

ANALYTICAL RESULTS AND SAMPLE INTERVALS
OF SAMPLES TAKEN FROM THE NTGS CORE
LIBRARY 9-18/4/85

THE BROKEN HILL PROPRIETARY COMPANY
LIMITED

EL1728 and EL2072

BING BONG AND WARRAMANA CREEK
HOLES (BB2, BB5, BB6, WM6).

CR 85 / 105

OPEN FILE



The Broken Hill Proprietary Company Limited

Minerals Division – Exploration Department
131 Reichardt Road
Winnellie Northern Territory 5789 Australia

2nd May, 1985

Department of Mines & Energy,
P.O. Box 2901,
DARWIN. N.T. 5794

Attention: Miss S.H. Hickey

Dear Miss Hickey,

Re: Your letter CS/RT:107:TECH5/P

Please find attached analytical results and sample intervals of samples taken from core stored in the Core Library.

Samples from drill hole BB2 are continuous edge-ground samples taken over 3-metre intervals. Samples from holes BB5, BB6 and WM6 are quarter-core samples taken over 15 to 20cm intervals.

As indicated in my letter of 4th June, 1984, the core from drill holes WM4 and WM5 was examined but no samples were taken.

Yours sincerely,

D. CARVILLE
PROJECT GEOLOGIST

Telephone: (089) 84 4580
(089) 84 4788
Facsimile: (089) 84 4020

Postal Address
PO Box 39096
Winnellie N.T. 5789

Your Ref:
Our Ref:

**NORTHERN TERRITORY
GEOLOGICAL SURVEY**

OR85/105

HOLE BB2

Continuous 3m Edge-Ground Samples

ROS 1	49m to 52m	ROS 41	169m to 172m	ROS 81	289m to 292m	ROS 121	409m to 412m
ROS 2	52m to 55m	ROS 42	172m to 175m	ROS 82	292m to 295m	ROS 122	412m to 415m
ROS 3	55m to 58m	ROS 43	175m to 178m	ROS 83	295m to 298m	ROS 123	415m to 418m
ROS 4	58m to 61m	ROS 44	178m to 181m	ROS 84	298m to 301m	ROS 124	418m to 421m
ROS 5	61m to 64m	ROS 45	181m to 184m	ROS 85	301m to 304m	ROS 125	421m to 424m
ROS 6	64m to 67m	ROS 46	184m to 187m	ROS 86	304m to 307m	ROS 126	424m to 427m
ROS 7	67m to 70m	ROS 47	187m to 190m	ROS 87	307m to 310m	ROS 127	427m to 430m
ROS 8	70m to 73m	ROS 48	190m to 193m	ROS 88	310m to 313m	ROS 128	430m to 433m
ROS 9	73m to 76m	ROS 49	193m to 196m	ROS 89	313m to 316m	ROS 129	433m to 436m
ROS 10	76m to 79m	ROS 50	196m to 199m	ROS 90	316m to 319m	ROS 130	436m to 439m
ROS 11	79m to 82m	ROS 51	199m to 202m	ROS 91	319m to 322m	ROS 131	439m to 442.9
ROS 12	82m to 85m	ROS 52	202m to 205m	ROS 92	322m to 325m		
ROS 13	85m to 88m	ROS 53	205m to 208m	ROS 93	325m to 328m		
ROS 14	88m to 91m	ROS 54	208m to 211m	ROS 94	328m to 331m		
ROS 15	91m to 94m	ROS 55	211m to 214m	ROS 95	331m to 334m		
ROS 16	94m to 97m	ROS 56	214m to 217m	ROS 96	334m to 337m		
ROS 17	97m to 100m	ROS 57	217m to 220m	ROS 97	337m to 340m		
ROS 18	100m to 103m	ROS 58	220m to 223m	ROS 98	340m to 343m		
ROS 19	103m to 106m	ROS 59	223m to 226m	ROS 99	343m to 346m		
ROS 20	106m to 109m	ROS 60	226m to 229m	ROS 100	346m to 349m		
ROS 21	109m to 112m	ROS 61	229m to 232m	ROS 101	349m to 352m		
ROS 22	112m to 115m	ROS 62	232m to 235m	ROS 102	352m to 355m		
ROS 23	115m to 118m	ROS 63	235m to 238m	ROS 103	355m to 358m		
ROS 24	118m to 121m	ROS 64	238m to 241m	ROS 104	358m to 361m		
ROS 25	121m to 124m	ROS 65	241m to 244m	ROS 105	361m to 364m		
ROS 26	124m to 127m	ROS 66	244m to 247m	ROS 106	364m to 367m		
ROS 27	127m to 130m	ROS 67	247m to 250m	ROS 107	367m to 370m		
ROS 28	130m to 133m	ROS 68	250m to 253m	ROS 108	370m to 373m		
ROS 29	133m to 136m	ROS 69	253m to 256m	ROS 109	373m to 376m		
ROS 30	136m to 139m	ROS 70	256m to 259m	ROS 110	376m to 379m		
ROS 31	139m to 142m	ROS 71	259m to 262m	ROS 111	379m to 382m		
ROS 32	142m to 145m	ROS 72	262m to 265m	ROS 112	382m to 385m		
ROS 33	145m to 148m	ROS 73	265m to 268m	ROS 113	385m to 388m		
ROS 34	148m to 151m	ROS 74	268m to 271m	ROS 114	388m to 391m		
ROS 35	151m to 154m	ROS 75	271m to 274m	ROS 115	391m to 394m		
ROS 36	154m to 157m	ROS 76	274m to 278m	ROS 116	394m to 397m		
ROS 37	157m to 160m	ROS 77	278m to 281m	ROS 117	397m to 400m		
ROS 38	160m to 163m	ROS 78	281m to 284m	ROS 118	400m to 403m		
ROS 39	163m to 166m	ROS 79	284m to 287m	ROS 119	403m to 406m		
ROS 40	166m to 169m	ROS 80	287m to 290m	ROS 120	406m to 409m		

ANALABS

A division of MacDonald Hamilton & Co. Pty. Ltd.

Phone (09) 458 7999

52 Murray Road, Welshpool, W.A. 6106

Telex AA92560

ANALYTICAL REPORT No. 14.8.14.8815

THIS REPORT MUST BE READ IN CONJUNCTION WITH THE ACCOMPANYING ANALYTICAL DATA

B.H.P. Co Ltd
 Exploration Dept
 PO Box 39096
 Winnellie NT 5789

ORDER No.	PROJECT
6846	BY <i>Orb</i>
DATE RECEIVED	RESULTS REQUIRED
28.4.84	

No. OF PAGES OF RESULTS	DATE REPORTED	No. OF COPIES	TOTAL No. OF SAMPLES
	1.5.84	3	131

STATE OF SAMPLES	SAMPLE NUMBERS	PRE-TREATMENT						ANALYSIS			
		DRY	CRUSH	SPLIT	FIL VERIST	SIVE	OTHER SET REMARKS	NONF	REFER TO ANALYSIS SECTION	PREPARATION	METHOD
SC	ROS 1-131				1				Cu Pb Zn		101

RESULTS TO

RESULTS TO

As Above
 Attention D. Carville

REMARKS

STATE OF SAMPLES	ANALYSIS — PREPARATION	ANALYSIS — METHOD
whole core WC	perchloric acid A1	atomic absorption AAS
split core SC	hydrochloric acid A2	x-ray fluorescence XRF
cutting CU	nitric acid A3	spectrophotometry SPEC
rock RO	aqua regia A4	colorimetry COL
soil SO	nitric-perchloric A5	chromatography CHR
pulp PU	HF mixture A6	titration TTN
water WA	HF under pressure A7	other chemicals means CHEM
tissue TI	fusion A8	miscellaneous MISC
stream sediment SS		fluorescence FLUOR
heavy mineral HM		inductively coupled plasma ICP

AUTHORISED OFFICER *B. D.*

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ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

ROS		14.8 14 0015			1.5.84		6846		1 OF 7	
TUBE No.	SAMPLE No.	Cu	Zn	Pb						
1	1	15	580	35						
2	2	10	430	30						
3	3	10	595	45						
4	4	15	750	25						
5	5	15	405	25						
6	6	20	540	20						
7	7	20	315	45						
8	8	10	320	5						
9	9	10	630	20						
10	10	10	575	40						
11	11	10	460	25						
12	12	10	315	10						
13	13	10	200	15						
14	14	10	185	15						
15	15	15	300	5						
16	16	10	260	10						
17	17	10	210	10						
18	18	15	120	10						
19	19	15	280	15						
20	20	10	160	10						
21	21	10	85	25						
22	22	15	110	20						
23	23	15	320	30						
24	24	20	230	30						
25	25	10	220	15						

Results in ppm unless otherwise specified
 T = element present; but concentration too low to measure
 X = element concentration is below detection limit
 -- = element not determined

AUTHORISED OFFICER

B. Don

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ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

ROS		14.8 14-0815			1.5.84		6846		2 OF 7	
TUBE No.	SAMPLE No.	Cu	Zn	Pb						
1	26	20	75	20						
2	27	10	70	10						
3	28	10	150	15						
4	29	15	265	15						
5	30	15	580	15						
6	31	15	355	20						
7	32	25	365	45						
8	33	35	360	25						
9	34	25	230	20						
10	35	25	325	25						
11	36	15	200	25						
12	37	35	330	35						
13	38	30	325	35						
14	39	35	555	65						
15	40	25	520	40						
16	41	15	365	10						
17	42	20	210	5						
18	43	30	300	10						
19	44	25	435	10						
20	45	40	435	35						
21	46	25	360	20						
22	47	40	435	30						
23	48	20	460	35						
24	49	15	325	30						
25	50	25	270	20						

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ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

ROS

14.8 14 0815

1.5.84

6845

3 OF 7

TUBE No.	SAMPLE No.	Cu	Zn	Pb					
1	51	25	215	25					
2	52	20	275	25					
3	53	25	370	30					
4	54	15	285	15					
5	55	20	465	20					
6	56	20	495	20					
7	57	15	310	15					
8	58	15	255	10					
9	59	20	250	10					
10	60	20	1050	20					
11	61	25	360	20					
12	62	20	265	65					
13	63	15	410	50					
14	64	10	440	60					
15	65	10	355	25					
16	66	10	235	45					
17	67	15	335	35					
18	68	50	290	115					
19	69	25	325	125					
20	70	25	330	70					
21	71	10	325	20					
22	72	20	450	25					
23	73	45	465	35					
24	74	45	535	35					
25	75	50	1000	60					

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ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

ROS		14.8 14 0815			1.5.84	6846		4 OF 7	
TUBE No.	SAMPLE No.	Cu	Zn	Pb					
1	76	35	420	70					
2	77	40	385	75					
3	78	45	1000	125					
4	79	50	340	40					
5	80	15	270	30					
6	81	5	190	30					
7	82	5	210	20					
8	83	5	160	20					
9	84	x	180	15					
10	85	5	210	15					
11	86	5	170	20					
12	87	x	155	15					
13	88	x	265	35					
14	89	5	270	40					
15	90	x	215	45					
16	91	x	185	25					
17	92	x	165	15					
18	93	x	210	20					
19	94	x	145	20					
20	95	x	120	20					
21	96	5	210	20					
22	97	5	240	100					
23	98	x	175	35					
24	99	5	160	45					
25	100	10	120	155					

Results in ppm unless otherwise specified
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ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

ROS

14.8 14 0815

1.5.84

6846

5 OF 7

TUBE No.	SAMPLE No.	Cu	Zn	Pb						
1	101	5	305	45						
2	102	x	340	895						
3	103	50	340	185						
4	104	5	350	25						
5	105	15	535	90						
6	106	55	590	50						
7	107	10	380	60						
8	108	25	485	60						
9	109	30	325	50						
10	110	85	325	150						
11	111	40	770	150						
12	112	50	1300	185						
13	113	45	945	120						
14	114	60	1100	140						
15	115	30	520	85						
16	116	70	670	65						
17	117	75	940	150						
18	118	50	1050	75						
19	119	45	1050	95						
20	120	50	1400	185						
21	121	40	830	130						
22	122	25	345	90						
23	123	295	290	305						
24	124	60	290	55						
25	125	15	435	20						

Results in ppm unless otherwise specified

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ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

ROS		14.8 14 0015			1.5.84		6846		6 OF 7	
TUBE No.	SAMPLE No.	Cu	Zn	Pb						
1	126	60	365	20						
2	127	15	280	10						
3	128	35	280	15						
4	129	10	230	15						
5	130	10	365	15						
6	131	20	260	25						
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24										
25										

Results in ppm unless otherwise specified
 T = element present; but concentration too low to measure
 X = element concentration is below detection limit
 — = element not determined

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ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

RQS		14.8 14 0815			1.5.84	6846		7 OF 7	
TUBE No.	SAMPLE No.	Cu	Zn	Pb					
1	R1	15	600	40					
2	R20	20	150	20					
3	R41	15	345	15					
4	R60	20	1100	15					
5	R81	5	195	20					
6	R100	15	130	145					
7	R121	40	845	130					
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23	DETECTION	5	5	5					
24	DIGESTION								
25	METHOD	101	101	101					

Results in ppm unless otherwise specified
 Y = element present; but concentration too low to measure
 X = element concentration is below detection limit
 -- = element not determined

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SPLIT CORE SAMPLES DDH BB5

<u>No.</u>	<u>From</u>	<u>To</u>	<u>Description</u>
ROS 130	336.70	336.90	black bituminous shale; disseminated pyrite
ROS 131	332.05	332.20	black bituminous shale; rare disseminated pyrite
ROS 132	330.45	330.65	black dolomitic shale
ROS 133	328.35	328.55	black dolomitic shale
ROS 134	343.40	343.60	grey tuffaceous shale; minor pyrite disseminations
ROS 135	326.50	326.70	black dolomitic shale
ROS 136	315.00	315.20	black carbonaceous shale; trace pyrite, sphalerite, galena
ROS 137	305.00	305.20	black carbonaceous shale; trace pyrite
ROS 138	293.00	293.20	black carbonaceous shale; minor pyrite disseminations and fracture-filling
ROS 139	280.20	280.40	black carbonaceous shale; minor tuffs in adjacent sequence, minor disseminated pyrite
ROS 140	243.70	243.90	black dolomitic shale; trace pyrite
ROS 141	235.80	236.00	grey shale; ?tuffaceous; pyrite fracture-fillings and minor laminations
ROS 142	224.50	224.70	black dolomitic shale; pyrite laminations
ROS 143	214.55	214.75	black dolomitic shale
ROS 144	168.00	168.20	pyritic carbonaceous shale; strong contamination from galvanised tray
ROS 145	141.60	141.80	pyritic black shale
ROS 146	124.97	125.17	grey/black laminated shale; possibly tuffaceous
ROS 147	70.70	70.90	black carbonaceous shale

SPLIT CORE SAMPLES DDH BB6

<u>No.</u>	<u>From</u>	<u>To</u>	<u>Description</u>
ROS 148	181.45	181.60	black shale; trace pyrite laminae and nodules
ROS 149	172.00	172.20	black blocky shale
ROS 150	190.40	190.60	W-Fold shale member; green/grey pyritic shale
ROS 151	162.35	162.55	black shale; trace disseminated pyrite
ROS 152	152.00	152.20	black shale
ROS 153	142.00	142.20	black shale
ROS 154	132.00	132.20	black shale
ROS 155	121.60	121.80	black shale
ROS 156	112.20	112.40	black shale
ROS 157	102.00	102.20	black/grey laminated dolomitic siltstone
ROS 158	82.46	82.66	black/grey laminated dolomitic siltstone
ROS 159	61.10	61.30	black/grey laminated dolomitic siltstone

SPLIT CORE SAMPLES DDH WM6

<u>No.</u>	<u>From</u>	<u>To</u>	<u>Description</u>
ROS 160	516.00	516.20	blocky black shale; nodular pyrite
ROS 161	501.00	501.20	blocky black shale
ROS 162	496.65	496.85	blocky black shale
ROS 163	489.00	489.20	blocky black shale; pyritic bed
ROS 164	484.00	484.20	blocky black shale
ROS 165	474.00	474.20	blocky black shale
ROS 166	467.00	467.15	blocky black shale
ROS 167	447.00	447.15	blocky black shale
ROS 168	434.00	434.17	black dolomitic shale
ROS 169	386.85	387.00	black dolomitic shale
ROS 170	367.28	367.43	black dolomitic shale
ROS 171	310.85	311.00	black dolomitic shale
ROS 172	168.25	168.42	dolomitic siltstone with distinct oolitic beds
ROS 173	125.00	125.15	blocky dolomitic siltstone

Date: 19-APR-85
Time: 12:15:55

Geochemical Analyses
All values as ppm.

Sample No	Pb	Zn	Cu	U	As	Ba
ROS 130	20					
ROS 131	120					
ROS 132	180					
ROS 133	180					
ROS 134	670					
ROS 135	130					
ROS 136	235	610	50	2.3	29	415.0
ROS 137	200	630	60	2.7	170	370.0
ROS 138	55	340	35	1.7	10	330.0
ROS 139	20	115	25	1.4	10	280.0
ROS 140	20	150	15	0.9	5	180.0
ROS 141	35	1150	30	3.3	22	300.0
ROS 142	50	40	15	2.1	28	130.0
ROS 143	95	580	45	1.8	80	380.0
ROS 144	10	330	20	0.9	7	670.0
ROS 145	20	200	15	0.8	10	385.0
ROS 146	30	80	15	0.7	20	335.0
ROS 147	40	200	15	0.6	10	700.0
ROS 148	120	1100	65	1.1	25	490.0
ROS 149	75	315	35	1.6	15	440.0
ROS 150	60	105	50	0.4	40	430.0
ROS 151	90	110	40	8.1	120	380.0
ROS 152	80	330	40	1.3	13	400.0
ROS 153	40	200	30	1.2	17	410.0
ROS 154	30	200	25	1.0	16	350.0
ROS 155	20	80	20	1.3	20	520.0
ROS 156	10	60	15		13	280.0
ROS 157	30	170	15	0.7	13	260.0
ROS 158	5	85	15	1.1	10	350.0
ROS 159	70	35	20	1.3	41	480.0
ROS 160	35	230	20	0.9	48	330.0
ROS 161	295	15700	65	0.7	12	660.0
ROS 162	55	330	25	5.2	33	360.0
ROS 163	95	180	30	6.9	160	400.0
ROS 164	25	120	20	1.5	13	530.0
ROS 165	40	210	40	12.0	1	420.0
ROS 166	15	180	20	1.9	9	300.0
ROS 167	15	90	20	0.7	15	300.0
ROS 168	15	110	20	1.1	13	330.0
ROS 169	15	195	25	0.9	13	360.0
ROS 170	15	175	20	0.7	12	330.0
ROS 171	15	175	15	0.7	12	310.0
ROS 172	15	225	5	0.8	20	250.0
ROS 173	10	50	10	0.7	15	380.0