

Open File Envelope

No. 5869

EL 1250

NACKARA

**PROGRESS AND FINAL REPORTS TO LICENCE
SURRENDER, FOR THE PERIOD 24/9/1984 TO 12/9/1986**

Submitted by
Utah Development Co. Ltd and BHP Minerals Ltd
1986

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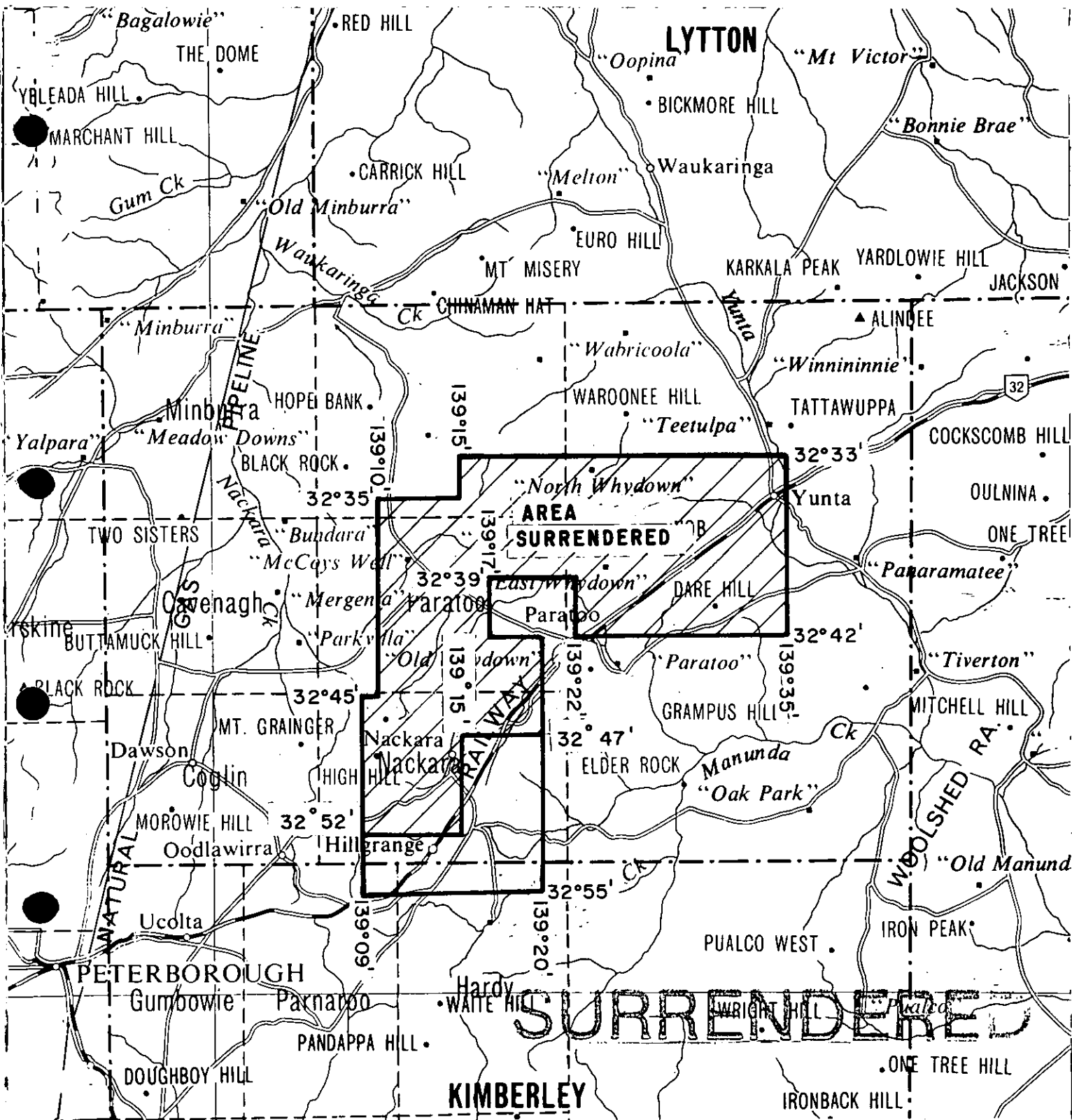
Customer Services
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101 Grenfell Street, Adelaide 5000

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Government of South Australia

Department for Manufacturing,
Innovation, Trade, Resources and Energy



SCALE 1:500,000

KILOMETRES 10 0 10 20 30 40 50 KILOMETRES

● APPLICANT: UTAH DEVELOPMENT COMPANY LIMITED

DM: 129/84

AREA: ~~982~~ 167 square kilometres (approx.)

1:250 000 PLANS: ORROROO, OLARY

LOCALITY: NACKARA AREA - Approx. 40km northeast of Peterborough

DATE GRANTED: 24-9-84

DATE EXPIRED: 23-9-85 ~~86~~

EL No: 1250

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TENEMENT HOLDER: Utah Development Company Limited.

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PLEASE NOTE:

To interpret geological logs in this Envelope please see either:

- 1) Geolog Rules Pages 82-117 of SADME Envelope No. 2160
or
- 2) The "Geolog System", appendix in SADME Report Book RB 81/89.

E.L. ENV.	Env. 2269	E.L. 57	Env. E.L.
113-2362			c4547- 942
239-2705	2318	82	c4572- 956
	2376	114	c5020-1102
	2423	137	c5215-1163
			c5644-1234
	2493	160	c3771- 968
			✓ c ? -1250
	2706	240	5869
	2886	267	
	2915	277	
	3507	461	
		850	
	3823	599	

QUARTERLY REPORT ON EXPLORATION
EL.1250 - NACKARA
for the period 24.9.84 to 23.12.84

by
S. T. Mann

Keywords: Mineral Exploration; Nackara, property consultants.

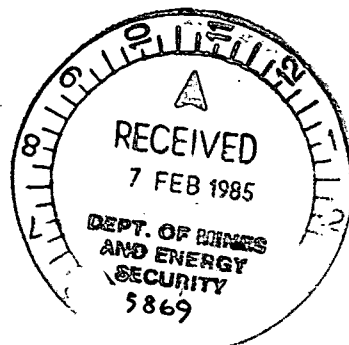


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1. SUMMARY.

This report represents the first quarterly report for Nackara, EL.1250, and covers the period from 24th September 1984 to 23rd December 1984.

To date no fieldwork has been carried out in Exploration Licence 1250.

Coloured aerial photography at a scale of 1:40,000 was obtained and covers the entire licence. These will enable regional scale geological mapping to be undertaken.

Property consultants, Maloney Field Services, were contracted to perform an ownership search and make contact with all landowners affected by Exploration Licence 1250.

Exploration expenditure incurred in the three months ending 23rd December 1984 totalled \$24,986.

2. TENEMENT HISTORY.

Utah Development Company Limited forwarded an application for an Exploration Licence in the Nackara area of South Australia on 17th April 1984. An Exploration Licence was duly granted by the Minister of Mines for a period of one year, commencing 24th September, 1984.

The Exploration Licence covers an area of approximately 982 square kilometres and is located between Oodlawirra and Yunta, in the north-east pastoral area of South Australia (see Figure 1).

The licence was granted to Utah Development Company Limited for a period of one year with a minimum expenditure commitment of \$50,000.

3. PROPERTY CONSULTANTS.

Maloney Field Services were contracted by Utah Development Company Limited to perform an ownership search and make contact with all landowners affected by the Exploration Licence.

In all, 30 separate ownerships occur over the licence area. The land tenure is dominantly Perpetual Leasehold or Freehold (as against Pastoral Leasehold).

Notices of Entry, Notices of Use of Declared Equipment and Waivers of Notice of Entry have been served on the landholders.

4. AERIAL PHOTOGRAPHY.

Coloured aerial photographs at a scale of 1:40,000 were obtained from the Lands Department to cover the entire exploration licence. The 1:40,000 aerial photographs will enable broad regional geological mapping to be carried out.

5. EXPLORATION EXPENDITURE.

The total expenditure for the three months ending 23rd December, 1984 is \$24,986.00. The table overleaf details this expenditure.

Table 1

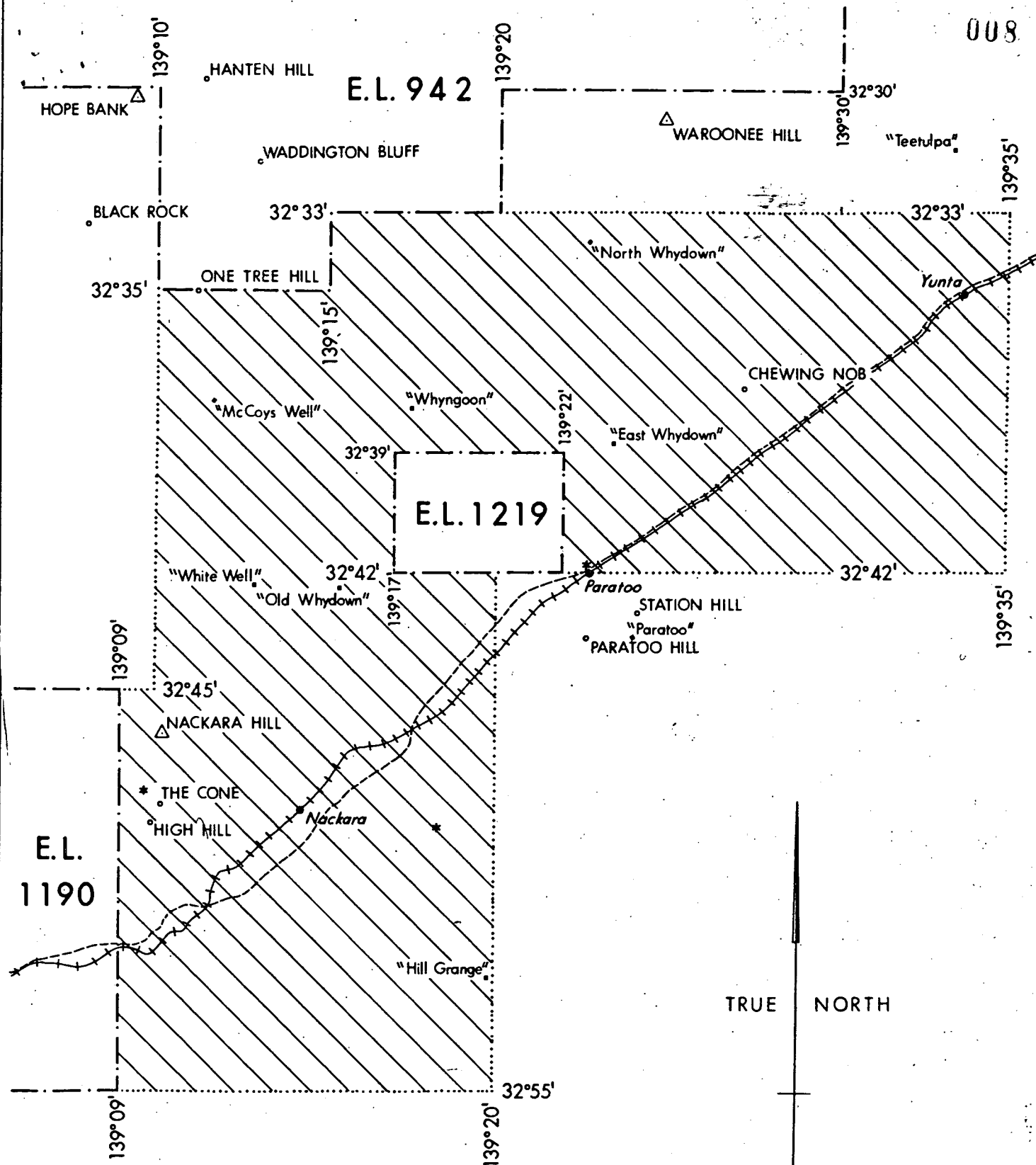
EXPENDITURE STATEMENT

EL.1250 - Nackara

Period ended 23.12.84

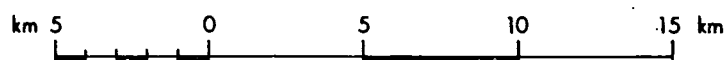
Onsite salaries - Projects	6,964
Rent on Exploration Leases	418
Independent Analysis/Sampling	1,859
Contract Work - Other	621
Motor Vehicle Running Cost	964
Blueprint Duplicating Photography	823
Camp Operations	86
Consultants	515
Licences & Taxes	4
Office Equipment Rent	100
Office Equipment Repairs	280
Other outside services	4,970
Office Supplies	245
Telephone & Telegraph	125
Travel Expenses	89
Equipment Use Charge	2,263
Admin. & Office Overheads	4,660

Total	\$ 24,986
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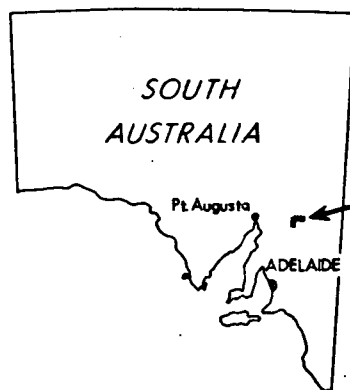


LOCALITY MAP

* Aboriginal sacred site



SCALE 1:250 000



UTAH
DEVELOPMENT
COMPANY
LIMITED

EXPLORATION
ADELAIDE

LOCALITY
E.L.1250
NACKARA AREA
South Australia

COMPILED D. M. Jarvis

REVISED

SCALE

FIGURE 1

DRAWN S. J. J.

17-04-84

As shown

REPORT NO.

(CR 4535)

EXPLORATION LICENCE 1250

NACKARA, SOUTH AUSTRALIA.

REPORT FOR THE QUARTER ENDED 23RD MARCH 1985.

by: M.A. Dugmore
Geologist

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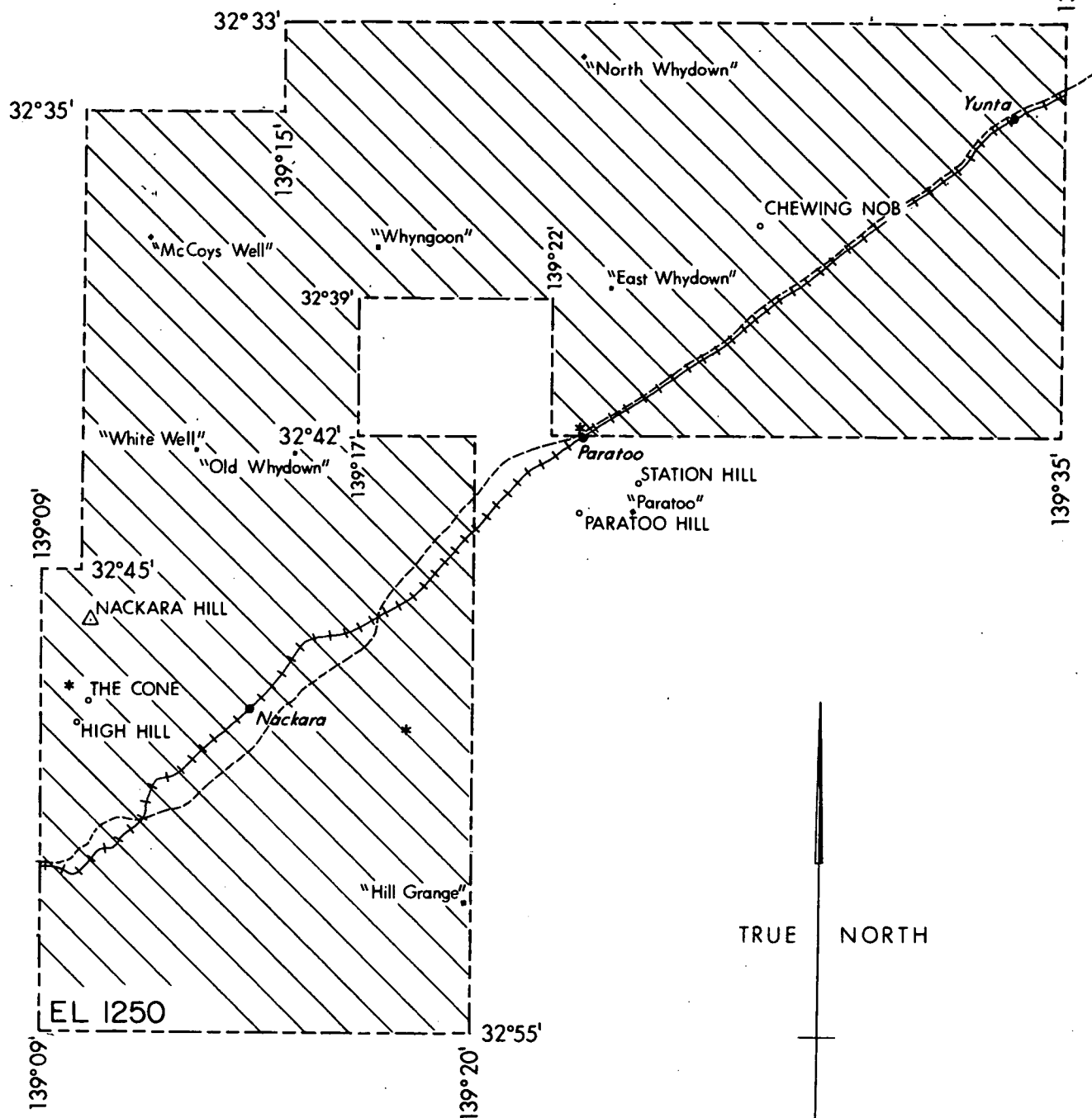
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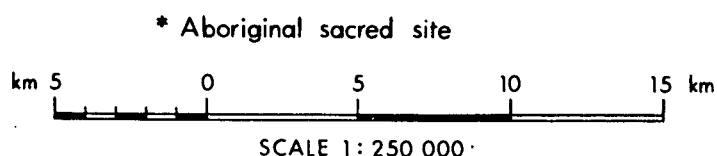
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Sample Results - EL.1250 - NACKARA.



LOCALITY MAP



EXPLORATION
AREA



Centre
Kent Town

Date
16-5-85

THE BROKEN HILL PROPRIETARY CO. LTD.
LOCATION MAP
EL 1250 NACKARA SA.

Project No
6-A79-1

Drawing No
A4-414

EXPLORATION LICENCE 1250NACKARA, SOUTH AUSTRALIAREPORT FOR THE QUARTER ENDED 23RD MARCH 1985.1. SUMMARY

This report represents the second quarterly report for Nackara, EL.1250 and covers the period from 24th December, 1984 to 23rd March, 1985.

Three days were spent at SADME on a literature search, the results of which are still being assessed.

Field work was commenced within the Licence area during the quarter.

Coloured aerial photography at a scale of 1:40,000 was obtained during the previous quarter and covers the entire Licence area.

Field Logistics for the current quarter are given in Table 1.

Exploration expenditure incurred during the quarter totalled \$9,538.

2. TENEMENT HISTORY.

Utah Development Company Limited submitted an application for an Exploration Licence in the Nackara Area of South Australia on the 17th April, 1984. Exploration Licence (EL.1250) was duly granted by the Minister of Mines for a period of one year, commencing 24th September, 1984.

The Exploration Licence covers an area of approximately 982 square kilometres and is located between the townships of Oodlawirra and Yunta, in the northeast pastoral area of South Australia (see Figure 1).

The minimum expenditure commitment for EL.1250 is \$50,000.

3. GEOLOGICAL MAPPING

Approximately 4 square kilometres of geological mapping (including four vertical profile traverses, totalling 2,005m, was completed at 1:50,000 scale during the quarter.

The traverses were pegged, logged and randomly sampled using rockchip geochemistry, over prospective lithologies.

4. GEOCHEMICAL PROGRAMMES

Rock-chip and grab sampling:

A total of 23 rockchip and grab samples were taken during the quarter. (Five samples were taken of actual rockchip, while the remaining 18 were grab samples from ore dumped at the surface of old mine pits.)

Assay results are given in Appendix I and sample locations and results given in Plates 1 and 2 respectively.

All samples were sent to Comlabs Pty. Ltd., Adelaide, for analysis for Cu, Pb, Zn, As, Ag and Au.

Results:

Of the 23 samples sent for assay, 6 are considered to be anomalous for gold (>0.5 ppm). The best result from the Whydown Prospect was 3 ppm Au while other values of 1.45, 1.15, 0.88, 0.67 and 0.52 ppm Au were recorded.

Stream Sediment Sampling Programme.

A regional style stream sediment sampling programme was initiated during the latter part of this quarter. The programme is primarily aimed at the detection of gold mineralization and for that reason, care was taken to select suitable heavy mineral trapsites.

A minimum of about 2.5 kg, but on average 4 kg, constituted the sample which was sieved in the field using a 20# mesh screen. A total of 74 samples have been taken to date, covering the northern half of the licence. All samples were sent to Comlabs for analysis using their AAS 5C analytical technique (AAS followed by carbon rod finish).

Elements assayed for were as follows:- Cu, Pb, Zn, Mn, As and Au.

Results:

The assay results for all samples are presented in Appendix II.

Of the 74 sample results, 11 are considered to be anomalous in gold (10 ppb). Concentrations of anomalous gold are shown on Plate 2 as zones A to E.

Zone A: This area contains 4 anomalous stream sediment samples in creeks draining a N-S trending line of hills, 1km east of Old Whydown Homestead. The anomalous zone is about 2.5km long.

Geology within the zone is essentially the geological contact between the Tapley Hill Formation and Tarcowie Siltstone of the Umberatana Group. The best stream sample result was 30 ppb Au, draining east from the hills. This same sample also reported high values for Cu, As and Mn (i.e. NK 551C).

A grab rock sample from a small pit within the zone assayed 1.45 ppm Au (NK 008R).

Several samples occurring to the south of Zone A (Nos. 540, 541, 542) are all anomalous in As and have mild Cu anomalism. The one sample which is anomalous in Au also has the highest As and Cu values.

Zone B: This is a small zone with two values of 20 ppb Au from creeks draining the Appila Tillite. A cross-cutting SE trending fault occurs just to the north.

Zone C: Three anomalous gold values, all of 10 ppb, define a zone 1.5km in length along a NE trending line of hills composed of Appila Tillite.

Two of the anomalous gold values are also anomalous in As, Cu and Mn. A rockchip value of 0.33 ppm Au was recorded in a small pit within the Appila Tillite (NK 011R).

Zone D: This zone encircles an area in which extensive mining has previously taken place. This particular area is referred to as Whydown Prospect in Section 5 of this report below.

Only one anomalous stream sediment sample is located within Zone D; however, several grab rock samples, one assaying 3 ppm Au, have confirmed anomalous gold.

The stream sample anomalous in gold is also anomalous in As and Cu.

Zone D can probably be combined with Zone C to give an anomalous strike length of over 3 km.

Zone E: This zone contains one anomalous gold value of 10 ppb which probably reflects the gold mineralization at West Nob Mine. Gold mineralization of the mine was confirmed by two grab rock samples assaying 1.15 ppm Au and 0.67 ppm Au.

Mild Cu and large Mn anomalism is reported in this stream sample also.

5. MINERALIZATION

5.1 *Robertson's Mine.*

Robertson's Mine is located 6 km northeast from the Nackara Railway Siding. The workings are now represented by a 165⁰M trending shallow trench with various 'filled in' shafts sunk at different intervals along the trench. The trench extends for a distance of about 150 metres. Records state that the main shaft (at the northern end? of the trench) had been sunk to a depth of 220 ft.

A grab sample (NK 010R) from ore at the surface of the main shaft assayed 1.30% Cu (malachite) and 0.88 ppm Au. The lode is visible in the old shafts and consists of a 20-30 cm thick concordant quartz-iron vein, dipping approx. 80⁰ to the west.

Country rock is a white, leached sandy schist probably belonging to the Tapley Hill Formation. The geological contact between the Tapley Hill Formation and Tarcowie Siltstone occurs approximately 10 metres stratigraphically above the lode horizon, to the west.

The extent of the lode horizon appears to be controlled by a NE trending foliation (shearing) which crosscuts the bedding.

5.2 *Nob Mines.*

The Nob mine workings have been divided into the West Nob and East Nob workings, separated by a distance of about 1,200 metres.

West Nob:

This group consists of many small pits and shafts within a 150m radius of each other, situated on a small rocky outcrop.

Ore material on the surface consists of a malachite stained quartz-iron-carbonate 'breccia' with quartz fragments entrained within carbonate-silica. Host rock is a grey, laminated slaty siltstone of Burra Group. Several grab rock

samples reported the following assay results:-

NK 001 R	1.50%	Cu
NK 002 R	1.00%	Cu
NK 003 R	11.8%	Cu + 1.15 ppm Au
NK 004 R	8.6%	Cu + 0.67 ppm Au

East Nob:

These workings consist of several deep shafts and various pits. Ore material is a brown iron-rich quartz 'breccia' with some haematite, and minor copper carbonates. The host rock is a grey laminated siltstone to fine grained sandstone which is quite siliceous. The East Nob workings also occur within the Burra Group.

5.3 Whydown Prospect.

A rather extensive group of workings occurs 3 km west of the Paratoo Railway Siding. The workings consist of many shafts and various trenches which extend for about 700 metres in a NE direction.

Various smaller scratchings to the NE and SW of the main workings extend the horizon over a distance of about 3.5 km.

The main workings occur on a 30-40 cm thick quartz lode, concordant within the Appila Tillite. The lode horizon occurs close to the Appila Tillite/Tapley Hill Formation? contact. Dip is 55° to SE.

Ore is iron-manganese-siderite-pyrite quartz vein material. Hanging wall alteration is evident in places as a dark brown siliceous rich rock with thin concordant quartz veins.

Six grab rock samples were taken from along the line of lode. The two best results are:-

NK 014 R	0.52 ppm Au
NK 041 R	3.0 ppm Au

These workings are contained within anomalous area D on Plate 2.

6. EXPLORATION EXPENDITURE.

The total expenditure for the three months ending 23rd March, 1985 is \$9,538. Table 2 details this expenditure.

Table 1Table of Logistics

EL.1250 - NACKARA
Period ended 23.3.85

Geological Mapping.

Area mapped at 1:50,000 (sq. kms)	4
No. of Vertical Profile Traverses Logged	4
Length of Vertical Profile Traverses Logged (line kms)	2.005

Geochemistry.

No. of rock samples collected	23
No. of stream sediment samples collected	74

Table 2Expenditure Statement

EL.1250 - Nackara.
Period Ended 23.3.85.

	\$
WAGES AND SALARIES	6,287
RENT ON EXPLORATION LICENCE	417
TELEPHONE	68
MOTOR VEHICLE RUNNING COSTS	631
EQUIPMENT	166
SURVEYS	176
FIELD SUPPORT	614
SERVICES (In house) - Drafting	725
ADMINISTRATION CHARGE	<u>454</u>
	<u>\$9,538</u>

APPENDIX I

GEOCHEMICAL ASSAY RESULTS SHEETS FOR
ROCK SAMPLES.



COMLABS Pty. Ltd.
COMPUTERISED ANALYTICAL LABORATORIES

021
Head Office and
Central Laboratory
305 South Road,
Mile End South,
Sth. Aust. 5031.
Tel: (08) 43 5722
Telex: AA89323



NATA REGISTERED No. 1526

OUR REF.: COM850521

YOUR REF.: 008701

23 rock chips from
known mineralisation (old
workings) in EL. 250

Mr. M. Dugmore
BHP Exploration Co. Ltd.
125-129 Rundle Street
KENT TOWN

SA 5061

April 11, 1985

Dear Mark

RE: JOB COM850521

Enclosed are the assays for the samples delivered to our
Laboratory on April 1, 1985

Yours Sincerely,
COMLABS PTY LTD

per :

Report Length 1 pages



COMLABS Pty. Ltd.
COMPUTERISED ANALYTICAL LABORATORIES



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ANALYTICAL REPORT

JOB COM850521

O/N : 008701

SAMPLE	Co	Pb	Zn	Ag	As	Au
NK001 R	1.30%	26	32	<1	85	0.43
NK002 R	1.00%	6	9	<1	12	0.13
NK003 R	11.8%	10	22	<1	55	1.15
NK004 R	8.60%	8	16	<1	50	0.67
NK005 R	550	8	18	<1	36	0.08
NK006 R	7100	4	10	<1	90	0.11
NK008 R	36	12	14	<1	85	1.45
NK010 R	1.30%	14	42	4	150	0.88
NK011 R	450	<4	18	<1	810	0.33
NK014 R	240	4	36	<1	260	0.52
NK015 R	230	26	75	<1	170	0.12
NK027 R	150	14	8	<1	22	0.07
NK031A R	220	8	18	<1	1750	0.10
NK031B R	55	6	18	<1	1200	0.07
NK033 R	28	8	44	<1	115	0.03
NK034 R	60	6	22	<1	85	0.02
NK035A R	7800	6	12	<1	32	0.01
NK035B R	2.50%	4	9	<1	12	0.32
NK039A R	1.35%	6	60	<1	280	0.09
NK039B R	8600	<4	26	<1	145	0.04
NK041 R	165	10	24	<1	100	3.0
NK042 R	36	4	6	<1	100	0.12
NK043 R	32	6	22	<1	170	<0.01
UNITS	ppm	ppm	ppm	ppm	ppm	ppm
SCHEME	AAS1 AAS1A	AAS1	AAS1	AAS3	XRF1	FAS1

APPENDIX II

GEOCHEMICAL ASSAY RESULTS SHEETS FOR

STREAM SEDIMENT SAMPLES.



COMLABS Pty. Ltd.
COMPUTERISED ANALYTICAL LABORATORIES

024

Head Office and
Central Laboratory
305 South Road,
Mile End South,
Sth. Aust. 5031.
Tel: (08) 43 5722
Telex: AA89323



NATA REGISTERED No. 1526

OUR REF.: COM850573

YOUR REF.: A79 008702

Mr. M. Dugmore
BHP Exploration Co. Ltd.
125-129 Rundle Street
KENT TOWN

SA 5061

April 12, 1985

Dear Mark

RE: JOB COM850573

Enclosed are the assays for the samples delivered to our
laboratory on April 4, 1985

Yours Sincerely,
COMLABS PTY LTD

per :

c.c.: Mr. D. Jarvis

No. of copies : 1

Report Length 3 pages



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ANALYTICAL REPORT

JOB COM850573
O/N : A79 008702

SAMPLE	Au	Cu	Pb	Zn	Mn	As	Weight
NK500	8	34	14	34	410	22	2200.0
NK501	<5	32	28	80	620	14	3600.0
NK502	<5	24	18	55	710	10	2300.0
NK503	<5	24	14	44	560	14	3000.0
NK504	<5	30	10	36	450	30	4000.0
NK505	<5	55	14	42	690	80	3500.0
NK506	8	38	38	80	1600	28	2500.0
NK507	<5	20	16	46	650	20	5500.0
NK508	<5	24	12	42	560	22	3500.0
NK509	<5	34	24	46	700	48	3100.0
NK510	<5	36	30	60	1100	18	3700.0
NK511	<5	40	32	60	1050	16	2900.0
NK512	<5	40	16	55	840	20	3900.0
NK513	<5	26	18	44	430	16	2500.0
NK514	<5	55	36	60	580	40	2400.0
NK515	<5	36	32	75	690	12	2500.0
NK516	<5	60	12	34	1200	70	2400.0
NK517	<5	70	26	44	1450	185	3000.0
NK518	<5	46	16	34	1000	60	2500.0
NK519	<5	32	12	55	600	34	2600.0
NK520	<5	20	12	30	500	18	2900.0
NK521	<5	28	8	28	600	26	3300.0
NK522	<5	44	12	36	730	36	3100.0
NK523	<5	30	12	24	730	22	3800.0
NK524	<5	32	14	30	490	28	3200.0
UNITS	ppb	ppm	ppm	ppm	ppm	ppm	gram
SCHEME	AAS5C	AAS1	AAS1	AAS1	AAS2	XRF1	WEIGHT



COMLABS Pty. Ltd.
COMPUTERISED ANALYTICAL LABORATORIES

- 2 -



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ANALYTICAL REPORT

JOB COM850573
O/N : A79 008702

SAMPLE	Au	Cu	Pb	Zn	Mn	As	Weight
NK525	<5	24	10	24	400	18	5400.0
NK526	<5	18	12	38	350	10	4600.0
NK527	<5	30	26	65	3100	14	4200.0
NK528	<5	24	16	55	620	14	4600.0
NK529	<5	36	24	40	570	22	4600.0
NK530	6	22	6	30	370	8	3000.0
NK531	10	55	46	60	1250	42	4300.0
NK532	8	50	24	36	1400	26	4300.0
NK533	7	55	38	46	1100	32	4100.0
NK534	<5	18	12	32	350	14	5600.0
NK535	<5	24	20	42	400	20	5600.0
NK536	<5	20	8	24	650	20	7200.0
NK537	<5	22	8	18	540	14	5400.0
NK538	<5	18	<4	24	420	8	5300.0
NK539	<5	50	22	60	2850	80	2600.0
NK540	8	75	30	48	1350	90	4500.0
NK541	10	80	16	36	580	155	3200.0
NK542	7	55	26	36	550	90	3500.0
NK543	6	40	12	46	520	30	4500.0
NK544	10	32	10	46	480	22	2400.0
NK545	6	30	16	50	450	18	3100.0
NK546	20	50	20	42	830	48	2900.0
NK547	20	20	30	80	900	28	3800.0
NK548	<5	48	34	90	1600	38	4400.0
NK549	8	44	16	50	1500	40	3100.0
UNITS	ppb	ppm	ppm	ppm	ppm	ppm	gram
SCHEME	AAS5C	AAS1	AAS1	AAS1	AAS2	XRF1	WEIGHT



COMLABS Pty. Ltd.
COMPUTERISED ANALYTICAL LABORATORIES

- 3 -

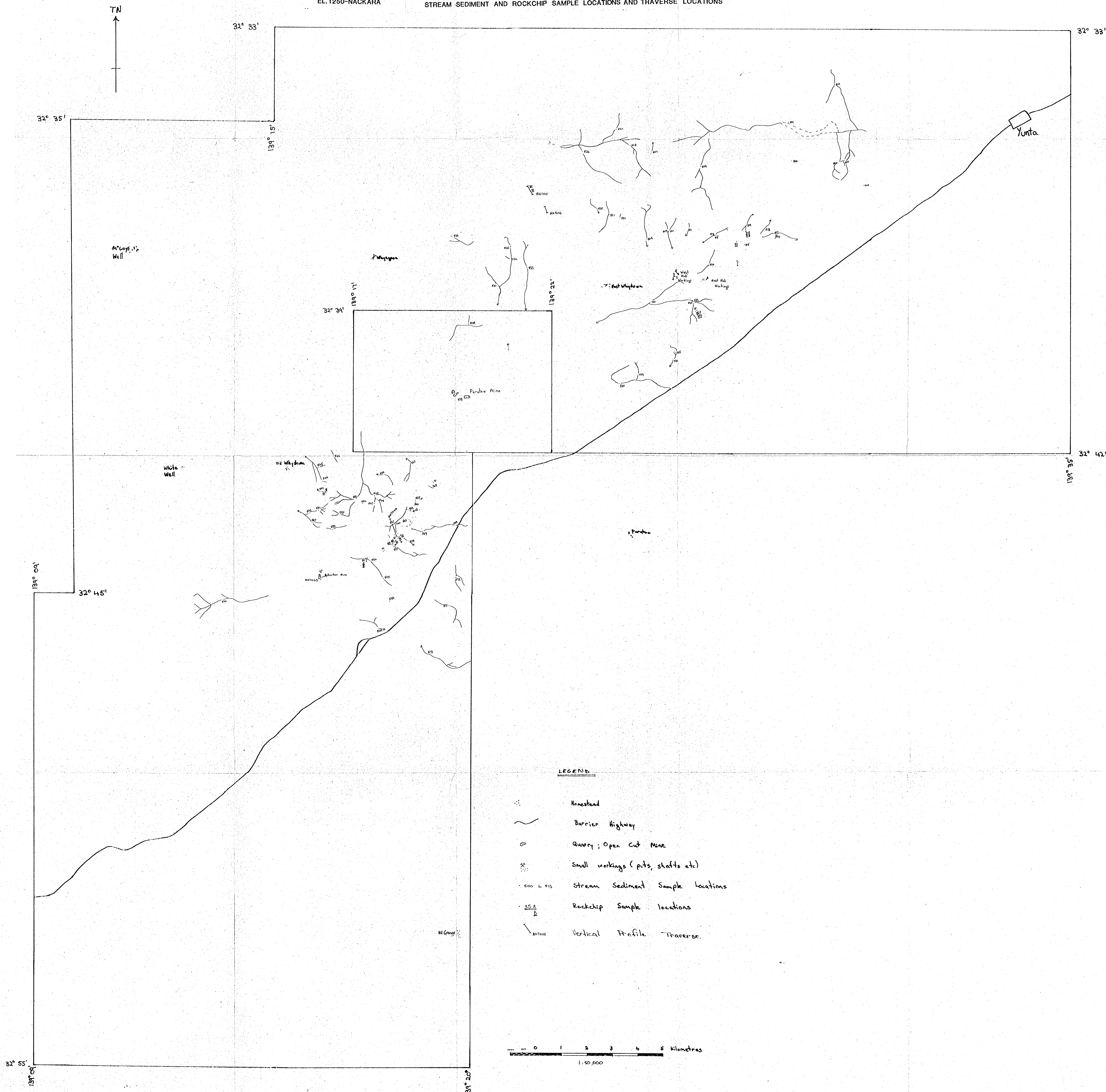


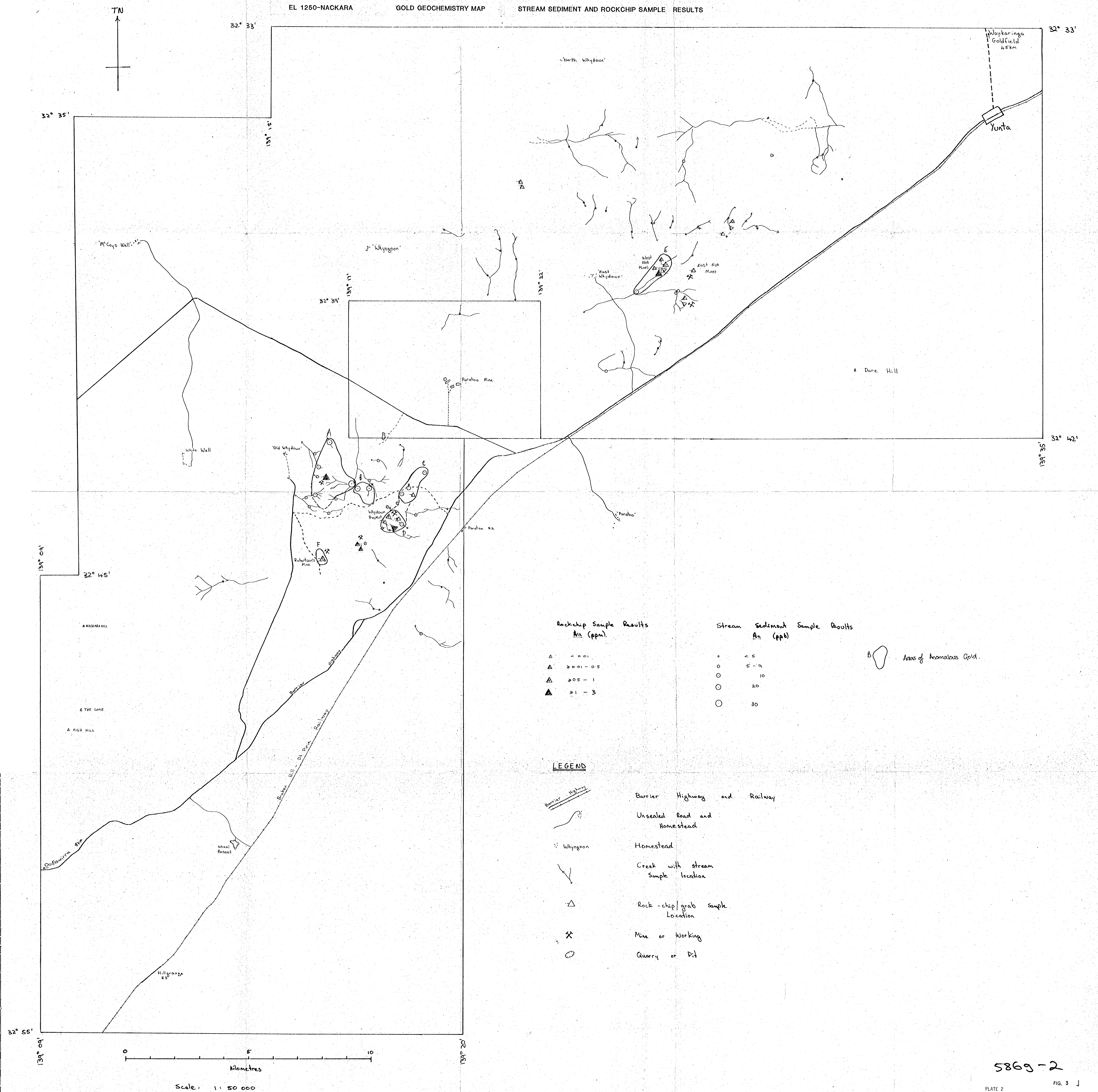
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ANALYTICAL REPORT

JOB COM850573
O/N : A79 008702

SAMPLE	Au	Cu	Pb	Zn	Mn	As Weight
NK550	20	32	40	165	550	34 4900.0
NK551	30	115	32	55	1500	105 4100.0
NK552	9	80	24	70	730	55 2900.0
NK553	9	50	10	32	600	36 4000.0
NK554	5	70	26	60	1550	38 4100.0
NK555	<5	65	28	65	1500	40 2700.0
NK556	<5	38	20	65	1350	30 3000.0
NK557	<5	65	32	60	1500	46 4500.0
NK558	10	55	12	34	1200	85 3100.0
NK559	9	75	14	34	1650	180 4200.0
NK560	<5	80	4	22	1300	65 3900.0
NK561	8	70	6	32	1200	65 4000.0
NK562	6	46	8	32	930	26 3200.0
NK563	10	60	6	30	1750	32 3900.0
NK564	10	60	12	46	1500	90 3700.0
NK565	<5	48	24	90	1100	26 2900.0
NK566	7	55	12	36	1050	46 4100.0
NK567	<5	50	16	65	820	24 4300.0
NK568	10	85	26	75	1550	125 7600.0
NK569	<5	46	20	55	1250	28 7300.0
NK570	<5	40	18	95	750	12 7200.0
NK571	<5	40	32	105	600	14 7800.0
NK572	<5	20	20	48	540	9 6700.0
NK573	8	32	34	100	460	10 7800.0
UNITS	ppb	ppm	ppm	ppm	ppm	ppm gram
SCHEME	AAS5C	AAS1	AAS1	AAS1	AAS2	XRF1 WEIGHT





5869-2

(C.R. 4684)

EXPLORATION LICENCE 1250

NACKARA - SOUTH AUSTRALIA

REPORT FOR THE QUARTER ENDED 23rd JUNE, 1985.

by: S.T. Mann
Adelaide.

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2. TITLE
3. EXPLORATION EXPENDITURE

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EXPLORATION LICENCE 1250NACKARA - SOUTH AUSTRALIAREPORT FOR THE QUARTER ENDED 23rd JUNE, 1985.1. SUMMARY.

This is the Third Quarterly Report for Nackara E.L.1250 and covers the period from the 24th March, 1985 to the 23rd June, 1985.

Since the last quarterly report was compiled, no additional fieldwork has been undertaken within the licence area.

A rock chip and stream sediment sampling programme covering the southern anticlinal structure is planned for the fourth quarter of tenure of this licence.

2. TITLE.

Utah Development Company Limited was granted Exploration Licence 1250, Nackara on 24th September, 1984. Subsequently this Company has been taken over by B.H.P. Minerals Limited.

The Licence covers approximately 982 square kilometres, and is located between the townships of Oodlawirra and Yunta, in the northeast pastoral area of South Australia (Figure 1).

The minimum expenditure commitment for E.L.1250 is \$50,000.

3. EXPLORATION EXPENDITURE.

Expenditure incurred for the Third Quarter totalled \$14,573. This brings the total expenditure for the Exploration Licence ending the 23rd June, 1985 to \$49,097. The details of expenditure for the period 24.3.85 to 23.6.85 are:-

	\$
Wages and Salaries	7,990
Field Support	1,044
Rent on Exploration Licence	417
Vehicles	1,192
Equipment	196
Geochemistry	1,988
Overheads	97
Freight	12
Drafting	943
Administration	694
	<hr/>
	\$14,573
	<hr/>

(CR 4785)

EXPLORATION LICENCE 1250

NACKARA - SOUTH AUSTRALIA

REPORT FOR THE QUARTER ENDED 23rd SEPTEMBER, 1985.

by: S.T. Mann,
Adelaide.

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APPENDICES

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Geochemical Assays, Comlabs Job No. 851187.
2. Stream Sediment and Rock Chip Samples.
Comlabs Job No. 851660.
3. Stream Sediment and Loam Samples.
Comlabs Job No. 851599.

EXPLORATION LICENCE 1250NACKARA - SOUTH AUSTRALIA.REPORT FOR THE QUARTER ENDED 23rd SEPTEMBER, 1985.1. SUMMARY.

This is the Fourth Quarterly Report for Nackara E.L. 1250 and covers the period from the 24th June, 1985 to the 23rd September, 1985.

Since the last Quaterly Report was submitted, a stream sediment and rock chip sampling programme has been completed. This was followed by an appraisal of the work undertaken to that stage, which led to the relinquishment of a major portion of the Licence. This report also includes the discussion and location of 44 stream sediment and 8 loam samples collected for kimberlitic indicators.

2. TITLE.

Utah Development Company Limited was granted Exploration Licence 1250, Nackara on the 24th September, 1984. Subsequently this Company has been taken over by BHP Minerals Limited.

Currently the Licence covers an area of approximately 982 square kilometres, and is located east of the township of Oodlawirra, in the northeast pastoral area of South Australia (Figure 1). An application for a partial surrender of Exploration Licence 1250 - Nackara was submitted to The Director-General of the South Australian Department of Mines and Energy on the 22nd August, 1985. This would reduce the Licence from its original area of approximately 982 square kilometres to an area of 165 square kilometres.

The minimum expenditure commitment for E.L. 1250 is \$50,000.

3. ROCK CHIP AND STREAM SEDIMENT SAMPLING PROGRAMME.

A detailed rock chip and stream sediment sampling programme was undertaken during this quarter to complement a similar sampling programme carried out during the second quarter. The location of the samples are identified on Figure 2.

2.

In all 38 stream sediment samples and eleven rock chip samples have been collected. All samples were assayed for Cu, Pb, Zn, As, Ag and Au by Comlabs Pty. Ltd. in Adelaide. The majority of stream sediment samples were collected from the top of the Appila Tillite in the south of the Exploration Licence, while the remainder were collected from areas draining the Ulupa Siltstone and Pepuarta Tillite.

The Wheal Basset mine was relocated, having been marked incorrectly on published topographic sheets. Highly anomalous copper assays were recorded from this locality, where malachite staining of the Tindelpina Shale occurred.

The maximum gold values of 130 ppb and 50 ppb were obtained from rock chip samples collected from arenites within the Appila Tillite on the northern side of the southern anticline. Two samples (NK 108, NK 109), collected from small pits in arenites near the Ulupa Siltstone/Pepuarta Tillite contact, returned gold assays below the limit of detection.

No significant gold was detected from stream sediment samples collected from the closure of the anticline.

Four stream sediment samples (NK 145C - 148C) and one rock chip sample (NK 149R) were collected from the southwest corner of the licence area to follow up a sample containing visible gold collected for kimberlitic indicators. Unfortunately the followup samples contained negligible gold, and in view of the fact that only one grain of gold was originally identified, the result is indicative of the nugget effect when sampling for gold.

A summary of the geochemical results of all the samples collected is as follows. The assay results are in Appendices 1 and 2.

(results in ppm unless otherwise stated)

	<u>Cu</u>	<u>Pb</u>	<u>Zn</u>	<u>Ag</u>	<u>As</u>	<u>Au</u>
Stream Sediment	6-90	4-55	14-170	<1-1	4-64	<0.005-0.03
Rock Chip	24-2.4%	<1-24	2-110	<1-1	6-920	<0.005-0.13

4. DIAMOND SAMPLING.

A total of 44 heavy mineral stream sediment samples and 8 loam samples were collected within Exploration Licence 1250 to test the kimberlite potential of the area (Figure 3). At each site a 20 kilogram sample of minus 4mm stream sediment or loam was collected. This sampling was supervised by an experienced geologist. Samples were collected where the heavy mineral content of the stream sediment was at a maximum for the drainage channel. The samples are prefixed RT and were sited where tracks crossed the active drainage of the area.

The samples were dispatched to our Belmont Laboratory in Western Australia where a heavy mineral concentrate was prepared. These were then observed for kimberlitic indicators. Chrome diopside was identified in RT 1820 but no followup work was recommended. One grain of gold was identified from RT 1810 and followup sampling was subsequently undertaken, as discussed in the previous section. At sample sites RT 1793 - RT 1799 and RT 1810 - RT 1825 a geochemical silt sample was also collected. These were analysed by Comlabs Pty. Ltd. in Adelaide for 13 elements. The 13 elements were copper, lead, zinc, nickel, cobalt, chromium, gold, arsenic, niobium, zirconium, cerium, lanthanum and barium and the results are shown in Appendix 3.

5. EXPENDITURE.

Exploration Expenditure incurred for the quarter under review totalled \$25,772. This brings the total expenditure for the 12 months ending the 23rd September 1985 to \$74,869. The details of expenditure for the period 24.6.85 to 23.9.85 are:

	\$
Wages and Salaries	7,557
Field Support	952
Rent on Exploration Licence	417
Vehicles	781
Geochemistry	542
Surveys	49
Equipment	149
Drafting	1,523
Belmont Laboratories	12,472
Others	103
Administration Charge	1,227
	<hr/>
Total	\$25,772

APPENDIX 1

STREAM SEDIMENT AND ROCK CHIP SAMPLING GEOCHEMICAL ASSAYS

Comlabs Job No. 851187



COMLABS Pty. Ltd.

COMPUTERISED ANALYTICAL LABORATORIES

038
Head Office and
Central Laboratory
305 South Road,
Mile End South,
Sth. Aust. 5031.
Tel: (08) 43 5722
Telex: AA89323

Received 22/7/85



NATA REGISTERED No. 1526

OUR REF:

YOUR REF: COM851187

A79 Sheet 008719

ELI250 (Nooban)

Stream Sediment Sampling
Franklin

Nooban (Nooban)

Mr. S. Mann
BHP Exploration Co. Ltd.
125-129 Rundle Street
KENT TOWN

SA 5061

July 22, 1985

Dear Stephen

RE: JOB COM851187

Enclosed are the assays for the samples delivered to our
laboratory on July 8, 1985

Yours Sincerely,
COMLABS PTY LTD

per :

c.c.: BHP ADELAIDE

No. of copies : 1

Report Length 2 pages



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JOB COM851187

ANALYTICAL REPORT D/N : A79 Sheet 008719

SAMPLE	Cu	Pb	Zn	Ag	Au	As
NK100	28	16	36	<1	6	28
NK101	26	28	60	<1	9	22
NK102	22	24	70	<1	10	20
NK103	50	30	65	<1	6	50
NK104	34	28	60	<1	<5	30
NK105	24	22	70	<1	20	18
NK106	24	28	80	<1	7	12
NK107	38	18	65	<1	<5	6
NK108	60	4	14	<1	<5	6
NK109	185	18	38	<1	<5	6
NK110	24	12	30	<1	10	24
NK111	28	10	18	<1	10	24
NK112	28	10	22	<1	20	28
NK113	28	12	30	<1	30	24
NK114	26	6	34	<1	10	18
NK115	60	16	55	<1	<5	65
NK116	40	18	70	<1	10	38
NK117	24	22	60	<1	20	20
NK118	32	8	40	<1	<5	30
NK119	38	8	30	<1	6	34
NK120	220	<4	40	<1	10	920
NK121	38	<4	5	<1	130	290
NK122	42	<4	12	<1	20	85
NK123	22	14	70	<1	10	24
NK124	16	14	50	<1	<5	16
UNITS	ppm	ppm	ppm	ppm	ppb	ppm
SCHEME	AAS1	AAS1	AAS1	AAS3	AAS5C	XRF1



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- 2 -



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ANALYTICAL REPORT

JOB COM851187

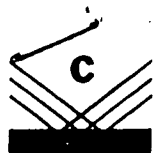
O/N : A79 Sheet 008719

SAMPLE	Cu	Pb	Zn	Ag	Au	As
NK125	20	12	55	<1	<5	16
NK126	22	16	75	<1	<5	20
NK127	20	20	75	<1	<5	22
NK128	28	26	105	<1	<5	44
NK129	24	26	115	<1	8	44
NK130	2.40%	<4	9	<1	7	260
NK131	1.60%	6	16	1	5	50
NK132	60	26	75	<1	6	34
NK133	36	8	30	<1	<5	10
NK134	24	12	65	<1	8	14
NK135	30	16	170	<1	10	16
NK136	22	16	90	1	6	14
NK137	16	16	40	<1	20	8
NK138	16	16	44	<1	7	7
NK139	9	4	18	<1	5	4
NK140	9	8	14	<1	20	5
NK141	12	8	32	<1	20	7
NK142	55	<4	2	<1	50	36
NK143	24	<4	4	<1	8	38
UNITS	ppm	ppm	ppm	ppm	ppb	ppm
SCHEME	AAS1 AAS1A	AAS1	AAS1	AAS3	AAS5C	XRF1

APPENDIX 2

STREAM SEDIMENT AND ROCK CHIP SAMPLES

Comlabs Job No. 851660



COMLABS Pty. Ltd.
COMPUTERISED ANALYTICAL LABORATORIES

042
Head Office and
Central Laboratory
305 South Road,
Mile End South,
Sth. Aust. 5031.
Tel: (08) 43 5722
Telex: AA89323



NATA REGISTERED No. 1526

OUR REF.: COM851660

YOUR REF.: A79 Sheet 008732

Mr. S. Mann
BHP Exploration Co. Ltd.
125-129 Rundle Street
KENT TOWN

SA 5061

October 1, 1985

Dear Stephen

RE: JOB COM851660

Enclosed are the assays for the samples delivered to our
Laboratory on September 12, 1985

Yours Sincerely,
COMLABS PTY LTD

per

c.c.: BHP ADELAIDE
c.c.: BHP VICTORIA

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No. of copies : 1

Report Length 1 pages



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JOB COM851660

ANALYTICAL REPORT^{O/N} : A79 Sheet 008732

SAMPLE	Cu	Pb	Zn	Ag	Au	As
NK 145C	32	22	80	<1	10	18
NK 146C	32	26	55	<1	10	16
NK 147C	42	55	125	<1	10	48
NK 148C	36	20	55	<1	<5	20
NK 149R	22	24	110	<1	<5	18
UNITS	ppm	ppm	ppm	ppm	ppb	ppm
SCHEME	AAS1	AAS1	AAS1	AAS3	AASSC	XRF1

APPENDIX 3

STREAM SEDIMENT AND LOAM SAMPLES

Comlabs Job No. 851599.



COMLABS Pty. Ltd.
COMPUTERISED ANALYTICAL LABORATORIES

045
Head Office and
Central Laboratory
305 South Road,
Mile End South,
Sth. Aust. 6031.
Tel: (08) 43 5722
Telex: AA89323



NATA REGISTERED No. 1526

OUR REF.: COM851599

YOUR REF.: Sheet 008731

Mr. R.J. Taylor
BHP Exploration Co. Ltd.
125-129 Rundle Street
KENT TOWN

SA 5061

September 17, 1985

Dear Sir

RE: JOB COM851599

Enclosed are the assays for the samples delivered to our
Laboratory on September 3, 1985

Yours Sincerely,
COMLABS PTY LTD

per : 

c.c.: Camberwell - BHP
c.c.: Adelaide - BHP

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ANALYTICAL REPORT

JOB COM851599

O/N : Sheet 008731

SAMPLE	Cu	Pb	Zn	Ni	Co	Cr	Au
RT 1793	28	20	90	34	16	16	<5
RT 1794	22	18	75	20	10	12	(9)
RT 1795	24	26	65	30	16	12	<5
RT 1796	14	22	48	16	10	16	(5)
RT 1797	24	20	80	22	14	10	<5
RT 1798	32	20	85	30	16	14	<5
RT 1799	26	22	60	20	14	16	<5
RT 1810	34	20	75	32	16	16	(7)
RT 1811	28	24	65	24	14	16	<5
RT 1812	28	14	65	28	14	20	(10)
RT 1813	32	14	55	26	12	16	<5
RT 1814	28	24	55	34	16	18	(6)
RT 1815	40	16	60	44	26	16	<5
RT 1816	34	32	65	38	20	20	<5
RT 1817	26	38	65	38	20	20	<5
RT 1818	34	22	75	32	16	16	<5
RT 1819	32	24	70	32	18	16	<5
RT 1820	32	28	60	26	20	20	<5
RT 1821	32	22	85	38	18	22	<5
RT 1822	24	24	75	36	20	20	<5
RT 1823	24	20	60	38	20	18	<5
RT 1824	26	22	75	32	16	20	<5
RT 1825	20	26	95	30	12	20	(7)
UNITS	ppm	ppm	ppm	ppm	ppm	ppm	ppb
SCHEME	AAS1	AAS1	AAS1	AAS1	AAS1	AAS2	AAS5C



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ANALYTICAL REPORT

JOB COM851599
O/N : Sheet 008731

SAMPLE	As	Nb	Zr	Ce	La	Ba
RT 1793	4	14	210	40	40	280
RT 1794	4	14	240	40	20	230
RT 1795	4	10	175	40	30	280
RT 1796	2	10	185	20	30	150
RT 1797	7	14	260	30	40	270
RT 1798	7	14	210	40	40	330
RT 1799	5	12	270	30	40	210
RT 1810	14	12	240	50	40	240
RT 1811	5	14	195	50	40	220
RT 1812	5	16	310	40	50	200
RT 1813	6	14	220	30	30	210
RT 1814	14	12	240	40	40	220
RT 1815	10	12	180	30	30	220
RT 1816	6	12	185	50	40	240
RT 1817	7	12	220	60	40	250
RT 1818	10	12	210	30	50	310
RT 1819	7	14	210	50	40	260
RT 1820	6	14	210	40	40	300
RT 1821	5	16	220	50	40	280
RT 1822	4	14	240	60	40	270
RT 1823	9	12	250	50	40	220
RT 1824	3	14	230	40	50	240
RT 1825	6	10	175	20	30	185
UNITS	ppm	ppm	ppm	ppm	ppm	ppm
SCHEME	XRF1	XRF1	XRF1	XRF1	XRF1	XRF1

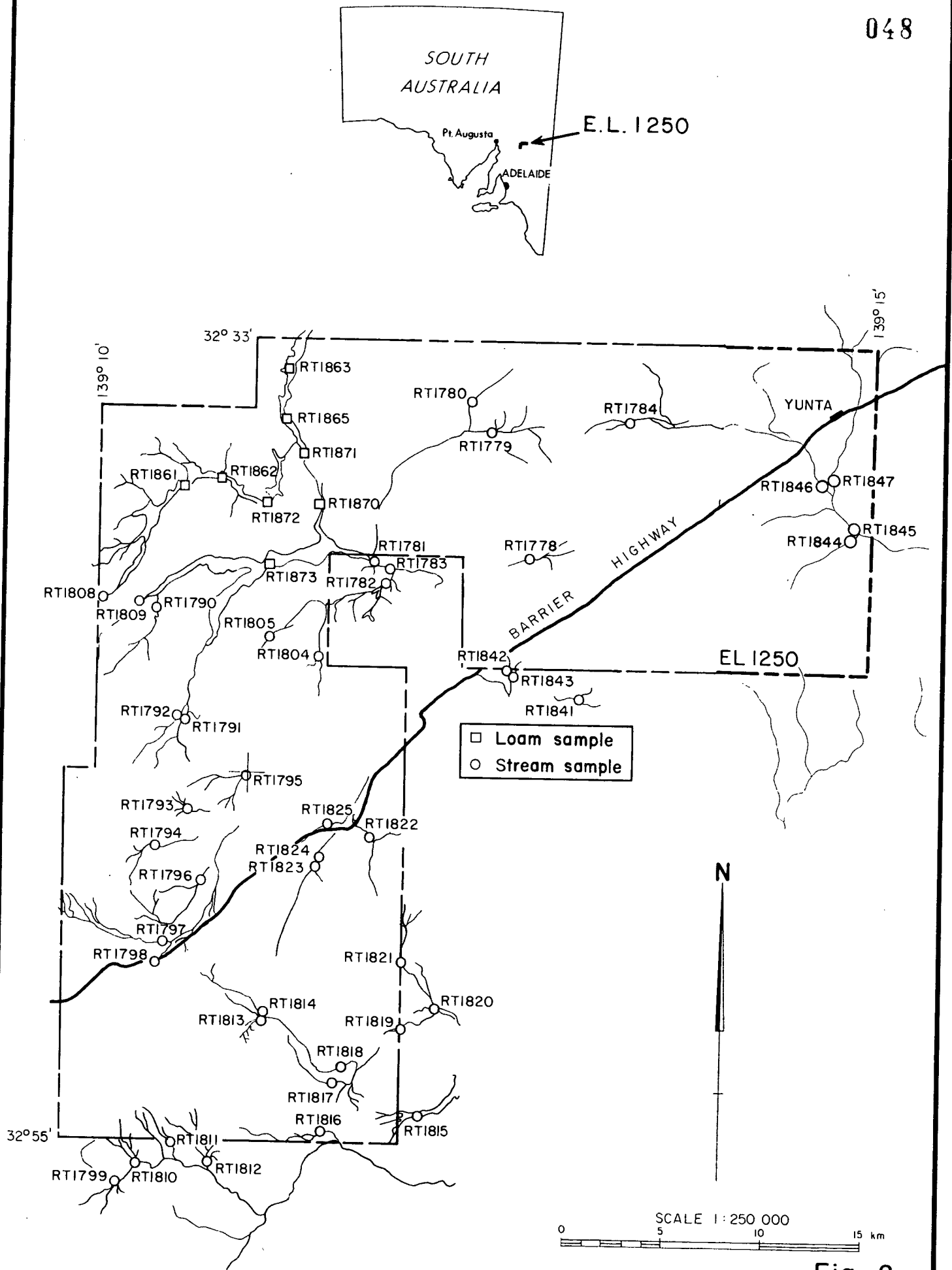


Fig. 3

Centre
ADELAIDE

Date
29.10.85

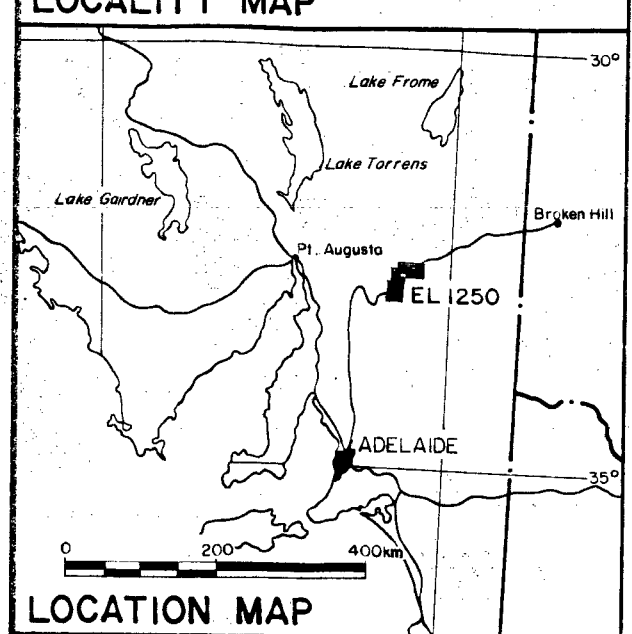
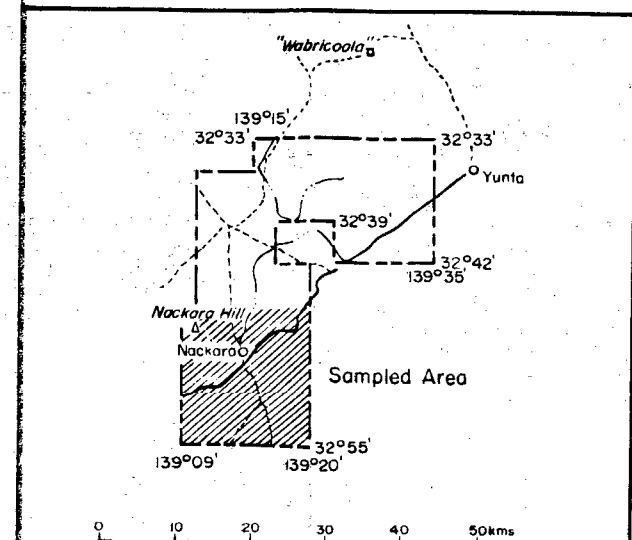
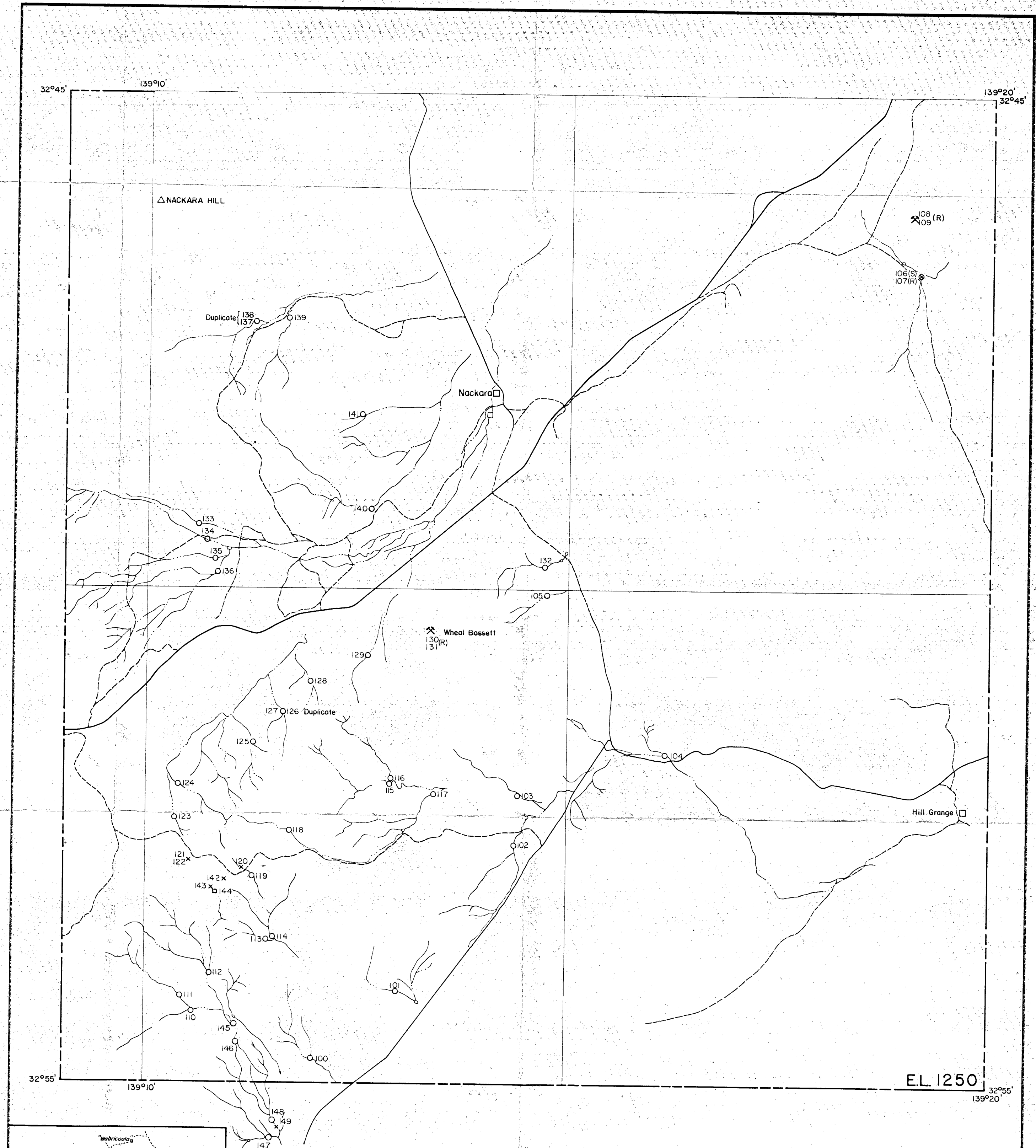
THE BROKEN HILL PROPRIETARY CO. LTD.

E.L. 1250 NACKARA, S.A.

DIAMOND SAMPLING

Project No
6-A79-5

Drawing No
A4-440



LEGEND

- Stream sediment sample (S), prefixed NK
- × Rock chip sample (R), prefixed NK
- Petrological sample, prefixed NK
- ⌵ Workings
- Major road, track
- ~ Creek
- - - E.L. Boundary

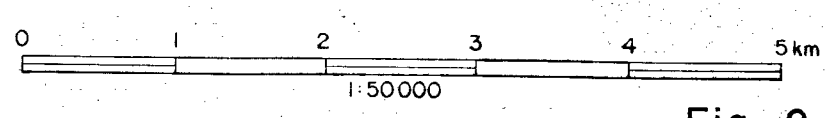
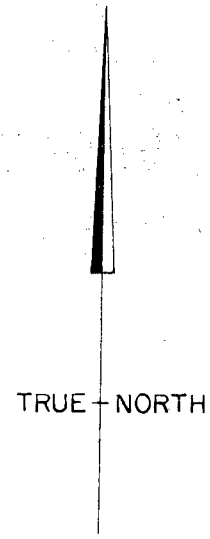


Fig. 2

THE BROKEN HILL PROPRIETARY CO. LTD.		
EXPLORATION DEPARTMENT		
EL. 1250 NACKARA S.A.		
STREAM, ROCK AND PETROLOGICAL SAMPLE SITES.		
Drawn: S.T. Mann	Date: 19-7-85	Centre: Adelaide
Traced: J.A. Mitris	Project No: 6-A79-3	Drawing No: A2-432
Checked:		

Taken from 1:50000 topographic plans - NACKARA, PITCAIRN.

5869-3

(CR 4848)

EXPLORATION LICENCE 1250
NACKARA - SOUTH AUSTRALIA

REPORT FOR THE QUARTER ENDED
23rd DECEMBER, 1985.

by: S.T. Mann
Adelaide

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1. GENERAL
2. FIELD INVESTIGATIONS
3. EXPENDITURE

FIGURE

1. E.L. 1250 Nackara, S.A.
Location Map.

A4-414A

EXPLORATION LICENCE 1250NACKARA - SOUTH AUSTRALIAREPORT FOR THE QUARTER ENDED 23rd DECEMBER 19851. GENERAL

This is the Fifth Quarterly Report for Nackara E.L. 1250 and covers the period from the 24th September 1985 to the 23rd December 1985.

Utah Development Company Limited was granted Exploration Licence 1250, Nackara on the 24th September, 1984. Subsequently this Company was taken over by BHP Minerals Limited. The licence covers an area of approximately 165 square kilometres and is located east of the township of Oodlawirra, in the northeast pastoral area of South Australia.

2. FIELD INVESTIGATIONS

No further fieldwork has been undertaken in Exploration Licence 1250 during the quarter under review.

3. EXPENDITURE

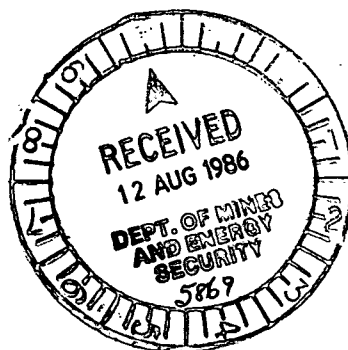
Exploration Expenditure incurred for the quarter under review totalled \$2,125. This brings the total expenditure for the Exploration Licence ending the 23rd December, 1985 to \$76,994. The details of expenditure for the period 24.9.85 to 23.12.85 are:

	\$
Wages & Salaries	313
Field Support	59
Drafting	1,161
Vehicles	35
Geochemistry	142
Tenement Fees	314
Administration Charges	101
	<hr/>
	\$2,125
	<hr/>

(CR 5095)

EXPLORATION LICENCE 1250
NACKARA - SOUTH AUSTRALIA

REPORT FOR THE QUARTER ENDED
23rd MARCH 1986.



P. Wright
Adelaide

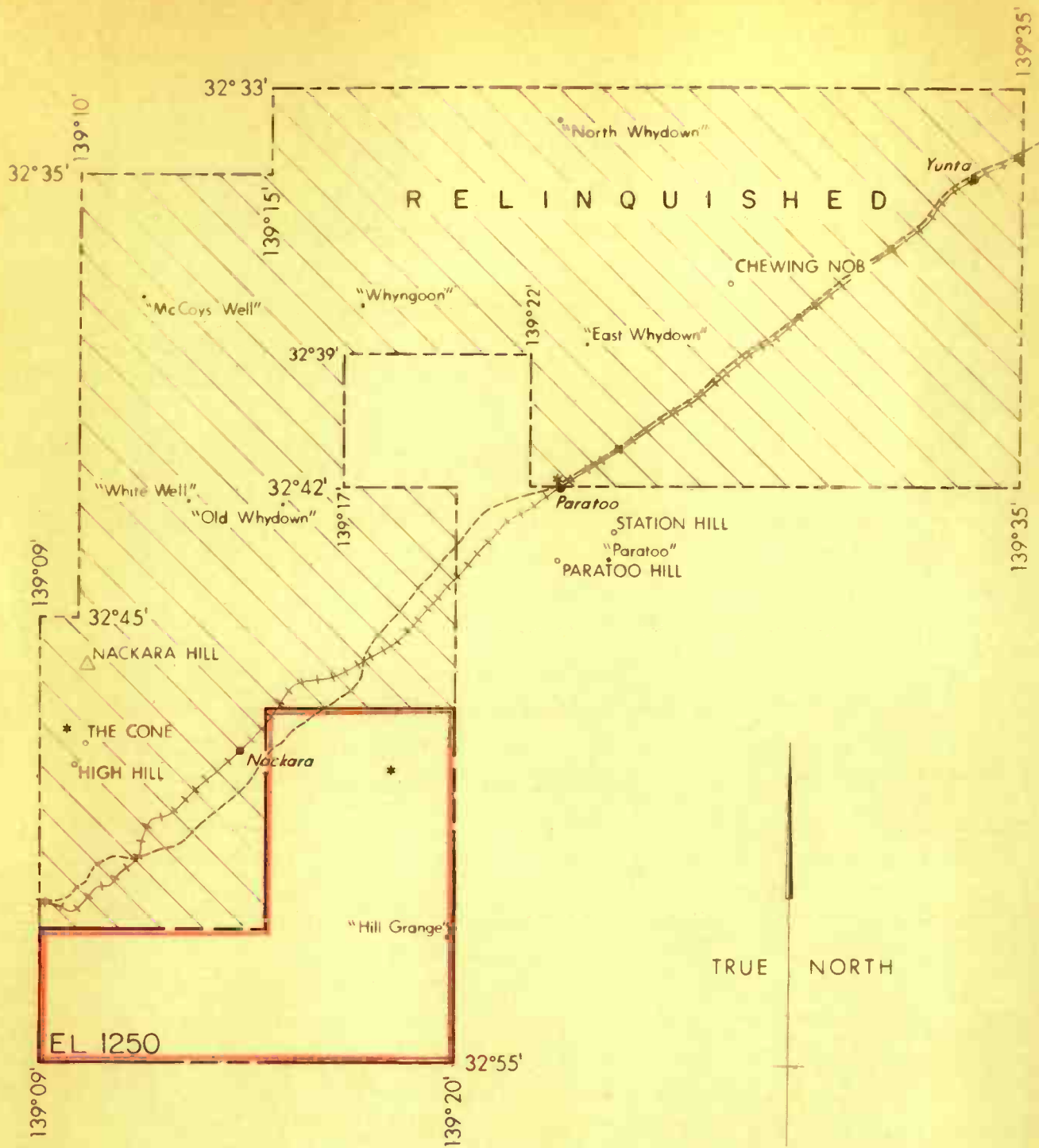
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1. GENERAL
2. FIELD INVESTIGATIONS
3. EXPENDITURE

FIGURES

1. EL.1250 - Nackara, South Australia.
Location Map.

A4-414



LOCALITY MAP



* Aboriginal sacred site



Fig. 1

Centre
Ken: own

Date
16-5-85

THE BROKEN HILL PROPRIETARY CO. LTD.
EL 1250 NACKARA SA.
LOCATION MAP

Project N^o

Drawing N^o

A4-414

EXPLORATION LICENCE 1250NACKARA - SOUTH AUSTRALIAREPORT FOR THE QUARTER ENDED 23rd MARCH, 19861. GENERAL

This is the Sixth Quarterly Report for Nackara EL.1250 and covers the period from the 24th December 1985 to the 23rd March 1986.

Utah Development Company Limited was granted Exploration Licence 1250, Nackara on the 24th September, 1984. Subsequently this Company was taken over by BHP Minerals Limited. The licence covers an area of approximately 165 square kilometres and is located east of the township of Oodlawirra, in the northeast pastoral area of South Australia (Figure 1).

2. FIELD INVESTIGATIONS

No further fieldwork has been undertaken in Exploration Licence 1250 during the quarter under review.

3. EXPENDITURE

Exploration Expenditure incurred for the quarter under review totalled \$1,686. This brings the total expenditure for the Exploration Licence ending the 23rd March, 1986 to \$78,680. The details of expenditure for the period 24.12.85 to 23.3.86 are:

	\$
Wages & Salaries	1,462
Services (In-House)	144
Administration	80
	<hr/>
	\$1,686
	<hr/>

(CR 5096)

EXPLORATION LICENCE 1250
NACKARA - SOUTH AUSTRALIA

REPORT FOR THE QUARTER ENDED
23rd JUNE, 1986.

P. Wright
Adelaide

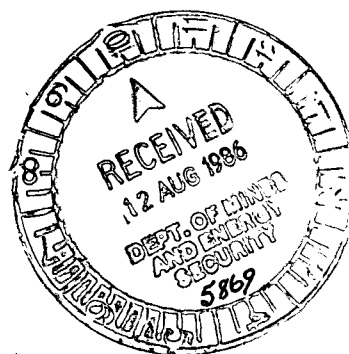


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1. GENERAL
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3. EXPENDITURE

FIGURES

1. EL.1250 - Nackara, South Australia.
Location Map.

A4-414

EXPLORATION LICENCE 1250NACKARA - SOUTH AUSTRALIAREPORT FOR THE QUARTER ENDED 23rd JUNE 19861. GENERAL

This is the Seventh Quarterly Report for Nackara EL.1250 and covers the period from the 24th March to the 23rd June 1986.

Utah Development Company Limited was granted Exploration Licence 1250, Nackara on the 24th September, 1984. Subsequently this Company was taken over by BHP Minerals Limited. The licence covers an area of approximately 165 square kilometres and is located east of the township of Oodlawirra, in the northeast pastoral area of South Australia (Figure 1).

2. FIELD INVESTIGATIONS

No further fieldwork has been undertaken in Exploration Licence 1250 during the quarter under review.

3. EXPENDITURE

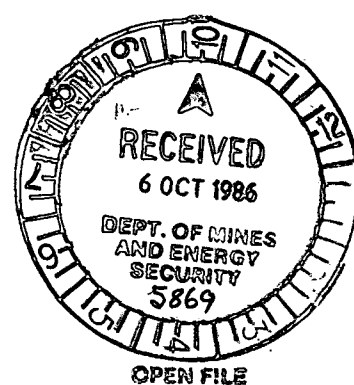
Exploration Expenditure incurred for the quarter under review totalled \$405. This brings the total expenditure for the Exploration Licence ending the 23rd June 1986 to \$79,085. The details of expenditure for the period 24.3.86 to 23.6.86 are:

	\$
Wages & Salaries	84
Equipment	32
Services (In-House)	270
Administration	19
	<hr/>
	\$405
	<hr/>

(CR 5164)

EXPLORATION LICENCE 1250
NACKARA - SOUTH AUSTRALIA

FINAL REPORT
AUGUST 1986



Paul Wright
Adelaide.

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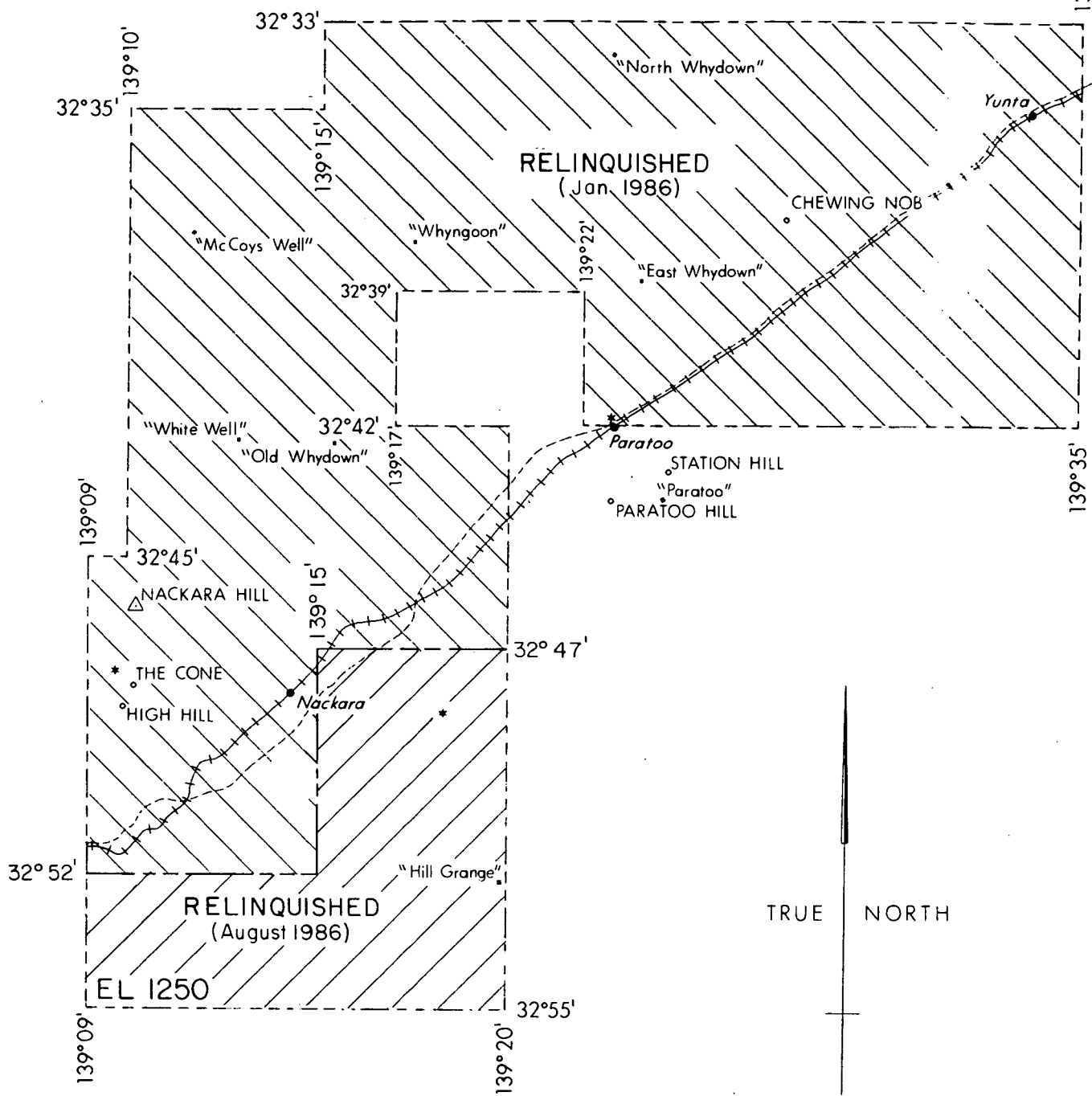
1. INTRODUCTION
2. EXPLORATION ACTIVITIES
 - 2.1 Diamond Sampling
 - 2.2 Rock Chip and Stream Sediment Sampling Programme
3. CONCLUDING REMARKS
4. EXPENDITURE

FIGURES

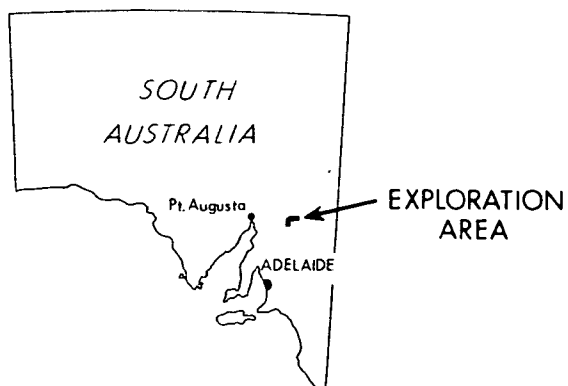
1. EL.1250 - Nackara, South Australia
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APPENDICES

1. Assay Results : Cu, Pb, Zn, Ni, Co, Cr, Au, As,
Nb, Zr, Ce, La, Ba.
Stream Samples (Diamond Search)
Job. No. Com 851599
2. Assay Results : Cu, Pb, Zn, Ag, Au, As.
Stream Samples (Follow-up)
Job. No. Com 851660.



LOCALITY MAP



* Aboriginal sacred site

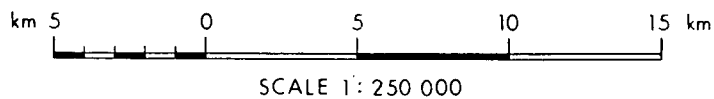


Fig. 1

Centre
Kent Town

Date
16-5-85

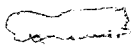
THE BROKEN HILL PROPRIETARY CO LTD
EL 1250 NACKARA SA.
RELINQUISHED AREAS

Project No
6-A79-1

Drawing No
A4-414A

EXPLORATION LICENCE 1250NACKARA - SOUTH AUSTRALIAFINAL REPORT - AUGUST 19861. INTRODUCTION

This is the final report for Exploration Licence 1250, Nackara.

The tenement is located approximately 15 km east northeast of the township of Oodlawirra in the northeast pastoral area of South Australia (Figure 1).

Utah Development Company Limited, was granted the Exploration Licence on the 24th September, 1984. Subsequently this Company was taken over by BHP Minerals Limited.

The original licence area was approximately 982 square kilometres, but this was reduced to 165 square kilometres in January, 1986. (Figure 1) It has now been decided to surrender the remaining part of the tenement.

A detailed account of the geology, mineral occurrences and overall exploration activities has been discussed in the "Partial Surrender Report, Exploration Licence 1250, Nackara" submitted on 13th January, 1986.

Included in this report are the remaining results of exploration activities conducted within the area now being relinquished.

2. EXPLORATION ACTIVITIES2.1 Diamond Sampling

A total of 29 heavy mineral stream sediment samples and 8 loam samples were collected within the original area of Exploration Licence 1250 to test the kimberlite potential of the area (Figure 2). At each site a 20 kilogram sample of minus 4 mm stream sediment or loam was collected. This sampling was supervised by an experienced geologist. Samples were collected where the heavy mineral content

of the stream sediment was at a maximum for the drainage channel. The samples are prefixed RT and were sited where tracks crossed the active drainage of the area.

The samples were dispatched to the BHP Belmont Laboratory in Western Australia where a heavy mineral concentrate was prepared. These were then examined for kimberlitic indicators

At sample sites RT 1793 - RT 1798, RT 1822 and RT 1825 a geochemical silt sample was also collected. These were analysed by Comlabs Pty. Ltd. in Adelaide for 13 elements. The 13 elements were copper, lead, zinc, nickel, cobalt, chromium, gold, arsenic, niobium, zirconium, cerium, lanthanum and barium and the results are shown in Appendix 1.

One grain of gold was reported in the heavy mineral concentrate for sample RT 1810.

2.2 Rock Chip and Stream Sediment Sampling Programme

Rock chip and stream sediment sampling within the current area of the Nackara Licence Area were carried out as part of a broad scale sampling programme over the original area of the tenement. The locations of the samples are shown on Figures 3 and 4.

A summary of the results of this geochemical sampling programme has been discussed in the "Partial Surrender Report, Exploration Licence 1250, Nackara" submitted on the 13th January, 1986.

An additional small scale stream sediment sampling exercise was implemented to follow up a report of a gold grain found in stream sediment sample RT 1810 collected as part of a diamond search. The results from this follow up work were disappointing. The assay values are included as Appendix 2.

3. CONCLUDING REMARKS

A "Telfer" model was invoked while exploring the surrendered Licence Area. The results from this work indicated that Exploration Licence 1250, Nackara is unprospective for the above type of gold mineralization.

4. EXPENDITURE

Total Expenditure for EL.1250 Nackara, including Diamond Exploration Expenditure costs (\$25,772), for the period ending 23rd July, 1986 is \$79,085.

Wages & Salaries	30,657
Field Support	2,844
Vehicles	3,603
Equipment	2,806
Geochemistry	4,531
Surveys	1,361
Tenement Fees	1,983
Office Expenses	1,641
Other Expenses	5,182
Drafting	4,766
Belmont Laboratory	12,472
Administration	7,239
	<hr/>
	\$79,085
	<hr/>

APPENDIX 1

ASSAY RESULTS - STREAM SAMPLES (Diamond Search)



COMLABS Pty. Ltd.
COMPUTERISED ANALYTICAL LABORATORIES

- 3 -



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ANALYTICAL REPORT

JOB COM851599
O/N : Sheet 008731

SAMPLE	Cu	Pb	Zn	Ni	Co	Cr	Au
RT 1793	28	20	90	34	16	16	<5
RT 1794	22	18	75	20	10	12	9
RT 1795	24	26	65	30	16	12	<5
RT 1796	14	22	48	16	10	16	5
RT 1797	24	20	80	22	14	10	<5
RT 1798	32	20	85	30	16	14	<5
RT 1799	26	22	60	20	14	16	<5
RT 1810	34	20	75	32	16	16	7
RT 1811	28	24	65	24	14	16	<5
RT 1812	28	14	65	28	14	20	10
RT 1813	32	14	55	26	12	16	<5
RT 1814	28	24	55	34	16	18	6
RT 1815	40	16	60	44	26	16	<5
RT 1816	34	32	65	38	20	20	<5
RT 1817	26	38	65	38	20	20	<5
RT 1818	34	22	75	32	16	16	<5
RT 1819	32	24	70	32	18	16	<5
RT 1820	32	28	60	26	20	20	<5
RT 1821	32	22	85	38	18	22	<5
RT 1822	24	24	75	36	20	20	<5
RT 1823	24	20	60	38	20	18	<5
RT 1824	26	22	75	32	16	20	<5
RT 1825	20	26	95	30	12	20	7
UNITS	ppm	ppm	ppm	ppm	ppm	ppm	ppb
SCHEME	AAS1	AAS1	AAS1	AAS1	AAS1	AAS2	AASSC



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- 4 -

ANALYTICAL REPORT

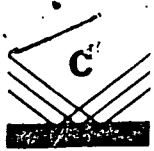
JOB COM851599

O/N : Sheet 008731

SAMPLE	As	Nb	Zr	Ce	La	Ba
RT 1793	4	14	210	40	40	280
RT 1794	4	14	240	40	20	230
RT 1795	4	10	175	40	30	280
RT 1796	2	10	185	20	30	150
RT 1797	7	14	260	30	40	270
RT 1798	7	14	210	40	40	330
RT 1799	5	12	270	30	40	210
RT 1810	14	12	240	50	40	240
RT 1811	5	14	195	50	40	220
RT 1812	5	16	310	40	50	200
RT 1813	6	14	220	30	30	210
RT 1814	14	12	240	40	40	220
RT 1815	10	12	180	30	30	220
RT 1816	6	12	185	50	40	240
RT 1817	7	12	220	60	40	250
RT 1818	10	12	210	30	50	310
RT 1819	7	14	210	50	40	260
RT 1820	6	14	210	40	40	300
RT 1821	5	16	220	50	40	280
RT 1822	4	14	240	60	40	270
RT 1823	9	12	250	50	40	220
RT 1824	3	14	230	40	50	240
RT 1825	6	10	175	20	30	185
UNITS	ppm	ppm	ppm	ppm	ppm	ppm
SCHEME	XRF1	XRF1	XRF1	XRF1	XRF1	XRF1

APPENDIX 2

ASSAY RESULTS - STREAM SAMPLES (Follow-up)



COMLABS Pty. Ltd.
COMPUTERISED ANALYTICAL LABORATORIES

069
Head Office and
Central Laboratory
305 South Road,
Mile End South,
Sth. Aust. 5031.
Tel: (08) 43 5722
Telex: AA89323



NATA REGISTERED No. 1526

OUR REF.: COM851660

YOUR REF.:
A79 Sheet 008732

Mr. S. Mann,
BHP Exploration Co. Ltd.
125-129 Rundle Street
KENT TOWN

SA 5061

October 1, 1985

Dear Stephen

RE: JOB COM851660

Enclosed are the assays for the samples delivered to our
Laboratory on September 12, 1985.

Yours Sincerely,
COMLABS PTY LTD

per

c.c.: BHP ADELAIDE
c.c.: BHP VICTORIA

No. of copies : 1
No. of copies : 1

Report Length 1 pages



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JOB COM851660

ANALYTICAL REPORT^{0/N} : A79 Sheet 008732

SAMPLE	Cu	Pb	Zn	Ag	Au	As
MMS 199	34	38	70	<1	<5	10
MMS 200	70	140	170	<1	<5	36
NK 145C	32	22	80	<1	10	18
NK 146C	32	26	55	<1	10	16
NK 147C	42	55	125	<1	10	48
NK 148C	36	20	55	<1	<5	20
NK 149R	22	24	110	<1	<5	18
UNITS	ppm	ppm	ppm	ppm	ppb	ppm
SCHEME	AAS1	AAS1	AAS1	AAS3	AAS5C	XRF1

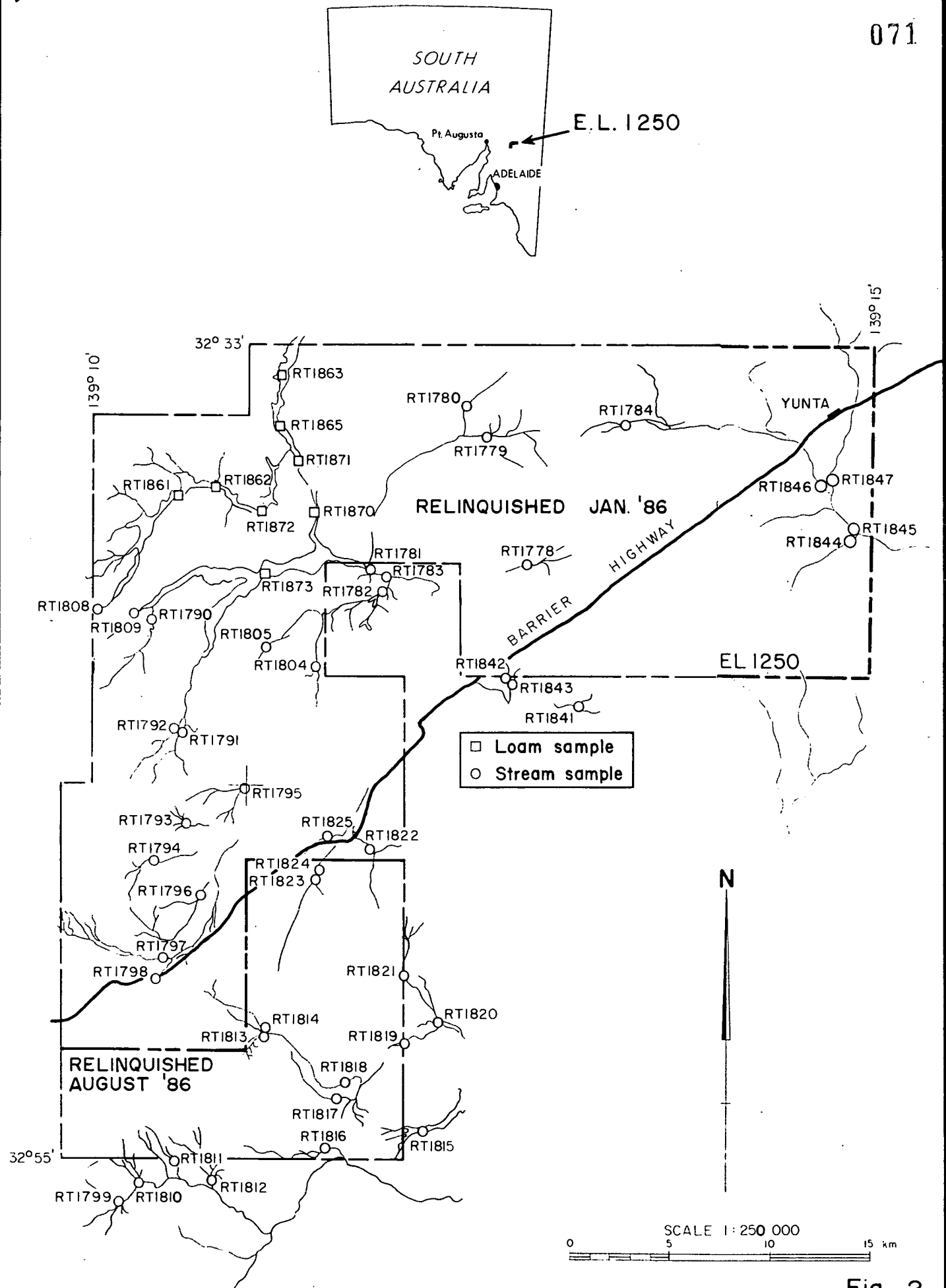


Fig. 2

Centre
ADELAIDE

Date
29.10.85

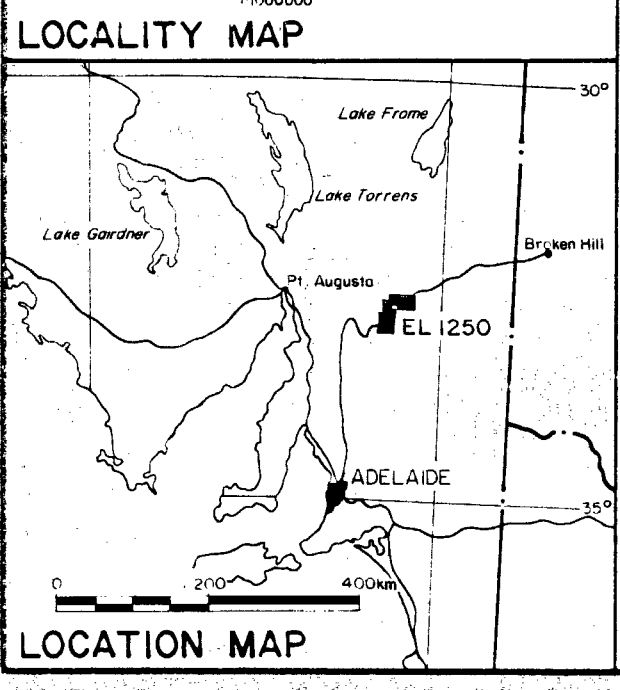
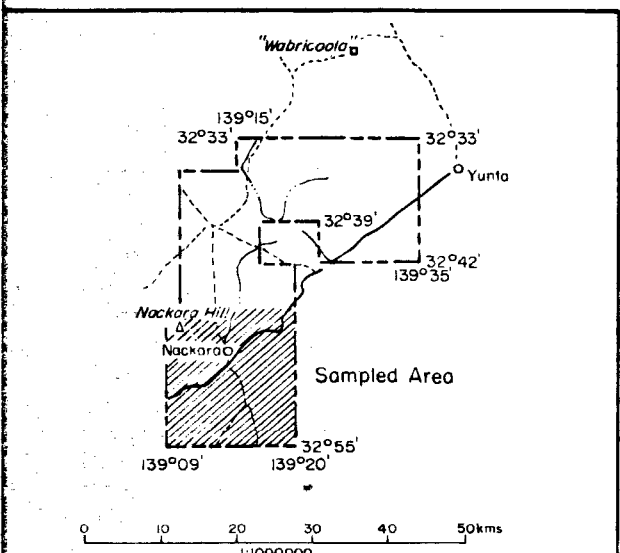
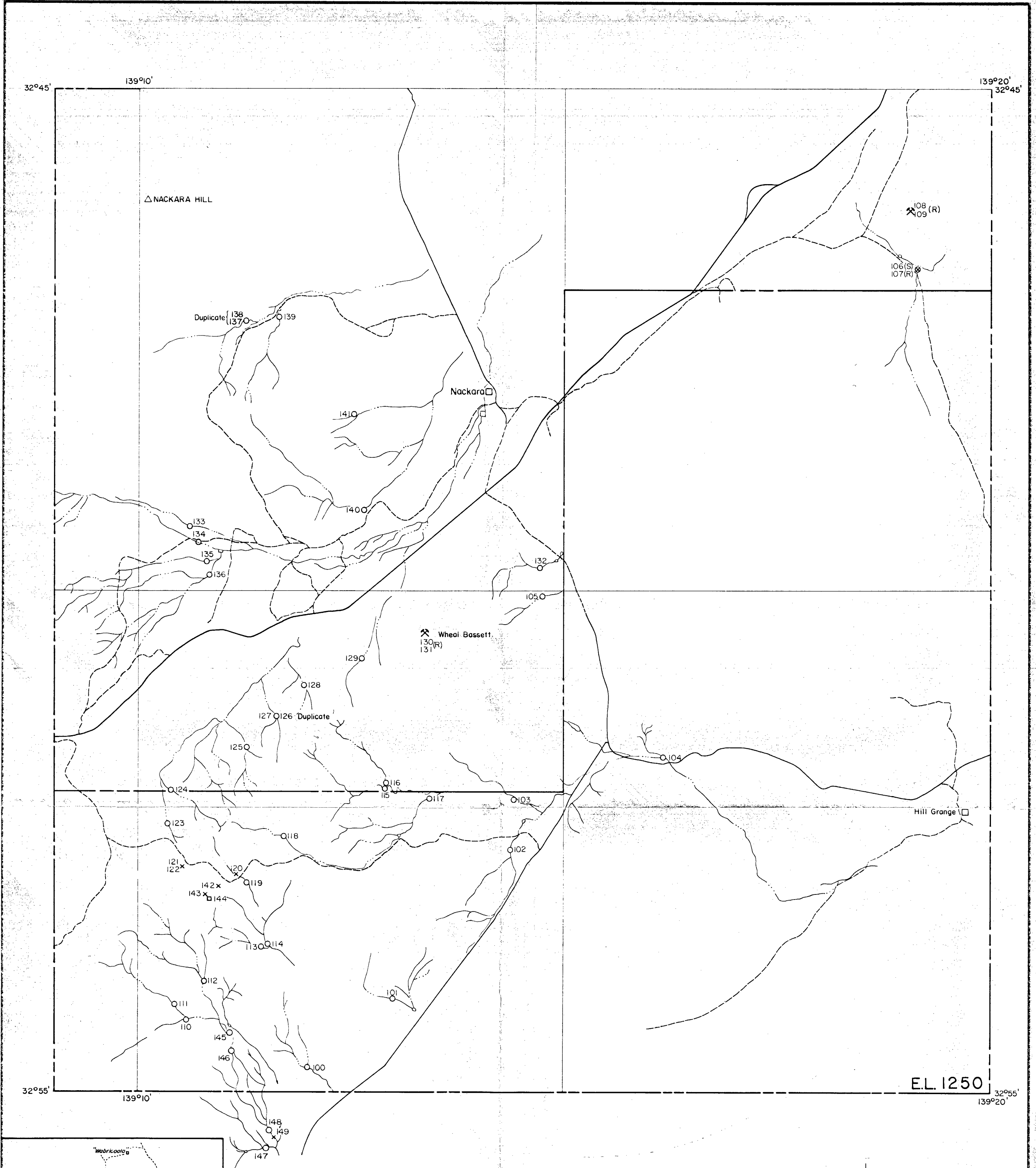
THE BROKEN HILL PROPRIETARY CO. LTD.

E.L. 1250 NACKARA, S.A.

DIAMOND SAMPLING

Project No
6-A79-5

Drawing No
A4-440



LEGEND

- Stream sediment sample (S), prefixed NK
- × Rock chip sample (R), prefixed NK
- Petrological sample, prefixed NK
- ⚡ Workings
- Major road, track
- ~ Creek
- - - E.L. Boundary

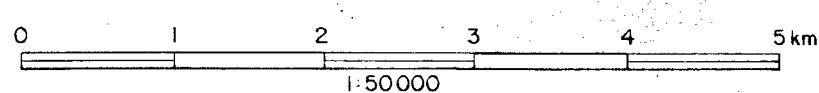
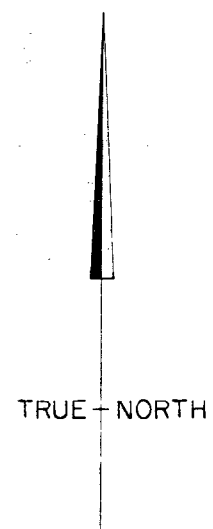


Fig. 3

THE BROKEN HILL PROPRIETARY CO. LTD. EXPLORATION DEPARTMENT		
EL 1250 NACKARA S.A. STREAM, ROCK AND PETROLOGICAL SAMPLE SITES.		
Drawn: S.T. Mann	Date: 19-7-85	Centre: Adelaide
Traced: J.A. Mitris	Project No: 6-A79-3	Drawing No: A2-432
Checked:		

Taken from 1:50000 topographic plans - NACKARA, PITCAIRN.

S869-4

