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EL 2550 ; ML 6034

KARKAROOK

**ANNUAL REPORTS TO LICENCE EXPIRY/RENEWAL,
FOR THE PERIOD 17/9/1998 TO 16/9/2003**

Submitted by
Olliver Geological Services Pty Ltd and Helix Resources Ltd
2004

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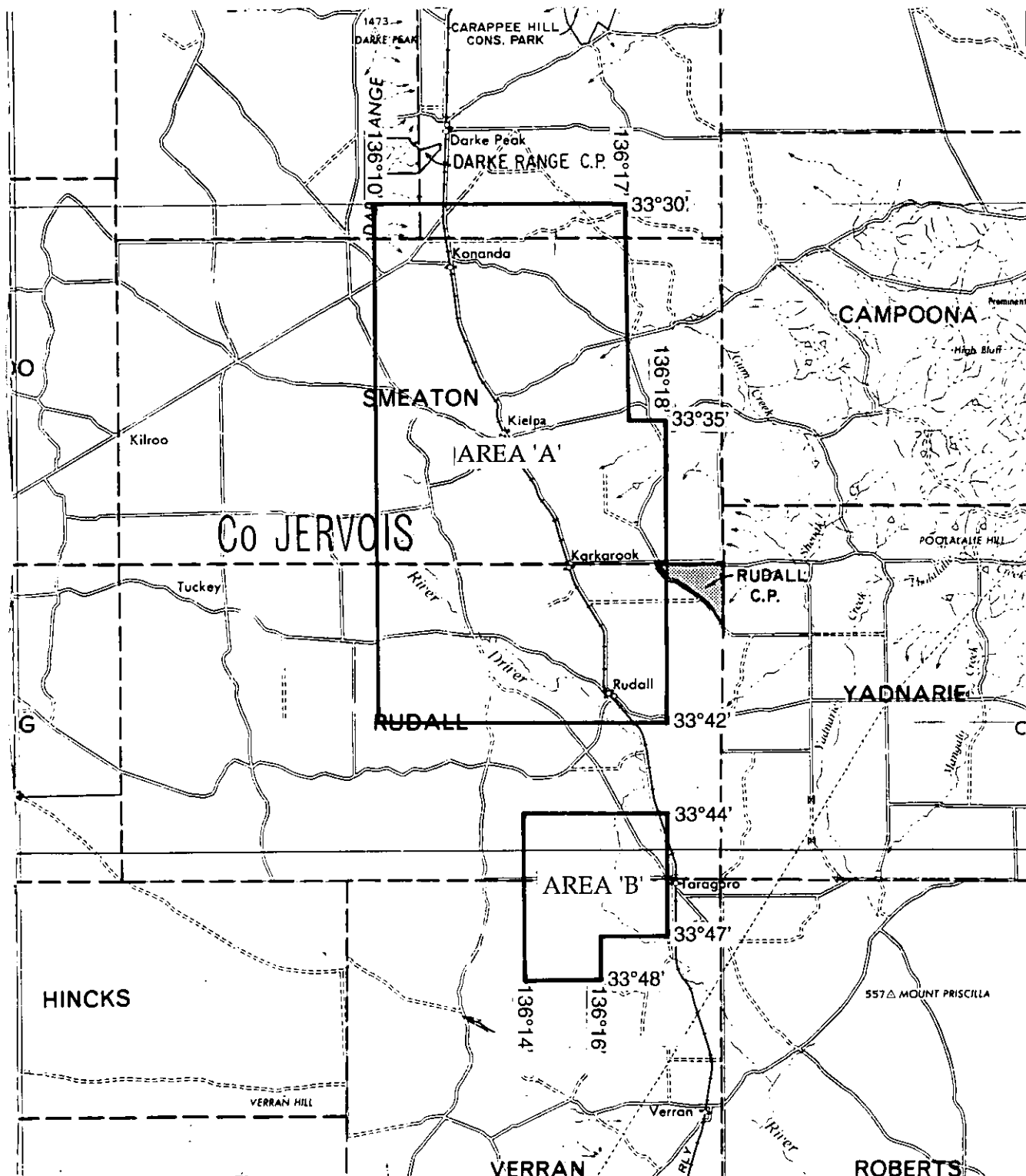
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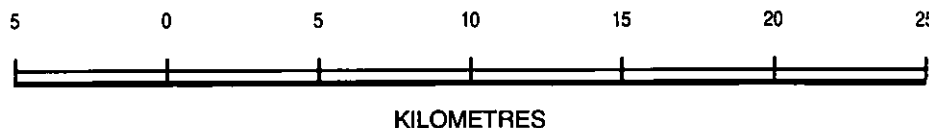
Government of South Australia

Department for Manufacturing,
Innovation, Trade, Resources and Energy

SCHEDULE A



SCALE 1 : 250 000



PARTIALLY
SURRENDERED

APPLICANT : OLLIVER GEOLOGICAL SERVICES PTY. LTD.

DM : 112/98

MINERAL ONLY

AREA : 299 square kilometres (approx.)

1:250 000 PLANS : KIMBA

LOCALITY : KARKAROOK AREA – Approximately 60 km west of Cowell

DATE GRANTED : 17 September 1998 DATE EXPIRED : 16 September 1999

EL No : 2550

2000
2001, 2002 16.7.2003

EL 2550 KARKAROOK
ANNUAL REPORT
FOR
YEAR ENDING 16 SEPTEMBER 1999

by

J G Olliver

April 2000

kagy rep 2



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	ALS Report ST 26077

PLANS

Fig 1	EL 2550 Regional Geology
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Fig 2	Location of Gypsum Deposits
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MINERAL TENURE

EL 2550 was granted to Olliver Geological Services Pty Ltd on 17 September 1998 over 229 square kilometres to cover gypsum-bearing ground outside adjacent EL 2305 including some ground that was relinquished inadvertently.

MC 3066 was registered on 17 July 1998 over the Konanda No 1 gypsum deposit and ML 6034 was granted for 7 years from 5 February 1999.

AERIAL RECONNAISSANCE

Air photo interpretation was completed to identify gypsum deposits both lake and lunette dunes.

On 31 May 1998 and 23 May 1999 a light aircraft was hired and flew in part over EL 2550. A number of potential deposits were delineated for later checking on the ground.

GEOLOGICAL SETTING

EL 2550 is situated within the Gawler Craton, an extensive stable crystalline basement province of metamorphic and igneous rocks of late Archaean to Mesoproterozoic age.

Lacustrine gypsum designated as Yamba Formation of Holocene age formed by evaporation of saline water about 6 000 years ago in a series of shallow lakes and lagoons along the Driver River which drains from Caralue, about 30km southsouthwest of Kimba, southwards for about 80km to the coast near Arno Bay (Fig 1).

Subsequent weathering and wind erosion produced a surface layer of white gypsite (clay-sized gypsum) often in the form of a lunette dune on the opposite side (normally eastern) to the prevailing wind of a modern depression.

The only gypsum shown by Flint et al (1989) on KIMBA 1:250 000 sheet is in the swamps and dunes at Caralue.

Elsewhere, especially at Konanda, the distinctive gypsum lunette dunes have not formed in the interdunal corridors. As well, gypsum is usually obscured by drift sand.

None of these gypsum resources from Caralue to Terra Leen to Arno Bay are mentioned in the PIRSA statewide review of gypsum by Valentine (1997).

DRILLING/TRENCHING

Konanda No 1 contains indicated resources of 20 000 tonnes and, under about 0.5m of sandy overburden, inferred resources of 10 000 tonnes based on 61 machine auger holes to 1m. (Olliver, 1998). An average grade of 70 – 80% $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$ was expected after some selective mining.

Konanda No 2 (0.5km to the north, see Fig 2).

Fifteen narrow trenches dug by Ditchwitch outlined gypsum up to 0.9m thick over an area of 2 025 square metres (Plate 1). Indicated resources are 3 000 tonnes. Samples from Trench 9 (0.08 – 0.72m) and Trench 13 (0.10 – 1.00m) assayed 83.2 and 45.4% gypsum respectively.

Schumann No 1 (1.5km to the north).

Mine trenches to 1m outlined gypsum up to 1.0m thick over an area of about 3 000 square metres. Indicated resources are 3 000 tonnes. A grab sample from the landowners stockpile of 200 tonnes assayed 78.1% gypsum.

Schumann No 2 (2.5km to the north).

Thirteen trenches outlined gypsum up to 0.92m thick over an area of about 2 700 square metres. Indicated resources are 2 500 tonnes. Composite sample from Trenches 10 (0.08 – 0.94m), 13 (0.08 – 1.00m), 16 (0.1 – 0.9m) and 19 (0.23 – 0.9m) assayed 72.2% gypsum.

QUALITY OF GYPSUM

Results of chemical analysis are summarised below from details in the Appendix.

	Gypsum	CaMgCO ₃	Salt	Calculated Silica
Konanda No 1 Stockpile April 1999	75.0	1.82	0.01	22
Konanda No 2 Trench 9 (0.08 – 0.72m)	83.2	6.96	0.04	9
Trench 13 (0.1 – 1.00m)	45.4	3.02	0.04	49
Schumann No 1 Stockpile April 1999	78.1	6.78	0.01	14
Schumann No 2 Trench composite	72.2	2.95	0.11	23

As expected all four deposits are Grade 2 gypsum - 67 – 81% CaSO₄.2H₂O with very low salt content.

CONCLUSIONS

The three new deposits – Konanda No 2, Schumann No 1 and Schumann No 2 are too small to warrant pegging Mineral Claims and obtaining Mineral Leases especially as gypsum content is only Grade 2.

Exploration will continue in the search for larger, higher grade deposits.


Jeffrey Graham Olliver

REFERENCES

- Flint, R. B., Rankin, L. R. and Parker, A. J. 1989 KIMBA map sheet SI 53 – 7 Geological Atlas of South Australia 1:250 000 series. *Geological Survey of South Australia*.
- Olliver, J. G. 1998 Konanda No 1 Gypsum Deposit Eyre Peninsula. Geological Investigations 1998 and Proposed Mining Program November 1998
kagy rep 1
- Valentine, J. T. 1997 Gypsum deposits of South Australia. PIRSA unpublished report.



PLATE 1

**Exploration for gypsum in interdunal corridors using a Ditchwitch.
White gypsum augered to the surface at Konanda No 2 deposit.**

APPENDIX

Chemical Analysis

ALS Report ST 26077

ANALYTICAL REPORT

PAGE 1 of 2

CONTACT: **MR J OLLIVER**
CLIENT: **OLLIVER GEOLOGICAL SERVICES**
ADDRESS: **PO BOX 24
MCLAREN VALE SA 5171**

LABORATORY: **STAFFORD**
BATCH NUMBER: **ST26077**
SUB BATCH: **0**
No. OF SAMPLES: **26**
DATE RECEIVED: **15/04/99**
DATE COMPLETED: **30/04/99**

ORDER No.:

SAMPLE TYPE: **GYPSUM**

PROJECT:

SAMPLE NUMBER	ELEMENT UNIT METHOD L.O.R.	CaSO4.2H2O % M290 0.1	CaCO3 % M290 0.01	MgCO3 % M290 0.01	NaCl % M290 0.01	Fe2O3 % M290 0.01	Al2O3 % M290 0.01
E/L WHITE 07/04/99		93.8	3.14	0.62	2.16	0.09	0.06
E/L AGRI 07/04/99		86.4	5.77	1.58	3.37	0.12	0.16
MUN HOLE 1 0.0-0.6M		80.7	1.43	0.83	0.18	0.44	1.48
MUN HOLE 1 0.6-0.96M		77.2	<0.01	0.89	0.26	0.70	2.43
MUN HOLE 2 0.0-0.6M		66.3	3.19	0.50	0.08	0.39	0.65
MUN HOLE 2 0.6-1.0M		51.1	1.56	0.51	0.10	0.50	1.03
KON NO 1 STOCK 07/04/99		75.0	1.62	0.20	0.01	0.31	0.86
KONNO 2 HOLE 9 0.08-0.72M		83.2	5.70	1.26	0.04	0.22	0.36
KONNO 2 HOLE 13 0.1-1.00M		45.4	1.96	1.06	0.04	0.68	1.72
SCHNO 1 STOCK 07/04/99		78.1	6.23	0.55	0.01	0.14	0.22
SCHNO 2 COMPOSITE		72.2	2.43	0.52	0.11	0.31	0.82
SIV DS 0.0-1.26M		85.8	1.00	0.30	0.47	0.27	0.49
SIV DS 1.26-2.20M		74.0	0.65	0.40	0.49	0.56	1.26
MOK M1 0.0-0.6M		39.0	4.55	2.49	1.67	0.33	0.41
MOK M2 0.0-0.55M		27.6	6.47	2.32	2.79	0.30	0.38
MOK M2 0.55-1.20M		3.0	3.83	1.36	4.54	0.29	0.29
MOK M3 0.0-0.9M		34.3	8.23	3.47	2.25	0.54	0.61
MOK M4 0.0-0.45M		1.8	3.69	1.70	3.43	0.31	0.30
WER W3 0.0-0.65M		84.5	0.22	2.16	3.51	0.61	1.26
ID D1 0.0-0.6M		90.6	0.17	0.04	0.02	0.19	0.31
ID D2 0.0-4.0M		97.2	<0.01	0.04	<0.01	0.15	0.11
ID L3 0.0-0.5M		95.5	<0.01	0.31	1.99	0.24	0.50
ID D3 0.0-0.57M		96.0	<0.01	0.01	<0.01	0.16	0.17
ID D4 0.0-0.8M		75.1	0.68	0.23	<0.01	0.31	0.50
ID D6 0.0-0.7M		63.7	0.32	0.29	0.05	0.38	0.43
ID D6 0.0-1.1M		62.2	<0.01	0.20	0.02	0.50	0.58

COMMENTS:

• This is the Final Report which supersedes any preliminary reports with this batch number.

• Results apply to sample(s) as submitted by client.

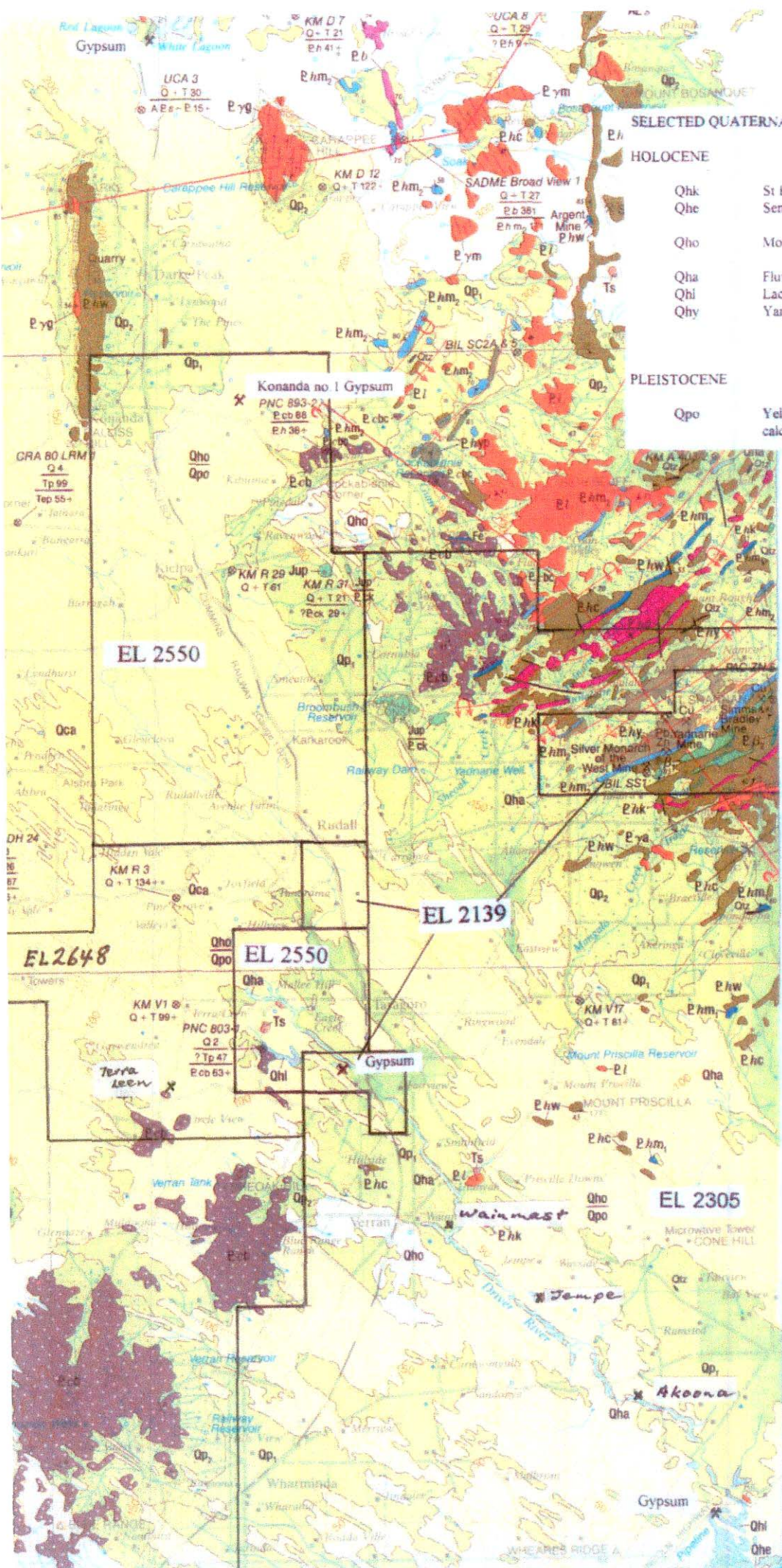
Alice Springs Laboratory
Phone: (08) 8952 8020 Fax: (08) 8952 8028
Bendigo Laboratory
Phone: (03) 5446 1390 Fax: (03) 5446 1389
Brisbane Laboratory
Phone: (07) 3243 7222 Fax: (07) 3243 7218
Charters Towers Laboratory
Phone: (077) 87 4155 Fax: (077) 87 4220

Cloncurry Laboratory
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Kalgoorlie Laboratory
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Phone: (02) 6363 1722 Fax: (02) 6363 1189

Perth Laboratory
Phone: (08) 9249 2988 Fax: (08) 9249 2942
Townsville Laboratory
Phone: (077) 79 9155 Fax: (077) 79 9729

**All pages of this report
have been checked and
approved for release.**

David James



SELECTED QUATERNARY UNITS

HOLOCENE

Qhk	St Kilda Fm	intertidal shelly mud & sand
Qhe	Semaphore Sand	white to grey quartz & shelly sand of coastal aeolian dunes
Qho	Mornaba Sand	white, grey & orange sand in dunes & spreads
Qha	Fluvial gravelly clay, sand, silt & clay	
Qhi	Lacustrine clay, silt & calcareous mud	
Qhy	Yamba Fm	lacustrine gypsarenite, gypsite, halite & gypsiferous mud & aeolian gypsite

PLEISTOCENE

Qpo	Yellow - orange quartz sand & clayey sand with soft biscuity calcrete
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x Gypsum Deposits

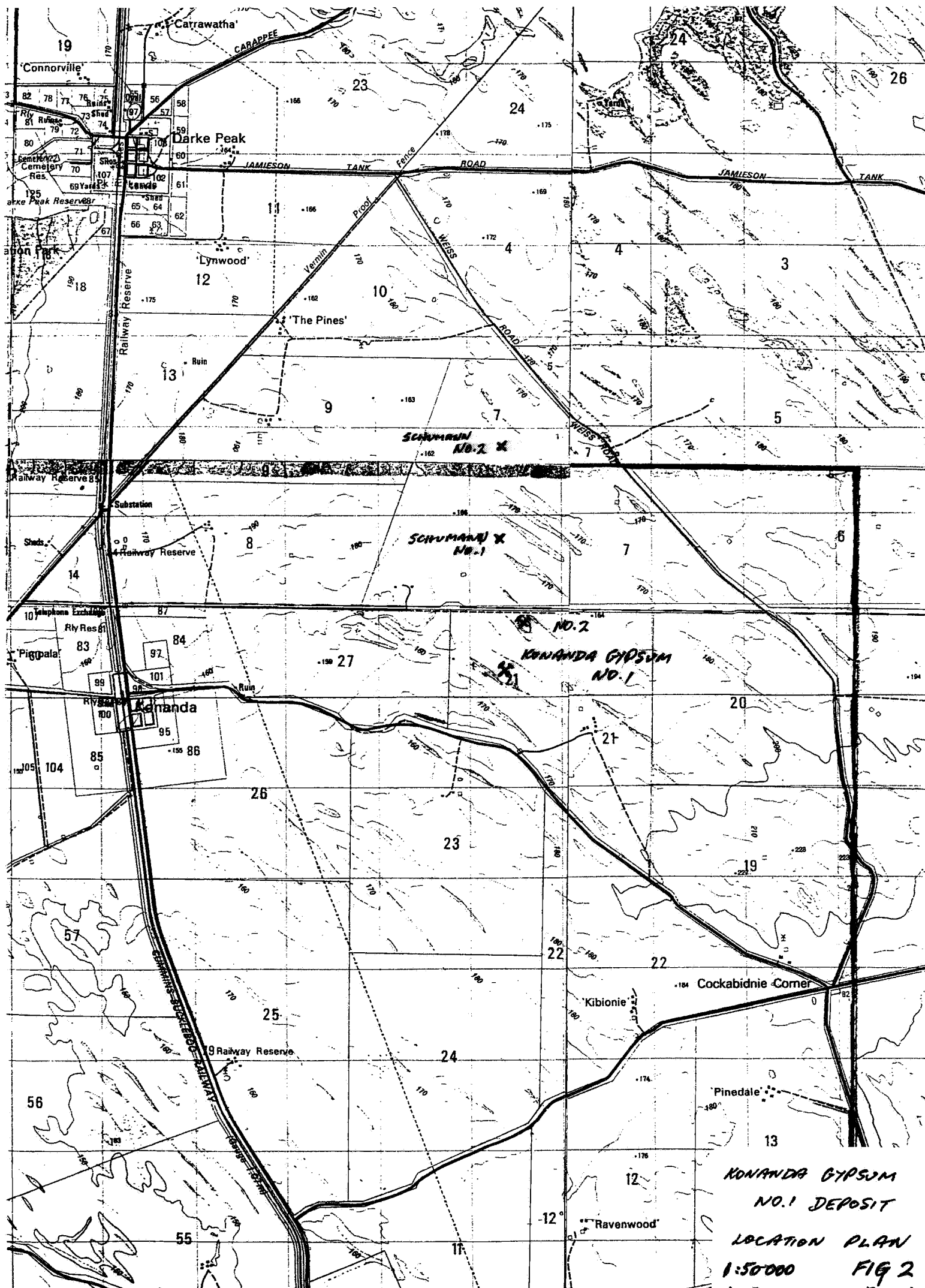
Part of KIMBA 1:250 000 Sheet - Flint et al (1989)

KONANDA GYPSUM DEPOSITS

REGIONAL GEOLOGY

1:250 000

FIG 1



KONANDA GYPSUM
NO. 1 DEPOSIT
LOCATION PLAN
1:50000 FIG 2

EL 2550 KARKAROOK

Annual Report for year ended 16 September 2000

EL 2550 was granted to Olliver Geological Services Pty Ltd on 17 September 1998, was renewed over a reduced area of 249 square kilometres and renewed for a further year to 16 September 2001.

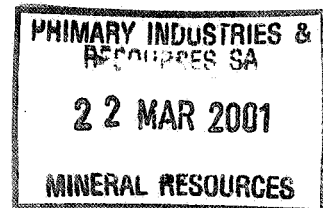
Mining of gypsum continued on ML 6034 Konanda but owing to drought conditions only 125 tonnes of Grade 3 gypsum was sold.

On 30 August 2000, a Joint Venture was finalised for Helix Resources NL to explore for metals and diamonds.

There was no field work.

However, time was spent on marketing to promote gypsum use for the next spreading season.


J G Olliver
March 2001



PIRSA

C2001/00348



02212335

Our Ref: SAOG1004 Karkarook Annual Report

Date: 8 October, 2002

Primary Industries & Resources – SA
MINERAL RESOURCES GROUP
PO Box 1671
ADELAIDE SA 5001



Attention: George Kwitko

Dear Sir,

Re: Annual Report EL 2550 – KARKAROOK - letter in lieu.

Helix has not undertaken active exploration on the Karkarook Project during the reporting period. Expenses accrued to the tenement are for non-field based items.

Due to non-aboriginal land access issues, namely an excellent wheat crop in the area, geochemical sampling of the tenement was delayed until after the harvest. The tenement forms part of Helix's eastern Eyre Peninsula copper/gold focus. The company is systematically exploring the project areas in the 2002-2003 field season.

Eyre Peninsula Gypsum mined 1 131 tonnes from ML 6034 Konanda no 1 deposit.

Any queries regarding this report should be directed to Mr Tony Martin, Exploration Director or myself at Helix Resources Limited, in Perth on (08) 9321 2644.

Yours sincerely
for Helix Resources Limited

Michael Wilson
Project Geologist

C:\MyFiles\Eyre Peninsula\Konanda\Karkarook Annual.doc



Expenditure for EL 2550 - 1 April 2001 to 30 March 2002

Description	Amount
Consultancy Fees	\$382
Contractors	\$27
Overhead Allocation	\$208
Salary & Wages Contract	\$186
Salary Alloc to Exploration	\$589
Tenement, administration	\$14
Tenement, application & advert	\$73
Tenement, Rental	\$860
Travel Domestic	\$113
Total	\$2 452
Eyre Peninsula Gypsum (Olliver Geol Serv)	\$4 059



TENEMENT ADMINISTRATION SERVICES

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GPO Box 3081
Brisbane QLD 4001
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Facsimile: (07) 3229 8816

12 February, 2004

Mineral Resources Group
Primary Industries and Resources SA
GPO Box 1671
ADELAIDE SA 5001

Express Post

Dear Sir/Madam

**RE: ANNUAL TECHNICAL REPORT
EXPLORATION LICENCE 2550 (CENT - Karkarook)**

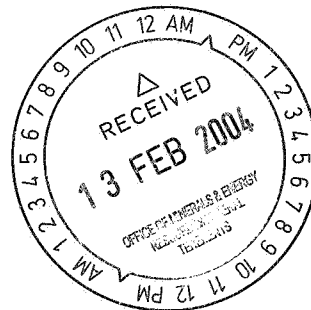
We act as tenement managers to Helix Resources Limited.

Please find enclosed the Annual Technical Report for the above tenement for the period ending 16 September 2003.

Yours faithfully
TENEMENT ADMINISTRATION SERVICES PTY LTD

Natalie Faas
MINING TENEMENT MANAGER

enc.



OUR REF: SUMMARY RPT - PIRSA
FILE REF:
REVISED DATE: 3 APRIL 2002

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MERFF

R2004/00355



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HELIX RESOURCES LIMITED

Our Ref: SAOG1004 Karkarook Annual Technical Report
OGS Ref: kagy 036

Date: 11th February 2004

Primary Industries & Resources – SA
MINERAL RESOURCES GROUP
PO Box 1671
ADELAIDE SA 5001

Attention: **George Kwitko**

Dear Sir,

Re: **Annual Report EL 2550 – Karkarook.**

Attached please find the annual technical report on operations for the -Exploration Licence 2550, covering the 12-month period ending 16th September 2003.

Any queries regarding this report should be directed to Mr. Tony Martin, Exploration Director or myself at Helix Resources Limited, in Perth on (08) 9321 2644.

Yours sincerely
For Helix Resources Limited

Steve Savcin
Geologist

RECEIVED

11 FEB 2004

AS PERTH



HELIX RESOURCES LIMITED

ACN 009 138 738

INCORPORATED IN WESTERN AUSTRALIA

P.O. Box 825
West Perth, Western Australia 6872
Telephone (09) 321 2644 Facsimile (09) 321 3909

**KARKAROOK – SOUTH AUSTRALIA
EL 2550**

**ANNUAL TECHNICAL REPORT FOR THE
YEAR ENDING 16th September 2003**

Author: M Wilson & S Savcin

Date: February 2004

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Appendices

1. Calcrete Sample Locations & Assay Results.
2. Rock Pool Data

1. SUMMARY

In August 2000 Helix Resources Ltd entered into a joint venture agreement with Olliver Geological Services to explore selected tenements held by Olliver on the Eyre Peninsula in South Australia for precious metals, base metals and diamonds.

A program of calcrete sampling was undertaken over an area believed to be a continuation of the Hutchison Group Metasediments in November 2002. Samples were collected on an 800m-line spacing at approximately 200m centres over the northern portion of the tenement, chasing the faulted extension of the anomalous Sugarloaf Hill trend north east of the tenement.

The results of the calcrete sampling proved to be disappointing with low grade gold and basemetals returned.

Peak results from the calcrete sampling included 5ppb Au, 18ppm Cu, 20ppb Pb & 22ppm Zn.

2. INTRODUCTION

Helix Resources Limited (Helix) is in joint venture with Olliver Geological Services Pty Ltd on EL 2550, the Karkarook Project. Helix is managing precious and basemetal exploration on the licence as part of its Central Eyre Peninsula exploration focus, which includes an adjacent tenement EL2858 Carappee and EL2815 Cockadibnie held under a separate joint venture

Helix is pursuing Fe oxide copper /gold targets associated with Hutchison Group sediments that are found subcropping on low hills through the central portion of an adjacent tenement EL2858, and are believed to extend into this tenement under Tertiary cover.

A regional calcrete sampling program was conducted over the northern part of the Karkarook tenement in November 2002, targeting the faulted southwest extension of the Sugarloaf multi-element anomalism.

Results from the calcrete sampling were disappointing with peak results of 5ppb Au, 18ppm Cu, 20ppb Pb & 22ppm Zn.

3. LOCATION AND ACCESS

Exploration license EL 2550 is located approximately 140 kilometres NNE of Port Lincoln, on the southern Eyre Peninsula and approximately 25km west of the rural township of Cleve (Figure 1).

The tenement area is dominated by dissected rolling uplands primarily cultivated for the growing of cereal crops with lesser sheep and cattle grazing. The area is accessed by main sealed road between Port Lincoln and Cleve and by numerous well-maintained unsealed roads throughout the region.

4. TENURE

Helix Resources Ltd entered into a joint venture agreement with the holder of EL2550 Olliver Geological Services Pty Ltd in August 2000. Under the agreement Helix Resources has the right to earn 90% equity in the tenement by meeting minimum expenditure requirements within the first 18 months of the joint venture. Olliver Geological Services has maintained the rights to all industrial minerals, dimension stone and gemstones (not including diamonds).

In August 2002 an application for renewal for of the license for the period of one year was lodged with PIRSA in order to complete and evaluate the regional sampling program after some early sampling difficulties with a view to completing a RAB drilling program late in 2002.

5. GEOLOGY

The northern part (20%) of the tenement area covers rocks of the Cleve Sub-domain, a Palaeoproterozoic fold belt composed of tightly folded, high-grade metamorphic rocks of the Hutchison Group. The Hutchison Group represents sediments derived mainly from clastic shallow-marine sedimentation, iron formations, carbonates and mafic and to a lesser extent, acid, volcanics (Drexel *et al* 1993). The Hutchison Group has been intruded to the west and south east by numerous granitoids of the Lincoln Complex during major deformation and metamorphism of the Kimban Orogeny.

The southern part (80%) of the tenement area covers the Poldia Trough, composed of deep Triassic – Cretaceous sediments and volcanoclastics.

The tenement area predominantly contains cover of sand plains with sand dunes (Moornaba Sand), or Pooraka Formation in the vicinity of Darke Peak. The sand plain contains a well-developed calcrete horizon.

6. PREVIOUS EXPLORATION

The southern Eyre Peninsula has been explored extensively for a range of commodities since the early 1970's. Exploration has predominantly focused on the potential of Hutchison Group meta sediments to host base metal sulphide (Pb, Zn $\pm$ Cu) mineralisation. Other minerals explored for either in conjunction with base metals or exclusively include uranium during the 1970's, commercial mineral deposits of kaolin, graphite and refractory clays, diamonds and platinum group minerals (PGM) in the late 1980's and gold and lesser nickel during the 1990's.

Historical exploration for base metal sulphide mineralisation focused on iron rich lithologies of the Hutchison Group, with BIF units of the Middleback Subgroup interpreted as potential hosts for stratiform Pb, Zn mineralisation of Broken Hill or Aggeneys-Gamsberg type and Copper Belt type, Cu (Pb / Zn) mineralisation. From 1970 to 1985 CSR / Pacminex (Env 1264, 1353, 1856, 1266) and to a lesser extent CRA Exploration (Env 2926, 2963, 2964, 5247), Picklands Mather and Co International (Env 1412) and Australian Anglo American (Env 2378) explored the central and eastern mid to lower Eyre Peninsula defining a number of targets but no significant mineralisation. In the mid to late 1980's CRA Exploration (Env 5247) and Dominion Metals (Env 8240) explored the western and central to western Eyre Peninsula respectively for Broken Hill type mineralisation around the Lady Franklin Mine and under Tertiary sediments of the Cummins Basin with no success. From 1989 to 1994 WMC (Env 8243, 8729) explored the area to the north of Cummins and across to Port Neil defining a number of stream sediment anomalies prior to a board decision to stop exploration for Pb - Zn mineralisation.

A number of companies explored areas to the east and west of Cummins for sedimentary (Wyoming or Colorado Plateau type), unconformity related (Pine Creek type) and or vein-like U mineralisation between 1968 and 1979. Uranium exploration on the southern Eyre Peninsula was initiated by Noranda Australia (Env 934) in the late 1960's who defined a number of radiometric anomalies in and around Port Lincoln. During the 1970's Endeavor Oil (Env 1943), Sturts Meadows Prospecting Syndicate (Env 1767) and Uranerz (Env 2552 & 3283) explored the area to the west and south of Cummins for sedimentary / sandstone related U mineralisation in Lower Tertiary carbonaceous and pyritic quartzose sands. Pancontinental Mining in JV with Power Reactor and Nuclear Fuel Development Corp. (PNC) and AFMECO (Env 3519, 4848) and AFMECO (Env 3776) explored areas to the east of Cummins for unconformity related U mineralisation at or near the Lower Proterozoic / Archaean contact.

Prior to 1995 gold exploration was limited with only CRA Exploration (Env 5247), Australian Anglo American (Env 2378) and Helix Resources (Env 8103, 8246) including gold as a secondary target. From 1995 to 1999 Goldstream Mining NL (Env 9323, 9372, 9478, 9492, 9520, 9521) conducted gold exploration programmes that encroached on or covered large parts of the current tenement area. Goldstream explored several tenements for Challenger type Au deposit within granulite facies of the Archaean Sleaford Complex and for shear hosted polymetallic Au-Pb-Zn-Cu in interpreted Archaean greenstones and Lower Proterozoic BIF units. Extensive lag and lesser stream and soil sampling in combination with drilling failed to identify any significant anomalies.

Exploration for other minerals within or surrounding the current tenement has included platinum group minerals (PGM) by Helix Resources (Env 8103, 8246) and Thompson Belt and Messina type Ni deposits by CRA Exploration (Env 9196) and Australian Anglo American (Env 2378) respectively. Extensive exploration for diamonds by WMC (Env 8243) and Stockdale (Env 8076) over much of the Eyre Peninsula found numerous kimberlitic indicators but no diamonds.

Limited exploration for industrial or commercial minerals including kaolin (Env 1264, 1940, 1943), graphite (Env 5233, 6538), heavy mineral sands (Env 8240) and lignite (Env 4246) has also been conducted over areas of the southern Eyre Peninsula.

As part of a regional search for dimension stone granite, EL 2210 was obtained on 10.11.1996 by Olliver Geological Services Pty Ltd to cover Royal Mahogany-style red granite near Darke Peak. EL 2858 is the flow-on tenement.

Schubert Red Granite prospect was discovered in 1996. Diamond coring and bulk sampling is required before Mineral Claim is pegged.

7. EXPLORATION ACTIVITIES AND RESULTS

Calcrete sampling undertaken over adjacent tenements EL2858 (Carapsee) and EL2815 (Cockabidnie) delineated a 2.5km long, 300m wide multi- element (Au, Cu, Pb, As) anomaly. The anomaly is defined by gold in calcrete over 10ppb, with peak values over 60ppb and contains Cu values from 100 to 400ppm, Zn from 50 to 450ppm, and As from 20 to 295ppm. Figure 3 shows the multi-element anomaly in detail.

This geochemical anomaly extends undercover along a south westerly strike direction into this tenement from a hill of outcropping banded iron formation (Sugarloaf Hill) along which a number of old Cu & Au workings occur within a partially outcropping dolomite unit along the western margin of the Hill.

116 calcrete samples were collected during the current reporting period from EL2550, to test for the faulted strike extension of the Carrapsee / Cockabidnie multi-element geochemical anomaly. The samples were collected from the northern part of the tenement; which has been interpreted to contain Hutchinson Group metasediments.

Calcrete samples were collected on an 800m x 200m grid (Figure 2). Sample collection methods ranged from pick & shovel to jackhammer, with sample depths ranging from at surface to depths of one metre.

Approximately 2 kilograms of material from each sample site was sent to Genalysis Laboratories for assay. The calcrete samples were crushed using a single stage mix and grind. The calcrete samples were analysed by aqua regia with a graphite furnace AAS finish for Au and ICP-OES finish for the remaining elements (As, Bi, Ca, Cu, Pb, and Zn).

The results of the calcrete sampling proved to be disappointing with low grade gold and basemetals returned.

Peak results included 5ppb Au, 18ppm Cu, 20ppb Pb & 22ppm Zn.

Eyre Peninsula Gypsum

Owing to the drought, there were no sales of gypsum from ML6034, no mining was required and no exploration undertaken.

8. CONCLUSIONS AND PROPOSED PROGRAMME

The calcrete sampling on EL2550 tested for the faulted strike extension of the Sugarloaf multi-element geochemical anomaly.

The results of the calcrete sampling proved to be disappointing with low-grade gold and basemetals returned, suggesting that the Sugarloaf anomalism is unlikely to extend into the northern part of the Karkarook tenement.

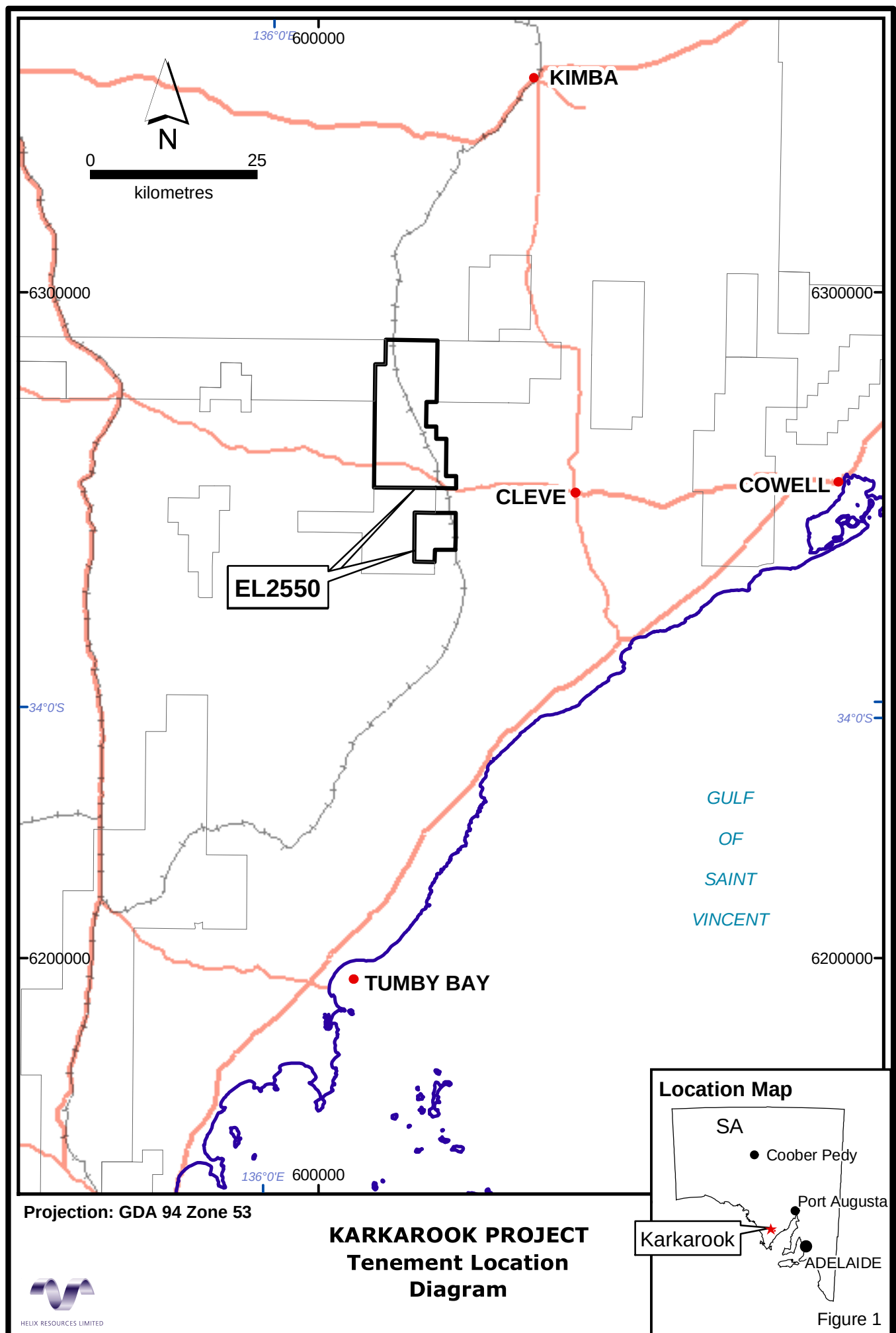
As RAB drilling on adjacent tenements (Carapsee & Cockabidnie) of the Sugarloaf anomaly returned disappointing results with only silver showing significant anomalism over broad intersections, this down graded the targets potential to host Au – Cu mineralisation.

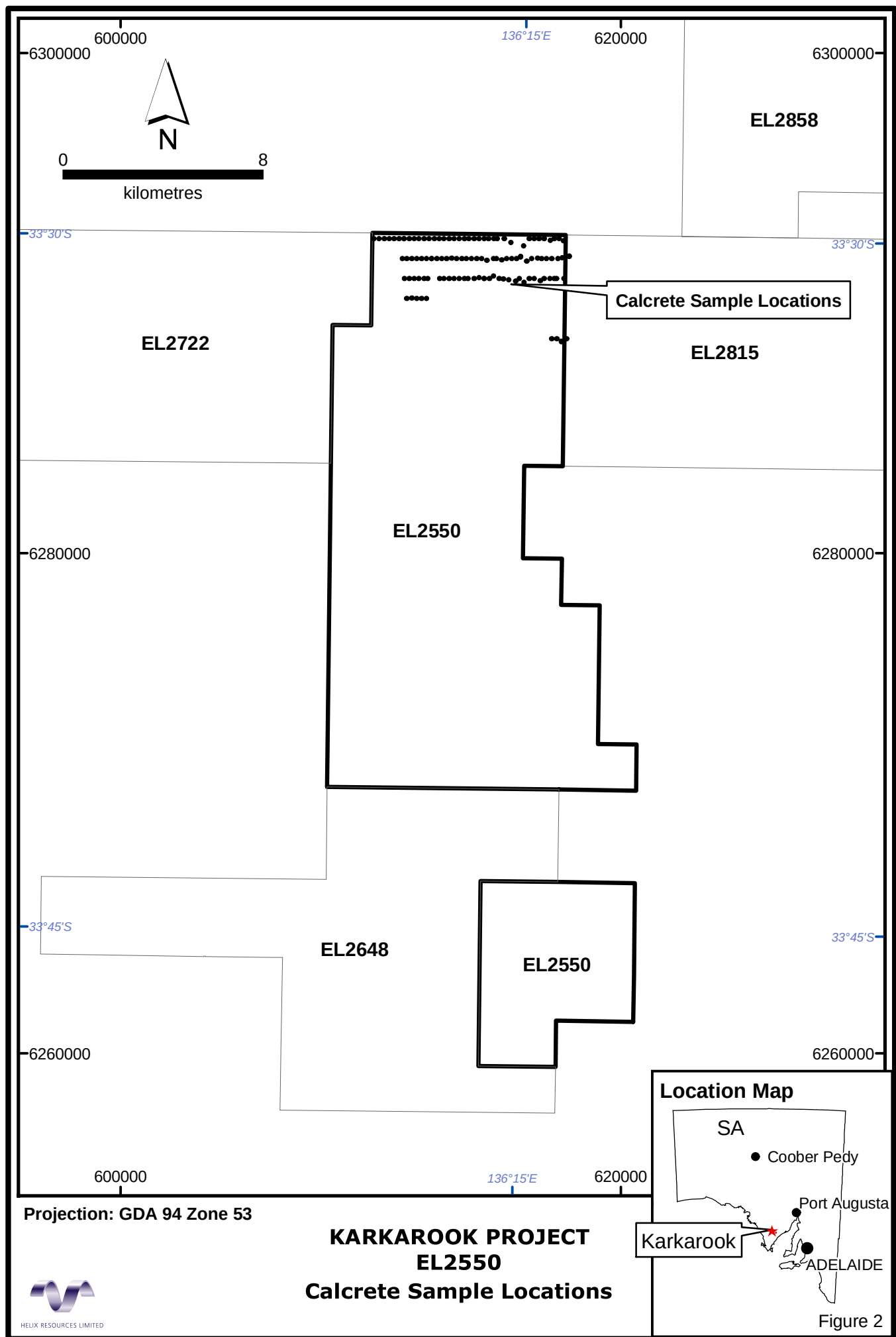
No further work is planned for this project.

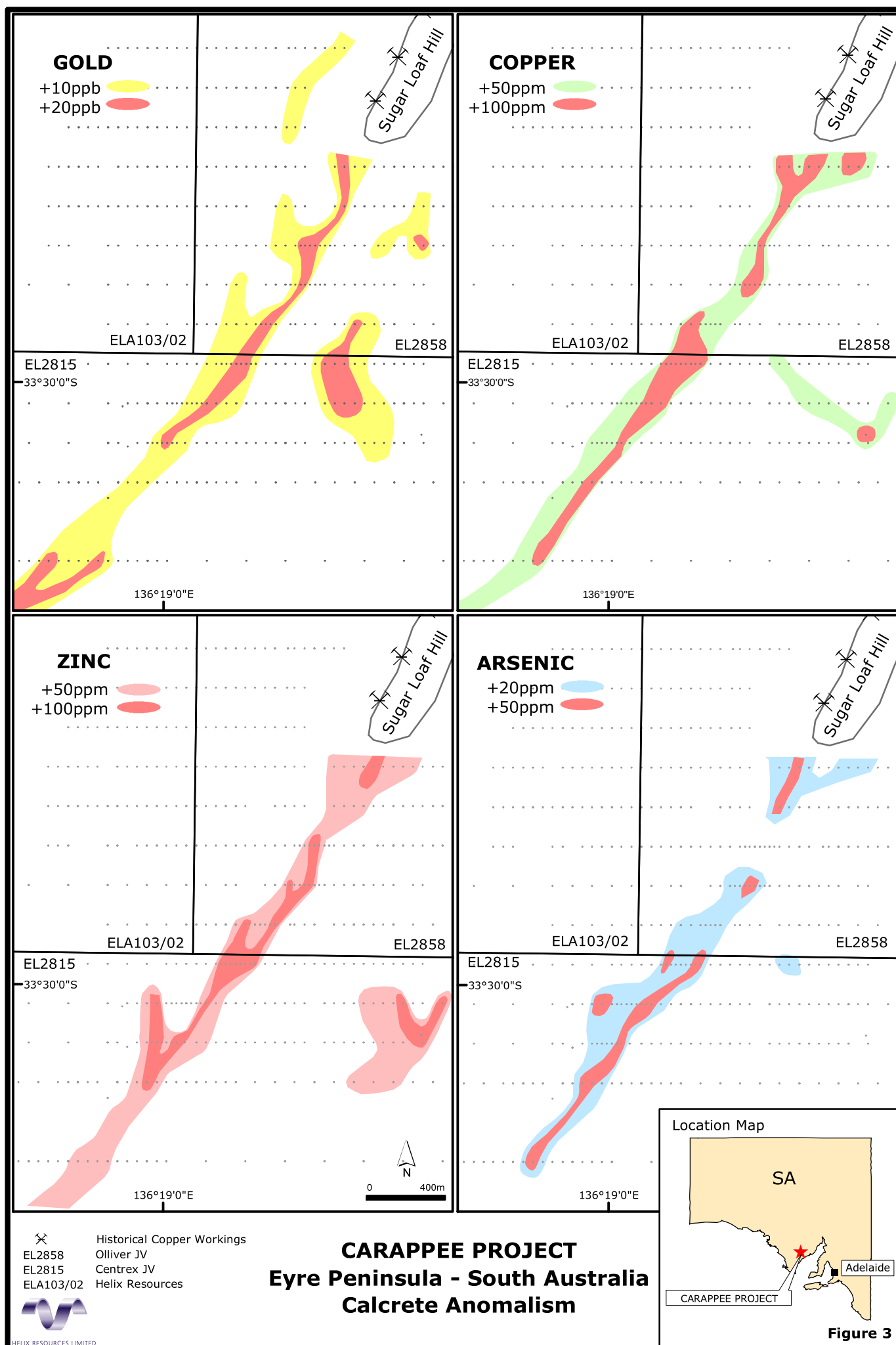
9. EXPENDITURE

The following outlines expenditure by Helix Resources Ltd and Eyre Peninsula Gypsum on the Karkarook EL for the Year Ending 16th September 2003.

Exploration Expenditure September 2002 to 16 September 2003		17 Karkarook EL 2550
Expenditure	Cost	\$
Accommodation - Domestic	280	
Analysis, Other Geochemical	1,915	
Buildings, lease	314	
Buildings, maintenance	4	
Cleaning	8	
Communications, mobile phones	39	
Communications, office	31	
Communications, satellite	1	
Computer Software Maintenance	28	
Consultancy Fees - Geology	3,000	
Electricity -Supply/Generation	15	
Entertainment	22	
Equipment hire - Other	250	
Freight, Courier (admin)	7	
Fuel, Light vehicles	489	
Insurance - Motor Vehicle	2	
Insurance - Office	14	
Insurance - Travel	2	
Insurance - Workers Comp	56	
Light Vehicle - Hire	769	
Messing (consumables & services)	234	
Payroll Tax - WA	94	
Printing/Copy/Stationery	6	
Rates and Taxes	55	
Salaries and Wages - Contract	10	
Salary Alloc. to Exploration	796	
Seminars and Conferences	7	
Sponsorships - General	81	
Subscriptions & Memberships	46	
Superannuation	17	
Tenement, administration	58	
Tenement, application & advert	990	
Travel-Domestic Airfares & Expenses	141	
Helix Total	9,784	
Eyre Peninsula Gypsum		
Salaries and Wages	1063	
Office Expenses	172	
ML 6034 - Rental	268	
Chemical Analysis	43	
EPG Total	1546	
Grand Total	11,330	







Appendix 1

Appendix 1

Calcrete sampling – Kockabibnie
Nov – Dec 2002
GDA94 Zone 53

Aqua Regia Digest
Au - Graphite furnace AAS
As, Bi, Ca, Cu, Pb, Zn ICP-OES

SITE ID	East 94	North 94	Sample Depth (m)	Au 1ppb	As ppm	Bi ppm	Cu ppm	Pb ppm	Zn ppm	Ca ppm
224632	617228.8	6288571	0.2	-1	1	5	7	2	4	177700
224633	617428.8	6288571	0.4	2	1	5	9	6	7	158000
224634	617628.8	6288471	0.4	3	4	5	13	4	6	83900
224635	617828.8	6288571	0.6	1	6	5	10	5	12	35900
225001	617698.8	6292481	0.4	1	1	0.5	12	7	5	227600
225002	617528.8	6292571	0.3	2	3	0.5	9	6	3	213000
225003	617328.8	6292571	0.8	2	2	0.5	9	8	8	220100
225004	617178.8	6292501	0.7	2	1	0.5	9	8	9	119700
225005	616928.8	6292571	0.5	-1	3	0.5	6	7	12	25100
225006	616728.8	6292571	1	-1	3	0.5	6	8	14	16200
225007	616528.8	6292571	0	1	1	0.5	7	4	6	132300
225008	616328.8	6292571	0.5	2	1	0.5	10	8	9	162100
225009	616111.8	6292286	0.3	1	1	0.5	12	6	5	259900
225010	615595.8	6292424	0.3	1	1	0.5	7	9	4	214000
225011	615335.8	6292564	0.5	2	2	0.5	6	6	3	198200
225012	615058.8	6292571	0.7	-1	5	0.5	11	13	19	14600
225013	614928.8	6292571	0.7	-1	3	0.5	11	19	16	35400
225014	614703.8	6292571	0.4	-1	1	0.5	11	9	7	217000
225015	614528.8	6292571	0.7	1	1	0.5	13	11	20	53400
225016	614228.8	6291771	0.4	-1	1	0.5	12	8	7	181600
225017	614428.8	6291771	0.3	1	1	0.5	9	4	3	202400
225018	614628.8	6291711	0.3	-1	1	0.5	10	5	3	222700
225019	614908.8	6291781	0.5	-1	1	0.5	8	9	10	167600
225020	615028.8	6291771	0	2	1	0.5	6	5	5	157400
225021	615228.8	6291721	0	-1	1	0.5	6	5	6	110100
225022	615428.8	6291771	0	-1	1	0.5	7	6	8	128600
225023	615628.8	6291771	0.3	1	1	0.5	9	6	5	230300
225024	615828.8	6291771	1	-1	1	0.5	10	9	11	162400
225025	615988.8	6291861	0.6	-1	1	0.5	10	6	5	200500
225026	616228.8	6291671	0.8	-1	4	0.5	8	5	11	14000
225027	615988.8	6291861	0.6	1	1	0.5	10	6	6	209600
225028	616428.8	6291771	0	2	3	0.5	10	6	7	242800
225029	616663.8	6291786	0.8	1	4	0.5	12	12	14	65000
225030	616828.8	6291771	0.4	4	4	0.5	11	8	6	206200
225031	617028.8	6291771	0.3	2	3	0.5	10	6	4	215500
225032	617228.8	6291771	1	2	1	0.5	10	11	14	100300
225033	617478.8	6291771	0	3	1	0.5	11	5	4	223800
225034	617658.8	6291799	0.5	2	3	0.5	8	8	9	146700
225035	617928.8	6291881	0.8	-1	4	0.5	12	10	15	38500
225036	617728.8	6290971	0.3	3	5	0.5	9	6	4	206000
225037	617418.8	6290971	0.3	3	1	0.5	15	4	4	229600
225038	617328.8	6290971	0.6	2	1	0.5	6	4	4	82800
225039	617158.8	6290971	0.5	2	1	0.5	9	6	4	216600
225040	616928.8	6290971	1	-1	3	0.5	6	5	10	27200
225041	616778.8	6290891	0.8	1	4	0.5	8	7	6	143000
225042	616528.8	6290971	0.7	1	4	0.5	10	11	16	46900
225043	616328.8	6290971	0.2	2	1	0.5	13	6	4	248700

225044	616128.8	6290821	0.8	2	4	0.5	10	7	5	237600
SITE ID	East 94	North 94	Sample Depth (m)	Au 1ppb	As ppm	Bi ppm	Cu ppm	Pb ppm	Zn ppm	Ca ppm
225045	615947.8	6290971	0.5	-1	1	0.5	11	9	12	51000
225046	615788.8	6290871	0.3	-1	1	0.5	3	1	2	73500
225047	615513.8	6290931	0.8	2	1	0.5	8	7	6	192600
225048	615298.8	6290966	1	-1	4	0.5	9	7	12	72100
225049	615128.8	6290971	0	2	1	0.5	10	5	11	159800
225050	614528.8	6290971	1	1	1	0.5	12	6	9	238200
225051	614908.8	6291071	0.4	3	4	0.5	16	5	9	243200
225052	614528.8	6290971	0.4	1	2	0.5	12	6	7	249900
225053	614728.8	6290971	0	1	1	0.5	15	7	16	64900
225054	614328.8	6291011	1	-1	4	0.5	11	8	8	234900
225055	614128.8	6290971	0.7	-1	3	0.5	12	10	19	28000
225056	613893.8	6290971	0.7	-1	5	0.5	9	7	12	17600
225057	613728.8	6290971	0.7	-1	4	0.5	16	9	19	29200
225058	613528.8	6290971	0.8	-1	6	0.5	16	12	22	13700
225059	613328.8	6290971	0.8	1	3	0.5	14	9	19	59400
225060	613128.8	6290971	0.6	1	4	0.5	15	10	22	60600
225061	612928.8	6290971	0.6	1	2	0.5	15	11	21	53500
225062	612748.8	6290971	0.4	2	2	0.5	16	7	18	98800
225063	612278.8	6290971	0.5	-1	6	0.5	6	13	5	15300
225064	612128.8	6290971	0.4	2	1	0.5	11	7	11	149200
225065	611928.8	6290971	0.3	-1	1	0.5	11	9	9	122300
225066	611728.8	6290971	0.8	2	1	0.5	11	6	5	234300
225067	611528.8	6290971	0.4	1	4	0.5	14	12	18	71700
225068	611348.8	6290971	0.4	2	1	0.5	12	8	15	99700
225069	611263.8	6291771	0	-1	5	0.5	5	9	4	25300
225070	611428.8	6291771	0.6	2	1	0.5	9	4	4	208700
225071	611628.8	6291771	0.3	1	6	0.5	12	14	16	60100
225072	611828.8	6291771	0.7	-1	1	0.5	11	7	6	234200
225073	612028.8	6291771	0.5	1	4	0.5	11	6	11	91800
225074	612228.8	6291771	0.3	1	1	0.5	8	6	6	125600
225075	612428.8	6291771	0.3	3	1	0.5	12	3	2	214400
225076	612628.8	6291771	0.5	1	11	0.5	9	18	14	54400
225077	612428.8	6291771	0.6	5	3	0.5	14	3	2	238700
225078	612828.8	6291771	0.6	-1	1	0.5	8	6	6	166700
225079	613028.8	6291771	0.5	1	1	0.5	10	7	8	149500
225080	613228.8	6291796	0.8	1	4	0.5	10	6	12	43800
225081	613428.8	6291771	0.5	1	4	1	10	11	10	115200
225082	613628.8	6291771	0.5	1	3	0.5	10	8	13	86900
225083	613828.8	6291771	0.3	1	5	0.5	8	4	4	166100
225084	614028.8	6291771	0.2	2	6	0.5	11	9	6	157900
225085	614328.8	6292571	0.4	-1	1	0.5	8	7	13	89300
225086	614128.8	6292571	0.3	1	1	0.5	8	5	3	221300
225087	613928.8	6292571	0.3	2	1	0.5	11	7	10	139200
225088	613728.8	6292571	0.3	2	3	0.5	9	5	5	222500
225089	613528.8	6292571	0.6	1	1	0.5	8	7	13	38300
225090	613328.8	6292571	0.8	1	1	0.5	9	5	6	155700
225091	613128.8	6292571	0.5	1	2	0.5	10	7	4	205700
225092	612928.8	6292571	0.8	2	1	0.5	12	7	5	159600
225093	612728.8	6292571	0.4	2	3	0.5	13	8	8	144400
225094	612528.8	6292571	0.4	1	1	0.5	8	8	3	225500
225095	612328.8	6292571	0.6	2	1	0.5	12	8	6	132400
225096	612128.8	6292571	0.6	-1	4	0.5	15	9	19	73100

225097	611928.8	6292571	0	1	1	0.5	10	4	3	227600
225098	611728.8	6292571	0.6	1	5	0.5	14	13	16	47900
SITE ID	East 94	North 94	Sample Depth (m)	Au 1ppb	As ppm	Bi ppm	Cu ppm	Pb ppm	Zn ppm	Ca ppm
225099	611528.8	6292571	1	-1	9	0.5	11	20	15	70000
225100	611328.8	6292571	0.3	-1	1	0.5	6	7	4	106200
225101	611119.8	6292571	0.3	-1	3	0.5	12	10	13	121400
225102	611328.8	6292571	0.6	-1	1	0.5	7	6	5	210500
225103	610928.8	6292571	0.6	2	3	0.5	8	6	7	86400
225104	610728.8	6292571	0.9	-1	1	0.5	11	7	12	60500
225105	610528.8	6292571	0.4	-1	2	0.5	5	7	3	54800
225106	610328.8	6292571	0.4	-1	1	0.5	10	8	13	57200
225107	610128.8	6292571	0.4	-1	1	0.5	6	7	3	104900
225108	611428.8	6290171	0.4	-1	2	0.5	12	5	5	220100
225109	611628.8	6290196	0.2	1	1	0.5	7	4	3	191900
225110	611828.8	6290171	0.7	-1	1	1	11	8	7	208200
225111	612028.8	6290171	0.3	2	1	0.5	9	5	3	250300
225112	612228.8	6290171	0.8	-1	1	0.5	18	10	20	56800

SITE ID	East 94	North 94	Sample De Au	ppb As	ppm Bi	ppm Cu	ppm Pb	ppm Zn	ppm Ca	ppm
224632	617228.8	6288571	0.2	-1	1	5	7	2	4	177700
224633	617428.8	6288571	0.4	2	1	5	9	6	7	158000
224634	617628.8	6288471	0.4	3	4	5	13	4	6	83900
224635	617828.8	6288571	0.6	1	6	5	10	5	12	35900
225001	617698.8	6292481	0.4	1	1	0.5	12	7	5	227600
225002	617528.8	6292571	0.3	2	3	0.5	9	6	3	213000
225003	617328.8	6292571	0.8	2	2	0.5	9	8	8	220100
225004	617178.8	6292501	0.7	2	1	0.5	9	8	9	119700
225005	616928.8	6292571	0.5	-1	3	0.5	6	7	12	25100
225006	616728.8	6292571	1	-1	3	0.5	6	8	14	16200
225007	616528.8	6292571	0	1	1	0.5	7	4	6	132300
225008	616328.8	6292571	0.5	2	1	0.5	10	8	9	162100
225009	616111.8	6292286	0.3	1	1	0.5	12	6	5	259900
225010	615595.8	6292424	0.3	1	1	0.5	7	9	4	214000
225011	615335.8	6292564	0.5	2	2	0.5	6	6	3	198200
225012	615058.8	6292571	0.7	-1	5	0.5	11	13	19	14600
225013	614928.8	6292571	0.7	-1	3	0.5	11	19	16	35400
225014	614703.8	6292571	0.4	-1	1	0.5	11	9	7	217000
225015	614528.8	6292571	0.7	1	1	0.5	13	11	20	53400
225016	614228.8	6291771	0.4	-1	1	0.5	12	8	7	181600
225017	614428.8	6291771	0.3	1	1	0.5	9	4	3	202400
225018	614628.8	6291711	0.3	-1	1	0.5	10	5	3	222700
225019	614908.8	6291781	0.5	-1	1	0.5	8	9	10	167600
225020	615028.8	6291771	0	2	1	0.5	6	5	5	157400
225021	615228.8	6291721	0	-1	1	0.5	6	5	6	110100
225022	615428.8	6291771	0	-1	1	0.5	7	6	8	128600
225023	615628.8	6291771	0.3	1	1	0.5	9	6	5	230300
225024	615828.8	6291771	1	-1	1	0.5	10	9	11	162400
225025	615988.8	6291861	0.6	-1	1	0.5	10	6	5	200500
225026	616228.8	6291671	0.8	-1	4	0.5	8	5	11	14000
225027	615988.8	6291861	0.6	1	1	0.5	10	6	6	209600
225028	616428.8	6291771	0	2	3	0.5	10	6	7	242800
225029	616663.8	6291786	0.8	1	4	0.5	12	12	14	65000
225030	616828.8	6291771	0.4	4	4	0.5	11	8	6	206200
225031	617028.8	6291771	0.3	2	3	0.5	10	6	4	215500

225032	617228.8	6291771	1	2	1	0.5	10	11	14	100300
225033	617478.8	6291771	0	3	1	0.5	11	5	4	223800
225034	617658.8	6291799	0.5	2	3	0.5	8	8	9	146700
225035	617928.8	6291881	0.8	-1	4	0.5	12	10	15	38500
225036	617728.8	6290971	0.3	3	5	0.5	9	6	4	206000
225037	617418.8	6290971	0.3	3	1	0.5	15	4	4	229600
225038	617328.8	6290971	0.6	2	1	0.5	6	4	4	82800
225039	617158.8	6290971	0.5	2	1	0.5	9	6	4	216600
225040	616928.8	6290971	1	-1	3	0.5	6	5	10	27200
225041	616778.8	6290891	0.8	1	4	0.5	8	7	6	143000
225042	616528.8	6290971	0.7	1	4	0.5	10	11	16	46900
225043	616328.8	6290971	0.2	2	1	0.5	13	6	4	248700
225044	616128.8	6290821	0.8	2	4	0.5	10	7	5	237600
225045	615947.8	6290971	0.5	-1	1	0.5	11	9	12	51000
225046	615788.8	6290871	0.3	-1	1	0.5	3	1	2	73500
225047	615513.8	6290931	0.8	2	1	0.5	8	7	6	192600
225048	615298.8	6290966	1	-1	4	0.5	9	7	12	72100
225049	615128.8	6290971	0	2	1	0.5	10	5	11	159800
225050	614528.8	6290971	1	1	1	0.5	12	6	9	238200
225051	614908.8	6291071	0.4	3	4	0.5	16	5	9	243200
225052	614528.8	6290971	0.4	1	2	0.5	12	6	7	249900
225053	614728.8	6290971	0	1	1	0.5	15	7	16	64900
225054	614328.8	6291011	1	-1	4	0.5	11	8	8	234900
225055	614128.8	6290971	0.7	-1	3	0.5	12	10	19	28000
225056	613893.8	6290971	0.7	-1	5	0.5	9	7	12	17600
225057	613728.8	6290971	0.7	-1	4	0.5	16	9	19	29200
225058	613528.8	6290971	0.8	-1	6	0.5	16	12	22	13700
225059	613328.8	6290971	0.8	1	3	0.5	14	9	19	59400
225060	613128.8	6290971	0.6	1	4	0.5	15	10	22	60600
225061	612928.8	6290971	0.6	1	2	0.5	15	11	21	53500
225062	612748.8	6290971	0.4	2	2	0.5	16	7	18	98800
225063	612278.8	6290971	0.5	-1	6	0.5	6	13	5	15300
225064	612128.8	6290971	0.4	2	1	0.5	11	7	11	149200
225065	611928.8	6290971	0.3	-1	1	0.5	11	9	9	122300
225066	611728.8	6290971	0.8	2	1	0.5	11	6	5	234300
225067	611528.8	6290971	0.4	1	4	0.5	14	12	18	71700

225068	611348.8	6290971	0.4	2	1	0.5	12	8	15	99700
225069	611263.8	6291771	0	-1	5	0.5	5	9	4	25300
225070	611428.8	6291771	0.6	2	1	0.5	9	4	4	208700
225071	611628.8	6291771	0.3	1	6	0.5	12	14	16	60100
225072	611828.8	6291771	0.7	-1	1	0.5	11	7	6	234200
225073	612028.8	6291771	0.5	1	4	0.5	11	6	11	91800
225074	612228.8	6291771	0.3	1	1	0.5	8	6	6	125600
225075	612428.8	6291771	0.3	3	1	0.5	12	3	2	214400
225076	612628.8	6291771	0.5	1	11	0.5	9	18	14	54400
225077	612428.8	6291771	0.6	5	3	0.5	14	3	2	238700
225078	612828.8	6291771	0.6	-1	1	0.5	8	6	6	166700
225079	613028.8	6291771	0.5	1	1	0.5	10	7	8	149500
225080	613228.8	6291796	0.8	1	4	0.5	10	6	12	43800
225081	613428.8	6291771	0.5	1	4	1	10	11	10	115200
225082	613628.8	6291771	0.5	1	3	0.5	10	8	13	86900
225083	613828.8	6291771	0.3	1	5	0.5	8	4	4	166100
225084	614028.8	6291771	0.2	2	6	0.5	11	9	6	157900
225085	614328.8	6292571	0.4	-1	1	0.5	8	7	13	89300
225086	614128.8	6292571	0.3	1	1	0.5	8	5	3	221300
225087	613928.8	6292571	0.3	2	1	0.5	11	7	10	139200
225088	613728.8	6292571	0.3	2	3	0.5	9	5	5	222500
225089	613528.8	6292571	0.6	1	1	0.5	8	7	13	38300
225090	613328.8	6292571	0.8	1	1	0.5	9	5	6	155700
225091	613128.8	6292571	0.5	1	2	0.5	10	7	4	205700
225092	612928.8	6292571	0.8	2	1	0.5	12	7	5	159600
225093	612728.8	6292571	0.4	2	3	0.5	13	8	8	144400
225094	612528.8	6292571	0.4	1	1	0.5	8	8	3	225500
225095	612328.8	6292571	0.6	2	1	0.5	12	8	6	132400
225096	612128.8	6292571	0.6	-1	4	0.5	15	9	19	73100
225097	611928.8	6292571	0	1	1	0.5	10	4	3	227600
225098	611728.8	6292571	0.6	1	5	0.5	14	13	16	47900
225099	611528.8	6292571	1	-1	9	0.5	11	20	15	70000
225100	611328.8	6292571	0.3	-1	1	0.5	6	7	4	106200
225101	611119.8	6292571	0.3	-1	3	0.5	12	10	13	121400
225102	611328.8	6292571	0.6	-1	1	0.5	7	6	5	210500
225103	610928.8	6292571	0.6	2	3	0.5	8	6	7	86400

225104	610728.8	6292571	0.9	-1	1	0.5	11	7	12	60500
225105	610528.8	6292571	0.4	-1	2	0.5	5	7	3	54800
225106	610328.8	6292571	0.4	-1	1	0.5	10	8	13	57200
225107	610128.8	6292571	0.4	-1	1	0.5	6	7	3	104900
225108	611428.8	6290171	0.4	-1	2	0.5	12	5	5	220100
225109	611628.8	6290196	0.2	1	1	0.5	7	4	3	191900
225110	611828.8	6290171	0.7	-1	1	1	11	8	7	208200
225111	612028.8	6290171	0.3	2	1	0.5	9	5	3	250300
225112	612228.8	6290171	0.8	-1	1	0.5	18	10	20	56800

Appendix 2

	SITE_ID	TENEMENT	LONGITUDE WGS dd.ddddddd	LATITUDE WGS dd.ddddddd	RL metres	East_94 metres	North_94 metres	SAMPLE TYPE	SAMPLE MEDIUM	Au_PPb B_ETA ppb B-ETA	Ag_PPM B_EOES ppm B-EOES	As_PPM B_OES PPM B-OES	Bi_PPM PPM B-EOES	Ca_PPM B_OES PPM B-OES	Cu_PPM B_OES PPM B-OES	Pb_PPM B_OES ppm B-OES	Zn_PPM B_OES ppm B-OES
			0.01secs	0.01secs	10	1	1			1	0.1	2	1	100	1	2	1
										1	0.1	2	1	100	1	2	1
D	224632	EL2550	136.263	-33.536	0	617228.8	6288571	O	CC	-1		1	5	177700	7	2	4
D	224633	EL2550	136.265	-33.536	0	617428.8	6288571	O	CC	2		1	5	158000	9	6	7
D	224634	EL2550	136.267	-33.537	0	617628.8	6288471	O	CC	3		4	5	83900	13	4	6
D	224635	EL2550	136.269	-33.536	0	617828.8	6288571	O	CC	1		6	5	35900	10	5	12
D	225001	EL2550	136.267	-33.501	200	617698.8	6292481	O	CC	1	0	1	0.5	227600	12	7	5
D	225002	EL2550	136.265	-33.5	200	617528.8	6292571	O	CC	2	0	3	0.5	213000	9	6	3
D	225003	EL2550	136.263	-33.5	200	617328.8	6292571	O	CC	2	0	2	0.5	220100	9	8	8
D	225004	EL2550	136.262	-33.501	200	617178.8	6292501	O	CC	2	0	1	0.5	119700	9	8	9
D	225005	EL2550	136.259	-33.5	200	616928.8	6292571	O	CC	-1	0	3	0.5	25100	6	7	12
D	225006	EL2550	136.257	-33.5	200	616728.8	6292571	O	CC	-1	0	3	0.5	16200	6	8	14
D	225007	EL2550	136.255	-33.5	200	616528.8	6292571	O	CC	1	0	1	0.5	132300	7	4	6
D	225008	EL2550	136.252	-33.5	200	616328.8	6292571	O	CC	2	0	1	0.5	162100	10	8	9
D	225009	EL2550	136.25	-33.503	200	616111.8	6292286	O	CC	1	0	1	0.5	259900	12	6	5
D	225010	EL2550	136.245	-33.501	200	615595.8	6292424	O	CC	1	0	1	0.5	214000	7	9	4
D	225011	EL2550	136.242	-33.5	200	615335.8	6292564	O	CC	2	0	2	0.5	198200	6	6	3
D	225012	EL2550	136.239	-33.5	200	615058.8	6292571	O	CC	-1	0	5	0.5	14600	11	13	19
D	225013	EL2550	136.237	-33.5	200	614928.8	6292571	O	CC	-1	0	3	0.5	35400	11	19	16
D	225014	EL2550	136.235	-33.5	200	614703.8	6292571	O	CC	-1	0	1	0.5	217000	11	9	7
D	225015	EL2550	136.233	-33.5	200	614528.8	6292571	O	CC	1	0	1	0.5	53400	13	11	20
D	225016	EL2550	136.23	-33.508	200	614228.8	6291771	O	CC	-1	0	1	0.5	181600	12	8	7
D	225017	EL2550	136.232	-33.507	200	614428.8	6291771	O	CC	1	0	1	0.5	202400	9	4	3
D	225018	EL2550	136.234	-33.508	200	614628.8	6291711	O	CC	-1	0	1	0.5	222700	10	5	3
D	225019	EL2550	136.237	-33.507	200	614908.8	6291781	O	CC	-1	0	1	0.5	167600	8	9	10
D	225020	EL2550	136.239	-33.507	200	615028.8	6291771	O	CC	2	0	1	0.5	157400	6	5	5
D	225021	EL2550	136.241	-33.508	200	615228.8	6291721	O	CC	-1	0	1	0.5	110100	6	5	6
D	225022	EL2550	136.243	-33.507	200	615428.8	6291771	O	CC	-1	0	1	0.5	128600	7	6	8
D	225023	EL2550	136.245	-33.507	200	615628.8	6291771	O	CC	1	0	1	0.5	230300	9	6	5
D	225024	EL2550	136.247	-33.507	200	615828.8	6291771	O	CC	-1	0	1	0.5	162400	10	9	11
D	225025	EL2550	136.249	-33.507	200	615988.8	6291861	O	CC	-1	0	1	0.5	200500	10	6	5
D	225026	EL2550	136.251	-33.508	200	616228.8	6291671	O	CC	-1	0	4	0.5	14000	8	5	11
D	225027	EL2550	136.249	-33.507	200	615988.8	6291861	O	CC	1	0	1	0.5	209600	10	6	6
D	225028	EL2550	136.254	-33.507	200	616428.8	6291771	O	CC	2	0	3	0.5	242800	10	6	7
D	225029	EL2550	136.256	-33.507	200	616663.8	6291786	O	CC	1	0	4	0.5	65000	12	12	14
D	225030	EL2550	136.258	-33.507	200	616828.8	6291771	O	CC	4	0	4	0.5	206200	11	8	6
D	225031	EL2550	136.26	-33.507	200	617028.8	6291771	O	CC	2	0	3	0.5	215500	10	6	4
D	225032	EL2550	136.262	-33.507	200	617228.8	6291771	O	CC	2	0	1	0.5	100300	10	11	14
D	225033	EL2550	136.265	-33.507	200	617478.8	6291771	O	CC	3	0	1	0.5	223800	11	5	4
D	225034	EL2550	136.267	-33.507	200	617658.8	6291799	O	CC	2	0	3	0.5	146700	8	8	9
D	225035	EL2550	136.27	-33.506	200	617928.8	6291881	O	CC	-1	0	4	0.5	38500	12	10	15
D	225036	EL2550	136.268	-33.514	200	617728.8	6290971	O	CC	3	0	5	0.5	206000	9	6	4
D	225037	EL2550	136.264	-33.514	200	617418.8	6290971	O	CC	3	0	1	0.5	229600	15	4	4
D	225038	EL2550	136.263	-33.514	200	617328.8	6290971	O	CC	2	0	1	0.5	82800	6	4	4
D	225039	EL2550	136.262	-33.514	200	617158.8	6290971	O	CC	2	0	1	0.5	216600	9	6	4
D	225040	EL2550	136.259	-33.514	200	616928.8	6290971	O	CC	-1	0	3	0.5	27200	6	5	10
D	225041	EL2550	136.257	-33.515	200	616778.8	6290891	O	CC	1	0	4	0.5	143000	8	7	6
D	225042	EL2550	136.255	-33.514	200	616528.8	6290971	O	CC	1	0	4	0.5	46900	10	11	16
D	225043	EL2550	136.253	-33.515	200	616328.8	6290971	O	CC	2	0	1	0.5	248700	13	6	4
D	225044	EL2550	136.25	-33.516	200	616128.8	6290821	O	CC	2	0	4	0.5	237600	10	7	5
D	225045	EL2550	136.249	-33.515	200	615947.8	6290971	O	CC	-1	0	1	0.5	51000	11	9	12

	SITE_ID	TENEMENT	LONGITUDE WGS dd.ddddddd	LATITUDE WGS dd.ddddddd	RL metres	East_94 metres	North_94 metres	SAMPLE TYPE	SAMPLE MEDIUM	Au_PPb B_ETA ppb B-ETA	Ag_PPM B_EOES ppm B-EOES	As_PPM B_OES PPM B-OES	Bi_PPM PPM B-EOES	Ca_PPM B_OES PPM B-OES	Cu_PPM B_OES PPM B-OES	Pb_PPM B_OES ppm B-OES	Zn_PPM B_OES ppm B-OES
										1	0.1	2	1	100	1	2	1
D	225046	EL2550	136.247	-33.515	200	615788.8	6290871	O	CC	-1	0	1	0.5	73500	3	1	2
D	225047	EL2550	136.244	-33.515	200	615513.8	6290931	O	CC	2	0	1	0.5	192600	8	7	6
D	225048	EL2550	136.242	-33.515	200	615298.8	6290966	O	CC	-1	0	4	0.5	72100	9	7	12
D	225049	EL2550	136.24	-33.515	200	615128.8	6290971	O	CC	2	0	1	0.5	159800	10	5	11
D	225050	EL2550	136.233	-33.515	200	614528.8	6290971	O	CC	1	0	1	0.5	238200	12	6	9
D	225051	EL2550	136.237	-33.514	200	614908.8	6291071	O	CC	3	0	4	0.5	243200	16	5	9
D	225052	EL2550	136.233	-33.515	200	614528.8	6290971	O	CC	1	0	2	0.5	249900	12	6	7
D	225053	EL2550	136.235	-33.515	200	614728.8	6290971	O	CC	1	0	1	0.5	64900	15	7	16
D	225054	EL2550	136.231	-33.514	200	614328.8	6291011	O	CC	-1	0	4	0.5	234900	11	8	8
D	225055	EL2550	136.229	-33.515	200	614128.8	6290971	O	CC	-1	0	3	0.5	28000	12	10	19
D	225056	EL2550	136.226	-33.515	200	613893.8	6290971	O	CC	-1	0	5	0.5	17600	9	7	12
D	225057	EL2550	136.225	-33.515	200	613728.8	6290971	O	CC	-1	0	4	0.5	29200	16	9	19
D	225058	EL2550	136.222	-33.515	200	613528.8	6290971	O	CC	-1	0	6	0.5	13700	16	12	22
D	225059	EL2550	136.22	-33.515	200	613328.8	6290971	O	CC	1	0	3	0.5	59400	14	9	19
D	225060	EL2550	136.218	-33.515	200	613128.8	6290971	O	CC	1	0	4	0.5	60600	15	10	22
D	225061	EL2550	136.216	-33.515	200	612928.8	6290971	O	CC	1	0	2	0.5	53500	15	11	21
D	225062	EL2550	136.214	-33.515	200	612748.8	6290971	O	CC	2	0	2	0.5	98800	16	7	18
D	225063	EL2550	136.209	-33.515	200	612278.8	6290971	O	CC	-1	0	6	0.5	15300	6	13	5
D	225064	EL2550	136.207	-33.515	200	612128.8	6290971	O	CC	2	0	1	0.5	149200	11	7	11
D	225065	EL2550	136.205	-33.515	200	611928.8	6290971	O	CC	-1	0	1	0.5	122300	11	9	9
D	225066	EL2550	136.203	-33.515	200	611728.8	6290971	O	CC	2	0	1	0.5	234300	11	6	5
D	225067	EL2550	136.201	-33.515	200	611528.8	6290971	O	CC	1	0	4	0.5	71700	14	12	18
D	225068	EL2550	136.199	-33.515	200	611348.8	6290971	O	CC	2	0	1	0.5	99700	12	8	15
D	225069	EL2550	136.198	-33.508	200	611263.8	6291771	O	CC	-1	0	5	0.5	25300	5	9	4
D	225070	EL2550	136.2	-33.508	200	611428.8	6291771	O	CC	2	0	1	0.5	208700	9	4	4
D	225071	EL2550	136.202	-33.508	200	611628.8	6291771	O	CC	1	0	6	0.5	60100	12	14	16
D	225072	EL2550	136.204	-33.508	200	611828.8	6291771	O	CC	-1	0	1	0.5	234200	11	7	6
D	225073	EL2550	136.206	-33.508	200	612028.8	6291771	O	CC	1	0	4	0.5	91800	11	6	11
D	225074	EL2550	136.208	-33.508	200	612228.8	6291771	O	CC	1	0	1	0.5	125600	8	6	6
D	225075	EL2550	136.211	-33.508	200	612428.8	6291771	O	CC	3	0	1	0.5	214400	12	3	2
D	225076	EL2550	136.213	-33.508	200	612628.8	6291771	O	CC	1	0	11	0.5	54400	9	18	14
D	225077	EL2550	136.211	-33.508	200	612428.8	6291771	O	CC	5	0	3	0.5	238700	14	3	2
D	225078	EL2550	136.215	-33.508	200	612828.8	6291771	O	CC	-1	0	1	0.5	166700	8	6	6
D	225079	EL2550	136.217	-33.508	200	613028.8	6291771	O	CC	1	0	1	0.5	149500	10	7	8
D	225080	EL2550	136.219	-33.507	200	613228.8	6291796	O	CC	1	0	4	0.5	43800	10	6	12
D	225081	EL2550	136.221	-33.508	200	613428.8	6291771	O	CC	1	0	4	1	115200	10	11	10
D	225082	EL2550	136.223	-33.508	200	613628.8	6291771	O	CC	1	0	3	0.5	86900	10	8	13
D	225083	EL2550	136.226	-33.508	200	613828.8	6291771	O	CC	1	0	5	0.5	166100	8	4	4
D	225084	EL2550	136.228	-33.508	200	614028.8	6291771	O	CC	2	0	6	0.5	157900	11	9	6
D	225085	EL2550	136.231	-33.5	200	614328.8	6292571	O	CC	-1	0	1	0.5	89300	8	7	13
D	225086	EL2550	136.229	-33.5	200	614128.8	6292571	O	CC	1	0	1	0.5	221300	8	5	3
D	225087	EL2550	136.227	-33.5	200	613928.8	6292571	O	CC	2	0	1	0.5	139200	11	7	10
D	225088	EL2550	136.224	-33.5	200	613728.8	6292571	O	CC	2	0	3	0.5	222500	9	5	5
D	225089	EL2550	136.222	-33.5	200	613528.8	6292571	O	CC	1	0	1	0.5	38300	8	7	13
D	225090	EL2550	136.22	-33.5	200	613328.8	6292571	O	CC	1	0	1	0.5	155700	9	5	6
D	225091	EL2550	136.218	-33.5	200	613128.8	6292571	O	CC	1	0	2	0.5	205700	10	7	4
D	225092	EL2550	136.216	-33.5	200	612928.8	6292571	O	CC	2	0	1	0.5	159600	12	7	5
D	225093	EL2550	136.214	-33.5	200	612728.8	6292571	O	CC	2	0	3	0.5	144400	13	8	8
D	225094	EL2550	136.212	-33.5	200	612528.8	6292571	O	CC	1	0	1	0.5	225500	8	8	3
D	225095	EL2550	136.209	-33.501	200	612328.8	6292571	O	CC	2	0	1	0.5	132400	12	8	6

	SITE_ID	TENEMENT	LONGITUDE WGS dd.ddddddd	LATITUDE WGS dd.ddddddd	RL metres	East_94 metres	North_94 metres	SAMPLE TYPE	SAMPLE MEDIUM	Au_PPb B_ETA ppb B-ETA	Ag_PPM B_EOES ppm B-EOES	As_PPM B_OES PPM B-OES	Bi_PPM PPM B-EOES	Ca_PPM B_OES PPM B-OES	Cu_PPM B_OES PPM B-OES	Pb_PPM B_OES ppm B-OES	Zn_PPM B_OES ppm B-OES
										1	0.1	2	1	100	1	2	1
D	225096	EL2550	136.207	-33.501	200	612128.8	6292571	O	CC	-1	0	4	0.5	73100	15	9	19
D	225097	EL2550	136.205	-33.501	200	611928.8	6292571	O	CC	1	0	1	0.5	227600	10	4	3
D	225098	EL2550	136.203	-33.501	200	611728.8	6292571	O	CC	1	0	5	0.5	47900	14	13	16
D	225099	EL2550	136.201	-33.501	200	611528.8	6292571	O	CC	-1	0	9	0.5	70000	11	20	15
D	225100	EL2550	136.199	-33.501	200	611328.8	6292571	O	CC	-1	0	1	0.5	106200	6	7	4
D	225101	EL2550	136.196	-33.501	200	611119.8	6292571	O	CC	-1	0	3	0.5	121400	12	10	13
D	225102	EL2550	136.199	-33.501	200	611328.8	6292571	O	CC	-1	0	1	0.5	210500	7	6	5
D	225103	EL2550	136.194	-33.501	200	610928.8	6292571	O	CC	2	0	3	0.5	86400	8	6	7
D	225104	EL2550	136.192	-33.501	200	610728.8	6292571	O	CC	-1	0	1	0.5	60500	11	7	12
D	225105	EL2550	136.19	-33.501	200	610528.8	6292571	O	CC	-1	0	2	0.5	54800	5	7	3
D	225106	EL2550	136.188	-33.501	200	610328.8	6292571	O	CC	-1	0	1	0.5	57200	10	8	13
D	225107	EL2550	136.186	-33.501	200	610128.8	6292571	O	CC	-1	0	1	0.5	104900	6	7	3
D	225108	EL2550	136.2	-33.522	200	611428.8	6290171	O	CC	-1	0	2	0.5	220100	12	5	5
D	225109	EL2550	136.202	-33.522	200	611628.8	6290196	O	CC	1	0	1	0.5	191900	7	4	3
D	225110	EL2550	136.204	-33.522	200	611828.8	6290171	O	CC	-1	0	1	1	208200	11	8	7
D	225111	EL2550	136.206	-33.522	200	612028.8	6290171	O	CC	2	0	1	0.5	250300	9	5	3
D	225112	EL2550	136.209	-33.522	200	612228.8	6290171	O	CC	-1	0	1	0.5	56800	18	10	20

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