086

526086

BROKEN HILL PROPRIETARY CO. LTD.

DRILL LOG HEADER SHEET

Project: TIN, TASMANIA
Prospect: WARATAH T650
Local Grid co-ords.
AMG co-ords CQ 825096
Drilling Co: OVERLAND DRILLING Co.
Drill type: WARMAN 25D SCOUT
Driller: R. WADDLE
R. LESAY

Hole No: WA.4.
Total depth: 349.15m
Bearing:
Depression VERTICAL
R.L. Collar:
Commenced: 12/2/83
Completed: 28/2/83
Logged by: S.P. KERBER
Sampled by: S.P. KERBER

Hole Size		From	To	Total
Non-core	HQ	0	85.0	85.0
Core	NQ	85.0	200.9	115.9
	BQ	200.9	317.0	116.1
	AQ	317.0	349.15	32.15
Casing				
Casing left.				

Core storage:	SCAMANDER
No. of trays.	25 CORE 1 CHIP
Sample storage	ANALABS - COOKE
Geochem. Lab.	ANALABS
Analytical reports	
Min. and Pet Lab.	M.R.L.
Min and Pet report	

Hole Survey Data: Susceptibility - 2m intervals.

GEOCHEMISTRY - BE 5052 - BE 5054
BE 5098
PETROLOGY - WA4-1 to WA4-2

Summary Log: TERTIARY 0 - 285.6 Basalt
285.6 - 317.5 Gravels

PRECAMBRIAN 317.5 - 349.15 Shale / Dolomite

E.O.H. 349.15

Comments: River bed at 285.6 caused problems. Attempt to ream with NQ abandoned. Reduced to AQ but core loss considerable.

Project WARATAH T650

THE BROKEN HILL PROPRIETARY CO. LTD.

Drillhole No. WA 4

Sheet 1 of 5

DRILLING						DESCRIPTIVE LOG											
										INTERSECTION ANGLE LCA							
Core size	From m	To	Intersection m	Recovered	% Recovery	From m	To	LITHOLOGY	MINERALISATION	Sample No	Bedding	Veins		Other		Petrology etc	Box No
N						0	6	CLAY, yellow rounded balls.									
O																	
N						6	20	CLAY, pale grey, weathered grey basalt chips.									
C						20	85	BASALT,									
O								20.0-28.0 Basalt, pink tinge, weathered.									
R								28.0-40.0 Basalt, grey, minor zeolites									
I								40.0-42.0 Basalt, grey, light grey clay balls.									
N								42.0-50.0 Basalt, grey									
G								50.0-52.0 Basalt, green-grey weathered chips.									
								52.0-66.0 Basalt, grey									
								66.0-79.0 Basalt, grey abundant zeolites									
								79.0-82.0 Basalt, pink tinged, amygdaloidal									
								82.0-85.0 Basalt, grey.									
						85	166.17	BASALT grey, medium grained									1
	85.0	88.0	3.0	3.0	100			85.0-87.85 Basalt, dense, coarse grained, olivine phenocrysts.									
	88.0	91.0	3.0	3.0	100			87.85-89.59 Basalt, weathered amygdaloidal, zeolite and calcite in vugs.									
								89.59-90.6 Basalt, dense, white feldspar laths.									
	91.0	93.5	2.5	2.5	100			90.6-93.5 Basalt, amygdaloidal, zeolites, minor chalcedony, 2cm vugs.									2
	93.5	96.5	3.0	3.0	100			93.5-96.9 Basalt, dense, elongated amygdales coarse grained									
	96.5	99.5	3.0	3.0	100			96.9-99.5 Basalt, amygdaloidal.				65°					
	99.5	102.0	3.0	3.0	100			99.5-102.8 Basalt, dense, small amygdales with iddingsite / bowlingite									3
	102.0	105.0	3.0	3.0	100			102.8-106.5 Basalt, very dense, coarse grained									
	105.0	106.5	1.5	1.5	100												
	106.5	108.5	2.0	2.0	100			106.5-107.25 Basalt, rounded amygdales, chlorite fillings.									
								107.25-108.2 Basalt, amygdaloidal, weathered to black, chalcedony abundant.									4
	108.5	109.4	0.9	0.9	100			108.5-109.7 Basalt, dense, grey-black, calcite veining, secondary minerals common.				35°	40°				
	109.4	111.5	2.1	2.1	100			109.7-111.0 Basalt, amygdaloidal, weathered, zeolites, chalcedony.									
	111.5	114.5	3.0	3.0	100			111.0-112.0 Basalt, amygdaloidal. black clay abundant.									
								112.0-113.8 Basalt, dense, few amygdales, coarse grained, chalcedony veining				90°					
	114.5	117.5	3.0	3.0	100			113.8-115.0 Basalt, amygdaloidal, black, weathered.									5
								115.0-115.4 Basalt, vesicular, amygdaloidal, red-brown, weathered									
								115.4-116.0 Basalt, dense, several large vugs.									
								116.0-117.8 Basalt, dense, small lava chlorite amygdales, elongated 90°.									

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Project WARATAH T650

THE BROKEN HILL PROPRIETARY CO. LTD.

Drillhole No. WA4.

Sheet 2 of 5

DRILLING								DESCRIPTIVE LOG			INTERSECTION ANGLE LEA							
Core Size	From m	To	Intersected m	Recovered	% Recovery	From m	To	LITHOLOGY	MINERALISATION	Sample No	Bedding	Veins		Other (contact, fract.)		Petrology etc.	Box No
	117.5	120.2	2.8	2.74	97.8			117.8-118.0 Basalt, dense, colour change green-grey to grey contact 65°									
								118.0-118.45 Basalt, dense, green-grey.									
								118.45-120.1 Basalt dense, light grey, phenocrysts abundant olivine									
	120.2	123.5	3.3	3.16	95.8			120.1-123.05 Basalt, amygdaloidal, weathered, high clay mineral content.									6
	123.5	124.5	1.0	1.0	100			123.05-124.5 Basalt dense, partly amygdaloidal and vesicular.									
	124.5	126.5	2.0	2.0	100			124.5-126.2 Basalt, amygdaloidal, weathered, dark greeny-grey.									
	126.5	129.5	3.0	2.8	93.3			126.2-127.75 Basalt, dense, phenocrysts abundant, calcite amygdules flow 90° to core.									
								127.75-128.35 Basalt, green-grey, dense. 55-60° contact. chalcedony veins.									
	129.5	132.5	3.0	2.68	89.3			128.35-130.2 Basalt, vesicular, amygdaloidal.									
								130.2-131.0 Basalt, dense, coarse grained, dark grey calcite veining.				0°					7
	132.5	135.5	3.0	3.0	100			131.0-133.5 Basalt, amygdaloidal, weathered, green-grey									
								133.5-134.5 Basalt, calcite veining dense.									
	135.5	138.5	3.0	2.98	99.3			134.5-142.6 Basalt, dense, very coarse grained.									8
	138.5	140.5	2.0	2.0	100												
	140.5	143.6	3.1	3.1	100			142.6-143.6 Basalt, slightly amygdaloidal.									
	143.6	148.4	1.1	1.1	100			143.6-143.8 Basalt, amygdaloidal, rounded, zeolites and clay minerals.									
								143.8-144.7 Basalt, dense									
								144.7-147.5 Basalt, amygdaloidal, weathered.									9
	148.4	151.5	1.0	1.0	100			147.5-149.0 Basalt, dense									
								149.0-149.4 Sand, brown, medium grained with mudstone, light grey, plant matter.			25°			35°			
								149.4-149.75 Mudstone, sandy.									
								149.75-149.9 Sand, coarse grained, grey-brown.									
								149.9-150.09 Silty Mudstone									
	151.5	151.6	0.1	0.1	100			150.09-150.49 Basalt, amygdaloidal, black, weathered									
	151.6	153.3	1.7	0.13	7.6			150.49-158.6 Basalt, dense, weathered.									10
	153.3	155.3	2.0	1.78	89			158.6-165.9 Basalt, very dense, coarse grained, fine calcite veining				3°					
	155.3	158.4	3.1	3.1	100												
	158.4	161.0	2.6	2.6	100												11
	161.0	164.1	3.1	3.1	100												
	164.1	167.2	3.1	3.1	100			165.9-166.17 Basalt, dense,									
						166.17	172.0	MUDSTONE			2°						
	167.2	170.3	3.1	3.1	100			166.17-172.0 Mudstone, light tan, sericite and plant matter abundant									12

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Project WARATAH T650

THE BROKEN HILL PROPRIETARY CO. LTD.

Drillhole No. WR4

Sheet 3 of 5

DRILLING						DESCRIPTIVE LOG											
										INTERSECTION ANGLE LCA							
Core Size	From m	To	Intersected m	Recovered	% Recovery	From m	To	LITHOLOGY	MINERALISATION	Sample No	Bedding	Veins		Other CORE	Other BRACE	Petrology etc	Box No
	170.3	172.4	2.1	2.1	100	172.0	285.6	BASALT, grey, medium grainsize.									
	172.4	174.5	2.1	2.1	100			172.0-172.4 Basalt, vesicular, weathered.									
	174.5	177.5	3.0	2.07	69			172.4-175.5 Basalt, dense.									
N								175.5-175.95 Basalt, small vesicles, green-grey, weathered, altered									13
Q								175.95-177.23 Basalt, vesicular, red-brown.									
	177.5	178.5	1.0	1.0	100			177.23-178.12 Basalt, dense, green-grey.									
								178.12-178.48 Basalt, vesicular, pale green, partly amygdaloidal.									
C	178.5	180.5	2.0	1.0	50			178.48-178.65 Basalt, vesicular, dense.									
O								178.65-178.72 Vein, chalcedony.									
R								178.72-179.57 Basalt, green, dense but vesicular.									
I								179.57-180.1 Basalt, very flat, pinky-red, highly vesicular.						35°			
N								180.1-180.77 Basalt, dense, greeny grey.									
G	180.5	183.5	3.0	3.0	100			180.77-181.97 Basalt, dense, amygdales oval shapes, dark green secondary mineral 45°									
								181.97-182.25 Basalt, vesicular, amygdaloidal, no green secondary minerals									
								182.25-182.65 Basalt, vesicular, red staining, black clay abundant.									
	182.5	186.5	3.0	2.83	94.3			182.65-184.27 Basalt, vesicular, partly amygdaloidal.									14
								184.27-185.28 Basalt, dense,							2°		
	186.5	189.5	3.0	3.0	100			185.28-187.23 Basalt, amygdaloidal, round dark green clay filled amygdales. 1mm size.									
								187.23-189.0 Basalt, dense, still amygdaloidal, elongated, angular shapes									
								189.0-189.25 Basalt, vesicular, dark green, clayey.									
	189.5	191.5	2.0	1.7	85			189.25-190.45 Basalt, dense,									
								190.45-191.5 Basalt, weathered, clayey, thick 15cm chalcedony veins.									
	191.5	194.5	3.0	2.6	86.6			191.5-192.5 Basalt, vesicular, minor.									15
								192.5-192.8 Basalt, dense, dark green, vesicles, clayey groundmass.									
								192.8-193.4 Basalt, dark green amygdales, zeolite common.									
								193.4-193.83 Basalt, weathered, 20cm chalcedony veins, very broken up.									
	194.5	197.5	3.0	3.0	100			193.83-195.96 Basalt, dense, light green, small vesicles and amygdales.									
	197.5	200.5	3.0	3.0	100			195.96-200.4 Basalt, dense, grey, phenocrysts of olivine abundant.									16
	200.5	200.9	0.4	0.35	87.5			200.4-202.5 Basalt, vesicular, weathered.						40°			
	200.9	203.0	2.1	1.3	61.9												
	203.0	205.0	2.0	2.0	100			202.5-211.1 Basalt, dense, dark grey-green, few vesicles.									
B	205.0	207.5	2.5	2.48	99.2												
Q	207.5	210.5	3.0	3.0	100												17
	210.5	213.5	3.0	2.69	89.6			211.1-214.28 Basalt, vesicular, minor zeolite									
	213.5	216.5	3.0	2.98	99.2			214.28-216.83 Basalt, dense, small veins.									

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Project T650 WARATAH

THE BROKEN HILL PROPRIETARY CO LTD

Drillhole No WA4.

Sheet 4 of 5

DRILLING						DESCRIPTIVE LOG										
										INTERSECTION ANGLE						
Core Size	From m	To	Intersected m	Recovered	% Recovery	From m	To	LITHOLOGY	MINERALISATION	Sample No	Bedding	Veins		Other Cont.	Other Fract.	Petrology etc	Box No
	216·5	219·5	3·0	3·0	100			216·83-217·5 Basalt, vesicular and amygdaloidal,									18
	219·5	221·9	2·4	2·37	98·7			219·5-221·5 Basalt, dense,									
	221·9	222·5	0·6	0·53	88·3			221·5-222·85 Basalt, vesicular, green, clayey						45°			
	222·5	224·4	1·9	1·47	77·4			222·85-223·25 Basalt, dense									
B	224·4	227·4	3·0	2·97	99			223·25-224·9 Basalt, vesicular, green, amygdales with calcite common									
Q	227·4	230·5	3·1	3·1	100			224·9-227·5 Basalt, dense									
								227·5-228·6 Basalt, vesicular and amygdaloidal, dark green, clay minerals.									19
	230·5	233·5	3·0	3·0	100			228·6-230·67 Basalt, dense									
								230·67-231·8 Basalt, vesicular, green.									
								231·8-232·75 Basalt, dense calcite veining				0°	45°				
C	233·5	236·6	3·1	3·1	100			232·75-236·16 Basalt, vesicular, amygdaloidal, very clayey									
O	236·6	239·7	3·1	3·1	100			236·16-239·28 Basalt, dense, calcite veining, thick 10 cm green clay veins.				2°	25°				20
R	239·7	240·8	1·1	1·1	100												
I	240·8	242·8	2·0	1·65	82·5												
N	242·8	245·9	3·1	3·1	100												
G	245·9	248·1	2·2	2·15	97·7												21
	248·1	251·2	3·1	2·9	93·5			249·28-285·6 Basalt, weathered, mottled grey-green, brecciated, calcite between									
	251·2	252·5	1·3	1·15	88·5			fragments, some fragments angular and vesicular.									
	252·5	255·5	3·0	2·45	81·7			Hyalocastite?									
	255·5	256·0	0·5	0·2	40												
	256·0	257·5	1·5	1·28	85·3												
	257·5	259·7	2·2	1·15	52·2												22
	259·7	260·2	0·5	0·3	60												
	260·2	263·3	3·1	2·3	74·1												
	263·3	264·5	1·2	0·95	79·1												
	264·5	267·5	3·0	2·9	96·6												
	267·5	268·5	1·0	0·65	65												
	268·5	270·5	1·0	1·85	92·5												23
	270·5	273·5	3·0	2·5	83·3												
	273·5	276·5	3·0	2·3	76·6												
	276·5	279·5	3·0	2·45	81·7												
	279·5	282·5	3·0	2·65	88·3												24
	282·5	285·5	3·0	1·5	50												
	285·5	288·5	3·0	1·0	33·3	285·6	327·5	TERTIARY SEDIMENTS.									
								285·6-288·5 Mudstone, grey,									

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Project T650 WARATAH

THE BROKEN HILL PROPRIETARY CO. LTD.

Drillhole No. WA4.

Sheet 5 of 5

DRILLING								DESCRIPTIVE LOG			INTERSECTION ANGLE						
Core Size	From m	To	Intersected m	Recovered	% Recovery	From m	To	LITHOLOGY	MINERALISATION	Sample No.	Bedding	Veins		Other		Petrology etc	Box No.
B	288·5	291·5	3·0	0·55	18·3			288·5-295·2 Chert pebbles, clayey basalt infill.									
Q	291·5	295·8	4·25	2·65	62·3			295·2-308·9 Mudstone, grey, puggy.									
	295·8	300·5	4·7	0·35	7·4												
C	300·5	306·5	6·0	0·65	10·8												
O	306·5	308·9	2·4	-	-												
R	308·9	310·0	1·1	0·3	27·2			308·9-312·5 Basaltic breccia and clay, rounded quartzite and silcrete pebbles.									
I	310·0	312·5	2·5	-	-												
N	312·5	315·5	3·0	0·1	3·3			312·5-315·5 Chert pebbles, river clay quartz sand.									
G	315·5	317·0	1·5	0·35	23·3			315·5-317·0 Siltstone, light brown, clay.									
	317·0	318·5	1·5	0·05	3·3			317·0-318·5 Pebbles, quartzite, black shale.									
A	318·5	321·5	3·0	0·03	1·0			318·5-321·5 Pebbles, quartzite and black shale, rounded.									
Q	321·5	324·5	3·0	0·05	1·6			321·5-322·5 Pebbles, chalcedony, angular.									
	324·5	327·5	3·0	-	-												
C	327·5	328·6	1·1	0·2	18·1	327·5	349·15	PRECAMBRIAN SEDIMENTS.									
O	328·6	329·9	1·3	0·05	3·85			328·6-331·4 Black shale, steep dip.	Disseminated Py.	BE 3092	80°						25
R	329·9	331·3	1·4	0·25	17·9												
I	331·3	333·55	2·25	1·25	55·6			331·4-332·85 Dolomite, white, fine grained, very fine veinlets.	Disseminated Py.	BE 3093 BE 3093							
N	333·55	336·6	3·05	1·3	42·6			332·85-342·15 Dolomite, white and black, fine grained, cherty, brecciated, carbonate veins.	Sphalerite	BE 3094						WA4-1 Dolomite 333·85 WA4-2 Cherty dolomite 336·6	
G	336·6	339·1	2·5	0·7	28												
	339·1	342·65	3·55	0·05	1·4												
	342·65	348·75	6·10	0·2	3·3												
	348·75	349·15	0·3	0·05	16·7												
								E.O.H. 349·15m.									

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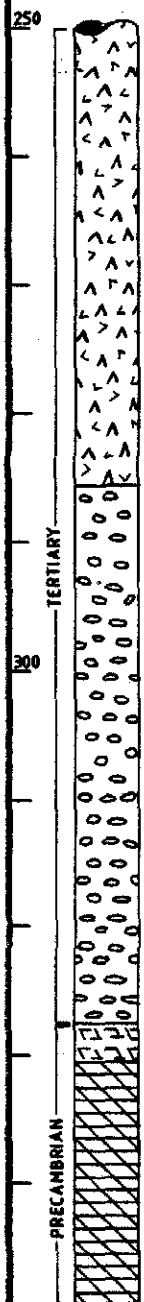
RL 620m



Basalt, grey, medium grainsize, approximately 31 flows below 85·0 metres. Average thickness 4·9 metres. Six metre mudstone sequence at 166·2 metres. Plant matter abundant. Basalt brecciated and highly weathered below 249·3 metres

Gravels, coarse grained granite derived river sand, well rounded chert and quartz pebbles

Black shales, dolomites, steeply dipping, disseminated pyrite.

Dolomite, white, fine grained, very fine veinlets, cherty, brecciated, disseminated pyrite and very minor sphalerite.

5 cm

Sample No	Interval		Cu	Pb	Zn	Ag	As	Sn	W
BE 5052	327·5	331·5	25	210	2450	-	-	-	-
BE 5098	331·4	331·5	10	95	190	-	-	-	-
BE 5053	331·5	333·9	20	205	940	-	-	4	-
BE 5054	333·9	349·15	20	115	465	-	-	3	-

TD 349·15 metres

Vertical scale 1:500

Centre HOBART

Date 9-5-83

THE BROKEN HILL PROPRIETARY CO. LTD.

DRILL HOLE WA 4 (ANOMALY G)

GRAPHIC LOG AND GEOCHEMICAL RESULTS

Project No. 7650

Drawing No.