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EL 1084

MOUNT ALECK

PARTIAL SURRENDER REPORT FOR THE PERIOD 19/11/82 TO 18/11/83

Submitted by
BHP Minerals Ltd
1984

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Government of South Australia
Primary Industries and Resources SA

ENVELOPE 5326

TENEMENT: EL 1084, Mt Aleck

TENEMENT HOLDER: BHP Minerals Ltd

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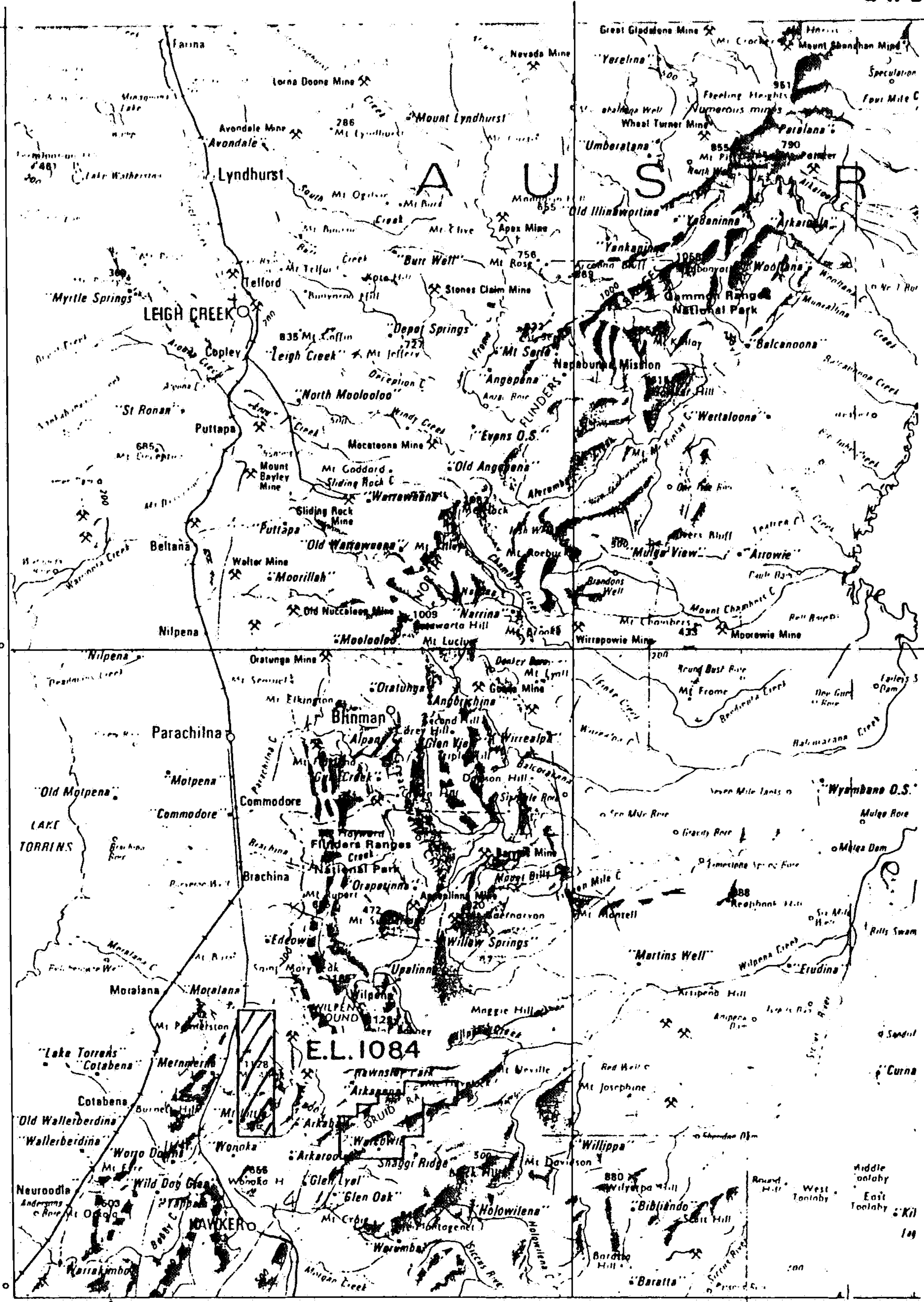


T N

/// AREA RELINQUISHED

Scale 1: 1,000,000

0 20 40 60 Km

Centre Melbourne	THE BROKEN HILL PROPRIETARY CO LTD EL 1084, MT. ALECK, S.A. LOCATION MAP	Project No
Date 29-3-83		Drawing No A4-2385

EXPLORATION LICENCE 1084

MT. ALECK, SOUTH AUSTRALIA

PARTIAL RELINQUISHMENT REPORT

1. GENERAL

Exploration Licence 1084 of 298 square kilometres was granted to BHP Minerals Limited for one year on 19th November, 1982. This licence replaced E.L. 727, which was originally granted to BHP Minerals Limited (formerly Dampier Mining Company Limited) over a larger area of 780 square kilometres on 22nd September, 1980. A twelve month extension was granted to E.L. 727 over a reduced area of 474 square kilometres on 22nd September, 1981.

A twelve month extension to E.L. 1084 was granted on 19th November, 1983 over a reduced area of 150 square kilometres, which incorporates the Chace and Druids Ranges area.

This report covers the work carried out on the relinquished portion (Mern Merna Syncline) of E.L. 1084 Mt. Aleck.

2. SUMMARY OF EXPLORATION CARRIED OUT

a) Literature search of all previous exploration and research data.

b) Reconnaissance geological mapping and prospecting (helicopter supported).

c) Colour aerial photography at 1:20,000 scale.

d) Stream sediment sampling.

e) Rock-chip / soil sampling of Vanessa Prospect.

3. RESULTS FROM ABOVE WORK

a) Geological mapping on the eastern limb of the Mern Merna Syncline showed that potential existed within the Lower Cambrian carbonates for Mississippi Valley Type mineralization. Further prospecting in the area failed to detect any major zones of mineralization; sporadic mineralization (galena/sphalerite) is present in the basal units of the Wilkawillina Limestones, as had been previously detected by former explorers, however, lack of sufficient prepared ground (karst fill, brecciation, porosity) downgraded the potential of the area.

b) Vanessa Prospect

Barite, copper and zinc mineralization was discovered associated with a faulted block of Lower Cambrian carbonates on the eastern side of the Mern Mera Syncline.

...2/.

South dipping massive Wilkawillina Limestone is fault bound to the north against westward dipping shaley Parara limestone. The mineralization (Vanessa Prospect) is associated with this fault zone.

Extensive areas of talus scree and Tertiary silcrete capping cover a large proportion of this area.

Twenty-eight (28) stream sediment samples were collected from streams draining this faulted area. (Sample Nos. 6857-6884). The -20 +80 mesh fraction of these samples was analysed by COMLABS (Adelaide) for Cu, Pb, Zn, by AAS methods.

The results were generally low, with maximum values being 60ppm, 130ppm and 200ppm for Cu, Pb, Zn respectively (background values 15ppm, 20ppm, 45ppm).

A total of one hundred and forty-seven (147) soil samples were collected at 50 metre intervals on the Vanessa Prospect grid (1,000 x 300 m).

All samples were analysed by COMLABS (Adelaide) for Cu, Pb and Zn by AAS methods.

Maximum values (background values in brackets) for this programme were 710ppm (8ppm), 60ppm(6ppm) and 650ppm (45ppm) for Cu, Pb and Zn respectively.

4. EXPENDITURE

Expenditure debited to E.L. 1084 to the end of January, 1984 is:-

Wages & Salaries	16,946
Field Support	2,531
Vehicles	2,249
Equipment	6,324
Geochemistry	9,008
Surveying	4,387
Tenement fees	1,287
Services	717
Sundries	326
Administration & Overheads	2,188
	$45,963

E.L. 1084 MT. ALECK - PARTIAL RELINQUISHMENT

FLINDERS UNCONFORMITY

The Flinders Unconformity and associated mineralization is our major target within the Lower Cambrian carbonates of the Flinders Ranges, for Mississippi Valley Style Pb/Zn.

Within our other tenements in the Flinders Ranges (e.g. Donkey Bore, Wirrealpa Mine, Linda Prospect, etc.), exploration is still being carried out to delineate the continuity of the mineralization at depth.

Within the Mern Merna Syncline, this unconformity is not as well expressed on the surface as it is in other tenements, and only trace amounts of lead and zinc mineralization were detected during our exploration activities.

This area was given the lowest priority when recently we rated the various prospects in the Flinders Ranges. Although the potential still exists in the Mern Merna Syncline for extensive MVT mineralization, the cost of exploration would be higher here than it would in other prospects where we have greater knowledge of the geology, prepared ground and mineralization.

CHACE AND DRUID RANGES

An anomalous zone (approximately 6 km. strike length) of Pb, Zn geochemistry was detected during our stream sediment sampling programme within the Chace and Druid Ranges. Further exploration in this area is warranted.

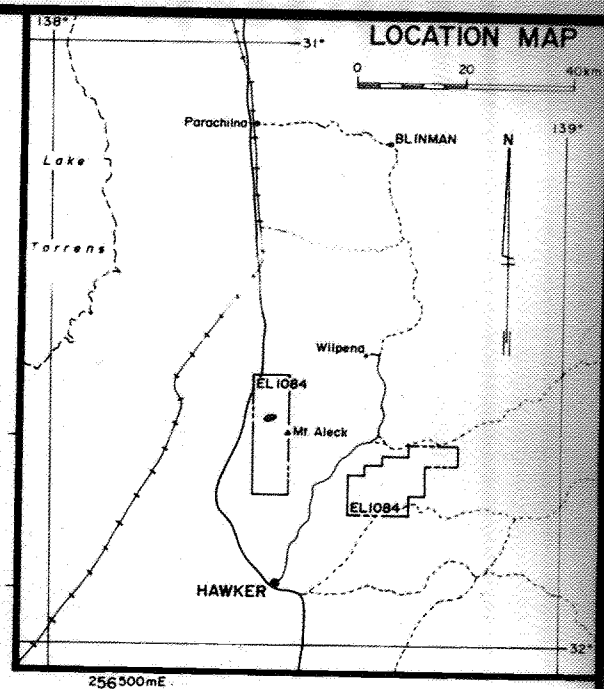
This area is part of the "package deal" recently offered out to potential joint venture partners.

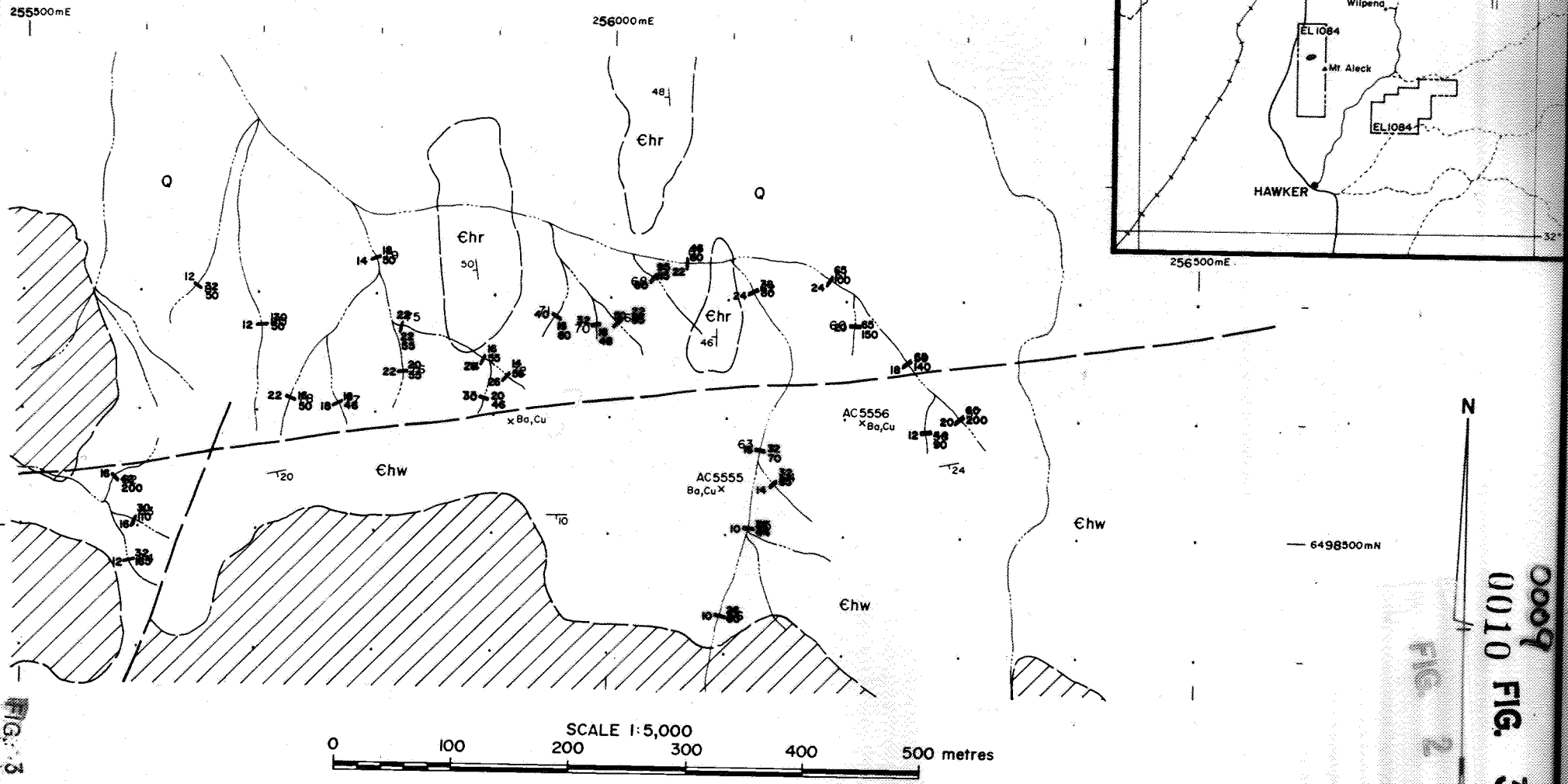
M. ROCHE

LEGEND

- Q — Quaternary alluvium/scree
- Tertiary silcrete
- €hr — Parara limestone
- €hw — Wilkawillina limestone (poor outcrop)
- Fault
- Geological boundary
- Stream sample site - prefixed by SS68
- AC5556 ×Ba,Cu — Mineral occurrence and sample number
- Grid (emplaced August 1982)
- Cu / Pb Zn — Geochemical stream sample, p.p.m.

LOCATION MAP





THE BROKEN HILL PROPRIETARY CO. LTD.

E.L.1084 MT. ALECK, S.A. — VANESSA PROSPECT

GEOCHEMICAL STREAM SAMPLE SURVEY Cu, Pb, Zn (ppm)

Centre ADELAIDE

Date 15-12-84

Project No 6-1128-212

Drawing No A4-343

FIG. 3

0009 0010 FIG. 3

FIG. 2

Centre ADELAIDE

Date

THE BROKEN HILL PROPRIETARY CO. LTD.

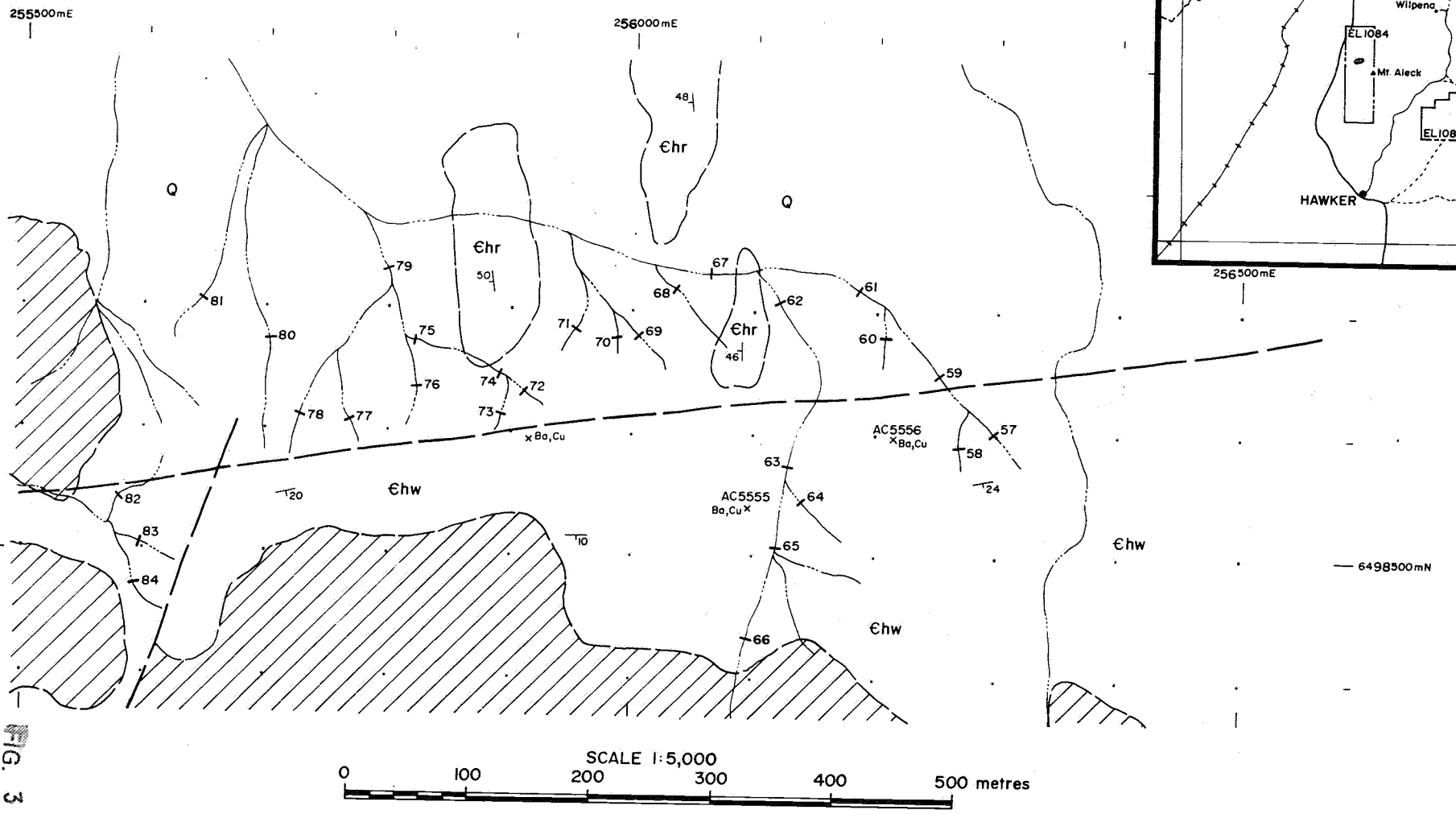
E.L.1084 MT. ALECK S.A. — VANESSA PROSPECT

LOCATION OF AREA

Project No 6-L28-21

LEGEND

- Q — Quaternary alluvium/scree
- Tertiary silcrete
- €hr — Parara limestone
- €hw — Wilkawillina limestone (poor outcrop)
- Fault
- Geological boundary
- 69 — Stream sample site - prefixed by SS68
- AC5556 ×Ba,Cu — Mineral occurrence and sample number
- Grid (emplaced August 1982)



SCALE 1:5,000

0 100 200 300 400 500 metres

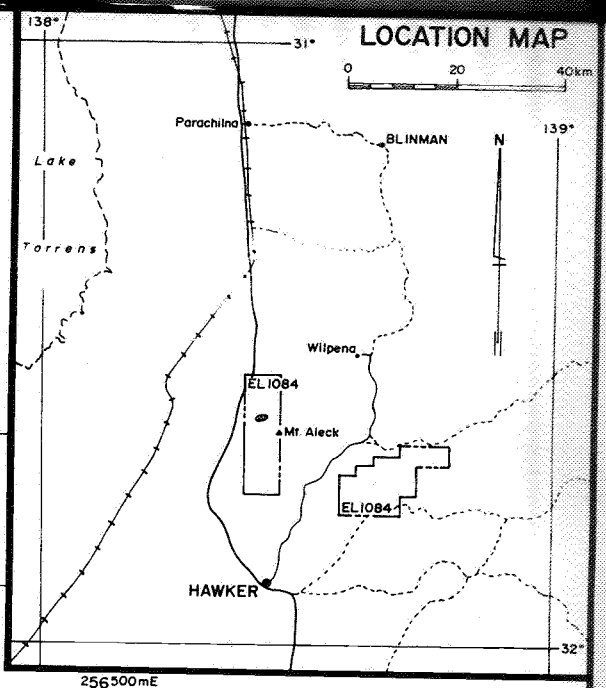


FIG. 3

0010 FIG. 3

E.L.1084 MT ALECK S.A.
MERNMERNA SYNCLINE AREA
CAMBRIAN GEOLOGY

THE BROKEN HILL PROPRIETARY CO. LTD.

Drawn: R.K. | Date: JULY '82 | Centre: WHYALLA
Prepared: M.R. | Project No: 6-128-20 | Drawing No: AO-37
Revised:

1-9765

FIG. 4

SCALE 1 : 20 000

0 1 2 3 Kilometres

QUATERNARY	Q	ALLUVIUM, SCREE, ETC.
TERTIARY		MERNMERNA SILCRETE – DURICRUST DEVELOPED ON TERTIARY SANDS MARGINAL TO PIRIE – TORRENS BASIN.
MIDDLE CAMBRIAN	€b	BILLY CREEK FORMATION: RED BROWN MICACEOUS SANDSTONES AND SHALES WITH HALITE PSUEDOMORPHS.
LOWER CAMBRIAN	€ho	ORAPARINNA SHALE – GREEN CARBONACEOUS SILTSTONES.
	€hr	PARARA LIMESTONE: GENERALLY FLAGGY GREY LIMESTONES WITH INTERBEDDED SHALES; CYCLIC MOTTLED CALCARENITES AND CALCILUTITES AT BASE.
	€hw	WILKAWILLINA LIMESTONE: MASSIVE BIOSTROMAL ARCHAEOCYATHID LIMESTONE; OCCASIONAL INTERBEDDED GREY FLAGGY LIMESTONE UNITS; GENERALLY DOLOMITIC AT BASE.
	€hp	PARACHILNA FORMATION: ARGILLACEOUS SANDSTONES WITH WORM BURROWS (DIPLOCRATERION)
PROTEROZIC	Ewp	RESISTANT WHITE QUARTZITE WITH MINOR SHALE BANDS ABOVE RED CROSSBEDDED FELDSPATHIC SANDSTONE.

?—?— GEOLOGICAL BOUNDARIES; INFERRED.

BEDDING TREND LINES.

FAULT

SYNCLINAL; ANTICLINAL AXIS.

UNCONFORMITY: FLINDERS; OTHER.

30 BEDDING INCLINED.

082 PHOTO CENTRE (S.A. LANDS DEPT SURVEY 2678)

008 PHOTO CENTRE (S.A. LANDS DEPT SURVEY 2679)

KK KARST COLLAPSE FEATURES

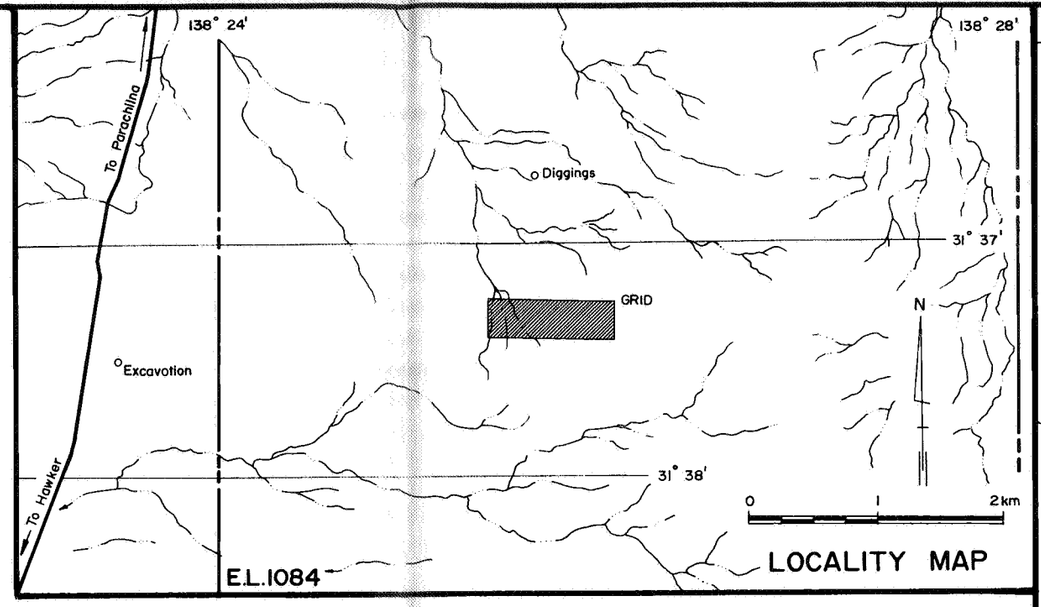
Ba BARYTES
Pb LEAD
Cu COPPER
Zn ZINC
MINERAL OCCURRENCES

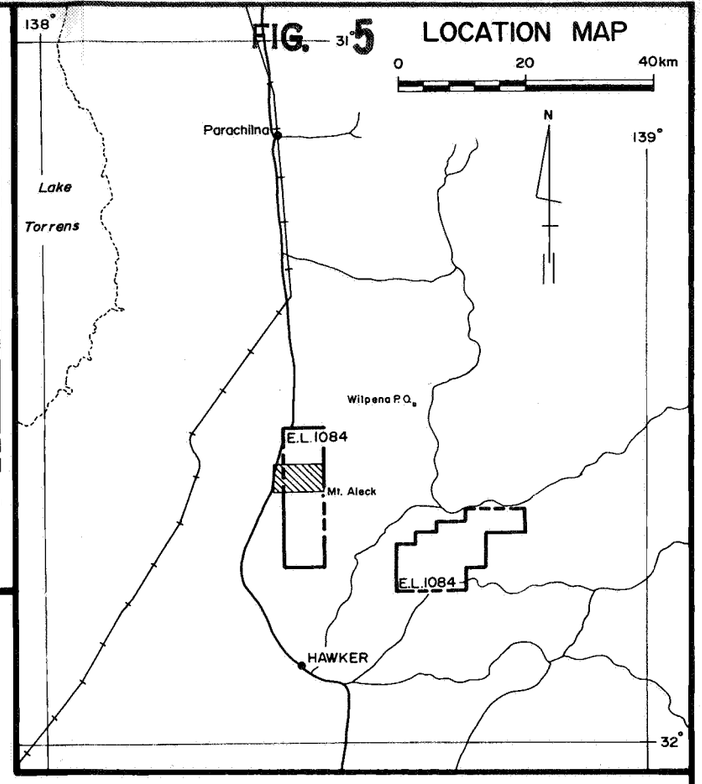
RELINQUISHED AREA
E.L.1084
MT. ALECK
"Mernmerna"
"Mount Little"
WONOKA
Hookina Ck
Mernmerna Ck
0 5 10 Km

•7	•14	•21	•28	•35	•42	•49	•56	•63	•70	•77	•84	•91	•98	•105	•112	•119	•126	•133	•140	•147
•6	•13	•20	•27	•34	•41	•48	•55	•62	•69	•76	•83	•90	•97	•104	•111	•118	•125	•132	•139	•146
•5	•12	•19	•26	•33	•40	•47	•54	•61	•68	•75	•82	•89	•96	•103	•110	•117	•124	•131	•138	•145
•4	•11	•18	•25	•32	•39	•46	•53	•60	•67	•74	•81	•88	•95	•102	•109	•116	•123	•130	•137	•144
•3	•10	•17	•24	•31	•38	•45	•52	•59	•66	•73	•80	•87	•94	•101	•108	•115	•122	•129	•138	•143
•2	•9	•16	•23	•30	•37	•44	•51	•58	•65	•72	•79	•86	•93	•100	•107	•114	•121	•128	•137	•142
•1	•8	•15	•22	•29	•36	•43	•50	•57	•64	•71	•78	•85	•92	•99	•106	•113	•120	•127	•136	•141

GRID SAMPLE NUMBERS

(prefixed VSO)





255 500 m E

256 500 m E

16 20/250	12 18/130	12 10/150	22 6/130	12 16/36	8 4/42	18 14/65	14 4/60	8 4/28	6 4/32	8 4/48	16 4/50	14 4/44	20 4/60	14 4/60	14 4/40	10 4/10	4 4/28	6 6/20	24 26/30	10 8/34
16 28/540	16 18/120	8 10/50	24 8/450	8 4/28	8 4/46	8 6/28	6 4/40	8 4/36	6 4/46	8 4/48	6 10/22	14 4/48	6 4/12	4 4/16	6 4/12	16 10/50	6 4/48	6 4/28	8 14/65	16 12/55
32 44/560	10 12/130	10 10/150	12 4/50	16 22/75	8 4/32	8 4/30	6 4/46	10 6/70	10 4/55	8 4/48	6 10/44	12 4/65	6 4/36	8 4/34	6 4/34	4 4/24	6 4/24	10 4/38	6 4/34	12 8/34
34 26/250	22 8/110	8 8/125	14 4/50	8 4/36	8 4/36	16 4/60	8 4/38	10 6/55	20 4/44	10 14/55	10 6/55	30 4/32	14 4/200	6 4/28	6 4/70	6 10/34	10 4/34	16 10/55	8 4/20	75 8/60
16 36/430	8 16/140	18 12/120	55 20/36	10 4/24	10 4/65	14 4/70	8 4/65	55 16/65	100 24/42	36 4/30	710 4/18	10 4/28	14 4/26	6 4/46	6 4/26	8 4/18	10 4/26	18 20/85	16 10/55	4 4/14
16 22/650	8 10/150	8 12/85	10 4/55	12 4/34	6 4/60	30 60/160	85 65/90	22 10/85	95 34/100	55 4/75	44 4/75	18 4/60	18 20/130	18 30/65	18 4/55	16 14/46	10 4/22	24 24/75	6 4/14	6 4/6
12 24/140	10 8/70	8 12/230	8 4/100	14 4/55	10 4/38	36 6/80	16 6/30	16 4/75	55 28/100	75 32/110	36 4/75	24 4/75	30 6/75	28 4/65	18 9/55	14 10/48	70 4/40	26 14/70	6 4/10	8 8/20

6 498 700 m N

6 498 400 m N

LEGEND

Cu / Pb / Zn — Geochemical sample, values in ppm

NOTE: Analysis method AAS

N

Scale 1:5,000

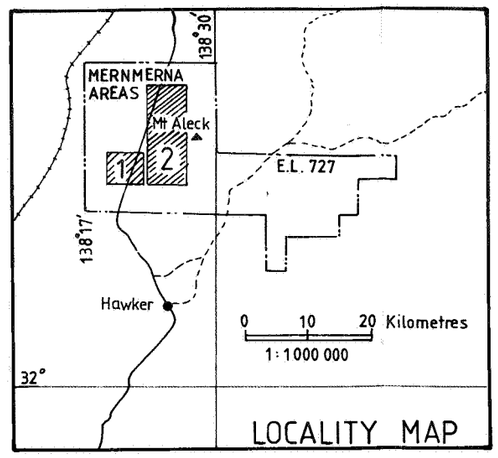
0 100 200 300 400m

FIG. 5 cont

	THE BROKEN HILL PROPRIETARY CO. LTD. EXPLORATION DEPARTMENT
	E.L.1084 MT. ALECK, S.A. VANESSA PROSPECT COPPER (ppm), LEAD (ppm), ZINC (ppm) ASSAYS
Revisions:	Prepared by: M T R. — Centre: Adelaide Date: 18-3-83 — Project No.: 6-L280-1 — Drawing No.: A3_142 Drawn: S C S.

0011

FIG. 6



ANALYSIS PREPARATION: PERCHLORIC ACID.
ANALYSIS METHOD: A.A.S.

G 6

THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

E.L. 727 MT. ALECK S.A.

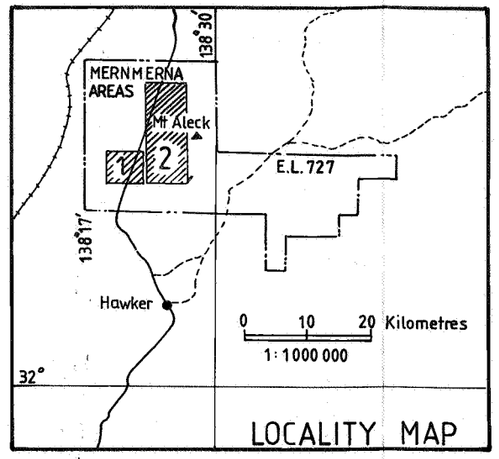
MERNMERNA SYNCLINE AREA-SHEET 1
STREAM SEDIMENT ANALYSES
SAMPLE SITE LOCATIONS

Drawn: R.K.	Date: OCT. 81	Centre: WHYALLA
Prepared: M. ROCHE	Project No: 6-L28-2	Drawing No: A3-159
Checked:		

Revisions:

2100

FIG. 7



6 490 000 m E

250 000 mE

PARACHILNA

N

"Woolyana"

HAWKER

0 200 400 600 800 1000 metres

SCALE 1: 20 000

STREAMS TRACED FROM ENLARGEMENT OF MORALANA 1:50 000 TOPO MAP.

ANALYSIS PREPARATION: PERCHLORIC ACID.
ANALYSIS METHOD: A.A.S.

0013

FIG. 7

THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

E.L. 727 MT. ALECK S.A.

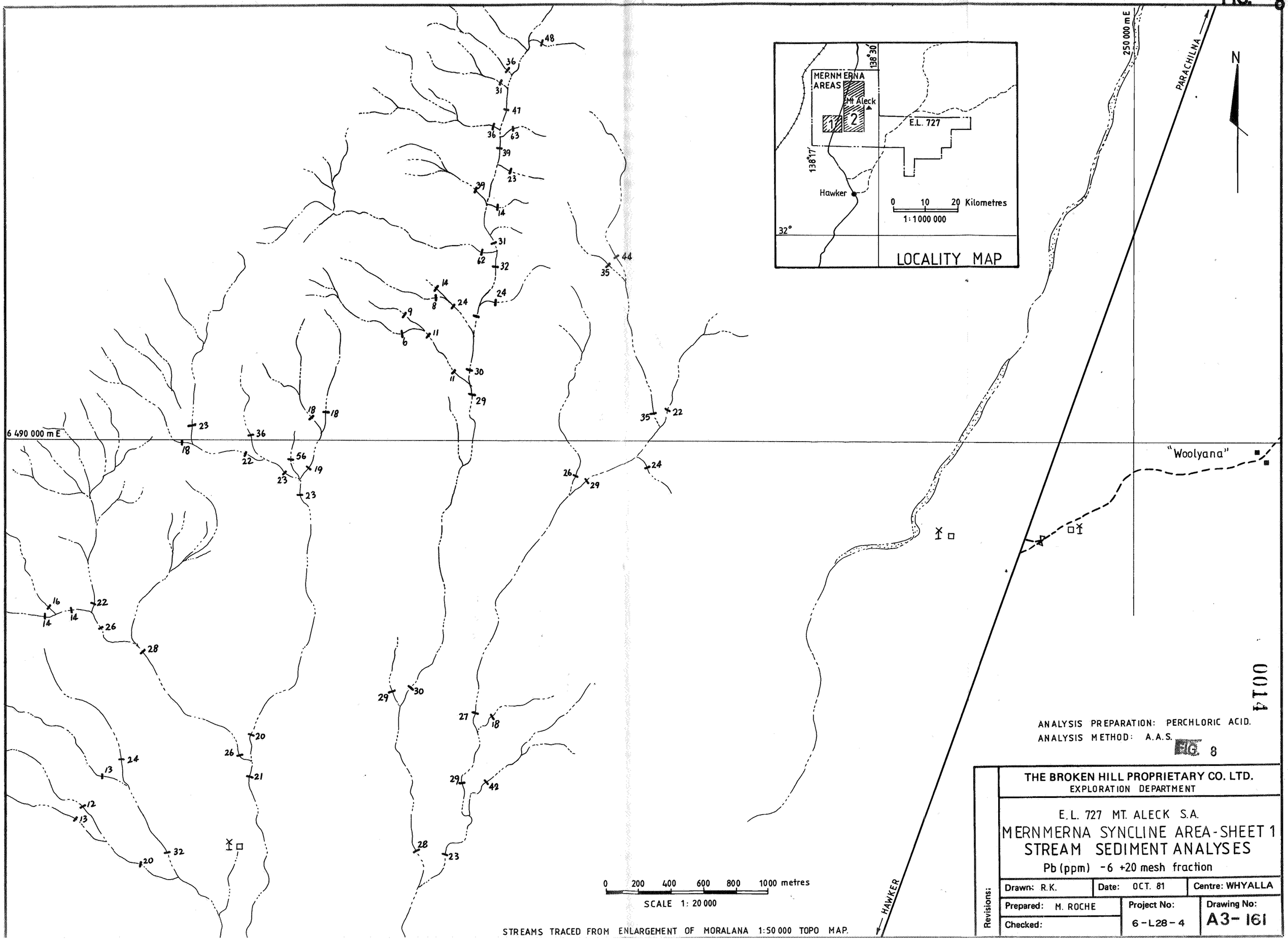
MERNMERNA SYNCLINE AREA-SHEET 1
STREAM SEDIMENT ANALYSES

Cu (ppm) -6 +20 mesh fraction

Drawn: R.K.	Date: OCT. 81	Centre: WHYALLA
Prepared: M. ROCHE	Project No: 6-L28-3	Drawing No: A3-160
Checked:		

Revisions:

FIG. 8



STREAMS TRACED FROM ENLARGEMENT OF MORALANA 1:50 000 TOPO MAP.

0014

ANALYSIS PREPARATION: PERCHLORIC ACID.
ANALYSIS METHOD: A.A.S.

FIG. 8

THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

E.L. 727 MT. ALECK S.A.

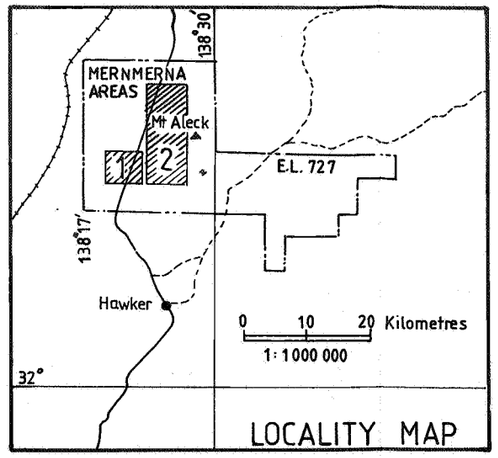
MERNMERNA SYNCLINE AREA - SHEET 1
STREAM SEDIMENT ANALYSES

Pb (ppm) -6 +20 mesh fraction

Drawn: R.K.	Date: OCT. 81	Centre: WHYALLA	
Prepared: M. ROCHE	Project No: 6-L28-4	Drawing No: A3-161	
Checked:			

Revisions:

FIG. 9



6 490 000 m E

250 000 m E

PARACHILNA

"Woolyana"

HAWKER

0 200 400 600 800 1000 metres

SCALE 1: 20 000

STREAMS TRACED FROM ENLARGEMENT OF MORALANA 1:50 000 TOPO MAP.

0015

ANALYSIS PREPARATION: PERCHLORIC ACID.
ANALYSIS METHOD: A.A.S.

FIG. 9

THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

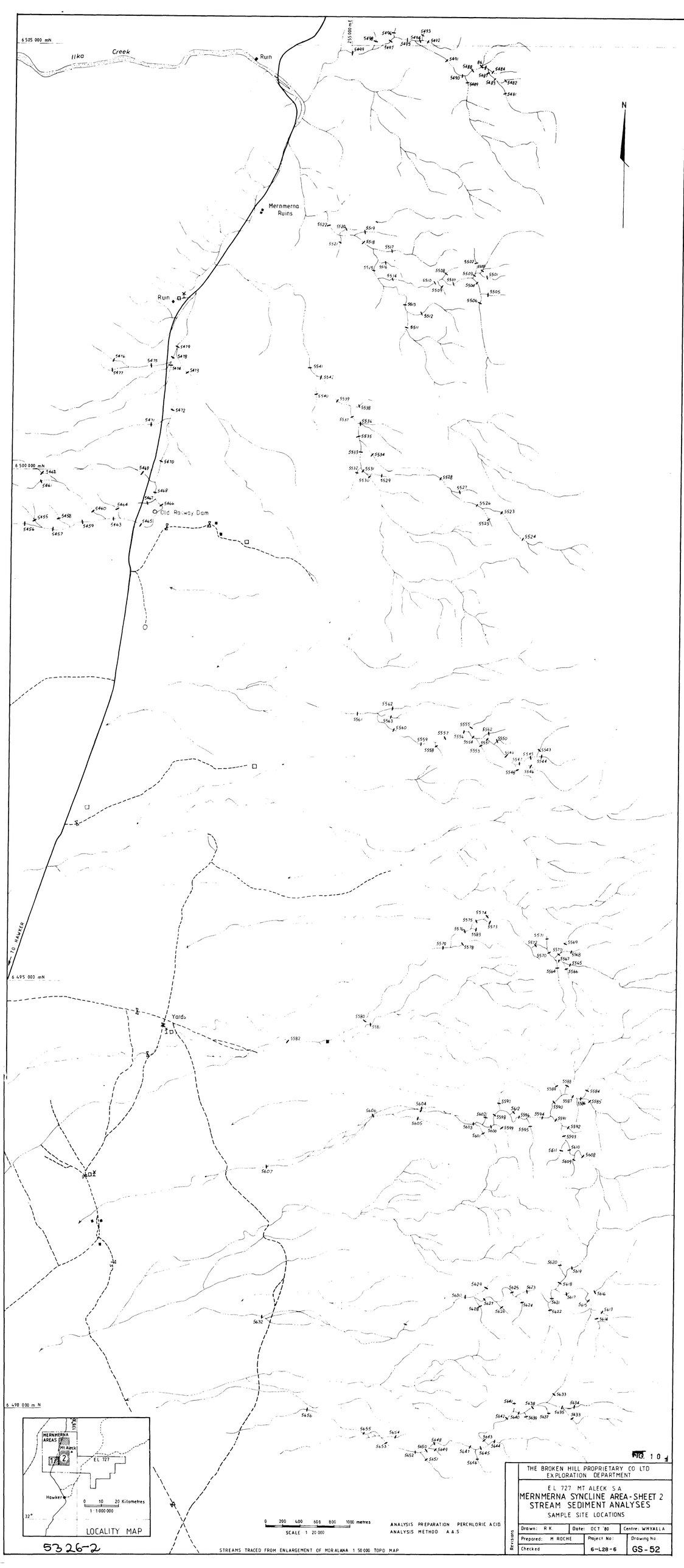
E.L. 727 MT. ALECK S.A.

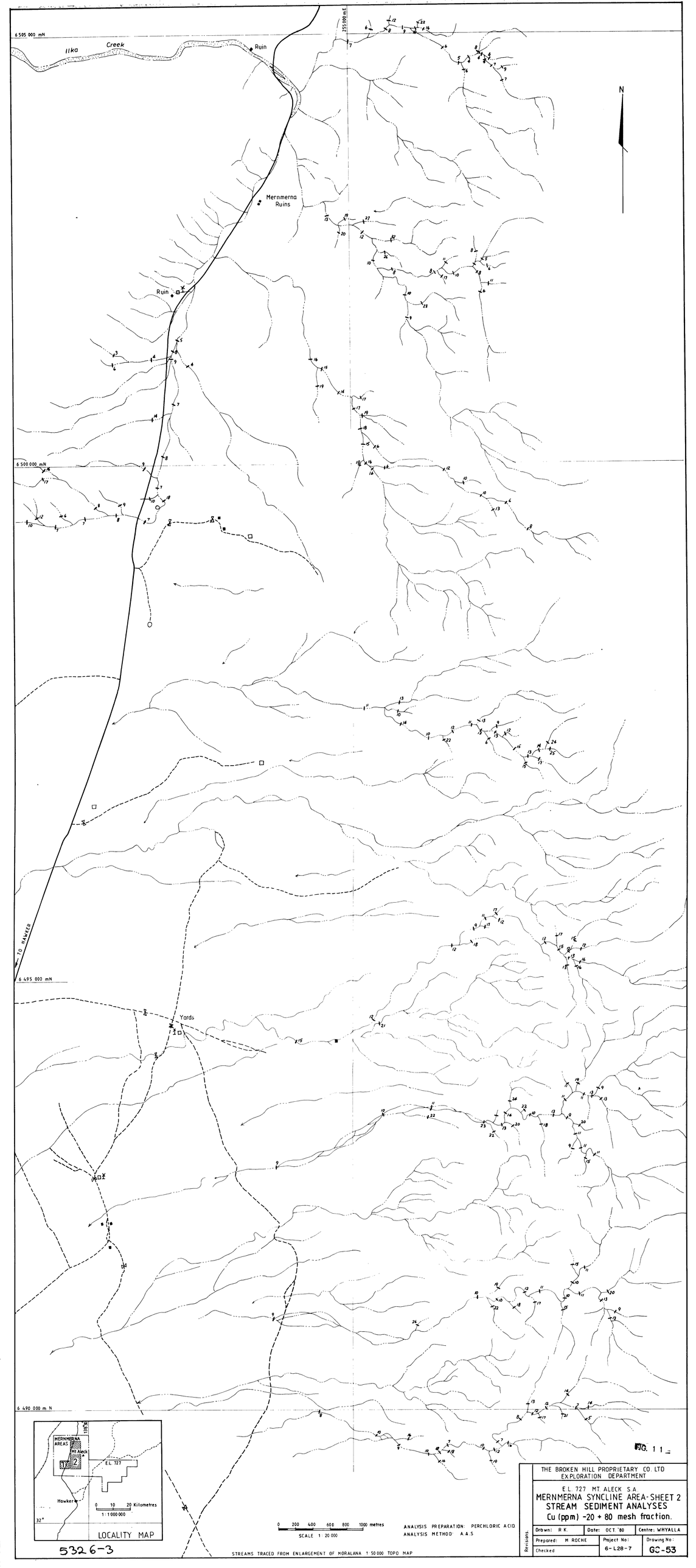
MERNMERNA SYNCLINE AREA-SHEET 1
STREAM SEDIMENT ANALYSES

Zn (ppm) - 6 +20 mesh fraction

Drawn: R.K.	Date: OCT. 81	Centre: WHYALLA
Prepared: M. ROCHE	Project No: 6 - L28 - 5	Drawing No: A3-162
Checked:		

Revisions:


6 505 000 mN
Ilka Creek
Ruin
355 000 mE
Mernmerna Ruins
Ruin
N
6 500 000 mN
Old Railway Dam
TO HAWKER
6 495 000 mN
Yards
6 490 000 m N
MERNMERNA AREAS
Mt Aleck
EL 727
Hawker
0 10 20 Kilometres
1 : 1 000 000
LOCALITY MAP
5326-2
0 200 400 600 800 1000 metres
SCALE 1 20 000
ANALYSIS PREPARATION PERCHLORIC ACID
ANALYSIS METHOD A A S
STREAMS TRACED FROM ENLARGEMENT OF MORALANA 1 50 000 TOPO MAP
THE BROKEN HILL PROPRIETARY CO LTD
EXPLORATION DEPARTMENT
E L 727 MT ALECK S A
MERNMERNA SYNCLINE AREA - SHEET 2
STREAM SEDIMENT ANALYSES
SAMPLE SITE LOCATIONS
Drawn: R K.
Date: OCT '80
Centre: WHYALLA
Prepared: M ROCHE
Project No: 6-L28-6
Drawing No: GS-52
Checked
Revisions
FIG. 10



5326-3

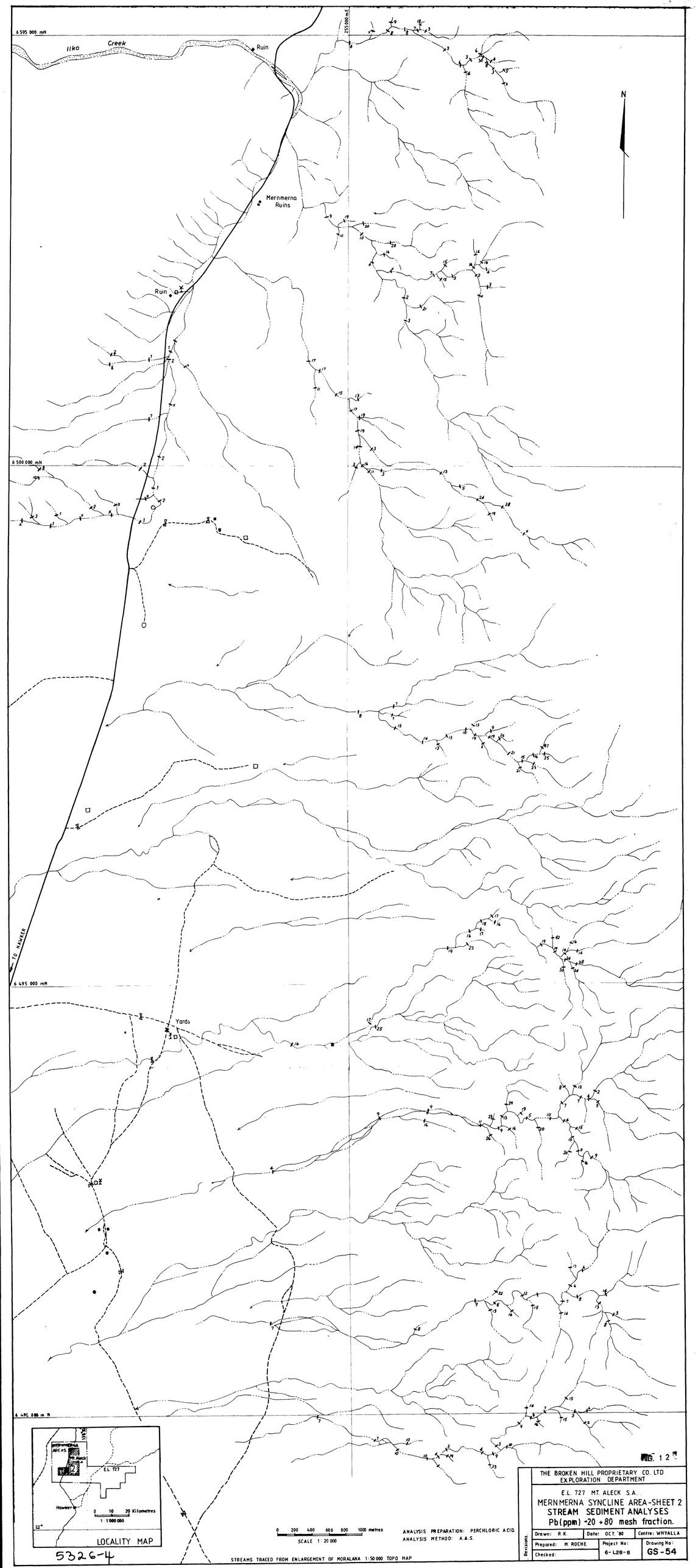
THE BROKEN HILL PROPRIETARY CO. LTD
EXPLORATION DEPARTMENT

E.L. 727 MT ALECK S.A.

MERNMERNA SYNCLINE AREA-SHEET 2
STREAM SEDIMENT ANALYSES
Cu (ppm) -20 + 80 mesh fraction.

Drawn: R.K.	Date: OCT '80	Centre: WHYALLA	
Prepared: M. ROCHE	Project No: 6-L28-7	Drawing No: GC-53	
Checked:			

Revisions



5326-4

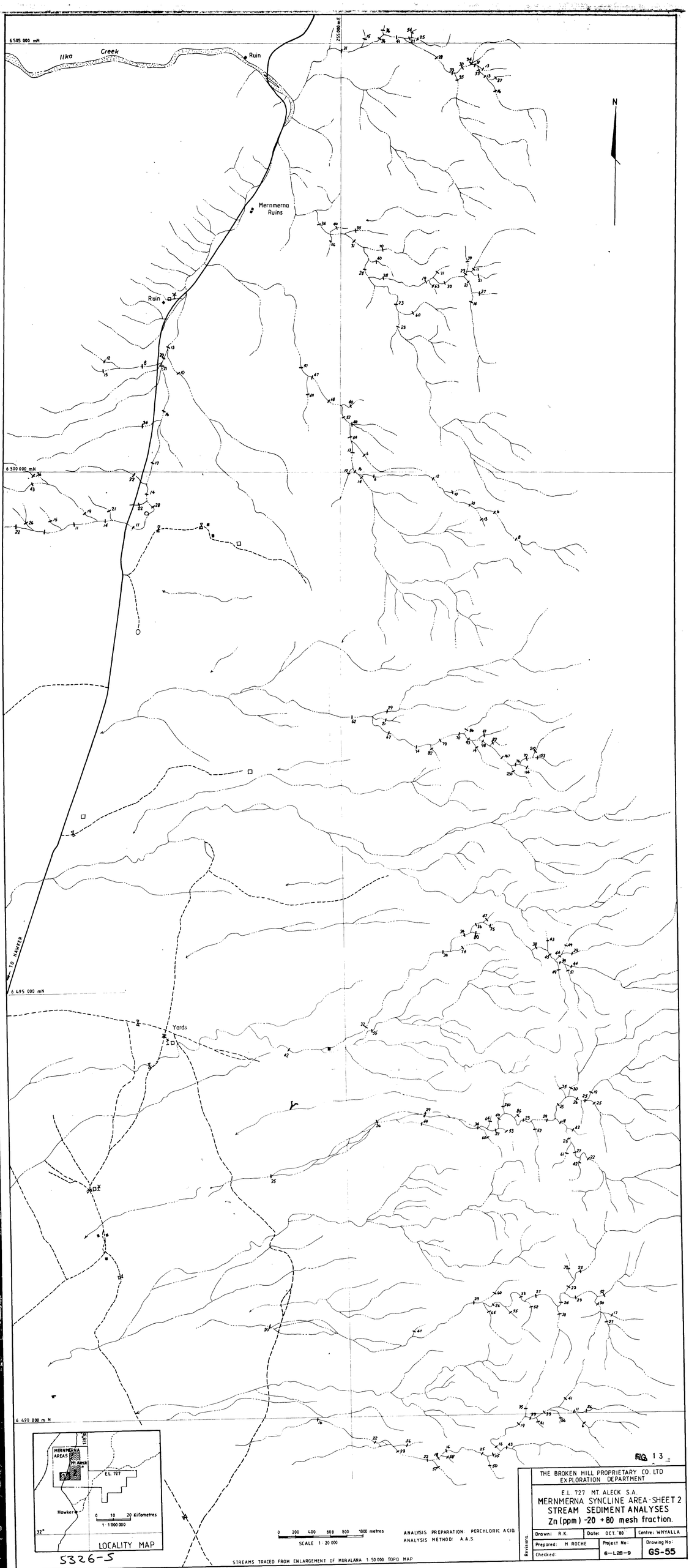
THE BROKEN HILL PROPRIETARY CO. LTD
EXPLORATION DEPARTMENT

E.L. 727 MT. ALECK S.A.

MERNMERNA SYNCLINE AREA-SHEET 2
STREAM SEDIMENT ANALYSES
Pb (ppm) -20 +80 mesh fraction.

Drawn: R.K.	Date: OCT. '80	Centre: WHYALLA	
Prepared: M. ROCHE	Project No: 6-128-8	Drawing No: GS-54	
Checked:			

Revisions.



THE BROKEN HILL PROPRIETARY CO. LTD
EXPLORATION DEPARTMENT

E.L. 727 MT. ALECK S.A.

MERNMERNA SYNCLINE AREA - SHEET 2
STREAM SEDIMENT ANALYSES
Zn (ppm) -20 +80 mesh fraction.

Drawn: R.K.	Date: OCT. '80	Centre: WHYALLA	
Prepared: M ROCHE	Project No: 6-L28-9	Drawing No: GS-55	
Checked:			

Revisions

APPENDIX I

STREAM SEDIMENT SAMPLES

ASSAY RESULTS

ANALABS
A division of MacDonald Hamilton & Co. Pty. Ltd.
52 Murray Road, Welshpool, W.A. 6106 (Reg. Office)
Phone (09) 458 7999
Division.....
Phone.....

Code No. 14.9 01 1988
Rack No. 44
Page No. 3
Order No.

RESULT SHEET

TUBE No.	SAMPLE No.		Cu	Zn	Pb					
3		91	18	43	22					
4		92	13	98	35					
5		93	6	48	24					
6		94	10	66	29					
7		95	16	91	26					
8		96	14	105	21					
9		97	14	101	20					
10		98	15	121	26					
11		99	19	142	28					
12	SS	5400	16	220	26					
13		01	15	116	22					
14		02	10	74	14					
15		03	11	81	16					
16		04	11	58	14					
17		05	17	56	13					
18		06	18	54	12					
19		07	28	131	24					
20		08	16	42	13					
21		09	34	149	32					
22	SS	5410	16	51	20					
23		11	32	144	29					
24		12	35	215	30					
25		13	36	190	28					
Detection										
Standard										
Digestion										
Method										

12/8/88

X = element concentration is below detection limit
– = element not determined

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RESULT SHEET

TUBE No.	SAMPLE No.		Cu	Zn	Pb					
1	SS	5414	16	73	23					
2		15	23	96	29					
3		16	27	116	42					
4		17	15	52	18					
5		18	22	106	27					
6		19	16	200	49					
7	SS	5420	8	80	35					
8		21	16	123	48					
9		22	28	175	36					
10		23	39	89	31					
11		24	34	215	47					
12		25	24	205	63					
13		26	73	220	36					
14		27	42	195	39					
15		28	13	45	23					
16		29	41	126	39					
17	SS	5430	43	240	31					
18		31	53	290	62					
19		32	32	185	32					
20		33	21	104	24					
21		34	42	205	32					
22										
23										
24	SS	5381	20	73	29					
25	SS	5414	17	73	23					
Detection			1	1	1					
Standard	FS	4	285	700	90					
Digestion										
Method										

12/8/85

X = element concentration is below detection limit
\- = element not determined

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RESULT SHEET

TUBE No.	SAMPLE No.		Cu	Zn	Pb					
1	SS	5435	39	63	24					
2		36	36	41	14					
3		37	11	15	8					
4		38	23	25	9					
5		39	10	23	6					
6	SS	5440	19	22	11					
7		41	29	200	30					
8		42	32	153	29					
9		43	12	46	14					
10		44	18	26	11					
11		45	13	52	18					
12		46	10	63	18					
13		47	13	60	19					
14		48	12	84	23					
15		49	23	220	56					
16	SS	5450	14	128	23					
17		51	14	124	22					
18		52	18	119	18					
19		53	16	159	36					
20	SS	5454	20	165	23					
21										
22										
23										
24										
25	SS	5435	36	60	22					
Detection			1	1	1					
Standard	FS	4	290	710	86					
Digestion			A1							
Method			A1/2							

12/8/85

X = element concentration is below detection limit
– = element not determined

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RESULT SHEET

TUBE No.	SAMPLE No.		Cu	Zn	Pb					
1	SS	5615	13	30	13					
2		16	20	52	14					
3		17	11	23	8					
4		18	10	23	6					
5		19	11	25	6					
6	SS	5620	15	39	13					
7		21	10	24	7					
8		22	15	38	14					
9		23	11	27	9					
10		24	17	82	15					
11		25	12	33	12					
12		26	18	55	16					
13		27	10	26	8					
14		28	22	65	13					
15		29	19	60	22					
16	SS	5630	10	29	9					
17		31	26	47	8					
18		32	9	20	7					
19		33	5	6	2					
20		34	14	26	6					
21		35	7	11	3					
22		36	14	41	15					
23		37	21	56	15					
24		38	12	53	7					
25		39	17	41	16					
26	SS	5640	12	29	9					
27		41	13	35	14					
28		42	8	19	9					
29		43	7	16	3					
30		44	16	43	10					
31		45	12	35	9					
32		46	19	50	23					
33		47	10	25	4					
34		48	7	16	2					
35		49	18	58	19					
36	SS	5650	18	18	4					
37		51	16	51	16					
38		52	10	22	10					
39		53	9	23	10					
40		54	16	36	10					
Detection			1	1	1					
Standard	FS	4	290	695	92					
Repeat–	SS	5615	13	30	12					
Repeat–	SS	5634	14	27	4					
Method										

RESPONSIBLE OFFICER ..... 31/8/...

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

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RESULT SHEET

TUBE No.	SAMPLE No.		Cu	Zn	Pb					
1	SS	5575	11	36	18					
2		76	9	34	16					
3		77	12	44	14					
4		78	18	74	23					
5		79	12	39	19					
6	SS	5580	12	32	17					
7		81	21	55	25					
8		82	15	42	16					
9		83	17	80	17					
10		84	9	19	2					
11		85	13	25	5					
12		86	13	25	4					
13		87	11	26	7					
14		88	19	30	12					
15		89	11	35	8					
16	SS	5590	11	25	7					
17		91	9	18	4					
18		92	20	42	15					
19		93	11	25	10					
20		94	13	29	10					
21		95	18	52	20					
22		96	10	23	5					
23		97	24	240	29					
24		98	14	49	13					
25		99	20	53	16					
26	SS	5600	13	37	9					
27		01	22	60	26					
28		02	23	64	23					
29		03	12	34	11					
30		04	11	29	9					
31		05	22	49	16					
32		06	10	26	9					
33		07	9	25	4					
34		08	11	22	9					
35		09	15	42	16					
36	SS	5610	11	27	8					
37		11	19	61	20					
38		12	22	86	19					
39		13	9	17	3					
40		14	13	27	8					
Detection			1	1	1					
Standard	FS	4	205	700	90					
Repeat–	SS	5575	11	35	17					
Repeat–	SS	5594	13	30	9					
Method										

RESPONSIBLE OFFICER 31/1/88

Results in ppm unless otherwise specified
T = element present; but concentration too low to measure
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– = element not determined

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RESULT SHEET

TUBE No.	SAMPLE No.		Cu	Zn	Pb					
1	SS	5535	17	54	19					
2		36	19	40	19					
3		37	17	52	17					
4		38	17	40	13					
5		39	14	48	15					
6	SS	5540	19	49	11					
7		41	16	51	17					
8		42	18	47	17					
9		43	24	210	47					
10		44	25	153	35					
11		45	14	70	16					
12		46	17	114	23					
13		47	13	76	15					
14		48	15	230	21					
15		49	15	167	21					
16	SS	5550	12	82	26					
17		51	13	98	19					
18		52	9	47	9					
19		53	6	19	6					
20		54	12	93	19					
21		55	13	56	13					
22		56	11	70	10					
23		57	12	79	13					
24		58	22	82	13					
25		59	10	74	14					
26	SS	5560	14	67	15					
27		61	11	52	8					
28		62	13	29	7					
29		63	10	21	1					
30		64	13	49	30					
31		65	16	44	28					
32		66	16	51	24					
33		67	13	39	24					
34		68	12	29	14					
35		69	15	49	16					
36	SS	5570	15	45	19					
37		71	17	43	42					
38		72	13	38	19					
39		73	12	35	16					
40		74	17	47	17					
Detection			1	1	1					
Standard	FS	4	300	700	88					
Repeat–	SS	5535	18	53	18					
Repeat–	SS	5554	12	91	19					
Method										

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Results in ppm unless otherwise specified
T = element present; but concentration too low to measure
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RESULT SHEET

TUBE No.	SAMPLE No.		Cu	Zn	Pb					
1	SS	5495	8	41	8					
2		96	12	36	9					
3		97	8	36	8					
4		98	6	15	x					
5		99	7	31	4					
6	SS	5500	5	11	16					
7		01	6	21	4					
8		02	8	39	14					
9		03	7	23	16					
10		04	8	21	2					
11		05	11	27	3					
12		06	6	14	x					
13		07	10	30	3					
14		08	11	71	15					
15		09	17	63	15					
16	SS	5510	8	19	7					
17		11	9	23	3					
18		12	23	60	21					
19		13	10	23	2					
20		14	8	28	x					
21		15	10	28	4					
22		16	24	49	16					
23		17	32	70	28					
24		18	12	31	10					
25		19	27	55	20					
26	SS	5520	19	40	19					
27		21	20	56	10					
28		22	13	34	9					
29		23	6	19	28					
30		24	8	17	x					
31		25	13	59	19					
32		26	10	37	24					
33		27	10	25	5					
34		28	12	28	13					
35		29	6	18	3					
36	SS	5530	14	45	11					
37		31	16	54	16					
38		32	10	20	3					
39		33	13	40	14					
40		34	6	14	3					
Detection			1	1	1					
Standard	FS	4	300	685	91					
Repeat–	SS	5495	9	40	8					
Repeat–	SS	5514	8	28	1					
Method										

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

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RESULT SHEET

TUBE No.	SAMPLE No.		Cu	Zn	Pb					
1	SS	5455	12	26	3					
2		56	10	22	x					
3		57	7	15	1					
4		58	6	15	1					
5		59	7	11	x					
6	SS	5460	8	19	2					
7		61	17	43	10					
8		62	16	36	8					
9		63	8	14	x					
10		64	9	21	x					
11		65	7	11	1					
12		66	18	28	2					
13		67	10	22	x					
14		68	7	14	1					
15		69	9	22	2					
16	SS	5470	8	17	2					
17		71	14	34	7					
18		72	7	16	x					
19		73	4	10	x					
20		74	9	21	2					
21		75	4	8	1					
22		76	3	12	2					
23		77	6	15	x					
24		78	8	20	1					
25		79	5	13	x					
26	SS	5480	4	9	x					
27		81	7	16	x					
28		82	9	27	5					
29		83	7	13	3					
30		84	4	13	4					
31		85	4	51	30					
32		86	8	34	6					
33		87	4	33	8					
34		88	4	30	3					
35		89	6	35	4					
36	SS	5490	5	33	6					
37		91	6	28	3					
38		92	16	25	3					
39		93	22	54	18					
40		94	10	27	7					
Detection			1	1	1					
Standard	FS	4	290	650	91					
Repeat–	SS	5455	12	25	3					
Repeat–	SS	5474	9	22	1					
Method										

RESPONSIBLE OFFICER 31/8/87

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

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RESULT SHEET

TUBE No.	SAMPLE No.		Cu	Zn	Pb					
1	SS	5655	10	22	7					
2	SS	5656	8	16	7					
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										
Detection			1	1	1					
Standard	FS	4	290	690	91					
Repeat–	SS	5655	10	23	6					
Repeat–										
Method			A1/2							

RESPONSIBLE OFFICER 31.8.87

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

COMLABS Pty. Ltd.
COMPUTERISED ANALYTICAL LABORATORIES

ANALYTICAL REPORT

JOB CO:821264 O/P : 1250 Sheet 001850

Results in ppm

SAMPLE	Cu	Pb	Zn
SS 6857	20	60	200
SS 6858	12	44	90
SS 6859	18	65	140
SS 6860	20	65	150
SS 6861	24	65	100
SS 6862	24	38	80
SS 6863	16	32	70
SS 6864	14	32	85
SS 6865	10	32	44
SS 6866	10	26	60
SS 6867	22	46	60
SS 6868	60	95	115
SS 6869	50	22	65
SS 6870	32	18	48
SS 6871	40	16	60
SS 6872	26	14	55
SS 6873	30	20	46
SS 6874	28	16	55
SS 6875	22	22	55
SS 6876	22	20	55
SS 6877	18	18	46
SS 6878	22	16	50
SS 6879	14	18	50
SS 6880	12	130	50
SS 6881	12	32	50

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COMLABS Pty. Ltd.
COMPUTERISED ANALYTICAL LABORATORIES

ANALYTICAL REPORT

JOB C0:821264 O/P : P650/500 Sheet 004903

Results in ppm

SAMPLE	Cu	Pb	Zn
SS 6882	10	42	200
SS 6883	16	30	110
SS 6884	12	32	165

Method of Analysis : Cu Pb Zn : AAS1

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APPENDIX II

SOIL SAMPLES - ASSAY RESULTS

COMLABS Pty. Ltd.
COMPUTERISED ANALYTICAL LABORATORIES

ANALYTICAL REPORT

JOB COM830027 O/N : L270/280 Sheet 004968

Results in ppm

SAMPLE	Cu	Pb	Zn
VS 001	12	24	140
VS 002	16	22	650
VS 003	16	36	430
VS 004	34	26	250
VS 005	32	44	560
VS 006	16	28	540
VS 007	16	20	250
VS 008	10	8	70
VS 009	8	10	150
VS 010	8	16	140
VS 011	22	8	110
VS 012	10	12	130
VS 013	16	18	120
VS 014	12	18	130
VS 015	8	12	230

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COMLABS Pty. Ltd.
COMPUTERISED ANALYTICAL LABORATORIES

ANALYTICAL REPORT

JOB COM830027 O/N : L270/280 Sheet 004968

Results in ppm

SAMPLE	Cu	Pb	Zn
VS 016	8	12	85
VS 017	18	12	120
VS 018	8	8	125
VS 019	10	10	150
VS 020	8	10	50
VS 021	12	10	150
VS 022	8	<4	100
VS 023	10	<4	55
VS 024	55	20	36
VS 025	14	<4	50
VS 026	12	<4	50
VS 027	24	8	450
VS 028	22	6	130
VS 029	14	<4	55
VS 030	12	<4	34
VS 031	10	<4	24
VS 032	8	<4	36
VS 033	16	22	75
VS 034	8	<4	28
VS 035	12	16	36
VS 036	10	4	38
VS 037	6	<4	60
VS 038	10	<4	65
VS 039	8	<4	36
VS 040	8	<4	32

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COMLABS Pty. Ltd.
COMPUTERISED ANALYTICAL LABORATORIES

ANALYTICAL REPORT

JOB COM830027 O/N : L270/280 Sheet 004968

Results in ppm

SAMPLE	Cu	Pb	Zn
VS 041	8	<4	46
VS 042	8	<4	42
VS 043	36	6	80
VS 044	30	60	160
VS 045	14	<4	70
VS 046	16	<4	60
VS 047	8	<4	30
VS 048	8	6	28
VS 049	18	14	65
VS 050	16	6	30
VS 051	85	65	90
VS 052	8	4	65
VS 053	8	<4	38
VS 054	6	<4	46
VS 055	6	<4	40
VS 056	14	<4	60
VS 057	16	<4	75
VS 058	22	10	85
VS 059	55	16	65
VS 060	10	6	55
VS 061	10	6	70
VS 062	8	<4	36
VS 063	8	<4	28
VS 064	55	28	100
VS 065	95	34	100

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COMLABS Pty. Ltd.
COMPUTERISED ANALYTICAL LABORATORIES

ANALYTICAL REPORT

JOB COM830027 O/N : L270/280 Sheet 004968

Results in ppm

SAMPLE	Cu	Pb	Zn
VS 066	100	24	42
VS 067	20	<4	44
VS 068	10	<4	55
VS 069	6	<4	46
VS 070	6	<4	32
VS 071	75	32	110
VS 072	55	<4	75
VS 073	36	<4	30
VS 074	10	14	55
VS 075	8	<4	48
VS 076	8	<4	48
VS 077	8	<4	48
VS 078	36	<4	75
VS 079	44	<4	75
VS 080	710	<4	18
VS 081	10	6	55
VS 082	6	10	44
VS 083	6	10	22
VS 084	16	<4	50
VS 085	24	<4	75
VS 086	18	<4	60
VS 087	10	<4	28
VS 088	30	<4	32
VS 089	12	<4	65
VS 090	14	<4	48

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COMLABS Pty. Ltd.
COMPUTERISED ANALYTICAL LABORATORIES

ANALYTICAL REPORT

JOB COM830027 O/N : L270/280 Sheet 004968

Results in ppm

SAMPLE	Cu	Pb	Zn
VS 091	14	<4	44
VS 092	30	6	75
VS 093	18	20	130
VS 094	14	<4	26
VS 095	14	<4	200
VS 096	6	<4	36
VS 097	6	<4	12
VS 098	20	<4	60
VS 099	28	<4	65
VS 100	18	30	65
VS 101	6	<4	46
VS 102	6	<4	28
VS 103	8	<4	34
VS 104	4	<4	16
VS 105	14	<4	60
VS 106	18	<4	55
VS 107	18	<4	55
VS 108	6	<4	26
VS 109	6	<4	70
VS 110	6	<4	34
VS 111	6	<4	12
VS 112	14	<4	40
VS 113	14	10	48
VS 114	16	14	46
VS 115	8	4	18

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COMLABS Pty. Ltd.
COMPUTERISED ANALYTICAL LABORATORIES

ANALYTICAL REPORT

JOB COM830027 O/N : L270/280 Sheet 004968

Results in ppm

SAMPLE	Cu	Pb	Zn
VS 116	6	10	34
VS 117	4	<4	24
VS 118	16	10	50
VS 119	10	<4	10
VS 120	70	<4	40
VS 121	10	<4	22
VS 122	10	<4	26
VS 123	10	<4	34
VS 124	6	<4	24
VS 125	6	<4	48
VS 126	4	<4	28
VS 127	26	14	70
VS 128	24	24	75
VS 129	18	20	85
VS 130	16	10	55
VS 131	10	<4	38
VS 132	6	<4	28
VS 133	6	6	20
VS 134	6	<4	10
VS 135	6	<4	14
VS 136	16	10	55
VS 137	8	<4	20
VS 138	6	<4	34
VS 139	8	14	65
VS 140	24	26	30

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COMPUTERISED ANALYTICAL LABORATORIES

ANALYTICAL REPORT

JOB COM830027 O/N : L270/280 Sheet 004968

Results in ppm

SAMPLE	Cu	Pb	Zn
VS 141	8	8	20
VS 142	6	<4	6
VS 143	4	<4	14
VS 144	75	8	60
VS 145	12	8	34
VS 146	16	12	55
VS 147	10	8	34

Method of Analysis : Cu Pb Zn : AAS1