526071

T70

BROKEN HILL PROPRIETARY CO. LTD.

DRILL LOG HEADER SHEET

Project: TIN, TASMANIA
Prospect: WARATAH T650
Local Grid co-ords.
AMG co-ords CQ 82915800
Drilling Co: OVERLAND DRILLING Co
Drill type: WARMAN 250
Driller: W. EVERSDEN B. LOVELL L. THOMPSON I. LARSEN

Hole No: WA. 1.
Total depth: 299.9m
Bearing:
Depression VERTICAL
R.L. Collar:
Commenced: 12/1/83
Completed: 20/1/83
Logged by: S.P. KERBER
Sampled by: S.P. KERBER, A. CLARKE

Hole Size		From	To	Total
Non-core	HQ	0	85.0	85.0
Core	NQ	85.0	213.5	128.5
	BQ	213.5	299.9	86.4
Casing				
Casing left.				

Core storage:	SCAMANDER
No. of trays.	24 CORE 1 CHIP
Sample storage	ANALABS - CODEE
Geochem. Lab.	ANALABS
Analytical reports	
Min. and Pet Lab.	M.R.L.
Min and Pet report	

Hole Survey Data: Susceptibility - 2m intervals. Geochemistry - BE 5001 - BE 5029
Petrology - WA1-1 to WA1-8

Summary Log:
TERTIARY 0 - 223.52 Basalt
223.52 - 233.5 Silcrete
CAMBRIAN 233.5 - 270.23 Andesite
270.23 - 282.4 Shale
282.4 - 284.2 Dolomitic chert
284.2 - 299.9 Shale

Comments: E.O.H 299.9m

Project WARATAH T650

THE BROKEN HILL PROPRIETARY CO. LTD.

Drillhole No. WA. 1.

Sheet 1 of 5

DRILLING						DESCRIPTIVE LOG				INTERSECTION ANGLE LCA						
Core Size	From m	To m	Inter-section m	Recov-ered m	% Recovery	From m	To m	LITHOLOGY	MINERALISATION	Sample No.	Bedding	Veins		Other FRACTURES		Petrology etc	Box No.
						0	4.0	SOIL									
						4.0	85.0	BASALT									
NQH CORING								4.0-10.0 grey rounded chips coated in brown clay.									
								10.0-16.0 grey angular chips, shiny black clay mineral minor with zeolites.									
								16.0-20.0 grey angular chips, abundant shiny black clay mineral									
								20.0-58.0 grey, angular chips, abundant zeolites, brown clay mineral									
								58.0-85.0 dark grey to black, abundant zeolites									
	85.0	86.5	1.5	1.5	100	85.0	223.52	BASALT				80°					1
	86.5	88.8	2.3	2.3	100			- grey medium grained with interflow sediments.									
	88.8	91.0	2.2	2.18	99			90.5 - 91.2 Basalt, amygdaloidal, zeolite minor, abundant clay minerals.									
	91.0	93.4	2.4	2.24	93.3			91.2 - 91.36 Mudstone, light brown									2
	93.4	96.5	3.1	3.1	100			91.36 - 99.5 Basalt, amygdaloidal, zeolite, black clay.					70°				
	96.5	99.5	3.0	3.0	100												
	99.5	102.5	3.0	2.91	97			99.5 - 100.12 Basalt, dense									3
WIRE								100.12 - 101.47 Basalt, amygdaloidal									
								101.47 - 102.25 Basalt, dense, small 1mm lathlike phenocrysts.									
CORE	102.5	104.8	2.3	2.26	98.2			102.25 - 102.95 Basalt, vesicular									
								102.95 - 103.2 Basalt, pink hinge, dense.				48°					
	104.8	107.2	2.4	2.4	100			103.2 - 105.6 Basalt, numerous clay replaced phenocrysts. coarse vesicles. 3cm long.									
	107.2	110.3	3.1	3.09	99.6			105.6 - 107.4 Basalt, phenocrysts. clay replaced.									4
	110.3	111.5	1.2	1.06	88.3			107.4 - 111.15 Basalt, amygdaloidal. zeolites minor.									
	111.5	114.5	3.0	3.0	100			111.15 - 117.5 Basalt, light grey dense.									
NQ	114.5	117.3	2.8	2.53	90.4			117.5 - 120.4 Basalt, very vesicular, pink hinge.									5
	117.3	120.4	3.1	3.1	100												
	120.4	123.5	3.1	3.1	100			120.4 - 123.5 Basalt, dense, thin calcite veins.				58°					
	123.5	126.8	3.3	3.3	100			123.5 - 124.6 Basalt, amygdaloidal.									6
								124.6 - 124.8 Basalt, very dense. Flow indicated by phenocrysts 58° to core.									
								124.8 - 126.87 Basalt, vesicular, mauve colour, weathered.									
	126.8	129.1	2.3	2.3	100			126.87 - 130.7 Basalt, amygdales dense Flow in all directions, minty chalcedony.									
	129.1	132.5	3.4	3.4	100			130.7 - 131.2 Basalt, weathered to clay, vesicular, zeolites / calcite									Y
	132.5	134.0	1.5	1.5	100			131.2 - 136.5 Basalt, dense calcite amygdales. chalcedony veining.				80°					
	134.0	136.5	2.5	2.5	100												
	136.5	138.3	1.8	1.8	100			136.5 - 143.3 Basalt, amygdaloidal, all clay in vugs.									8

072

5260172

Project WARATAH T650

THE BROKEN HILL PROPRIETARY CO LTD.

Drillhole No WA 1.

Sheet 2 of 5

DRILLING								DESCRIPTIVE LOG			INTERSECTION ANGLE LCA						
Core size	From m	To	Intersected m	Recovered m	% Recovery	From m	To	LITHOLOGY	MINERALISATION	Sample No	Bedding	Veins		Other		Petrology etc	Box No
	138·3	138·9	0.6	0.6	100			BASALT									
	138·9	141·3	2.4	2.4	100												
	141·3	144·4	3.1	3.1	100			143·3 - 146·89 Basalt, dense									
	144·4	144·9	0.5	0.5	100												
	144·9	147·5	2.6	2.6	100			146·89 - 147·5 Basalt, amygdaloidal, black clay fillings.									9
	147·5	150·5	3.0	3.0	100			147·5 - 151·22 Basalt, weathered to soft green clays, vesicular.									
	150·5	153·4	2.9	2.81	96.9			151·22 - 153·4 Basalt, black, small amygdales									10
	153·4	153·9	0.5	0.44	88			153·4 - 155·1 Basalt, clayey, soft, grey									
	153·9	154·4	0.5	0.36	72												
	154·4	155·1	0.7	0.56	80												
	155·1	156·0	0.9	0.51	56.7			155·1 - 162·45 Basalt, amygdaloidal clayey, dense. Feldspar laths altered to kaolinite, fresh olivines.									
	156·0	156·5	0.5	0.5	100												
N	156·5	156·8	0.3	0.3	100												
Q	156·8	157·5	0.7	0.62	88.6												
1	157·5	158·2	0.7	0.27	38.6												
R	158·2	159·5	1.3	1.05	80.8												
O	159·5	161·0	1.5	1.48	98.7											WA2-1-160.5m	
C	161·0	162·8	1.8	1.8	100			162·45 - 170·0 Basalt, weathered, clayey green amygdaloidal.									11
	162·8	163·0	0.2	0.2	100												
	163·0	163·6	0.6	0.6	100												
	163·6	163·9	0.3	0.3	100												
	163·9	164·1	0.2	0.2	100												
Q	164·1	165·0	0.9	0.9	100												
N	165·0	166·5	1.5	1.5	100												
	166·5	167·3	0.8	0.8	100												
	167·3	170·3	3.0	3.0	100			170·0 - 173·4 Basalt, dense, iddingsite / bowlingite in phenocrysts.									12
	170·3	171·4	1.1	1.1	100												
	171·4	172·5	1.1	1.1	100												
	172·5	174·4	1.9	1.9	100			173·4 - 174·0 Basalt, weathered to greenish clay									
	174·4	175·8	1.4	1.4	100			174·0 - 176·35 Basalt, porphyritic, 2mm in size, black clay.									
	175·8	176·3	0.5	0.5	100												13
	176·3	179·3	3.0	3.0	100			176·35 - 180·9 Basalt, dense, black amygdaloidal, zeolite, black clays.									
	179·3	180·4	1.1	1.1	100												
	180·4	182·0	1.6	1.56	97.5			180·9 - 182·1 Basalt, vesicular, 2cm vugs, zeolite / calcite.									
	182·0	183·9	1.9	1.9	100			182·1 - 185·8 Mudstone, small sections in basalt, clayey.									14

Project WARATAH T650

THE BROKEN HILL PROPRIETARY CO. LTD.

Drillhole No. WA.1.

Sheet 3 of 5

DRILLING						DESCRIPTIVE LOG											
										INTERSECTION ANGLE							
Core size	From m	To m	Intersected m	Recovered m	% Recovery	From m	To m	LITHOLOGY	MINERALISATION	Sample No.	Bedding	Veins		Other		Petrology etc.	Box No.
	183.9	184.8	0.9	0.9	100			BASALT									
N	184.8	187.2	2.4	2.4	100			185.8-190.5 Basalt, dense clay filled amygdales and phenocrysts.									
Q	187.2	188.7	1.5	1.5	100												
	188.7	190.0	1.3	1.3	100												15
C	190.0	191.5	1.5	1.5	100			190.5-191.05 Basalt, very amygdaloidal, 3cm amygdales, zeolites and calcite									
O	191.5	192.8	1.3	1.3	100			191.05-192.3 Basalt, pink, coarse chalcedony veins.									
R	192.8	194.0	1.2	1.2	100			192.3-194.6 Basalt, vertical fracture filled by coarse feathery zeolites									
I	194.0	197.1	3.1	3.1	100			194.6-203.32 Basalt, dense, fine calcite veins,				2°					16
N	197.1	200.2	3.1	3.1	100												
G	200.2	203.0	2.8	2.8	100												
	203.0	206.1	3.1	3.1	100			203.32-206.1 Basalt, weathered, red-brown clay									17
	206.1	209.2	3.1	3.1	100			206.1-210.2 Basalt, dense									
	209.2	212.3	3.1	3.01	97			210.2-212.7 Basalt, vesicular, amygdaloidal, calcite filling vugs.									18
	212.3	213.5	1.2	1.2	100			212.7-219.46 Basalt, less vesicular, smaller amygdales.									
	213.5	216.1	2.6	2.06	79.2												
	216.1	218.1	2.0	1.89	94.5												
	218.1	221.2	3.1	2.99	96.5			219.46-223.52 Basalt, dense fine calcite veins, chalcedony veins				75°					19
B	221.2	224.5	3.3	3.1	93.9	223.52	233.5	TERTIARY SILCRETE / SILT									
Q	224.5	226.6	2.1	1.74	82.9			223.52-226.1 Silt, sandy, light brown, coarse grained, abundant wood fragments.		GE SD01							
	226.6	228.8	2.2	1.81	82.3			226.1-228.5 Silcrete, white, coarse grained, fine vugs.		GE SD02							
C								228.5-228.8 Silt, coarse grained, dark brown, sandy.		GE SD03							
O	228.8	230.4	1.6	0.55	34.4			228.8-232.5 Silcrete, rounded quartz pebbles		GE SD04							20
R	230.4	232.5	2.1	1.85	88.0												
I																	
N	232.5	233.8	1.3	1.29	99.2	233.5	270.23	CAMBRIAN ANDESITE									
G	233.8	236.4	2.6	2.6	100			233.5-270.23 Andesite, dark green, medium grained, red/brown haematite rings,		GE SD05		15°					
	236.4	238.6	2.4	2.21	92			feldspar phenocrysts 1-2mm, magnetic, calcite veins.									
	238.6	241.4	2.8	2.62	93.6					GE SD06							21
	241.4	243.4	2.0	2.0	100												
	243.4	244.5	1.1	1.1	100					GE SD07							
	244.5	247.5	3.0	3.0	100												
	247.5	249.7	2.2	2.17	98.6												22
	249.7	250.7	1.0	0.96	96					GE SD08							
	250.7	251.7	1.0	0.98	98												

5226074

Project WARATAH T650

THE BROKEN HILL PROPRIETARY CO. LTD.

Drillhole No. WA1.

Sheet 4 of 5

DRILLING						DESCRIPTIVE LOG											
										INTERSECTION ANGLE LCA							
Core size	From m	To	Intersected m	Recovered m	% Recovery	From m	To	LITHOLOGY	MINERALISATION	Sample No.	Bedding	Veins		Other (Contact, Cleavage)		Petrology etc	Box No.
	251.4	253.8	2.1	2.1	100											WA1-2 252.54	
	253.8	255.1	1.3	1.15	88.5											WA1-3 254.04	
	255.1	255.5	0.4	0.4	100												
	255.5	258.5	3.0	3.0	100												
	258.5	261.5	3.0	3.0	100					DE SD09							23
	261.5	264.1	2.6	2.55	98												
B	264.1	267.5	3.4	3.34	98.2					DE SD10						WA1-4 262.5	
Q	267.5	270.5	3.0	3.0	100	270.23	273.1	SHALE, turbidite sequence.		DE SD11							24
	270.5	273.0	2.5	2.5	100			270.23-273.1 Shale, red, micro-faulting, calcite veining several 10-20cm lithicwacke beds.	Py on contact face.	DE SD12		65°		60°			
	273.0	273.5	0.5	0.5	100	273.1	273.5	ANDESITE									
C								273.1-273.5 Andesite, dark green, medium grainsize, magnetic, minor haematite banding, calcite veining.		DE SD13				55°			
O																	
R																	
I						273.5	278.4	SHALE/CHERT									
N	273.5	276.5	3.0	2.92	97.3			273.5-276.4 Chert, lithicwacke, green, with minor red shale interbeds.		DE SD14							
G	276.5	277.8	1.3	1.29	99.2			276.4-278.4 Shale, dark red-brown, fine calcite veining		DE SD15							25
						278.4	278.7	VOLCANIC BRECCIA									
	277.8	278.7	0.9	0.58	64.4			278.4-278.7 Breccia, fine grained, fragments of basaltic glass, cohesive veining	Fine pyrite.	DE SD16						WA1-5 278.4	
						278.7	281.47	SHALE/CHERT									
	278.7	279.5	0.8	0.8	100			278.7-280.4 Shale, red, very fine grained.		DE SD17							
	279.5	279.8	0.3	0.3	100												
	279.8	280.7	0.9	0.9	100			280.4-280.8 Fracture filling, fragments of shale and chert strongly veined		DE SD18							
	280.7	281.7	1.0	1.0	100			280.8-281.03 Vein, siliceous, medium grained in green Chert.		DE SD19							
								281.03-281.3 Chert, green.		DE SD20							
						281.3	281.47	VEIN									
								281.3-281.47 Calcite-chalcedony vein and possible volcanic breccia.		DE SD21							
						281.47	282.4	CHERT									
	281.7	282.3	0.6	0.6	100			281.47-282.4 Chert, green, banding 50° to core.		DE SD22	50°						

075

526075

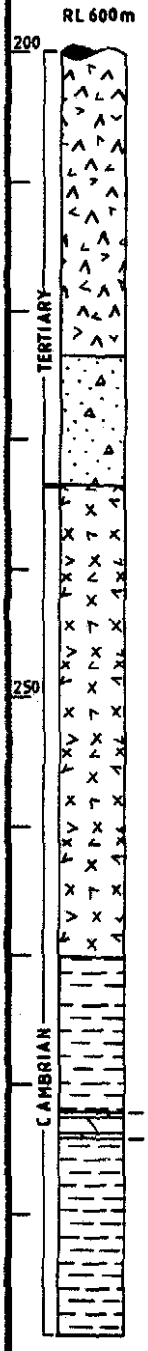
Project WARATAH T650

THE BROKEN HILL PROPRIETARY CO. LTD.

Drillhole N° WA.1

Sheet 5 of 5

DRILLING						DESCRIPTIVE LOG											
										INTERSECTION ANGLE LCA							
Core Size	From m	To	Intersected m	Recovered	% Recovery	From m	To	LITHOLOGY	MINERALISATION	Sample N°	Bedding	Veins		Other		Petrology etc	Box N°
	282.3	283.3	1.0	1.0	100	282.4	284.2	DOLOMITIC CHERT									
	283.3	284.7	1.4	1.38	98.5			282.4 - 284.2 Dolomitic Chert, white, fine to medium grained.		GE SD23		50°				WAI-6 284.1	
																WAI-7 283.2	
								CHERT									
	284.7	285.6	0.9	0.85	94.4	284.2	286.8	284.2-286.8		GE SD24							
B	285.6	286.1	0.5	0.5	100												
Q	286.1	286.6	0.5	0.42	84												26
	286.6	286.9	0.3	0.3	100	286.8	291.3	SHALE									
	286.9	287.5	0.8	0.8	100			286.8-289.9 Shale, red-brown, cross bedding apparent.		GE SD25							
	287.5	287.8	0.3	0.3	100												
C	287.8	288.6	0.8	0.79	98.8												
O	288.6	290.5	1.9	1.9	100			289.9-290.5 Lithic wacke, dark green, medium grained.		GE SD26							
R	290.5	293.1	2.6	2.6	100			290.5-291.3 Shale, red		GE SD27							
I																	
N						291.3	292.8	MICRODIORITE									
G								291.3-292.8 Microdiorite, green, medium grained, magnetic		GE SD28						WAI-8 292.6	
						292.8	299.9	SHALE									
	293.1	294.5	1.4	1.4	100			292.8-299.9 Shale, red.		GE SD29							
	294.5	297.5	3.0	1.3	43.3												27
	297.5	298.5	1.0	1.0	100												
	298.5	299.9	1.4	1.22	87.1			E.O.H. 299.9m									



Sample No	Interval		Cu	Pb	Zn	Ag	As	Sn	W
BE 5001	223·53	226·1	60	25	375	-	-	5	-
BE 5002	226·1	227·53	15	5	190	0·5	-	-	-
BE 5003	227·53	230·6	20	10	180	0·5	-	3	-
BE 5004	230·6	233·5	30	5	145	-	-	-	-
BE 5005	233·5	238·6	65	10	245	0·5	-	7	-
BE 5006	238·6	243·4	145	15	200	-	-	3	-
BE 5007	243·4	249·7	100	5	215	-	-	-	-
BE 5008	249·7	255·5	115	20	195	-	-	7	-
BE 5009	255·5	261·5	140	20	175	0·5	-	4	-
BE 5010	261·5	267·5	165	55	185	0·5	-	3	-
BE 5011	267·5	270·2	160	40	205	-	-	4	10
BE 5012	270·2	273·1	375	45	135	0·5	-	5	-
BE 5013	273·1	273·5	365	55	225	-	-	8	-
BE 5014	273·5	276·7	80	30	205	-	-	8	10
BE 5015	276·7	278·4	60	25	80	-	-	3	-
BE 5016	278·4	278·7	195	10	75	0·5	-	3	-
BE 5017	278·7	280·4	140	60	160	-	-	-	15
BE 5018	280·4	280·8	115	10	40	-	-	3	-
BE 5019	280·8	281·03	265	15	65	1·0	-	-	-
BE 5020	281·03	281·3	160	20	90	-	-	4	-
BE 5021	281·3	281·47	110	20	25	-	-	3	-
BE 5022	281·47	282·4	90	15	105	-	-	3	-
BE 5023	282·4	284·2	125	20	250	-	-	3	-
BE 5024	284·2	286·8	160	5	105	-	-	5	-
BE 5025	286·8	289·9	100	20	75	0·5	-	7	-
BE 5026	289·9	290·5	95	5	240	0·5	-	-	-
BE 5027	290·5	291·3	35	15	115	0·5	50	6	-
BE 5028	291·3	292·8	115	10	190	0·5	-	-	-
BE 5029	292·8	299·9	45	25	125	-	-	-	-

Centre HOBART	THE BROKEN HILL PROPRIETARY CO. LTD.	Project No. T650
Date 10-5-83	DRILL HOLE WA1 (ANOMALY E)	Drawing No.
	GRAPHIC LOG AND GEOCHEMISTRY RESULTS	