

FINAL REPORT FOR
EXPLORATION LICENCE 6622

MS 244
April 1992

by

P.A. VERBEEK

of

AZTEC MINING COMPANY PTY LIMITED

for

NICRON RESOURCES LIMITED

Batchelor 1:100,000

Burnside 1:50,000 14/2-II

DARWIN, NT

BY: P.A. Verbeek
for
Aztec Mining Company Pty Ltd
Darwin, NT

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Year Two
April 1992

For:
Nicon Resources Limited
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EL 6622 "Ban Ban" |
|--------------|--|

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APPENDICES

Appendix I Analytical results for samples from EL6622 "Ban Ban"- Year 1

Appendix II Analytical results for samples from EL6622 "Ban Ban"- Year 2

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SUMMARY

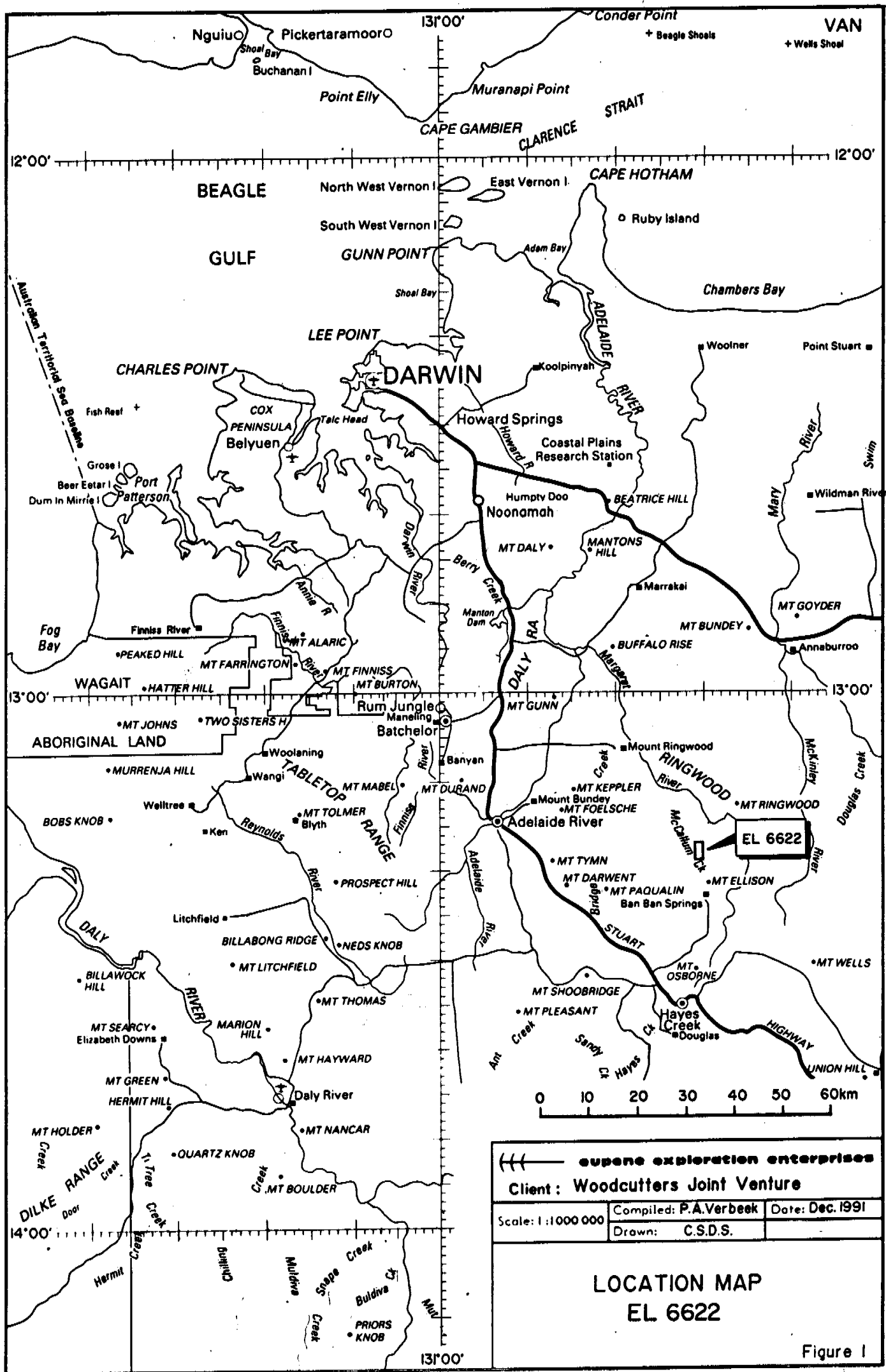
Exploration work carried out on EL6622 for Years 1 and 2 failed to locate any significant base metals or gold mineralisation. As a consequence this lease is recommended for relinquishment.

The work undertaken comprised BLEG stream sediment sampling and reconnaissance rock chipping followed up by detailed stream sediment sampling, rock chipping and soil sampling. Stream sediment sampling highlighted several gold and one weak base metal anomaly that could not be accounted for. Follow up investigations and sampling on these, in a subsequent field trip, indicated spurious gold analytical results for some of the earlier samples. Other gold anomalies were confirmed but did not lead to economic sources of mineralisation. The one weak base metal anomaly was attributed to elevated background values from quartz veined doleritic host rocks but once again did not indicate the presence of economic mineralisation.

1. INTRODUCTION

Exploration Licence 6622 is located approximately eight kilometres north of the Ban Ban Station which is approximately 140 km south-east of Darwin.(Figure 1). Access to the lease is best achieved by coming off a station track running between Ban Ban and Mt Ringwood Station where it crosses McCallum Creek. The country in general is gently undulating and can be traversed by 4WD vehicle during the dry season.

This report details the work undertaken during the entire period of tenure. This work was orientated towards testing the base metals potential of the area. In the course of this activity, however, any gold potential observed was also investigated.



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2. TENURE

Exploration Licence 6622 was granted to Nicron Resources Limited on 17 November 1989 for a four year term. The lease originally comprised 5 graticular blocks but was voluntarily reduced to 2 blocks on the 4th February 1991 and was the remainder relinquished 4 February 1992.

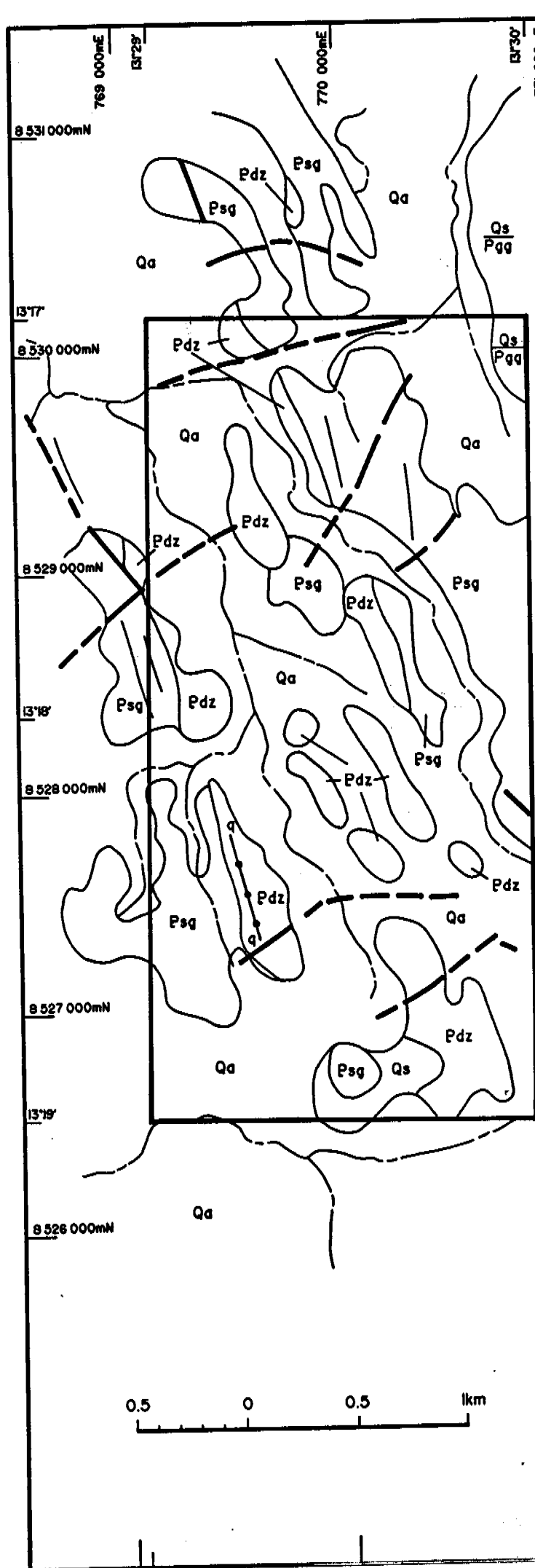
3. GEOLOGY

Exploration licence 6622 overlies the early Proterozoic Gerowie Tuff unit of the South Alligator Group (Figure 2). The Gerowie Tuff comprise pale grey green tuffaceous greywacke, cherty tuff and siliceous cherty siltstones. These lithologies outcrop as a series of low hills that have a relatively good drainage pattern developed but are separated by intervening areas of flat black soil plains.

The Gerowie Tuff is extensively intruded by doleritic rocks of the Zamu Dolerite unit. The dolerites are considered to be conformable to stratigraphy although, within EL 6622, poor overall outcrop prevent positive conformation of this. The dolerites occasionally form very hard resistant low ridges of outcrop but pinch out quickly and disappear under block soil cover.

In a regional sense the Gerowie Tuff and Zamu dolerites occur as a north-easterly trending belt between the Burnside Granite to the south and the Margaret Granite to the east.

Quartz reefs are noted to occur within and on the contacts of the Zamu Dolerite and Gerowie Tuff throughout EL 6622. One large quartz reef is shown in the geology map trending in a north-westerly direction and is confirmed on the ground to extend over a considerable strike to form an interpreted fault structure. Other quartz reefs occur as isolated outcrop and the controls for these are not understood.



LEGEND

- Geological Boundary
- Watercourse
- Fault
- Silt, clay, sand, black soil: alluvium
- Alluvial sand, outwash and colluvial deposits.
- ZAMU DOLOMITE
Basic intrusives; dolerite
- GEROWIE TUFF
Siliceous tuffaceous shale and siltstone.
- MARGARET GRANITE
Course Porphyritic adamellite



Aztec Mining Company Ltd

Scale: 1: 25 000

Compiled: P.A. Verbeek

Date: Dec. 1991

Drawn: C.S.D.S.

EL 6622 BAN BAN
REGIONAL GEOLOGY

Figure 2

4. PREVIOUS EXPLORATION

The area formed part of EL 1195 held by Geopeko in 1976. Exploration conducted consisted of airborne radiometrics and magnetics, transient electromagnetics (TEM), petrographic and geochemical surveys.

In 1983 the area was granted to W.R. Grace as part of El 3643, and initial exploration carried out by Western Mining Corporation consisted of selective rock chip sampling, regional stream sediment sampling, aeromagnetics and soil sampling and geological mapping. An area of geochemically anomalous soils was subsequently drilled by reverse circulation drilling. Of the 20 holes drilled only one returned an intersection of 1M @ 0.26 g/t in gabbro. Some sulphidic Koolpin Formation was also recorded as being encountered.

5. EXPLORATION WORK

5.1 Year One

Although it was recognised that the area had been competently explored by WMC it was felt a Bulk Leach Extractable survey may further expand the gold mineralisation potential of the area. Three samples of the BLEG survey were considered anomalous. These were No.22232 (4.51ppb.), sample No.22237 (3.30ppb) and sample No.22258 (2.50ppb). Follow up of the anomalies showed that samples 22232 and 22237 drained the area previously drilled by Western Mining, and sample 22258 was traced to a phyllite hosted, sheared quartz, hematite ridge. Rock chip sampling of the ridge returned low order gold results of 0.355 ppm Au and 0.153 ppm Au. Highly anomalous arsenic of up to 2500 ppm were also analysed in the rock chip sampling, together with highly anomalous lead of up to 3900 ppm, moderately anomalous copper and zinc were also analysed from the rock chip sampling.

5.2 Year Two

Exploration work in Year 2 was undertaken over two trips of six days duration in total. The first field trip involved detailed stream sediment sampling and traversing to investigate the geological setting. A total of 42 stream sediment samples were collected in the initial work. (BB100 to BB142 Diagram 1). The stream sediment samples were sieved to -40# and analysed for Cu, Pb, Zn by AAS technique, As by XRF and Au by fire assay.

Anomalous gold values were obtained for this work from samples BB 102, BB 103, BB 107, BB 109, BB 110, BB 111, BB 112, BB 115 and BB 116 (Diagram 1). Weakly evaluated base metal values were also obtained from samples BB 125 to BB 129.

The following tabulation presents the final results received after additional sampling and geological investigations were carried out.

A complete listing of analytical results is presented in Appendix 1.

A. Anomalous samples BB 102 and BB 103. Both these samples were anomalous

in gold (0.70 and 0.27 ppm respectively). These samples were collected from the one active stream which in this area passes through flat black soil plains.

Resamples of the anomalous sites failed to substantiate the original findings: samples 43674 and 43673 both returning <0.02 ppm Au.

- B. Anomalous sample BB 107.** The anomalous gold stream sample (0.08 ppm) on this site is almost certainly derived from a weakly gossanous quartz reef extending along strike from an earlier Western Mining Corporation gold prospect. Eight rock- chip samples were collected from this quartz reef and four samples returned values between 0.11 and 0.44 ppm Au.
- C. Anomalous sample BB 109, BB 110 and BB 120.** These anomalous gold stream sediment samples, returning 0.85, 0.17 and 0.17 ppm respectively are sourced from the gold prospect drilled by Western Mining Corporation. No further investigation was therefore carried out.
- D. Anomalous sample BB 115.** Originally a single anomalous gold stream sediment (0.36 ppm Au) which however was not duplicated in resampling; <0.02 ppm being achieved from resample number 43685. One anomalous rock-chip sample from weakly gossaneous quartz float (0.14 ppm Au from sample 43651) was obtained from within the small catchment area of this stream but no signs of extensive mineralisation or more quartz veining was observed.
- E. Anomalous sample BB111 and BB 112.** These samples drain a small catchment area of outcropping Gerowie Tuff with quartz veining. The original stream sediment samples returned 0.03 and 0.05 ppm gold but were not repeated by resample results, both being <0.02 ppm. Nine rock-chips from weakly gossanous quartz veins within the catchment failed to return significant results. (Samples 43658 to 43664.)
- F. Anomalous samples BB 125 to BB 129.** All these stream sediment samples are derived from one catchment area and are weakly elevated in Cu, Pb, and Zn values; the best values overall being 115 ppm Cu, 51 ppm, Pb and 80 ppm Zn.

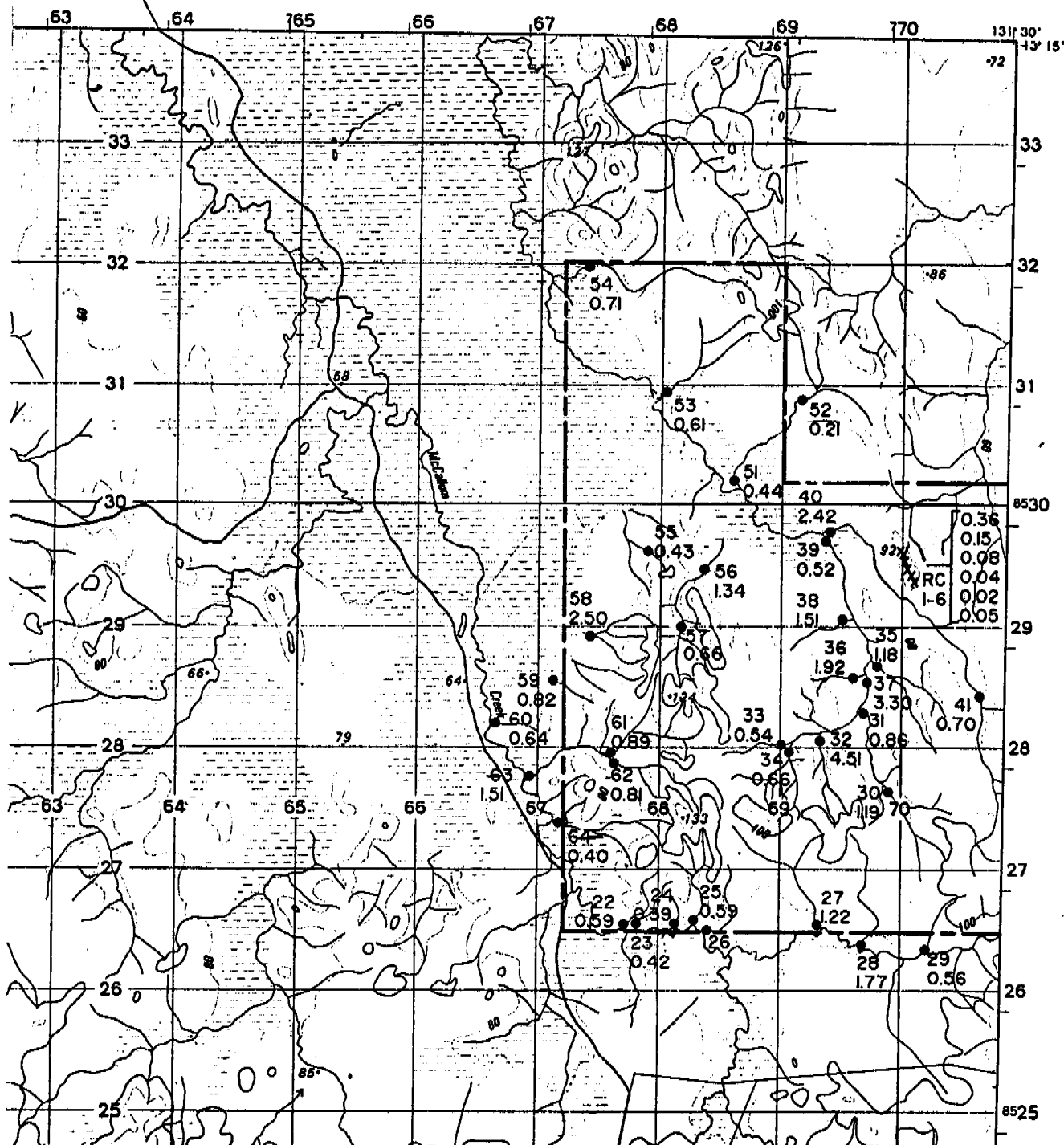
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The catchment area completely drains an area of doleritic rock and although not extensively exposed no evidence of significant mineralisation was observed. One soil sample traverse was placed across the upper portion of the catchment to test for buried sources of mineralisation but no anomalous results were obtained. The soil samples (samples 43687 to 43701) were collected at 25 m intervals and after sieving to -40# were analyzed for Cu, Pb, Zn, As and Au. Weakly elevated copper results (≤ 160 ppm) were obtained but these are considered to reflect slightly higher background levels present in dolerite rather than any significant mineralisation sources.

MOUNT RINGWOOD 18 km



LEGEND

- BLEG Stream Sediment sample site and results in ppb.
- x Rock Chip sample location and results in ppm.

TN

0 1 2km

WOODCUTTERS JOINT VENTURE

Scale: 1: 50 000 Compiled: N. Scriven Date: Dec. 1990
Drawn: C.S.D.S.

EL 6622 ROCK CHIP & BLEG SAMPLE LOCATION AND RESULTS

6. TOTAL EXPENDITURE

Overall expenditure on the licence is as follows:

6.1 Year One

HELICOPTER HIRE (Includes fuel, mobilisation)	\$4200
GEOLOGISTS	\$2000
FIELD ASSISTANT	\$800
VEHICLE	\$800
SUSTENANCE/CONSUMERABLE	\$750
ASSAY	\$1200
REPORTING	\$550
ADMINISTRATION @ 12%	\$1236
<hr/>	
TOTAL	\$11536

6.2 Year Two

GEOLOGICAL SUPERVISION, FIELD ASSISTANTS	
AND REPORTING	\$10541
ASSAYS	\$1554
TENEMENT MANAGEMENT	\$97
VEHICLE, CONSUMABLES	\$1275
DRAFTING AND SERVICES	\$370
<hr/>	
TOTAL	\$13837

7. CONCLUSION AND RECOMMENDATIONS

- A. The primary objective of assessing the base metal potential within EL 6622 has been completed and unfortunately no significant mineralisation is indicated.
- B. The various sources of gold anomalism in stream sediments and rock-chips is accounted for and does not indicate economic sources of mineralisation. Western Mining Corporation tested the single best anomaly, derived from quartz reefs in dolerite, and failed to locate economic mineralisation.
- C. No further opportunity for economic mineralisation is recognized and the lease should therefore be relinquished.

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APPENDIX

Assay Results



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Final

ANALYTICAL REPORT

Job: ODN1673A
O/N: 25175

SAMPLE	Au
22222	0.59
22223	0.42
22224	0.39
22225	0.59
22226	0.74
22227	1.22
22228	1.77
22229	0.56
22230	1.19
22231	0.86
22232	4.51
22233	0.54
22234	0.66
22235	1.18
22236	1.92
22237	3.30
22238	1.51
22239	0.52
22240	2.42
22241	0.70
22251	0.44
22252	0.21
22253	0.61
22254	0.71
22255	0.43
UNITS	ppb
SCHEME	BLEG2

**CLASSIC LABORATORIES LTD**

Final

ANALYTICAL REPORTJob: ODN1673A
O/N: 25175

SAMPLE	Au
22256	1.34
22257	0.66
22258	2.50
22259	0.52
22260	0.64
22261	0.89
22262	0.81
22263	1.51
22264	0.40

UNITS
SCHEMEppb
BLEG2

ANALABS

ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

330.0.21.04745

025352

1 OF 1

TUBE
No.

SAMPLE
No.

AGE

AGE

AL

ALY

AL(S)

ALY

ALY

ALY

ALY

3

RC 1

100

0.355

-

-

4

RC 2

200

0.153

-

-

5

RC 3

500

0.083

-

-

6

RC 4

100

0.042

-

0.048

7

RC 5

300

0.023

-

-

8

RC 6

400

0.048

-

-

9

RC 7

2300

0.085

-

-

10

11

12

13

14

15

16

17

18

19

20

21

22

DETECTION

100

1

0.008

0.008

0.008

UNITS

PPM

PPM

PPM

PPM

PPM

METHOD

101

114

309

309

309

its in ppm unless otherwise specified
ment present but concentration too low to measure
ment concentration is below detection limit
ement not determined

AUTHORISED
OFFICER

[Signature]

ANALABS

A Division of Incoape Inspection and Testing Services Australia Pty. Ltd.

ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER 115000.21.04792

REPORT DATE

CLIENT ORDER No.

PAGE

VERBAL

1 OF 1

TUBE No.	SAMPLE No.	Cu	Zn	Pb						
1	RC 1	22	19	367						
2	RC 2	32	24	695						
3	RC 3	54	26	224						
4	RC 4	47	18	263						
5	RC 5	32	26	369						
6	RC 6	312	117	3900						
7	RC 7	239	103	416						
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23	DETECTION	5	5	5						
24	UNITS	PPM	PPM	PPM						
25	METHOD	GA101	GA101	GA101						

Results in ppm, unless otherwise specified.
T = element present; but concentration too low to measure.
X = element concentration is below detection limit.
- = element not determined.

AUTHORIZED OFFICER


CLASSIC LABORATORIES LTD

 Job: 1DN1504
 O/N: D/S 11742

Final

ANALYTICAL REPORT

SAMPLE	Cu	Pb	Zn	As	Au	AuDp1
BB100 -40mesh	30	9	5	42	0.001	--
BB101 -40mesh	25	41	18	24	0.002	--
BB102 -40mesh	48	26	18	46	0.070	0.10
BB103 -40mesh	53	30	18	52	0.027	0.050
BB104 -40mesh	38	17	8	52	0.003	--
BB105 -40mesh	33	24	69	40	0.002	--
BB106 -40mesh	43	23	41	30	0.004	--
BB107 -40mesh	33	16	7	26	0.008	0.011
BB108 -40mesh	39	13	10	42	0.002	--
BB109 -40mesh	37	15	7	66	0.085	0.070
BB110 -40mesh	57	26	32	48	0.017	0.020
BB111 -40mesh	39	13	13	68	0.030	0.070
BB112 -40mesh	20	13	5	44	0.005	--
BB113 -40mesh	36	6	2	48	<0.001	--
BB114 -40mesh	36	11	5	98	0.002	--
BB115 -40mesh	38	6	5	16	0.36	0.31
BB116 -40mesh	48	10	3	48	<0.001	--
BB117 -40mesh	17	14	8	4	<0.001	--
BB118 -40mesh	36	16	8	130	<0.001	--
BB119 -40mesh	11	8	<1	13	<0.001	--
BB120 -40mesh	62	11	2	22	0.017	0.019
BB121 -40mesh	60	6	8	18	0.001	--
BB122 -40mesh	70	7	4	64	0.064	0.10
BB123 -40mesh	17	5	2	3	0.002	--
BB124 -40mesh	69	63	48	54	0.004	--
BB125 -40mesh	115	27	49	30	<0.001	--
BB126 -40mesh	62	20	46	84	0.001	--
BB127 -40mesh	90	51	80	105	<0.001	--
BB128 -40mesh	79	23	49	80	<0.001	--
BB129 -40mesh	56	22	33	60	<0.001	--
BB130 -40mesh	31	47	24	18	<0.001	--
BB131 -40mesh	33	61	52	17	<0.001	--
BB132 -40mesh	18	14	8	12	0.002	--
BB133 -40mesh	27	25	10	11	0.001	--
BB134 -40mesh	5	7	3	4	<0.001	--
BB135 -40mesh	8	7	7	2	0.003	--
BB136 -40mesh	9	15	3	12	<0.001	--
BB137 -40mesh	37	19	11	12	<0.001	<0.001
BB138 -40mesh	27	10	8	16	<0.001	0.001
BB139 -40mesh	7	7	3	<1	0.001	--
BB140 -40mesh	6	13	5	<1	0.001	--
BB141 -40mesh	5	7	1	1	<0.001	--
BB142 -40mesh	3	9	2	4	<0.001	--

UNITS	ppm	ppm	ppm	ppm	ppm	ppm
DET.LIM	1	2	1	1	0.001	0.001
SCHEME	AAS2M	AAS2M	AAS2M	XRF1L	FA3	FA3



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ANALYTICAL REPORT

SAMPLE	Cu	Pb	Zn	As	Au	AuDupl
43683 -40mesh	30	11	16	48	<0.02	--
43684 -40mesh	16	10	12	48	<0.02	--
43685 -40mesh	24	12	14	24	<0.02	--
43686 -40mesh	56	9	12	48	<0.02	--
43673 -40mesh	63	28	26	40	<0.02	--
43674 -40mesh	47	23	24	32	<0.02	--
43687 -40mesh	110	10	12	28	<0.02	--
43688 -40mesh	99	8	10	44	<0.02	<0.02
43689 -40mesh	61	5	12	12	<0.02	--
43690 -40mesh	76	<2	14	17	<0.02	--
43691 -40mesh	74	<2	18	9	<0.02	--
43692 -40mesh	78	11	27	36	<0.02	--
43693 -40mesh	100	19	20	44	<0.02	--
43694 -40mesh	140	11	33	38	<0.02	<0.02
43695 -40mesh	160	24	50	32	<0.02	--
43696 -40mesh	77	18	30	56	<0.02	--
43697 -40mesh	68	25	45	72	<0.02	--
43698 -40mesh	66	14	25	64	<0.02	--
43699 -40mesh	64	15	21	46	<0.02	--
43700 -40mesh	95	11	23	3	<0.02	--
43701 -40mesh	66	7	27	24	<0.02	--

UNITS	ppm	ppm	ppm	ppm	ppm	ppm
DET.LIM	1	2	1	1	0.02	0.02
SCHEME	AAS2M	AAS2M	AAS2M	XRF1L	AAS7	AAS7



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CLASSIC LABORATORIES LTD

 Job: 1DN1775A
 O/N: 033202 D/S 11772

ANALYTICAL REPORT

SAMPLE	Cu	Pb	Zn	As	Ag	Bi
43651	60	<50	20	<500	<2	<50
43652	80	<50	<20	<500	<2	<50
43653	130	<50	<20	<500	<2	<50
43654	580	<50	<20	<500	<2	<50
43655	380	<50	<20	<500	<2	<50
43656	60	<50	20	<500	<2	<50
43657	3110	<50	<20	<500	<2	<50
43658	70	<50	<20	<500	<2	<50
43659	60	<50	<20	<500	<2	<50
43660	90	<50	<20	<500	<2	<50
43661	70	<50	<20	3200	<2	<50
43662	90	<50	<20	990	<2	<50
43663	40	<50	<20	<500	<2	<50
43664	60	<50	<20	<500	<2	<50
43665	70	<50	<20	<500	<2	<50
43666	110	<50	<20	<500	<2	<50
43667	130	<50	<20	<500	<2	<50
43668	210	<50	<20	<500	<2	<50
43669	60	<50	<20	<500	<2	<50
43670	80	<50	<20	<500	<2	<50
43671	90	<50	<20	<500	<2	<50
43672	210	<50	470	<500	<2	<50
43673	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
43675	90	<50	<20	<500	<2	<50
43676	330	<50	<20	<500	<2	980
43677	450	<50	20	<500	<2	2340
43678	470	<50	20	<500	<2	200
43679	700	<50	<20	<500	<2	480

 UNITS
 DET.LIM
 SCHEME

 ppm
 20
 AAS2S

 ppm
 50
 AAS2S

 ppm
 20
 AAS2S

 ppm
 500
 AAS2S

 ppm
 2
 AAS2S

 ppm
 50
 AAS2S



CLASSIC LABORATORIES LTD

Job: 1DN1775A
O/N: 033202 D/S 11772

ANALYTICAL REPORT

SAMPLE	Au	AuDup1	Sn	W
43651	0.14	0.10	4	<10
43652	<0.02	--	<4	<10
43653	0.03	--	<4	<10
43654	<0.02	--	4	10
43655	0.07	--	<4	<10
43656	<0.02	--	<4	<10
43657	0.04	--	<4	<10
43658	<0.02	--	<4	<10
43659	<0.02	<0.02	4	<10
43660	<0.02	--	4	<10
43661	0.09	--	4	<10
43662	0.02	--	6	<10
43663	0.04	--	<4	<10
43664	<0.02	--	<4	<10
43665	0.09	--	<4	<10
43666	0.44	--	<4	10
43667	0.11	--	<4	<10
43668	0.11	--	<4	<10
43669	0.03	--	<4	<10
43670	0.04	--	4	<10
43671	<0.02	--	<4	<10
43672	0.23	--	<4	<10
43673	L.N.R.	L.N.R.	L.N.R.	L.N.R.
43675	0.03	--	<4	<10
43676	<0.02	--	<4	<10
43677	0.02	<0.02	<4	20
43678	<0.02	--	<4	<10
43679	<0.02	--	<4	15

UNITS	ppm	ppm	ppm	ppm
DET.LIM	0.02	0.02	4	10
SCHEME	AAS7	AAS7	XRF1	XRF1

