ANNUAL REPORT 1993 - 1994

EL 11/92 MEUNNA

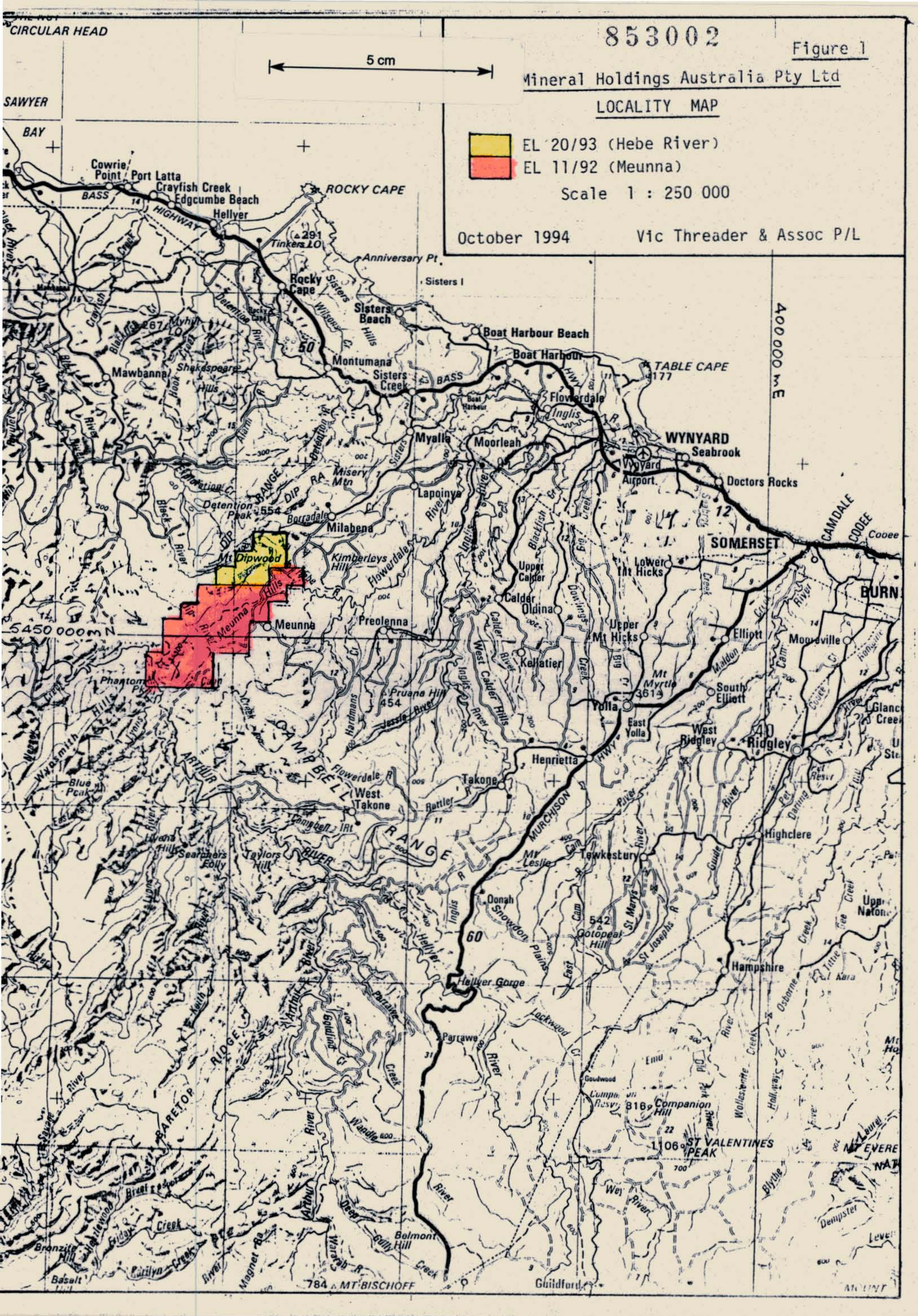
for

MINERAL HOLDINGS AUSTRALIA PTY LTD

by Vic Threader

October 1994

Vic Threader & Associates Pty Ltd
Kingston Beach


853002
Figure 1
Mineral Holdings Australia Pty Ltd
LOCALITY MAP
EL 20/93 (Hebe River)
EL 11/92 (Meunna)
Scale 1 : 250 000
October 1994
Vic Threader & Assoc P/L
5 cm
CIRCULAR HEAD
SAWYER
BAY
Cowrie Point
Port Latta
Crayfish Creek
Edgcumbe Beach
Hellyer
ROCKY CAPE
Tinkers LO
Anniversary Pt
Sisters I
Rocky Cape
Sisters Beach
Boat Harbour Beach
Boat Harbour
TABLE CAPE
Montumana
Sisters Creek
BASS
Flowerdale
Inglis
WYNYARD
Seabrook
Wynyard Airport
Doctors Rocks
400 000 mE
Mawbanna
Shakespeare Hills
Myalla
Moorleah
Lapoinya
Misery Mtn
DIP RA
DIP RANGE
Detention Peak
554
Borradale
Milabena
Mt Dipwood
Kimberleys Hill
Meunna
Meunna Hills
5450 000mN
Preolenna
Upper Calder
Calder
Oldina
Lower Mt Hicks
SOMERSET
CAMDALE
COOEE
Cooee
BURN
Upper Mt Hicks
Elliott
Mooreville
Kellatier
Mt Myrtle
South Elliott
Yolla
East Yolla
West Ridgley
Ridgley
Phantom Pk
Pruana Hill
454
West Calder Hills
Henrietta
Takone
West Takone
CAMPBELL RANGE
Blue Peak
Searchers Folly
Taylors Hill
ARTHUR RIVER
MURCHISON HWY
Highclere
Tewkesbury
Mt Leslie
Oonah
Snowdon Plains
542
Gotopeak Hill
Hampshire
Hellyer Gorge
60
Parrawe
Goodwood
Companion Resvr
816
Companion Hill
1106
ST VALENTINES PEAK
BARETOP RIDGE
Bronzite Hill
Basalt
Belmont Hill
784
MT BISCHOFF
Guildford
MT EVERE

CONTENTS

Introduction

EL 11/92 was issued on 25th Sept 1992 over 49 km^2 for the exploration of high grade silica and was reduced to 30 km^2 at first renewal.

The licence was amalgamated with the adjoining EL 20/93 (Hebe River) for the purposes of reporting expenditure and renewal. The next renewal date for the amalgamated licence will be 25th September 1995.

Previous Exploration

Seven surface samples were collected from a sand/gravel extraction area near the junction of Myalla Road and Newhaven Track and also east of Myalla Road. These are included in this report for comparison with sand samples from some other of the company's tenements in the northwest. These sand samples were collected from the Meunna Hills which has been identified as Jacob Quartzite. This unit crops out again in the Milabena - Lapoinya area to the N.E., which is roughly co-linear with the Meunna Hills.

Exploration 1993-4

Surface sampling was continued into the southwest of the licence area: N.H. (Newhaven Track) 1 to 6 and B.R. (Blazely Road) 1 - 13. Most of this material can be discounted due to high levels of contaminants. All materials sampled were quartzites; the only chip samples which showed any promise were B.R.3 and N.H.4 which contained 99.7% and 99.6% SiO_2 respectively (Summary data of surface sample and their location is given in Table 1).

Previous exploration of Rocky Cape Quartzite has been principally in the Detention Subgroup as at Hebe River and Dip Range and a comparison of chemical purity and grain size distribution in the Detention and Jacob Quartzites has been made to ascertain the suitability of the materials for various end uses.

Within the limits imposed by the availability of data, it appears that Detention Quartzite sand (Hebe River and Dip Range) is slightly coarser than Jacob Quatzite sand (Meunna and Milabena) but many more samples are needed to confirm this trend. It has been noted that the coarse fractions of some screen analyses consist of composite particles; much care is needed to avoid bias caused by incomplete disaggregation of parent material (e.g. PR 2 and 3) othewise the analyses can be quite misleading.

Proposed Exploration 1994-5

A comprehensive sampling programme will be implemented throughout the amalgamated licences to search for i) drilling targets with respect to quartzites and ii) prospective sand/sandstone areas amenable to development. This will be confined to surface sampling and hand augering in the first instance and so will be non-intrusive.

Table 1

853006

Summary Data on Surface Sampling EL.11/92

Sample Nos	Material	Analysis	Lab No.	Locality
PR 1 - 4	Sand	Screen & Chemical	Analabs 10951.5.60. 08637 18.3.92	Newhaven Track (formerly Pokes Rd)
PRE 21 (15m) 22 (10m) 23 (spot)	sand	" "	10951.5.60. 08685 15.4.92	East of Myalla Rd
BR 1 - 5	Quartzite	Chemical	Analabs	Blazely Rd
BR 6 - 13	"	"	Amdel 4AD0163	and Newhaven Track
NH 1 - 6	"	"		

Localities on figure 2

Table 2

853007

Comparative Table of Contaminants in Sand from Rocky Cape Quartzites

	1	2	3	4	5
Al_2O_3	0.08	0.05	0.05	0.53	0.11
Fe_2O_3	0.05	0.12	0.03	0.05	0.033
TiO_2	0.16	0.23	0.04	0.36	0.127

Milabena (ELA 34/94)

1. Summons Surface sample
2. Average analysis of borehole samples by Zetetic/Longworth and McKenzie TCR 87 - 2722

Meunna (EL 11/92)

3. Average of surface samples PR 1,2,3,4,21,22,23

Dip Range (EL 25/88 - ML8M/89)

4. Average analysis BH.4 (over 14m of drilling)
   " " BH.30 (over 22m of drilling)

Hebe River (EL 20/93)

5. Sur face sample HR7 - HR8

Table 3

853008

Comparative Table of % 20/40 (-850µm +425µm) Content of Sand from Rocky Cape Quartzite (surface samples)

Milabena	Meunna	Hebe River	Dip Range
1) 5.9	PR 1 4.1	22	27
2) 15.0	2 39.0		
	3 32.9		
	4 17.6		
	21 22.3		
	22 15.6		
	23 4.1		

See Table 1 for Sample detail

AR HEAD 44

MMETT

MOUNT DIPWOOD

DIPWOOD

CROWN LAND

PLAIN

QUARTZITE

DETENTION

MEUNNA

HILLS

STATE FOREST

Meunna

MEUNNA ROAD

Milabeena

Folly

5450000 mN

5 448 000mN

370 000mE

853009

Figure 2

EL 20/93 (Hebe River) – EL 11/92 (Meunna)

Mineral Holdings Australia Pty Ltd

AMALGAMATED LICENCES

EL 11/92 Meunna 30 km²

EL 20/93 Hebe River 8 km²

Boundaries of Rocky Cape Quartzites (MRT Trowutta sheet in press)

Exploration to date:

Surface Sampling

Drilling

October 1994 Vic Threader & Assoc P/L

0 1 2km

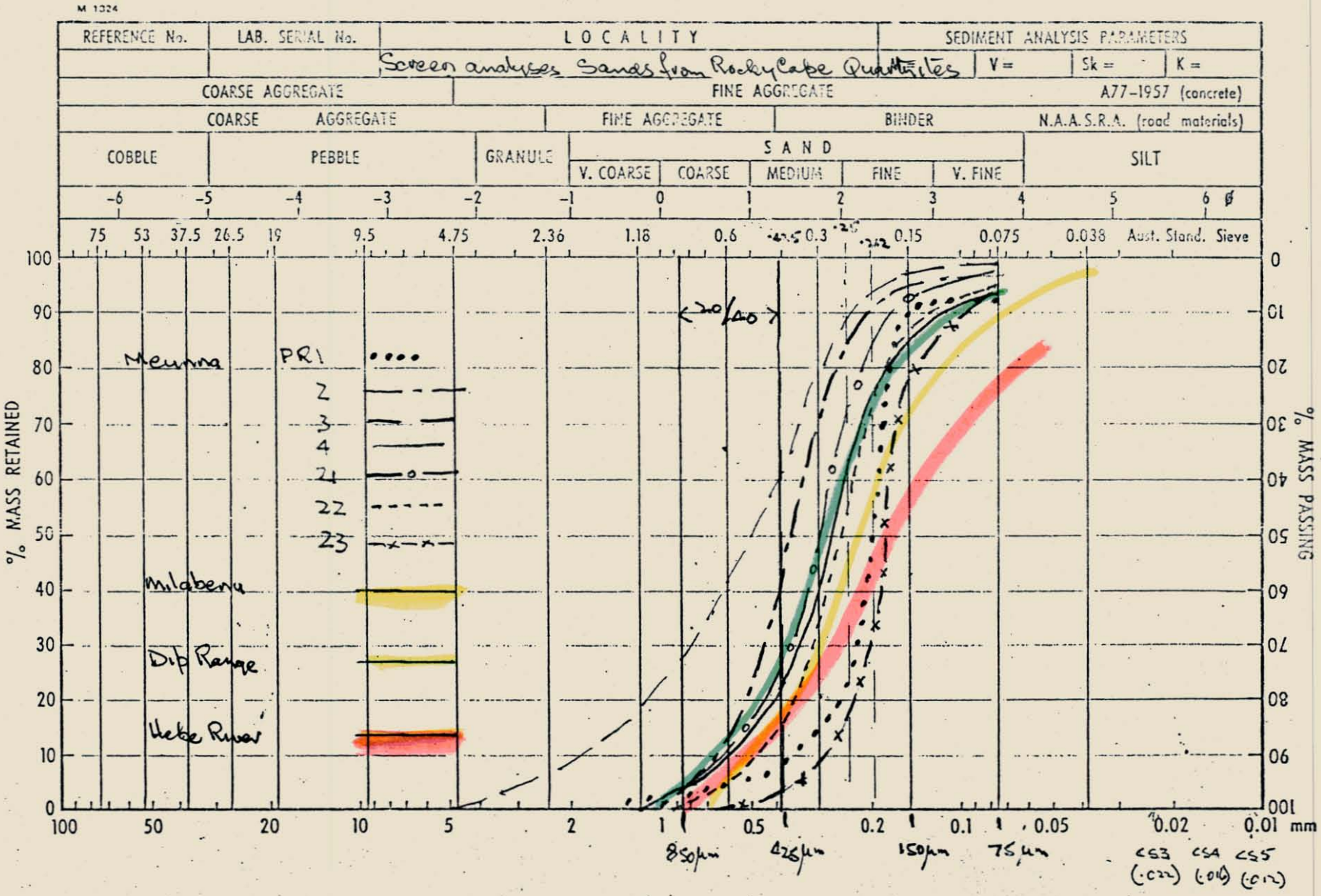
Scale 1:25000

5 cm

October 1993

Vic Threader and Associates Pty Ltd

Figure 3



8530 10

APPENDIX

Laboratory Reports

Analabs 10951.5.60.08637

10951.5.60.08685

Amdel 4AD0163

853012

ANALABS A.C.N. 004 591 664

A division of Inchcape Inspection & Testing Services Pty. Ltd.

18th March, 1992

Mr Neil Thomas
Mineral Holdings Australia Pty Limited
2nd Floor
100 Collins Street
MELBOURNE VIC 3000

Dear Sir,

MUNDA TRIG. Boyces Road

RE: JOB NO. 109515.60.08637

Attached please find the results for three (3) samples submitted by Mr Kevin Pinner on the 12th March, 1992 for size analysis.

Yours faithfully,

MR NIGEL BALL
MANAGER - TASMANIA

Enc.

BURNIE:
14 THIRKELL STREET, BURNIE, TASMANIA, 7320, P.O. BOX 929, TASMANIA, 7320. TELEPHONE: (004) 31 6837 FACSIMILE: (004) 31 8890

HEAD OFFICE:
50 MURRAY RD, WELSHPOOL, WESTERN AUSTRALIA, 6106, P.O. BOX 210, BENTLEY, W.A., 6102. TELEX: AA 92560 TELEPHONE: (09) 458 7999 FACSIMILE: (09) 458 2922

AUSTRALIA • FIJI • INDONESIA • NEW ZEALAND • PAPUA NEW GUINEA • PHILIPPINES • SOLOMON ISLANDS • GHANA • UNITED KINGDOM

853013

109515.60.08637

PROSPECT: MEUNA TRIG (POKES ROAD)

PARTICLE SIZE ANALYSIS

SAMPLE NO. PR 1

SIEVE SIZE	FRACTION WEIGHT (g)	FRACTION WEIGHT (%)	CUMULATIVE WEIGHT (%)
3.35mm	10.00	0.8	0.8
2.00mm	7.20	0.6	1.3
850um	24.80	1.9	3.3
425um	52.30	4.1	7.4
150um	1073.90	83.8	91.2
75um	11.50	0.9	92.0
-75um	101.90	8.0	100.0
TOTAL	1281.60		

SAMPLE NO. PR 2

SIEVE SIZE	FRACTION WEIGHT (g)	FRACTION WEIGHT (%)	CUMULATIVE WEIGHT (%)
3.35mm	0.60	0.1	0.1
2.00mm	2.40	0.2	0.3
850um	40.60	3.5	3.7
425um	453.10	39.0	42.7
150um	625.00	53.7	96.4
75um	11.20	1.0	97.4
-75um	30.30	2.6	100.0
TOTAL	1163.20		

SAMPLE NO. PR 3

SIEVE SIZE	FRACTION WEIGHT (g)	FRACTION WEIGHT (%)	CUMULATIVE WEIGHT (%)
3.35mm	30.30	2.5	2.5
2.00mm	73.10	6.0	8.5
850um	214.20	17.7	26.2
425um	398.60	32.9	59.2
150um	473.50	39.1	98.3
75um	7.40	0.6	98.9
-75um	13.00	1.1	100.0
TOTAL	1210.10		

ANALABS

PRELIMINARY ANALYTICAL DATA
MEUNA TREG SAND (POKES ROAD)

CLIENT PREFIX	REPORT NUMBER	REPORT DATE	CLIENT ORDER No.	PAGE
	109515.60.00637	25/03/92	N. Thomas	1 OF 2

SAMPLE	Au	Al2O3	SiO2	TiO2	Fe2O3	MnO	CaO	K2O	MgO
PR 1	<0.2	0.043	99.72	0.079	0.0440	0.0006	0.0055	0.0035	0.0040
PR 2	<0.2	0.073	99.67	0.028	0.0240	<0.0002	0.0055	0.0080	0.0040
PR 3	<0.2	0.061	99.73	0.041	0.0225	<0.0002	0.0039	0.0063	0.0025

SAMPLE	P2O5	Na2O	Wt	LOI
PR 1	0.0009	0.0022	2.30	0.10
PR 2	0.0011	0.0021	0.53	0.10
PR 3	0.0007	0.0021	1.67	0.13
DETECTION	0.2	0.001	0.01	0.005
UNITS	ppm	%	%	%
METHOD	GG309	OA144	OA199	OA141

SAMPLE	Cr	Na2O	K2O	CaO	MgO	Fe2O3	MnO
PR NO.4 SPOT SAMPLE	-	0.0036	0.0050	0.0020	0.0030	0.0204	0.0005
PR EAST NO.21 15 MTR	-	0.0039	0.0051	0.0028	0.0020	0.0193	0.0003
PR EAST NO.22 10 MTR	-	0.0036	0.0075	0.0022	0.0023	0.0176	<0.0002
PR EAST NO.23 SPOT	-	0.0027	0.0026	0.0020	0.0027	0.0153	0.0003

SAMPLE	Al2O3	TiO2	P2O5	SiO2	LOI
PR NO.4 SPOT SAMPLE	0.036	0.036	0.0014	99.78	0.11
PR EAST NO.21 15 MTR	0.033	0.022	0.0014	99.79	0.12
PR EAST NO.22 10 MTR	0.042	0.026	0.0014	99.81	0.09
PR EAST NO.23 SPOT	0.015	0.015	0.0009	99.96	<0.05
DETECTION	0.0002	0.0002	0.01	0.01	
UNITS	%	%	g	%	
METHOD	OA144	OA144	GP001	OM615	

08637

08685

853015

ANALABS A.C.N. 004 591 664

A division of Inchcape Inspection & Testing Services Pty. Ltd.

15th April,1992

Mr Neil Thomas
Mineral Holdings Australia Pty Limited
2nd Floor
100 Collins Street
MELBOURNE VIC 3000

Dear Sir,

RE: JOB NO. 109515.60.08685

Attached please find the results for six (6) samples submitted by Mr Kevin Pinner on the 2nd April 1992 and a further three (3) samples submitted by Mr Vic Threader on the 6th April 1992, for size analysis.

Yours faithfully,

MR NIGEL BALL
MANAGER - TASMANIA

Enc.

BURNIE:
14 THIRKELL STREET, BURNIE, TASMANIA, 7320. P.O. BOX 929, TASMANIA, 7320. TELEPHONE: (004) 31 6837 FACSIMILE: (004) 31 8890

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Sample	SiO2	Fe2O3	Al2O3	CaO	TiO2	P2O5	V2O5	Na2O	K2O	MgO	MnO	LOI	Ni	Pb	Colour	Hardness
Calder O/S	99.70	0.0126	0.090	0.0037	0.042	0.003	0.0004	0.005	0.016	0.0029	0.00015	0.12	1	1	W	H
HR 1	99.79	0.0073	0.020	0.0040	0.016	0.001	0.0003	0.004	0.005	0.0033	0.00013	0.15	2	2	W	H
HR 2	99.72	0.0079	0.029	0.0032	0.012	0.004	0.0001	0.003	0.006	0.0023	0.00009	0.21	1	1	W	H
BR 2 (float)	99.87	0.0030	0.025	0.0041	<0.005	0.002	<0.0001	0.004	0.006	0.0030	0.00002	0.08	1	1	W	H
BR 3	99.71	0.0143	0.041 (dup)	0.0035	0.050	0.001	0.0001	0.007	0.009	0.0047	0.00016	0.16	2	4	W	H
BR 4	97.28	0.0629	1.891	0.0052	0.021	0.003	0.0009	0.013	0.346	0.0803	0.00033	0.30	1	0	W	H
BR 5	99.65	0.0106	0.074 (float)	0.0029	0.041	0.015	0.0003	0.007	0.018	0.0060	0.00011	0.17	1	1	W	H
BR 1 (Chipsample)	94.52	0.1148	3.300	0.0054	0.052	0.001	0.0022	0.011	1.070	0.3537	0.00037	0.57	1	2	O/W	H
UNITS	%	%	%	%	%	%	%	%	%	%	%	%	PPM	PPM		

OLOUR:- W = WHITE. O/W = OFF WHITE. B/W = BROWN-WHITE
ARDNESS:- ALL SAMPLES WERE DETERMINED TO BE HARD
NO DISCRIMINATION COULD BE MADE DURING CRUSHING

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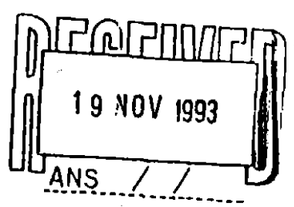
division of
ting Services Pty Ltd



SMANIA

PARTICLE SIZE ANALYSIS

SAMPLE PR NO.4 SPOT

SIEVE SIZE	FRACTION WEIGHT (g)	FRACTION WEIGHT (%)	CUMULATIVE WEIGHT (%)
+3.35mm	0.11	0.0	0.0
+2.36mm	0.43	0.1	0.1
+2.00mm	0.31	0.1	0.2
+1.70mm	0.50	0.1	0.4
+850um	10.81	2.9	3.3
+425um	65.80	17.6	20.9
+150um	238.45	63.9	84.8
+75um	35.32	9.5	94.3
-75um (pan)	21.29	5.7	100.0
TOTAL	373.02		

PR EAST NO.21 15 MTR

SIEVE SIZE	FRACTION WEIGHT (g)	FRACTION WEIGHT (%)	CUMULATIVE WEIGHT (%)
+3.35mm	1.49	0.6	0.6
+2.36mm	0.24	0.1	0.8
+2.00mm	0.15	0.1	0.8
+1.70mm	0.14	0.1	0.9
+850um	2.67	1.2	2.0
+425um	51.32	22.3	24.3
+150um	159.64	69.3	93.5
+75um	9.40	4.1	97.6
-75um (pan)	5.47	2.4	100.0
TOTAL	230.52		

PR EAST NO.22 10 MTR

SIEVE SIZE	FRACTION WEIGHT (g)	FRACTION WEIGHT (%)	CUMULATIVE WEIGHT (%)
+3.35mm	0.00	0.0	0.0
+2.36mm	0.28	0.1	0.1
+2.00mm	0.12	0.0	0.1
+1.70mm	0.15	0.0	0.1
+850um	3.69	0.9	1.1
+425um	62.00	15.6	16.7
+150um	278.35	70.1	86.8
+75um	29.46	7.4	94.3
-75um (pan)	22.81	5.7	100.0
TOTAL	396.86		

PR EAST NO.23 SPOT

SIEVE SIZE	FRACTION WEIGHT (g)	FRACTION WEIGHT (%)	CUMULATIVE WEIGHT (%)
+3.35mm	0.00	0.0	0.0
+2.36mm	0.00	0.0	0.0
+2.00mm	0.00	0.0	0.0
+1.70mm	0.00	0.0	0.0
+850um	0.18	0.1	0.1
+425um	8.40	4.1	4.2
+150um	150.69	74.2	78.4
+75um	29.51	14.5	93.0
-75um (pan)	14.31	7.0	100.0
TOTAL	203.09		

amdel

ANALYTICAL SERVICES

Memma 11/92 853019

Amdel Laboratories Limited
Brown Street, Thebarton, 5031
Telephone: (08) 416 5300 Facsimile: (08) 234 0321

Mr Neil Thomas
Mineral Holdings Australia P/L
2nd Floor, 135 Collins Street
MELBOURNE
VIC 3000

FINAL ANALYSIS REPORT

Your Order No: Our Job Number : 4AD0163

Samples received : 24-JAN-1994 Results reported : 08-FEB-1994
No. of samples : 14
Report comprises a cover sheet and pages 1 to 3

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 Mr Alan Ciplys quoting the above job number.

Approved Signatory:

Chris Altmann

for Trevor Francis
Marketing Manager

CC Mr Vic Threader TAS

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

amdel

853020

Job: 4AD0163
O/N:

ANALYTICAL REPORT

		Sample BR 06	Sample BR 07	Sample BR 08	Sample BR 09	Sample BR 10	
CaO	ppm	45	45	50	60	50	IC4E
Fe2O3	ppm	1400	780	280	700	190	IC4E
Na2O	ppm	120	90	160	140	60	IC4E
Al2O3	ppm	1.60%	6700	8100	1.54%	1250	IC4E
TiO2	ppm	1100	760	780	1150	660	IC4E
K2O	ppm	5900	2400	2750	5300	500	IC4E
MnO	ppm	5	45	<5	<5	<5	IC4E
P2O5	ppm	50	55	55	75	40	IC4E
MgO	ppm	1050	460	480	700	130	IC4E
V2O5	ppm	9	7	6	16	2	IC4E
SiO2	%	95.8	96.9	96.9	95.7	98.6	IC4E
LOI	%	0.34	0.22	0.34	0.34	0.28	IC4E
Colour		Off White	Off White	Off White	Off White	Off White	

amdel

853021

Job: 4AD0163
O/N:

ANALYTICAL REPORT

			Sample BR 06	Sample BR 07	Sample BR 08	Sample BR 09	Sample BR 10	
CaO	ppm	CaO	45	45	50	60	50	IC4E
Fe2O3	ppm	Fe_2O_3	1400	780	280	700	190	IC4E
Na2O	ppm	Na_2O	120	90	160	140	60	IC4E
Al2O3	ppm	Al_2O_3	1.60%	6700	8100	1.54%	1250	IC4E
TiO2	ppm	TiO_2	1100	760	780	1150	660	IC4E
K2O	ppm	K_2O	5900	2400	2750	5300	500	IC4E
MnO	ppm	MnO	5	45	<5	<5	<5	IC4E
P2O5	ppm	P_2O_5	50	55	55	75	40	IC4E
MgO	ppm	MgO	1050	460	480	700	130	IC4E
V2O5	ppm	V_2O_5	9	7	6	16	2	IC4E
SiO2	%	SiO_2	95.8	96.9	96.9	95.7	98.6	IC4E
LOI	%	LOI	0.34	0.22	0.34	0.34	0.28	IC4E
Colour			Off White	Off White	Off White	Off White	Off White	

amdel

853022

Job: 4AD0163
O/N:

ANALYTICAL REPORT

			Sample BR 11	Sample BR 12	Sample BR 13	Sample NH 01	Sample NH 02	
aO	ppm	CaO	85	60	75	65	50	IC4E
e2O3	ppm	Fe_2O_3	560	780	370	190	190	IC4E
a2O	ppm	Na_2O	100	85	55	85	90	IC4E
.l2O3	ppm	Al_2O_3	7100	5100	740	4300	5000	IC4E
iO2	ppm	TiO_2	960	820	3550	190	280	IC4E
:2O	ppm	K_2O	2600	1950	340	1450	1700	IC4E
inO	ppm	MnO	<5	<5	<5	<5	<5	IC4E
2O5	ppm	P_2O_5	60	25	50	40	25	IC4E
gO	ppm	MgO	390	350	80	200	220	IC4E
/2O5	ppm	V_2O_5	9	5	6	5	4	IC4E
iO2	%	SiO_2	97.0	97.3	98.7	98.2	97.8	IC4E
OI	%	LOI	0.28	0.35	0.44	0.31	0.35	IC4E
Colour			Off White	Off White	Off White	White	Off White	

amdel

Job: 4AD0163
O/N: P 420234a

ANALYTICAL REPORT

		Sample NH 03	Sample NH 04	Sample NH 05	Sample NH 06	
CaO	ppm	50	35	80	70	IC4E
Fe2O3	ppm	220	120	160	300	IC4E
Na2O	ppm	75	20	70	90	IC4E
Al2O3	ppm	3000	520	2800	6400	IC4E
TiO2	ppm	190	160	340	360	IC4E
K2O	ppm	1050	320	900	2100	IC4E
MnO	ppm	<5	<5	<5	<5	IC4E
P2O5	ppm	40	20	50	50	IC4E
MgO	ppm	140	20	140	280	IC4E
V2O5	ppm	3	<2	4	8	IC4E
SiO2	%	98.6	99.6	98.5	96.8	IC4E
LOI	%	0.30	0.34	0.45	0.48	IC4E
Colour		Off White	Off White	Off White	Off White	