

OPEN FILE

ANNUAL REPORT

1989 - 90

E.L. 25/89 SMITHTON

MINES

by Vic Threader

for Mineral Holdings Australia Pty. Ltd.

90-3161

MINES	
File Ref. <u>E.L. 25/89</u>	
<u>13 AUG 1990</u>	
Doc. Ref.	
Action Officer	Initials
<u>REFER TO</u>	
<u>CORRES.</u>	<u>8.8.90</u>
Resubmit to	Date

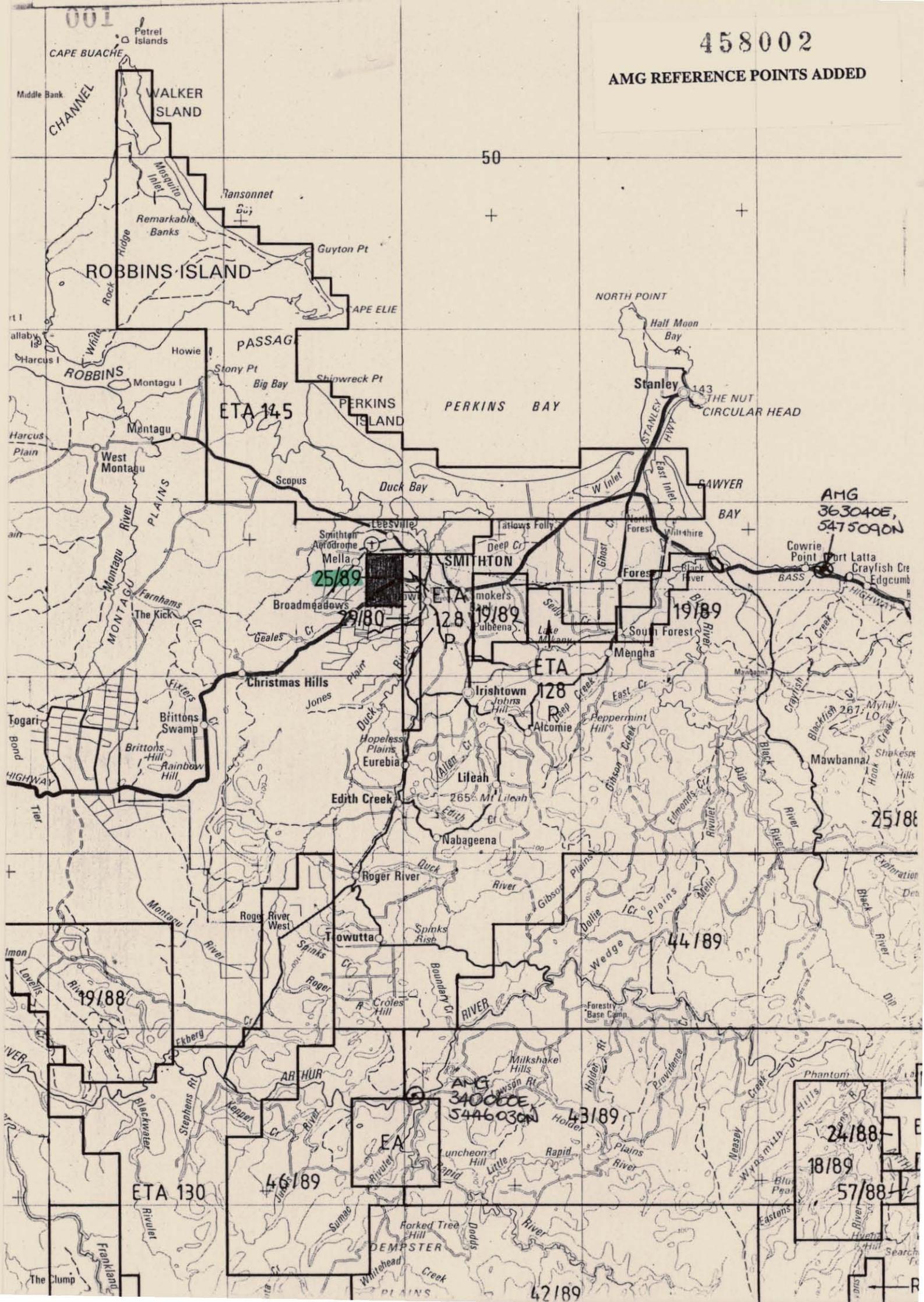
August 1990

Vic Threader and Associates Pty. Ltd.
Kingston Beach.

AMG REFERENCE POINTS ADDED

458002

AMG REFERENCE POINTS ADDED



C O N T E N T S

Introduction

Geology

Past Exploration

Current Exploration

Future Exploration

Drill Hole Locations and Logs

Analytical Results

Figures:

1. Location Map (1 : 500 000)
2. Drill Hole Location Map (1 : 10 000)

Introduction

The exploration area covers 6 km² southwest of the township of Smithton and is situated mainly in agricultural land lying N. and S. of the Bass Highway.

Geology

The area is entirely underlain by rocks of the Smithton Dolomite which only crops out sparingly in the district - at Blackwood Bridge 39707545 and Watsons Bend. The beds strike N-S to NE-SW and dip westerly at around 40°.

Most of the area is covered by superficial sand to a depth of 3-4m and soils generally have a high humic content, particularly in the west of the E.L.

Previous Exploration

Surface sampling of dolomite was carried out by Nye and Thomas and reported in Bulletin 41.

Diamond drilling by B.H.P. was undertaken in the 40s to search for dolomite of refractory grade. The holes highlighted in blue on the attached map were those in which a satisfactory grade was intersected in that drilling programme:

	CaO	MgO	SiO ₂	Fe ₂ O ₃	Al ₂ O ₃
Average grade of all holes:	304	20.3	2.25	0.57	1.00
" " " selected holes (coloured blue)	313	20.9	0.25	0.42	0.33

The results are given in more detail in the Annual Report for E.L.43 by M.H.A. in 1987 (T.G.R.87-2708).

Current Programme

Ten hammer drill holes were put down along the Bass Highway and

in freehold land on the north side of the highway. All holes drilled in dolomite but encountered surface sand which caused sample contamination resulting in high silica content. The samples were screened to remove sand and the coarse fractions were reanalysed. On visual inspection, the +500 μ m was seen to contain some lighter coloured particles. These were removed and examined by XRD, which showed them to be 80% dolomite, 10% quartz, 5% kaolin, 3% calcite, 2% goethite. This analysis indicates that the sequence contains dolomite of variable grade. An XRD analysis of the darker coloured particles will also be done. Diamond drill core would be useful in ascertaining how the contaminants occur and will probably be undertaken at a later stage in the exploration programme if a potentially minable resource is indicated.

The drilling was undertaken during winter and consequently the depth of holes was limited by the high water table and for satisfactory results would be better drilled after a prolonged dry season when the water table is at its lowest level.

Future Exploration

This programme will be continued in September using PVC casing to prevent contamination from surface sand. It is intended to explore within ballast reserved areas within the licence and approval to do this is being sought.

458006

E.L.25/89 - Smithton Hammer Drill Logs

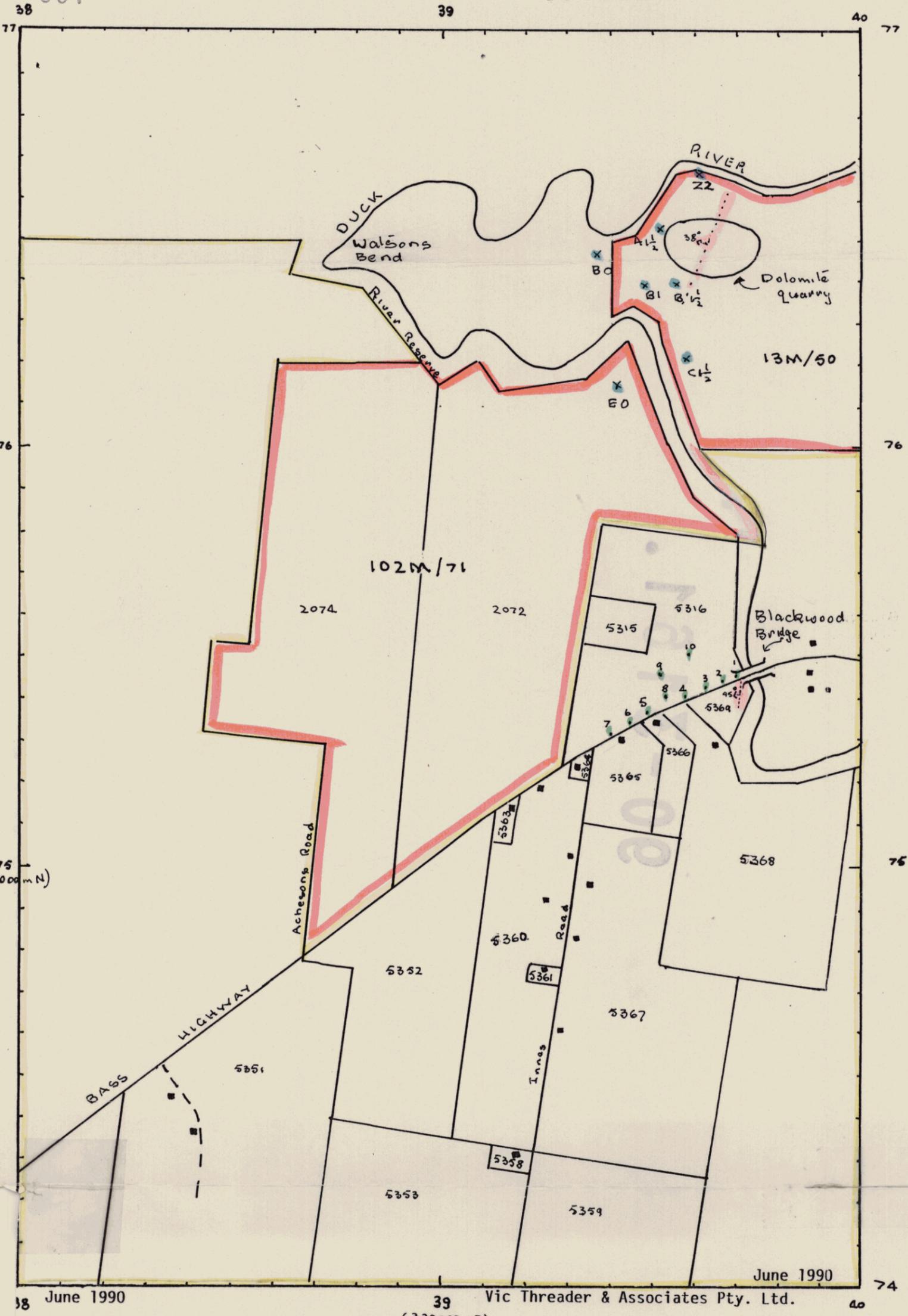
B.H.no.	Grid Reference		Depth (m)		Thickness (m)	Sample	Depth Water struck (m)	Log	Composite Sample groupings	
	ME	mit	From	To						
1	339730	5475460	0	3	3	1.1	14	Sand. Dolomite at 3m	} 1.2, 1.3	
			3	6	3	1.2		Light grey dolomite		
			6	9	3	1.3		(slightly darker 8-9)		
			9	12	3	1.4		Darker grey dolomite		
			12	14	2	1.5				
2	339680	5475440	0	3	3	2.1		} Grey dolomite	} 2.2, 2.3	
			3	6	3	2.2				
			6	9	3	2.3				
			9	10	1	-		Hole abandoned due to blockage		
2a	339680 (relocated 2a)	5475440	0	4	4	2a.1		} Sand	} 2a.2, 2a.3	
			4	6	2	2a.2				Light grey
			6	9	3	2a.3				
			9	12	3	2a.4		Dark grey		
			12	15	3	2a.5				
			15	16	1	2a.6				
(Last 2 rods and bit in hole due to jamming at 10 m.)										
3	339640	5475420	0	1½	1½	3.1		} Brown sand	} 3.1, 3.2	
			1½	5	3½	3.1				Light grey dolomite
			5	5	1	3.2		Brown dolomite		
			5	5	0	3.3		Grey		
			5	10½	5½	3.4				
4	339690	54755400	0	3	3	4.1		} Light grey to white dolomite at	} 4.1, 4.2	
			3	5½	2½	4.2				Similar surface
			5½	5	0	-		Rods dropped into cavity - no sample return below bit.		
5	339680	5475360	0	3½	3½	5.1	3½	Brown sand with scattered dolomite chips		
6	339480	5475340	0	4	4	6.1	4	Brown sand		
7	339420	5475310	0	3	3	n.s.	3	Black sand		

003

458007

B.H.no.	Grid Reference		Depth (m)		Thickness (m)	Sample	Depth Water struck (m)	Log	Recommended Sample Groupings
	NE	WN	From	To					
8	539500	5475400	0	2	2	N.S.		Brown sand	} 8.2a, 8.2b } 8.3
			2	3	1	8.1		Black sand	
			3	5	2	8.2a		White dolomite	
			5	6	1	8.2b		White and gray chips	
			6	9	3	8.3	5	Grey dolomite, soft towards bottom - wet cavity at 8.3	
9	539550	5475450	0	2	2	9.1		White and grey sand	} 9.2
			0	3	1	N.S.		Sand and dolomite	
			3	6	3	9.2	5	Light grey dolomite	
10	339600	5475500	0	1 1/2	1 1/2	10.1		White, yellow and grey sand	} 10.2
			1 1/2	6	4 3/4	10.2	5	Dark grey dolomite	

016

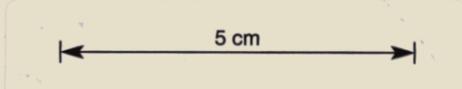


E.L.25/89 (Smithton) - M.H.A. Pty. Ltd.

- E.L. Boundary
- Lease boundaries (Circ. Head Dolomite & Trading Co.)
- ~ Average strike & dip of dolomite
- i Hammer drill hole
- x B.H.P. Diamond Drill holes 1944
- Residence

5351 UPI no. on 1:25000 topographic map (see list of land titles)

Scale 1 : 10 000



75
(5475000mN)

39
(3390000mE)

38 June 1990 39 Vic Threader & Associates Pty. Ltd. 40