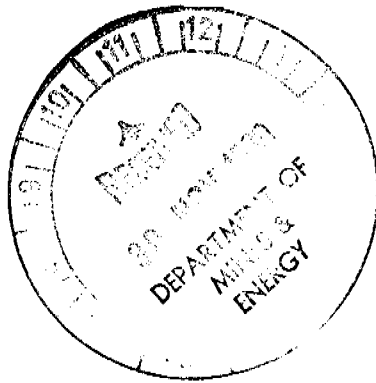


# OPEN FILE



## RELINQUISHMENT REPORT

FOR EL 5456

MOUNT RINGWOOD AREA

By

D. N. NIHILL BSc(Hons) M.AusIMM

Of

EUPENE EXPLORATION ENTERPRISES PTY LTD

For

WHITE GOLD MINES PTY LTD & ZAPOPAN NL

CR90/685

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## 1. SUMMARY

EL 5456 is underlain by greywacke and mudstone of the Early Proterozoic Burrell Creek Formation. Outcrop is confined to two areas, one in the western half of the tenement, the other in the eastern half. The country between is covered by soils of the Margaret River floodplain.

In the eastern portion of EL 5456, the outcrop area was tested by soil geochemistry in 1988 and the floodplain area was investigated by RAB drilling in 1989.

Only low order anomalous gold or arsenic zones were found. The eastern block of EL 5456 was relinquished on 4/10/89. No work was carried out on the remaining block in 1990.

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Darwin, NT

**RELINQUISHMENT REPORT  
FOR EL 5456**

For:  
White Gold Mines Pty Ltd  
& Zapopan NL  
30 November, 1990  
Page: 4

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## **2. CONCLUSION**

A reconnaissance programme of soil geochemistry and RAB drilling over EL 5456 has detected only low order, low priority As and Au anomalies. The licence has been surrendered.

### 3. INTRODUCTION

In October, 1990, Eupene Exploration Enterprises Pty Ltd was approached by White Gold Mines Pty Ltd to compile a relinquishment report for EL 5456. This report describes exploration undertaken by White Gold Mines Pty Ltd as managers of a joint venture between themselves and Zapopan NL in 1988 and 1989. No work was done in 1990.

The tenement consists of one block covering 330 hectares. It is located on Mount Ringwood Station approximately 130 kilometres by road southeast of Darwin (Figure 1.). On the second anniversary of the licence, 4 October, 1989, a second eastern block was relinquished.

EL 5456 is currently registered in the name of Zapopan NL. However, in terms of an Agreement dated 11 April, 1988, White Mining Services Ltd are responsible for exploration and have earned at 50% holding. Surrender documents for the above licence were lodged at the Department of Mines and Energy on 24 July, 1990.

#### 4. EXPLORATION SUMMARY

In the first year of tenure, in 1988, exploration consisted of reconnaissance soil geochemistry over the two areas of outcrop within the licence area. An orientation survey on an adjacent tenement showed that optimum sampling over areas of outcrop and eluvial gravel was 1.5 kilograms of unsieved soil, excluding the coarse +10 fraction. Although the -80 mesh (180 microns) fraction was found to be the best for gold, it was very poor for arsenic and so was not used (Stidolph, 1988).

Using a hand held power auger, a total of 93 samples were collected at intervals of 25m along each east-west line. Samples were taken from an average depth of 0.3 metres and were assayed for low level Au and As; fire assays and XRF respectively at Classic Laboratories, Berrimah, NT. Assay results are in Appendix I and locations shown on Figure 2. A peak of 120 ppm As and 24 ppb Au occurs in the centre of line P (Figure 2.)

During the second year, in 1989, exploration was concentrated on testing soil covered areas of the Margaret River floodplain within the eastern block. Results were not encouraging, so the eastern block was relinquished on 4/10/89 (Stidolph, 1989).

Three lines were flagged from west to east across the floodplain, approximately at right angles to the regional structural trend. The lines are approximately 800 metres apart.

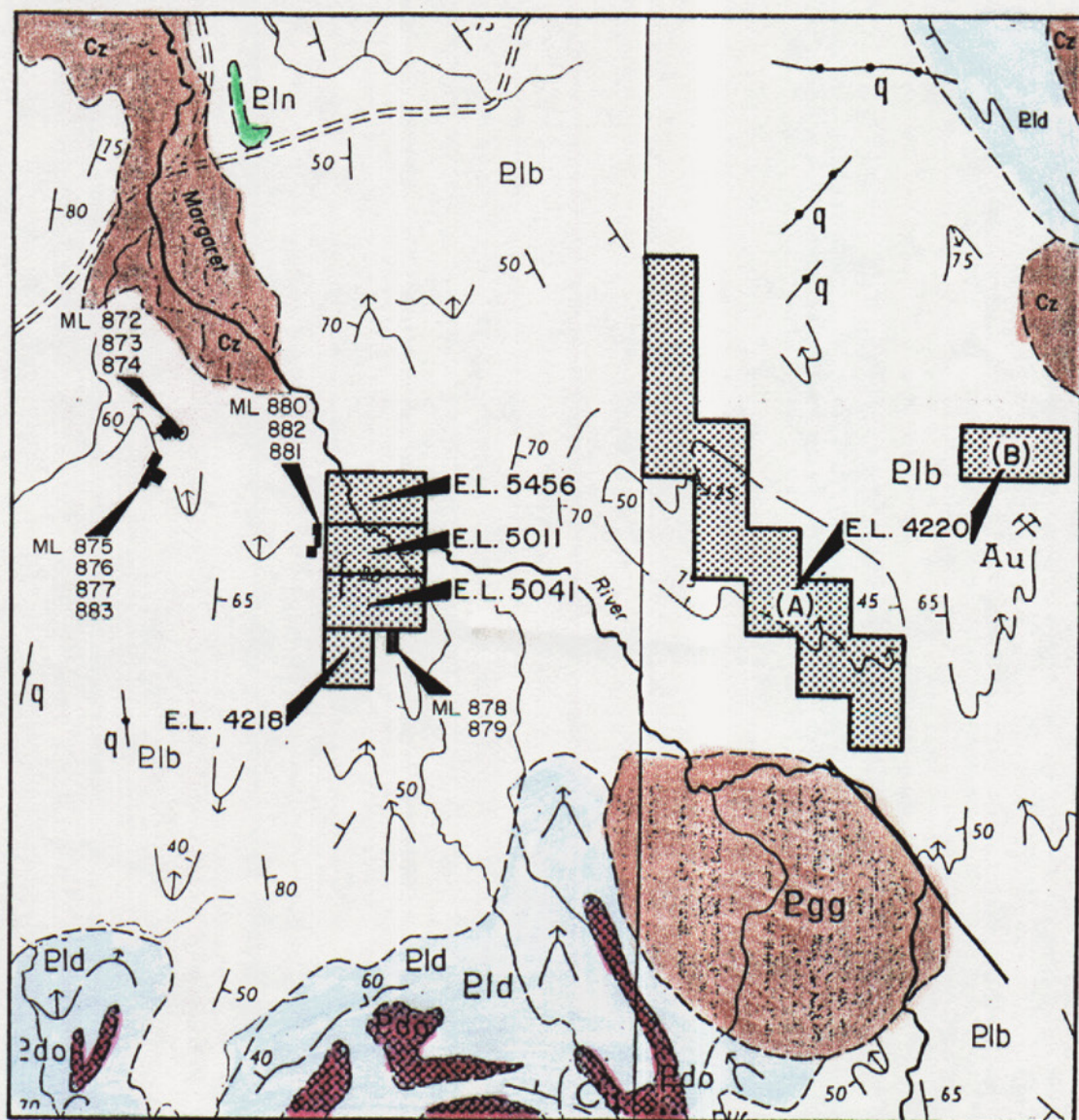
Gaden Drilling Pty Ltd, Batchelor, NT, were contracted to drill a series of rotary air blast (RAB) holes along each grid line using an Investigator Mark V drill mounted on a 4 x 4 Bedford with a Sullair 450 cfm/175 psi compressor.

A total of 94 holes were drilled at 25 metre intervals along each line: 27 holes on line 16200 N, 24 holes on line 15400 N and 42 holes on line 14500 N. Each hole was drilled through surficial soil to bedrock. Bedrock was sampled and tested for low level gold and arsenic.

Sample were submitted to Classic Laboratories, Berrimah, for analysis of low level gold by furnace AAS methods and arsenic by XRF methods. Assay results are tabled in Appendix II.

MINING DISTRICT : DARWIN - KATHERINE  
 ATPA, ELA : —  
 ATP, EL : EL 4218, 4220A, 4220B, 5011, 5041, 5456  
 MLA : —  
 ML : 872-883  
 MAP REFERENCE : SD 52-8 PINE CREEK

<b>Elb</b>	Greywacke, siltstone, greywacke siltstone, quartz greywacke, minor calcareous greywacke and conglomerate
<b>Cz</b>	Alluvium, soil, swamp deposits, sand and ferruginous gravel
<b>Egg</b>	Porphyritic adamellite
<b>Edo</b>	Dolerite dykes and sills, epidiorite, amphibolite, gabbro
<b>Ein</b>	Greywacke, quartz greywacke, siltstone, pebble conglomerate, minor greywacke conglomerate, arkose
<b>Eld</b>	Carbonaceous dolomitic shale, pyritic carbonaceous siltstone with chert lenses, bands and nodules, chert, quartz siltstone, dolomite



WHITE INDUSTRIES LIMITED

MOUNT RINGWOOD PROJECT

GEOLOGY - KATHERINE - DARWIN REGION

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date: NOV. '87

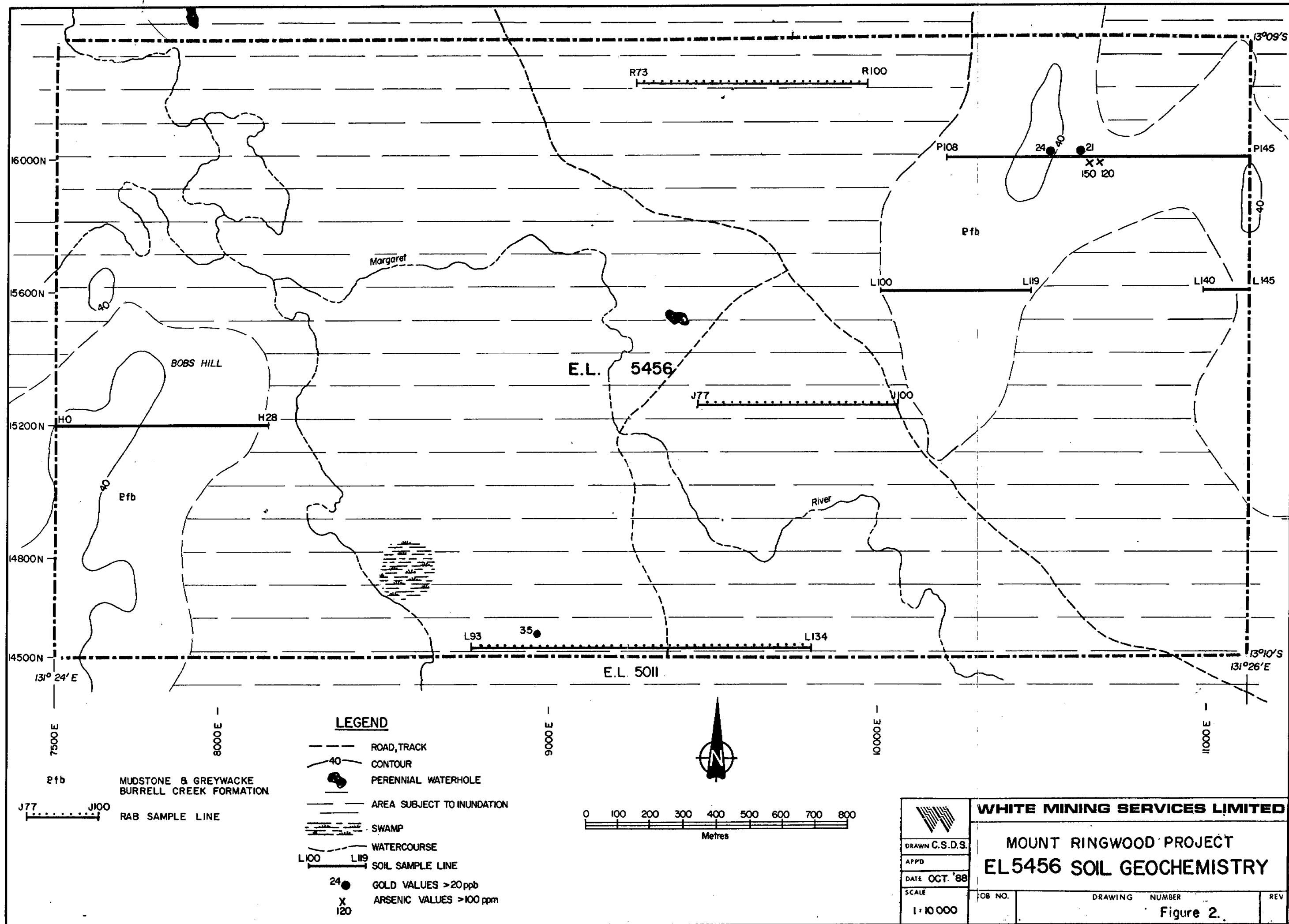
drawn: R.L.H.

checked: —

FIGURE

1







## 5. RESULTS

On line 16200 N (samples R73 to R100), the average hole depth was 4.4 metres. Maximum gold value was 18 ppb in greywacke, with most samples assaying below 5 ppb. All arsenic values were below 20 ppm. Bedrock consisted of barren unmineralised greywacke and mudstone of the Early Proterozoic Burrell Creek Formation. Only two holes contained quartz (see Appendix II).

On line 15400 N (samples J77 to J100), average depth to bedrock was 7.9 metres, ranging from 9 metres in the west to 6 metres in the east. Most holes intersected unmineralised greywacke or mudstone, several with quartz. Some holes stopped in quartz-rich alluvial or eluvial gravel. No gold assays exceeded 8 ppb and no arsenic values exceeded 40 ppm.

On line 14500 N immediately south of EL 5456 boundary (samples L93 to L134), soil cover was 9 metres thick near the Margaret River, becoming shallower to the east. Average depth to bedrock was 4.4 metres. The highest gold value of 35 ppb came from quartz and laterite gravel at L101; the remainder were nearly all below 10 ppb. Arsenic values showed a slight increase to 50 - 90 ppm on the eastern half of the sample line. Most holes ended in unmineralised mudstone and some greywacke; however near the Margaret River, most holes stopped in alluvial gravel composed of rounded quartz and ferricrete.

## 6. EXPENDITURE

Unaudited expenditure on EL 5011 in 1988 as provided by White Gold Mines Pty Ltd is as follows:-

Salaries	\$12,329.60
Geology	\$3,586.00
Air Photos & Interpretation	\$200.00
Legal Costs	\$1,350.00
Tenement Administration	\$60.00
Travel and Accommodation	\$750.00
Office/Camp Costs	\$970.00
	-----
TOTAL:	\$19,245.60
	=====

Unaudited expenditure on EL 5011 in 1989 as provided by White Gold Mines Pty Ltd is as follows:-

Salaries:	
Managerial	\$600.00
Geologist	\$1,200.00
Field Assistants	\$1,500.00
Vehicle Expenses	\$420.00
Camp Costs	\$165.00
Drilling	\$4,940.00
Assays	\$1,309.00
Materials	\$94.00
Drafting	\$106.00
Office Costs, Overheads, Typing	\$1,005.00
Zapopan Staff Costs (lease officer, senior geologist, accounts)	\$1,300.00
	-----
TOTAL	\$12,639.00
	=====

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For:  
White Gold Mines Pty Ltd  
& Zapopan NL  
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## **7. REFERENCES**

RUSSELL, R., 1988. Air Photo Interpretation Report.

STIDOLPH, P., 1988. Exploration Report for EL 5011, EL 5456, MCN 2205 - MCN 2240. *Unpublished Company Report for Mount Ringwood Joint Venture.*

STIDOLPH, P., 1989. Annual Report for Period 5/10/88 - 4/10/89 for EL 5456. *Unpublished Company Report for Mount Ringwood Joint Venture.*

*APPENDIX I*

*ASSAYS RESULTS*



# CLASSIC COMLABS LTD

Analytical Laboratories (INC. IN WA.)

Marjorie Street, Berrimah, Northern Territory 0828  
P.O. Box 58, Berrimah, Northern Territory 0828  
Telephone: (089) 32 2669; Fax: (089) 32 3531

15th November 1988

Our Ref : 8DN0641

REPORT NUMBER 8DN0641

CLIENT : White Industries (N.T.)

CLIENT REFERENCE : Order Number Q006563

REPORT COMPRISING :  
Cover Page  
Pages G1 - G3  
Pages 1 - 4

DATE RECEIVED : 28th October 1988

Alan Ciplys  
Manager  
CLASSIC COMLABS LTD. (N.T.)

This report relates specifically to the sample(s) tested  
in so far as that the sample(s) is truly representative  
of the sample source as supplied.

Analysis code AAS10

Report 8DN0641

Page G1

Order No. Q 006563

Results in ppm

Sample	Au
EL5456 H 0	0.001
EL5456 H 1	<0.001
EL5456 H 2	<0.001
EL5456 H 3	<0.001
EL5456 H 4	<0.001
EL5456 H 5	<0.001
EL5456 H 6	<0.001
EL5456 H 7	<0.001
EL5456 H 8	<0.001
EL5456 H 9	0.001
EL5456 H 10	0.001
EL5456 H 11	0.001
EL5456 H 12	0.001
EL5456 H 13	0.002
EL5456 H 14	<0.001
EL5456 H 15	<0.001
EL5456 H 16	<0.001
EL5456 H 17	<0.001
EL5456 H 18	0.001
EL5456 H 19	0.003
EL5456 H 20	0.001
EL5456 H 21	<0.001
EL5456 H 22	0.001
EL5456 H 23	<0.001
EL5456 H 24	<0.001
EL5456 H 25	0.002
EL5456 H 26	0.002
EL5456 H 27	0.002
EL5456 H 28	0.003
EL5456 L 100	0.002
EL5456 L 101	0.001
EL5456 L 102	<0.001
EL5456 L 103	<0.001
EL5456 L 104	<0.001
EL5456 L 105	<0.001
EL5456 L 106	<0.001
EL5456 L 107	0.001
EL5456 L 108	<0.001
EL5456 L 109	0.002
EL5456 L 110	0.001
Detn limit	(0.001)



Analysis code AAS10

Report 8DN0641

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Order No. Q 006563

Results in ppm

Sample	Au
EL5456 L 111	0.001
EL5456 L 112	0.001
EL5456 L 113	0.004
EL5456 L 114	0.002
EL5456 L 115	0.002
EL5456 L 116	<0.001
EL5456 L 117	0.003
EL5456 L 118	0.001
EL5456 L 119	<0.001
EL5456 L 140	0.002
EL5456 L 141	<0.001
EL5456 L 142	0.003
EL5456 L 143	0.001
EL5456 L 144	0.001
EL5456 L 145	<0.001
EL5456 P 108	0.002
EL5456 P 109	0.001
EL5456 P 110	0.001
EL5456 P 111	<0.001
EL5456 P 112	0.001
EL5456 P 113	0.001
EL5456 P 114	0.002
EL5456 P 115	0.003
EL5456 P 116	0.003
EL5456 P 117	<0.001
EL5456 P 118	0.001
EL5456 P 119	0.004
EL5456 P 120	0.002
EL5456 P 121	0.024
EL5456 P 122	0.002
EL5456 P 123	0.002
EL5456 P 124	0.021
EL5456 P 125	0.002
EL5456 P 126	0.002
EL5456 P 127	0.005
EL5456 P 128	<0.001
EL5456 P 129	<0.001
EL5456 P 130	0.001
EL5456 P 131	0.002
EL5456 P 132	<0.001
Detn limit	(0.001)





Analysis code AAS10

Report 8DN0641

Page G3

Order No. Q 006563

Results in ppm

Sample	Au
EL5456 P 133	<0.001
EL5456 P 134	0.002
EL5456 P 135	0.001
EL5456 P 136	<0.001
EL5456 P 137	<0.001
EL5456 P 138	<0.001
EL5456 P 139	<0.001
EL5456 P 140	<0.001
EL5456 P 141	<0.001
EL5456 P 142	<0.001
EL5456 P 143	<0.001
EL5456 P 144	<0.001
EL5456 P 145	<0.001
Detn limit	(0.001)



Job: 8AD3560

O/N: 8DN0461

**ANALYTICAL REPORT**

SAMPLE	As
H0	34
H1	24
H2	17
H3	17
H4	19
H5	14
H6	24
H7	24
H8	24
H9	17
H10	11
H11	10
H12	8
H13	18
H14	20
H15	30
H16	22
H17	24
H18	19
H19	22
H20	32
H21	42
H22	30
H23	32
H24	16
UNITS	ppm
SCHEME	XRF1



Job: 8AD3560  
O/N: 8DN0461

ANALYTICAL REPORT

SAMPLE	As
H25	18
H26	19
H27	12
H28	22
L100	14
L101	46
L102	30
L103	46
L104	42
L105	58
L106	44
L107	34
L108	36
L109	20
L110	34
L111	18
L112	26
L113	36
L114	44
L115	36
L116	32
L117	44
L118	15
L119	19
L140	14
UNITS	ppm
SCHEME	XRF1



Job: 8AD3560  
O/N: 8DN0461

ANALYTICAL REPORT

SAMPLE	AS
L141	32
L142	26
L143	32
L144	32
L145	58
P108	32
P109	62
P110	46
P111	48
P112	26
P113	28
P114	28
P115	42
P116	17
P117	34
P118	19
P119	19
P120	30
P121	20
P122	30
P123	15
P124	20
P125	150
P126	120
P127	82
UNITS	ppm
SCHEME	XRF1



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Job: 8AD3560

O/N: 8DN0461

## ANALYTICAL REPORT

SAMPLE	As
P128	52
P129	58
P130	44
P131	12
P132	22
P133	40
P134	36
P135	26
P136	40
P137	26
P138	28
P139	20
P140	14
P141	22
P142	19
P143	12
P144	18
P145	28
UNITS	ppm
SCHEME	XRF1

***APPENDIX II***

***RAB DRILLING ASSAYS/LOG***

EL 5456

RAB DRILLING August 1989

No.	NORTH	EAST	LITHOLOGY	DEPTH metres	GOLD ppb	ARSENIC ppm
J77	15400	9400	gw,ms,5% q	9	7	40
J78	15400	9425	gw,ms,5% q	9	3	18
J79	15400	9450	q gravel	9	6	22
J80	15400	9475	gw,ms	8	1	15
J81	15400	9500	ms;q gravel	8	4	14
J82	15400	9525	gw,ms	8	4	14
J83	15400	9550	ms	9	7	28
J84	15400	9575	gw	9	3	13
J85	15400	9600	ms	9	2	13
J86	15400	9625	ms, gw,1% q	9	4	24
J87	15400	9650	gw,ms	9	2	14
J88	15400	9675	gw,ms	9	1	16
J89	15400	9700	ms,2% q	7	2	13
J90	15400	9725	gw,q gravel	8	1	16
J91	15400	9750	ms,q gravel	7	4	19
J92	15400	9775	siltstone	9	3	22
J93	15400	9800	ms,q gravel	6	3	18
J94	15400	9825	q gravel	9	4	40
J95	15400	9850	ms	9	2	8
J96	15400	9875	ms	6	4	20
J97	15400	9900	gw,ms	6	5	14
J98	15400	9925	ms	6	3	17
J99	15400	9950	gw	6	2	20
J100	15400	9975	gw	6	4	14

Total metres drilled: 190  
 Number of holes: 24  
 Average depth: 7.9 m

gw = greywacke  
 ms = mudstone  
 q = quartz



No.	NORTH	EAST	LITHOLOGY	DEPTH metres	GOLD ppb	ARSENIC ppm
R73	16200	9300	gw, 2% q	5	11	15
R74	16200	9325	gw	9	5	5
R75	16200	9350	ms	4	1	16
R76	16200	9375	ms	3	2	18
R77	16200	9400	gw, ms	6	1	6
R78	16200	9425	ms	7	2	13
R79	16200	9450	gw, ms	5	1	11
R80	16200	9475	ms	8	1	18
R81	16200	9500	gw	5	1	9
R82	16200	9525	ms	4	1	11
R83	16200	9550	ms	4	1	18
R84	16200	9575	gw	3	7	8
R85	16200	9600	ms, gw	6	4	9
R86	16200	9625	gw, ms	2	1	10
R87	16200	9650	gw	2	18	17
R88	16200	9675	gw	3	2	12
R89	16200	9700	ms	3	1	13
R90	16200	9725	ms	3	1	5
R91	16200	9750	gw	4	6	2
R92	16200	9775	ms	3	2	7
R93	16200	9800	ms	3	1	4
R94	16200	9825	gw	3	1	3
R95	16200	9850	gw	3	1	4
R96	16200	9875	ms	4	1	3
R97	16200	9900	gw	6	1	2
R98	16200	9925	gw, ms	6	1	3
R99	16200	9950	gw, 1% q	5	1	5

Total metres drilled: 119  
 Number of holes: 27  
 Average depth: 4.4 m