# **Adelaide Exploration Limited**

ACN 097 387 918

# Exploration Licence 2669 Wudinna Hill

Eyre Peninsula South Australia

Second Partial Surrender Report Report Period 11 November 2000 to 10 November 2002

1:250,000 sheets Kimba SI53-7 Yardea SI53-3

1:100,000 sheets Cacuppa 6032 Kopi 6031

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#### 1. SUMMARY

During the first year of tenure of Exploration of EL 2669 Adelaide Resources completed a regional calcrete sampling program over the whole tenement. This report describes the sampling completed on the part of the Licence surrendered at the third anniversary on 11 November 2002.

Five samples were collected from the surrendered area and an aboriginal heritage survey was carried out. The assay results for the samples indicate the area surrendered has no potential for gold or copper mineralisation.

#### 2. INTRODUCTION

Exploration Licence 2669 "Wudinna Hill" on the Northern Eyre Peninsula of South Australia was acquired to secure vacant ground in the vicinity of Exploration Licence 2845 "Minnipa" (northwest of EL 2669) where Adelaide Exploration was exploring for gold at the Barns Prospect. The Licence is part of an extensive group of tenements mostly 100% owned by Adelaide Exploration Limited and covering 7,538 square kilometres of the northern Eyre Peninsula.

#### 3. LOCATION AND ACCESS

Exploration Licence 2669 is located on the Kimba and Yardea 1:250,000 map sheets on Freehold or Perpetual Crown Leasehold land used primarily for cereal farming.

The surrendered area is 7.5km northeast of the town of Wudinna and 15km north of the town of Kyancutta on the northern Eyre Peninsula. (Figure 1).

Access is via the sealed Eyre Highway and along good quality unsealed council maintained roads and on farm tracks.

#### 4. CLIMATE AND LANDFORM

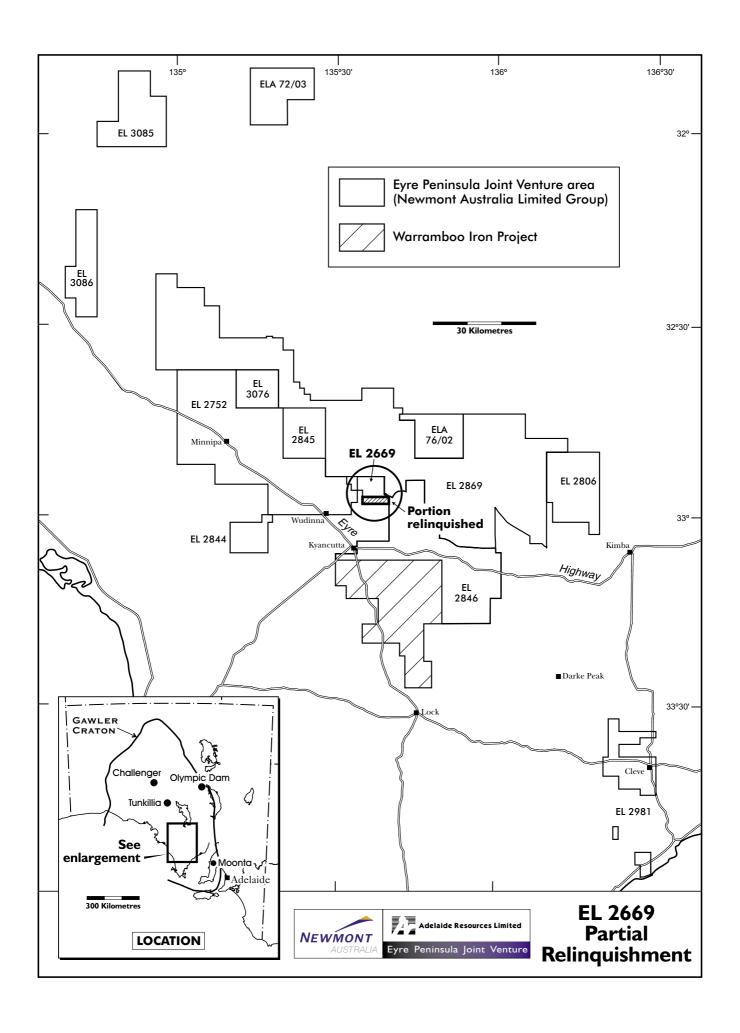
The climate is warm and dry. Wudinna records some of the highest summer temperatures in South Australia. Annual rainfall is around 300mm but variable and unreliable.

The tenement lies on cleared red brown sand plains interspersed with northwest - southeast trending vegetated sand dunes. Remnant native vegetation is mallee woodland and is generally confined to road verges and the crests of sand ridges.

## 5. TENURE

Exploration Licence 2669 "Wudinna Hill" was granted to Adelaide Resources Limited on 11 November 1999 and later transferred to Adelaide Exploration Limited, a wholly owned subsidiary of Adelaide Resources. The licence has been renewed annually and now expires on 10 November 2003.

The area of the licence was reduced from 111sq km to 56sq km on the first anniversary of the title and to 42sq km on the third anniversary. The surrendered areas are where calcrete sampling has failed to identify any targets worthy of further work.



#### 6. REGIONAL GEOLOGY

EL 2669 lies within Gawler Craton Precambrian crystalline basement. Although outcrop is sparse within the licence area, rock types exposed are Mesoproterozoic Hiltaba Suite granites as seen at Wudinna Hill, Little Wudinna Rock and Polda Hill. Elsewhere, the rocks are covered with Cainozoic sand and calcrete.

#### 7. CURRENT EXPLORATION

#### 9.1 Calcrete Geochemistry

Following granting of the title, work commenced with the service of statutory notices (Notice of Entry, Waiver of Exemption) on the landowners of properties covered by EL 2669. No landowner denied access to their property.

Reconnaissance calcrete sampling commenced on 11 November 1999 and by 9 December 1999 sample collection over the entire licence area had been completed. Samples were collected at 1.6 km spacing with sample sites located using a DGPS navigation instrument. Sample collection was completed using shovel and crowbar or hand-augers with the presence of calcrete confirmed by testing with weak hydrochloric acid.

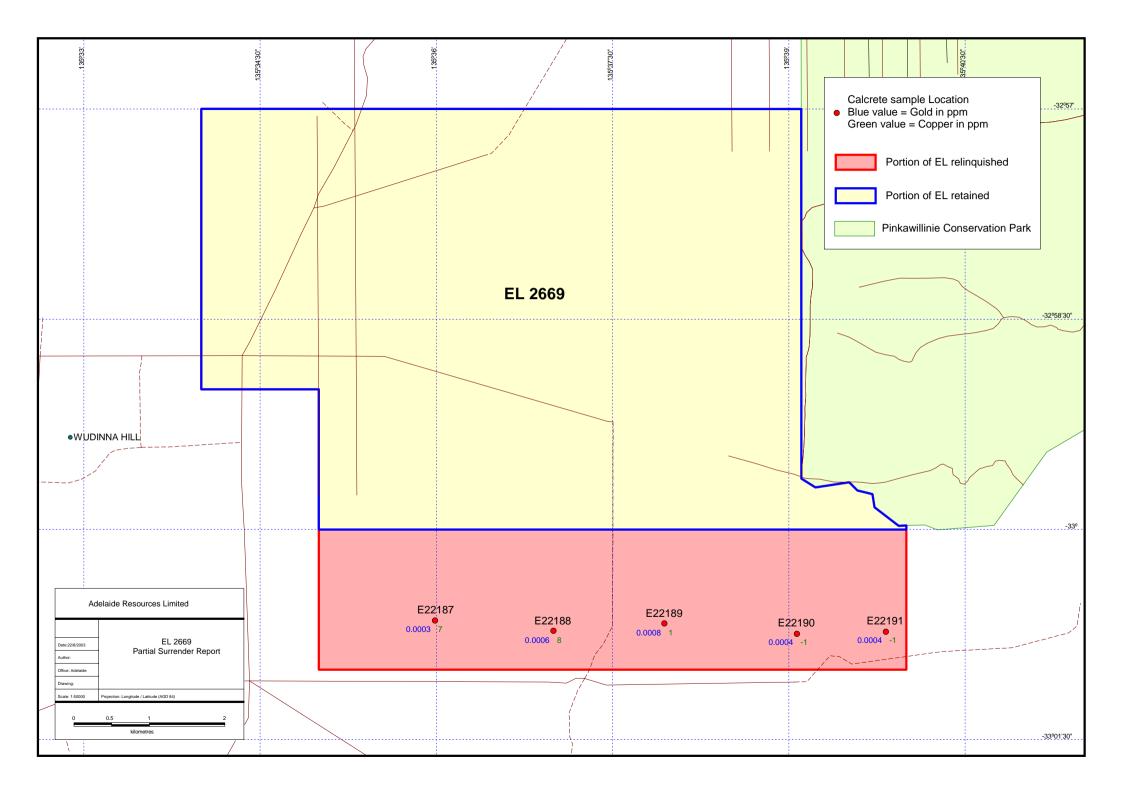
The locations of the reconnaissance samples, local geography and access tracks are shown on Figure 2. A total of 5 reconnaissance samples (E22187-E22191) were collected over this relinquished area. Sample details and assay results are included as Appendix 1-3 of this report.

The reconnaissance samples were dispatched to Amdel Laboratories and Au and Ag determined by cyanide leach finished on a mass spectrometer (Amdel method BLEG1C, giving a 0.05ppb detection limit for Au and a 0.5ppb detection limit for Ag). Cu, Pb, Zn, Ni, As, Mo, Ca, Mg, Fe and Mn were determined by mixed acid digest finished on an ICP-OES instrument (Amdel method IC2EC, giving detection limits of 1ppm for Cu, Zn, Ni, As, Mo, 3ppm for Pb, 5ppm for Mn, 100ppm for Fe, 0.01% for Ca and Mg). Analytical results are given in Appendix 2, together with estimated calcite, dolomite and total carbonate content calculated from the calcium and magnesium assays.

The carbonate estimates assume that all the Ca and Mg present is as either dolomite or calcite with ideal compositions. Estimates of total carbonate in the samples taken in the relinquished area range from 13.6% to 77.4%. These levels fall in the acceptable range of carbonate content and the quality of the samples collected is therefore considered to be suitable.

Gold (ppb) and copper (ppm) results of the reconnaissance samples are shown with sample number on Figure 2. Assay results for all elements are tabulated and included as Appendix 1 in this report.

Orientation studies, preliminary statistical analysis and experience from other areas on the Gawler Craton suggests that a threshold of 2.5ppb Au is appropriate to define regional gold anomalism, and 18 ppm copper to define regional copper anomalism. No samples collected from within the relinquished area surpassed these thresholds and the area is not considered to warrant any further work.



#### 9.2 Aboriginal Heritage Survey

In June 2000 a field survey was completed to ensure compliance with the Aboriginal Heritage Act of South Australia. A group comprising both male and female representatives of the Barngala Claimant group, whom DOSAA had advised were the Traditional Owners of the area in question, together with Traditional men and women from Coober Pedy, a male anthropologist and a company representative visited the area of EL 2669.

The granite hills and landforms located around Mt Wudinna were nominated as sites of Aboriginal significance, while no sites were located in the northern part of the licence.

#### 8. CONCLUSIONS

Regional calcrete sampling and an aboriginal heritage survey have been completed on Exploration Licence 2669. Assessment of the calcrete assay results showed some areas of the licence to be not prospective for gold or copper. These areas have been relinquished. A total of 55sq km was surrendered from the licence in 2000 (Reference 2) and 14sq km were surrendered in 2002 (this report).

The granite hills and landforms located around Mt Wudinna were nominated as sites of Aboriginal significance.

#### 9. REFERENCES

Drown, C., March 2001. First annual report for the period ending 10 November 2000 for EL 2669 "Wudinna Hill" Eyre Peninsula, South Australia.). Adelaide Resources Limited report to PIRSA (unpublished).

Drown, C., March 2001. Partial relinquishment report for EL 2669 "Wudinna Hill" Eyre Peninsula, South Australia (covering areas relinquished on 10 November, 2000). Adelaide Resources Limited report to PIRSA.

#### 10. KEYWORDS

Aboriginal site clearance, Adelaide Resources, Archaean, calcrete, copper, Eyre Peninsula, gold, Hiltaba Suite, granite, Mesoproterozoic, Wudinna

# **APPENDIX 1**

**Assay Submission Statistics** 

#### **ASSAY SUBMISSION STATISTICS**

AOR_No	Lab	Lab_No	Project	Tenement	Date_Submitted	Assays_Received			Sample_	Elements_
								Samples	Type	Assayed
9AOR0309	Amdel (AMA)	3AD2886_AMA	Wudinna Hill	EL 2669	November 16, 1995	November 16, 1995	E22187-E22191	5		Au, Ag, As, Ca, Cu, Fe, Mn, Ni, Pb, Zn, Ca, Mg

# **APPENDIX 2**

**Calcrete Sampling & Codes** 

# **Calcrete Codes**

Calc	rete Type	HC	L (Acid reaction 10% HCL)
1	soil + calcrete	1	vigorous
2	nodular	2	strong
3	powdery	3	moderate
4	massive	4	weak
5	platey	5	no reaction
6	sandy		
7	clay + calcrete	TEI	R (Terrain)
8	casilcrete	1	roadside
9	not calcrete	2	ploughed fields
10	gypsum +/- calcrete	3	lakes & swamps
		4	low bush
CON	N (Contamination)	5	dense bush
1	uncontaminated	6	woodland
2	mine workings	7	dunes
3	rubbish	8	grazing land
4	organic		
5	agricultural	ST	(Site Type)
6	fences	1	shallow
7	roads	2	auger
8	other specified in notes	3	crowbar + shovel

## **CALCRETE SAMPLING DATA**

Sample_ No	Easting	Northing	Grid	Project	Tenement_ No	Area	Anomaly	Pattern	Sample_ Type	From (m)	To (m)	Class	Acid	Contam	Terrain	Site	Date
E22187	556025	6347340	AMG53H	Wudinna Hill	EL_2669	NOD	NOD	1.6km	Calcrete	0.1	0.2	124	1	1	38	3	November 14, 1999
E22188	557594	6347196	AMG53H	Wudinna Hill	EL_2669	NOD	NOD	1.6km	Calcrete	0.4	0.5	123	1	1	38	3	November 14, 1999
E22189	559065	6347285	AMG53H	Wudinna Hill	EL_2669	NOD	NOD	1.6km	Calcrete	0.3	0.4	12	1	1	38	3	November 14, 1999
E22190	560820	6347137	AMG53H	Wudinna Hill	EL_2669	NOD	NOD	1.6km	Calcrete	0.4	0.5	26	1	1	38	3	November 14, 1999
E22191	561999	6347157	AMG53H	Wudinna Hill	EL_2669	NOD	NOD	1.6km	Calcrete	0.3	0.4	326	1	1	38	3	November 14, 1999

## **CALCRETE SAMPLING DATA**

Sample_ No	As 1ppm IC2EC	Cu 1ppm IC2EC	Pb 3ppm IC2EC	Zn 1ppm IC2EC	Mo 1ppm IC2EC	Ni 1ppm IC2EC	Ca 0_01pc IC2EC	Calcite 0_01pc CAL1	Mg 0_01pc IC2EC	Dolomite 0_01pc CAL2	CO3 0_01pc CAL3	Fe 100ppm IC2EC
E22187	1	7	6	13	<1	8	6.5	14.6	0.4	3.01	17.6	9300
E22188	3	8	6	17	<1	9	12	26.8	0.63	4.75	31.6	10900
E22189	7	1	12	14	1	6	7.5	16.9	0.45	3.39	20.3	36700
E22190	2	<1	4	6	<1	5	8	17.5	0.7	5.35	22.9	6200
E22191	2	<1	<3	6	<1	5	9	20.7	0.48	3.62	24.3	6650

## **CALCRETE SAMPLING DATA**

Sample_ No	Mn 5ppm IC2EC	Au 0_05ppb BLEG1C	CNG 0_05ppb CAL4	Ag 0_5ppb BLEG1C	CNS 0_5ppb BLEG1C	AOR No	Lab Code
E22187	120	0.3	1.7	14	77	AOR0309	9AD2886_AMA
E22188	130	0.6	1.8	11	35	AOR0309	9AD2886_AMA
E22189	240	0.8	3.9	24	119	AOR0309	9AD2886_AMA
E22190	30	0.4	1.6	3	14	AOR0309	9AD2886_AMA
E22191	25	0.4	1.7	3.5	15	AOR0309	9AD2886_AMA

# **APPENDIX 3**

**Laboratory Assay Report** 

AMDEL 9AD2886	art of job)					
IDENT	Au	Au Dup	CNG	Ag	Ag Dup	CNS
UNITS	ppb	ppb	ppb	ppb	ppb	ppb
SCHEME	BLEG1C	BLEG1C	BLEG1C	BLEG1C	BLEG1C	BLEGIC
<b>DETECTION LIMIT</b>	0.05	0.05		0.5	0.5	
BBLANK	0.1			<0.5		
UE22187	0.3		1.7	14		77
UE22188	0.55		1.8	11		35
UE22189	0.8		3.9	24		119
UE22190	0.35		1.6	3		14
UE22191	0.4		1.7	3.5		15

AMDEL 9AD2886	(part of	job)											
IDENT	As	Cu	Pb	Zn	Мо	Ni	Ca	Calcite	Mg	Dol	Carb	Fe	Mn
UNITS	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	ppm	ppm
SCHEME	IC2EC	IC2EC	IC2EC	IC2EC	IC2EC	IC2EC	IC2EC	IC2EC	IC2EC	IC2EC	IC2EC	IC2EC	IC2EC
DETECTION LIMIT	1	1	3	1	1	1	0.01		0.01			100	5
UE22187	1	7	6	13	<1	8	6.5	14.6	0.4	3.01	17.6	9300	120
UE22188	3	8	6	17	<1	9	12	26.8	0.63	4.75	31.6	10900	130
UE22189	7	1	12	14	1	6	7.5	16.9	0.45	3.39	20.3	36700	240
UE22190	2	<1	4	6	<1	5	8	17.5	0.7	5.35	22.9	6200	30
UE22191	2	<1	<3	6	<1	5	9	20.7	0.48	3.62	24.3	6650	25

# File Verification Listing of Digital Files Supplied on CD with Hard Copy Report

Verification Listing	VL1		
<b>Exploration Work Type</b>	File_Name	Format	Description
Office Studies			
Report	EL2669_200211_01_SecondPartialSurrenderReport.pdf	pdf	Partial surrender report
Report	EL2669_200211_0x_FileVerificationList.txt	txt	List of digital files supplied
Geochemical Surveying			
Calcrete	EL2669_200211_02_CalcreteSampling.txt	txt	Calcrete sample locations and assays