

CONTENTS ENVELOPE 6895

TENEMENT: E.L. 1396 - Benda Range.

TENEMENT HOLDER: The Shell Co. Of Australia Ltd.

REPORT: Quarterly Report E.L. 1396 Period Ending 28th July 1987. Pgs. 3-10

PLANS: Locality Diagram E.L. 1396. Drg. No. TAE 002. Fig. 1. Pg. 11

REPORT: Quarterly Report E.L. 1396 Period Ending 28th October 1987. Pgs. 12-19

APPENDIX 1: BLEG Stream Sediment And Rock Chip Assay Results. Pgs. 20-23

PLANS: Sample Location Map. Drg. No. TAE 002. Fig. 1. Pg. 15

000003

REPORT FOR THE
QUARTER ENDING 28TH JULY, 1987

EXPLORATION LICENCE 1396,

BENDA RANGE,

SOUTH AUSTRALIA

by

C.K. PROWSE

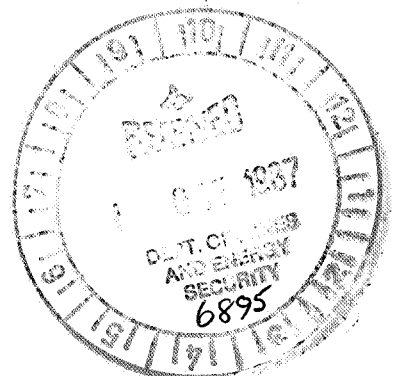
AUGUST, 1987

TENEMENT HOLDER:

THE SHELL COMPANY OF AUSTRALIA LIMITED,
G.P.O. BOX 1319,
ADELAIDE, SOUTH AUSTRALIA, 5001.

TENEMENT OPERATOR:

TRI-ARC ENERGY LIMITED,
4TH FLOOR, 124 EXHIBITION STREET,
MELBOURNE, VICTORIA, 3000.



CONTENTS

	<u>Page Number</u>
1. INTRODUCTION	1
2. WORK CARRIED OUT	2
2.1 Literature Search	2
2.2 Field reconnaissance	3
2.3 Orientation geochemical sampling	3
3. WORK PROGRAMME	4
4. CONCLUSIONS	5
5. EXPENDITURE	6

LIST OF PLANS

Fig. 1 Locality Diagram EL 1396 1:250,000

1. INTRODUCTION

Exploration Licence 1396 is situated over the Benda Range area in north-eastern South Australia, approximately 61 kilometres from the township of Peterborough, adjacent to the Barrier Highway (Refer Figure 1). It was granted to The Shell Company of Australia Limited on April 29th, 1987, and covers an area of 1455 square kilometres.

Exploration in the region is targeted toward cross-cutting gold mineralized quartz reefs/veining primarily in the Tarcowie Siltstone (Umberatana group), gold in known mineralized zones in the Saddleworth Formation (Burra Group), and circular features as outlined from Landsat interpretation. Although the area has received exhaustive exploration for base metals, no consistent or comprehensive search for gold has been undertaken.

Tri-Arc Energy Limited has entered into a joint venture agreement with The Shell Company of Australia Limited whereby Tri-Arc Energy Limited can earn a 50% interest in the tenement over a two year period.

2.

2. WORK CARRIED OUT

Work during the quarter centred on preliminary data gathering and field visits of reported gold anomalies.

2.1 Literature Search

A detailed literature search was undertaken of all information pertaining to the area. Open file reports from previous tenement holders indicated a bias toward base metal exploration. The more recent periods of activity in the region are outlined below:-

1968 - 1970	ASARCO (AUSTRALIA) PTY. LTD.
1971	ARCHEAN EXPLORATION PTY. LTD.
1971 - 1974	SASEARCH PTY. LTD.
1977	AUSTRALIAN CITIES SERVICE INCORPORATED
1980	STELLAR MINING N.L.
1981	CRA EXPLORATION PTY. LTD.
1985	AUSTRALIAN ANGLO AMERICAN SEARCHES PTY. LTD.

The latter company's exploration was centred on gold mineralization but results were inconclusive. It does, however, give the only significant data over EL 1396.

All published mapping over the area has been compiled.

3.

2.2 Field Reconnaissance

A field team visited the area for preliminary investigation of known mineralized areas, anomalous zones and sampling.

Rock chip sampling over the Gum Well and Scobie Hill mine areas (see Figure 1) was carried out to attempt to duplicate anomalous gold values from previous work. The style of mineralization in the area could be seen particularly in the Scobie Hill workings. This showed chiefly steeply dipping siltstones with pyrite pseudomorphic texture, heavily jointed and sheared in places. High iron contents (hematite) were noted in some beds with copper mineralization evident. Quartz reefs dipped concordantly and ranged in thickness from twenty centimetres to approximately fifty centimetres.

Anomalous gold assay results from Australian Anglo American Searches Pty. Ltd. work in the Gum Dam area proved to be from cross-cutting quartz veins mainly ten to fifty centimetres thick with occasional one metre thicknesses. These reefs returned values of up to 15.8 g/t Au in Anglo's work.

2.3 Orientation Geochemical Sampling

Rock chip sampling was confined to known anomalous gold areas in an attempt to duplicate previous anomalous gold assays. Stream sediment samples were taken from streams draining known anomalous gold areas as well as from streams where anomalous arsenic values had previously been obtained by Australian Anglo American Searches Pty. Ltd. All samples were forwarded to Analabs, Perth, W.A., for assaying.

4.

The stream sediment samples consisted of 5kg of -6mm sieved material and were analysed for Au, Cu and Ag by the Bulk Cyanide Leach (BCL) method, however, results were not available at the time of reporting. The BCL method is a very sensitive indicator (0.01 ppb Au detection limit) of gold mineralisation and tends to give more reliable results than conventional AAS techniques because of the larger than normal sample size collected, combined with the fact that all of the sample is used in the cyanide leaching process. The BCL assay results are an expression of the fine free gold in the sample and therefore are not a total gold analysis.

3. WORK PROGRAMME

Future work on Exploration Licence 1396 will include:-

1. Production of reliable regional mapping with adequate control from current published mapping and air photography.
2. Air photo interpretation of structure, particularly the lineaments and circular features outlined from Landsat data.
3. Regional helicopter supported BCL stream sediment survey (approximately 300 samples) to establish anomalous zones for subsequent testing.

5.

4. CONCLUSIONS

It is evident that the area has not been adequately tested for gold mineralization. Potential for smaller tonnages of high grade deposits exists although regional sampling may indicate potential for high tonnage, open cut resources.

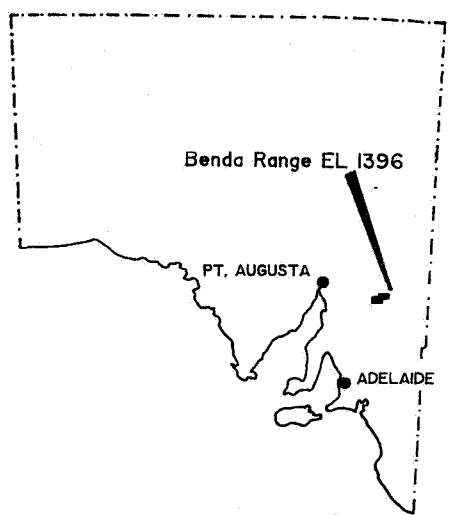
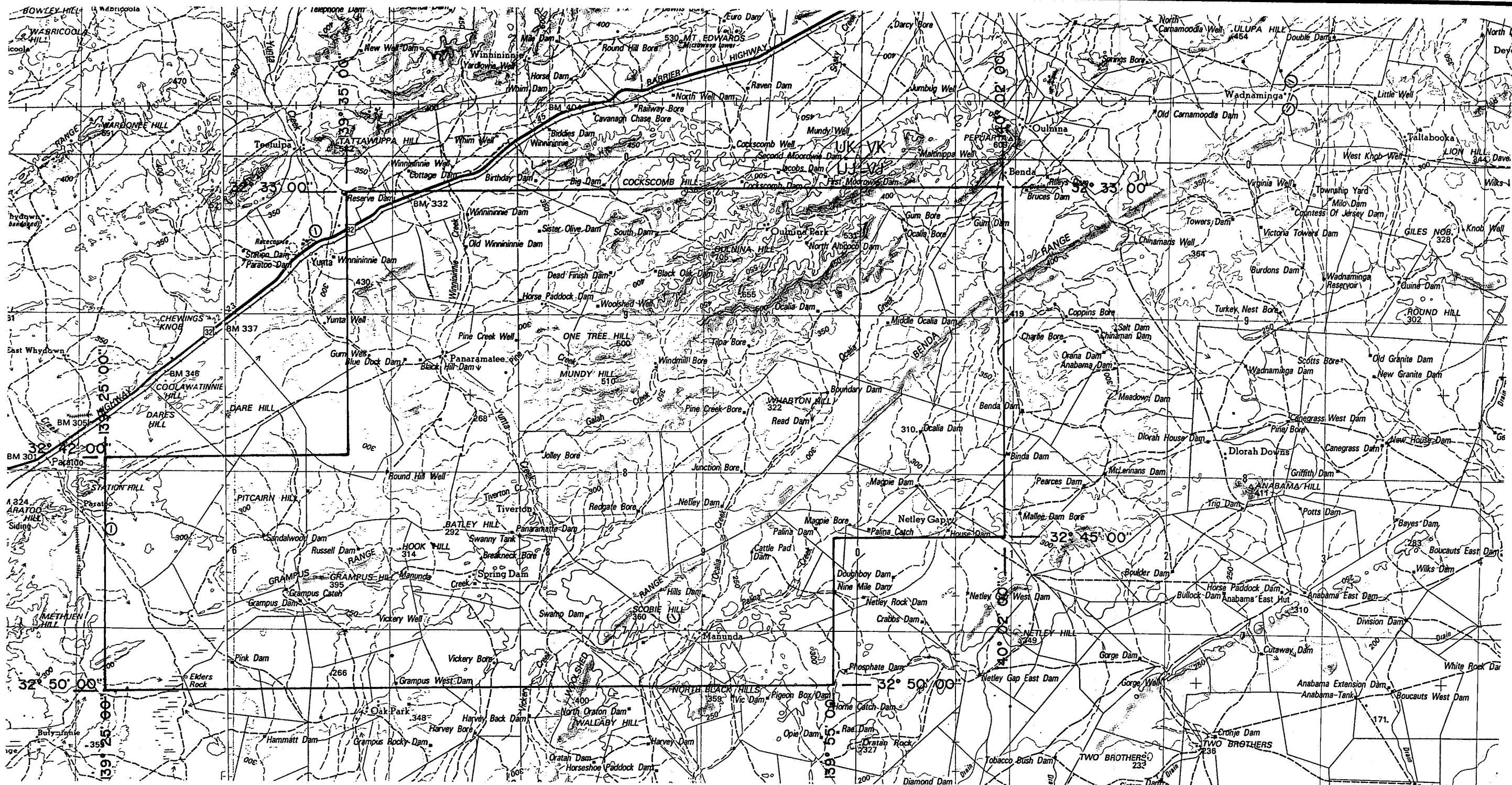
5. EXPENDITURE

BENDA RANGE EXPLORATION LICENCE 1396

EXPENDITURE STATEMENT

QUARTER ENDING 28TH JULY, 1987

Staff Salaries	\$ 5,875.00
Consultants Fees	3,025.00
Travelling Expenses	1,270.06
Accommodation and Meals	610.40
Motor Vehicle Expenses	937.73
Field Supplies	136.38
Plans and Maps	17.80
Freight	426.46
Overhead Costs	1,230.00
	<hr/>
	\$13,528.83
	<hr/>



TRI-ARC ENERGY LIMITED		
Benda Range EL 1396		
SOUTH AUSTRALIA		
PREPARED CKP	DRAWN CKP	SCALE 1:250,000
DATE 10-7-87	DRAWING No. TAE 0002	FIGURE No. 1

000011

REPORT FOR THE
QUARTER ENDING 28TH OCTOBER, 1987

EXPLORATION LICENCE 1396,

BENDA RANGE,

SOUTH AUSTRALIA

by

C.K. PROWSE

NOVEMBER, 1987

TENEMENT HOLDER:

THE SHELL COMPANY OF AUSTRALIA LIMITED,
G.P.O. BOX 1319,
ADELAIDE, SOUTH AUSTRALIA, 5001.

TENEMENT OPERATOR:

TRIARC CORPORATION LIMITED,
4TH FLOOR, 124 EXHIBITION STREET,
MELBOURNE, VICTORIA, 3000.



CONTENTS

	<u>Page Number</u>
1. INTRODUCTION	1
2. WORK CARRIED OUT	2
2.1 Base Map	2
2.2 Orientation Sampling Results	2
2.2.1 Rock Chip Sampling	3
2.2.2 Stream Sediment BLEG Samples	3
3. WORK PROGRAMME	5
4. EXPENDITURE	5

LIST OF PLANS

FIG 1. Sample Location Diagram, 1:250,000

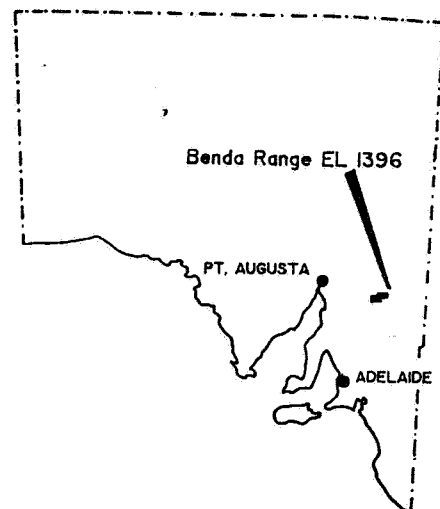
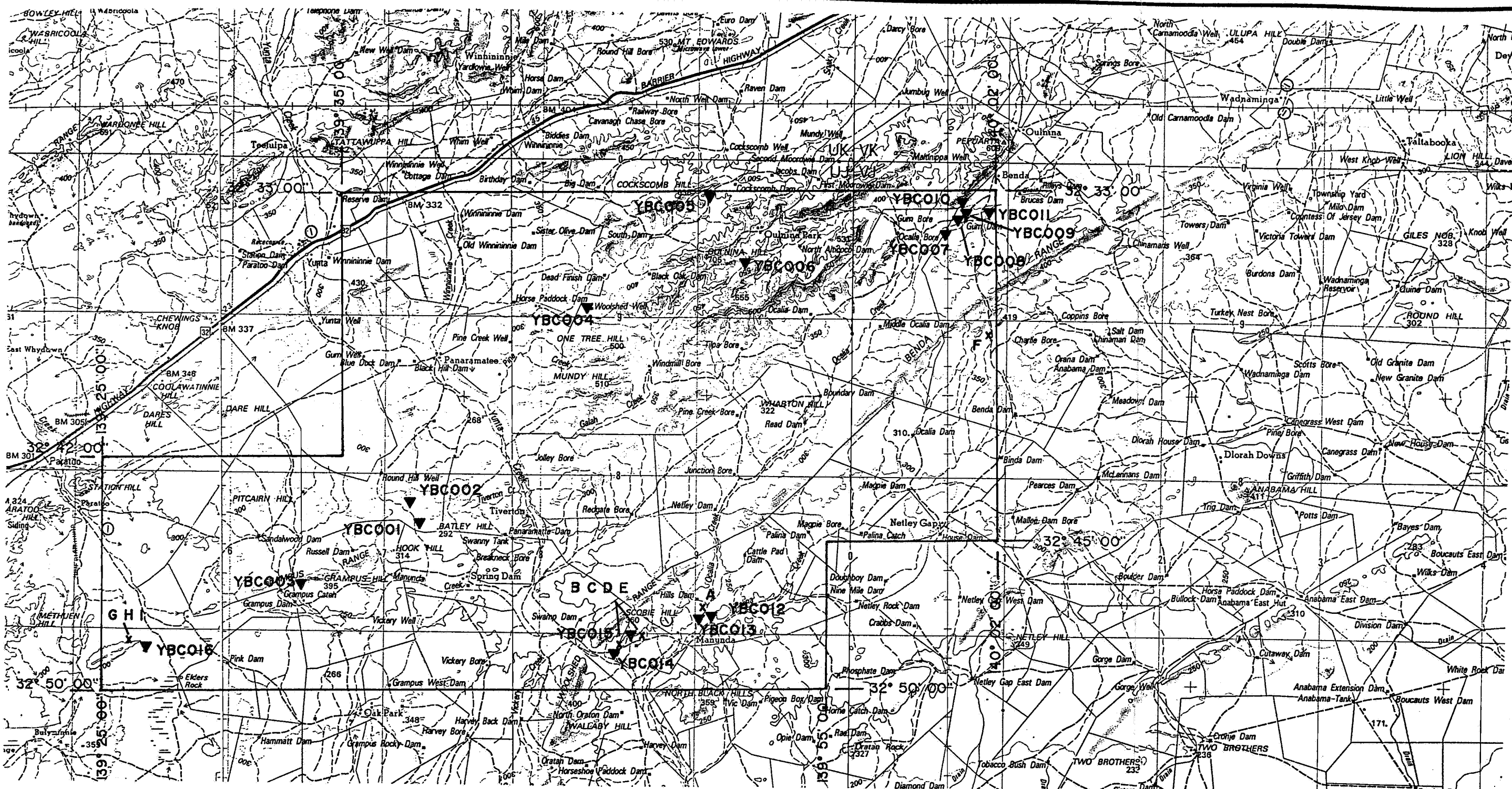
APPENDIX 1. BLEG stream sediment and rock chip assay results

1. INTRODUCTION

Exploration Licence 1396 is situated over the Benda Range area in north-eastern South Australia, approximately 61 kilometres from the township of Peterborough, adjacent to the Barrier Highway (Refer Figure 1). It was granted to The Shell Company of Australia Limited on April 29th, 1987, and covers an area of 1455 square kilometres.

Exploration in the region is targeted toward cross-cutting gold mineralized quartz reefs/veining primarily in the Tarcowie siltstone (Umberatana group), gold in known mineralized zones in the Saddleworth Formation (Burra Group), and circular features as outlined from Landsat interpretation. Although the area has received exhaustive exploration for base metals, no consistent or comprehensive search for gold has been undertaken.

Triarc Corporation Limited, formerly Tri-Arc Energy Limited, entered into a joint venture agreement with The Shell Company of Australia Limited whereby Triarc Corporation Limited can earn a 50% interest in the tenement over a two year period.



- ▼ Sample location
(BLEG Stream sediment)
- B x Rock chip location

TRIARC CORPORATION LIMITED

Benda Range EL 1396

SOUTH AUSTRALIA

SAMPLE LOCATION

PREPARED CKP	DRAWN CKP	SCALE 1:250,000
DATE 10-7-87	DRAWING No. TAE 0002	FIGURE No. 1

2.

2. WORK CARRIED OUT

Activities during the quarter consisted of preparation for a regional geochemical sampling programme and assessment of orientation sampling results. No field work was carried out.

2.1 Base Map

Department of Lands airphoto coverage of the region was flown in 1982 at a scale of 1:87,000. A small portion of EL 1396 is covered by a subsequent survey conducted in 1983 at a scale of 1:40,000. Colour air photo coverage, enlarged to a scale of 1:40,000, was obtained for the Licence area. Compilation of a 1:40,000 base sheet, from the airphoto collage and published mapping is in progress.

2.2 Orientation Sampling Results

Rock Chip samples and Bulk Leach Extractable Gold (BLEG) samples were submitted to Analabs, Perth, W.A., for assaying by method 328 for gold, silver and copper. Results are tabulated in Appendix 1.

2.2.1 Rock Chip Sampling

The rock chip samples failed to reproduce previously reported anomalous gold values, although they did reflect expected high copper contents. Highest gold values of 0.52 ppm and 0.26 ppm Au coincide with highest copper values of 2.75% and 3.75% Cu respectively. No correlation between gold and arsenic is evident from these assays.

2.2.2 Stream Sediment BLEG Samples

YBC001-006 tested arsenic anomalies outlined by an Australian Anglo American Searches Ltd. (Anglo) stream sediment sampling programme. The samples produced low silver and copper assays with gold values in the 0.17 ppb to 0.74 ppb Au range.

YBC007-011 were taken downstream from the Gum Dam area and were designed to test Anglo's anomalous rock chip samples from auriferous cross cutting quartz veins (Assays ranged from 0.20 ppm - 15.8 ppm Au). Copper and silver values are low in all of these samples with the exception of YBC008. This sample recorded the highest gold value (2.7 ppb) and second highest silver and copper values (26.7ppb Ag; 503 ppb Cu). The other four samples from the area, YBC007, 009, 010 and 011, gave values of 1.2, 1.0, 0.91 and 0.6 ppb Au and low copper and silver assays.

YBC012-015 tested sediments downstream from known copper mineralization. YBC012-013 were taken from the Gum Well (Manunda) workings with YBC012 reporting the highest silver and copper readings of 27.3 ppb Ag and 827 ppb Cu, but lower gold (0.35 ppb). This contrasted with the Gum Creek (Scobie Hill) samples, YBC014-015, which gave mixed, but generally low assays of all elements.

The BLEG method does not give a total assay of the Au, Ag or Cu contained in the sample. The Au and Ag values represent the fine free gold in the sample but the Cu values are less reliable. However, it is the relative values of each element in the samples that are significant and from these relative values the following conclusions have been reached:

1. Orientation data suggests gold values of ≥ 1 ppb indicate anomalous bedrock gold mineralization.
2. Arsenic appears to be unsuitable as a pathfinder element as resampling of previous arsenic stream sediment anomalies gave low BLEG gold assays. (There was no correlation between gold and arsenic in the rock chip samples.)
3. Similarly, copper and silver appear unsuitable as indicators of gold mineralisation. Although copper and silver correlate well with each other, neither correlates with gold.

3. WORK PROGRAMME

The stream sediment sampling programme is planned for early 1988. BLEG samples will be collected at a density of one sample per 5 square kilometres. Approximately 300 sample sites have been selected from the aerial photographs.

4. EXPENDITURE

BENDA RANGE EXPLORATION LICENCE 1396.

EXPENDITURE STATEMENT.

QUARTER ENDING 28TH OCTOBER, 1987.

	\$
Staff Salaries	1,520
Travelling Expenses	268
Assaying	721
Plans & Maps	1,037
Telephone	120
General	85
Legal Costs	1,948
Overhead Costs	570

	\$6,269
	=====

APPENDIX 1

- i Rock Chip Assay Results
- ii BLEG Stream Sediment Assay Results

Project Name BENDA RANGE
Sample type ROCK CHIP / GRAB

SAMPLE ASSAY SUMMARY

Assay Laboratory ANALABS, W.A.

Page 1 of 3

[illegible]

X = Below detection limit.

Project Name BENDA RANGE

SAMPLE ASSAY SUMMARY

Assay Laboratory ANALABS, W.A.

Sample type BLEG Stream Sed. Orientation

Page 2 of 3

SAMPLE No.	DESCRIPTION	Au	Ag	Cu							
YBC 001	Near qtz reef with specular hematite. Red & grey siltstone pebbles, honeycombed. As anomaly; near AAA0029	0.42	2.3	214							
YBC 002	Grey siltstones & red fine sand & silt, Honeycomb siltst. Tilite & Hematite pebbles in channel. As anomaly; near AAA 0026	0.21	5.5	282							
YBC 003	Buckshot gravel, qtz. Sst., cobbles & red-brown clayey material, As anomaly; near AAA 0266.	0.35	4.0	27							
YBC 004	Abundant pyrite pseudomorphs in siltstone, boulders of sst & siltst. Qtz/limonite, As anomaly; near AAA 0061, Red soil.	0.74	4.3	x							
YBC 005	Sst & siltst. strike oblique to channel. Fe veining & honeycomb pseudo. Siltst. Lt. brown soil, As anomaly Near AAA 0575.	0.40	11.0	255							
YBC 006	Flat dip 5° Massive Siltstone. Honeycomb pebbles minor qtz. As anomaly, Near AAA 0185.	0.17	7.1	321							
YBC 007	Tributary 2m deep. Lt. red soil. Siltstone minor qtz Near AAA 0814. Gum Dam area.	1.20	6.9	133							
YBC 008	Clayey red soil, small buckshot gravel. Minor qtz. Siltst. & Sst pebbles; no bedrock visible. Gum Dam.	2.70	26.7	503							

Project Name BENDA RANGE

SAMPLE ASSAY SUMMARY

Assay Laboratory ANALABS, W.A.

Sample type BLEG Stream Sed. Orientation

Page 3 of 3

SAMPLE No.	DESCRIPTION	Au	Ag	Cu							
YBC 009	Shallow trib. 0.5m deep. Calcrete bottom. Gravel & sand size. Lt.brown soil. Near AAA 0820, Gum Dam area.	1.00	4.7	34							
YBC 010	Behind Gum Dam, Near AAA 0804, Gum Dam area, Calcrete bedrock. Cementing Sst & Siltst. pebbles abundant buck shot.	0.91	14.7	147							
YBC 011	Fine gravels, sand siltclay. No bedrock visible Brown-red soil, Near AAA 0802 Gum Dam area.	0.60	12.2	179							
YBC 012	Gum Well Cu. workings. Abundant qtz & Fe fine gravel Downstream AAA 0923-0924. Near BAUS Rx chip.	0.25	27.3	827							
YBC 013	Red-brown soil. Downstream AAA 0925 No bedrock visible. Gum Well Cu workings.	1.20	25.5	494							
YBC 014	Cobbly gravel. Abundant qtz/limonite. Sst/Siltst. pebbles & gravel Grey- Buff-red/brown, Scobie Hill Near AAA 0942.	0.11	4.1	436							
YBC 015	Qtz gravels, Fe siltst/Sst. Near AAA 0941 Scobie Hill.	0.28	12.9	257							
YBC 016	Elder Rock area. Red soil. Qtz gravels, Near AAA BRR 001, BR 002.	0.25	6.0	348							
DETECTION LIMIT		0.5	0.1	20	ppb	x =	Below Detection Limit.				