THE SHELL COMPANY OF AUSTRALIA LIMITED

METALS DIVISION

ANNUAL REPORT ON EL 2072, WARRAMANA CREEK N.T.

13 JUNE, 1981 - 12 JUNE 1982

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1.0 INTRODUCTION

Exploration Licence 2072 located in the Warramana Creek area was first granted to A.O. (Australia) Pty. Ltd. on 13th June, 1979.

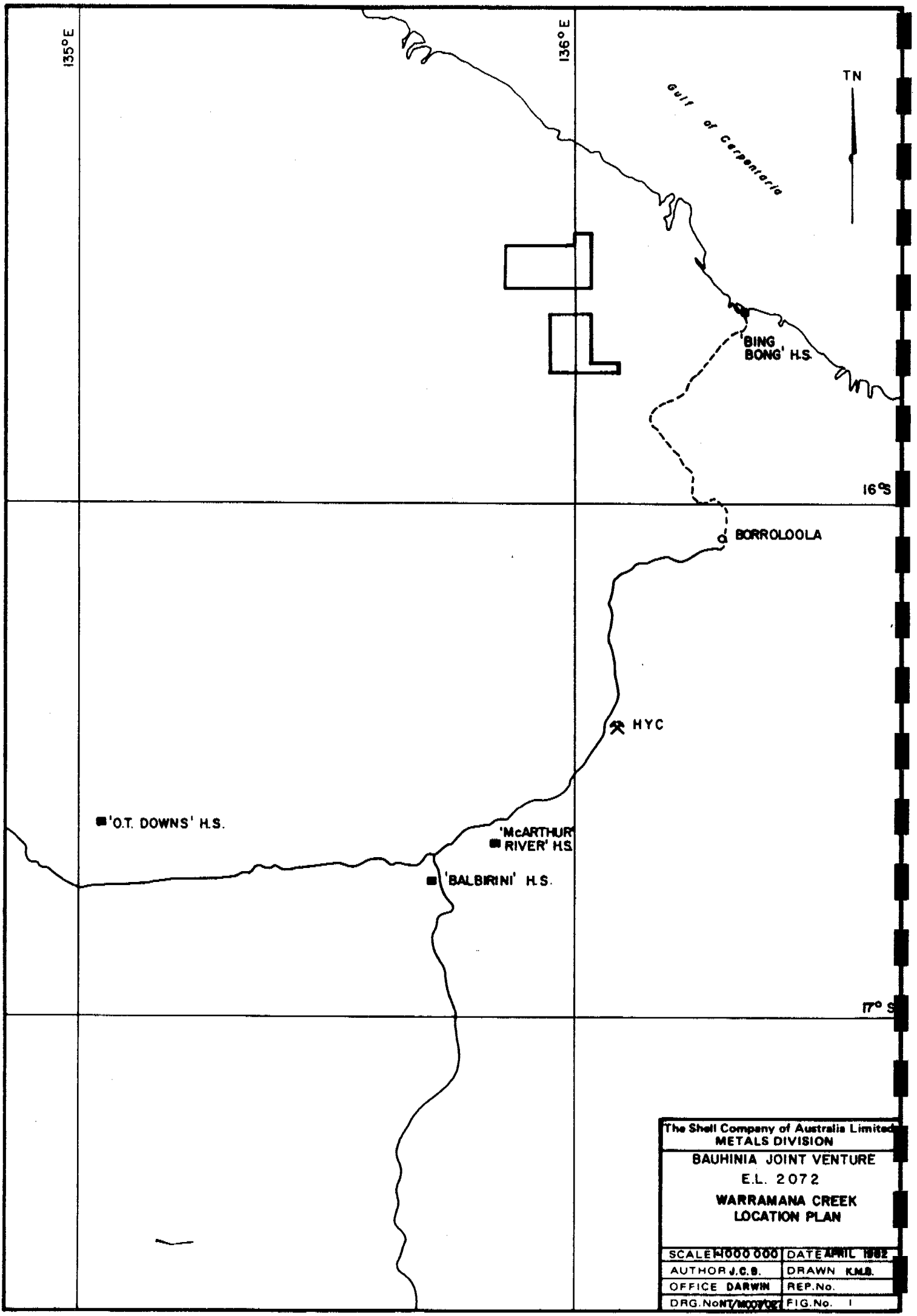
The initial area of 1285.5 square kilometres was reduced to 626.2 square kilometres in 1981. An application was lodged on May 11, 1982 for renewal of the licence over an area of 312.8 square kilometres.

During the first year of tenure, exploration centred on the implementation of a gravity survey, geological mapping and geochemical sampling in the western section of the licence. In addition an induced polarization/resistivity programme of 1.6 kilometres was carried out in the southwestern portion of EL 2072.

Activities during the second year of tenure consisted of follow up drilling of gravity and geochemical anomalies. Three diamond drill holes were completed totalling 455.5 metres.

Exploration activities in the third year of tenure, as detailed in this report consisted of a RAB (Rotary Air Blast) bedrock drilling programme and completion of two diamond drill holes.

This report represents a summary of work completed in EL 2072 during the period 13 June 1981 to 12 June, 1982. A statement of expenditure covering this period is included in the report as Appendix 6.



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METALS DIVISION

BAUHINIA JOINT VENTURE

E.L. 2072

WARRAMANA CREEK
LOCATION PLAN

SCALE 1:1000 000	DATE APRIL 1982
AUTHOR J.C.B.	DRAWN K.M.B.
OFFICE DARWIN	REP.No.
DRG.No NT/MOOYOR	FIG.No. 1

2.0 LOCATION AND ACCESS

2.1 GENERAL

The licence area is located approximately 70 kilometres northwest of Borroloola in the eastern Gulf Country of the Northern Territory (Fig. 1).

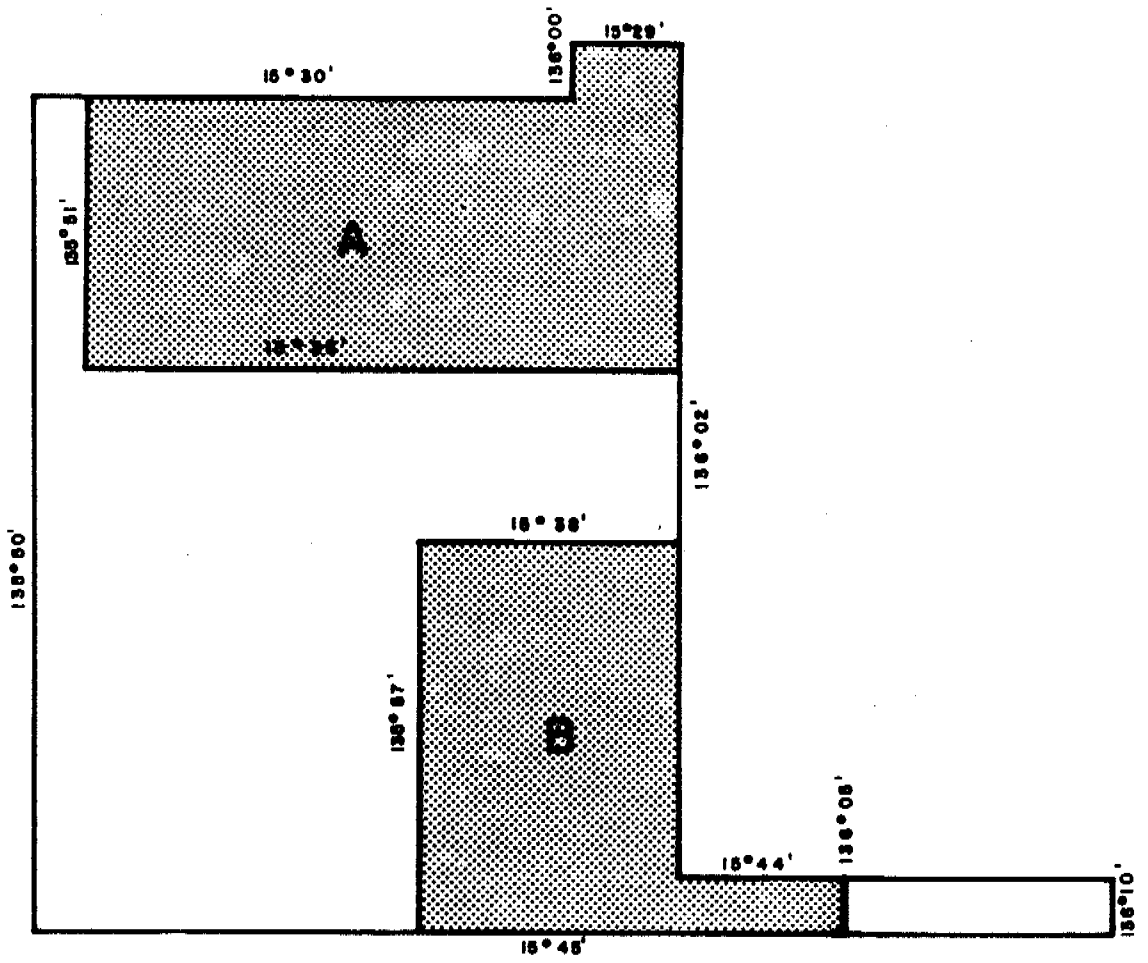
The majority of the licence area occurs within the Bing Bong (6166) and Tawallah Range (6066) 1:100,000 sheet areas in the central eastern portion of the Mt. Young (SF 53-9) 1:250,000 sheet.

No established vehicle tracks exist within the licence with the exception of surveyed gravity traverse lines and two central north-south base lines. Access is generally restricted due to thick vegetation cover.

2.2 Physiography

Exploration Licence 2072 lies entirely within the Coastal Plains topographic unit. Warramana, Rosie and Pine Creeks flow through the licence area in a north-easterly direction towards the Gulf of Carpentaria.

The Coastal Plain is underlain by horizontal Cretaceous sediments with inliers of Proterozoic rocks and is now covered by sand, probably of marine origin. Alluvial flats occur along major streams. The relief of the Fall is controlled by the underlying lithology and faulted blocks of Masterton Formation and Tatoola Sandstone form prominent mesas with less resistant rocks of the McArthur Group in the valleys between, to the west of the licence. Further east the McArthur Group outcrops occur as low rounded hills.



LEGEND

Current E.L. Boundary.

Area to be retained.

The Shell Company of Australia Limited
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WARRAMANA CREEK
E.L. 2072
RELINQUISHMENT 1982

SCALE 1: 250 000	DATE APRIL 1982
AUTHOR N.J.C.	DRAWN K.M.B.
OFFICE DARWIN	REP.No.
DRG.No NT/M007/030	FIG.No. 2

3.0 TENURE AND JOINT VENTURE

3.1 Title

An outline of the licence is shown in Figure 2.

3.2 Bauhinia Joint Venture

Exploration Licence 2072 is one of a pair of licences in the McArthur River region which are the subject of the Bauhinia Joint venture in which the following companies are participants:

A.O. (Australia) Pty. Ltd.
Electrolytic Zinc Company of Australia Ltd.
Penarroya (Australia) Pty. Ltd.
Preussag Australia Pty. Ltd.

The Joint Venture was formed in November, 1976 with the aim of locating economic lead-zinc mineralisation of the HYC-type within the McArthur River region. The agreement was approved and registered under the Northern Territory Mining Ordinance on the 28th January, 1977 with A.O. (Australia) Pty. Ltd. as Manager. On 9th July, 1979, Shell Company of Australia Ltd. entered into an agreement with the four above mentioned companies by which it could earn fifty percent interest in the Bauhinia Joint Venture and became the Manager on the 1st April, 1981.

GROUP	SUB GROUP	FORMATION	MEMBER
ROPER			
McARTHUR GROUP		STOTT FORMATION	
		SMYTH SANDSTONE	
	BATTEN SUB-GROUP	LOOKING GLASS FORMATION	
		STRETTON SANDSTONE	
		YALCO FORMATION	
		LYNOTT FORMATION	
	UMBOLOOGA SUB-GROUP	REWARD DOLOMITE	
		BARNEY CREEK FORMATION	
		TEENA FORMATION	W FOLD SHALE COXCO DOLOMITE
		EMMERUGGA DOLOMITE	MITCHELL YARD DOLOMITE MARA DOLOMITE
		TOOGANINIE FORMATION	MYRTLE SHALE LEILA SANDSTONE
		TATOOLA SANDSTONE	
		AMELIA DOLOMITE	
		MALLAPUNYAH FORMATION	
TAWALLAH			

(MODIFIED AFTER PLUMB & BROWN 1973)

The Shell Company of Australia Limited
METALS DIVISION

General Stratigraphy
of
McARTHUR GROUP

SCALE	DATE AUG. 1982
AUTHOR S.A.D.	DRAWN K.M.B.
OFFICE DARWIN	REP. No
DRG. No. NT/MT/M/004	FIG. No. 3

4.0 REGIONAL GEOLOGY

Exploration Licence 2072 lies in the central portion of the McArthur Basin, within the northern extensions of the Batten Trough.

Three major groups are recognised within the basin. The basal Tawallah Group forms a quartz-arenite-basic volcanic suite which is overlain by the McArthur Group, a dominantly carbonate suite with minor shallow water fine grained clastics. These two groups are of Carpentarian age. The overlying Roper Group of Adelaidean age, consists of an arenite-lutite suite.

4.1 Stratigraphy

Within the licence area minor outcrop of the McArthur Group has previously been mapped. The established subdivision of the McArthur Group is shown in Figure 3. The distribution of formations and major structural features are shown in Figures 4&5 (Back pocket).

4.2 Structure

West of the licence area the major structural features are a series of generally north-trending faults which displace units of the Tawallah Group.

Within the licence area interpreted north-trending faults bound a series of horsts and grabens containing gently folded basins and domes of lower McArthur Group sediments.

5.0 PROGRAMME 1931 - 1982

5.1 RAB Drilling

The RAB drilling programme in this licence was designed to test the distribution and extent of anomalous lead geochemistry in the Boko Beds/Barney Creek Formation. This horizon was tested by DDH WM 4 and 5 during 1980.

RAB holes were located at 50 m intervals along lines 16 N, 15.3 N, 14.7, 13.3 N and 12.7 N. One hole was completed on line 14 N. Due to high water table conditions, the depth of weathering and the thickness of cover sediments, hole spacings were increased 150 metres or more in places and sections of lines not drilled. A total of 313 holes for an aggregate of 4003 m were completed. Hole locations, depths and numbers are presented in Figure 6 (back pocket). Analytical results and geochemical profiles are presented in Appendix 1.

From a consideration of the analytical results it is evident that values are generally low. Anomalous values occured in hole RWM 126 adjacent to DDH WM 4 where Pb values of 1500 and 900 ppm were recorded. The anomalous Pb values extended east from here (line 15.3 N, 19 W) to 18 W where values of 425 ppm were obtained. Isolated single point anomalies were located at:

Line 12.7 N; 34.5 W (140 ppm Cu) 37.5 W and 37 W (135 and 160 ppm Pb respectively), 2 W (765 ppm Cu associated with 1% Mn).

Line 13.3 N; 16 W (550 ppm Zn), 37 W (240 ppm Cu, 170 ppm Pb).

Line 14.7 N; 18 W (470 ppm Pb)

Line 15.3 N; 6.5 E (180 ppm Cu)

Line 16 N; 2.5 E (180 ppm Pb), 1W (170 ppm Zn)

In addition to base metals, Fe, Mn, Ag and As was analysed for.

5.2 Ground Magnetics

2 lines

Ground magnetic surveys were completed along lines 14 N and 16 N in conjunction with the RAB drilling programme. The aim of the survey was to obtain more structural information along these lines. As with the Bing Bong licence area, a considerable magnetic contribution from near surface and surficial laterite horizons masked contributions from the bedrock and although previously known basement faults could be identified on the traces no additional information was gained. (see Appendix 2)

5.3 Diamond Drilling

Two holes, DDH WM 6 and DDH WM 7 were completed. DDH WM6, located on line 24 N at 4 W (Figure 3 back pocket) was designed to test the northern part of the licence area and was completed at a depth of 543.0m. The following stratigraphic subdivisions have been made.

0 - 61.80	Lynott Formation
61.80 - 77.80	Reward Formation (R_2)
77.80 - 91.63	Reward Formation (R_1)
91.63 -101.60	Barney Creek Formation
101.60 -136.00	Surprise Creek Pyritic Shale
136.00 -488.40	Barney Creek Formation
488.40 -496.60	B.C.F. Pyritic Shale
496.60 -543.00	B.C.F. Basal Tuffs

A graphic lithocolumn is presented in Figure 7 (back pocket) and detailed lithological descriptions are presented together with analytical results and drilling information in Appendix 3. Elements analysed for included Cu, Pb, Zn, Ag, Fe, and As.

Analytical results were generally poor with best values obtained in the Barney Creek Formation Pyritic Shale and the tuffaceous shales immediately below this unit. Average values for Cu, Pb and Zn were 27, 69, 361 and 30, 66, 390 ppm respectively for the two zones (refer to Figure 7 for average assays). Maximum values included 1200 ppm Zn and 120 ppm Pb.

DDH WM 7 was collared at 22 W on line 15.3 N (Figure 4 back-pocket). This holes was designed to test the down dip extension of the anomalous Pb values encountered in DDH WM 4 (300 m to the east) and in outcrop to the east of DDH WM 4. The hole was terminated at 246.0 m and the following stratigraphic subdivision have been made:

0 - 209.3 m	Barney Creek Formation
209.30 - 246.0 m	Mara Dolomite

A graphic lithocolumn is presented in Figure 8 (back pocket) and detailed lithological descriptions are presented in Appendix 4 together with analytical results and drilling information. Elements analysed for included Cu, Pb, Zn, Ag Fe, and As. Correlations with DDH WM 4, 5 and 1 are presented in Figure 9 (back pocket).

5.4 Downhole Logging

Logging of DDH WM 6 was completed producing gamma, neutron and density logs. Due to the reduction of the hole size to BQ at 158 m the density probe could not be lowered any further and consequently density logs only covered this part of the hole. Due to a complete lack of water in the hole no electric logs were run.

No logs were run on DDH WM 7 as correlation with other holes in the area posed no problems. In addition ground conditions in this hole were very poor and the sequence oxidised.

5.5 Petrology

Six samples were taken in DDH WM 6 for petrological examinations. Sample locations and detailed petrological descriptions are presented in Appendix 5. Samples WM 6/4 and 6/5 were suspected tuffs and results confirmed this. Samples WM 6/2 contained nodules (dolomitic) within Barney Creek Formation silty shales. Examination proved these to be cherty and of a clastic nature and therefore pre-consolidation in origin. Samples WM 6/1, 6/3 and 6/6 were submitted to confirm their composition. Dark bands within sample WM 6/3 were reported to have possibly been kerogen.

6.0 CONCLUSIONS

Despite poor analytical results in DDH WM 6 the significant thickness of Barney Creek Formation intersected is regarded as encouraging. Further work is warranted in this area to determine the extent and thickness of the sub-basin and to establish mineralisation trends.

The poor analytical results together with the thin and weathered nature of the Barney Creek Formation in DDH WM 7 has reduced the prospectivity of the south-western corner of the licence area.

Significant portions of this licence has remained effectively untested and it is considered that the prospective potential of the area is high. Due to the failure of most techniques employed in the past to detect mineralised areas, it is considered that drilling (percussion or diamond) is ultimately the most effective technique of obtaining conclusive information despite the high cost factor.

APPENDIX 1

RAB DRILLING GEOCHEMICAL RESULTS AND PROFILES

DRILL HOLE No:	CO ORDINATES	TOTAL DEPTH (m)	SAMPLES SUB-MITTED	COMMENTS	GEOCHEMISTRY (ppm)											
					Cu	Pb	Zn	Ag	Fe %	Mn	As					
RWM 1	12.7N 38W	10	9		10	20	75	1	3.10%	35	<20					
			10		8	30	38	1	3.30%	35	<20					
2	37.5W	11	10		12	20	18	1	3.60%	15	20					
			11		12	250	60	1	2.50%	15	<20					
3	37W	11	10		16	270	75	1	3.60%	15	<20					
			11		14	50	20	1	2.40%	15	<20					
4	36.5W	9	8		60	90	32	1	3.30%	40	<20					
			9		50	80	24	1	2.00%	30	<20					
5	36W	7	6		18	25	12	1	2.20%	10	20					
			7		14	35	10	1	1.70%	15	30					
6	35.5W	8	7		22	25	10	1	3.80%	10	150					
			8		20	50	18	1	2.10%	20	30					
7	35W	11	10		42	35	10	1	5.60%	20	80					
			11		34	40	10	1	3.90%	20	60					
8	34.5W	10	9	not bedrock?	110	90	14	2	7.70%	1400	60					
			10	bedrock?	170	80	14	2	14.1%	480	50					
9	34W	12	11		14	10	8	1	9900	25	<20					
			12		14	15	8	1	8400	15	<20					
10	33.5W	10	9		18	20	12	2	3.40%	25	<20					
			10		16	15	12	2	2.40%	30	<20					
11	33W	11	10		26	20	16	2	6.70%	90	40					
			11		26	20	20	2	6.30%	95	<20					
12	32.5W	10	9		18	15	12	2	2.00%	35	<20					
			10		24	20	12	2	1.40%	40	<20					

DRILL HOLE No:	CO ORDINATES	TOTAL DEPTH (m)	SAMPLES SUB-MITTED	COMMENTS	GEOCHEMISTRY (ppm)											
					Cu	Pb	Zn	Ag	Fe %	Mn	As					
RWM 13	12.7N 32W	9	8		18	20	12	2	2.60%	20	<20					
			9		16	15	10	1	1.20%	30	60					
14	31.5W	8	7		18	30	10	1	5.40%	10	<20					
			8		14	30	8	1	4.30%	10	90					
15	31.0W	6	5		10	15	20	1	2.30%	5	40					
			6		6	30	8	1	1.20%	5	20					
16	30.5W	3	2		6	20	8	1	2.00%	5	40					
			3		4	25	8	1	7300	5	<20					
17	30W	4	3		14	20	8	1	1.30%	25	20					
			4		14	25	10	1	1.60%	40	<20					
18	29.5W	9	8		14	20	20	1	1.30%	15	<20					
			9		26	40	55	1	1.80%	35	30					
19	29W	3	2		8	10	28	1	7400	20	<20					
			3		10	10	30	1	1.20%	15	<20					
20	28.5W	4	3		16	15	26	2	1.00%	35	30					
			4		18	20	26	1	1.50%	40	20					
21	28W	5	4		8	15	12	1	9400	10	30					
			5		8	20	14	1	1.80%	20	30					
22	27.5W	6	5		8	20	10	1	2.30%	15	40					
			6		8	20	10	1	1.70%	15	60					
23	27W	7	6		22	25	22	1	3.40%	50	60					
			7		14	10	16	1	3.30%	15	40					
24	26.5W	4	3		16	25	6	1	8.50%	15	100					
			4		8	25	8	1	2.80%	15	40					

DRILL HOLE No:	CO ORDINATES	TOTAL DEPTH (m)	SAMPLES SUB-MITTED	COMMENTS	GEOCHEMISTRY (ppm)						
					Cu	Pb	Zn	Ag	Fe%	Mn	As
RWM 25	12.7N 26W	5	4		12	20	10	1	6.80%	15	40
			5		14	25	10	1	3.70%	20	30
26	25.5W	5	4		8	35	8	1	2.40%	10	<20
			5		8	25	10	1	1.20%	10	<20
27	25W	6	5		12	15	16	1	4.00%	15	40
			6		14	30	12	1	2.30%	15	40
28	24.5W	15	4		16	30	8	1	7.10%	20	80
			5		10	20	10	1	3.20%	20	20
			10		14	15	18	1	1.20%	15	30
			11		20	15	26	1	3.40%	15	60
			14		18	40	20	1	2.70%	15	30
			15		20	35	20	1	3.20%	10	50
29	24W	5	4		8	15	10	1	2.00%	10	20
			5		10	20	6	1	4.70%	45	60
30	23.5W	6	5		6	35	12	1	2.20%	10	<20
			6		4	25	10	1	1.30%	10	<20
31	23W	6	5		2	20	8	1	1.60%	5	40
			6		2	25	8	1	9200	10	<20
32	22.5W	7	6		6	25	8	1	4.60%	30	40
			7		6	25	12	1	5.70%	10	80
33	22W	7	6		8	25	10	1	4.50%	10	60
			7		6	15	8	1	1.60%	5	40
34	21.5W	13	12		10	30	28	1	7.70%	20	90
			13		16	35	50	1	10.2%	170	70

DRILL HOLE No:	CO ORDINATES	TOTAL DEPTH (m)	SAMPLES SUB-MITTED	COMMENTS	GEOCHEMISTRY (ppm)						
					Cu	Pb	Zn	Ag	Fe %	Mn	As
RWM 35	12.7N 21W	10	9		8	25	20	1	5.30%	30	40
			10		10	20	16	1	6.30%	50	50
36	20.5W	14	13		8	15	28	1	2.00%	65	<20
			14		8	20	34	1	2.00%	50	<20
37	20W	14	13		12	25	12	1	5.40%	10	<20
			14		10	35	10	1	8.30%	10	<20
38	19.5W	20	19		18	85	65	1	3.60%	420	<20
			20		24	50	70	1	3.90%	210	<20
39	19W	16	15		12	25	16	1	2.70%	15	40
			16		8	25	16	1	1.20%	10	<20
40	18.5W	17	16		10	35	26	<1	1.10%	10	40
			17		10	25	32	1	2.40%	20	<20
41	18W	15	14		8	30	14	1	4.90%	10	<20
			15		8	20	22	1	1.50%	10	<20
42	17.5W	17	16		8	20	12	1	9700	5	<20
			17		6	25	14	1	1.50%	10	<20
43	17W	16	15		6	30	14	1	2.20%	15	<20
			16		6	40	10	1	1.50%	10	<20
44	16.5W	15	14		8	20	8	1	1.70%	15	<20
			15		10	25	14	1	2.20%	15	<20
45	16W	15	14		8	30	16	1	2.30%	15	<20
			15		8	25	14	1	2.90%	35	<20
46	15.5W	16	15		14	35	14	1	5.20%	35	<20
			16		12	40	14	1	8.00%	65	<20

DRILL HOLE No:	CO ORDINATES	TOTAL DEPTH (m)	SAMPLES SUB-MITTED	COMMENTS	GEOCHEMISTRY (ppm)											
					Cu	Pb	Zn	Ag	Fe %	Mn	As					
RWM 47	12.7N 15W	14	13		8	25	30	1	2.10%	25	<20					
			14		10	30	14	1	3.30%	45	<20					
48	14.5W	13	12		24	35	8	1	7.00%	30	<20					
			13		18	30	6	1	7.10%	85	<20					
49	14W	12	11		26	35	12	1	12.8%	35	<20					
			12		10	25	14	1	2.80%	20	<20					
50	13.5W	17	16		2	20	8	<1	7700	15	<20					
			17		2	25	2	<1	7800	5	<20					
51	13W	15	14		4	20	4	<1	3800	5	<20					
			15		2	15	4	<1	5500	5	<20					
52	12.5W	11	8	possibly bedrock	6	10	8	<1	1.70%	20	<20					
			10		4	40	4	<1	9400	85	<20					
			11		2	30	8	<1	5400	15	40					
53	12W	12	6	possibly bedrock	2	35	2	<1	8000	15	20					
			11		2	25	2	<1	5700	5	20					
			12		4	20	4	<1	5200	5	<20					
54	11.5W	9	5	possibly bedrock	6	35	6	1	3.10%	10	<20					
			8		12	15	12	<1	4.90%	110	<20					
			9		12	15	14	1	4.50%	85	<20					
55	11W	4	3		18	20	8	1	9.40%	20	<20					
			4		16	25	6	1	7.80%	10	<20					
56	10.5W	4	3		16	20	6	1	8.00%	25	<20					
			4		4	10	6	<1	3.10%	10	<20					

DRILL HOLE No:	CO ORDINATES	TOTAL DEPTH (m)	SAMPLES SUB-MITTED	COMMENTS	GEOCHEMISTRY (ppm)											
					Cu	Pb	Zn	Ag	Fe %	Mn	As					
RWM 57	12.7N 10W	4	3		8	20	10	1	6.80%	20	<20					
			4		10	25	8	1	7.10%	25	<20					
58	9.5W	5	4		6	20	6	<1	3.90%	15	<20					
			5		4	15	6	<1	2.10%	5	<20					
59	9W	6	5		4	15	12	<1	5.80%	5	<20					
			6		4	20	6	<1	1.30%	5	<20					
60	8.5W	10	9		6	20	6	<1	3.30%	10	<20					
			10		6	15	20	<1	2.50%	15	<20					
61	8W	7	7		8	25	16	<1	3.10%	20	<20					
62	7.5W	8	7		4	25	10	<1	1.90%	10	<20					
			8		2	20	8	<1	9700	5	<20					
63	7W	6	5		8	30	14	<1	2.10%	15	<20					
			6		6	25	18	<1	2.20%	15	<20					
64	6.5W	9	8		4	10	10	<1	4100	5	<20					
			9		8	20	16	<1	4600	5	<20					
65	6W	11	10		2	5	6	<1	4300	5	<20					
			11		2	5	4	<1	2700	5	<20					
66	5.5W	15	14		38	5	34	<1	3.10%	270	<20					
			15		26	5	28	<1	2.20%	400	<20					
67	5W	13	12		22	5	22	<1	5.00%	100	<20					
			13		38	5	60	1	9.50%	450	20					
68	4.5W	18	17		44	5	40	<1	2.60%	100	20					
			18		50	5	48	<1	2.90%	120	<20					

DRILL HOLE No:	CO ORDINATES	TOTAL DEPTH (m)	SAMPLES SUB-MITTED	COMMENTS	GEOCHEMISTRY (ppm)						
					Cu	Pb	Zn	Ag	Fe %	Mn	As
RWM 69	12.7N 4W	14	-	hole abandoned,wet							
70	3.5W	16	15		70	10	20	<1	3.30%	300	<20
			16		65	10	20	1	2.50%	330	30
71	3W	9	8		44	5	14	<1	3.90%	300	<20
			9		36	10	16	<1	5.90%	370	<20
72	2.5W	6	5		14	15	6	<1	1.30%	45	<20
			6		70	15	10	<1	5600	15	<20
73	2W	11	10		1100	10	60	<1	6.10%	1.90%	60
			11		430	60	20	<1	2.20%	3000	70
74	1.5W	11	10		44	20	10	1	2.60%	170	<20
75	1W	4	-	too hard							
76	0.5W	11	10		10	10	14	<1	1.80%	70	<20
			11		4	10	10	1	6000	15	<20
77	00	13	12		22	25	14	1	2.50%	5	<20
			13		14	20	16	1	1.40%	10	<20
78	13.3N 00	18	17		60	25	10	1	5.90%	10	30
			18		24	15	8	1	1.70%	5	<20
79	0.5W	19	18		38	20	10	1	3.90%	20	<20
			19		26	15	18	<1	2.30%	15	<20
80	1W	12	11		20	20	12	1	1.70%	30	<20
			12		18	45	18	1	2.70%	30	<20

DRILL HOLE No:	CO ORDINATES	TOTAL DEPTH (m)	SAMPLES SUB-MITTED	COMMENTS	GEOCHEMISTRY (ppm)											
					Cu	Pb	Zn	Ag	Fe %	Mn	As					
RWM 81	1.5W	8	-	too hard												
82	2W	11	-	too hard												
83	2.5W	12	11		8	15	12	<1	1.50%	30	<20					
			12		10	15	8	<1	2.10%	20	<20					
84	3W	12	11		12	15	14	<1	1.10%	15	<20					
			12		10	20	14	<1	8200	75	<20					
85	3.5W	12	11	Lam. grey chert	24	20	18	1	5.80%	65	<20					
			12		14	25	14	1	2.40%	30	<20					
86	4W	17	16		100	15	16	<1	4.50%	110	<20					
			17		190	10	24	<1	3.70%	140	<20					
87	4.5W	14	13		38	30	18	1	9.00%	40	40					
			14	Lam. grey chert	12	25	12	2	2.50%	60	<20					
88	5.5W	12	11		4	15	16	<1	1.10%	10	<20					
			12		6	10	14	<1	9700	20	<20					
89	6W	17	16		36	25	26	1	7.30%	810	<20					
			17		24	20	24	<1	2.50%	300	<20					
90	7W	13	12		16	20	12	1	6.40%	40	<20					
			13		10	20	8	1	2.50%	15	<20					
91	7.5W	13	12		12	25	8	1	5.40%	55	<20					
			13		10	25	8	<1	6.70%	100	<20					
92	8W	18	17		4	20	10	<1	4400	20	<20					
			18		8	25	18	<1	1.20%	20	20					

DRILL HOLE No:	CO ORDINATES	TOTAL DEPTH (m)	SAMPLES SUB-MITTED	COMMENTS	GEOCHEMISTRY (ppm)											
					Cu	Pb	Zn	Ag	Fe %	Mn	As					
RWM 93	13.3N 8.5W	14	13	?												
			14		12	25	16	30	5.8%	6	<20					
94	9W	15	14		12	45	14	1	3.80%	10	<20					
			15		8	45	18	1	2.40%	5	30					
95	9.5W	16	15		8	25	16	1	9800	10	<20					
			16		6	25	8	<1	4800	10	<20					
96	10W	16	15		8	25	22	1	5300	5	20					
			16		4	20	48	<1	7000	15	<20					
97	10.5W	17	16		12	20	60	1	1.00%	10	<20					
			17		4	15	16	<1	6800	10	20					
98	11W	18	17		8	15	8	1	6300	5	<20					
			18		6	20	12	5	4100	5	40					
99	11.5W	15	14		14	15	6	1	3.30%	25	30					
			15		10	30	6	1	3.00%	20	30					
100	12W	14	13		10	15	6	1	4.60%	35	20					
			14		8	10	12	1	8300	40	20					
101	12.5W	20	19		16	20	55	1	3.30%	75	40					
			20		6	15	20	<1	1.40%	55	40					
102	13W	17	16		6	25	6	1	7500	15	40					
			17		4	20	6	1	5800	20	40					
103	13.5W	12	11		6	20	8	1	2.80%	30	<20					
			12		6	20	8	1	4.60%	70	70					
104	14W	12	10		4	10	6	1	8900	30	60					
			11		6	20	6	1	8300	25	110					

DRILL HOLE No:	CO ORDINATES	TOTAL DEPTH (m)	SAMPLES SUB-MITTED	COMMENTS	GEOCHEMISTRY (ppm)						
					Cu	Pb	Zn	Ag	Fe %	Mn	As
RWM 105	13.3N 14.5W	20	19	Bedrock?	14	25	75	1	3.20%	50	30
			20		14	40	75	1	4.70%	65	80
106	15W	18	17	Bedrock?	10	45	24	1	1.80%	35	40
			18		12	45	22	1	1.10%	110	50
107	15.5W	21	20	Bedrock?	6	90	4	1	1800	30	<20
			21		6	100	10	<1	1400	20	<20
108	16W	20	19		16	50	220	<1	2.90%	290	50
			20		24	85	790	1	9.80%	970	40
109	16.5W	20	19	?	26	20	65	1	13.5%	2400	<20
			20		26	20	55	1	10.4%	4200	<20
110	17W	20	19	Bedrock?	20	35	60	1	7.80%	1600	<20
			20		24	70	80	1	9.50%	3600	<20
111	18W	20	-	no Bedrock							
112	19W	21	21	Bedrock?	38	30	110	1	5.20%	520	<20
113	20W	20	19	Bedrock?	65	65	130	1	8.10%	530	20
			20		36	50	70	2	2.20%	220	<20
114	21W	13	-	blocked-clay							
115	21.5W	21	21	Bedrock?	46	50	70	1	4.40%	230	<20

DRILL HOLE No:	CO ORDINATES	TOTAL DEPTH (m)	SAMPLES SUB-MITTED	COMMENTS	GEOCHEMISTRY (ppm)						
					Cu	Pb	Zn	Ag	Fe %	Mn	As
RWM 116	13.3N 23W	15	-	blocked-clay							
117	23.5W	27	-	blocked-clay							
118	25W	19	18	bedrock?	50	35	55	1	1.10%	720	<20
			19		50	45	65	<1	1.50%	310	<20
119	26W	19	18	bedrock-water?	24	40	30	1	1.70%	110	<20
			19		26	35	40	1	2.00%	270	<20
120	27W	19	-	blockage-clay							
121	38W	33	33	small sample poss. bedrock-wet	18	10	18	1	1.20%	100	<20
122	39W	27	-	no bedrock-water							
123	37W	30	25		65	35	16	1	2.10%	70	<20
			29		230	180	32	1	6.30%	450	30
			30		250	160	44	1	7.00%	380	50
124	35.5W	24	-	blocked clay							
125	14N 7E	15	-	hard							
126	15.3N 19W	19	18	adjacent DDH	22	1500	36	<1	2.20%	360	<20
			19	WM no 4	20	990	38	<1	2.20%	330	<20

DRILL HOLE No:	CO ORDINATES	TOTAL DEPTH (m)	SAMPLES SUB-MITTED	COMMENTS	GEOCHEMISTRY (ppm)											
					Cu	Pb	Zn	Ag	Fe%	Mn	As					
RWM 127	15.3N 19.5W	18	17		16	75	60	1	4.10%	400	<20					
			18		16	60	50	1	3.90%	210	<20					
128	20W	10	9		8	40	16	1	1.50%	65	<20					
			10		8	25	10	<1	1.40%	80	<20					
129	20.5W	9	8		10	25	18	<1	1.50%	100	<20					
			9		6	30	10	<1	7500	40	<20					
130	21W	8	7		4	20	14	<1	5500	90	<20					
			8		6	15	18	1	1.70%	65	<20					
131	21.5W	20	19	Bedrock?	18	15	30	1	2.30%	210	<20					
			20		18	15	30	<1	2.10%	140	<20					
132	22W	9	8	(9 Contaminated -steel)	16	25	20	1	4.50%	30	20					
133	22.5W	10	9		10	30	20	1	1.30%	25	<20					
			10		8	80	16	<1	6100	190	<20					
134	23W	11	10		10	30	30	<1	4.20%	70	20					
			11		16	35	44	1	2.50%	40	30					
135	23.5W	10	9		12	25	20	1	5.50%	40	20					
			10		16	25	16	1	6.90%	100	<20					
136	24W	11	10	Bedrock?-hard	10	25	22	<1	4.30%	30	<20					
			11		14	30	28	1	9.00%	65	40					
137	24.5W	13	12	Bedrock?	6	15	20	<1	1.10%	25	<20					
			13		6	15	22	1	2.60%	30	<20					

DRILL HOLE No:	CO ORDINATES	TOTAL DEPTH (m)	SAMPLES SUB-MITTED	COMMENTS	GEOCHEMISTRY (ppm)											
					Cu	Pb	Zn	Ag	Fe %	Mn	As					
RWM 138	15.3N 25W	12	-	No Bedrock-hard												
139	25.5W	15	14	Bedrock?	6	15	32	<1	4100	20	<20					
			15		8	25	32	<1	4200	30	<20					
140	26W	20	19		14	15	75	<1	1.80%	35	<20					
			20		22	20	90	<1	2.10%	60	<20					
141	26.5W	10	9	Bedrock?	28	15	26	1	2.00%	430	<20					
			10		28	10	22	1	2.20%	650	<20					
142	27W	12	11	Bedrock?	24	5	18	1	1.80%	370	<20					
			12		22	10	18	1	1.80%	330	<20					
143	27.5W	15	14	bedrock?	46	15	22	1	1.80%	2100	<20					
			15		46	10	20	1	1.50%	650	<20					
144	28W	19	10	poss.Bedrock clay blockage at 19.	22	15	20	1	4.60%	85	<20					
145	28.5W	20	15	Possibly Bedrock	30	20	20	1	5.20%	70	<20					
			20		50	35	28	1	5.30%	2400	<20					
146	29W	18	17	?	20	15	20	1	2.00%	45	<20					
			18		40	25	22	1	8.20%	75	30					
147	29.5W	22	18	Possibly Bedrock	55	30	24	1	8.50%	240	<20					
148	30W	15	13	Bedrock?	50	25	24	1	8.30%	250	<20					
			15		55	40	24	1	6.80%	680	<20					

DRILL HOLE No:	CO ORDINATES	TOTAL DEPTH (m)	SAMPLES SUB-MITTED	COMMENTS	GEOCHEMISTRY (ppm)						
					Cu	Pb	Zn	Ag	Fe %	Mn	As
RWM 149	15.3N 30.5W	15	12	Bedrock?	44	25	20	1	5.90%	180	<20
			15		65	30	24	1	7.30%	760	<20
150	31W	15	11	Bedrock?	20	20	22	1	6.30%	120	<20
			15		28	15	26	1	6.60%	90	<20
151	31.5W	30	30	Bedrock?	30	30	26	1	1.60%	190	<20
152	32.5W	18	16	Bedrock?	50	35	24	1	6.20%	300	<20
			18		50	20	22	1	5.10%	410	<20
153	33W	20	17	Bedrock?	55	25	24	1	6.40%	320	<20
			18		55	25	24	1	6.10%	400	<20
154	33.5W	30	26	Bedrock?	20	45	20	<1	1.10%	130	30
			30		30	140	22	1	2.90%	260	<20
155	34.5W	27	20	No Bedrock at 27	55	30	24	1	2.70%	140	<20
				blockage-clay 20							
				possible Bedrock							
156	35.5W	27	-	blocked-clay							
157	36.5W	24	-	blocked-clay							
158	37.5W	30	29		14	5	24	1	3.70%	110	<20
			30		6	5	24	1	2.90%	130	<20
159	39W	30	16		12	15	26	1	3.50%	150	<20
			30		8	5	50	1	6.70%	630	<20
160	18.5W	6	5	50m East of DDH	18	650	6	<1	8700	30	50
			6	WM no 4	60	1000	110	<1	1.20%	120	60

DRILL HOLE No:	CO ORDINATES	TOTAL DEPTH (m)	SAMPLES SUB-MITTED	COMMENTS	GEOCHEMISTRY (ppm)											
					Cu	Pb	Zn	Ag	Fe	Mn	As					
RWM 161	15.3N 18W	8	7		36	430	100	<1	2.50%	170	60					
			8		38	420	65	<1	3.30%	390	40					
162	17.5W	8	7		8	85	8	<1	8000	10	50					
			8		40	170	34	<1	7700	20	40					
163	17W	8	7		26	50	12	<1	2.70%	15	80					
			8		18	40	12	<1	1.20%	10	60					
164	16.5W	8	7		18	60	12	<1	5.90%	30	70					
			8		34	110	22	<1	3.40%	25	80					
165	16W	5	---													

DRILL HOLE No:	CO ORDINATES		TOTAL DEPTH (m)	SAMPLES SUB-MITTED	COMMENTS	GEOCHEMISTRY (ppm)						
						Cu	Pb	Zn	Ag	Fe %	Mn	As
RWM 166	15.3N	15.5W	8	7		10	35	10	<1	3.70%	30	<20
				8		10	65	10	<1	3.10%	30	<20
167		15W	5	5		16	25	12	2	9.90%	60	<20
168		14.5W	7	6		12	20	12	<1	8.60%	45	50
				7		10	20	10	3	5.70%	60	<20
169		14W	10	9		6	90	8	<1	2.20%	20	<20
				10		10	150	12	<1	3.70%	30	<20
170		13.5W	12	11	no sample							
				12		16	55	14	<1	7.40%	60	<20
171		13W	13	12		20	55	10	<1	8.90%	25	60
				13		18	40	14	<1	10.5%	55	30
172		12.5W	12	11		10	45	14	<1	2.40%	30	<20
				12		10	30	8	<1	2.40%	35	<20
173		12W	12	11		8	25	10	1	1.10%	25	<20
				12		10	30	10	<1	1.70%	25	<20
174		11.5W	10	9		12	20	12	<1	2.30%	35	<20
				10		12	10	18	<1	1.10%	20	<20
175		11W	16	15		12	40	10	<1	3800	15	<20
				16		10	35	14	9	3500	15	<20
176		10.5W	12	11		10	20	8	<1	5900	25	<20
				12		12	20	14	<1	1.40%	20	<20
177		10W	9	8		20	10	10	<1	3.30%	20	<20
				9		12	20	6	<1	4.10%	40	<20

DRILL HOLE No:	CO ORDINATES		TOTAL DEPTH (m)	SAMPLES SUB-MITTED	COMMENTS	GEOCHEMISTRY (ppm)						
						Cu	Pb	Zn	Ag	Fe %	Mn	As
RWM 178	15.3N	9.5W	14	14	WET	85	35	20	<1	5.30%	120	40
179		9W	9	8		14	10	8	<1	1.60%	35	<20
				9		6	5	6	<1	1.10%	30	<20
180		8.5W	5	4		20	20	12	<1	5.10%	30	<20
				5		10	20	6	<1	2.40%	45	<20
181		8W	5	4		22	10	8	<1	6.00%	110	<20
				5		20	25	10	1	5.70%	400	<20
182		7.5W	10	10		16	30	8	<6	2.70%	100	<20
183		7W	15	15	WET	85	25	55	<1	4.90%	230	<20
184		6.5W	5	4		50	40	10	<1	14.3%	190	50
				5		48	25	12	<1	10.4%	160	70
185		6W	5	4		20	10	14	<1	3.30%	60	<20
				5		16	30	8	1	2.50%	60	<20
186		5.5W	3	2		55	45	18	<1	20.6%	630	70
				3		14	10	6	<1	3.30%	120	<20
187		5W	2	2		24	30	4	<1	6.70%	570	<20
188		4.5W	2	2		22	15	6	<1	6.70%	390	<20
189		4.W	12	11		8	5	6	<1	1.10%	75	<20
				12		6	5	8	1	5600	45	<20

DRILL HOLE No:	CO ORDINATES		TOTAL DEPTH (m)	SAMPLES SUB-MITTED	COMMENTS	GEOCHEMISTRY (ppm)						
						Cu	Pb	Zn	Ag	Fe %	Mn	As
RWM 190	15.3N	3.5W	11	10		6	40	18	<1	1.50%	65	<20
				11		6	25	14	<1	1.20%	35	<20
191		3W	12	11		8	20	40	<1	6100	80	<20
				12		6	30	22	<1	5900	30	<20
192		2.5W	10	10		10	25	8	<1	1.10%	55	<20
193		2W	10	9	WET	8	40	8	1	6300	40	<20
				10		8	35	8	<1	8000	45	30
194		1.5W	18	17	WET	12	20	10	<1	6600	30	<20
				18	WET	10	20	6	<1	8500	40	<20
195		1W	10	10	BEDROCK?	20	20	12	<1	1.20%	110	<20
196		0.5W	6	5		14	10	12	<1	2.10%	1100	<20
				6		12	10	14	<1	1.20%	450	<20
197		00.	13	13	WET	32	30	60	<1	1.60%	310	<20
198		0.5E	6	6		28	20	28	<1	4.70%	190	<20
199		1E	6	5		12	15	14	<1	1.40%	130	<20
				6		10	5	10	<1	9900	370	<20
200		1.5E	11	10		10	15	12	<1	6200	150	<20
				11		16	5	8	<1	6100	85	<20

DRILL HOLE No:	CO ORDINATES	TOTAL DEPTH (m)	SAMPLES SUB-MITTED	COMMENTS	GEOCHEMISTRY (ppm)											
					Cu	Pb	Zn	Ag	Fe %	Mn	As					
RWM 201	15.3N 2E	5	4		22	20	18	<1	5.70%	340	<20					
			5		18	20	20	<1	4.30%	190	<20					
202	2.5E	8	7		14	10	14	<1	1.20%	70	<20					
			8		14	10	12	<1	1.30%	220	<20					
203	3E	7	7		16	20	16	<1	2.10%	140	<20					
204	3.5E	7	7		6	20	6	<1	2.80%	140	<20					
205	4E	3	3		30	20	18	4	8.70%	390	<20					
206	4.5E	2	2		26	20	14	4	10.9%	210	<20					
207	5E	2	2		14	30	8	<1	7.80%	260	<20					
208	5.5E	3	3		28	40	8	<1	20.5%	360	90					
209	6E	18	18	BEDROCK?	80	20	60	<1	2.90%	3500	<20					
210	6.5E	12	12	BEDROCK?	180	30	65	<1	9.80%	870	<20					
211	7E	15	14		14	20	8	<1	1.20%	70	<20					
			15		16	15	10	<1	1.80%	60	<20					
212	7.5E	3	3		12	15	8	<1	2.20%	80	<20					

DRILL HOLE No:	CO ORDINATES	TOTAL DEPTH (m)	SAMPLES SUB-MITTED	COMMENTS	GEOCHEMISTRY (ppm)											
					Cu	Pb	Zn	Ag	Fe %	Mn	As					
RWM 213	15.3N 8E	3	3		20	15	4	<1	4.80%	100	<20					
214	16N 26W	15	15	BEDROCK?	14	20	8	<1 20	6.60%	60 90	<20					
215	25.5W	17	17		16	20	10	20	3.80%	90	<20					
216	25W	9	9		14	15	22	<1	4.20%	55	<20					
217	24.5W	17	17		12	20	8	<1	5.00%	80	<20					
218	24W	14	14		20	40	12	<1	16.2%	90	50					
219	23.5W	14	14		18	35	12	<1	9.90%	110	50					
220	23W	15	15		14	35	10	2	6.40%	75	40					
221	22.5W	15	15		22	35	12	<1	17.7%	180	30					
222	22.W	14	14		26	35	10	1	8.60%	210	30					
223	21.5W	20	20		8	25	4	<1	1.30%	130	<20					
224	20W	22	22	BEDROCK?	4	15	8	<1	6800	50	<20					

DRILL HOLE No:	CO ORDINATES	TOTAL DEPTH (m)	SAMPLES SUB-MITTED	COMMENTS	GEOCHEMISTRY (ppm)											
					Cu	Pb	Zn	Ag	Fe %	Mn	As					
RWM 225	16N 8W	9	8	WH DDH No 5.	8	30	34	<1	2.20%	50	<20					
			9		12	35	60	<1	2.10%	55	<20					
226	8.5W	8	7		16	65	44	<1	4.00%	75	<20					
			8		14	35	55	<1	1.50%	45	<20					
227	9W	9	8		6	20	18	<1	1.60%	30	<20					
			9		14	25	36	<1	3.10%	40	<20					
228	9.5W	8	8		20	55	14	<1	13.8%	110	60					
229	10W	11	10		8	40	28	<1	1.60%	25	<20					
			11		6	35	20	<1	2.30%	50	<20					
230	10.5W	11	10		12	70	16	<1	6.40%	55	40					
			11		12	60	22	<1	6.00%	90	30					
231	11W	14	13		8	70	30	<1	1.30%	15	<20					
			14		6	60	24	<1	1.60%	15	<20					
232	11.5W	12	12		6	55	32	<1	2.10%	40	<20					
233	12W	12	12		22	45	18	2	6.30%	90	<20					
234	12.5W	13	12		12	25	12	<1	2.90%	55	<20					
			13		12	35	14	<1	2.30%	230	<20					
235	13W	34	17	BEDROCK?	18	35	95	<1	3.00%	150	<20					
			18		34	25	120	<1	4.30%	170	<20					
			34		38	150	170	<1	3.60%	1050	40					

DRILL HOLE No:	CO ORDINATES	TOTAL DEPTH (m)	SAMPLES SUB-MITTED	COMMENTS	GEOCHEMISTRY (ppm)											
					Cu	Pb	Zn	Ag	Fe %	Mn	As					
RWM 236	16N 13.5W	18	17	BEDROCK?	26	35	34	<1	1.80%	60	<20					
			18		32	35	42	<1	2.00%	100	<20					
237	14W	15	14		12	50	14	<1	2.90%	150	<20					
			15		10	80	26	<1	3.30%	75	<20					
238	14.5W	17	16		10	60	65	<1	2.20%	60	<20					
			17		12	60	70	<1	2.60%	45	50					
239	15W	17	16		12	40	85	<1	2.50%	30	<20					
			17		14	50	190	<1	2.30%	50	<20					
240	15.5W	18	18	BEDROCK?	20	40	110	<1	2.90%	1500	<20					
241	7.5W	4	4	BEDROCK?	20	65	18	<1	15.7%	50	70					
242	7W	5	5	BEDROCK?	32	50	18	<1	16.6%	340	40					

DRILL HOLE No:	CO ORDINATES	TOTAL DEPTH (m)	SAMPLES SUB-MITTED	COMMENTS	GEOCHEMISTRY (ppm)											
					Cu	Pb	Zn	Ag	Fe %	Mn	As					
RWM 243	16N 6.5W	10	9		8	25	12	<1	1.70%	5	<20					
			10		8	35	12	<1	2.40%	25	<20					
244	6W	8	7		8	45	14	<1	3.30%	25	<20					
			8		4	30	10	<1	8200	75	<20					
245	5.5W	11	10		4	20	6	<1	5700	10	<20					
			11		4	15	4	<1	1.30%	15	<20					
246	5W	21	21		16	30	70	<1	1.40%	240	<20					
247	4.5W	18	18	Bedrock?	26	35	90	<1	2.80%	2000	<20					
248	4W	18	8	"	12	15	12	<1	1.70%	160	<20					
			18		20	45	85	<1	1.30%	70	<20					
249	3W	11	11		28	35	14	<1	11.8%	310	<20					
250	2.5W	11	10		16	25	18	<1	1.80%	470	<20					
			11		16	20	30	<1	1.90%	480	<20					
251	2W	11	10		20	35	22	<1	2.60%	1600	<20					
			11		26	65	44	<1	4.00%	630	<20					
252	1.5W	16	15	Bedrock?	22	30	38	<1	1.80%	45	<20					
			16	"	20	20	36	<1	1.00%	890	<20					
253	1W	18	17	"	70	40	170	<1	3.10%	55	<20					

DRILL HOLE No:	CO ORDINATES	TOTAL DEPTH (m)	SAMPLES SUB-MITTED	COMMENTS	GEOCHEMISTRY (ppm)						
					Cu	Pb	Zn	Ag	Fe %	Mn	As
RWM 254	16N 00	13	12		22	15	24	<1	2.10%	40	<20
			13		16	15	18	<1	1.70%	45	<20
255	0.5E	18	18	Bedrock?	22	40	28	<1	1.00%	40	<20
256	1E	10	10	"	24	25	18	<1	3.70%	55	<20
257	1.5E	9	9	"	24	50	10	<1	8.30%	110	40
258	2E	9	9		8	25	6	<1	1.90%	5	<20
259	2.5E	7	7	Bedrock?	26	180	70	<1	5.50%	70	30
260	3E	8	7	"	12	30	8	<1	4.50%	10	<20
			8	"	10	30	6	<1	2.80%	30	20
261	3.5E	5	--	No Bedrock							
262	4E	9	9	Bedrock?	24	30	8	<1	5.10%	15	40
263	4.5E	10	---	No Bedrock?							
264	5E	12	12	Bedrock?	26	30	8	<1	4.50%	200	<20

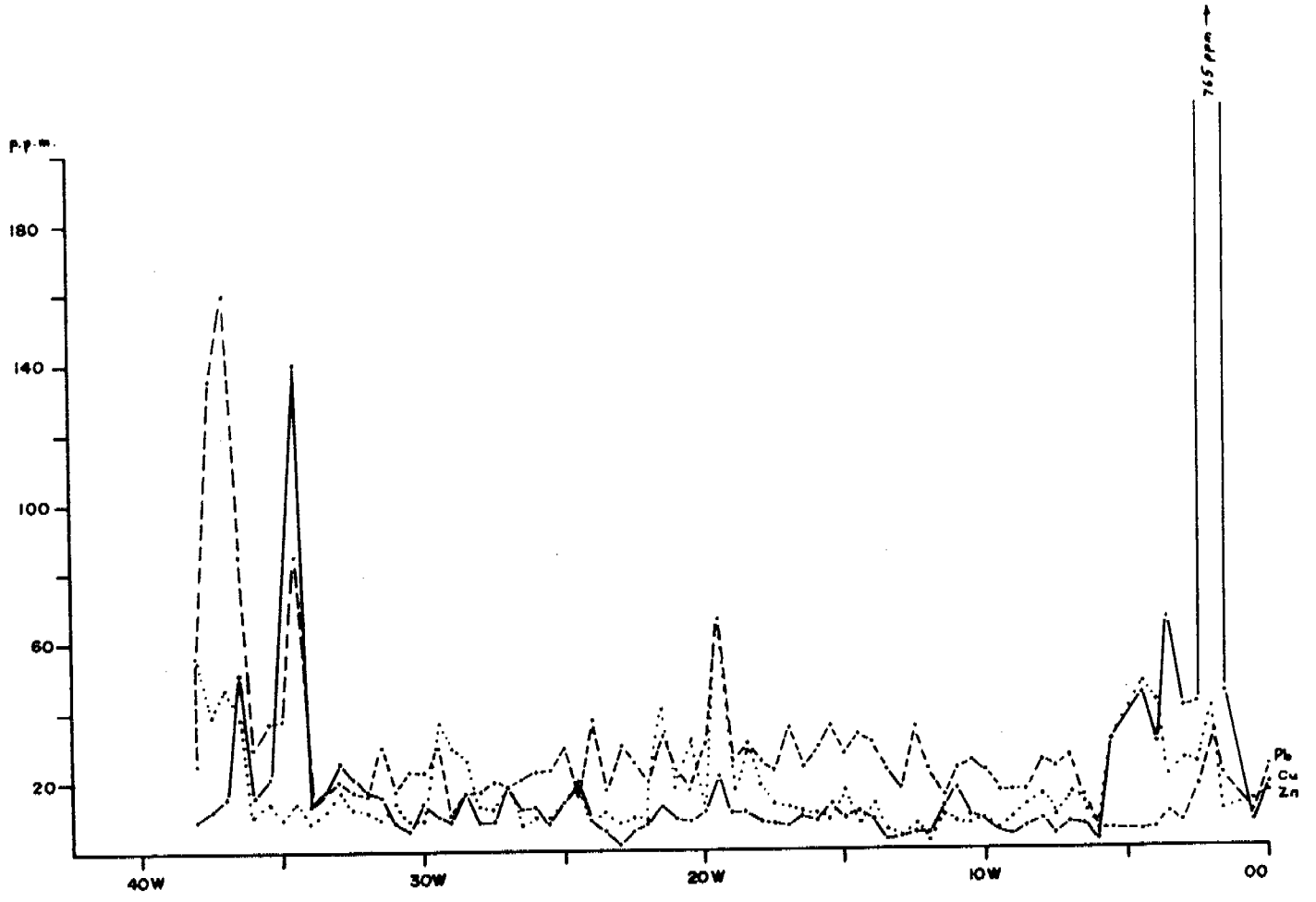
DRILL HOLE No:	CO ORDINATES	TOTAL DEPTH (m)	SAMPLES SUB-MITTED	COMMENTS	GEOCHEMISTRY (ppm)						
					Cu	Pb	Zn	Ag	Fe %	Mn	As
RWM 265	16N 5.5E	14	--	No Bedrock							
266	6E	17	17	contam?	36	50	10	<1	6.20%	20	150
267	7E	13	12		12	20	8	<1	1.70%	10	20
			13		16	10	8	<1	1.40%	15	20
268	8E	10	10		10	15	8	<1	1.80%	30	30
269	9E	10	9		10	15	6	<1	1.10%	20	<20
			10		28	30	8	<1	10.7%	280	40
270	10E	9	8		28	20	6	<1	6.40%	30	60
			9							30	
271	14.7N 34W	27	27	Bedrock?	20	15	8	<1	2.60%	150	<20
272	33W	22	--	No Bedrock							
273	31.5W	14	--	" "							
274	30W	13	--	" "							

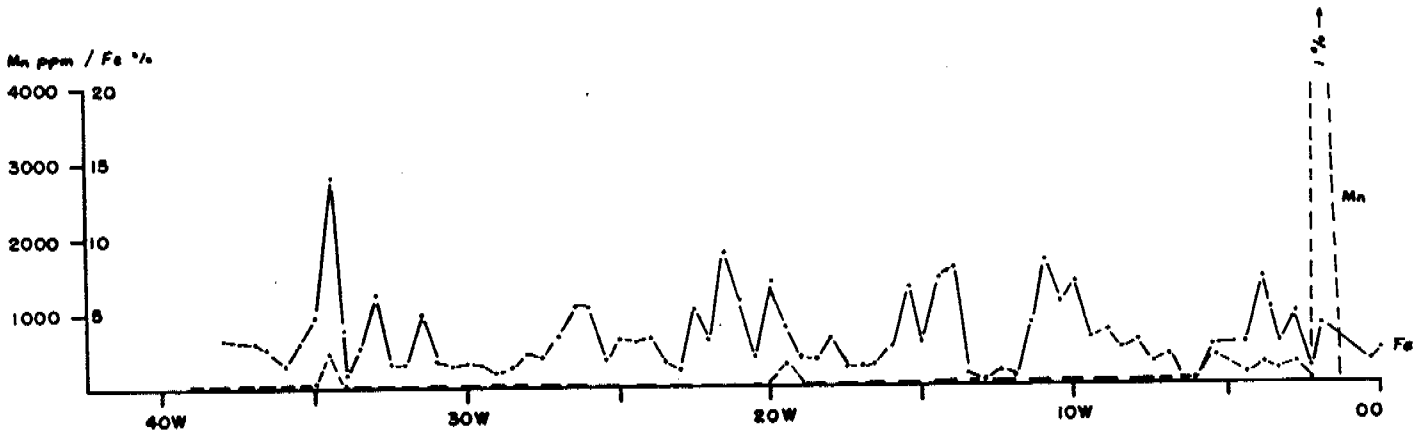
DRILL HOLE No:	CO ORDINATES	TOTAL DEPTH (m)	SAMPLES SUB-MITTED	COMMENTS	GEOCHEMISTRY (ppm)											
					Cu	Pb	Zn	Ag	Fe %	Mn	As					
RWM 275	14.7N 28.5W	26	25?		18	40	10	<1	1.20%	130	30					
			26		8	25	6	<1	8900	65	30					
276	26W	21	21		8	65	24	<1	3600	200	30					
277	24.5W	16	--	No Bedrock												
278	22.5W	22	--	"												
279	21W	12	--	"												
280	19.5W	15	15		24	55	40	<1	7900	70	<20					
281	19W	10	10		14	100	22	<1	6800	180	<20					
282	18.5W	9	8		24	100	40	<1	1.30%	85	20					
			9		14	160	18	<1	5500	35	<20					
283	18W	7	6		18	410	14	1	4.90%	65	60					
			7		22	530	48	<1	2.00%	40	30					
284	17.5W	7	7		12	35	12	<1	1.20%	90	<20					
285	17W	4	4		12	25	4	<1.	1.30%	15	<20					

DRILL HOLE No:	CO ORDINATES	TOTAL DEPTH (m)	SAMPLES SUB-MITTED	COMMENTS	GEOCHEMISTRY (ppm)											
					Cu	Pb	Zn	Ag	Fe %	Mn	As					
RWM 286	14.7N 16.5W	2	2		18	25	8	1	1.50%	10	20					
287	16W	4	4		10	35	8	<1	1.90%	10	<20					
288	15.5W	3	3		22	20	8	1	2.40%	10	40					
289	15W	4	3		24	20	10	1	6.70%	15	<20					
			4		22	15	12	1	2.10%	10	<20					
290	14.5W	6	5		20	30	12	1	8.60%	15	30					
			6		20	20	10	2	3.80%	10	30					
291	14W	7	6		20	20	14	1	3.40%	25	20					
			7		22	20	8	1	1.80%	15	<20					
292	13.5W	6	6		18	20	10	1	3.60%	25	<20					
293	13W	8	7		22	25	10	<1	3.90%	15	<20					
			8		14	15	6		2.60%		<20					
294	12.5W	9	8		16	15	6	1	1.80%	10	<20					
			9		16	15	6	2	1.60%	10	<20					
295	12W	11	11		20	30	16	1	1.70%	10	<20					
296	11.5W	11			10	15	16	<1	3.80%	25	<20					

DRILL HOLE No:	CO ORDINATES	TOTAL DEPTH (m)	SAMPLES SUB-MITTED	COMMENTS	GEOCHEMISTRY (ppm)						
					Cu	Pb	Zn	Ag	Fe %	Mn	As
RWM 297	14.7N 11W	14			12	15	14	<1	2.20%	15	<20
298	10W	12			16	25	14	1	6.40%	35	<20
299	9W	10			8	5	8	<1	1.50%	15	<20
300	8.5W	11			8	5	8	<1	1.80%	25	<20
301	8W	10			10	5	6	<1	1.30%	40	<20
302	7.5W	22			44	15	8	<1	1.10%	25	<20
303	6.5W	16			14	10	4	<1	4900	10	<20
304	6W	9	9		16	30	6	1	4.00%	35	80
305	4.5W	9	9		18	35	8	1	2.30%	110	30
306	3W	5	5		12	25	6	<1	1.50%	20	<20
307	1.5W	5	4		14	25	4	1	1.30%	45	<20
			5		14	20	6	<1	5800	15	<20

DRILL HOLE No:	CO ORDINATES	TOTAL DEPTH (m)	SAMPLES SUB-MITTED	COMMENTS	GEOCHEMISTRY (ppm)											
					Cu	Pb	Zn	Ag	Fe %	Mn	As					
RWM 308	14.7N 00	14														
309	1.5E	13	13		26	15	4	1	6600	5	< 20					
310	2E	13	13		6	10	2	< 1	5000	5	< 20					
311	3.5E	10														
312	5E	9	9		60	20	12	1	3.80%	90	< 20					
313	6E	12	12		18	30	10	1	3.50%	30	< 20					

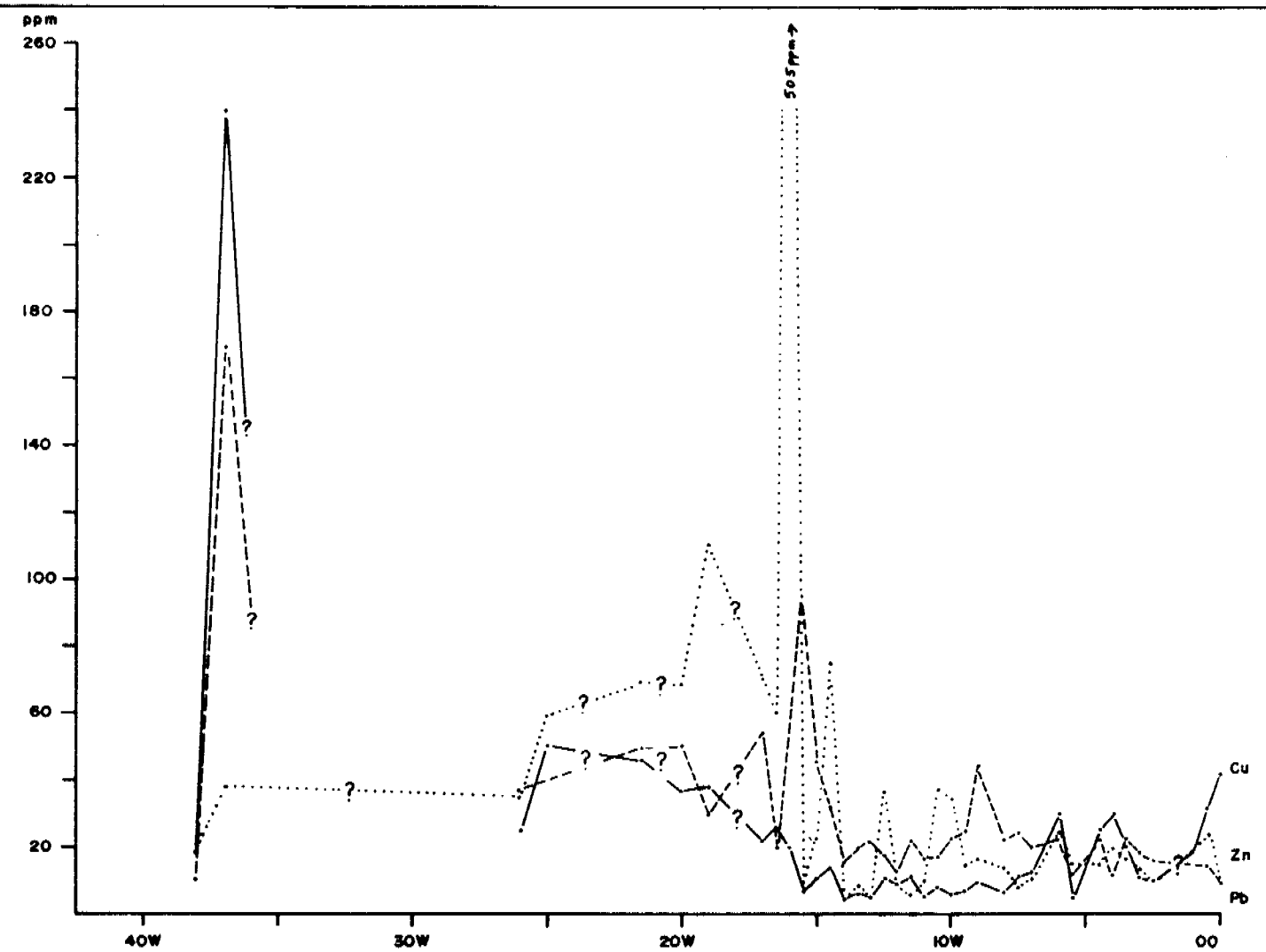


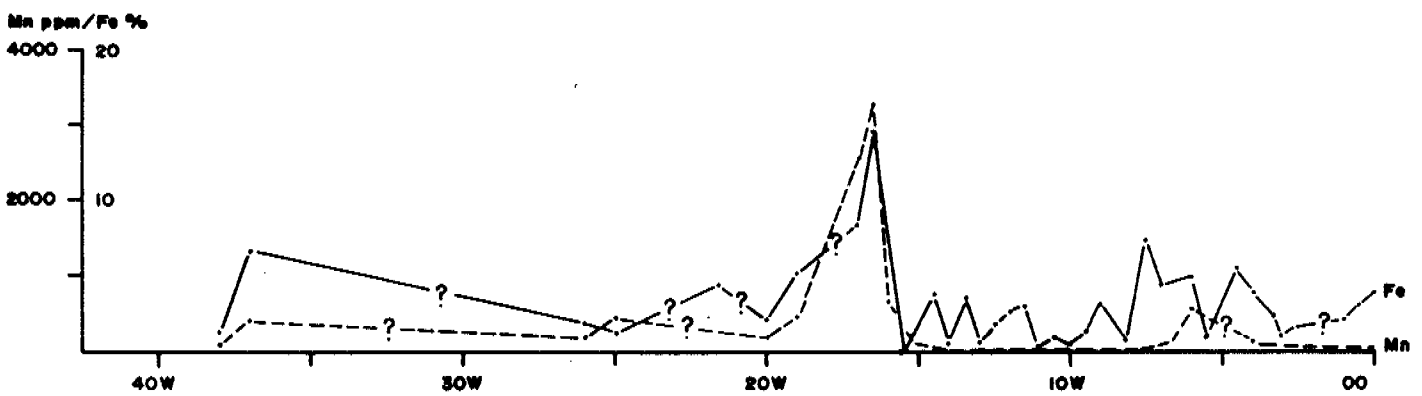


The Shell Company of Australia Limited
METALS DIVISION

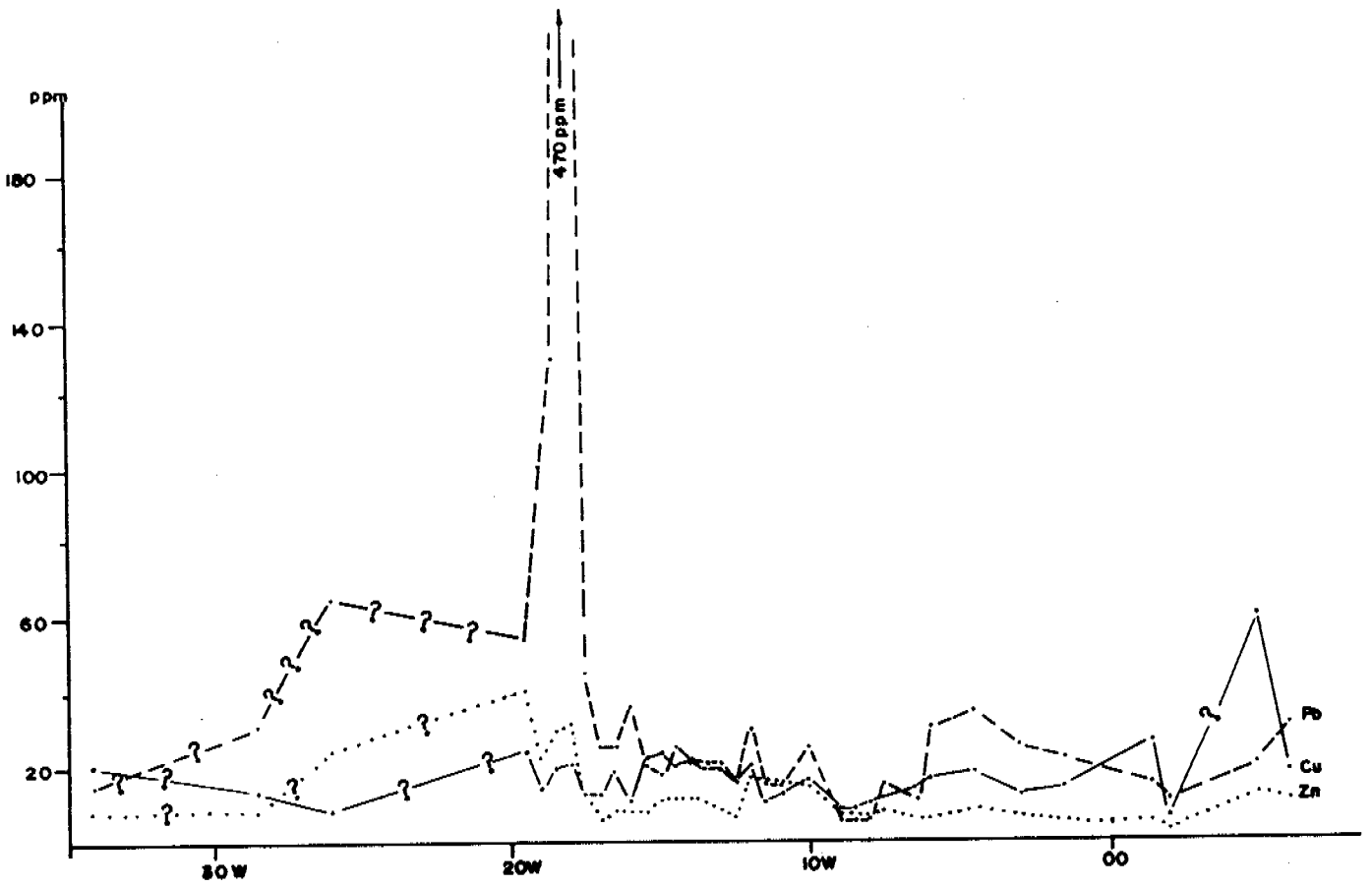
BAUHINIA JOINT VENTURE
WARRAMANA
LINE 12·7 N
GEOCHEMICAL PROFILES
Scale 1: 25,000

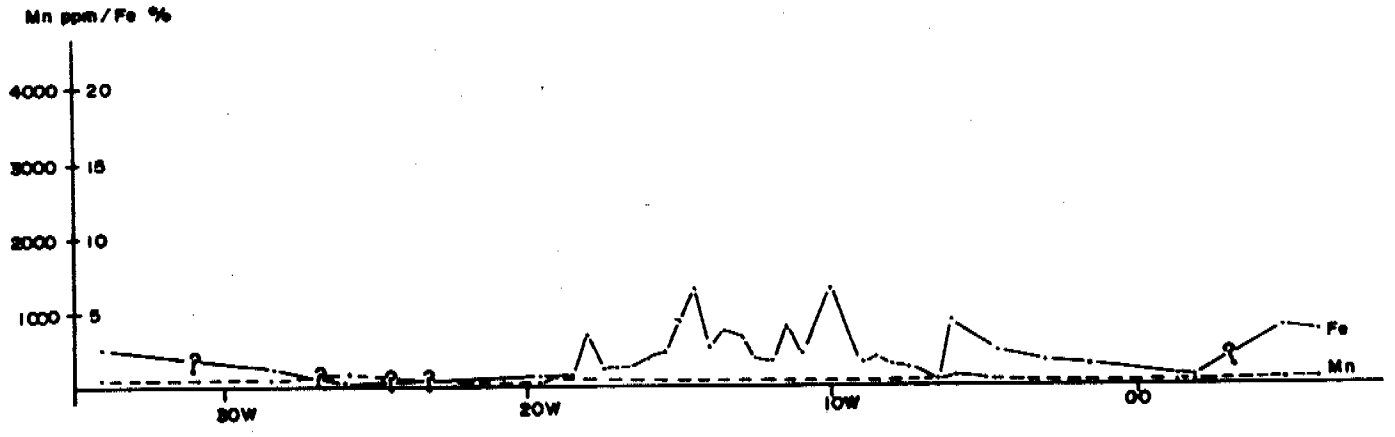
FIG No	REPORT No
ENCL No	DRG No NT/M007/009
DATE AUG '81	AUTHOR S.D
DRAWN T.E.	OFFICE DWN.





The Shell Company of Australia Limited METALS DIVISION	
BAUHINIA JOINT VENTURE WARRAMANA GEOCHEMICAL PROFILES LINE 13·3N Scale 1:25,000	
FIG No	REPORT No
ENCL No	DRG No NT/M007/008
DATE AUG '81	AUTHOR S.D.
DRAWN TF	OFFICE DARWIN

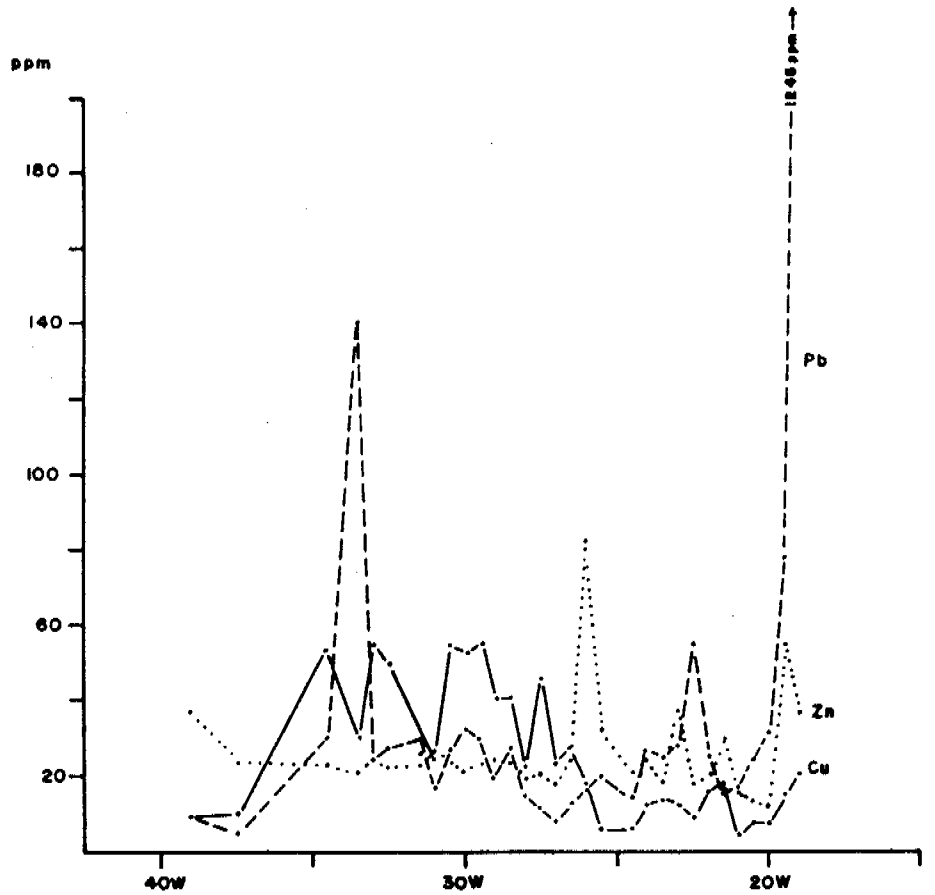


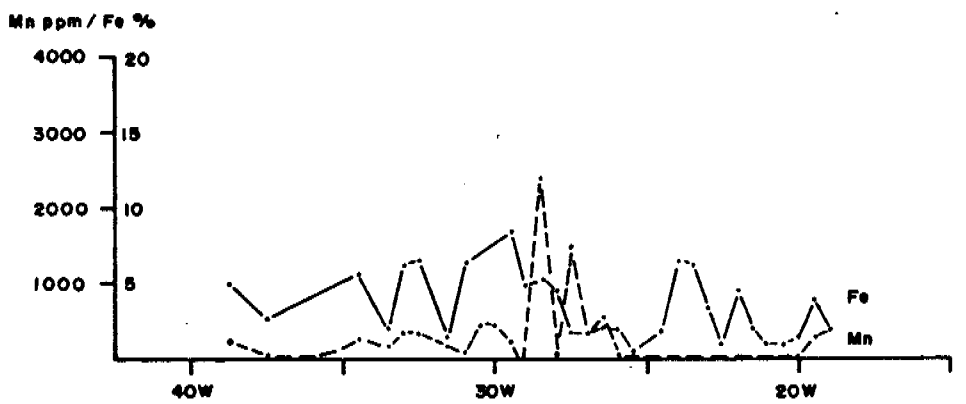


The Shell Company of Australia Limited
METALS DIVISION

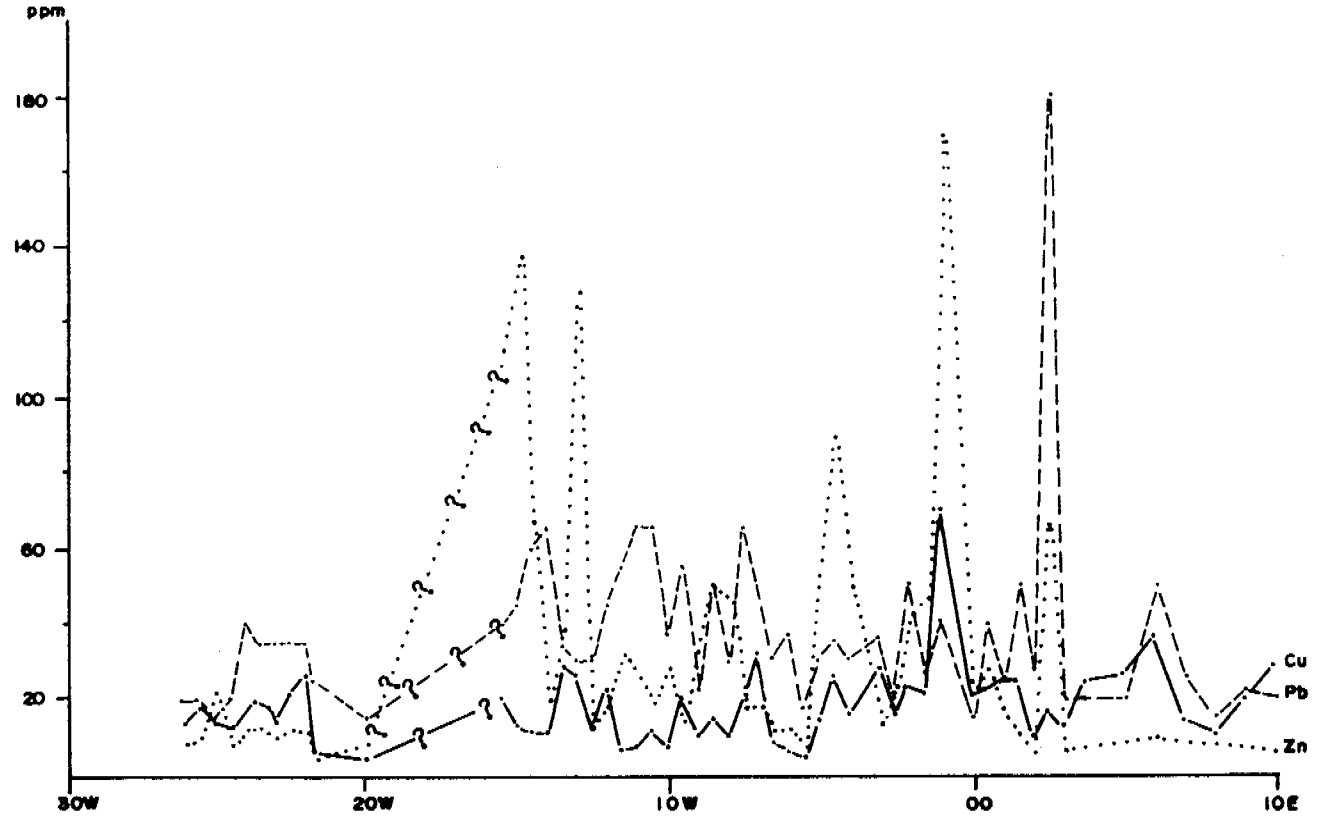
BAUHINIA JOINT VENTURE
E.L. 2072
WARRAMANA CREEK
GEOCHEMICAL PROFILES
LINE 14·7 N

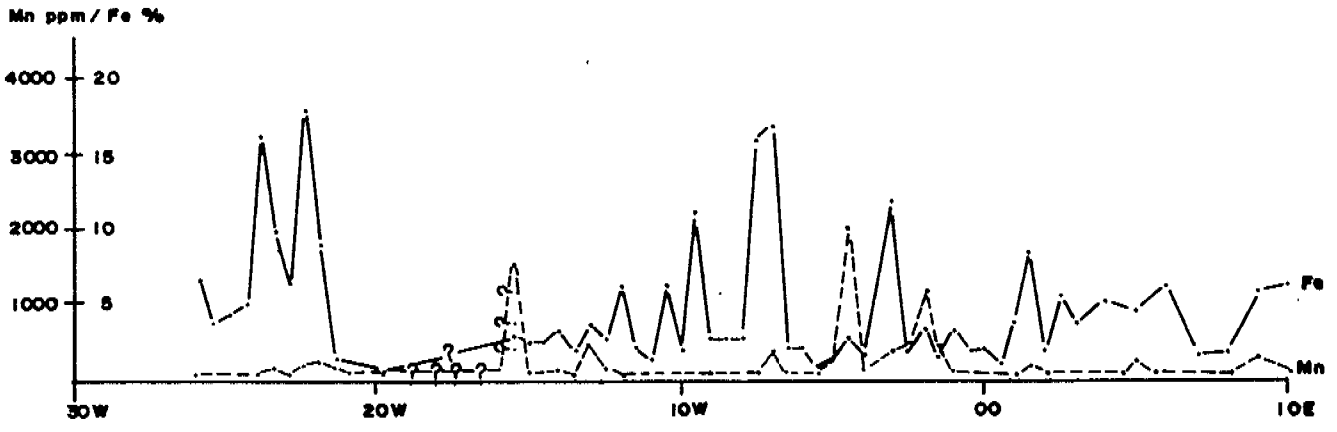
SCALE 1:25 000	DATE JAN 1982
AUTHOR J.C.B.	DRAWN K.M.B.
OFFICE DARWIN	REP. No.
DRG. No NT/M007/022	FIG. No.





The Shell Company of Australia Limited METALS DIVISION	
BAUHINIA JOINT VENTURE WARRAMANA GEOCHEMICAL PROFILES LINE 15·3 N Scale 1: 25,000	
FIG No	REPORT No
ENCL No	DRG No NT/M007/007
DATE AUG '81	AUTHOR S.D.
DRAWN T.F.	OFFICE DARWIN





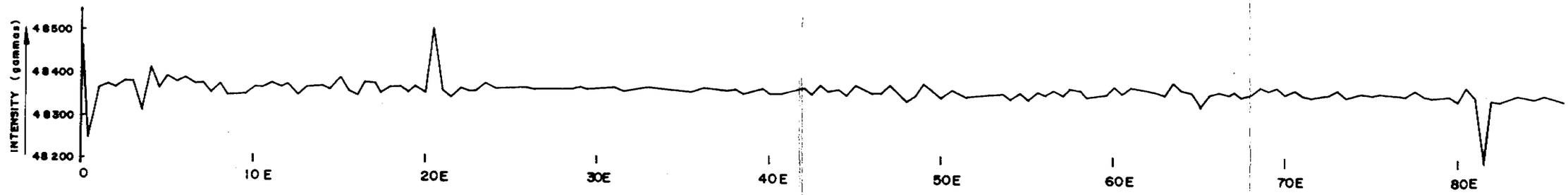
The Shell Company of Australia Limited
METALS DIVISION

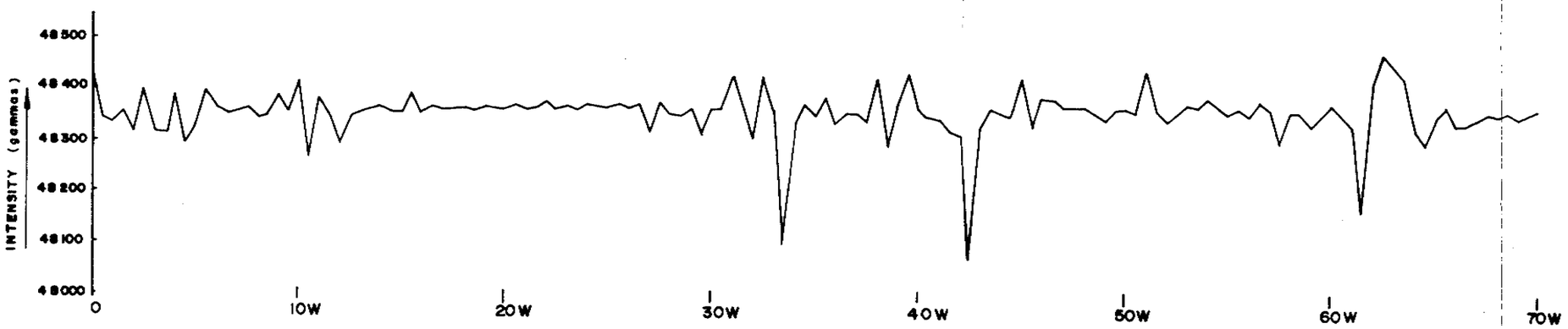
BAUHINIA JOINT VENTURE
E.L. 2072
WARRAMANA CREEK
GEOCHEMICAL PROFILES
LINE 16 N

SCALE 1 25 000	DATE JAN 1982
AUTHOR J.C.B.	DRAWN KMB
OFFICE DARWIN	REP.No.
DRG. NoNT/M007/025	FIG.No.

APPENDIX 2

GROUND MAGNETICS PROFILES





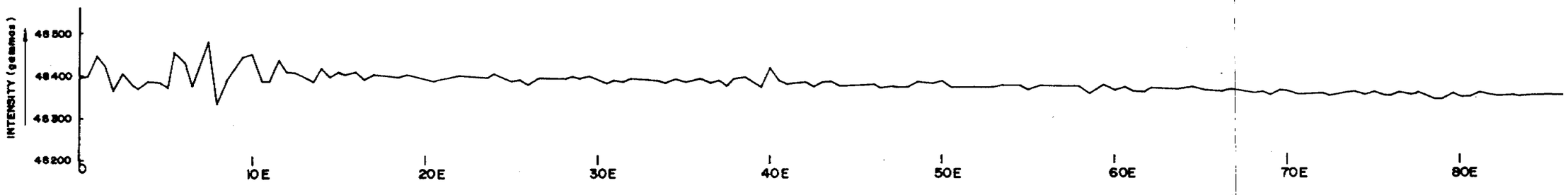
VERTICAL SCALE 1cm = 100 gammas

The Shell Company of Australia Limited
METALS DIVISION

BAUHINIA JOINT VENTURE
E.L. 2072

WARRAMANA CREEK
GROUND MAGNETICS PROFILE
LINE 14N

SCALE 1:25 000	DATE JAN. 1982
AUTHOR J.C.B.	DRAWN K.M.B.
OFFICE DARWIN	REP. No.
DRG. No. NT/M007/021	FIG. No.



VERTICAL SCALE 1cm = 100 gammas

The Shell Company of Australia Limited
METALS DIVISION

BAUHINIA JOINT VENTURE
E.L. 2072

WARRAMANA CREEK
GROUND MAGNETICS PROFILE
LINE 16N

SCALE 1: 25 000	DATE JAN. 1982
AUTHOR J.C.B.	DRAWN K.M.B.
OFFICE DARWIN	REP. No.
DRG. No. NT/ M007/ 020	FIG. No.

APPENDIX 3

DDH WM 6 LOG SHEETS

The Shell Company of Australia Limited
METALS DIVISION

DRILL LOG SHEET

PROJECT: BAUHINIA JOINT VENTURE

Hole No : WM 6

COLLAR CO-ORDINATES: LINE 24N/400N

LOCATION CODE: M00 7

COLLAR R.L.:

LOCATION: WARRAMANA CREEK (EL 2072)

MAP/PHOTO REFERENCE:

DATE STARTED	9.9.81	HOLE SIZE		FROM	TO	TOTAL	CORE STORAGE	DARWIN
DATE FINISHED	18.9.81	NON CORE	NW	0	42	42	No OF TRAYS	64
TOTAL DEPTH	543.0 m						SAMPLE STORAGE	AMDEL
LOGGED BY	J.C. BORNMAN	CORE	NQ	42.0	158.4	116.4	ASSAY LAB.	AMDEL
CONTRACTOR	ROCKDRILL		BQ	158.4	543.0	384.6	ASSAY REPORTS	~~AC 1701/82~~ AC 2044/82
RIG								
DRILL CREW		CASING	NW	0	42	42	MIN. & PET. LAB.	C.M.S.
			NQ	0	158.4	158.4	MIN. & PET. REPORTS	C.M.S. 81/12/3
		CASING LEFT	NW	0	42	42		

HOLE SURVEY DATA

INSTRUMENT:

DEPTH	INSTRUMENT INCL.	INSTRUMENT AZ.	ACID ETCH INCL.	ACID ETCH AZ.	REMARKS
COLLAR					
543.0			3°		

GRAPHIC / LETTER SYMBOL LOGGING KEY

N	NON-CORE DRILLING
DS	DOLOMITIC SILTSTONE
SS	SHALEY SILTSTONE
PS	PYRITIC SHALE
CS	CARBONACEOUS SHALE
TS	TUFFACEOUS SHALE

STRUCTURE / ALTERATION CODE

- B BEDDING
- J JOINTING
- C CLEAVAGE
- F FOLIATION
- sh SHEARING
- q QUARTZ VEINS
- O OXIDATION

DRILLING SUMMARY:

PROJECT: BABINDA J.V. SCALE: 1:200 HOLE No: DDH WM 6

From	To	Inter'l (m)	Core Rec'd	% Rec'd	Sample NO	Graph'c Log	Assays PPM/% Cu	Pb	Zn	Fe	Ag	As	Weighted Assays/Ratios Cu	Pb	Zn	% Estimates	Core Angles	All	T.S P.S.	Description
0.00	2.00	2				N														
2.00	4.00					N														
4.00	6.00					N														
6.00	8.00					N														
8.00	10.00					N														
10.00	12.00					N														
12.00	14.00					N														
14.00	16.00					N														
16.00	18.00					N														NON - CORE DRILLING
18.00	20.00					N														
20.00	22.00					N														
22.00	24.00					N														
24.00	26.00					N														
26.00	28.00					N														
28.00	30.00					N														
30.00	32.00					N														
32.00	34.00					N														
34.00	36.00					N														
36.00	38.00					N														
38.00	40.00					N														
40.00	42.00					N														42.00
42.00	44.00			100		DS											8 5			Grey-white dolomitic mudstone with occasional interbedded thin (1-40 mm.) shale and shale flake units. Occasional thin black and grey chert bands and nodules and low intensity
				100		DS														
45.00	47.00				WM6 23	DS	14	5	40	.40	.1	<20								
				77		DS														leisegang banding associated with shaley sections.
48.00	50.00			61		DS														
50.00	52.00			69		DS														
52.00	54.00			100	230	DS	18	10	34	.45	3	<20								
54.00	56.00					DS														
56.00	58.00				229	DS	12	10	50	.50	1	<20								
58.00	60.00					DS														
60.00	62.00					DS											8 0			61.80
63.00	65.00				220	SS	12	10	34	.50	2	<20								Dolomitic laminated shaley siltstone with occasional mudstone bands and chert balls. Minute angular mudstone
						SS														
66.000	68.00					SS														chips and occasional brecia bands (up to 23 cm.) of mudstone and chert chips becomming more common towards the base.
						SS							22	12	55					
69.00	71.00				227	SS	22	10	60	.65	8	<20								Unit weakly pyritic with occasional pyrite nodules and
72.00	73.00					SS														mottled dolomitic zones. Bitumen fracture fill.
	75.00					SS														
75.00	77.00				226	SS	70	10	100	.30	50	<20								
78.00	80.00					SS											8 0			77.80
81.00	83.00				225	SS	16	10	38	.35	7	<20								Dolomitic laminated shaley siltstone with occasional chert balls and pyritic nodules.
						SS														
84.00	86.00					SS														
86.00	88.00					SS														88.00
88.00	90.00					DS											8 5			White leached dolomitic siltstone
90.00	92.00					DS											8 5			91.63
92.00	94.00				224	SS	22	25	40	.100	.1	20					8 5			Shaley dolomitic siltstone with occasional shale bands. Weakly pyritic nodules. Slumping and dewatering microfaults
94.00	96.00					SS														
96.00	98.00				223	SS	24	20	100	.130	.1	<20								evident.
98.00	100.00	2				SS														

PROJECT : BAUHINIA J.V. SCALE : 1:400 HOLE NO : DDH WM 6

From	To	Inter'l (m)	Core Rec'd	% Rec'd	Sample No	Graph'c Log	Assays ppm /% Cu	Pb	Zn	Fe	Ag	As	Weighted Assays/Ratios Cu	Pb	Zn	% Estimates	Core Angles	Azi	TS PS	Description
101.26	102.00	2.74		100	WM6001	SS	42	15	65	190	28	30					80			101.60 Pyritic carbonaceous shale with occasional pyrite and galena bands (1-2 mm). Occasional thin (1-2 mm) pyritic and dolomitic siltstone lenses. Unit more towards base.
	104.00					PS														
104.00	106.00	2			002	PS	38	15	60	190	23	<20								
106.00	108.00				003	PS	42	30	100	270	4	<20								
108.00	110.00				004	PS	34	20	95	290	10	30								
110.00	112.00				005	PS	44	15	95	260	10	<20								
112.00	114.00				006	PS	34	15	85	240	<1	<20								
114.00	116.00				007	PS	26	20	80	270	4	<20								
116.00	118.00				008	PS	22	20	70	280	<1	<20								
118.00	120.00				009	PS	26	20	95	260	1	<20								
120.00	122.00				010	PS	26	15	100	280	11	<20	34	20	91					
122.00	124.00				011	PS	65	15	95	260	100	<20								
124.00	126.00				012	PS	50	40	260	280	42	<20								
126.00	128.00				013	PS	24	20	80	240	1	<20								
128.00	130.00				014	PS	42	20	100	290	38	<20								
130.00	132.00				015	PS	24	20	65	300	1	<20								
132.00	134.00				016	PS	28	20	60	240	14	<20					80			136.00 Moderately silty carbonaceous shale (weakly pyritic)
134.00	136.00				017	PS	14	15	40	160	<1	<20					80			
136.00	138.00				018	CS	10	15	46	130	<1	<20								
138.00	140.00				019	CS	14	10	75	110	9	<20								
140.00	142.00				020	CS	12	20	75	130	1	<20								
142.00	144.00				021	CS	16	10	130	130	<1	<20								
144.00	146.00				022	CS	14	10	80	130	<1	<20								
146.00	148.00				023	CS	22	15	65	150	13	<20								
148.00	150.00				024	CS	14	20	55	120	1	<20								
150.00	152.00				--	CS														
152.00	154.00				025	CS	28	20	75	130	10	<20								
154.00	156.00				026	CS	14	15	70	90	<1	<20								
156.00	158.00				027	CS	14	20	75	120	<1	<20								
158.00	160.00				028	CS	30	20	85	90	32	<20								
160.00	162.00				029	CS	16	20	75	90	9	<20					80			160.90 Silty (tuffaceous?), weakly pyritic carbonaceous shale. Occasional dolomite nodules. Green tuff band at 191.72 - 191.75 m.
162.00	164.00				030	CS	14	15	100	80	<1	<20					80			
164.00	166.00				031	CS	16	20	65	100	6	40								
166.00	168.00				032	CS	12	20	48	55	3	<20								
168.00	170.00				033	CS	50	20	120	70	190	<20								
170.00	172.00				034	CS	24	20	75	75	1	<20								
172.00	174.00				035	CS	14	20	85	65	<1	<20								
174.00	176.00				036	CS	16	20	65	60	15	<20								
176.00	178.00				037	CS	14	20	95	50	1	<20								
178.00	180.00				038	CS	12	15	50	45	<1	<20								
180.00	182.00				039	CS	14	20	40	90	<1	<20								
182.00	184.00				040	CS	10	20	24	65	<1	<20								
184.00	186.00				041	CS	10	25	44	95	1	<20								
186.00	188.00				042	CS	10	20	60	85	<1	30								
188.00	190.00				043	CS	8	15	60	75	<1	70					80			189.60 Laminated silty carbonaceous shale with occasional thin (2-80 mm) white tuffaceous and dolomite bands.
190.00	192.00				044	CS	16	15	65	80	5	<20					80			
192.00	194.00				045	CS	14	15	70	100	<1	<20								
194.00	196.00				046	CS	18	25	75	95	<1	<20								
196.00	198.00				047	CS	12	25	90	85	<1	<20					80			
198.00	200.00				048	CS	16	15	80	110	<1	40								

HOLE NO DDH WM 6

HOLE NO DDH WM 6

PROJECT : BAUHINIA JV

SCALE : 1:400

From	To	Inter'l (m)	Core Rec'd	% Rec'd	Sample No	Graph's Log	Assays ppm / % Cu	Pb	Zn	Fe	Ag	As	Weighted Cu	Pb	Zn	% Estimates	Core Angles	Alt	T S P S	Description
200.00	202.00	2		100	WM.049	CS	12	20	75	90	<1	40								Green Tuff bands at
202.00	204.00				050	CS	12	15	42	75	<1	<20								201.88 - 201.90; 233.37 - 233.48;
204.00	206.00				051	CS	14	20	60	80	3	<20								244.43 - 244.47; 255.04 - 255.12;
206.00	208.00				052	CS	12	25	65	80	1	<20								257.08 - 257.11; 262.65 - 262.74;
208.00	210.00				053	CS	10	20	46	75	<1	<20								273.87 - 273.90; 275.88 - 275.95;
210.00	212.00				054	CS	12	25	42	90	<1	<20								277.70 - 277.71; 282.29 - 282.33;
212.00	214.00				055	CS	14	20	70	100	5	<20								295.40 - 295.43; 302.79 - 302.84;
214.00	216.00				056	CS	10	20	100	95	<1	<20								327.15 - 327.23; 351.31 - 351.35;
216.00	218.00				057	CS	10	20	55	95	<1	<20								430.88 - 430.91; 440.26 - 440.30;
218.00	220.00				058	CS	10	25	55	100	2	<20								461.13 - 461.14; 468.91 - 468.93;
220.00	222.00				059	CS	12	20	60	110	2	<20								484.14 - 484.16;
222.00	224.00				060	CS	20	15	70	100	33	<20								Slumped bedding from 442.78 to 443.02 m.
224.00	226.00				061	CS	12	15	60	110	4	<20								
226.00	228.00				062	CS	12	10	46	110	<1	<20								
228.00	230.00				063	CS	12	15	46	100	1	<20								
230.00	232.00				064	CS	12	20	36	100	2	<20								
232.00	234.00				065	CS	16	15	46	120	6	<20								
234.00	236.00				066	CS	14	15	65	110	10	<20								
236.00	238.00				067	CS	14	15	48	110	<1	<20								
238.00	240.00				068	CS	14	25	65	110	1	<20								
240.00	242.00				069	CS	14	30	55	90	1	<20								
242.00	244.00				070	CS	16	10	65	85	1	<20								
244.00	246.00				071	CS	14	25	44	130	<1	<20								
246.00	248.00				072	CS	14	20	50	120	<1	<20								
248.00	250.00				073	CS	14	25	65	110	5	<20								
250.00	252.00				074	CS	12	20	85	120	<1	<20								
252.00	254.00				075	CS	22	15	70	140	1	<20								
254.00	256.00				076	CS	14	15	55	160	<1	<20								
256.00	258.00				077	CS	14	15	65	120	3	<20								
258.00	260.00				078	CS	14	20	60	140	<1	<20								
260.00	262.00				079	CS	12	20	48	150	1	<20								
262.00	264.00				080	CS	14	25	60	140	<1	<20								
264.00	266.00				081	CS	14	20	70	140	<1	<20								
266.00	268.00				082	CS	16	20	70	150	<1	<20								
268.00	270.00				083	CS	16	20	60	150	<1	<20								
270.00	272.00				084	CS	16	20	60	150	1	<20								
272.00	274.00				085	CS	14	25	75	170	7	<20								
274.00	276.00				086	CS	18	25	120	150	3	<20								
276.00	278.00				087	CS	20	35	90	150	8	<20								
278.00	280.00				088	CS	20	35	65	150	1	<20								
280.00	282.00				089	CS	20	30	65	150	6	<20								
282.00	284.00				090	CS	16	30	130	150	2	<20								
284.00	286.00				091	CS	18	25	90	160	1	<20								
286.00	288.00				092	CS	16	25	90	170	<1	<20								
288.00	290.00				093	CS	18	25	55	170	<1	<20								
290.00	292.00				094	CS	18	25	65	200	<1	<20								
292.00	294.00				095	CS	18	25	90	180	<1	60								
294.00	296.00				096	CS	18	25	100	140	<1	<20								
296.00	298.00				097	CS	18	30	70	170	1	<20								
298.00	300.00	2			098	CS	18	30	85	150	1	<20								

80

80

SHEET 3 OF 6 SHEETS

HOLE NO DDH WM 6

PROJECT : BAGUINTA JV SCALE : 1:400 HOLE NO : DDH WM 9

From	To	Inter'l (m)	Core Rec'd	% Recd	Sample No	Grap'c Log	Assays ppm/% Cu	Pb	Zn	Fe	Ag	As	Weighted Assays/Int. Cu	Pb	Zn	% Estimates	Core Angles	Alt	TS PS	Description
300.00	302.00	2		100	WM6095	CS	18	25	80	150	<1	50					80			
302.00	304.00				100	CS	14	30	120	160	1	<20								
304.00	306.00				101	CS	18	20	65	160	1	<20	18	22	83					
306.00	308.00				102	CS	24	25	48	190	1	<20								
308.00	310.00				103	CS	22	20	55	170	1	<20								
310.00	312.00				104	CS	18	25	140	150	<1	<20								
312.00	314.00				105	CS	18	30	80	170	<1	<20								
314.00	316.00				106	CS	18	25	65	150	<1	<20								
316.00	318.00				107	CS	20	25	70	170	<1	<20								
318.00	320.00				108	CS	18	25	85	170	1	50								
320.00	322.00				109	CS	18	20	100	190	<1	<20								
322.00	324.00				110	CS	18	20	70	170	2	<20								
324.00	326.00				111	CS	16	20	80	140	<1	<20								
326.00	328.00				112	CS	14	20	100	170	<1	<20								
328.00	330.00				113	CS	18	20	70	160	<1	<20								
330.00	332.00				114	CS	22	25	70	170	<1	<20								
332.00	334.00				115	CS	18	25	60	140	<1	<20								
334.00	336.00				116	CS	20	35	90	170	<1	<20								
336.00	338.00				117	CS	20	25	60	140	2	<20								
338.00	340.00				118	CS	18	20	60	140	1	<20								
340.00	342.00				119	CS	20	25	65	190	3	<20								
342.00	344.00				120	CS	22	25	70	150	<1	<20								
344.00	346.00				121	CS	20	30	60	240	1									
346.00	348.00				122	CS	24	25	65	190	<1									
348.00	350.00				123	CS	28	30	65	180	7									
350.00	352.00				124	CS	22	25	80	200	<1									
352.00	354.00				125	CS	22	30	80	190	2									
354.00	356.00				126	CS	24	30	60	190	1									
356.00	358.00				127	CS	20	25	65	190	2									
358.00	360.00				128	CS	20	25	65	200	2									
360.00	362.00				129	CS	26	20	60	200	4									
362.00	364.00				130	CS	18	20	80	210	<1									
364.00	366.00				131	CS	20	20	75	190	1									
366.00	368.00				132	CS	20	25	280	170	<1									
368.00	370.00				133	CS	20	20	80	180	<1									
370.00	372.00				134	CS	22	25	80	200	1									
372.00	374.00				135	CS	20	20	85	210	1									
374.00	376.00				136	CS	26	15	75	200	11									
376.00	378.00				137	CS	26	20	70	200	1									
378.00	380.00				138	CS	22	20	100	190	2									
380.00	382.00				139	CS	24	20	90	200	<1									
382.00	384.00				140	CS	24	20	100	210	<1									
384.00	386.00				141	CS	24	20	110	140	<1									
386.00	388.00				142	CS	24	25	85	200	<1									
388.00	390.00				143	CS	24	20	80	200	<1									
390.00	392.00				144	CS	24	20	85	210	<1									
392.00	394.00				145	CS	30	20	90	200	<1									
394.00	396.00				146	CS	24	25	110	190	<1									
396.00	398.00				147	CS	30	25	130	200	10									
398.00	400.00	2			148	CS	24	20	110	200	3	<20					80			

SHEET 4 OF 6 SHEETS

HOLE No DDH WM 9

PROJECT : BADHINIA JV SCALE : 1:400 HOLE No : DDH WM 6

From	To	Inter'l (m)	Core Rec'd	% Rec'd	Sample NO	Grap'c Log	Assays ppm/% Cu	Pb	Zn	Fe	Ag	As	Weighted Assays/Ratios Cu	Pb	Zn	% Estimates	Core Angles	Alt	T S P S	Description
400.00	402.00	2		100	WM6 149	CS	24	35	80	200	1	<20					80			
402.00	404.00				150	CS	24	20	85	180	3									
404.00	406.00				151	CS	22	30	100	200	<1									
406.00	408.00				152	CS	24	25	85	200	<1									
408.00	410.00				153	CS	24	25	80	220	<1									
410.00	412.00				154	CS	22	25	80	190	<1									
412.00	414.00				155	CS	22	20	85	200	<1									
414.00	416.00				156	CS	22	25	90	240	<1									
416.00	418.00				157	CS	24	25	75	240	<1									
418.00	420.00				158	CS	24	20	90	200	2									
420.00	422.00				159	CS	28	15	100	190	3									
422.00	424.00				160	CS	24	25	100	220	1									
424.00	426.00				161	CS	26	20	95	200	<1									
426.00	428.00				162	CS	24	20	110	200	<1									
428.00	430.00				163	CS	24	20	90	200	1									
430.00	432.00				164	CS	20	25	110	230	<1									
432.00	434.00				165	CS	12	30	140	210	<1									
434.00	436.00				166	CS	22	25	140	200	<1									
436.00	438.00				167	CS	22	25	110	170	<1									
438.00	440.00				168	CS	26	35	140	200	1									
440.00	442.00				169	CS	22	25	110	210	7									
442.00	444.00				170	CS	20	25	130	210	1									
444.00	446.00				171	CS	20	25	100	260	<1									
446.00	448.00				172	CS	26	20	140	220	<1									
448.00	450.00	2			173	CS	24	25	90	230	<1									
450.00	452.00	4			174 —	CS	25	23	58	240	<1	<20								
452.00	454.00				176	CS														
454.00	456.00	2			177	CS	26	25	130	220	<1	20	24	28	111					
456.00	458.00				178	CS	26	35	140	210	<1	20								
458.00	460.00				179	CS	22	25	140	200	<1	<20								
460.00	462.00				180	CS	22	45	150	190	<1	<20								
462.00	464.00				181	CS	24	25	170	190	2	20								
464.00	466.00				182	CS	36	25	210	190	1	20								
466.00	468.00				183	CS	28	35	200	200	1	20								
468.00	470.00				184	CS	26	25	180	190	<1	<20								
470.00	472.00				185	CS	40	70	330	220	<1	20								
472.00	474.00				186	CS	50	50	120	230	2	40								
474.00	476.00				187	CS	42	55	600	240	<1	30	38	45	250					
476.00	478.00				188	CS	44	60	320	260	1	20								
478.00	480.00				189	CS	40	35	65	230	1	20								
480.00	482.00				190	CS	42	35	100	220	<1	30								
482.00	484.00	2			191	CS	36	75	340	200	1	20								
484.00	486.42	2.42			192	CS	36	35	260	250	11	30								
486.00	488.00	1.58			193	CS	36	40	270	250	9	30					80			488.40
488.00	490.00	2			194	PS	30	50	330	260	6	30					90			Carbonaceous pyritic shale with occasional nodules and fracture fill of galena and sphalerite. Abundant pyrite nodules. Slicken sided joints throughout. Irregular
490.00	492.00	2			195	PS	26	60	75	280	5	130	27	69	361					
492.00	494.00	2			196	PS	24	50	130	250	3	60								
494.00	495.5	1.5			197	PS	26	65	70	270	1	80					90			496.60 root contact exhibiting slumped bedding and
495.00	497.00	1.5			198	PS	28	120	1200	260	2	40								
497.00	498.50	1.5			199	TS	32	60	740	260	<1	30					90			dewatering and compaction microfaults.
498.50	500.00	1.5			200	TS	30	60	350	260	3	30					90			

SHEET 5 OF 6 SHEETS

DDH WM 6

PROJECT : SAGUENIA JV SCALE : 1:400 HOLE No. : [illegible]

From	To	Inter'l (m)	Core Rec'd	% Rec'd	Sample No	Grap'c Log	Assays ppm/% Cu	Pb	Zn	Fe	Ag	As	Description
500.00	502.00	2		100	WM6 201	TS	30	60	380	230	23	20	Laminated silty shale and tuffaceous shale with numerous grey-green and pink tuff bands throughout. Unit becomes more tuffaceous towards the base. Occasional nodules of pyrite.
502.00	504.00				202	TS	30	110	260	260	<1	<20	
504.00	506.00				203	TS	30	40	220	240	<1	20	
506.00	508.00				204	TS	40	25	65	250	23	20	
508.00	510.00				205	TS	46	25	60	300	33	50	
510.00	512.00				206	TS	32	20	44	290	1	20	
512.00	514.00				207	TS	28	20	44	290	<1	20	
514.00	516.00				208	TS	30	20	50	260	<1	20	
516.00	518.00				209	TS	24	20	46	270	2	30	
518.00	520.00				210	TS	32	30	120	250	<1	20	
520.00	522.00				211	TS	34	40	180	200	9	20	
522.00	524.00				212	TS	36	20	55	260	1	20	
524.00	526.00	2			213	TS	40	20	55	220	55	20	
526.00	527.99	1.99			214	TS	48	15	60	300	29	<20	
527.99	530.00	2.01			215	TS	30	15	95	260	24	<20	
530.00	532.00	2			216	TS	38	5	90	260	12	<20	
532.00	534.00				217	TS	22	5	70	260	3	<20	
534.00	536.00				218	TS	26	5	65	210	27	<20	
536.00	538.00				219	TS	40	5	95	210	4	<20	
538.00	540.00				220	TS	40	5	110	220	1	<20	
540.00	542.00	2			221	TS	42	10	130	210	1	<20	
542.00	543.00	1		100	222	TS	32	10	85	220	<1	<20	543.00

Weighted Assays/Ratios: Cu 30, Pb 66, Zn 390 | 35, 17, 80

% Estimates: 90 | 90

Core Angles

AU

TS P.S.

SHEET 6 OF 6 SHEETS

HOLE No. DDH WM6

APPENDIX 4

DDH WM 7 LOG SHEETS

The Shell Company of Australia Limited
METALS DIVISION

DRILL LOG SHEET

Hole No : MM 7

PROJECT : BAUHINIA JOINT VENTURE

LOCATION CODE : M007

COLLAR CO-ORDINATES : LINE 15.3N; 2200W

COLLAR R.L. :

LOCATION : WARRAMANA CREEK (EL 2072)

MAP/PHOTO REFERENCE :

DATE STARTED	19.9.1981	HOLE SIZE		FROM	TO	TOTAL	CORE STORAGE	DARWIN
DATE FINISHED	23.9.1981	NON CORE	NW	0	60	60	No OF TRAYS	19
TOTAL DEPTH	246.0 m.						SAMPLE STORAGE	AMDEL
LOGGED BY	J.C. BORNMAN	CORE	NQ	60	231	171	ASSAY LAB.	AMDEL
CONTRACTOR	ROCKDRILL		BQ	231	246	15	ASSAY REPORTS	AC. 2044/82
RIG	FOX 3							
DRILL CREW		CASING	NW	0	69	69	MIN. & PET. LAB.	-----
			NQ	0	231	231	MIN. & PET. REPORTS	----
		CASING LEFT	NW	0	69	69		

HOLE SURVEY DATA

INSTRUMENT :

DEPTH	INSTRUMENT INCL.	INSTRUMENT AZ.	ACID ETCH INCL.	ACID ETCH AZ.	REMARKS
COLLAR					

GRAPHIC / LETTER SYMBOL LOGGING KEY

	N	NON-CORE DRILLING	S	D	STROMATOLITIC DOLOMITE
S	H	SHALE			
S	T	SILTSTONE			
S	S	SHALEY SILTSTONE			
D	S	DOLOMITIC SILTSTONE			

STRUCTURE / ALTERATION CODE

B BEDDING
J JOINTING
C CLEAVAGE
F FOLIATION
sh SHEARING
q QUARTZ VEINS
O OXIDATION

DRILLING SUMMARY :

PROJECT : BAUHINIA JV

SCALE : 0-60 m 1:200
60-120 m 1:400

HOLE NO : DDH WM7

From	To	Inter'l (m)	Core Rec'd	% Recd	Sample NO	Grap'c Log	Assays ppm/% Cu	Pb	Zn	Fe	Ag	As	Weighted Assays/Ratios Cu	Pb	Zn	% Estimates	Core Angles		Alt.	T.S. P.S.	Description
0.00	3.00	3			WM7 3	N	24	25	38	380	<1	<20									
3.00	6.00				6	N	16	20	42	260	<1	20									
6.00	9.00				9	N	16	25	46	270	<1	20									
9.00	12.00				12	N	12	20	42	190	<1	20									
12.00	15.00				15	N	6	10	20	150	<1	30	12	19	35						
15.00	18.00				18	N	8	10	18	150	<1	20									
18.00	21.00				21	N	12	20	44	110	<1	20									
21.00	24.00				24	N	8	20	30	95	<1	20									
24.00	27.00				27	N	10	20	32	120	<1	20									
27.00	30.00				-----	N															
30.00	33.00				-----	N															Non-Core Drilling
33.00	36.00				-----	N															
36.00	39.00				-----	N															
39.00	42.00				-----	N															
42.00	45.00				-----	N															
45.00	48.00				-----	N							---	---	---						
48.00	51.00				-----	N															
51.00	54.00				-----	N															
54.00	57.00				-----	N															
57.00	60.00				-----	N															
60.00	62.15	2.15		90	WM7001	SH	28	55	130	400	<1	50									60.00
62.15	64.00	1.85		90	002	ST	30	55	110	380	<1	30					7	0			Leached shale with laminated shale and shale flake beds.
64.00	66.00	2		90	003	ST	24	45	120	300	<1	30					7	0			62.15
66.00	68.00			43	004	ST	36	45	130	410	7	20									
68.00	70.00			43	005	ST	48	40	110	300	32	20									
70.00	72.00			43	006	ST	32	25	65	110	15	20									
72.00	74.00			43	007	ST	26	40	100	340	6	20									
74.00	76.00			43	008	ST	22	35	100	250	2	20									
76.00	78.00			43	009	ST	18	35	80	300	4	50									
78.00	80.00			69	010	ST	20	55	90	340	<1	60									
80.00	82.00			60	011	ST	26	50	85	220	3	50									
82.00	84.00			60	012	ST	28	60	110	420	36	60									
84.00	86.00	2		45	013	ST	18	40	75	160	2	40									Pale yellowish - orange and orange - brown weathered siltstone with yellowish - orange, red - yellow, gray and mauve laminated shale and shale interbeds. Occasional shale flake units. Limonite bands and oölitic limonite grains common at top of unit and present near the base. Brecciation common from 87.00 - 130.20 metres.
86.00	88.00	4		32	014	ST	32	35	75	230	130	40									
88.00	90.00			20		ST															
90.00	92.00	2		74	015	ST	36	55	100	400	2	60	32	33	116						
92.00	94.00	2		67	016	ST	32	50	110	460	<1	90									
94.00	96.00	2		61	017	ST	34	30	75	290	2	100									
96.00	98.00			23		ST															
98.00	100.00	6		23	018	ST	46	35	120	270	9	120									
100.00	102.00			23		ST															
102.00	104.00	2		91	019	ST	34	35	95	170	2	90									
104.00	106.00	2		91	020	ST	65	35	110	220	6	50									
106.00	108.00	2		91	021	ST	70	40	150	110	2	20									
108.00	110.00	2		0	-----	ST															
110.00	112.00	2		0	-----	ST															
112.00	114.00	2		0	-----	ST															
114.00	116.00	2		85	022	ST	28	40	170	410	5	40									
116.00	118.00	2		92	023	ST	24	50	150	400	5	110									
118.00	120.00	2		100	024	ST	26	25	130	390	2	450									

HOLE NO : DDH WM 7

PROJECT : VAGUINIA JV. SCALE : 1:400 HOLE No :

From	To	Inter'l (m)	Core Rec'd	% Rec'd	Sample No	Grap'c Log	Assays ppm/% Cu	Pb	Zn	Fe	Ag	As	Weighted Assays/Ratios Cu	Pb	Zn	% Estimates	Core Angles		Alt.	T.S. P.S.	Description
120.00	122.00	2		100	025	ST	26	30	170	520	1	80					7	0			
122.00	124.00	4		61	026	ST	32	40	200	360	4	50									
124.00	126.00			22		ST															
126.00	128.00	2		62	027	ST	20	35	140	260	1	40									
128.00	130.00			80	028	ST	26	35	210	380	1	40									130.20
130.00	132.00			98	029	ST	22	45	200	360	4	20					7	0			
132.00	134.00			69	030	ST	40	45	210	300	1	20									
134.00	136.00			69	031	ST	16	25	130	380	5	20									
136.00	138.00			69	032	ST	18	30	150	360	2	20									
138.00	140.00			53	033	ST	30	45	180	360	7	20									Light green-grey to grey-green muddy siltstone
140.00	142.00			53	034	ST	22	20	170	260	1	20									and mudstone with rare siltstone and shale
142.00	144.00	2		57	035	ST	18	20	170	420	2	20									flake bands. Fracturing and brecciation near top and
144.00	146.00			29		ST															bottom. Oolitic limonite grains common in top part of
146.00	148.00	6		29	036	ST	46	20	150	280	43	20									unit. Rare mauve - green stains and bands. Ghost bedding.
148.00	150.00			29		ST															
150.00	152.00			11		ST															
152.00	154.00	6		11	037	ST	18	20	130	270	16	20									
154.00	156.00			1		ST															
156.00	158.00			24		ST															
158.00	160.00	6		24	038	ST	16	20	90	280	21	<20									
160.00	162.00			24		ST															
162.00	164.00			17		ST															
164.00	166.00	6		17	039	ST	28	20	100	340	27	20									
166.00	168.00			17		ST															
168.00	170.00			32		ST															
170.00	172.00	6.3		32	040	ST	85	30	140	320	28	20									
172.00	174.30			32		ST															174.30
174.30	176.00	4.7		32		ST											7	0			Greenish to gray fractured and brecciated siltstone with
176.00	179.00			67	041	ST	32	20	90	320	16	20									yellowish - gray shale and shale flake interbeds becomming
179.00	181.00	2		84	042	ST	26	15	75	230	5	20									more common towards the base. Abundant limonite stain
181.00	183.00	2		84	043	ST	75	15	120	200	100	20									and fracture fill.
183.00	185.00	2		100	044	ST	22	10	65	200	2	20									
185.00	187.00	2		92	045	ST	32	20	90	200	5	20									
187.00	189.00	2		83	046	ST	32	15	80	210	4	20									
189.00	191.00			50		ST															192.87
191.00	192.87	3.87		50	047	ST	34	20	65	170	23	20									Orange - red laminated shaley siltstone with siltstone
192.87	195.00	2.13		77	048	ST	36	20	50	240	4	20					7	0			interbeds. Silicified towards base. Occassional brecciated
195.00	198.00	3		59	049	SS	32	20	55	210	15	420									zones with grey chert clasts.
198.00	201.00	3		59		SS															
201.00				57	050	SS	36	15	55	60	19	420									201.00
	204.00	6		38	051	DS	44	30	60	510	2	20									Yellow - brown to grey - brown fractured and brecciated
204.00	207.00			20		DS															limonite stained dolomitic siltstone interbedded with rare
207.00				28		DS															siltstone and shale. Occassional grey chert clasts in breccia.
	210.00	7.5		26	052	SD	40	25	75	280	1	420					8	5			209.30
210.00	212.00			40		SD															Pale pink, yellow and grey siliceous dolomite, leached dolomitic
212.00	214.50			40		SD															siltstone and chert and dolomitic siltstone breccia at top
214.50	216.00			28	----	SD															of unit -
216.00	218.00			32	----	SD															
218.00	220.00			24	----	SD															

DDH MM 7. HOLE No

PROJECT : BAUHINIA JV SCALE : 1:400 HOLE NO : DDH WM 7

From	To	Inter'l (m)	Core Rec'd	% Rec'd	Sample NO	Grap'c Log	Assays ppm/%	Weighted Assays/Ratios Cu	Pb	Zn	% Estimates	Core Angles	Alt.	T.S. P.S.	Description
220.00	222.00	2		15	-----	SD						85			Grading to siliceous dolomite and grey stromatolitic chert
222.00	224.00			29	-----	SD									from 240 - 246 m. Dark grey silty shale and shale flake
224.00	226.00			42	-----	SD									unit at 231.31 - 232.48 m.
226.00	228.00			88	-----	SD									
228.00	230.00			88	-----	SD									
230.00	232.00			94	-----	SD									
232.00	234.00			100	-----	SD									
234.00	236.00			91	-----	SD									
236.00	238.00			91	-----	SD									
238.00	240.00			91	-----	SD									
240.00	242.00			25	-----	SD						85			
242.00	244.00			25	-----	SD						60			246.00
244.00	246.00			25	-----	SD									

HOLE NO DDH WM 7

APPENDIX 5

DDH WM 6 PETROLOGY

DDH WM 6

PETROLOGY - SAMPLING INTERVALS

Sample No.	Interval (m)
WM6/1	91.44 - 91.49
WM6/2	171.33 - 171.41
WM6/3	203.99 - 204.06
WM6/4	529.24 - 529.29
WM6/5	538.58 - 538.63
WM6/6	44.79 - 44.82

Sample No.	Rock Type - Composition	Fabric	Minor Minerals	Central Mineralogical Service Comments
WA 6/1	Dolostone. Dominantly microgranular, cloudy, Fe-stained dolomite(-ankerite), with interspersed silt-sized clastic quartz grains, a few ?shards.	Fairly uniform, faintly banded. Rare grains with shard-like textures.	Dendritic MnO_2 patches throughout.	Essentially a chemical sediment, perhaps a mixture of dolomite and ankerite. Traces of volcaniclastic material may be present.
WA 6/2	Nodular, Pyritic, Ferruginous Carbonate Rock. Chert nodules, partly replaced by coarse calcite, in matrix of fine ?ankerite with pyrite and hematite(?) pigment.	Some nodules concentrically zoned, and of various shapes. Small ooliths occur.	Isolated crystals of white sphalerite in nodules. Lenses of oolitic carbonate.	Nodules formed early (pre-consolidation) and are probably clastic; sulphides are syngeneti Calcite also of early formation. Complex.
WA 6/3	Pyritic Carbonate Rock. Masses anddisrupted beds of fine granular calcite embedded in fine dolomite pigmented with ?organic matter; fine pyrite.	Could be regarded as soft-pebble conglomerate i.e. pre-consolidation structures.	Minor clastic quartz, mica flakes. Some ooliths and ?fossil fragments.	A limestone-dolostone with soft-sediment deformation; dark colour due to ?kerogen. Pyrite is syngenetic.
WA 6/4	Dolomitic Tuff. Small quartz splinters and many small dolomite rhombs embedded in dense mass of fine altered glass shards and ash.	Well-laminated, fine-grained, with clearly preserved shard textures.	Ultrafine syngenetic pyrite throughout.	Subaqueously depositedtuff, reducing environment. Dolomite is diagenetic, comprises 25-30 % remainder is tuff.
WA 6/5	Vitric Tuff. Small quartz and K-feldspar splinters embedded in devitrified glassy material, now microcrystalline quartz, with brown ?phosphatic streaks.	Well-bedded, compact; poorly-preserved textures. Laminated.	5-10 % dolomite as small scattered diagenetic crystals. Fine syngenetic pyrit..	Subaqueously deposited under reducing conditions; similar to 6/4, but coarser and with less dolomite.
WA 6/6 (T.S. 40151)	Dolostone. Dominantly extremely fine semi-opaque dolomite mud, with irregular oblong chert nodules; coarser, bedded dolomite with clastic quartz.	Faint bedding in finer material; average grainsize = < 5 μ.	Very small pyrite crystals occur in the chert nodules.	Straightforward chemical sediment with authigenic chert ("flint") nodules.

APPENDIX 6

STATEMENT OF EXPENDITURE

STATEMENT OF EXPENDITURE

EL 2072 WARRAMANA CREEK

13TH JUNE 1981 - 12TH JUNE 1982

STAFFING COSTS	$32793
SUPPORT COSTS	$33561
CONCESSION PAYMENTS	$ 242
ASSAYS, ANALYSIS	$ 4478
MISCELLANEOUS	$ 7398
DRILLING	$94828

OVERHEADS:

GEOLOGICAL, DRAWING, COMPUTOR	$ 2975
GENERAL ADMIN SERVICES	$ 7522
TOTAL	$183797

SHELL METALS REPORT DATABASE - DATA INPUT SHEET

CHAPTER NAME: _____
(Office use only)

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TITLE

ANNUAL REPORT EL 2072, WARRAMANA CREEK, N.T.

13 JUNE 1981 - 12 JUNE 1982

DATE ___/___/___ (Publication date in Format dd/mm/yy)

AUTHOR

J.C. BORNMAN

SOURCE (If Non-SCOA)

SCOA

DESCRIPTOR (Not indexed)

ANNUAL REPORT

PROSPECT/PROJECT

WARRAMANA CREEK

KEYWORDS

ANNUAL REPORT

EXPLORATION LICENCE

COPPER, LEAD, ZINC

LOCATION

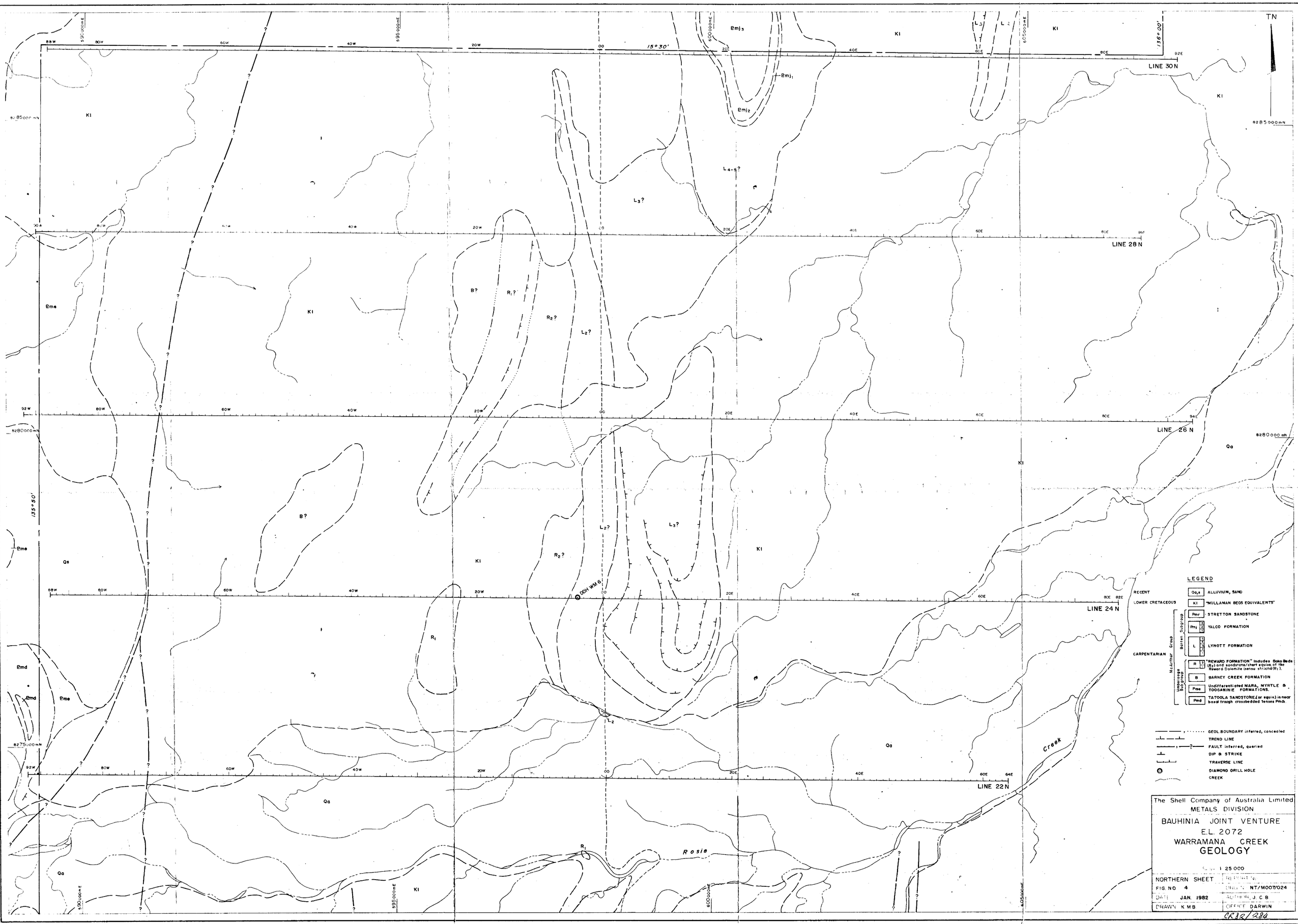
NORTHERN TERRITORY

SHEET NAME (1:250,000)

MOUNT YOUNG SD 53-15

REPORT No (Not indexed)

08.1148



The Shell Company of Australia Limited
METALS DIVISION

BAUHINIA JOINT VENTURE
E.L. 2072
WARRAMANA CREEK
GEOLOGY

Scale 1:25 000

NORTHERN SHEET	REPORT No.
FIG. NO 4	DRGS. No. NT/M007/024
DATE JAN. 1982	AUTHOR J.C.B
DRAWN K.M.B	OFFICE DARWIN

CR82/284

TN

LINE 20N

LINE 18N

LINE 15·3N

LINE 14·7N

LINE 14N

LINE 13·3N

LINE 12·7N

LINE 12N

15°30'

15°45'

LEGEND

RECENT	Qa, s	ALLUVIUM, SAND
LOWER CRETACEOUS	K1	"MULLAMAN BEDS EQUIVALENTS"
CARPENTARIAN — McARTHUR Group — Batten Subgroup	Pmr	STRETTON SANDSTONE
	Pmj 3	YALCO FORMATION
	Pmj 2	
	Pmj 1	
	L	LYNOTT FORMATION
	R	"REWARD FORMATION" includes Boko Beds (Rg) and sandstone/chert equiv. of the Reward Dolomite (sensu stricto) (R1)
McARTHUR Group — Undifferentiated Subgroup	B	BARNEY CREEK FORMATION
	Pme	Undifferentiated MARA, MYRTLE & TOOGANINNIE FORMATIONS.
	Pmd	TATOOLA SANDSTONE (or equiv.) in near basal trough crossbedded lenses Pmd 1
	Pmo	Undifferentiated AMELIA DOLOMITE and MALLAPUNYAH FORMATION excluding Teviot's sandstone
	Pmb	Resistant sandstone at or near base of MALLAPUNYAH
TAMALLAH Group	Ptn	MASTERTON SANDSTONE
	Ptg	GOLD CREEK VOLCANICS
	Pto	WOLLOGORANG FORMATION

GEOL. BOUNDARY inferred, concealed

TREND LINE

FAULT inferred, queried

DIP & STRIKE

TRAVERSE LINE

DIAMOND DRILL HOLE

CREEK

andesite

Lithified Qs or Emd P

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BAUHINIA JOINT VENTURE
E.L. 2072
WARRAMANA CREEK

GEOLOGY

SCALE 1:25,000

SOUTHERN SHEET — REPORT No. N.T./MOOT/001

DIAGRAM No. 5 — AUTHOR N.J.C.

DATE AUGUST 1981 — OFFICE DARWIN

DRAWN TEE

OR32/284

590000mE 595000mE 600000mE 605000mE

174W 160W 140W 120W 100W 80W 60W 40W 20W

LINE 20N

TN

8270000mN

92W 80W 60W 40W 20W 20E 40E 60E 80E

LINE 18N

135°50'

8265000mN

76W 60W 40W 20W 2E 20E 40E 60E

SOUTH WA1 SOUTH WA5

LINE 15·3N

LINE 14·7N

LINE 13·3N

LINE 12·7N

LINE 12N

8260000mN

142W 120W 100W 15° 45' 80W 60W 40W 20W

590000mE 595000mE 600000mE 605000mE

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BAUHINIA JOINT VENTURE
E.L. 2072
WARRAMANA CREEK
R.A.B. DEPTH PROFILES

SCOUTHERN SHEET	REPORT No.
FIG No. 6	DRAWING No.
DATE 2 9 8	SCALE
DRAWN TEE	OFFICE CHECK

OR82/284

AVERAGE ASSAYS
Cu / Pb / Zn (ppm)

CORE BEDDING ANGLE

70°-75°

70°-75°

70°

70°

70°

80°-90°

60°

NON CORE DRILLING

LEACHED WHITE SILTSTONE

60·00
62·16

LIMONITE SPOTS

BRECCIATION COMMON

130·20

LIMONITE SPOTS
BRECCIATED

BRECCIATED

174·30

BRECCIATED

192·87

BRECCIA (CHERTY)

201·00

BRECCIATED
LIMONITE STAINED

209·30

CHERT BRECCIA

LEACHED SILTSTONE INTERBEDS

246·00

END OF HOLE 246m

WARRAMANA CREEK FORMATION

BARNEY

MARA DOLOMITE

12/19/35

32/33/116

LEGEND

Leached shale with laminated shale interbeds.
Occ. siltstone and shale flake units.

Weathered siltstone with laminated shale interbeds.
Occ. shale flake bands.

Green-grey "muddy" siltstone and mudstone.
Ghost bedding.

Shaley siltstone with siltstone interbeds.

Dolomitic siltstone interbedded with siltstone and occ. shale.

Dolomite. Occ. stromatolites.
Occ. leached siltstone interbeds.

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BAUHINIA JOINT VENTURE
E.L. 2072

WARRAMANA CREEK

DDH WM 7

SCALE 1:1000	DATE OCT. 1981
AUTHOR J.C.B.	DRAWN K.M.B.
OFFICE DARWIN	REP. No.
DRG. No NT/MOOT/017	FIG. No 8

CR82/284

CORE BEDDING ANGLE

AVERAGE ASSAYS
Pb/Zn (ppm)

42.00 — OCC. SHALE FLAKE BANDS & CHERT NODULES — LYNOTT FORMATION

80°-90°

61.80 — ANGULAR MUDSTONE BRECCIA FLAKES CHERT NODULES

77.80 — OCC CHERT NODULES — BCF REWARD FM. (R1) — REWARD FM. (R2)

88.00 — WEATHERED / LEACHED

91.63 — OCC SHALE BANDS TR. PYRITE

80°-90°

101.60

80°

136.00 — TR PYRITE — BCF (SURPRISE CREEK PYRITIC SHALE)

160.90 — OCC. DOLOMITE NODULES

80°

189.60

23/12/55

34/20/91

18/22/83

80°

OCC THIN GREY-GREEN TUFF BANDS THROUGHOUT

BARNEY CREEK FORMATION

90°

488.40 — TR GALENA AND SPHALERITE — B.C.F. PYRITIC SHALE

496.60

90°

TR PYRITE — B.C.F. (BASAL TUFFS)

80°-90°

543.00 — END OF HOLE 543.00m

24/28/111

38/45/250

27/69/361

30/66/390

35/17/80

LEGEND

- Siltstone (Dolomitic)
- Shaley siltstone (Dolomitic)
- Pyritic carbonaceous shale
- Carbonaceous shale
- Silty carbonaceous shale
- Laminated silty shale with tuffaceous shale and tuff interbeds

CR82/284

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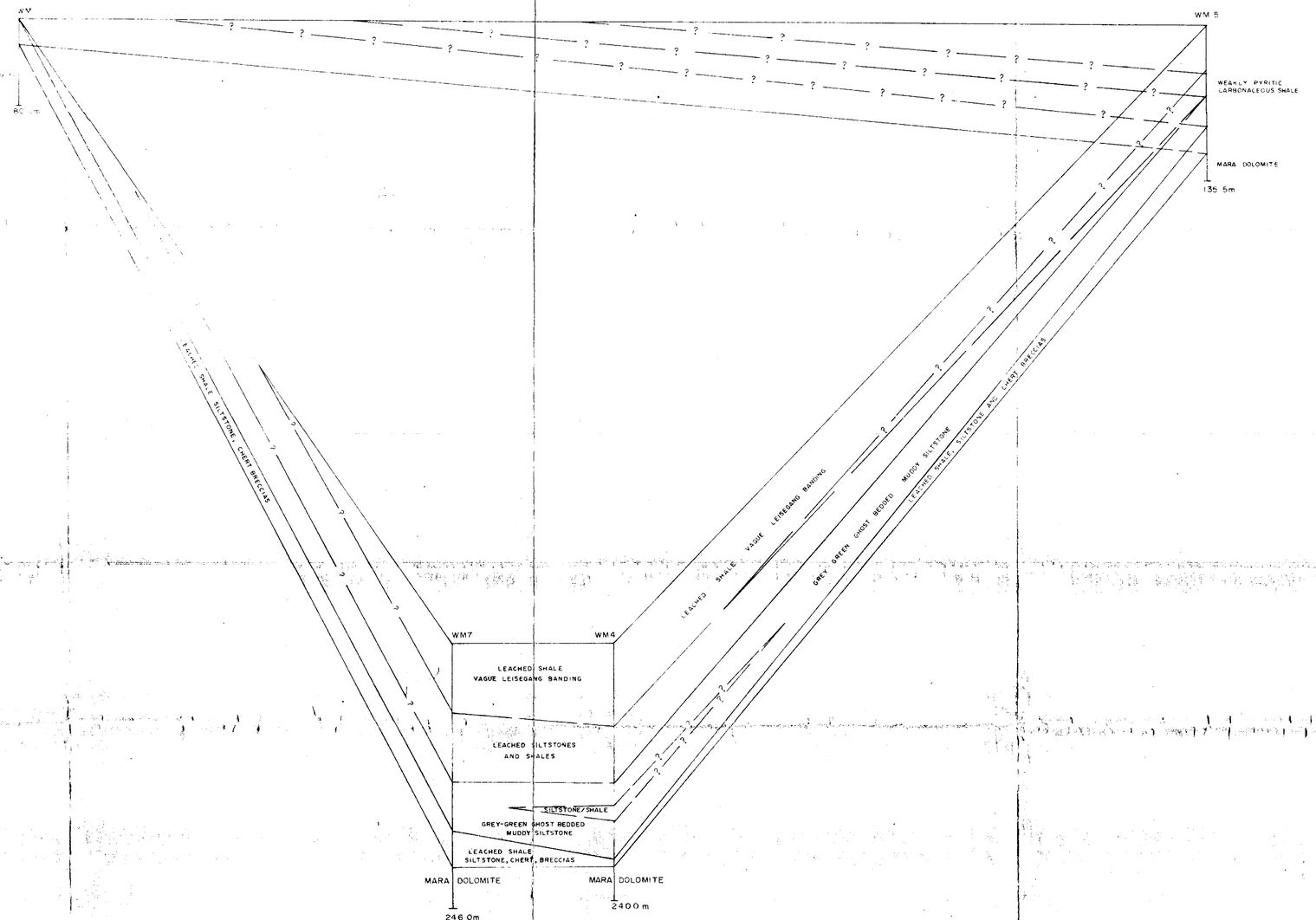
METALS DIVISION

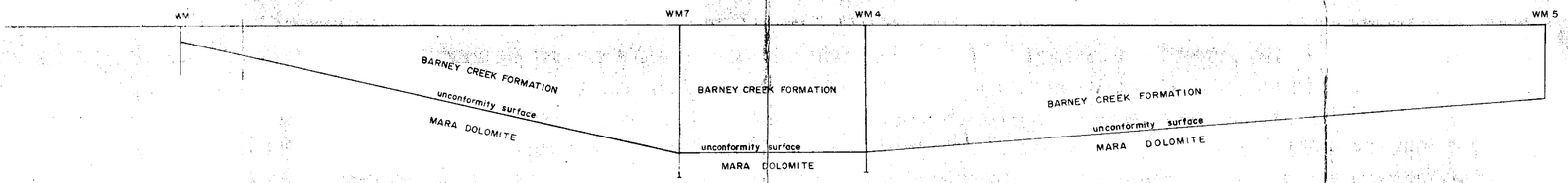
BAUHINIA JOINT VENTURE
EL 2072

WARRAMANA CREEK
DDH WM 6

SCALE 1:1000	DATE OCT 1981
AUTHOR J C B	DRAWN K M B
OFFICE DARWIN	REP No
DRG No NT/M007/018	FIG No 7



$\frac{V}{H} = \frac{2}{1}$



$\frac{V}{H} = \frac{1}{1}$

The Shell Company of Australia Limited
METALS DIVISION

BAUHINIA JOINT VENTURE
E.L. 2072

WARRAMANA CREEK

DRILLHOLE CORRELATIONS

Scale 1:5000 (hor.)

FIG. No. 9	REPORT No.
ENCL. No.	DRG No. NT/M007/019
DATE DEC 1981	AUTHOR J.C.B.
DRAWN K.M.B.	OFFICE DARWIN

CR82/224