

ANNUAL REPORT
EXPLORATION LICENCES
7260, 7261, 7262, 7263, 7264,
7341 and 7824

For the Period
24th May, 1993 to 23rd May, 1994

Volume 3

Licensee:	Ashton Mining Limited
Operator:	Ashton Mining Limited BHP Minerals Pty Ltd
Sheet Reference:	1:250,000 Mt Young (SE 53-15) 1:250,000 Roper River (SE 53-11)
Submitted to:	Department of Mines & Energy, DARWIN

Authors:

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EAST PERTH WA 6004

June, 1994
Report Number: 50902

CR 94 / 6080

Vol 3

~~CR 94 / 6080~~

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APPENDIX 6

Soil and Rock Sample Results

Analytical Techniques

All geochemical analyses were carried out at Assay Corp Pty Ltd, Pine Creek, Northern Territory. The analytical method was AAS/MA-3, elements determined and detection limits used at the Laboratory are set out below:

-	Cu	2ppm
-	Pb	2ppm
-	Zn	1ppm
-	Ag	0.5ppm
-	Mn	2ppm
-	Fe	20ppm
-	As	2ppm

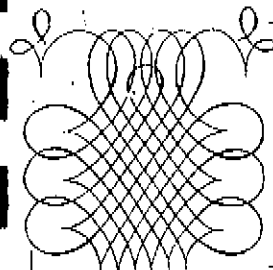
Analytical Methods

Base Metal Assays - Cu, Pb, Zn, Ag, Mn, Fe

A 0.3 g sample is digested in a triple mixture of hydrochloric, nitric and perchloric acids at 180°C. The cooled and dried residue is leached with concentrated HCl acid at 90°C and diluted with distilled water. After cooling, the sample is mixed and left to stand for sediment settling. Elements are read on an atomic absorption spectrophotometer (AAS) against aqueous standards of pure metals for each element. Cu, Pb, Zn and Ag are read using an air acetylene flame and Fe and Mn using a nitrous oxide - acetylene flame.

Hydride Forming Element Assays - As

A 1:10 dilution is taken from the base metal digestion to give a concentration of 10% HCl and 0.2% KI solution. The solution is pumped into a GBC model HG 3000 hydride generator and mixed with concentrated HCl acid and Na BH₄. The gas which is given off passes through a gas-liquid separator and the gas passes to a quartz cell on the AAS for reading.



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A.C.N. 052 982 911

174 Ward Street, Pine Creek, N.T. 0847

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Facsimile (089) 76 1310

ASSAY CODE: AC 10398

BHP-Utah Minerals

ENTERED

09 NOV 1993

Distribution

A. Hender

M. Rennison

Client Reference: 00633

Date Received:

12/10/1993

Project :

Number of Samples:

20

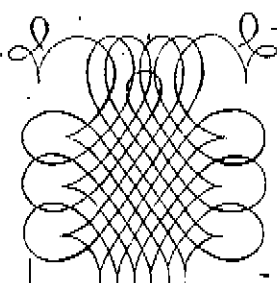
Cost Code: BBA 261

Sample Preparation

Analysis	Analytical Technique	Precision & Accuracy	Detection Limit	Data Units
Cu	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
Pb	AAS/MA-3	Prec. $\pm$ 10%	2	ppm
Zn	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
Ag	AAS/MA-3	Prec. $\pm$ 10%	0.5	ppm
As	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
Mn	AAS/MA-3	Prec. $\pm$ 10%	2	ppm
Fe	AAS/MA-3	Prec. $\pm$ 10%	20	ppm

Authorisation: Ray Wooldridge

Report Dated: 31/10/1993



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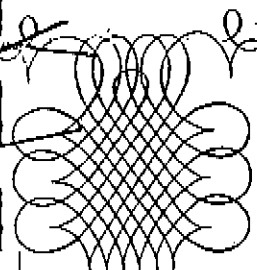
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Page 1 of 1

Sample	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	As (ppm)	Mn (ppm)	Fe (ppm)
EH1264 ✓	13	10	5	<0.5	4	91	1.49%
EH1265 ✓	29	<2	10	<0.5	5	1460	10.40%
EH1266 ✓	36	4	10	<0.5	4	258	4.64%
EH1267 ✓	73	8	10	<0.5	7	491	36.20%
EH1268 ✓	489	375	1350	<0.5	56	2.65%	34.80%
EH1269 ✓	110	32	109	<0.5	8	951	4.93%
EH1270 ✓	90	74	697	<0.5	8	625	11.60%
EH1271 ✓	12	7	32	<0.5	1	9100	3.35%
EH1272 ✓	27	6	30	<0.5	1	1.14%	6.35%
EH1273 ✓	220	85	1150	<0.5	29	8.80%	42.10%
EH1274 ✓	82	29	565	2.3	3360	5800	52.40%
EH1275 ✓	8	8	10	<0.5	48	3050	4.23%
EH1278 ✓	51	7	13	<0.5	6	3560	6.05%
EH1279 ✓	13	6	9	<0.5	3	412	1.55%
EH1280 ✓	55	48	169	<0.5	18	356	6.86%
EH1281 ✓	179	12	39	<0.5	5	299	13.80%
EH1282 ✓	46	7	38	<0.5	20	2170	4.05%
EH1283 ✓	41	<2	24	<0.5	33	421	4.02%
EH1284 ✓	118	21	250	<0.5	6	6.65%	5.88%
EH1285 ✓	37	10	9	<0.5	<1	301	1.55%



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ASSAY CODE: AC 10166

BHP-Utah Minerals

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09 NOV 1993

Distribution

Adam Hender

BHP Minerals

Client Reference: 00628

Project : BBA

Cost Code:

Date Received:

03/10/1993

Number of Samples:

21

Sample Preparation

Analysis	Analytical Technique	Precision & Accuracy	Detection Limit	Data Units
Cu	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
Pb	AAS/MA-3	Prec. $\pm$ 10%	2	ppm
Zn	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
As	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
Mn	AAS/MA-3	Prec. $\pm$ 10%	2	ppm
Fe	AAS/MA-3	Prec. $\pm$ 10%	20	ppm

Authorisation: Ray Wooldridge

Report Dated: 14/10/1993

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Sample	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	Mn (ppm)	Fe (ppm)
DJ 7581	452	37	1380	68	1660	39.80%
DJ 7584	40	11	309	105	1790	23.30%
DJ 7585	41	45	59	7	1020	9.18%
DJ 7586	24	30	683	280	6170	42.40%
DJ 7587	68	51	629	210	691	49.90%

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ASSAY CODE: AC 10168

BHP-Utah Minerals

ENTERED

18 NOV 1993

Distribution

Adam Hender

BHP Minerals

R.D.

Client Reference: 00631

Date Received:

03/10/1993

Project : BBA/BBB

Number of Samples:

21

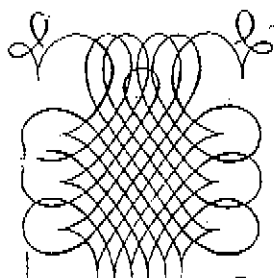
Cost Code:

Sample Preparation

Analysis	Analytical Technique	Precision & Accuracy	Detection Limit	Data Units
Cu	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
Pb	AAS/MA-3	Prec. $\pm$ 10%	2	ppm
Zn	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
As	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
Mn	AAS/MA-3	Prec. $\pm$ 10%	2	ppm
Fe	AAS/MA-3	Prec. $\pm$ 10%	20	ppm

Authorisation: Ray Wooldridge

Report Dated: 14/10/1993



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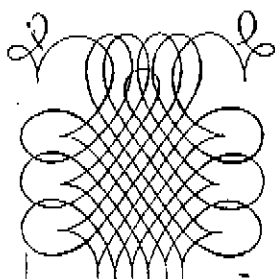
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ASSAY CODE: AC 10168

Page 1 of 1

Sample	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	Mn (ppm)	Fe (ppm)
EH 1927	42	<2	83	1	1110	3.28%
EH 1928	56	9	306	9	1810	48.70%
EH 1929	38	36	74	40	399	6.47%
EH 1930	27	14	<1	2	228	2.36%
EI 4017	<< Sample not received >>					
EI 4018	<< Sample not received >>					
EH 1035	6	6	1	<1	209	8800
EH 1036	5	4	5	2	182	1.67%
EH 1037	5	3	6	8	135	2.42%
EH 1038	4	<2	<1	<1	37	5800
EH 1039	5	5	6	1	186	1.01%
EH 1040	7	4	<1	<1	81	8300
EH 1041	6	5	<1	1	39	1.43%
EH 1042	15	13	28	1	461	3.19%
EH 1043	20	15	23	2	422	4.03%
EH 1044	13	6	10	1	489	1.63%
EH 1045	12	15	12	3	669	2.18%
EH 1047	11	5	17	3	605	3.69%
EH 1048	9	4	10	2	253	1.86%
EH 1049	12	5	<1	2	300	1.79%
EH 1050	19	16	21	5	389	3.91%



Permatex

Permatex

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ASSAY CODE: AC 10167

BHP-Utah Minerals

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09 NOV 1993

Distribution

Adam Hender

BHP Perth

Client Reference: 00630

Project : BBB

Cost Code:

Date Received:

03/10/1993

Number of Samples:

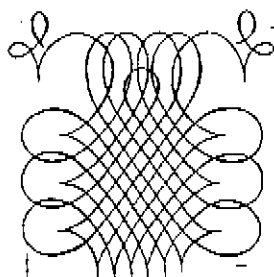
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Sample Preparation

Analysis	Analytical Technique	Precision & Accuracy	Detection Limit	Data Units
Cu	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
Pb	AAS/MA-3	Prec. $\pm$ 10%	2	ppm
Zn	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
As	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
Mn	AAS/MA-3	Prec. $\pm$ 10%	2	ppm
Fe	AAS/MA-3	Prec. $\pm$ 10%	20	ppm

Authorisation: Ray Wooldridge

Report Dated: 14/10/1993



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ASSAY CODE: AC 10167

Page 1 of 1

Sample	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	Mn (ppm)	Fe (ppm)
DJ 7588	53	<2	239	33	2970	25.50%
DJ 7589	39	67	10	31	101	4.41%
DJ 7590	94	15	106	160	1.07%	20.20%

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ASSAY CODE: AC 10166

BHP-Utah Minerals

ENTERED

09 NOV 1993

Distribution

Adam Hender

BHP Minerals

Client Reference: 00628

Date Received: 03/10/1993

Project : BBA

Number of Samples: 21

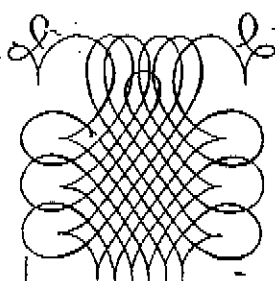
Cost Code:

Sample Preparation

Analysis	Analytical Technique	Precision & Accuracy	Detection Limit	Data Units
Cu	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
Pb	AAS/MA-3	Prec. $\pm$ 10%	2	ppm
Zn	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
As	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
Mn	AAS/MA-3	Prec. $\pm$ 10%	2	ppm
Fe	AAS/MA-3	Prec. $\pm$ 10%	20	ppm

Authorisation: Ray Wooldridge

Report Dated: 14/10/1993



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ASSAY CODE: AC 10166

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Sample	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	Mn (ppm)	Fe (ppm)
EI 04001	3	4	<1	<1	173	4700
EI 04002	4	6	<1	<1	168	4100
EI 04003	4	8	1	<1	120	3500
EI 04004	4	4	<1	<1	26	4100
EI 04005	6	8	2	<1	220	3900
EI 04006	4	3	<1	<1	51	5200
EI 04007	6	7	1	<1	42	7100
EI 04008	10	15	27	2	295	2.93%
EI 04009	11	16	18	4	678	2.07%
EI 04010	13	4	9	<1	522	9100
EI 04011	17	12	24	2	146	3.57%
EI 04012	15	13	12	4	601	2.57%
EI 04013	8	3	11	2	517	1.87%
EI 04014	8	4	8	1	269	1.34%
EI 04015	17	13	22	4	253	3.53%
EI 04016	7	3	<1	<1	314	7200
DJ 7581	452	37	1380	68	1660	39.80%
DJ 7584	40	11	309	105	1790	23.30%
DJ 7585	41	45	59	7	1020	9.18%
DJ 7586	24	30	683	280	6170	42.40%
DJ 7587	68	51	629	210	691	49.90%

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ASSAY CODE: AC 10222

BHP-Utah Minerals

ENTERED

12 OCT 1993

Distribution

Adam Hender/Ben Jones

Harry Muntanion

Client Reference: 00615

Project : BBA

Cost Code:

Date Received: 30/09/1993

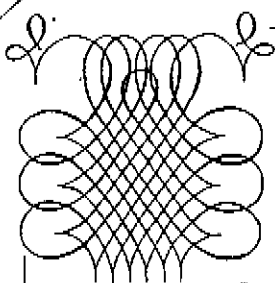
Number of Samples: 49

Sample Preparation

Analysis	Analytical Technique	Precision & Accuracy	Detection Limit	Data Units
Cu	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
Pb	AAS/MA-3	Prec. $\pm$ 10%	2	ppm
Zn	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
As	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
Mn	AAS/MA-3	Prec. $\pm$ 10%	2	ppm
Fe	AAS/MA-3	Prec. $\pm$ 10%	20	ppm

Authorisation: Ray Wooldridge

Report Dated: 14/10/1993



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ASSAY CODE: AC 10222

Page 1 of 2

Sample	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	Mn (ppm)	Fe (ppm)
DJ9544	3	5	<1	<1	142	4100
DJ9545	1	4	<1	<1	83	3200
DJ9546	2	4	<1	<1	78	2500
DJ9547	1	6	<1	<1	57	2300
DJ9548	1	8	<1	<1	79	2100
DJ9549	2	7	<1	<1	118	3800
DJ9550	9	10	5	2	508	1.42%
DJ9551	6	7	3	<1	134	7100
DJ9552	1	4	5	<1	78	7600
DJ9553	2	2	<1	<1	96	7800
DJ9554	2	<2	<1	<1	118	6400
DJ9555	6	<2	1	<1	246	6800
DJ9556	2	<2	<1	<1	45	2900
DJ9557	19	18	33	<1	369	1.23%
DJ9558	25	2	39	1	1340	1.26%
DJ9559	2	<2	1	<1	792	3200
DJ9560	7	3	14	<1	124	8400
DJ9561	3	3	5	<1	199	6700
DJ9573	3	4	28	<1	179	4400
DJ9574	2	5	2	<1	85	2700
DJ9575	2	7	2	<1	65	7300
DJ9576	3	4	2	<1	149	5700
DJ9577	2	6	1	<1	31	4900
DJ9578	2	6	1	<1	24	4800
DJ9579	3	5	1	<1	133	6500

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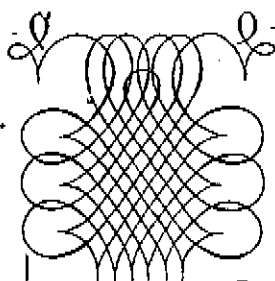
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ASSAY CODE: AC 10222

Page 2 of 2

Sample	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	Mn (ppm)	Fe (ppm)
DJ9580	2	5	<1	<1	52	6900
DJ9581	1	8	1	<1	161	5400
DJ9582	2	6	<1	<1	98	1900
DJ9583	4	5	1	1	123	5500
DJ9584	43	7	80	18	2150	4.31%
DJ9585	14	12	19	11	739	1.99%
DJ9586	17	20	53	27	1530	4.48%
DJ9587	7	15	7	5	909	1.14%
DJ9588	5	11	2	1	226	6500
DJ9589	4	7	2	<1	107	6300
DJ9590	3	3	<1	<1	178	6300
DJ9591	4	6	8	1	165	8400
DJ9592	7	19	7	2	873	8300
EH2622	3	3	1	4	228	1.75%
EH2623	3	4	<1	<1	86	4300
EH2624	1	4	<1	<1	156	5200
EH2625	2	6	<1	<1	114	7100
EH2626	<1	<2	<1	<1	136	1800
EH2627	1	<2	<1	<1	57	1500
EH2628	2	<2	<1	<1	51	1500
EH2629	1	<2	<1	<1	22	2200
EH2630	3	<2	<1	<1	44	5100
EH2631	6	<2	<1	<1	154	1600
EH2632	2	<2	<1	<1	26	2800



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ASSAY CODE: AC 10224

BHP-Utah Minerals

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03 NOV 1993

Distribution

Adam Hender/Ben Jones

Harry Muntanion

Client Reference: 00625

Project : BAZ

Cost Code:

Date Received: 05/10/1993

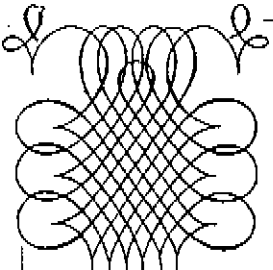
Number of Samples: 6

Sample Preparation

Analysis	Analytical Technique	Precision & Accuracy	Detection Limit	Data Units
Cu	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
Pb	AAS/MA-3	Prec. $\pm$ 10%	2	ppm
Zn	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
As	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
Mn	AAS/MA-3	Prec. $\pm$ 10%	2	ppm
Fe	AAS/MA-3	Prec. $\pm$ 10%	20	ppm

Authorisation: Ray Wooldridge

Report Dated: 14/10/1993



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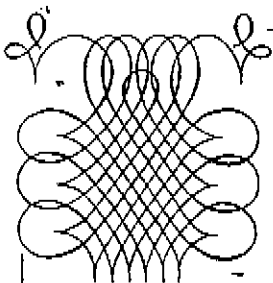
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Sample	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	Mn (ppm)	Fe (ppm)
DJ9593	2	4	<1	1	12	3600
DJ9594	2	4	<1	<1	112	6900
DJ9595	3	5	1	<1	61	7300
EH2633	2	2	<1	<1	53	2800
EH2634	3	<2	<1	<1	96	3300
EH2635	6	<2	<1	<1	277	5100



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ASSAY CODE: AC 10226

BHP-Utah Minerals

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03 NOV 1993

Distribution

Adam Hender/Ben Jones

Harry Muntanion

Client Reference: 00627

Date Received: 05/10/1993

Project : BBB

Number of Samples: 44

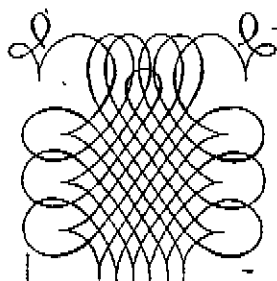
Cost Code:

Sample Preparation

Analysis	Analytical Technique	Precision & Accuracy	Detection Limit	Data Units
Cu	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
Pb	AAS/MA-3	Prec. $\pm$ 10%	2	ppm
Zn	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
As	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
Mn	AAS/MA-3	Prec. $\pm$ 10%	2	ppm
Fe	AAS/MA-3	Prec. $\pm$ 10%	20	ppm

Authorisation: Ray Wooldridge

Report Dated: 14/10/1993



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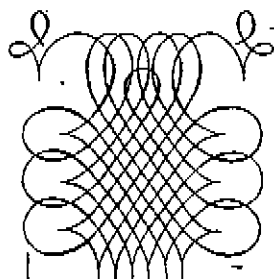
Telephone (089) 76 1262

Facsimile (089) 76 1310

ASSAY CODE: AC 10226

Page 1 of 2

Sample	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	Mn (ppm)	Fe (ppm)
EH2601	2	<2	<1	<1	168	4000
EH2602	<1	3	<1	<1	98	6300
EH2603	2	3	<1	<1	99	4000
EH2604	12	2	6	1	413	1.57%
EH2605	4	<2	2	<1	136	6500
EH2606	1	<2	<1	<1	31	4900
EH2607	1	4	<1	<1	120	6400
EH2608	1	3	1	<1	111	9300
EH2609	<1	2	<1	<1	69	4100
EH2610	1	2	<1	<1	34	3700
EH2611	<1	<2	<1	<1	31	4300
EH2612	3	2	2	<1	20	6500
EH2613	4	2	3	<1	127	8800
EH2614	9	<2	4	<1	254	9500
EH2615	11	<2	8	<1	213	1.11%
EH2616	18	3	16	<1	177	1.39%
EH2644	6	2	3	<1	302	8200
EH2645	1	2	1	<1	174	5700
EH2646	2	<2	<1	<1	110	5200
EH2647	2	<2	<1	<1	128	7000
EH2648	2	2	1	<1	102	5900
EH2649	2	<2	<1	<1	114	5200
EH2650	1	<2	<1	<1	101	5200
EH2651	2	3	<1	<1	106	4600
EH2652	2	<2	1	<1	168	3700



ASSAYCORP PTY LTD

A.C.N. 052 982 911

174 Ward Street, Pine Creek, N.T. 0847

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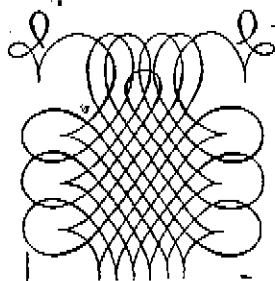
Telephone (089) 76 1262

Facsimile (089) 76 1310

ASSAY CODE: AC 10226

Page 2 of 2

Sample	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	Mn (ppm)	Fe (ppm)
EH2653	3	<2	1	<1	213	4400
EH2654	2	2	<1	<1	199	4300
EH2655	4	<2	1	<1	247	5000
EH2656	<1	<2	<1	<1	72	1900
EH2657	1	<2	<1	<1	71	1700
EH2658	1	<2	<1	<1	78	1600
EH2659	2	<2	2	<1	209	5200
EH2660	1	<2	<1	<1	216	4200
DJ9562	4	<2	3	<1	115	6900
DJ9563	1	<2	<1	<1	94	3800
DJ9564	5	2	3	<1	263	6200
DJ9565	8	<2	<1	<1	58	5100
DJ9566	7	2	3	<1	139	7600
DJ9567	16	7	27	<1	181	2.72%
DJ9568	3	10	<1	<1	316	6700
DJ9569	4	<2	<1	<1	171	5900
DJ9570	17	3	5	<1	286	1.15%
DJ9571	5	<2	<1	<1	229	5300
DJ9572	2	<2	<1	<1	97	3500



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Telephone (089) 76 1262

Facsimile (089) 76 1310

ASSAY CODE: AC 10225

BHP-Utah Minerals

ENTERED

03 NOV 1993

Distribution

Adam Hender/Ben Jones

Harry Muntanion

Client Reference: 00626

Date Received:

05/10/1993

Project : BBK

Number of Samples:

8

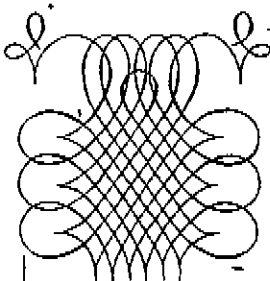
Cost Code:

Sample Preparation

Analysis	Analytical Technique	Precision & Accuracy	Detection Limit	Data Units
Cu	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
Pb	AAS/MA-3	Prec. $\pm$ 10%	2	ppm
Zn	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
As	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
Mn	AAS/MA-3	Prec. $\pm$ 10%	2	ppm
Fe	AAS/MA-3	Prec. $\pm$ 10%	20	ppm

Authorisation: Ray Wooldridge

Report Dated: 14/10/1993



ASSAYCORP PTY LTD

A.C.N. 052 982 911

174 Ward Street, Pine Creek, N.T. 0847

P.O. Box 41, Pine Creek, N.T. 0847

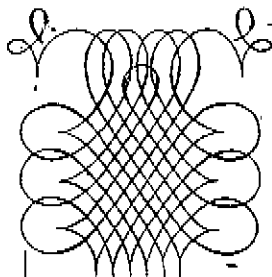
Telephone (089) 76 1262

Facsimile (089) 76 1310

ASSAY CODE: AC 10225

Page 1 of 1

Sample	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	Mn (ppm)	Fe (ppm)
EH2636	27	15	9	3	648	2.19%
EH2637	2	2	<1	<1	25	1.42%
EH2638	12	6	7	1	609	1.62%
EH2639	4	3	1	<1	298	1.16%
EH2640	2	<2	<1	<1	22	8700
EH2641	3	<2	1	<1	157	1.02%
EH2642	3	<2	<1	<1	42	1.32%
EH2643	2	<2	<1	<1	121	6900



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174 Ward Street, Pine Creek, N.T. 0847

P.O. Box 41, Pine Creek, N.T. 0847

Telephone (089) 76 1262

Facsimile (089) 76 1310

ASSAY CODE: AC 10223

BHP-Utah Minerals

ENTERED

03 NOV 1993

Distribution

Adam Hender/Ben Jones

Harry Muntanion

Client Reference: 00624

Date Received: 30/09/1993

Project : BBC

Number of Samples: 5

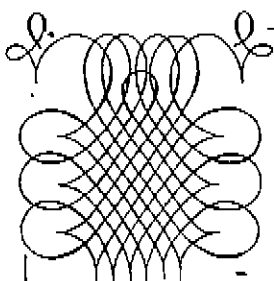
Cost Code:

Sample Preparation

Analysis	Analytical Technique	Precision & Accuracy	Detection Limit	Data Units
Cu	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
Pb	AAS/MA-3	Prec. $\pm$ 10%	2	ppm
Zn	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
As	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
Mn	AAS/MA-3	Prec. $\pm$ 10%	2	ppm
Fe	AAS/MA-3	Prec. $\pm$ 10%	20	ppm

Authorisation: Ray Wooldridge

Report Dated: 14/10/1993



ASSAYCORP PTY LTD

A.C.N. 052 982 911

174 Ward Street, Pine Creek, N.T. 0847

P.O. Box 41, Pine Creek, N.T. 0847

Telephone (089) 76 1262

Facsimile (089) 76 1310

ASSAY CODE: AC 10223

Page 1 of 1

Sample	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	Mn (ppm)	Fe (ppm)
EH2617	8	3	20	3	351	9900
EH2618	6	2	10	3	285	7800
EH2619	12	5	24	3	531	1.25%
EH2620	6	5	17	1	292	9600
EH2621	5	3	17	<1	253	9200

APPENDIX 7

QUESTEM Anomaly Mapping and Sampling

ANOMALY NO: MY1
LOCATION: 504650E 8353000N
MAP SHEET: Roper 1:100,000
TENEMENT: EL 7341
GEOLOGY: Pri/Pnz
GRID: 3 x 1.5 km lines oriented 085°
NUMBER SOIL SAMPLES: 8 (-2 mm, -80#)
NUMBER ROCK SAMPLES: 1

ACCESS:

1 km north of Roper Bar-Port Roper Road

MAPPED GEOLOGY AND STRUCTURE:

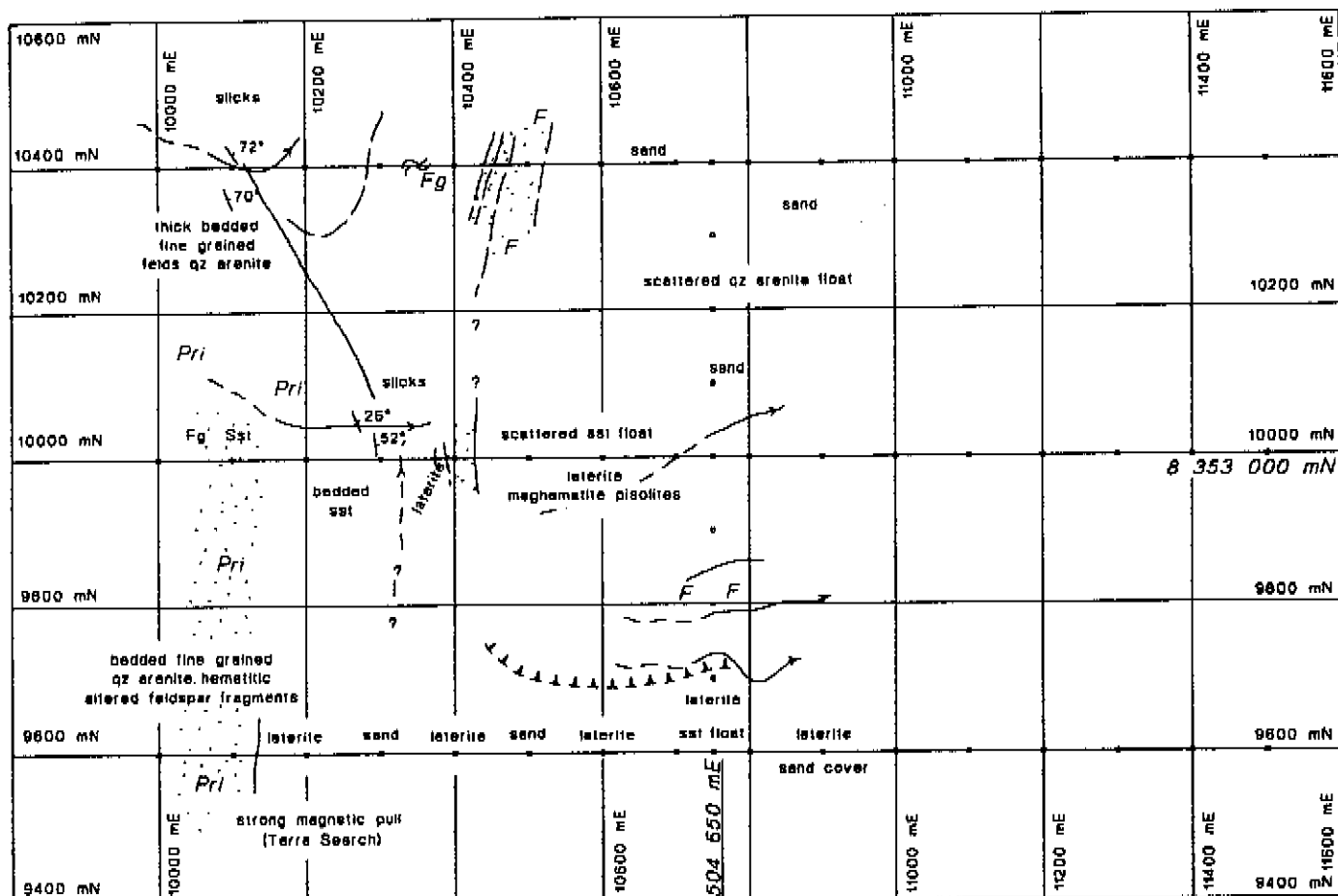
The EM anomaly lies in an area of outcropping Limmen Sandstone (Pri) which is possibly underlain by Balbirini Dolomite (Pnz). A north-south striking fault is mapped 1 km west of the anomaly.

PREVIOUS WORK:

No previous work is reported.

DETAILED GEOLOGY:

The western half of the grid has been mapped at a scale of 1:10,000. Limmen Sandstone outcrops at the western end of the lines. The remainder of the grid is patchy laterite and extensive sand cover. No mineralisation was noted.



LEGEND

- | | | | |
|------------|-----------|-----|-------|
| F | Float | --- | Scarp |
| --- | Creek | --- | Fault |
| . | Grid Peg | --- | Fence |
| [stippled] | Siltstone | | |
| [dotted] | Breccia | | |



Scale 1:10000
0 200 400 600 800 metres

C:\BHP\EX\MTY1.DGN

Prepared : M.W.R.

Drawn : G.W.P.

Date : 10/04/94

Revised :



BHP Minerals Limited
ACN 006 004 782

MOUNT YOUNG
EM ANOMALY MY 1

Centre : Perth

A4-5576

FIGURE

ANOMALY NO: MY11
LOCATION: 537050E 8296000N
MAP SHEET: Towns 1:100,000
TENEMENT: EL 7262
GEOLOGY: No outcrop. Possible Pnz.
GRID: 085° magnetic 3 x 1.5 km lines
NUMBER SOIL SAMPLES: 11 (-80# and -2 mm)
NUMBER ROCK SAMPLES: 2

ACCESS:

1.8 km west of Roper Highway.

MAPPED GEOLOGY AND STRUCTURE:

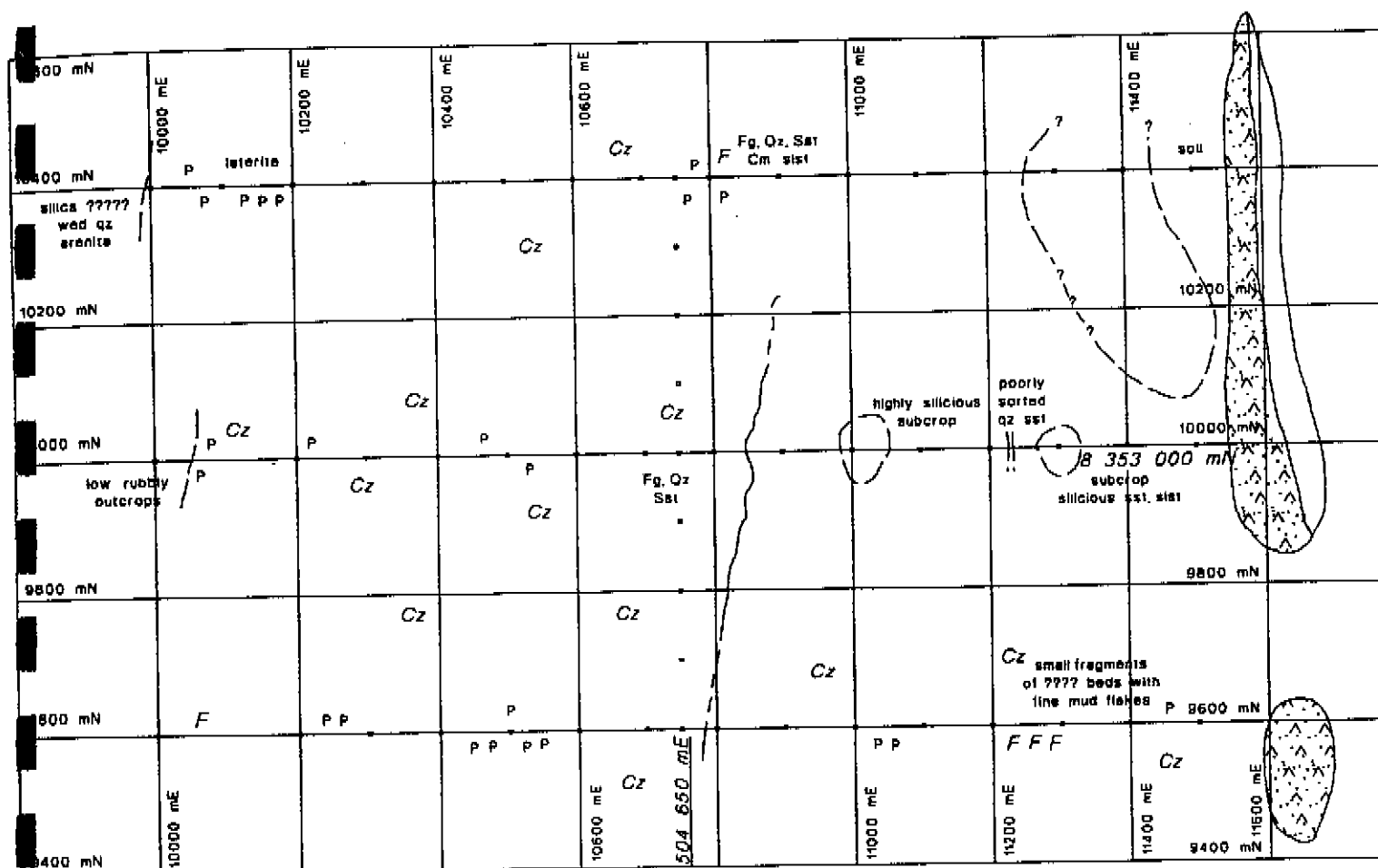
No outcrop mapped, probably buried Balbirini Dolomite (Pnz). Anomaly located 1 km west of north-south striking Limmen Fault. This is interpreted to be the down-thrown side of the fault.

PREVIOUS WORK:

130 ppm Zn stream sediment anomalously located 500 m to the south.

DETAILED GEOLOGY:

The grid over MY11 has been mapped at a scale of 1:10,000. A prominent ridge of brecciated quartz arenite with extensive quartz veining lies immediately east of the grid. The majority of the grid is covered with recent alluvium. No mineralisation was noted.



LEGEND

- | | | | |
|-----|-----------|------|------------|
| F | Float | ▲▲▲▲ | Scarp |
| --- | Creek | --- | Fault |
| . | Grid Peg | --- | Fence |
| ■ | Sandstone | P | Piesolites |
| ▲ | Breccia | | |



Scale 1:10000
0 200 400 600 800 metres

C:\BHP\EX\MTY11.DGN

Prepared : M.W.R.

Drawn : G.W.P.

Date : 10/04/94

Revised :

BHP Minerals Limited
AON 008 006 742

**MOUNT YOUNG
EM ANOMALY MY 11**

Centre : Perth

A4-5577

FIGURE

ANOMALY NO: MY13
LOCATION: 542800E 8291000N
MAP SHEET: Towns 1:100,000
TENEMENT: EL 7262
GEOLOGY: Pri/Pnz
GRID: 3 x 1.5 km lines oriented 085° Magnetic
NUMBER SOIL SAMPLES: 20 (-80# and -2 mm)
NUMBER ROCK SAMPLES: 4

ACCESS:

By graded station track to centre of anomaly 1 km north of Roper Highway.

MAPPED GEOLOGY AND STRUCTURE:

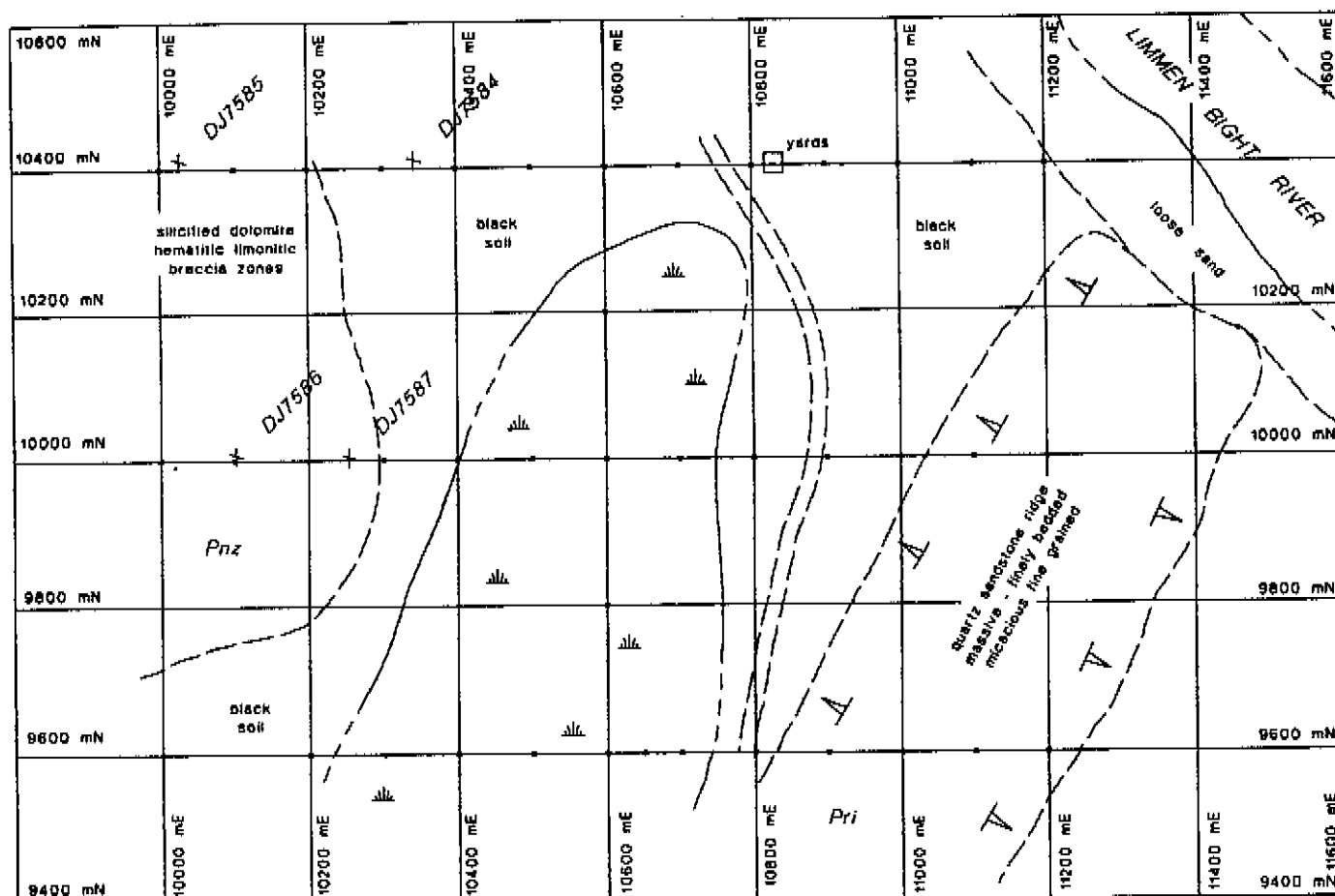
Lies in area of cover between outcrop of Balbirini Dolomite (Pnz) to the west and Limmen Sandstone (Pri) to the east. The north-south striking Four Archers Fault is located 2 km to the east.

PREVIOUS WORK:

No previous work is reported.

DETAILED GEOLOGY:

Much of the anomaly area is covered with black soil and sand related to low lying swampy ground. The eastern part of the area is dominated by a prominent ridge of fine grained micaceous quartz sandstone. This is mapped as Limmen Sandstone. The western part of the mapped area is a low mound of silicified dolomite which displays common hematite and limonite alteration. Zones of brecciation are also common. Three samples returned anomalous zinc values (DJ7584 309 ppm Zn, DJ7586 683 ppm Zn, DJ7587 629 ppm Zn). Outcrop is interpreted as weathered Balbirini Dolomite.



LEGEND

- | | | | |
|-----|-----------|-------|-------|
| F | Flood | ▲▲▲ | Scarp |
| --- | Creek | - - - | Fault |
| . | Grid Peg | — | Fence |
| | Sandstone | | |
| | Breccia | | |



Scale 1:10000
0 200 400 600 800 metres

C:\BHP\EX\MTY13.DGN

Prepared : M.W.R.

Drawn : G.W.P.

Date : 10/04/94

Revised :

 **BHP Minerals Limited**
AON 008 004 742

**MOUNT YOUNG
EM ANOMALY MY 13**

Centre : Perth

A4-5578

FIGURE

ANOMALY NO: MY16
LOCATION: 539700E 8288000N
MAP SHEET: Towns 1:100,000
TENEMENT: EL 7262
GEOLOGY: No outcrop. Possible Pnz.
GRID: 3 x 1.5 km lines oriented 085° Magnetic
NUMBER SOIL SAMPLES: 18 (-80# and -2 mm)
NUMBER ROCK SAMPLES: 2

ACCESS:

3 km south-west of Roper Highway by graded station track.

MAPPED GEOLOGY AND STRUCTURE:

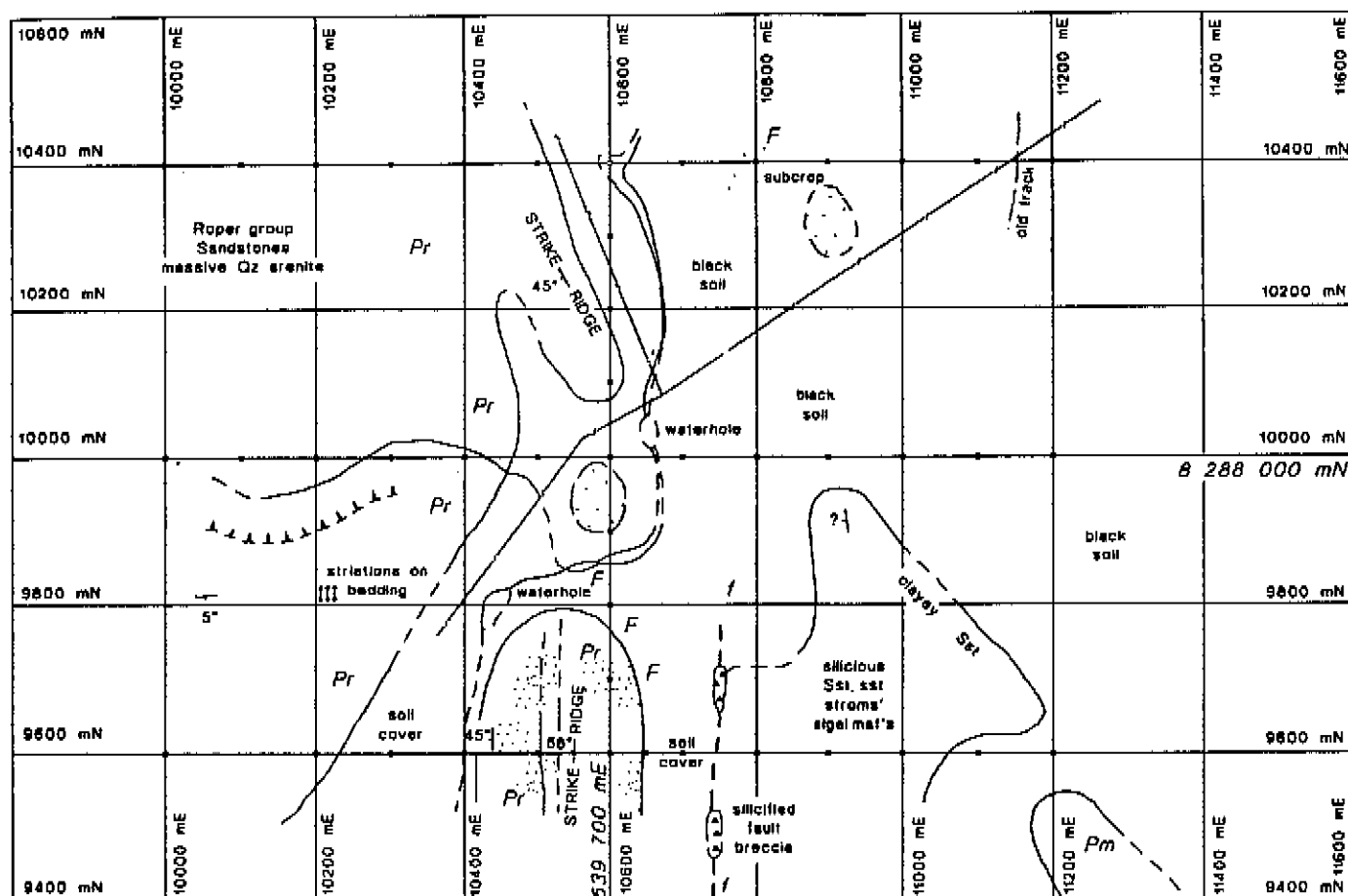
Located on interpreted northern extension of Limmen Fault possibly within buried Balbirini Dolomite.

PREVIOUS WORK:

Moderately anomalous stream sediment geochemistry (>45 ppm Pb, 730 ppm Zn) occurs immediately to the east of the EM anomaly.

DETAILED GEOLOGY:

The grid has been mapped at a scale of 1:10,000. Roper Group sandstones outcrops over the western half of the grid. Siliceous algal and stromatolitic dolomites interbedded with sandstones (Nathan Group?) outcrop on the eastern end of the southern line. A zone of siliceous fault breccia occurs between the Roper Group sandstones and the dolomites. No mineralisation was noted.



LEGEND

- | | | | |
|-----|-----------|------|-------|
| F | Float | ▲▲▲▲ | Scarp |
| --- | Creek | --- | Fault |
| • | Grid Peg | --- | Fence |
| | Sandstone | | |
| | Breccia | | |



Scale 1:10000
0 200 400 600 800 metres

C:\BHP\EX\MTY16.DGN

Prepared : M.W.R.

Drawn : G.W.P.

Date : 10/04/94

Revised :



BHP Minerals Limited
ACN 009 984 787

MOUNT YOUNG
EM ANOMALY MY 16

Centre : Perth

A4-5579

FIGURE

ANOMALY NO: 21
LOCATION: 546950E 8274000N
MAP SHEET: Mantungula 1:100,000
TENEMENT: EL 7263
GEOLOGY: Subcropping Pru
GRID: 3 x 1.5 km lines 075° Magnetic
NUMBER SOIL SAMPLES: 16 (-80# and -2 mm)
NUMBER ROCK SAMPLES: -

ACCESS:

On Roper Highway 3 km south of Nathan River Homestead.

MAPPED GEOLOGY AND STRUCTURE:

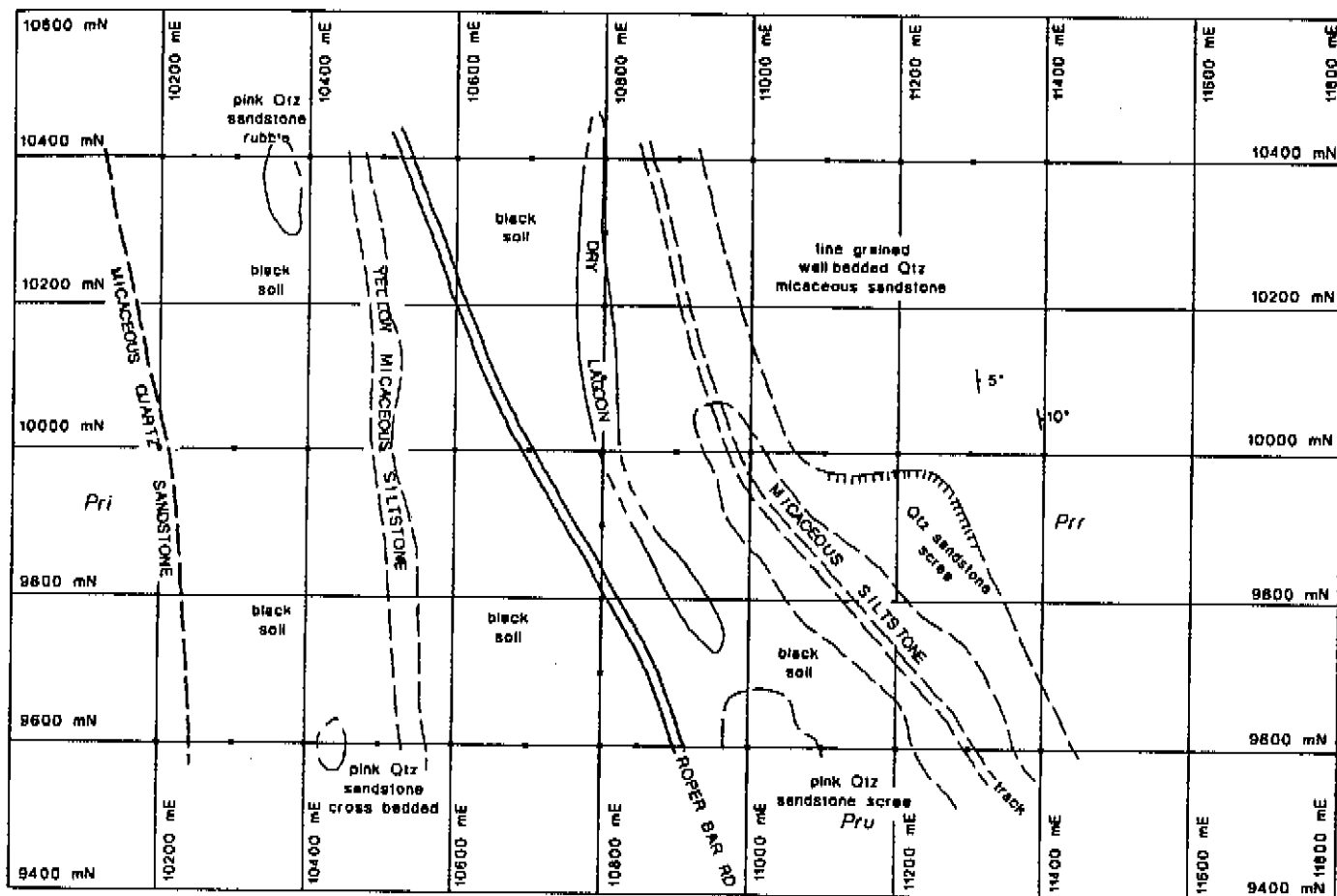
Subcropping Mainoru Fm (Pru) occurs in the central anomaly area bounded by Crawford Sandstone to the east and Limmen Sandstone to the west. The Four Archers Fault is mapped 2 km to the east.

PREVIOUS WORK:

No stream sediment sample coverage of the area.

DETAILED GEOLOGY:

Much of the central area of the anomaly is covered by black soil. Micaceous siltstone is exposed as float and isolated outcrops. Good exposure also occurs to the east in scrapings used for road construction. Roper Group sandstone ridges and cliffs dominate the flanks of the area. No ferruginous veining or scree was noted.



LEGEND

- | | | | |
|-----|-----------|------|-------|
| F | Float | ▲▲▲▲ | Scarp |
| --- | Creek | /--- | Fault |
| • | Grid Peg | — | Fence |
| | Sandstone | | |
| | Breccia | | |



Scale 1:10000
0 200 400 600 800 metres

Prepared : M.W.R.

Drawn : G.W.P.

Date : 10/04/94

Revised :



BHP Minerals Limited
AON 006 084 787

**MOUNT YOUNG
EM ANOMALY MY 21**

C:\BHP\PEX\MTY21.DGN

Centre : Perth

A4-5580

FIGURE

ANOMALY NO: 24
LOCATION: 539950E 827000N
MAP SHEET: Mantungula 1:100,000
TENEMENT: EL 7263
GEOLOGY: Subcropping Pnz
GRID: 3 x 1.2 km lines 105° Magnetic
NUMBER SOIL SAMPLES: 15 (-80# anmd -2 mm)
NUMBER ROCK SAMPLES: 3

ACCESS:

Helicopter access from Nathan River Homstead.

MAPPED GEOLOGY AND STRUCTURE:

Poorly outcropping Balbirini Dolomite (Pnz) is mapped over the anomaly with Limmen Sandstone immediately to the west. The north-south trending Limmen Fault is mapped 400 m to the east.

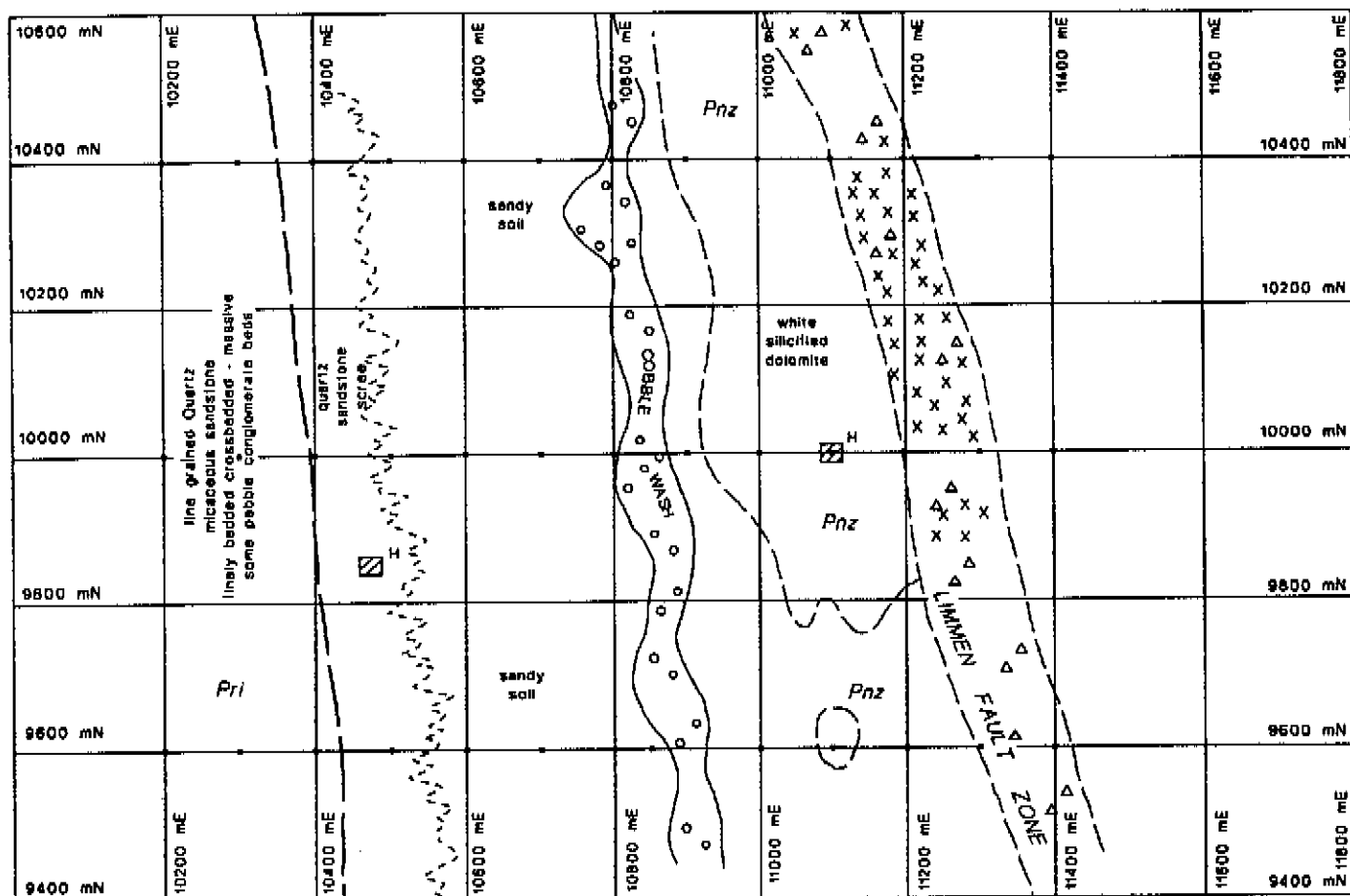
PREVIOUS WORK:

Coincident with low level stream sediment anomalism (40 ppm Pb 30 ppm Zn).

DETAILED GEOLOGY:

The central part of the anomaly is covered by alluvial sandy deposits ranging from sands to cobbles. The western part is a ridge of micaceous quartz sandstone (Limmen Sandstone). The eastern part of the anomaly is covered by a white silicified dolomite. Interpreted to be Balbirini Dolomite. This is cross cut (north-south) by a zone highly ferruginous dolomitic breccia. This consists of variably ferruginized clasts (up to 10 cm) of dolomite sub-rounded to angular. Matrix material is sand sized and consists of highly limonitic/hemalitic material containing rounded grit sized milky chert grains. Mangraniferous and Goethilic coatings are common. This zone is interpreted to be part of the Limmen Fault. Two rock samples returned low levels of Zinc anomalism (239 ppm and 106 ppm Zn).

e:\docs\berents\reports\cr7835



LEGEND

- | | | | |
|-------|-------------|----------------|-------------------------|
| F | Float | | Scarp |
| - - - | Creek | / - - - | Fault |
| . | Grid Peg | — | Fence |
| X | Iron Rich | □ ^H | Helicopter Landing Site |
| △ | Brecciation | | |



Scale 1:10000
0 200 400 600 800 metres

C:\BHP\EX\MTY24.DGN

Prepared : M.W.R.

Drawn : G.W.P.

Date : 10/04/94

Revised :



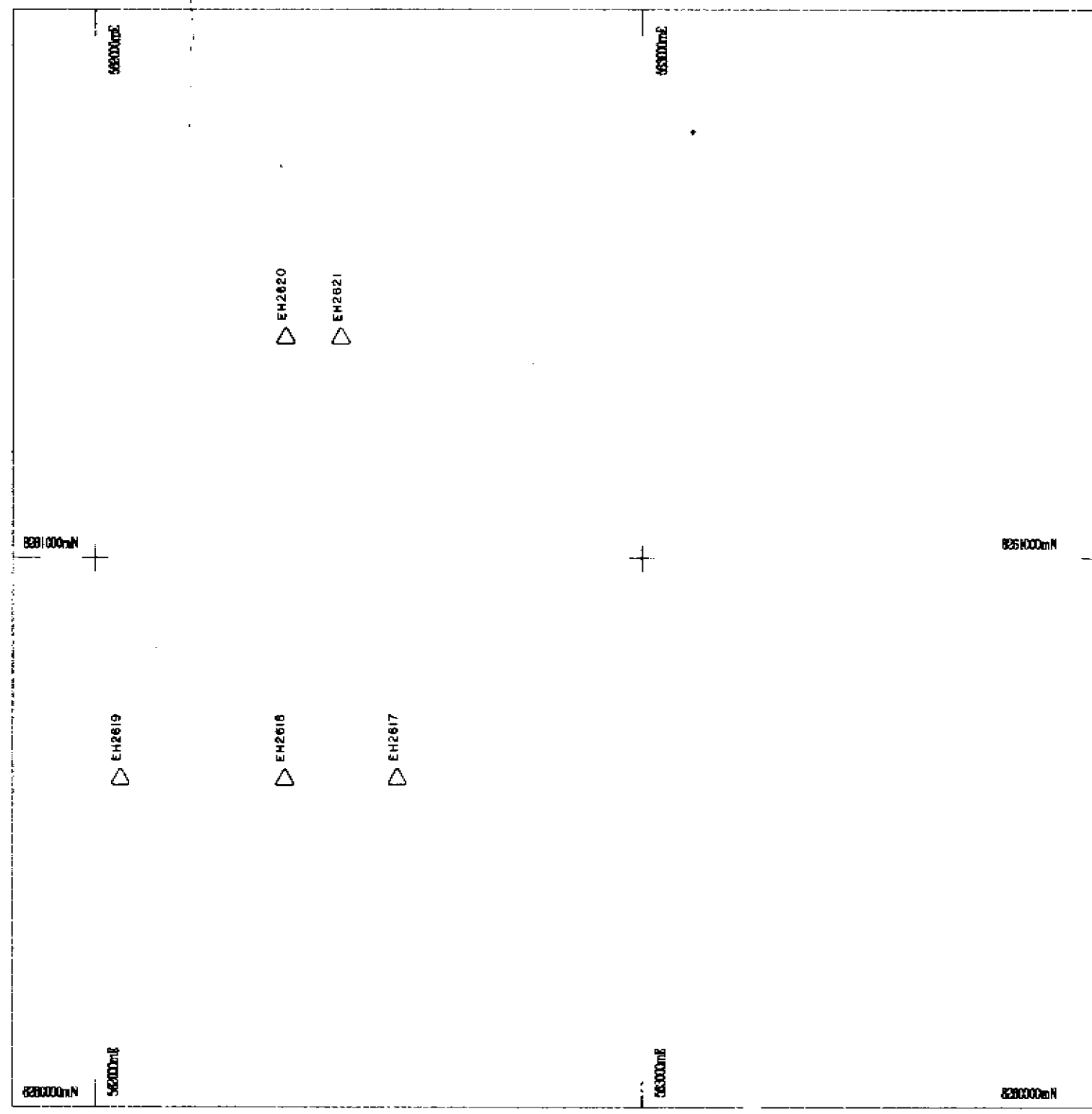
BHP Minerals Limited
ACN 006 084 782

**MOUNT YOUNG
EM ANOMALY MY 24**

Centre : Perth

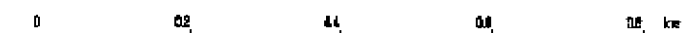
A4-558I

FIGURE



Soil Sample

Scale 1:10000



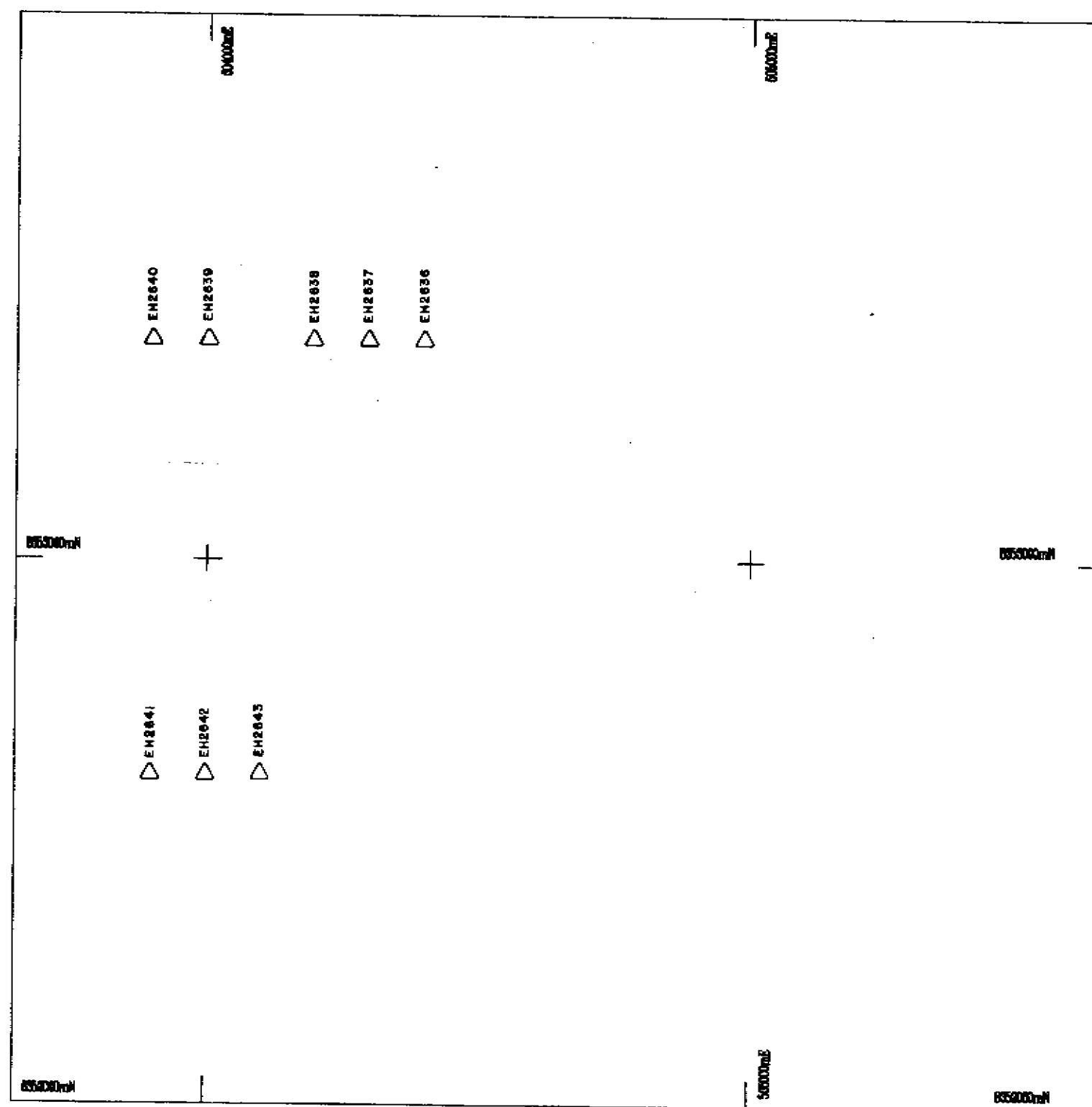
Universal Transverse Mercator Projection

BHP Minerals Pty. Ltd.
ACN 008 094 702

Carpentaria Group
Nathan River Project
Questem Anomaly MY27
Soil Sample Locations

Prepared: AJH	Date: 25/03/1994
Drawn: AJH	Revisions: 1
Control: Perth	Org. No: A3-3900

PLATE:



△ Soil Sample

Scale 1:10000



Universal Transverse Mercator Projection

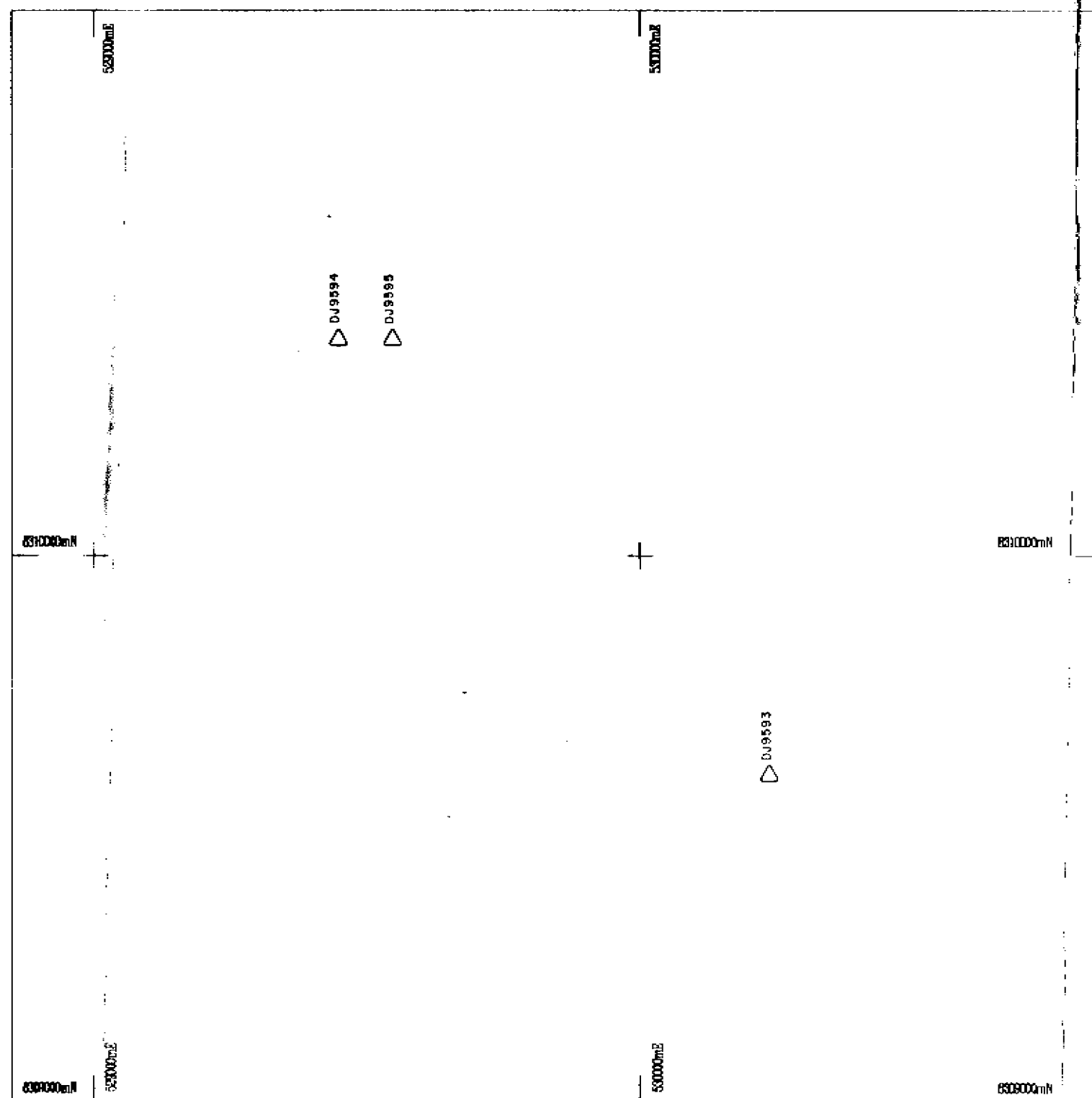


BHP Minerals Pty. Ltd.
A.C.N. 088 004 788

Carpentaria Group
Nathan River Project
Questern Anomaly MY1
Soil Sample Locations

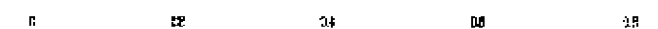
Prepared: AH	Date: 25/03/1994
Drawn: AH	Revised: 1
Checked: Peth	Proj. No.: A37-3882

PLATE:



Soil Sample
△

Scale 1:10000



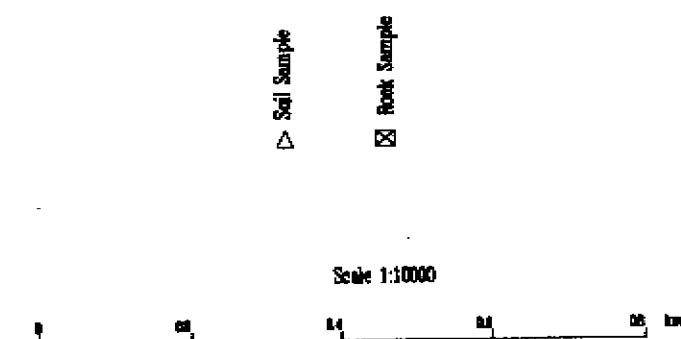
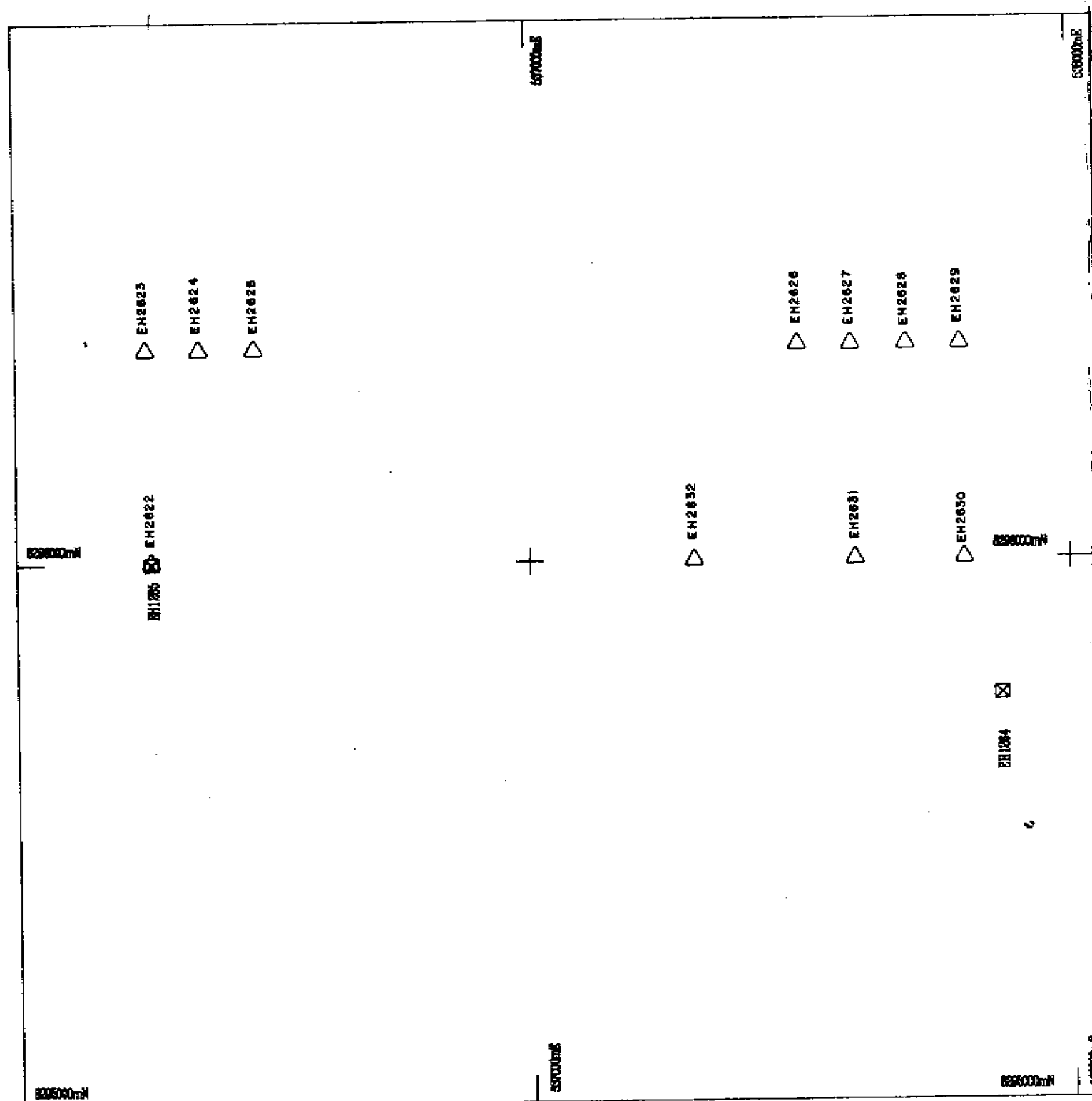
Universal Transverse Mercator Projection



BHP Minerals Pty. Ltd.
A.C.N. 008 004 762

Carpentaria Group
Nathan River Project
Questern Anomaly MY5
Soil Sample Locations

Prepared: AH	Date: 25/03/1994	PLATE
Drawn: AH	Revisions: 1	
Centre: Perth	Org. No: A3-3893	



Universal Transverse Mercator Projection

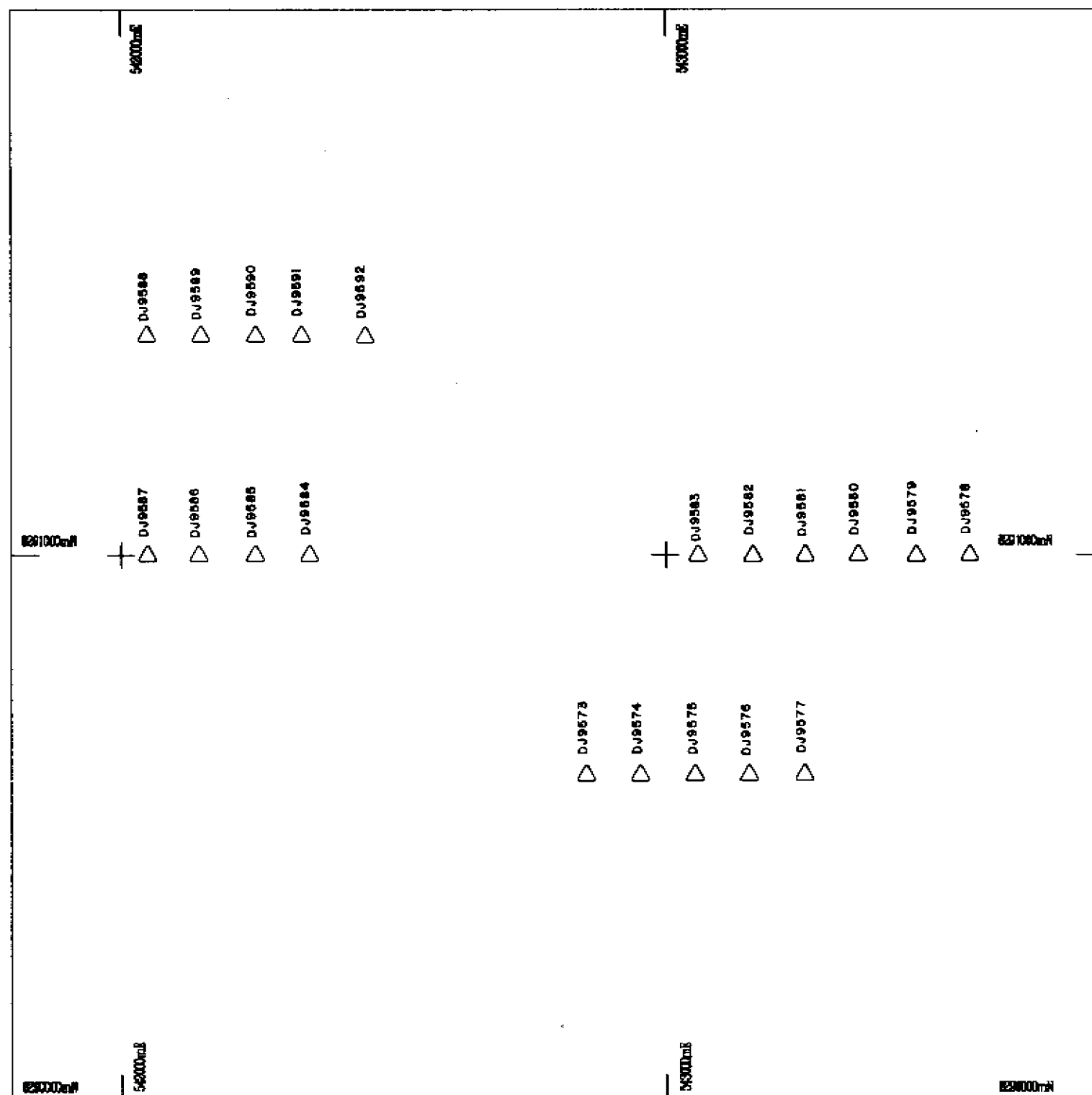


BHP Minerals Pty. Ltd.
A.C.N. 609 604 702

Carpentaria Group
Nathan River Project
Questem Anomaly MY11
Soil & Rock Sample Locations

Prepared: AM	Date: 25/05/1994
Drawn: AM	Revisions: 1
Control: Perth	Reg. No: A3-3894

PLATE:



△ Soil Sample

Scale 1:10000



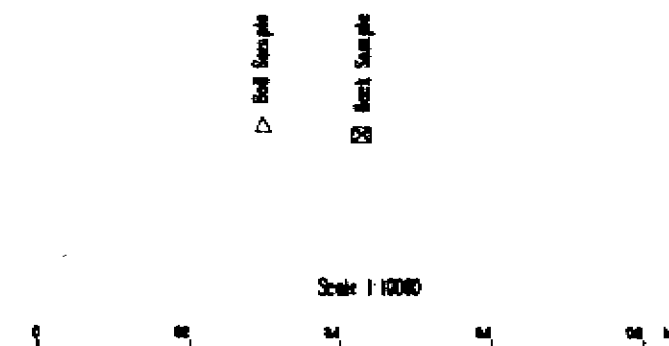
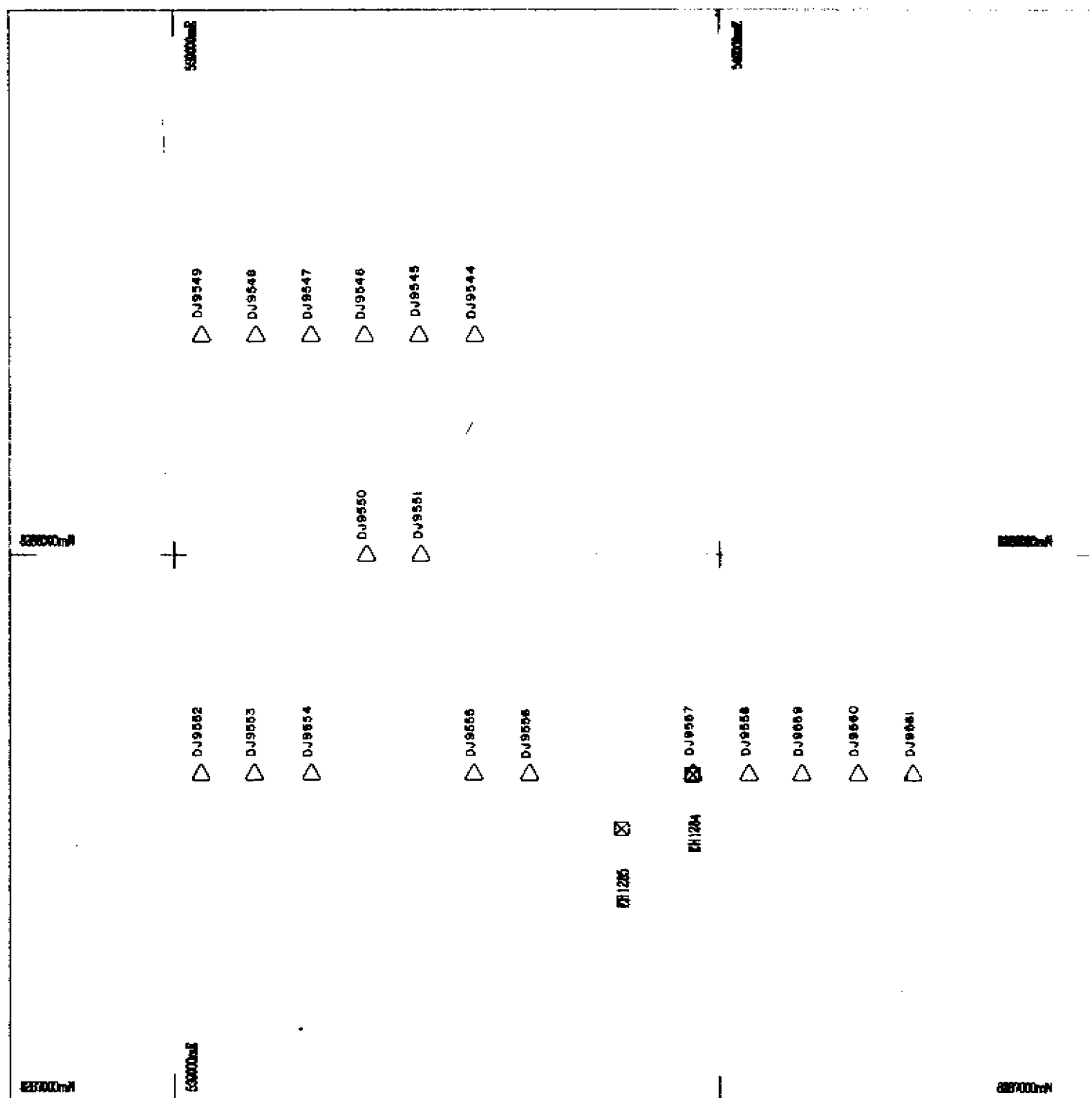
Universal Transverse Mercator Projection

 BHP Minerals Pty. Ltd.
ACN 008 094 782

Carpentaria Group
Nathan River Project
Questem Anomaly MY13
Soil Sample Locations

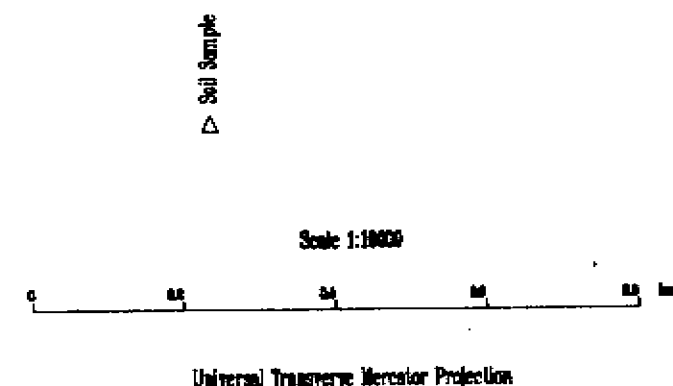
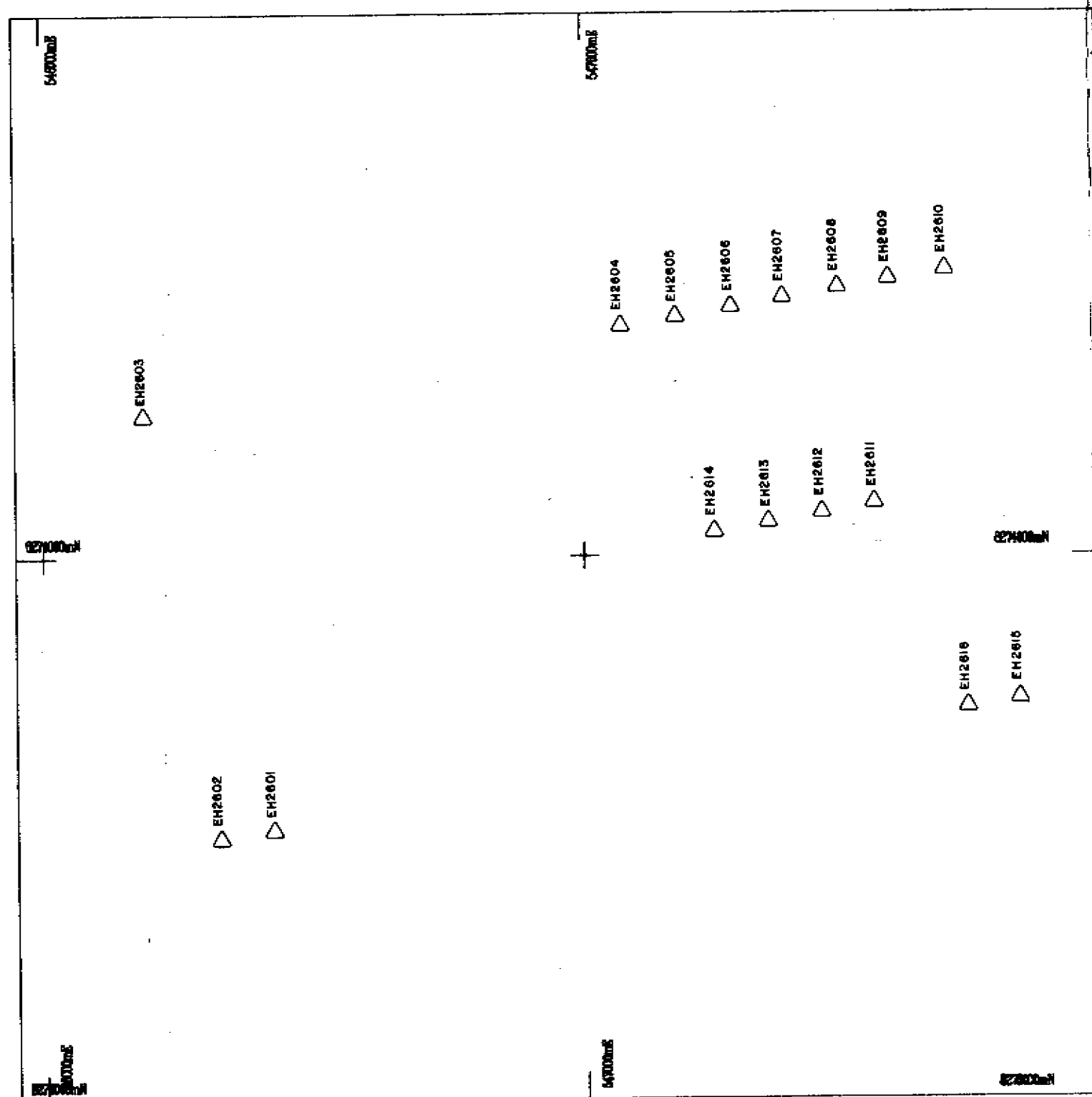
Prepared: AM	Date: 25/03/1994
Drawn: AM	Revisions: 1
Checked: Perth	Eng. No: A3-3 9

PLATE:

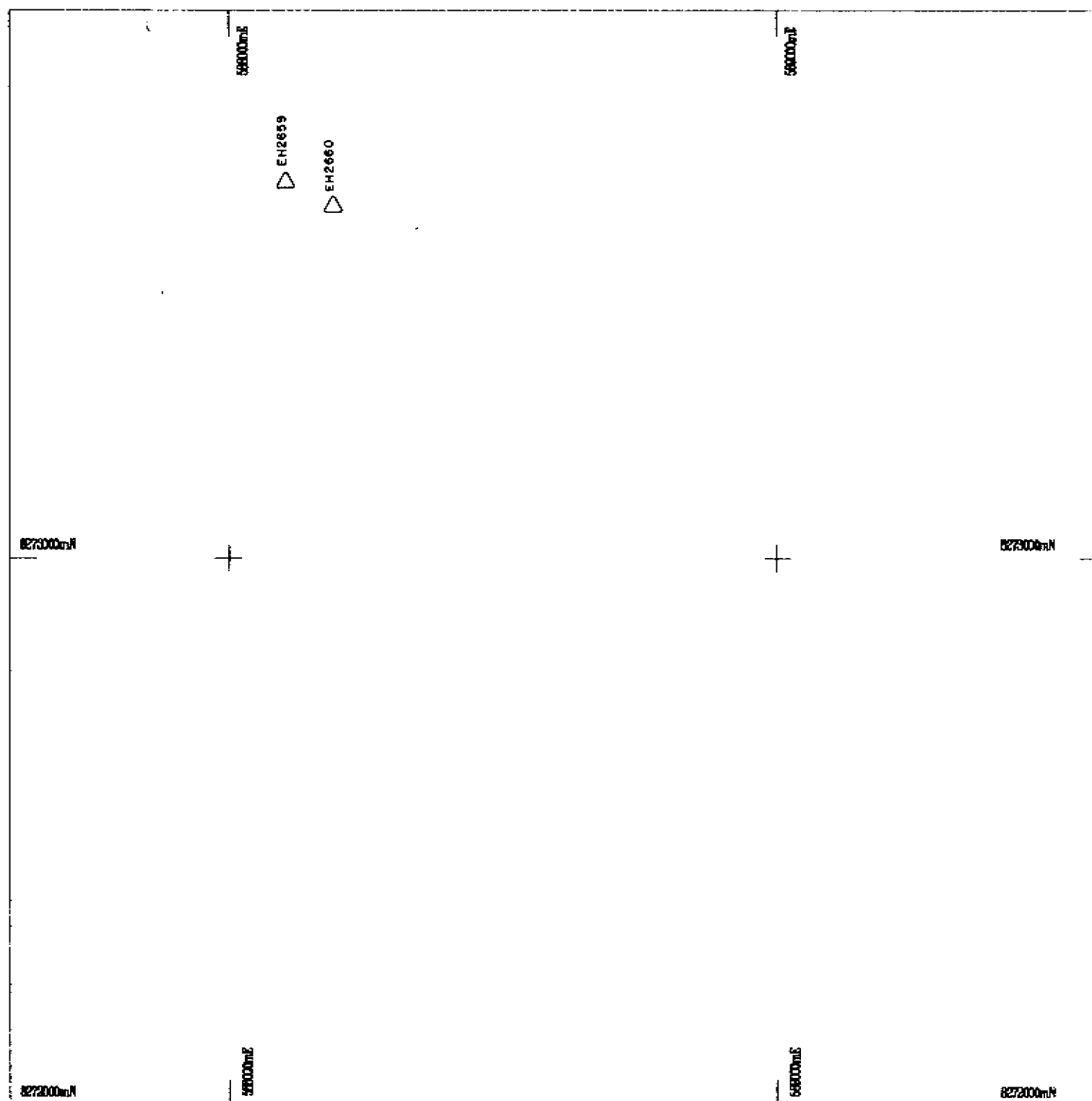


Universal Transverse Mercator Projection

 BHP Minerals Pty. Ltd. A.C.N. 005 094 702		
Carpentaria Group Nathan River Project Questern Anomaly MY16 Soil & Rock Sample Locations		
Prepared: AM	Date: 25/03/1994	PLATE:
Drawn: AM	Revisions: 1	
Centre: Perth	Doc. No.: A3-3896	



 BHP Minerals Pty. Ltd. ACN 009 604 702		
Carpentaria Group Nathan River Project Questem Anomaly MY21 Soil Sample Locations		
Prepared: AM	Date: 28/03/2004	PLATE:
Drawn: AM	Revisions: 1	
Checked: PMB	Dwg. No: A3-3897	



Soil Sample



Scale 1:10000



Universal Transverse Mercator Projection

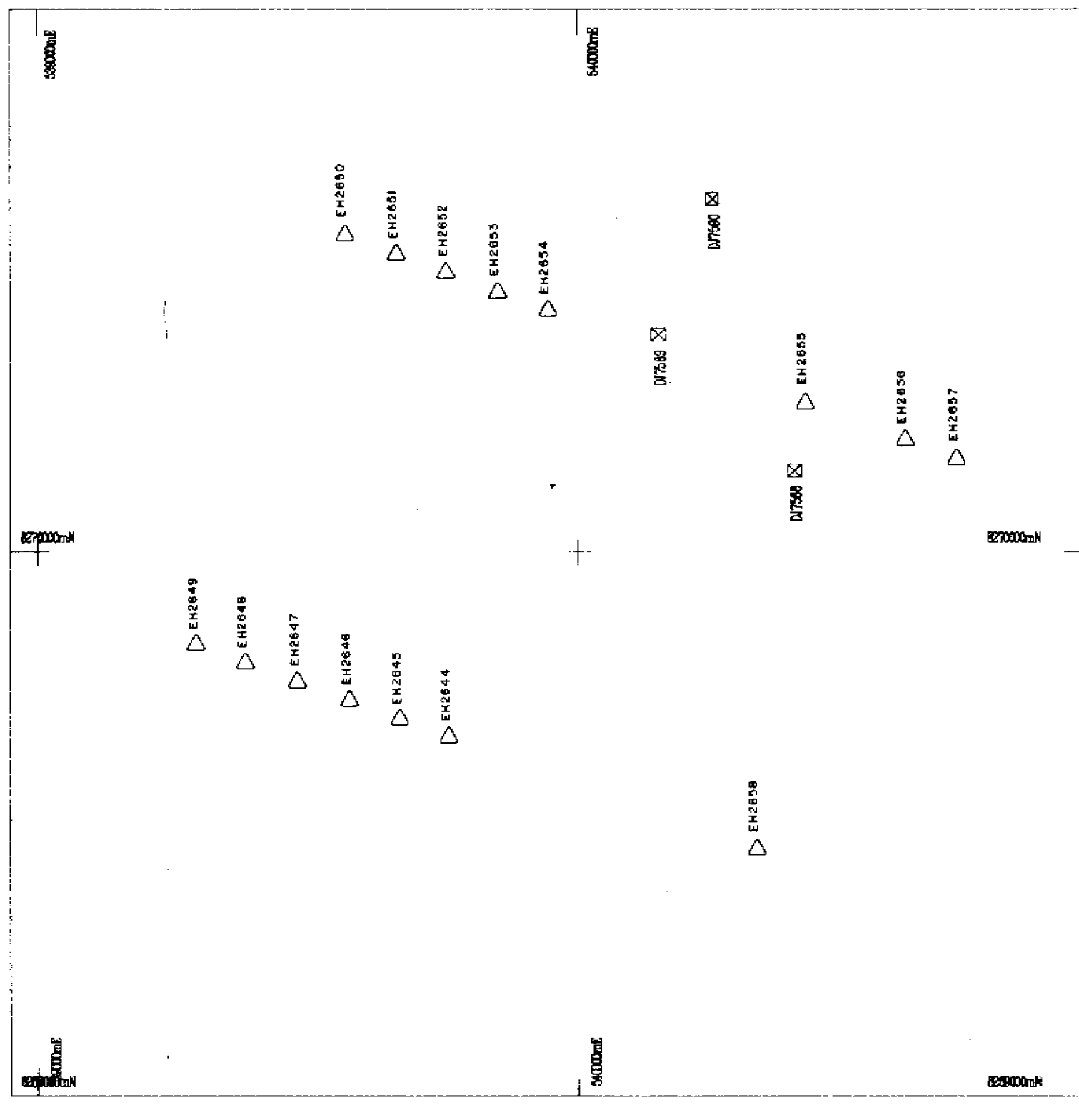


BHP Minerals Pty. Ltd.
ACN 008 694 782

Carpentaria Group
Nalhan River Project
Questern Anomaly MY23
Soil Sample Locations

Prepared: AJH	Date: 26/03/1994
Drawn: AJH	Revisions: 1
Centre: Perth	Doc. No: A3-3898

PLATE:



△ Soil Sample
⊠ Rock Sample

Scale 1:10000



Universal Transverse Mercator Projection

 BHP Minerals Pty. Ltd.
ACN 008 004 782

Carpentaria Group
Nathan River Project
Questern Anomaly MY24
Soil & Rock Sample Locations

Prepared: AMH	Date: 20/03/2004	PLATE:
Drawn: AMH	Revisions: 1	
Centre: Perth	Dwg. No: A3-3899	

APPENDIX 8

RC Drill Chip Geochemistry

Hole	From	To	Sample	Hole	From	To	Sample
MYR13	22	26	DZ 980	TRR53	10	12	DZ 897
TRR03	22	24	DZ 837	TRR53	38	40	DZ 898
TRR05	40	50	DZ 838	TRR54	14	16	DZ 899
TRR05	50	58	DZ 839	TRR55	50	52	DZ 900
TRR06	34	44	DZ 840	TRR56	10	16	DZ 901
TRR06	44	46	DZ 841	TRR57	38	40	DZ 902
TRR07	40	50	DZ 843	TRR58	30	34	DZ 903
TRR07	50	58	DZ 844	TRR59	42	46	DZ 905
TRR10	50	58	DZ 845	TRR60	44	46	DZ 906
TRR11	16	22	DZ 846	TRR60	60	64	DZ 924
TRR12	4	10	DZ 847	TRR61	40	42	DZ 907
TRR13	52	58	DZ 848	TRR61	50	56	DZ 935
TRR14	40	46	DZ 849	TRR62	36	40	DZ 908
TRR15	6	8	DZ 850	TRR63	16	22	DZ 909
TRR15	20	22	DZ 853	TRR64	50	52	DZ 912
TRR16	50	52	DZ 854	TRR65	28	34	DZ 910
TRR17	54	58	DZ 855	TRR66	36	40	DZ 911
TRR18	52	56	DZ 856	TRR67	34	40	DZ 914
TRR19	8	10	DZ 857	TRR68	34	40	DZ 919
TRR19	10	12	DZ 858	TRR69	30	34	DZ 904
TRR19	14	16	DZ 860	TRR69	34	40	DZ 921
TRR19	48	52	DZ 861	TRR70	12	18	DZ 923
TRR20	42	46	DZ 862	TRR70	18	22	DZ 924
TRR21	34	40	DZ 915	TRR71	12	16	DZ 925
TRR23	52	58	DZ 863	TRR72	18	22	DZ 926
TRR24	58	64	DZ 864	TRR73	6	10	DZ 927
TRR25	16	22	DZ 865	TRR74	58	64	DZ 928
TRR26	52	58	DZ 866	TRR75	46	52	DZ 929
TRR27	52	56	DZ 867	TRR76	28	30	DZ 930
TRR29	16	22	DZ 868	TRR77	12	16	DZ 931
TRR30	22	28	DZ 869	TRR78	4	10	DZ 932
TRR31	22	28	DZ 870	TRR78	10	16	DZ 933
TRR32	16	22	DZ 871	TRR80	16	22	DZ 940
TRR33	16	22	DZ 872	TRR81	28	34	DZ 941
TRR34	10	16	DZ 873	TRR82	16	22	DZ 942
TRR35	4	10	DZ 874	TRR83	34	40	DZ 943
TRR36	22	28	DZ 875	TRR84	34	40	DZ 944
TRR37	20	22	DZ 876	TRR85	22	28	DZ 945
TRR38	22	28	DZ 877	TRR86	50	58	DZ 946
TRR39	32	34	DZ 878	TRR86	58	66	DZ 947
TRR40	16	22	DZ 879	TRR87	10	16	DZ 948
TRR41	40	46	DZ 880	TRR89	40	46	DZ 949
TRR42	4	6	DZ 920	TRR90	16	22	DZ 950
TRR42	22	28	DZ 882	TRR91	54	60	DZ 952
TRR43	10	16	DZ 883	TRR91	60	63	DZ 953
TRR44	2	8	DZ 884	TRR92	16	22	DZ 954
TRR44	10	16	DZ 885	TRR93	58	64	DZ 955
TRR45	22	28	DZ 886	YER01	28	34	DZ 956
TRR46	18	20	DZ 887	YER02	52	58	DZ 957
TRR46	52	58	DZ 888	YER03	36	42	DZ 958
TRR47	22	28	DZ 889	YER03	42	48	DZ 959
TRR48	40	46	DZ 890	YER03	48	54	DZ 960
TRR49	10	16	DZ 891	YER03	54	60	DZ 961
TRR50	4	10	DZ 892	YER03	70	76	DZ 962
TRR51	10	16	DZ 893	YER04	52	58	DZ 963
TRR52	26	32	DZ 894	YER05	28	34	DZ 964
TRR52	42	48	DZ 895	YER06	20	22	DZ 965
TRR52	50	56	DZ 896	YER06	34	40	DZ 966
				YER08	24	30	DZ 967

	From	To	Sample
RR03	22	24	DZ 837
RR05	40	50	DZ 838
RR05	50	58	DZ 839
RR06	34	44	DZ 840
RR06	44	46	DZ 841
RR07	40	50	DZ 843
RR07	50	58	DZ 844
RR10	50	58	DZ 845
RR11	16	22	DZ 846
RR12	4	10	DZ 847
RR13	52	58	DZ 848
RR14	40	46	DZ 849
RR15	6	8	DZ 850
RR15	20	22	DZ 853
RR16	50	52	DZ 854
RR17	54	58	DZ 855
RR18	52	56	DZ 856
RR19	8	10	DZ 857
RR19	10	12	DZ 858
RR19	14	16	DZ 860
RR19	48	52	DZ 861
RR20	42	46	DZ 862
RR23	52	58	DZ 863
RR24	58	64	DZ 864
RR25	16	22	DZ 865
RR26	52	58	DZ 866
RR27	52	56	DZ 867
RR29	16	22	DZ 868
RR30	22	28	DZ 869
RR31	22	28	DZ 870
RR32	16	22	DZ 871
RR33	16	22	DZ 872
RR34	10	16	DZ 873
RR35	4	10	DZ 874
RR36	22	28	DZ 875
RR37	20	22	DZ 876
RR38	22	28	DZ 877
RR39	32	34	DZ 878
RR40	16	22	DZ 879
RR41	40	46	DZ 880
RR42	22	28	DZ 882
RR43	10	16	DZ 883
RR44	2	8	DZ 884
RR44	10	16	DZ 885
RR45	22	28	DZ 886
RR46	18	20	DZ 887
RR46	52	58	DZ 888
RR47	22	28	DZ 889
RR48	40	46	DZ 890
RR49	10	16	DZ 891
RR50	4	10	DZ 892
RR51	10	16	DZ 893
RR52	26	32	DZ 894
RR52	42	48	DZ 895
RR52	50	56	DZ 896
RR53	10	12	DZ 897
RR53	38	40	DZ 898
RR54	14	16	DZ 899
RR55	50	52	DZ 900

MAY

MBK

MAY

MBK

Job Nos

Hole
 TRR56
 TRR57
 TRR58
 TRR69
 TRR59
 TRR60
 TRR61
 TRR62
 TRR63
 TRR65
 TRR66
 TRR64
 TRR67
 TRR21
 TRR68
 TRR42
 TRR69
 TRR70
 TRR60
 TRR70
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 YER01
 YER02
 YER03
 YER03
 YER03
 YER03
 YER04
 YER05
 YER06
 YER06
 YER08
 MYR13

From	To	Sample
10	16	DZ 901
38	40	DZ 902
30	34	DZ 903
30	34	DZ 904
42	46	DZ 905
44	46	DZ 906
40	42	DZ 907
36	40	DZ 908
16	22	DZ 909
28	34	DZ 910
36	40	DZ 911
50	52	DZ 912
34	40	DZ 914
34	40	DZ 915
34	40	DZ 919
4	6	DZ 920
34	40	DZ 921
12	18	DZ 923
60	64	DZ 924
18	22	DZ 924
12	16	DZ 925
18	22	DZ 926
6	10	DZ 927
58	64	DZ 928
46	52	DZ 929
28	30	DZ 930
12	16	DZ 931
4	10	DZ 932
10	16	DZ 933
50	56	DZ 935
16	22	DZ 940
28	34	DZ 941
16	22	DZ 942
34	40	DZ 943
34	40	DZ 944
22	28	DZ 945
50	58	DZ 946
58	66	DZ 947
10	16	DZ 948
40	46	DZ 949
16	22	DZ 950
54	60	DZ 952
60	63	DZ 953
16	22	DZ 954
58	64	DZ 955
28	34	DZ 956
52	58	DZ 957
36	42	DZ 958
42	48	DZ 959
48	54	DZ 960
54	60	DZ 961
70	76	DZ 962
52	58	DZ 963
28	34	DZ 964
20	22	DZ 965
34	40	DZ 966
24	30	DZ 967
22	26	DZ 980

MBK

MBK

MBK

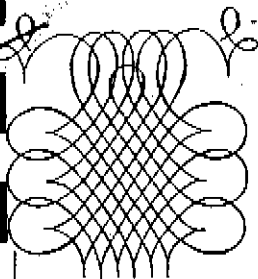
MAY

MAZ

MBB

MBA

Job Nos



3/5/91 BKS
ASSAYCORP PTY LTD

A.C.N. 052 982 911

174 Ward Street, Pine Creek, N.T. 0847

P.O. Box 41, Pine Creek, N.T. 0847

Telephone (089) 76 1262

Facsimile (089) 76 1310

ASSAY CODE: AC 09501

BHP-Utah Minerals

Distribution

Adam Hender

Harry Muntanion

Client Reference: 01262

Date Received:

04/09/1993

Project : ~~BK~~, BAY, LQA

Number of Samples:

73

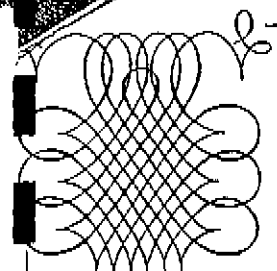
Cost Code:

Sample Preparation

Analysis	Analytical Technique	Precision & Accuracy	Detection Limit	Data Units
Cu	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
Pb	AAS/MA-3	Prec. $\pm$ 10%	2	ppm
Zn	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
Ag	AAS/MA-3	Prec. $\pm$ 10%	0.5	ppm
As	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
Mn	AAS/MA-3	Prec. $\pm$ 10%	2	ppm
Fe	AAS/MA-3	Prec. $\pm$ 10%	20	ppm

Authorisation: Ray Wooldridge

Report Dated: 20/09/1993



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ASSAY CODE: AC 09501

Page 1 of 3

Sample	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	As (ppm)	Mn (ppm)	Fe (ppm)
DZ 826	2	26	98	<0.5	2	1065	1.15%
DZ 827	1	<2	21	<0.5	<1	428	8600
DZ 828	37	26	39	<0.5	<1	400	1.46%
DZ 829	32	2	63	<0.5	<1	1042	5.64%
DZ 830	62	<2	52	<0.5	<1	808	7.91%
DZ 831	3	36	128	<0.5	1	393	8600
DZ 832	5	7	163	<0.5	2	1310	2.29%
DZ 838	11	8	26	<0.5	2	148	2.53%
DZ 839	5	3	17	<0.5	9	204	4.72%
DZ 840	4	<2	6	<0.5	1	65	1.54%
DZ 841	41	11	9	<0.5	4	39	9700
DZ 842	4	<2	41	<0.5	1	169	2.72%
DZ 843	31	<2	50	<0.5	4	1960	2.74%
DZ 844	21	<2	150	<0.5	2	2172	3.02%
DZ 845	4	<2	32	<0.5	1	1359	1.94%
DZ 846	19	56	62	<0.5	2	696	3.04%
DZ 847	9	6	10	<0.5	<1	123	2.01%
DZ 848	20	2	30	<0.5	7	59	1.90%
DZ 849	40	44	43	<0.5	22	9330	3.70%
DZ 853	29	7	26	<0.5	7	450	4.02%
DZ 854	21	15	87	<0.5	13	1682	4.03%
DZ 855	28	17	27	<0.5	3	149	1.35%
DZ 856	56	<2	34	<0.5	4	486	3.09%
DA 861	31	<2	13	<0.5	1	404	1.90%
DA 862	15	5	9	<0.5	2	117	1.44%

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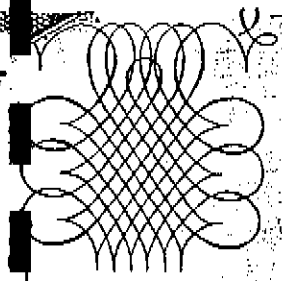
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Page 2 of 3

Sample	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	As (ppm)	Mn (ppm)	Fe (ppm)
DA 863	73	2	18	<0.5	6	250	3.80%
DA 864	23	<2	17	<0.5	2	230	3.74%
DA 865	9	<2	6	<0.5	3	82	1.10%
DA 866	24	31	27	<0.5	4	224	2.28%
DA 867	32	4	18	<0.5	<1	46	1.49%
DA 868	4	22	8	<0.5	<1	5	4300
DA 869	13	10	6	<0.5	1	23	8500
DA 870	13	30	3	<0.5	<1	75	1.08%
DA 871	6	63	4	<0.5	2	15	7500
DA 872	5	27	10	<0.5	1	5	6600
DA 873	10	17	13	<0.5	4	75	2.06%
DA 874	10	2	8	<0.5	9	32	3.09%
DA 875	3	8	35	<0.5	3	742	1.65%
DA 876	16	125	99	<0.5	31	1.39%	3.01%
DA 877	16	8	13	<0.5	6	195	1.01%
DA 878	16	2	24	<0.5	3	188	1.14%
DA 879	15	16	26	<0.5	10	135	2.15%
DA 880	21	12	88	<0.5	18	615	7.50%
DZ 882	8	<2	15	<0.5	4	374	1.38%
DZ 883	10	3	38	<0.5	3	463	1.13%
DZ 885	6	2	6	<0.5	<1	1046	7400
DZ 886	3	<2	31	<0.5	3	819	3.10%
DZ 888	22	5	43	<0.5	19	3665	7.07%
DZ 889	18	2	28	<0.5	15	774	2.62%
DZ 890	12	<2	34	<0.5	5	742	2.17%



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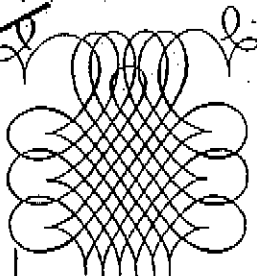
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Page 3 of 3

Sample	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	As (ppm)	Mn (ppm)	Fe (ppm)
DZ 891	12	21	7	<0.5	1	123	1.36%
DZ 892	11	34	11	<0.5	1	80	1.53%
DZ 893	28	12	29	<0.5	3	435	2.62%
DZ 894	52	22	38	<0.5	3	166	2.95%
DZ 895	5	<2	46	<0.5	<1	106	5.61%
DZ 896	60	2	30	<0.5	3	401	3.33%
DZ 898	21	8	9	<0.5	1	393	1.37%
DZ 899	11	9	13	<0.5	7	53	3.93%
DZ 900	2	<2	50	<0.5	5	57	4.91%
DZ 901	10	6	15	<0.5	2	114	3.26%
DZ 902	32	19	208	<0.5	<1	2.25%	6.08%
DZ 903	52	12	148	<0.5	27	3050	4.85%
DZ 904	19	<2	47	<0.5	18	213	4.17%
DZ 905	81	51	142	<0.5	18	4358	3.84%
DZ 906	24	<2	63	<0.5	20	316	5.70%
DZ 907	15	4	52	<0.5	15	397	3.11%
DZ 908	21	36	43	<0.5	3	116	2.52%
DZ 909	6	27	32	<0.5	12	103	4.99%
DZ 910	38	10	44	<0.5	5	324	3.28%
DZ 911	8	5	19	<0.5	1	772	1.49%
DZ 912	20	3	49	<0.5	21	225	4.06%
DZ 914	20	5	21	<0.5	12	1.09%	1.51%
DZ 915	46	38	53	<0.5	7	594	1.09%



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ASSAY CODE: AC 09527

BHP-Utah Minerals

Distribution

H. Muntanion

A. Hender

Client Reference: 01263

Date Received:

05/09/1993

Project :BAZ,BAY,BBB,BBA.

Number of Samples:

40

Cost Code:

Sample Preparation

Analysis	Analytical Technique	Precision & Accuracy	Detection Limit	Data Units
Cu	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
Pb	AAS/MA-3	Prec. $\pm$ 10%	2	ppm
Zn	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
Ag	AAS/MA-3	Prec. $\pm$ 10%	0.5	ppm
As	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
Mn	AAS/MA-3	Prec. $\pm$ 10%	2	ppm
Fe	AAS/MA-3	Prec. $\pm$ 10%	20	ppm

Authorisation: Ray Wooldridge

Report Dated: 16/09/1993

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A.C.N. 052 982 911

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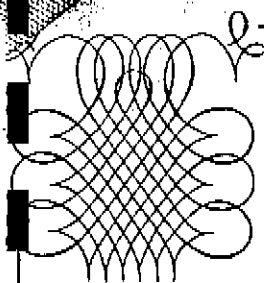
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ASSAY CODE: AC 09527

Page 1 of 2

Sample	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	As (ppm)	Mn (ppm)	Fe (ppm)
DZ 919	9	9	15	<0.5	9	3743	1.17%
DZ 921	19	11	23	<0.5	14	1227	2.35%
DZ 922	24	14	70	<0.5	4	146	3.01%
DZ 923	35	17	48	<0.5	3	339	2.95%
DZ 924	10	5	26	<0.5	7	334	1.40%
DZ 925	5	11	18	<0.5	4	71	2.60%
DZ 926	26	29	28	<0.5	15	204	3.80%
DZ 927	8	10	41	<0.5	3	113	2.21%
DZ 928	13	9	20	<0.5	2	69	1.22%
DZ 929	8	2	7	<0.5	<1	140	1.31%
DZ 930	9	9	10	<0.5	1	92	1.43%
DZ 931	10	23	41	<0.5	1	46	2.86%
DZ 932	7	20	16	<0.5	2	22	2.61%
DZ 933	12	22	32	<0.5	7	34	5.93%
DZ 935	9	5	15	<0.5	4	2251	1.39%
DZ 940	20	8	46	<0.5	4	191	5.10%
DZ 941	34	4	44	<0.5	1	120	5.16%
DZ 942	19	17	7	<0.5	<1	101	1.73%
DZ 943	15	20	43	<0.5	<1	496	3.19%
DZ 944	16	43	66	<0.5	<1	1434	3.02%
DZ 945	88	15	54	<0.5	<1	261	3.95%
DZ 946	16	17	144	<0.5	5	113	3.87%
DZ 947	17	12	235	<0.5	3	132	3.04%
DZ 948	55	25	239	<0.5	14	1223	12.50%
DZ 949	9	16	12	<0.5	3	266	9900



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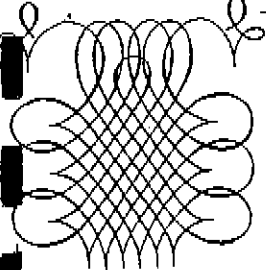
ASSAY CODE: AC 09527

Page 2 of 2

Sample	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	As (ppm)	Mn (ppm)	Fe (ppm)
DZ 950	72	22	123	<0.5	15	475	5.42%
DZ 952	28	6	59	<0.5	5	1046	4.18%
DZ 953	12	6	42	<0.5	1	1799	2.35%
DZ 954	15	5	46	<0.5	2	125	3.16%
DZ 955	26	19	49	<0.5	8	679	3.96%
DZ 956	16	19	20	<0.5	5	85	1.20%
DZ 957	14	2	49	<0.5	6	1.91%	9.10%
DZ 958	24	5	16	<0.5	5	485	2.03%
DZ 959	23	7	9	<0.5	6	149	1.88%
DZ 960	24	9	12	<0.5	12	119	2.12%
DZ 961	20	14	29	<0.5	9	99	1.96%
DZ 962	16	27	425	<0.5	5	2504	16.20%
DZ 963	11	14	36	<0.5	3	116	1.73%
DZ 964	11	3	21	<0.5	8	2043	2.47%
DZ 966	52	9	33	<0.5	13	1781	4.29%

APPENDIX 9

Manganese Geochemical Results



ASSAYCORP PTY LTD

A.C.N. 052 982 911

174 Ward Street, Pine Creek, N.T. 0847

P.O. Box 41, Pine Creek, N.T. 0847

Telephone (089) 76 1262

Facsimile (089) 76 1310

ASSAY CODE: AC 09586

BHP-Utah Minerals

Distribution

Harald Berents

BHP Melbourne

Client Reference: 13300

Date Received: 05/09/1993

Project :

Number of Samples: 9

Cost Code:

Sample Preparation

ANALYSES OF MYR014.

Analysis	Analytical Technique	Precision & Accuracy	Detection Limit	Data Units
Cu	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
Pb	AAS/MA-3	Prec. $\pm$ 10%	2	ppm
Zn	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
Mn(A)	AAS/MA-3	Acc. $\pm$ 15%	2	ppm
Mn(B)	AAS/MA-3	Acc. $\pm$ 15%	2	ppm
Fe	AAS/MA-3	Prec. $\pm$ 10%	20	ppm
Ca	AAS/MA-3	Prec. $\pm$ 10%	0.1	percent
Mg	AAS/MA-3	Prec. $\pm$ 10%	0.01	percent
As	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
Al	ICP/OES	Prec. $\pm$ 10%	0.01	percent
SiO ₂	ICP/OES	Prec. $\pm$ 10%	0.1	percent
P	ICP/OES	Prec. $\pm$ 10%	20	ppm
Ba	ICP/MS	Prec. $\pm$ 10%	1	ppm
Sr	ICP/MS	Prec. $\pm$ 10%	0.1	ppm
La	ICP/MS	Prec. $\pm$ 10%	0.1	ppm

Authorisation: Ray Wooldridge

Report Dated: 29/09/1993

ASSAYCORP PTY LTD

A.C.N. 052 982 911

174 Ward Street, Pine Creek, N.T. 0847

P.O. Box 41, Pine Creek, N.T. 0847

Telephone (089) 76 1262

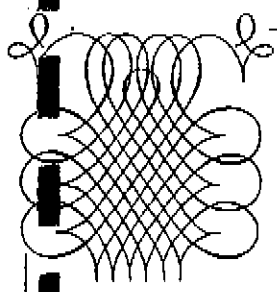
Facsimile (089) 76 1310

ASSAY CODE: AC 09586

MYR014

Page 1 of 3

Sample	Cu (ppm)	Pb (ppm)	Zn (ppm)	Mn(A) (ppm)	Mn(B) (ppm)	Fe (ppm)	Ca (%)
(m)							
DZ 980	<< Sample not received >>						
DZ 982 56-58	37	2	143	15.60%	14.80%	8800	1.35
DZ 983 58-60	41	<2	244	25.30%	21.80%	1.71%	1.61
DZ 984 60-62	49	2	126	12.60%	11.20%	1.01%	1.68
DZ 985 62-64	99	28	134	14.40%	12.40%	1.24%	1.40
DZ 986 64-66	101	445	125	9.80%	8.60%	2.64%	1.46
DZ 987 66-68	105	338	169	9.60%	8.20%	5.62%	1.09
Mn2(GEM Std)	--	--	--	--	51.50%	--	--
Mn3 (GEM Std)	--	--	--	--	44.90%	--	--



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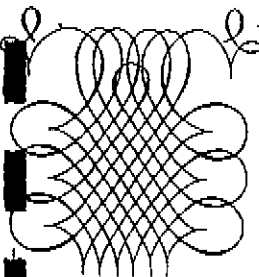
Facsimile (089) 76 1310

ASSAY CODE: AC 09586

MYR014

Page 2 of 3

Sample	Mg	As	Al	SiO2	P	Ba	Sr
(m)	(%)	(ppm)	(%)	(%)	(ppm)	(ppm)	(ppm)
DZ 980	<< Sample not received >>						
DZ 982 56-58	1371	18	5.80	62.0	980	4.70%	47.0
DZ 983 58-60	1065	26	2.40	54.0	1450	6.60%	52.0
DZ 984 60-62	1053	30	6.60	72.0	780	3.70%	31.0
DZ 985 62-64	1179	41	5.40	68.0	880	4.20%	39.0
DZ 986 64-66	868	108	7.00	68.0	820	2.80%	26.5
DZ 987 66-68	1261	230	5.20	66.0	1180	2.50%	41.0
Mn2(GEM Std)	--	--	--	--	--	--	--
Mn3 (GEM Std)	--	--	--	--	--	--	--



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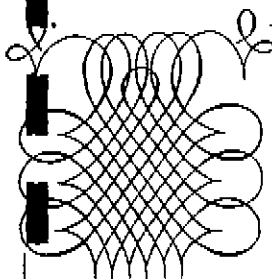
Telephone (089) 76 1262

Facsimile (089) 76 1310

ASSAY CODE: AC 09586

Page 3 of 3

Sample	La (ppm)
DZ 980	<< Sample not received >>
DZ 982	36.0
DZ 983	12.0
DZ 984	40.0
DZ 985	22.0
DZ 986	34.0
DZ 987	18.0
Mn2(GEM Std)	--
Mn3 (GEM Std)	--



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Facsimile (089) 76 1310

ASSAY CODE: AC 09526

BHP-Utah Minerals

Distribution

Harald Berents

BHP Melbourne

Client Reference: 15534

Date Received:

05/09/1993

Project : MBB

Number of Samples:

7

Cost Code:

Sample Preparation

DRILL HOLES : TRR 091
VER 006
MNR 014

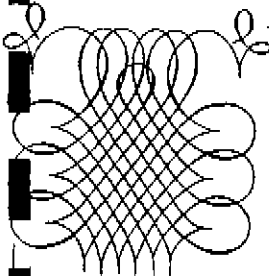
Analysis	Analytical Technique	Precision & Accuracy	Detection Limit	Data Units
Cu	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
Pb	AAS/MA-3	Prec. $\pm$ 10%	2	ppm
Zn	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
Mn(A)	AAS/MA-3	Acc. $\pm$ 15%	2	ppm
Mn(B)	AAS/MA-3	Acc. $\pm$ 15%	2	ppm
Fe	AAS/MA-3	Prec. $\pm$ 10%	20	ppm
Ca	AAS/MA-3	Prec. $\pm$ 10%	0.1	percent
Mg	AAS/MA-3	Prec. $\pm$ 10%	0.01	percent
Al	ICP/OES	Prec. $\pm$ 10%	0.01	percent
SiO ₂	ICP/OES	Prec. $\pm$ 10%	0.1	percent
P	ICP/OES	Prec. $\pm$ 10%	20	ppm
Ba	ICP/MS	Prec. $\pm$ 10%	1	ppm
Sr	ICP/MS	Prec. $\pm$ 10%	0.1	ppm
La	ICP/MS	Prec. $\pm$ 10%	0.1	ppm

Mn(A)=Geochem

Mn(B)=Total Digestion

Authorisation: Ray Wooldridge

Report Dated: 29/09/1993



ASSAYCORP PTY LTD

A.C.N. 052 982 911

174 Ward Street, Pine Creek, N.T. 0847

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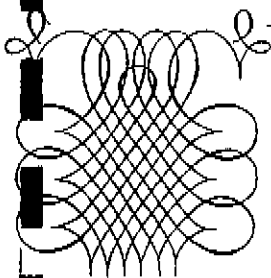
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Facsimile (089) 76 1310

ASSAY CODE: AC 09526

Page 1 of 2

Sample	Cu (ppm)	Pb (ppm)	Zn (ppm)	Mn(A) (ppm)	Mn(B) (ppm)	Fe (ppm)	Ca (%)
DZ 951 } TRR 91 42		9	371	3.37%	4.95%	25.50%	3.72
DZ 951A } 42-44m 49		10	431	5.13%	6.05%	31.70%	4.99
DZ 1020 } VIER 6 57		56	736	36.00%	39.10%	9.17%	4.44
DZ 1020 } 20-22m --		--	--	--	39.20%	--	--
DZ 1021 } VIER 6 36		41	478	13.70%	17.90%	8.24%	4.18
DZ 1022 MYR 014.109		171	156	10.20%	12.90%	1.18%	2.23
Mn2(GEM Std)	--	--	--	--	51.60%	--	--



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ASSAY CODE: AC 09526

Page 2 of 2

Sample	Mg (%)	Al (%)	SiO ₂ (%)	P (ppm)	Ba (ppm)	Sr (ppm)	La (ppm)
DZ 951 } TRR 91 42-44m	2914	3.40	43.0	720	5000	50.0	21.0
DZ 951A } 4485	4485	1.35	33.0	640	5600	49.0	7.8
DZ 1020 } YER 6 20-22m	2366	2.15	13.5	1450	2.05%	860.0	36.0
DZ 1020 } 20-22m	--	--	--	--	--	--	--
DZ 1021 } YER 6 20-22m	4124	8.80	32.0	1000	1.10%	480.0	31.0
DZ 1022 MYR 014	977	6.00	56.0	820	4.20%	43.0	30.0
Mn2(GEM Std)	--	--	--	--	--	--	--

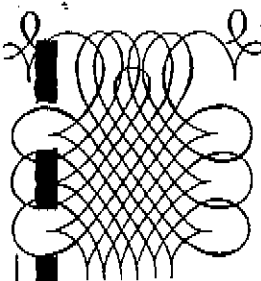
DZ 951 = TRR 91, 42-44m "HEAD GRADE" sample

DZ 951A = TRR 91, 42-44m + 1mm sieved sample.

DZ 1020 = YER 6, 20-22m + 1mm sieved sample.

DZ 1021 = YER 6, 20-22m "HEAD GRADE" sample.

DZ 1022 = MYR 014 composite sample collected from around the hole.



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Facsimile (089) 76 1310

ASSAY CODE: AC 08714

BHP-Utah Minerals

Distribution

Harald Berents

Client Reference: 15533

Date Received:

03/08/1993

Project :

Number of Samples:

12

Cost Code:

Sample Preparation

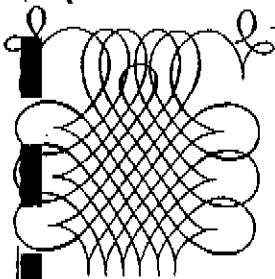
DRILL HOLE S TRR 15, 19, 42, 67, 59, 61
79.

Analysis	Analytical Technique	Precision & Accuracy	Detection Limit	Data Units
Cu	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
Pb	AAS/MA-3	Prec. $\pm$ 10%	2	ppm
Zn	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
Mn	AAS/MA-3	Prec. $\pm$ 10%	2	ppm
Fe	AAS/MA-3	Prec. $\pm$ 10%	20	ppm
Ca	DX/OES	Prec. $\pm$ 10%	0.1	percent
Mg	DX/OES	Prec. $\pm$ 10%	0.01	percent
Al	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
SiO ₂	DX/OES	Prec. $\pm$ 10%	0.1	percent
P	DX/OES	Prec. $\pm$ 10%	0.01	percent
Ba	DX/MS	Prec. $\pm$ 10%	10	ppm
Sr	DX/MS	Prec. $\pm$ 10%	1	ppm
La	DX/MS	Prec. $\pm$ 10%	1	ppm

Please note change to Mn Results.

Authorisation: Ray Wooldridge

Report Dated: 19/08/1993



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A.C.N. 052 982 911

174 Ward Street, Pine Creek, N.T. 0847

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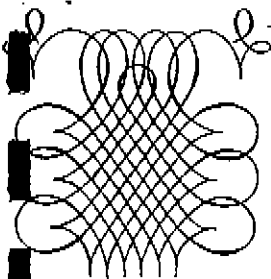
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Facsimile (089) 76 1310

ASSAY CODE: AC 08714

Page 1 of 2

Sample	Cu (ppm)	Pb (ppm)	Zn (ppm)	Mn (ppm)	Fe (ppm)	Ca (%)	Mg (%)	Al (ppm)
TRR (m)								
5 DZ 851 8-10	45	14	29	1.47%	3.50%	2.2	3.60	1.65%
19 DZ 859 12-14	16	9	19	6465	3.10%	0.5	2.20	2.34%
2 DZ 881 14-16	27	43	21	2.82%	5.78%	0.6	1.70	1.37%
67 DZ 913 32-34	54	36	62	17.90%	2.28%	1.0	0.68	2057
9 DZ 916 36-38	19	22	40	3.94%	17.90%	0.3	0.64	5169
9 DZ 917 38-40	26	20	59	14.40%	12.90%	0.3	0.34	5021
59 DZ 918 40-42	28	8	35	6.67%	7.23%	0.2	0.14	2045
1 DZ 934 48-50	43	70	25	9.95%	2.22%	3.1	2.05	2764
79 DZ 936 42-44	24	16	30	4.95%	7.30%	0.3	0.23	2820
79 DZ 937 44-46	27	34	37	2.63%	11.10%	0.2	0.25	3519
79 DZ 938 46-48	24	29	30	3.15%	9.55%	0.2	0.14	1830
79 DZ 939 48-50	19	19	19	1.79%	4.80%	3.0	1.95	1167



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ASSAY CODE: AC 08714

Page 2 of 2

Sample	SiO ₂ (%)	P (%)	Ba (ppm)	Sr (ppm)	La (ppm)
TRR (m)					
15 DZ 851 8-10	60.0	<0.01	2750	64	35
19 DZ 859 12-14	70.0	0.01	1040	35	28
42 DZ 881 14-16	68.0	0.01	5800	72	27
67 DZ 913 32-34	48.0	0.04	5.40%	190	3
59 DZ 916 36-38	54.0	0.03	8800	37	13
59 DZ 917 38-40	41.0	0.09	4.20%	37	2
59 DZ 918 40-42	68.0	0.05	2.35%	49	<1
61 DZ 934 48-50	54.0	0.04	4.30%	78	3
79 DZ 936 42-44	72.0	0.06	1.65%	43	6
79 DZ 937 44-46	68.0	0.09	9600	17	7
79 DZ 938 46-48	74.0	0.08	1.14%	29	5
79 DZ 939 48-50	72.0	0.01	3800	14	4

GROOTE EYLANDT MINING CO. PTY LTD

LABORATORY ANALYSIS REPORT - QUALITY CONTROL

[illegible]

APPENDIX 10

RC Drill Logs

PROJECT : CARPENTARIA

LOCALITY: EL 7262

SHEET : Mt Young

JOB NO : MBA

CONTRACTOR : Gaden Drilling

RIG TYPE : UDR-650

DATE DRILLED: 14-AUG-93

HOLE NUMBER : MYR01

COMMENTS:

LOGGED BY : PRD

TOTAL DEPTH : 58.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 590500

NORTHING: 8286670

R.L.: 25.0

SHEET 1 OF 2 HOLE NUMBER : MYR01

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor								
0.0	2.0		CEM	Sand	quartzose	light	yellow	grey	med sand	to vc sand	loose	
2.0	4.0		CEM	Sandstone	ferruginous lateritic	light	orange	brown	med sand	to vc sand	weak	
4.0	6.0		CEM	Sandstone	ferruginous lateritic	light	orange	brown	med sand	to vc sand	weak	
6.0	8.0		CEM	Sand								
				Clay	sandy	light	brown	grey	clay	to f sand	firm	
				Silcrete								
8.0	10.0		CEM	Gravel		medium	brown		vs pebble	to s pebble	friable	
				Sand	clayey							
10.0	12.0		CRE	Sand	clayey	medium	brown		f sand	to med sand	firm	
				Sandstone								
12.0	14.0		CRE	Sand	clayey	medium	brown		f sand	to med sand	firm	
				Sandstone								
14.0	16.0		CRE	Sandstone	clayey ferruginous	medium	red	brown	vf sand	to f sand	weak	
16.0	18.0		CRE	Sandstone	clayey ferruginous	medium	red	brown	vf sand	to f sand	weak	
18.0	20.0		CRE	Claystone	sandy	light	grey		clay	to f sand	weak	
20.0	22.0		CRE	Clay		banded	brown	grey	clay	to vf sand	firm	
				Clay	sandy							
22.0	24.0		CRE	Clay		light	grey		clay	to med silt	stiff	
24.0	26.0		CRE	Clay		light	grey		clay	to med silt	stiff	small traces of soft black material - mn?
26.0	28.0		CRE	Clay		light	grey		clay	to med silt	soft	
28.0	30.0		CRE	Clay		light	grey		clay	to med silt	firm	
30.0	32.0		CRE	Clay	sandy	patchy	brown	grey	clay	to f sand	firm	
32.0	34.0		CRE	Claystone	sandy	patchy	brown	grey	clay	to f sand	weak	cretaceous/proterozoic contact about 33 metres
				Sandstone	ferruginous							
34.0	36.0		PRO	Sandstone	ferruginous	patchy	brown	grey	clay	to f sand	weak	
				Claystone	sandy							
36.0	38.0		PRO	Sandstone		light	grey		vf sand	to f sand	mod'ly strong	
38.0	40.0		PRO	Sandstone	quartzose ferruginous	patchy	brown	grey	f sand	to med sand	mod'ly strong	
40.0	42.0		PRO	Sandstone	quartzose ferruginous	patchy	brown	grey	f sand	to med sand	mod'ly strong	

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor							
42.0	44.0		PRO	Sandstone		light	brown	f sand		mod'ly strong	
44.0	46.0		PRO	Sandstone		light	brown	f sand		mod'ly strong	
46.0	48.0		PRO	Sandstone	quartzose	light	grey	f sand	to med sand	mod'ly strong	
48.0	50.0		PRO	Siltstone							
48.0	50.0		PRO	Sandstone		light	brown	f sand	to med sand	mod'ly strong	
50.0	58.0	DZ969	PRO	Sandstone		light	brown	f sand	to med sand	mod'ly strong	

EOH at 58.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7262

SHEET : Mt Young

JOB NO : MBA

CONTRACTOR : Gaden Drilling

RIG TYPE : UDR-650

DATE DRILLED: 15-AUG-93

HOLE NUMBER : MYR02

COMMENTS:

LOGGED BY : PRO

TOTAL DEPTH : 58.0

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 594780 NORTHING: 8294450 R.L.: 15.0
SHEET 1 OF 2 HOLE NUMBER : MYR02

DEPTHS		SAMPLE NUMBER	GEOLOGICAL TIME	ROCK TYPES major/ minor	COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS	
From (m)	To (m)											
0.0	2.0		CEN	Sand	quartzose	light	brown	grey	f sand	to med sand	loose	
2.0	4.0		CEN	Laterite Sand	pisolitic clayey	light	brown	grey	f sand	to med sand	firm	
4.0	6.0		CRE	Laterite Claystone	pisolitic sandy	light	khaki	grey	clay	to f sand	weak	
6.0	8.0		CRE	Sandstone	clayey	light	brown	grey	vf sand	to f sand	weak	
8.0	10.0		CRE	Sandstone	clayey	light	brown	grey	vf sand	to f sand	weak	
10.0	12.0		CRE	Claystone	sandy	light	brown	grey	clay	to vf sand	weak	
12.0	14.0		CRE	Clay	sandy	light	brown	grey	clay	to vf sand	soft	dendritic mn on harder rock fragments
14.0	16.0		CRE	Clay	sandy	light	brown		clay	to vf sand	soft	
16.0	18.0		CRE	Ironstone Clay	pisolitic sandy	light	brown	grey	clay	to vf sand	soft	
18.0	20.0		CRE	Clay	sandy	light	brown	grey	clay	to vf sand	soft	
20.0	22.0		CRE	Sandstone	ferruginous	light	brown	grey	clay	to vf sand	soft	
22.0	24.0		CRE	Clay	sandy	light	brown	grey	clay	to vf sand	soft	
24.0	26.0		CRE	Sandstone	ferruginous	medium	brown		clay	to vf sand	soft	
26.0	28.0		CRE	Clay	sandy	patchy	brown	grey	clay	to vf sand	soft	
28.0	30.0		CRE	Sandstone	ferruginous	light	brown		vf sand	to f sand	mod'ly strong	
30.0	32.0		CRE	Clay	sandy	light	brown		f sand	to med sand	weak	
32.0	34.0		CRE	Sandstone	clayey	light	brown	grey	vf sand	to f sand	weak	
34.0	36.0		CRE	Clay	sandy	medium	brown		clay	to f sand	soft	
36.0	38.0		CRE	Clay	sandy	medium	brown		clay	to f sand	soft	minor very dark grey clay present
38.0	40.0		CRE	Clay	sandy	medium	brown		clay	to f sand	soft	
40.0	42.0		CRE	Sandstone	ferruginous silty	light	grey		med silt	to vf sand	weak	basement?

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor							
42.0	44.0		CRE	Sandstone	silty	laminated	light grey	med silt	to vf sand	mod'ly strong	
44.0	46.0		CRE	Clay Sandstone	silty		light grey	clay	to vf sand	soft	
46.0	48.0		CRE	Sandstone	ferruginous		patchy brown grey	f sand	to med sand	mod'ly strong	basement?
48.0	50.0		PRO	Sandstone Chert	ferruginous		patchy brown grey	f sand	to med sand	mod'ly strong	probably basement
50.0	52.0	DZ970	PRO	Sandstone	ferruginous		light brown	f sand	to med sand	mod'ly strong	
52.0	54.0	DZ970	PRO	Sandstone	ferruginous		light brown	f sand	to med sand	mod'ly strong	
54.0	56.0	DZ970	PRO	Sandstone	ferruginous		light brown	vf sand	to f sand	mod'ly strong	
56.0	58.0	DZ970	PRO	Sandstone	ferruginous		light grey	vf sand	to f sand	mod'ly strong	

EOH at 58.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7261

SHEET : Mt Young

JOB NO : MAZ

CONTRACTOR : Gaden Drilling

RIG TYPE : UDR-650

DATE DRILLED: 17-AUG-93

HOLE NUMBER : MYR03

COMMENTS:

LOGGED BY : PRD

TOTAL DEPTH : 16.0

GRID: AMG ZONE: 53

RELIABILITY: SATL

EASTING: 594973

NORTHING: 8299346

R.L.: 15.0

SHEET 1 OF 1 HOLE NUMBER : MYR03

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES			COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor								
0.0	2.0		CEN	Sand			medium	brown	f sand	to med sand	loose	
2.0	4.0		CRE	Laterite Clay	pisolitic sandy		light	grey	clay	to vf sand	soft	
4.0	6.0		CRE	Sand Clay	sandy		light	orange brown	clay	to vf sand	soft	
6.0	8.0		CRE	Sand	clayey		light	orange brown	vf sand	to f sand	soft	
8.0	10.0	DZ971	PRO	Sandstone	quartzose	siliceous	light	orange brown	f sand	to med sand	strong	
10.0	12.0	DZ971	PRO	Sandstone	quartzose	siliceous	light	orange brown	f sand	to med sand	strong	
12.0	14.0	DZ971	PRO	Sandstone	quartzose	siliceous	light	orange brown	f sand	to med sand	strong	
14.0	16.0	DZ971	PRO	Sandstone	quartzose	siliceous	light	orange brown	f sand	to med sand	strong	

EOH at 16.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7261

SHEET : Mt Young

JOB NO : MAZ

CONTRACTOR : Gaden Drilling

RIG TYPE : UDR-650

DATE DRILLED: 17-AUG-93

HOLE NUMBER : MYR04

COMMENTS:

LOGGED BY : PRO

TOTAL DEPTH : 52.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 593156

NORTHING: 8299362

R.L.: 15.0

SHEET 1 OF 2 HOLE NUMBER : MYR04

DEPTHS From To (m) (m)	SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
			major/ minor							
0.0 2.0		CEN	Sand	silty	light	orange brown	f sand	to med sand	loose	
2.0 4.0		CEN	Sand Sandstone	clayey	medium	khaki brown	med silt	to med sand	soft	
4.0 6.0		CRE	Sand	clayey	light	khaki brown	med silt	to med sand	friable	
6.0 8.0		CRE	Clay	sandy	light	khaki brown	clay	to vf sand	soft	
8.0 10.0		CRE	Clay Sandstone	sandy ferruginous	light	khaki brown	clay	to vf sand	soft	
10.0 12.0		CRE	Clay Sandstone	sandy ferruginous	light	khaki brown	clay	to vf sand	soft	
12.0 14.0		CRE	Clay	sandy	light	khaki brown	clay	to vf sand	soft	
14.0 16.0		CRE	Sandstone	ferruginous	medium	brown	f sand	to med sand	strong	
16.0 18.0		CRE	Sandstone	ferruginous	medium	brown	f sand	to med sand	strong	
18.0 20.0		CRE	Sandstone	clayey ferruginous	patchy	grey brown	f sand	to med sand	weak	
20.0 22.0		CRE	Sandstone	clayey ferruginous	patchy	grey brown	f sand	to med sand	weak	
22.0 24.0		CRE	Sandstone Claystone	clayey sandy	ferruginous	patchy	grey brown	f sand	to med sand	weak
24.0 26.0		CRE	Sandstone Clay	clayey sandy	ferruginous	patchy	grey brown	f sand	to med sand	weak
26.0 28.0		CRE	Clay Sandstone	sandy ferruginous	patchy	grey brown	clay	to f sand	weak	
28.0 30.0		CRE	Clay Sandstone	sandy ferruginous	patchy	grey brown	clay	to f sand	weak	
30.0 32.0		CRE	Sandstone Clay	clayey sandy	medium	red brown	f sand	to med sand	weak	
32.0 34.0		PRO	Sandstone	shaly ferruginous	medium	red brown	vf sand	to f sand	weak	
34.0 36.0		PRO	Sandstone	shaly ferruginous	medium	red brown	vf sand	to f sand	weak	
36.0 38.0		PRO	Sandstone	shaly ferruginous	medium	red brown	vf sand	to f sand	weak	
38.0 40.0		PRO	Sandstone	shaly ferruginous	medium	red brown	vf sand	to f sand	weak	
40.0 42.0		PRO	Mudstone Sandstone	shaly	medium	red brown	vf sand	to f sand	weak	

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor							
42.0	44.0		PRO	Sandstone	shaly	medium	red	brown	vf sand	to f sand	mod'ly strong
44.0	46.0	DZ972	PRO	Sandstone	shaly	medium	red	brown	vf sand	to f sand	mod'ly strong
46.0	48.0	DZ972	PRO	Sandstone	shaly	medium	red	brown	f sand	to med sand	mod'ly strong
48.0	50.0	DZ972	PRO	Sandstone	shaly	medium	red	brown	f sand	to med sand	mod'ly strong
50.0	52.0	DZ972	PRO	Sandstone	shaly	medium	red	brown	f sand	to med sand	mod'ly strong

EOH at 52.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7261

SHEET : Mt Young

JOB NO : MAZ

CONTRACTOR : Gaden Drilling

RIG TYPE : UDR-650

DATE DRILLED: 18-AUG-93

HOLE NUMBER : MYR05

COMMENTS:

LOGGED BY : PRD

TOTAL DEPTH : 46.0

GRID: ANG

ZONE: 53

RELIABILITY: SATL

EASTING: 590860

NORTHING: 8298662

R.L.: 15.0

SHEET 1 OF 2 HOLE NUMBER : MYR05

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS		
From (m)	To (m)			major/ minor									
0.0	2.0		CEN	Sand	quartzose	pale	tan	brown	f sand		Loose		
2.0	4.0		CEN	Sand	quartzose	pale	tan	brown	f sand		Loose		
4.0	6.0		CEN	Sand	quartzose	pale	tan	brown	f sand	to med sand	Loose		
6.0	8.0		CEN	Gravel	sandy	clayey	light	red	brown	f sand	to s pebble	friable	
8.0	10.0		CRE	Clay	sandy		light	brown		clay	to f sand	soft	
10.0	12.0		CRE	Clay	sandy		light	brown		clay	to f sand	soft	
12.0	14.0		CRE	Gravel	clayey		light	brown		med sand	to s pebble	soft	
14.0	16.0		CRE	Clay	sandy		light	brown		clay	to med sand	soft	
16.0	18.0		CRE	Gravel	ferruginous		light	brown		clay	to granule	soft	
18.0	20.0		CRE	Clay	gritty		light	brown		clay	to granule	soft	
18.0	20.0		CRE	Sandstone	clayey	gritty	medium	brown	grey	med sand	to granule	weak	could be proterozoic from here
20.0	22.0		CRE	Sandstone	clayey		light	pink	grey	med sand	to vc sand	weak	
22.0	24.0		CRE	Sandstone	clayey		light	pink	grey	f sand	to c sand	weak	
24.0	26.0		CRE	Sandstone	clayey		light	pink	grey	f sand	to c sand	weak	
26.0	28.0		CRE	Sandstone	clayey		light	pink	grey	f sand	to c sand	weak	
28.0	30.0		CRE	Sandstone	clayey		light	pink	grey	f sand	to c sand	weak	
30.0	32.0		CRE	Gravel	clayey		light	pink	grey	granule	to med pebble	weak	
32.0	34.0		CRE	Sandstone	clayey		light	pink	grey	f sand	to c sand	weak	
34.0	36.0		CRE	Sandstone	clayey		light	pink	grey	med sand	to vc sand	weak	
36.0	38.0		CRE	Sandstone	quartzose		light	pink	grey	med sand	to c sand	weak	
38.0	40.0	02973	PRO	Sandstone	silty	shaly	light	grey		vf sand	to f sand	mod'ly strong	
40.0	42.0	02973	PRO	Sandstone	silty	shaly	light	grey		vf sand	to f sand	mod'ly strong	

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor							
42.0	44.0	DZ973	PRO	Sandstone	silty	shaly	light grey	vf sand	to f sand	mod'ly strong	
44.0	46.0	DZ973	PRO	Sandstone	silty	shaly	light grey	vf sand	to f sand	mod'ly strong	

EOH at 46.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7261

SHEET : Mt Young

JOB NO : MAZ

CONTRACTOR : Gaden Drilling

RIG TYPE : UDR-650

DATE DRILLED: 18-AUG-93

HOLE NUMBER : MYR06

COMMENTS:

LOGGED BY : PRD

TOTAL DEPTH : 40.0

GRID: ANG

ZONE: 53

RELIABILITY: SATL

EASTING: 590910

NORTHING: 8300730

R.L.: 15.0

SHEET 1 OF 1 HOLE NUMBER : MYR06

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS		
From (m)	To (m)			major/ minor									
0.0	2.0		CEN	Sand		medium	brown		f sand	to med sand	loose		
2.0	4.0		CRE	Laterite Claystone	sandy	patchy	brown	grey	clay	to f sand	weak		
4.0	6.0		CRE	Laterite Sandstone	clayey	light	grey		vf sand	to f sand	weak		
6.0	8.0		CRE	Sandstone	clayey	ferruginous	medium	brown	f sand	to med sand	weak		
8.0	10.0		CRE	Sandstone	clayey	ferruginous	medium	red	brown	f sand	to med sand	weak	
10.0	12.0		CRE	Sandstone	clayey	ferruginous	medium	red	brown	f sand	to vc sand	weak	
12.0	14.0		CRE	Sandstone	clayey		medium	red	brown	f sand	to vc sand	weak	
14.0	16.0		CRE	Sandstone	clayey	ferruginous	patchy	brown	grey	f sand	to med sand	mod'ly strong	
16.0	18.0		CRE	Sandstone	clayey	ferruginous	patchy	brown	grey	f sand	to med sand	mod'ly strong	
18.0	20.0		CRE	Sandstone	clayey	ferruginous	patchy	brown	grey	vf sand	to f sand	mod'ly strong	
20.0	22.0		CRE	Sandstone	clayey	ferruginous	patchy	brown	grey	vf sand	to f sand	mod'ly strong	
22.0	24.0		CRE	Siltstone	clayey	ferruginous	medium	grey		med silt	to f sand	mod'ly strong	
24.0	26.0		CRE	Siltstone	clayey	ferruginous	medium	grey		med silt	to f sand	weak	
26.0	28.0		CRE	Clay	silty	medium	khaki	grey	clay	to med silt	firm		
28.0	30.0		PRO	Sandstone	quartzose	clayey	light	brown		med sand	to c sand	weak	could be proterozoic or cretaceous
30.0	32.0		PRO	Sandstone	quartzose		light	brown		med sand	to c sand	weak	
32.0	34.0		PRO	Sandstone	clayey		light	brown		f sand	to med sand	weak	
34.0	36.0	DZ974	PRO	Clay Sandstone	clayey		light	brown		vf sand	to f sand	weak	
36.0	38.0	DZ974	PRO	Clay Sandstone	clayey		medium	red	brown	f sand	to med sand	weak	
38.0	40.0	DZ974	PRO	Mudstone	sandy		medium	red	brown	f sand	to med sand	weak	

EOH at 40.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7261

SHEET : Mt Young

JOB NO : MAZ

CONTRACTOR : Gaden Drilling

RIG TYPE : UDR-650

DATE DRILLED: 18-AUG-93

HOLE NUMBER : MYR07

COMMENTS:

LOGGED BY : PRO

TOTAL DEPTH : 40.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 590830

NORTHING: 8301800

R.L.: 15.0

SHEET 1 OF 1 HOLE NUMBER : MYR07

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor							
0.0	2.0		CEN	Sand	clayey	light	brown	f sand	to med sand	soft	
2.0	4.0		CRE	Claystone	sandy	patchy	brown	grey	clay	to f sand	weak
4.0	6.0		CRE	Siltstone	sandy	light	grey		med silt	to vf sand	weak
6.0	8.0		CRE	Clay	sandy	light	grey		clay	to f sand	soft
8.0	10.0		CRE	Clay	sandy	light	grey		clay	to f sand	soft
10.0	12.0		CRE	Clay	sandy	light	grey		clay	to f sand	soft
12.0	14.0		CRE	Clay	sandy	light	grey		clay	to f sand	soft
14.0	16.0		CRE	Clay	sandy	light	grey		clay	to f sand	soft
16.0	18.0		CRE	Clay	sandy	light	grey		clay	to f sand	soft
18.0	20.0		CRE	Clay	sandy	light	brown		clay	to f sand	soft
20.0	22.0		CRE	Clay	sandy	light	brown		clay	to f sand	soft
22.0	24.0		CRE	Clay	sandy	light	brown		clay	to f sand	soft
24.0	26.0		CRE	Sandstone	ferruginous	light	brown	grey	f sand		weak (proterozoic?)
26.0	28.0		CRE	Sandstone	clayey	light	brown	grey	f sand	to med sand	weak (proterozoic?)
28.0	30.0		PRO	Sandstone	quartzose	light	pink	grey	f sand	to med sand	mod'ly strong
30.0	32.0		PRO	Sandstone	quartzose	light	pink	grey	f sand	to med sand	weak
32.0	34.0		PRO	Sandstone	quartzose	light	pink	grey	f sand	to med sand	weak
34.0	36.0		PRO	Sandstone	quartzose	light	pink	grey	f sand	to med sand	weak
36.0	38.0	DZ975	PRO	Mudstone	clayey	medium	red	brown	med silt	to vf sand	stiff
38.0	40.0	DZ975	PRO	Mudstone	clayey	medium	red	brown	med silt	to vf sand	stiff

EOH at 40.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7261

SHEET : Mt Young

JOB NO : MAZ

CONTRACTOR : Gaden Drilling

RIG TYPE : UDR-650

DATE DRILLED: 19-AUG-93

HOLE NUMBER : MYR08

COMMENTS:

LOGGED BY : PRD

TOTAL DEPTH : 28.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 589270

NORTHING: 8301240

R.L.: 15.0

SHEET 1 OF 1 HOLE NUMBER : MYR08

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)										
0.0	2.0		CEN	Sand Claystone	clayey silty	light	grey	brown	f sand to med sand	loose	
2.0	4.0		CRE	Claystone Sandstone	sandy ferruginous	patchy	brown	grey	clay to f sand	weak	
4.0	6.0		CRE	Sandstone	clayey	light	grey		med silt to f sand	weak	
6.0	8.0		CRE	Clay	silty	light	grey		clay to med silt	soft	
8.0	10.0		CRE	Clay	sandy	light	grey		clay to f sand	soft	
10.0	12.0		CRE	Clay	sandy	medium	khaki	brown	clay to f sand	soft	
12.0	14.0		CRE	Clay Sandstone	sandy ferruginous	medium	khaki	brown	clay to f sand	soft	
14.0	16.0		PRO	Sandstone	quartzose	light	grey	brown	med sand to c sand	mod'ly strong	probably warramanna sandstone, part of tawallah group
16.0	18.0		PRO	Sandstone	quartzose	light	grey	brown	med sand to c sand	mod'ly strong	
18.0	20.0		PRO	Sandstone	quartzose	light	grey	brown	med sand to c sand	mod'ly strong	
20.0	22.0		PRO	Sandstone	quartzose	light	grey	brown	med sand to c sand	mod'ly strong	
22.0	24.0		PRO	Sandstone	quartzose	light	grey	brown	med sand to c sand	strong	
24.0	26.0		PRO	Sandstone	quartzose	light	grey	brown	med sand to c sand	strong	
26.0	28.0		PRO	Sandstone	quartzose	light	grey	brown	med sand to c sand	strong	

EOH at 28.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7261

SHEET : Mt Young

JOB NO : NAZ

CONTRACTOR : Gaden Drilling

RIG TYPE : UDR-650

DATE DRILLED: 19-AUG-93

HOLE NUMBER : MYR09

COMMENTS:

LOGGED BY : PRD

TOTAL DEPTH : 16.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 589370

NORTHING: 8302400

R.L.: 15.0

SHEET 1 OF 1 HOLE NUMBER : MYR09

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor								
0.0	2.0		CEN	Sand	clayey	light	khaki	brown	f sand	to med sand	loose	
2.0	4.0		CRE	Clay	sandy	light	grey	brown	clay	to f sand	soft	
4.0	6.0		CRE	Clay	sandy	light	grey	brown	clay	to f sand	soft	
6.0	8.0		CRE	Clay	sandy	light	grey	brown	clay	to f sand	soft	
8.0	10.0		CRE	Clay	sandy	light	grey	brown	clay	to f sand	soft	
10.0	12.0		CRE	Clay	sandy	light	brown	grey	clay	to f sand	soft	
12.0	14.0	DZ976	PRO	Sandstone	quartzose	ferruginous	medium	red	brown	f sand	to med sand	strong
14.0	16.0	DZ976	PRO	Sandstone	quartzose	ferruginous	medium	red	brown	f sand	to med sand	very strong

EOH at 16.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7261

SHEET : Mt Young

JOB NO : MAZ

CONTRACTOR : Gaden Drilling

RIG TYPE : UDR-650

DATE DRILLED: 19-AUG-93

HOLE NUMBER : MYR10

COMMENTS:

LOGGED BY : PRO

TOTAL DEPTH : 33.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 591885

NORTHING: 8308649

R.L.: 15.0

SHEET 1 OF 1 HOLE NUMBER : MYR10

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor							
0.0	2.0		CEN	Sand Clay	clayey	light	brown	grey	f sand	to med sand	loose
2.0	4.0		CRE	Clay	sandy	light	grey		clay	to f sand	firm
4.0	6.0		CRE	Sandstone Clay	clayey	patchy	brown	grey	f sand	to med sand	weak
6.0	8.0		CRE	Claystone Laterite	sandy pisolitic	patchy	brown	grey	clay	to f sand	weak
8.0	10.0		CRE	Claystone Laterite	sandy pisolitic	patchy	brown	grey	clay	to f sand	weak
10.0	12.0		PRO	Mudstone		light	khaki	brown	med silt	to vf sand	strong basement? trace mn as coatings on rock frags
12.0	14.0		PRO	Mudstone		light	khaki	brown	med silt	to vf sand	strong basement?
14.0	16.0		PRO	Mudstone Clay		light	khaki	brown	med silt	to vf sand	weak
16.0	18.0		PRO	Clay Mudstone		light	brown		clay	to vf sand	soft
18.0	20.0		PRO	Clay		light	brown		clay	to vf sand	soft
20.0	22.0		PRO	Mudstone	clayey	light	brown		med silt	to vf sand	weak
22.0	24.0		PRO	Mudstone	clayey	light	brown		med silt	to vf sand	weak
24.0	26.0		PRO	Mudstone Sandstone	clayey quartzose	light	brown		med silt	to vf sand	weak
26.0	28.0		PRO	Mudstone Sandstone	clayey quartzose	light	brown		med silt	to vf sand	weak
28.0	30.0		PRO	Shale		medium	grey		med silt	to vf sand	mod'ly strong
30.0	33.0	D2977	PRO	Shale		dark	grey		med silt	to vf sand	mod'ly strong

EOH at 33.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7261

SHEET : Mt Young

JOB NO : MAZ

CONTRACTOR : Gaden Drilling

RIG TYPE : UDR-650

DATE DRILLED: 19-AUG-93

HOLE NUMBER : MYR11

COMMENTS:

LOGGED BY : PRD

TOTAL DEPTH : 28.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 594150

NORTHING: 8308306

R.L.: 15.0

SHEET 1 OF 1 HOLE NUMBER : MYR11

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor								
0.0	2.0		CEN	Sand	quartzose	light	orange	brown	f sand	to med sand	Loose	
2.0	4.0		CRE	Clay	sandy	patchy	brown	grey	clay	to f sand	soft	
4.0	6.0		CRE	Sandstone	ferruginous	patchy	brown	grey	clay	to f sand	soft	
6.0	8.0		CRE	Clay	sandy							
			CRE	Sandstone	ferruginous							
			CRE	Claystone	sandy	light	grey		clay	to vf sand	weak	
8.0	10.0		CRE	Claystone	sandy	light	grey		clay	to vf sand	weak	
10.0	12.0		CRE	Clay	sandy	light	brown		clay	to vf sand	soft	
12.0	14.0		CRE	Clay	sandy	light	brown		clay	to vf sand	soft	
14.0	16.0		CRE	Sandstone	ferruginous	light	brown		clay	to vf sand	weak	
			CRE	Claystone	sandy							
16.0	18.0		CRE	Pebbles		light	brown		med sand	to vs pebble	soft	
			CRE	Pebbles	clayey							
18.0	20.0		PRO	Sandstone	quartzose	light	brown		f sand	to med sand	mod'ly strong	basement?
20.0	22.0		PRO	Sandstone	quartzose	light	brown		f sand	to med sand	strong	
22.0	24.0		PRO	Mudstone		light	khaki	brown	med silt	to vf sand	weak	identical to 10-12 in myr10
24.0	26.0	D2978	PRO	Mudstone		light	khaki	brown	med silt	to vf sand	stiff	
26.0	28.0	D2978	PRO	Clay		light	khaki	brown	clay	to vf sand	firm	

EOH at 28.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7262

SHEET : Mt_Young

JOB NO : NBA

CONTRACTOR : Gaden Drilling

RIG TYPE : UDR-650

DATE DRILLED: 20-AUG-93

HOLE NUMBER : MYR12

COMMENTS:

LOGGED BY : PRD

TOTAL DEPTH : 70.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 599737

NORTHING: 8289342

R.L.: 15.0

SHEET 1 OF 2 HOLE NUMBER : MYR12

DEPTHS From To (m) (m)	SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
			major/ minor							
0.0 2.0		CEN	Sand		medium	brown	f sand	to med sand	loose	
2.0 4.0		CEN	Laterite Clay	pisolitic sandy	lateritic	medium	red	brown clay	to med sand	firm
4.0 6.0		CRE	Claystone	sandy	medium	red	brown clay	to f sand	weak	
6.0 8.0		CRE	Claystone	sandy	medium	red	brown clay	to f sand	weak	
8.0 10.0		CRE	Sand Claystone	ferruginous sandy	medium	red	brown clay	to f sand	weak	
10.0 12.0		CRE	Sand Claystone	ferruginous sandy	medium	red	brown clay	to f sand	weak	
12.0 14.0		CRE	Pebbles Sand	lateritic clayey	medium	red	brown f sand	to med sand	soft	
14.0 16.0		CRE	Sandstone Pebbles	ferruginous ferruginous	medium	red	brown f sand	to med sand	weak	
16.0 18.0		CRE	Sandstone	clayey	ferruginous	medium	red	brown f sand	to med sand	weak
18.0 20.0		CRE	Sandstone Pebbles	clayey ferruginous	ferruginous	medium	red	brown f sand	to med sand	weak
20.0 22.0		CRE	Clay	sandy	light	grey	clay	to vf sand	soft	
22.0 24.0		CRE	Clay	sandy	light	grey	clay	to vf sand	soft	
24.0 26.0		CRE	Clay Pebbles	sandy	patchy	brown	grey clay	to vc sand	stiff	
26.0 28.0		CRE	Clay Pebbles	sandy	medium	red	brown clay	to vc sand	stiff	rock2 could be frags of pebbles or a coherent snst
28.0 30.0		PRO	Mudstone		light	green	grey med silt	to vf sand	weak	rock is very similar to myr10 10-12metres - basement?
30.0 32.0		PRO	Mudstone		light	green	grey med silt	to vf sand	mod'ly strong	unit is probably pmnh member of lynott formation, contain
32.0 34.0		PRO	Mudstone		light	green	grey med silt	to vf sand	mod'ly strong	thin bedded siltstones, sandstones
34.0 36.0		PRO	Mudstone Sandstone		light	green	grey med silt	to vf sand	mod'ly strong	
36.0 38.0		PRO	Sandstone Mudstone	siliceous	light	green	grey vf sand	to f sand	strong	
38.0 40.0		PRO	Mudstone	sandy	light	green	grey med silt	to vf sand	strong	
40.0 42.0		PRO	Mudstone Sandstone	sandy	light	green	grey med silt	to vf sand	strong	interbedded sandstone and mudstone

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR	GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor						
42.0	44.0		PRO	Sandstone		light green grey	vf sand	to f sand	strong	
44.0	46.0		PRO	Sandstone		light green grey	vf sand	to f sand	strong	
46.0	48.0		PRO	Sandstone		light green grey	vf sand	to f sand	strong	
48.0	50.0		PRO	Sandstone		light grey	vf sand	to f sand	strong	
50.0	52.0		PRO	Sandstone		light grey	vf sand	to f sand	strong	trace mn as coatings on ?joint surfaces
52.0	54.0		PRO	Sandstone		light grey	vf sand	to f sand	strong	
54.0	56.0		PRO	Siltstone Sandstone	laminated dolomitic	cherty medium grey	med silt	to vf sand	very strong	
56.0	58.0		PRO	Sandstone Siltstone	dolomitic cherty	light brown	vf sand	to f sand	strong	
58.0	60.0		PRO	Sandstone Siltstone	dolomitic cherty	light brown	vf sand	to f sand	strong	
60.0	62.0		PRO	Sandstone Siltstone	dolomitic cherty	light green grey	vf sand	to f sand	strong	
62.0	64.0		PRO	Sandstone Siltstone	dolomitic cherty	light green grey	vf sand	to f sand	strong	
64.0	66.0	DZ979	PRO	Sandstone	silty dolomitic	light green grey	vf sand	to f sand	strong	
66.0	68.0	DZ979	PRO	Sandstone	silty dolomitic	light green grey	vf sand	to f sand	strong	
68.0	70.0	DZ979	PRO	Sandstone	silty dolomitic	light green grey	vf sand	to f sand	strong	

EOH at 70.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7262

SHEET : Mt_Young

JOB NO : MBA

CONTRACTOR : Gaden Drilling

RIG TYPE : UDR-650

DATE DRILLED: 21-AUG-93

HOLE NUMBER : MYR14

Mn but assoc. with fractures

LOGGED BY : PRD

TOTAL DEPTH : 70.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 599969

NORTHING: 8289332

R.L.: 15.0

SHEET 1 OF 2 HOLE NUMBER : MYR14

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS		
From (m)	To (m)			major/ minor									
0.0	2.0		CEN	Sand		medium	red	brown	f sand	to med sand	loose		
				Laterite	pisolitic								
2.0	4.0		CEN	Clay	sandy	medium	red	brown	clay	to med sand	soft		
				Laterite	pisolitic								
4.0	6.0		CEN	Clay	sandy	medium	red	brown	clay	to med sand	soft		
				Pebbles	ferruginous								
6.0	8.0		CRE	Claystone	sandy	medium	red	brown	clay	to med sand	soft		
				Sandstone	ferruginous								
8.0	10.0		CRE	Claystone	sandy	medium	red	brown	clay	to med sand	soft		
				Sandstone	ferruginous								
10.0	12.0		CRE	Clay	sandy	medium	red	brown	clay	to med sand	soft		
				Sandstone	ferruginous								
12.0	14.0		CRE	Clay	sandy	medium	red	brown	clay	to med sand	soft		
				Sandstone	ferruginous								
14.0	16.0		CRE	Clay	sandy	patchy	grey	brown	clay	to med sand	soft		
16.0	18.0		CRE	Sand	clayey	*pb	patchy	grey	brown	f sand	to vs pebble	firm	contains sand & clasts of fg snst, ss snst - prob pebble
18.0	20.0		CRE	Sand	clayey	*pb	patchy	grey	brown	f sand	to vs pebble	firm	
20.0	22.0		CRE	Sand	clayey	*pb	patchy	grey	brown	f sand	to vs pebble	firm	
22.0	24.0		CRE	Claystone		light	grey		clay	to vf sand	weak		
				Sand	ferruginous								
24.0	26.0		CRE	Claystone	sandy	light	grey		clay	to vf sand	weak		
26.0	28.0		CRE	Claystone	sandy	light	grey		clay	to vf sand	weak		
				Sandstone	ferruginous								
28.0	30.0		CRE	Claystone	sandy	medium	grey	brown	clay	to vf sand	weak		
				Sandstone	ferruginous								
30.0	32.0		CRE	Clay		light	brown		clay	to med silt	soft		
32.0	34.0		CRE	Siltstone	siliceous	light	brown		med silt	to vf sand	mod'ly strong	sample is sludge with rock frags in it - pebbles?	
				Mudstone	ferruginous								
34.0	36.0		CRE	Claystone		light	brown		clay	to f sand	weak		
				Sandstone	ferruginous								
36.0	38.0		CRE	Claystone		light	brown		clay	to f sand	weak		
				Sandstone	ferruginous								
38.0	40.0		CRE	Claystone	sandy	light	brown		clay	to f sand	weak		
				Sandstone	ferruginous								
40.0	42.0		CRE	Claystone	sandy	light	brown		clay	to f sand	weak		
				Sandstone	ferruginous								

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor							
42.0	44.0		PRO	Siltstone Sandstone	siliceous	light	brown	med silt	to f sand	mod'ly strong	
44.0	46.0		PRO	Siltstone Sandstone	siliceous	light	brown	med silt	to f sand	mod'ly strong	
46.0	48.0	DZ981	PRO	Siltstone Sandstone	siliceous	light	brown	med silt	to f sand	mod'ly strong	
48.0	50.0		PRO	Siltstone Sandstone	siliceous	light	brown	med silt	to f sand	mod'ly strong	
50.0	52.0		PRO	Siltstone Sandstone	siliceous	light	brown	med silt	to f sand	mod'ly strong	trace mn as coatings on chips
52.0	54.0		PRO	Siltstone Sandstone	siliceous	light	brown	med silt	to f sand	mod'ly strong	trace mn as coatings on chips
54.0	56.0		PRO	Siltstone Sandstone	siliceous	light	brown	med silt	to f sand	mod'ly strong	
56.0	58.0	DZ982	PRO	Sandstone Siltstone		patchy	black grey	f sand	to med sand	weak	
58.0	60.0	DZ983	PRO	Sandstone Siltstone		patchy	black grey	f sand	to med sand	weak	
60.0	62.0	DZ984	PRO	Siltstone	sandy	pale	brown	med silt	to vf sand	strong	some mn frags but probably contamination
62.0	64.0	DZ985	PRO	Siltstone	sandy	pale	brown	med silt	to vf sand	strong	
64.0	66.0	DZ986	PRO	Siltstone	sandy	pale	brown	med silt	to vf sand	strong	very fractured ground mn is probably mainly contaminatic
66.0	68.0	DZ987	PRO	Sandstone	silty dolomitic	pale	green grey	med silt	to vf sand	strong	
68.0	70.0		PRO	Sandstone	silty dolomitic	pale	green grey	med silt	to vf sand	strong	

EOH at 70.0 m

PROJECT : CARPENTARIA
 LOCALITY: EL 7262
 SHEET : Mt Young
 JOB NO : M8A
 GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 600579 NORTHING: 8290202 R.L.: 15.0
 CONTRACTOR : Gaden Drilling
 RIG TYPE : UDR-650
 DATE DRILLED: 20-AUG-93
 HOLE NUMBER : MYR13
 LOGGED BY : PRD
 TOTAL DEPTH : 60.0
 SHEET 1 OF 2 HOLE NUMBER : MYR13

COMMENTS:

DEPTHS From (m)	To (m)	SAMPLE NUMBER	GEOLOGICAL TIME	ROCK TYPES major/ minor	COLOUR	GRAIN SIZE	STRENGTH/ HARDNESS	COMMENTS
0.0	2.0		CEN	Laterite Clay	pisolitic sandy	medium red brown med silt to med sand	weak	
2.0	4.0		CEN	Laterite Clay	pisolitic sandy	medium red brown med silt to med sand	weak	
4.0	6.0		CEN	Sandstone Clay	ferruginous sandy	medium red brown med silt to med sand	weak	
6.0	8.0		CRE	Sandstone Claystone	ferruginous sandy	medium red brown med silt to med sand	weak	
8.0	10.0		CRE	Sandstone Claystone	ferruginous sandy	medium red brown med silt to med sand	weak	
10.0	12.0		CRE	Sandstone Claystone	clayey sandy	ferruginous medium red brown med silt to med sand	weak	
12.0	14.0		CRE	Sandstone Claystone	clayey sandy	ferruginous medium red brown med silt to med sand	weak	
14.0	16.0		CRE	Clay	sandy	medium red brown clay to f sand	soft	
16.0	18.0		CRE	Clay Pebbles	sandy ferruginous	medium red brown clay to f sand	soft	
18.0	20.0		CRE	Claystone	sandy	light grey clay to f sand	weak	
20.0	22.0		CRE	Claystone	sandy	light grey clay to f sand	weak	
22.0	24.0	D2980	CRE	Claystone		palest grey clay to vf sand	weak	
24.0	26.0	D2980	CRE	Claystone		palest grey clay to vf sand	weak	
26.0	28.0		CRE	Claystone		palest grey clay to vf sand	weak	
28.0	30.0		CRE	Claystone		palest grey clay to vf sand	weak	
30.0	32.0		CRE	Claystone		palest grey clay to vf sand	weak	
32.0	34.0		CRE	Claystone		palest grey clay to vf sand	weak	
34.0	36.0		CRE	Sandstone Clay Pebbles	ferruginous ferruginous	light brown grey clay to vf sand	soft	
36.0	38.0		CRE	Sandstone Chert	silty	light grey vf sand to f sand	mod'ly strong	could be basement from here
38.0	40.0		CRE	Clay Sandstone	sandy ferruginous	light brown clay to f sand	mod'ly strong	
40.0	42.0		CRE	Clay Sandstone	sandy ferruginous	light brown clay to f sand	mod'ly strong	

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)									
42.0	44.0		CRE	Clay Sandstone	sandy ferruginous	light	brown	clay	to f sand	mod'ly strong
44.0	46.0		CRE	Sandstone Clay	quartzose	light	brown	f sand	to med sand	weak
46.0	48.0		CRE	Sandstone Clay	quartzose	light	brown	f sand	to med sand	weak
48.0	50.0		CRE	Clay	sandy	light	brown	clay	to f sand	soft
50.0	52.0		CRE	Clay	sandy	light	brown	clay	to f sand	soft
52.0	54.0		CRE	Clay	sandy	light	brown	clay	to f sand	soft
54.0	56.0		CRE	Chert Clay	laminated	light	brown	med silt		soft
56.0	58.0		CRE	Sandstone Chert	silty	light	brown	med silt	to f sand	mod'ly strong
58.0	60.0		PRO	Sandstone Chert	siliceous	light	brown	med silt	to f sand	mod'ly strong

EQH at 60.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7262

SHEET : Mt_Young

JOB NO : MBA

CONTRACTOR : Gaden Drilling

RIG TYPE : UDR-650

DATE DRILLED: 22-AUG-93

HOLE NUMBER : MYR15

COMMENTS:

LOGGED BY : PRD

TOTAL DEPTH : 22.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 603500

NORTHING: 8286500

R.L.: 15.0

SHEET 1 OF 1 HOLE NUMBER : MYR15

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS		
From (m)	To (m)			major/ minor									
0.0	2.0		CEN	Sand		light	grey	brown	f sand	to med sand	loose		
				Laterite	pisolitic								
2.0	4.0		CRE	Clay	sandy	light	grey	brown	clay	to med sand	stiff		
				Laterite	pisolitic								
4.0	6.0		CRE	Clay	sandy	light	grey	brown	clay	to med sand	stiff		
				Sand									
6.0	8.0		CRE	Clay	sandy	light	grey	brown	clay	to med sand	stiff		
				Sandstone	ferruginous								
8.0	10.0		CRE	Clay	sandy	light	grey	brown	clay	to med sand	stiff		
10.0	12.0		CRE	Sandstone	*pb	medium	red	brown	med sand	to granule	weak		
					clayey								
12.0	14.0		PRO	Sandstone	quartzose	ferruginous	patchy	grey	brown	f sand	to med sand	mod'ly strong	basement? trace mn
14.0	16.0		PRO	Sandstone	quartzose	ferruginous	patchy	grey	brown	f sand	to med sand	mod'ly strong	
16.0	18.0		PRO	Claystone	silty	light	grey		clay	to med silt	weak		
18.0	20.0		PRO	Claystone	silty	light	grey		clay	to med silt	weak		
20.0	22.0		PRO	Claystone	silty	light	grey		clay	to med silt	weak		

EOH at 22.0 m

PROJECT : CARPENTARIA
 LOCALITY: EL 7262
 SHEET : Mt_Young
 JOB NO : HBA

CONTRACTOR : Gaden Drilling
 RIG TYPE : UDR-650
 DATE DRILLED: 22-AUG-93

HOLE NUMBER : MYR16

COMMENTS:

LOGGED BY : PRD
 TOTAL DEPTH : 64.0

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 604952 NORTHING: 8290000 R.L.: 15.0
 SHEET 1 OF 2 HOLE NUMBER : MYR16

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)										
0.0	2.0		CEN	Sand	quartzose	light	orange	brown	f sand	to med sand	loose
2.0	4.0		CEN	Sand	quartzose	light	orange	brown	f sand	to med sand	loose
4.0	6.0		CRE	Laterite Clay	pisolitic sandy	medium	red	brown	clay	to f sand	firm
6.0	8.0		CRE	Laterite Clay	pisolitic sandy	medium	red	brown	clay	to f sand	firm
8.0	10.0		CRE	Sandstone Clay	ferruginous sandy	medium	red	brown	clay	to f sand	soft
10.0	12.0		CRE	Sandstone Clay	ferruginous sandy	ferruginous medium	brown		clay	to f sand	soft
12.0	14.0		CRE	Clay	sandy	ferruginous light	yellow	brown	clay	to f sand	soft
14.0	16.0		CRE	Clay	sandy	ferruginous medium	red	brown	clay	to f sand	soft
16.0	18.0		CRE	Pebbles Clay	ferruginous sandy	ferruginous medium	red	brown	clay	to f sand	soft
18.0	20.0		CRE	Pebbles Clay	ferruginous sandy	ferruginous medium	brown		clay	to f sand	soft
20.0	22.0		CRE	Sandstone Sandstone	ferruginous clayey	ferruginous medium	brown		f sand	to med sand	weak
22.0	24.0		CRE	Sandstone Pebbles	clayey ferruginous	medium	brown		f sand	to med sand	weak
24.0	26.0		CRE	Sandstone	clayey	ferruginous patchy	brown	grey	f sand	to med sand	weak
26.0	28.0		CRE	Siltstone	clayey	light	grey		med silt	to vf sand	weak
28.0	30.0		PRO	Sandstone	silty	patchy	grey	brown	vf sand	to f sand	mod'ly strong basement?
30.0	32.0		PRO	Sandstone	silty	patchy	grey	brown	vf sand	to f sand	mod'ly strong basement?
32.0	34.0		PRO	Sandstone	silty	shaly patchy	grey	brown	vf sand	to f sand	strong
34.0	36.0		PRO	Sandstone	ferruginous	light	brown		f sand	to med sand	weak
36.0	38.0		PRO	Sandstone	ferruginous	light	brown		f sand	to med sand	weak
38.0	40.0		PRO	Sandstone	clayey	light	brown		vf sand	to f sand	soft
40.0	42.0		PRO	Clay	sandy	light	brown		clay	to f sand	soft

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS	
From (m)	To (m)			major/ minor								
42.0	44.0		PRO	Clay	sandy	light	brown	clay	to f sand	soft		
44.0	46.0		PRO	Sandstone	clayey	ferruginous	light	brown	f sand	to med sand	soft	could be still cretaceous
46.0	48.0		PRO	Sandstone			light	brown	f sand	to med sand	weak	pebbles could be contamination
48.0	50.0		PRO	Pebbles	ferruginous							
			PRO	Clay	sandy	light	brown	clay	to f sand	soft		
50.0	52.0		PRO	Clay	sandy	light	brown	clay	to f sand	soft		
52.0	54.0		PRO	Clay	sandy	light	brown	clay	to f sand	soft		gamma ray shows change at about 53m
54.0	56.0		PRO	Pebbles								
			PRO	Sandstone		pale	grey	vf sand	to f sand	strong		this may be start of basement
56.0	58.0		PRO	Chert	laminated							
			PRO	Clay	sandy	light	brown	grey	clay	to f sand	soft	basement?
			PRO	Chert								
58.0	60.0	DZ988	PRO	Chert	laminated	medium	grey	med silt	to vf sand	mod'ly strong		
			PRO	Sandstone								
60.0	62.0	DZ988	PRO	Chert	laminated	medium	grey	med silt	to vf sand	mod'ly strong		
			PRO	Sandstone								
62.0	64.0	DZ988	PRO	Sandstone		medium	grey	med silt	to vf sand	mod'ly strong		
			PRO	Chert								

EOH at 64.0 m

PROJECT : CARPENTARIA
 LOCALITY: EL 7262
 SHEET : Mt_Young
 JOB NO : MBA

CONTRACTOR : Gaden Drilling
 RIG TYPE : UDR-650
 DATE DRILLED: 22-AUG-93

HOLE NUMBER : MYR17

COMMENTS:

LOGGED BY : PRD
 TOTAL DEPTH : 58.0

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 606692 NORTHING: 8291394 R.L.: 15.0
 SHEET 1 OF 2 HOLE NUMBER : MYR17

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor								
0.0	2.0		CEN	Sand		medium	red	brown	f sand	to med sand	soft	
				Laterite	pisolitic							
2.0	4.0		CEN	Laterite	pisolitic	medium	red	brown	f sand	to med sand	weak	
				Sand								
4.0	6.0		CRE	Clay	sandy ferruginous	medium	orange	brown	clay	to med sand	firm	
6.0	8.0		CRE	Clay	sandy	medium	orange	brown	clay	to med sand	firm	
				Pebbles	ferruginous							
8.0	10.0		CRE	Clay	sandy	medium	orange	brown	clay	to med sand	firm	
				Pebbles	ferruginous							
10.0	12.0		CRE	Clay	sandy	medium	orange	brown	clay	to med sand	firm	
				Pebbles	ferruginous							
12.0	14.0		CRE	Clay	sandy	medium	orange	brown	clay	to med sand	firm	
				Pebbles	ferruginous							
14.0	16.0		CRE	Clay	sandy	light	brown		clay	to f sand	soft	
16.0	18.0		CRE	Clay	sandy	light	brown		clay	to f sand	soft	
				Pebbles	ferruginous							
18.0	20.0		CRE	Sandstone	ferruginous clayey	medium	orange	brown	f sand	to med sand	weak	
20.0	22.0		CRE	Sandstone	ferruginous clayey	medium	orange	brown	f sand	to med sand	weak	
22.0	24.0		CRE	Sandstone	ferruginous clayey	medium	orange	brown	f sand	to med sand	weak	
24.0	26.0		CRE	Sandstone	ferruginous clayey	medium	orange	brown	f sand	to med sand	weak	trace mn on some chips
				Pebbles	ferruginous							
26.0	28.0		CRE	Sandstone	ferruginous clayey	medium	orange	brown	f sand	to med sand	weak	
				Pebbles	ferruginous							
28.0	30.0		CRE	Sandstone	ferruginous clayey	medium	orange	brown	f sand	to med sand	weak	
				Pebbles	ferruginous							
30.0	32.0		CRE	Sandstone	ferruginous clayey	medium	orange	brown	f sand	to med sand	weak	
				Pebbles	ferruginous							
32.0	34.0		CRE	Claystone	sandy	light	green	grey	clay	to f sand	weak	
34.0	36.0		CRE	Claystone	sandy	light	brown	grey	clay	to f sand	weak	
				Sandstone	ferruginous							
36.0	38.0		CRE	Claystone	sandy	light	brown	grey	clay	to f sand	weak	could be basement
				Sandstone	quartzose							
38.0	40.0		CRE	Sandstone	quartzose	light	grey		f sand	to med sand	weak	basement?
40.0	42.0		CRE	Sandstone	quartzose	light	grey		f sand	to med sand	weak	

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)									
42.0	44.0		CRE	Sandstone Clay	quartzose	light brown grey	f sand	to med sand	weak	
44.0	46.0		CRE	Clay Pebbles	sandy ferruginous	medium brown	clay	to f sand	soft	more likely cretaceous this sample
46.0	48.0		CRE	Clay	sandy	medium brown	clay	to f sand	soft	
48.0	50.0		CRE	Clay Sandstone	sandy	medium brown	clay	to f sand	soft	
50.0	52.0		CRE	Sandstone Pebbles	clayey ferruginous	medium brown	vf sand	to f sand	firm	
52.0	54.0		PRO	Sandstone	ferruginous	medium brown red	vf sand	to f sand	mod'ly strong	deep brick red coloured fg sandstone
54.0	56.0	DZ989	PRO	Sandstone	ferruginous	medium brown red	vf sand	to f sand	mod'ly strong	deep brick red coloured fg sandstone
56.0	58.0	DZ989	PRO	Sandstone	ferruginous	medium brown red	vf sand	to f sand	mod'ly strong	deep brick red coloured fg sandstone

EOH at 58.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7260

SHEET : TOWNS

JOB NO : MAY

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 19-JUN-93

HOLE NUMBER : TRR03

COMMENTS:

LOGGED BY : PRD & DMW

TOTAL DEPTH : 56.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 528826

NORTHING: 8324643

R.L.: 20.0

SHEET 1 OF 2 HOLE NUMBER : TRR03

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS	
From (m)	To (m)			major/ minor								
0.0	2.0		TER	Laterite Sand	weathered ferruginous pisolitic	medium	red	orange	f silt	to vf sand	hard	
2.0	4.0		TER	Sand Laterite	ferruginous lateritic	medium	red	brown	med silt	to med sand	friable	
4.0	6.0		CRE	Sandstone	weathered ferruginous	medium	grey	red	med silt	to med sand	friable	
6.0	8.0		CRE	Clay	ferruginous sandy	medium	grey	red	f silt	to vf sand	firm	
8.0	10.0		CRE	Clay	ferruginous sandy	light	red	grey	f silt	to vf sand	soft	
10.0	12.0		CRE	Clay	ferruginous sandy	light	red		f silt	to vf sand	soft	
12.0	14.0		CRE	Sand	clayey	pale	red	grey	med silt	to vf sand	soft	
14.0	16.0		CRE	Sandstone	ferruginous clayey	patchy	orange	grey	f silt	to f sand	weak	
16.0	18.0		CRE	Sandstone	clayey	pale	red	grey	f silt	to f sand	weak	
18.0	20.0		CRE	Sandstone	clayey	pale	red	grey	f silt	to vf sand	weak	
20.0	22.0		CRE	Sand	clayey	pale	red	grey	f silt	to med sand	stiff	
22.0	24.0	DZ837	CRE	Sand	clayey	pale	red	grey	f silt	to med sand	stiff	possible manganese intersection sample taken
24.0	26.0		CRE	Sand	clayey	pale	red	grey	f silt	to med sand	stiff	
26.0	28.0		CRE	Sand	clayey	pale	red	grey	f silt	to med sand	stiff	
28.0	30.0		CRE	Sand	clayey ferruginous	light	red	grey	f silt	to med sand	stiff	
30.0	32.0		CRE	Sand	clayey ferruginous	light	red	grey	f silt	to med sand	stiff	
32.0	34.0		CRE	Sand	clayey ferruginous	light	red	grey	f silt	to med sand	stiff	
34.0	36.0		CRE	Sand	clayey	pale	brown	grey	f silt	to med sand	stiff	
36.0	38.0		CRE	Sand	clayey	pale	brown	grey	f silt	to med sand	stiff	
38.0	40.0		CRE	Clay	sandy	pale	orange	grey	vf silt	to vf sand	firm	
40.0	42.0		CRE	Sand	clayey	light	grey		f sand	to med sand	soft	

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor							
42.0	44.0		CRE	Sand	clayey	light	grey	f sand	to med sand	soft	
44.0	46.0		CRE	Sand	clayey	light	brown grey	vf sand	to f sand	soft	
46.0	48.0		CRE	Sand	quartzose	light	brown grey	f sand	to med sand	soft	
48.0	50.0		CRE	Sand	quartzose	light	brown grey	f sand	to med sand	soft	
50.0	52.0		CRE	Sand	quartzose	light	brown grey	f sand	to c sand	soft	
52.0	54.0		CRE	Sand	quartzose	light	orange grey	f sand	to vc sand	soft	
54.0	56.0		CRE	Sand	quartzose	light	orange grey	f sand	to vc sand	soft	groundwater - estimated flow rate > 10,000 litres per hr
56.0	58.0		CRE	Sand	quartzose	gritty	light orange grey	med sand	to granule	soft	

EOH at 56.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7260

SHEET : TOWNS

JOB NO : MAY

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 20-JUN-93

HOLE NUMBER : TRR04

COMMENTS:

LOGGED BY : PRD & DW

TOTAL DEPTH : 52.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 526870

NORTHING: 8322730

R.L.: 20.0

SHEET 1 OF 2 HOLE NUMBER : TRR04

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS		
From (m)	To (m)			major/ minor									
0.0	2.0		TER	Laterite	sandy	medium	red	brown	f sand	to granule	firm		
2.0	4.0		TER	Laterite Sandstone	pisolitic ferruginous	medium	red	brown	f sand	to granule	firm		
4.0	6.0		TER	Sandstone	lateritic	clayey	dark	red	brown	med silt	to med sand	firm	
6.0	8.0		TER	Sandstone	lateritic	clayey	light	pink	grey	med silt	to med sand	weak	
8.0	10.0		CRE	Sandstone	clayey		light	brown		med silt	to f sand	weak	
10.0	12.0		CRE	Sandstone	clayey		pale	tan	brown	med silt	to f sand	weak	
12.0	14.0		CRE	Sandstone Mudstone	gritty	quartzose	pale	tan	brown	f sand	to c sand	weak	contains rounded qtz clasts up to 5mm base of cretaceous
14.0	16.0		CRE	Sandstone Chert	clayey		medium	tan	brown	med silt		weak	
16.0	18.0		CRE	Siltstone Claystone	clayey		medium	grey	brown	med silt		weak	start cretaceous unit 2, with algal mat material
18.0	20.0		CRE	Siltstone Claystone	siliceous	laminated	pale	grey	white	med silt		weak	
20.0	22.0		CRE	Siltstone Claystone	siliceous	laminated	pale	grey	white	med silt		weak	
22.0	24.0		CRE	Siltstone Claystone	siliceous	laminated	pale	tan	grey	med silt		weak	
24.0	26.0		CRE	Sandstone Claystone	quartzose		pale	tan	grey	f sand	to med sand	weak	
26.0	28.0		CRE	Sandstone Siltstone			pale	tan	grey	f sand	to med sand	weak	
28.0	30.0		CRE	Sandstone	laminated clayey	laminated	pale	grey	brown	med silt	to f sand	firm	
30.0	32.0		CRE	Siltstone Claystone	siliceous	laminated	light	grey	brown	med silt		weak	
32.0	34.0		CRE	Siltstone Claystone	siliceous	laminated	light	grey	brown	med silt		weak	
34.0	36.0		CRE	Siltstone	siliceous		light	grey	brown	med silt		weak	
36.0	38.0		CRE	Siltstone	siliceous	laminated	light	grey	brown	med silt		weak	
38.0	40.0		CRE	Siltstone	siliceous	laminated	light	grey	brown	med silt		weak	
40.0	42.0		CRE	Siltstone	siliceous	laminated	light	grey	brown	med silt		weak	

DEPTHS		SAMPLE NUMBER	GEOLOGICAL TIME	ROCK TYPES major/ minor	COLOUR				GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)											
42.0	44.0		CRE	Siltstone	siliceous	laminated	light	grey	brown	med silt	weak	
44.0	46.0		CRE	Siltstone	siliceous	laminated	light	grey	brown	med silt	weak	
46.0	48.0		CRE	Siltstone	siliceous	laminated	medium	tan	brown	med silt	weak	dendritic manganese in tan mudstone, start cretaceous ur
48.0	50.0		CRE	Siltstone	siliceous	laminated	medium	tan	brown	med silt	weak	
50.0	52.0		CRE	Mudstone	silty	laminated	medium	grey	brown	med silt	weak	

PROJECT : CARPENTARIA
LOCALITY: EL 7260
SHEET : TOWNS
JOB NO : MAY

CONTRACTOR : GADEN DRILLING
RIG TYPE : UDR-650
DATE DRILLED: 21-JUN-93

HOLE NUMBER : TRR05

COMMENTS:

LOGGED BY : PRD & DWN
TOTAL DEPTH : 58.0

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 525113 NORTHING: 8320913 R.L.: 20.0
SHEET 1 OF 2 HOLE NUMBER : TRR05

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor							
0.0	2.0		TER	Laterite Sand	sandy pisolitic	medium red	brown	f sand	to med sand	weak	
2.0	4.0		PRO	Sandstone	quartzose	medium red	brown	f sand	to med sand	weak	
4.0	6.0		PRO	Sandstone	quartzose	patchy red	brown	f sand	to med sand	mod'ly strong	
6.0	8.0		PRO	Sandstone	quartzose	patchy grey	brown	f sand	to med sand	strong	
8.0	10.0		PRO	Sandstone	quartzose	patchy grey	brown	f sand	to med sand	strong	
10.0	12.0		PRO	Sandstone	ferruginous	medium red	brown	f sand	to med sand	strong	
12.0	14.0		PRO	Sandstone	clayey ferruginous	patchy brown	grey	vf sand	to f sand	mod'ly strong	
14.0	16.0		PRO	Sandstone	quartzose	light pink	grey	f sand	to med sand	strong	
16.0	18.0		PRO	Sandstone	quartzose	light pink	grey	f sand	to med sand	strong	
18.0	20.0		PRO	Sandstone	clayey	banded grey	brown	vf sand	to f sand	mod'ly strong	
20.0	22.0		PRO	Sandstone	ferruginous	dark red	brown	vf sand	to f sand	mod'ly strong	
22.0	24.0		PRO	Sandstone	massive ferruginous	dark red	brown	vf sand	to f sand	mod'ly strong	
24.0	26.0		PRO	Sandstone	massive ferruginous	dark red	brown	vf sand	to f sand	mod'ly strong	
26.0	28.0		PRO	Sandstone Claystone	ferruginous	medium red	brown	vf sand	to f sand	mod'ly strong	
28.0	30.0		PRO	Sandstone	ferruginous clayey	medium red	brown	vf sand	to f sand	mod'ly strong	
30.0	32.0		PRO	Sandstone	quartzose	light grey		vf sand	to f sand	mod'ly strong	
32.0	34.0		PRO	Sandstone	quartzose	light grey		vf sand	to f sand	mod'ly strong	
34.0	36.0		PRO	Sandstone	quartzose	light grey		vf sand	to f sand	mod'ly strong	
36.0	38.0		PRO	Shale	sandy	medium grey		vf sand	to f sand	mod'ly strong	
38.0	40.0		PRO	Shale Sandstone	sandy	medium grey		vf sand	to f sand	mod'ly strong	
40.0	42.0	DZ838	PRO	Sandstone Sandstone Sandstone	quartzose massive shaly	medium grey		f sand	to med sand	strong	

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor							
42.0	44.0	DZ838	PRO	Sandstone	shaly	medium	grey	vf sand	to f sand	strong	
44.0	46.0	DZ838	PRO	Sandstone	shaly	medium	grey	vf sand	to f sand	strong	
46.0	48.0	DZ838	PRO	Slate	micaceous	medium	grey	med silt	to vf sand	strong	
48.0	50.0	DZ838	PRO	Shale	sandy	medium	grey	med silt	to vf sand	strong	
50.0	52.0	DZ839	PRO	Shale	sandy	medium	grey	med silt	to vf sand	strong	
52.0	54.0	DZ839	PRO	Shale	sandy	medium	grey	med silt	to vf sand	strong	
54.0	56.0	DZ839	PRO	Shale	sandy	medium	grey	med silt	to vf sand	strong	
56.0	58.0	DZ839	PRO	Sandstone	shaly	medium	grey	vf sand	to f sand	strong	

EOH at 58.0 m

PROJECT : CARPENTARIA
 LOCALITY: EL 7260
 SHEET : TOWNS
 JOB NO : MAY

CONTRACTOR : GADEN DRILLING
 RIG TYPE : UDR-650
 DATE DRILLED: 21-JUN-93

HOLE NUMBER : TRR06

COMMENTS:

LOGGED BY : PRD & DWW
 TOTAL DEPTH : 46.0

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 523350 NORTHING: 8319132 R.L.: 20.0
 SHEET 1 OF 2 HOLE NUMBER : TRR06

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor								
0.0	2.0		TER	Sand	quartzose	light	orange	brown	f sand	to med sand	loose	
2.0	4.0		PRO	Sandstone	quartzose clayey	light	orange	brown	f sand	to med sand	soft	
4.0	6.0		PRO	Sandstone	quartzose clayey	light	orange	brown	f sand	to med sand	soft	
6.0	8.0		PRO	Mudstone	ferruginous	medium	red	brown	med silt	to f sand	weak	
8.0	10.0		PRO	Mudstone	ferruginous	medium	red	brown	med silt	to f sand	weak	
10.0	12.0		PRO	Sandstone	quartzose	light	grey		f sand	to med sand	strong	
12.0	14.0		PRO	Sandstone	quartzose	light	grey		f sand	to med sand	strong	alternating hard qtz sandstone and weathered clay
				Clay	ferruginous							
14.0	16.0		PRO	Sandstone	quartzose	medium	grey		f sand	to med sand	strong	
16.0	18.0		PRO	Sandstone	shaly	medium	grey		vf sand	to f sand	strong	
18.0	20.0		PRO	Mudstone	shaly	pale	grey	white	med silt	to vf sand	strong	
20.0	22.0		PRO	Sandstone	quartzose	light	grey	tan	f sand	to med sand	strong	
22.0	24.0		PRO	Sandstone	quartzose	light	grey	tan	f sand	to med sand	strong	
24.0	26.0		PRO	Sandstone	quartzose	banded	red	grey	f sand	to med sand	strong	
26.0	28.0		PRO	Sandstone	quartzose ferruginous	patchy	grey	brown	f sand	to med sand	strong	
28.0	30.0		PRO	Sandstone	quartzose	light	grey		f sand	to med sand	very strong	
30.0	32.0		PRO	Sandstone	quartzose	light	grey		f sand	to med sand	very strong	
32.0	34.0		PRO	Sandstone	quartzose	banded	grey	brown	f sand	to med sand	very strong	
34.0	36.0	DZ840	PRO	Sandstone	quartzose	banded	grey	brown	f sand	to med sand	very strong	
36.0	38.0	DZ840	PRO	Sandstone	quartzose	banded	grey	brown	f sand	to med sand	very strong	
38.0	40.0	DZ840	PRO	Sandstone	quartzose	banded	grey	brown	f sand	to med sand	very strong	
40.0	42.0	DZ840	PRO	Sandstone	quartzose	light	grey		f sand	to med sand	very strong	

PROJECT : CARPENTARIA
 LOCALITY: EL 7260
 SHEET : TOWNS
 JOB NO : MAY
 GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 531085 NORTHING: 8323790
 CONTRACTOR : GADEN DRILLING
 RIG TYPE : UDR-650
 DATE DRILLED: 22-JUN-93
 HOLE NUMBER : TRR07
 LOGGED BY : PRD & DWW
 TOTAL DEPTH : 58.0
 R.L.: 20.0
 SHEET 1 OF 2 HOLE NUMBER : TRR07

COMMENTS:

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor								
0.0	2.0		TER	Sand	quartzose silty	light	orange	brown	f sand	to med sand	loose	
2.0	4.0		TER	Sand	quartzose silty	medium	orange	brown	f sand	to med sand	loose	
4.0	6.0		TER	Sandstone	lateritic	medium	red	brown	f sand	to med sand	weak	
6.0	8.0		CRE	Sand	silty	light	tan		vf sand	to f sand	friable	
8.0	10.0		CRE	Sand	silty	light	tan		vf sand	to f sand	friable	
10.0	12.0		CRE	Sand	silty	pale	tan	grey	vf sand	to f sand	friable	
12.0	14.0		CRE	Sand	silty	pale	tan	grey	vf sand	to med sand	weak	
14.0	16.0		CRE	Sand	silty	pale	tan	grey	vf sand	to med sand	weak	
16.0	18.0		CRE	Sand	ferruginous	pale	tan	grey	vf sand	to med sand	weak	
18.0	20.0		CRE	Grit	quartzose sandy	light	yellow	grey	f sand	to vs pebble	weak	contains rounded qtz clasts to 5mm diameter
20.0	22.0		CRE	Grit	clayey	medium	yellow	brown	f sand	to vs pebble	weak	contains rounded qtz clasts to 5mm diameter
22.0	24.0		CRE	Clay Sand	sandy clayey	medium	yellow	brown	f sand	to vs pebble	weak	
24.0	26.0		CRE	Clay Sand	sandy clayey	light	grey		vf sand	to c sand	soft	
26.0	28.0		CRE	Sand	clayey	light	grey		vf sand	to c sand	soft	
28.0	30.0		CRE	Sand	clayey	light	grey		med silt	to c sand	soft	
30.0	32.0		CRE	Sand	clayey	light	grey		med silt	to c sand	soft	
32.0	34.0		CRE	Sandstone Chert	clayey	medium	grey	brown	med silt	to c sand	soft	cretaceous unit 2 (silic. dolomite frags from basement?)
34.0	36.0		CRE	Sandstone Chert	clayey	medium	grey	brown	med silt	to c sand	soft	trace mm as coating on cherty fragments
36.0	38.0		CRE	Sandstone Chert	clayey	medium	grey	brown	med silt	to c sand	soft	
38.0	40.0		CRE	Sandstone Chert	clayey	medium	grey	brown	med silt	to c sand	soft	
40.0	42.0	DZB43	PRO	Chert	siliceous	medium	grey	brown	med silt	to c sand	soft	possible silicified dolomite (basement)

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor							
42.0	44.0	DZ843	PRO	Chert	siliceous	medium	grey	brown	med silt	to c sand	soft
44.0	46.0	DZ843	PRO	Chert	siliceous	medium	grey	brown	med silt	to c sand	soft
46.0	48.0	DZ843	PRO	Chert	siliceous	medium	grey	brown	med silt	to c sand	soft
48.0	50.0	DZ843	PRO	Siltstone	siliceous	medium	grey	brown	med silt	to vf sand	strong
50.0	52.0	DZ844	PRO	Clay Siltstone	sandy ferruginous	dark	brown		med silt	to vf sand	strong
52.0	54.0	DZ844	PRO	Mudstone	ferruginous	medium	red	brown	med silt	to vf sand	strong
54.0	56.0	DZ844	PRO	Clay Sandstone	ferruginous	medium	red	brown	vf sand		strong
56.0	58.0	DZ844	PRO	Sandstone	ferruginous	medium	red	brown	vf sand		strong

EOH at 58.0 m

PROJECT : CARPENTARIA
 LOCALITY: EL 7260
 SHEET : TOWNS
 JOB NO : MAY

CONTRACTOR : GADEN DRILLING
 RIG TYPE : UDR-650
 DATE DRILLED: 22-JUN-93

HOLE NUMBER : TRR08

COMMENTS:

LOGGED BY : PRD & DWW
 TOTAL DEPTH : 64.0

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 531780 NORTHING: 8321240 R.L.: 20.0
 SHEET 1 OF 2 HOLE NUMBER : TRR08

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From	To										
(m)	(m)										
0.0	2.0		TER	Laterite Sand	pisolitic	light	red	brown	med silt	to vs pebble	loose
2.0	4.0		TER	Laterite Mudstone	sandy	light	red	brown	med silt	to vs pebble	weak
4.0	6.0		CRE	Mudstone	sandy	light	pink	brown	med silt	to vf sand	mod'ly strong
6.0	8.0		CRE	Mudstone	clayey	medium	red	brown	clay	to med silt	mod'ly strong
8.0	10.0		CRE	Mudstone	clayey	medium	red	brown	clay	to med silt	mod'ly strong
10.0	12.0		CRE	Mudstone	clayey	medium	red	brown	clay	to med silt	mod'ly strong
12.0	14.0		CRE	Mudstone	clayey	medium	red	brown	clay	to med silt	mod'ly strong
14.0	16.0		CRE	Mudstone	clayey	medium	red	brown	clay	to med silt	mod'ly strong
16.0	18.0		CRE	Mudstone	clayey	medium	red	brown	clay	to med silt	mod'ly strong
18.0	20.0		CRE	Mudstone	clayey	medium	red	brown	clay	to med silt	mod'ly strong
20.0	22.0		CRE	Mudstone	clayey	medium	red	brown	clay	to med silt	mod'ly strong
22.0	24.0		CRE	Mudstone	clayey	pale	pink	brown	clay	to med silt	mod'ly strong
24.0	26.0		CRE	Mudstone	clayey	pale	pink	brown	clay	to med silt	mod'ly strong
26.0	28.0		CRE	Mudstone	clayey	pale	pink	brown	clay	to med silt	mod'ly strong
28.0	30.0		CRE	Mudstone	clayey	pale	pink	brown	clay	to med silt	mod'ly strong
30.0	32.0		CRE	Mudstone	clayey	pale	pink	brown	clay	to med silt	mod'ly strong
32.0	34.0		CRE	Mudstone	clayey	pale	pink	brown	clay	to med silt	mod'ly strong
34.0	36.0		CRE	Mudstone	clayey	pale	pink	brown	clay	to med silt	mod'ly strong
36.0	38.0		CRE	Mudstone	clayey	pale	pink	brown	clay	to med silt	mod'ly strong
38.0	40.0		CRE	Mudstone	clayey	pale	pink	brown	clay	to med silt	mod'ly strong
40.0	42.0		CRE	Mudstone	clayey	light	pink	brown	clay	to med silt	mod'ly strong

DEPTHS From To (m) (m)	SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR	GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
42.0 44.0		CRE	Mudstone shaly	light pink	brown clay	to med silt	mod'ly strong	
44.0 46.0		CRE	Mudstone shaly	light pink	brown clay	to med silt	mod'ly strong	
46.0 48.0		CRE	Mudstone shaly	light pink	brown clay	to med silt	mod'ly strong	
48.0 50.0		CRE	Mudstone shaly	light pink	brown clay	to med silt	mod'ly strong	
50.0 52.0		CRE	Shale Clay	medium khaki	grey med silt	to vf sand	mod'ly strong	
52.0 54.0		CRE	Mudstone shaly	medium grey	med silt		mod'ly strong	
54.0 56.0		CRE	Mudstone shaly	medium grey	med silt		mod'ly strong	
56.0 58.0		CRE	Shale	dark grey	med silt		strong	
58.0 60.0		CRE	Shale	dark grey	med silt		strong	
60.0 62.0		PRO	Mudstone sandy	dark grey	med silt	to f sand	strong	
62.0 64.0		PRO	Mudstone shaly	dark grey	med silt	to f sand	very strong	

EOH at 64.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7260

SHEET : TOWNS

JOB NO : MAY

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 23-JUN-93

HOLE NUMBER : TRR09

COMMENTS:

LOGGED BY : PRD & DWW

TOTAL DEPTH : 88.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 532099

NORTHING: 8318604

R.L.: 20.0

SHEET 1 OF 3 HOLE NUMBER : TRR09

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor								
0.0	2.0		TER	Sand	silty	light	grey	brown	med silt	to med sand	loose	
2.0	4.0		TER	Sand		medium	red	brown	vf sand	to f sand	loose	
4.0	6.0		TER	Sand		medium	red	brown	vf sand	to f sand	loose	
6.0	8.0		TER	Laterite Sand	pisolitic	medium	red	brown	med silt	to vs pebble	weak	
8.0	10.0		CRE	Sand	clayey	light	red	brown	vf sand	to med sand	soft	
10.0	12.0		CRE	Sandstone	ferruginous	pale	pink	brown	f sand	to med sand	weak	
12.0	14.0		CRE	Sandstone Mudstone	ferruginous sandy	pale	pink	brown	f sand	to med sand	weak	
14.0	16.0		CRE	Mudstone	sandy	pale	pink	brown	med silt	to f sand	weak	
16.0	18.0		CRE	Sandstone Siltstone	quartzose siliceous	pale	pink	brown	med sand	to vc sand	weak	rounded qtz grains to 2mm and siltstone frags
18.0	20.0		CRE	Mudstone Chert	clayey	pale	pink	brown	clay	to vf sand	mod'ly strong	
20.0	22.0		CRE	Mudstone Chert	clayey	pale	pink	grey	clay	to vf sand	mod'ly strong	probably start of cretaceous unit 2 here
22.0	24.0		CRE	Mudstone Chert	clayey	pale	pink	grey	clay	to vf sand	mod'ly strong	
24.0	26.0		CRE	Mudstone	clayey	pale	grey	white	clay	to vf sand	mod'ly strong	
26.0	28.0		CRE	Mudstone	clayey	pale	grey	white	clay	to vf sand	strong	
28.0	30.0		CRE	Mudstone Chert	clayey	pale	grey	white	clay	to vf sand	strong	
30.0	32.0		CRE	Mudstone	clayey	pale	grey	white	clay	to vf sand	strong	
32.0	34.0		CRE	Mudstone	clayey	pale	grey	white	clay	to f sand	soft	
34.0	36.0		CRE	Mudstone	clayey	pale	grey	white	clay	to f sand	weak	
36.0	38.0		CRE	Mudstone	clayey	pale	grey	white	clay	to f sand	weak	minor mn present
38.0	40.0		CRE	Mudstone	clayey	pale	grey	white	clay	to f sand	weak	
40.0	42.0		CRE	Mudstone	clayey	pale	grey	white	clay	to f sand	weak	

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR		GRAIN SIZE			STRENGTH/ HARDNESS	COMMENTS	
From (m)	To (m)											
42.0	44.0		CRE	Mudstone	clayey	pale	grey	white	clay	to f sand	weak	
44.0	46.0		CRE	Mudstone	clayey	pale	pink	grey	clay	to f sand	weak	
46.0	48.0		CRE	Mudstone	clayey	medium	red	brown	clay	to f sand	weak	start of cretaceous unit 3 here
48.0	50.0		CRE	Mudstone	clayey	medium	red	brown	clay	to f sand	weak	
50.0	52.0		CRE	Mudstone	clayey	medium	red	brown	clay	to f sand	weak	
52.0	54.0		CRE	Mudstone	clayey	medium	red	brown	clay	to f sand	weak	
54.0	56.0		CRE	Mudstone	clayey	medium	red	brown	clay	to f sand	weak	
56.0	58.0		CRE	Mudstone	clayey	medium	red	brown	clay	to f sand	weak	
58.0	60.0		CRE	Mudstone	clayey	medium	red	brown	clay	to f sand	weak	
60.0	62.0		CRE	Mudstone	clayey	medium	red	brown	clay	to f sand	weak	
62.0	64.0		CRE	Mudstone	clayey	dark	red	brown	clay	to f sand	weak	
64.0	66.0		CRE	Mudstone	clayey	dark	red	brown	clay	to f sand	weak	
66.0	68.0		CRE	Mudstone	clayey	dark	red	brown	clay	to f sand	weak	
68.0	70.0		CRE	Mudstone	clayey	dark	red	brown	clay	to f sand	weak	
70.0	72.0		CRE	Mudstone	clayey	dark	red	brown	clay	to f sand	weak	
72.0	74.0		CRE	Mudstone	clayey	medium	red	brown	clay	to f sand	weak	
74.0	76.0		CRE	Mudstone	clayey	medium	red	brown	clay	to f sand	weak	
76.0	78.0		CRE	Mudstone	clayey	medium	tan	brown	clay	to f sand	weak	
78.0	80.0		PRO	Mudstone	clayey	medium	khaki	brown	clay	to f sand	strong	probably proterozoic as rock chips are hard
80.0	82.0		PRO	Mudstone	clayey	medium	khaki	brown	clay	to f sand	strong	
82.0	84.0		PRO	Mudstone	clayey	medium	khaki	brown	clay	to f sand	strong	
84.0	86.0		PRO	Mudstone	clayey	medium	khaki	brown	clay	to f sand	strong	
86.0	88.0		PRO	Mudstone	clayey	medium	khaki	brown	clay	to f sand	strong	

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR	GRAIN SIZE	STRENGTH/ HARDNESS	COMMENTS
From	To							
(m)	(m)							

EOH at 88.0 m

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor							
42.0	44.0		CRE	Mudstone	clayey sandy	dark	brown	f silt	to vf sand	weak	
44.0	46.0		CRE	Mudstone		dark	brown	med silt	to vf sand	weak	
46.0	48.0		CRE	Mudstone		dark	brown	med silt	to vf sand	weak	
48.0	50.0		PRO	Siltstone	sandy	medium	red	brown	med silt	mod'ly strong	possibly proterozoic
50.0	52.0	D2845	PRO	Sandstone	massive	light	red	brown	vf sand	strong	
52.0	54.0	D2845	PRO	Sandstone	massive	light	red	brown	vf sand	strong	
54.0	56.0	D2845	PRO	Sandstone	massive	light	red	brown	vf sand	strong	
56.0	58.0	D2845	PRO	Sandstone	massive	light	red	brown	vf sand	strong	

EOH at 58.0 m

PROJECT : CARPENTARIA
LOCALITY: EL 7260
SHEET : TOWNS
JOB NO : MAY

CONTRACTOR : GADEN DRILLING
RIG TYPE : UDR-650
DATE DRILLED: 25-JUN-93

HOLE NUMBER : TRR11

COMMENTS:

LOGGED BY : PRD & DWW
TOTAL DEPTH : 22.0

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 528200 NORTHING: 8315024 R.L.: 20.0
SHEET 1 OF 1 HOLE NUMBER : TRR11

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS		
From (m)	To (m)			major/ minor									
0.0	2.0		TER	Sand Mudstone	silty silty	light	red	brown	med silt	to f sand	loose		
2.0	4.0		CRE	Mudstone	sandy	light	red	brown	med silt	to f sand	mod'ly strong		
4.0	6.0		CRE	Mudstone	sandy	light	red	brown	med silt	to f sand	mod'ly strong		
6.0	8.0		CRE	Mudstone	sandy	light	red	brown	med silt	to f sand	mod'ly strong		
8.0	10.0		PRO	Sandstone	siliceous	medium	red	brown	f sand	to med sand	strong		
10.0	12.0		PRO	Sandstone Mudstone	siliceous	medium	red	brown	f sand	to med sand	strong		
12.0	14.0		PRO	Mudstone	ferruginous	medium	red	brown	med silt	to vf sand	weak		
14.0	16.0		PRO	Mudstone Sandstone	ferruginous siliceous	medium	red	brown	med silt	to vf sand	weak	interbedded qtz sandstone and ferruginous mudstone	
16.0	18.0	DZ846	PRO	Mudstone Sandstone	ferruginous siliceous	medium	red	brown	med silt	to vf sand	weak	interbedded qtz sandstone and ferruginous mudstone	
18.0	20.0	DZ846	PRO	Sandstone Mudstone	quartzose ferruginous	siliceous	medium	red	brown	f sand	to med sand	strong	
20.0	22.0	DZ846	PRO	Mudstone	ferruginous shaly		medium	red	brown	med silt	to vf sand	mod'ly strong	

EOK at 22.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7260

SHEET : TOWNS

JOB NO : MAY

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 25-JUN-93

HOLE NUMBER : TRR12

COMMENTS:

LOGGED BY : PRD & DWW

TOTAL DEPTH : 10.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 534268

NORTHING: 8322543

R.L.: 20.0

SHEET 1 OF 1 HOLE NUMBER : TRR12

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor								
0.0	2.0		PRO	Sandstone	ferruginous	medium	red	brown	f sand	to med sand	strong	
2.0	4.0		PRO	Sandstone	ferruginous	medium	red	brown	f sand	to med sand	strong	
4.0	6.0	DZ847	PRO	Sandstone	quartzose	light	pink	grey	f sand	to med sand	very strong	
6.0	8.0	DZ847	PRO	Sandstone Quartzite	quartzose	siliceous	light	pink	grey	f sand	to med sand	very strong
8.0	10.0	DZ847	PRO	Sandstone Quartzite	quartzose	siliceous	light	pink	grey	f sand	to med sand	very strong

EOH at 10.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7260

SHEET : TOWNS

JOB NO : MAY

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 26-JUN-93

HOLE NUMBER : TRR13

COMMENTS:

LOGGED BY : PRD & DWM

TOTAL DEPTH : 58.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 536416

NORTHING: 8323790

R.L.: 20.0

SHEET 1 OF 2 HOLE NUMBER : TRR13

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR		GRAIN SIZE			STRENGTH/ HARDNESS	COMMENTS		
From (m)	To (m)												
0.0	2.0		TER	Laterite Sand	pisolitic	medium	red	brown	f sand	to granule	loose		
2.0	4.0		TER	Laterite Sandstone	pisolitic	medium	red	brown	f sand	to granule	loose		
4.0	6.0		CRE	Sandstone	clayey	light	grey	brown	med silt	to f sand	weak		
6.0	8.0		CRE	Sandstone	clayey	light	grey	brown	med silt	to f sand	weak		
8.0	10.0		CRE	Sandstone	clayey	ferruginous	light	grey	brown	med silt	to f sand	weak	
10.0	12.0		CRE	Sandstone	clayey	medium	orange	brown	med silt	to f sand	weak		
12.0	14.0		CRE	Sandstone	clayey	medium	orange	brown	med silt	to f sand	firm		
14.0	16.0		CRE	Clay	sandy	patchy	grey	brown	clay	to f sand	soft		
16.0	18.0		CRE	Clay	sandy	patchy	white	brown	clay	to f sand	soft	boundary between cretaceous units 1 and 2 in this interval	
18.0	20.0		CRE	Clay	sandy	pale	grey	white	clay	to f sand	soft		
20.0	22.0		CRE	Sandstone Clay	clayey sandy	pale	grey	white	f sand	to med sand	weak-		
22.0	24.0		CRE	Sand	clayey	pale	grey	white	med silt	to f sand	soft		
24.0	26.0		CRE	Claystone	sandy	pale	grey		clay	to vf sand	weak		
26.0	28.0		CRE	Claystone	sandy	pale	grey		clay	to vf sand	weak	includes approx 5% siliceous siltstone fragments	
28.0	30.0		CRE	Claystone Sand	sandy	patchy	brown	grey	clay	to f sand	weak		
30.0	32.0		CRE	Claystone Sandstone	sandy clayey	patchy	brown	grey	clay	to f sand	weak		
32.0	34.0		CRE	Claystone	sandy	pale	brown	grey	clay	to f sand	weak		
34.0	36.0		CRE	Mudstone	ferruginous	light	orange	brown	med silt	to vf sand	weak	boundary of cretaceous unit 3?	
36.0	38.0		CRE	Mudstone Sandstone	ferruginous clayey	light	grey	brown	med silt	to vf sand	weak		
38.0	40.0		CRE	Clay	sandy	light	brown	grey	clay	to f sand	soft		
40.0	42.0		CRE	Clay	sandy	light	grey		clay	to f sand	soft		

DEPTHS		SAMPLE NUMBER	GEOLOGICAL TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor							
42.0	44.0		CRE	Mudstone	clayey	pale	grey	clay	to vf sand	weak	
44.0	46.0		CRE	Mudstone	clayey	pale	grey	clay	to vf sand	weak	
46.0	48.0		CRE	Mudstone	sandy	light	khaki	brown	med silt	to f sand	weak
48.0	50.0		PRO	Sandstone	quartzose	pale	brown	grey	f sand	strong	
50.0	52.0		PRO	Siltstone	siliceous						
52.0	54.0	DZ848	PRO	Mudstone	clayey	light	khaki	brown	med silt	to vf sand	weak
54.0	56.0	DZ848	PRO	Sandstone	quartzose	light	grey		f sand	strong	
56.0	58.0	DZ848	PRO	Sandstone	quartzose	light	grey		f sand	strong	
				Mudstone	siliceous						
EOH at 58.0 m											

PROJECT : CARPENTARIA
LOCALITY: EL 7260
SHEET : TOWNS
JOB NO : MAY

CONTRACTOR : GADEN DRILLING
RIG TYPE : UDR-650
DATE DRILLED: 27-JUN-93

HOLE NUMBER : TRR14

COMMENTS:

LOGGED BY : PRD & DWW
TOTAL DEPTH : 46.0

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 530276 NORTHING: 8328784 R.L.: 20.0
SHEET 1 OF 1 HOLE NUMBER : TRR14

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR		GRAIN SIZE			STRENGTH/ HARDNESS	COMMENTS		
From (m)	To (m)												
0.0	2.0		TER	Laterite Sand	pisolitic	medium	red	brown	f sand	to vs pebble	weak		
2.0	4.0		TER	Laterite Sand	pisolitic	medium	red	brown	f sand	to vs pebble	weak		
4.0	6.0		CRE	Sandstone Sand	clayey	light	red	brown	vf sand	to med sand	weak		
6.0	8.0		CRE	Sandstone	clayey	light	red	tan	f sand	to med sand	weak		
8.0	10.0		CRE	Sandstone	clayey	light	red	tan	f sand	to med sand	weak		
10.0	12.0		CRE	Sand	silty	light	brown	grey	vf sand	to f sand	friable		
12.0	14.0		CRE	Grit	quartzose	light	brown	grey	c sand	to granule	friable	contains laminated siliceous siltstone fragments to 1.5c	
14.0	16.0		CRE	Conglomerate	gritty	sandy	light	brown	grey	c sand	to s pebble	friable	
16.0	18.0		CRE	Claystone	sandy	pale	grey	white	clay	to f sand	weak	cret. unit 2? contains clay, qtz frags to 2mm & clayston	
18.0	20.0		CRE	Claystone	silty	pale	grey	white	clay	to med silt	weak		
20.0	22.0		CRE	Claystone Siltstone	silty laminated	pale	grey	white	clay	to med silt	weak	contains laminated siltstone frags - algal material?	
22.0	24.0		CRE	Clay Mudstone		dark	brown		med silt	to vf sand	weak		
24.0	26.0		PRO	Mudstone Siltstone	ferruginous laminated	medium	tan	brown	med silt	to vf sand	weak		
26.0	28.0		PRO	Mudstone Siltstone	ferruginous laminated	medium	tan	brown	med silt	to vf sand	weak	interpreted as interbedded silic. dolomite & mudstone	
28.0	30.0		PRO	Mudstone	ferruginous	medium	tan	brown	med silt	to vf sand	weak		
30.0	32.0		PRO	Mudstone	ferruginous	medium	tan	brown	med silt	to vf sand	weak		
32.0	40.0		PRO	Mudstone	ferruginous	medium	tan	brown	med silt	to vf sand	weak		
40.0	46.0	DZB49	PRO	Mudstone Sandstone	ferruginous	medium	tan	brown	med silt	to vf sand	weak		

EOH at 46.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7260

SHEET : TOWNS

JOB NO : MAY

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 27-JUN-93

HOLE NUMBER : TRR15

COMMENTS:

LOGGED BY : PRD & DWW

TOTAL DEPTH : 22.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 528466

NORTHING: 8330800

R.L.: 20.0

SHEET 1 OF 1 HOLE NUMBER : TRR15

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor								
0.0	2.0		TER	Sand		medium	grey	brown	f sand	to granule	loose	
				Laterite	pisolitic							
2.0	4.0		TER	Laterite	pisolitic	medium	red	brown	c sand	to vs pebble	loose	
4.0	6.0		CRE	Claystone		pale	grey	white	clay	to med silt	weak	trace mn
6.0	8.0	DZ850	CRE	Claystone		pale	grey	white	clay	to med silt	weak	trace mn
8.0	10.0	DZ851	CRE	Claystone		pale	grey	white	clay	to med silt	weak	abundant mn
10.0	12.0	DZ852	CRE	Claystone	sandy	pale	grey	white	clay	to med silt	weak	trace mn
12.0	14.0		CRE	Sand	clayey	medium	orange	brown	vf sand	to med sand	soft	
				Clay								
14.0	16.0		CRE	Sand	clayey	medium	orange	brown	vf sand	to med sand	soft	
16.0	18.0		CRE	Grit	sandy	medium	orange	brown	med sand	to granule	loose	
18.0	20.0		CRE	Conglomerate		medium	tan	brown	med sand	to granule	loose	
				Siltstone	siliceous laminated							
20.0	22.0	DZ853	PRO	Siltstone	siliceous laminated	medium	tan	brown	med silt		mod'ly strong	
				Mudstone	ferruginous							

EOH at 22.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7260

SHEET : TOWNS

JOB NO : MAY

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 27-JUN-93

HOLE NUMBER : TRR16

COMMENTS:

LOGGED BY : PRD & DW

TOTAL DEPTH : 52.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 524912

NORTHING: 8329946

R.L.: 20.0

SHEET 1 OF 2 HOLE NUMBER : TRR16

DEPTHS From To (m) (m)	SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
0.0 2.0		TER	Sand		medium	red	brown	f sand	to c sand	loose	
2.0 4.0		TER	Laterite Clay	pisolitic sandy	medium	red	brown	f sand	to c sand	loose	
4.0 6.0		CRE	Laterite Sand	pisolitic quartzose	pale	tan	brown	med sand	to c sand	loose	
6.0 8.0		CRE	Sand	quartzose	pale	tan	brown	vf sand	to med sand	loose	
8.0 10.0		CRE	Sand	quartzose	pale	tan	brown	vf sand	to med sand	loose	
10.0 12.0		CRE	Sand	quartzose	pale	tan	brown	f sand	to c sand	loose	
12.0 14.0		CRE	Sand	quartzose	pale	tan	brown	f sand	to c sand	loose	
14.0 16.0		CRE	Sandstone		pale	tan	brown	med sand	to vc sand	weak	
16.0 18.0		CRE	Sand	gritty	pale	tan	brown	c sand	to granule	loose	
18.0 20.0		CRE	Grit Conglomerate	quartzose	pale	tan	brown	c sand	to granule	loose	
20.0 22.0		CRE	Grit Claystone	quartzose	patchy	grey	brown	c sand	to granule	loose	
22.0 24.0		CRE	Clay	sandy	light	pink	grey	clay	to med silt	weak	
24.0 26.0		CRE	Siltstone	laminated	light	pink	grey	clay	to med silt	weak	
26.0 28.0		CRE	Claystone	sandy	light	pink	grey	clay	to med silt	weak	
28.0 30.0		CRE	Siltstone	laminated	pale	grey		clay	to med silt	weak	abundant siltstone fragments in samples to 32m
30.0 32.0		CRE	Claystone	sandy	pale	grey	white	clay	to med silt	weak	
32.0 34.0		CRE	Siltstone	laminated	pale	grey	white	clay	to med silt	weak	
34.0 36.0		CRE	Claystone	sandy	patchy	grey	brown	clay	to med silt	weak	start cretaceous unit 3
36.0 38.0		CRE	Mudstone	ferruginous	medium	brown		med silt	to f sand	weak	
38.0 40.0		PRO	Sandstone	ferruginous	medium	brown		vf sand	to f sand	mod'ly strong	could be proterozoic sediments
40.0 42.0		PRO	Sandstone	ferruginous	medium	brown		vf sand	to f sand	weak	chocolatey brown snst & siltstone, well indurated > prob
			Mudstone								includes small (1-3mm) angular qtz frags

EOH at 52.0 m

EOH at 58.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7260

SHEET : TOWNS

JOB NO : MAY

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 28-JUN-93

HOLE NUMBER : TRR17

COMMENTS:

LOGGED BY : PRD & DWW

TOTAL DEPTH : 58.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 523377

NORTHING: 8327858

R.L.: 20.0

SHEET 1 OF 2 HOLE NUMBER : TRR17

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS	
From (m)	To (m)			major/ minor								
0.0	2.0		TER	Laterite Sand	pisolitic	medium	red	brown	med sand	to vs pebble	loose	
2.0	4.0		TER	Laterite Sand	pisolitic	medium	red	brown	med sand	to vs pebble	loose	
4.0	6.0		CRE	Sandstone Sand	silty	light	tan	brown	vf sand	to med sand	weak	
6.0	8.0		CRE	Sandstone Sand	silty	light	tan	brown	vf sand	to med sand	weak	
8.0	10.0		CRE	Sandstone Sand	silty	light	tan	brown	vf sand	to med sand	weak	
10.0	12.0		CRE	Sandstone Sand		light	tan	brown	vf sand	to med sand	weak	
12.0	14.0		CRE	Sandstone Sand	gritty	pale	tan	brown	c sand	to granule	weak	
14.0	16.0		CRE	Sand	quartzose	pale	grey		c sand	to vc sand	loose	
16.0	18.0		CRE	Grit Sand	sandy	medium	tan	brown	med sand	to granule	soft	
18.0	20.0		CRE	Grit Sand	sandy	medium	tan	brown	med sand	to granule	soft	
20.0	22.0		CRE	Conglomerate	clayey	light	brown	grey	granule	to s pebble	soft	start unit 2?
22.0	24.0		CRE	Conglomerate Clay	sandy	light	brown	grey	f sand	to med pebble	soft	
24.0	26.0		CRE	Sandstone Mudstone	ferruginous	light	tan	brown	vf sand	to med sand	weak	could be start of proterozoic
26.0	28.0		CRE	Sandstone Mudstone	ferruginous	light	tan	brown	vf sand	to med sand	weak	
28.0	30.0		CRE	Sandstone Mudstone	ferruginous	light	tan	brown	vf sand	to med sand	weak	
30.0	32.0		PRO	Sandstone	ferruginous	medium	red	brown	f sand	to med sand	mod'ly strong	
32.0	34.0		PRO	Siltstone	siliceous	medium	red	brown	med silt	to vf sand	mod'ly strong	
34.0	36.0		PRO	Mudstone	ferruginous	medium	brown		med silt		mod'ly strong	
36.0	38.0		PRO	Mudstone Clay	ferruginous	medium	red	brown	med silt	to vf sand	weak	rock is soft & clayey - cretaceous?
38.0	40.0		PRO	Mudstone Clay	ferruginous	medium	red	brown	med silt	to vf sand	weak	sample is like thick clayey soup with small rock chips
40.0	42.0		PRO	Mudstone Clay	ferruginous	medium	red	brown	med silt	to vf sand	weak	sample is like thick clayey soup with small rock chips

PROJECT : CARPENTARIA

LOCALITY: EL 7260

SHEET : TOWNS

JOB NO : MAY

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 28-JUN-93

HOLE NUMBER : TRR18

COMMENTS:

LOGGED BY : PRD & DWW

TOTAL DEPTH : 56.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 522024

NORTHING: 8325727

R.L.: 20.0

SHEET 1 OF 2 HOLE NUMBER : TRR18

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor							
0.0	2.0		TER	Sand		medium	red	brown	med sand	to vs pebble	loose
				Pisolite	lateritic						
2.0	4.0		TER	Sand		medium	red	brown	med sand	to vs pebble	loose
				Pisolite	lateritic						
4.0	6.0		CRE	Sandstone	clayey	light	orange	brown	vf sand	to f sand	weak
				Sand							
6.0	8.0		CRE	Sandstone	clayey	light	orange	brown	vf sand	to f sand	weak
				Sand							
8.0	10.0		CRE	Clay	sandy	medium	orange	brown	clay	to f sand	firm
10.0	12.0		CRE	Sand	quartzose	light	grey	brown	med sand	to vc sand	friable
12.0	14.0		CRE	Sand	clayey	light	grey	brown	vf sand	to med sand	soft
14.0	16.0		CRE	Sand	clayey	light	grey		vf sand	to med sand	soft
16.0	18.0		CRE	Sand	clayey	light	grey	brown	f sand	to c sand	soft
				Sandstone	ferruginous						qtz frags present also
18.0	20.0		CRE	Grit	clayey	medium	red	brown	vf sand	to granule	soft
20.0	22.0		CRE	Sand	clayey	medium	red	brown	vf sand	to med sand	soft
				Clay							
22.0	24.0		CRE	Conglomerate	gritty	medium	red	brown	f sand	to vs pebble	soft
					clayey						clasts include: qtz grains, fe snst, cherty frags
24.0	26.0		CRE	Conglomerate	clayey	light	grey	brown	f sand	to s pebble	soft
				Clay	sandy						
26.0	28.0		CRE	Conglomerate	clayey	light	grey	brown	f sand	to s pebble	soft
				Clay	sandy						
28.0	30.0		CRE	Conglomerate	clayey	light	grey	brown	f sand	to s pebble	soft
				Clay	sandy						
30.0	32.0		CRE	Clay		light	grey	brown	clay	to s pebble	soft
				Siltstone	siliceous						clay with cherty frags (2-3 cm diameter)
32.0	34.0		CRE	Clay		light	grey	brown	clay	to f sand	weak
				Sandstone	clayey						contains pisolites - contamination?
34.0	36.0		CRE	Clay		light	grey	brown	clay	to f sand	weak
				Sandstone	clayey						contains pisolites - contamination?
36.0	38.0		CRE	Clay		light	grey	brown	clay	to f sand	weak
				Sandstone	clayey						
38.0	40.0		CRE	Sandstone		light	grey	brown	f sand	to med sand	weak
				Ironstone	pisolitic						
40.0	42.0		CRE	Clay	gritty	light	grey	brown	clay	to granule	weak
				Ironstone	pisolitic						

DEPTHS From (m)	To (m)	SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR	GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
42.0	44.0		CRE	Sandstone	light grey brown	f sand	to med sand	weak	sample is clayey liquid with frags of snst & fe snst
44.0	46.0		PRO	Sandstone	ferruginous	f sand	to med sand	mod'ly strong	
46.0	48.0		PRO	Sandstone	ferruginous	f sand	to med sand	mod'ly strong	
48.0	50.0		PRO	Sandstone	ferruginous	f sand	to med sand	mod'ly strong	
50.0	52.0		PRO	Chert					
50.0	52.0		PRO	Dolomite	silicified	medium tan brown		strong	cavities present
52.0	56.0	DZ856	PRO	Dolomite	silicified	medium tan brown		strong	cavities present

EOH at 56.0 m

PROJECT : CARPENTARIA
LOCALITY: EL 7260
SHEET : TOWNS
JOB NO : MAY

CONTRACTOR : GADEN DRILLING
RIG TYPE : UDR-650
DATE DRILLED: 29-JUN-93

HOLE NUMBER : TRR19

COMMENTS:

LOGGED BY : PRD & DWW
TOTAL DEPTH : 52.0

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 526285 NORTHING: 8331811

R.L.: 20.0

SHEET 1 OF 2 HOLE NUMBER : TRR19

DEPTHS From To (m) (m)	SAMPLE NUMBER	GEOLOGICAL TIME	ROCK TYPES major/ minor	COLOUR	GRAIN SIZE	STRENGTH/ HARDNESS	COMMENTS
0.0 2.0		TER	Laterite sandy	medium red brown	f sand to vs pebble	weak	
2.0 4.0		TER	laterite sandy	medium red brown	f sand to vs pebble	weak	
4.0 6.0		TER	Clay Sand	light khaki brown	clay to med silt	stiff	
6.0 8.0		CRE	Sand	light grey brown	vf sand to med sand	soft	
8.0 10.0	DZ857	CRE	Claystone sandy	light grey white	clay to f sand	weak	
10.0 12.0	DZ858	CRE	Claystone sandy	light grey white	clay to f sand	weak	
12.0 14.0	DZ859	CRE	Claystone sandy	light grey white	clay to f sand	weak	
14.0 16.0	DZ860	CRE	Claystone sandy	medium brown grey	clay to f sand	weak	
16.0 18.0		CRE	Claystone sandy	pale grey white	clay to f sand	weak	
18.0 20.0		CRE	Chert Claystone	pale grey white	clay to f sand	weak	
20.0 22.0		CRE	Chert Claystone	pale grey white	clay to f sand	weak	
22.0 24.0		CRE	Chert Claystone	pale grey white	clay to f sand	weak	
24.0 26.0		CRE	Chert Claystone	pale grey white	clay to f sand	weak	
26.0 28.0		CRE	Chert Sandstone	pale grey white	f sand to med sand	weak	
28.0 30.0		CRE	Chert Sandstone	pale grey white	f sand to med sand	weak	
30.0 32.0		CRE	Chert Sandstone	pale grey white	f sand to med sand	weak	
32.0 34.0		CRE	Chert Sandstone	pale grey white	f sand to med sand	weak	
34.0 36.0		CRE	Chert Claystone	pale grey white	clay to vf sand	weak	
36.0 38.0		CRE	Claystone sandy	pale grey white	clay to vf sand	weak	
38.0 40.0		CRE	Sandstone clayey	light grey	vf sand to f sand	strong	could be cre or pro
40.0 42.0		CRE	Siltstone Sandstone	light grey	vf sand to med sand	strong	snst & rare cherty frags

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor							
42.0	44.0		CRE	Sandstone		light	grey	f sand	to med sand	strong	
44.0	46.0		CRE	Siltstone							
				Sandstone	clayey	light	grey	vf sand	to med sand	weak	cherty frags set in clayey sand matrix
				Chert							
46.0	48.0		PRO	Sandstone	ferruginous	medium	orange brown	vf sand	to c sand	mod'ly strong	start 50u snst with loose sand layer on it - contact?
				Sand							
48.0	50.0	DZ861	PRO	Sandstone	quartzose	medium	brown	f sand	to med sand	strong	
50.0	52.0	DZ861	PRO	Sandstone	quartzose	medium	brown	f sand	to med sand	strong	

EOH at 52.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7341

SHEET : TOWNS

JOB NO : MBK

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 29-JUN-93

HOLE NUMBER : TRR20

COMMENTS:

LOGGED BY : PRD & DWW

TOTAL DEPTH : 46.0

R.L.: 20.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 527570

NORTHING: 8333980

SHEET 1 OF 2 HOLE NUMBER : TRR20

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS	
From (m)	To (m)			major/ minor								
0.0	2.0		TER	Laterite Sand	pisolitic	medium	red	brown	granule	to s pebble	loose	
2.0	4.0		TER	Laterite Sand	pisolitic	medium	red	brown	granule	to s pebble	loose	
4.0	6.0		CRE	Clay	sandy	medium	brown	grey	clay	to f sand	soft	
6.0	8.0		CRE	Claystone	sandy	pale	grey	white	clay	to vf sand	weak	trace mn
8.0	10.0		CRE	Claystone	sandy	pale	grey	white	clay	to vf sand	weak	
10.0	12.0		CRE	Claystone	sandy	pale	grey	white	clay	to vf sand	weak	
12.0	14.0		CRE	Claystone	sandy	pale	grey	white	clay	to vf sand	weak	
14.0	16.0		CRE	Claystone Clay	sandy ferruginous	patchy	grey	brown	clay	to f sand	firm	
16.0	18.0		CRE	Clay	sandy	light	orange	brown	clay	to vf sand	soft	
18.0	20.0		CRE	Sand	clayey	light	orange	brown	vf sand	to f sand	soft	
20.0	22.0		CRE	Sand	clayey	light	orange	brown	f sand	to med sand	soft	
22.0	24.0		CRE	Grit	clayey	quartzose	light	orange	brown	c sand	to granule	soft
24.0	26.0		CRE	Grit	clayey	quartzose	light	grey		c sand	to granule	soft
26.0	28.0		CRE	Grit	clayey	quartzose	light	grey		c sand	to granule	soft
28.0	30.0		CRE	Sand	gritty	clayey	light	grey		med sand	to vc sand	soft
30.0	32.0		PRO	Mudstone Sandstone	laminated	light	brown		med silt	to vf sand	weak	weathered basement?
32.0	34.0		PRO	Mudstone Clay	siliceous	light	brown		med silt	to vf sand	weak	still contains rounded (pisolitic) ironstone clasts
34.0	36.0		PRO	Chert Sandstone		light	purple	brown	med silt		weak	
36.0	38.0		PRO	Chert Sandstone		light	purple	brown	med silt		weak	
38.0	40.0		PRO	Chert Sandstone		light	purple	brown	med silt		weak	
40.0	42.0		PRO	Sandstone		light	purple	brown	vf sand	to f sand	mod'ly strong	minor cherty frags

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)									
42.0	44.0	DZ862	PRO	Sandstone	light	purple brown	vf sand	to f sand	mod'ly strong	minor cherty frags
44.0	46.0	DZ862	PRO	Sandstone	light	purple brown	vf sand	to f sand	mod'ly strong	minor cherty frags

ECW at 46.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7341

SHEET : TOWNS

JOB NO : MBK

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 29-JUN-93

HOLE NUMBER : TRR21

COMMENTS:

LOGGED BY : PRD & DMW

TOTAL DEPTH : 40.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 529063

NORTHING: 8336023

R.L.: 20.0

SHEET 1 OF 1 HOLE NUMBER : TRR21

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From	To										
(m)	(m)										
0.0	2.0		TER	Laterite Sand	pisolitic	medium	red	brown	vc sand	to vs pebble	loose
2.0	4.0		TER	Laterite Sand	pisolitic	medium	red	brown	vc sand	to vs pebble	loose
4.0	6.0		CRE	Mudstone		light	grey	brown	med silt	to vf sand	weak
6.0	8.0		CRE	Mudstone		light	grey	brown	med silt	to vf sand	weak
8.0	10.0		CRE	Mudstone Clay		medium	grey	brown	med silt	to vf sand	soft
10.0	12.0		CRE	Clay Mudstone	gritty sandy	light	grey	brown	clay	to f sand	soft
12.0	14.0		CRE	Clay	gritty	light	grey	brown	clay	to f sand	soft mainly clay with various rock frags
14.0	16.0		CRE	Clay	gritty	light	grey		clay	to f sand	soft
16.0	18.0		CRE	Clay Chert	gritty	light	grey		clay	to f sand	soft
18.0	20.0		CRE	Chert Sandstone	clayey	dark	grey		med silt		weak
20.0	22.0		CRE	Chert Clay		dark	grey		med silt		weak
22.0	24.0		PRO	Chert Sandstone		medium	grey		med silt		mod'ly strong probably basement since ?15m?
24.0	26.0		PRO	Sandstone	cherty	medium	grey		med silt	to vf sand	mod'ly strong
26.0	28.0		PRO	Chert	laminated	medium	grey		med silt		strong
28.0	30.0		PRO	Chert	laminated	medium	grey		med silt		strong
30.0	32.0		PRO	Chert	laminated	medium	grey		med silt		strong
32.0	34.0		PRO	Chert	laminated	medium	grey		med silt		strong
34.0	36.0	DZ915	PRO	Chert	laminated	medium	grey		med silt		strong
36.0	38.0	DZ915	PRO	Chert	laminated	medium	grey		med silt		strong
38.0	40.0	DZ915	PRO	Chert	laminated	light	brown		med silt		strong

EOH at 40.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7341

SHEET : TOWNS

JOB NO : MBK

GRID: AMG

ZONE: 53

RELIABILITY: SATL

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 30-JUN-93

EASTING: 530488

NORTHING: 8338091

SHEET 1

OF 2

HOLE NUMBER : TRR22

HOLE NUMBER : TRR22

COMMENTS:

LOGGED BY : PRD & DWW

TOTAL DEPTH : 46.0

R.L.: 20.0

DEPTHS From (m)	To (m)	SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS		
0.0	2.0		TER	Laterite	pisolitic	weathered	medium	red	vf silt	to c silt	stiff		
2.0	4.0		TER	Laterite	weathered		medium	red	vf silt	to c silt	stiff		
4.0	6.0		CRE	Chert			pale	grey	vf silt	to med silt	hard		
6.0	8.0		CRE	Clay	sandy		pale	grey	vf silt	to med silt	weak		
8.0	10.0		CRE	Claystone	siliceous		pale	grey	vf silt	to med silt	weak		
10.0	12.0		CRE	Chert	quartz								
12.0	14.0		CRE	Claystone	ferruginous	sandy	light	grey	brown	vf silt	to med silt	weak	
14.0	16.0		CRE	Chert	quartz								
16.0	18.0		CRE	Claystone	ferruginous	sandy	light	grey	orange	vf silt	to med silt	weak	
18.0	20.0		CRE	Chert	quartz								
20.0	22.0		CRE	Claystone	ferruginous	sandy	light	red	orange	vf silt	to med silt	weak	
22.0	24.0		CRE	Chert	quartz								
24.0	26.0		CRE	Clay	ferruginous	sandy	light	red	orange	vf silt	to med silt	weak	
26.0	28.0		CRE	Chert	quartz		m light	orange		vf silt	to med silt	weak	
28.0	30.0		CRE	Clay	ferruginous	silty	m light	red	orange	vf silt	to med silt	weak	
30.0	32.0		CRE	Chert	quartz		m light	grey	orange	vf silt	to med silt	weak	
32.0	34.0		CRE	Clay	ferruginous	silty	m light	grey	orange	vf silt	to med silt	weak	
34.0	36.0		CRE	Chert	quartz		m light	grey	orange	vf silt	to med silt	weak	
36.0	38.0		CRE	Clay	ferruginous	sandy	medium	orange		vf silt	to c silt	stiff	
38.0	40.0		CRE	Clay	ferruginous	sandy	medium	orange		vf silt	to c silt	stiff	
40.0	42.0		CRE	Clay	silty	ferruginous	medium	grey	orange	clay	to f silt	stiff	
42.0	44.0		CRE	Clay	ferruginous	silty	medium	grey	orange	vf silt	to med silt	hard	
44.0	46.0		CRE	Chert	laminated								
46.0	48.0		CRE	Clay	ferruginous	silty	medium	grey	orange	vf silt	to med silt	hard	
48.0	50.0		CRE	Chert	laminated								
50.0	52.0		CRE	Clay	ferruginous	sandy	medium	orange		vf silt	to med silt	stiff	
52.0	54.0		CRE	Clay	ferruginous	sandy	m light	orange		vf silt	to med silt	stiff	
54.0	56.0		CRE	Clay	ferruginous	sandy	m light	orange		vf silt	to med silt	stiff	
56.0	58.0		CRE	Sandstone	clayey	ferruginous	light	orange		f silt	to c silt	hard	could be pro
58.0	60.0		CRE	Chert			light	brown		vf sand	to f sand	weak	
60.0	62.0		CRE	Sandstone	clayey		light	brown		vf sand	to f sand	weak	sample is clayey soup, rock frags are fine-grained sands

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor							
42.0	44.0		CRE	Grit	ferruginous clayey	light	brown	med sand	to granule	soft	sample has qtz grains & small (1-3mm) rounded ironstones
44.0	46.0		PRO	Sandstone	massive	light	brown grey	vf sand	to f sand	weak	could be cre or pro. bit blocked, hole abandoned

EOH at 46.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7341

SHEET : TOWNS

JOB NO : MBK

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 30-JUN-93

HOLE NUMBER : TRR23

COMMENTS:

LOGGED BY : PRD & DWW

TOTAL DEPTH : 58.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 524925

NORTHING: 8333840

R.L.: 20.0

SHEET 1 OF 2 HOLE NUMBER : TRR23

DEPTHS From (m)	To (m)	SAMPLE NUMBER	GEOLOGICAL TIME	ROCK TYPES major/ minor		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
0.0	2.0		TER	Soil Laterite	sandy pisolitic	ferruginous transported	light orange	med silt	to vf sand	soft	
2.0	4.0		TER	Clay Sandstone	sandy	lateritic	medium orange	brown clay	to med sand	firm	
4.0	6.0		CRE	Sandstone	clayey		pale grey	vf sand	to f sand	weak	
6.0	8.0		CRE	Sandstone Claystone	clayey		light grey	brown vf sand	to f sand	weak	
8.0	10.0		CRE	Sandstone	clayey		banded grey	brown vf sand	to f sand	mod'ly strong	could be pro
10.0	12.0		CRE	Sandstone	siliceous		banded grey	brown vf sand	to f sand	strong	well indurated - pro?
12.0	14.0		CRE	Sandstone Mudstone	clayey sandy		banded grey	brown vf sand	to f sand	weak	
14.0	16.0		CRE	Sandstone Mudstone	clayey sandy		banded grey	brown vf sand	to f sand	weak	
16.0	18.0		CRE	Sandstone Mudstone	clayey sandy		banded grey	brown vf sand	to f sand	weak	
18.0	20.0		CRE	Sandstone Mudstone	clayey sandy		banded grey	brown vf sand	to f sand	weak	
20.0	22.0		CRE	Sand Sandstone	silty		medium purple	brown vf sand	to f sand	soft	
22.0	24.0		CRE	Sandstone	quartzose		light grey	f sand		strong	basement?
24.0	26.0		CRE	Sandstone	clayey		banded brown	grey vf sand	to f sand	weak	quite soft - cretaceous?
26.0	28.0		CRE	Sandstone	clayey		banded brown	grey vf sand	to f sand	weak	
28.0	30.0		CRE	Sandstone Siltstone	siliceous	laminated	light grey	vf sand	to f sand	weak	
30.0	32.0		CRE	Sandstone Siltstone	siliceous	laminated	light grey	vf sand	to f sand	weak	
32.0	34.0		CRE	Sandstone	clayey		light brown	grey vf sand	to f sand	weak	
34.0	36.0		CRE	Sandstone	clayey		banded purple	grey vf sand	to f sand	weak	
36.0	38.0		CRE	Sandstone	clayey		banded purple	grey vf sand	to f sand	weak	
38.0	40.0		CRE	Sandstone Chert	clayey		patchy grey	orange vf sand	to f sand	weak	
40.0	42.0		CRE	Sandstone Chert	clayey laminated		pale grey	vf sand		weak	

DEPTHS From (m)	To (m)	SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
42.0	44.0		PRO	Chert	laminated	ferruginous	medium	grey	med silt to c silt	mod'ly strong	possibly silicified dolomite - balbirini formation
44.0	46.0		PRO	Chert	laminated	ferruginous	medium	grey	med silt to c silt	mod'ly strong	
46.0	48.0		PRO	Chert	laminated		medium	grey	med silt	strong	
48.0	50.0		PRO	Chert	laminated		medium	grey	med silt	strong	
50.0	52.0		PRO	Chert	laminated		medium	grey	med silt	strong	
52.0	54.0	DZ863	PRO	Chert Sandstone	laminated		medium	grey	med silt	strong	
54.0	56.0	DZ863	PRO	Chert Sandstone	laminated		medium	grey	med silt	strong	
56.0	58.0	DZ863	PRO	Sandstone Chert			medium	red brown	vf sand to med sand	strong	

EOH at 58.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7341

SHEET : TOWNS

JOB NO : MBK

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 01-JUL-93

HOLE NUMBER : TRR24

COMMENTS:

LOGGED BY : PRD & DWW

TOTAL DEPTH : 64.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 523885

NORTHING: 8336175

R.L.: 20.0

SHEET 1 OF 2 HOLE NUMBER : TRR24

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor							
0.0	2.0		TER	Soil	sandy	light	orange	vf sand	to f sand	soft	
2.0	4.0		TER	Soil	sandy clayey	light	orange	vf sand	to f sand	soft	
4.0	6.0		TER	Sandstone	lateritic	light	red	orange vf sand	to f sand	firm	
6.0	8.0		CRE	Sandstone	clayey	light	orange	f sand	to med sand	stiff	
8.0	10.0		CRE	Claystone Chert	laminated	light	grey	clay	to med silt	weak	
10.0	12.0		CRE	Claystone Clay	sandy	light	grey	brown vf silt	to c silt	hard	
12.0	14.0		CRE	Claystone Clay	sandy ferruginous	light	grey	brown vf silt	to c silt	hard	
14.0	16.0		CRE	Sandstone	clayey	light	orange	brown vf sand	to f sand	weak	
16.0	18.0		CRE	Sandstone Chert	clayey laminated ferruginous	light	orange	brown vf sand	to f sand	weak	
18.0	20.0		CRE	Mudstone	ferruginous	medium	orange	brown med silt	to vf sand	weak	
20.0	22.0		CRE	Mudstone	ferruginous clayey	medium	orange	brown med silt	to vf sand	hard	
22.0	24.0		CRE	Mudstone Sandstone	ferruginous clayey	medium	orange	brown med silt	to vf sand	hard	
24.0	26.0		CRE	Mudstone Sandstone	ferruginous clayey	medium	orange	brown med silt	to vf sand	hard	
26.0	28.0		CRE	Mudstone Sandstone	ferruginous clayey	patchy	red	brown med silt	to vf sand	hard	
28.0	30.0		CRE	Sandstone	ferruginous	light	brown	vf sand	to f sand	weak	
30.0	32.0		CRE	Sandstone	ferruginous	light	brown	vf sand	to med sand	weak	
32.0	34.0		CRE	Sandstone	ferruginous	med dark	brown	vf sand	to med sand	weak	
34.0	36.0		CRE	Sandstone	ferruginous	med dark	brown	vf sand	to f sand	weak	
36.0	38.0		CRE	Mudstone	sandy laminated	patchy	red	brown med silt	to vf sand	weak	
38.0	40.0		CRE	Mudstone	sandy laminated	patchy	red	brown med silt	to vf sand	weak	
40.0	42.0		CRE	Sandstone	silty ferruginous	medium	orange	brown vf sand	to f sand	weak	

SHEET 2 OF 2 HOLE NUMBER : TRR24

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor								
42.0	44.0		CRE	Sandstone Chert	ferruginous	medium	orange	brown	vf sand	to f sand	weak	
44.0	46.0		CRE	Sandstone Chert	ferruginous	medium	orange	brown	vf sand	to f sand	weak	
46.0	48.0		CRE	Sandstone Chert	ferruginous	patchy	red	brown	med silt	to vf sand	weak	
48.0	50.0		CRE	Sandstone	ferruginous	medium	orange	brown	vf sand	to f sand	weak	
50.0	52.0		CRE	Sandstone	ferruginous	medium	orange	brown	vf sand	to f sand	weak	
52.0	54.0		CRE	Sandstone	ferruginous	medium	orange	brown	vf sand	to f sand	weak	
54.0	56.0		PRO	Sandstone	ferruginous laminated	medium	orange	brown	vf sand	to f sand	weak	possibly basement material
56.0	58.0		PRO	Sandstone Chert	ferruginous laminated	patchy	red	brown	med silt	to vf sand	weak	
58.0	60.0	D2864	PRO	Sandstone Chert	ferruginous laminated	patchy	red	brown	med silt	to vf sand	weak	
60.0	62.0	D2864	PRO	Chert Sandstone	laminated ferruginous	patchy	red	brown	med silt	to vf sand	weak	
62.0	64.0	D2864	PRO	Sandstone Chert	ferruginous laminated	patchy	red	brown	med silt	to vf sand	weak	

EOH at 64.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7341

SHEET : TOWNS

JOB NO : MBK

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 01-JUL-93

HOLE NUMBER : TRR25

COMMENTS:

LOGGED BY : PRD & DW

TOTAL DEPTH : 22.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 520179

NORTHING: 8335916

R.L.: 20.0

SHEET 1 OF 1 HOLE NUMBER : TRR25

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor								
0.0	2.0		TER	Sand	lateritic	medium	red		vf sand	to med sand	soft	
2.0	4.0		PRO	Laterite Sandstone	pisolitic siliceous	patchy	red	grey	vf sand	to med sand	weak	
4.0	6.0		PRO	Sandstone	siliceous	patchy	red	grey	vf sand	to med sand	weak	
6.0	8.0		PRO	Chert Sandstone	fresh	pale	orange	grey	vf sand	to f sand	mod'ly strong	
8.0	10.0		PRO	Sandstone	fresh	pale	grey		vf sand	to f sand	mod'ly strong	
10.0	12.0		PRO	Sandstone		patchy	red	grey	vf sand	to f sand	mod'ly strong	
12.0	14.0		PRO	Sandstone	fresh	pale	grey		vf sand	to f sand	mod'ly strong	
14.0	16.0		PRO	Chert Sandstone	laminated fresh	pale	orange	grey	vf sand	to f sand	mod'ly strong	
16.0	18.0	D2865	PRO	Sandstone	fresh	pale	grey		vf sand	to f sand	mod'ly strong	
18.0	20.0	D2865	PRO	Sandstone	massive	pale	orange	grey	vf sand	to f sand	mod'ly strong	
20.0	22.0	D2865	PRO	Sandstone	massive	pale	orange	grey	vf sand	to f sand	mod'ly strong	

EOH at 22.0 m

PROJECT : CARPENTARIA
LOCALITY: EL 7341
SHEET : TOWNS
JOB NO : MBK

CONTRACTOR : GADEN DRILLING
RIG TYPE : UDR-650
DATE DRILLED: 01-JUL-93

HOLE NUMBER : TRR26

COMMENTS:

LOGGED BY : PRD & DWW
TOTAL DEPTH : 58.0

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 517762 NORTHING: 8334864 R.L.: 20.0
SHEET 1 OF 2 HOLE NUMBER : TRR26

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor								
0.0	2.0		TER	Sand Pisolite	clayey lateritic	light	orange	brown	f sand	to med sand	firm	
2.0	4.0		TER	Sand Clay	clayey	light	orange	brown	vf sand	to med sand	stiff	
4.0	6.0		CRE	Sandstone Carbonate	clayey	pale	brown	grey	f sand	to med sand	weak	
6.0	8.0		CRE	Claystone Carbonate	sandy	pale	grey		clay	to f sand	weak	trace mn in sandy claystone
8.0	10.0		CRE	Claystone Siltstone	sandy siliceous	pale	grey		clay	to f sand	weak	
10.0	12.0		CRE	Claystone Siltstone	sandy siliceous	pale	orange	grey	clay	to f sand	weak	
12.0	14.0		CRE	Sandstone	ferruginous calcareous clayey	medium	brown		f sand	to med sand	weak	
14.0	16.0		CRE	Sandstone	ferruginous clayey	medium	brown		f sand	to med sand	weak	
16.0	18.0		CRE	Sandstone	ferruginous clayey	patchy	red	grey	vf sand	to f sand	weak	
18.0	20.0		CRE	Sandstone	ferruginous clayey	patchy	red	grey	vf sand	to f sand	weak	
20.0	22.0		CRE	Sandstone	ferruginous clayey	patchy	red	grey	vf sand	to f sand	weak	
22.0	24.0		CRE	Sandstone Claystone	ferruginous clayey	medium	red	brown	vf sand	to f sand	weak	
24.0	26.0		CRE	Sandstone Claystone	ferruginous clayey	medium	red	brown	vf sand	to f sand	weak	
26.0	28.0		CRE	Mudstone Sandstone	clayey ferruginous	medium	red	brown	med silt	to f sand	weak	
28.0	30.0		CRE	Sandstone	ferruginous	medium	red	brown	f sand	to med sand	mod'ly strong	
30.0	32.0		CRE	Sandstone Chert	quartzose ferruginous	medium	red	brown	f sand	to med sand	mod'ly strong	rock is hard - probably proterozoic?
32.0	34.0		CRE	Sandstone Chert	quartzose ferruginous	medium	red	brown	f sand	to med sand	mod'ly strong	
34.0	36.0		CRE	Sandstone Chert	quartzose ferruginous	medium	red	brown	f sand	to med sand	mod'ly strong	
36.0	38.0		CRE	Sandstone Chert	quartzose ferruginous	medium	red	brown	f sand	to med sand	mod'ly strong	
38.0	40.0		CRE	Clay Chert	sandy laminated	medium	red	brown	clay	to vf sand	weak	
40.0	42.0		CRE	Clay Chert	sandy laminated	medium	red	brown	clay	to vf sand	weak	

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor								
42.0	44.0		CRE	Clay Chert	sandy laminated	medium	red	brown	clay	to vf sand	weak	
44.0	46.0		CRE	Claystone Chert	sandy laminated	medium	brown		clay	to vf sand	weak	
46.0	48.0		PRO	Sandstone	laminated	medium	grey		f sand		strong	
48.0	50.0		PRO	Sandstone Chert	laminated	medium	grey		f sand		strong	
50.0	52.0		PRO	Siltstone	siliceous laminated	medium	grey		med silt	to vf sand	strong	
52.0	54.0	DZ866	PRO	Sandstone		light	brown		f sand	to med sand	strong	
54.0	56.0	DZ866	PRO	Sandstone		light	brown		f sand	to med sand	strong	
56.0	58.0	DZ866	PRO	Sandstone Mudstone		light	brown		f sand	to med sand	strong	

EOH at 58.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7341

SHEET : TOWNS

JOB NO : MBK

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 02-JUL-93

HOLE NUMBER : TRR27

COMMENTS:

LOGGED BY : PRD & DWM

TOTAL DEPTH : 56.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 518091

NORTHING: 8332902

R.L.: 20.0

SHEET 1 OF 2 HOLE NUMBER : TRR27

DEPTHS From (m)		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR		GRAIN SIZE			STRENGTH/ HARDNESS	COMMENTS		
To (m)													
0.0	2.0		TER	Clay	sandy	medium	brown		clay	to f sand	stiff		
2.0	4.0		TER	Clay Laterite	sandy	medium	brown		clay	to f sand	stiff		
4.0	6.0		CRE	Sandstone	clayey	medium	brown	grey	f sand	to med sand	weak		
6.0	8.0		CRE	Sandstone	clayey	ferruginous	patchy	grey	brown	f sand	to med sand	weak	
8.0	10.0		CRE	Sandstone	clayey	ferruginous	patchy	grey	brown	f sand	to med sand	weak	
10.0	12.0		CRE	Sand Grit	clayey	light	red	grey	f sand	to med sand	weak		
12.0	14.0		CRE	Sand Grit	clayey	light	red	grey	f sand	to med sand	weak		
14.0	16.0		CRE	Clay Sandstone	sandy	light	red	grey	f silt	to vf sand	hard		
16.0	18.0		CRE	Sandstone	clayey	light	orange	grey	med silt	to vf sand	hard		
18.0	20.0		CRE	Sandstone	clayey	light	orange	grey	med silt	to vf sand	hard		
20.0	22.0		CRE	Sandstone	clayey	fresh	light	grey		med silt	to vf sand	hard	
22.0	24.0		CRE	Sandstone Chert	clayey laminated	fresh	pale	orange	grey	med silt	to vf sand	weak	
24.0	26.0		CRE	Sandstone	clayey	ferruginous	patchy	red	grey	med silt	to f sand	hard	
26.0	28.0		CRE	Sandstone Chert	clayey laminated		light	red	grey	med silt	to f sand	hard	
28.0	30.0		CRE	Sandstone	clayey		light	red	grey	med silt	to f sand	hard	
30.0	32.0		CRE	Sandstone Chert	clayey laminated		pale	red	grey	med silt	to f sand	weak	
32.0	34.0		CRE	Sandstone	clayey		pale	red	grey	f silt	to vf sand	weak	
34.0	36.0		CRE	Sandstone Clay	fresh interbedded	fresh	palest	red	grey	vf silt	to vf sand	weak	
36.0	38.0		CRE	Sandstone Clay	siliceous ferruginous	ferruginous	m light	grey	red	f silt	to vf sand	weak	trace mn oxides.
38.0	40.0		CRE	Clay	sandy	ferruginous	m light	grey	red	vf silt	to vf sand	weak	
40.0	42.0		CRE	Claystone	sandy		light	red	grey	vf silt	to c silt	hard	

trace mn oxides.

PROJECT : CARPENTARIA
LOCALITY: EL 7260
SHEET : TOWNS
JOB NO : MAY

CONTRACTOR : GADEN DRILLING
RIG TYPE : UDR-650
DATE DRILLED: 02-JUL-93

HOLE NUMBER : TRR28

COMMENTS:

LOGGED BY : DWW
TOTAL DEPTH : 52.0

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 518454 NORTHING: 8330989 R.L.: 20.0
SHEET 1 OF 2 HOLE NUMBER : TRR28

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS	
From (m)	To (m)			major/ minor									
0.0	2.0		TER	Soil	sandy	ferruginous	m light	brown	med silt	to vf sand	soft		
2.0	4.0		TER	Sandstone	lateritic	weathered	patchy	red	grey	med silt	to f sand	hard	
4.0	6.0		CRE	Claystone	siliceous		palest	orange	grey	vf silt	to med silt	weak	trace mn oxides.
6.0	8.0		CRE	Carbonate Claystone Chert	siliceous siliceous massive		palest	orange	grey	vf silt	to med silt	weak	trace mn oxides.
8.0	10.0		CRE	Claystone	sandy		patchy	red	grey	f silt	to vf sand	weak	
10.0	12.0		CRE	Sandstone	ferruginous		patchy	red	grey	f silt	to vf sand	weak	possibly transported basement material
12.0	14.0		CRE	Claystone	sandy		patchy	red	grey	f silt	to vf sand	weak	possibly transported basement material
14.0	16.0		CRE	Claystone	ferruginous		patchy	red	grey	vf silt	to med silt	weak	
16.0	18.0		CRE	Sandstone	ferruginous	clayey	patchy	red	grey	med silt	to vf sand	weak	
18.0	20.0		CRE	Carbonate	siliceous		patchy	red	grey	med silt	to vf sand	weak	
20.0	22.0		CRE	Sandstone	ferruginous	ferruginous	patchy	red	grey	med silt	to vf sand	weak	
22.0	24.0		CRE	Carbonate	siliceous		patchy	red	grey	med silt	to vf sand	weak	
24.0	26.0		CRE	Clay	gritty		light	brown	grey	vf silt	to vf sand	hard	
26.0	28.0		CRE	Claystone	sandy		patchy	orange	grey	vf silt	to vf sand	hard	
28.0	30.0		CRE	Claystone	gritty		patchy	red	grey	vf silt	to vf sand	hard	
30.0	32.0		CRE	Claystone	sandy		m light	orange	red	vf silt	to vf sand	hard	
32.0	34.0		CRE	Claystone	massive		m light	orange	red	vf silt	to vf sand	hard	
34.0	36.0		CRE	Sandstone	ferruginous		m light	orange	red	vf silt	to vf sand	hard	
36.0	38.0		CRE	Claystone	massive		m light	orange	red	vf silt	to vf sand	hard	
38.0	40.0		CRE	Claystone	ferruginous		m light	orange	red	vf silt	to vf sand	hard	
40.0	42.0		CRE	Sandstone	sandy		medium	orange	red	vf silt	to vf sand	hard	
			CRE	Claystone	ferruginous		medium	orange	brown	vf silt	to vf sand	hard	
			CRE	Sandstone	ferruginous		medium	orange	brown	vf silt	to vf sand	hard	
			CRE	Claystone	ferruginous		medium	orange	red	vf silt	to c silt	weak	
			CRE	Claystone	gritty		medium	orange	red	vf silt	to c silt	weak	
			CRE	Claystone	gritty		light	orange	grey	vf silt	to c silt	weak	
			CRE	Sandstone	ferruginous	weathered	medium	orange	brown	vf sand	to f sand	weak	
			CRE	Clay	ferruginous		medium	orange	brown	vf sand	to f sand	weak	

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From	To			major/ minor							
(m)	(m)										
42.0	44.0		CRE	Clay	ferruginous	medium	red	brown med silt	to vf sand	weak	
				Sandstone	ferruginous						
44.0	46.0		CRE	Claystone	ferruginous gritty	medium	red	f silt	to vf sand	weak	

EDR at 52.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7260

SHEET : TOWNS

JOB NO : MAY

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 07-JUL-93

HOLE NUMBER : TRR29

COMMENTS:

LOGGED BY : DWW

TOTAL DEPTH : 22.0

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 517510 NORTHING: 8329200 R.L.: 20.0
SHEET 1 OF 1 HOLE NUMBER : TRR29

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor								
0.0	2.0		TER	Soil	sandy	lateritic	light	red	brown	med silt	to f sand	friable
2.0	4.0		TER	Soil	sandy	lateritic	light	red	brown	med silt	to f sand	hard
4.0	6.0		CRE	Laterite Sandstone	weathered ferruginous	clayey	patchy	red	grey	c silt	to f sand	weak
6.0	8.0		PRO	Sandstone	clayey	fresh	light	brown	grey	med silt	to f sand	mod'ly strong
8.0	10.0		PRO	Chert Sandstone	laminated clayey	fresh	pale	grey		med silt	to f sand	mod'ly strong
10.0	12.0		PRO	Chert Sandstone	laminated clayey	fresh	patchy	orange	grey	med silt	to f sand	mod'ly strong
12.0	14.0		PRO	Sandstone	ferruginous clayey	fresh	patchy	orange	grey	med silt	to f sand	mod'ly strong
14.0	16.0		PRO	Sandstone	ferruginous clayey	fresh	patchy	orange	grey	med silt	to f sand	mod'ly strong
16.0	18.0	DZ868	PRO	Sandstone	ferruginous clayey	fresh	pale	grey		med silt	to f sand	mod'ly strong
18.0	20.0	DZ868	PRO	Sandstone	clayey	fresh	pale	grey		med silt	to f sand	mod'ly strong
20.0	22.0	DZ868	PRO	Sandstone	clayey	fresh	pale	grey		med silt	to f sand	mod'ly strong

EOK at 22.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7260

SHEET : TOWNS

JOB NO : MAY

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 07-JUL-93

HOLE NUMBER : TRR30

COMMENTS:

LOGGED BY : DWW

TOTAL DEPTH : 28.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 516674

NORTHING: 8331991

R.L.: 20.0

SHEET 1 OF 1 HOLE NUMBER : TRR30

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor								
0.0	2.0		TER	Soil	ferruginous	sandy	light	orange	brown	f silt	to vf sand	friable
2.0	4.0		TER	Soil	ferruginous	sandy	light	orange	brown	vf silt	to vf sand	firm
4.0	6.0		CRE	Sandstone	clayey	gritty	patchy	red	grey	med silt	to med sand	weak
6.0	8.0		PRO	Sandstone	fresh	massive	patchy	red	grey	c silt	to f sand	weak
8.0	10.0		PRO	Sandstone	ferruginous	fresh	patchy	red	grey	med silt	to vf sand	weak
10.0	12.0		PRO	Sandstone	ferruginous	fresh	patchy	red	grey	med silt	to vf sand	weak
12.0	14.0		PRO	Siltstone	ferruginous	sandy	light	orange		f silt	to vf sand	weak
14.0	16.0		PRO	Siltstone	ferruginous	interbedded	light	orange		f silt	to vf sand	weak
16.0	18.0		PRO	Siltstone	ferruginous	interbedded	light	orange		f silt	to vf sand	weak
18.0	20.0		PRO	Clay	ferruginous	sandy	light	orange		f silt	to vf sand	weak
20.0	22.0		PRO	Sandstone	clayey		patchy	orange	grey	med silt	to f sand	weak
22.0	24.0	DZ869	PRO	Sandstone	clayey		patchy	orange	grey	med silt	to f sand	weak
24.0	26.0	DZ869	PRO	Clay	sandy		light	orange		vf silt	to vf sand	weak
26.0	28.0	DZ869	PRO	Sandstone	sandy		light	orange		vf silt	to vf sand	weak
			PRO	Clay	fresh	sandy	light	orange	grey	med silt	to vf sand	weak

EON at 28.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7260

SHEET : TOWNS

JOB NO : MAY

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 07-JUL-93

HOLE NUMBER : TRR31

COMMENTS:

LOGGED BY : DMW

TOTAL DEPTH : 28.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 514263

NORTHING: 8331974

R.L.: 20.0

SHEET 1 OF 1 HOLE NUMBER : TRR31

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor								
0.0	2.0		TER	Soil	sandy	lateritic	medium	orange	brown	med silt	to f sand	friable
				Laterite	weathered							
2.0	4.0		TER	Laterite	weathered		patchy	red	grey	vf sand	to med pebble	weak
				Gravel	quartzose							
4.0	6.0		CRE	Gravel	quartzose		light	red	grey	granule	to med pebble	weak
6.0	8.0		PRO	Sandstone	weathered		pale	red	grey	vf sand	to f sand	mod'ly strong
												weathered basement.
8.0	10.0		PRO	Siltstone	silicified		patchy	grey	brown	f silt	to vf sand	mod'ly strong
				Sandstone	clayey							
10.0	12.0		PRO	Siltstone	silicified		patchy	grey	brown	f silt	to vf sand	mod'ly strong
				Chert								
12.0	14.0		PRO	Siltstone	silicified		patchy	grey	brown	f silt	to vf sand	mod'ly strong
				Chert								
14.0	16.0		PRO	Siltstone	silicified		patchy	grey	brown	f silt	to vf sand	mod'ly strong
				Chert								
16.0	18.0		PRO	Sandstone	silicified	fresh	patchy	grey	brown	med silt	to med sand	mod'ly strong
				Quartzite								
18.0	20.0		PRO	Claystone	ferruginous	weathered	light	orange	grey	vf silt	to med silt	weak
												clay infill of a void.
20.0	22.0		PRO	Claystone	ferruginous	weathered	light	orange	grey	vf silt	to med silt	weak
				Chert								
22.0	24.0	DZ870	PRO	Siltstone	silicified	fresh	patchy	grey	brown	f silt	to med silt	mod'ly strong
				Chert	laminated							
24.0	26.0	DZ870	PRO	Siltstone	silicified	clayey	patchy	grey	brown	f silt	to med silt	mod'ly strong
				Chert	laminated							
26.0	28.0	DZ870	PRO	Siltstone	silicified	clayey	patchy	grey	brown	c silt	to vf sand	mod'ly strong
				Chert	laminated							

EOH at 28.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7260

SHEET : TOWNS

JOB NO : MAY

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 07-JUL-93

HOLE NUMBER : TRR32

COMMENTS:

LOGGED BY : DWW

TOTAL DEPTH : 22.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 511637

NORTHING: 8331930

R.L.: 20.0

SHEET 1 OF 1 HOLE NUMBER : TRR32

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS	
From (m)	To (m)			major/ minor									
0.0	2.0		TER	Sandstone	lateritic	weathered	med dark red	brown	med silt	to f sand	stiff		
2.0	4.0		TER	Claystone	lateritic	silicified	patchy	grey	red	vf silt	to med silt	weak	
4.0	6.0		PRO	Sandstone	ferruginous	clayey	medium	orange	brown	med silt	to f sand	weak	weathered basement.
6.0	8.0		PRO	Sandstone	weathered	clayey	patchy	red	grey	med silt	to f sand	weak	weathered basement.
8.0	10.0		PRO	Siltstone	silicified	laminated							
			PRO	Sandstone	clayey		light	orange	grey	med silt	to f sand	weak	
10.0	12.0		PRO	Sandstone	fresh	silicified	light	orange	grey	med silt	to f sand	weak	
12.0	14.0		PRO	Siltstone	silicified								
			PRO	Chert	massive	silicified	patchy	brown	grey	f silt	to med silt	mod'ly strong	
14.0	16.0		PRO	Siltstone	laminated								
			PRO	Chert	massive	silicified	patchy	brown	grey	f silt	to med silt	mod'ly strong	
16.0	18.0	DZ871	PRO	Siltstone	laminated								
			PRO	Chert	massive		patchy	brown	grey	f silt	to med silt	mod'ly strong	
18.0	20.0	DZ871	PRO	Siltstone	massive		patchy	brown	grey	f silt	to med silt	mod'ly strong	
			PRO	Chert	massive								
20.0	22.0	DZ871	PRO	Sandstone	clayey		patchy	brown	grey	med silt	to f sand	mod'ly strong	
				Siltstone	silicified								

EOH at 22.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7260

SHEET : TOWNS

JOB NO : MAY

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 08-JUL-93

HOLE NUMBER : TRR33

COMMENTS:

LOGGED BY : DWW

TOTAL DEPTH : 22.0

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 509667 NORTHING: 8330734 R.L.: 20.0
SHEET 1 OF 1 HOLE NUMBER : TRR33

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS	
From (m)	To (m)			major/ minor									
0.0	2.0		TER	Sand	clayey	lateritic	m light	red	brown	f silt	to f sand	soft	
				Laterite	pisolitic	weathered							
2.0	4.0		TER	Sandstone	ferruginous	lateritic	patchy	brown	grey	f silt	to f sand	hard	
				Chert	ferruginous	clayey							
4.0	6.0		CRE	Sandstone	clayey		patchy	orange	grey	med silt	to vf sand	weak	
				Siltstone	silicified	laminated							
6.0	8.0		PRO	Sandstone	silty	massive	pale	orange	grey	c silt	to vf sand	weak	weathered basement material.
8.0	10.0		PRO	Sandstone	silty	massive	patchy	orange	grey	f silt	to vf sand	weak	weathered basement material.
				Siltstone	silicified								
10.0	12.0		PRO	Siltstone	siliceous	sandy	patchy	orange	grey	med silt	to vf sand	weak	
				Sandstone	ferruginous	clayey							
12.0	14.0		PRO	Sandstone	silty	silicified	patchy	orange	grey	med silt	to vf sand	weak	
14.0	16.0		PRO	Sandstone	clayey	fresh	patchy	orange	grey	f silt	to vf sand	weak	
				Clay	ferruginous								
16.0	18.0	D2872	PRO	Sandstone	massive		pale	orange	grey	f silt	to vf sand	weak	
				Clay	silty								
18.0	20.0	D2872	PRO	Sandstone	massive		pale	orange	grey	vf sand	to f sand	mod'ly strong	
20.0	22.0	D2872	PRO	Sandstone	clayey		light	orange	grey	f silt	to vf sand	weak	
				Siltstone	sandy								

EOH at 22.0 m

PROJECT : CARPENTARIA
LOCALITY: EL 7260
SHEET : TOWNS
JOB NO : MAY

CONTRACTOR : GADEN DRILLING
RIG TYPE : UDR-650
DATE DRILLED: 08-JUL-93

HOLE NUMBER : TRR34

COMMENTS:

LOGGED BY : DWW
TOTAL DEPTH : 16.0

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 507644 NORTHING: 8329411 R.L.: 20.0
SHEET 1 OF 1 HOLE NUMBER : TRR34

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE			STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor								
0.0	2.0		TER	Laterite	weathered	med dark red		brown	f silt	to vf sand	hard	
2.0	4.0		TER	Sandstone	lateritic clayey	patchy red		grey	vf silt	to f sand	hard	
4.0	6.0		PRO	Sandstone	clayey ferruginous	patchy red		grey	med silt	to vf sand	weak	weathered basement.
6.0	8.0		PRO	Sandstone	clayey ferruginous	patchy red		grey	med silt	to vf sand	weak	weathered basement.
8.0	10.0		PRO	Sandstone	ferruginous clayey	patchy grey	red		med silt	to vf sand	weak	weathered basement.
10.0	12.0	DZ873	PRO	Sandstone	clayey ferruginous	patchy orange	grey		f silt	to vf sand	mod'ly strong	
12.0	14.0	DZ873	PRO	Siltstone	silicified clayey ferruginous	patchy orange	grey		f silt	to vf sand	mod'ly strong	
14.0	16.0	DZ873	PRO	Siltstone	silicified fresh clayey	patchy red	grey		vf silt	to vf sand	mod'ly strong	

EOH at 16.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7260

SHEET : TOWNS

JOB NO : MAY

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 08-JUL-93

HOLE NUMBER : TRR35

COMMENTS:

LOGGED BY : DMW

TOTAL DEPTH : 10.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 505508

NORTING: 8327884

R.L.: 20.0

SHEET 1 OF 1 HOLE NUMBER : TRR35

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES			COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor									
0.0	2.0		TER	Laterite	sandy	weathered	medium	red	brown	vf silt	to vf sand	stiff	
2.0	4.0		PRO	Sandstone	lateritic		medium	orange	red	c silt	to f sand	weak	weathered basement.
4.0	6.0	DZ874	PRO	Sandstone	ferruginous	weathered	m light	orange	red	vf sand	to f sand	weak	weathered basement.
6.0	8.0	DZ874	PRO	Sandstone	ferruginous		patchy	orange	grey	vf sand	to f sand	weak	weathered basement.
8.0	10.0	DZ874	PRO	Sandstone	fresh		patchy	red	grey	vf sand	to f sand	weak	
				Sandstone	massive								

EOH at 10.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7341

SHEET : TOWNS

JOB NO : MBK

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 08-JUL-93

HOLE NUMBER : TRR36

COMMENTS:

LOGGED BY : DWW

TOTAL DEPTH : 28.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 518697

NORTHING: 8338220

R.L.: 20.0

SHEET 1 OF 1 HOLE NUMBER : TRR36

DEPTHS		SAMPLE NUMBER	GEOLOGICAL TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor							
0.0	2.0		TER	Soil		medium	grey	f silt	to vf sand	soft	
				Laterite	transported						
2.0	4.0		TER	Soil		light	orange brown	f silt	to f sand	firm	
				Sand							
4.0	6.0		CRE	Siltstone	sandy massive	m light	grey	f silt	to vf sand	weak	
6.0	8.0		CRE	Sandstone	ferruginous	patchy	orange grey	med silt	to f sand	weak	
				Chert	massive						
8.0	10.0		PRO	Sandstone	clayey	patchy	orange grey	med silt	to f sand	weak	weathered basement.
				Siltstone	ferruginous clayey						
10.0	12.0		PRO	Sandstone	clayey ferruginous	m light	orange	med silt	to vf sand	weak	
				Siltstone	interbedded						
12.0	14.0		PRO	Sandstone	ferruginous silty	m light	orange red	vf sand		mod'ly strong	
14.0	16.0		PRO	Sandstone	ferruginous silty	medium	orange	vf sand		weak	mn oxides on fracture planes.
16.0	18.0		PRO	Sandstone	ferruginous silty	medium	orange	vf sand		weak	
18.0	20.0		PRO	Sandstone	ferruginous	patchy	orange red	vf sand	to f sand	weak	
20.0	22.0		PRO	Sandstone	ferruginous	patchy	orange red	vf sand	to f sand	weak	
22.0	24.0	DZ875	PRO	Sandstone	ferruginous	patchy	orange red	vf sand	to f sand	weak	
24.0	26.0	DZ875	PRO	Sandstone	ferruginous	patchy	orange red	vf sand	to f sand	weak	
26.0	28.0	DZ875	PRO	Sandstone	ferruginous micaceous	patchy	orange red	vf sand	to f sand	weak	

EOH at 28.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7341

SHEET : TOWNS

JOB NO : NBK

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 08-JUL-93

HOLE NUMBER : TRR37

COMMENTS:

LOGGED BY : DWW

TOTAL DEPTH : 22.0

GRID: AMG ZONE: 53

RELIABILITY: SATL

EASTING: 520720

NORTHING: 8338616

R.L.: 20.0

SHEET 1 OF 1 HOLE NUMBER : TRR37

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES			COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor									
0.0	2.0		TER	Sand	clayey		m light	brown	vf silt	to vf sand	soft		
2.0	4.0		CRE	Claystone	sandy		palest	orange grey	vf silt	to vf sand	weak	mn oxides approx. 2%-5%.	
4.0	6.0		CRE	Claystone	sandy	siliceous	palest	orange grey	f silt	to vf sand	weak	mn oxides present.	
6.0	8.0		CRE	Claystone	sandy		pale	orange grey	f silt	to vf sand	weak	mn oxides present.	
8.0	10.0		CRE	Claystone	sandy		pale	orange grey	f silt	to vf sand	weak		
10.0	12.0		CRE	Sandstone	massive	transported	patchy	grey	red	vf sand	to f sand	weak	
12.0	14.0		CRE	Carbonate	weathered								
			CRE	Sandstone	massive	transported	patchy	grey	red	vf sand	to f sand	weak	
				Carbonate	weathered								
14.0	16.0		CRE	Sandstone	clayey	weathered	patchy	orange	red	med silt	to f sand	hard	
				Clay	sandy								
16.0	18.0		CRE	Siltstone	massive	silty	med dark	red		vf silt	to f silt	weak	
18.0	20.0		CRE	Sandstone	ferruginous	weathered	med dark	red		med silt	to vf sand	weak	weathered basement.
				Siltstone	massive								
20.0	22.0	02876	PRO	Sandstone	siliceous	weathered	medium	orange	red	vf sand		mod'ly strong	basement material.

EOH at 22.0 m

PROJECT : CARPENTARIA
LOCALITY: EL 7341
SHEET : TOWNS
JOB NO : MBK

CONTRACTOR : GADEN DRILLING
RIG TYPE : UDR-650
DATE DRILLED: 09-JUL-93

HOLE NUMBER : TRR38

Drill hole moved 150m west.

LOGGED BY : DWW
TOTAL DEPTH : 28.0

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 523138 NORTHING: 8338479 R.L.: 20.0
SHEET 1 OF 1 HOLE NUMBER : TRR38

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES			COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS	
From (m)	To (m)			major/ minor									
0.0	2.0		TER	Soil	sandy		medium	brown	f silt	to f sand	soft		
2.0	4.0		CRE	Carbonate Sand	fragmental clayey	transported ferruginous	patchy	red	grey	vf silt	to f sand	hard	minor mn oxides.
4.0	6.0		CRE	Claystone	sandy		pale	orange	grey	vf silt	to vf sand	hard	minor mn oxides.
6.0	8.0		CRE	Clay	sandy		light	orange	grey	vf silt	to vf sand	hard	
8.0	10.0		CRE	Carbonate	fragmental	transported	light	orange	grey	vf silt	to vf sand	hard	
10.0	12.0		CRE	Clay	sandy		light	orange	grey	vf silt	to vf sand	hard	
12.0	14.0		CRE	Carbonate	fragmental	transported	light	orange	grey	vf silt	to vf sand	hard	
14.0	16.0		CRE	Clay	sandy		pale	orange	grey	vf silt	to vf sand	hard	
16.0	18.0		CRE	Chert	laminated		pale	brown	grey	f silt	to vf sand	weak	
18.0	20.0		PRO	Siltstone	silicified	laminated	patchy	brown	grey	vf silt	to med silt	mod'ly strong	
20.0	22.0		PRO	Siltstone	siliceous	massive	patchy	brown	grey	vf silt	to med silt	mod'ly strong	
22.0	24.0	DZ877	PRO	Siltstone	silicified	laminated	patchy	brown	grey	vf silt	to med silt	mod'ly strong	
24.0	26.0	DZ877	PRO	Siltstone	siliceous	massive	patchy	brown	grey	vf silt	to med silt	mod'ly strong	
26.0	28.0	DZ877	PRO	Siltstone	silicified	laminated	patchy	brown	grey	vf silt	to med silt	mod'ly strong	clay infill from weathering.

EOH at 28.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7341

SHEET : TOWNS

JOB NO : MBK

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 09-JUL-93

HOLE NUMBER : TRR39

COMMENTS:

LOGGED BY : DWW

TOTAL DEPTH : 34.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 523678

NORTHING: 8341122

R.L.: 20.0

SHEET 1 OF 1 HOLE NUMBER : TRR39

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor								
0.0	2.0		TER	Soil	sandy	patchy	brown	white	vf silt	to vf sand	firm	
2.0	4.0		CRE	Clay	sandy							
				Carbonate	fragmental	massive	palest	white	vf silt	to vf sand	hard	
4.0	6.0		CRE	Carbonate	silty	siliceous	palest	grey	vf silt	to vf sand	weak	
6.0	8.0		CRE	Clay	sandy							
				Carbonate	silty	siliceous	patchy	orange	white	vf silt	to vf sand	weak
8.0	10.0		CRE	Clay	sandy							
				Carbonate	silty	siliceous	patchy	orange	white	vf silt	to vf sand	weak
10.0	12.0		CRE	Clay	sandy							
				Carbonate	silty	siliceous	patchy	brown	white	vf silt	to med silt	mod'ly strong
12.0	14.0		CRE	Chert	massive							
				Carbonate	siliceous	patchy	red	grey	vf silt	to med silt	weak	
14.0	16.0		CRE	Clay	ferruginous							
				Carbonate	sandy	spotty	red	grey	vf silt	to vf sand	weak	
16.0	18.0		CRE	Clay	fragmental							
				Carbonate	sandy	spotty	red	grey	vf silt	to vf sand	weak	
18.0	20.0		CRE	Clay	fragmental							
				Carbonate	sandy	spotty	red	grey	vf silt	to vf sand	weak	
20.0	22.0		CRE	Clay	fragmental							
				Carbonate	sandy	ferruginous	m light	red	grey	vf silt	to vf sand	stiff
22.0	24.0		CRE	Clay	sandy							
				Carbonate	ferruginous	m light	grey	red	vf silt	to vf sand	stiff	
24.0	26.0		CRE	Clay	sandy	patchy	red	grey	vf silt	to vf sand	stiff	
26.0	28.0		CRE	Clay	sandy	patchy	red	grey	vf silt	to vf sand	stiff	
28.0	30.0		CRE	Clay	sandy	patchy	red	grey	vf silt	to c silt	hard	very small percentage of Mn oxides.
30.0	32.0		CRE	Clay	sandy	patchy	orange	grey	f silt	to vf sand	weak	
				Sandstone								
32.0	34.0	D2B78	PRO	Sandstone	massive	siliceous	patchy	orange	grey	vf sand	mod'ly strong	

EOW at 34.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7341

SHEET : TOWNS

JOB NO : MBK

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 09-JUL-93

HOLE NUMBER : TRR40

COMMENTS:

LOGGED BY : DWW

TOTAL DEPTH : 22.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 514644

NORTHING: 8340706

R.L.: 20.0

SHEET 1 OF 1 HOLE NUMBER : TRR40

DEPTHS From To (m) (m)		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor			COLOUR			GRAIN SIZE		STRENTGR/ HARDNESS	COMMENTS
0.0	2.0		TER	Laterite	pisolitic	weathered	medium	red	brown	med silt	to vf sand	hard	
2.0	4.0		TER	Laterite	pisolitic		medium	red	brown	med silt	to vf sand	hard	
4.0	6.0		TER	Clay Chert	ferruginous transported	weathered	patchy	grey	red	f silt	to c silt	hard	
6.0	8.0		CRE	Claystone	fresh		patchy	red	grey	vf silt	to vf sand	weak	
8.0	10.0		CRE	Sandstone	ferruginous sandy	siliceous	patchy	orange	grey	f silt	to vf sand	weak	
10.0	12.0		PRO	Siltstone	siliceous		patchy	orange	grey	f silt	to vf sand	weak	basement material.
12.0	14.0		PRO	Sandstone	ferruginous siliceous		patchy	orange	grey	f silt	to vf sand	weak	
14.0	16.0		PRO	Siltstone	siliceous		patchy	brown	grey	f silt	to med silt	weak	
16.0	18.0	DZ879	PRO	Siltstone	silicified		patchy	orange	brown	med silt	to vf sand	weak	
18.0	20.0	DZ879	PRO	Sandstone	ferruginous siliceous	silicified	patchy	red	grey	f silt	to c silt	weak	
20.0	22.0	DZ879	PRO	Sandstone Chert	ferruginous	massive	light	orange		med silt	to f sand	weak	

EOM at 22.0 m

PROJECT : CARPENTARIA
 LOCALITY: EL 7341
 SHEET : ROPER
 JOB NO : MBK
 GRID: AMG

CONTRACTOR : GADEN DRILLING
 RIG TYPE : UDR-650
 DATE DRILLED: 10-JUL-93
 EASTING: 516595
 NORTHING: 8342285
 R.L.: 18.0
 SHEET 1 OF 2

HOLE NUMBER : TRR41
 LOGGED BY : DWJ
 TOTAL DEPTH : 46.0
 HOLE NUMBER : TRR41

COMMENTS:

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS	
From (m)	To (m)			major/ minor									
0.0	2.0		TER	Laterite	weathered		m light	red	brown	f silt	to vf sand	hard	
2.0	4.0		TER	Laterite Saprolite	weathered sandy		m light	orange	brown	vf silt	to vf sand	hard	
4.0	6.0		CRE	Claystone Chert	ferruginous massive	fragmental	patchy	orange	grey	vf silt	to med silt	hard	
6.0	8.0		CRE	Claystone Chert	weathered massive	fragmental	patchy	orange	grey	vf silt	to med silt	hard	
8.0	10.0		CRE	Claystone Chert	massive	fragmental	patchy	red	white	vf silt	to med silt	hard	
10.0	12.0		CRE	Claystone Chert	massive	fragmental	light	orange	grey	vf silt	to med silt	hard	
12.0	14.0		CRE	Clay Sandstone	ferruginous ferruginous		light	orange		vf silt	to c silt	hard	
14.0	16.0		CRE	Claystone Chert	ferruginous massive	fragmental	m light	orange		clay	to f silt	stiff	
16.0	18.0		CRE	Claystone Chert	ferruginous massive	fragmental	m light	orange		clay	to f silt	stiff	
18.0	20.0		CRE	Claystone Sandstone	ferruginous bedded		m light	orange		clay	to vf sand	hard	
20.0	22.0		CRE	Claystone Sandstone	ferruginous bedded		m light	orange		clay	to vf sand	hard	
22.0	24.0		CRE	Claystone Chert	ferruginous fragmental		m light	orange		clay	to med silt	hard	
24.0	26.0		CRE	Claystone Chert	ferruginous fragmental		m light	orange		clay	to med silt	hard	
26.0	28.0		CRE	Claystone Sandstone	ferruginous fragmental		m light	orange		vf silt	to vf sand	weak	
28.0	30.0		CRE	Claystone Sandstone	ferruginous fragmental		m light	orange		vf silt	to vf sand	weak	
30.0	32.0		CRE	Claystone Sandstone	ferruginous fragmental		m light	orange		vf silt	to vf sand	weak	
32.0	34.0		CRE	Claystone Sandstone	ferruginous fragmental		m light	orange		vf silt	to vf sand	weak	
34.0	36.0		CRE	Claystone Sandstone	ferruginous fragmental	siliceous	m light	orange		vf silt	to vf sand	weak	
36.0	38.0		PRO	Sandstone Clay	ferruginous ferruginous	siliceous	patchy	orange	brown	f silt	to vf sand	weak	weathered basement.
38.0	40.0		PRO	Siltstone Clay	bedded ferruginous	siliceous	patchy	orange	brown	vf silt	to med silt	weak	weathered basement.
40.0	42.0	02880	PRO	Siltstone Clay	silicified ferruginous	laminated	patchy	orange	brown	vf silt	to med silt	mod'ly strong	

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor								
42.0	44.0	DZ880	PRO	Sandstone	siliceous	patchy	orange	brown	vf silt	to f sand	mod'ly strong	
44.0	46.0	DZ880	PRO	Siltstone	silicified							
				Sandstone	siliceous	patchy	orange	brown	vf silt	to f sand	mod'ly strong	
				Chert	massive							

EOH at 46.0 m

PROJECT : CARPENTARIA
 LOCALITY: EL 7341
 SHEET : ROPER
 JOB NO : MBK

CONTRACTOR : GADEN DRILLING
 RIG TYPE : UDR-650
 DATE DRILLED: 10-JUL-93

HOLE NUMBER : TRR42

COMMENTS:

LOGGED BY : DWN
 TOTAL DEPTH : 28.0

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 518374 NORTHING: 8344139 R.L.: 17.0
 SHEET 1 OF 1 HOLE NUMBER : TRR42

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS	
From (m)	To (m)			major/ minor								
0.0	2.0		TER	Laterite	pisolitic	weathered	med dark red	brown	med silt	to f sand	hard	
2.0	4.0		CRE	Claystone	sandy		patchy red	grey	vf silt	to c silt	weak	minor mn oxides.
4.0	6.0	DZ920	CRE	Laterite	pisolitic	weathered	patchy red	grey	vf silt	to c silt	weak	minor mn oxides.
				Claystone	sandy							
6.0	8.0		CRE	Laterite	pisolitic	weathered	patchy red	grey	vf silt	to c silt	weak	minor mn oxides.
				Claystone	sandy		palest orange	white	vf silt	to med silt	weak	
8.0	10.0		CRE	Siltstone	silicified							
				Siltstone	sandy	siliceous	palest white		f silt	to vf sand	weak	
10.0	12.0		CRE	Siltstone	sandy	siliceous	palest grey		f silt	to c silt	weak	
12.0	14.0		CRE	Siltstone	sandy	siliceous	pale brown	grey	f silt	to c silt	weak	
				Chert	massive	fragmental						
14.0	16.0	DZ881	CRE	Siltstone	sandy		patchy black	grey	f silt	to c silt	weak	mn oxides present sample taken.
				Chert	massive	laminated						
16.0	18.0		CRE	Siltstone	sandy	siliceous	palest grey		f silt	to c silt	weak	
				Chert	massive							
18.0	20.0		CRE	Claystone	sandy	siliceous	patchy brown	grey	vf silt	to med silt	weak	
				Carbonate	massive							
20.0	22.0		PRO	Dolomite	massive		patchy orange	brown	clay	to f silt	mod'ly strong	basement material.
				Clay	ferruginous							
22.0	24.0	DZ882	PRO	Dolomite	silicified	massive	med dark brown	brown	clay	to f silt	mod'ly strong	
				Dolomite	massive							
24.0	26.0	DZ882	PRO	Dolomite	silicified	massive	med dark brown	brown	clay	to f silt	mod'ly strong	
				Dolomite	massive							
26.0	28.0	DZ882	PRO	Dolomite	silicified	massive	med dark brown	brown	clay	to f silt	mod'ly strong	
				Dolomite	massive							

EOH at 28.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7341

SHEET : ROPER

JOB NO : MBK

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 10-JUL-93

HOLE NUMBER : TRR43

COMMENTS:

LOGGED BY : DMW

TOTAL DEPTH : 16.0

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 520216 NORTHING: 8345991 R.L.: 17.0

SHEET 1 OF 1 HOLE NUMBER : TRR43

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor								
0.0	2.0		TER	Laterite	pisolitic	weathered	medium	red	brown	f silt	to vf sand	hard
2.0	4.0		CRE	Clay	ferruginous	weathered	patchy	red	grey	clay	to f silt	firm
4.0	6.0		CRE	Clay	sandy		light	orange	grey	vf silt	to med silt	hard
6.0	8.0		CRE	Carbonate Claystone	clayey massive		palest	grey		clay	to vf silt	hard
8.0	10.0		PRD	Carbonate	massive		palest	white		vf silt	to f silt	weak
10.0	12.0	DZ883	PRD	Carbonate	massive		patchy	orange	white	vf silt	to f silt	mod'ly strong
12.0	14.0	DZ883	PRD	Carbonate	massive		patchy	orange	white	vf silt	to f silt	mod'ly strong
14.0	16.0	DZ883	PRD	Carbonate	massive		patchy	orange	white	vf silt	to f silt	mod'ly strong

EOH at 16.0 m

PROJECT : CARPENTARIA
LOCALITY: EL 7341
SHEET : ROPER
JOB NO : MBK

CONTRACTOR : GADEN DRILLING
RIG TYPE : UDR-650
DATE DRILLED: 10-JUL-93

HOLE NUMBER : TRR44

COMMENTS:

LOGGED BY : DWM
TOTAL DEPTH : 16.0

GRID: ANG ZONE: 53 RELIABILITY: SATL EASTING: 522180 NORTHING: 8347646 R.L.: 18.0
SHEET 1 OF 1 HOLE NUMBER : TRR44

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor							
0.0	2.0		TER	Sand	silty	light	brown	med silt	to f sand	Loose	
2.0	4.0	DZ884	CRE	Clay	sandy	patchy	orange grey	vf silt	to c silt	stiff	
4.0	6.0	DZ884	CRE	Clay	ferruginous massive	light	red	vf silt	to med silt	hard	minor mn oxides.
6.0	8.0	DZ884	CRE	Clay	massive	light	red	vf silt	to med silt	hard	minor mn oxides.
8.0	10.0		CRE	Claystone	weathered massive	palest	white	clay	to vf silt	weak	
10.0	12.0	DZ885	PRO	Carbonate	massive	palest	white	vf silt		mod'ly strong	
12.0	14.0	DZ885	PRO	Carbonate	massive	palest	white	vf silt		mod'ly strong	
14.0	16.0	DZ885	PRO	Carbonate	massive	palest	pink white	vf silt		mod'ly strong	

ECH at 16.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7341

SHEET : TOWNS

JOB NO : MBK

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 11-JUL-93

HOLE NUMBER : TRR45

COMMENTS:

LOGGED BY : DMW

TOTAL DEPTH : 28.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 511775

NORTHING: 8339751

R.L.: 21.0

SHEET 1 OF 1 HOLE NUMBER : TRR45

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS	
From (m)	To (m)			major/ minor									
0.0	2.0		TER	Laterite Sand	pisolitic transported	weathered	m light	red	brown	med silt	to vf sand	hard	
2.0	4.0		TER	Laterite	pisolitic	sandy	medium	red		f silt	to vf sand	stiff	
4.0	6.0		CRE	Clay Laterite	ferruginous pisolitic	sandy	patchy	red	grey	vf silt	to c silt	stiff	
6.0	8.0		PRO	Sandstone Sandstone	silty ferruginous	fresh	patchy	orange	grey	c silt	to vf sand	weak	weathered basement
8.0	10.0		PRO	Sandstone Siltstone	silty ferruginous	fresh	patchy	orange	grey	med silt	to vf sand	weak	
10.0	12.0		PRO	Sandstone Quartzite	fresh fresh	siliceous	light	orange	red	c silt	to vf sand	mod'ly strong	
12.0	14.0		PRO	Sandstone	silty		patchy	orange	red	c silt	to vf sand	weak	
14.0	16.0		PRO	Sandstone Siltstone	silty siliceous		patchy	orange	grey	med silt	to vf sand	weak	
16.0	18.0		PRO	Sandstone Siltstone	silty clayey		medium	brown		f silt	to vf sand	weak	
18.0	20.0		PRO	Siltstone	clayey		med dark	brown		vf silt	to med silt	weak	
20.0	22.0		PRO	Siltstone	sandy		med dark	brown		vf silt	to med silt	weak	
22.0	24.0	DZ886	PRO	Siltstone Clay	siliceous ferruginous	micaceous	med dark	brown		vf silt	to med silt	weak	
24.0	26.0	DZ886	PRO	Siltstone Clay	siliceous ferruginous	micaceous	med dark	brown		vf silt	to med silt	weak	
26.0	28.0	DZ886	PRO	Siltstone	siliceous	micaceous	med dark	brown		f silt	to vf sand	weak	

EOL at 28.0 m

PROJECT : CARPENTARIA
 LOCALITY: EL 7341
 SHEET : TOWNS
 JOB NO : MBK
 GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 508559 NORTHING: 8338939 R.L.: 24.0
 CONTRACTOR : GADEN DRILLING
 RIG TYPE : UDR-650
 DATE DRILLED: 11-JUL-93
 HOLE NUMBER : TRR46
 LOGGED BY : DWW
 TOTAL DEPTH : 58.0
 SHEET 1 OF 2 HOLE NUMBER : TRR46

COMMENTS:

DEPTHS From (m)	To (m)	SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
0.0	2.0		TER	Laterite	sandy	weathered	medium red brown	med silt to f sand	hard		
2.0	4.0		TER	Laterite	pisolitic		medium red brown	med silt to f sand	hard		
4.0	6.0		CRE	Sandstone	clayey	gravelly	patchy orange grey	med silt to med pebble	hard		
6.0	8.0		CRE	Sandstone	clayey	weathered	patchy red grey	f silt to vf sand	weak		
8.0	10.0		CRE	Sandstone	clayey	weathered	patchy red grey	f silt to vf sand	weak		
10.0	12.0		CRE	Sandstone	clayey	weathered	patchy red grey	f silt to vf sand	weak		
12.0	14.0		CRE	Siltstone	sandy	ferruginous	patchy red grey	vf silt to vf sand	weak		
14.0	16.0		CRE	Claystone	fresh		patchy red grey	vf silt to vf sand	stiff		
16.0	18.0		CRE	Siltstone	sandy	ferruginous					
16.0	18.0		CRE	Claystone	fresh		light grey	vf silt to f silt	hard		
18.0	20.0	DZ887	CRE	Claystone	fresh		patchy black grey	vf silt to f silt	hard		noticeable percentage of mn oxides sample taken dz 919.
20.0	22.0		CRE	Claystone	fresh		patchy black grey	vf silt to f silt	hard		minor mn oxides.
22.0	24.0		CRE	Claystone	fresh		pale orange grey	vf silt to f silt	hard		
24.0	26.0		CRE	Claystone	fresh		pale grey	vf silt to f silt	hard		minor mn oxides.
26.0	28.0		CRE	Claystone	fresh		pale grey	vf silt to f silt	hard		minor mn oxides.
28.0	30.0		CRE	Claystone	fresh		pale orange grey	vf silt to f silt	hard		minor mn oxides.
30.0	32.0		CRE	Claystone	fresh		pale orange grey	vf silt to f silt	hard		minor mn oxides.
32.0	34.0		CRE	Claystone	fresh		pale red grey	vf silt to f silt	hard		
34.0	36.0		CRE	Claystone	sandy		pale red grey	vf silt to vf sand	hard		
36.0	38.0		CRE	Carbonate	fragmental						
36.0	38.0		CRE	Claystone	sandy		pale red grey	vf silt to vf sand	hard		
38.0	40.0		CRE	Carbonate	fragmental						
38.0	40.0		CRE	Claystone	sandy		palest red grey	vf silt to vf sand	hard		
40.0	42.0		CRE	Carbonate	fragmental		palest grey	vf silt to vf sand	hard		

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)									
42.0	44.0		CRE	Clay Carbonate	sandy fragmental	palest grey	vf silt	to vf sand	hard	
44.0	46.0		CRE	Clay Carbonate	sandy fragmental	palest grey	vf silt	to vf sand	hard	
46.0	48.0		CRE	Clay Carbonate	sandy fragmental	palest grey	vf silt	to vf sand	hard	
48.0	50.0		CRE	Clay Carbonate	sandy fragmental	palest grey	vf silt	to vf sand	hard	
50.0	52.0		CRE	Clay Carbonate	sandy fragmental	palest grey	vf silt	to vf sand	hard	
52.0	54.0	DZ888	CRE	Clay Carbonate	sandy fragmental	palest grey	vf silt	to vf sand	hard	
54.0	56.0	DZ888	CRE	Clay Sandstone	sandy fragmental	pale brown grey	vf silt	to vf sand	hard	
56.0	58.0	DZ888	CRE	Clay Sandstone	sandy ferruginous fragmental	light orange	vf silt	to vf sand	weak	

EOH at 58.0 m

PROJECT : CARPENTARIA
LOCALITY: EL 7341
SHEET : TOWNS
JOB NO : MBK

CONTRACTOR : GADEN DRILLING
RIG TYPE : UDR-650
DATE DRILLED: 12-JUL-93

HOLE NUMBER : TRR47

Drill hole moved 1km east.

LOGGED BY : DWW
TOTAL DEPTH : 28.0

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 506866 NORTHING: 8338964 R.L.: 35.0
SHEET 1 OF 1 HOLE NUMBER : TRR47

DEPTHS From To (m) (m)	SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR			GRAIN SIZE			STRENGTH/ HARDNESS	COMMENTS
0.0 2.0		TER	Laterite	sandy	pisolitic	m light red brown	med silt	to f sand	hard		
2.0 4.0		TER	Clay	sandy	ferruginous	medium red	vf silt	to vf sand	stiff		
4.0 6.0		CRE	Clay	sandy	ferruginous	medium red	vf silt	to vf sand	hard		
6.0 8.0		CRE	Siltstone	sandy	ferruginous	patchy red grey	vf silt	to vf sand	hard		
8.0 10.0		CRE	Claystone	sandy	ferruginous	patchy red grey	vf silt	to vf sand	hard		
10.0 12.0		CRE	Siltstone	sandy	ferruginous	patchy red grey	vf silt	to vf sand	hard		
12.0 14.0		PRO	Siltstone	sandy	bedded	patchy orange grey	med silt	to vf sand	weak		?weathered basement.
14.0 16.0		PRO	Chert	massive	bedded	patchy orange grey	med silt	to vf sand	weak		?weathered basement.
16.0 18.0		PRO	Siltstone	silty	interbedded	light orange	c silt	to vf sand	weak		
18.0 20.0		PRO	Siltstone	silty	interbedded	light orange	c silt	to vf sand	weak		
20.0 22.0		PRO	Chert	massive		patchy orange brown	med silt	to vf sand	mod'ly strong		
22.0 24.0	DZ889	PRO	Siltstone	silicified	interbedded	patchy orange brown	med silt	to vf sand	mod'ly strong		
24.0 26.0	DZ889	PRO	Siltstone	silty		patchy orange brown	med silt	to vf sand	mod'ly strong		
26.0 28.0	DZ889	PRO	Siltstone	silicified	bedded	patchy orange brown	vf silt	to c silt	mod'ly strong		

EOH at 28.0 m

PROJECT : CARPENTARIA
 LOCALITY: EL 7341
 SHEET : ROPER
 JOB NO : MBK

CONTRACTOR : GADEN DRILLING
 RIG TYPE : UDR-650
 DATE DRILLED: 12-JUL-93

HOLE NUMBER : TRR48

COMMENTS:

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 512691 NORTHING: 8342085 R.L.: 22.0
 SHEET 1 OF 2 HOLE NUMBER : TRR48

DEPTHS		SAMPLE NUMBER	GEOL. TINE	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor								
0.0	2.0		TER	Laterite Soil	pisolitic clayey	weathered	medium	red	brown	f silt	to c silt	hard
2.0	4.0		TER	Laterite Chert	pisolitic fragmental	weathered transported	medium	red	brown	f silt	to c silt	hard
4.0	6.0		CRE	Clay	sandy	weathered	patchy	orange	red	f silt	to vf sand	weak
6.0	8.0		CRE	Siltstone	siliceous	sandy	patchy	red	grey	f silt	to med silt	weak
8.0	10.0		CRE	Siltstone	ferruginous	sandy	patchy	orange	red	f silt	to c silt	weak
10.0	12.0		CRE	Siltstone Sandstone	ferruginous weathered	sandy ferruginous	patchy	orange	red	f silt	to f sand	weak
12.0	14.0		CRE	Siltstone Sandstone	fresh silty	ferruginous	patchy	orange	red	f silt	to f sand	weak
14.0	16.0		CRE	Siltstone Sandstone	fresh silty	ferruginous	patchy	brown	yellow	f silt	to vf sand	weak
16.0	18.0		CRE	Siltstone Sandstone	fresh silty	ferruginous	patchy	orange	red	f silt	to vf sand	weak
18.0	20.0		CRE	Siltstone Sandstone	fresh silty	ferruginous	patchy	orange	red	f silt	to vf sand	weak
20.0	22.0		CRE	Claystone Sandstone	fresh silty		light	orange	grey	vf silt	to vf sand	weak
22.0	24.0		CRE	Claystone Siltstone	fresh massive		light	orange	grey	vf silt	to vf sand	weak
24.0	26.0		CRE	Claystone Chert	massive fragmental		light	orange		vf silt	to c silt	weak
26.0	28.0		CRE	Claystone	massive	silty	pale	orange	grey	vf silt	to med silt	weak
28.0	30.0		CRE	Claystone	ferruginous	sandy	m light	red		vf silt	to vf sand	weak
30.0	32.0		CRE	Claystone Siltstone	sandy sandy	siliceous	patchy	red	orange	vf silt	to c silt	weak
32.0	34.0		CRE	Claystone Sandstone	sandy silty	ferruginous	medium	orange		vf silt	to vf sand	weak
34.0	36.0		CRE	Claystone Sandstone	sandy silty	ferruginous	medium	orange		vf silt	to vf sand	weak
36.0	38.0		CRE	Claystone Sandstone	sandy silty	ferruginous	m light	orange		vf silt	to vf sand	weak
38.0	40.0		CRE	Claystone Sandstone	sandy silty	siliceous	m light	orange		vf silt	to vf sand	weak
40.0	42.0	DZ890	CRE	Claystone Sandstone	sandy silty	ferruginous	patchy	orange	red	vf silt	to c silt	weak

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor								
42.0	44.0	DZ890	PRO	Sandstone	silty	siliceous	medium	orange red	c silt	to vf sand	weak	weathered basement.
44.0	46.0	DZ890	PRO	Dolomite	silicified		medium	brown	f silt		mod'ly strong	

EOH at 46.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7341

SHEET : ROPER

JOB NO : MBK

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 12-JUL-93

HOLE NUMBER : TRR49

COMMENTS:

LOGGED BY : DWW

TOTAL DEPTH : 16.0

GRID: ANG

ZONE: 53

RELIABILITY: SATL

EASTING: 509403

NORTHING: 8345266

R.L.: 22.0

SHEET 1 OF 1 HOLE NUMBER : TRR49

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor								
0.0	2.0		TER	Sand	quartzose	patchy	yellow	red	med silt	to f sand	firm	
2.0	4.0		CRE	Laterite Claystone	pisolitic sandy	weathered						
						ferruginous	patchy	red	grey	vf silt	to vf sand	stiff
4.0	6.0		CRE	Claystone	sandy	ferruginous	patchy	red	grey	vf silt	to vf sand	hard
6.0	8.0		CRE	Sandstone	silty	fresh						
				Claystone	sandy		patchy	orange	grey	f silt	to vf sand	weak
8.0	10.0		PRO	Sandstone	ferruginous	weathered						
				Siltstone	silicified	massive	patchy	orange	grey	f silt	to c silt	mod'ly strong
10.0	12.0	DZ891	PRO	Sandstone	ferruginous	interbedded						
				Siltstone	siliceous	massive	patchy	brown	grey	f silt	to med silt	mod'ly strong
12.0	14.0	DZ891	PRO	Chert	massive							
				Siltstone	siliceous	massive	patchy	brown	grey	f silt	to med silt	mod'ly strong
14.0	16.0	DZ891	PRO	Chert	massive							
				Siltstone	siliceous	massive	patchy	brown	grey	f silt	to med silt	mod'ly strong
				Chert	massive							

EOH at 16.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7341

SHEET : ROPER

JOB NO : MBK

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 12-JUL-93

HOLE NUMBER : TRR50

COMMENTS:

LOGGED BY : DWM

TOTAL DEPTH : 10.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 507437

NORTHING: 8346380

R.L.: 21.0

SHEET 1 OF 1 HOLE NUMBER : TRR50

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor							
0.0	2.0		TER	Laterite Clay	pisolitic ferruginous weathered	medium	red	f silt	to vf sand	hard	
2.0	4.0		PRO	Sandstone Chert	weathered massive fragmental	patchy	orange brown	med silt	to vf sand	weak	weathered basement.
4.0	6.0	DZ892	PRO	Sandstone Siltstone	massive interbedded	patchy	orange grey	med silt	to vf sand	weak	weathered basement.
6.0	8.0	DZ892	PRO	Siltstone	sandy siliceous	light	orange white	f silt	to vf sand	weak	
8.0	10.0	DZ892	PRO	Siltstone	silicified	patchy	orange brown	clay	to f silt	mod'ly strong	

EOH at 10.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7341

SHEET : ROPER

JOB NO : MBK

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 13-JUL-93

HOLE NUMBER : TRR51

COMMENTS:

LOGGED BY : DWW

TOTAL DEPTH : 16.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 505028

NORTHING: 8347436

R.L.: 30.0

SHEET 1 OF 1 HOLE NUMBER : TRR51

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES			COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor									
0.0	2.0		TER	Laterite Sand	pisolitic transported	weathered	medium	red	brown	med silt	to f sand	hard	
2.0	4.0		TER	Laterite Clay	pisolitic sandy		patchy	grey	red	f silt	to f sand	hard	
4.0	6.0		CRE	Sandstone	clayey	weathered	patchy	brown	grey	f silt	to f sand	hard	
6.0	8.0		PRO	Sandstone	clayey	weathered clayey	patchy	red	grey	f silt	to f sand	hard	weathered basement.
8.0	10.0		PRO	Sandstone	clayey		pale	grey		f silt	to vf sand	weak	
10.0	12.0	DZ893	PRO	Sandstone	clayey		pale	grey		f silt	to vf sand	weak	
12.0	14.0	DZ893	PRO	Siltstone	micaceous	massive	patchy	red	grey	f silt	to c silt	weak	
14.0	16.0	DZ893	PRO	Siltstone	micaceous	massive	patchy	red	grey	f silt	to c silt	weak	

EON at 16.0 m

PROJECT : CARPENTARIA

LOCALITY : EL 7341

SHEET : ROPER

JOB NO : MBK

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 13-JUL-93

HOLE NUMBER : TRR52

Mineralization found in PRO.

LOGGED BY : DWW

TOTAL DEPTH : 58.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 513538

NORTHING: 8355081

R.L.: 19.0

SHEET 1 OF 2 HOLE NUMBER : TRR52

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor								
0.0	2.0		TER	Soil	sandy	patchy	red	brown	f silt	to vf sand	stiff	
				Laterite	weathered							
2.0	4.0		TER	Clay	ferruginous	patchy	brown	grey	f silt	to vf sand	stiff	
				Siltstone	massive							
4.0	6.0		CRE	Claystone	ferruginous	light	brown		vf silt	to med silt	hard	
6.0	8.0		CRE	Claystone	massive	light	brown		vf silt	to med silt	hard	
8.0	10.0		CRE	Claystone	massive	light	brown		vf silt	to med silt	hard	
					chloritic							
10.0	12.0		CRE	Claystone	massive	light	brown		vf silt	to vf sand	weak	
				Sandstone	silty							
12.0	14.0		CRE	Mudstone	massive	patchy	lime	brown	vf silt	to med silt	weak	
					chloritic							
14.0	16.0		CRE	Siltstone	bedded	patchy	lime	brown	f silt	to med silt	weak	?possibly proterozoic seen a similar rock type at trr51.
16.0	18.0		CRE	Siltstone	bedded	patchy	lime	brown	f silt	to med silt	weak	?possibly proterozoic seen a similar rock type at trr51.
					chloritic							
18.0	20.0		CRE	Siltstone	bedded	patchy	brown	black	f silt	to med silt	weak	?possibly proterozoic seen a similar rock type at trr51.
				Black shale	carbonaceous							
20.0	22.0		PRO	Black shale	siliceous	dark	black		f silt	to med silt	mod'ly strong	
					bedded							
22.0	24.0		PRO	Black shale	siliceous	dark	black		f silt	to med silt	mod'ly strong	very fine disseminated pyrite
					bedded							
24.0	26.0		PRO	Black shale	siliceous	dark	black		f silt	to med silt	mod'ly strong	very fine disseminated pyrite
					bedded							
26.0	28.0	DZ894	PRO	Black shale	siliceous	dark	black		f silt	to med silt	mod'ly strong	very fine disseminated and vein pyrite, fault evidence.
					bedded							
28.0	30.0	DZ894	PRO	Black shale	bedded	dark	black		f silt	to med silt	mod'ly strong	
30.0	32.0	DZ894	PRO	Black shale	bedded	dark	black		f silt	to med silt	mod'ly strong	
32.0	34.0		PRO	Black shale	bedded	dark	black		f silt	to med silt	mod'ly strong	fine disseminated pyrite
34.0	36.0		PRO	Black shale	bedded	dark	black		f silt	to med silt	mod'ly strong	fine disseminated pyrite
36.0	38.0		PRO	Black shale	bedded	dark	black		f silt	to med silt	mod'ly strong	fine disseminated pyrite
38.0	40.0		PRO	Shale	bedded	patchy	brown	lime	f silt	to med silt	strong	
40.0	42.0		PRO	Black shale	bedded	patchy	lime	black	f silt	to med silt	strong	

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES			COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)				major/ minor								
42.0	44.0	DZ895	PRO	Shale	siliceous	*aa	patchy	lime	brown	f silt	to med silt	strong	disseminated pyrite, brown shale has a dull metallic lust
44.0	46.0	DZ895	PRO	Shale	siliceous	*aa	patchy	lime	brown	f silt	to med silt	strong	disseminated pyrite, brown shale has a dull metallic lust
46.0	48.0	DZ895	PRO	Shale	siliceous	*aa	patchy	lime	brown	f silt	to med silt	strong	disseminated pyrite, brown shale has a dull metallic lust
48.0	50.0		PRO	Black shale	*aa		dark	black		f silt	to med silt	strong	
50.0	52.0	DZ896	PRO	Black shale	*aa		dark	black		f silt	to med silt	strong	disseminated pyrite and dark ?sulphide minerals
52.0	54.0	DZ896	PRO	Black shale	*aa		dark	black		f silt	to med silt	strong	disseminated pyrite and dark ?sulphide minerals
54.0	56.0	DZ896	PRO	Black shale	*aa		patchy	brown	black	vf silt	to f silt	strong	disseminated pyrite and dark ?sulphide minerals
56.0	58.0		PRO	Dolomite	silicified	*aa							
			PRO	Dolomite	silicified	laminated	medium	brown		vf silt	to f silt	strong	

EOH at 58.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7341

SHEET : ROPER

JOB NO : MBK

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 14-JUL-93

HOLE NUMBER : TRR53

COMMENTS:

LOGGED BY : DWW

TOTAL DEPTH : 40.0

GRID: ANG ZONE: 53

RELIABILITY: SATL

EASTING: 515880

NORTING: 8354871

R.L.: 20.0

SHEET 1 OF 1 HOLE NUMBER : TRR53

DEPTHS From To (m) (m)		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor		COLOUR		GRAIN SIZE			STRENGTH/ HARDNESS	COMMENTS	
0.0	2.0		TER	Laterite	pisolitic	weathered	medium	red	brown	med silt	to vf sand	hard	
2.0	4.0		TER	Clay	ferruginous	sandy	patchy	red	grey	vf silt	to vf sand	stiff	
4.0	6.0		TER	Clay	ferruginous	sandy	patchy	red	grey	vf silt	to vf sand	hard	
6.0	8.0		CRE	Claystone	sandy		patchy	red	grey	vf silt	to vf sand	weak	
8.0	10.0		CRE	Claystone	sandy		light	orange	grey	vf silt	to vf sand	weak	
10.0	12.0	D2897	CRE	Claystone	sandy		light	red	grey	vf silt	to vf sand	weak	mn oxides present.
12.0	14.0		CRE	Claystone	sandy		pale	grey		vf silt	to vf sand	weak	mn oxides present.
14.0	16.0		CRE	Claystone	sandy		pale	grey		vf silt	to vf sand	weak	mn oxides present.
16.0	18.0		CRE	Claystone	sandy	fresh	patchy	red	white	vf silt	to vf sand	weak	
18.0	20.0		CRE	Sandstone	ferruginous	fragmental	patchy	orange	white	vf silt	to med silt	weak	
20.0	22.0		CRE	Claystone	sandy		palest	white		vf silt	to vf sand	weak	
22.0	24.0		CRE	Claystone	sandy		palest	white		vf silt	to vf sand	weak	
24.0	26.0		CRE	Claystone	sandy		palest	white		vf silt	to vf sand	weak	
26.0	28.0		CRE	Claystone	sandy		light	orange	white	vf silt	to vf sand	weak	weathered basement.
28.0	30.0		CRE	Sandstone	clayey		light	orange	white	vf silt	to vf sand	weak	weathered basement.?proterozoic
30.0	32.0		CRE	Claystone	sandy		pale	yellow		vf silt	to vf sand	weak	
32.0	34.0		CRE	Sandstone	clayey		palest	yellow	white	vf silt	to vf sand	weak	
34.0	36.0		CRE	Claystone	sandy	fragmental	palest	white		vf silt	to vf sand	weak	
36.0	38.0		CRE	Sandstone	clayey	fragmental	palest	orange	white	vf silt	to vf sand	weak	
38.0	40.0	D2898	PRO	Quartzite	weathered	fragmental	patchy	yellow	brown	vf silt	to c silt	mod'ly strong	basement, hammer blocked hole abandoned.
				Clay	sandy								

EOH at 40.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7341

SHEET : ROPER

JOB NO : MBK

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 15-JUL-93

HOLE NUMBER : TRR54

Drill hole moved 400m east.

LOGGED BY : DWW

TOTAL DEPTH : 16.0

GRID: AMG ZONE: 53

RELIABILITY: SATL

EASTING: 518811

NORTHING: 8354109

R.L.: 10.0

SHEET 1 OF 1 HOLE NUMBER : TRR54

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS	
From (m)	To (m)			major/ minor									
0.0	2.0		TER	Laterite	weathered	clayey	medium	red	brown	f silt	to f sand	hard	
2.0	4.0		CRE	Clay	weathered	sandy	m light	orange		vf silt	to vf sand	stiff	
4.0	6.0		CRE	Clay	sandy		m light	orange		vf silt	to vf sand	stiff	
6.0	8.0		CRE	Sand Sandstone	clayey ferruginous	weathered	medium	orange	red	f silt	to f sand	hard	
8.0	10.0		CRE	Sand Sandstone	clayey ferruginous	weathered	medium	orange	red	f silt	to f sand	hard	
10.0	12.0		CRE	Sand Sandstone	clayey ferruginous	weathered	medium	orange	red	f silt	to f sand	hard	
12.0	14.0		CRE	Sand Sandstone	clayey ferruginous	weathered	medium	orange		f silt	to f sand	hard	
14.0	16.0	D2899	PRO	Sandstone Sandstone	weathered fresh	ferruginous massive	patchy	grey	brown	vf sand	to f sand	weak	basement,fresh at the end of 2m.
EQH at 16.0 m													

EOM at 16.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7341

SHEET : ROPER

JOB NO : NBK

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 16-JUL-93

HOLE NUMBER : TRR55

COMMENTS:

LOGGED BY : DWW

TOTAL DEPTH : 52.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 520277

NORTHING: 8354074

R.L.: 10.0

SHEET 1 OF 2 HOLE NUMBER : TRR55

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS	
From (m)	To (m)			major/ minor									
0.0	2.0		TER	Sand	clayey	patchy	orange	brown	med silt	to vf sand	stiff		
				Pisolite	lateritic								
2.0	4.0		CRE	Sand	ferruginous	clayey	m light	orange	med silt	to f sand	stiff		
				Sandstone	ferruginous								
4.0	6.0		CRE	Claystone	sandy	light	brown		med silt	to f sand	stiff		
				Sandstone	ferruginous								
6.0	8.0		CRE	Claystone	sandy	light	orange	grey	vf silt	to vf sand	weak	mn oxides present.	
8.0	10.0		CRE	Claystone	sandy	pale	grey		vf silt	to vf sand	weak	mn oxides present.	
10.0	12.0		CRE	Claystone	sandy	pale	orange	grey	vf silt	to vf sand	weak		
				Sandstone	ferruginous								
12.0	14.0		CRE	Siltstone	ferruginous	fragmental	patchy	lime	red	f silt	to med silt	weak	?proterozoic therefore basement.
				Siltstone	siliceous	fresh							
14.0	16.0		CRE	Siltstone	ferruginous	weathered	patchy	lime	red	f silt	to med silt	weak	?proterozoic therefore basement.
				Siltstone	siliceous	fresh							
16.0	18.0		CRE	Siltstone	ferruginous	weathered	patchy	lime	red	f silt	to med silt	weak	
				Siltstone	siliceous	fresh							
18.0	20.0		CRE	Siltstone	ferruginous	weathered	patchy	lime	red	f silt	to med silt	weak	
				Siltstone	siliceous	fresh							
20.0	22.0		CRE	Siltstone	clayey	medium	orange	lime	f silt	to med silt	weak		
22.0	24.0		CRE	Claystone	fresh	patchy	red	lime	vf silt	to f silt	weak		
24.0	26.0		CRE	Claystone	fresh	patchy	red	lime	vf silt	to f silt	weak		
26.0	28.0		CRE	Claystone	fresh	patchy	red	lime	vf silt	to f silt	weak		
28.0	30.0		CRE	Claystone	fresh	patchy	red	lime	vf silt	to f silt	weak		
30.0	32.0		CRE	Claystone	fresh	patchy	red	lime	vf silt	to f silt	weak		
32.0	34.0		CRE	Claystone	fresh	m light	brown	lime	clay	to vf silt	weak		
34.0	36.0		CRE	Claystone	fresh	m light	brown	lime	clay	to vf silt	weak		
36.0	38.0		CRE	Claystone	fresh	m light	brown	lime	clay	to vf silt	weak		
40.0	42.0		CRE	Claystone	sandy	patchy	lime	red	vf silt	to vf sand	weak		
42.0	44.0		CRE	Claystone	sandy	patchy	lime	red	vf silt	to vf sand	weak		

DEPTHS		SAMPLE NUMBER	GEOLOGICAL TIME	ROCK TYPES		COLOUR		GRAIN SIZE			STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor								
44.0	46.0		CRE	Claystone	sandy	patchy	red	lime	vf silt	to vf sand	weak	
46.0	48.0		CRE	Claystone	sandy	medium	red		vf silt	to vf sand	weak	
48.0	50.0		CRE	Claystone		patchy	red	lime	clay	to vf silt	weak	
50.0	52.0	DZ900	CRE	Claystone	sandy	medium	red		vf silt	to vf sand	weak	sample taken.
EOH at 52.0 m												

PROJECT : CARPENTARIA

LOCALITY: EL 7341

SHEET : ROPER

JOB NO : MBK

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 16-JUL-93

HOLE NUMBER : TRR56

COMMENTS:

LOGGED BY : DWW

TOTAL DEPTH : 16.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 519427

NORTHING: 8356322

R.L.: 15.0

SHEET 1 OF 1 HOLE NUMBER : TRR56

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor								
0.0	2.0		TER	Laterite	pisolitic	medium	red	brown	f silt	to c silt	hard	
2.0	4.0		TER	Laterite	pisolitic	medium	red	brown	f silt	to c silt	hard	
4.0	6.0		CRE	Sandstone	weathered clayey	patchy	orange	grey	f silt	to f sand	weak	weathered basement.
6.0	8.0		PRO	Sandstone	clayey	patchy	orange	grey	f silt	to f sand	weak	weathered basement.
8.0	10.0		PRO	Sandstone	ferruginous	patchy	orange	grey	f silt	to f sand	weak	
10.0	12.0	DZ901	PRO	Sandstone	clayey	patchy	red	grey	f silt	to f sand	weak	
12.0	14.0	DZ901	PRO	Sandstone	ferruginous	patchy	red	grey	f silt	to f sand	weak	
14.0	16.0	DZ901	PRO	Sandstone	clayey	m light	orange		vf silt	to vf sand	weak	

EOH at 16.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7341

SHEET : ROPER

JOB NO : MBK

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 16-JUL-93

HOLE NUMBER : TRR57

COMMENTS:

LOGGED BY : DWW

TOTAL DEPTH : 40.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 521113

NORTHING: 8357694

R.L.: 15.0

SHEET 1 OF 1 HOLE NUMBER : TRR57

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS	
From (m)	To (m)			major/ minor									
0.0	2.0		TER	Laterite	pisolitic	weathered	medium	red	brown	f silt	to c silt	hard	
2.0	4.0		TER	Laterite Saprolite	pisolitic sandy		patchy	grey	red	vf silt	to c silt	hard	
4.0	6.0		CRE	Clay	sandy	weathered	light	red	grey	vf silt	to vf sand	stiff	
6.0	8.0		CRE	Claystone	sandy	weathered	patchy	orange	grey	vf silt	to vf sand	hard	
8.0	10.0		CRE	Sandstone	clayey	weathered	light	orange		vf silt	to vf sand	weak	
10.0	12.0		CRE	Clay	sandy		patchy	orange	grey	vf silt	to vf sand	weak	
12.0	14.0		CRE	Clay	sandy		patchy	orange	grey	vf silt	to vf sand	weak	
14.0	16.0		CRE	Clay	sandy		pale	orange	grey	vf silt	to f sand	weak	
16.0	18.0		CRE	Clay	sandy		pale	orange	grey	vf silt	to f sand	weak	
18.0	20.0		CRE	Clay	sandy		pale	orange	grey	vf silt	to f sand	weak	
20.0	22.0		CRE	Clay	sandy		light	orange	grey	vf silt	to f sand	weak	
22.0	24.0		CRE	Clay	sandy		light	orange	grey	vf silt	to f sand	weak	
24.0	26.0		CRE	Clay	sandy		light	orange	grey	vf silt	to f sand	weak	
26.0	28.0		CRE	Sandstone	ferruginous	fragmental	light	orange	grey	vf silt	to f sand	weak	
28.0	30.0		CRE	Clay	sandy	fragmental	light	orange	grey	vf silt	to f sand	weak	
28.0	30.0		CRE	Sandstone	ferruginous	fragmental	light	lime		vf silt	to vf sand	weak	
30.0	32.0		CRE	Claystone	sandy		patchy	red	lime	vf silt	to vf sand	weak	
32.0	34.0		CRE	Claystone	ferruginous		patchy	red	lime	vf silt	to vf sand	weak	
34.0	36.0		CRE	Sandstone	sandy	fragmental	patchy	red	lime	vf silt	to vf sand	weak	
34.0	36.0		CRE	Claystone	ferruginous	fragmental	patchy	red	lime	vf silt	to vf sand	weak	
36.0	38.0		CRE	Sandstone	sandy	fragmental	patchy	red	lime	vf silt	to vf sand	weak	
36.0	38.0		CRE	Claystone	ferruginous	ferruginous	v dark	brown		vf silt	to vf sand	weak	
38.0	40.0	DZ902	PRO	Siltstone	silicified	weathered	medium	orange	brown	clay	to vf sand	weak	weathered basement.
				Claystone	sandy								

EOH at 40.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7341

SHEET : ROPER

JOB NO : MBK

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 16-JUL-93

HOLE NUMBER : TRR58

COMMENTS:

LOGGED BY : DWW

TOTAL DEPTH : 34.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 521696

NORTHING: 8359673

R.L.: 15.0

SHEET 1 OF 1 HOLE NUMBER : TRR58

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS	
From (m)	To (m)			major/ minor									
0.0	2.0		TER	Laterite	pisolitic	weathered	medium	red	brown	f silt	to vf sand	hard	
2.0	4.0		TER	Laterite	pisolitic	clayey	m light	red	brown	vf silt	to vf sand	hard	
4.0	6.0		TER	Clay	sandy	ferruginous	patchy	grey	red	vf silt	to s pebble	hard	
6.0	8.0		CRE	Gravel	weathered		patchy	brown	grey	vf silt	to vf sand	weak	
8.0	10.0		CRE	Clay	sandy		patchy	brown	grey	vf silt	to vf sand	weak	
10.0	12.0		CRE	Sandstone	ferruginous		patchy	brown	orange	vf silt	to vf sand	weak	
12.0	14.0		CRE	Clay	sandy		patchy	brown	lime	vf silt	to vf sand	weak	
14.0	16.0		CRE	Sandstone	ferruginous		patchy	brown	lime	vf silt	to vf sand	weak	
16.0	18.0		CRE	Claystone	sandy		patchy	orange	lime	vf silt	to vf sand	weak	
18.0	20.0		CRE	Siltstone	sandy		patchy	orange	lime	vf silt	to vf sand	weak	
20.0	22.0		CRE	Siltstone	fresh	massive	medium	lime		f silt	to med silt	weak	
22.0	24.0		CRE	Siltstone	fresh	massive	medium	lime		f silt	to med silt	weak	
24.0	26.0		CRE	Siltstone	fresh	massive	medium	lime		f silt	to c sand	weak	
26.0	28.0		CRE	Grit	quartzose		patchy	brown	lime	f silt	to c silt	weak	
28.0	30.0		CRE	Siltstone	fresh	massive	patchy	brown	lime	f silt	to c silt	weak	
30.0	32.0	DZ903	PRO	Siltstone	micaceous		patchy	brown	lime	vf silt	to c silt	weak	weathered basement
32.0	34.0	DZ903	PRO	Siltstone	ferruginous		patchy	brown	lime	vf silt	to med silt	weak	
			PRO	Dolomite	weathered	siliceous	medium	orange		vf silt	to f silt	weak	

EOH at 34.0 m

PROJECT : CARPENTARIA
LOCALITY: EL 7260
SHEET : TOWNS
JOB NO : MAY

CONTRACTOR : GADEN DRILLING
RIG TYPE : UDR-650
DATE DRILLED: 17-JUL-93

HOLE NUMBER : TRR59
LOGGED BY : DWW
TOTAL DEPTH : 46.0

COMMENTS:

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 530550 NORTHING: 8326295 R.L.: 20.0
SHEET 1 OF 2 HOLE NUMBER : TRR59

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor								
0.0	2.0		TER	Laterite	weathered	medium	red	red		to granule	weak	
2.0	4.0		TER	Laterite	weathered	medium	red	red		to granule	weak	
4.0	6.0		TER	Laterite	weathered	medium	red	pink	med sand		weak	
6.0	8.0		TER	Laterite	weathered	medium	pink		med sand		weak	
8.0	10.0		CRE	Sand	clayey	medium	red	tan	med sand		loose	
10.0	12.0		CRE	Sand	clayey	medium	tan	white	med sand		soft	
12.0	14.0		CRE	Clay	sandy	medium	white		med sand		soft	
14.0	16.0		CRE	Clay	sandy	medium	white		f sand		soft	water injection
16.0	18.0		CRE	Clay	sandy	pale	green		f sand		soft	ditto
18.0	20.0		CRE	Clay	sandy	pale	green	white	med sand		soft	ditto
20.0	22.0		CRE	Sand	clayey	pale	white	green	vc sand		soft	ditto
22.0	24.0		CRE	Sand	clayey	palest	grey		vf silt	to f sand	stiff	
24.0	26.0		CRE	Sandstone	fragmental	palest	grey		vf silt	to f sand	stiff	
26.0	28.0		CRE	Sandstone	clayey	patchy	orange	grey	vf silt	to med sand	weak	
28.0	30.0		CRE	Siltstone	ferruginous	patchy	orange	grey	vf silt	to vf sand	weak	
30.0	32.0		CRE	Siltstone	clayey	light	orange		vf silt	to c silt	weak	
32.0	34.0		CRE	Siltstone	siliceous	patchy	orange	red	vf silt	to vf sand	weak	?weathered basement.
34.0	36.0		CRE	Siltstone	sandy	patchy	orange	red	vf silt	to vf sand	weak	?weathered basement.
36.0	38.0	D2916	CRE	Siltstone	weathered	patchy	black	brown	vf silt	to med silt	weak	?weathered basement.
38.0	40.0	D2917	CRE	Siltstone	ferruginous	patchy	black	brown	vf silt	to med silt	weak	heavily weathered palaeo surface nn present.
40.0	42.0	D2918	CRE	Siltstone	weathered	patchy	black	brown	vf silt	to med silt	weak	nn present.
			CRE	Siltstone	ferruginous							

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES			COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor									
42.0	44.0	DZ905	PRO	Siltstone	silicified	weathered	patchy	grey	brown	vf silt	to med silt	mod'ly strong	basement material.
44.0	46.0	DZ905	PRO	Siltstone	micaceous		patchy	orange	brown	vf silt	to med silt	weak	hammer blocked hole abandoned.
				Siltstone	siliceous								
EOH at 46.0 m													

PROJECT : CARPENTARIA

LOCALITY: EL 7260

SHEET : TOWNS

JOB NO : MAY

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 18-JUL-93

HOLE NUMBER : TRR60

Deepened from 46 to 64m 27/7

LOGGED BY : DW&HWS

TOTAL DEPTH : 64.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 532859

NORTHING: 8327831

R.L.: 17.0

SHEET 1 OF 2 HOLE NUMBER : TRR60

DEPTHS From (m)	To (m)	SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR				GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
0.0	2.0		TER	Sand	lateritic	clayey	patchy	red	grey	f silt	to f sand	stiff
2.0	4.0		TER	Sand	lateritic	clayey	patchy	red	grey	f silt	to f sand	stiff
4.0	6.0		CRE	Sand	clayey	ferruginous	patchy	orange	grey	f silt	to f sand	stiff
6.0	8.0		CRE	Sand	clayey	ferruginous	patchy	orange	grey	f silt	to f sand	hard
8.0	10.0		CRE	Sand	clayey	gritty	pale	grey		vf silt	to vc sand	hard
10.0	12.0		CRE	Sand	clayey	gritty	pale	grey		vf silt	to vc sand	hard
12.0	14.0		CRE	Sand	clayey	gritty	pale	grey		vf silt	to vc sand	hard
14.0	16.0		CRE	Sand	clayey	gritty	m light	orange		f silt	to vc sand	hard
16.0	18.0		CRE	Sand	clayey	gritty	m light	orange		f silt	to vc sand	hard
18.0	20.0		CRE	Sand	clayey	gritty	m light	orange		f silt	to vs pebble	hard
20.0	22.0		CRE	Sand	clayey	gritty	m light	orange		f silt	to vs pebble	hard
22.0	24.0		CRE	Sand	clayey	gritty	m light	orange		f silt	to vs pebble	hard
24.0	26.0		CRE	Clay	sandy		patchy	orange	grey	f silt	to vf sand	hard
26.0	28.0		CRE	Siltstone	ferruginous	sandy	patchy	orange	grey	f silt	to vf sand	hard
28.0	30.0		CRE	Claystone	sandy		patchy	orange	grey	f silt	to vf sand	hard
30.0	32.0		CRE	Sandstone	ferruginous	fragmental	patchy	orange	grey	f silt	to vf sand	hard
32.0	34.0		CRE	Claystone	sandy		patchy	orange	grey	f silt	to vf sand	hard
34.0	36.0		CRE	Sandstone	siliceous	ferruginous	light	orange		f silt	to vf sand	hard
36.0	38.0		CRE	Claystone	sandy	fragmental	light	orange		f silt	to vf sand	hard
38.0	40.0		CRE	Sandstone	massive	fragmental	medium	orange		f silt	to vf sand	hard
40.0	42.0		CRE	Sandstone	massive	fragmental	medium	orange		f silt	to vf sand	hard
			CRE	Clay	siliceous	sandy						

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor								
42.0	44.0		OTH	Sandstone	ferruginous	siliceous	medium	orange brown	c silt	to vf sand	weak	
44.0	46.0	DZ906	OTH	Sandstone	weathered	silicified	patchy	orange brown	f silt	to vf sand	mod'ly strong	
46.0	48.0		OTH	Sandstone	pisolitic	siliceous	medium	yellow	med sand	to c sand	mod'ly strong	siliceous oolites
48.0	50.0		OTH	Clay Sandstone	sandy		medium	yellow	clay		firm	
50.0	52.0		OTH	Siltstone Chert	siliceous		medium	yellow brown	f silt		weak	
52.0	54.0		OTH	Sandstone	pisolitic	siliceous	med dark yellow	brown	med sand	to c sand	mod'ly strong	
54.0	56.0		OTH	Siltstone Shale	ferruginous		med dark red	brown	f silt		stiff	
56.0	58.0		OTH	Sandstone Shale	pisolitic	siliceous	med dark red	brown	f silt	to med sand	weak	mn coating oolitic snst
58.0	60.0		OTH	Sandstone Shale	pisolitic	siliceous	med dark red	brown	f silt	to med sand	weak	mn coating oolitic snst - rare
60.0	62.0	DZ924	PRO	Dolomite Shale			medium	yellow	f silt		mod'ly strong	
62.0	64.0	DZ924	PRO	Dolomite	laminated	siliceous	med dark yellow	tan	f silt		mod'ly strong	

EOH at 64.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7260

SHEET : TOWNS

JOB NO : MAY

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 18-JUL-93

HOLE NUMBER : TRR61

Deepened from 42 to 56m 26/7

LOGGED BY : DWW&NWB

TOTAL DEPTH : 56.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 535513

NORTHING: 8328980

R.L.: 16.0

SHEET 1 OF 2 HOLE NUMBER : TRR61

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS	
From (m)	To (m)			major/ minor									
0.0	2.0		TER	Laterite	pisolitic	weathered	patchy	grey	red	vf silt	to vf sand	hard	
2.0	4.0		CRE	Claystone	silty		patchy	red	white	vf silt	to vf sand	hard	
4.0	6.0		CRE	Laterite	pisolitic	weathered							
				Claystone	sandy		palest	orange	white	vf silt	to c silt	hard	
6.0	8.0		CRE	Claystone	sandy		patchy	orange	grey	vf silt	to c silt	hard	
				Sandstone	silty	ferruginous							
8.0	10.0		CRE	Sandstone	silty		patchy	red	grey	med silt	to vf sand	weak	
				Sandstone	ferruginous	silty							
10.0	12.0		CRE	Sandstone	silty		patchy	red	grey	med silt	to vf sand	weak	
				Sandstone	ferruginous	silty							
12.0	14.0		CRE	Siltstone	sandy		palest	white		f silt	to vf sand	weak	
14.0	16.0		CRE	Claystone	silty		light	red	grey	vf silt	to med silt	weak	
16.0	18.0		CRE	Claystone	silty		light	red	grey	vf silt	to med silt	weak	
18.0	20.0		CRE	Claystone	silty		light	orange	grey	vf silt	to med silt	weak	
20.0	22.0		CRE	Claystone	sandy		patchy	orange	grey	vf silt	to med silt	weak	
22.0	24.0		CRE	Claystone	sandy		patchy	grey	red	vf silt	to vf sand	weak	
24.0	26.0		CRE	Claystone	silty		patchy	red	grey	vf silt	to med silt	weak	
26.0	28.0		CRE	Claystone	fresh		patchy	orange	grey	vf silt	to med silt	weak	
				Carbonate	weathered	fragmental							
28.0	30.0		CRE	Claystone	silty		patchy	orange	grey	vf silt	to med silt	weak	
				Carbonate	weathered	fragmental							
30.0	32.0		CRE	Claystone	sandy		pale	orange	grey	vf silt	to vf sand	weak	
32.0	34.0		CRE	Claystone	sandy		light	orange	grey	vf silt	to vf sand	weak	
34.0	36.0		CRE	Claystone	sandy		light	orange	grey	vf silt	to vf sand	weak	
				Sandstone	siliceous	fragmental							
36.0	38.0		CRE	Clay	sandy		pale	grey		vf silt	to vf sand	weak	
				Sandstone	siliceous	fragmental							
38.0	40.0		CRE	Clay	sandy		light	orange	grey	vf silt	to vf sand	weak	
				Sandstone	siliceous	fragmental							
40.0	42.0	DZ907	CRE	Clay	sandy		light	orange	grey	vf silt	to vf sand	weak	hole deepened
				Sandstone	siliceous	fragmental							

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)									
42.0	44.0			Sandstone	dark	yellow	f sand		weak	
44.0	46.0			Sand	light	tan	yellow vf silt	to c sand	firm	interbedded chert/oolite; age uncertain
46.0	48.0			Chert						
				Sandstone	light	tan	yellow vf sand	to #1	weak	oolites react weakly with 10% hcl
48.0	50.0	DZ934		Sandstone	banded	black	tan	vf sand	mod'ly strong	mn band approx 1.5m thick assoc. with oolites
50.0	52.0	DZ935	PRO	Dolomite	m light	tan	f silt		strong	
52.0	54.0	DZ935	PRO	Dolomite	m light	tan	f silt		strong	
54.0	56.0	DZ935	PRO	Dolomite	m light	red	tan	f silt	strong	mn on partings
EOH at 56.0 m				Shale						

PROJECT : CARPENTARIA
 LOCALITY: EL 7260
 SHEET : TOWNS
 JOB NO : MAY

CONTRACTOR : GADEN DRILLING
 RIG TYPE : UDR-650
 DATE DRILLED: 19-JUL-93

HOLE NUMBER : TRR62

COMMENTS:

LOGGED BY : DWW
 TOTAL DEPTH : 40.0

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 538522 NORTHING: 8330076 R.L.: 16.0
 SHEET 1 OF 1 HOLE NUMBER : TRR62

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS	
From (m)	To (m)			major/ minor									
0.0	2.0		TER	Laterite	sandy	pisolitic	m light	red	brown	granule	to c silt	weak	
2.0	4.0		TER	Laterite Sand	sandy clayey	pisolitic	m light	yellow	brown	granule	to c silt	weak	
4.0	6.0		TER	Clay Sand	sandy		pale	yellow	brown	granule	to med sand	friable	
6.0	8.0		TER	Clay Sand	sandy		pale	yellow	brown	granule	to med sand	friable	
8.0	10.0		CRE	Sand			pale	yellow	tan	c sand	to clay	friable	
10.0	12.0		CRE	Sand	clayey		m light	orange	red	c sand	to clay	friable	
12.0	14.0		CRE	Sand			m light	yellow	brown	c sand		friable	
14.0	16.0		CRE	Sand	clayey		light	yellow	brown	c sand	to clay	friable	
16.0	18.0		CRE	Sand			pale	yellow	brown	c sand	to clay	friable	
18.0	20.0		CRE	Sand	clayey		pale	yellow	brown	c sand	to clay	friable	
20.0	22.0		CRE	Sand	clayey		pale	white		c sand	to clay	friable	
22.0	24.0		CRE	Sand	clayey		pale	white		c sand	to clay	friable	
24.0	26.0		CRE	Clay	sandy		pale	white		c sand	to clay	friable	
26.0	28.0		CRE	Clay	sandy		pale	white		c sand	to clay	friable	
28.0	30.0		CRE	Clay	sandy		pale	white		c sand	to clay	friable	
30.0	32.0		CRE	Clay	sandy		pale	white		c sand	to clay	friable	
32.0	34.0		CRE	Sand	clayey		pale	white		c sand	to clay	friable	rare small pebbles
34.0	36.0		CRE	Sand	clayey		pale	white		c sand	to clay	friable	
36.0	38.0	DZ908	CRE	Sand	clayey		pale	white		c sand	to clay	friable	common small pebbles
38.0	40.0	DZ908	CRE	Sand	clayey		m light	yellow		vc sand	to clay	friable	

EOH at 40.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7260

SHEET : TOWNS

JOB NO : MAY

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 19-JUL-93

HOLE NUMBER : TRR63

COMMENTS:

LOGGED BY : DMW

TOTAL DEPTH : 22.0

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 538166 NORTHING: 8331101 R.L.: 16.0
SHEET 1 OF 1 HOLE NUMBER : TRR63

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)									
0.0	2.0		TER	Sand clayey	medium	tan	med sand		friable	
2.0	4.0		TER	Sand clayey	pale	tan	med sand	to vf silt	friable	
4.0	6.0		CRE	Clay sandy	pale	tan	med sand	to vf silt	friable	
6.0	8.0		CRE	Clay sandy	pale	tan brown	med sand	to vf silt	friable	
8.0	10.0		CRE	Clay sandy	pale	yellow white	med sand	to vf silt	friable	
10.0	12.0		CRE	Clay sandy	pale	yellow white	med sand	to vf silt	friable	
12.0	14.0		OTH	Fe crete	medium	orange red	vf sand		mod'ly strong	
14.0	16.0		PRO	Shale	pale	yellow pink	f silt		mod'ly strong	banded green & maroon shale/siltstone
16.0	18.0	DZ909	PRO	Shale	pale	pink white	f silt		mod'ly strong	ditto
18.0	20.0	DZ909	PRO	Shale	light	pink white	f silt		mod'ly strong	ditto
20.0	22.0	DZ909	PRO	Shale	med dark pink	red	f silt		mod'ly strong	ditto

EOH at 22.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7260

SHEET : TOWNS

JOB NO : MAY

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 19-JUL-93

HOLE NUMBER : TRR64

Hole deepened

LOGGED BY : DMW

TOTAL DEPTH : 52.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 537235

NORTHING: 8332043

R.L.: 15.0

SHEET 1 OF 2 HOLE NUMBER : TRR64

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor								
0.0	2.0		CEN	Sand		pale	pink	tan	med sand		loose	
2.0	4.0		TER	Laterite	pisolitic	med dark red		brown	vs pebble		weak	
4.0	6.0		TER	Clay	sandy	light	yellow		med sand	to clay	soft	
6.0	8.0		TER	Clay		light	yellow	white	clay		soft	
8.0	10.0		PLI	Carbonate		light	yellow				weak	
10.0	12.0		CRE	Sand	clayey	pale	yellow	white	c sand	to clay	soft	
12.0	14.0		CRE	Sand		light	yellow		vc sand	to med sand	soft	
14.0	16.0		CRE	Sand	clayey	light	pink	yellow	c sand	to clay	soft	
16.0	18.0		CRE	Sand		light	yellow		vc sand	to med sand	soft	
18.0	20.0		CRE	Sandstone		pale	yellow		c sand		weak	
20.0	22.0		CRE	Clay	ferruginous sandy	medium	yellow		vf silt	to f sand	weak	
22.0	24.0		CRE	Clay	ferruginous sandy	medium	yellow		vf silt	to f sand	weak	
24.0	26.0		CRE	Sandstone	fragmental							
24.0	26.0		CRE	Clay	ferruginous sandy	medium	yellow		vf silt	to f sand	weak	
24.0	26.0		CRE	Sandstone	fragmental							
26.0	28.0		CRE	Clay	sandy	m light	khaki		vf silt	to f sand	weak	sample taken for an age determination.
26.0	28.0		CRE	Sandstone	fragmental							
28.0	30.0		CRE	Clay	sandy	medium	yellow		vf silt	to f sand	weak	
28.0	30.0		CRE	Sandstone	fragmental							
30.0	32.0		CRE	Clay	sandy	medium	yellow		vf silt	to vf sand	weak	
30.0	32.0		CRE	Sandstone	silicified fragmental							
32.0	34.0		CRE	Clay	sandy	m light	yellow		vf silt	to f sand	weak	
32.0	34.0		CRE	Sandstone	fragmental							
34.0	36.0		CRE	Clay	sandy	medium	yellow		vf silt	to f sand	weak	
34.0	36.0		CRE	Sandstone	fragmental							
36.0	38.0		CRE	Clay	sandy	medium	yellow		vf silt	to vf sand	weak	
36.0	38.0		CRE	Sandstone	fragmental							
38.0	40.0		CRE	Clay	sandy	medium	yellow		vf silt	to vf sand	weak	
38.0	40.0		CRE	Sandstone	fragmental							
40.0	42.0		CRE	Clay	sandy	medium	yellow		vf silt	to vf sand	weak	
40.0	42.0		CRE	Sandstone	fragmental							

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor							
42.0	44.0		CRE	Clay Sandstone	sandy fragmental	medium	yellow	vf silt	to f sand	weak	
44.0	46.0		CRE	Clay Sandstone	sandy fragmental	medium	orange	vf silt	to f sand	weak	
46.0	48.0		CRE	Siltstone	fresh	medium	orange	f silt	to c silt	weak	
48.0	50.0		CRE	Siltstone	fresh	medium	orange	f silt	to c silt	weak	
50.0	52.0	DZ912	PRO	Sandstone	fresh	medium	orange	med silt	to vf sand	mod'ly strong	

EOH at 52.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7341

SHEET : TOWNS

JOB NO : MBK

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 20-JUL-93

HOLE NUMBER : TRR65

COMMENTS:

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 538463

NORTHING: 8334234

R.L.: 10.0

LOGGED BY : DWV

TOTAL DEPTH : 34.0

SHEET 1 OF 1 HOLE NUMBER : TRR65

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor								
0.0	2.0		TER	Laterite Clay	weathered sandy	pisolitic weathered	med dark red	brown	f silt	to vf sand	hard	
2.0	4.0		CRE	Clay	weathered	silty	patchy red	grey	vf silt	to c silt	stiff	
4.0	6.0		CRE	Claystone	silty		patchy red	grey	vf silt	to med silt	hard	
6.0	8.0		CRE	Claystone	sandy		m light grey		vf silt	to med silt	weak	
8.0	10.0		CRE	Sandstone	weathered	clayey	patchy red	grey	f silt	to vf sand	weak	?weathered basement.
10.0	12.0		CRE	Sandstone Clay	weathered weathered	clayey ferruginous	patchy orange	grey	f silt	to vf sand	weak	?weathered basement.
12.0	14.0		CRE	Claystone	sandy		patchy red	grey	vf silt	to vf sand	weak	
14.0	16.0		CRE	Claystone	siliceous	massive	m light grey		vf silt	to med silt	weak	
16.0	18.0		CRE	Claystone Sandstone	sandy fragmental	ferruginous	m light red	orange	vf silt	to vf sand	weak	minor mn oxides.
18.0	20.0		CRE	Claystone	sandy	ferruginous	m light red	orange	vf silt	to vf sand	weak	minor mn oxides.
20.0	22.0		CRE	Siltstone	ferruginous		m light khaki		med silt	to vf sand	weak	
22.0	24.0		CRE	Siltstone	ferruginous		medium brown		f silt	to med silt	weak	
24.0	26.0		CRE	Siltstone	ferruginous		medium brown		f silt	to med silt	weak	
26.0	28.0		CRE	Siltstone	siliceous	laminated	patchy lime	brown	f silt	to med silt	weak	
28.0	30.0	DZ910	PRO	Siltstone	siliceous		medium lime		f silt	to med silt	weak	
30.0	32.0	DZ910	PRO	Siltstone	siliceous		med dark lime		f silt	to med silt	weak	
32.0	34.0	DZ910	PRO	Siltstone	siliceous		med dark lime		f silt	to med silt	weak	

EDH at 34.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7341

SHEET : TOWNS

JOB NO : MBK

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 20-JUL-93

HOLE NUMBER : TRR66

COMMENTS:

LOGGED BY : DWW

TOTAL DEPTH : 40.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 539678

NORTHING: 8336416

R.L.: 10.0

SHEET 1 OF 1 HOLE NUMBER : TRR66

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor							
0.0	2.0		TER	Laterite Clay	weathered ferruginous pisolitic	patchy	red	brown	vf silt to f sand	hard	
2.0	4.0		CRE	Clay Laterite	ferruginous weathered pisolitic	patchy	red	orange	vf silt to vf sand	hard	minor mn oxides.
4.0	6.0		CRE	Carbonate Clay	weathered sandy	pale	orange	white	vf silt to c silt	hard	
6.0	8.0		CRE	Claystone Sandstone	weathered ferruginous transported	patchy	red	grey	vf silt to vf sand	hard	minor mn oxides.
8.0	10.0		CRE	Claystone	weathered sandy	patchy	red	grey	vf silt to vf sand	hard	
10.0	12.0		CRE	Conglomerate	fluvial transported	patchy	red	grey	vf silt to vc sand	weak	
12.0	14.0		CRE	Conglomerate	fluvial transported	patchy	red	grey	vf silt to vc sand	weak	minor mn oxides.
14.0	16.0		CRE	Claystone	sandy ferruginous	patchy	red	grey	vf silt to vf sand	weak	
16.0	18.0		CRE	Claystone	sandy	patchy	red	grey	vf silt to vf sand	weak	
18.0	20.0		CRE	Claystone	sandy	patchy	red	grey	vf silt to vf sand	hard	
20.0	22.0		CRE	Claystone Sandstone	sandy ferruginous fragmental	pale	red	grey	vf silt to vf sand	hard	
22.0	24.0		CRE	Claystone Sandstone	sandy ferruginous fragmental	light	orange	grey	vf silt to f sand	weak	minor mn oxides.
24.0	26.0		CRE	Clay Sandstone	sandy ferruginous fragmental	pale	orange	grey	vf silt to f sand	weak	minor mn oxides.
26.0	28.0		CRE	Clay Sandstone	sandy ferruginous fragmental	palest	white		vf silt to f sand	weak	minor mn oxides.
28.0	30.0		CRE	Clay Sandstone	sandy ferruginous fragmental	palest	white		vf silt to f sand	weak	
30.0	32.0		CRE	Clay Sandstone	sandy ferruginous fragmental	palest	white		vf silt to f sand	weak	
32.0	34.0		CRE	Clay Chert	sandy fragmental	pale	yellow		vf silt to med silt	weak	
34.0	36.0		CRE	Clay Chert	sandy fragmental	light	yellow		vf silt to med silt	weak	
36.0	38.0	DZ911	PRO	Dolomite Clay	siliceous sandy	m light	yellow		vf silt to med silt	mod'ly strong	weathered basement.
38.0	40.0	DZ911	PRO	Dolomite	siliceous silty	m light	brown		clay to vf silt	mod'ly strong	

EOH at 40.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7260

SHEET : TOWNS

JOB NO : MAY

CONTRACTOR : GADEM DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 21-JUL-93

HOLE NUMBER : TRR67

Significant Mn intersected, 2m

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 538610

NORTHING: 8328251

R.L.: 15.0

LOGGED BY : DWW

TOTAL DEPTH : 40.0

SHEET 1 OF 1 HOLE NUMBER : TRR67

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor							
0.0	2.0		TER	Soil	sandy	weathered	pale brown	med silt	to f sand	stiff	
2.0	4.0		CRE	Laterite Clay	pisolitic sandy	weathered ferruginous	patchy grey orange	vf silt	to vf sand	hard	
4.0	6.0		CRE	Clay	sandy	weathered	patchy orange grey	vf silt	to vf sand	hard	minor mn oxides.
6.0	8.0		CRE	Carbonate Claystone	fragmental sandy		patchy orange grey	vf silt	to vf sand	weak	minor mn oxides.
8.0	10.0		CRE	Claystone	sandy		light grey	vf silt	to vf sand	weak	minor mn oxides.
10.0	12.0		CRE	Claystone	sandy		light orange grey	vf silt	to vf sand	weak	
12.0	14.0		CRE	Sandstone Clay	ferruginous sandy	fragmental	medium orange brown	vf silt	to vf sand	weak	
14.0	16.0		CRE	Sand	clayey		m light orange	med silt	to med sand	stiff	
16.0	18.0		CRE	Sand	clayey		pale orange brown	med silt	to med sand	stiff	
18.0	20.0		CRE	Sandstone	fragmental		pale orange brown	f silt	to f sand	stiff	
20.0	22.0		CRE	Sand	clayey	gritty	pale yellow	vf silt	to vc sand	stiff	
22.0	24.0		CRE	Chert	fragmental						
24.0	26.0		CRE	Clay	sandy		patchy orange brown	vf silt	to c silt	hard	
26.0	28.0		CRE	Siltstone	siliceous	massive	light orange	vf silt	to vf sand	hard	
28.0	30.0		CRE	Clay	sandy		light orange	vf silt	to vf sand	hard	
30.0	32.0		CRE	Siltstone	sandy	siliceous	patchy orange brown	vf silt	to med silt	weak	
32.0	34.0	D2913	CRE	Clay	silicified		med dark brown	vf silt	to c silt	hard	
34.0	36.0	D2914	PRO	Siltstone	silicified	fragmental	v dark black brown	vf silt	to vf sand	weak	abundant mn oxides sample taken
36.0	38.0	D2914	PRO	Dolomite	sandy		m light red brown	vf silt	to med silt	weak	
38.0	40.0	D2914	PRO	Dolomite	siliceous	massive	m light red brown	vf silt	to med silt	mod'ly strong	

EOR at 40.0 m

PROJECT : CARPENTARIA
LOCALITY: EL 7260
SHEET : TOWNS
JOB NO : MAY

CONTRACTOR : GADEN DRILLING
RIG TYPE : UDR-650
DATE DRILLED: 22-JUL-93

HOLE NUMBER : TRR68

0.5m Mn intersection

LOGGED BY : MWB
TOTAL DEPTH : 40.0

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 538675 NORTHING: 8328087 R.L.: 15.0
SHEET 1 OF 2 HOLE NUMBER : TRR68

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)										
0.0	2.0		TER	Clay Laterite	sandy	light	yellow	brown	vf silt	to med sand	friable
2.0	4.0		TER	Sand	sandy clayey	pale	yellow	white	vf silt	to med sand	friable
4.0	6.0		TER	Sand Carbonate	clayey	light	tan		clay	to med sand	friable
6.0	8.0		CRE	Clay	sandy	pale	green	white	clay	to med sand	friable
8.0	10.0		CRE	Clay	sandy	pale	green	white	clay	to med sand	friable
10.0	12.0		CRE	Sand	clayey	light	yellow		med sand	to clay	friable
12.0	14.0		CRE	Sand	clayey	light	yellow	white	*4	to clay	loose minor clay & larger qtz grains
14.0	16.0		CRE	Sand	clayey	light	yellow	white	*4	to clay	loose ditto
16.0	18.0		CRE	Sand	clayey	light	tan	white	granule		loose coarse sand conglomerate
18.0	20.0		CRE	Sand	clayey	light	tan	white	granule		loose
20.0	22.0		CRE	Sand Conglomerate	clayey	light	white		granule		loose qtz, fe sst, chert frags in cong.
22.0	24.0		CRE	Conglomerate	clayey	light	white		vs pebble		loose
24.0	26.0		CRE	Clay Chert	sandy	light	tan	yellow	clay	to med sand	friable
26.0	28.0		CRE	Breccia		light	tan	yellow	l pebble	to clay	firm oolitic frags
28.0	30.0		CRE	Breccia		m light	khaki		l pebble	to clay	stiff
30.0	31.0		CRE	Breccia		m light	brown	khaki	l pebble	to clay	stiff concretions & poss replacing oolitic material; 30-50cm t
31.0	32.0		PRO	Dolomite Breccia		m light	brown	khaki	med silt		mod'ly strong
32.0	34.0		PRO	Dolomite		medium	yellow	brown	vf silt		mod'ly strong
34.0	36.0	D2919	PRO	Dolomite Shale		medium	yellow	brown	vf silt		mod'ly strong fg pink material may be tuff, has dendritic mn
36.0	38.0	D2919	PRO	Dolomite Tuff	shaly	m light	yellow	brown	vf silt		strong
38.0	40.0	D2919	PRO	Dolomite Tuff	shaly	m light	tan	pink	vf silt		strong

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR	GRAIN SIZE	STRENGTH/ HARDNESS	COMMENTS
From	To							
(m)	(m)							

EOH at 40.0 m

PROJECT : CARPENTARIA
LOCALITY: EL 7260
SHEET : TOWNS
JOB NO : MAY

CONTRACTOR : GADEN DRILLING
RIG TYPE : UDR-650
DATE DRILLED: 22-JUL-93

HOLE NUMBER : TRR69

COMMENTS:

LOGGED BY : HWB
TOTAL DEPTH : 40.0

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 541550 NORTHING: 8327067 R.L.: 15.0
SHEET 1 OF 1 HOLE NUMBER : TRR69

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)										
0.0	2.0		TER	Laterite	sandy	medium	tan	red	f sand	friable	
2.0	4.0		CRE	Clay	sandy	light	yellow	pink	clay	to f sand	trace mn
4.0	6.0		CRE	Clay	sandy	light	pink		clay	to f sand	friable
6.0	8.0		CRE	Clay	sandy	light	pink		clay	to f sand	friable
8.0	10.0		CRE	Clay	sandy	light	brown	yellow	clay	to f sand	friable
10.0	12.0		CRE	Sand	clayey	light	brown	yellow	f sand	to clay	friable
12.0	14.0		CRE	Clay		light	white		vf silt	friable	age not clear
14.0	16.0		CRE	Clay		light	white		vf silt	friable	ditto
16.0	18.0		PRO	Siltstone		light	lime	white	f silt	firm	age not clear, does not look cre
18.0	20.0		PRO	Siltstone		light	lime		f silt	firm	
20.0	22.0		PRO	Chert Siltstone		light	lime	white		weak	
22.0	24.0		PRO	Chert Siltstone		light	lime	white		weak	
24.0	26.0		PRO	Siltstone Chert		light	lime	white		weak	
26.0	28.0		PRO	Chert Siltstone		pale	pink	yellow	f silt	weak	
28.0	30.0		PRO	Siltstone Chert	ferruginous	medium	brown		f silt	weak	
30.0	32.0	DZ904	PRO	Siltstone Dolomite	ferruginous	medium	yellow	brown	f silt	weak	minor chert
32.0	34.0	DZ904	PRO	Sandstone Chert	ferruginous	medium	yellow	brown	f sand	strong	tr dolomite in part oolitic
34.0	36.0	DZ921	PRO	Sandstone Dolomite	ferruginous	medium	yellow	brown	f sand	strong	
36.0	38.0	DZ921	PRO	Dolomite Chert		m light	yellow	brown		strong	
38.0	40.0	DZ921	PRO	Dolomite		light	tan	grey		strong	

EOH at 40.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7260

SHEET : TOWNS

JOB NO : MAY

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 22-JUL-93

HOLE NUMBER : TRR70

COMMENTS:

LOGGED BY : HWB

TOTAL DEPTH : 22.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 544400

NORTHING: 8327985

R.L.: 15.0

SHEET 1 OF 1 HOLE NUMBER : TRR70

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)										
0.0	2.0		CEN	Clay	sandy	light	green	white	clay	to f sand	friable
2.0	4.0		TER	Clay Laterite		pale	yellow	white	clay	to f sand	friable
4.0	6.0		TER	Clay Carbonate	sandy	m light	yellow		clay	to f sand	friable
6.0	8.0		TER	Sand Carbonate	clayey	med dark red		brown	f sand	to clay	friable
8.0	10.0		TER	Sand	clayey	m light	yellow	brown	f sand	to clay	friable
10.0	12.0		PRO	Siltstone	ferruginous	m light	pink		f silt		soft
12.0	18.0	DZ923	PRO	Siltstone	ferruginous	m light	pink		f silt		stiff
18.0	22.0	DZ924	PRO	Siltstone	ferruginous	m light	pink		f silt		hard

EOH at 22.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7260

SHEET : TOWNS

JOB NO : MAY

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 22-JUL-93

HOLE NUMBER : TRR71

COMMENTS:

LOGGED BY : RWB

TOTAL DEPTH : 16.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 547760

NORTHING: 8325273

R.L.: 15.0

SHEET 1 OF 1 HOLE NUMBER : TRR71

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor							
0.0	2.0		CEN	Sand	ferruginous	medium	orange	yellow	med sand	loose	
2.0	4.0		CEN	Sand	ferruginous	medium	orange	red	med sand	loose	
4.0	6.0		CEN	Sand	ferruginous	medium	orange	red	med sand	loose	
6.0	8.0		CEN	Sand	ferruginous	medium	orange	red	med sand	soft	
8.0	10.0		CEN	Sandstone	ferruginous	medium	pink	orange	med sand	soft	
10.0	12.0		PRO	Sandstone	ferruginous	medium	red	brown	med sand	firm	
12.0	16.0	DZ925	PRO	Siltstone	sandy	light	tan	yellow f silt	to med sand	mod'ly strong	light green sist underlys weathered fe sandstone

EDR at 16.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7260

SHEET : TOWNS

JOB NO : MAY

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 23-JUL-93

HOLE NUMBER : TRR72

COMMENTS:

LOGGED BY : HWB

TOTAL DEPTH : 22.0

GRID: ANG

ZONE: 53

RELIABILITY: SATL

EASTING: 544038

NORTHING: 8322745

R.L.: 18.0

SHEET 1 OF 1 HOLE NUMBER : TRR72

DEPTKS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR				GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor									
0.0	2.0		CEN	Clay	sandy	m light	orange	grey	f silt			loose	
2.0	4.0		CEN	Sand Carbonate	clayey	m light	tan	yellow	f silt			soft	
4.0	6.0		TER	Sand Carbonate	clayey	light	pink	tan	med sand			firm	trace mm on carbonate
6.0	8.0		PRO	Sandstone	clayey	light	white		med sand			weak	no obvious cretaceous
8.0	12.0		PRO	Sandstone	clayey	ferruginous	light	yellow	brown	med sand		weak	
12.0	14.0		PRO	Sandstone	clayey	ferruginous	m light	yellow	brown	med sand		weak	
14.0	16.0		PRO	Sandstone	ferruginous	clayey	m light	yellow	brown	med sand		weak	
16.0	18.0		PRO	Sandstone Clay	ferruginous	m light	red	brown	med sand			weak	
18.0	20.0	DZ926	PRO	Sandstone Clay	ferruginous	m light	red	brown	med sand			weak	
20.0	22.0	DZ926	PRO	Shale Sandstone	ferruginous ferruginous	medium	red					mod'ly strong	

EOH at 22.0 m

PROJECT : CARPENTARIA
LOCALITY: EL 7260
SHEET : TOWNS
JOB NO : MAY

CONTRACTOR : GADEN DRILLING
RIG TYPE : UDR-650
DATE DRILLED: 23-JUL-93

HOLE NUMBER : TRR73
LOGGED BY : HWB
TOTAL DEPTH : 10.0

COMMENTS:

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 539350 NORTHING: 8323300 R.L.: 22.0
SHEET 1 OF 1 HOLE NUMBER : TRR73

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor							
0.0	2.0		TER	Laterite	sandy	med dark yellow	brown	med pebble	to med sand	weak	
2.0	4.0		TER	Sand	clayey	m light yellow	orange	med sand	to vf silt	soft	trace mn film on clay
4.0	6.0		TER	Sand	clayey	m light tan	pink	med sand	to vf silt	weak	
6.0	8.0	DZ927	PRO	Sandstone	ferruginous weathered	m light pink		med sand		mod'ly strong	
8.0	10.0	DZ927	PRO	Sandstone	ferruginous weathered	light yellow	white	med sand		mod'ly strong	

EOH at 10.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7260

SHEET : TOWNS

JOB NO : MAY

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 24-JUL-93

HOLE NUMBER : TRR74

COMMENTS:

LOGGED BY : HWB

TOTAL DEPTH : 64.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 540175

NORTHING: 8322300

R.L.: 22.0

SHEET 1 OF 2 HOLE NUMBER : TRR74

DEPTHS From To (m) (m)	SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR	GRAIN SIZE	STRENGTH/ HARDNESS	COMMENTS
0.0 2.0		TER	Sand Laterite	pisolitic	light yellow brown med sand to granule	Loose	
2.0 4.0		TER	Sand Laterite	clayey	light yellow brown f sand to clay	friable	
4.0 6.0		TER	Sand	clayey	light pink f sand to clay	friable	
6.0 8.0		TER	Sand Conglomerate	clayey	m light red brown f sand to *0	friable	
8.0 10.0		OTH	Sand	med dark red brown f sand to med sand	friable		
10.0 12.0		OTH	Sandstone	clayey	m light yellow brown f sand to clay	weak	
12.0 14.0		CRE	Sand	clayey	pale tan white f sand to clay	soft	
14.0 16.0		CRE	Sand		pale yellow white f sand	friable	poss unit 2
16.0 18.0		CRE	Sand		light yellow tan f sand	friable	
18.0 20.0		CRE	Clay Sand	ferruginous clayey	medium pink red clay to f sand	stiff	
20.0 22.0		CRE	Clay	ferruginous	medium pink red clay	stiff	
22.0 24.0		CRE	Clay	ferruginous	med dark red brown clay	stiff	
24.0 26.0		CRE	Clay	sandy	ferruginous m light pink clay to f sand	stiff	
26.0 28.0		CRE	Silt	sandy	light yellow tan med silt to f sand	firm	
28.0 30.0		CRE	Silt	sandy	light yellow tan med silt to f sand	firm	
30.0 32.0		CRE	Sand	silty	m light yellow tan med silt to vf sand	firm	
32.0 34.0		CRE	Clay	sandy	m light white clay to f sand	firm	
34.0 36.0		CRE	Silt	sandy	pale yellow white clay to vf sand	firm	
36.0 38.0		CRE	Silt	sandy	med dark yellow clay to vf sand	firm	
38.0 40.0		CRE	Sand	silty	med dark yellow f sand	firm	
40.0 42.0		CRE	Silt	sandy	mottled yellow white c silt to vf sand	firm	

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR		GRAIN SIZE			STRENGTH/ HARDNESS	COMMENTS	
From (m)	To (m)											
42.0	44.0		CRE	Sand	silty	mottled	yellow	white	c silt	to vf sand	firm	
44.0	46.0		CRE	Sand		pale	yellow	white	vf sand		friable	
46.0	48.0		CRE	Sand		pale	pink		vf sand		friable	
48.0	50.0		CRE	Sand		pale	pink		vf sand		friable	
50.0	52.0		CRE	Sand Chert	clayey	medium	yellow		f sand		firm	
52.0	54.0		CRE	Sand	clayey	m light	yellow		f sand	to clay	firm	
54.0	56.0		CRE	Clay Sandstone	sandy	m light	yellow	tan	clay	to f sand	firm	poss weathered basement
56.0	58.0		CRE	Sand Chert	clayey	m light	yellow	tan	f sand	to clay	weak	
58.0	60.0	DZ928	PRO	Sand Chert	clayey	m light	yellow	tan	f sand	to clay	mod'ly strong	
60.0	62.0	DZ928	PRO	Chert Sandstone		light	tan				mod'ly strong	
62.0	64.0	DZ928	PRO	Chert Sandstone		light	tan				mod'ly strong	some possible dolomite

EOH at 64.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7260

SHEET : TOWNS

JOB NO : MAY

GRID: ANG ZONE: 53

RELIABILITY: SATL

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 25-JUL-93

EASTING: 541770

NORTHING: 8321390

R.L.: 22.0

HOLE NUMBER : TRR75

COMMENTS:

LOGGED BY : KWB

TOTAL DEPTH : 52.0

SHEET 1 OF 2 HOLE NUMBER : TRR75

DEPTHS From (m)	To (m)	SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR	GRAIN SIZE	STRENGTH/ HARDNESS	COMMENTS
0.0	2.0		CEN	Sand Laterite	light yellow	med sand	loose	
2.0	4.0		TER	Laterite Sand	light tan	med sand	loose	
4.0	6.0		TER	clayey Sand	pale pink	med sand	friable	
6.0	8.0		TER	clayey Sand	light yellow	med sand	soft	angular snst frags
8.0	10.0		OTH	Duricrust Conglomerate	ferruginous siliceous	light yellow tan	weak	feri & silcrete
10.0	12.0		OTH	Duricrust Sand	ferruginous siliceous	light yellow tan	weak	
12.0	14.0		CRE	clayey Sand	medium yellow	med sand	soft	
14.0	16.0		CRE	sandy Clay	light yellow	clay	soft	
16.0	18.0		CRE	sandy Clay	mottled yellow	clay	soft	
18.0	20.0		CRE	Clay	mottled pink	clay	firm	
20.0	22.0		CRE	Clay	mottled white	clay	firm	
22.0	24.0		CRE	Clay	med dark orange	clay	firm	
24.0	26.0		CRE	sandy Clay	med dark orange	clay	firm	
26.0	28.0		CRE	sandy Clay	m light pink	clay	firm	sand content increased
28.0	30.0		CRE	sandy Clay	mottled pink	clay	firm	sand content decreasing
30.0	32.0		CRE	clayey Sand	ferruginous medium red	clay	loose	ferrug. sands
32.0	34.0		CRE	clayey Sand	medium red	clay	loose	clean well sorted sands
34.0	36.0		CRE	clayey Sand	m light yellow	clay	firm	
36.0	38.0		CRE	sandy Clay	m light yellow	clay	firm	
38.0	40.0		CRE	clayey Sand	mottled white	clay	firm	
40.0	42.0		CRE	clayey Sand Shale	light tan	clay	firm	cher frags;2m poss weathered basement

SHEET 2 OF 2 HOLE NUMBER : TRR75

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR	GRAIN SIZE	STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor					
42.0	44.0		PRO	Sandstone Chert		mottled yellow red	f sand	weak	shale frags
44.0	46.0		PRO	Sandstone Chert		m light yellow	f sand	mod'ly strong	
46.0	48.0	DZ929	PRO	Sandstone		light tan	f sand	mod'ly strong	
48.0	50.0	DZ929	PRO	Sandstone		light yellow white	f sand	mod'ly strong	
50.0	52.0	DZ929	PRO	Sandstone		light tan	f sand	mod'ly strong	snst pinkish hue

EOH at 52.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7260

SHEET : TOWNS

JOB NO : MAY

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 25-JUL-93

HOLE NUMBER : TRR76

COMMENTS:

LOGGED BY : HWB

TOTAL DEPTH : 30.0

GRID: ANG

ZONE: 53

RELIABILITY: SATL

EASTING: 539630

NORTHING: 8319590

R.L.: 38.0

SHEET 1 OF 1 HOLE NUMBER : TRR76

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor								
0.0	2.0		CEN	Sand		m light	red	brown	c sand		loose	
2.0	4.0		OTH	Sand		medium	orange	red	c sand		loose	
4.0	6.0		OTH	Sand		medium	orange	red	f sand	to c sand	loose	
6.0	8.0		OTH	Sand		med dark	orange	red	f sand	to c sand	loose	
8.0	10.0		OTH	Sand		med dark	orange	red	f sand	to c sand	weak	
10.0	12.0		OTH	Sandstone	ferruginous	light	pink	tan	c sand		loose	
12.0	14.0		OTH	Sandstone	ferruginous							
12.0	14.0		OTH	Conglomerate	sandy	pale	yellow	pink	s pebble		loose	
14.0	16.0		OTH	Conglomerate	sandy	pale	yellow	tan	s pebble		loose	
16.0	18.0		OTH	Conglomerate	sandy	pale	yellow		s pebble		friable	
18.0	20.0		OTH	Duricrust	ferruginous sandy	pale	tan	white	f sand	to c sand	weak	
20.0	22.0		OTH	Duricrust	ferruginous sandy	medium	yellow		med silt	to f sand	weak	limonitic
22.0	24.0		OTH	Duricrust	ferruginous sandy	mottled	yellow	white	med silt	to f sand	weak	
24.0	26.0		CRE	Sandstone		medium	tan		med sand		weak	still unsure of age
26.0	28.0		CRE	Sand	clayey	pale	grey	white	med sand		firm	
28.0	30.0	D2930	PRO	Chert								
28.0	30.0		PRO	Sandstone		light	pink		f sand	to med sand	strong	snst pinkish hue
28.0	30.0			Sand	clayey							

EOW at 30.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7260

SHEET : TOWNS

JOB NO : MAY

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 26-JUL-93

HOLE NUMBER : TRR77

COMMENTS:

LOGGED BY : HWB

TOTAL DEPTH : 16.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 536680

NORTHING: 8317210

R.L.: 25.0

SHEET 1 OF 1 HOLE NUMBER : TRR77

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS		
From (m)	To (m)											
0.0	2.0		CEN	Clay	sandy	pale	grey	clay	to med sand	firm	clay pan	
2.0	4.0		OTH	Clay	sandy	banded	grey	yellow clay	to vc sand	soft	contact at 3m	
4.0	6.0		TER	Sand		light	yellow	c sand	to vc sand	loose		
6.0	8.0		TER	Sand	clayey	m light	red	yellow clay	to c sand	loose	minor carb	
8.0	10.0		TER	Carbonate	sandy	medium	yellow	brown clay	to f sand	soft	carb is very fine grained	
10.0	12.0		CRE	Clay	sandy	light	yellow	tan	vf silt	to f sand	firm	unsure of age
12.0	14.0	D2931	PRO	Siltstone		light	yellow	tan	f sand	weak		
				Sandstone	ferruginous							
14.0	16.0	D2931	PRO	Sandstone	ferruginous	medium	red	brown	f sand	weak		
				Sandstone								

EOH at 16.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7260

SHEET : TOWNS

JOB NO : MAY

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 16-JUL-93

HOLE NUMBER : TRR78

COMMENTS:

LOGGED BY : HWB

TOTAL DEPTH : 16.0

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 534360 NORTHING: 8316216 R.L.: 38.0
SHEET 1 OF 1 HOLE NUMBER : TRR78

DEPTHS From To (m) (m)	SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor		COLOUR		GRAIN SIZE			STRENGTH/ HARDNESS	COMMENTS
0.0 2.0		TER	Sand	ferruginous	medium red	brown med sand				loose	
2.0 4.0		TER	Laterite Sand Sandstone	clayey	mottled red	yellow f sand				weak	snst boulder float
4.0 6.0	DZ932	PRO	Dolomite Shale	ferruginous	mottled yellow	red vf silt	to f silt			strong	
6.0 8.0	DZ932	PRO	Dolomite Silt	weathered	mottled yellow	white vf silt	to f silt			weak	
8.0 10.0	DZ932	PRO	Shale Dolomite	ferruginous weathered	m light pink	red vf silt	to f silt			weak	
10.0 12.0	DZ933	PRO	Shale	ferruginous weathered	med dark red	brown vf silt	to f silt			weak	
12.0 14.0	DZ933	PRO	Shale	ferruginous weathered	med dark red	brown vf silt	to f silt			weak	
14.0 16.0	DZ933	PRO	Shale	ferruginous weathered	med dark red	brown vf silt	to f silt			weak	

EOH at 16.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7260

SHEET : TOWNS

JOB NO : MAY

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 27-JUL-93

HOLE NUMBER : TRR79

300m up track from trr59.

LOGGED BY : HWB,APD

TOTAL DEPTH : 52.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 530856

NORTHING: 8326628

R.L.: 20.0

SHEET 1 OF 2 HOLE NUMBER : TRR79

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)									
0.0	2.0		TER	Laterite	sandy	med dark red	brown s pebble	to med sand	weak	
2.0	4.0		TER	Laterite	sandy	medium orange	brown s pebble	to med sand	weak	
4.0	6.0		TER	Silt	sandy	m light pink	med silt	to f sand	soft	
6.0	8.0		TER	Clay	sandy	mottled pink	white clay	to f sand	firm	
8.0	10.0		TER	Clay	sandy	mottled pink	white clay	to med sand	soft	sandstone fragments
10.0	12.0		TER	Clay	sandy	pale yellow	white clay	to med sand	firm	
12.0	14.0		CRE	Clay	sandy	light grey	white clay	to f sand	firm	
14.0	16.0		CRE	Sand	clayey	pale white	c sand	to clay	firm	
16.0	18.0		CRE	Sand	clayey	medium yellow	brown granule	to clay	firm	
18.0	20.0		CRE	Sand	clayey	medium yellow	brown granule	to clay	firm	
20.0	22.0		CRE	Sand	clayey	pale white	grey granule	to clay	firm	
22.0	24.0		CRE	Sand	clayey	pale white	grey s pebble	to clay	stiff	abundant lithic fragments
24.0	26.0		CRE	Sand	clayey	pale white	grey s pebble	to clay	stiff	? algal chert
26.0	28.0		CRE	Sand	clayey	pale white	grey f sand	to clay	hard	? algal chert
28.0	30.0		CRE	Pebble Cong	clayey	medium yellow	med pebble	to clay	hard	abundant chert fragments
30.0	32.0		CRE	Pebble Cong	sandy	medium brown	yellow med pebble	to vf sand	weak	abundant chert fragments
32.0	34.0		CRE	Sand	clayey	medium yellow	brown f sand	to clay	weak	
34.0	36.0		CRE	Sand	silty	medium brown	yellow med sand	to c silt	firm	interbedded ferug. siltst. and clean loose sand
36.0	38.0		CRE	Sand	silty	med dark yellow	med sand	to c silt	soft	interbedded ferug. siltst. and clean loose sand
38.0	40.0		CRE	Sand	cherty	med dark yellow	f sand		weak	interlaminated fine sand and chert
40.0	42.0		CRE	Sand	silty	med dark yellow	vf sand	to med silt	weak	chert frag.

PROJECT : CARPENTARIA

LOCALITY: EL 7261

SHEET : TOWNS

JOB NO : KAZ

CONTRACTOR : GADEN DRILLING

RIG TYPE : LDR-650

DATE DRILLED: 30-JUL-93

HOLE NUMBER : TRR80

COMMENTS:

LOGGED BY : APO

TOTAL DEPTH : 22.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 538959

NORTHING: 8306497

R.L.: 15.0

SHEET 1 OF 1 HOLE NUMBER : TRR80

DEPTHS From To (m) (m)	SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR			GRAIN SIZE			STRENGTH/ HARDNESS	COMMENTS
0.0 2.0		TER	Laterite	clayey	medium	blue	khaki	vf silt	to f sand	soft	ferruginous mottled-zone clays
2.0 4.0		TER	Laterite	clayey	medium	brown	red	vf silt	to f sand	soft	ferruginous mottled-zone clays
4.0 6.0		TER	Laterite	pisolitic	m light	brown	red	c silt	to vs pebble	friable	loose ferruginous pisoliths in silty clay
6.0 8.0		TER	Laterite	silty	medium	red	brown	c silt	to vs pebble	friable	kaolinitic mottled zone with minor ferruginous pisoliths
8.0 10.0		CRE	Sand	clayey	light	white	khaki	clay	to f sand	firm	kaolinitic clay
10.0 12.0		CRE	Sand	clayey	light	pink	white	clay	to f sand	firm	kaolinitic clay, minor hematite mottling
12.0 14.0		CRE	Silt	clayey	medium	white	grey	clay	to c silt	firm	minor disseminated wad
14.0 16.0		CRE	Silt	clayey	med dark	brown	red	clay	to c silt	firm	minor hematitic mottling, trace ?pyrolusite
16.0 18.0	DZ940	PRO	Quartzite Dolomite	clayey	medium	brown	white	c sand	to clay	strong	minor chert, mildly ferruginous ?pru
18.0 20.0	DZ940	PRO	Siltstone	micaceous	dark	green		clay		weak	chlorite phyllite, ?dololomite ?pru
20.0 22.0	DZ940	PRO	Siltstone	micaceous	dark	green		clay		weak	chlorite phyllite, ?dololomite ?pru

EOH at 22.0 m

PROJECT : CARPENTARIA
LOCALITY: EL 7261
SHEET : TOWNS
JOB NO : MAZ

CONTRACTOR : GADEN DRILLING
RIG TYPE : UDR-650
DATE DRILLED: 30-JUL-93

HOLE NUMBER : TRR81

COMMENTS:

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 541395 NORTHING: 8306613 R.L.: 15.0
SHEET 1 OF 1 HOLE NUMBER : TRR81

DEPTHS From To (m) (m)		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
0.0	2.0		TER	Laterite Pisolite	silty	medium brown	yellow clay	to c silt	soft	
2.0	4.0		TER	Sand Pisolite	clayey	medium brown	yellow vf sand	to vs pebble	soft	lateritized clayey sand
4.0	6.0		CRE	Sand	silty	m light yellow	vf sand	to vf silt	firm	weakly lateritized silty sand
6.0	8.0		CRE	Sand	clayey	light grey	brown vf sand	to clay	stiff	minor disseminated wad
8.0	10.0		CRE	Sand	clayey	medium red	brown vf sand	to clay	stiff	hematite mottled, minor pebble size quartzite fragments
10.0	12.0		CRE	Silt	clayey	med dark red	brown med silt	to clay	stiff	hematite mottled, trace disseminated mn
12.0	14.0		CRE	Sand	clayey	m light pink	white clay	to c sand	firm	? top of unit 2
14.0	16.0		CRE	Sand	clayey	pale white	clay	to med sand	stiff	trace dissem, mn
16.0	18.0		CRE	Sand	clayey	m light yellow	clay	to f sand	hard	
18.0	20.0		CRE	Sand	clayey	pale yellow	grey clay	to f sand	hard	trace diseaminated mn
20.0	22.0		CRE	Conglomerate	clayey	m light yellow	blue clay	to med pebble	hard	chert and quartzite frags.
22.0	24.0		CRE	Conglomerate	clayey	m light yellow	blue clay	to med pebble	hard	chert and quartzite frags.
24.0	26.0		PRO	Silt	shaly	m light yellow	blue clay	to f silt	hard	pru
26.0	28.0		PRO	Silt	shaly	m light yellow	clay	to f silt	hard	minor quartzite pru
28.0	30.0	DZ941	PRO	Silt	shaly	med dark purple	clay	to f silt	hard	mixture of greenish and ferruginous silty shale pru
30.0	32.0	DZ941	PRO	Silt	shaly	m light purple	white clay	to f silt	hard	laminated silty shale, ferruginous pru
32.0	34.0	DZ941	PRO	Silt	shaly	med dark purple	clay	to f silt	hard	laminated silty shale, ferruginous pru

EOH at 34.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7261

SHEET : TOWNS

JOB NO : MAZ

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 30-JUL-93

HOLE NUMBER : TRR82

COMMENTS:

LOGGED BY : APO

TOTAL DEPTH : 22.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 543176

NORTHING: 8308164

R.L.: 15.0

SHEET 1 OF 1 HOLE NUMBER : TRR82

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)									
0.0	2.0		CRE	Sand	silty	m light tan	f silt	to f sand	friable	minor mn coatings
2.0	4.0		CRE	Sand	clayey	m light khaki tan	clay	to vf sand	firm	minor mn coatings
4.0	6.0		CRE	Sand	clayey	light tan white	clay	to vf sand	firm	
6.0	8.0		CRE	Sand	clayey	light yellow tan	clay	to f sand	firm	
8.0	10.0		CRE	Sand	clayey	light tan yellow	clay	to f sand	firm	minor ferruginous mottling
10.0	12.0		CRE	Sand	clayey	pale white	clay	to f sand	firm	minor ferruginous mottling
12.0	14.0		PRO	Quartzite Chert		pale white grey	clay	to vf sand	mod'ly strong	chert occurs as replacement of the fine sandstone ?ptl
14.0	16.0		PRO	Quartzite Chert		palest white	clay	to vf sand	mod'ly strong	laminated chert ?ptl
16.0	18.0	DZ942	PRO	Quartzite Chert		palest white	clay	to vf sand	mod'ly strong	laminated chert ?ptl
18.0	20.0	DZ942	PRO	Quartzite Chert		palest white	clay	to vf sand	mod'ly strong	laminated chert ?ptl
20.0	22.0	DZ942	PRO	Quartzite Chert		palest white	clay	to vf sand	mod'ly strong	laminated chert ?ptl

EOH at 22.0 m

PROJECT : CARPENTARIA
LOCALITY: EL 7261
SHEET : TOWNS
JOB NO : MAZ

CONTRACTOR : GADEN DRILLING
RIG TYPE : UDR-650
DATE DRILLED: 31-JUL-93

HOLE NUMBER : TRR83

COMMENTS:

GRID: ANG ZONE: 53 RELIABILITY: SATL EASTING: 540822 NORTHING: 8309380 R.L.: 15.0
SHEET 1 OF 1 HOLE NUMBER : TRR83

DEPTHS From (m)	To (m)	SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR	GRAIN SIZE	STRENGTH/ HARDNESS	COMMENTS
0.0	2.0		CEN	Sand clayey	medium yellow tan	clay to f sand	soft	minor dissem. mn
2.0	4.0		CEN	Sand clayey	medium yellow tan	clay to f sand	soft	
4.0	6.0		CEN	Silt clayey	med dark red brown	clay to c silt	firm	
6.0	8.0		CRE	Clay gravelly	med dark red brown	clay to vs pebble	stiff	contains small angular quartzite pebbles
8.0	10.0		CRE	Clay	m light pink red	clay	firm	
10.0	12.0		CRE	Clay silty	pale grey white	clay to f silt	firm	
12.0	14.0		CRE	Clay Chert sandy fragmental transported	pale grey white	clay to vf sand	firm	contains small transported chert and quartzite pebbles
14.0	16.0		CRE	Clay silty	pale grey white	clay to f silt	stiff	several specks of mn oxides present
16.0	18.0		CRE	Clay Conglomerate sandy	pale grey white	clay to c sand	stiff	contains quartzite and chert pebbles
18.0	20.0		CRE	Clay Conglomerate sandy	m light yellow tan	clay to c sand	stiff	contains quartzite and chert pebbles, chert dominant
20.0	22.0		CRE	Clay sandy	m light purple red	clay to f sand	stiff	minor quartzite fragments
22.0	24.0		CRE	Clay sandy	m light purple red	clay to granule	stiff	
24.0	26.0		CRE	Clay sandy	m light purple red	clay to granule	stiff	
26.0	28.0		PRO	Sandstone clayey	med dark red	clay to f sand	stiff	contains fine mica, and thin indurated fine sandstone ls
28.0	30.0		PRO	Sandstone clayey	med dark red	clay to f sand	stiff	as above, but more sandstone pru
30.0	32.0		PRO	Sandstone clayey	med dark red	clay to f sand	stiff	as above, but even more sandstone pru
32.0	34.0		PRO	Sandstone clayey	med dark red grey	clay to f sand	mod'ly strong	interlam. fg hematitic sandstone and grey micaceous shal
34.0	36.0	DZ943	PRO	Sandstone clayey	m light grey white	clay to f sand	mod'ly strong	interlam. fg hematitic sandstone and grey micaceous shal
36.0	38.0	DZ943	PRO	Sandstone clayey	med dark grey	clay to f sand	mod'ly strong	interlam. fg hematitic sandstone and grey micaceous shal
38.0	40.0	DZ943	PRO	Siltstone sandy	med dark grey	f silt to vf sand	mod'ly strong	grey sandy siltstone (micaceous) pru

EOH at 40.0 m

PROJECT : CARPENTARIA
LOCALITY: EL 7261
SHEET : TOWNS
JOB NO : MAZ

CONTRACTOR : GADEN DRILLING
RIG TYPE : UDR-650
DATE DRILLED: 31-JUL-93

HOLE NUMBER : TRR84

COMMENTS:

GRID: ANG ZONE: 53 RELIABILITY: SATL EASTING: 539537 NORTHING: 8311162 R.L.: 15.0
SHEET 1 OF 1 HOLE NUMBER : TRR84

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS	
From (m)	To (m)											
0.0	2.0		TER	Laterite	pisolitic	light	white	tan	f sand	to s pebble	soft	pisoliths with yellow sandy matrix
2.0	4.0		CRE	Sand	clayey	light	tan		clay	to f sand	firm	
4.0	6.0		CRE	Laterite Sand	pisolitic clayey	m light	red	white	clay	to f sand	firm	
6.0	8.0		CRE	Sand	clayey	m light	red	white	clay	to f sand	firm	
8.0	10.0		CRE	Clay	sandy	med dark	pink	red	clay	to c sand	firm	
10.0	12.0		CRE	Clay	sandy	med dark	pink	red	clay	to c sand	firm	minor grey shale and chert frags
12.0	14.0		CRE	Clay	sandy	med dark	pink	white	clay	to med sand	firm	wthd frags of fg ferug sandstone
14.0	16.0		CRE	Clay	sandy	med dark	pink	red	clay	to med sand	firm	wthd frags of fg ferug sandstone, minor chert frags
16.0	18.0		CRE	Clay	sandy	med dark	pink	red	clay	to med sand	firm	wthd frags of fg ferug sandstone, minor chert frags
18.0	20.0	concrete columns	CRE	Clay	sandy	pale	white	red	clay	to f sand	stiff	wthd frags of fg ferug sandstone,
20.0	22.0		CRE	Clay	sandy	pale	white	red	clay	to f sand	stiff	wthd frags of fg ferug sandstone,
22.0	24.0		CRE	Clay	sandy	pale	white	red	clay	to f sand	stiff	wthd frags of fg ferug sandstone,
24.0	26.0		CRE	Clay Conglomerate	sandy sandy	light	pink	white	clay	to med pebble	stiff	frags of; silic. ooid grainstone, ?algal chert, sil. silt
26.0	28.0		CRE	Clay	sandy	medium	yellow		clay	to granule	firm	minor chert frags
28.0	30.0		CRE	Conglomerate Clay	sandy sandy	medium	yellow	pink	clay	to med pebble	stiff	frags of; silic. ooid grainstone, ?algal chert, sil. silt
30.0	32.0		CRE	Clay	sandy	medium	pink	red	clay	to vc sand	firm	minor fg sandst. fragments
32.0	34.0		CRE	Clay	sandy	medium	pink	red	clay	to vc sand	firm	minor fg sandst. fragments
34.0	36.0	DZ944	PRO	Siltstone Sandstone	ferruginous	medium	pink	white	f silt	to f sand	hard	intercal. green-grey siltst and fg purple sandst. pr
36.0	38.0	DZ944	PRO	Siltstone Sandstone	ferruginous	med dark	grey	white	f silt	to f sand	hard	intercal. green-grey siltst and fg purple sandst. pr
38.0	40.0	DZ944	PRO	Siltstone Sandstone	ferruginous	med dark	grey	white	f silt	to f sand	hard	intercal. green-grey siltst and fg purple sandst. pr

EOH at 40.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7261

SHEET : TOWNS

JOB NO : MAZ

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 31-JUL-93

HOLE NUMBER : TRR85

COMMENTS:

LOGGED BY : APD

TOTAL DEPTH : 28.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 546900

NORTHING: 8307918

R.L.: 15.0

SHEET 1 OF 1 HOLE NUMBER : TRR85

DEPTHS From To (m) (m)		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR				GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS	
0.0	2.0		CRE	Sand	silty	ferruginous	light	yellow	red	f silt	to med sand	soft	weakly lateritized sand
2.0	4.0		CRE	Sand	silty	ferruginous	medium	red	yellow	f silt	to med sand	soft	weakly lateritized sand
4.0	6.0		CRE	Sand	silty		pale	tan		f silt	to med sand	soft	
6.0	8.0		CRE	Silt	sandy	ferruginous	m light	red	white	f silt	to med sand	soft	
8.0	10.0		CRE	Sand	conglomeratic		med dark	yellow		med sand	to med pebble	loose	sandst. and chert pebbles
10.0	12.0		CRE	Sand	conglomeratic		med dark	yellow		med sand	to med pebble	loose	sandst. and chert pebbles
12.0	14.0		CRE	Sand			med dark	yellow		f sand	to #1	soft	contains some weakly cemented fine sandst.
14.0	16.0		CRE	Sand			medium	pink	red	f sand		soft	contains some weakly cemented fine sandst.
16.0	18.0		CRE	Sand Conglomerate	silty		medium	pink	red	med silt	to med sand	firm	chert and quartzite fragments
18.0	20.0		CRE	Conglomerate	sandy		med dark	purple	red	vf sand	to l pebble	stiff	oolite, ferrug. sandst., and chert frags
20.0	22.0		PRO	Sandstone			med dark	purple	red	f sand	to s pebble	strong	ferruginous sandst
22.0	24.0	DZ945	PRO	Sandstone	silty		med dark	purple	red	c silt	to med sand	mod'ly strong	ferruginous sandst
24.0	26.0	DZ945	PRO	Sandstone	silty		med dark	purple	white	c silt	to med sand	mod'ly strong	ferruginous sandst
26.0	28.0	DZ945	PRO	Siltstone	sandy		medium	khaki	yellow	c silt	to med sand	weak	intercal. green siltst. and ferrug. sandst.

EOH at 28.0 m

PROJECT : CARPENTARIA
LOCALITY: EL 7261
SHEET : TOWNS
JOB NO : MAZ

CONTRACTOR : GADEN DRILLING
RIG TYPE : UDR-650
DATE DRILLED: 31-JUL-93

HOLE NUMBER : TRR86

lost return-black clay

LOGGED BY : APO
TOTAL DEPTH : 70.0

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 545475 NORTHING: 8311162 R.L.: 15.0
SHEET 1 OF 2 HOLE NUMBER : TRR86

DEPTHS From (m)	To (m)	SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS		
0.0	2.0		CEN	Sand	silty	pale	tan	white	med silt	to med sand	loose	weakly lateritized	
2.0	4.0		CEN	Sand	silty	medium	tan		med silt	to med sand	soft	weakly lateritized	
4.0	6.0		TER	Sand	silty	pisolitic	light	pink	med silt	to med sand	stiff	lateritized sandstone	
6.0	8.0		TER	Sand	clayey	pisolitic	medium	red	blue	clay	to med sand	stiff	lateritized sandstone
8.0	10.0		CRE	Sand	clayey	m light	pink	red	clay	to med sand	hard	contains weakly indurated fine quartz sandst. ?unit 2	
10.0	12.0		CRE	Sandstone	clayey	light	pink	white	clay	to med sand	hard	contains weakly indurated fg ferrug qtz sandst. ?unit 2	
12.0	14.0		CRE	Sandstone	clayey	light	white	tan	clay	to med sand	hard	as above but more clay	
14.0	16.0		CRE	Sandstone	clayey	light	white	tan	clay	to vs pebble	stiff	contains white chert frags	
16.0	18.0		CRE	Sand	clayey	light	white		clay	to vs pebble	stiff	contains white chert frags-syneresis cracks, silic. calc	
18.0	20.0		CRE	Conglomerate	clayey	light	white	grey	clay	to vs pebble	stiff	as above, but secondary silic. dissem mn	
20.0	22.0		CRE	Sand	clayey	light	white	grey	clay	to vs pebble	stiff	as above, but secondary silic. dissem mn	
22.0	24.0		CRE	Conglomerate	clayey	light	white	grey	clay	to vs pebble	stiff	as above, but secondary silic. dissem mn	
24.0	26.0		CRE	Clay	silty	pale	white		clay	to med silt	stiff	clean kaolinitic clay	
26.0	28.0		CRE	Clay	sandy	pale	white	tan	clay	to med sand	stiff	minor chert frags	
28.0	30.0		CRE	Clay	sandy	pale	tan	white	clay	to med sand	stiff	contains charcoal ? contamination	
30.0	32.0		CRE	Conglomerate	sandy	pale	tan	white	clay	to s pebble	stiff	contains chert and fg ferrug. sandst. frags	
32.0	34.0		CRE	Clay	sandy	pale	tan	white	clay	to s pebble	stiff	contains chert and fg ferrug. sandst. frags	
34.0	36.0		CRE	Conglomerate	sandy	pale	tan	white	clay	to s pebble	stiff	contains chert and fg ferrug. sandst. frags	
36.0	38.0		CRE	Clay	sandy	m light	yellow		clay	to s pebble	stiff	contains chert and fg ferrug. sandst. frags	
38.0	40.0		CRE	Clay	sandy	m light	white	yellow	clay	to s pebble	stiff	contains chert and fg ferrug. sandst. frags	
40.0	42.0		CRE	Clay	sandy	medium	yellow	pink	clay	to c sand	stiff	contains chert and fg ferrug. sandst. frags	
			CRE	Clay		light	white		clay	to f silt	stiff	minor ferrug. clay	
			CRE	Clay		med dark red		white	clay	to f silt	stiff	minor ferrug. clay	
			CRE	Clay		med dark red		white	clay	to f silt	stiff	minor ferrug. clay	

DEPTHS From To (m) (m)		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
42.0	44.0		CRE	Clay		medium	yellow	clay	to f silt	stiff	
44.0	46.0		CRE	Clay		medium	yellow	clay	to f silt	stiff	
46.0	48.0		CRE	Clay	sandy	medium	yellow	clay	to vf sand	stiff	
48.0	50.0		CRE	Clay		medium	yellow	clay	to f silt	stiff	minor fine sand; puggy clay
50.0	52.0	DZ946	CRE	Clay		medium	yellow grey	clay	to f silt	stiff	contains some dark grey clay, ?manganiferrous
52.0	54.0	DZ946	CRE	Clay		v dark	grey	clay	to f silt	stiff	dark grey clay ?manganiferrous
54.0	56.0	DZ946	CRE	Clay		v dark	grey	clay	to f silt	stiff	dark grey clay ?manganiferrous
56.0	58.0	DZ946	CRE	Clay		v dark	grey	clay	to f silt	stiff	dark grey clay ?manganiferrous
58.0	60.0	DZ947	CRE	Clay		v dark	grey	clay	to f silt	stiff	dark grey clay ?manganiferrous
60.0	62.0	DZ947	CRE	Clay	silty	v dark	grey	clay	to f silt	stiff	dark grey clay ?manganiferrous age dating sample take
62.0	64.0	DZ947	CRE	Clay	silty	v dark	grey	clay	to f silt	stiff	dark grey clay ?manganiferrous
64.0	66.0	DZ947	CRE	Clay	silty	v dark	grey	clay	to f silt	stiff	dark grey clay ?manganiferrous
66.0	68.0		CRE	Clay	sandy	med dark khaki	yellow clay	clay	to med sand	stiff	contains sandst. and chert frags
68.0	70.0		CRE	Clay	sandy	med dark khaki	yellow clay	clay	to med sand	stiff	as above-mixture of oxidized yellow and reduced grey cla

EOK at 70.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7261

SHEET : TOWNS

JOB NO : NAZ

CONTRACTOR : GADEN DRILLING

RIG TYPE : LDR-650

DATE DRILLED: 02-AUG-93

HOLE NUMBER : TRR87

COMMENTS:

LOGGED BY : APO

TOTAL DEPTH : 16.0

GRID: ANG

ZONE: 53

RELIABILITY: SATL

EASTING: 547446

NORTHING: 8313465

R.L.: 15.0

SHEET 1 OF 1 HOLE NUMBER : TRR87

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS	
From (m)	To (m)			major/ minor								
0.0	2.0		TER	Laterite	sandy	pisolitic	med dark red	brown	med silt	to med sand	soft	lateritized sand
2.0	4.0		TER	Laterite	sandy	pisolitic	med dark red	brown	med silt	to med sand	soft	lateritized sand
4.0	6.0		CRE	Sand	clayey		m light red	yellow	clay	to granule	soft	contains quartz sand/granules and minor lateritic pisoli
6.0	8.0		CRE	Conglomerate	sandy		pale	white	clay	to 1 pebble	stiff	contains sandst. and chert frags
8.0	10.0		PRO	Sandstone			pale	white	med silt	to med sand	mod'ly strong	?pml-pru
10.0	12.0	DZ948	PRO	Sandstone			m light pink	red	med silt	to med sand	mod'ly strong	?pml-pru
12.0	14.0	DZ948	PRO	Sandstone			med dark red	brown	med silt	to med sand	mod'ly strong	contains minor ferrug. chert ?pml-pru
14.0	16.0	DZ948	PRO	Sandstone			med dark red		med silt	to med sand	mod'ly strong	contains minor ferrug. chert ?pml-pru

EOH at 16.0 m

PROJECT : CARPENTARIA
LOCALITY: EL 7261
SHEET : TOWNS
JOB NO : MAZ

CONTRACTOR : GADEN DRILLING
RIG TYPE : UDR-650
DATE DRILLED: 02-AUG-93

HOLE NUMBER : TRR88

COMMENTS:

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 544538 NORTHING: 8313702 R.L.: 15.0
SHEET 1 OF 2 HOLE NUMBER : TRR88

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS	
From (m)	To (m)			major/ minor									
0.0	2.0		TER	Sand	ferruginous	light	orange	red	vf sand	to f sand	firm		
2.0	4.0		TER	Sand	ferruginous	m light	orange	red	vf sand	to f sand	firm		
4.0	6.0		TER	Sand	ferruginous	m light	orange	red	vf sand	to f sand	firm		
6.0	8.0		TER	Laterite Sand	weathered ferruginous	fragmental	light	brown	red	med silt	to f sand	stiff	
8.0	10.0		CRE	Laterite Sandstone	weathered ferruginous	sandy	patchy	grey	red	f silt	to f sand	hard	cretaceous?
10.0	12.0		CRE	Sandstone Sand	clayey ferruginous		patchy	orange	red	f silt	to f sand	hard	
12.0	14.0		CRE	Sandstone Sand	clayey ferruginous	ferruginous silty	patchy	grey	orange	f silt	to f sand	hard	
14.0	16.0		CRE	Sandstone Sand	clayey ferruginous	silty	patchy	red	orange	f silt	to f sand	hard	
16.0	18.0		CRE	Sandstone	clayey silty		patchy	orange	grey	f silt	to f sand	stiff	rounded transported chert fragments
18.0	20.0		CRE	Sandstone Grit	silty quartzose		patchy	orange	grey	f silt	to vc sand	stiff	
20.0	22.0		CRE	Sandstone Grit	clayey quartzose	ferruginous	patchy	orange	grey	f silt	to vc sand	stiff	
22.0	24.0		CRE	Clay	sandy	ferruginous	m light	grey	red	vf silt	to vf sand	stiff	
24.0	26.0		CRE	Clay	sandy	ferruginous	m light	red	grey	vf silt	to vf sand	hard	
26.0	28.0		CRE	Clay	silty		light	grey		clay	to c silt	weak	
28.0	30.0		CRE	Clay	silty		light	red	grey	clay	to vf sand	weak	
30.0	32.0		CRE	Clay	sandy		m light	grey	red	vf silt	to vf sand	hard	
32.0	34.0		CRE	Clay Sandstone	sandy ferruginous		patchy	brown	grey	f silt	to f sand	hard	
34.0	36.0		CRE	Sandstone	silty	ferruginous	patchy	brown	grey	f silt	to f sand	weak	sandstone seems to be more consolidated
36.0	38.0		CRE	Sandstone Grit	clayey	ferruginous	patchy	brown	grey	f silt	to vc sand	hard	
38.0	40.0		CRE	Clay Grit	sandy		pale	grey		vf silt	to vf sand	hard	minor mn oxides present
40.0	42.0		CRE	Claystone	sandy		pale	red	grey	clay	to c silt	weak	minor mn oxides present

DEPTHS From (m)	To (m)	SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR		GRAIN SIZE			STRENGTH/ HARDNESS	COMMENTS
42.0	44.0		CRE	Claystone	sandy	pale red	grey	clay	to c silt	weak	minor mn oxides present
44.0	46.0		CRE	Claystone	sandy	patchy red	grey	vf silt	to vf sand	hard	minor mn oxides present
46.0	48.0		CRE	Claystone	fragmental sandy	patchy red	grey	vf silt	to vf sand	hard	minor mn oxides present
48.0	50.0		CRE	Claystone	silty	patchy red	grey	clay	to c silt	weak	
50.0	52.0		CRE	Claystone	silty	pale red	grey	clay	to med silt	weak	
52.0	54.0		CRE	Claystone	silty	pale red	grey	clay	to med silt	weak	
54.0	56.0		CRE	Claystone	silty	pale red	grey	clay	to med silt	weak	
56.0	58.0		CRE	Clay		v dark grey		clay	to vf silt	weak	same "black clay" as seen in trr86, age dating sample to

EOH at 58.0 m

PROJECT : CARPENTARIA
LOCALITY: EL 7261
SHEET : TOWNS
JOB NO : MAZ

CONTRACTOR : GADEN DRILLING
RIG TYPE : UDR-650
DATE DRILLED: 02-AUG-93

HOLE NUMBER : TRR89

COMMENTS:

LOGGED BY : APO
TOTAL DEPTH : 46.0

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 545010 NORTHING: 8316112 R.L.: 15.0
SHEET 1 OF 2 HOLE NUMBER : TRR89

DEPTHS From (m)	To (m)	SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR		GRAIN SIZE			STRENGTH/ HARDNESS	COMMENTS
0.0	2.0		CEN	Sand	ferruginous	med dark red	brown	med silt	to med sand	loose	weakly lateritized sand
2.0	4.0		CEN	Sand	ferruginous	med dark red	brown	med silt	to med sand	loose	weakly lateritized sand
4.0	6.0		CEN	Sand	ferruginous silty	med dark red	brown	f silt	to f sand	loose	contains minor clay
6.0	8.0		CEN	Sand	ferruginous silty	med dark red	brown	f silt	to f sand	loose	
8.0	10.0		TER	Sand Laterite	ferruginous silty pisolitic	med dark red	brown	f silt	to s pebble	loose	more silty than the above sample
10.0	12.0		TER	Sand		m light yellow	khaki	med sand		loose	minor ferrug. latr. pisolths
12.0	14.0		TER	Sand		light yellow		med sand		loose	minor ferrug. latr. pisolths
14.0	16.0		TER	Sand	silty	light yellow		med silt	to f sand	loose	
16.0	18.0		TER	Sand Laterite	silty pisolitic	patchy yellow	white	med silt	to f sand	friable	
18.0	20.0		TER	Sand Laterite	silty pisolitic	patchy yellow	white	med silt	to f sand	friable	
20.0	22.0		CRE	Sand	silty	pale yellow	white	med silt	to med sand	friable	
22.0	24.0		CRE	Sand	clayey	pale yellow	white	med silt	to med sand	soft	
24.0	26.0		CRE	Sand Laterite	clayey pisolitic	pale yellow	white	med silt	to med sand	soft	contains goethitic nodules
26.0	28.0		CRE	Sand Laterite	clayey pisolitic	m light yellow		med silt	to med sand	soft	contains goethitic nodules
28.0	30.0		CRE	Sand Laterite	clayey pisolitic	light yellow	white	med silt	to med sand	soft	contains goethitic nodules
30.0	32.0		CRE	Sand Laterite	clayey pisolitic	light yellow	white	med silt	to med sand	soft	contains goethitic nodules
32.0	34.0		CRE	Conglomerate Sandstone	sandy	pale yellow	white	c silt	to l pebble	hard	contains qtzite, lamin. chert frags and silic. fine sand
34.0	36.0		PRO	Sandstone		pale yellow	white	vf sand		strong	laminated fine sandstone ptl
36.0	38.0		PRO	Sandstone Clay		m light yellow		clay	to vf sand	weak	laminated sandstone silicified in places ptl
38.0	40.0		PRO	Sandstone Clay		patchy yellow	white	clay	to vf sand	weak	laminated sandstone silicified in places ptl
40.0	42.0	DZ949	PRO	Sandstone Siltstone		pale white	yellow	f silt	to vf sand	mod'ly strong	laminated sandstone and siltstone silicified in places

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS	
From (m)	To (m)										
42.0	44.0	DZ949	PRO	Sandstone	pale	white	yellow f silt	to vf sand	mod'ly strong	laminated sandstone silicified in places	ptl
44.0	46.0	DZ949	PRO	Sandstone	pale	white	yellow f silt	to vf sand	mod'ly strong	laminated sandstone silicified in places	ptl

EOK at 46.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7261

SHEET : TOWNS

JOB NO : MAZ

CONTRACTOR : GADEM DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 03-AUG-93

HOLE NUMBER : TRR90

COMMENTS:

LOGGED BY : DMW

TOTAL DEPTH : 22.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 546860

NORTHING: 8309577

R.L.: 16.0

SHEET 1 OF 1 HOLE NUMBER : TRR90

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS	
From (m)	To (m)			major/ minor									
0.0	2.0		TER	Soil	sandy	weathered	medium	yellow	brown	f silt	to vf sand	stiff	
				Laterite	pisolitic	weathered							
2.0	4.0		CRE	Conglomerate	sandy		patchy	red	grey	vf silt	to med pebble	stiff	conglomerate bed followed by manganiferrous clay layer
				Clay	sandy								
4.0	6.0		CRE	Conglomerate	cherty		patchy	yellow	grey	med silt	to med pebble	hard	alternating layers of conglomerate and clay or siltstone
				Siltstone									
6.0	8.0		CRE	Siltstone	sandy		light	grey		f silt	to vf sand	weak	
				Chert	fragmental								
8.0	10.0		CRE	Siltstone	sandy		light	yellow	grey	f silt	to vf sand	weak	
				Chert	fragmental								
10.0	12.0		CRE	Siltstone	clayey		patchy	red	grey	f silt	to c silt	weak	
12.0	14.0		CRE	Siltstone	clayey		med dark red		brown	f silt	to med silt	weak	
14.0	16.0		CRE	Clay	silty		med dark brown			vf silt	to f silt	weak	
16.0	18.0	DZ950	CRE	Chert	quartzose		patchy	brown	grey	vf silt	to f silt	mod'ly strong	politic chert fragments seen
				Clay	silty								
18.0	20.0	DZ950	PRO	Chert	quartzose		patchy	brown	grey	vf silt	to f silt	mod'ly strong	
				Clay	silty								
20.0	22.0	DZ950	PRO	Chert	quartzose		patchy	brown	grey	vf silt	to f silt	mod'ly strong	basement material

EOH at 22.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7261

SHEET : TOWNS

JOB NO : MAZ

GRID: AMG

ZONE: 53

RELIABILITY: SATL

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 03-AUG-93

EASTING: 535213

NORTHING: 8304325

R.L.: 15.0

SHEET 1 OF 2 HOLE NUMBER : TRR91

HOLE NUMBER : TRR91

COMMENTS:

LOGGED BY : APO

TOTAL DEPTH : 63.0

DEPTHS From (m)	To (m)	SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
				major/ minor							
0.0	2.0		CEN	Sand	silty	medium	khaki	yellow f silt	to med sand	friable	"black soil plane"
				Laterite	pisolitic						
2.0	4.0		CRE	Sand	clayey	m light	yellow	tan clay	to med sand	soft	
4.0	6.0		CRE	Clay	sandy	medium	yellow	purple clay	to f sand	firm	
6.0	8.0		CRE	Clay	silty	m light	yellow	tan clay	to med silt	stiff	
8.0	10.0		CRE	Clay	silty	m light	yellow	tan clay	to f sand	stiff	
				Sandstone	fragmental						
12.0	14.0		CRE	Clay	silty	m light	yellow	tan clay	to f sand	stiff	
				Sandstone	fragmental						
14.0	16.0		CRE	Conglomerate	sandy	m light	tan	clay	to l pebble	hard	sandst. silic. oolite and ?algal chert frags
				Clay	silty						
16.0	18.0		CRE	Conglomerate	sandy	med dark	tan	purple clay	to l pebble	hard	sandst. silic. oolite and ?algal chert frags
				Siltstone	ferruginous						
18.0	20.0		CRE	Siltstone	ferruginous	med dark	purple	vf silt	to vf sand	stiff	
				Sandstone	quartzose						
20.0	22.0		CRE	Siltstone	ferruginous	med dark	purple	vf silt	to vf sand	stiff	
				Sandstone	quartzose						
22.0	24.0		CRE	Siltstone	ferruginous	med dark	purple	vf silt	to vf sand	stiff	
				Sandstone	quartzose						
24.0	26.0		CRE	Siltstone	ferruginous	med dark	purple	brown vf silt	to vf sand	stiff	
				Siltstone	quartzose						
26.0	28.0		CRE	Siltstone	ferruginous	med dark	purple	brown vf silt	to vf sand	stiff	
				Siltstone	quartzose						
28.0	30.0		CRE	Siltstone	ferruginous	med dark	brown	vf silt	to vf sand	stiff	
30.0	32.0		CRE	Siltstone	ferruginous	med dark	brown	vf silt	to f sand	weak	
				Conglomerate	cherty						
32.0	34.0		OTH	Siltstone		medium	tan	brown vf silt	to l pebble	weak	chert frags oolitic ?pnz
				Conglomerate	cherty						
34.0	36.0		OTH	Conglomerate	cherty	medium	tan	brown vf silt	to l pebble	weak	snst, silic oolite and algal chert frags ?pnz
				Clay							
36.0	38.0		OTH	Conglomerate	cherty	medium	tan	brown vf silt	to l pebble	weak	snst, silic oolite and algal chert frags ?pnz
				Clay							
38.0	40.0		OTH	Sand	clayey	medium	tan	brown vf silt	to l pebble	weak	snst, silic oolite and algal chert frags ?pnz
				Conglomerate	cherty						
40.0	42.0		OTH	Conglomerate	cherty	medium	tan	brown vf silt	to l pebble	weak	snst, silic oolite and algal chert frags ?pnz
				Clay							
42.0	44.0	D2951	OTH	Siltstone	ferruginous	v dark	brown	black vf silt	to med silt	weak	about 30cm mn occurs as thin (<2mm) vienlets in siltstone
				Chert							

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR		GRAIN SIZE			STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)										
44.0	46.0		OTH	Chert	pisolitic	medium red	tan	clay	to f sand	strong	oolitic chert ?pnz
46.0	48.0		OTH	Chert	pisolitic	medium red	brown	clay	to f sand	strong	oolitic chert ?pnz
48.0	50.0		OTH	Chert	quartzose	medium red	brown	clay	to vf sand	strong	?pnz
50.0	52.0		OTH	Sandstone	quartzose	medium red	brown	clay	to vf sand	strong	chert has algal lamination and infilled vugs ?pnz
52.0	54.0		OTH	Chert	quartzose	medium red	brown	clay	to vf sand	strong	sist has chert rip-up clasts in it ?pnz
54.0	56.0	DZ952	OTH	Siltstone	silicified	medium red	brown	clay	to vf sand	strong	chert porous and has algal lamination ?pnz
56.0	58.0	DZ952	OTH	Chert	sandy	medium red	brown	clay	to vf sand	strong	some clay filled pores in chert very angular ? after gyp
58.0	60.0	DZ952	OTH	Sandstone	silicified	medium red	brown	clay	to vf sand	strong	sandst. has mound like laminations in it ? stromalites
60.0	62.0	DZ953	PRO	Chert	sandy	medium red	brown	clay	to vf sand	strong	snst and cher massive ?pny
62.0	63.0	DZ953	PRO	Sandstone	silicified	medium red	brown	med silt	to med sand	very strong	very hard, hole terminated ?pny

EOH at 63.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7261

SHEET : TOWNS

JOB NO : MAZ

CONTRACTOR : GADAM DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 04-AUG-93

HOLE NUMBER : TRR92

COMMENTS:

LOGGED BY : APO

TOTAL DEPTH : 22.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 537794

NORTHING: 8301967

R.L.: 15.0

SHEET 1 OF 1 HOLE NUMBER : TRR92

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor								
0.0	2.0		CEN	Sand Laterite	clayey pisolitic		light tan	khaki	clay	to med pebble	loose	nodular ferruginous laterite in a sandy matrix
2.0	4.0		CRE	Siltstone Soil	clayey sandy	foliated	m light	red	brown	vf silt	stiff	
4.0	6.0		PRO	Siltstone	clayey	foliated	m light	red	brown	vf silt	weak	about 30cm silcrete
6.0	8.0		PRO	Siltstone	clayey	foliated	m light	pink	white	vf silt	weak	mildly ferrug. siltst. pro? pml
8.0	10.0		PRO	Siltstone	clayey	foliated	m light	pink	white	vf silt	weak	as above pml
10.0	12.0		PRO	Siltstone	clayey	foliated	m light	pink	white	vf silt	weak	as above pml
12.0	14.0		PRO	Siltstone	clayey	foliated	m light	pink	white	vf silt	weak	as above pml
14.0	16.0		PRO	Siltstone	clayey	foliated	m light	pink	white	vf silt	weak	as above pml
16.0	18.0	D2954	PRO	Siltstone	clayey	foliated	m light	pink	white	vf silt	weak	as above pml
18.0	20.0	D2954	PRO	Siltstone	clayey	foliated	m light	pink	white	vf silt	weak	as above pml
20.0	22.0	D2954	PRO	Siltstone	clayey	foliated	m light	pink	white	vf silt	weak	as above pml

EOH at 22.0 m

PROJECT : CARPENTARIA
 LOCALITY: EL 7261
 SHEET : TOWNS
 JOB NO : MAZ

CONTRACTOR : GADEN DRILLING
 RIG TYPE : UDR-650
 DATE DRILLED: 04-AUG-93

HOLE NUMBER : TRR93
 LOGGED BY : APO
 TOTAL DEPTH : 64.0

COMMENTS:

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 540659 NORTHING: 8303145 R.L.: 15.0
 SHEET 1 OF 2 HOLE NUMBER : TRR93

DEPTHS From (m)	To (m)	SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
0.0	2.0		CEN	Clay Laterite	sandy pisolitic	conglomeratic	light khaki	red	clay	to med pebble	soft	quartzite pebbles latr minor and hematitic
2.0	4.0		CRE	Clay	sandy		pale	white	yellow clay	to vf sand	firm	
4.0	6.0		CRE	Sand	clayey		patchy	yellow	pink clay	to med sand	firm	minor calcilutite bands
6.0	8.0		CRE	Sand	clayey		pale	white	yellow clay	to f sand	soft	as above
8.0	8.0		CRE	Sand	clayey		patchy	white	pink clay	to f sand	soft	unsure whether calcilutite occurs as pebbles?
8.0	10.0		CRE	Sand	clayey		patchy	white	pink clay	to f sand	soft	
10.0	12.0		CRE	Sand Laterite	clayey ferruginous		patchy	white	red clay	to f sand	soft	about 20 cm "coffee rock"
12.0	14.0		CRE	Silt	clayey		palest	tan	clay	to c silt	friable	diatomite?
14.0	16.0		CRE	Silt	clayey		palest	white	clay	to c silt	friable	
16.0	18.0		CRE	Silt	clayey		patchy	white	brown clay	to c silt	friable	
18.0	20.0		CRE	Silt	clayey		patchy	white	purple clay	to med silt	soft	
20.0	22.0		CRE	Clay	silty		patchy	white	purple clay	to c silt	soft	
20.0	24.0		CRE	Silt	clayey		patchy	yellow	white clay	to c silt	soft	
24.0	26.0		CRE	Silt	clayey		m light	yellow	clay	to c silt	soft	minor small sandstone pebbles
26.0	28.0		CRE	Silt	clayey		m light	yellow	clay	to c silt	soft	
28.0	30.0		CRE	Chert Clay	pisolitic	laminated	pale	white	clay	to f sand	mod'ly strong	silicified oolite and algal laminated chert
30.0	32.0		CRE	Chert Clay	pisolitic	laminated	pale	white	tan clay	to f sand	mod'ly strong	silicified oolite and algal laminated chert
32.0	34.0		CRE	Sandstone Clay	ferruginous		m light	yellow	tan clay	to f sand	weak	minor dissem. mn
34.0	36.0		CRE	Sandstone Clay	ferruginous	quartzose	pale	white	yellow clay	to f sand	weak	
36.0	38.0		CRE	Sandstone Clay	ferruginous	silty	pale	white	yellow clay	to med sand	weak	
38.0	40.0		CRE	Sandstone Clay	cherty	silty	pale	white	yellow clay	to med sand	weak	

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor							
40.0	42.0		OTH	Sandstone Clay	silty	ferruginous	light tan	yellow clay	to f sand	weak	snst. has algal lamin; mn dissem. in the more ferrug snst
42.0	44.0		OTH	Sandstone Clay	silty	ferruginous	light tan	yellow clay	to f sand	weak	snst. has algal lamin ?pr
44.0	46.0		OTH	Sandstone Clay	silty	ferruginous	light tan	yellow clay	to f sand	weak	snst. has algal lamin ?pr
46.0	48.0		OTH	Sandstone Clay	silty	ferruginous	light tan	yellow clay	to f sand	mod'ly strong	broken high water flow, clay possibly contamination ?pr
48.0	50.0		OTH	Sandstone Clay	silty	ferruginous	light tan	yellow clay	to med sand	mod'ly strong	broken high water flow, clay possibly contamination ?pr
50.0	52.0		OTH	Sandstone Chert	silty laminated	quartzose	light tan	yellow clay	to med sand	mod'ly strong	algal laminated chert is porous ?pr
52.0	54.0		OTH	Sandstone Chert	silty laminated	quartzose	light tan	yellow clay	to med sand	mod'ly strong	algal laminated chert is porous ?pr
54.0	56.0		OTH	Sandstone	silty	quartzose	light tan	yellow c silt	to med sand	mod'ly strong	snst algal laminated ?pr
56.0	58.0		PRO	Chert Sandstone	laminated		light tan	yellow clay	to med sand	very strong	chert brecciated (tectonic) ?pr
58.0	60.0	DZ955	PRO	Chert Sandstone	laminated		light tan	yellow clay	to med sand	very strong	?pry
60.0	62.0	DZ955	PRO	Chert Sandstone	laminated		light tan	yellow clay	to med sand	very strong	?pry
62.0	64.0	DZ955	PRO	Sandstone Siltstone	silicified ferruginous	silicified	light tan	yellow f silt	to med sand	very strong	?pry

EOH at 64.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7263

SHEET : TAWALLAH RANGE

JOB NO : MBB

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR 650

DATE DRILLED: 06-AUG-93

HOLE NUMBER : YER01

COMMENTS:

LOGGED BY : APO

TOTAL DEPTH : 34.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 573642

NORTHING: 8274302

R.L.: 60.0

SHEET 1 OF 1 HOLE NUMBER : YER01

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR				GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS	
From (m)	To (m)												
0.0	2.0		TER	Laterite Sand	pisolitic quartzose	ferruginous	pale	tan	khaki	f sand	to s pebble	loose	
2.0	4.0		OTH	Silt	clayey		m light	yellow	green	clay	to c silt	soft	
4.0	6.0		OTH	Silt	clayey		medium	yellow	green	clay	to c silt	soft	fine coating of mn of drill chips ?veining
6.0	8.0		OTH	Clay	foliated		mottled	khaki	red	clay	to f silt	firm	? latr mottled zone
8.0	10.0		OTH	Clay	foliated		mottled	khaki	red	clay	to f silt	firm	? latr mottled zone
10.0	12.0		CRE	Sandstone Clay	quartzose foliated		light	yellow	khaki	clay	to f sand	stiff	weakly indurated snst
12.0	14.0		CRE	Sandstone	quartzose		patchy	yellow	purple	f silt	to f sand	hard	
14.0	16.0		CRE	Sandstone	quartzose		pale	yellow	white	med silt	to f sand	hard	
16.0	18.0		CRE	Sandstone	quartzose		pale	white	yellow	med silt	to f sand	hard	
18.0	20.0		CRE	Sand	clayey		patchy	yellow	white	clay	to f sand	firm	
20.0	22.0		OTH	Sandstone Dolomite	quartzose massive		m light	yellow		clay	to med sand	mod'ly strong	porous snst intercalated with massive white chert
22.0	24.0		PRO	Sandstone Chert	quartzose massive		pale	white		clay	to med sand	strong	hard tight snst and massive black chert ?pma
24.0	26.0		PRO	Dolomite	massive	clayey	pale	white		clay		mod'ly strong	chert and kaolinite clay ?pma
26.0	28.0		PRO	Dolomite	massive		pale	white		clay	to med silt	mod'ly strong	?pma
28.0	30.0	DZ956	PRO	Dolomite Sandstone	laminated quartzose		pale	white		clay	to f sand	strong	?pma
30.0	32.0	DZ956	PRO	Dolomite Sandstone	laminated quartzose		pale	white		clay	to f sand	strong	?pma
32.0	34.0	DZ956	PRO	Dolomite Sandstone	laminated quartzose		pale	white		clay	to f sand	strong	?pma

EOH at 34.0 m

PROJECT : CARPENTARIA
LOCALITY: EL 7263
SHEET : TAWALLAH RANGE
JOB NO : MBB

CONTRACTOR : GADEN DRILLING
RIG TYPE : UDR 650
DATE DRILLED: 06-AUG-93

HOLE NUMBER : YER02

COMMENTS:

LOGGED BY : APO
TOTAL DEPTH : 58.0

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 574912 NORTHING: 8274252 R.L.: 60.0
SHEET 1 OF 2 HOLE NUMBER : YER02

DEPTHS From To (m) (m)	SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
0.0 2.0		CEM	Soil							
			Laterite	pisolitic	sandy	patchy grey	yellow vf silt	to vs pebble	loose	
2.0 4.0		TER	Laterite	pisolitic		med dark brown	khaki clay	to vs pebble	loose	
			Sand	chloritic						
4.0 6.0		CRE	Clay	sandy		med dark khaki	green clay	to med sand	firm	
6.0 8.0		CRE	Clay			med dark khaki	green clay		firm	
8.0 10.0		CRE	Clay	silty		med dark khaki	green clay	to med silt	firm	
10.0 12.0		CRE	Silt	clayey		medium khaki	yellow clay	to vf sand	stiff	
12.0 14.0		CRE	Silt	clayey		medium khaki	yellow clay	to vf sand	stiff	
14.0 16.0		CRE	Clay	sandy		med dark khaki	yellow clay	to f sand	stiff	
16.0 18.0		CRE	Clay	sandy		med dark khaki	yellow clay	to c sand	stiff	
18.0 20.0		CRE	Sand	clayey	quartzose	med dark khaki	yellow clay	to granule	stiff	minor quartzite pebbles
20.0 22.0		CRE	Sand	clayey	quartzose	medium yellow	khaki clay	to s pebble	firm	minor snst and chert pebbles
			Conglomerate	sandy						
22.0 24.0		CRE	Sandstone	quartzose		medium yellow	green med silt	to med sand	stiff	weakly indurated snst; mn occurs as coatings ? weatherin
24.0 26.0		CRE	Sandstone	quartzose		medium yellow	green med silt	to med sand	stiff	weakly indurated snst
26.0 28.0		CRE	Sandstone	quartzose		medium purple	yellow clay	to c sand	stiff	interbedded snst and sandy clay
			Clay	sandy						
28.0 30.0		CRE	Sand	silty		light tan	vf silt	to vf sand	stiff	
			Sandstone	ferruginous	fragmental					
30.0 32.0		CRE	Sand	clayey		light tan	grey vf silt	to vf sand	stiff	minor mn oxides present
32.0 34.0		CRE	Clay	sandy		pale tan	grey vf silt	to vf sand	stiff	minor mn oxides present
34.0 36.0		CRE	Clay	laminated		v dark grey	clay	to f silt	weak	
36.0 38.0		CRE	Clay	laminated		v dark grey	clay	to f silt	weak	
38.0 40.0		CRE	Clay	laminated		v dark grey	clay	to f silt	weak	a few fragments of pyrite found approx. 1mm-5mm.
			Sandstone	siliceous	fragmental					
40.0 42.0		CRE	Claystone	fresh		pale grey	clay	to vf silt	weak	

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor							
42.0	44.0		CRE	Claystone	fresh	pale	grey	clay	to vf silt	weak	minor fragments of pyrite
44.0	46.0		CRE	Claystone	fresh	pale	grey	clay	to vf sand	weak	
46.0	48.0		PRO	Sandstone	fresh	light	grey	c silt	to vf sand	mod'ly strong	?basement material
48.0	50.0		PRO	Siltstone	silicified	light	grey	f silt	to c silt	mod'ly strong	
50.0	52.0		PRO	Clay	silty						
50.0	52.0		PRO	Siltstone	silicified	light	grey	f silt	to c silt	mod'ly strong	siliceous siltstone with cherty bands and some clay
52.0	54.0	DZ957	PRO	Clay	silty						
52.0	54.0		PRO	Siltstone	micaceous	medium	red	brown	f silt	to med silt	weak
54.0	56.0	DZ957	PRO	Siltstone	chloritic	patchy	grey	red	f silt	to med silt	weak
54.0	56.0		PRO	Siltstone	siliceous						
56.0	58.0	DZ957	PRO	Siltstone	siliceous	light	orange	grey	vf silt	to med silt	mod'ly strong

EOH at 58.0 m

PROJECT : CARPENTARIA
 LOCALITY: EL 7263
 SHEET : TAWALLAH RANGE
 JOB NO : NBB

CONTRACTOR : GADEN DRILLING
 RIG TYPE : UDR 650
 DATE DRILLED: 09-AUG-93

HOLE NUMBER : YER03

COMMENTS:

LOGGED BY : APO
 TOTAL DEPTH : 76.0

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 578160 NORTHING: 8273332 R.L.: 60.0
 SHEET 1 OF 2 HOLE NUMBER : YER03

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From	To			major/	minor						
(m)	(m)										
0.0	2.0		CEN	Sand Soil	clayey	quartzose	patchy tan	white clay	to granule	friable	
2.0	4.0		CEN	Clay	sandy		m light tan	khaki clay	to granule	friable	
4.0	6.0		CEN	Clay	sandy		m light tan	khaki clay	to granule	friable	
6.0	8.0		CRE	Clay			pale white	grey clay	to f silt	soft	
8.0	10.0		CRE	Clay	sandy		m light khaki	tan clay	to f silt	firm	
10.0	12.0		CRE	Clay	sandy		m light khaki	tan clay	to f silt	firm	
12.0	14.0		CRE	Clay			pale white	grey clay	to f silt	firm	
14.0	16.0		CRE	Clay			patchy white	purple clay	to f silt	firm	
16.0	18.0		CRE	Sand	clayey		m light tan	khaki clay	to granule	firm	
18.0	20.0		CRE	Clay	silty		medium tan	yellow clay	to f sand	firm	minor dissem. mn
20.0	22.0		CRE	Sandstone Clay	quartzose		light white	tan clay	to med sand	weak	
22.0	24.0		CRE	Sandstone Clay	quartzose		light white	tan clay	to med sand	weak	minor ferrug. mottles
24.0	26.0		CRE	Sandstone Clay	quartzose		light white	tan clay	to med sand	weak	minor ferrug. mottles
26.0	28.0		CRE	Sand	quartzose		pale white	c silt	to med sand	firm	
28.0	30.0		CRE	Sand	quartzose	clayey	pale white	clay	to c sand	stiff	minor indurated snst
30.0	32.0		CRE	Sand	quartzose	clayey	pale white	clay	to c sand	stiff	minor indurated ferrug snst
32.0	34.0		CRE	Sand	quartzose	clayey	m light brown	tan clay	to med sand	stiff	
34.0	36.0		CRE	Sand	quartzose	clayey	m light brown	tan clay	to med sand	stiff	
36.0	38.0	DZ958	CRE	Sand	clayey		v dark grey	black clay	to f sand	stiff	sand and black clay ?carbonaceous -oily film on drill wa
38.0	40.0	DZ958	CRE	Sand	clayey		v dark grey	black clay	to f sand	stiff	sand and black clay ?carbonaceous-oily film on drill wat
40.0	42.0	DZ958	CRE	Dolomite Sand	cherty clayey		v dark grey	black clay	to f sand	weak	cg pyrite, algal laminated dolostone age dating

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS	
From (m)	To (m)			major/ minor								
42.0	44.0	DZ959	CRE	Sandstone	cherty	v dark	grey	black	clay	to f sand	weak	cg pyrite, algal laminated dolostone
44.0	46.0	DZ959	CRE	Sand	silty	med dark	grey	black	f silt	to med sand	firm	?carcoal frags
46.0	48.0	DZ959	CRE	Sand	silty	med dark	grey		f silt	to med sand	firm	?carcoal frags
48.0	50.0	DZ960	CRE	Sand	silty	med dark	grey		f silt	to med sand	firm	?carcoal frags pyrite laminated
50.0	52.0	DZ960	CRE	Silt		med dark	grey		f silt	to med sand	firm	?carcoal frags age dating
52.0	54.0	DZ960	CRE	Sandstone	cherty	pisolitic	med dark	grey	clay	to f sand	weak	silicified oolite, algal laminated chert
54.0	56.0	DZ961	CRE	Sand	quartzose	m light	grey		vf silt	to f sand	firm	
56.0	58.0	DZ961	CRE	Sandstone	cherty							
56.0	58.0	DZ961	CRE	Sand	quartzose	light	grey	white	vf silt	to granule	soft	
58.0	60.0	DZ961	CRE	Sandstone	cherty							
58.0	60.0	DZ961	CRE	Sand	quartzose	light	grey	white	vf silt	to granule	soft	
60.0	62.0		CRE	Sandstone	cherty							
60.0	62.0		CRE	Clay	sandy	quartzose	pale	white	clay	to c sand	firm	
62.0	64.0		CRE	Sandstone	silicified	quartzose	pale	white	clay	to f sand	hard	
64.0	66.0		CRE	Clay	sandy	quartzose	pale	white	clay	to granule	stiff	
64.0	66.0		CRE	Sandstone	silicified	quartzose	pale	white	clay	to granule	stiff	
66.0	68.0		OTH	Sandstone	silicified	dolomitic	pale	white	med silt	to f sand	weak	algal laminated
68.0	70.0		OTH	Sandstone	silicified	dolomitic	pale	white	clay	to med sand	mod'ly strong	
70.0	72.0	DZ962	PRO	Clay								
70.0	72.0	DZ962	PRO	Sandstone	silicified	dolomitic	pale	white	med silt	to med sand	mod'ly strong	
72.0	74.0	DZ962	PRO	Dolomite	sandy	silicified	pale	white	med silt	to med sand	mod'ly strong	
74.0	76.0	DZ962	PRO	Dolomite	sandy	silicified	pale	white	med silt	to med sand	mod'ly strong	
74.0	76.0	DZ962	PRO	Clay								

EOH at 76.0 m

PROJECT : CARPENTARIA
 LOCALITY: EL 7263
 SHEET : TAWALLAH RANGE
 JOB NO : MBB

CONTRACTOR : GADEN DRILLING
 RIG TYPE : UDR 650
 DATE DRILLED: 09-AUG-93

HOLE NUMBER : YER04

COMMENTS:

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 578120 NORTHING: 8272977 R.L.: 60.0
 SHEET 1 OF 2 HOLE NUMBER : YER04

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)										
0.0	2.0		CEM	Sand Soil	silty	medium	khaki	yellow f silt	to granule	friable	
2.0	4.0		CEM	Sand	clayey	medium	khaki	brown clay	to granule	soft	
4.0	6.0		CRE	Clay	sandy	patchy	white	purple clay	to med sand	firm	
6.0	8.0		CRE	Clay	silty	light	yellow	khaki clay	to c silt	stiff	
8.0	10.0		CRE	Clay	silty	light	yellow	khaki clay	to c silt	stiff	
10.0	12.0		CRE	Clay	sandy	pale	white	clay	to c silt	stiff	
12.0	14.0		CRE	Clay	sandy	pale	white	green clay	to c silt	stiff	
14.0	16.0		CRE	Clay	sandy	m light	yellow	green clay	to c silt	stiff	
16.0	18.0		CRE	Clay	sandy	light	white	green clay	to c silt	stiff	
18.0	20.0		CRE	Clay	sandy	light	white	green clay	to c silt	stiff	
20.0	22.0		CRE	Clay	silty	m light	tan	yellow clay	to c silt	stiff	
22.0	24.0		CRE	Clay Conglomerate	sandy	m light	tan	yellow clay	to vs pebble	stiff	contains minor chert frags
24.0	26.0		CRE	Sandstone	quartzose	m light	white	grey f silt	to med sand	weak	
26.0	28.0		CRE	Sandstone	quartzose	m light	white	grey f silt	to med sand	weak	
28.0	30.0		CRE	Sandstone Clay	quartzose	m light	white	grey clay	to med sand	stiff	
30.0	32.0		CRE	Sand	quartzose	m light	white	grey f silt	to c sand	firm	
32.0	34.0		CRE	Sand	quartzose clayey	m light	white	grey clay	to med sand	stiff	minor ferrug snst
34.0	36.0		CRE	Sand	quartzose clayey	m light	white	grey clay	to med sand	stiff	
36.0	38.0		CRE	Sand	quartzose clayey	medium	grey	white clay	to f sand	stiff	contains minor grey clay
38.0	40.0		CRE	Sand Sandstone	quartzose quartzose	m light	white	grey f silt	to granule	firm	contains minor chert pebbles
40.0	42.0		CRE	Sand Sandstone	quartzose quartzose	m light	white	grey c silt	to granule	firm	contains minor chert pebbles

DEPTHS From (m)	To (m)	SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
				major/ minor							
42.0	44.0		OTH	Dolomite	silicified	pisolitic	pale white	clay	to med sand	weak	silicified oolite
44.0	46.0		OTH	Dolomite	silicified	pisolitic	pale white	clay	to med sand	weak	silicified oolite
46.0	48.0		OTH	Sandstone Clay	dolomitic	silicified	pale white	clay	to med sand	weak	silicified oolite and algal lam. chert
48.0	50.0		OTH	Clay Dolomite	silicified	pisolitic	pale white	clay	to med sand	weak	
50.0	52.0		OTH	Dolomite	silicified	pisolitic	pale white	clay	to med sand	weak	algal lam.
52.0	54.0	DZ963	OTH	Dolomite	silicified	pisolitic	pale white	clay	to med sand	weak	minor cg pyrite-possible weak malachite stained clay
54.0	56.0	DZ963	OTH	Dolomite	silicified	pisolitic	pale white	clay	to med sand	weak	minor cg pyrite-possible weak malachite stained clay
56.0	58.0	DZ963	OTH	Dolomite	silicified	pisolitic	pale white	clay	to med sand	weak	minor cg pyrite-possible weak malachite stained clay

EOH at 58.0 m

PROJECT : CARPENTARIA
LOCALITY: EL 7263
SHEET : TAWALLAH RANGE
JOB NO : MBB

CONTRACTOR : GADEN DRILLING
RIG TYPE : UDR 650
DATE DRILLED: 10-AUG-93

HOLE NUMBER : YER05

COMMENTS:

LOGGED BY : APO
TOTAL DEPTH : 34.0

GRID: AMG ZONE: S3 RELIABILITY: SATL EASTING: 584730 NORTHING: 8277162 R.L.: 55.0
SHEET 1 OF 1 HOLE NUMBER : YER05

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor								
0.0	2.0		CEN	Soil		medium	grey	brown	f silt	to med sand	loose	
				Sand	quartzose							
2.0	4.0		CRE	Sand	quartzose clayey	medium	tan	blue	clay	to med sand	soft	
4.0	6.0		CRE	Clay	silty	light	white	khaki	clay	to c silt	firm	trace dissem. mn
6.0	8.0		CRE	Clay	silty	med dark	khaki	green	clay	to med silt	firm	trace dissem. mn
8.0	10.0		CRE	Clay	silty	patchy	grey	khaki	clay	to med silt	firm	
10.0	12.0		CRE	Clay	silty	patchy	grey	khaki	clay	to med silt	firm	
12.0	14.0		CRE	Clay	silty	m light	khaki	green	clay	to med silt	firm	
14.0	16.0		CRE	Clay	silty	m light	khaki	yellow	clay	to med silt	firm	
16.0	18.0		CRE	Clay	silty	medium	khaki	green	clay	to med silt	firm	
18.0	20.0		CRE	Clay	silty	medium	khaki	green	clay	to med silt	firm	
20.0	22.0		CRE	Clay	silty	medium	khaki	green	clay	to med silt	firm	
22.0	24.0		CRE	Clay	silty	medium	khaki	grey	clay	to med silt	firm	
24.0	26.0		CRE	Clay	silty	patchy	khaki	brown	clay	to f sand	stiff	contact with weakly indurated snst
				Sandstone	quartzose							
26.0	28.0		OTH	Siltstone	ferruginous laminated	dark	brown	purple	vf silt	to vf sand	hard	paleosoil developed on lam. sist?
28.0	30.0	DZ964	OTH	Siltstone	ferruginous laminated	dark	brown	purple	vf silt	to vf sand	hard	paleosoil developed on lam. sist?
30.0	32.0	DZ964	OTH	Siltstone	ferruginous laminated	med dark	purple		vf silt	to vf sand	hard	intercalated silicified purple sist and silicified qtz s
				Siltstone	quartzose							
32.0	34.0	DZ964	OTH	Siltstone	ferruginous laminated	med dark	purple		vf silt	to vf sand	hard	intercalated silicified purple sist and silicified qtz s
				Siltstone	quartzose							

EOH at 34.0 m

PROJECT : CARPENTARIA
 LOCALITY: EL 7263
 SHEET : TAWALLAH RANGE
 JOB NO : MBB

CONTRACTOR : GADEN DRILLING
 RIG TYPE : UDR 450
 DATE DRILLED: 10-AUG-93

HOLE NUMBER : YER06

COMMENTS:

LOGGED BY : DWW/APD
 TOTAL DEPTH : 40.0

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 583915 NORTHING: 8277115 R.L.: 55.0
 SHEET 1 OF 1 HOLE NUMBER : YER06

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor								
0.0	2.0		TER	Sand	weathered	pale	orange	red	vf sand	to f sand	firm	
2.0	4.0		TER	Sand	weathered	clayey	light	orange	red	vf silt	to f sand	stiff
4.0	6.0		CRE	Laterite Clay	pisolitic sandy	weathered ferruginous	patchy	white	brown	vf silt	to vf sand	stiff
6.0	8.0		CRE	Carbonate Clay	weathered sandy	ferruginous	m light	orange	grey	vf silt	to vf sand	hard
8.0	10.0		CRE	Carbonate Claystone	weathered silty		m light	orange	grey	vf silt	to c silt	weak
10.0	12.0		CRE	Claystone	silty		m light	orange	grey	vf silt	to c silt	weak
12.0	14.0		CRE	Claystone	silty		m light	orange	grey	vf silt	to c silt	weak
14.0	16.0		CRE	Claystone	silty		m light	orange	grey	vf silt	to c silt	weak
16.0	18.0		CRE	Carbonate Claystone	fragmental silty		medium	khaki	grey	vf silt	to c silt	weak
18.0	20.0		CRE	Carbonate Claystone	fragmental fresh		m light	grey		vf silt	to f silt	weak
20.0	22.0	DZ965	CRE	Clay Unident rock	ferruginous		patchy	black	brown	vf silt	to med silt	weak
22.0	24.0		OTH	Clay			m light	khaki	green	clay	to c silt	weak
24.0	26.0		OTH	Dolomite Clay	sandy	silicified	med dark	khaki	green	clay	to c silt	weak
26.0	28.0		OTH	Dolomite Clay	sandy	silicified	med dark	khaki	green	clay	to c silt	weak
28.0	30.0		OTH	Chert Siltstone	sandy ferruginous	dolomitic	med dark	tan	khaki	clay	to c silt	weak
30.0	32.0		PRO	Chert Siltstone	dolomitic ferruginous		patchy	purple	tan	clay	to med silt	weak
32.0	34.0		PRO	Siltstone	ferruginous		dark	purple		clay	to med silt	mod'ly strong
34.0	36.0	DZ966	PRO	Chert Tuff	ferruginous		medium	yellow	khaki	clay	to f silt	strong
36.0	38.0	DZ966	PRO	Siltstone	silicified		medium	green	grey	clay	to f silt	very strong
38.0	40.0	DZ966	PRO	Siltstone Chert	silicified		med dark	purple		clay	to med silt	strong

EOH at 40.0 m

PROJECT : CARPENTARIA
LOCALITY: EL 7263
SHEET : TAWALLAH RANGE
JOB NO : MBB

CONTRACTOR : GADEN DRILLING
RIG TYPE : UDR 650
DATE DRILLED: 11-AUG-93

HOLE NUMBER : YER07

COMMENTS:

LOGGED BY : APO
TOTAL DEPTH : 64.0

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 579794 NORTHING: 8279579 R.L.: 55.0
SHEET 1 OF 2 HOLE NUMBER : YER07

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS		
From (m)	To (m)											
0.0	2.0		CEN	Sand Soil	silty	med dark tan	brown	f silt	to f sand	soft		
2.0	4.0		CRE	Clay	silty	m light tan		clay	to med silt	firm		
4.0	6.0		CRE	Clay		pale white		clay	to f silt	stiff		
6.0	8.0		CRE	Clay	silty	patchy white	tan	clay	to c silt	stiff		
8.0	10.0		CRE	Clay	silty	patchy white	tan	clay	to c silt	stiff		
10.0	12.0		CRE	Clay	sandy	m light tan	yellow	clay	to f sand	stiff		
12.0	14.0		CRE	Clay	silty	patchy white	tan	clay	to c silt	stiff		
14.0	16.0		CRE	Clay	silty	patchy white	tan	clay	to c silt	stiff		
16.0	18.0		CRE	Clay	silty	pale white	grey	clay	to c silt	stiff	trace dissem. mn	
18.0	20.0		CRE	Clay	silty	patchy white	tan	clay	to c silt	stiff		
20.0	22.0		CRE	Clay	sandy	m light khaki	tan	clay	to med sand	stiff		
22.0	24.0		CRE	Clay	sandy	m light khaki	tan	clay	to med sand	stiff	trace dissem. mn	
24.0	26.0		CRE	Sand	clayey	medium khaki	tan	clay	to c sand	stiff		
26.0	28.0		CRE	Clay Sand	silty clayey	patchy black	yellow	clay	to vf sand	stiff	contact with black organic clay	
28.0	30.0		CRE	Clay	silty	v dark grey	black	clay	to vf sand	stiff	black organic (?sulfidic) clay	
30.0	32.0		CRE	Sand	conglomeraticclayey	medium yellow	tan	clay	to s pebble	firm	chert fragments	
32.0	34.0		CRE	Sand Sandstone	clayey quartzose	medium white	tan	vf silt	to granule	hard	loose sand intercalated withweakly indurated snst	
34.0	36.0		CRE	Sand Sandstone	clayey quartzose	conglomeraticmedium	white	tan	vf silt	to s pebble	hard	sand contains chert frags.
36.0	38.0		CRE	Sandstone	quartzose	ferruginous conglomeraticlight	white	tan	vf silt	to s pebble	hard	weakly indurated snst contains chert frags
38.0	40.0		CRE	Sandstone	quartzose	pale white	tan	f sand	to granule	hard	very well rounded sand	
40.0	42.0		CRE	Sandstone	quartzose	conglomeraticpale	white	tan	f sand	to s pebble	hard	contains dolm frags

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor							
42.0	44.0		CRE	Clay Sandstone	calcareous quartzose conglomeratic	pale	white	clay	to s pebble	stiff	
44.0	46.0		CRE	Clay	calcareous	pale	white	clay		stiff	
46.0	48.0		CRE	Clay Siltstone	calcareous ferruginous	pale	white	clay	to c silt	stiff	
48.0	50.0		CRE	Clay	calcareous	pale	white	clay		stiff	
50.0	52.0		CRE	Clay	calcareous	pale	white	clay		stiff	
52.0	54.0		CRE	Clay Sandstone	calcareous	pale	white	clay	to f sand	stiff	
54.0	56.0		CRE	Clay	calcareous	pale	white	clay		stiff	
56.0	58.0		CRE	Clay	silty calcareous	pale	white	clay	to f silt	stiff	
58.0	60.0		CRE	Siltstone	calcareous	pale	white	vf silt	to med silt	hard	
60.0	62.0		CRE	Siltstone	calcareous	pale	white	vf silt	to med silt	hard	
62.0	64.0		CRE	Siltstone	calcareous	pale	white	vf silt	to med silt	hard	
64.0		DZ967									

EOH at 64.0 m

PROJECT : CARPENTARIA
 LOCALITY: EL 7261
 SHEET : Mt Young
 JOB NO : MAZ

CONTRACTOR : Gaden Drilling
 RIG TYPE : UDR-650
 DATE DRILLED: 13-AUG-93

HOLE NUMBER : YER08

COMMENTS:

LOGGED BY : PRD
 TOTAL DEPTH : 58.0

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 572800 NORTHING: 8291860 R.L.: 40.0
 SHEET 1 OF 2 HOLE NUMBER : YER08

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS	
From (m)	To (m)			major/ minor								
0.0	2.0		CEN	Sand	clayey	light	brown	vf sand	to med sand	loose		
				Laterite	pisolitic							
2.0	4.0		CEN	Clay	sandy	ferruginous	medium	orange	brown	clay	to f sand	soft
4.0	6.0		CRE	Claystone	silty	sandy	light	khaki	grey	clay	to vf sand	weak
6.0	8.0		CRE	Claystone	silty	sandy	light	khaki	grey	clay	to vf sand	weak
8.0	10.0		CRE	Clay	silty	sandy	light	khaki	grey	clay	to vf sand	hard
10.0	12.0		CRE	Clay	silty	sandy	light	khaki	grey	clay	to vf sand	stiff
12.0	14.0		CRE	Clay	silty		light	khaki	brown	clay	to med silt	stiff
14.0	16.0		CRE	Clay	silty		light	khaki	brown	clay	to med silt	stiff
16.0	18.0		CRE	Clay	silty		light	grey	brown	clay	to med silt	stiff
18.0	20.0		CRE	Clay	silty		light	brown	purple	clay	to med silt	stiff
20.0	22.0		CRE	Sand	clayey	light	brown	purple	f sand	to med sand	stiff	
22.0	24.0		CRE	Clay		light	brown		clay		firm	
24.0	26.0	D2967	CRE	Clay		v dark	grey		clay		firm	
26.0	28.0	D2967	CRE	Clay		v dark	grey		clay		firm	
28.0	30.0	D2967	CRE	Sandstone	shaly	clayey	v dark	grey	vf sand	to f sand	weak	
30.0	32.0		CRE	Sandstone	shaly	clayey	v dark	grey	vf sand	to f sand	weak	possibly proterozoic?
32.0	34.0		CRE	Sandstone	clayey		v dark	grey	vf sand	to f sand	weak	
34.0	36.0		CRE	Sandstone	quartzose		dark	grey	med sand	to vc sand	weak	
36.0	38.0		CRE	Sandstone	quartzose		medium	grey	med sand	to vc sand	weak	
				Sandstone	clayey							
38.0	40.0		CRE	Sandstone	quartzose		medium	grey	med sand	to vc sand	weak	
				Sandstone	clayey							
40.0	42.0		CRE	Sandstone	quartzose		medium	grey	med sand	to vc sand	weak	
				Sandstone	clayey							

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)									
42.0	44.0		CRE	Clay	silty	dark grey	clay	to med silt	soft	
44.0	46.0		CRE	Clay	sandy	dark grey	clay	to med sand	firm	
46.0	48.0		PRO	Sandstone	quartzose	medium orange brown	med sand	to c sand	weak	yyintyi sandstone?
48.0	50.0		PRO	Sandstone	quartzose	medium orange brown	med sand	to c sand	weak	
50.0	52.0		PRO	Chert	laminated	light grey	med silt	to vf sand	strong	
52.0	54.0	DZ968	PRO	Chert	laminated	light grey	med silt	to vf sand	strong	
54.0	56.0	DZ968	PRO	Chert	laminated	light grey	med silt	to vf sand	strong	
56.0	58.0	DZ968	PRO	Chert	laminated	light grey	med silt	to vf sand	strong	

EOM at 58.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7261

SHEET : Mt Young

JOB NO : MAZ

CONTRACTOR : Gaden Drilling

RIG TYPE : UDR-650

DATE DRILLED: 13-AUG-93

HOLE NUMBER : YER09

COMMENTS:

LOGGED BY : PRD

TOTAL DEPTH : 70.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 573640

NORTHING: 8291500

R.L.: 40.0

SHEET 1 OF 2 HOLE NUMBER : YER09

DEPTHS From (m)	To (m)	SAMPLE NUMBER	GEOLOGICAL TIME	ROCK TYPES major/ minor	COLOUR	GRAIN SIZE	STRENGTH/ HARDNESS	COMMENTS
0.0	2.0	CEN	Clay	sandy	medium khaki brown	clay to f sand	stiff	
2.0	4.0	CEN	laterite Clay	pisolitic sandy	medium khaki brown	clay to f sand	stiff	
4.0	6.0	CRE	Claystone	sandy	banded grey brown	clay to vf sand	weak	
6.0	8.0	CRE	Claystone	sandy	medium grey brown	clay to vf sand	weak	
8.0	10.0	CRE	Claystone		medium khaki brown	clay to med silt	weak	
10.0	12.0	CRE	Clay	silty	light grey brown	clay to med silt	firm	
12.0	14.0	CRE	Clay	silty	light grey brown	clay to med silt	firm	
14.0	16.0	CRE	Clay		light grey brown	clay to med silt	firm	
16.0	18.0	CRE	Clay		light grey brown	clay to med silt	firm	
18.0	20.0	CRE	Clay		light grey brown	clay to med silt	firm	
20.0	22.0	CRE	Clay		light grey brown	clay to med silt	firm	
22.0	24.0	CRE	Clay		light grey brown	clay to med silt	firm	
24.0	26.0	CRE	Clay		medium grey	clay to med silt	firm	
26.0	28.0	CRE	Clay		dark grey	clay to med silt	firm	
28.0	30.0	CRE	Clay	sandy	dark grey	clay to med silt	firm	
30.0	32.0	CRE	Clay	sandy	dark grey	clay to med silt	firm	
32.0	34.0	CRE	Clay	sandy	dark grey	clay to med silt	firm	
34.0	36.0	CRE	Clay	sandy	dark grey	clay to med silt	firm	
36.0	38.0	CRE	Clay	sandy	dark grey	clay to vf sand	firm	
38.0	40.0	CRE	Clay	sandy	dark grey	clay to f sand	firm	
40.0	42.0	CRE	Clay	sandy	dark grey	clay to f sand	stiff	

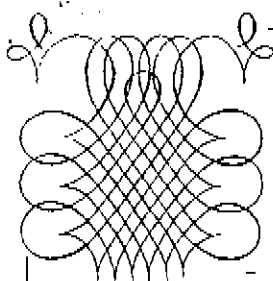
DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor								
42.0	44.0		CRE	Clay	sandy		dark	grey	clay	to f sand	stiff	
44.0	46.0		CRE	Clay	sandy		dark	grey	clay	to f sand	stiff	
46.0	48.0		CRE	Sand	clayey		dark	grey	f sand	to med sand	firm	
48.0	50.0		CRE	Sand	quartzose	clayey	dark	grey	f sand	to med sand	firm	
50.0	52.0		CRE	Sand	quartzose	clayey	dark	grey	f sand	to med sand	firm	
52.0	54.0		CRE	Sand	quartzose		medium	grey	f sand	to med sand	friable	
54.0	56.0		CRE	Sand	quartzose		medium	grey	f sand	to med sand	friable	
56.0	58.0		CRE	Sand Sandstone	quartzose	clayey	medium	grey	f sand	to med sand	friable	
58.0	60.0		CRE	Sand Sandstone	quartzose	clayey	medium	grey	f sand	to med sand	friable	
60.0	62.0		PRO	Sand	quartzose		light	yellow	brown	med sand	to vc sand	friable
62.0	64.0		PRO	Sand	quartzose		light	yellow	brown	med sand	to vc sand	friable
64.0	66.0		PRO	Sand	quartzose	gritty	light	brown	grey	c sand	to vc sand	friable
66.0	68.0		PRO	Sand	quartzose	gritty	pale	pink	grey	c sand	to vc sand	friable
68.0	70.0		PRO	Sand Chert	quartzose		pale	pink	grey	c sand	to vc sand	friable

EOH at 70.0 m

APPENDIX 11

Diamond Drill Hole Fillet and Half Core Sample Analysis

FILLET RESULTS



entered AJH 25/2/94.
ASSAYCORP PTY LTD

A.C.N. 052 982 911

174 Ward Street, Pine Creek, N.T. 0847

P.O. Box 41, Pine Creek, N.T. 0847

Telephone (089) 76 1262

Facsimile (089) 76 1310

ASSAY CODE: AC 11495

BHP-Utah Minerals

Distribution

Adam Hender

Harry Muntanion

Client Reference: 13092

Date Received: 08/12/1993

Project : BAZ

Number of Samples: 20

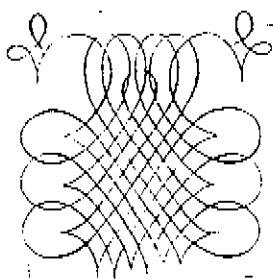
Cost Code:

Sample Preparation

Analysis	Analytical Technique	Precision & Accuracy	Detection Limit	Data Units
Cu	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
Pb	AAS/MA-3	Prec. $\pm$ 10%	2	ppm
Zn	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
Ag	AAS/MA-3	Prec. $\pm$ 10%	0.1	ppm
As	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
Mn	AAS/MA-3	Prec. $\pm$ 10%	2	ppm
Fe	AAS/MA-3	Prec. $\pm$ 10%	20	ppm

Authorisation: Ray Wooldridge

Report Dated: 30/12/1993



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A.C.N. 052 982 1

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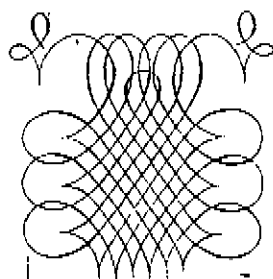
Facsimile (089) 76 13

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Page 1 of 1

Sample	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	As (ppm)	Mn (ppm)	Fe (ppm)
55-60 EH3582	19	15	83	<0.1	18	267	2.66%
60-65 EH3583	16	12	99	<0.1	18	844	3.15%
65-70 EH3584	24	11	81	<0.1	17	1470	3.86%
70-75 EH3585	23	10	83	<0.1	12	1060	2.59%
75-80 EH3586	22	9	98	<0.1	7	921	2.07%
80-85 EH3587	31	8	97	<0.1	10	1250	2.08%
85-90 EH3588	23	6	99	<0.1	2	1420	1.08%
90-95 EH3589	43	4	100	<0.1	3	1470	7100
95-100 EH3590	31	6	103	<0.1	2	1490	7600
100-105 EH3591	19	8	58	<0.1	4	1200	1.51%
105-110 EH3592	17	9	56	<0.1	6	1380	1.34%
110-115 EH3593	11	7	59	<0.1	6	1510	1.43%
115-120 EH3594	7	8	59	<0.1	4	1580	1.82%
120-125 EH3595	10	9	85	<0.1	10	1020	2.54%
125-130 EH3596	25	9	124	0.1	8	578	3.36%
130-135 EH3597	32	8	276	<0.1	12	912	3.78%
135-140 EH3598	47	6	596	<0.1	8	825	3.92%
140-145 EH3599	102	16	755	<0.1	4	772	2.02%
145-150 EH3600	31	18	934	<0.1	3	1320	2.53%
150-155 EH0734	178	23	1020	<0.1	3	823	1.21%

HALF CORE RESULTS



entered ASH 25/2/94
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ASSAY CODE: AC 11496

BHP-Utah Minerals

Distribution

Adam Hender

Harry Muntanion

Client Reference: 13092

Date Received: 08/12/1993

Project : BAZ

Number of Samples: 51

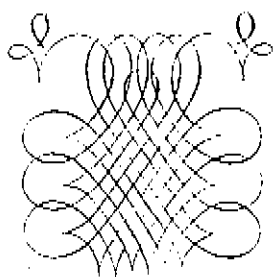
Cost Code:

Sample Preparation

Analysis	Analytical Technique	Precision & Accuracy	Detection Limit	Data Units
Cu	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
Pb	AAS/MA-3	Prec. $\pm$ 10%	2	ppm
Zn	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
Ag	AAS/MA-3	Prec. $\pm$ 10%	0.1	ppm
As	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
Mn	AAS/MA-3	Prec. $\pm$ 10%	2	ppm
Fe	AAS/MA-3	Prec. $\pm$ 10%	20	ppm

Authorisation: Ray Wooldridge

Report Dated: 27/12/1993



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A.C.N. 002 082

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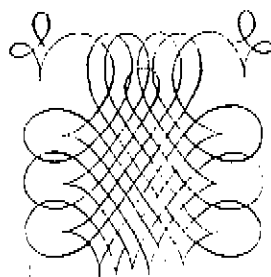
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ASSAY CODE: AC 11496

Page 1 of 3

Sample	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	As (ppm)	Mn (ppm)	Fe (ppm)
157-158 EH0735	11	26	15	<0.1	5	138	1.57%
160-161 EH0736	10	20	12	<0.1	4	127	1.53%
163-164 EH0737	11	18	9	<0.1	3	133	1.50%
166-167 EH0738	12	19	10	<0.1	3	138	1.73%
169-170 EH0739	12	20	9	<0.1	4	187	2.01%
172-173 EH0740	10	22	7	<0.1	3	121	1.49%
175-176 EH0741	9	27	5	<0.1	3	125	1.45%
178-179 EH0742	14	21	6	<0.1	4	138	1.82%
181-182 EH0743	11	18	9	<0.1	4	116	1.69%
184-185 EH0744	14	12	11	<0.1	8	152	2.22%
187-188 EH0745	12	10	12	<0.1	7	124	1.72%
190-191 EH0746	14	9	19	<0.1	3	132	1.82%
193-194 EH0747	11	10	9	<0.1	3	118	1.59%
196-197 EH0748	13	10	11	<0.1	4	116	1.62%
199-200 EH0749	10	11	9	<0.1	3	109	1.41%
202-203 EH0750	11	11	17	<0.1	3	119	1.52%
205-206 EH0751	10	16	7	<0.1	3	133	1.41%
208-209 EH0752	11	13	9	<0.1	3	118	1.56%
211-212 EH0753	9	14	13	<0.1	2	113	1.51%
214-215 EH0754	11	14	19	<0.1	2	218	1.53%
217-218 EH0755	8	15	13	<0.1	2	151	1.48%
220-221 EH0756	9	12	8	<0.1	3	129	1.37%
223-224 EH0757	10	12	12	<0.1	3	132	1.62%
226-227 EH0758	10	13	14	<0.1	2	114	1.53%
229-230 EH0759	10	13	17	<0.1	3	156	1.48%



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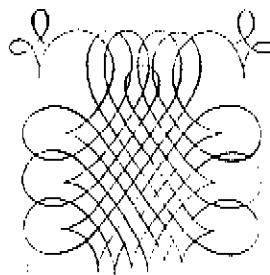
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ASSAY CODE: AC 11496

Page 2 of 3

Sample	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	As (ppm)	Mn (ppm)	Fe (ppm)
232-233 EHO760	11	16	11	<0.1	3	124	1.56%
235-236 EHO761	9	16	8	<0.1	2	109	1.39%
238-239 EHO762	9	14	9	<0.1	2	105	1.23%
241-242 EHO763	11	12	13	<0.1	2	119	1.56%
244-245 EHO764	11	10	25	<0.1	2	121	1.62%
247-248 EHO765	6	8	22	<0.1	2	100	1.25%
250-251 EHO766	5	12	13	<0.1	2	111	1.45%
253-254 EHO767	7	13	21	<0.1	2	101	1.21%
256-257 EHO768	7	14	25	<0.1	2	102	1.18%
259-260 EHO769	8	12	109	<0.1	2	133	1.36%
262-263 EHO770	11	16	16	<0.1	2	132	1.49%
265-266 EHO771	20	21	42	<0.1	2	182	2.39%
268-269 EHO772	15	21	81	<0.1	2	121	1.72%
271-272 EHO773	17	20	11	<0.1	2	163	2.13%
274-275 EHO774	12	19	14	<0.1	2	126	1.56%
277-278 EHO775	14	21	17	<0.1	2	128	1.69%
280-281 EHO776	19	23	11	<0.1	3	235	2.16%
283-284 EHO777	10	<2	61	<0.1	3	115	1.64%
286-287 EHO778	15	2	11	<0.1	3	159	1.61%
289-290 EHO779	11	6	32	<0.1	2	150	1.52%
293-294 EHO781	10	4	8	<0.1	2	168	1.41%
296-297 EHO782	10	3	31	<0.1	4	67	1.37%
299-300 EHO783	10	3	13	<0.1	4	126	1.88%
302-303 EHO784	12	18	91	<0.1	3	101	1.89%
305-306 EHO785	8	4	19	<0.1	3	82	1.81%



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Page 3 of 3

Sample	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	As (ppm)	Mn (ppm)	Fe (ppm)
309-30-2 EH0786	7	9	27	<0.1	3	126	1.63%

APPENDIX 12.

Diamond Drill Hole Sheets

Sheet 1 of 6

DRILLING INFORMATION

HOLE NUMBER: M4D1
Oz Recon Record No.: _____
Logged By: PEN JONES

Drill Target: 13 Ω m CONDUCTOR AT 26-219m
DEFINED BY MT YOUNG SOUNDING 6 Y106/110 IN A
SUBDUED MAGNETIC BLOCK 2.4 KM SOUTHEAST OF A
NORTHEAST TRENDING SLIPY OFF THE INFERRED EMU FAULT
GEOPHYSICAL LOGGING

HOLE TYPE			
Method/Size	From	To	Comments
5 1/4" HAMMER	0.0	55.0	43m WATER BORE
H ₂ DIAMOND	55.0	80.9	DRILLED AT 59 7550E
NQ DIAMOND	80.9	310.2	8308600 N

WEDGE POSITION		
Depth from Collar	Azimuth	Inclination

MATERIAL LEFT IN HOLE			
Casing	From	To	Comments
150mm UPVC	0.0	6.0	HOLE HAS TAPPED ARTESIAN WATER.
35mm UPVC	0.0	310.2	PRESIALLY FLOWING. HOLE IS UNCAPIED.

[illegible]

ANALYSIS							
Sampled Inter.		Sample No's		Sample Type	Laboratory Batch No.	Elements	Method
From	To	From	To				
SS. 0	ISS. 0	EH3582	EH3600 EH0739	5m FILLET	AL1495	Cu, Pb, Zn, Fe Mn, As, Ag	AAS
ISS. 0	R10.2	EH0735	EH0736	1m ¹ / ₂ CORE EVERY 3m	AL1496	"	"

COMMENTS:

INTERSECTIONS

[illegible]

GENERAL COMMENTS: DIAGENETIC BOTRYOIDAL QUARTZ NODULES (CALIFLOWER CHERTS) ARE CONSIDERED TO BE DIAGNOSTIC OF THE MALLAPURAM FORMATION. OTHER POSSIBLE INTERPRETATIONS FOR THE PROTEROZOIC UNITS ARE MAYBORN FORMATION / LIMMEN SANDSTONE (UNLIKELY AS DEPTH UNIT IS NON MICACEOUS) MYRTLE SHALE / LELLA SANDSTONE (UNLIKELY AS THE SANDSTONE UNIT IS TOO THICK) AND JOGGHALLIK FORMATION / TATOLA SANDSTONE (UNLIKELY AS THE TATOLA IS A DISTINCTIVE LIGHT COLOURED THIN BEDDED FINE GRAINED SANDSTONE). NO OBVIOUS GEOLOGICAL CORRELATION INTERSECTED BETWEEN 26-219m. IT APPEARS TO BE MASKED BY CONDUCTIVE CHITACEOUS MANGROVE PLANT.

HOLE NO. 1110

DATE 26-28/11/93

LOGGED BY BEN JONES

HOLE DEPTH 310.2 m

JOB No. BAZ

HOLE No. MYD1

DRILLED INTERVAL		CORE RECOVERY %	FORMATION	ROCK TYPE		ROCK TYPE		OXIDATION	COLOUR		GRAIN TEXTURE SIZE					CONTACT	STRUCTURE	ANGLE TO LCA	THICKNESS	ROCK TEXTURE		ALGAE		EVAPORITE TEXTURE			SULPHIDE MINERALISATION						COMMENTS:																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
				MAJOR	q	MINOR	q		LIGHT	HUE	SORTING	ROUNDNESS	SPHERICITY	FINE	COARSE					MAX	T1	T2	A1	A2	1	2	3	pyrite	chalcopyrite	galena	sphalerite	m %		m %	m %	m %																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
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DATE 26-28/11/93

LOGGED BY BEN JONES

HOLE DEPTH 310.2 m

JOB No. BAZ

HOLE No. M461

DRILLED INTERVAL		CORE RECOVERY %	FORMATION	ROCK TYPE		ROCK TYPE		OXIDATION	COLOUR		GRAIN TEXTURE SIZE					CONTACT	STRUCTURE	ANGLE TO LCA	THICKNESS	ROCK TEXTURE		ALGAE		EVAPORITE TEXTURE			SULPHIDE MINERALISATION						COMMENTS	
				MAJOR	q	MINOR	q		LIGHT	HUE	SORTING	ROUNDNESS	SPHERICITY	FINE	COARSE					MAX	S1	T1	T2	A1	A2	1	2	3	PYRITE	CHALCOPYRITE	GALENA	SPHALERITE		m %
70	72	100	Pml	DOLU		DOAS		04	RW	7			BF			B6	90	2	LM					AN				VR						Anhydrite pseudomorphs, cauliflower clasts.
72	74	100	Pml	DOLU		DOAS		04	RW	6	6	4	BF	M		B6	90	2	LM	L													Interglacial breccia.	
74	76	97	Pml	DOLU		DOAS		04	RW	6	6	4	BF	M		B6	90	2	LM														70.0-74.0 Sericite fracture coatings	
76	78	100	Pml	DOLU		DOAS		04	RW	8			BE						LM	FM													Irregular elongate diagenetic quartz carbonate	
78	80	77	Pml	DOLU		DOAS		04	RW	7			BF			B6	90	2	LM														Host after anhydrite? Some host rare pyrite	
80	82	98	Pml	DOLU		DOAS		04	RW	7			BF			B6	90	2	LM														76.0-80.0 Carbonate veining	
82	84	96	Pml	DOLU		DOAS		04	RW	7			BF			B6	90	2	LM					CC									82.0-84.0 Botryoidal diagenetic quartz carbonate nodules up to 50mm in size.	
84	86	100	Pml	DOLU		DOAS		04	RW	7	6	4	BF	L		B6	90	2	LM	IL			AN			FT							84.0-86.0 Carbonate blebs after anhydrite, pyrite sericite	
86	88	100	Pml	DOLU		DOAS		04	RW	1			BF			B6	90	2	LM														Fracture coatings.	
88	90	100	Pml	DOAS	CH	DOLU		07	EO	8			FF	L								AM				FT							88.1-90.8 Massive chertified dolomite	
90	92	103	Pml	DOAS				07	EO	8			FF									AM											Possible algal mat.	
92	94	103	Pml	DOAS				07	EO	8			FF									AM											88.1-90.8 limonite stains on fracture	
94	96	99	Pml	DOAS				07	EO	8			FF																				89.0 Botryoidal diagenetic quartz carbonate	
96	98	98	Pml	DOAS				07	EO	8			FF																				nodule 200mm in size.	
98	100	98	Pml	DOAS				07	EO	8			FF																				100.8-149.2 Laminated dolomite dolomite	
100	102	99	Pml	DOAS	CH	DOLU		04	RW	8			FF	L					LM				CC	AN									Cross bedded, ripple marks. Anhydrite pseudomorphs	
102	104	99	Pml	DOLU		DOAS		04	RW	7			BF			B6	90	2	LM														cauliflower clasts. Quartz component increasing	
104	106	99	Pml	DOLU		DOAS		04	RW	6	6	3	BF	K		B6	90	2	LM	IL													to base	
106	108	94	Pml	DOLU		DOAS		04	RW	7			BF			B6	90	4	LM														100.0-114.0 Botryoidal diagenetic quartz carbonate	
108	110	94	Pml	DOLU		DOAS	CH	04	RW	6	6	3	BF	K		B6	90	4	LM	IL						FT							nodules	
110	112	94	Pml	DOLU		DOAS		04	RW	6	6	4	BF			B6	90	3	LM							FT	VR						102.0 Carbonate blebs after anhydrite	
112	114	98	Pml	DOLU		DOAS		04	RW	6	6	4	BF			B6	90	3	LM														106.0-108.0 Sericite fracture coatings	
114	116	98	Pml	DOLU		DOAS		04	RW	6	6	4	BF			B6	90	3	LM				AN			FT							110.2 Botryoidal dolomite diagenetic quartz	
116	118	98	Pml	DOLU		DOAS		04	RW	6	6	4	BF			B6	90	2	LM				AN										carbonate nodule 60mm in size. Hosts fine	
118	120	101	Pml	DOLU		DOAS		04	RW	6	6	4	BF			B6	90	3	LM				AN										pyrite, chalcopyrite.	
120	122	101	Pml	DOLU		DOAS		04	RW	6	6	4	BF	L		B6	90	4	LM	IL			AN			FT							116.0-124.0 Irregular elongate diagenetic	
122	124	101	Pml	DOAS				04	RL	5	4	5	CG						LM														quartz carbonate blebs after anhydrite	
124	126	100	Pml	DOAS				04	RL	5	4	5	CG						LM														129.7, 131.5, 133.1, 133.3. Botryoidal diagenetic	
126	128	108	Pml	DOAS				04	RL	5	4	5	CG						LM														quartz carbonate nodules	
128	130	100	Pml	DOAS				04	RL	5	4	5	CG						LM														115.0 Disseminated fine pyrite along bedding	
130	132	100	Pml	DOAS				04	RL	5	4	5	CG						LM														laminations	
132	134	100	Pml	DOAS				04	RL	5	4	5	CG						LM														34.0-136.0 Quartz carbonate blebs after	
134	136	100	Pml	DOAS				04	RL	5	4	5	CG						LM														anhydrite?	
136	138	100	Pml	DOAS				04	RL	5	4	5	CG						LM														135.3 Quartz vein 5mm thick. After anhydrite?	
138	140	100	Pml	DOAS				04	RL	5	4	5	CG						LM															

DATE 26-28/11/93

LOGGED BY BEN JONES

HOLE DEPTH 310.2 m

JOB No. 8AZ

HOLE No. MYD 1

DRILLED INTERVAL		CORE RECOVERY %	FORMATION	ROCK TYPE		ROCK TYPE		OXIDATION	COLOUR		GRAIN TEXTURE SIZE					CONTACT	STRUCTURE	ANGLE TO LCA	THICKNESS	ROCK TEXTURE		ALGAE		EVAPORITE TEXTURE			SULPHIDE MINERALISATION						COMMENTS:	
				MAJOR	q	MINOR	q		LIGHT	HUE	SORTING	ROUNDNESS	SPHERICITY	FINE	COARSE					MAX	T1	T2	A1	A2	1	2	3	PYRITE	CHALCOPYRITE	GALENA	SPHALERITE	m %		m %
1140.0	1142.0	100	Pml	DOLU		DDAS			4R	5	4	5	5	5					LM	LM														1140.0-1142.0 Angular quartz blocks after anhydrite
1142.0	1144.0	99	Pml	DOLU		DDAS			4R	5	4	5	5	5					LM	LM														1142.0-1144.0 Quartz carbonate, hematite veins knobby oriented 90° to LCA. After evaporites? Some
1144.0	1146.0	99	Pml	DOLU		DDAS			4R	5	4	5	5	5					LM	LM														collective seriate alteration of intercalated
1146.0	1148.0	99	Pml	DDAS					6RL	3	4	5	5	5					LM	LM														1146.0-1148.0 Quartz dolomite sandstone
1148.0	1150.0	92	Pml	DDAS		DDAS	QS		6RL	3	4	5	5	5					FM	FM														Fragmental quartz and carbonate after evaporites as veins and matrix. Massive soft black
1150.0	1152.0	92	Pml	DDAS	QS				7WL	3	4	5	5	5					FM	FM														Mineral coats fractures
1152.0	1154.0	95	Pml	DDAS	QS				6RL	3	4	5	5	5					FM	FM														Angular clasts of underlying sandstone.
1154.0	1156.0	97	Pms	SNST	QS				6OW	4	5	5	5	5					SRM	SRM														Hiatus
1156.0	1158.0	95	Pms	SNST	QS				6OW	4	5	5	5	5					SRM	SRM														53.9-310.2 PROTEROZOIC MASTERTON SANDSTONE (Pms)
1158.0	1160.0	94	Pms	SNST	QS				6OW	4	5	5	5	5					SRM	SRM														Medium to coarse grained quartz
1160.0	1162.0	99	Pms	SNST	QS				6OW	4	5	5	5	5					SRM	SRM														Sandstone. Cross bedded, ripple marks.
1162.0	1164.0	99	Pms	SNST	QS				6OW	4	5	5	5	5					SRM	SRM														Ferruginous mottling, silicification
1164.0	1166.0	99	Pms	SNST	QS				6OW	4	5	5	5	5					SRM	SRM														153.9 Fractured top Hiatus.
1166.0	1168.0	88	Pms	SNST	QS				4RP	5	6	7	6	6					BM	BM														
1168.0	1170.0	102	Pms	SNST	QS				4RP	5	6	7	6	6					BM	BM														
1170.0	1172.0	100	Pms	SNST	QS				4RP	5	6	7	6	6					BM	BM														
1172.0	1174.0	102	Pms	SNST	QS				4RP	5	6	7	6	6					BM	BM														
1174.0	1176.0	101	Pms	SNST	QS				4RP	5	6	7	6	6					BM	BM														
1176.0	1178.0	97	Pms	SNST	QS				4RP	5	6	7	6	6					BM	BM														
1178.0	1180.0	99	Pms	SNST	QS				05OW	4	5	5	5	5					RM	RM														
1180.0	1182.0	99	Pms	SNST	QS				05OW	4	5	5	5	5					RM	RM														
1182.0	1184.0	99	Pms	SNST	QS				05OW	4	5	5	5	5					RM	RM														
1184.0	1186.0	99	Pms	SNST	QS				04LO	4	5	5	5	5					RM	RM														
1186.0	1188.0	100	Pms	SNST	QS				04LO	4	5	5	5	5					LM	LM														
1188.0	1190.0	99	Pms	SNST	QS				04LO	4	5	5	5	5					RM	RM														
1190.0	1192.0	99	Pms	SNST	QS				06OW	4	5	5	5	5					RM	RM														
1192.0	1194.0	100	Pms	SNST	QS				06OW	4	5	5	5	5					RM	RM														
1194.0	1196.0	100	Pms	SNST	QS				06OW	4	5	5	5	5					RM	RM														
1196.0	1198.0	100	Pms	SNST	QS				06OW	4	5	5	5	5					RM	RM														
1198.0	1200.0	101	Pms	SNST	QS				06OW	4	5	5	5	5					RM	RM														
1200.0	1202.0	101	Pms	SNST	QS				06OW	4	5	5	5	5					RM	RM														
1202.0	1204.0	102	Pms	SNST	QS				06OW	4	5	5	5	5					RM	RM														
1204.0	1206.0	103	Pms	SNST	QS				06OW	4	5	5	5	5					RM	RM														
1206.0	1208.0	105	Pms	SNST	QS				05OW	4	5	5	5	5					RM	RM														
1208.0	1210.0	96	Pms	SNST	QS				04LO	4	5	5	5	5					RM	RM														208.0-210.0 Oxidized sideritic cement?

DATE 26-28/11/93

LOGGED BY LEN JONES

HOLE DEPTH 310.2 m

JOB No. BAZ

HOLE No. MY01

DRILLED INTERVAL		CORE RECOVERY %	FORMATION	ROCK TYPE		ROCK TYPE		OXIDATION	COLOUR		GRAIN TEXTURE SIZE					CONTACT	STRUCTURE	ANGLE TO LCA	THICKNESS	ROCK TEXTURE		ALGAE		EVAPORITE TEXTURE			SULPHIDE MINERALISATION						COMMENTS:		
FROM	TO			MAJOR	q	MINOR	q		LIGHT	HUE	SORTING	ROUNDNESS	SPHERICITY	FINE	COARSE					MAX	T1	T2	A1	A2	1	2	3	PYRITE	CHALCOPYRITE	GALENA	SPHALERITE				
210.0	212.0	98	PMS	SNST	QS				05	OW	40	7	G	1			BG	90	6																
212.0	214.0	103	PMS	SNST	QS				05	OW	40	7	G	1			BG	90	6																
214.0	216.0	103	PMS	SNST	QS				04	RO	50	7	G	1			BC	70	6																214.0-216.0 Oxidised sideritic cement
216.0	218.0	103	PMS	SNST	QS				04	RO	50	7	G	1			BG	90	6																
218.0	220.0	99	PMS	SNST	QS				06	OW	40	7	G	1			BG	90	6	RM															
220.0	222.0	102	PMS	SNST	QS				06	OW	40	7	G	1			BG	90	6	RM															
222.0	224.0	100	PMS	SNST	QS				06	OW	40	7	G	1			BG	90	6	RM															
224.0	226.0	99	PMS	SNST	QS				06	OW	40	7	G	1			BG	90	6	RM															
226.0	228.0	99	PMS	SNST	QS				06	OW	40	7	G	1			BG	90	6	RM															
228.0	230.0	92	PMS	SNST	QS				06	OW	40	7	G	1			BG	90	6	RM															
230.0	232.0	92	PMS	SNST	QS				06	OW	40	7	G	1			BG	90	6	RM															
232.0	234.0	99	PMS	SNST	QS				06	OW	40	7	G	1			BG	90	6	RM															
234.0	236.0	100	PMS	SNST	QS				05	OW	40	7	G	1			BC	70	6	RM															
236.0	238.0	100	PMS	SNST	QS				06	OW	40	7	G	1			BC	70	6	RM															
238.0	240.0	104	PMS	SNST	QS				06	OW	40	7	G	1			BC	70	6	RM															
240.0	242.0	100	PMS	SNST	QS				06	OW	40	7	G	1			BC	70	6	RM															
242.0	244.0	100	PMS	SNST	SS	P.B.S.N			06	OR	50	7	G	1	N		BC	80	6															242.0-246.0 Occasional elongate angular mudstone clasts up to 20mm	
244.0	246.0	99	PMS	SNST	QS	P.B.S.N			06	OR	50	7	G	1			BC	70	6	RM															
246.0	248.0	79	PMS	SNST	QS				06	OR	50	7	G	1																					
248.0	250.0	96	PMS	SNST	QS	MDST	1B		06	OR	50	7	G	1																					
250.0	252.0	103	PMS	SNST	QS				06	OR	50	7	G	1																					250.0-252.0 Sericite coats fractures
252.0	254.0	103	PMS	SNST	QS	MDST	1B		06	EW	40	7	G	1			BC	70	6	RM															
254.0	256.0	99	PMS	SNST	QS	MDST	1B		06	EW	40	7	G	1			BC	70	6	RM															
256.0	258.0	101	PMS	SNST	QS				06	EW	40	7	G	1			BC	70	6	RM															
258.0	260.0	101	PMS	SNST	QS				06	EW	40	7	G	1			BC	70	6	RM															
260.0	262.0	101	PMS	SNST	QS	P.B.S.N			06	EW	40	7	G	1			BC	70	6	RM															
262.0	264.0	101	PMS	SNST	QS				06	EW	40	7	G	1			BC	70	6	RM															
264.0	266.0	101	PMS	SNST	QS				06	EW	40	7	G	1			BC	70	6	RM															
266.0	268.0	100	PMS	SNST	QS				06	EW	40	7	G	1			BC	70	6	RM															
268.0	270.0	100	PMS	SNST	QS				06	EW	40	7	G	1			BC	70	6	RM															
270.0	272.0	99	PMS	SNST	QS				06	EW	40	7	G	1			BC	70	6	RM															
272.0	274.0	99	PMS	SNST	SS	P.B.S.N			06	EW	40	7	G	1			BC	70	6	RM															272.0-274.0 30mm thick muscovite rich mudstone interbed
274.0	276.0	99	PMS	SNST	QS				06	EW	40	7	G	1			BC	70	6	RM															
276.0	278.0	99	PMS	SNST	QS				06	EW	40	7	G	1			BC	70	6	RM															
278.0	280.0	100	PMS	SNST	QS	P.B.S.N			06	EW	40	7	G	1			BC	70	6	RM															

HOLE NO. M90

APPENDIX 13.

Exploration Expenditure

STATEMENT OF EXPENDITURE

EXPLORATION LICENCE 7260

For the Period
24th May, 1993 to 23rd May, 1994

Geoscientist/Professional	28,242
Field Support/Office Staff	13,475
Other Contractors	5,736
Equipment Hire	12,758
Vehicles	3,987
Geophysics	2,970
Laboratory	2,640
Drafting	230
Drilling	63,577
Geochemistry	1,331
Surveys	7
Office Expenses	399
Sub-Total	\$ 135,352
Overheads 10%	13,535
TOTAL:	\$ 148,887

STATEMENT OF EXPENDITURE

EXPLORATION LICENCE 7261

For the Period
24th May, 1993 to 23rd May, 1994

Geoscientist/Professional	28,955
Field Support/Office Staff	17,127
Other Contractors	2,293
Travel/Accommodation/Meals	507
Equipment Hire	36,079
Vehicles	6,053
Helicopter Charter	1,182
Fixed Wing Air Charter	12,923
Geophysics	51,933
Laboratory	1,892
Drafting/Computing	1,364
Drilling	71,406
Geochemistry	1,561
Surveys	5,340
Office Expenses	366
Sub-Total	\$ 238,981
Overheads 10%	23,898
TOTAL:	\$ 262,879

STATEMENT OF EXPENDITURE

EXPLORATION LICENCE 7262

For the Period
24th May, 1993 to 23rd May, 1994

Geoscientist/Professional	26,115
Field Support/Office Staff	8,331
Other Contractors	1,837
Equipment Hire	27,402
Vehicles	4,364
Fixed Wing Air Charter	292
Geophysics	37,342
Laboratory	660
Drafting/Computing	2,373
Drilling	23,127
Geochemistry	1,602
Surveys	5,180
Office Expenses	776
Sub-Total	\$ 139,401
Overheads 10%	13,940
TOTAL:	\$ 153,341

STATEMENT OF EXPENDITURE

EXPLORATION LICENCE 7263

For the Period
24th May, 1993 to 23rd May, 1994

Geoscientist/Professional	16,183
Field Support/Office Staff	5,518
Other Contractors	100
Travel/Accommodation/Meals	507
Equipment Hire	10,083
Vehicles	824
Freight/Storage	1,875
Fixed Wing Air Charter	10,368
Geophysics	21,835
Laboratory	3,479
Drafting/Computing	1,042
Drilling	12,232
Geochemistry	1,266
Surveys	6,935
Office Expenses	890
Sub-Total	\$ 93,137
Overheads 10%	9,313
TOTAL:	\$ 102,450

STATEMENT OF EXPENDITURE

EXPLORATION LICENCE 7264

For the Period
24th May, 1993 to 23rd May, 1994

Geoscientist/Professional	9,308
Field Support/Office Staff	14,105
Other Contractors	138
Travel/Accommodation/Meals	604
Field Supplies	474
Equipment Hire	8,134
Vehicles	638
Helicopter Charter	6,278
Fixed Wing Air Charter	632
Geophysics	5,595
Laboratory	3,206
Drafting/Computing	417
Geochemistry	913
Surveys	2,289
Office Expenses	407
Sub-Total	\$ 53,138
Overheads 10%	5,313
TOTAL:	\$ 58,451

STATEMENT OF EXPENDITURE

EXPLORATION LICENCE 7341

For the Period
24th May, 1993 to 23rd May, 1994

Geoscientist/Professional	16,707
Field Support/Office Staff	10,005
Other Contractors	1,600
Travel/Accommodation/Meals	434
Equipment Hire	12,850
Vehicles	3,380
Geophysics	9,014
Laboratory	5,115
Drafting/Computing	653
Drilling	38,805
Geochemistry	930
Surveys	1,907
Office Expenses	179
Sub-Total	\$ 101,579
Overheads 10%	10,157
TOTAL:	\$ 111,736

STATEMENT OF EXPENDITURE

EXPLORATION LICENCE 7824

For the Period
24th May, 1993 to 23rd May, 1994

Geoscientist/Professional	2,844
Field Support/Office Staff	2,228
Travel/Accommodation/Meals	261
Field Supplies	670
Equipment Hire	1,180
Vehicles	878
Freight/Storage	239
Geophysics	567
Drafting/Computing	431
Library	25
Sub-Total	\$ 9,323
Overheads 10%	932
TOTAL:	\$ 10,255

**ANNEXURE
to
ANNUAL REPORT**

ELs 7260-7264, 7341 & 7824

24th May, 1993 to 23rd May, 1994

Report No. 50902

OPEN FILE

Author:

**T.H. Reddcliffe
ASHTON MINING LIMITED
24 Outram Street
WEST PERTH WA 6005**

March, 1995

0899/008

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FIGURES

Figure 1.	Tenement Location Plan - EL 7824
Figure 2.	Sample Location Plan

APPENDICES

Appendix 1.	Sample Results
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1.0 INTRODUCTION

Exploration Licence 7824 forms part of Ashton Mining Limited's Nathan River group reporting project. This group has a combined reporting date of the 23rd June.

An annual report was forwarded to the Department for the reporting period 24th May, 1993 to 23rd May, 1994. This report detailed the exploration carried out for that period over ELs 7260, 7261, 7262, 7263, 7264 and 7341. Due to clerical oversight, details of the exploration carried out over EL 7824 (Figure 1) was omitted.

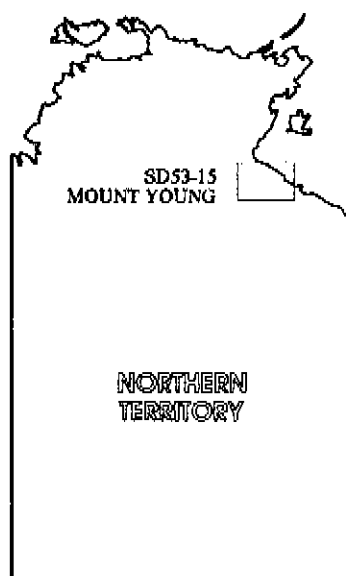
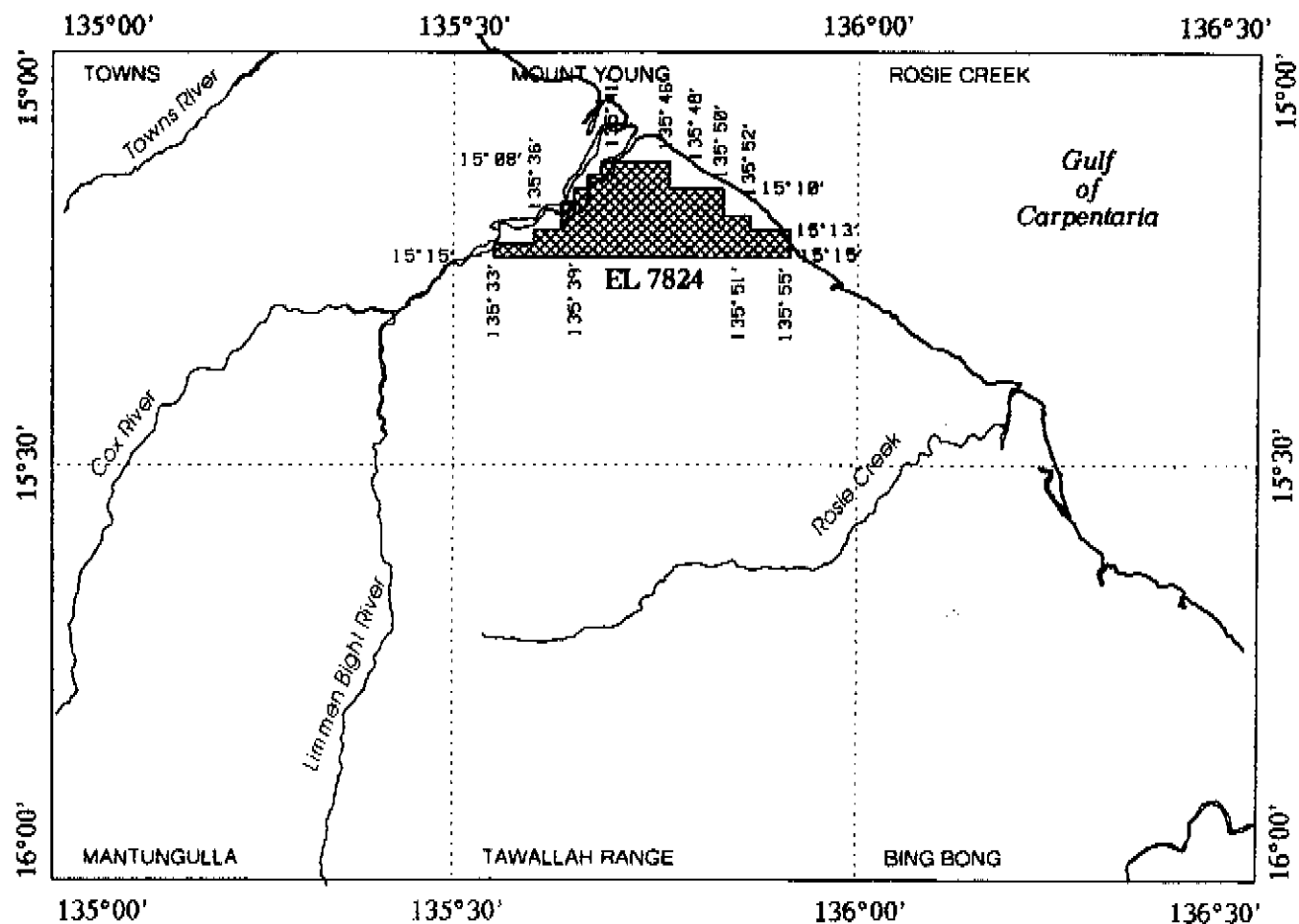
This report now provides details of all work carried out by Ashton Mining on EL 7824 for the period 24th May, 1993 to 23rd May, 1994.

2.0 EXPLORATION PROGRAMME

2.1 Reconnaissance Sampling

An office study was undertaken to identify sample sites for a reconnaissance stream sediment sampling programme.

The programme was undertaken by vehicle with a total of nine samples being collected (MYO 678 to 686). The samples were forwarded to Ashton's Perth laboratory for analysis. Sample locations are shown on Figure 2.



ASHTON MINING LIMITED
ADE JOINT VENTURE

FIGURE 1
EXPLORATION LICENCE 7824
LOCATION MAP

2.2 Laboratory Procedure

All heavy mineral samples were processed by the Ashton Mining Limited Laboratory in Perth, where they were concentrated by Wilfley Table and heavy liquid separation techniques.

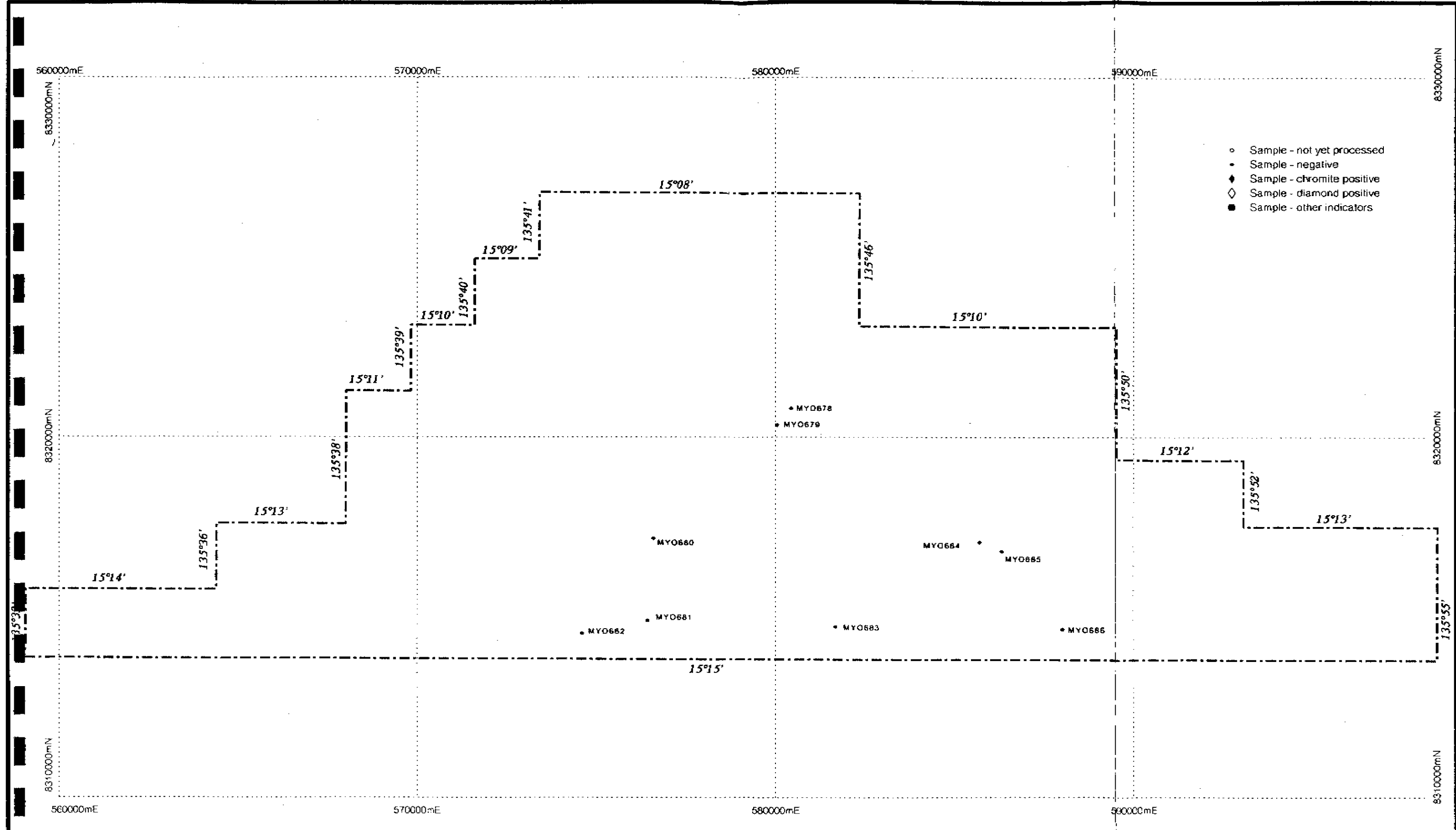
The heavy liquid used was tetrabromethane with a specific gravity of 2.96. The concentrates were then screened into various size fractions, further concentrated where required by magnetic and electrostatic separation techniques and a comprehensive grain by grain examination carried out on the minus 1.0mm plus 0.425mm fractions.

2.3 Results

Processing of stream samples, collected from EL 7824, all reported negative. A full sample listing is given in Appendix 1.

3.0 CONCLUSIONS AND RECOMMENDATIONS

As all samples returned negative results, no further work is recommended on this tenement.



- Sample - not yet processed
- Sample - negative
- ◆ Sample - chromite positive
- ◇ Sample - diamond positive
- Sample - other indicators

ASHTON MINING LIMITED		
A.D.E. JOINT VENTURE		
EXPLORATION LICENCE 7824		
SAMPLE LOCATIONS		
FIGURE 2		
Geologist	Date	Report No.
Dr. J. R. ...	MARCH 1995	...

APPENDIX 1.

Sample Results

EXPLORATION LICENCE 7824

Sample	Result	Type	Diamond		Chromite	Other
			Micro	Macro		
MYO 0678	neg	G	-	-	-	-
MYO 0679	neg	G	-	-	-	-
MYO 0680	neg	G	-	-	-	-
MYO 0681	neg	G	-	-	-	-
MYO 0682	neg	G	-	-	-	-
MYO 0683	neg	G	-	-	-	-
MYO 0684	neg	G	-	-	-	-
MYO 0685	neg	G	-	-	-	-
MYO 0686	neg	G	-	-	-	-

SAMPLE METHODS/TYPES

G = Gravel

L = Loam

R = Rock

P = Pit

BG = Bulk gravel

BL = Bulk loam

BT = Bulk trench

TR = Trench/costean

LG = Loam on grid

L PF = Loam on photofeature

DS = Drill spoil