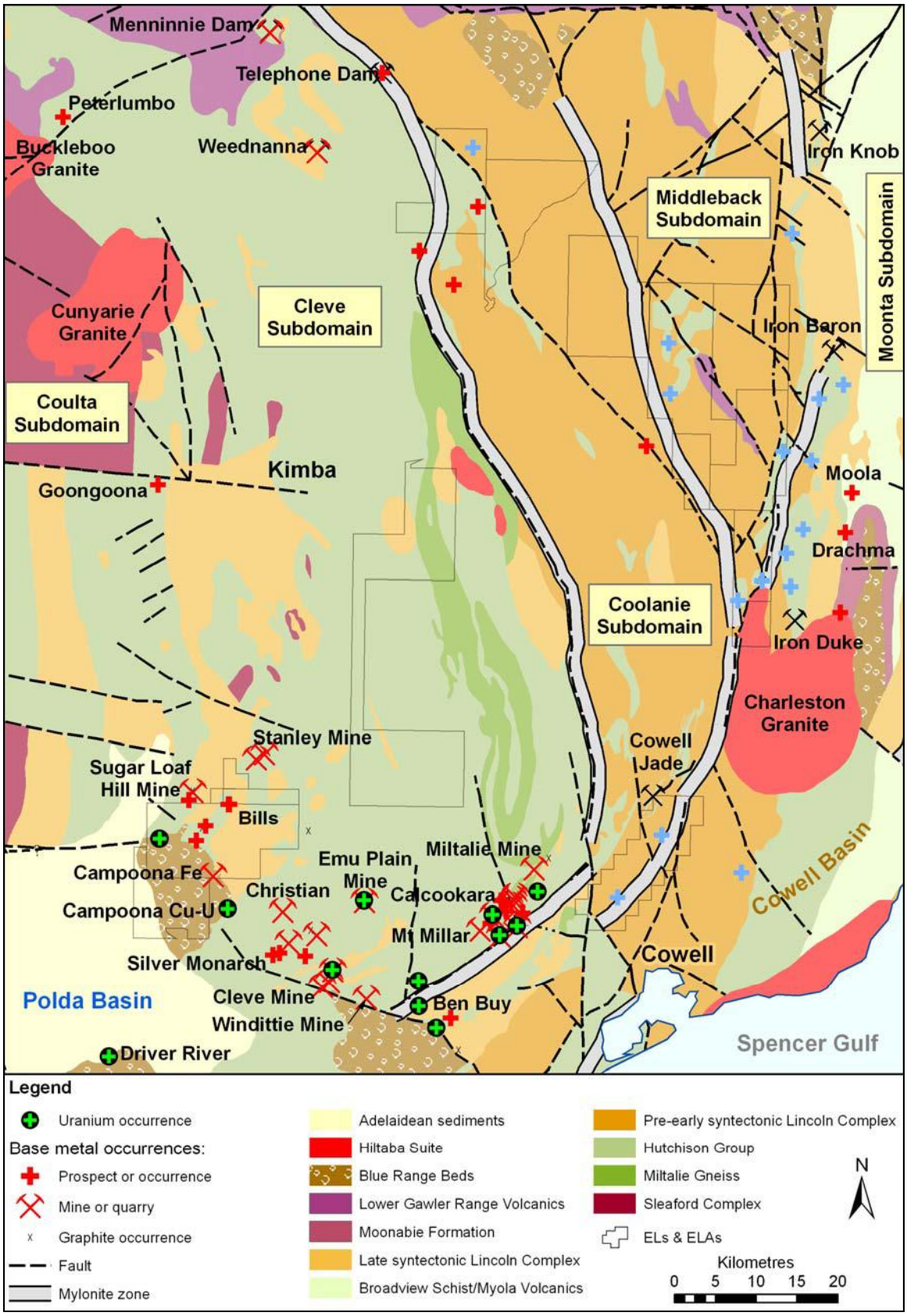

Figure 2: Regional Geological setting for Northern Eyre Peninsula

3 Previous Exploration

The reader is referred to the first annual technical report (EL3498 Cockabidnie North Eyre Peninsula 2008) for a detailed account of previous exploration.

4 Results

4.1 Drilling

No drilling was directly undertaken on EL3498, however the reader is referred to the neighbouring tenements' second annual technical report on EL3609 (Cockabidnie) Eyre Peninsula for a comprehensive drilling account.

4.2 Historic drillhole re-sampling

Re-assaying of old RAB drilling samples collected by C.R.A. Exploration Pty Ltd in 1981 (ENV 3573) on the Campoona Syncline provided additional information on basement chemistry. The historic drillholes ranged from depths of 4-21m depending on refusal depths with the bottom of hole sampled for Bi, Cu, Pb, Zn. The historic RAB samples were collated at Challenger Geological Services and forwarded to a laboratory for further analysis. The elements assayed by ICP-ME were As, Ca, Co, Cu, Fe, Mg, Ni, Pb, Zn. The results indicated anomalous nickel and cobalt assays up to 0.16% Ni and 0.02% Co displayed in Table 1 and Figure 3.

Table 1: Elevated Nickel and Cobalt samples from CRA RAB drilling

HoleID	Easting	Northing	Hole Depth	Ni%	Co ppm
CGR-453	624994	6289733	21	0.16	203
CGR-506	623941	6290058	12	0.11	202
CGR-475	624924	6289766	4	0.09	70
CGR-454	624969	6289745	6	0.08	55
CGR-274	625882	6291180	9	0.08	63
CGR-509	623869	6290097	6	0.06	71
CGR-253	626348	6291537	9	0.06	45

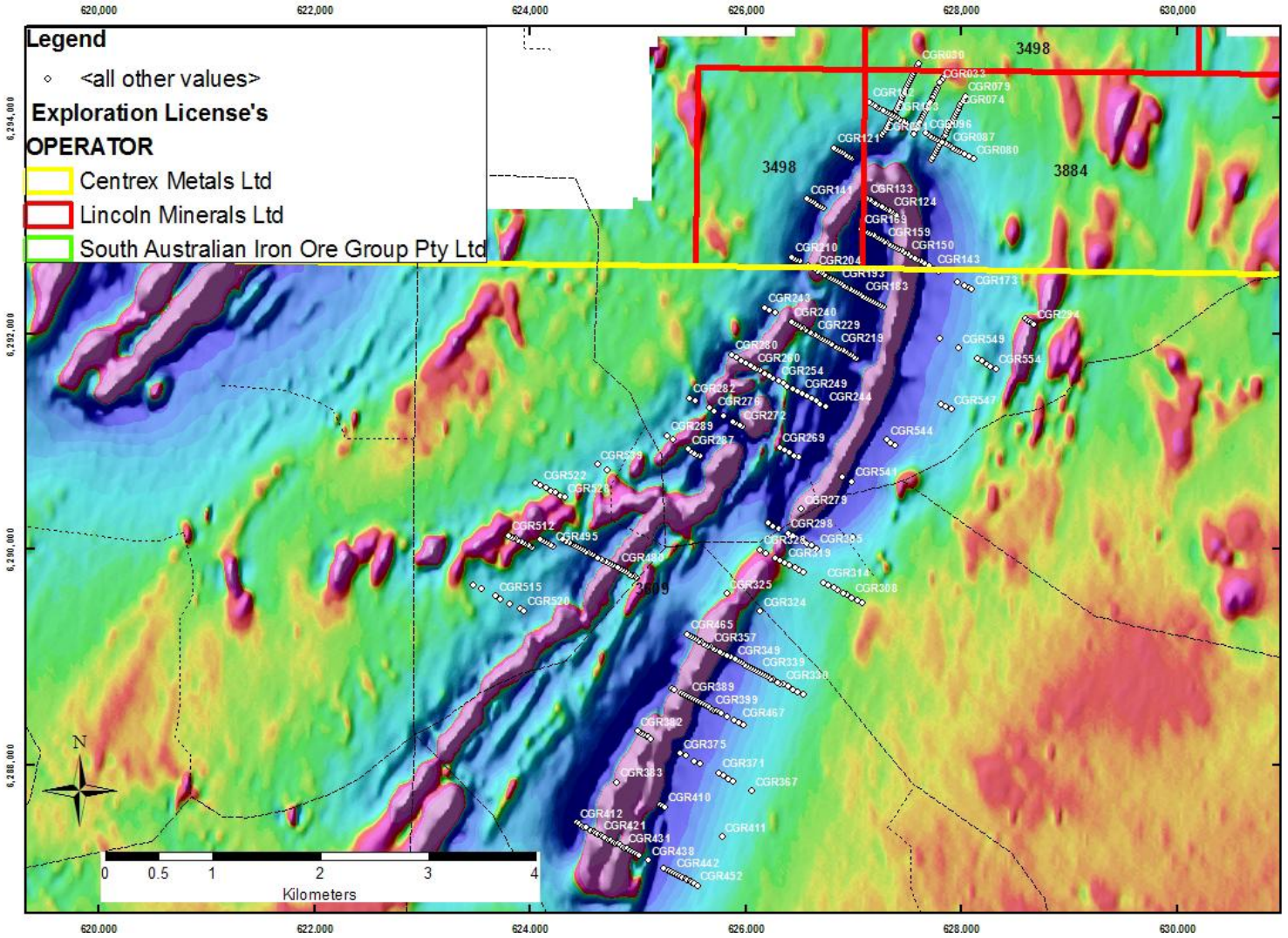

Figure 3: *Aeromagnetic map highlighting CRA RAB drillholes (1981) re-assayed, Cockabidnie Project*

5 Expenditure

Expenditure Details 18 January 2008 to 17 January 2009

Expenditure	Centrex Metals Limited	Lincoln Minerals Limited	Total
Geology - salaries	3979.96	1097.61	5077.57
Geology - materials, freight	510.07	68.65	578.72
Geology - travel costs	338.09	90.91	429
Geology - communications	950.81		950.81
Geology - field office, genera	455.63		455.63
Access - compensation			
Drilling & sampling - o/s cont		728	728
Drill & sampling - salaries		1075.88	1075.88
Drill & sampling - materials		1284.64	1284.64
Drill & sampling - travel	1740.08	1531.73	3271.81
Drill & sampling - consumables			
Drill & sampling - vehicle	352.87	2563.03	2915.9
Drill & sampling - freight		334.67	334.67
Drilling - compensation		960	960
Tenement rents & fees	203.46	330.2	533.66
Assays - o/s contractors		16172.01	16172.01
Assays - storage		150	150
NT & Heritage - legal fees		250	250
Heritage - o/s contractors		2329.14	2329.14
Heritage - travel, food etc		2414.43	2414.43
Heritage - vehicle hire			
Environmental - travel accom			
Community consult - O/S contra		443.64	443.64
Miscellaneous items	15.89	265.69	281.58
Total Expenditure for Period	8546.86	32090.23	40637.09

6 References

Drexel, J.F., Preiss, W.V. and Parker, A.J., 1993. *The geology of South Australia, Vol. 1*, The Precambrian, South Australia. *Department of Primary Industry and Resources. Geological Survey, Bulletin*, 54.

Lincoln Minerals. First Annual Technical Report 2008 EL3498 Cockabidnie North.

Lincoln Minerals. Second Annual Technical Report 2008 EL3609 Cockabidnie.

Open File Envelop ENV 3573 – CRA Exploration and Shell Metals/Billiton.

Schwarz, M.P., 2002**.** LINCOLN map sheet. South Australia. *Geological Survey. Geological Atlas 1:250,000 Series, sheet SI53-11*.

LINCOLN MINERALS LIMITED

ABN 50 050 117 023

EL3498 (Cockabidnie North) Eyre Peninsula

Annual Technical Report for Period
18th January 2009 to 17th January 2010

For Twelve Months Ending:	17/01/2010	**Licensee:**	Centrex Metals Limited
		Operator:	Lincoln Minerals Limited
Mineral(s) Sought:	Iron ore with Centrex Metals. Gold and base metals All minerals other than opal	**Prepared by:**	A J Parker
		Date:	12 March 2010
		Phone No:	08 8274 0243
Map Sheets:	KIMBA VERRAN	**Fax No:**	08 8274 0242

Key Words: Gawler Craton, Hutchison Group, Lincoln Complex, Bosanquet Volcanics, Campoona Syncline, airborne gravity.

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List of Figures

Figure No.

1 Introduction

This report is for the period 18th January 2009 to 17th January 2010.

The Cockabidnie North Project, EL 3498, is located approximately 25km northwest of Cleve (Figure 1). It forms part of a joint venture between Lincoln Minerals Limited (LML) and Centrex Metals Limited (CXM) whereby CXM has the rights to iron ore and LML retains the rights to all other minerals.

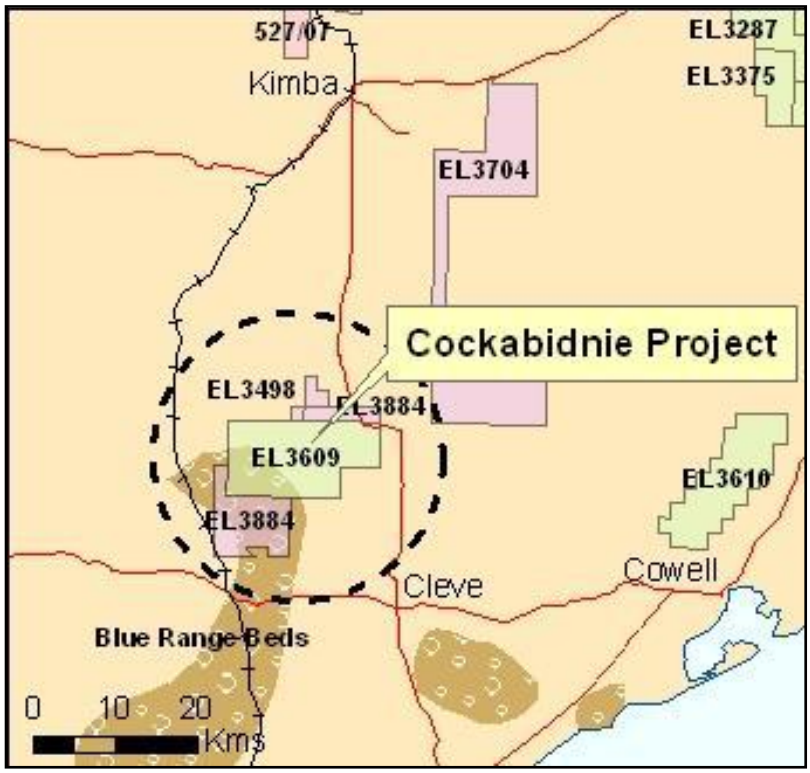

Figure 1: Locality map showing the Cockabidnie project and tenement boundaries held jointly with Centrex Metals (LML ELs pink, CXM ELs green).

The project area is prospective for a large range of polymetallic minerals including iron ore, Menninnie Dam style Pb-Zn-Ag (Cu-Au) mineralisation, Ni-Co and U.

During the reporting year exploration activities included:

- Ongoing review and interpretation of geological, geophysical, drilling and geochemical data;
- Planning for and acquisition of and airborne gravity survey.

2 Regional Geology

The regional geological setting of central Eyre Peninsula straddles the boundaries between the Archaean Coulta Subdomain, Palaeoproterozoic Cleve Subdomain and Palaeoproterozoic Spencer Subdomain (Figure 2).

EL 3498 is located within the Cleve Subdomain where the Palaeoproterozoic Hutchison Group metasedimentary sequence was highly metamorphosed to upper amphibolite facies and multiply deformed during the Kimban Orogeny about 1840-1700 Ma (Drexel *et al*., 1993). This deformation folded the rocks into a series of tight, often refolded synclines and anticlines sandwiched between major faults and shear zones. The Hutchison Group was intruded by a series of granites, the Lincoln Complex, prior to and during the Kimban Orogeny and many of these granites and dykes are now strongly deformed themselves.

The Hutchison Group on central Eyre Peninsula was formed from a sequence of platformal mixed carbonate and clastic sediments. The basal Warrow Quartzite progrades from west to east and contains quartz-pebble conglomerate with potential for Elliot Lake style uranium mineralisation. Warrow Quartzite is overlain by a platformal carbonate sequence now represented by dolomitic marble, calcsilicate gneiss and BIF. This is prospective for base metals, iron ore and uranium. The carbonate/BIF sequence is overlain by a thick sequence of fine grained clastic sediments now represented by garnetiferous schist, gneiss and amphibolite. The latter may have a mafic volcanic component.

A second upper carbonate/BIF sequence is present in the Cleve-Cockabidnie area and this is overlain by more garnetiferous schist, often with the appearance of “pyjama rock”, and local felsic volcanics (Bosanquet Volcanics).

Exposure of the Hutchison Group and associated rocks on central Eyre Peninsula is poor and much of the region is covered by Cainozoic sediments ranging from a blanket of aeolian sand, alluvial sand and gravel in creek beds, and calcareous soils.

The Cockabidnie area has been the focus of both base metal and uranium exploration sporadically since the late 1960’s. It has potential for unconformity uranium mineralisation associated with the base of the Blue Range Beds and also both base metal, manganese, graphite and iron ore mineralisation associated with the BIF-marble-calcsilicate sequence extending south and southwest from the Stanley Mine.

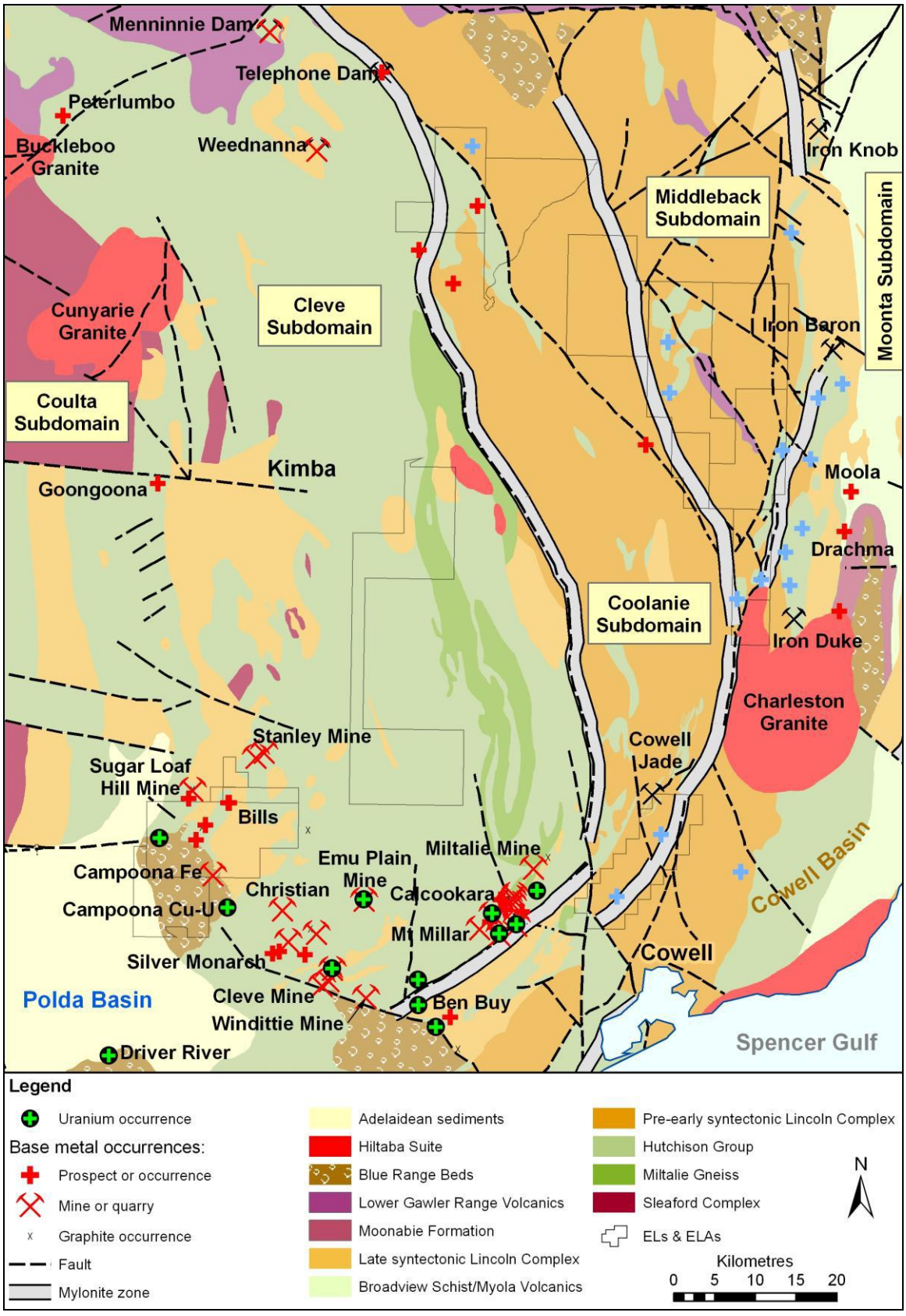

Figure 2: Regional Geological setting for northern and central Eyre Peninsula

3 Previous Exploration

The reader is referred to previous annual technical reports (EL3498 Cockabidnie North Eyre Peninsula 2008 & 2009) for a detailed account of previous exploration.

4 Results

An airborne gravity survey was undertaken over EL 3498 as part of a large survey covering also parts of ELs 3609 and 3884. (Survey data submitted with EL3609)

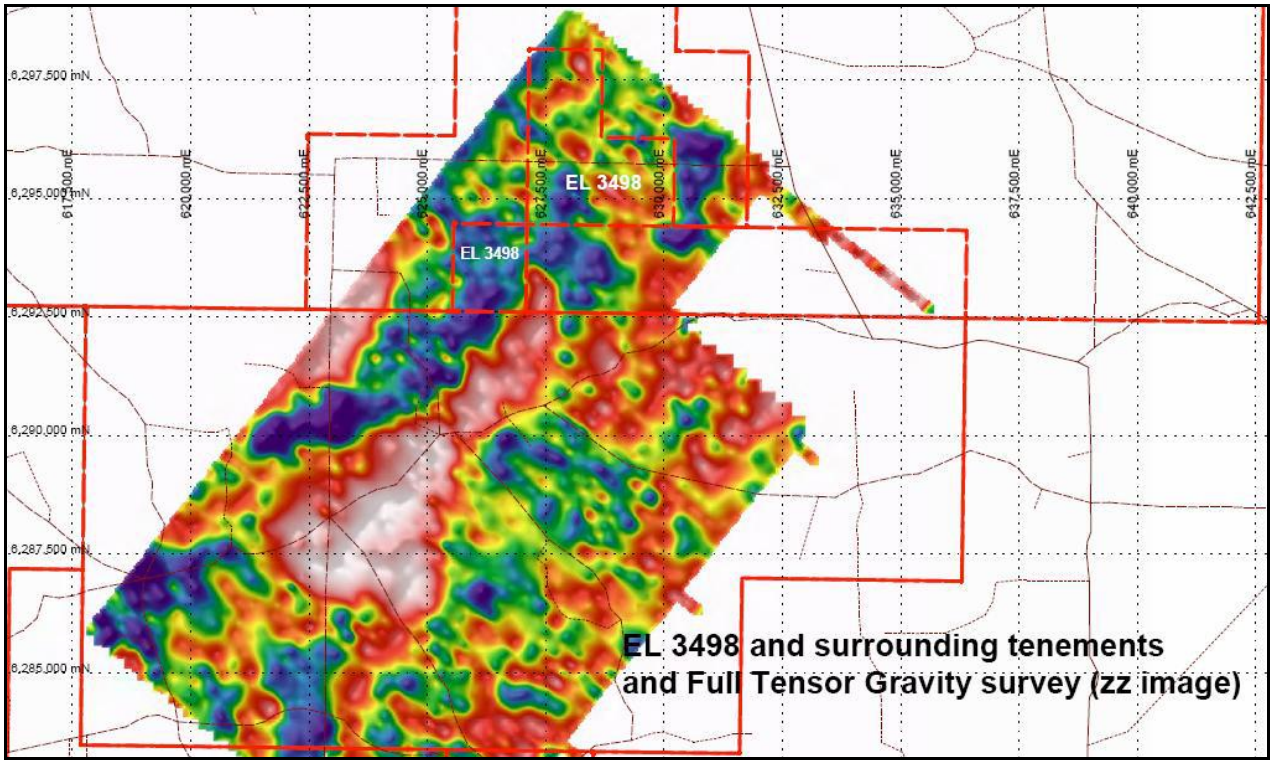

Figure 3: Full Tensor Gravity map (Tzz image) of EL 3498 and surrounding tenements

Bell Geospace was contracted by CXM to perform an Air-FTG® survey, mapping gravity gradient from the air (Bell Geospace Ltd, 2009). Fieldwork took place between 19 August 2009 and the 1 September 2009.

The survey was built from using the following master point and orientations:

Master Point **GDA94 Zone 53**	**Main Line Orientation**	**Tie Line Orientation**
617800 6285800	37.9º (grid)	127.9º

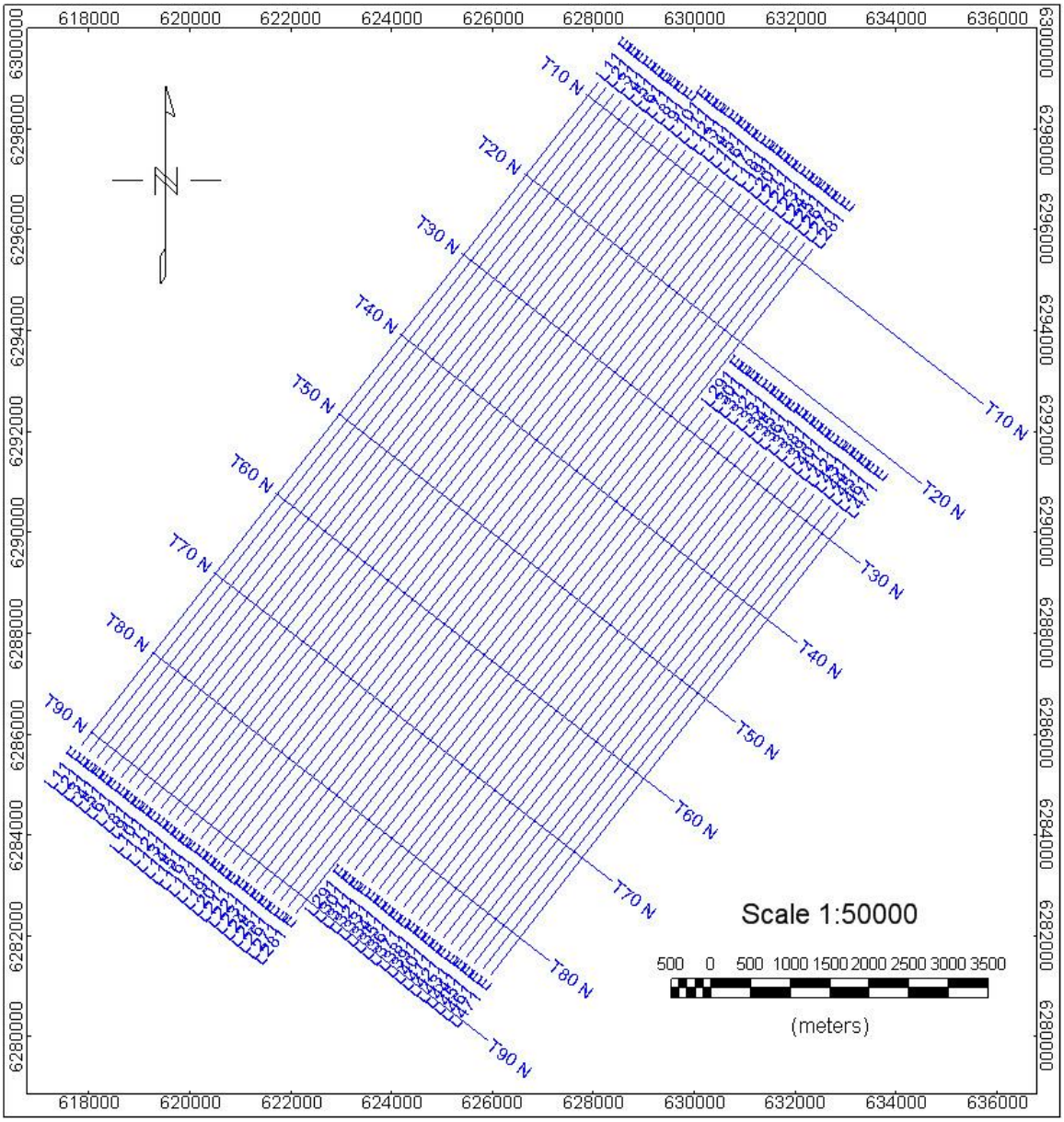

Figure 4: Location of FTG gravity survey flight lines

4.1 Instrumentation

The position data was based on differential GPS. The differential corrections, provided by Fugro OmniSTAR's VBS service, are applied within the receiver and typically 95% of positions are accurate to within 1m.

The pilots are guided by an AgNav navigation system that reads the aircraft's GPS position and compares it to the planned line and drape. A simple and intuitive display mounted on the dashboard shows the pilots where they are relative to the line.

The FTG incorporates a sophisticated inertial navigation system that uses a filter to combine the relatively low-rate differential GPS data with high rate precise motion and

attitude input from the platform gyroscopes and accelerometers. This results in an accurate record of the FTG positions but also provides the high-resolution motion data required to maintain platform stability and compensate the gradient data in post-processing. The FTG data is time-stamped with GPS and UTC times allowing it to be merged with other data sets.

Lockheed Martin Full Tensor Gradiometer (FTG)

The FTG used on this project comprises three gravity gradient instruments (GGIs) mounted on a stabilised platform. The platform is housed in a closed 'binnacle' in which the air temperature, humidity and pressure are tightly controlled. The platform has roll pitch and azimuth gimbals that are torqued, in response to gyro and navigation information, such that the frame holding the GGIs is always level and faces a constant operator-selected heading regardless of aircraft motion. The binnacle is isolated from high frequency vibrations (above 5Hz) by pneumatic mounting pads and accelerometers and gyros within the platform continually measure motion data that is used to compensate for accelerations or rotations that affect the gradient data.

Once set up the FTG runs automatically with the platform stabilisation and GGI tuning handled continually by the circuits and software housed in the electronics cabinet. The user interface is through a computer called the System Control Processor that allows the operator to monitor performance and status parameters and change settings such as calibration values. A second passive computer, the Online Monitor, picks up the data output from the SCP for further analysis and data recording.

An FTG raw data file grows to 1GB in 2.5 hours. Much of this information is high rate motion data that is used to calculate compensated gradients in post-processing and other information such as environmental status that is monitored and recorded continually. After processing and exporting the gradient and navigation data at 2Hz sample rate 1GB of data will have been reduced and compressed to under 4MB.

4.2 Data Processing

The AirFTG® data must undergo many steps in order to produce the final measured gravity gradient data that is used for interpretation purposes. Specific processing methods may be altered slightly depending on survey layout, weather conditions, and other factors affecting the data. Bell Geospace has dedicated research and development experts and software technicians who continually improve the processing, analysis, and visualisation methods.

The data processing steps are summarised below:

1. High Rate Post Mission Compensation – Raw data recorded by the instrument consists of two signals from each of the three Gravity Gradient Instruments (GGI). The three sets of signal data are run through proprietary High-Rate Post Mission Compensation (HRPMC) software. HRPMC compensates the data for most of the physical conditions during signal acquisition. This includes corrections for the gradients of the aircraft and of the instrument itself.
2. FTG-Specific Line Corrections – this includes the following steps:
    a. High Rate Processing yields raw data.
    b. Co-ordinates projected in Map Grid of Australia / GDA94 datum.
    c. Clipped to client AOI + lines split + rename lines.

d. Line correction

e. Terrain correction applied at density 2.40 g/cc

f. Network adjustment / Line Level

g. Terrain correction backed out to produce Free Air Anomaly data

h. RHM (Regularised Harmonic Model) denoise applied with specific cut-off wavelength/frequency

3. Final Line Levelling
4. Grid-Based Regularised Harmonic Modelling
5. Terrain Correction

4.3 Gradient Tensor Component Maps

The tensor component maps illustrate data which have undergone the following data processing steps:

- High Rate pre-processing compensation applied to raw data;
- Low Rate data normalisation, final line selection and coarse grained corrections;
- Fine grained line levelling or network adjustment corrections using Oasis Levelling System.

The gridded map images were generated in Oasis MONTAJ using equal area histogram/default colour range visualisation, which typically enhances detailed features in the data. The maps illustrate the following:

- Free Air Levelled for each tensor component.
- Free Air Levelled Full Tensor Processed for each tensor component.
- Terrain corrected for reduction density 2.40 g/cc for each tensor component.

The Tzz map is similar to the vertical derivative of Bouguer Gravity.

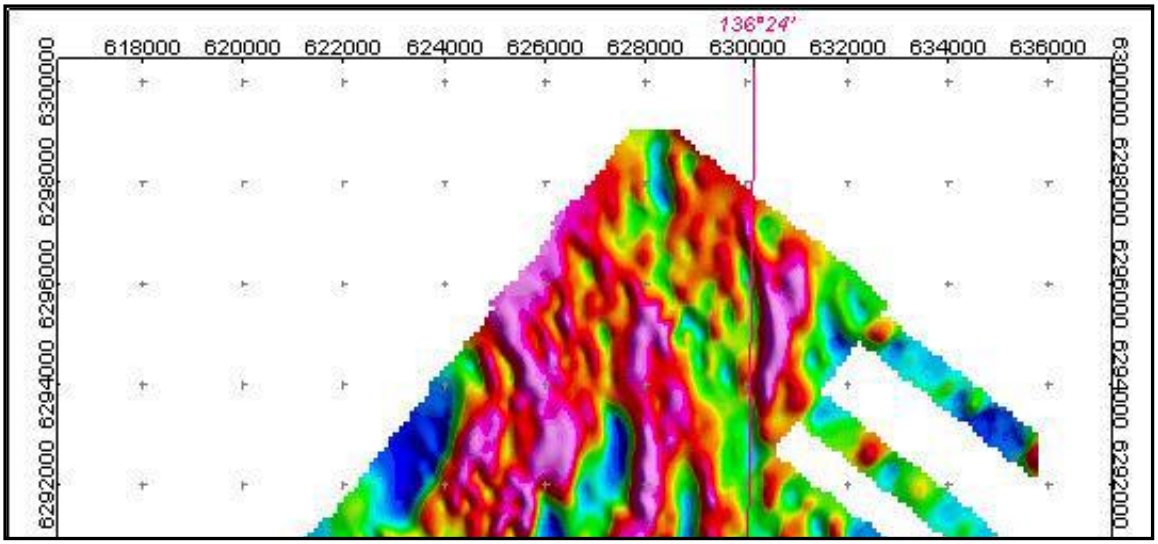

Figure 5: Full Tensor Processed, Terrain Corrected Txx for reduction density 2.40 g/cc

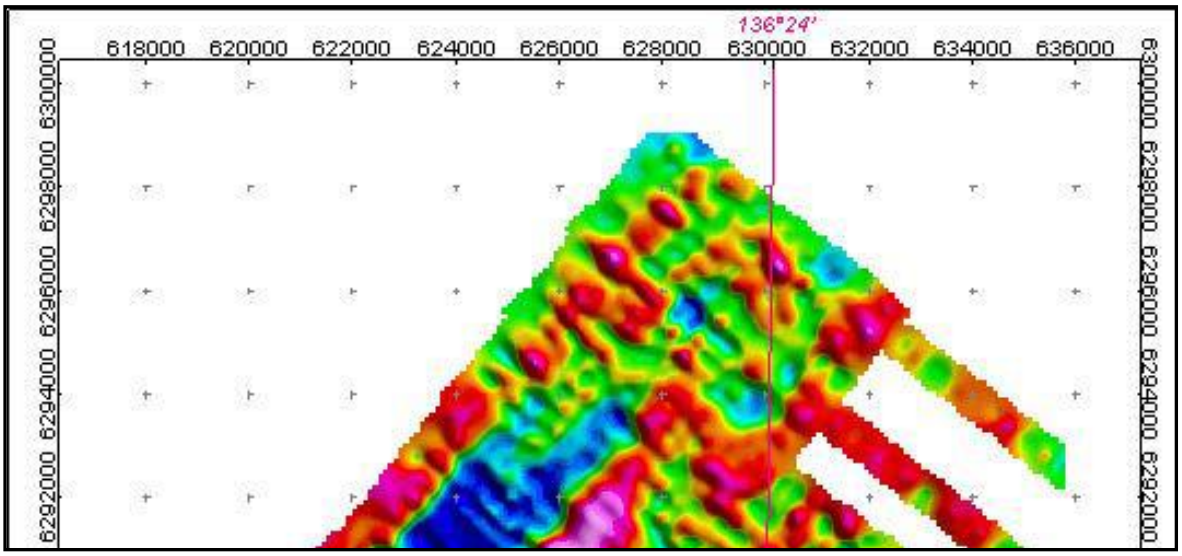

Figure 6: Full Tensor Processed, Terrain Corrected Txy for reduction density 2.40 g/cc

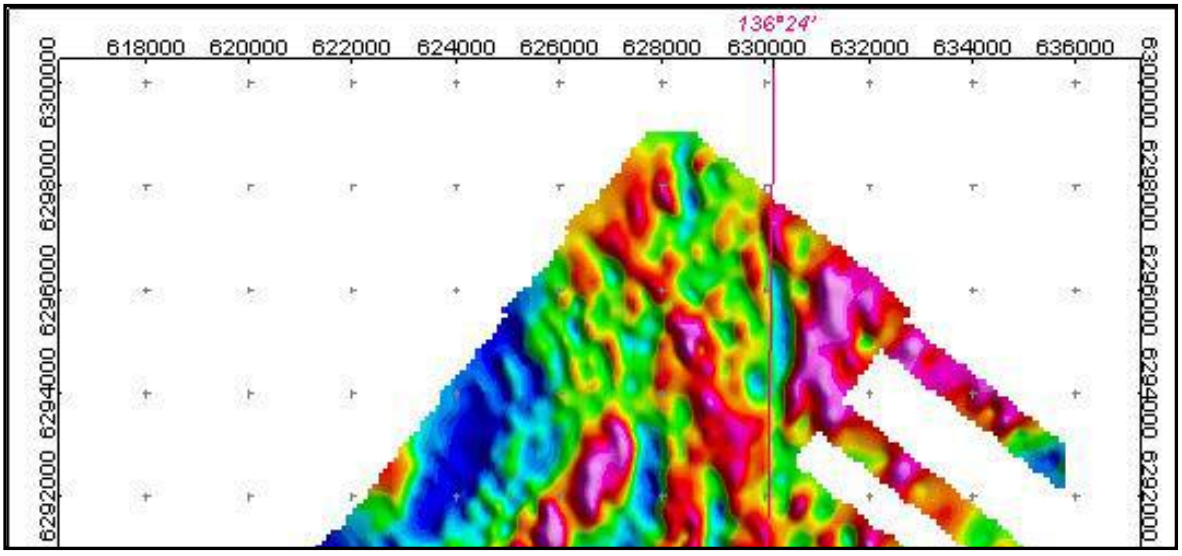

Figure 7: Full Tensor Processed, Terrain Corrected Txz for reduction density 2.40 g/cc

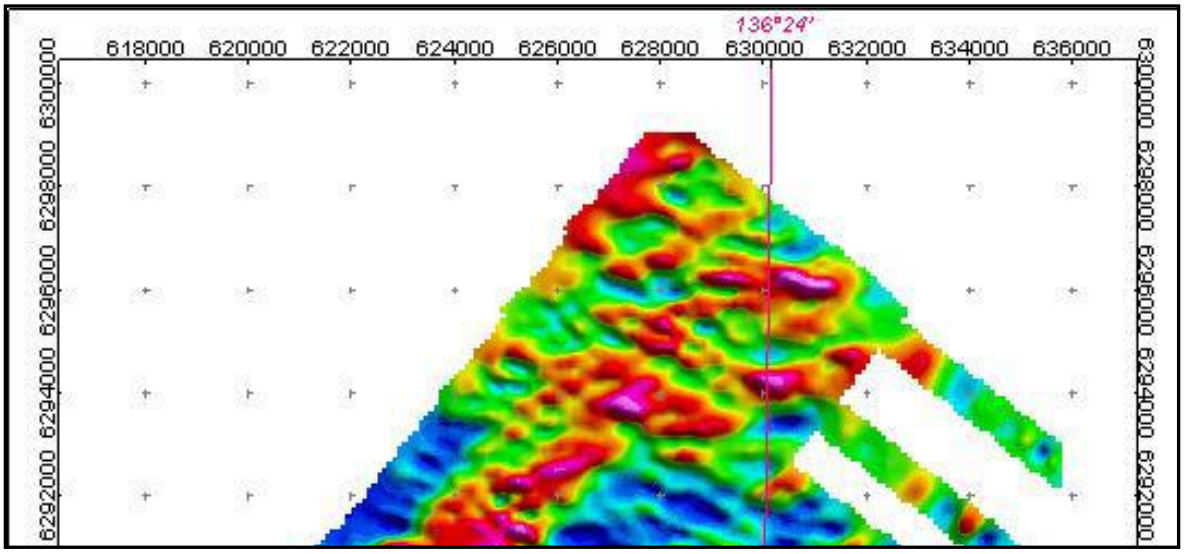

Figure 8: Full Tensor Processed, Terrain Corrected Tyy for reduction density 2.40 g/cc

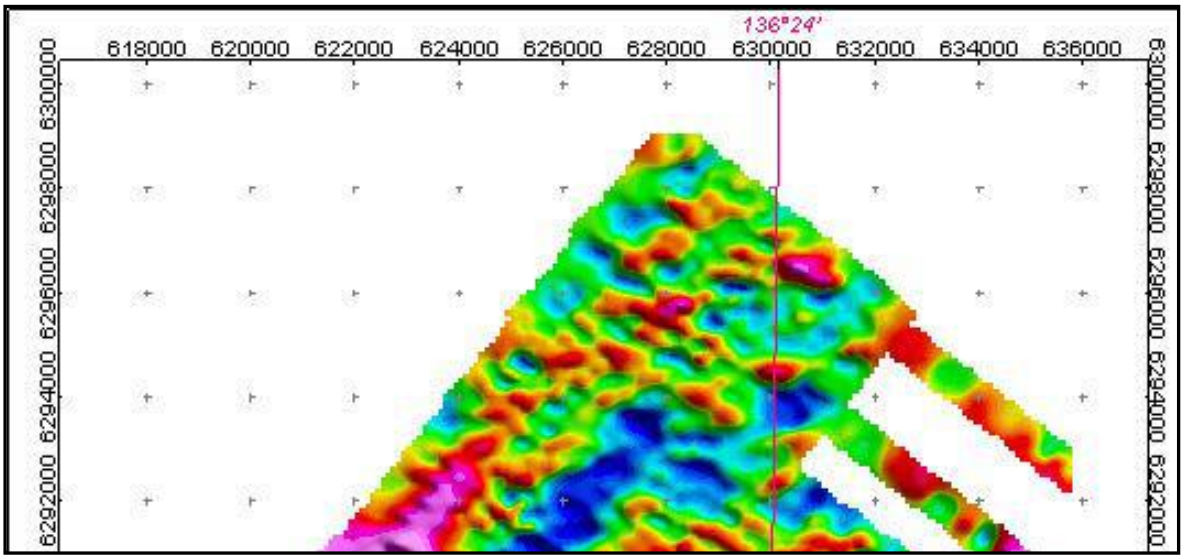

Figure 9: Full Tensor Processed, Terrain Corrected Tyz for reduction density 2.40 g/cc

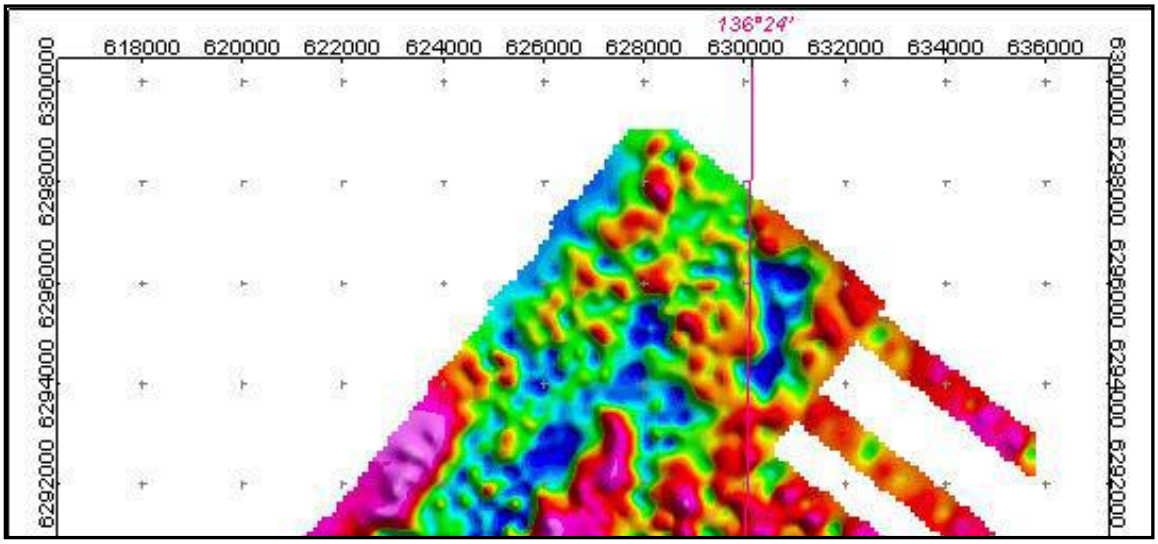

Figure 10: Full Tensor Processed, Terrain Corrected Tzz for reduction density 2.40 g/cc

5 Expenditure

Expenditure Details 18 January 2009 to 17 January 2010

LML Expenditure		**CXM Expenditure**	
Geology - salaries	$1,051.21	Wages & Salaries	$11,163.74
Assays	$1,244.55	Travel & miscellaneous items	$786.80
Miscellaneous items	$76.23	Vehicle Operating Costs	$190.92
Tenement Rents	$430.00	Equipment Operating Costs	$26.73
		Training/Conference/Courses	$227.73
		Airborne Geophysics	$11,665.20
SUB-TOTAL	**$1,801.99**	**SUB-TOTAL**	**$24,062.12**

6 References

Bell Geospace Ltd, 2009. *Air-FTG® Acquisition & Processing Report, Centrex Metals Limited, Ash & Walnut Survey Areas, Australia.*

Drexel, J.F., Preiss, W.V. and Parker, A.J., 1993. *The Geology of South Australia, Vol. 1*, The Precambrian, South Australia. *Department of Primary Industry and Resources. Geological Survey, Bulletin*, 54.

Lincoln Minerals Limited, 2008. *Second Annual Technical Report, EL3498 Cockabidnie North*.

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