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EL 1738

ERUDINA

PROGRESS REPORTS TO LICENCE SURRENDER FOR THE PERIOD 5/8/91 TO MARCH 1992

Submitted by
BHP Minerals Ltd
1992

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101 Grenfell Street, Adelaide 5000

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PRIMARY INDUSTRIES AND RESOURCES SA

ENVELOPE 8501

TENEMENT: EL 1738, Erundina

TENEMENT HOLDER: BHP Minerals Ltd

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CR 7394
EL 1738 ERUDINA
SOUTH AUSTRALIA
QUARTERLY REPORT
NOVEMBER 1991

A R WILDE

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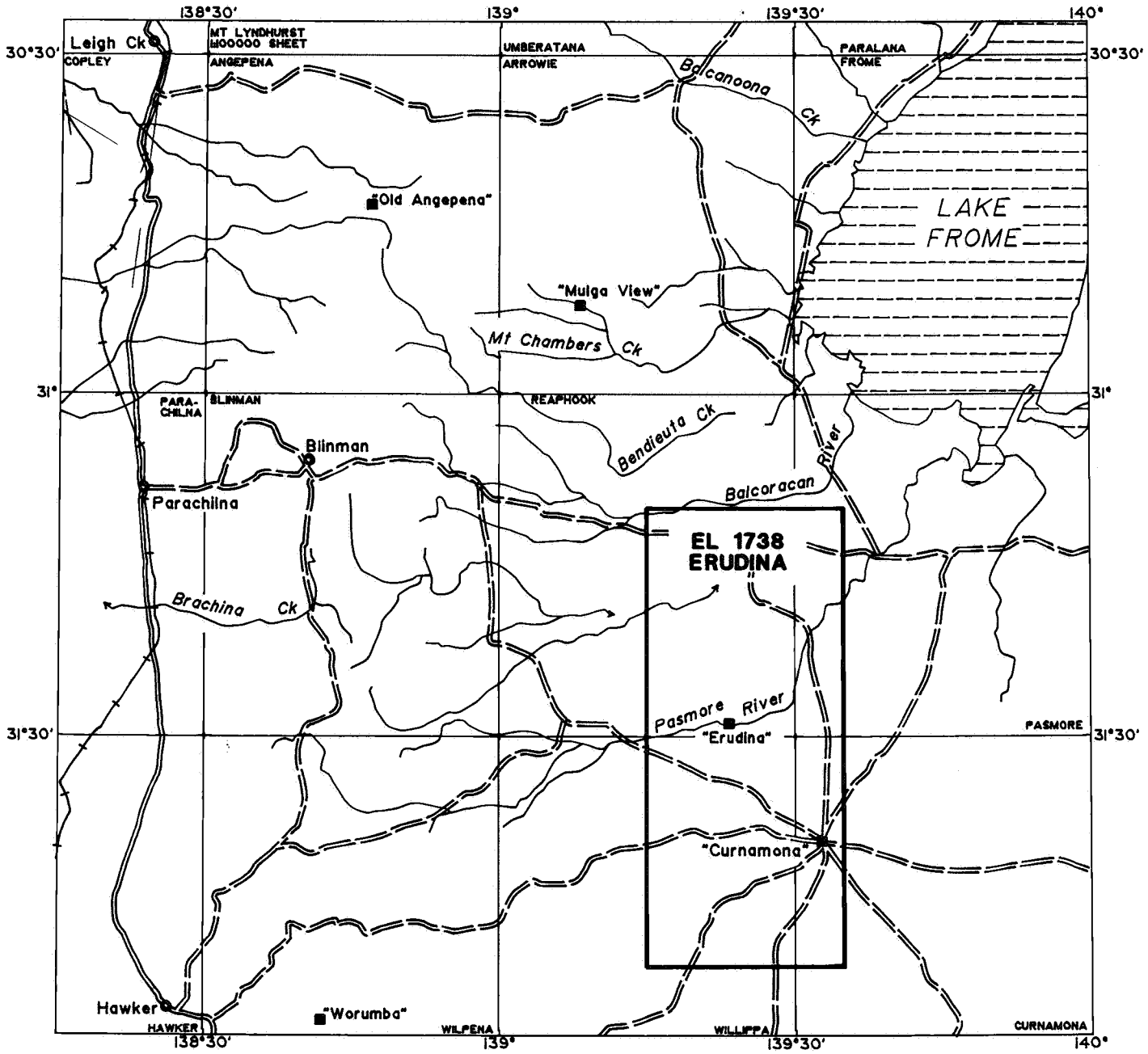
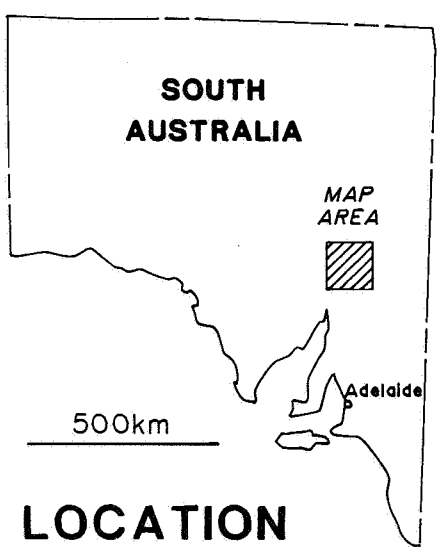




LOCATION

Scale 1:1,000,000

0 10 20 30 40 50 km

Lambert Conformal Conic Projection, standard parallels 28°40' and 31°20'

Major Road

Minor Road

Railway

Prepared:	BHP Minerals (Asia Pacific Division)	Proj. No.;
Drawn: F.Barlow/ustn	EL 1738, ERUDINA, SOUTH AUSTRALIA	Drg No.; A4-3151
Date: August 1991	LOCATION MAP	Fig 1
Centre: Melbourne		

1. INTRODUCTION

EL 1738 "Erudina" (2340 km^2) is located 20 km S.W. of Lake Frome (Fig. 1). It was granted to BHP Minerals on August 5th 1991 for a period of one year. The main commodity sought is gold. The licence was taken out in order to test the concept that the Lower Cambrian sequence (exposed NE of Reaphook Hill) is a prospective host-rock for fine grained gold mineralization of "Carlin-type".

2. GEOLOGY

Much of the licence area is covered by Plio-Pleistocene fluviatile deposits which reach at least 100m in thickness to the east of the area. These deposits a plain in which discontinuous and transient creeks and salt pans are developed. Proterozoic and Cambrian rocks low hills to the west of the licence area.

The Cambrian sequence apparently overlies the Proterozoic Pound Quartzite (which forms Reaphook Hill) without discordance. At its base is 35m of coarse sandstone and conglomerate of the Parachilna Formation overlain by ca. 450m of dolarenite and dolomite of the Wilkawillina Limestone. The sequence is completed by a maroon to green micaceous shale and sandstone (Billy Creek Formation).

As elsewhere in the Flinders Ranges, the Proterozoic/Cambrian contact is marked by the development of discontinuous bodies of massive Fe and Mn oxide variably referred to as ironstone, gossan, manganiferous limonite etc. These bodies are often enriched in Cu (malachite and azurite are visible), Zn and Pb. Some contain traces of gold. Basal Cambrian carbonates exhibit secondary dolomitization, probably regionally (Johns, 1972).

3. PREVIOUS EXPLORATION, REAPHOOK HILL AREA

Prospectors sunk several pits at Reaphook Hill into "manganiferous limonite" (Johns, 1972). Drilling by Kennecott during the late sixties (5 diamond, 2 non-core) revealed chalcophanite and scholzite mineralization to a depth of 7m below the surface, but no sulphide ore beneath.

The Reaphook Hill area has been sampled on numerous occasions for base metals in stream sediments, by Kennecott, BHP and EZ. The creeks draining Reaphook Hill and the Proterozoic/Cambrian contact to its north are consistently anomalous in base metals reflecting high concentrations in ferruginous rocks at the Cambrian/Proterozoic contact. With the exception of the Reaphook Hill prospect there has been no drilling of the contact.

The only recent gold exploration has been a stream sediment BLEG survey commissioned by Lynch Mining in 1987. This survey covered the Proterozoic outcrop south of Reaphook Hill, and the Reaphook Hill secondary Zn occurrence but did not cover most of the Cambrian. No significant anomalies were generated.

4. WORK COMPLETED

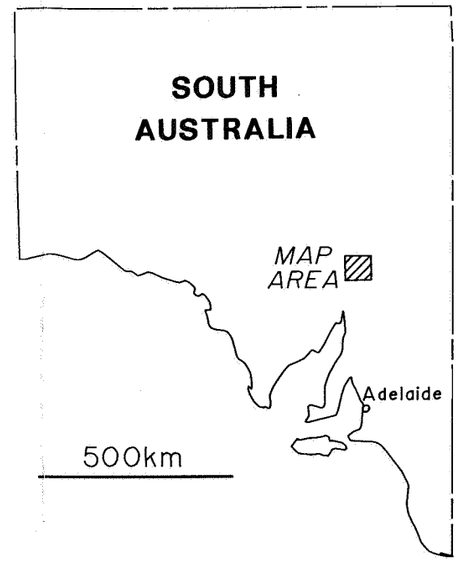
Work completed by BHP in this quarter consisted of geological reconnaissance and a stream sediment BLEG survey in August. Twenty-two stream sediment samples were collected, including a duplicate (DC889 & 890). Two and a half kilograms of -2mm sediment were collected and despatched to Classic Laboratories of Adelaide. At the laboratory 500 gms were split, sieved to -80# and analysed for Cu, Pb, Zn, Fe, Mn (AAS1), Sb and As (XRF1L). The remaining 2 kg was analysed for gold by bulk cyanide leach (BLEG2). Results are given in Appendix 1. A statistical analysis of the data is presented as Appendix 2.

139°20'

31°20'

883/0·10
884/0·05
886/<0·05
PC019
2·75/380/15/20/50
885/0·2
2·50/1020/13/26/76
PC 017
873/0·15
2·60/370/N/14/52
PC 018A
880/0·10
1·91/650/30/78/195
878/0·10
1·74/480/14/25/82
2·05/500/24/24/50
874/0·30
876/0·25
2·25/590/13/28/68
881/0·15
1·61/400/19/32/70
882/0·15
873/0·45
2·60/370/11/14/52
2·55/500/42/45/72
872/0·30
871/0·20
2·10/450/22/25/75
870/0·18
2·85/420/44/28/135
875/0·20
2·15/470/22/24/70
877/0·20
1·94/420/12/16/56
3726
40·05
888/0·10
162/190/12/20/86
4026/<0·05
Reaphook Hill
3926/<0·05
1·76/350/14/25/115
3725C/0·05
3725B/0·10
890,889/0·45,0·65
887/0·20
2·25/900/32/140/920
2·15/300/32/140/920
PC 018B
3724/0·10
3828B(0·20)
3925B/0·05
3725
(0·5)
869/0·20
1·13/680/42/58/1000
3925A/0·05

LOCATION



LEGEND

⊕3725/0·1 — *BLEG Stream sample (prefix PA) location and result (Au ppb) Lynch Mining 1987*

x PC017 — *Rock chip sample*

● 878/0·10 — *BLEG Stream sample (prefix DC) location and result (Au, Fe,Mn,Cu,Pb,Zn ppm)*

Road / Track

Stream

Intermittent lake

Gas pipeline (underground)

Outcrop of Zn mineralisation

Scale 1:50000

0 1 2 3 4 km

BHP Minerals
Asia Pacific Division

EL 1738, ERUDINA, SOUTH AUST.

BLEG STREAM SAMPLES and RESULTS (Au ppb)

Prepared: A.Wilde	Date: August 1991	Fig 2
Drawn: F.Barlow/ustn	Project No.: FK5	
Centre: Melbourne	Drawing No.: A3-1950	

5. RESULTS & CONCLUSIONS

BLEG values were uniformly low except one sample within the drainage containing the Reaphook Hill Zn occurrence, which reached 0.65 ppb (a duplicate from the same site gave 0.45 ppb). This weakly anomalous gold is associated with anomalous base-metal (Zn to 0.1%), and most likely reflects minor gold enrichment associated with the secondary Zn occurrence, as the sample was taken approx. 100m downstream from a massive "ironstone" occurrence. However, a composite sample of the ironstone (PC 18B) does not contain detectable gold (<0.008 ppm).

6. EXPENDITURE

The following expenditure was incurred during the quarter:

Geochemistry	$1,122
Logistics (accommodation, transport, wages etc.)	$4,500
Administration costs	$ 300
Total	$5,922

7. REFERENCE

JOHNS R.K., 1972, Geol. Survey South Australia, Report of Investigation #37.

APPENDIX 1

ANALYTICAL DATA

CLASSIC LABORATORIES LTD
Incorporated in WA; a wholly owned subsidiary of Amdel Ltd
ACN 009-076-555
Osman Place, Thebarton, South Australia 5031
Telephone: (08) 43 5722 Facsimile: (08) 234 0321

Please note our new Phone Number is (08) 416 5300

Mr Andy Wilde
BHP Exploration Ltd
801 Glenferrie Road
Hawthorn
VIC 3122

FINAL ANALYSIS REPORT

Your Order No: 17752 Our Job Number : 1AD2200

Samples received : Results reported :
No. of samples : 22
Report comprises a cover sheet and pages 1 to 1

This report relates specifically to the samples tested in so far as that the samples as supplied are truly representative of the sample source.

Note:
If you have any enquiries please contact Miss Anne Reed quoting the above job number.

Approved Signatory:

John Waters
Laboratory Manager - Adelaide

Report Codes:
N.A. - Not Analysed.
L.N.R. - Listed But Not Received.
I.S. - Insufficent Sample.

Distribution Codes:
CC - Carbon Copy
EM - Electronic Media
MM - Magnetic Media

"RELIABLE ANALYSES AT COMPETITIVE COST"

CLASSIC LABORATORIES LTD

Job: 1AD2200
O/N: 17752

ANALYTICAL REPORT

Sample	Fe	Mn	Cu	Pb	Zn	Au
DC 869	1.13%	680	42	58	1000	0.20
DC 870	2.85%	420	44	28	135	0.15
DC 871	2.10%	450	22	25	75	0.20
DC 872	2.55%	500	42	45	72	0.30
DC 873	2.60%	370	11	14	52	0.45
DC 874	2.05%	500	24	24	50	0.30
DC 875	2.15%	470	22	24	70	0.20
DC 876	2.25%	590	13	28	68	0.25
DC 877	1.94%	420	12	16	56	0.20
DC 878	1.74%	480	14	25	82	0.10
DC 879	2.65%	340	17	28	74	0.15
DC 880	1.91%	650	30	78	195	0.10
DC 881	1.61%	400	19	32	70	0.15
DC 882	1.72%	400	15	24	78	0.15
DC 883	3.70%	360	15	28	38	0.10
DC 884	3.00%	350	12	22	44	0.05
DC 885	2.50%	1020	13	26	76	0.20
DC 886	2.75%	380	15	20	50	<0.05
DC 887	1.76%	350	14	25	115	0.20
DC 888	1.62%	190	12	20	86	0.10
DC 889	2.15%	810	32	125	850	0.65
DC 890	2.25%	900	32	140	920	0.45
Units	ppm	ppm	ppm	ppm	ppm	ppb
DL	4	4	2	4	2	0.05
Scheme	AAS1	AAS1	AAS1	AAS1	AAS1	BLEG2
Upper Scheme	AAS1C					

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Please note our new Phone Number is (08) 416 5300

Mr Andy Wilde
BHP Exploration Ltd
801 Glenferrie Road
Hawthorn
VIC 3122

F I N A L A N A L Y S I S R E P O R T

Your Order No: DRAGOUT 1AD2158/2200 Our Job Number : 1AD2955

Samples received : 25-SEP-1991 Results reported : 30-SEP-1991
No. of samples : 90
Report comprises a cover sheet and pages 1 to 2

This report relates specifically to the samples tested in so far as that the samples as supplied are truly representative of the sample source.

Note:
If you have any enquiries please contact Miss Anne Reed quoting the above job number.

Approved Signatory:

John Waters
Laboratory Manager - Adelaide

Report Codes:
N.A. - Not Analysed.
L.N.R. - Listed But Not Received.
I.S. - Insufficent Sample.

Distribution Codes:
CC - Carbon Copy
EM - Electronic Media
MM - Magnetic Media

"RELIABLE ANALYSES AT COMPETITIVE COST"

Job: 1AD2955
O/N: DRAGOUT 1AD2158/2200

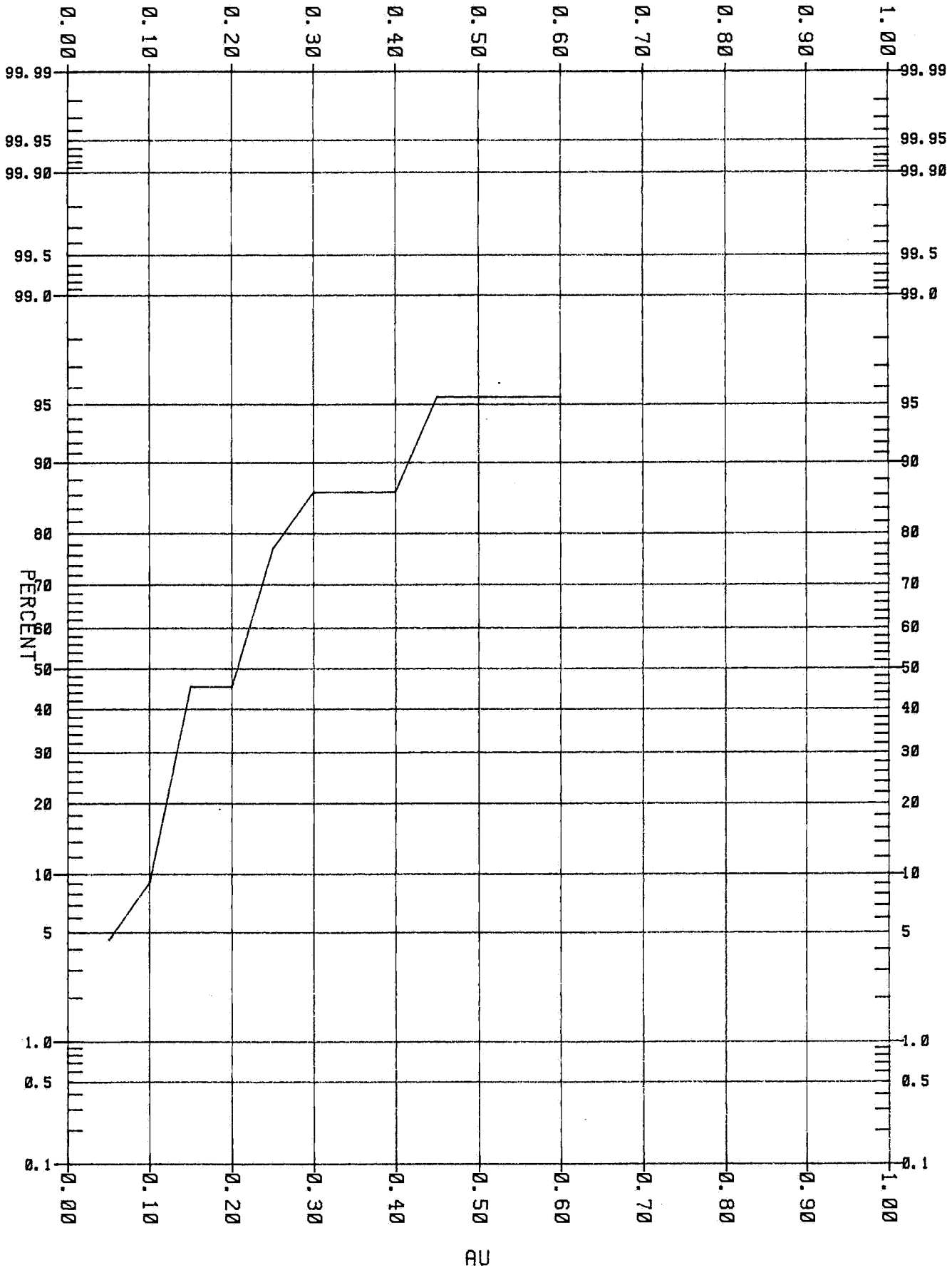
ANALYTICAL REPORT

Sample	As	Sb
DC 869	4	<2
DC 870	6	<2
DC 871	5	<2
DC 872	5	<2
DC 873	4	2
DC 874	6	<2
DC 875	4	<2
DC 876	4	<2
DC 877	5	<2
DC 878	3	2
DC 879	6	<2
DC 880	2	<2
DC 881	5	<2
DC 882	5	<2
DC 883	6	<2
DC 884	6	<2
DC 885	6	<2
DC 886	3	<2
DC 887	3	<2
DC 888	2	2
DC 889	4	<2
DC 890	<1	2
Units	ppm	ppm
DL	1	2
Scheme	XRF1L	XRF1L

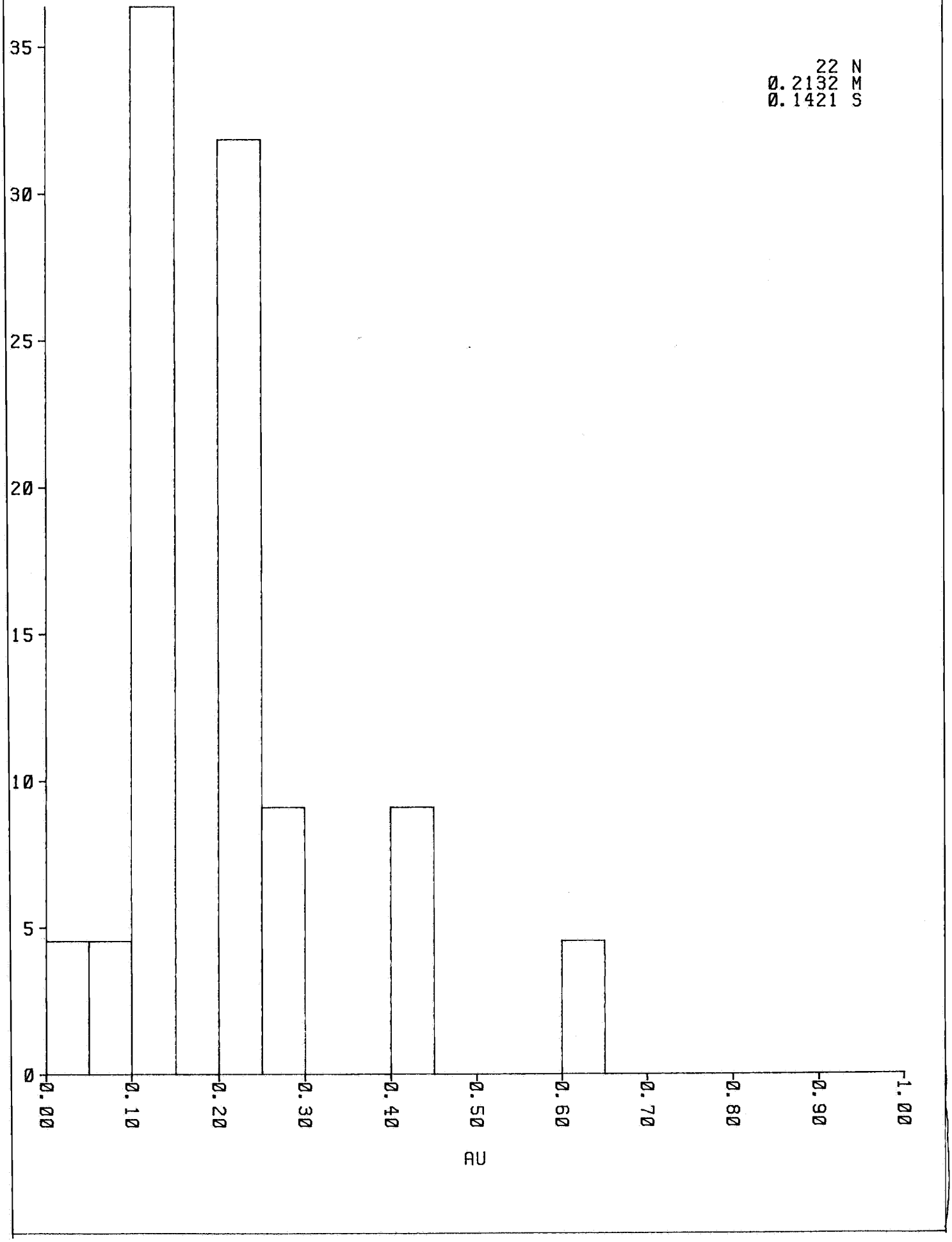
APPENDIX 2

STATISTICAL ANALYSIS OF STREAM SEDIMENT DATA

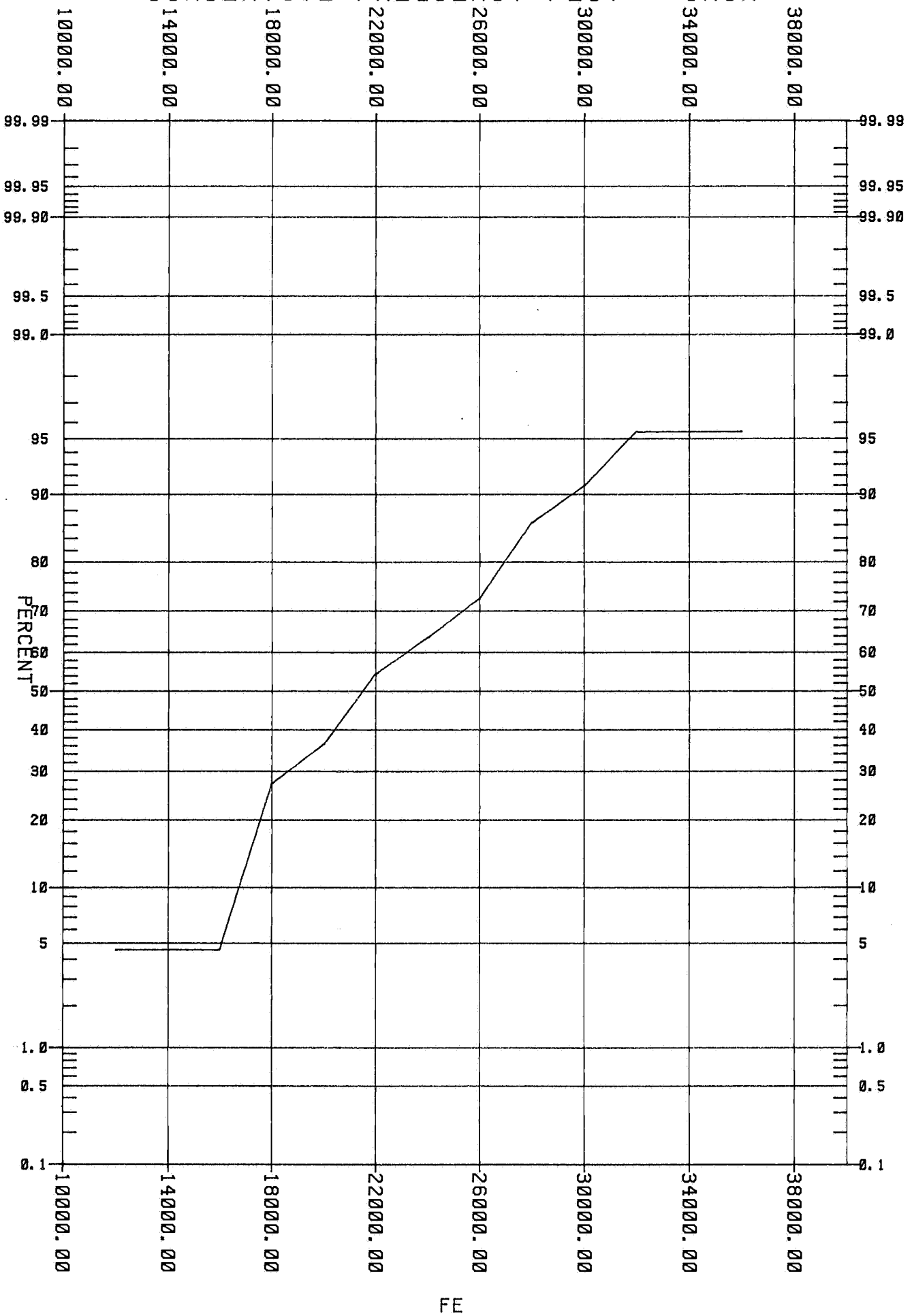
CUMULATIVE FREQUENCY PLOT - GOLD



HISTOGRAM - GOLD



CUMULATIVE FREQUENCY PLOT - IRON



HISTOGRAM - IRON

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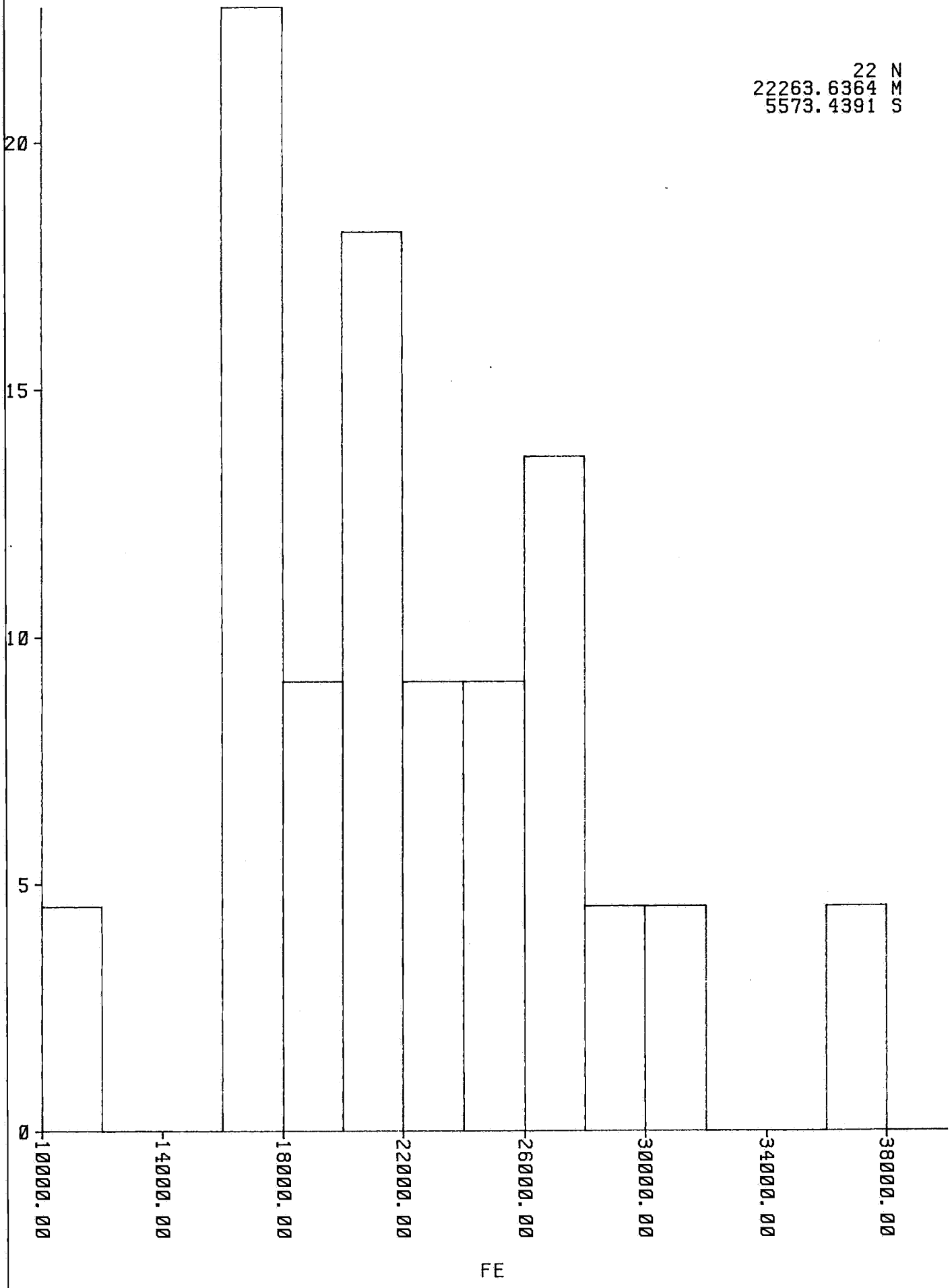
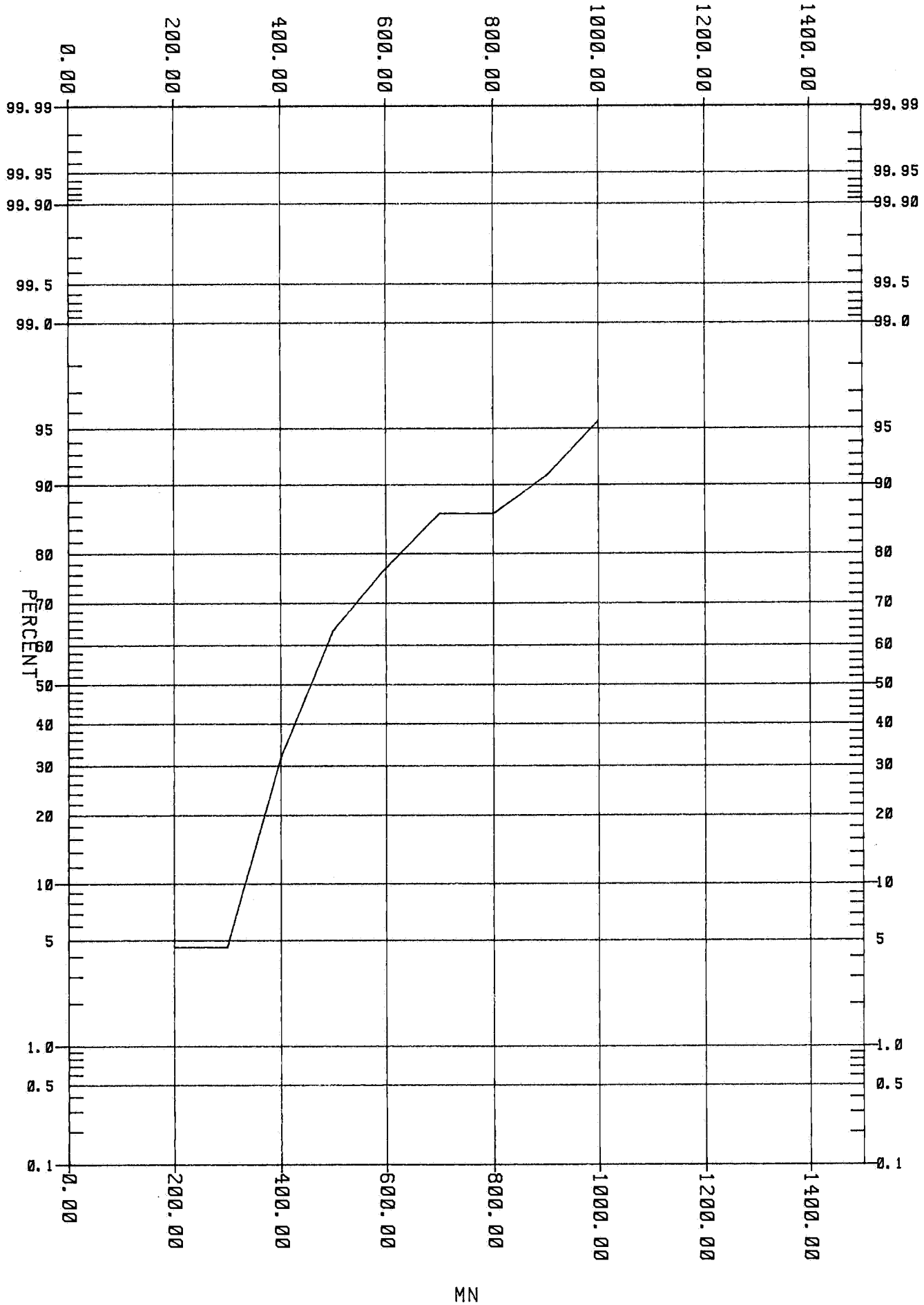
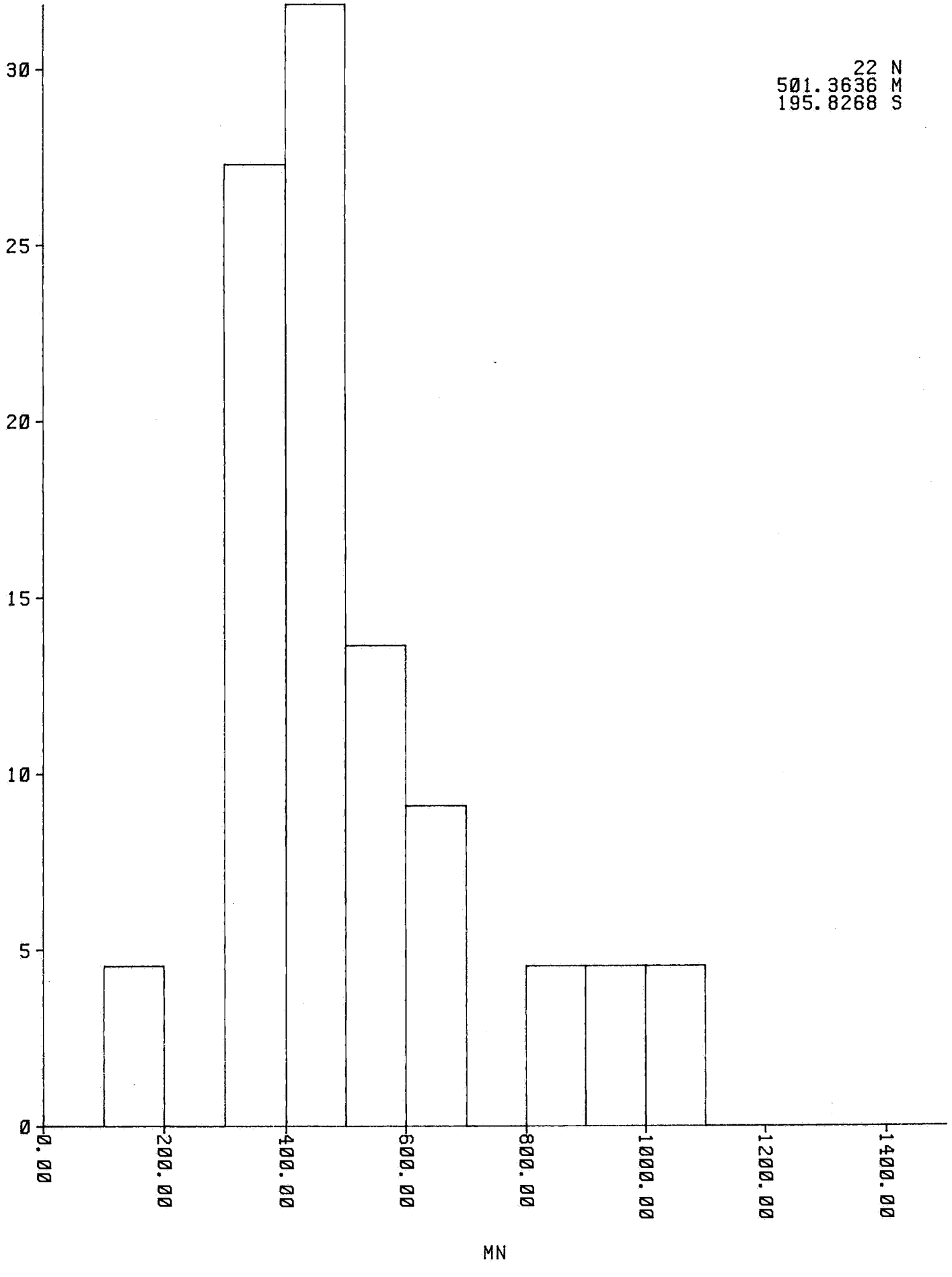
22263.6364 M
5573.4391 S

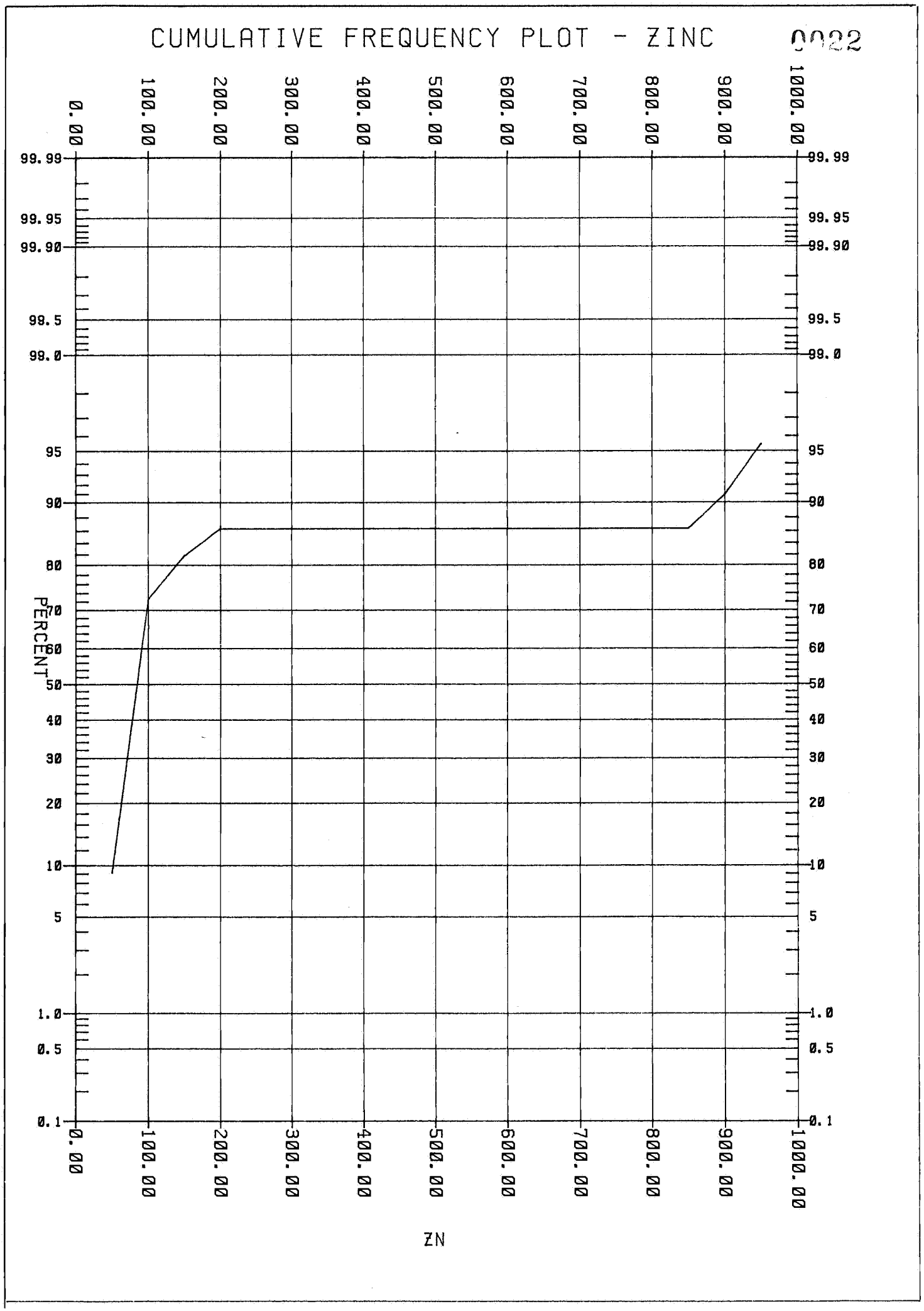


CUMULATIVE FREQUENCY PLOT - MANGANESE



HISTOGRAM - MANGANESE




CUMULATIVE FREQUENCY PLOT - ZINC
0022
PERCENT
99.99
99.95
99.90
99.5
99.0
95
90
80
70
60
50
40
30
20
10
5
1.0
0.5
0.1
0.00
100.00
200.00
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400.00
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700.00
800.00
900.00
1000.00
ZN

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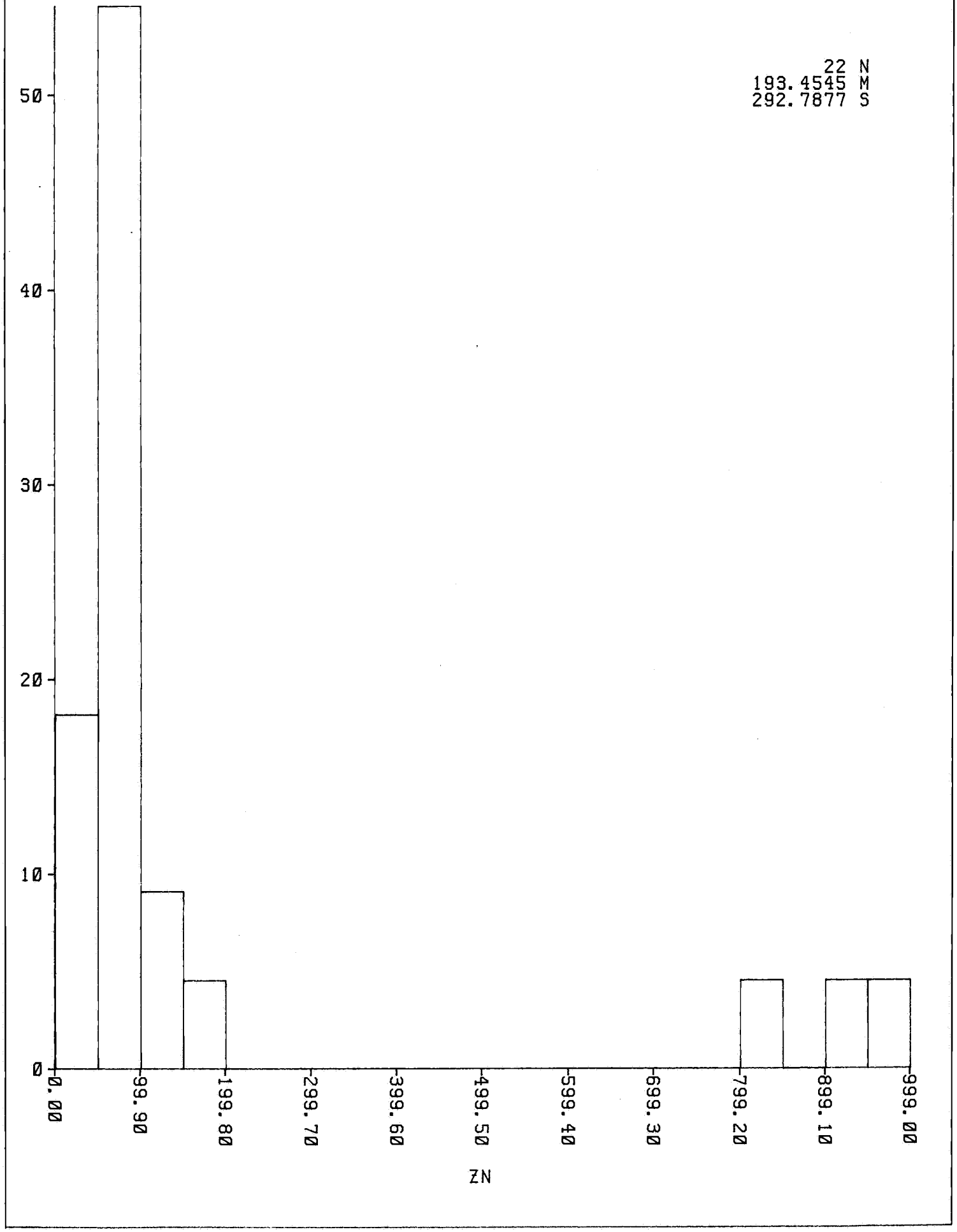

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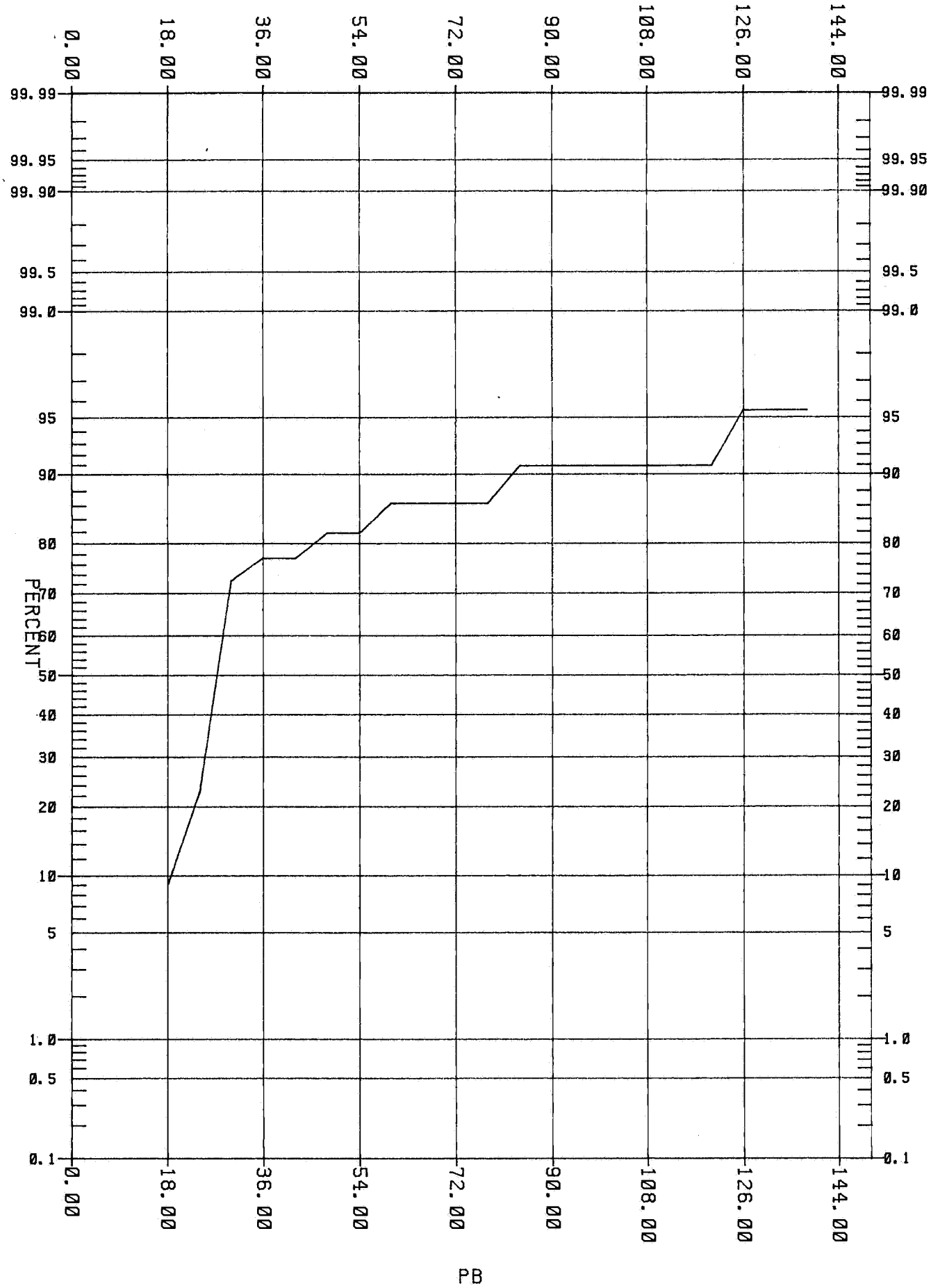

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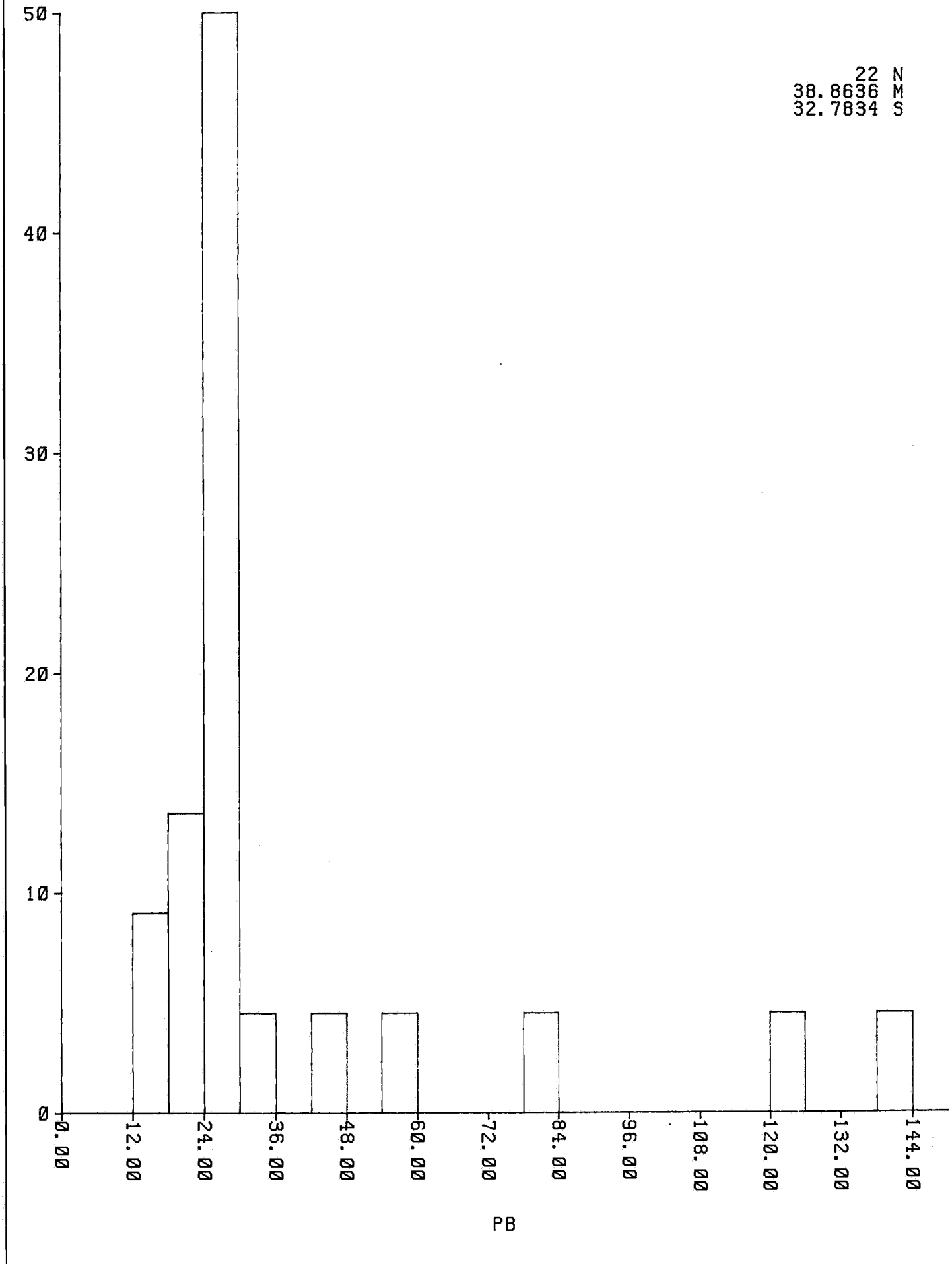

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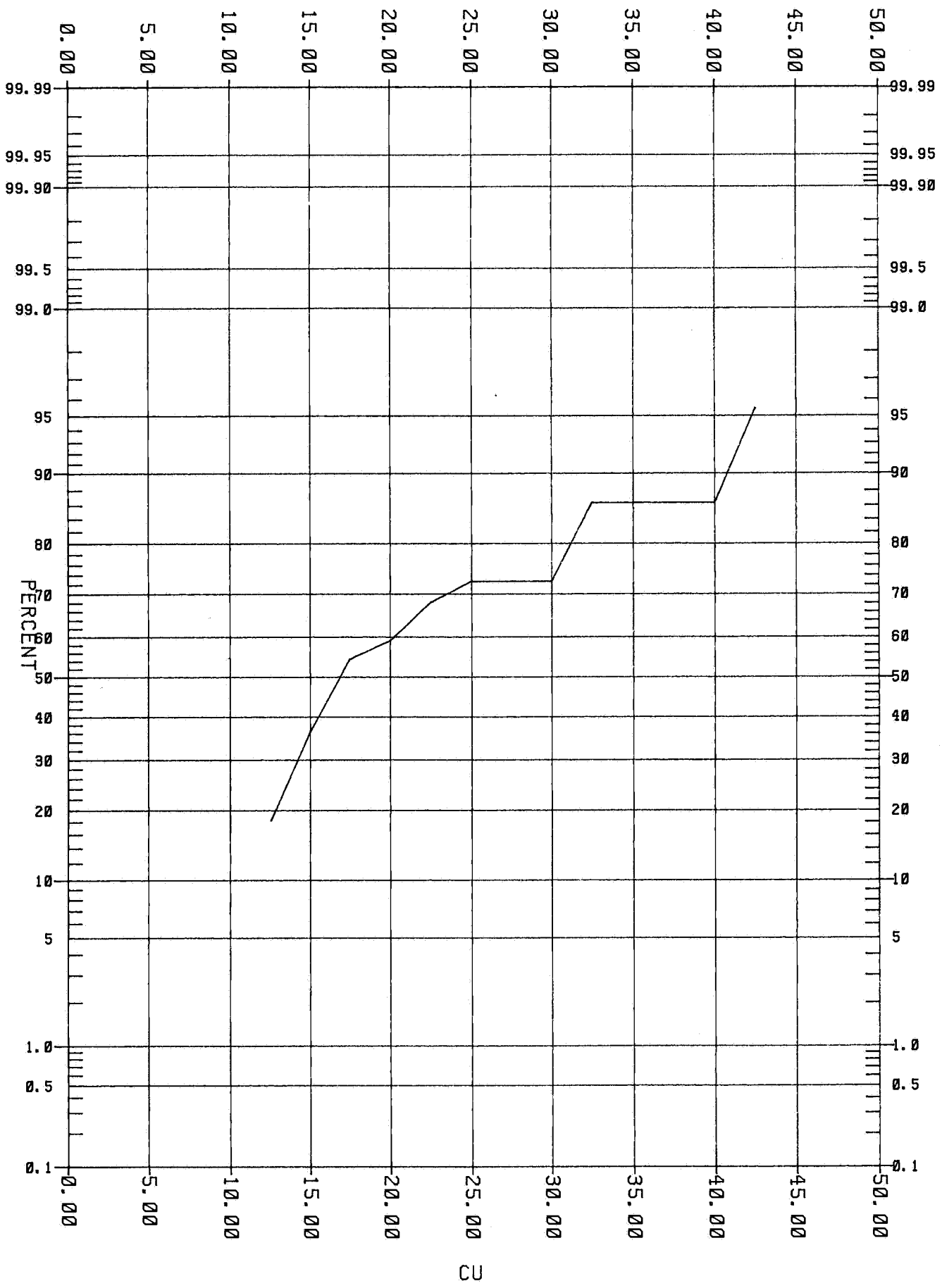

HISTOGRAM - COPPER

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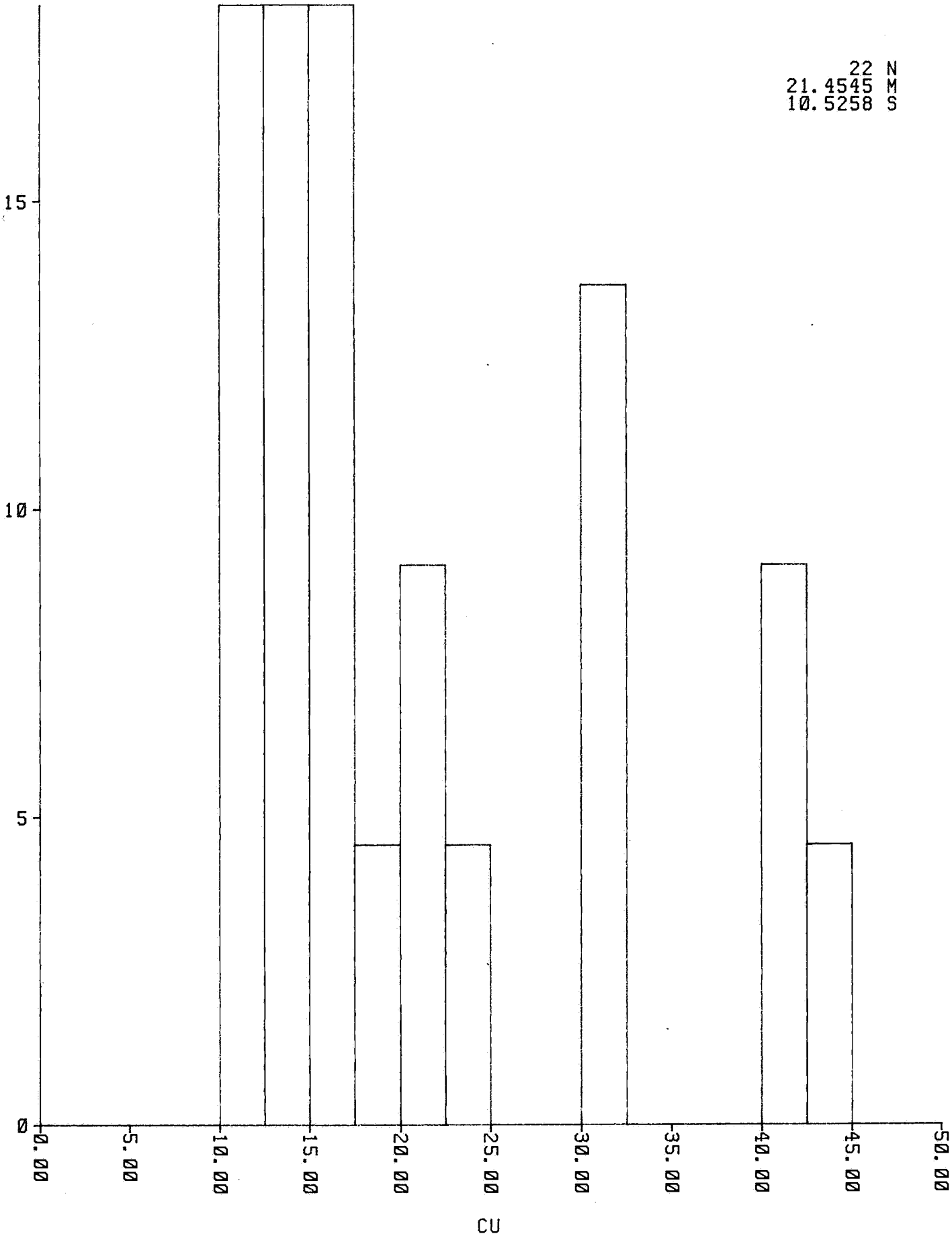
21.4545 M
10.5258 S



CR 7476
EL 1738 ERUDINA
SOUTH AUSTRALIA
SECOND QUARTERLY REPORT
FEBRUARY 1992

A WILDE

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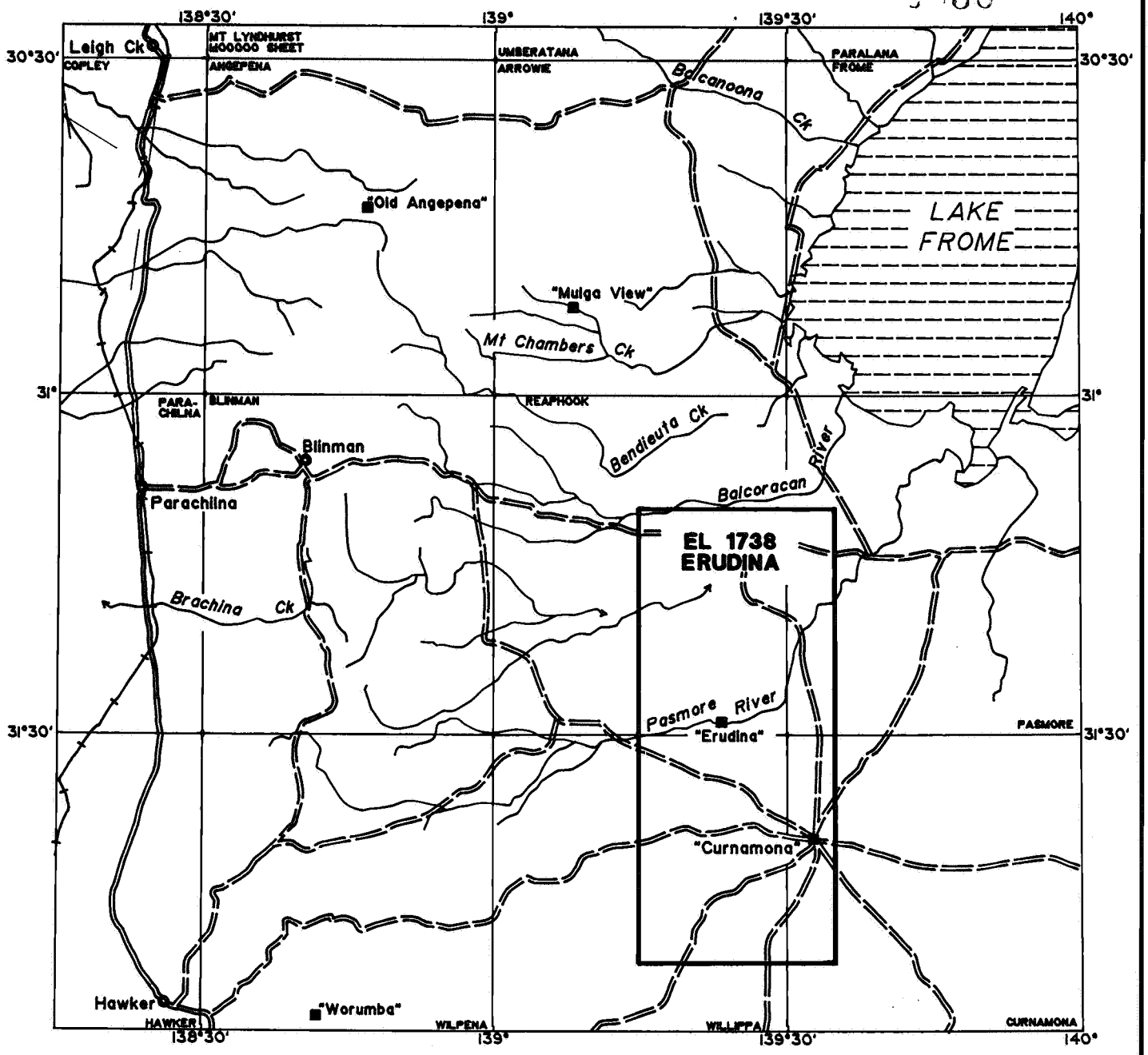
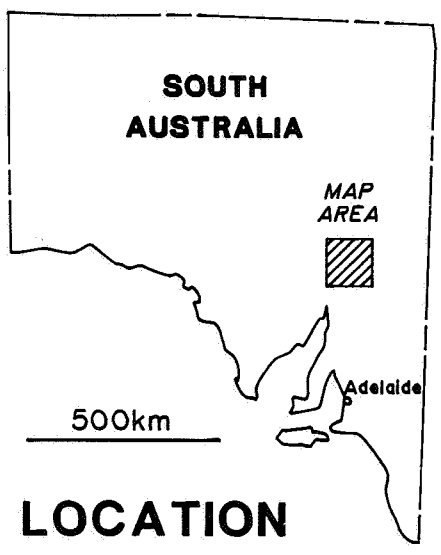




LOCATION

Scale 1:1,000,000

0 10 20 30 40 50 km

Lambert Conformal Conic Projection,
standard parallels 28°40' and 31°20'

Major Road

Minor Road

Railway

Prepared:	BHP Minerals (Asia Pacific Division)	Proj. No.:
Drawn: F.Barlow/ustn	EL 1738, ERUDINA, SOUTH AUSTRALIA	Drg No.: A4-3151
Date: August 1991	LOCATION MAP	Fig 1
Centre: Melbourne		

1. INTRODUCTION

EL 1738 "Erudina" (2,340 km^3) is located 20 km S.W. of Lake Frome (Fig. 1). It was granted to BHP Minerals on August 5th 1991 for a period of one year. This is a summary report of activities undertaken during the second quarter (to 5/2/92). As investigations are in progress, results will be reported more fully in the following quarterly report.

During the first quarter a stream sediment survey was carried out over the exposed Cambrian sequence. This, together with data collected by Lynch Mining suggest that the potential for outcropping gold mineralisation is negligible. Thus during the present quarter the focus of activity shifted eastward into the area underlain by Tertiary sediments.

2. WORK IN PROGRESS

Work completed by BHP during this quarter consisted of a review of previous exploration drilling, interpretation of reprocessed 1966 aeromagnetic data and preparation for a RAB drilling programme. A re-appraisal of the Reaphook Hill Zn occurrence commenced.

Previous drilling in the area was carried out by Minead, CRAE and Marathon Petroleum, who were searching for sandstone-hosted uranium deposits (without success). This drilling has provided detailed information on the Tertiary stratigraphy and on minimum depth to Cambrian or Proterozoic basement in the central part of the licence area (Fig. 2).

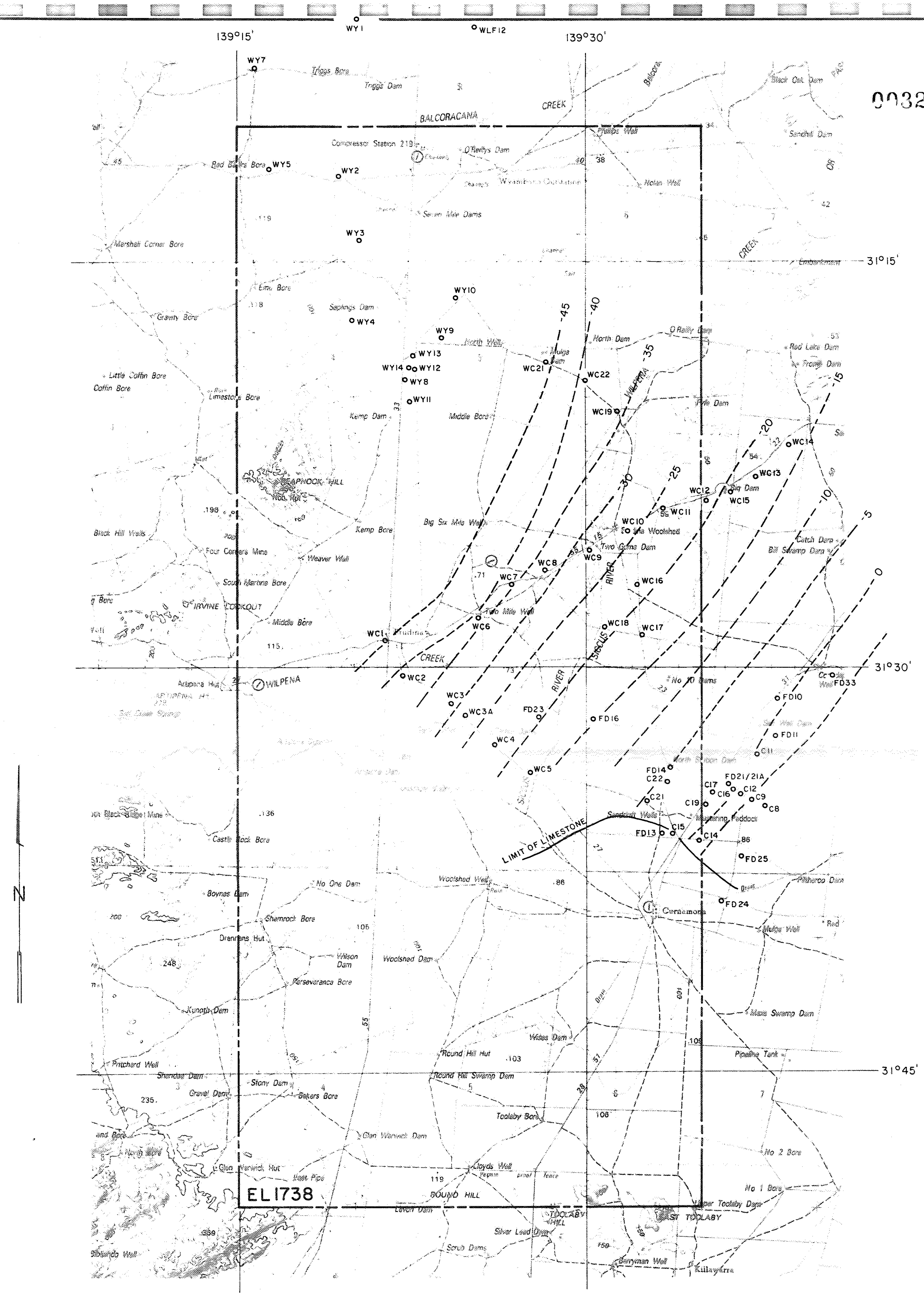
Aeromagnetic data reveal numerous lineaments which extend over several kilometers within the area underlain by Tertiary sediments. Some of these lineaments correspond to mapped faults with significant vertical and lateral displacement. Basement rocks may therefore be shallower adjacent to such structures.

A Mercedes-mounted RAB drill rig of A & J Drilling has been contracted to carry-out a small programme designed to test the magnetic lineaments. This will be carried out in February and March.

Kennecott data relating to the Reaphook Hill occurrence has been reviewed and diamond drillcore will be re-logged early in February.

3. CONCLUSIONS

Existing geochemical data indicate wide-spread enrichment in base-metals at the Proterozoic/Cambrian boundary but do not provide evidence of near-surface economic gold mineralization.


139°15'
139°30'
31°15'
31°30'
31°45'
WY1
WLF12
WY7
Triggs Bore
Triggs Dam
BALCORACANA
CREEK
Compressor Station 219
O'Reillys Dam
Phillips Well
Nolan Well
Black Oak Dam
Sandhill Dam
Bad Bakers Bore
WY5
WY2
WY3
Seven Mile Dams
Marshall Corner Bore
Embankment
Emu Bore
Saplings Dam
WY4
WY10
WY9
North Well
Gravity Bore
WY13
WY14
WY12
WY8
WY11
Little Coffin Bore
Coffin Bore
Limestone Bore
Kemp Dam
Middle Bore
Mulga Dam
North Dam
O Reilly Dam
Red Lake Dam
WC21
WC22
WC19
WILPENA
Pyle Dam
-45
-40
-35
-30
-25
-20
-15
-10
-5
0
WC14
WC13
WC12
WC15
Big Dam
WC11
WC10
Woolshed
Two Gums Dam
WC9
WC8
WC7
WC16
Big Six Mile Well
Kemp Bore
Weaver Well
Black Hill Wells
Four Corners Mine
South Martins Bore
IRVINE LOOKOUT
Middle Bore
Catch Dam
Bill Swamp Dam
Two Mile Well
WC6
WC18
WC17
WC1
Erudina
CREEK
RIVER
SIccUS
WC2
WILPENA
Arkapena Hut
No 10 Dams
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WC3
WC3A
FD23
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WC4
C11
WC5
FD14
C22
FD21/21A
C17
C16
C12
C9
C8
C21
C19
Sandcutt Wells
Mustering Paddock
LIMIT OF LIMESTONE
FD13
C15
C14
FD25
Castle Rock Bore
No One Dam
Boynes Dam
Woolshed Well
Pitherco Dam
FD24
Curnamona
Shamrock Bore
Drennans Hut
Mulga Well
Wilson Dam
Woolshed Dam
Perseverance Bore
Kunoth Dam
Mais Swamp Dam
Wises Dam
Round Hill Hut
Pipeline Tank
Pritchard Well
Shandee Dam
Round Hill Swamp Dam
Stony Dam
Bakers Bore
Gravel Dam
Tooleby Bore
Glen Warwick Dam
No 2 Bore
Glen Warwick Hut
Lloyds Well
No 1 Bore
EL1738
ROUND HILL
Upper Tooleby Dam
TOOLABY HILL
EAST TOOLABY
Silver Lead Dam
Scrub Dams
Berryman Well
Killawarra
N

o WC11 *Marathon Petroleum EL337*

o FD14 *Esso SML544*

o C21 *Minead EL254*

o WY9 *Minead SML495*

o WLF12 *CRAE SML544*

- - - *Depth to base Tertiary Limestone*

Scale 1 : 250000

0 10 20km

BHP Minerals
Asia Pacific Division

EL 1738, ERUDINA, S. A.

PREVIOUS DRILLING

(FROM MARATHON PETROLEUM)

Prepared: A. Wilde	Date: Jan 92	Fig
Drawn: M. Rosker	Project No.: FKS	
Centre: Melbourne	Drawing No.: A3-1967	

There is evidence for Tertiary sediment exceeding 100m in thickness over parts of the area east of Reaphook Hill. These rocks could host sandstone-type uranium, alluvial gold and heavy minerals or even lignite deposits. Of most interest, however, is the possibility of relatively shallow and altered basement associated with magnetic lineaments.

The Reaphook Hill prospect may have Mississippi-Valley type Pb-Zn potential, particularly to the east where known mineralization has been truncated by faulting.

4. EXPENDITURE

Expenditure for the quarter is estimated at $2,800, for aeromagnetic interpretation and review of old exploration data.

0034

CR 7500
EL1738 "ERUDINA"
SOUTH AUSTRALIA
FINAL REPORT

A.R. WILDE
MARCH 1992

DISTRIBUTION

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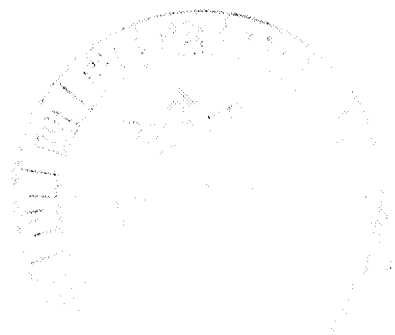

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SUMMARY

BHP exploration within EL 1738 was aimed at locating open-pittable Carlin-type gold mineralization in Cambrian or Proterozoic carbonate rocks. A stream sediment BLEG survey found no evidence of near surface gold mineralization. RAB/Aircore drilling demonstrated that much of the licence area is buried by over 70m of Cenozoic sediments. So it is concluded that there is no open-pittable gold resource within the licence area, and the licence has been relinquished.

Key Words

Gold, Carlin-type, Stream Sediment BLEG, RAB/Aircore Drilling, Secondary Zn, Reaphook Hill Zn Prospect, Parachilna 1: 250,000, Curnamona 1: 250,000, Reaphook Hill 1: 50,000, Erudina 1: 50,000.

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MR\AF
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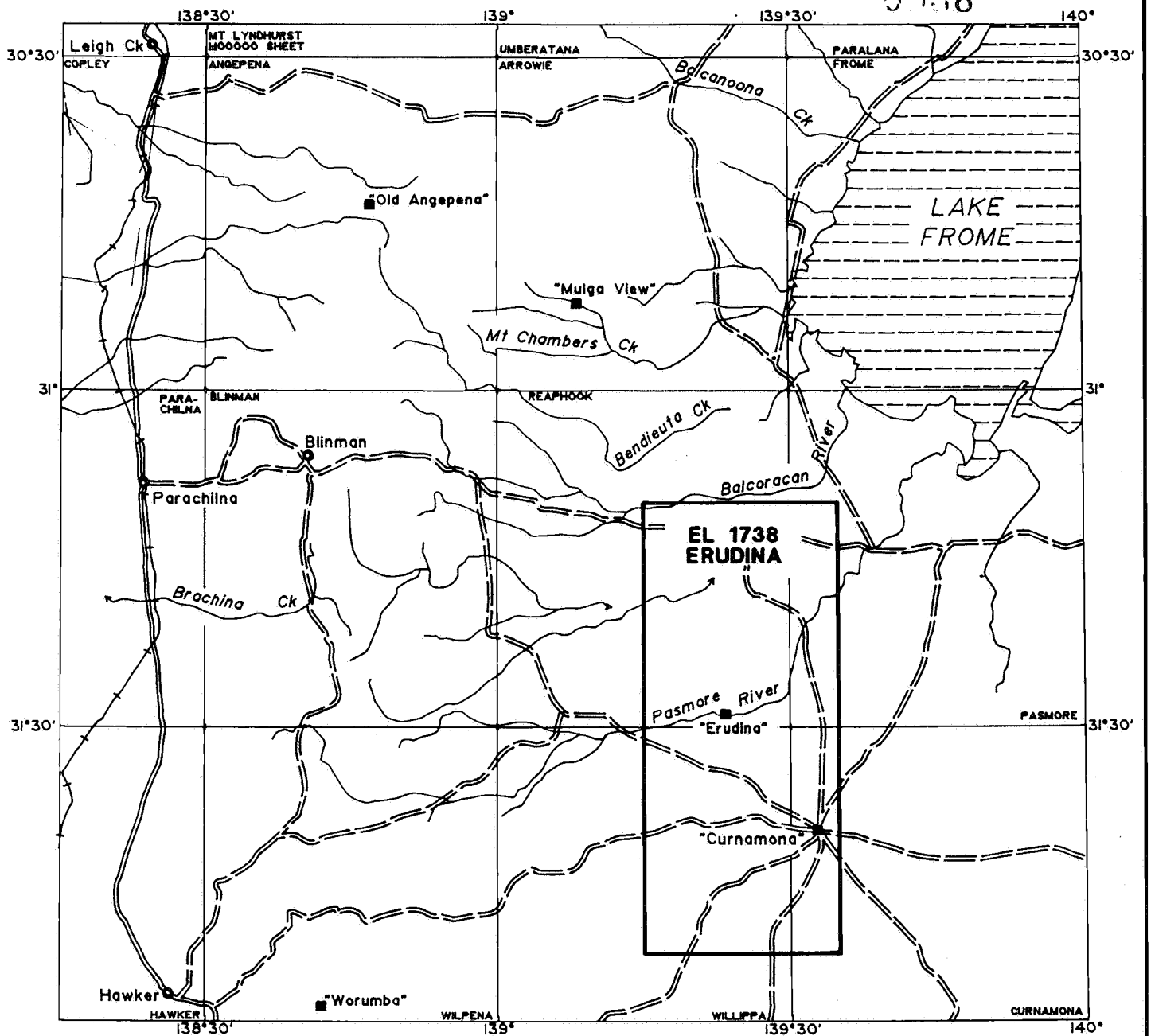
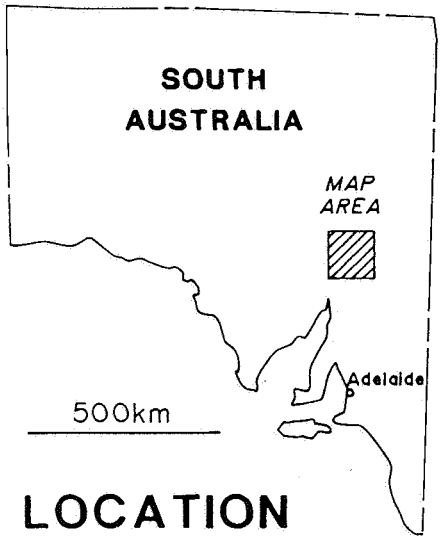




LOCATION

Scale 1:1,000,000

0 10 20 30 40 50 km

Lambert Conformal Conic Projection,
standard parallels 28°40' and 31°20'

Major Road

Minor Road

Railway

Prepared:	BHP Minerals (Asia Pacific Division)	Proj. No.;
Drawn: F.Barlow/ustn	EL 1738, ERUDINA, SOUTH AUSTRALIA	Drg No.; A4-3151
Date: August 1991	LOCATION MAP	Fig 1
Centre: Melbourne		

1. INTRODUCTION

EL1738 "Erudina" of 2,340km^2 is located 20km S.W. of Lake Frome (Fig.1). It was granted to BHP Minerals on August 5th 1991 for a period of one year. The main commodity sought was gold.

The licence was acquired in order to test the potential for open-pittable sediment-hosted gold mineralization (of "Carlin-type") at the intersection of prominent structural/aeromagnetic corridors beneath thin (<100m) Cenozoic cover. Suitable host rocks include basal cambrian dolomite (Wilkawillina Formation) and interbedded Proterozoic limestone and shale (Wonoka Formation).

This report presents a summary of previous exploration activity in EL1738 and results of BHP exploration during the period August 1991 to February 1992.

2. PREVIOUS WORK

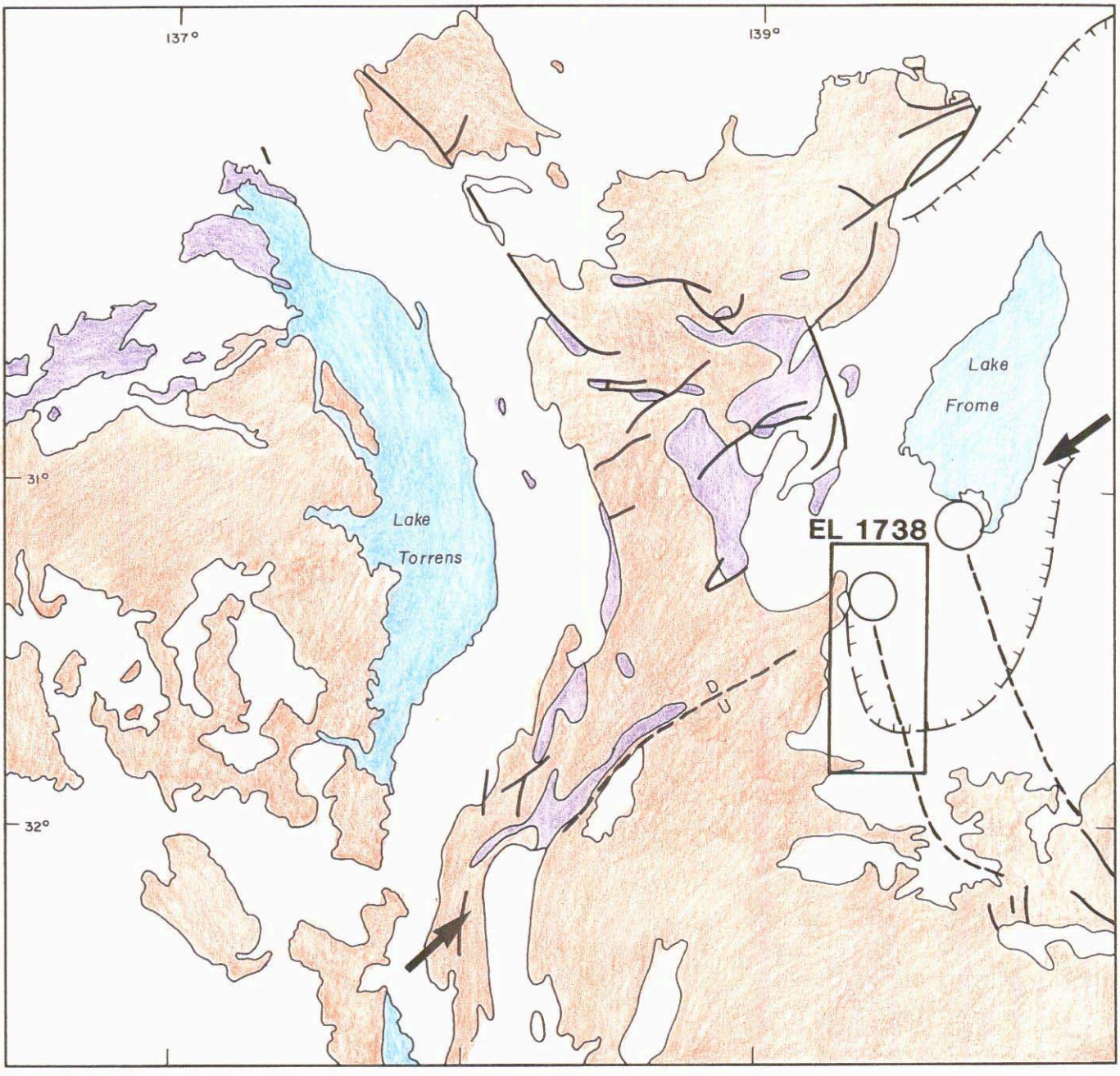
Exploration within EL1738 has involved at least nine companies since the late nineteen sixties. Most effort was put into locating base-metal or uranium mineralization, but there has been one attempt to locate gold. The result of this exploration has been to define substantial, but low grade zinc mineralization in the vicinity of Reaphook Hill.

2.1 Base Metals

Interest in the area for base metals was spurred by the discovery of zinc-rich Cambrian limestone near Reaphook Hill (Johns, 1972). Kennecott Explorations drilled five diamond drillholes here, and collected numerous rock-chip samples. On this basis it was estimated that there was a possible resource of the order of 2 million tons grading at 1% Zn and 5%Mn (McNeil, 1967). Subsequent work by the EZ Co and BHP located extensions of this mineralization over a strike length of 8km, but presumably owing to the low grade this zone was never drilled. The Reaphook Hill prospect is discussed in detail below.

2.2 Uranium

Uranium exploration for sandstone-type deposits has been carried out in the eastern and central parts of the licence area, by Marathon Petroleum, Mines Administration, Esso and to a lesser extent CRAE. This work involved resistivity soundings in some areas and drilling of 34 holes, typically of 100-200m depth. It demonstrated that the central part of the licence is underlain by substantial thicknesses (ie >100m) of Miocene clay (Namba Formation) and Quaternary clastics (Ellis, 1978). Cambrian basement was intersected north-east of Erudina station at depths of 95 to 187m.



LEGEND

- Aeromagnetic Lineament
- Zone of Interest
- Post Paleaozoic Cover
- Cambrian - Arrowie Basin
- Subsurface Extent of Arrowie Basin
- Proterozoic - Adelaidean and older

LOCATION

Scale 1 : 2,000,000

0 40 80 120 160 200km

Copied from the 1:2000000 Geological Map of South Australia

Prepared : A. Wilde	BHP Minerals Limited A.C.N. 008 694 782	Centre : Melbourne
Drawn : F, Barlow		Drg. No. : A4- 3195
Date : April 1992	EL 1738, ERUDINA, S.A.	
Revised :	**REGIONAL GEOLOGICAL SETTING**	FIGURE 2

Hole WC14 was the only one to intersect significant uranium, having returned 1.5m at 0.05% U3O8.

2.3 Gold

Evidently most companies have not considered this area as prospective for gold. Indeed, there are no known occurrences within the licence although workers from the Pipelines Authority of S.A. claim to have panned gold from Cenozoic sediments exposed in gravel pits. Lynch Mining carried out a stream sediment BLEG survey over outcropping Proterozoic rocks in 1988, but obtained results which did justify further work (maximum 0.45ppt Au).

3. STREAM SEDIMENT GEOCHEMISTRY

The first phase of exploration carried out by BHP involved the collection of 22 stream sediment samples from creeks draining the exposed Cambrian rocks in the vicinity of Reaphook Hill. This survey overlapped that carried out by Lynch Mining (Figs, 3 & 4)

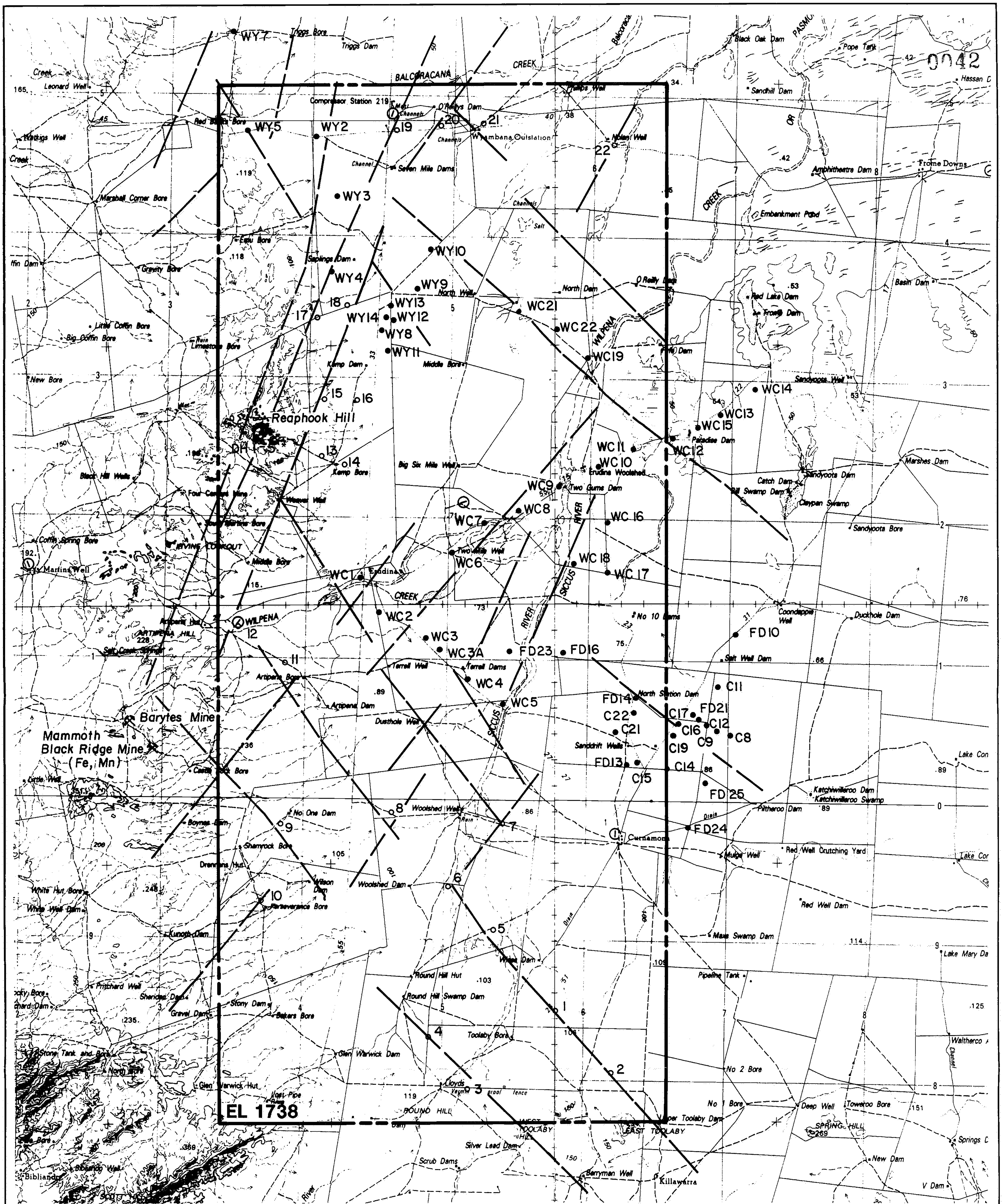
Two and a half kilograms of -2mm sediment were bagged and despatched to Classic Laboratories of Adelaide. At the laboratory 500 gms were split, sieved to -80# and analysed for Cu, Pb, Zn, Fe, Mn (AAS1), Sb, As (XRF1L) Au and Pd (BLEG2). Results are given in figure 4 and a statistical analysis is Appendix 1.

The BHP and Lynch Mining data suggest that the potential for gold mineralization in the outcropping Cambrian and Proterozoic sequence is low but confirm the known base-metal anomalism at the base of the Cambrian sequence at Reaphook Hill.

4. AEROMAGNETIC INTERPRETATION

In order to better define the NW-SE aeromagnetic lineament which traverses the licence area, BMR aeromagnetic data were reprocessed. These data were collected in 1966 at a flight-line spacing of 1.5km and height of 152 m. Clearly this survey is not adequate to resolve lithological detail within the Cambrian and Proterozoic rocks, which are generally of low susceptibility.

Reprocessed BMR data, however, allow mapping of numerous lineaments, presumed to be faults (Fig.5). Two dominant directions are evident: NW-SE and NE-SW. The former correspond to mapped faults at Reaphook Hill, with apparent lateral displacement, and are also visible in seismic data from north of the EL (Oke, 1983). The seismic data suggest that some of these structures have a component of normal displacement of the order of 35-45m and that they offset Cenozoic sediments. Seismic data also reveal nearly N-S trending structures with apparent reverse displacement of 75m. These faults are not apparent in the aeromagnetic data.


0042
WY7
Triggs Bore
Triggs Dam
BALCORACANA
CREEK
Compressor Station 219
O'Reillys Dam
19
20
21
Wyambana Outstation
Phillips Well
Nolan Well
22
Leonard Well
Watkins Well
Red Banks Bore
WY5
WY2
Seven Mile Dams
WY3
Marshall Corner Bore
Emu Bore
Gravity Bore
Saplings Dam
WY4
WY10
WY9
North Well
18
17
WY13
WY14
WY12
WY8
WY11
Little Coffin Bore
Big Coffin Bore
Twin Limestone Bore
Kemp Dam
Middle Bore
New Bore
15
16
Reaphook Hill
DH
13
14
Kemp Bore
Big Six Mile Well
Black Hill Wells
Four Corners Mine
Weaver Well
Coffin Spring Bore
IRVINE LOOKOUT
Martins Well
WC1
Erudina
CREEK
WC2
WILPENA
12
ARTIPENA HILL
Artipena Hut
Salt Creek Springs
11
Artipena Bore
Artipena Dam
Dusthole Well
Barytes Mine
Mammoth
Black Ridge Mine
(Fe, Mn)
Castle Rock Bore
Little Well
No One Dam
8
Woolshed Well
Ruin
7
9
Boynes Dam
Shamrock Bore
Drennans Hut
Wilson Dam
Woolshed Dam
6
10
Perseverance Bore
White Hut Bore
White Well Dam
Kunoth Dam
5
Wilpena Dam
Round Hill Hut
Round Hill Swamp Dam
Pritchard Well
Sheridan Dam
Gravel Dam
Stony Dam
Bakers Bore
4
Toolaby Bore
Stone Tank and Bore
North Bore
Glen Warwick Dam
Glen Warwick Hut
Lost Pipe Bore
Lloyds
3
ROUND HILL
EL 1738
Silver Lead Dam
Scrub Dams
Bibliando Well
Bibliando
River
WEST TOOLABY HILL
EAST TOOLABY
Upper Toolaby Dam
Berryman Well
Killawarra
1
2
Black Oak Dam
Pope Tank
Hassan D
Sandhill Dam
Amphitheatre Dam
Frome Downs
CREEK
Embankment Pond
Channels
Salt
North Dam
O Reilly Dam
WC21
WC22
WILPENA
WC19
Red Lake Dam
Frome Dam
Basin Dam
Sandyoota Well
WC14
WC13
WC15
Paradise Dam
WC11
WC12
WC10
Erudina Woolshed
Marshes Dam
Sandyoota Dam
Catch Dam
Bill Swamp Dam
Claypan Swamp
Sandyoota Bore
WC9
Two Gums Dam
WC8
WC7
RIVER
WC16
Two Mile Well
WC6
WC18
WC17
SICCUS
No 10 Dams
Coondappie Well
Duckhole Dam
FD10
WC3
WC3A
FD23
FD16
Terrell Well
Terrell Dams
Salt Well Dam
WC4
WC5
C11
FD14
North Station Dam
C22
C17
FD21
C16
C12
C21
C9
C8
C19
Sanddrift Wells
FD13
C14
C15
FD25
Katchiwilleroo Dam
Katchiwilleroo Swamp
Piltheroo Dam
Lake Con
FD24
Curnamona
Drain
Mulga Well
Red Well Crutching Yard
Red Well Dam
Maxs Swamp Dam
Lake Mary Da
Pipeline Tank
Waltherco
Channel
No 2 Bore
No 1 Bore
Deep Well
Toweroo Bore
SPRING HILL
269
Springs C
New Dam
V Dam

— — — Aeromagnetic Lineament

1o *BHP Drillhole (prefix 'EDP92')*

WY3• *Previous Exploration Drillhole*

WY	*MINEAD SML495*	FD	*ESSO SML544*
C	*MINEAD EL254*	DH	*Kennecott SML137*
WC	*Marathon Petroleum EL337*		

SOUTH AUSTRALIA

EL1738

Adelaide

Scale 1:250,000

0 10 20 km

BASE COPIED FROM 'PARACHILNA' & 'CURNAMONA' 1:250000 SHEETS

BHP Minerals Limited
A.C.N. 008 694 782

EL 1738, ERUDINA, S.A.

DRILL HOLE LOCATIONS & AEROMAGNETIC LINEAMENTS

Prepared : A. Wilde	Date : April 1992	FIGURE **3**
Drawn : F. Barlow	Revised:	
Centre : Melbourne	Drg. No.: A3- 1975	

EL 1738

Compressor Station 219

BG9831 I.S/<1 >70m

BG9833 0·15/<1 >70m

BG9834 <0·05/1 >70m

BG 9835 0·05/<1 >70m

>213

>158

>152m

>213

>152

BG9832

BG9830 0·1/<1 >70m

>152m

>152m

>168m

150m

>140m

BG 9828, 0·35/<1, 70m

BG9829 0·05/<1 70m

BG9836 I.S/<1 >70m

BG 9827 0·05/<1 >70m

179 m

187m

>196m

>177m

>168m

>168m

>168m

186m

>198m

BG9826 0·4/<1 >70m

BG9825 0·05/<1 >70m

BG9822 0·1/<1 >70m

BG9821 0·05/<1 >68m

BG 9823 0·25/<1 70m

BG9824 0·4/<1 >58m

BG9820 0·15/<1 >70m

BG 9819 0·25/<1 >70m

BG 9815 0·10/<1 >48m

BG9818 0·1/<1 >70m

BG 9817 0·3/<1 >62m

BG 9816 0·15/<1 >70m

105m

103m

103m

110m

98m

137m

119m

142m

156m

Scale 1:250,000

0 10 20 km

SOUTH AUSTRALIA

EL1738

Adelaide

BG9856 BHP bottom hole sample number

2·0/2·5• *BLEG / FIRE assay Gold (ppb)*

>70m *Depth to Cambrian (below surface)*

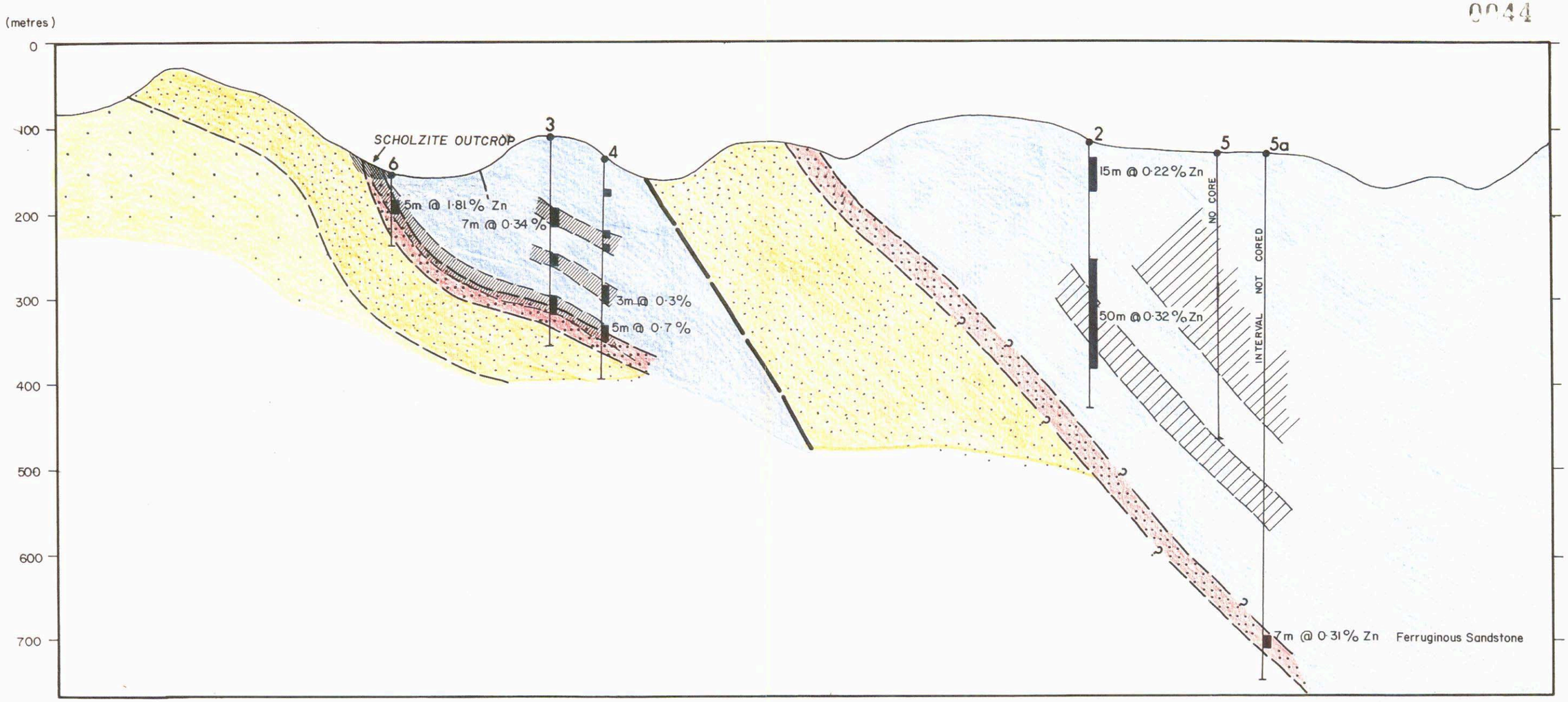
Approx. limit Cambrian / Proterozoic Outcrop

BASE COPIED FROM 'PARACHILNA' & 'CURNAMONA' 1:250000 SHEETS

BHP Minerals Limited
A.C.N. 008 694 782

EL 1738, ERUDINA, S.A
DEPTH TO BASEMENT & DOWN HOLE GEOCHEMISTRY

Prepared : A. Wilde	Date : April 1992	FIGURE 4
Drawn : F. Barlow	Revised:	
Centre : Melbourne	Drg. No.: A3- 1974	



LOWER CAMBRIAN
- *Wilkawillina Limestone*
- *Parachilna Formation*

PROTEROZOIC
- *Pound Quartzite White Member*
- *Red Member*

- *Fault - definite*
- *Fault - inferred*
- *Geological Boundary - definite*
- *Geological Boundary - inferred*
- *Drillhole with intersection of >0.2% Zn*
- *Zone of Ferruginisation*
- *Mineralised Zone (Zn >0.2%)*

Horizontal Scale = 1:5000 approx.

0 200 400 m

V/H = 0.5

N.B. Geology from this report.
Geochemistry from Kennecott, 1967
For Section location refer to Drawing AI-2515

BHP Minerals Limited
A.C.N. 008 694 782

EL 1738, ERUDINA, S.A.
REAPHOOK HILL Zn OCCURRENCE
SECTION AB

Prepared : A. Wilde	Date : March 1992	FIGURE 5
Drawn : F. Barlow	Revised:	
Centre : Melbourne	Dgn. No. : AZ 1979	

5. RAB/AIRCORE DRILLING

A drilling programme was carried out with the following objectives:

- Determine whether there are areas of shallow (<50m) Cambrian/Proterozoic basement, upthrown by faults defined by aeromagnetic lineaments.

- Establish (by way of composite bottom hole samples) whether there are geochemical haloes associated with these faults.

RAB/aircore drilling commenced on the 23rd February and finished on 6th March. Twenty-two holes (locations are given in figure 5) were completed for 1492m, most reaching their target depth of 70m. Details are given in Table 1. The contractors employed were A & J Drilling of Kalgoorlie, who use a custom-built rig with a compressor rated at 220psi. In the early holes a combination of blade and aircore was employed. Sticky clays encountered below 40m posed problems for the aircore bits which frequently became blocked. Later holes were therefore completed with a bladebit and water injection. All holes were rehabilitated by replacing cuttings down the hole, unless the station-owner requested that they be left open as possible water bores.

Drill Hole Name	Depth	Location	Bottom Hole Sample	Date Drilled
EDP92 1	48m	139° 29.97'E 31° 45.54'	BG 9815	23/2
2	70m	139° 32.51'E 31° 47.97'S	BG 9816	23-24/2
3	62m	139° 26.03'E 31° 48.66'S	BG 9817	24-25/2
4	70m	139° 24.34'E 31° 46.52'S	BG 9818	25-26/2
5	70m	139° 27.17'E 31° 42.57'S	BG 9819	26-27/2
6	70m	139° 25.09'E 31° 40.75'S	BG9820	27/2
7	68m	139° 27.49'E 31° 38.50'S	BG9821	27-28/2
8	70m	139° 22.74'E 31° 38.07'S	BG9822	28/2
9	70m	139° 17.62'E 31° 38.39'S	BG9823	29/2
10	58m	139° 16.89'E 31° 41.54'S	BG9824	29/2-1/3
11	70m	139° 17.93'E 31° 32.14'S	BG9825	1/3-2/3
12	70m	139° 15.70'E 31° 30.73'S	BG9826	2/3-3/3
13	70m	139° 19.52'E 31° 24.33'S	BG9836	3/3
14	70m	139° 20.24'E 31° 24.62'S	BG9827	3/3
15	70m	139° 19.58'E 31° 22.11'S	BG9828	4/3
16	70m	139° 21.10'E 31° 21.80'S	BG9829	4/3
17	66m	139° 19.27'E 31° 18.96'S	BG9830	4/3-5/3
18	70m	139° 20.19'E 31° 18.65'S	BG9832	5/3
19	70m	139° 22.84'E 31° 11.84'S	BG9833	5/3
20	70m	139° 24.80'E 31° 11.73'S	BG9834	5/3
21	70m	139° 26.56'E 31° 11.63'S	BG9831	5/3-6/3
22	70m	139° 32.60'E 31° 12.33'S	BG9835	6/3

TABLE 1: Details of drilling programme. Location was determined using a Pronav GPS System (Accurate to $\pm$ 30m). R/L was not determined.

All twenty two holes failed to intersect Cambrian or Proterozoic basement and bottomed in Middle Miocene Namba Formation clays (see Appendix 2). Nevertheless, a composite sample of the bottom six metres of each hole was later, in case fault-related anomalism extended upwards into the cover rocks. These samples were submitted to Classic Laboratories of Adelaide for analysis of Au, Pd (BLEG2) Au (Fire assay), Cu, Pb, Zn, Hg (AAS), Sb and As (XRF). Results are given as Appendix 4. All results were low, and do not provide evidence of a fault-related Halo.

6. REAPHOOK HILL Zn PROSPECT

Mineralization at Reaphook Hill is hosted by Cambrian sedimentary rocks ("Parachilna Formation", Wilkawillina Limestone) which conformably overlie Proterozoic quartzite (Pound Quartzite). The geology is shown in Plate 1.

A thickness of 340m of quartzite has been mapped. Much of this rock is pink coloured, presumably due to disseminated hematite. The upper 35m, however, is white. In drillcore, the white rock is a medium-grained, kaolinite-cemented and friable sandstone.

Overlying the "quartzite" is a poorly outcropping unit, assigned to the Parachilna Formation (McNeil, 1967). In drillcore, it is defined by pink to white mottled clay and massive iron-manganese oxide (e.g. DH4). Core recoveries were low in this unit, probably reflecting washing out of the clay. No relict sedimentary structures were observed in the so-called Parachilna formation, and a secondary origin for the clay is favoured. This is consistent with evidence of desilicification and iron dissolution in the uppermost Pound Quartzite.

The Wilkawillina Limestone is some 425m thick at Reaphook Hill, and is a massive, structureless brown, buff to blue-grey dolomite of variable grain size. In drillcore this rock varies from fine to coarse grained. In the coarser grained examples vuggy cavities lined with euhedral carbonate are more common, as is interstitial hematite. Stylolites are well developed in the fine-grained variety, but less so in the coarse vuggy variety. Thus this unit also has evidence of alteration, involving decarbonation and hematite deposition. Secondary Mn oxides along fractures are common.

Zinc distribution is not well defined, although Kennecott drilling provides some constraints (Plate 2). The clay and Fe/Mn oxide zone at the Proterozoic/Cambrian boundary seems to be consistently mineralized (Fig. 5) with highest grades at, or close to the surface. Secondary zinc minerals including the rare mineral scholzite actually outcrop (Plate 1, Fig. 5) Where Zn minerals are visible they occur with iron hydroxide and clay. This is also seen in drillcore, where high Zn grades correlate with high clay content (and therefore poor core recovery).

	DH4 54m DOLOMITE	DH4 90m CLAY	DH5 82m DOLOMITE	DH5A 146m DOLOMITE	DH5A 173m DOLOMITE	DH6 10m CLAY	NORTGE
Ag	1.0	<0.5	1.0	1.5	1.5	<0.5	1
As	<1	52	3	3	<1	<1	10
Bi	26	<3	28	5	30	<3	16
Cd	7	2	2	1	2	1	3
Co	9	9	9	7	7	<2	7
Cr	54	34	60	9	60	46	44
Cu	5	80	10	9	10	16	22
Fe(%)	0.82	4.54	1.23	0.54	0.69	1.47	1.55
Mn	2800	320	1760	510	1680	30	1180
Mo	5	2	5	<1	5	<1	3
Ni	18	28	22	17	17	8	18
Pb	22	220	22	15	19	20	53
P	260	500	320	70	210	175	256
V	22	44	24	8	24	58	31
Zn	970	840	330	82	165	810	532
Sb	5	<5	5	<5	5	<5	<5
Au	<0.02	<0.02	<0.02	<0.02	<0.02	0.02	<0.02

TABLE 2: Assays of drillcore from Reaphook Hill Zn Prospect (Method "Classic Labs ICP2).

The Wilkawillina Limestone also contains anomalous Zn in both fine and coarse-grained varieties. Four dolomite samples average 387ppm Zn (and 0.16%Mn).

Kennecott estimated that Reaphook Hill area could contain 2 million tonnes of ore grading at 1%Zn and 5%Mn (McNeil, 1967). Stream sediment and rock chip data (Fig.4) suggest that the mineralized Cambrian dolomite extends much further than the vicinity of Reaphook Hill, and anomalous Zn values have been recorded in the Freshwater Gap area.

7. CONCLUSIONS

A combination of BHP and older drilling suggests that the licence area is underlain by at least 70m of Tertiary and Quaternary sediments, except for immediately adjacent to outcrops of Cambrian and Proterozoic rocks. There is no evidence that basement rocks are shallower in the vicinity of aeromagnetic lineaments. There is no geochemical evidence for secondary dispersion within the cover sequence from a buried deposit. Thus the potential for an open-pittable gold resource within Cambrian or Proterozoic rocks is deemed to be negligible.

The Reaphook Hill Zn occurrence is of substantial extent, although it has not been fully delineated. Apart from supergene enrichment at surface, grades are low (generally <1%), and associated with secondary manganese oxide.

These results do not warrant additional work at this time and therefore the licence has been relinquished.

8. EXPENDITURE

Total expenditure to the end of March 1992 totalled $58,002:

Geology and Geophysics	Sample Analysis	$ 1,500
	Samples Bags etc.	$ 1,002
	Maps etc.	$ 392
Drilling	Rig Hire	$29,198
	Hire of Water Truck	$ 571
Logistics	Salaries & Wages	$16,476
	Transport & Accom.	$ 3,426
Office	Miscellaneous	$ 188
Tenement Fees		$ 6,251

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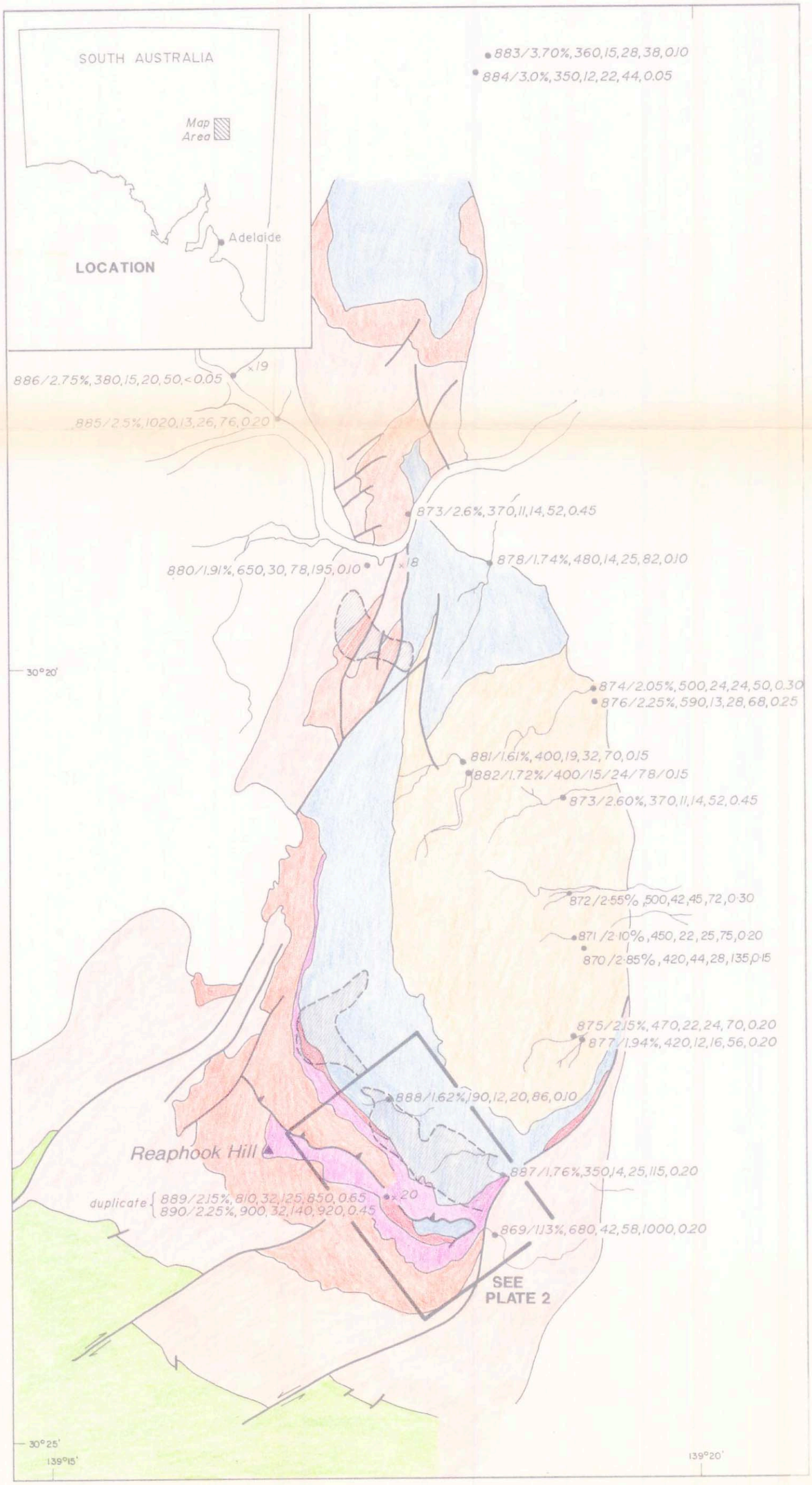
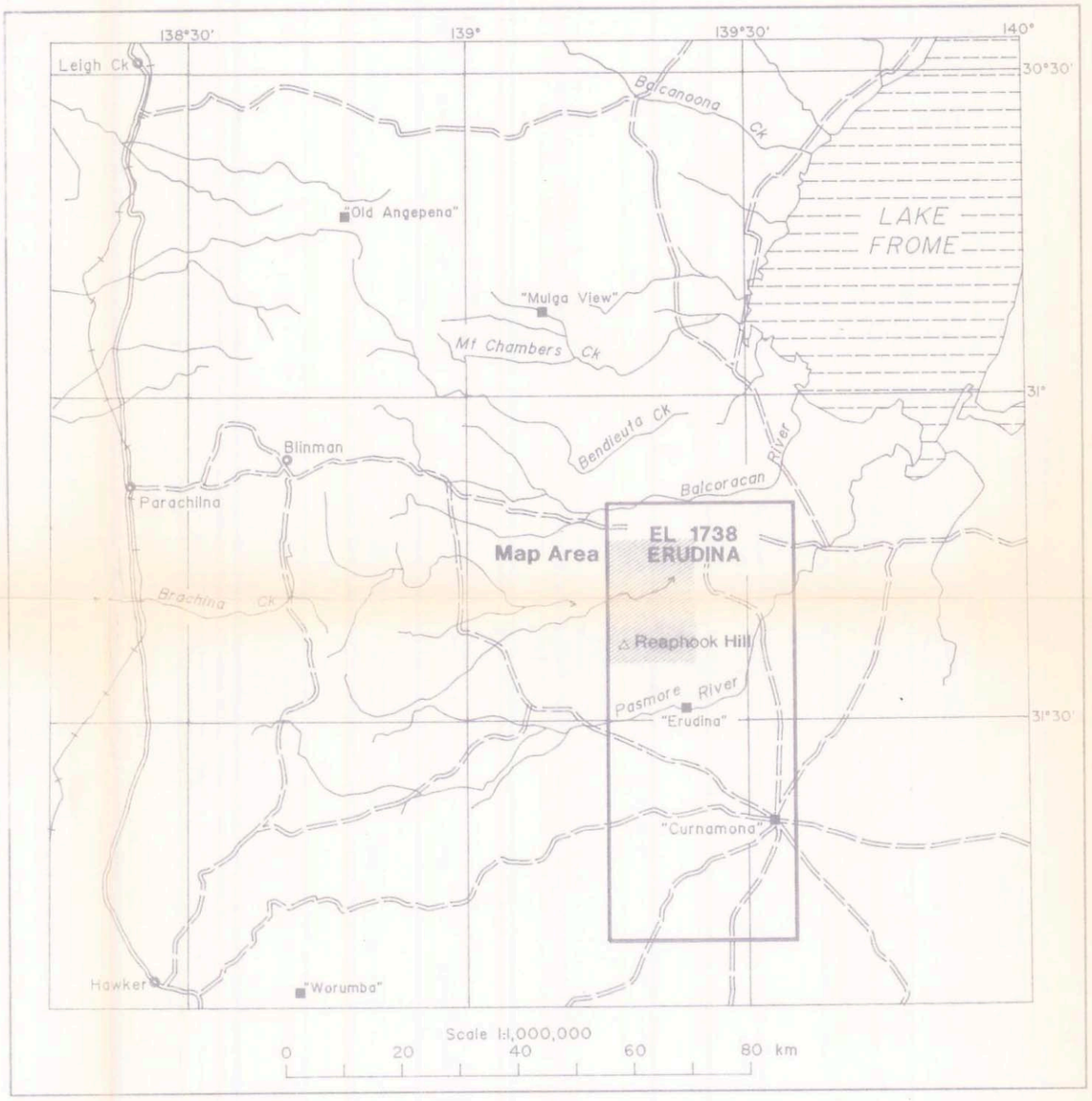




Scree and Alluvium

Billy Creek Formation

Wilkawillina Limestone

Parachilna Formation

Geology after Kennecott Exploration

Pound Quartzite (Upper member)

Pound Quartzite (Lower member)

Wonoka Formation

Bunyeroo Formation

888/1.62%,190,12,20,86,0.10 • Stream Sediment BLEG Sample (prefix 'DC') Location and Result (sample number/Fe,Mn,Cu,Pb,Zn,Au) (all units ppm, except Au in ppb)

20× Rock Chip Sample Location (prefix 'PC')

Areas of Zinc Anomalism (Zn > 200ppm) in stream sediments

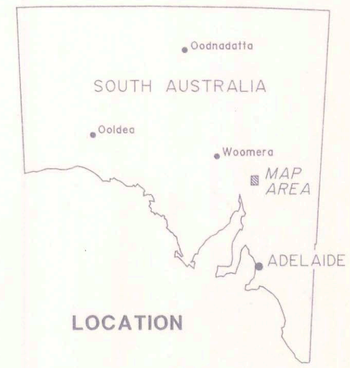
8501-1

BHP Minerals Limited
A.C.N. 008 694 782

EL 1738, ERUDINA, S.A.
REAPHOOK HILL AREA
GEOLOGY and GEOCHEMISTRY

Prepared : A. Wilde	Date : April 1992	PLATE 1
Drawn : F. Barlow	Revised :	
Centre : Melbourne	Drg No : A2-1792	

337000E
338000E
339000E
6527000N
6526000N
6525000N



LOCATION

LEGEND

RECENT		Scree
LOWER CAMBRIAN		Wilkawillina Limestone
		Parachilna Formation
PROTEROZOIC		Pound Quartzite *White Member*
		Red Member
		Wonoka Formation
		Mn, Fe rock

Fault - definite
Fault - position approximate
Fault - inferred

Geological boundary
Geological boundary - inferred

Axis of anticline
Axis of syncline

10 Dip and strike of bedding

o5 • 2 Diamond drill hole; Percussion drill hole

Bulldozed trench

42 10 Linear chip samples with Zn content (%)

73/9·1 • Chip samples, sample number / % Zn results (Prefix 'RPH')

Scale 1 : 5000
0 200 400 m
AMG Zone 54

BHP Minerals Limited
A.C.N. 008 694 782

EL 1738, ERUDINA, S.A.

GEOLOGY & ROCKCHIP GEOCHEMISTRY

(After Kennecott, 1967)

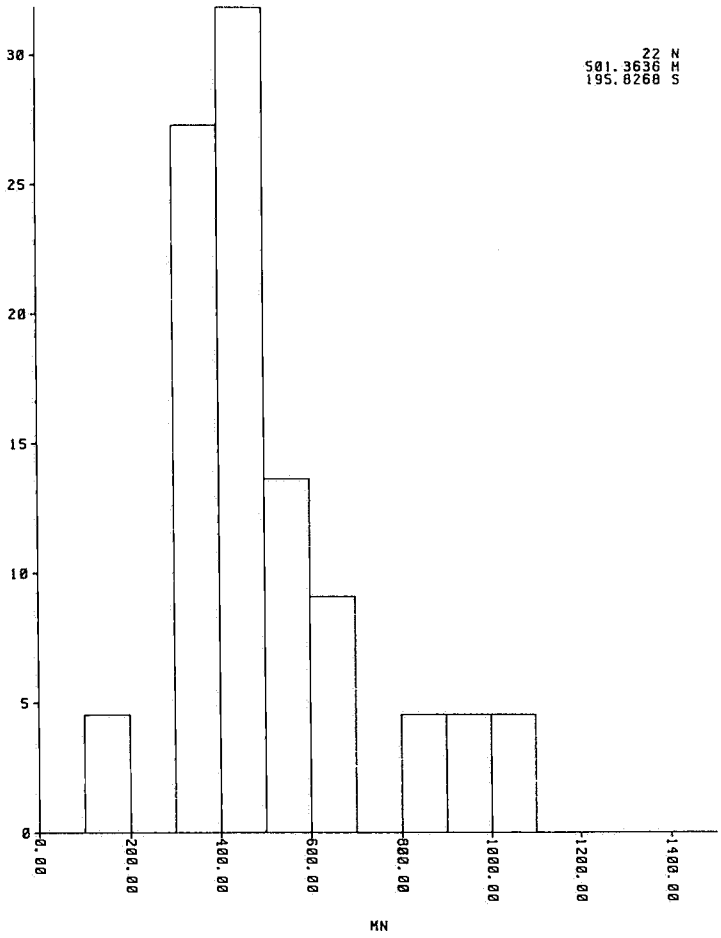
Prepared : A. Wilde	Date : March 92	PLATE 2
Drawn : F. Barlow	Revised :	
Centre : Melbourne	Drg No : AI-2515	

8501-2

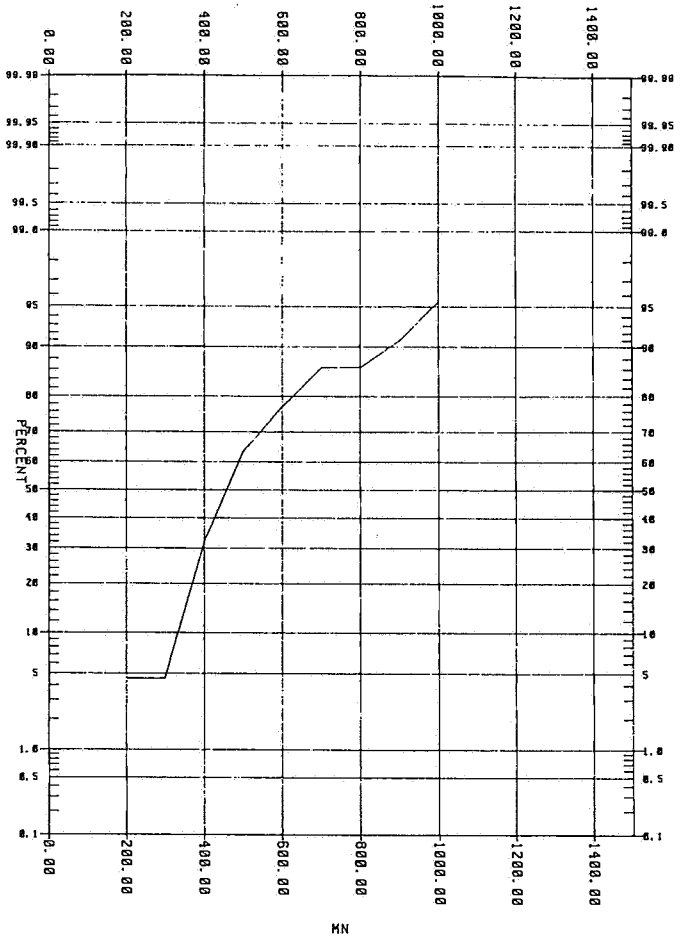
APPENDIX 1

STATISTICAL ANALYSIS OF STREAM SEDIMENT DATA

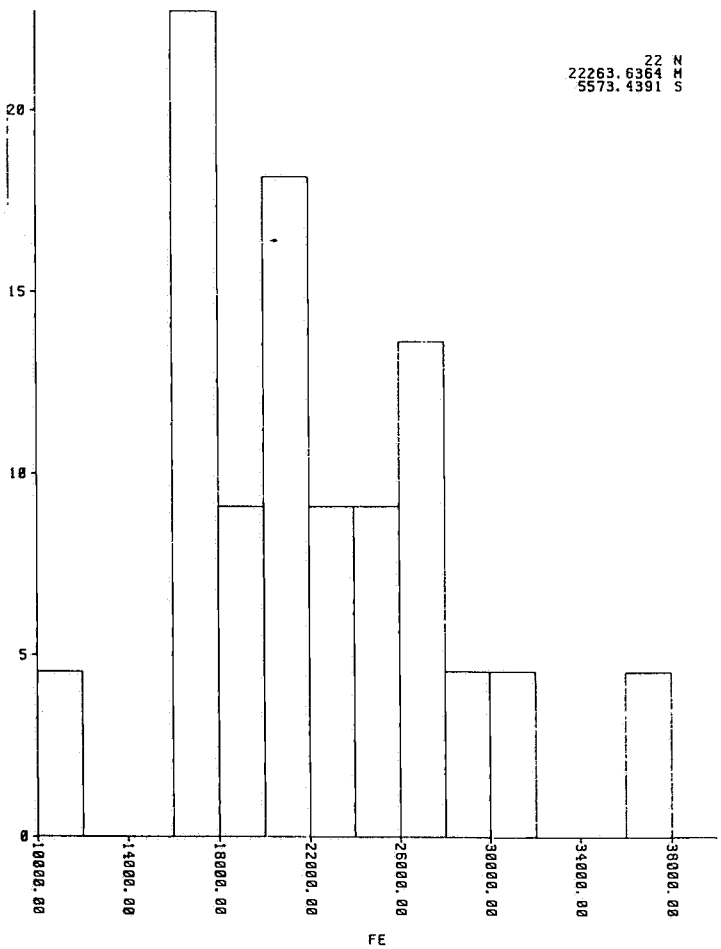
HISTOGRAM - MANGANESE



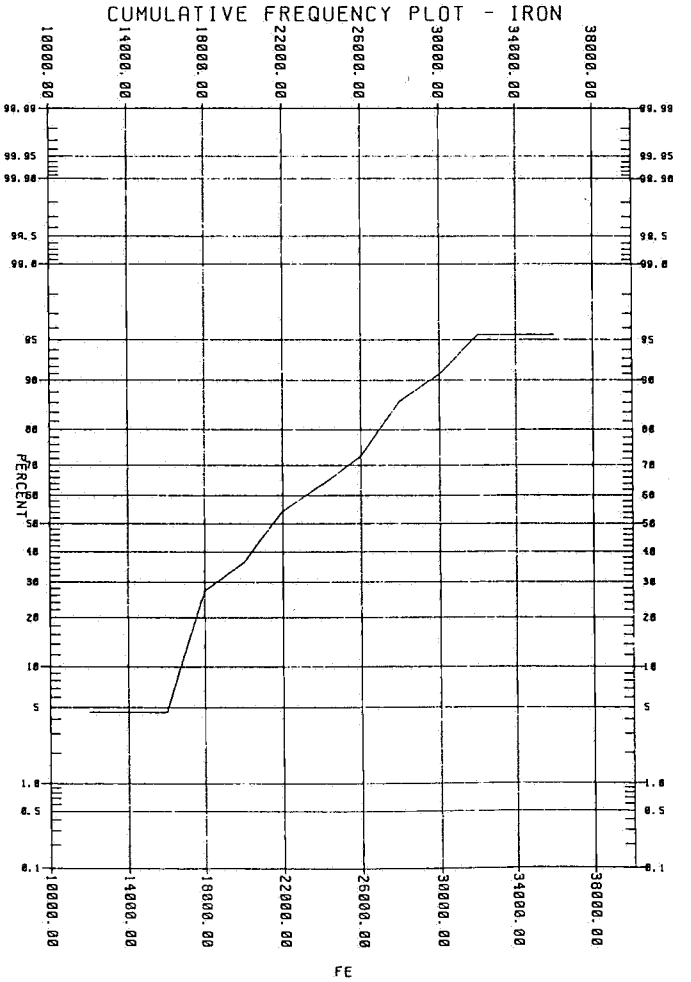
CUMULATIVE FREQUENCY PLOT - MANGANESE



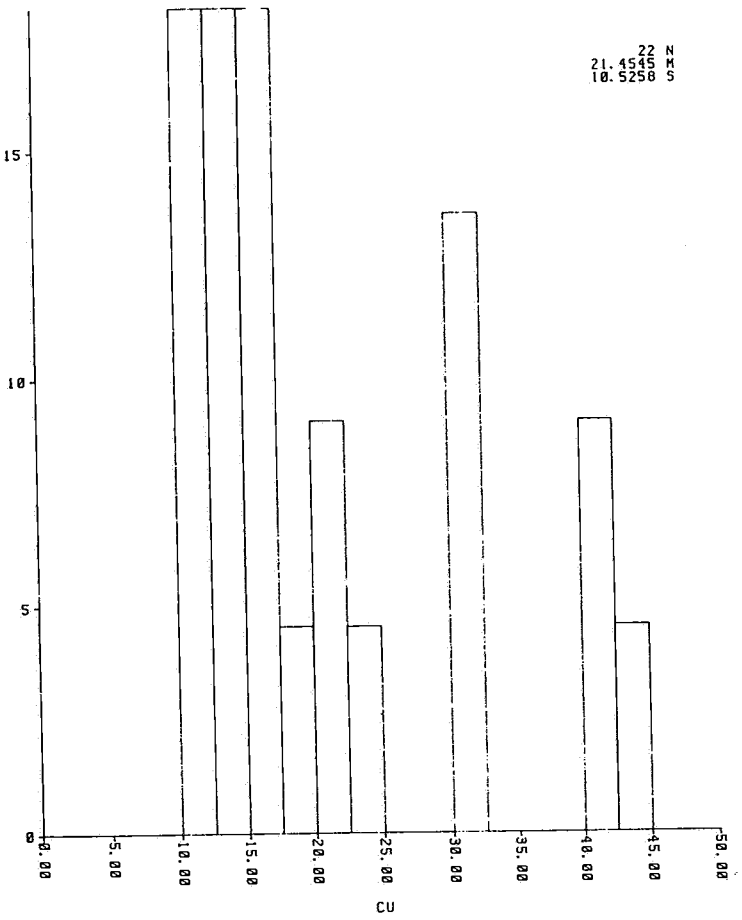
HISTOGRAM - IRON



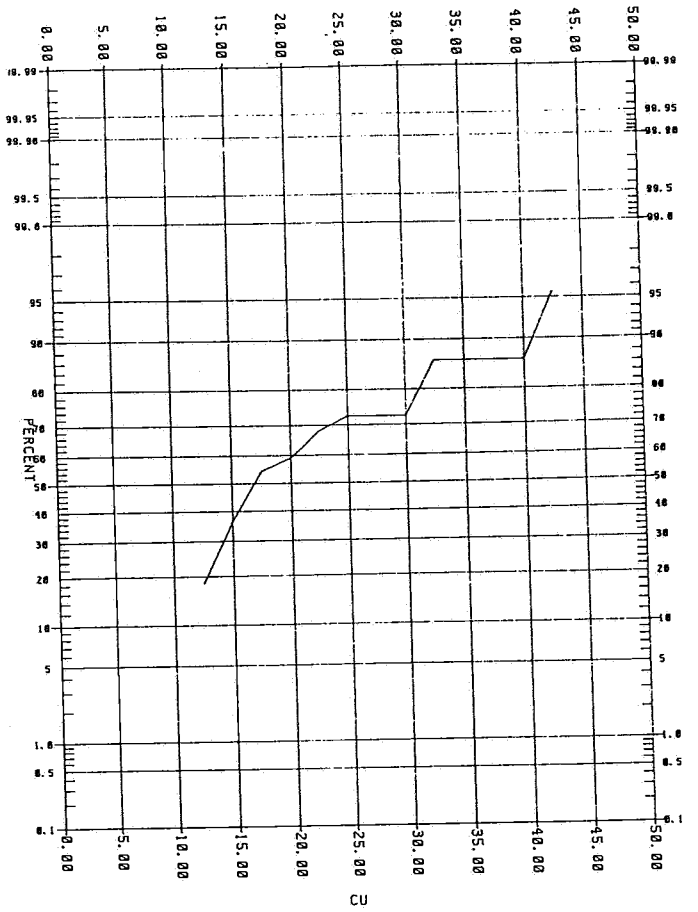
CUMULATIVE FREQUENCY PLOT - IRON



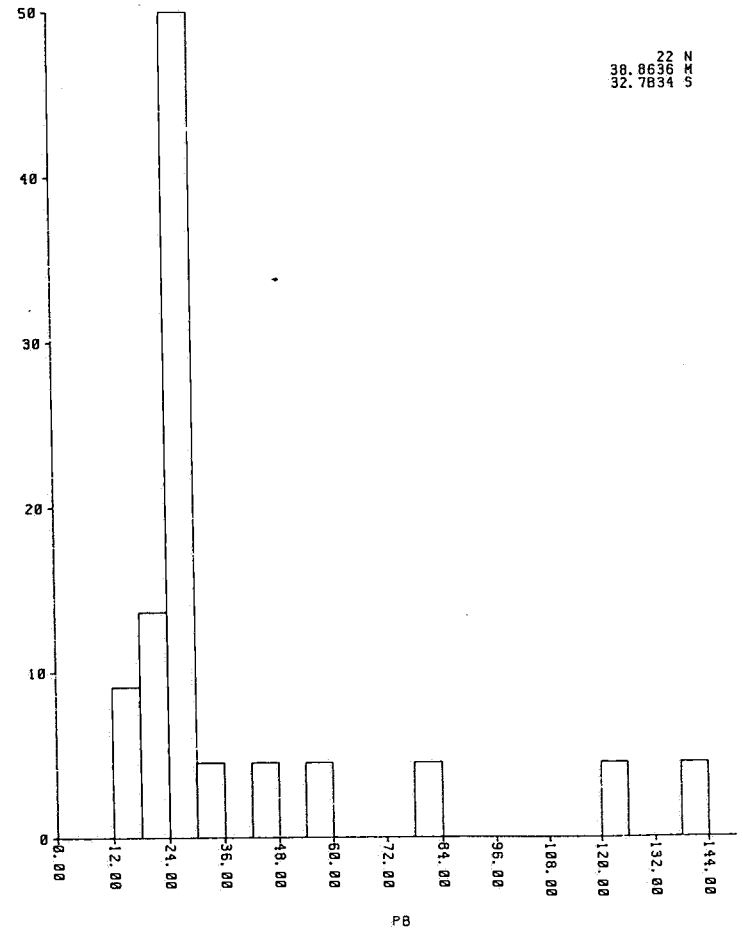
HISTOGRAM - COPPER



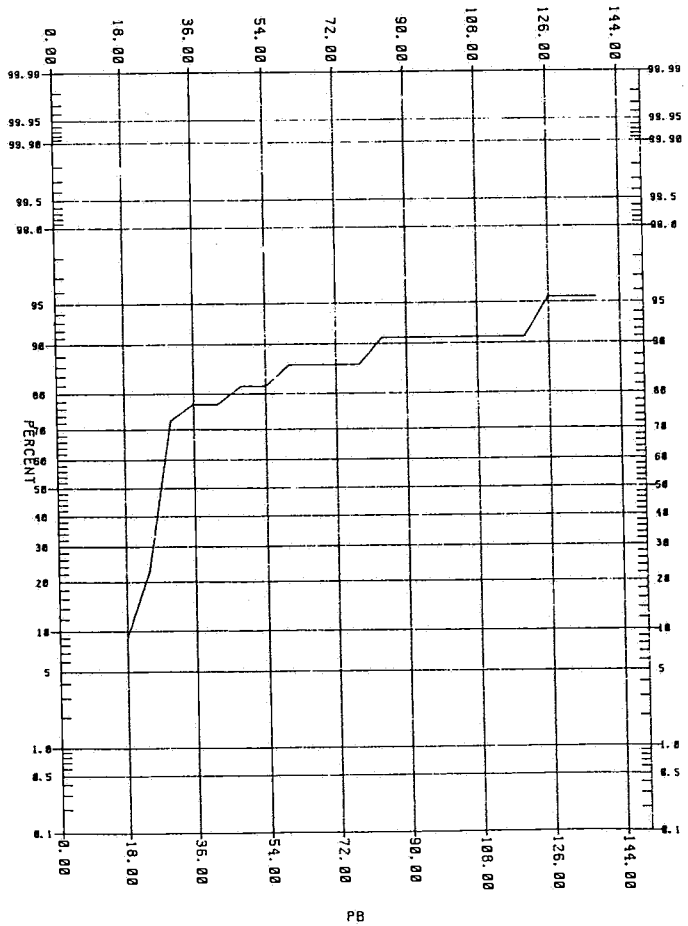
CUMULATIVE FREQUENCY PLOT - COPPER



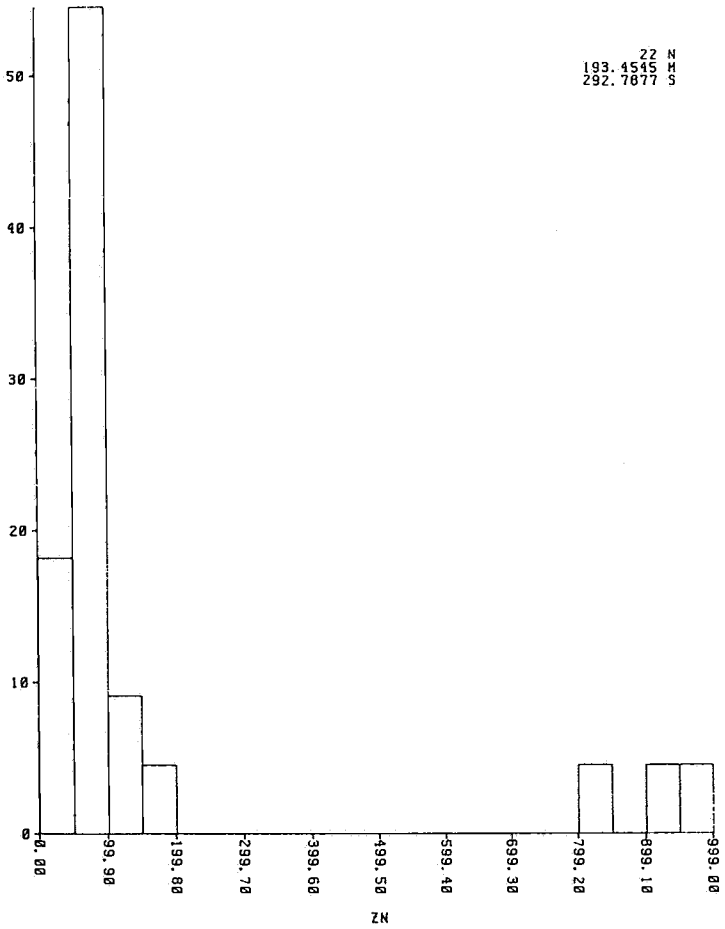
HISTOGRAM - LEAD



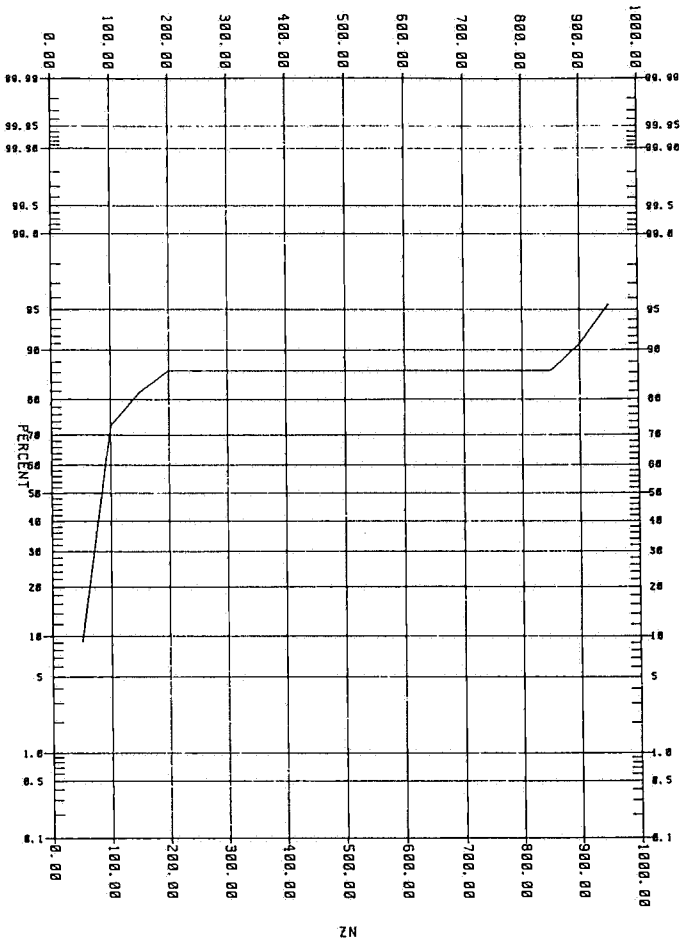
CUMULATIVE FREQUENCY PLOT- LEAD



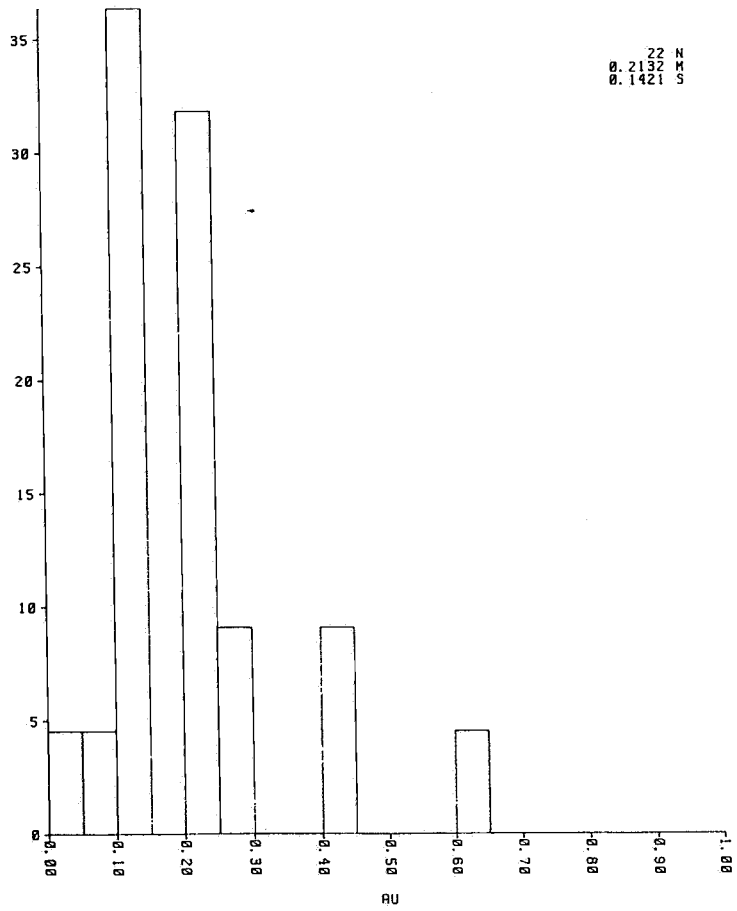
HISTOGRAM - ZINC



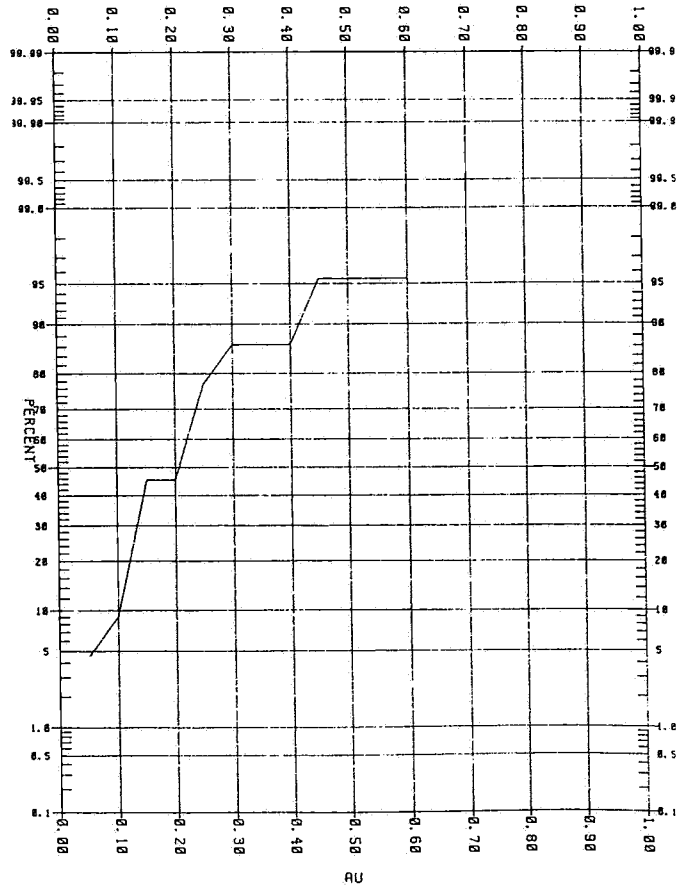
CUMULATIVE FREQUENCY PLOT - ZINC



HISTOGRAM - GOLD



CUMULATIVE FREQUENCY PLOT - GOLD



APPENDIX 2

DRILL LOGS - BHP DRILLING

Abbreviations:-

CALC - Calcrete
CLAY - Unconsolidated clay
SAND - Unconsolidated sand
SILT - Unconsolidated silt
PEBB - Pebbles
GRAV - Gravel

WA GOLD RAB/RC DRILL LOG SHEET

BHP GOLD MINES

SH. 1 OF 1 HOLE No. EDP92 1

PROJECT ERUDINA AREA FLINDERS RANGES 1:250,000 SH. CURNAMONA 1: SH. LOGGED BY A. WILDE

JOB No. FKS (LOCAL / AMG) COLLAR CO ORDS 139° 29.97' E 31° 45.56' S N RL N/D (LOCAL / MAG) AZIMUTH — DIP 90° HOLE DEPTH 48° m WATER TABLE DEPTH — m

DATE 23.2.92 CONTRACTOR A & J DRILLING RIG GERRYBILT 1 LAB. and GEOCHEM. REPORT Nos.

AGE	GRAPHIC LOG	DRILLED INTERVAL FROM	TO	BRACKET	SAMPLE NUMBER METRE COMPOSITE	METRE INTERVAL	ROCK TYPE MAJOR	q1	q2	MINOR	q	WEATHERING	COLOUR L	HUE	MAJOR ROCK TYPE MINERALS DECREASING 1	2	3	4	SULPHIDES TYPE	%	% VEIN QTZ	COMMENTS	ANALYSES (SHOW UNITS)
		0	2				CALC			CLAY			5	RO	CB	CY	FE						
		2	4				SAND			PEBB			5	RO	Q2	FE						PEBBS = FRTGS. WHITE QUARTZITE, SAND	
		4	6				SAND			PEBB			5	RO	Q2	FE						COARSE WELL-SORTED, WELL ROUNDED	
		6	8				SAND			PEBB			5	RO	Q2	FE							
		8	10				SAND						5	OR	Q2	FE	PL						
		10	12				SAND			CLAY	PJ		5	OR	Q2	CY	FE						
		12	14				CLAY	PJ		SAND			5	OR	CY	Q2	FE					CLAY AS PELLETS	
		14	16				SAND			CLAY			5	OR	Q2	CY	FE						BLADE
		16	18				CLAY	PJ		SAND			5	OR	Q2	FE	CY						
		18	20				GRN			SAND			5	OR	Q2	FE	CY					POLYMICT: PURPLE MICACEOUS MUDSTONE,	
		20	22				SAND			GRN			7	O	Q2	FE	CY					QUARTZITE ETC.	
		22	24				SAND			GRN			7	O	Q2	FE	CY						
		24	26				SAND			GRN			7	OR	Q2	FE						FINE AT TOP, COARSE AT BASE.	
		26	28				SAND						6	OR	Q2	FE						GRAVEL PROBABLE CAVINGS.	
		28	30				SAND			CLAY	PJ		6	OR	Q2	CY	FE						
		30	32				CLAY	PJ		SAND			6	OR	CY	Q2	FE						
		32	34				CLAY	PJ		SAND			6	OR	CY	Q2	FE						
		34	36				CLAY	PJ		SAND			6	OR	CY	Q2	FE	G	Y			LIGHT GREY CLAY WITH	
		36	38				CLAY	PJ		SAND			5	OR	CY	FE	Q2					FERRUGINISATION LOCALLY	
		38	40				CLAY	PJ		SAND			5	OR	CY	FE	Q2					MINOR FINE SAND & SILT	
		40	42				CLAY	PJ					6	O	CY	FE							MRCORE
		42	44				CLAY	PJ					6	O	CY	FE							
		44	46		BG9815		CLAY	PJ					6	O	CY	FE							MRCORE +H2O
		46	48				CLAY	PJ					6	O	CY	FE							
					HOLE ABORTED AS BIT BLOCKED BY SWELLING CLAYS.																			

BHP-UTAH MINERALS INTERNATIONAL JP 3 90

q = rock type qualifier

FOR REFERENCE SEE DRILL LOG CODING SHEET WAG 1, JAN 1990

0956

BHP GOLD MINES

WA GOLD RAB/RC DRILL LOG SHEET

SH. 1 OF 2 HOLE No. EBP92-2

PROJECT ERUDINA AREA RUNDERS RA. 1:250,000 SH. CURNAMONA 1: SH. LOGGED BY A.WILDE

JOB No. FKS COLLAR CO ORDS (LOCAL/AMG) 139° 32.51' E 31 47.97' S RL N/D AZIMUTH (LOCAL/MAG) DIP 90° HOLE DEPTH 70 m WATER TABLE DEPTH N/D m

DATE 23/2/92 CONTRACTOR A & J RIG GERRYBUILT 1 LAB. and GEOCHEM. REPORT Nos.

AGE	GRAPHIC LOG	DRILLED INTERVAL FROM	TO	BRACKET	SAMPLE NUMBER METRE COMPOSITE	METRE INTERVAL	ROCK TYPE MAJOR	q1	q2	MINOR	q	WEATHERING	COLOUR L	COLOUR HUE	MAJOR ROCK TYPE MINERALS DECREASING 1	2	3	4	SULPHIDES TYPE	SULPHIDES %	%VEIN QTZ	COMMENTS	ANALYSES (SHOW UNITS)
		0	2				GRAV			CLAY			7	I	QZ	CY	FE	CB				CLAY = RED BROWN GRN = QTZ FRAGS MAINLY. MINOR CONCRETE (<1%)	
		2	4				CLAY	PJ					5	R	O	CY	FE	CB				RED-BROWN FIRM CLAY FRAGS TO 1cm + RARE CONCRETE FRAGS.	
		4	6				CLAY	PJ		GRAV			5	R	O	CY	FE	QZ					
		6	8				CLAY	PJ					5	R	O	CY	FE					CLAY AS ABV. SAND - QZ FRAGS + IRONSTONE POLLETS	
		8	10				SAND			CLAY			5	Y	O	QZ	FE	CY	GY			BOM. CLAY AS POLLETS, LT GREY INSIDE, RED OUT. SAND VF - F. MINOR CLAY ONLY GYPSUM 2% OF SAMPLE AS THIN PLATES	
		10	12				SILT			SILC			6	Y	W	QZ	FE					SILT W MINOR GREENISH WH ? SILCRETE FRAGS.	
		12	14				CLAY			SILT			5	R	O	CY	FE	QZ				RED OCCSY CLAY, MINOR QZ SAND + SILT	
		14	16				CLAY			SILT			5	R	O	CY	FE	QZ				AS ABV. MARKED CHANGE IN COLOUR OF SAMPLE.	
		16	18				CLAY						5	E	O	CY	FE					CLAY DARKER THAN SEEN IN FIRST HOLE. MAY BE LOWER NAMBA ?? CLAY FIRM, NOT STICKY !!	BLADE
		18	20				CLAY	CS					5	E	O	CY	FE					FLATTISH FRAGS OF CLAY W BLACK CARBONA CEOUS PATCHES. PENETRATION RATE DECLINING	
		20	22				CLAY	CS					5	E		CY	FE					CARB PATCHES ~1-2% 1mm DIAMETER.	
		22	24				CLAY			SNST			7	W	I	CY	FE	QZ				AS ABV. PATCHES OF ORANGE/YELLOW OR RED CLAY. ~1-2% RED & BROWN F. SNST. CLAY AS ABV. BUT FEW OR DIFFERENT FRAGS.	
		24	26				CLAY						5	R	E	CY	FE						
		26	28				CLAY						5	E	R	CY	FE					AS ABV PELLETS OF CLAY TO 2-3cm. PALER THAN ABOVE.	
		28	30				CLAY						5	E	R	CY	FE						
		30	32				CLAY						5	E	R	CY	FE					RARE SD GRAINS	
		32	34				CLAY						5	E	Q	CY	FE						
		34	36				CLAY						6	R	O	CY	FE					INCR. IN IRON CHANGE TO ARGORE. MARKED COLOUR CHANGE	
		36	38				CLAY						6	R	O	CY	FE					TRACE V. FINE SAND OR SILT. CLAY STICKY.	
		38	40				CLAY						6	R	O	CY	FE						
		40	42				CLAY						6	R	O	CY	FE					TRACE PLATY MIN (<1%) POSS MICA.	
		42	44				CLAY						6	R	O	CY	FE					CLAY RUNNING UP IN BIT. START WATER INJECTION	
		44	46				CLAY						6	O	R	CY	FE					EXTREMELY STICKY - POSS ADD TO WATER INJECTION	
		46	48				CLAY						6	O	R	CY	FE					VIRTUALLY NO COARSE CLASTIC MATERIAL FROM SD.	A/CORE +H_2O
		48	50				CLAY						6	O	Y	CY	FE						
		50	52				CLAY						6	O	Y	CY	FE						
		52	54				CLAY						6	O	Y	CY	FE						
		54	56				CLAY			SAND			6	O	Y	CY	FE					TRACE COARSE ANG QTZ SAND.	

BHP-UTAH MINERALS INTERNATIONAL JP 3-90

q = rock type qualifier

4503

BHP GOLD MINES

WA GOLD RAB/RC DRILL LOG SHEET

SH. 2 OF 2 HOLE No. EDP 92/2

PROJECT _____ AREA _____ 1:250,000 SH. _____ 1: _____ SH. _____ LOGGED BY _____

JOB No. _____ COLLAR CO ORDS (LOCAL/AMG) 139°32.5'E 31 47.97'S/N RL _____ AZIMUTH (LOCAL/MAG) _____ DIP _____ HOLE DEPTH _____ m WATER TABLE DEPTH _____ m

DATE _____ CONTRACTOR _____ RIG _____ LAB. and GEOCHEM. REPORT Nos. _____

AGE	GRAPHIC LOG	DRILLED INTERVAL FROM	TO	BRACKET	SAMPLE NUMBER 6 METRE COMPOSITE	METRE INTERVAL	ROCK TYPE MAJOR	q1	q2	MINOR	q	WEATHERING	COLOUR L	HUE	MAJOR ROCK TYPE MINERALS DECREASING 1	2	3	4	SULPHIDES TYPE	%	%VEIN QTZ	COMMENTS	ANALYSES (SHOW UNITS)	
		56	58				CLAY			SAND			6	EI	CY	FE	QZ						MINOR (<5%) FE-COATED ANG. QTZ GRAINS		
		58	60				CLAY			SAND			6	EY	CY	FE	QZ						PROPN OF QTZ INCREASING		
		60	62				CLAY			SAND			6	EY	CY	FE	QZ						DARKER ?Fe COATED GRAINS. (>75%) MORE QTZ, INC ANG MILKY WHITE FRAGS ?		
		62	64				SAND			CLAY			6	YE	QZ	CY	FE						QTZ MED. WELL RD TO SUB RD, GOOD SORTING.		
		64	66				CLAY			SAND			6	IE	QY	FE	QZ						PASSED THRO. RESISTANT LAYER DOMINED BY PURPLE Fe-COATED ? ~~SANDSTONE~~ * CLAYEY PKG GREY, ? FERRICRETE		
		66	68		BG9816		CLAY						7	E									MARKED COLOUR CHANGE. DOM. WHITE-GY STICKY CLAY V. LITTLE SAND-SIZED FRAGS.		
		68	70				CLAY						7	E									TRACE COARSE SAND-SIZED MATERIAL		

BHP-UTAH MINERALS INTERNATIONAL JP 3 90

q = rock type qualifier

EDP 92/2 0058

WA GOLD RAB/RC DRILL LOG SHEET

BHP GOLD MINES

SH. 1 OF 2 HOLE No. EDP92-3

PROJECT ERUDINA AREA FLINDERS RA. 1:250,000 SH. PARACHILNA 1:100,000 SH. ERUDINA LOGGED BY A. WILDE

JOB No. FK5 COLLAR CO ORDS (LOCAL/AMG) 139° 26.03' E 31° 48.66'S RL N/D AZIMUTH (LOCAL/MAG) — DIP 90° HOLE DEPTH 62 m WATER TABLE DEPTH 46 m

DATE 24.2.92 CONTRACTOR A.J DRILLING RIG GERRYBILT-1 LAB. and GEOCHEM. REPORT Nos.

AGE	GRAPHIC LOG	DRILLED INTERVAL FROM	TO	BRACKET	SAMPLE NUMBER METRE COMPOSITE	METRE INTERVAL	ROCK TYPE MAJOR	q1	q2	MINOR	q	WEATHERING	COLOUR L	HUE	MAJOR ROCK TYPE MINERALS DECREASING 1	2	3	4	SULPHIDES TYPE	%	%VEIN QTZ	COMMENTS	ANALYSES (SHOW UNITS)
		0	2				CLAY			GRAV		6	R	U	CY	QZ	FE				PEBBLES OF QUARTZ & SILCRETE ALSO.	
		2	4				GRAV			CLAY		6	I		QZ	CY	FE				ALSO GREY MDST, VN QTZ, QZIT PEBB.	
		4	6				CLAY			SILC		6	Y	U	CY	FE	QZ				SILCRETE 1-2%.	
		6	8				PEBB			GRAV		6	Y	U	QZ	CY	FE				FLAT MUDSTONE PEBBS, OCC QZIT, VN QTZ	RAB
		8	10				CLAY			PEBB		6	Y	U	CY	QZ	FE				WATER INJECTED	
		10	12				GRAV			SAND		6	Y	U	QZ	FE	CY	GY			SUCROSIC QZIT ± SILCRETE + VN QTZ	
		12	14				GRAV			CLAY		6	O	W	QZ	CY	FE				WHITE OR BRICK RED, V HARD, QZTIC? SILC.	
		14	16				GRAV			CLAY		6	O	W	QZ	CY	FE				POSSIBLY SEVERAL DISCRETE HARD	
		16	18				GRAV			CLAY		6	O	W	QZ	CY	FE				LAYERS (NOT PEBBLES) IN CLAY	
		18	20				GRAV			CLAY		6	O	W	QZ	CY	FE				UNIT.	HAM.
		20	22				GRAV			PEBB		6	O	W	QZ	CY	FE				PEBBLES OF PURPLE SILTSTONE	
		22	24				PEBB			CLAY		6	O	W	QZ	CY	FE					
		24	26				PEBB			CLAY		6	O	W	QZ	CY	FE				WATER INJECTION.	
		26	28				PEBB			CLAY		6	O	W	QZ	CY	FE				FLAT DISCOIDAL PP. MDST.	
		28	30				SILT			CLAY		6	Y	W	QZ	CY	FE					
		30	32				SILT			CLAY		6	Y	W	QZ	CY	FE				MINOR GRAV ?CAVINGS	
		32	34				SAND			CLAY		6	Y	G	QZ	FE	CY				COARSE SAND, QTZ COATED W. GOETHITE	
		34	36				SAND			CLAY		6	Y	G	QZ	FE	CY					
		36	38				SAND			CLAY		6	Y	G	QZ	FE	CY					
		38	40				SAND			CLAY		6	Y	G	QZ	FE	CY					A/CORE
		40	42				SAND			CLAY		6	Y	G	QZ	FE	CY				FINE-MED, SUB-RD - RD, WELL SORTED	
		42	44				SAND			CLAY		6	Y	G	QZ	FE	CY					
		44	46				SAND			CLAY		6	Y	G	QZ	FE	CY				RUNNING SAND (? AQUIFER?)	
		46	48				SAND			CLAY		6	Y	O	QZ	FE	CY				SOME PALE GREY PLASTIC CLAY.	
		48	50				CLAY			SAND		6	Y	O	QZ	CY	FE					
		50	52				CLAY			SAND		6	Y	O	QZ	CY	FE					
		52	54				CLAY					6	Y	O	CY	QZ	FE				STICKY PALE-GREY CLAY.	
		54	56				SAND			CLAY		6	Y	O	QZ	CY	FE				SAND - CAVING?	

BHP - UTAH MINERALS INTERNATIONAL JP 3 90

q = rock type qualifier

6540

BHP GOLD MINES

WA GOLD RAB/RC DRILL LOG SHEET

SH. OF HOLE No. EDP92-3

PROJECT _____ AREA _____ 1:250,000 SH. _____ 1: _____ SH. _____ LOGGED BY ARW

JOB No. _____ COLLAR CO ORDS (LOCAL / AMG) _____ E _____ N RL _____ AZIMUTH (LOCAL / MAG) _____ DIP _____ HOLE DEPTH _____ m WATER TABLE DEPTH _____ m

DATE _____ CONTRACTOR _____ RIG _____ LAB. and GEOCHEM. REPORT Nos. _____

AGE	GRAPHIC LOG	DRILLED INTERVAL FROM	DRILLED INTERVAL TO	BRACKET	SAMPLE NUMBER 6 METRE COMPOSITE	SAMPLE NUMBER METRE INTERVAL	ROCK TYPE MAJOR	ROCK TYPE q1	ROCK TYPE q2	ROCK TYPE MINOR	ROCK TYPE q	WEATHERING	COLOUR L	COLOUR HUE	MAJOR ROCK TYPE MINERALS DECREASING 1	2	3	4	SULPHIDES TYPE	SULPHIDES %	% VEIN QTZ	COMMENTS	ANALYSES (SHOW UNITS)	
		56	58		1		CLAY						6	YG	CY	FE								
		58	60		BG9817		CLAY			SAND			6	YG	OY	QZ	FE					PROB. CONTAMINATED BY CAVING SAND		
		60	62				CLAY			SAND			6	YG	CY	QZ	FE					" " " "		
					HOLE ABORTED DUE TO PROBLEMS WITH CAVING SAND																			

BHP - UTAH MINERALS INTERNATIONAL P 3 90

q = rock type qualifier

0900

BHP GOLD MINES

WA GOLD RAB/RC DRILL LOG SHEET

SH. 1 OF . HOLE No. EDP92-4

PROJECT ERUDINA AREA FLINDERS RANGES 1:250,000 SH. PARACHILNA 1:100,000 SH. ERUDINA LOGGED BY A. WILDE

JOB No. FKS COLLAR CO ORDS (LOCAL / AMG) 139° 24.34' E 31° 46.52' S/N RL N/D AZIMUTH (LOCAL / MAG) — DIP 90° HOLE DEPTH 70 m WATER TABLE DEPTH 60 m

DATE 25/2/92 CONTRACTOR A & J DRILLING RIG GERRYBILT-1 LAB. and GEOCHEM. REPORT Nos.

AGE	GRAPHIC LOG	DRILLED INTERVAL FROM	TO	BRACKET	SAMPLE NUMBER: METRE COMPOSITE	METRE INTERVAL	ROCK TYPE: MAJOR	q1	q2	MINOR	q	WEATHERING	COLOUR: L	HUE	MAJOR ROCK TYPE MINERALS DECREASING: 1	2	3	4	SULPHIDES: TYPE	%	%VEIN QTZ	COMMENTS	ANALYSES (SHOW UNITS)
QUATERNARY		0	2				CALC			CLAY			7	I	CB	CY	FE	QZ				CALC - PINK BN. MSO: ANG QTZ - IRONSTONE (SIMILAR TO INTERVAL IN EDP92-3, AT DEPTH) GRN-SIZED WHITE OR PINK FG SILC FRAGS.	
		2	4				GRAV			CLAY			7	I	QZ	FE	CY						
		4	6				GRAV			CLAY			7	I	W	QZ	FE	CY					
		6	8				GRAV			CLAY			7	I	W	QZ	FE	CY				OCC FRAGS OF ANG. QTZ & PP. ? IRONSTONE	
		8	10				GRAV			CLAY			7	I	W	QZ	FE	CY				(PROB DERIVED FROM PROTEROZOIC	
		10	12				CLAY			SILT			7	Y	O	CY	FE	QZ				OCC SILCRETE FRAGS	RAB
		12	14				CLAY			SILT			7	B		CY	FE	QZ				DARKER CLAY WITH CRUMB STRUCTURE	
		14	16				CLAY			SILT			7	B	O	CY	QZ	FE					
		16	18				CLAY			SILT			7	B	D	CY	QZ	FE					
		18	20				SAND			SILT			7	B	R	QZ	CY	FE				QUARTZ > 95%. MSO ROCK FRAGS. FINE-GD POORLY SORTED, ROUNDED TO SUB-ANG.	
		20	22				SAND						7	R	B	QZ	FE	CY				OCC COARSE PEBBLES OF IRONSTONE — CAVING!	
		22	24				SILT			SAND			7	Y	B	QZ	FE	CY				FINE GD, POORLY SORTED, RD/SUB-ANG. SOME SILCRETE - PROB. CAVINGS	
		24	26				CLAY			SILT			6	Y	E	CY	QZ	FE				SAND FINE. POORLY SORTED, SUB-ANG TO RD.	
		26	28				SAND			SILT			6	Y	E	QZ	CY	FE				WHITE-GRY OR ORANGE DRY, CRUMBY CLAY. SILCRETE PROB. CAVING FROM UPPER HOLE.	
		28	30				GRAV			CLAY			6	Y	B	QZ	CY	FE				SAND, FG-ML. OCC FRAGS OF SILCRETE, MOST PROB WATER INJECTION.	
		30	32				CLAY			SAND			6	Y	B	CY	FE	QZ				WHITE, SUCROSIC, FINE-GRAINED SILC.	AIRCORE
		32	34				GRAV			CLAY			6	Y	B	QZ	CY	FE				MSO ORANGE FE-CEMTD ? SILCRETE. SAND SIZE. C. WHITE STICKY CLAY. OCC COARSE QTZ FRAGS.	
		34	36				GRAV			CLAY			6	Y	B	QZ	CY	FE				ANG SILC FRAGS TO 1.5cm. BROWN, SUCROSIC.	
		36	38				CLAY			SILC			6	O	Y	CY	QZ	FE				CHANGE IN COLOUR MARKED — INCREASE IN % OF STICKY CLAY.	
		38	40				CLAY						6	O	Y	CY	FE						
		40	42				CLAY						6	O	R	CY	FE					CLAY VARIES FROM ORANGE-RED TO LT GREY.	
		42	44				CLAY						6	O	R	CY	FE						
		44	46				CLAY						6	O	R	CY	FE					V. SLOW DRILLING - BIT CLOGGED	
		46	48				CLAY						6	O	R	CY	FE					~1% COARSE SUB-RD FERRUG FRAGS	
		48	50				CLAY						6	O	R	CY	FE					NB CHANGE TO A/C BIT WITH NARROW ORIFICE	
		50	52				CLAY						6	O	R	CY	FE						
		52	54				CLAY						6	E	R	CY	FE					HARD GREY CLAY, ↑ FE-RICH PORTIONS GOOD RECOVERY OF CLAY CORES.	
		54	58				CLAY			SAND			6	R	Y	CY	FE	QZ				MINOR LT GREY CLAY, HARD SUB/ANG. OCC. WITH IRON STAIN FRAGS FINE - MED QTZ SD, POORLY SORTED	

TERTIARY (NAMBA)

BHP-UTAH MINERALS INTERNATIONAL JP 3 90

q = rock type qualifier

1960

WA GOLD RAB/RC DRILL LOG SHEET

BHP GOLD MINES

SH. 2 OF 2 HOLE No. EDP924

PROJECT _____ AREA _____ 1:250,000 SH. _____ 1: _____ SH. _____ LOGGED BY _____

JOB No. _____ COLLAR CO ORDS (LOCAL / AMG) _____ E _____ N RL _____ AZIMUTH (LOCAL / MAG) _____ DIP _____ HOLE DEPTH 70 m WATER TABLE DEPTH _____ m

DATE 26/2/92 CONTRACTOR _____ RIG _____ LAB. and GEOCHEM. REPORT Nos. _____

AGE	GRAPHIC LOG	DRILLED INTERVAL FROM	TO	BRACKET	SAMPLE NUMBER 6 METRE COMPOSITE	METRE INTERVAL	ROCK TYPE MAJOR	q1	q2	MINOR	q	WEATHERING	COLOUR L	COLOUR HUE	MAJOR ROCK TYPE MINERALS DECREASING 1	2	3	4	SULPHIDES TYPE	SULPHIDES %	%VEIN QTZ	COMMENTS	ANALYSES (SHOW UNITS)	
TERTIARY		58	60				CLAY						5	YW	CY	FE						DOMINANTLY FINE-GRD CLAY, MINOR FE-STAINED		
		60	62				CLAY			CLAY			5	WY	CY	FE						POOR RECOVERY, MINIMUM WATER.		
		62	64				SAND			CLAY			6	WY	QZ	FE	CY					FE-COATINGS (RED-HEM, ORANGE-GOETHITE) FINE-MED, SUBANG-RD, POORLY STD, QTZOSE OCC (W		
		64	66				SAND			CLAY			6	WY	QZ	FE	CY							
		66	68		BG9818		SAND			CLAY			6	IW	QZ	FE	CY					COMMENCING DOWN, BUT FEW > MEDIUM GD.		
		68	70				SAND			SILT			6	IW	QZ	FE	CY					MED, OCCC, QTZ, SUBANG-RD, POORLY SORTED.		

BHP-UTAH MINERALS INTERNATIONAL JP 3-90

q = rock type qualifier

2900

BHP GOLD MINES

WA GOLD RAB/RC DRILL LOG SHEET

SH. 1 OF . HOLE No. EDP92-5

PROJECT ERUDINA AREA FLINDERS RANGES 1:250,000 SH. PARACHILNA 1: 100,000 SH. ERUDINA LOGGED BY A WILDE

JOB No. FKS (LOCAL/AMG) COLLAR CO ORDS ____ E ____ N RL N/D (LOCAL/MAG) AZIMUTH — DIP 90° HOLE DEPTH 70m. m WATER TABLE DEPTH >70 m

DATE 26/2/92 CONTRACTOR A.J DRILLING RIG GOERYBILT 1 LAB. and GEOCHEM. REPORT Nos. ____

AGE	GRAPHIC LOG	DRILLED INTERVAL FROM	TO	BRACKET	SAMPLE NUMBER 6 METRE COMPOSITE	METRE INTERVAL	ROCK TYPE MAJOR	q1	q2	MINOR	q	WEATHERING	COLOUR L	COLOUR HUE	MAJOR ROCK TYPE MINERALS DECREASING 1	2	3	4	SULPHIDES TYPE	SULPHIDES %	%VEIN QTZ	COMMENTS	ANALYSES (SHOW UNITS)
1 ?QUATERNARY		0	2				CALC			CLAY		5	I		CB	FE					ROUNDED WHITE CALCRETE.	BLADE
		2	4				CLAY			CALC		6	Y	B	CY	CB	FE					
		4	6				GRAV			CLAY		6	Y	B	QZ	CY	FE				POSS. FRAGMENTED BOULDERS = ANG SILICEOUS QZIT FRAGS, OCC LARGE RD QUARTZ	
		6	8				GRAV			CLAY		6	Y	W	QZ	CY	FE					
		8	10				GRAV			CLAY		5	Y	W	QZ	CY	FE				PALE ORANGE-WHITE CLAY PINK-RED SILICEOUS QZIT = SILCRETE. MINOR ANG.	
		10	12				GRAV			CLAY		5	Y	W	QZ	CY	FE					
		12	14				CLAY			GRAV		5	Y	W	CY	FE	QZ				M.A. RARE ROUNDED FRITED QUARTZ PEBBLES.	
		14	16				CLAY					5	Y	W	CY	FE					RED-BN STICKY, CRUMBLY CLAY. TRACE QZIT GRAV.	
		16	18				CLAY					5	Y	W	CY	FE					TRACE COARSER MATERIAL.	
		18	20				CLAY					6	O	R	CY	FE					CLAY AS 1cm PELLETS	
		20	22				CLAY					6	O	R	CY	FE						
		22	24				CLAY					6	R	O	CY	FE					TRACE COARSER MATERIAL	
		24	26				CLAY			GRAV		6	R	O	CY	FE	QZ				SLI HIGHER PROP OF QZIT GRAV ? CAVINGS	
		26	28				CLAY					6	R	O	CY	FE						
		28	30				CLAY					6	R	O	CY	FE					RED-ORANGE STICKY CLAY. WATER INJECTION	
		30	32				CLAY					6	R	O	CY	FE						
		32	34				CLAY					6	R	O	CY	FE					STICKY RED-BROWN ORG BLUE-GREY CLAY. V LITTLE SILT OR COARSER MATERIAL. SLI COL VARIATION DUE TO RATIO HEM : GOETHITE.	AIR CORE
		34	36				CLAY					6	R	O	CY	FE						
		36	38				CLAY					6	R	O	CY	FE						
		38	40				CLAY					6	R	O	CY	FE						
		40	42				CLAY					6	R	O	CY	FE						
		42	44				CLAY					6	R	O	CY	FE						
		44	46				CLAY					6	R	O	CY	FE						
		46	48				CLAY					6	R	O	CY	FE						
		48	50				CLAY					6	R	O	CY	FE						
		50	52				CLAY					6	R	O	CY	FE						
		52	54				CLAY					6	R	O	CY	FE					POOR RECOVERY MAINLY WATER	
		54	56				CLAY			SAND		6	R	O	CY	FE					TR. COARSE SD-SIZE MATERIAL	

BHP-UTAH MINERALS INTERNATIONAL JP 3 90

q = rock type qualifier

FOR RECORDS

89/03

WA GOLD RAB/RC DRILL LOG SHEET

BHP GOLD MINES

SH. 2 OF 2 HOLE No. EDP92-5

PROJECT _____ AREA _____ 1:250,000 SH. _____ 1: _____ SH. _____ LOGGED BY _____

JOB No. _____ COLLAR CO ORDS (LOCAL / AMG) _____ E _____ N RL _____ AZIMUTH (LOCAL / MAG) _____ DIP _____ HOLE DEPTH _____ m WATER TABLE DEPTH _____ m

DATE _____ CONTRACTOR _____ RIG _____ LAB. and GEOCHEM. REPORT Nos. _____

AGE	GRAPHIC LOG	DRILLED INTERVAL FROM	TO	BRACKET	SAMPLE NUMBER 6 METRE COMPOSITE	METRE INTERVAL	ROCK TYPE MAJOR	q1	q2	MINOR	q	WEATHERING	COLOUR L	COLOUR HUE	MAJOR ROCK TYPE MINERALS DECREASING 1	2	3	4	SULPHIDES TYPE	SULPHIDES %	%VEIN QTZ	COMMENTS	ANALYSES (SHOW UNITS)	
		56	58				CLAY			SAND			6	RD	CY	FE	QZ					NB SAND < 2% OF TOTAL SAMPLE		
		58	60				CLAY			SAND			6	RD	CY	FE	QZ							
		60	62				CLAY			SAND			6	RD	CY	FE	QZ							
		62	64				CLAY						5	E	CY	FE						STICKY TO FIRM PALE GREY CLAY.		
		64	66				CLAY						5	E	CY	FE								
		66	68		BG9819		CLAY						5	E	CY	FE								
		68	70				CLAY						5	E	CY	FE								

BHP-UTAH MINERALS INTERNATIONAL JP 3-90

q = rock type qualifier

BHP GOLD MINES

WA GOLD RAB/RC DRILL LOG SHEET

SH. 1 OF 2 HOLE No. EDP92-6

PROJECT ERUDINA AREA FLINDERS RANGES 1:250,000 SH. PARACHILNA 1:100,000 SH. ERUDINA LOGGED BY A. WILDE

JOB No. FKS COLLAR CO ORDS (LOCAL / AMG) E N RL AZIMUTH (LOCAL / MAG) — DIP 90° HOLE DEPTH 70 m WATER TABLE DEPTH 36 m

DATE 27-2-92 CONTRACTOR A.J DRILLING RIG LAB. and GEOCHEM. REPORT Nos.

AGE	GRAPHIC LOG	DRILLED INTERVAL FROM	TO	BRACKET	SAMPLE NUMBER: METRE COMPOSITE	METRE INTERVAL	ROCK TYPE: MAJOR	q1	q2	MINOR	q	WEATHERING	COLOUR: L	HUE	MAJOR ROCK TYPE MINERALS DECREASING: 1	2	3	4	SULPHIDES: TYPE	%	%VEIN QTZ	COMMENTS	ANALYSES (SHOW UNITS)
		0	2				SILT			SAND			6	OR	Q2	FE	CY						MINOR CY. POORLY STD Q2 F/GD, SUBRD-ANG	
		2	4				GRAV			SAND			6	RP	Q2	FE	CY						FRTGS OF BOULDERS MILKY-PP Q2LT W SD.	
		4	6				CLAY			PEBB			6	RO	CY	FE	Q2						ORANGE CLAY. CA 5-10% PEBBLES & PEBB FRAGS & COARSE-GRAINED SAND PARTICLES	
		6	8				CLAY			SILT			6	RO	CY	FE	Q2						AS COARSER FRAGS	
		8	10				SILT			SAND			6	RO	Q2	FE	CY						F.SD. POORLY STD, SUB-RD-SUB-ANG, QTZ	
		10	12				PEBB			SAND			6	RO	Q2	FE	CY						WELL-RD Q2LT PEBBLES TO 3CM	
		12	14				CLAY			GRAV			6	RO	Q2	FE	CY						AS WITH ORANGE STICKY CLAY	
		14	16				SILT			CLAY			6	RO	Q2	CY	FE						MINOR F SD	
		16	18				SILT			CLAY			6	RO	Q2	CY	FE							
		18	20				SILT			CLAY			6	OR	Q2	CY	FE							
		20	22				SAND						6	OR	Q2	FE							MAINLY QTZ BUT CA 1-2% IRONSTONE. F-MD, MOD- POOR SORT, SUB-RD TO SUB-ANG	
		22	24				SAND						6	OR	Q2	FE							AS SLI COARSER OVERALL	
		24	26				SAND			CLAY			6	OR	Q2	FE	CY						QTZ SD, MOD SORTING, C-MD, RD- SUB RD OCC GEOTHITE COATINGS, IRONSTONE, 20% CLAY.	
		26	28				CLAY						6	OR	CY	FE								
		28	30				CLAY						6	OR	CY	FE							POOR SAMPLE RECOVERY	
		30	32				CLAY						6	OR	CY	FE								
		32	34				SAND						6	OR	Q2	FE							SLI INCR IN VOL OF PORRUG. FRAGS C SD, WELL RD, GOOD SORTING	
		34	36				SAND			GRAV			6	OR	Q2	FE							Q2 C-M, RD-SUB ANG, POOR SORTING, PORRUG FRAGS, FRESH WATER AT 35m. CARN ≤ 5%	
		36	38				CLAY			SAND			6	R	CY	Q2	FE						REDDISH ORG. TO GREY CLAY. CA 40% SAND	
		38	40				CLAY						6	OR	CY	FE								
		40	42				CLAY						6	OR	CY	FE								
		42	44				CLAY						6	OR	CY	FE							RED-ORANGE TO PALE GREY	
		44	46				CLAY						6	OR	CY	FE							COLOUR VARIATION REFLECTS	
		46	48				CLAY						6	OR	CY	FE							PROPN OF HEM. & GOETHITE.	
		48	50				CLAY						6	OR	CY	FE								
		50	52				CLAY						6	OR	CY	FE								
		52	54				CLAY						6	OR	CY	FE								
		54	56				CLAY						6	O	CY	FE	Q2						TRACE QUARTZ SAND	

BLADE

AIRCORE + WATER

BHP-UTAH MINERALS INTERNATIONAL JP 3 90

q = rock type qualifier

FOR RECEIPT OF ALL SAMPLES

9965

BHP GOLD MINES

WA GOLD RAB/RC DRILL LOG SHEET

SH. 2 OF 2 HOLE No. EDP92-6

PROJECT _____ AREA _____ 1:250,000 SH. _____ 1: _____ SH. _____ LOGGED BY _____

JOB No. _____ COLLAR CO ORDS (LOCAL / AMG) _____ E _____ N RL _____ AZIMUTH (LOCAL / MAG) _____ DIP _____ HOLE DEPTH _____ m WATER TABLE DEPTH _____ m

DATE _____ CONTRACTOR _____ RIG _____ LAB. and GEOCHEM. REPORT Nos. _____

AGE	GRAPHIC LOG	DRILLED INTERVAL FROM	TO	BRACKET	SAMPLE NUMBER 6 METRE COMPOSITE	METRE INTERVAL	ROCK TYPE MAJOR	q1	q2	MINOR	q	WEATHERING	COLOUR L	COLOUR HUE	MAJOR ROCK TYPE MINERALS DECREASING 1	2	3	4	SULPHIDES TYPE	SULPHIDES %	%VEIN QTZ	COMMENTS	ANALYSES (SHOW UNITS)	
		56	58				CLAY						5	O	CY	FE	QZ					TR. QTZ SAND		
		58	60				CLAY						5	OR	CY	FE	QZ					POOR RECOVERY, MINOR QTZ SD.		
		60	62				CLAY						5	OR	CY	FE						BIT BALLED - PULL RODS		
		62	64				CLAY						5	OR	CY	FE						BRICK-ROD TO LTGY CLAY		
		64	66				CLAY						5	OR	CY	FE								
		66	68		BG9820		CLAY						5	IE	CY	FE						MARKED INCREASE IN ROD		
		68	70				CLAY						5	WE	CY	FE						WT DUE TO IRON.		
													5	WE	CY	FE								

BHP-UTAH MINERALS INTERNATIONAL P 3 90

q = rock type qualifier

9903

BHP GOLD MINES

WA GOLD RAB/RC DRILL LOG SHEET

SH. 1 OF 2 HOLE No. EDP927

PROJECT ERUDINA AREA FLINDERS RANGES 1:250,000 SH. PARATHWA 1:100,000 SH. ERUDINA LOGGED BY A WILDE

JOB No. FKS (LOCAL/AMG) COLLAR CO ORDS 139° 27.49' E 31° 38.50'S/N RL N/D (LOCAL/MAG) AZIMUTH — DIP 90° HOLE DEPTH 68 m WATER TABLE DEPTH >68 m

DATE 27/2/92 CONTRACTOR A.J DRILLING RIG LAB. and GEOCHEM. REPORT Nos.

AGE	GRAPHIC LOG	DRILLED INTERVAL FROM	TO	BRACKET	SAMPLE NUMBER: METRE COMPOSITE	METRE INTERVAL	ROCK TYPE: MAJOR	q1	q2	MINOR	q	WEATHERING	COLOUR: L	HUE	MAJOR ROCK TYPE MINERALS DECREASING: 1	2	3	4	SULPHIDES: TYPE	%	%VEIN QTZ	COMMENTS	ANALYSES (SHOW UNITS)
		0	2				GRAV			SAND		6	R	O	QZ	FE						GRAV OF SUB-RD QZIT PEBBLES & C-SAND, QTZ, RD-ANG, POORLY SORTED, SOME IRONSTONE	
		2	4				GRAV			SAND		6	R	O	QZ	FE							
		4	6				SAND					6	Y	W	QZ	FE						GRAV = FRAGS OF QZIT VN QTZ & IRONSTONE PEBBS	
		6	8				GRAV			SAND		5	W		QZ	FE						C-M QTZ SAND, SUB-ANG OCC RD, POORLY SORTED V. HARD (USED HAMMER). FRAGS OF PINK QZIT ? SILCRETE. ALSO QTZ & UNMINERALISED PEBBLES.	
		8	10				GRAV			CLAY		5	W	B	QZ	FE	CY						
		10	12				CLAY			SAND		6	O	R	CY	FE	QZ					GRN NIA, ~40% BROWN PELLETS OF CLAY RG 1-2mm.	
		12	14				CLAY					6	R	O	CY	FE						ORANGE CLAY. FIRM- AS PELLETS ~1cm DIAM.	
		14	16				CLAY					6	O	R	CY	FE						NIA TRACE SAND + GRAVEL	
		16	18				CLAY					6	O	R	CY	FE						NIA TRACE SAND + GRAVEL.	
		18	20				CLAY					6	O	R	CY	FE							
		20	22				CLAY					6	O	R	CY	FE						ORANGE-BROWN CLAY AT TOP BCG PALE-GREY AT BOTTOM OCC MINOR SAND & SILT	
		22	24				CLAY					6	O	R	CY	FE							
		24	26				CLAY					6	O	R	CY	FE							
		26	28				CLAY					6	O	R	CY	FE							
		28	30				CLAY					6	O	R	CY	FE							
		30	32				GRAV			CLAY		6	O	R	CY	FE	CY					EITHER SILCRETE OR BOULDERS OF QZIT? ANG GY V MD QZITE FRAGS V ANGULAR.	
		32	34				GRAV			CLAY		6	O	R	QZ	FE	CY					NIA	
		34	36				GRAV			CLAY		6	O	R	QZ	FE	CY					POOR RECOVERY PREDOMIN FRAGS OF PEBBLES FRAGS OF VN QTZ, QZIT & FERRUG ROCK	
		36	38				GRAV			CLAY		6	O	R	QZ	FE	CY						
		38	40				CLAY					6	O	R	CY							PALE-GREY TO BRICK RED STICKY CLAY	
		40	42				CLAY					5	O		CY	FE	QZ					TRACE SAND	
		42	44				CLAY			SAND		5	O		CY	FE	QZ					CA 20-40% SAND. F-G, RD TO ANG, POORLY SORTED	
		44	46				CLAY			GRAV		5	O		CY	FE	QZ					WHITE STICKY CLAY AS ANG QZIT FRAGS TO 2cm.	
		46	48				CLAY			GRAV		5	O		CY	FE	QZ						
		48	50				CLAY			GRAV		5	O		CY	FE	QZ						
		50	52				CLAY					5	O		CY	FE						LIGHT-GREY STICKY CLAY. V. LITTLE COARSE MATERIAL	
		52	54				CLAY					5	O		CY	FE							
		54	56				CLAY					5	O		CY	FE							

BHP-UTAH MINERALS INTERNATIONAL JP 3 90

q = rock type qualifier

ANALYSES (SHOW UNITS): BLADE; HAMMER; BLADE; A RIG WITH WATER INJECTION

2900

BHP GOLD MINES

WA GOLD RAB/RC DRILL LOG SHEET

SH. 2 OF 2 HOLE No. EDP92-7

PROJECT _____ AREA _____ 1:250,000 SH. _____ 1: _____ SH. _____ LOGGED BY _____

JOB No. _____ COLLAR CO ORDS (LOCAL/AMG) _____ E _____ N RL _____ AZIMUTH (LOCAL/MAG) _____ DIP _____ HOLE DEPTH _____ m WATER TABLE DEPTH _____ m

DATE _____ CONTRACTOR _____ RIG _____ LAB. and GEOCHEM. REPORT Nos. _____

AGE	GRAPHIC LOG	DRILLED INTERVAL FROM	TO	BRACKET	6 SAMPLE NUMBER METRE COMPOSITE	METRE INTERVAL	ROCK TYPE MAJOR	q1	q2	MINOR	q	WEATHERING	COLOUR L	HUE	MAJOR ROCK TYPE MINERALS DECREASING 1	2	3	4	SULPHIDES TYPE	%	%VEIN QTZ	COMMENTS	ANALYSES (SHOW UNITS)	
		56	58				CLAY						50		CY	FE								
		58	60				CLAY						50		CY	FE								
		60	62				CLAY			SAND			50		CY	FE	QZ					CO MASS SAND = FERRUG FRITES + QTZ		
		62	64				CLAY						50		CY	FE								
		64	66		BG9821		CLAY						50		CY	FE								
		66	68				CLAY			SAND			50		CY	FE	QZ					HOLE ABORTED AS CLAY STICKING RODS.		

BHP-UTAH MINERALS INTERNATIONAL P 3 90

q = rock type qualifier

8900

BHP GOLD MINES

WA GOLD RAB/RC DRILL LOG SHEET

SH. 1 OF 2 HOLE No. EDP92-8

PROJECT ERUDINA AREA FLINDERS RANGES 1:250,000 SH. PARACHILNA 1:100,000 SH. ERUDINA LOGGED BY A. WILDE

JOB No. FKS COLLAR CO ORDS (LOCAL / AMG) 139 22.76' E 31°38.07'S (LOCAL / MAG) RL NYD AZIMUTH ____ DIP -90° HOLE DEPTH 70m m WATER TABLE DEPTH >70 m

DATE 28/2/92 CONTRACTOR A & J DRILLING RIG ____ LAB. and GEOCHEM. REPORT Nos. ____

AGE	GRAPHIC LOG	DRILLED INTERVAL FROM	TO	BRACKET	SAMPLE NUMBER: METRE COMPOSITE	METRE INTERVAL	ROCK TYPE: MAJOR	q1	q2	MINOR	q	WEATHERING	COLOUR: L	HUE	MAJOR ROCK TYPE MINERALS DECREASING: 1	2	3	4	SULPHIDES: TYPE	%	% VEIN QTZ	COMMENTS	ANALYSES (SHOW UNITS)
		0	2				CALC			CLAY			6	I	C	B	CY	FE				STICKY BROWN CLAY, CALCRETE FRAGM (RC)	
		2	4				GRAV			SAND			6	I	QZ	CY	FE	GY				M-SD SILT = CLAY MA. GRAV = MNR QZIT TO 1cm	
		4	6				GRAV			SAND			6	I	Y	QZ	CY	FE				SAND - F-M ANG - SUB ANG, RARE CLAY, ANG. PINK-WHITE QZIT FRAGS ('EX BOULDERS)	
		6	8				GRAV			CLAY			6	I	D	QZ	CY	FE				CLAY CA 40% RED-BROWN, STICKY, MOD S ANG	
		8	10				GRAV			CLAY			6	I	O	QZ	CY	FE				SILCRETE FRAGS, PINK? FELD QZITE, RD C-M SD	
		10	12				GRAV			SAND			6	O	Y	QZ	CY	FE				MA MINOR CLAY + SILT	
		12	14				SILT			SAND			6	O	Y	QZ	CY	FG				MINOR GRAV + CLAY.	
		14	16				SAND			CLAY			6	O	Y	QZ	CY	FE				MINOR CLAY + SILT	
		16	18				PEBB			SAND			6	O	Y	QZ	CY	FE				M-SD, POLYMICT, C, SUB-RD - SUB/ANG OCC MINOR UNWEATH SUB-RD PEBBLES TO 7cm ANG QZIT	
		18	20				CLAY			SAND			6	O	Y	QZ	CY	FE				COARSE SAND MA. SILT. OCC COARSER MATERIAL. BROWN STICKY CLAY ORIGINATE FLAT PELLETS	
		20	22				CLAY						6	O	R	CY	FE					TRACE SAND, SOME COARSER - PEBB CAVINGS	
		22	24				CLAY						6	O	R	CY	FE						
		24	26				CLAY						6	O	R	CY	FE						
		26	28				CLAY						6	O	R	CY	FE						
		28	30				CLAY	CB					6	O	K	CY	FE					OCC 1mm BLEBS CHAR MATERIAL	
		30	32				CLAY			SILT			6	O	K	CY	FE	QZ					
		32	34				CLAY			SILT			6	O	K	CY	FE	QZ				RED-BROWN FIRM TO STICKY	
		34	36				CLAY			SAND			6	O	W	CY	FE	QZ				CLAY. SILT + SAND IN UPPER	
		36	38				CLAY						6	O		CY	FE					PORTION < 40%	
		38	40				CLAY						6	O		CY	FE						
		40	42				CLAY						6	O		CY	FE						
		42	44				GRAV			CLAY			6	O	Y	QZ	FE	CY				ANG FRAGS OF PINK FD? QZIT. TO 1cm	
		44	46				GRAV			CLAY			6	O	Y	QZ	FE	CY				MA FRAGS GRDG POOR RECOVERY.	
		46	48				SAND						6	O	Y	QZ	FE					FUREVEINS + GOETHITE-COATED QTZ. F-MOD W GRD - SUB-RD QTZ, MOD SORTING, OCC MA SLI MORE GOETHITE COATED GNS	
		48	50				SAND						6	O	Y	QZ	FE						
		50	52				SAND			CLAY			6	O	Y	QZ	FE	CY					
		52	54				SAND			CLAY			6	O	Y	QZ	FE	CY					
		54	56				CLAY						6	R	O	QZ	FE	CY					

BUDE

TO CRC + EXTRA

BHP-UTAH MINERALS INTERNATIONAL JP 3 90

q = rock type qualifier

6900

BHP GOLD MINES

WA GOLD RAB/RC DRILL LOG SHEET

SH. 2 OF 2 HOLE No. EDP92-8

PROJECT _____ AREA _____ 1:250,000 SH. _____ 1: _____ SH. _____ LOGGED BY _____

JOB No. _____ COLLAR CO ORDS (LOCAL/AMG) _____ E _____ N RL _____ AZIMUTH (LOCAL/MAG) _____ DIP _____ HOLE DEPTH _____ m WATER TABLE DEPTH _____ m

DATE _____ CONTRACTOR _____ RIG _____ LAB. and GEOCHEM. REPORT Nos. _____

AGE	GRAPHIC LOG	DRILLED INTERVAL FROM	TO	BRACKET	SAMPLE NUMBER 6 METRE COMPOSITE	METRE INTERVAL	ROCK TYPE MAJOR	q1	q2	MINOR	q	WEATHERING	COLOUR L	COLOUR HUE	MAJOR ROCK TYPE MINERALS DECREASING 1	2	3	4	SULPHIDES TYPE	SULPHIDES %	%VEIN QTZ	COMMENTS	ANALYSES (SHOW UNITS)
		56	58				CLAY						6	RO	CY	FE						GY TO RED STICKY CLAYS W TERTE SAND.	
		58	60				CLAY						6	RO	CY	FE							
		60	62				CLAY						6	RI	CY	FE							
		62	64				CLAY						6	I	CY	FE							
		64	66				CLAY						6	I	CY	FE						N.B. COMPOSITE BIASED TO 64-66m.	
		66	68		BG98122		CLAY						6	I	CY	FE							
		68	70				CLAY			GRIT			6	I	CY	FE	QZ					POOR SAMPLE RECOVERY	

BHP-UTAH MINERALS INTERNATIONAL JP 3 90

q = rock type qualifier

0270

BHP GOLD MINES

WA GOLD RAB/RC DRILL LOG SHEET

SH. 1 OF 2 HOLE No. EDP92-9

PROJECT ERUDINA AREA FLINDERS RA. 1:250,000 SH. PARTCULNA 1: 50,000 SH. ERUDINA LOGGED BY A. WILDE

JOB No. PKS COLLAR CO ORDS (LOCAL/AMG) 139° 17.62' E 31° 38.39'S N RL N/D AZIMUTH (LOCAL/MAG) — DIP 90° HOLE DEPTH 70 m WATER TABLE DEPTH >70 m

DATE 1/3/92 CONTRACTOR A & J DRILLING, RIG GORYBILT) LAB. and GEOCHEM. REPORT Nos.

AGE	GRAPHIC LOG	DRILLED INTERVAL FROM	TO	BRACKET	SAMPLE NUMBER 6 METRE COMPOSITE	METRE INTERVAL	ROCK TYPE MAJOR	q1	q2	MINOR	q	WEATHERING	COLOUR L	HUE	MAJOR ROCK TYPE MINERALS DECREASING 1	2	3	4	SULPHIDES TYPE	%	%VEIN QTZ	COMMENTS	ANALYSES (SHOW UNITS)
		0	2				PEBB			SAND		6	R	QZ	FE	CY					PEBBS OF PP QZIT, IRONSTONE, VN QTZ ETC	
		2	4				CLAY			SILT		6	R	QZ	FE	CY					MINOR WHITE/GREY QZIT GRN	
		4	6				CLAY					6	O	R	CY	FE							
		6	8				CLAY					6	O	R	CY	FE							
		8	10				CLAY					6	O	R	CY	FE							
		10	12				CLAY					6	O	R	CY	FE							
		12	14				CLAY			GRAN		6	O	R	CY	FE	QZ				GRN OF SVE. QZIT, + C.SD	
		14	16				CLAY			SILT		6	O	Y	CY	FE	QZ					
		16	18				CLAY			SILT		6	O	Y	CY	FE	QZ					
		18	20				CLAY			SILT		6	O	Y	CY	FE	QZ					
		20	22				CLAY			SAND		6	O	Y	CY	FE	QZ					
		22	24				CLAY					6	O	R	CY	FE					SIGNIF. VOL (20%?) V.F.G, ING, NDSTD QTZ	
		24	26				CLAY					6	R	O	CY	FE					IS FIRM PELLETS OF RED-BN & GREY CLAY	
		26	28				CLAY					5	W		CY	FE						
		28	30				CLAY					6	R		CY	FE					FIRM TO BRITTLE CLAY PELLETS OR	
		30	32				CLAY					6	R		CY	FE					POWDER. VARYING FROM BLOBBY	
		32	34				CLAY					6	R		CY	FE					TO WITTY. TRACE SAND	
		34	36				CLAY					6	R		CY	FE						
		36	38				CLAY					6	R		CY	FE						
		38	40				CLAY					6	R		CY	FE						
		40	42				CLAY					5	W		CY	FE						
		42	44				CLAY			GRAN		5	W		CY						WHITE CLAY W CA 20% ING QZIT GRN ? SILCRETE	
		44	46				CLAY					5	W	E	CY							
		46	48				CLAY	CB				6	E		CY							
		48	50				CLAY	CB				6	E		CY							
		50	52				CLAY	CB				6	E		CY							
		52	54				CLAY					6	E	W	CY							
		54	56				CLAY					6	E	W	CY							

BLADE

AT DEPTH

BHP-UTAH MINERALS INTERNATIONAL JP 3 90

q = rock type qualifier

BHP GOLD MINES

WA GOLD RAB/RC DRILL LOG SHEET

SH. 2 OF 2 HOLE No. EDP92-9

PROJECT _____ AREA _____ 1:250,000 SH. _____ 1: _____ SH. _____ LOGGED BY _____

JOB No. _____ COLLAR CO ORDS (LOCAL/AMG) 139°17.62'E 31°38.39'N RL _____ AZIMUTH (LOCAL/MAG) _____ DIP _____ HOLE DEPTH _____m WATER TABLE DEPTH _____m

DATE _____ CONTRACTOR _____ RIG _____ LAB. and GEOCHEM. REPORT Nos. _____

AGE	GRAPHIC LOG	DRILLED INTERVAL FROM	TO	BRACKET	SAMPLE NUMBER 6 METRE COMPOSITE	METRE INTERVAL	ROCK TYPE MAJOR	q1	q2	MINOR	q	WEATHERING	COLOUR L	COLOUR HUE	MAJOR ROCK TYPE MINERALS DECREASING 1	2	3	4	SULPHIDES TYPE	SULPHIDES %	%VEIN QTZ	COMMENTS	ANALYSES (SHOW UNITS)
		56	58				CLAY			SAND			6	E W	CY							TRACE SAND + QTZ GRAVEL	
		58	60				CLAY			SAND			6	E W	CY							N/A.	
		60	62				CLAY						6	E	CY								
		62	64				CLAY						6	E	CY							STIFF DARK GREY TO BROWN CLAY W/ OCC. SAND.	
		64	66				SANDY						6	E R	CY	FE							
		66	68	■	BG9823		CLAY						6	E R	CY	FE							
		68	70	■			CLAY						6	E R	CY	FE							

BHP-UTAH MINERALS INTERNATIONAL JP 3 90

q = rock type qualifier

2700

WA GOLD RAB/RC DRILL LOG SHEET

BHP GOLD MINES

SH. 1 OF 2 HOLE No. EDP-9210

PROJECT ERUDINA AREA FLINDERS RANGES 1:250,000 SH. PARACHILNA 1:___ SH.___ LOGGED BY A. WILDE

JOB No. FKS COLLAR CO ORDS (LOCAL / AMG) 139°16.89'E 31°41.54'S RL N/D AZIMUTH (LOCAL / MAG) — DIP 90° HOLE DEPTH 58 m WATER TABLE DEPTH >58 m

DATE 29/2-1/3 CONTRACTOR A&J DRILLING RIG GERRYBILT 1 LAB. and GEOCHEM. REPORT Nos.

AGE	GRAPHIC LOG	DRILLED INTERVAL FROM	TO	BRACKET	SAMPLE NUMBER 6 METRE COMPOSITE	METRE INTERVAL	ROCK TYPE MAJOR	q1	q2	MINOR	q	WEATHERING	COLOUR L	COLOUR HUE	MAJOR ROCK TYPE MINERALS DECREASING 1	2	3	4	SULPHIDES TYPE	SULPHIDES %	%VEIN QTZ	COMMENTS	ANALYSES (SHOW UNITS)
		0	2				PEBB			GRAN			6	IR	QZ	FE						MOD MINOR CONCRETE. MOD SUB-RD PURPLISH, SUCROSIC QZIT, VN QTZ	
		2	4				PEBB			GRAN			6	IR	QZ	FE							
		4	6				CLAY						7	OR	CY	FE						ORANGE-RED OR GREY CLAY.	
		6	8				CLAY			SILT			6	RO	CY	FE	QZ					SILT - OCC C SAND < 5%	
		8	10				CLAY						6	RO	CY	FE	GY					RED OR GREY CLAY.	
		10	12				CLAY						6	RO	CY	FE	QZ					TR. SANDY SILT	
		12	14				SAND			SILT			6	RO	QZ	FE						OCC FERRUG COATING	
		14	16				CLAY			SAND			6	RO	QZ	FE	CY					FINE SD - SILT, SUB RD - SUB ANG, MOD SORTING.	
		16	18				CLAY						6	RO	CY	FE						SAND < 10%.	
		18	20				CLAY						6	RO	CY	FE							
		20	22				CLAY						6	OR	CY	FE							
		22	24				CLAY						6	OR	CY	FE						CLAY POWDERY TO 2cm.	
		24	26				CLAY						6	OR	CY	FE						FIRM. GREY TO RED-BROWN	
		26	28				CLAY						6	OR	CY	FE						TRACE ONLY SILT + SAND	
		28	30				CLAY						6	OR	CY	FE							
		30	32				CLAY						6	OR	CY	FE							
		32	34				CLAY						6	OR	CY	FE							
		34	36				CLAY						6	OW	CY	FE	QZ					TRACE FINE SD ONS. ~1-2%	
		36	38				CLAY						6	OR	CY	FE							
		38	40				CLAY						6	OR	CY	FE							
		40	42				CLAY						6	OR	CY	FE							
		42	44				CLAY						6	OR	CY	FE							
		44	46				CLAY						6	OR	CY	FE						GREY LIGHT TO RED-BROWN CLAY	
		46	48				CLAY						6	OR	CY	FE						TRACE ONLY SILT - SAND	
		48	50				CLAY						6	OR	CY	FE							
		50	52				CLAY						6	OR	CY	FE							
		52	54				CLAY						6	OR	CY	FE							
		54	56		BG9824		CLAY						6	OR	CY	FE							

BUNDE

A/CORE

0073

BHP - UTAH MINERALS INTERNATIONAL JP 3 90

q = rock type qualifier

BHP GOLD MINES

WA GOLD RAB/RC DRILL LOG SHEET

SH. 2 OF 2 HOLE No. EDP92-10

PROJECT _____ AREA _____ 1:250,000 SH. _____ 1: _____ SH. _____ LOGGED BY _____

JOB No. _____ COLLAR CO ORDS (LOCAL / AMG) _____ E _____ N RL _____ AZIMUTH (LOCAL / MAG) _____ DIP _____ HOLE DEPTH _____ m WATER TABLE DEPTH _____ m

DATE _____ CONTRACTOR _____ RIG _____ LAB. and GEOCHEM. REPORT Nos. _____

AGE	GRAPHIC LOG	DRILLED INTERVAL FROM	DRILLED INTERVAL TO	BRACKET	SAMPLE NUMBER METRE COMPOSITE	SAMPLE NUMBER METRE INTERVAL	ROCK TYPE MAJOR	ROCK TYPE q1	ROCK TYPE q2	ROCK TYPE MINOR	ROCK TYPE q	WEATHERING	COLOUR L	COLOUR HUE	MAJOR ROCK TYPE MINERALS DECREASING 1	2	3	4	SULPHIDES TYPE	SULPHIDES %	%VEIN QTZ	COMMENTS	ANALYSES (SHOW UNITS)	
		56	58				CLAY						SE	CY										

BHP-UTAH MINERALS INTERNATIONAL JP 5 90

q = rock type qualifier

FOR REFERENCE SEE DRILL LOG CODING SHEET WAG 1, JAN 1990

D2400

WA GOLD RAB/RC DRILL LOG SHEET

BHP GOLD MINES SH. 1 OF 2 HOLE No. EDP92-11

PROJECT ERUDINA AREA FLINDERS RANGES 1:250,000 SH. PARACHILNA 1: 100,000 SH. ERUDINA LOGGED BY A. WILDE

JOB No. PKS COLLAR CO ORDS (LOCAL / AMG) 139° 17.93' E 31° 32.16' S/N RL N/D (LOCAL / MAG) AZIMUTH — DIP 90° HOLE DEPTH 70. m WATER TABLE DEPTH 24 m

DATE 1/3/92 CONTRACTOR A & J DRILLING RIG GERRYBILT LAB. and GEOCHEM. REPORT Nos.

AGE	GRAPHIC LOG	DRILLED INTERVAL FROM	TO	BRACKET	SAMPLE NUMBER 6 METRE COMPOSITE	METRE INTERVAL	ROCK TYPE MAJOR	q1	q2	MINOR	q	WEATHERING	COLOUR L	COLOUR HUE	MAJOR ROCK TYPE MINERALS DECREASING 1	2	3	4	SULPHIDES TYPE	SULPHIDES %	%VEIN QTZ	COMMENTS	ANALYSES (SHOW UNITS)
		0	2				PEBB			GRAV		6	I	R	QZ	FE	CY				PROB. PROTEROZOIC DERIVED - CALCRETE. WEATHERED PEBBS OF MUDSTONE, SILTSTONE, QZIT	RUDE
		2	4				CLAY			GRAV		6	I	R	CY	QZ	FE					RED-BN CLAY > GRN PEBBS, OCC CALCRETE	
		4	6				PEBB			SAND		6	I	R	QZ	FE	CY					PEBBS = GREENISH SUCROSIC QZIT, MUDSTONE, MOUNTIC SILST (? FOUND QZIT) ETC. V. HARD	
		6	8				PEBB			SAND		6	I	R	QZ	FE	CY					NA + PP SILTSTONE	HAMMER
		8	10				PEBB			SAND		6	R	I	QZ	FE	CY					ALL MORE ANG. GRAVEL - POSS EX BOULDERS?	
		10	12				PEBB			SAND		6	Y	I	QZ	FE	CY						
		12	14				PEBB			SAND		6	Y	O	QZ	FE	CY						
		14	16				CLAY			GRAV		6	Y	O	CY	QZ	FE					CA 60% ORANGE YELLOW, STICKY CLAY + QZIT FRAGS	
		16	18				CLAY			GRAV		6	Y	O	CY	QZ	FE						
		18	20				CLAY			GRAV		6	R	O	CY	FE	QZ					CA 20-30% WHITE-GY MUD QZIT FRAGS	
		20	22				CLAY			GRAV		6	R	O	CY	FE	QZ						
		22	24				CLAY			GRAV		6	Q	R	CY	FE	QZ					GROUND WATER AT 24m - 25m POORLY SORTED. - ? SOURCE OF WATER? SMALL AMT (20%?) FINE QTZ SD WEATH - MOD RD	
		24	26				CLAY			SAND		6	O	R	CY	FE	QZ						AC/RC
		26	28				CLAY					6	O	R	CY	FE						TRACE ONLY SD. F GD. NA.	
		28	30				CLAY			GRAV		6	O	R	CY	FE	QZ					MINOR GRAN = PINK FOLIATE, PORPH, MATRIX	
		30	32				GRAV			CLAY		6	O	R	CY	FE						PP TO GN/GY SILTSTONE = MUDSTONE < 1cm. ~60%	
		32	34				GRAV			CLAY		6	O	Y	CY	FE						NA.	
		34	36				CLAY					6	O	Y	CY	FE						TRACE SAND	
		36	38				CLAY					6	O	Y	CY	FE						CROS GRAN TO STICKY ETC (RED-BROWN) M CLAY.	
		38	40				CLAY					6	O	Y									
		40	42				CLAY					6	O	Y								LT GRCY TO RED BN CLAY.	
		42	44				CLAY					6	O	Y								FIRM, OCC SD GNS.	
		44	46				CLAY					6	O	Y									
		46	48				CLAY					6	O	Y									
		48	50				CLAY					6	O	Y									
		50	52				CLAY					6	O	Y									
		52	54				CLAY					6	O	R									
		54	56				CLAY					6	O	R									

BHP-UTAH MINERALS INTERNATIONAL P 3 90

q = rock type qualifier

0115

WA GOLD RAB/RC DRILL LOG SHEET

BHP GOLD MINES

SH. 2 OF 2 HOLE No. EDP92-11

PROJECT _____ AREA _____ 1:250,000 SH. _____ 1: _____ SH. _____ LOGGED BY _____

JOB No. _____ (LOCAL/AMG) COLLAR CO ORDS _____ E _____ N RL _____ (LOCAL/MAG) AZIMUTH _____ DIP _____ HOLE DEPTH _____ m WATER TABLE DEPTH _____ m

DATE _____ CONTRACTOR _____ RIG _____ LAB. and GEOCHEM. REPORT Nos. _____

AGE	GRAPHIC LOG	DRILLED INTERVAL FROM	TO	BRACKET	SAMPLE NUMBER C METRE COMPOSITE	METRE INTERVAL	ROCK TYPE MAJOR	q1	q2	MINOR	q	WEATHERING	COLOUR L	HUE	MAJOR ROCK TYPE MINERALS DECREASING 1	2	3	4	SULPHIDES TYPE	%	%VEIN QTZ	COMMENTS	ANALYSES (SHOW UNITS)	
		56	58				CLAY						6	OR	CY	FE							PALE BLUE LIGHT GREY TO RED BROWN CLAY		
		58	60				CLAY						6	OR	CY	FE							WITH OCC SAND ONS		
		60	62				GRAV			CLAY			6	OY	CY	FE	Q	2					GRAV = SMALL PEBB'S - APOZIT, GREENSILTSTONE ETC		
		62	64				CLAY						6	OY	CY	FE									
		64	66				CLAY						6	OY	CY	FE							CLAY MA W TR SD & GRAVEL. (<5%)		
		66	68		BG9825		CLAY						6	OY	CY	FE									
		68	70				CLAY						6	OY	CY	FE									

BHP-UTAH MINERALS INTERNATIONAL JP 3 90

q = rock type quolifier

WA GOLD RAB/RC DRILL LOG SHEET

BHP GOLD MINES SH. 1 OF . HOLE No. EDP92-12

PROJECT ERUDINA AREA FLINDERS RANGES 1:250,000 SH. PARTCHINA 1: 50000 SH. ERUDINA LOGGED BY A. WILDE

JOB No. PKS COLLAR CO ORDS (LOCAL/AMG) 139° 15.70' E 31° 30.73'S RL N/D AZIMUTH (LOCAL/MAG) — DIP 90° HOLE DEPTH 70 m WATER TABLE DEPTH N14 m STANDING WATER LEVEL 30m

DATE 2/3/92 CONTRACTOR A.J DRILLING RIG GERR/BILT 1 LAB. and GEOCHEM. REPORT Nos.

AGE	GRAPHIC LOG	DRILLED INTERVAL FROM	TO	BRACKET	SAMPLE NUMBER 6 METRE COMPOSITE	METRE INTERVAL	ROCK TYPE MAJOR	q1	q2	MINOR	q	WEATHERING	COLOUR L	COLOUR HUE	MAJOR ROCK TYPE MINERALS DECREASING 1	2	3	4	SULPHIDES TYPE	SULPHIDES %	%VEIN QTZ	COMMENTS	ANALYSES (SHOW UNITS)
		0	2				PEBB			CLAY		5	W	I	QZ	FE	CY					PEBB FRAGS OF QZIT VARYING COLOURS, MAROON SILTSTONE/MUDSTONE ETC. MINOR WHITE CLAY.	BLADE
		2	4				PEBB			CLAY		5	W	I	QZ	FE	CY						
		4	6				PEBB			CLAY		5	W	I	QZ	FE	CY					ca 20%? M30 SD. POORLY SORTED, F-C, RD-ING.	
		6	8				GRAN			CLAY		5	W	I	QZ	FE	CY					FRAGS OF YELLOW-BUFF QZIT. WHITE CLAY & SD.	
		8	10				GRAN			CLAY		5	W		QZ	FE	CY					FRAGS OF Y.GN QZITIC SILTSTONE.	HAMMER
		10	12				CLAY	CA		GRAN		6	R	P	QZ	FE	CY					BROWN RED CLAY POLICTS. VIGOROUS FIZZING W HCL.	
		12	14				CLAY	CA				6	R	P	QZ	FE							
		14	16				GRAN			CLAY		6	Y	W	QZ	FE	CY						
		16	18				CLAY			GRAN		6	Y	O	QZ	FE	CY						
		18	20				CLAY			SAND		6	O	Y	CY	FE	QZ					MINOR VOL OF GRAVEL INC FD QZIT, QY SILTSTONE	
		20	22				CLAY					6	O	R	CY	FE	QZ						
		22	24				CLAY					6	O	R	CY	FE	QZ					RED-ORANGE/BROWN CLAY STICKY. TR SAND	
		24	26				CLAY			GRAV		6	O	R	CY	FE	QZ						
		26	28				CLAY					6	O	R	CY	FE						ca 10% C. ANG QZIT OR IRONSTONE (RD) FRAGS.	
		28	30				CLAY					6	O	R	CY	FE						TR QZ. YELLOWISH TO PALE CROSS CLAY.	
		30	32				CLAY					6	O	R	CY	FE							
		32	34				CLAY					6	O	R	CY	FE						STICKY RED/ORG TO PALE GY CLAY	
		34	36				CLAY					6	O	R	CY	FE						TR ONLY COARSER MATERIAL	
		36	38				CLAY					6	O	R	CY	FE							
		38	40				CLAY					6	R	O	CY	FE							
		40	42				CLAY					6	R	O	CY	FE							
		42	44				CLAY					6	R	O	CY	FE							
		44	46				CLAY			SAND		6	R	O	CY	FE	QZ					CHANGE IN CLAY CHARACTER, BCG HARDER. MINOR SAND PARTICLES	
		46	48				CLAY			GRAN		6	R	O	CY	FE	QZ					FERRUG & QZIT GRN. MUSC 1cm.	
		48	50				CLAY			GRAN		6	R	I	CY	FE	QZ						
		50	52				CLAY					6	R	I	CY	FE	QZ					TR. SILT & SAND. CLAYS LIGHTER - BIT BOGGING	
		52	54				CLAY					6	R	I	CY	FE						STICKY RED TO PALE GY CLAY	
		54	56				CLAY					7	R	I	CY	FE						TR ONLY COARSER MATERIAL	

BHP-UTAH MINERALS INTERNATIONAL JP 3 90

q = rock type qualifier

CORE + H2O

BHP GOLD MINES

WA GOLD RAB/RC DRILL LOG SHEET

SH. 2 OF 2 HOLE No. EDP92-12

PROJECT _____ AREA _____ 1:250,000 SH. _____ 1: _____ SH. _____ LOGGED BY _____

JOB No. _____ COLLAR CO ORDS (LOCAL/AMG) _____ E _____ N RL _____ AZIMUTH (LOCAL/MAG) _____ DIP _____ HOLE DEPTH _____ m WATER TABLE DEPTH _____ m

DATE _____ CONTRACTOR _____ RIG _____ LAB. and GEOCHEM. REPORT Nos. _____

AGE	GRAPHIC LOG	DRILLED INTERVAL FROM	DRILLED INTERVAL TO	BRACKET	SAMPLE NUMBER METRE COMPOSITE	SAMPLE NUMBER METRE INTERVAL	ROCK TYPE MAJOR	ROCK TYPE q1	ROCK TYPE q2	ROCK TYPE MINOR	ROCK TYPE q	WEATHERING	COLOUR L	COLOUR HUE	MAJOR ROCK TYPE MINERALS DECREASING 1	2	3	4	SULPHIDES TYPE	SULPHIDES %	% VEIN QTZ	COMMENTS	ANALYSES (SHOW UNITS)
		56	58				CLAY	CB					5	E	CY							FIRM CLAY. V LITTLE COARSE MATERIAL	
		58	60				CLAY						6	EW	CY							NIL.	
		60	62				CLAY						6	EW	CY							POOR SAMPLE RECOVERY - CLAY IN SUSPENSION	
		62	64				CLAY						6	EW	CY							SOLID CLAY. PROB. INCLUDES ABOVE INTERVAL	
		64	66				CLAY						6	EW	CY							NIL.	
		66	68				CLAY	CB					6	EW	CY								
		68	70				CLAY	CB					5	EW	CY								

ANALYSES (SHOW UNITS) — ↑ MY CORE ↓

BHP-UTAH MINERALS INTERNATIONAL JP 3-90

q = rock type qualifier

8409

BHP GOLD MINES

WA GOLD RAB/RC DRILL LOG SHEET

SH. 1 OF 2 HOLE No. EDP92-13

PROJECT ERUDINA AREA FLINDERS RANGES 1:250,000 SH. PARACHILNA 1:_ ,000 SH. ROAPINDOK LOGGED BY A. WILDE

JOB No. FK5 COLLAR CO ORDS (LOCAL / AMG) 139° 19.52'E 31° 24.33'S,N RL N/P AZIMUTH (LOCAL / MAG) – DIP 90° HOLE DEPTH 70 m WATER TABLE DEPTH >70 m

DATE 3/3/92 CONTRACTOR A.J DRILLING RIG GERRYBILT 1 LAB. and GEOCHEM. REPORT Nos.

AGE	GRAPHIC LOG	DRILLED INTERVAL FROM	TO	BRACKET	SAMPLE NUMBER 6 METRE COMPOSITE	METRE INTERVAL	ROCK TYPE MAJOR	q1	q2	MINOR	q	WEATHERING	COLOUR L	HUE	MAJOR ROCK TYPE MINERALS DECREASING 1	2	3	4	SULPHIDES TYPE	%	%VEIN QTZ	COMMENTS	ANALYSES (SHOW UNITS)
		0	2				GRAV						7	I	QZ	FE						ALLUVIAL/SCREE DEPOSITS?	↑
		2	4				GRAV						7	I	QZ	FE						GRAVL OF ANG. QZ+T FRAGS, OPTLY WITH KAOLINITE CEMENT = POSSD QZ+T, PERHAPS QZ+T + IRONSTONE	BLOCKS
		4	6				GRAV						7	I	QZ	FE						MINOR GYPSUM	↓
		6	8				GRAV						7	IY	QZ	FE	GY						↑
		8	10				GRAV			CLAY			7	OW	QZ	FE	CY						HAMMER
		10	12				CLAY			GRAV			7	OB	CY	QZ	FE					POWDERY ORANGE/RED OR WHITE CUTS W. FROSTED QZ+T + ?OOL CORNER.	↓
		12	14				GRAV			CLAY			7	OB	QZ	FE	CY						↑
		14	16				GRAV			CLAY			7	OB	QZ	FE	CY						
		16	18				CLAY			GRAV			7	OB	CY	QZ	FE						
		18	20				CLAY			GRAV			7	OR	CY	QZ	FE					POCKETS OF HARD RED-BROWN CLAY	BLADE
		20	22				CLAY			GRAV			7	OR	CY	QZ	FE						↓
		22	24				GRAV			CLAY			7	OR	CY	QZ	FE						
		24	26				CLAY			GRAV			7	OR	QZ	CY	FE						
		26	28				CLAY						7	YO	CY	FE						POCKETS OF GREENISH PALE GY CLAY + RED-BN	
		28	30				CLAY						7	YO	CY	FE							
		30	32				CLAY						7	YO	CY	FE						HARD POCKETS OF OCHRE TO OCC CARBY CLAYS TO 2cm	
		32	34				CLAY						7	YO	CY	FE							
		34	36				CLAY	CA					7	YO	CY	FE							
		36	38				CLAY						7	YO	CY	FE						W. OCC CALC. FRAGS, ?CONCRETE	
		38	40				CLAY						7	O	CY	FE							
		40	42				CLAY						7	O	CY	FE							
		42	44				CLAY						7	O	CY	FE							
		44	46				CLAY	CA					7	O	CY	FE						HARD POCKETS OF OCHRE TO RED BROWN + OCC CARBY CLAY TO 1cm	
		46	48				CLAY	CA					7	O	CY	FE						CALCRETIONS AT BASE (ie VIGOROUS FIZZING WITH HCl)	
		48	50				CLAY	CA					7	O	CY	FE							
		50	52				CLAY	CA					7	O	CY	FE							
		52	54				CLAY	CA					7	O	CY	FE							
		54	56				CLAY	CA					7	O	CY	FE							

BHP-UTAH MINERALS INTERNATIONAL JP 3-90

q = rock type qualifier

FOR OFFICE USE ONLY

6449

BHP GOLD MINES

WA GOLD RAB/RC DRILL LOG SHEET

SH. 2 OF 2 HOLE No. EDP92-13

PROJECT _____ AREA _____ 1:250,000 SH. _____ 1: _____ SH. _____ LOGGED BY _____

JOB No. _____ COLLAR CO ORDS (LOCAL/AMG) _____ E _____ N RL _____ AZIMUTH (LOCAL/MAG) _____ DIP _____ HOLE DEPTH _____ m WATER TABLE DEPTH _____ m

DATE _____ CONTRACTOR _____ RIG _____ LAB. and GEOCHEM. REPORT Nos. _____

AGE	GRAPHIC LOG	DRILLED INTERVAL FROM	TO	BRACKET	SAMPLE NUMBER 6 METRE COMPOSITE	METRE INTERVAL	ROCK TYPE MAJOR	q1	q2	MINOR	q	WEATHERING	COLOUR L	HUE	MAJOR ROCK TYPE MINERALS DECREASING 1	2	3	4	SULPHIDES TYPE	%	%VEIN QTZ	COMMENTS	ANALYSES (SHOW UNITS)
		56	58				CLAY						7	0Y	CY	FE							
		58	60				CLAY						7	0Y	CY	FE							
		60	62				CLAY						7	0Y	CY	FE						WATER INJECTION	
		62	64				CLAY						7	0Y	CY	FE							BLIND
		64	66				CLAY						7	0Y	CY	FE						HOMOGENEOUS, FINE GRAINED OLIVE YELLOW-ORANGE CLAY, PLASTIC & SOFT.	
		66	68		BG9836		CLAY						7	0Y	CY	FE							
		68	70				CLAY						7	0Y	CY	FE							

BHP-UTAH MINERALS INTERNATIONAL JP 3-90

q = rock type qualifier

0980

WA GOLD RAB/RC DRILL LOG SHEET

BHP GOLD MINES

SH. 1 OF 2 HOLE No. EDP92-14

PROJECT ERUDINA AREA FLINDERS RANGES 1:250,000 SH. PARACHILNA 1: 50,000 SH. REMPHOOK LOGGED BY A. WILDE

JOB No. FK5 COLLAR CO ORDS (LOCAL/AMG) 139° 20.24' E 31° 24.62' S/N RL N/D AZIMUTH (LOCAL/MAG) — DIP 90° HOLE DEPTH 70. m WATER TABLE DEPTH 30 m

DATE 3.3.92 CONTRACTOR A.J DRILLING RIG GERRYBILT 1 LAB. and GEOCHEM. REPORT Nos.

AGE	GRAPHIC LOG	DRILLED INTERVAL FROM	TO	BRACKET	SAMPLE NUMBER METRE COMPOSITE	METRE INTERVAL	ROCK TYPE MAJOR	q1	q2	MINOR	q	WEATHERING	COLOUR L	COLOUR HUE	MAJOR ROCK TYPE MINERALS DECREASING 1	2	3	4	SULPHIDES TYPE	SULPHIDES %	%VEIN QTZ	COMMENTS	ANALYSES (SHOW UNITS)
		0	2				GRAV			CLAY			5	RE	QZ	FE	CY						
		2	4				GRAV			CLAY			5	RE	QZ	FE	CY						
		4	6				PEBB			GRAV			5	RE	QZ	FE	CY						
		6	8				PEBB			GRAV			5	RE	QZ	FE	CY						
		8	10				PEBB			GRAV			5	RE	QZ	FE	CY						
		10	12				SILT			GRAV			5	OR	CY	QZ	FE	GY					
		12	14				GRAV			SAND			5	RP	QZ	FE							
		14	16				GRAV			CLAY			5	RP	QZ	FE	CY						
		16	18				GRAV			CLAY			5	OR	QZ	FE	CY						
		18	20				CLAY			GRAV			5	OR	CY	FE							
		20	22				CLAY			GRAV			5	OR	CY	FE							
		22	24				CLAY			GRAV			5	OR	CY	FE							
		24	26				SAND			GRAV			5	OR	QZ	FE	CY						
		26	28				SAND			GRAV			5	OR	QZ	FE	CY						
		28	30				PEBB			SAND			5	OR	QZ	FE	CY						
		30	32				SAND			CLAY			5	OR	QZ	FE	CY						
		32	34				CLAY			GRAV			5	OR	CY	FE	QZ						
		34	36				CLAY			GRAV			5	OR	CY	FE	QZ						
		36	38				CLAY			GRAV			5	OR	CY	FE	QZ						
		38	40				CLAY			GRAV			5	OR	CY	FE	QZ						
		40	42				CLAY			GRAV			5	OR	CY	FE	QZ						
		42	44				PEBB			CLAY			5	OR	QZ	FE	CY						
		44	46				PEBB			CLAY			5	OR	QZ	FE	CY						
		46	48				GRAV			CLAY			5	OR	QZ	FE	CY						
		48	50				PEBB			GRAV			5	OR	QZ	FE	CY						
		50	52				CLAY			GRAV			5	OR	CY	FE	QZ						
		52	54				CLAY			GRAV			5	OR	CY	FE	QZ						
		54	56				CLAY			SAND			5	OR	CY	FE	QZ						

FRAGS OF QUARTZITE, PURPLE TO GREEN-GRAY MUDSTONE (?PROT.) RIVER PEBBLES, SUB-RD TO SUB-ANG UP TO 4cm. ORANGE BROWN SILT & RED-BROWN CLAY — BUNDE

RED-ORANGE STICKY CLAY 20% FLUVIAL GRAVEL TO 1cm.

FINE-MED SAND, ROUNDED TO ANGULAR, POORLY SORTED GOETHITE COATINGS COMMON.

STICKY ORANGE-BROWN TO PALE GREY CLAY GRAV TO 35% (?CAVING?) — A/CORE +H2O

PEBBLES OF SILST-MUDSTONE, VN QTZ, QZIT, (RIVER PEBB'S) FLOW OF ~ 450 gph @ 48m.

GRAV CLAY ALL.

BHP-UTAH MINERALS INTERNATIONAL P 3 90

q = rock type qualifier

1981

WA GOLD RAB/RC DRILL LOG SHEET

BHP GOLD MINES

SH. 2 OF 2 . HOLE No. EDP92-14

PROJECT _____ AREA _____ 1:250,000 SH. _____ 1: _____ SH. _____ LOGGED BY _____

JOB No. _____ COLLAR CO ORDS (LOCAL/AMG) _____ E _____ N RL _____ AZIMUTH (LOCAL/MAG) _____ DIP _____ HOLE DEPTH _____ m WATER TABLE DEPTH _____ m

DATE _____ CONTRACTOR _____ RIG _____ LAB. and GEOCHEM. REPORT Nos. _____

AGE	GRAPHIC LOG	DRILLED INTERVAL FROM	TO	BRACKET	SAMPLE NUMBER 6 METRE COMPOSITE	METRE INTERVAL	ROCK TYPE MAJOR	q1	q2	MINOR	q	WEATHERING	COLOUR L	COLOUR HUE	MAJOR ROCK TYPE MINERALS DECREASING 1	2	3	4	SULPHIDES TYPE	SULPHIDES %	%VEIN QTZ	COMMENTS	ANALYSES (SHOW UNITS)
		56	58				CLAY						S	OR	CY	FE							
		58	60				CLAY						S	OR	CY	FE							
		60	62				CLAY						S	OR	CY	FE							
		62	64				CLAY						S	OR	CY	FE							
		64	66				CLAY						S	OR	CY	FE							
		66	68		BG9827		CLAY						S	OR	CY	FE							
		68	70				CLAY						S	OR	CY	FE							

ORANGE - BROWN TO GREY CLAY STICKY, WITH CA 20-30% CARB SIMILAR TO UNITS FURTHER UP. PROBABLE CAVINGS

+H2O

BHP-UTAH MINERALS INTERNATIONAL JP 3 90

q = rock type qualifier

FOR OFFICE USE ONLY

2800

WA GOLD RAB/RC DRILL LOG SHEET

BHP GOLD MINES

SH. 1 OF 2 HOLE No. EDP92-15

PROJECT ERUDINA AREA FLINDERS RANGES 1:250,000 SH. PARACHILNA 1:50,000 SH. REAPHOOK LOGGED BY A. WILDE

JOB No. FKS (LOCAL/AMG) COLLAR CO ORDS 139° 19.58' E 31° 22.11' S RL N/D (LOCAL/MAG) AZIMUTH — DIP 90° HOLE DEPTH 70 m WATER TABLE DEPTH >70 m

DATE 4/3/92 CONTRACTOR A a J DRILLING RIG GERRYBILT 1 LAB. and GEOCHEM. REPORT Nos.

AGE	GRAPHIC LOG	DRILLED INTERVAL FROM	TO	BRACKET	SAMPLE NUMBER 6 METRE COMPOSITE	METRE INTERVAL	ROCK TYPE MAJOR	q1	q2	MINOR	q	WEATHERING	COLOUR L	COLOUR HUE	MAJOR ROCK TYPE MINERALS DECREASING 1	2	3	4	SULPHIDES TYPE	SULPHIDES %	%VEIN QTZ	COMMENTS	ANALYSES (SHOW UNITS)
		0	2				CLAY	CA		GRAV		7	O	W	CY	QZ	FE						
		2	4				GRAV			CLAY	CA	7	W	I	QZ	CY	FE						
		4	6				PEBB			GRAV		7	W	Y	QZ	CY	FE						
		6	8				CLAY			GRAV		7	W	O	CY	QZ	FE						
		8	10				CLAY			GRAV		7	O	I	CY	QZ	FE						
		10	12				CLAY					7	O	I	CY	QZ	FE						
		12	14				CLAY					7	O	R	CY	QZ	FE						
		14	16				GRAV			SILT		7	O	R	CY	QZ	FE						
		16	18				CLAY					6	R	O	CY	FE							
		18	20				CLAY					6	R	O	CY	FE							
		20	22				GRAV			CLAY	CA	6	R	O	QZ	CY	FE						
		22	24				CLAY					6	O	R	CY	FE							
		24	26				CLAY					6	O	R	CY	FE							
		26	28				CLAY					6	O	R	CY	FE							
		28	30				CLAY					6	Y	O	CY	FE							
		30	32				SILT			CLAY		6	Y	O	QZ	FE	CY						
		32	34				SILT			CLAY		6	Y	O	QZ	FE	CY						
		34	36				CLAY					6	Y	O	CY	FE							
		36	38				CLAY					6	Y	O	CY	FE							
		38	40				CLAY					6	Y	O	CY	FE							
		40	42				CLAY					6	Y	O	CY	FE							
		42	44				CLAY					6	O	R	CY	FE							
		44	46				CLAY					6	O	R	CY	FE							
		46	48				CLAY					6	O	R	CY	FE							
		48	50				CLAY					6	O	R	CY	FE							
		50	52				CLAY	CB				6	O	R	CY	FE							
		52	54				CLAY					6	O	R	CY	FE							
		54	56				CLAY					6	O	R	CY	FE							

COMMENTS:

- M30 SAND, SILT, GRN + OCC PEBBS SILST, QZIT
- PREDOM ANG SUBANG PEBBS PP SILST, M30 SAND, CY ORANGE TO RED BROWN FIRM CLAY + PINK QZ IT GRN GRN + PEBBS OF PP SANDSTONE/SILTSTONE
- PELLETS OF CLAY TO 2cm. MINOR GRANCL. (CAVINGS?)
- M30 PEBBS PP SNST/SILTSTONE + QZIT. MOD CLAY.
- MINOR ANG. QZIT ? CAVINGS
- NO.
- M30 SILT + VFSD. GRN = WHITISH ? SILCRETE
- PELLETS OF RED-BN TO GREY CLAY WITH CA 20% COARSER MATERIAL INC. GRANCL + OCC PEBBLES
- PREDOM GREY CLAY PELLETS
- MIRCORE
- READY ORANGE TO GREY CLAY WITH COARSE PINK QZIT FRAGS (POSSIBLE CONTAMINATION)
- BLADE + H_2O

ANALYSES (SHOW UNITS): QUAD

BHP - UTAH MINERALS INTERNATIONAL JP 3 90

q = rock type qualifier

0983

BHP GOLD MINES

WA GOLD RAB/RC DRILL LOG SHEET

SH. 2 OF 2 HOLE No. EDP92-15

PROJECT _____ AREA _____ 1:250,000 SH. _____ 1: _____ SH. _____ LOGGED BY _____

JOB No. _____ COLLAR CO ORDS (LOCAL/AMG) _____ E _____ N RL _____ AZIMUTH (LOCAL/MAG) _____ DIP _____ HOLE DEPTH _____ m WATER TABLE DEPTH >70 m

DATE _____ CONTRACTOR _____ RIG _____ LAB. and GEOCHEM. REPORT Nos. _____

AGE	GRAPHIC LOG	DRILLED INTERVAL FROM	TO	BRACKET	SAMPLE NUMBER 6 METRE COMPOSITE	METRE INTERVAL	ROCK TYPE MAJOR	q1	q2	MINOR	q	WEATHERING	COLOUR L	HUE	MAJOR ROCK TYPE MINERALS DECREASING 1	2	3	4	SULPHIDES TYPE	%	%VEIN QTZ	COMMENTS	ANALYSES (SHOW UNITS)
		56	58				CLAY			GRAV			6	IW	CY	FE	QZ					CHANGE IN COLOUR - DECREASE IN FE OXIDE, INCREASE IN FIRMNESS, 10% FERRUG. GRVL.	
		58	60				CLAY			GRAV			6	IW	CY	FE	QZ					d/o.	
		60	62				CLAY						6	IW	CY	FE							
		62	64				CLAY						6	E	CY							MED TO DK-GREY CLAY. DK GREY PATCHES OMIT PETROLIFEROUS ODOUR. MINOR SD. GRAVEL PROB. CONTAMINATION	
		64	66				CLAY	CB					6	E	CY								
		66	68		BG9828		CLAY	CB					6	E	CY								
		68	70				CLAY	CB					6	E	CY								

BHP-UTAH MINERALS INTERNATIONAL JP 3 90

q = rock type qualifier

SEE REVERSE FOR ...

EDP92-15

1.00 3.4

BHP GOLD MINES — WA GOLD RAB/RC DRILL LOG SHEET

SH. 1 OF HOLE No. EDP92-16

PROJECT ERUDINA AREA FLINDERS RANGES 1:250,000 SH. PARTCHILNA 1:50,000 SH. REAPHOOK LOGGED BY A. WILDE

JOB No. FKS COLLAR CO ORDS (LOCAL/AMG) 139°21.10'E 31°21.80'S RL N/D AZIMUTH (LOCAL/MAG) — DIP 90° HOLE DEPTH 70 m WATER TABLE DEPTH >70 m

DATE 4/3/92 CONTRACTOR A.J DRILLING RIG GERRYBILT 1 LAB. and GEOCHEM. REPORT Nos.

AGE	GRAPHIC LOG	DRILLED INTERVAL FROM	TO	BRACKET	SAMPLE NUMBER 6 METRE COMPOSITE	METRE INTERVAL	ROCK TYPE MAJOR	q1	q2	MINOR	q	WEATHERING	COLOUR L	HUE	MAJOR ROCK TYPE MINERALS DECREASING 1	2	3	4	SULPHIDES TYPE	%	%VEIN QTZ	COMMENTS	ANALYSES (SHOW UNITS)
		0	2				PEBB			GRAV			6	RI	QZ	FE	CY						
		2	4				PEBB			GRAV			6	RI	QZ	FE	CY					COARSE ANG-SUBANG PEBBS TO 6cm OF QZIT, PP QZIT, PP SILTSTONE & BRIGHT GREEN TUFF (CAN BRUNS)	↑ BLADE ↓ ↑
		4	6				PEBB			GRAV			6	RI	QZ	FE	CY						
		6	8				PEBB			GRAV			6	RI	QZ	FE	CY						
		8	10				CLAY			GRAV			6	OR	CY	FE	QZ						
		10	12				CLAY			GRAV			6	OR	CY	FE	QZ						
		12	14				CLAY						6	OE	CY	FE							
		14	16				CLAY						6	OE	CY	FE							
		16	18				CLAY						6	OE	CY	FE							
		18	20				CLAY						6	OE	CY	FE							
		20	22				CLAY						6	OE	CY	FE							
		22	24				CLAY						6	OE	CY	FE							
		24	26				CLAY						6	OE	CY	FE							
		26	28				CLAY						6	OE	CY	FE							
		28	30				CLAY						6	OE	CY	FE						ORANGE-BROWN TO PALE GREY STICKY CLAY, VARIABLE AMOUNTS (5-20%) OF COARSE GRAVEL, SD + SILT. POSSIBLE CONTAMINATION	BLADE +H_2O
		30	32				CLAY						6	OE	CY	FE							
		32	34				CLAY						6	OE	CY	FE							
		34	36				CLAY						6	OE	CY	FE							
		36	38				CLAY						6	OE	CY	FE							
		38	40				CLAY						6	OE	CY	FE							
		40	42				CLAY						6	OE	CY	FE							
		42	44				CLAY						6	OE	CY	FE							
		44	46				CLAY						6	OE	CY	FE							
		46	48				CLAY						6	OE	CY	FE							
		48	50				CLAY			SAND			6	OE	CY	FE							
		50	52				SAND						6	OE	QZ	FE	CY					NO SIGNIF. WATER FLOW RECORDED F-M QZ SD, RD TO ANG, POORLY STD. OFTEN PORRUS.	
		52	54				CLAY			SAND			6	OE	CY	FE	QZ						
		54	56				CLAY			SAND			6	OE	CY	FE	QZ						

BHP-UTAH MINERALS INTERNATIONAL P 3 90

q = rock type qualifier

EDP92-16

BHP GOLD MINES

WA GOLD RAB/RC DRILL LOG SHEET

SH. 2 OF 2 HOLE No. EDP-16

PROJECT _____ AREA _____ 1:250,000 SH. _____ 1: _____ SH. _____ LOGGED BY _____

JOB No. _____ COLLAR CO ORDS (LOCAL / AMG) _____ E _____ N RL _____ AZIMUTH (LOCAL / MAG) _____ DIP _____ HOLE DEPTH _____ m WATER TABLE DEPTH _____ m

DATE _____ CONTRACTOR _____ RIG _____ LAB. and GEOCHEM. REPORT Nos. _____

AGE	GRAPHIC LOG	DRILLED INTERVAL FROM	DRILLED INTERVAL TO	BRACKET	SAMPLE NUMBER METRE COMPOSITE	SAMPLE NUMBER METRE INTERVAL	ROCK TYPE MAJOR	q1	q2	ROCK TYPE MINOR	q	WEATHERING	COLOUR L	COLOUR HUE	MAJOR ROCK TYPE MINERALS DECREASING 1	2	3	4	SULPHIDES TYPE	SULPHIDES %	%VEIN QTZ	COMMENTS	ANALYSES (SHOW UNITS)	
		56	58				CLAY			SILT			6	OY	CY	FZ	FE					ORANGE-BROWN TO PALE GREY CLAY W CA 5% COARSE RNDD QTZ GRNS & SD ? CMNGS		
		58	60				CLAY			SILT			6	OY	CY	QZ	FE							
		60	62				SILT						6	OY	CY	QZ	FE							
		62	64				CLAY						6	OY	CY	FE								
		64	66				CLAY						6	OY	CY	FE								
		66	68		BG9829		CLAY						6	OY	CY	FE								
		68	70				CLAY						6	OY	CY	FE								

BHP-UTAH MINERALS INTERNATIONAL JP 3-90

q = rock type qualifier

9810

BHP GOLD MINES

WA GOLD RAB/RC DRILL LOG SHEET

SH. 1 OF 2 HOLE No. EDP92-17

PROJECT ERUDINA AREA FLINDERS RANGE 1:250,000 SH. PARACHILNA 1:50,000 SH. REMPSTOCK LOGGED BY A. WILDE

JOB No. FKS COLLAR CO ORDS (LOCAL/AMG) 139° 19.27'E 31° 18.96'S/N RL N/D AZIMUTH (LOCAL/MAG) — DIP 90° HOLE DEPTH 66 m WATER TABLE DEPTH >66 m

DATE 4/4 CONTRACTOR A.J DRILLING RIG GORRYBILT 1 LAB. and GEOCHEM. REPORT Nos.

AGE	GRAPHIC LOG	DRILLED INTERVAL FROM	TO	BRACKET	SAMPLE NUMBER METRE COMPOSITE	METRE INTERVAL	ROCK TYPE MAJOR	q1	q2	MINOR	q	WEATHERING	COLOUR L	HUE	MAJOR ROCK TYPE MINERALS DECREASING 1	2	3	4	SULPHIDES TYPE	%	%VEIN QTZ	COMMENTS	ANALYSES (SHOW UNITS)
		0	2				CLAY	CA					6	0	CY	FE						ORANGE CLAY WITH TR CONGLOMERATE/VN	BLADE
		2	4				PEBB			GRAV			6	0R	QZ	FE						MED WELRD QTZ SD, M-C, ~~FEW~~ POOR SORTED	↑ HAMMER
		4	6				PEBB			GRAV			6	0R	QZ	FE	GY						↓
		6	8				CLAY			PEBB			6	0	CY	FE	QZ					PELLETS ∝ CLAY POWDER - RED BROWN	↑
		8	10				CLAY			PEBB			6	0	CY	FE	QZ					TO ORANGE WITH PEBBLES (~10%)	
		10	12				CLAY			SILT			6	0	CY	FE	QZ						
		12	14				CLAY						6	0	CY	FE							BLADE
		14	16				SILT			SAND			6	0	CY	FE	QZ					FSD, WELRD.	
		16	18				SILT			CLAY			6	0	CY	FE	QZ						
		18	20				SILT			CLAY			6	0	CY	FE	QZ						
		20	22				SILT			CLAY			6	0	CY	FE	QZ						
		22	24				SILT			CLAY			6	0	CY	FE	QZ						
		24	26				CLAY						6	0R	CY	FE							↓
		26	28				CLAY						6	0R	CY	FE							↑
		28	30				CLAY						6	0R	CY	FE						CLAY SUSPENSION WITH OCC.	
		30	32				CLAY						6	0R	CY	FE						PEBBLES, PROB CONTAMINATION	
		32	34				CLAY						6	0R	CY	FE							BLADE
		34	36				CLAY			GRAV			6	0R	CY	FE	QZ						+H_2O
		36	38				CLAY						6	0R	CY	FE						PATCHES OF RED FD? QZ/T + MN COATS.	
		38	40				CLAY						6	0R	CY	FE						CLAY + MINOR GRAVEL	
		40	42				CLAY						6	0R	CY	FE							
		42	44				CLAY			GRAV			6	0R	CY	FE	QZ					~30% RED TO GY QRIT (? SILCRETE)	
		44	46				CLAY						6	0R	CY	FE							
		46	48				CLAY						6	0R	CY	FE							
		48	50				CLAY						6	0R	CY	FE							
		50	52				CLAY						6	0R	CY	FE						RED-BROWN TO PALE-GREY	
		52	54				CLAY						6	0R	CY	FE						CLAY W ~5-10% GRAVEL ∝	
		54	56				CLAY						6	0R	CY	FE						SAND PROB. CONTAMINATION	

BHP-UTAH MINERALS INTERNATIONAL JP 3 90

q = rock type qualifier

BHP GOLD MINES

WA GOLD RAB/RC DRILL LOG SHEET

SH. 2 OF 2 HOLE No. EDP92-17

PROJECT _____ AREA _____ 1:250,000 SH. _____ 1: _____ SH. _____ LOGGED BY _____

JOB No. _____ COLLAR CO ORDS (LOCAL/AMG) 139 19.27E 31 18.96'N SRL _____ AZIMUTH (LOCAL/MAG) _____ DIP _____ HOLE DEPTH _____ m WATER TABLE DEPTH _____ m

DATE _____ CONTRACTOR _____ RIG _____ LAB. and GEOCHEM. REPORT Nos. _____

AGE	GRAPHIC LOG	DRILLED INTERVAL FROM	TO	BRACKET	SAMPLE NUMBER 6 METRE COMPOSITE	METRE INTERVAL	ROCK TYPE MAJOR	q1	q2	MINOR	q	WEATHERING	COLOUR L	HUE	MAJOR ROCK TYPE MINERALS DECREASING 1	2	3	4	SULPHIDES TYPE	%	%VEIN QTZ	COMMENTS	ANALYSES (SHOW UNITS)	
		56	58				CLAY						6	0E	CY	FE								
		58	60				CLAY						6	1E	CY	FE						CLAY - BCG PINCR WITH DEPTH.		
		60	62				CLAY						6	1E	CY	FE								
		62	64		BG9830		CLAY						6	1E	CY	FE								
		64	66				CLAY						6	1E	CY	FE								

BHP-UTAH MINERALS INTERNATIONAL P 3 90

q = rock type qualifier

8869

9.36 2.40

WA GOLD RAB/RC DRILL LOG SHEET

BHP GOLD MINES SH. 1 OF . HOLE No. EDP92-18

PROJECT ERUDINA AREA FLINDERS RANGE 1:250,000 SH. PARACHILNA 1:50,000 SH. REMPLOOK LOGGED BY A. WILDE

JOB No. FKS COLLAR CO ORDS (LOCAL/AMG) 31° 18.65 S 139° 20.19 E RL N/D AZIMUTH (LOCAL/MAG) — DIP 90° HOLE DEPTH 70 m WATER TABLE DEPTH >70 m

DATE 5/6/92 CONTRACTOR A-J DRILLING RIG GERRYBILT 1 LAB. and GEOCHEM. REPORT Nos.

AGE	GRAPHIC LOG	DRILLED INTERVAL FROM	TO	BRACKET	SAMPLE NUMBER 6 METRE COMPOSITE	METRE INTERVAL	ROCK TYPE MAJOR	q1	q2	MINOR	q	WEATHERING	COLOUR L	HUE	MAJOR ROCK TYPE MINERALS DECREASING 1	2	3	4	SULPHIDES TYPE	%	%VEIN QTZ	COMMENTS	ANALYSES (SHOW UNITS)
		0	2				CLAY	C	A	GRAV			6	0R	CY	FE	CB	QZ				OCC QZIT FRAGS TO 3cm.	
		2	4				PEBB			GRAV			6	0R	Q2	FE	CY					ROUNDED RIVER PEBBLES TO 5cm. INCLUDE: PP SILTSTONE, MUDSTONE, QZ QZIT.	↑ SURDE ↓
		4	6				SAND			GRAV			6	I	O	Q2	FE	CY				INCU RD, MOD SORTED C-M QTZ SAND. FERRUG FRAGS MOD. GRAVEL AS ABV. INTERVAL	↑
		6	8				PEBB			GRAV			6	I	O	Q2	FE	CY				SUBRD-ANG RIVER GRAVEL N.A. WITH QZ PEBBLES TO 4cm + CLAY	SURDE + H_2O
		8	10				GRAV			PEBB			6	I	O	Q2	FE	CY					
		10	12				GRAV			PEBB			6	I	O	Q2	FE	CY					
		12	14				GRAV						6	I	O	Q2	FE	CY					
		14	16				SAND			GRAV			6	I	O	Q2	FE					RD - SUBANG QTZ SAND, POOR-MOD SORTED + GRAVEL N.A. SAND IS LOCALLY FE-CEMENTED	
		16	18				CLAY						6	0R	Q2	FE							
		18	20				CLAY						6	0R	CY	FE						RED BROWN CLAY W OCC SILT = CA 40-50% PEBBLES SIMILAR TO ABOVE. PROBABLE CONTAMINATION	
		20	22				CLAY						6	0R	CY	FE							
		22	24				CLAY						6	0R	CY	FE							
		24	26				CLAY						6	0R	CY	FE							
		26	28				CLAY						6	0R	CY	FE							
		28	30				CLAY						6	0R	CY	FE						N.A. PEBBLES < 20%	
		30	32				CLAY						6	0R	CY	FE							
		32	34				CLAY			GRAV			6	0R	CY	FE						GRN OF ANG FE TO WHITE FD? QZIT	
		34	36				CLAY			GRAV			6	0R	CY	FE							
		36	38				SAND			CLAY			6	0R	Q2	FE	CY					C-F, POORLY SORTED, WOLRD-SUBANG QTZ SD.	
		38	40				SAND			CLAY			6	0R	Q2	FE	CY					AS W MST FERRUG. COATINGS + GRAINS	
		40	42				CLAY			SAND			6	0R	CY	Q2	FE					MINOR GRAVEL ; PROB CONTAMINATION	
		42	44				CLAY			SAND			6	0R	CY	Q2	FE					D/D.	
		44	46				CLAY						6	0R	CY	FE							
		46	48				CLAY						6	0R	CY	FE						STICKY TO FIRM RED-BROWN TO PALE GREY CLAY. <10% GRN & SD PROBABLE CONTAMINATION	
		48	50				CLAY						6	0R	CY	FE							
		50	52				CLAY						6	0R	CY	FE							
		52	54				CLAY						6	0R	CY	FE							
		54	56				CLAY						6	0R	CY	FE							

BHP-UTAH MINERALS INTERNATIONAL JP 3 90

q = rock type qualifier

6600

BHP GOLD MINES

WA GOLD RAB/RC DRILL LOG SHEET

SH. 2 OF 2 HOLE No. EDP92-18

PROJECT _____ AREA _____ 1:250,000 SH. _____ 1: _____ SH. _____ LOGGED BY _____

JOB No. _____ (LOCAL/AMG) COLLAR CO ORDS _____ E _____ N RL _____ (LOCAL/MAG) AZIMUTH _____ DIP _____ HOLE DEPTH _____ m WATER TABLE DEPTH _____ m

DATE _____ CONTRACTOR _____ RIG _____ LAB. and GEOCHEM. REPORT Nos. _____

AGE	GRAPHIC LOG	DRILLED INTERVAL FROM	TO	BRACKET	SAMPLE NUMBER 6 METRE COMPOSITE	METRE INTERVAL	ROCK TYPE MAJOR	q1	q2	MINOR	q	WEATHERING	COLOUR L	HUE	MAJOR ROCK TYPE MINERALS DECREASING 1	2	3	4	SULPHIDES TYPE	%	% VEIN QTZ	COMMENTS	ANALYSES (SHOW UNITS)	
		56	58				CLAY						6	OR	CY	FE								
		58	60				CLAY						6	OR	CY	FE						ORANGE-PALE GREY STICKY CLAY, 20% GRAVEL & SAND COMMINATION		
		60	62				CLAY						6	OR	CY	FE								
		62	64				CLAY						6	OR	CY	FE								
		64	66				CLAY						6	OR	CY	FE								
		66	68		BG9832		CLAY						6	OR	CY	FE								
		68	70				CLAY						6	OR	CY	FE								

BHP - UTAH MINERALS INTERNATIONAL P 3 90

q = rock type qualifier

FOR REFERENCE SEE DRILL LOG CODING SHEET WAG 1, JAN 1990

0600

1.15 → 3.00.

BHP GOLD MINES

WA GOLD RAB/RC DRILL LOG SHEET

SH. 1 OF . HOLE No. EDP92-19

PROJECT ERUDINA AREA FLINDERS RANGES 1:250,000 SH. PARACHILNA 1:50,000 SH. REMPTOOK LOGGED BY A. WILDE

JOB No. FKS (LOCAL/AMG) COLLAR CO ORDS 139° 22.84' E 31° 11.84' S (LOCAL/MAG) RL N/D AZIMUTH — DIP 90° HOLE DEPTH 70 m WATER TABLE DEPTH 270 m

DATE 5/3/92 CONTRACTOR A.J DRILLING RIG GERRYBILT 1 LAB. and GEOCHEM. REPORT Nos.

AGE	GRAPHIC LOG	DRILLED INTERVAL FROM	TO	BRACKET	SAMPLE NUMBER METRE COMPOSITE	METRE INTERVAL	ROCK TYPE MAJOR	q1	q2	MINOR	q	WEATHERING	COLOUR L	HUE	MAJOR ROCK TYPE MINERALS DECREASING 1	2	3	4	SULPHIDES TYPE	%	%VEIN QTZ	COMMENTS	ANALYSES (SHOW UNITS)
		0	2				CLAY	CA					6	I	CY	FE						POWDERY CLAY, OCC NODULAR CLAY PELLETS, V LITTLE COARSE MATERIAL	↑
		2	4				CLAY	CA					6	I	CY	FE							
		4	6				CLAY	CA					6	I	CY	FE							BLIND
		6	8				SILT			CLAY	CA		6	I	QZ	CY	FE						
		8	10				SAND			SILT			6	I	QZ	FE						F QTZ SD, ANG, MOD WELL SORTED	
		10	12				CLAY	CA					6	DY	CY	FE							
		12	14				CLAY	CA					6	DY	CY	FE						HARD PELLETS OF GREY CLAY	
		14	16				CLAY	CA					6	DY	CY	FE							
		16	18				CLAY	CA					6	DY	CY	FE							
		18	20				CLAY	CA					6	DY	CY	FE							
		20	22				CLAY						6	DY	CY	FE							
		22	24				CLAY						6	DY	CY	FE							
		24	26				SILT			SAND			6	DY	QZ	FE	CY					V.F ANG QTZ & SILT MINOR CLAY	
		26	28				SILT			SAND			6	DY	QZ	FE	CY						
		28	30				SILT			SAND			6	DY	QZ	FE	GY	CY					
		30	32				SAND			SILT			6	DY	QZ	FE						M QTZ SD, RD-SUB ANG, MOD-POOR STG.	
		32	34				SAND			CLAY			6	DY	QZ	FE	CY						
		34	36				PEBB			GRAV			6	DY	QZ	FE	CY					ROUNDED RIVER PEBBLES = CHANNEL OF QZ LT; PP SILTSTONE, FERRUG. MATORIAL	
		36	38				PEBB			CLAY			6	DY	QZ	FE	CY						BLIND +H_2O
		38	40				CLAY						6	DY	CY	FE							
		40	42				CLAY						6	DY	CY	FE						PELLETS OF RED-BROWN CLAY WITH <10% GRANUL. SAND PROBABLE CONTAMINATION	
		42	44				CLAY						6	DY	CY	FE							
		44	46				CLAY						6	DY	CY	FE							
		46	48				CLAY						6	DY	CY	FE							
		48	50				CLAY						6	DY	CY	FE							
		50	52				CLAY						6	DY	CY	FE							
		52	54				CLAY						6	DY	CY	FE							
		54	56				CLAY						6	DY	CY	FE							

BHP-UTAH MINERALS INTERNATIONAL P 3 90

q = rock type qualifier

1660

BHP GOLD MINES

WA GOLD RAB/RC DRILL LOG SHEET

SH. 2 OF 2 HOLE No. EDP92-19

PROJECT _____ AREA _____ 1:250,000 SH. _____ 1: _____ SH. _____ LOGGED BY _____

JOB No. _____ COLLAR CO ORDS (LOCAL / AMG) _____ E _____ N RL _____ AZIMUTH (LOCAL / MAG) _____ DIP _____ HOLE DEPTH _____ m WATER TABLE DEPTH _____ m

DATE _____ CONTRACTOR _____ RIG _____ LAB. and GEOCHEM. REPORT Nos. _____

AGE	GRAPHIC LOG	DRILLED INTERVAL FROM	TO	BRACKET	SAMPLE NUMBER 6 METRE COMPOSITE	METRE INTERVAL	ROCK TYPE MAJOR	q1	q2	MINOR	q	WEATHERING	COLOUR L	HUE	MAJOR ROCK TYPE MINERALS DECREASING 1	2	3	4	SULPHIDES TYPE	%	%VEIN QTZ	COMMENTS	ANALYSES (SHOW UNITS)	
		56	58				CLAY						6	YO	CY	FE								
		58	60				CLAY						6	YO	CY	FE								
		60	62				CLAY						6	YO	CY	FE								
		62	64				CLAY						6	YO	CY	FE								
		64	66				CLAY						6	YW	CY	FE								
		66	68		BG9833		CLAY						7	YW	CY	FE								
		68	70				CLAY						7	YW	CY	FE								

BHP - UTAH MINERALS INTERNATIONAL JP 3 90

q = rock type qualifier

FOR REFERENCE SEE DRILL LOG CODING SHEET WAG 1, JAN 1990

2000

WA GOLD RAB/RC DRILL LOG SHEET

BHP GOLD MINES

SH. 1 OF 2 HOLE No. EDP92-20

PROJECT ERUDINA AREA FLINDERS RANGES 1:250,000 SH. PARACHILNA 1: SH. LOGGED BY A. WILDE

JOB No. FKS COLLAR CO ORDS (LOCAL/AMG) 31° 11.73'S 139° 24.80'E RL N/D AZIMUTH (LOCAL/MAG) - DIP 90° HOLE DEPTH 70 m WATER TABLE DEPTH m

DATE 6/3 CONTRACTOR A.J DRILLING RIG LAB. and GEOCHEM. REPORT Nos.

AGE	GRAPHIC LOG	DRILLED INTERVAL FROM	TO	BRACKET	SAMPLE NUMBER METRE COMPOSITE	METRE INTERVAL	ROCK TYPE MAJOR	q1	q2	MINOR	q	WEATHERING	COLOUR L	HUE	MAJOR ROCK TYPE MINERALS DECREASING 1	2	3	4	SULPHIDES TYPE	%	%VEIN QTZ	COMMENTS	ANALYSES (SHOW UNITS)
		0	2				CLAY	CA					6	1R	CY	FE							
		2	4				CLAY	CA					6	1R	CY	FE							
		4	6				CLAY	CA					6	0R	CY	FE							
		6	8				CLAY	CA					6	0R	CY	FE							
		8	10				CLAY	CA		SILT			6	0R	CY	FE	Q2						
		10	12				SILT						6	0R	Q2	FE							
		12	14				GRAV			CLAY	CA		6	0	Q2	FE	CY					GRAINS FE-COATED	
		14	16				CLAY	CA					6	0	CY	FE						GRAVEL OF MASSIVE Q2IT (? SILCRETE)	
		16	18				CLAY	CA		GRAV			6	Y	CY	FE	Q2						
		18	20				CLAY						6	0	CY	FE							
		20	22				CLAY						6	0R	CY	FE							
		22	24				CLAY						6	0R	CY	FE							
		24	26				CLAY						6	0R	CY	FE							
		26	28				SILT			CLAY			6	0R	CY	FE							
		28	30				SILT						6	0R	Q2	FE							
		30	32				SILT						6	0R	Q2	FE							
		32	34				SAND			SILT			6	0R	Q2	FE						MOD. SORTED SUB-RD → SUB-ANG M-F Q72	
		34	36				PEBB			GRAV			6	0R	Q2	FE						FLATTISH PEBB, PP SILTSTONE, Q2IT &	
		36	38				PEBB			GRAV			6	0R	Q2	FE						IRONSTONE GRN.	
		38	40				CLAY			PEBB			6	0R	CY	Q2	FE						
		40	42				PEBB			GRAV			6	0R	Q2	FE							
		42	44				GRAV			PEBB			6	0R	Q2	FE							
		44	46				SAND						6	0R	Q2	FE						POORLY SRTD, M-F Q72, RD-ANG	
		46	48				SAND			GRAV			6	0R	Q2	FE							
		48	50				CLAY			SAND			6	0R	CY	Q2	FE						
		50	52				CLAY						6	0R	CY	FE							
		52	54				CLAY						6	0R	CY	FE							
		54	56				CLAY						6	0R	CY	FE							

BLADE

BLADE + H_2O

BHP-UTAH MINERALS INTERNATIONAL JP 3 90

q = rock type qualifier

FOR REFERENCE SEE DRILL LOG CODING SHEET WAG 1, JAN 1990

0993

BHP GOLD MINES

WA GOLD RAB/RC DRILL LOG SHEET

SH. 2 OF 2 HOLE No. EDP92-20.

PROJECT _____ AREA _____ 1:250,000 SH. _____ 1: _____ SH. _____ LOGGED BY _____

JOB No. _____ COLLAR CO ORDS (LOCAL / AMG) _____ E _____ N RL _____ AZIMUTH (LOCAL / MAG) _____ DIP _____ HOLE DEPTH _____ m WATER TABLE DEPTH _____ m

DATE _____ CONTRACTOR _____ RIG _____ LAB. and GEOCHEM. REPORT Nos. _____

AGE	GRAPHIC LOG	DRILLED INTERVAL FROM	DRILLED INTERVAL TO	BRACKET	SAMPLE NUMBER METRE COMPOSITE	SAMPLE NUMBER METRE INTERVAL	ROCK TYPE MAJOR	ROCK TYPE q1	ROCK TYPE q2	ROCK TYPE MINOR	ROCK TYPE q	WEATHERING	COLOUR L	COLOUR HUE	MAJOR ROCK TYPE MINERALS DECREASING 1	2	3	4	SULPHIDES TYPE	SULPHIDES %	%VEIN QTZ	COMMENTS	ANALYSES (SHOW UNITS)	
		56	58				CLAY						60	R	CY	FE								
		58	60				CLAY						60	R	CY	FE								
		60	62				CLAY						60	R	CY	FE								
		62	64				CLAY						60	R	CY	FE								
		64	66				CLAY						60	R	CY	FE								
		66	68		BG98		CLAY						60	R	CY	FE								
		68	70				CLAY						60	R	CY	FE								

HARD CLAY POLETS, RED-BROWN TO PINK CHERT. ~5-10% COARSE MATERIAL, ABOB. COMMINATION

BHP-UTAH MINERALS INTERNATIONAL P 5 90

q = rock type qualifier

FOR REFERENCE SEE DRILL LOG CODING SHEET WAG 1, JAN 1990

P6(10

WA GOLD RAB/RC DRILL LOG SHEET

BHP GOLD MINES SH. 1 OF 2 HOLE No. EDP92-2

PROJECT ERUDINA AREA FLINDERS RANGES 1:250,000 SH. PARACHILNA 1:_____ SH._____ LOGGED BY A. WILDE

JOB No. PKS (LOCAL/AMG) COLLAR CO ORDS 139° 26.56'E 31° 11.63'S N RL N/D (LOCAL/MAG) AZIMUTH — DIP 90° HOLE DEPTH 70 m WATER TABLE DEPTH _ m

DATE 6/3/92 CONTRACTOR A.J DRILLING RIG _____ LAB. and GEOCHEM. REPORT Nos. _____

AGE	GRAPHIC LOG	DRILLED INTERVAL FROM	TO	BRACKET	SAMPLE NUMBER METRE COMPOSITE	METRE INTERVAL	ROCK TYPE MAJOR	q1	q2	MINOR	q	WEATHERING	COLOUR L	HUE	MAJOR ROCK TYPE MINERALS DECREASING 1	2	3	4	SULPHIDES TYPE	%	%VEIN QTZ	COMMENTS	ANALYSES (SHOW UNITS)
		0	2				CLAY						6	I	CY	FE							
		2	4				SILT	CA					6	OR	QZ	FE						W. SUCROSIC CREA. FRAGS	
		4	6				SAND			GRAV			6	OR	QZ	FE						MED-C COARSE, RD-MNG, POORLY SORTED SD	
		6	8				PEBB			GRN			6	OR	QZ	PE							
		8	10				CLAY						6	OR	CY	FE							
		10	12				CLAY						6	OR	CY	FE						FIRM-STICKY GREY CLAY.	
		12	14				CLAY						6	OR	CY	FE							
		14	16				SILT			CLAY			6	OR	QZ	FE							
		16	18				SILT						6	OR	QZ	FE							
		18	20				SILT						6	OR	QZ	FE							
		20	22				SILT						6	OR	QZ	FE							
		22	24				SAND			PEBB			6	OR	QZ	FE						MNG CREA, ORANGE SILTSTONE C-M	
		24	26				PEBB			SAND			6	OR	QZ	FE						QTZ SD, RD-MNG, POORLY SORTED	
		26	28				CLAY						6	OR	CY	FE							
		28	30				CLAY						6	OR	CY	FE							
		30	32				CLAY						6	OR	CY	FE							
		32	34				CLAY						6	OR	CY	FE							
		34	36				CLAY						6	OR	CY	FE						POCKETS OF CLAY	
		36	38				CLAY						6	OR	CY	FE						RED-BROWN OR PALE GREY.	
		38	40				CLAY						6	OR	CY	FE						MINOR PEBBLES & COARSE	
		40	42				CLAY						6	OR	CY	FE						SAND ? COMMINATION	
		42	44				CLAY						6	OR	CY	FE							
		44	46				CLAY						6	OR	CY	FE							
		46	48				CLAY						6	OY	CY	FE							
		48	50				CLAY						6	OY	CY	FE							
		50	52				CLAY						6	OY	CY	FE							
		52	54				CLAY						6	OY	CY	FE							
		54	56				CLAY						6	OY	CY	FE							

ANALYSES (SHOW UNITS): BLIND ↓ BLIND → H2O ↓

BHP-UTAH MINERALS INTERNATIONAL JP 3 90

q = rock type qualifier

FOR REFERENCE SEE DRILL LOG CODING SHEET WAG 1, JAN 1990

0095

BHP GOLD MINES

WA GOLD RAB/RC DRILL LOG SHEET

SH. 2 OF 2 HOLE No. EDP92-21

PROJECT _____ AREA _____ 1:250,000 SH. _____ 1: _____ SH. _____ LOGGED BY _____

JOB No. _____ COLLAR CO ORDS (LOCAL/AMG) _____ E _____ N RL _____ AZIMUTH (LOCAL/MAG) _____ DIP _____ HOLE DEPTH _____ m WATER TABLE DEPTH _____ m

DATE _____ CONTRACTOR _____ RIG _____ LAB. and GEOCHEM. REPORT Nos. _____

AGE	GRAPHIC LOG	DRILLED INTERVAL FROM	DRILLED INTERVAL TO	BRACKET	SAMPLE NUMBER 6 METRE COMPOSITE	SAMPLE NUMBER METRE INTERVAL	ROCK TYPE MAJOR	ROCK TYPE q1	ROCK TYPE q2	ROCK TYPE MINOR	ROCK TYPE q	WEATHERING	COLOUR L	COLOUR HUE	MAJOR ROCK TYPE MINERALS DECREASING 1	2	3	4	SULPHIDES TYPE	SULPHIDES %	%VEIN QTZ	COMMENTS	ANALYSES (SHOW UNITS)	
		56	58				CLAY						6	OR	CY	FE								
		58	60				CLAY						6	OR	CY	FE								
		60	62				CLAY						6	OY	CY	FE								
		62	64				PEBB			CLAY			6	OY	QZ	CY	FE							
		64	66				CLAY						6	OY	CY	FE								
		66	68		BG 9		CLAY						6	OR	CY	FE								
		68	70				CLAY			GRN			6	OR	QZ	FE	CY							

BHP-UTAH MINERALS INTERNATIONAL P 5 90

q = rock type qualifier

FOR REFERENCE SEE DRILL LOG CODING SHEET WAG 1, JAN 1990

9606

WA GOLD RAB/RC DRILL LOG SHEET

BHP GOLD MINES SH. 1 OF 2 HOLE No. EDP92-22

PROJECT ERUDINA AREA FUNDERS RANGES 1:250,000 SH. PARACHILNA 1:50,000 SH. READYTOOK LOGGED BY A. WILDE

JOB No. FK5 COLLAR CO ORDS (LOCAL / AMG) 139° 32.6' E 31° 12.33'S N RL N/D AZIMUTH (LOCAL / MAG) — DIP 90° HOLE DEPTH 70 m WATER TABLE DEPTH ~13 m

DATE 6/3/92 CONTRACTOR A.J DRILLING RIG GERRYBILT 1 LAB. and GEOCHEM. REPORT Nos.

AGE	GRAPHIC LOG	DRILLED INTERVAL FROM	TO	BRACKET	SAMPLE NUMBER 6 METRE COMPOSITE	METRE INTERVAL	ROCK TYPE MAJOR	q1	q2	MINOR	q	WEATHERING	COLOUR L	HUE	MAJOR ROCK TYPE MINERALS DECREASING 1	2	3	4	SULPHIDES TYPE	%	% VEIN QTZ	COMMENTS	ANALYSES (SHOW UNITS)
		0	2				CLAY	CA		GRAV		6	I	W	CY	CB	QZ	FE				ALSO ABT GYPSUM. ORN = CONCRETE PRICES?	
		2	4				PEBB			CLAY	CA	6	I	W	QZ	CY	C	B	FE				ABT QZIT, RED-BROWN SNST FRITS TO 2cm	BLADE
		4	6				CLAY	CA				6	R	B	CY	CB	FE	GY					
		6	8				CLAY	CA				6	R	B	CY	CB	FE	GY					
		8	10				CLAY	CA				6	R	B	CY	CB	FE	GY				SAMPLE DAMP	
		10	12				SAND					6	R	B	QZ	FE	CY					SUBANG M QTZ MOST WITH FE COAT,	
		12	14				SAND			CLAY		6	B	W	QZ	FE						HOLE MAKING WATER FROM CA 13m (SMLING)	
		14	16				PEBB			SAND		6	B	O	QZ	FE	CY					GRAVEL = PEBBLES OF AP SILT, ON MUDSTONE, QZIT, A-ROCK	
		16	18				PEBB			SAND		6	B	O	QZ	FE	CY						
		18	20				PEBB			SAND		6	B	O	QZ	FE	CY					TRACE PYRITE	
		20	22				PEBB			SAND		6	B	O	QZ	FE	CY						BLADE +H2O
		22	24				PEBB			SAND		6	B	O	QZ	FE	CY						
		24	26				PEBB			SAND		6	B	O	QZ	FE	CY						
		26	28				SAND			CLAY		6	O	B	QZ	FE	CY						
		28	30				SAND			PEBB		6	O	B	QZ	FE	CY					PEBBLES PROD. CONTAMINATION FROM LAYER	
		30	32				SAND			PEBB		6	O	B	QZ	FE	CY						
		32	34				SAND			PEBB		6	O	B	QZ	FE	CY						
		34	36				SAND			PEBB		6	O	B	QZ	FE	CY						
		36	38				SAND			PEBB		6	O	B	QZ	CY	FE						
		38	40				CLAY			SAND		6	O	B	CY	FE	QZ					INCREASING VOL OF CLAY WITH	
		40	42				CLAY			SAND		6	O	B	CY	FE	QZ					DEPTH. SAND = PEBBLES PROD.	
		42	44				CLAY			SAND		6	O	B	CY	FE	QZ					DERIVED FROM PREV. INTERVAL	
		44	46				CLAY			SAND		6	O	B	CY	FE	QZ						
		46	48				CLAY			SAND		6	O	B	CY	FE	QZ						
		48	50				CLAY			SAND		6	O	B	CY	FE	QZ						
		50	52				CLAY			SAND		6	O	B	CY	FE	QZ						
		52	54				CLAY			SAND		6	O	B	CY	FE	QZ						
		54	56				CLAY			SAND		6	O	B	CY	FE	QZ						

BHP-UTAH MINERALS INTERNATIONAL P 3 90

q = rock type quolifier

2000

BHP GOLD MINES

WA GOLD RAB/RC DRILL LOG SHEET

SH. 2 OF 2 HOLE No. EDP92-22

PROJECT _____ AREA _____ 1:250,000 SH. _____ 1: _____ SH. _____ LOGGED BY _____

JOB No. _____ COLLAR CO ORDS (LOCAL / AMG) _____ E _____ N RL _____ AZIMUTH (LOCAL / MAG) _____ DIP _____ HOLE DEPTH _____ m WATER TABLE DEPTH _____ m

DATE _____ CONTRACTOR _____ RIG _____ LAB. and GEOCHEM. REPORT Nos. _____

AGE	GRAPHIC LOG	DRILLED INTERVAL FROM	TO	BRACKET	SAMPLE NUMBER 6 METRE COMPOSITE	METRE INTERVAL	ROCK TYPE MAJOR	q1	q2	MINOR	q	WEATHERING	COLOUR L	HUE	MAJOR ROCK TYPE MINERALS DECREASING 1	2	3	4	SULPHIDES TYPE	%	%VEIN QTZ	COMMENTS	ANALYSES (SHOW UNITS)
		56	58				CLAY						6	OB	CY	FE							
		58	60				CLAY						6	OB	CY	FE							
		60	62				CLAY						6	OB	CY	FE							
		62	64				CLAY						6	OB	CY	FE							
		64	66				CLAY						6	OB	CY	FE							
		66	68		BG9835		CLAY						6	OB	CY	FE							
		68	70				CLAY						6	OB	CY	FE							

ABUNDANT SAND, GRAVEL & PEBBLES, PROB. DERIVED FROM 10-26m

BHP-UTAH MINERALS INTERNATIONAL JP 3 90

q = rock type quolifier

FOR REFERENCE SEE DRILL LOG CODING SHEET WAG 1, JAN 1990

0998

APPENDIX 3

DRILL LOGS - KENNECOTT DH3-6
REAPHOOK HILL Zn PROSPECT

DH3

0-32m NO CORE

32-78m WEATHERED DOLOMITE
Yellow to pale orange to brick red, friable fine-grained dolomite. Mn is common as dendritic pyrolusite along fracture surfaces. Vugs are common and contain carbonate rhombs to 1mm. Sub-spherical pitting is common and locally constitutes ca. 3% of the rock. Intense orange colouration due to goethite persists only to about 34m, with a second interval at 70m. The uppermost zone is associated with elevated Zn values (up to 0.7%).

78-86.5m MEDIUM-GRAINED SAND & CLAY
Fragments of clay with medium-grained sand embedded. Conspicuous change in colour from previous unit to off-white. Kennecott correlated this unit with the Parachilna Formation and put the break at 74.5m.

86.5-98.7m MEDIUM-GRAINED SANDSTONE
White friable and possibly kaolinitic medium-grained sandstone. From 89m onwards the rock is less friable and more quartzitic.

DH4

0-9m GYPSIFEROUS CLAY & QUARTZITE BOULDER FRAGMENTS
Recovery very poor. Probable fluvial sediments of recent origin.

9-72.3m DOLOMITE
Texturally variable from finer variety with ca. 1% coarse carbonate patches to a coarse (recrystalised?) variety. Colour is typically pale maroon to purplish in upper part presumably due to interstitial hematite. Vuggy porosity is common throughout the upper part of the interval but is reduced below approximately 52m, where the rock takes on a pale pink colour, reflecting reduced hematite. Chalcophanite was noted coating a fracture at 41m. Dendritic pyrolusite is common throughout, but is noticeably more abundant between 224 and 228 where goethite is also present in abundance.

72.3-73.1m SANDSTONE
An off-white fine-grained sandstone with leisegang rings. Kennecott incorporate this into the Parachilna Formation although the rock beneath is identical to the dolomite above.

73.1-81.0m DOLOMITE - As above.

81.0-81.8m MASSIVE Mn & Fe OXIDE

81.7-84.0m BRICK-RED CLAY
With discontinuous seams of black Mn with white selvage (ca 1% of rock). Some dolomite fragments at base of this interval.

84.0-90.8m LAMINATED BUFF CLAY
Laminations picked out by Fe oxide. Ca 20° to core axis.

90.8-105m MEDIUM SANDSTONE
Abrupt contact. Sandstone is friable beneath contact but is quartzitic after 91.5m. Three sub-horizontal calcite veins (<2mm thick) were noted.

DH5

0-15.2m NO CORE

15.2-19.5m CLAY & SAND
Orange and unconsolidated.

19.5-27.4m NO CORE

27.4-99m FERRUGINOUS DOLOMITE
Pink, coarsely crystalline dolomite containing vuggy cavities with carbonate rhombs. From 48 to 48.5 is a goethite-rich interval which is rich in Zn. With depth dolomite becomes finer, develops a sucrosic texture. Minor interstitial hematite.

99-136m DOLOMITE
From 100m on dolomite is pink has a predominant sucrosic texture, with a slight decrease in vuggy porosity. 104-108m - no core, but flowing sand. Dolomite becomes paler at depth. 127-129m No core.

DH5A

0-121m NOT CORED

121-132m FERRUGINOUS DOLOMITE
Pale grey to pink. Coarse grains of subhedral carbonate in reddish hematite matrix. Numerous vugs (<1cm) lined with coarse, rhombohedral carbonate. Porosity probably >1-2% due to cavities.

132-142m NO CORE

142-148m DOLOMITE
Distinctive dark pink rock with carbonate-filled cavities forms uppermost 2m (see T/S). Stylolites with iron oxide seams are common. This grades into an off-white fine-grained dolomite with patches of yellow/brown carbonate (? ankerite) and numerous stytalites. Considerably finer and less iron-rich than the ferruginous dolomites.

148-157m CLAY
Poor recovery (<5%). Clay fragments.

157-174m FERRUGINOUS DOLOMITE
As above. Less iron rich between 158 - 164m. Stylolites lacking. Cavities abundant.

174-180m DOLOMITE
White to pale-grey as above (no stylolites). Minor Fe at base.

180-195m NO CORE

195-221m DOLOMITE
Massive, dark grey. Pink at top of zone. Laminations visible in places.

221-224m SANDSTONE
Creamy-white, fine-grained. Some medium-grained layers to 1 cm visible at top oriented at 30° to core axis. One conglomerate layer with pelletal clasts to 1 cm including a green ?sericite example.

224-229m NO CORE

229-237m FERRUGINOUS SANDSTONE
Fragments of orange/yellow friable sandstone. Poor recovery.

237-248m KAOLINITIC SANDSTONE
Pale-grey, medium grained sandstone with ca 2-3% white Kaolinite cement as flecks.

DH6

0-9.5m FLUVIAL SEDIMENTS (?)
Pale-grey, friable, medium-grained quartzose sandstone with white flecks, possibly kaolinitic cement. Sand grains are moderately rounded. Seems very similar to sandstone at top of Pound Quartzite (could be fluvial boulders?). Very poor recovery.

9.5-30.5m PINK/WHITE MOTTLED CLAY
Poor recovery. Pink to white mottled clay. Between 14 & 14.6 abundant goethite. Rare sandy layers (e.g. 15.5-15.8m). Pink colouration (ie disseminated hematite?) is more intense between 12.5 and 18.3m. A solitary quartzite fragment occurs at ca. 21.3m, but may have been displaced from its true position in the core tray.

30.5-34.75m KAOLINITIC SANDSTONE
Similar to friable sandstone above. Uppermost part of this unit is fragmented in the core trays, white and friable, but becomes better cemented and more coherent from 31.5m.

APPENDIX 4

ANALYTICAL RESULTS:

BOTTOMHOLE SAMPLES

CLASSIC LABORATORIES

Osman Place, Thebarton, South Australia 5031
Telephone: (08) 416 5300 Facsimile: (08) 234 0321

Mr Andy Wilde
BHP Exploration Ltd
801 Glenferrie Road
Hawthorn
VIC 3122

F I N A L A N A L Y S I S R E P O R T

Your Order No: 17769/FK5 Our Job Number : 2AD0699

Samples received : 09-MAR-1992 Results reported : 01-APR-1992
No. of samples : 22
Report comprises a cover sheet and pages 1 to 2

This report relates specifically to the samples tested in so far as that the samples as supplied are truly representative of the sample source.

Note:
If you have any enquiries please contact Miss Anne Reed quoting the above job number.

Approved Signatory:

John Waters
Laboratory Manager - Adelaide

MM Mr Andy Wilde VIC

Report Codes:
N.A. - Not Analysed.
L.N.R. - Listed But Not Received.
I.S. - Insufficent Sample.

Distribution Codes:
CC - Carbon Copy
EM - Electronic Media
MM - Magnetic Media

CLASSIC LABORATORIES

ANALYTICAL REPORT

Job: 2AD0699
O/N: 17769/FK5

Sample	Au Avg	Au Rp1	Au Rp2	Pd	Cu	Pb	Zn
BG-9815	0.10	0.10	0.10	<0.1	10	18	22
BG-9816	0.15	0.15	--	<0.1	10	38	75
BG-9817	0.30	0.30	--	<0.1	12	20	58
BG-9818	0.10	0.10	--	<0.1	7	8	14
BG-9819	0.25	0.25	--	<0.1	9	18	25
BG-9820	0.15	0.15	--	<0.1	12	26	19
BG-9821	0.05	0.05	--	<0.1	11	16	22
BG-9822	0.10	0.10	--	<0.1	14	18	15
BG-9823	0.25	0.35	0.20	<0.1	65	42	110
BG-9824	0.40	0.40	0.40	<0.1	20	32	13
BG-9825	0.05	0.05	--	<0.1	16	20	19
BG-9826	0.40	0.45	0.30	<0.1	34	25	66
BG-9827	<0.05	<0.05	--	<0.1	26	30	72
BG-9828	0.35	0.30	0.35	<0.1	28	36	98
BG-9829	<0.05	<0.05	--	<0.1	22	28	50
BG-9830	0.15	0.15	--	<0.1	13	30	15
BG-9831	I.S.	I.S.	I.S.	<0.1	22	30	40
BG-9832	0.10	0.10	--	<0.1	22	30	38
BG-9833	0.15	0.15	--	<0.1	26	32	58
BG-9834	<0.05	<0.05	--	<0.1	22	30	50
BG-9835	<0.05	<0.05	--	<0.1	16	24	30
BG-9836	I.S.	I.S.	I.S.	<0.1	26	35	70
Units	ppb	ppb	ppb	ppb	ppm	ppm	ppm
DL	0.05	0.05	0.05	0.1	2	4	2
Scheme	BLEG2	BLEG2	BLEG2	BLEG2	AA1	AA1	AA1

CLASSIC LABORATORIES

ANALYTICAL REPORT

Job: 2AD0699
O/N: 17769/FK5

Sample	Au Avg	Au Dp1	Au Dp2	As	Sb	Hg
BG-9815	<1	<1	<1	2	4	<0.05
BG-9816	<1	<1	--	3	<4	<0.05
BG-9817	<1	<1	--	3	<4	<0.05
BG-9818	<1	<1	--	<2	<4	<0.05
BG-9819	<1	<1	--	<2	<4	<0.05
BG-9820	<1	<1	--	<2	4	<0.05
BG-9821	<1	<1	--	2	<4	<0.05
BG-9822	<1	<1	--	<2	<4	<0.05
BG-9823	<1	<1	--	12	<4	<0.05
BG-9824	<1	<1	--	2	<4	<0.05
BG-9825	<1	<1	--	4	<4	<0.05
BG-9826	<1	<1	--	2	<4	0.15
BG-9827	<1	<1	--	4	<4	<0.05
BG-9828	<1	<1	--	6	<4	<0.05
BG-9829	<1	<1	--	3	<4	<0.05
BG-9830	<1	<1	--	4	<4	<0.05
BG-9831	<1	<1	--	7	<4	0.05
BG-9832	<1	<1	--	6	<4	<0.05
BG-9833	<1	<1	--	5	<4	<0.05
BG-9834	<1	<1	--	4	<4	<0.05
BG-9835	<1	<1	<1	4	<4	<0.05
BG-9836	<1	<1	--	6	<4	<0.05
Units	ppb	ppb	ppb	ppm	ppm	ppm
DL	1	1	1	2	4	0.05
Scheme	FA3	FA3	FA3	XRF1	XRF1	AA6