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518001

CRA EXPLORATION PTY. LIMITED

RETENTION LICENCES 8717 AND 8718 ARTHUR RIVER AREA, TASMANIA

REPORT ON EXPLORATION FOR 12 MONTHS TO 2ND MARCH, 1990

90-3093. C/F

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Corres. 6.2.90.
Resubmit to | Date

MICROFILMED

AUTHOR: T. W. Dickson

DATE: February, 1990

ACCEPTED BY: T. W. Dickson

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Mineral Holdings Aust. P/L
Department of Mines, Tasmania

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CRAE Report No. 16409

518002

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1. SUMMARY

Following unsuccessful attempts to expose a large face of good quality magnesite at the Pinner site a number of detailed drill traverses were constructed in the pit area over the past 12 months. A total of 822 metres in 25 holes were completed.

Highly siliceous magnesite was encountered east of the large dolomite zone exposed in the pit while better quality magnesite was encountered below the dolomite and to the west. The amount of overburden and the karstic weathering are still major problems and further sampling may have to be accomplished via an exploratory adit.

2. INTRODUCTION

CRA Exploration Pty. Limited has constructed detailed drilling and evaluation programmes over the two major magnesite deposits at Lyons River and Arthur River, under the terms of a Joint Venture Agreement signed with Mineral Holdings Australia Pty. Ltd. on 8th April, 1982.

The area is close to existing infrastructure and is less than 40 km south-west of the major port of Burnie. Large reserves of magnesite have been identified but the magnesite is deeply weathered and covered by 3-10 metres of orange coloured clay overburden. Recent work has been aimed at locating a suitable sample site to produce large and repeatable bulk samples.

3. CONCLUSIONS

The drilling programme has revealed a three fold subdivision of the carbonate rocks in the Pinner area. On the ridge above and to the east of the pit area there is a large body of deeply weathered and silicified magnesite although deeper drilling in the past has indicated a fall off in silica content with depth.

A large irregular body of dark grey dolomite dominates the pit area while better grade but deeply weathered magnesite occurs along the western footwall of the carbonate body. This footwall zone represents the best target material for future bulk sampling.

4. RECOMMENDATIONS

The search for a suitable bulk sample site should be restricted to the western footwall zone of the carbonate body. The zone is deeply weathered and future sampling may best be accomplished via an exploratory adit.

5. GEOLOGY

The magnesite deposits in the Arthur River region are situated in a north-northeast striking belt of highly deformed Precambrian rocks known as the Arthur Lineament. The Arthur Lineament varies from 8km to 15km wide and extends from Wynyard on the north-east coast to Granville Harbour on the west coast. The Savage River iron ore deposit occurs within the lineament 35km to the south-west of the Lyons River.

The area north of the Arthur River is largely occupied by Basal Permian tillites and mudstones and by Tertiary basalts. These rocks effectively bury the Precambrian rocks of the Arthur Lineament. A block of down faulted Permian mudstones occurs to the west of the Lyons River - Arthur River magnesite deposits.

The magnesite horizon is thought to be a conformable stratigraphic unit with a thick sequence of quartz schist and quartz-mica schists forming the hanging wall to the east. The western footwall sequence is dominated by amphibolite and pyritic siltstones. The Keith River gossan zone, which occurs between the two magnesite bodies, is situated within this sequence. Dips range from vertical to 70 degrees to the south-east.

The northern Keith to Arthur River deposit is covered by a veneer of alluvial gravels from 6-20m thick. It occurs over a strike length of 3,500 metres and ranges in thickness from 150-400 metres. It has been tested by seven diamond drill holes (1,642.8 metres) and the resouce figure is approximately 3 million tonnes/vertical metre. It extends to atleast 300 metres depth in drilling. High grade zones of +40% magnesite within the deposit have average Fe_2O_3 1.57%, CaO 2.17% and SiO_2 6.35%.

The Lyons River deposit occurs 4km along strike to the south. This body is up to 400 metres thick over a strike distance of at least 2,000 metres. The body grades to dolomite to the south and pinches out to the north under basalt cover. Magnesite is exposed over a vertical interval of at least 130 metres and has been proved to a further depth of 300 metres. Available tonnage is in the order of 2 million tonnes/vertical metre. The average of all +40% MgO material contains 1.09% Fe_2O_3, 3.4% CaO and 7.2% SiO_2.

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Initial testing of the Lyons River deposit consisted of 11 holes totalling 2,635 metres. A number of small bulk samples were taken for metallurgical evaluation and a large pit was excavated at a location known as the Pinner outcrop in an attempt to expose a large face of magnesite.

Magnesite commonly constitutes 70% of the rock in the bodies and is usually creamy white and has the texture of a fine grained dense marble. The magnesite is easily distinquishable from dolomite which is dark grey in colour. The dolomite occurs as distinct bands or as the matrix of dolomite-magnesite breccias.

Much of the dolomite bands could be removed by selective mining, and apart from bands of high grade magnesite, the dolomite from dolomite breccias can be easily floated to produce a high grade magnesite concentrate.

The high silica content of some magnesites can also be removed by floatation.

6. 1989 DIAMOND DRILLING PROGRAMME

The diamond drilling programme in the Pinner Pit area was carried out in two stages. The first in March-April 1989 consisted of 16 holes, LR14-LR29. A total of 510 metres was drilled in 3 lines approximately 30 metres apart. The holes were designed to test below the floor of the existing pit and the high wall to the east of the pit.

The second series of holes (9 holes totalling 311.7 metres LR30-LR38) was drilled during December, 1989 in two lines, one to the north and one to the south of the existing pit. The holes were designed to test the footwall sequence west of the pit but because of the deeply weathered and filled ground in the valley below the pit the holes had to be developed on low ridge lines to the north and south of the pit.

Hole DD89LR14 was collared on the pit floor at 366632E 5436120N and drilled -60° to 289°m for 30m. The hole was completely in clay overburden and no core was recovered.

Hole DD89LR15 was collared at the same position but drilled east at -45° to 109°m to a total depth of 40 metres. The hole passed through overburden to 3.3m, dolomite to 14.1 siliceous magnesite to 22.5 followed by better quality magnesite to 40 metres.

Hole DD89LR16 was drilled in the floor of the pit some 26m to the south-east of LR15 at 366616E 5436101N. It was drilled down slope at -60° to 289°m. Clay overburden extended to 8m with siliceous magnesite to 28.5m and dolomite to the total depth of 30 metres.

518006

Hole DD89LR17 was collared at the same location as LR16 but drilled easterly at -50° to 109°m for 35 metres. It passed through overburden to 4 metres dolomite to 7.7m then siliceous magnesite to 13.5 metres. Better quality magnesite extended throughout the remainder of the hole except for another siliceous band between 28.5-31.5m.

Hole DD90LR18 was drilled on the same line as LR16, LR17 on the ridge above the pit. It was collared at 366664E 5436067N and inclined easterly at -55° to 109°m. There was no core to 20 metres and the hole extended to 30 metres in highly siliceous magnesite.

DD89LR19 was collared at the same location as LR18 but was drilled downslope at -55° to 289°m for 45 metres. Overburden extended to 26 metres, a patch of siliceous magnesite to 28.7m dolomite to 43.5m and impure magnesite to 45 metres.

DD89LR20 was located 25m north east of LR19 at 366680E 5436083N. It was inclined -65° downslope towards the pit at 289°m. This hole encountered clay overburden to 11.5m siliceous magnesite to 30.5m and then dolomite to the end of the hole at 40 metres.

DD89LR21 collared at the same location LR20 but drilled easterly at -45° to 109°m for 30 metres. It passed into siliceous magnesite at only 2 metres. The magnesite extended to 16 metres with dolomite to the end of the hole at 30 metres.

DD89LR22 collared at 366694E 5436122N on a new line 42 metres west north west of LR21. The hole drilled -60° to 289°m encountered 15m of overburden with siliceous magnesite to 25.4 metres and then dolomite to the end of the hole at 35 metres.

DD89LR23 drilled at the same location as LR22 but angled -45° to 109° magnetic. The hole passed through elay overburden to 8 metres and apart from a band of dolomite between 10.6 and 13.8m the hole remained in siliceous magnesite to the final depth of 30m.

DD89LR24 was collared at 366679E 5436058N on the southern of the three central lines. It was drilled easterly at -50° to 109°m for 35 metres. The clay overburden extended to 23m where there was a three metre section of alluvial wash. A section of what appeared to be very weathered magnesite extended to 35 metres but insufficient material was obtained to enable assays to be run.

DD89LR25 was drilled on the central line at 366697E 5436069N and was drilled downslope at -60° to 289°m. No core was obtained to 24 metres with siliceous magnesite encountered from 24 to 40 metres.

DD89LR26 was then collared on the northern of the three lines at 366724E 5436093N and drilled -60° westerly to 289°m. Overburden extended to 21 metres with siliceous magnesite to the end of the hole at 30 metres.

518007

DD89LR27 was drilled at the same collar position but angled easterly at -50° to 109°m. It intersected overburden to 11 metres dolomite to 14.8 metres then siliceous magnesite to the depth of 35 metres.

DD89LR28 was sited in the pit floor at the same location as LR16 and LR17 but drilled vertically to 20 metres. Overburden and fill extended to 9 metres with siliceous magnesite to 10.5 metres then better quality magnesite to 20 metres.

DD89LR29 was also drilled in the pit floor at 366631E 5436095N 15 metres to the north of LR28. It intersected dolomite to 10 metres and then highly siliceous mixed dolomite and magnesite to 14 metres where the hole had to be abandoned.

In general the only non siliceous magnesites were encountered below the dolomite body outcropping in the pit floor. Any magnesite encountered east of the dolomite body was deeply weathered and often highly siliceous with 10-20% S_iO_2 a general rule.

Of the holes drilled in December 1989 hole DD89LR30 was collared at 366583E 5436077N on the southern side of the main access road just to the south of the pit. The hole was drilled down slope to the west at -55° to 315°m and extended to 40.3 metres.

No core was recovered to 20.1 metres where the hole intersected 2.2m of magnesite to 22.3 metres. There was a cavity to 26m and the hole then remained in dolomite to the final depth of 40.1m.

DD89LR31 was collared at 366585E 5436074N on the northern side of the access track but angled at -50° to 135° magnesite. No core was recovered to 21.7 metres. Low silica magnesite was then encountered to the final depth of 37 metres.

PD89LR32 was collared 22 metres south-west of LR30 at 366572E 3436099N and angled at -55° to 315° downslope. The hole traversed overburden to 28.4m with partches of dolomite to 34.6 metres. There was a clay filled cavity to the final depth of 43.3 metres. This may represent a cavity on the contact with the footwall slates.

DD89LR33 was collared at 366575E 5436092N only 3 metres from LR32 but angled easterly at -55° to 135° magnetic. The hole intersected clays to 10.4 metres with dolomitic rocks to the final depth of 30 metres.

DD89LR34 was collared at 366655E 5436184N on the ridge line to the north of the pit. The hole was depressed -55° to 270°m but was abandoned at 30.8 metres still in clay overburden.

DD89LR35 was drilled at the same collared position as LR34 but steepened to -70° to 270°m. This hole too was abandoned at 31 metres in clay overburden.

518008

DD89LR36 was collared 3 metres further east at 366658E 5436183N and drilled -55° to the east at 090°m. The hole was drilled to 30m but intersected only two small patches of weathered magnesite at 16.5-17.7 metres and 29.3-30 metres.

DD89LR37 was collared 22 metres further up the ridge at 366683E 5436175N. It was drilled -50° to 090° and was completed at 40 metres. The hole intersected clay to 26.3m with a 0.8m dolomite floater at 19.7m. Dolomite extended from 26.3 to 35.4 metres then a highly siliceous magnesite to the final depth at 40 metres.

DD89LR38 was collared at the same position at LR37 but drilled vertically and had to be abandoned at 29.3 metres in a clay filled cavity. Overburden clay extended to 26.1 metres with highly siliceous magnesite (26.1 to 27.3 metres) the only rock type intersected.

The second phase of drilling indicated that the carbonate rocks downslope from the pit area are highly weathered and often covered of up to 25 metres of overburden. As a result only thin remnants of magnesite or dolomite exist and there is little hope of attaining a large area of magnesite close to the surface.

However the footwall zone is known to contain the best magnesite at depth and indication from the present drilling also confirms that the better magnesite occurs below and to the west of the existing pit.

With such deep weathering the only satisfactory method of testing this footwall zone to obtain large bulk samples would appear to by via an adit sited below the Pinners Road and aimed to intersect under the northern section of this pit.

T. W. DICKSON

518009

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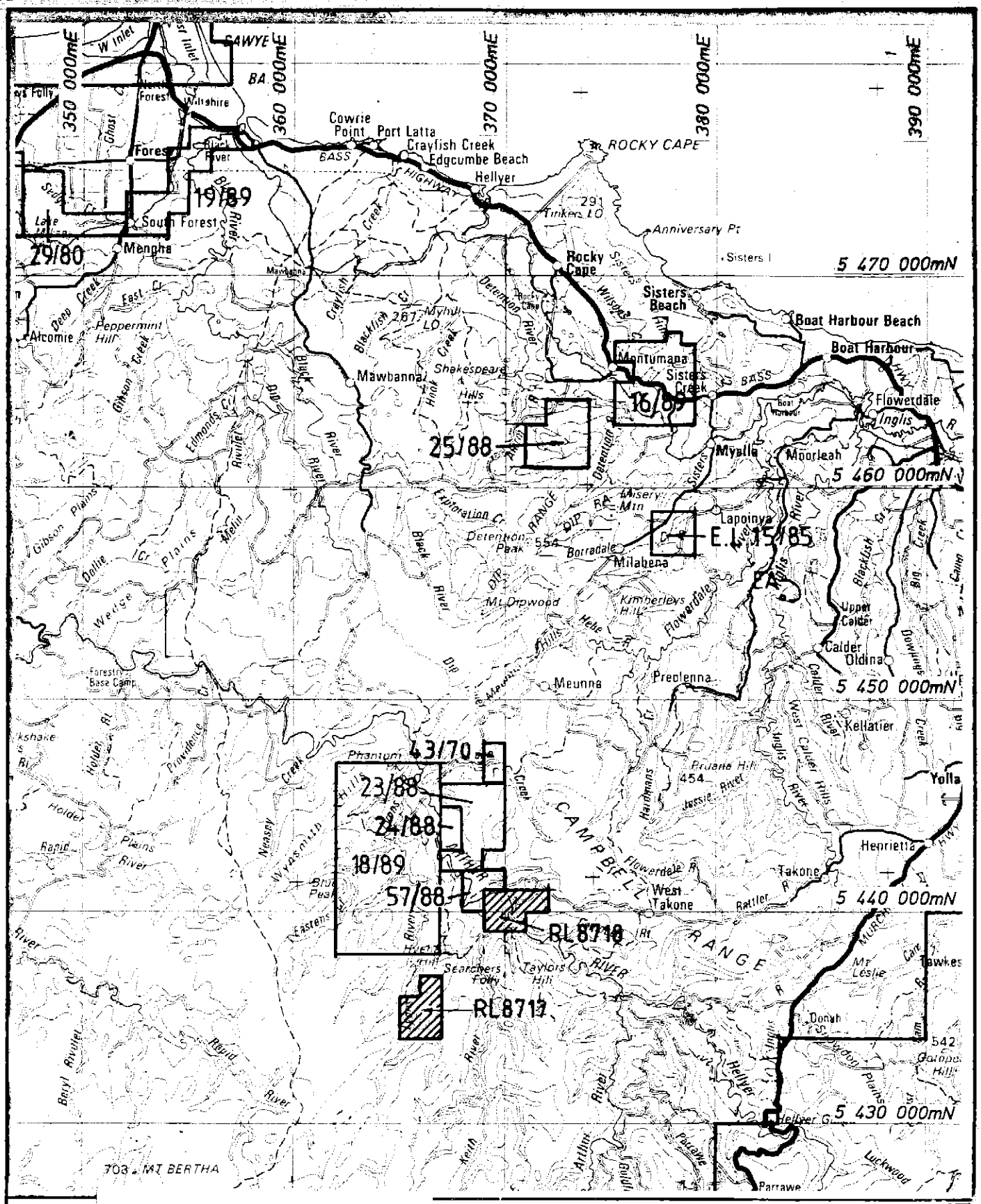
KEYWORDS

Magnesite, Carbonate, Drill-Diamond.



5 cm

90-3093

518010

Feb 1990

CRA EXPLORATION PTY. LIMITED

LYONS RIVER RL 8717 and

ARTHUR RIVER RL 8718

LOCATION PLAN

Ref.: BURNIE SK55 3	Scale: 1 : 250 000
Author: T.W.Dickson	Report No.: 16409
Drawn: R Traverso	Plan No.: Th 3728

610

366 700 mE

366 600 mE

366 500 mE

5 436 200 mN

5 436 100 mN

5 436 000 mN

5 435 900 mN

N

LR6
LR27
LR26
LR25
LR23
LR22
LR24
LR37
LR38(V)
LR21
LR20
LR11
(approx.)
LR18
LR19
LR36
LR34 &
LR35
Rock pile
Rock pile
LR15
LR14
LR29
Pit floor
LR28
LR17
LR16
Rock pile
Drain
Drain
Drain
Existing Track
Rock pile
LR9
LR31
LR30
LR33
LR32
"Clear line of sight
no trees need to be removed"
Filled and
replanted area
Log Wall
(Approx.)
LR10

Magnesite outcrop

Dolomite outcrop

LR6 Drill hole

0 10 20 30 40 50 metres

5 cm

90-3093

CRA EXPLORATION PTY. LIMITED

LYONS RIVER RL8717

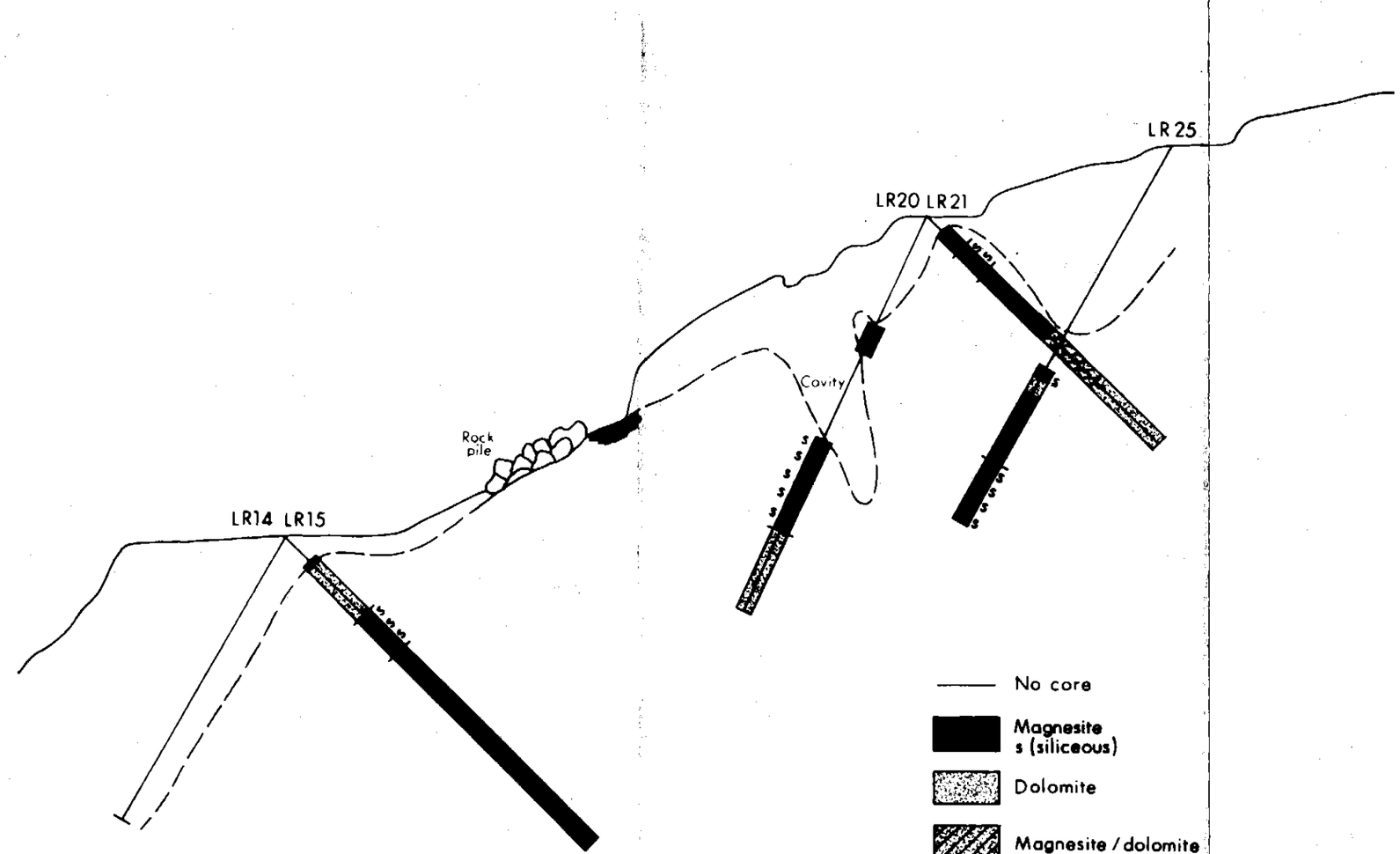
PINNER OUTCROP AREA

DRILL HOLE LOCATIONS

518011

Ref.: SK 55-3 7914	Scale: 1:500
Author: T.W. Dickson	Report No.: 16409
Drawn: J.Wright May'89	Plan No.: Th 3722

011



0 10 20 30 40 m

5 cm

CRA EXPLORATION PTY. LIMITED

LYONS RIVER RL8717

PINNER OUTCROP AREA

DRILL SECTION

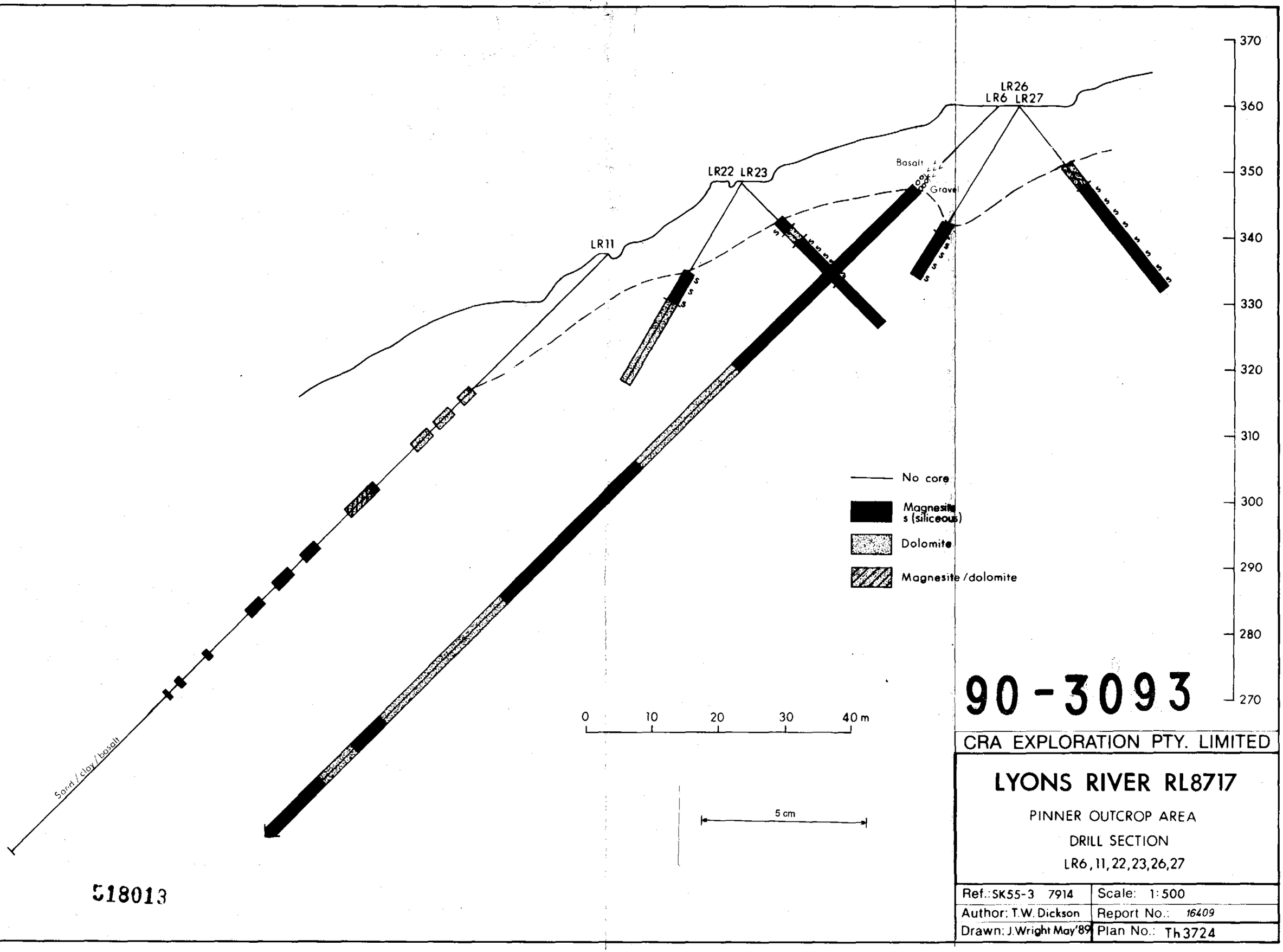
LR14,15,20,21,25

Ref.: SK55-3 7914	Scale: 1:500
Author: T.W.Dickson	Report No.: 16409
Drawn: J.Wright May '89	Plan No.: Th 3723

518012

90-3093

012



518013

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CRA EXPLORATION PTY. LIMITED

LYONS RIVER RL8717

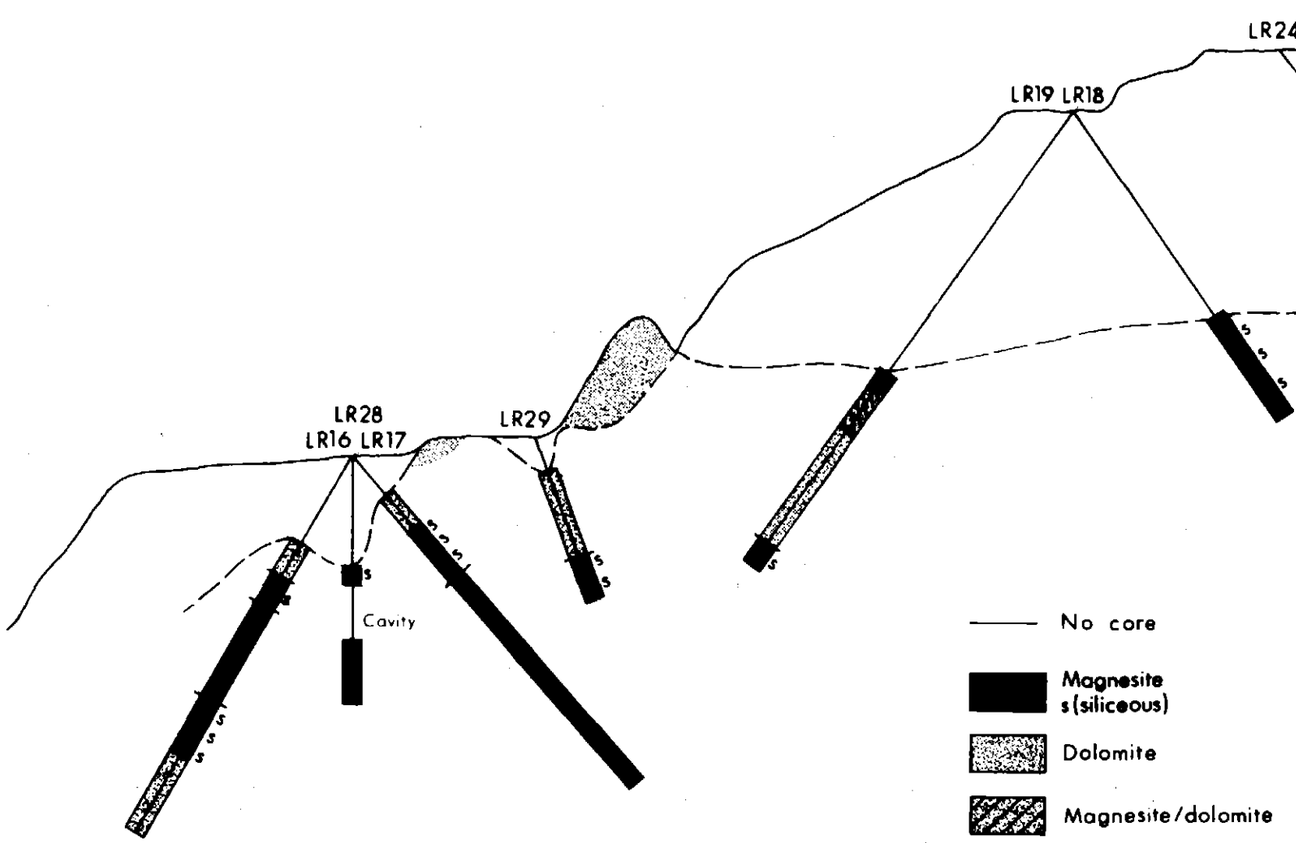
PINNER OUTCROP AREA

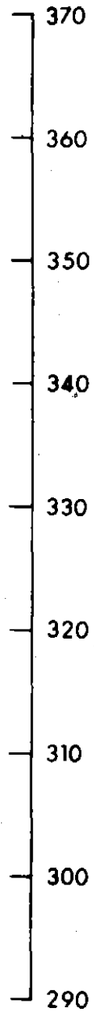
DRILL SECTION

LR6, 11, 22, 23, 26, 27

Ref.: SK55-3 7914	Scale: 1:500
Author: T.W. Dickson	Report No.: 16409
Drawn: J.Wright May'89	Plan No.: Th3724

014





0 10 20 30 40 m

5 cm

518014

90-3093

CRA EXPLORATION PTY. LIMITED

LYONS RIVER RL8717

PINNER OUTCROP AREA

DRILL SECTION

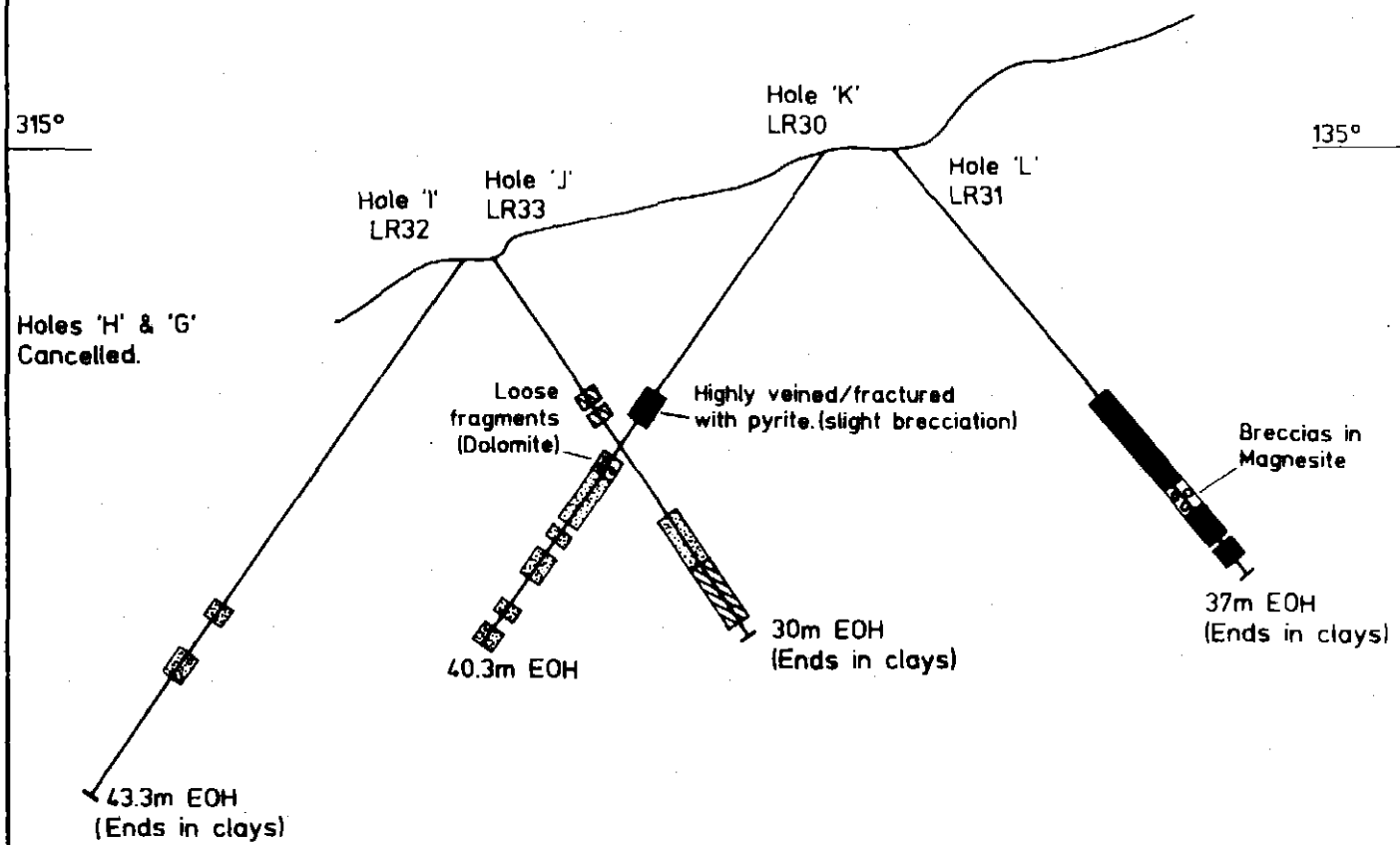
LR 16 - 19, 24, 28, 29

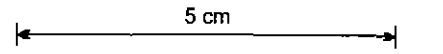
Ref.: SK55-3 7914	Scale: 1:500
Author: T.W. Dickson	Report No.: 16409
Drawn: J Wright May '89	Plan No: Th 3725

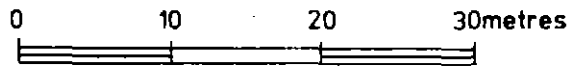
013

SKETCH SECTION

Lyons River Magnesite







MAGNESITE / DOLOMITE

MAGNESITE

DOLOMITE

518015

90-3093

Jan.'90

CRA EXPLORATION PTY. LIMITED

LYONS RIVER RL8717

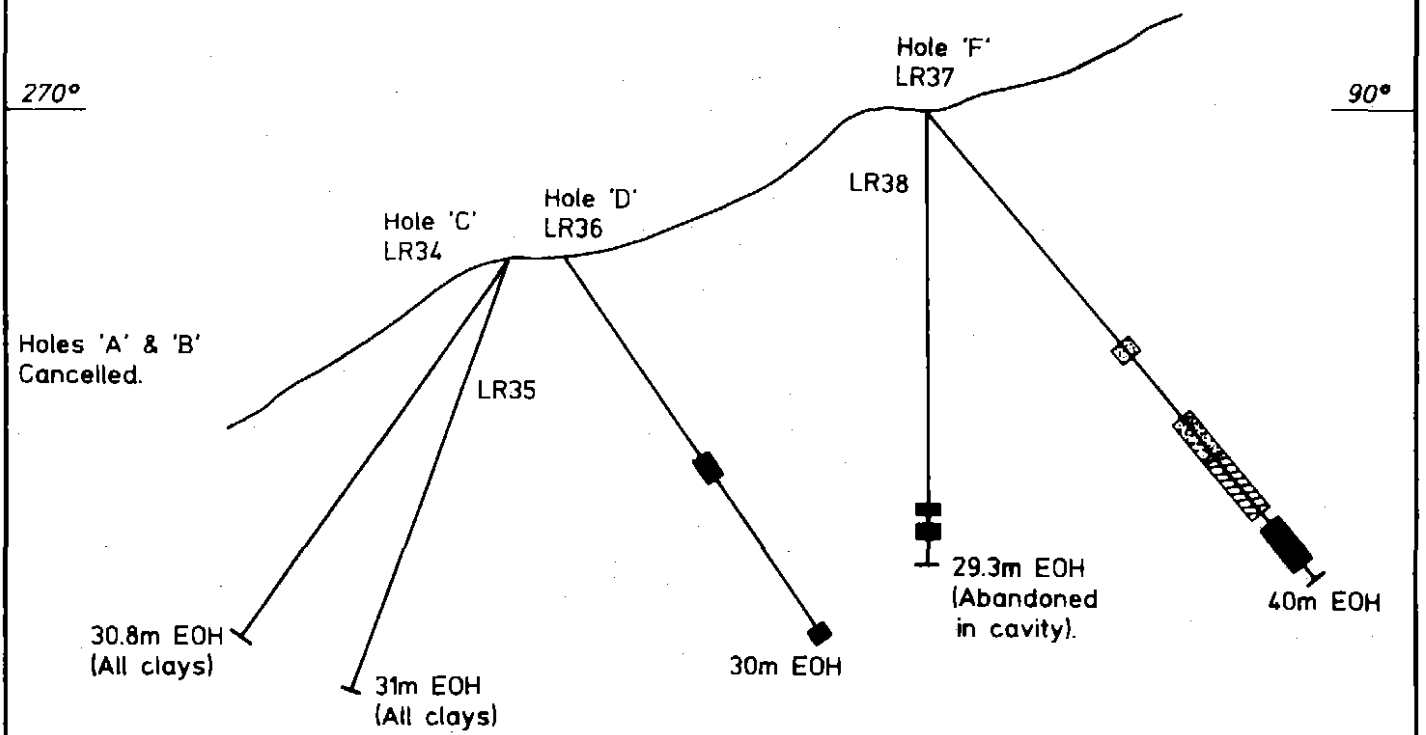
PINNER OUTCROP AREA
DRILLHOLE SECTION
LR30,31,32 & 33

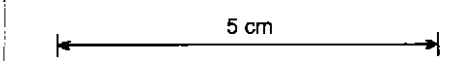
Ref.: SK55-3 7914	Scale: 1 : 500
Author: T.W.Dickson	Report No.: 16409
Drawn: R Traviersо	Plan No.: Th 3726

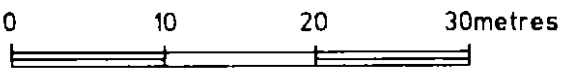
015

SKETCH SECTION

Lyons River Magnesite







MAGNESITE / DOLOMITE

MAGNESITE

DOLOMITE

518016

90-3093

Jan. 1990

CRA EXPLORATION PTY. LIMITED

LYONS RIVER RL8717

PINNER OUTCROP AREA
DRILLHOLE SECTION
LR34,35,36,37 & 38

Ref.: SK55-3 7914	Scale: 1 : 500
Author: T.W.Dickson	Report No.: 16409
Drawn: R Travierso	Plan No.: Th 3727

51801

LOCALITY

Burnie	1:250,000	SK 55 - 3

LIST OF PLANS

Plan No.	Title	Scale
Th 3728	Lyons River RL 8717 and Arthur River RL 8718. Location Plan	1:250,000
Th 3722	Lyons River RL 8717 Pinner Outcrop Area. Drillhole Locations	1:500
Th 3723	Lyons River RL 8717 Pinner Outcrop Area. Drill Section LR14, 15, 20, 21, 25	1:500
Th 3724	Lyons River RL 8717 Pinner Outcrop Area. Drill Section Lr 6, 11, 22, 23, 26, 27	1:500
Th 3725	Lyons River RL 8717. Pinner Outcrop Area. Drill Section LR 16-19, 24, 28, 29	1:500
Th 3726	Lyons River RL 8717. Pinner Outcrop Area. Drillhole Section LR 30, 31, 32 and 33	1:500
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APPENDIX I - Drill Logs DD89LR14 to LR38.

APPENDIX II - Assay Results Holes DD89LR14 to LR38.

518018

APPENDIX I

DRILL LOGS DD89LR14 TO LR38

[redacted] [redacted] [redacted] [redacted] [redacted] [redacted] [redacted] [redacted] [redacted] S.A. [redacted] ORATION PTY [redacted] LIMITED [redacted] [redacted] TENEMENT [redacted] NAME [redacted] YON [redacted] VC [redacted] No [redacted] 8217

DRILL CORE LOG

No 19

PLAN – MAP REFERENCE.....

COORDINATES 366632 E 5436120 N AZIMUTH 289°M DRILLERS P. Sharp COMMENCED 14/3/89 DEPTH 30 m HOLE No. 88 GR 14

RL COLLAR 324 INCLINATION -60° DRILL TYPE 4/4 38 COMPLETED 14/3/89 CASING LEFT..... DPO No(s) –

DEPTH From (M)	DEPTH To(M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by.....)
0	30	0			No core recovered hole completely in fill material.						
						EOH					
						(HOLE 'A')					

518019

[redacted] C.R.A. EXPLORATION PTY. LIMITED [redacted] ME[redacted]AME[redacted] No[redacted] 191

DRILL CORE LOG

366632 E

CO-ORDINATES 5436120 N AZIMUTH 109° M DRILLERS P. Sharp COMMENCED 15/3/89 PLAN – MAP REFERENCE .... DEPTH 40 m HOLE No. 89 LR 15

RL COLLAR 321 INCLINATION −45° DRILL TYPE L/Y 38 COMPLETED 18/3/89 CASING LEFT .... DPO No(s) 50651

DEPTH From (M)	DEPTH To (M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by ....)
0	3.3	0			No core						
3.3	3.75	.45	N		Magnesite white and massive recrystallised in part. Thin dolomite whisps towards base	Banding ⊥ to core	2583801	3.3	3.75		
3.75	10.50	6.25			Dolomite grey massive and unbanded. Sandy texture T/out.		802	3.75	6.75		
							803	6.75	10.50		
10.50	14.1	3.5			Magnesite soft and weathered in appearance some bands and patches of sandy dolomite	Dolomite bands ∠30 to 40° to core axis	804	10.50	13.50		
							805	13.50	16.50		
							806	16.50	19.50		
							807	19.50	22.50		
							808	22.50	25.50		
14.1	40.0	26.0			Magnesite white massive to crystalline in part Patches and occasional bands of grey dolomite		809	25.50	28.50		
							810	28.50	31.50		
							811	31.50	34.50		
							812	34.50	37.50		
							2583813	37.50	40.0		

E.O.H.

(HOLE 'B')

518020

[redacted] S.R.A. EXPLORATION PTY. LIMITED [redacted] SHEET No 1 of 1

DRILL CORE LOG

[redacted] TENEMENT NAME [redacted] No [redacted] 217

CO-ORDINATES 366616E 5436101N AZIMUTH 289°M DRILLERS P. Sharp COMMENCED 16/3/89 DEPTH 35.0 HOLE No. 89LR16

PLAN – MAP REFERENCE

RL COLLAR 326 INCLINATION −60° DRILL TYPE LY 38 COMPLETED 17/3/89 CASING LEFT DPO No(s) 50651

DEPTH From (M)	DEPTH To (M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by.....)
0	8.0				No recovery (fill)						
8.0	14.4	4.4			Dolomite grey massive and sandy texture. Irregular patches of white magnesite toward base	2m cavity at 12.0m broken ground at 13.0m but no afferent core loss.	2583814	8.0	11.0		
							815	11.0	14.4		
14.4	23.0	7.2			Magnesite white massive with slightly sandy texture minor dolomite patches.	1.4m core loss (Cavity) at 14.4m	816	14.4	17.0		
							817	17.0	20.0		
							818	20.0	23.0		
23.0	28.5	5.0			Magnesite and dolomite approx 50/50. Irregular patches of magnesite in dolomite matrix	Several small cavities	819	23.0	26.0		
							820	26.0	28.5		
28.5	35.0	6.5			Grey dolomite massive with sandy texture	Broken ground at 29.0m and 29.5m but minimal core loss	821	28.5	32.0		
							822	32.0	35.0		
						E.O.H.					
						(HOLE 'F')					

518021

No 141

C.R.A. EXPLORATION PTY. LIMITED

DRILL CORE LOG

[redacted]EME[redacted]AME[redacted] No[redacted]

PLAN – MAP REFERENCE

CO-ORDINATES 366618E 5436608N AZIMUTH 109°M DRILLERS P. Sharp COMMENCED 20/3/89 DEPTH 35.0 HOLE No. 89LR17

RL COLLAR 326 INCLINATION -50 DRILL TYPE LY 38 COMPLETED 21/3/89 CASING LEFT DPO No(s) 50651

DEPTH From (M)	DEPTH To (M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by ...)
0	4.0				No core (fill)						
4.0	10.50				Dolomite mostly massive and sandy but with irregular white magnesite patches to several cm's.		2583823	4.0	7.7		
							824	7.8	10.5		
10.50	35.0				Magnesite white to pinkish buff 20 cm dolomite band at 11.0 m Dark brown colour 22.1 – 22.4 weathering on joints Dark brown and weathered 28.1 – 28.3 and again at 31.50 Very white below 32.8 m		825	10.50	13.50		
							826	13.50	16.50		
							827	16.50	19.50		
							828	19.50	22.50		
							829	22.50	25.50		
							830	25.50	28.50		
							831	28.50	31.50		
							832	31.50	35.0		
						EOH HOLE 'G'					

518022

C.R.A. EXPLORATION PTY. LIMITED

DRILL CORE LOG

[redacted]ME[redacted]AME[redacted] No[redacted] 8717

PLAN – MAP REFERENCE

CO-ORDINATES 366664E 5436069N AZIMUTH 109° DRILLERS P. Sharp COMMENCED 21/3/89 DEPTH 30 HOLE No. 89 LR 18

RL COLLAR 3.51 INCLINATION -55° DRILL TYPE LY 38 COMPLETED 22/3/89 CASING LEFT DPO No(s) 50653

DEPTH From (M)	DEPTH To (M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by)
0	20	0			NO CORE.						
20	30				Magnesite pale buff colour dominantly cryptocrystalline but with numerous veins and patches of sparry magnesite approx 70/30. 0.3 m patch of broken dolomite at top.	1.8 m core loss dominantly around 28.5 m.	2583881	20.4	23.0		
							882	23.0	26.0		
							883	26.0	30.0		

E.O.H.

HOLE 'I'

518023

[redacted] .R.A. [redacted] ORA [redacted] N PT [redacted] MITE [redacted]

DRILL CORE LOG

5 1 1 10 19 1

[redacted] EME [redacted] AME [redacted] No [redacted] 87/2

PLAN – MAP REFERENCE

CO-ORDINATES 366664E 5436067N AZIMUTH 289° m DRILLERS P. Sharp COMMENCED 23/3/89 DEPTH 45 m HOLE No. 89LR 19

RL COLLAR 351 INCLINATION -55° DRILL TYPE LY 38 COMPLETED 28/3/89 CASING LEFT DPO No(s) 50652

DEPTH From (M)	DEPTH To (M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by)		
0	26				No core	Some hard patches drilled with tricone							
26.0	27.8	1.8			Magnesite lightly re-xtallised with some dolomite bands and veinlets.	258	3858	26.0	27.8		m	70	Cd
27.8	32.0	2.3			Magnesite / dolomite 50/50 irregular patches and bands mixed together mostly re-xtallised.	1.8 m core loss above 32 m.	859	27.8	32.0		m	60	Cd
32.0	35.0	2.2			Dolomite grey xtalline with white irregular magnesite blebs ~ 60/40	0.8 m core loss at top	860	32.0	35.0		d	–	?
35.0	42.2				Grey massive dolomite with minor white magnesite patches	mostly massive and structureless	861	35.0	38.0		d	–	?
							862	38.0	42.2		d	–	
							863	42.2	43.5		d	–	
42.2	45.0				Magnesite pinkish buff with dolomite patches 2 x 2 cm dolomite bands at 43.8 and 44.1		864	43.5	45.0		m	50	Cd
						EOH.							
						HOLE 'H'							

518024

C.R.A. EXPLORATION PTY. LIMITED

DRILL CORE LOG

366880E

CO-ORDINATES 5436083N AZIMUTH 289°m DRILLERS P. Stark COMMENCED 28/3/89 DEPTH 40.0 HOLE No. 89LR20

PLAN – MAP REFERENCE

RL COLLAR 345 INCLINATION −65 DRILL TYPE LY 38 COMPLETED 29/3/89 CASING LEFT DPO No(s) 5065Z

DEPTH From M)	DEPTH To(M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by.....)
0	11.5	0			No core						
11.5	14.0	2.3			Magnesite banded white Coarse xtalline with numerous veins and patches of Re xtalline magnesite. Bottom 0.1m badly weathered (Top of Cavity)		2583841	11.5	14.0	M	70
14.0	23.0	0			No core cavity.						
23.0	26.7	3.5			Magnesite mixed Rextallised and Coarse 60/40 with increasing xtalline magn patches → base.	Minor weathered core at 24.3 and 25.5. Minor 0.2 core loss at top.	842	23.0	26.7	M	60
26.7	27.6	0.9			xtalline dolomite light grey with irregular patches of Coarse magn especially at top and base		843	26.7	27.6	M	0
							844	27.6	30.5	M	0
27.6	38.0				Magnesite Rextallised light grey/white minor irregular patches of Coarse magn.	Minor dolomite bands to 0.2m at 28.5 and 29.5 1.5m core loss at 30.5m	845	32.0	35.0	D	10
							846	35.0	38.0	D	10
38.0	40.0				Dolomite xtalline with 10% Coarse magn patches.		847	38.0	40.0		15

HOLE C

518025

[redacted] C.R.A. EXPLORATION PTY. LIMITED [redacted] No [redacted]

DRILL CORE LOG

CO-ORDINATES 366 680E 543 6083N AZIMUTH 109°M DRILLERS P. Sharp COMMENCED 30/3/89 PLAN – MAP REFERENCE

RL COLLAR 345 INCLINATION −45 DRILL TYPE LY/38 COMPLETED 31/3/89 CASING LEFT DEPTH 30 HOLE No. 89 LR 21

DPO No(s) 50652

DEPTH From M)	DEPTH To(M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by .....)
0	2	0			No core						
2	4	1.4			Magnesite pinkish Cryptocrystalline to partly recrystallised	Small cavity 3.4 – 4.0	583848	2	4	m	50 pink
4	7.2	0.8			Strongly weathered Cryptocrystalline magnesite	Major cavity 4.8 – 7.0	849	4	7.2		80 brown
7.2	16.0	6.5			Magnesite dominantly Cryptocrystalline with irregular veins and patches of recrystallised magnesite and minor? dolomite.	1.3 M core loss probably at 13 m.	850	7.2	10.0		70 Grey
							851	10.0	13.0		70 "
							852	13.0	16.0	m	70 "
16.0	22.0	6.0			Magnesite light recrystallised and dolomite partly 60/40	16 – 19 and 0.7 m recovery Mostly at top of section. Another 1.5 m lost 19 – 22 mostly at 20 m	853	16.0	19.4	0	grey
							854	19.4	22.0	0	
22.0	30.0	8.0			Recrystallised magnesite and dolomite pale grey. Core is mostly core loss broken 23.8 – 28 m.	massive no structures.	855	22.0	25.0	0	
							856	25.0	28.0	0	– grey
							857	28.0	30.0	0	– grey
						HOLE 'D'	25				

518026

SHEET NO 1 of 1

[redacted] C.R.A. EXPLORATION PTY. LIMITED [redacted] [redacted]MEN[redacted]AME[redacted]. No[redacted]

DRILL CORE LOG

PLAN – MAP REFERENCE ....

CO-ORDINATES 366694 E 5436122 N	AZIMUTH 289° M	DRILLERS P. Shap	COMMENCED	DEPTH 35 m	HOLE No. 89 LR 22
RL COLLAR	INCLINATION -60°	DRILL TYPE LY/38	COMPLETED	CASING LEFT	DPO No(s) 50653

DEPTH From (M)	DEPTH To (M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by ....)		
0	15.5	0			NO CORE.								
15.5	20.3	4.2			Magnesite white to buff dominantly cryptoxtalline at top but with increasing dolomite veins and patches to base 80/20 top to 50/50 at base	0.6 m core loss at 18.3 m.	2583884	15.5	20.3		m	65	buff
20.3	20.8	.5			Dolomite grey sandy some magnesite patches.		885	20.3	20.8		m	10	grey
20.8	25.4				Magnesite pale buff to brownish mostly slightly recrystallised. irregular dolomite patches T/O.	1m core loss at 23 m.	886	20.8	25.4		D	–	buff
25.4	35.0				Dolomite? pale grey with slightly sandy texture	Major core loss 2.6m at 26m. av 2.2m betw 29-32 and 1.5m 32-35 m.	887	25.4	32.0		D	–	grey
							888	32.0	35.0		D	–	grey

HOLE R.

C.R.A. EXPLORATION PTY. LIMITED

DRILL CORE LOG

[redacted] No [redacted]8717

027 366694E

CO-ORDINATES 5436120N AZIMUTH 100gm DRILLERS P. SHARP COMMENCED 31/3/89 DEPTH 30 HOLE No. 89LR23

PLAN – MAP REFERENCE

RL COLLAR INCLINATION -45° DRILL TYPE LY 38 COMPLETED 31/3/89 CASING LEFT DPO No(s) 50652

DEPTH From M	DEPTH To(M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by.....)	
0	8	–			No Core							
8	13·8	4·0			Magnesite white crystalline hard and dense. Core broken in places but majority of core here at base of section	minor silicification at top. Some Fe stain on joints	2583833	8·0	10·6		80	WLMg
							2583834	10·6	13·8		85	"
13·8	21·7	5·9			Magnesite mixed cryptocrystalline to recrystallised Strong Fe stain for top 0·3m (base of quartz) and again towards base of section. Partly weathered	2m core loss at top of section	835	13·8	17·0		50	BuMg
							836	17·0	20·0		50	"
							837	20·0	21·7		50	"
21·7	30·0	8·3			Magnesite white to buff coloured mixed crypto – crystalline to recrystallised but dominantly crypto hard dense No core loss		838	21·7	25·0		70	Cream
							839	25·0	28·0		70	"
							840	28·0	~~29·0~~ 30·0		70	"
						EOH (HWL).						

518028

[redacted].A. [redacted]ORA[redacted] PTY [redacted]MITE[redacted] [redacted]MEN[redacted]AME[redacted]NS[redacted]LT[redacted]. No[redacted]P717

DRILL CORE LOG

CO-ORDINATES 366679E 5436058N   AZIMUTH 109° M   DRILLERS P. Sharp   COMMENCED ...

RL COLLAR ...   INCLINATION -50°   DRILL TYPE LY/38   COMPLETED ...

PLAN – MAP REFERENCE ...

DEPTH 35.0 m   HOLE No. 89 LR24

CASING LEFT ...   DPO No(s) –

DEPTH From (M)	DEPTH To(M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by ...)
0	23				NO CORE						
23	26	0.5			Quartz pebbles and wash.						
26	35	0.3			Magnesite? strongly weathered and iron stained very poor recovery.						– brown
					EOH.						

HOLE J.

518029

[redacted] C.R.A. EXPLORATION PTY. LIMITED [redacted]

DRILL CORE LOG

[redacted]EME[redacted]AME[redacted] No [redacted]8717

PLAN – MAP REFERENCE

CO-ORDINATES 366697E 5436069N AZIMUTH 289°m DRILLERS P. Sharp COMMENCED DEPTH 40.0 HOLE No. 89 CR 25

RL COLLAR INCLINATION -60° DRILL TYPE LY 38 COMPLETED CASING LEFT DPO No(s) 50653

DEPTH From (M)	DEPTH To (M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by)		
0	24	0			NO CORE								
24	25	1.0			Magnesite pale brown cryptocrystalline with numerous veinlets and patches of sparry ? magnesite approx 60/40 Massive structureless.		2583865	24.0	25.0		m	60	Buff
25	26.7	1.4			Dolomite grey massive with sandy texture Strongly weathered for 0.5 m above 26m. Core mostly broken throughout.	Minor core loss 0.3m above 26m.	866	25.0	26.7		D	–	grey
26.7	40.0				Magnesite pale buff colour Dominantly cryptoxtalline to 30.3 then increasingly sparry. Top 80/20 base 20/80	Weathering on joints at 30.25, 31, 34, 35 and 36m. 0.2m dolomite band at 27.7m. 0.6m core loss 31-35m mostly at 31.	867	26.7	30.1		m	80	Buff
							868	30.1	33.5		"	60	"
							869	33.5	37.0		"	40	"
							870	37.0	40.0		"	20	"

(EOH.)

(HOLE E.)

518030

[redacted] R.A. [redacted] ORATION PTY [redacted] LIMITED [redacted]

DRILL CORE LOG

TENEMENT NAME [redacted] No [redacted] 8717

PLAN – MAP REFERENCE

CO-ORDINATES 366724E 5436093N AZIMUTH 289°M DRILLERS P. Sharp COMMENCED DEPTH 30.0 m HOLE No. 89 LR26

RL COLLAR INCLINATION -60° DRILL TYPE 44/38 COMPLETED CASING LEFT DPO No(s) 50653

DEPTH From M)	DEPTH To(M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by.....)
0	21	0			NO CORE						
							2583871	21	23		m [redacted] Grav
21.0	30.0				Magnetite dominant cryptocrystalline but with veins and irregular patches of sparry magnetite 15/16 colour pale greenish.	0.9 m core loss at 23.0 1.7 m Core loss 23-26 mostly in middle of section.	[redacted]				
							872	23	26		m TO
							873	26	29		- TO
							874	29	30		m TO
					EOH.						
					(HOLE M)						

518031

[redacted] C.R.A. EXPLORATION PTY. LIMITED [redacted] No [redacted]717

DRILL CORE LOG

366724E
CO-ORDINATES 5436093N AZIMUTH 109° M DRILLERS P. Sharp COMMENCED PLAN – MAP REFERENCE
RL COLLAR INCLINATION −50° DRILL TYPE 4/38 COMPLETED CASING LEFT DEPTH 35.0 m HOLE No. 89 GR 27
DPO No(s) 50653

DEPTH From M)	DEPTH To(M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by)
0	11	0			NO CORE						
							2583875	11	14·8		
11	14·8				Magnesite mixed sparry and cryptocrystalline averages 50/50 pale cream to buff Fe Stain at 11·7 m	1·8 m core loss in weathered material at 11·7 m					52 Buff
14·8	20·6				Magnesite strongly weathered and broken T/Out	2·8 m core loss t/o Section					
20·6	23·3				Magnesite cryptocrystalline with numerous veins and patches of sparry material. 60/40 pinkish to buff colour.		876	20·6	23·3	m	60 Pink
23·3	25·0				Dolomite pale grey sandy to sparry texture with irregular patches of cryptic magnesite ~5%.		877	23·3	25·0	m	5 Grey
25·6	35·0				Magnesite mixed cryptic and sparry 60/40 pinkish at top grading to pale cream buff at base. Mostly irregular patches of cryptic in sea of sparry material.	Massive [redacted]	878	25·0	28·0	m	60 Pink
							879	28·0	31·9		60 Pink
							880	31·9	35·0		60 Pink

HOLE N.

518032

[redacted] R.A. [redacted]LORA[redacted]N PTY. [redacted]IMITED [redacted]

DRILL CORE LOG

[redacted]EME[redacted]NAME [redacted] N[redacted] 8717

PLAN – MAP REFERENCE

CO-ORDINATES 366632 E 5436120 N — AZIMUTH VERT — DRILLERS P. Sharp — COMMENCED

DEPTH 20.0 m — HOLE No. 89 LR 28

RL COLLAR — INCLINATION VERT — DRILL TYPE LY/38 — COMPLETED

CASING LEFT — DPO No(s) 50653

DEPTH From (M)	DEPTH To (M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by)	
0	9	0			NO CORE.							
9	10.5				Magnesite/Dolomite ~50/50 large nodular fragments of cryptoxtalline magnesite in grey Dolomite	3.9 m cavity 10.5 – 15.0 m	2583 889	9	10.5		50	x%
10.5	15.0				CAVITY.							
15.0	20.0				Magnesite white xtalline grain size approx ½ mm some minor veinlets of Dolomite white sugary texture	Major weathered zone 17. – 18.1 m filled with brown sand material. 0.7 m core loss in this section	890	15.0	17.0		0	[illegible]
							891	19.0	20.0		0	·4

(EOH)

(HOLE 0.)

518033

[redacted] C.R.A. EXPLORATION PTY LIMITED [redacted] No 191

DRILL CORE LOG

TENEMENT NAME [redacted] Yo [redacted] Ri [redacted] No [redacted] 7217

0 033 366631E

CO-ORDINATES 5436095N AZIMUTH 109° M DRILLERS P. Sharp COMMENCED PLAN – MAP REFERENCE

RL COLLAR INCLINATION −70° DRILL TYPE 4½ 38 COMPLETED DEPTH 14 HOLE No. 89 LR 29

CASING LEFT DPO No(s) 50653

DEPTH From M)	DEPTH To(M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by.....)
0	2·8	0			No core						
2·8	10·0				Dolomite grey sandy texture some iron stained bands. Core to bedding 30° at 7m and 45° at 10m		2583892	2·8	6·0		D
							893	6·0	10·0		D
10·0	14·0				Mixed magnesite/dolomite 40/60. Magnesite as irregular fragments to 1cm & bands at 45° to core.	2m Core loss at 12·14.	2583894	11·0	12·0		
						E.O.H.					
						'HOLE P'					

518034

[redacted] G.B.A. EXPLORATION PTY. LIMITED [redacted] TENEMENT NAME [redacted]ON [redacted]IVG [redacted] No [redacted]3717

DRILL CORE LOG

CO-ORDINATES 366583E 5436077N AZIMUTH 315° DRILLERS P. SHARP COMMENCED 6/12/89 PLAN – MAP REFERENCE

RL COLLAR 332.0 INCLINATION 55° DRILL TYPE LONGYEAR 38 COMPLETED 7/12/89 CASING LEFT — DPO No(s) 50655

DEPTH From M) | DEPTH To(M) | Core Rec. (M) | Core Size | Graphic Log | CORE DESCRIPTION | SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization | Sample No. | From (M) | To (M) | Rec (M) | ASSAY VALUES (Analysed by CLASSIC LABS)

From M)	To(M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)
0	20.1	–			NO CORE – CLAYS					
20.1	22.3	2.1	NQ		FRACTURED / BRECCIATED MAGNESITE White to creamy white Magnesite 'clasts' in a dark grey : clay matrix.	Matrix is weakly pyritic Intensely fractured & with a stockwork type vein set	2767901	20.1	22.3	2.1
22.3	25.3	–			CLAYS in Cavity.					
25.3	26.0	0.1			Fragments in CLAYS of pale grey-white dolomite.					
26.0	28.8	2.1			Dolomite – pale grey-white with slight sugary texture. (broken core)		2767902	26.0	29.0	2.3
28.8	40.3	8.0			Dolomite – as above but finer grained. – Several cavities occur within this zone :-		2767903	29.0	32.0	2.6
	EOH						2767904	32.0	35.0	2.7
					31.0 – 31.4, clays with fragments rich in crystalline Calcite		2767905	37.0	40.3	1.3
					32.8 – 33.1, clays only.					
					35.0 – 37.0, clays only.					
					37.9 – 39.1, clays only.					

518035

[redacted] C.R.A. EXPLORATION PTY. LIMITED [redacted]

DRILL CORE LOG

[redacted]EME[redacted]AME[redacted] ON [redacted] VE[redacted] N[redacted]87 17

635 366585E

CO-ORDINATES 5436074N AZIMUTH 135° DRILLERS P. SHEAR COMMENCED 7/12/89

RL COLLAR 332.0 INCLINATION 50° DRILL TYPE LONGYEAR 38 COMPLETED 8/12/89

PLAN – MAP REFERENCE ....

DEPTH 37.0m HOLE No. DD89 LR31

CASING LEFT —— DPO No(s) 50655

Depth From (M)	Depth To (M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by CLASSIC LABS)
0	21.7	–			No CORE (CLAYS ONLY)						
21.7	28.7	6.4	NQ		MAGNESITE – Pale creamy white to brown where weathered – Powdery nature. 26.2 – 26.8 clay zone	Numerous narrow Carbonate veins – cross-hatched. Occ. Massive Carbonate veins.	2767906	21.7	24.7	3.0	
28.7	31.0	2.3			MAGNESITE WITH OCCASIONAL BRECCIAS. Pale white to pink-white carbonate with occasional narrow calcite veins. Patchy breccia development – white "powdery" magnesite clasts in a dark grey weakly pyritic matrix.	Minor pyrite in matrix to breccias. Some Massive Carbonate development + a few narrow Carbonate veinlets.	2767907	24.7	27.7	2.4	
							2767908	27.7	30.7	3.0	
							2767909	30.7	33.7	1.9	
31.0	31.3	0.1			Gossanous Fe-oxides at Breccia / clay contact.						
31.3	37.0 EOH				Intermittent MAGNESITE + CLAYS (+/or Cavities) Pale white pinkish (fresh) to creamy (wth.) magnesite with orange-brown clays in cavities at:- 31.3 – 31.8, 32.4 – 33.0, and 35.2 – 37.0. HOLE ENDS IN CLAYS	Narrow Carbonate veining Common.	2767910	33.7	35.5	1.6	

518036

[redacted] C.R.A. EXPLORATION PTY. LIMITED [redacted] PROJECT [redacted] No [redacted] BHT

DRILL CORE LOG

636

CO-ORDINATES 366572E, 5436099N AZIMUTH 315° DRILLERS P. SHEAR COMMENCED 8/12/89 PLAN – MAP REFERENCE

RL COLLAR 323.5m INCLINATION 55° DRILL TYPE LONGYEAR 38 COMPLETED 9/12/89 CASING LEFT NONE DPO No(s) 50655

DEPTH From M | DEPTH To(M) | Core Rec. (M) | Core Size | Graphic Log | CORE DESCRIPTION | SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization | Sample No. | From (M) | To (M) | Rec (M) | ASSAY VALUES (Analysed by CLASSIC LABS)

From M	To(M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)
0	28.4	–			No Cores - clays + soils only					
28.4	29.6	1.2	NQ		Dolomite - pale grey - white sugary textured with occasional calcite veins up to 2cm wide.		2767911	28.4	29.6	1.2
29.6	32.15	–			Clay filled Cavity.					
32.15	34.55	1.8	NQ		Dolomite - as before but with several cavities - slight weathering along joints. Core very broken in places.		2767912	32.15	34.55	1.8
34.55	43.3 EOH	–			Large clay filled cavity - occasional fragments of dolomite recovered, totalling ~20cm of rock only.					

518037

[redacted] C.R.A. EXPLORATION PTY LIMITED [redacted] TENEMENT NAME [redacted] LYA [redacted] RIV [redacted] NO [redacted] 8717

DRILL CORE LOG

037 366575 E

CO-ORDINATES 5436097 N AZIMUTH [redacted] 135 DRILLERS P. SHEAR COMMENCED 11/12/89 DEPTH 30.0m HOLE No. DD89LR33

PLAN – MAP REFERENCE

RL COLLAR 323.5 INCLINATION 55 DRILL TYPE LONGYEAR 38 COMPLETED 11/12/89 CASING LEFT — DPO No(s) 50655

DEPTH From M)	DEPTH To(M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by CLASSIC LABS)
0	10.4				No Core – CLAYS.						
10.4	11.0	0.6	NQ		DOLOMITE/MAGNESITE – Pale white grey sugary textured dolomite with patches of porcellanous creamy white magnesite (~30%)	Silicified.	2767913	10.4	13.2	2.4	
11.0	11.4	–	–		CAVITY – CLAYS						
11.4	13.2	1.8	NQ		DOLOMITE/MAGNESITE (as above)						
13.2	19.2	–	–		CLAYS – NO Core.						
19.2	19.3	0.1			DOLOMITE/MAGNESITE – small boulder (as above)		2767914	19.2	21.9	1.7	
19.3	20.3	–			CLAYS						
20.3	21.9	1.6	NQ		DOLOMITE – Pale white-grey sugary textured rock – slightly banded.	Occasional Fe-Ox staining. Silicified.					
21.9	23.9	~2.0	NQ		DOLOMITE – Grey-grey/white sugary textured with strong Fe-Ox staining along fractures.	Occasional white crystalline calcite veins.	2767915	21.9	23.9	~2.0	
23.9	29.2	5.2	NQ		DOLOMITE – Pale white grey, sugary textured with occasional blebs of porcellanous MAGNESITE.	Silicified.	2767916	23.9	26.9	2.9	
							2767917	26.9	29.2	2.3	
29.2	30.0 EOH.	–			CLAYS.						

518038

[redacted] C.R.A. EXPLORATION PTY. LIMITED [redacted] SHEET NO [redacted]

DRILL CORE LOG

[redacted] TENEMENT NAME [redacted]YON[redacted]VE[redacted] NO [redacted]817

CO-ORDINATES 366655 E 6436184 N AZIMUTH 270° DRILLERS P. SHEAR COMMENCED 12/12/89 PLAN – MAP REFERENCE BURNIE SK 55-3

RL COLLAR 327.0 INCLINATION -55° DRILL TYPE LONGYEAR 38 COMPLETED 12/12/89 DEPTH 30.8m HOLE No. DD89LR34

CASING LEFT — DPO No(s) —

DEPTH From M)	DEPTH To(M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by CLASSIC LABS)
0	30.8	–	–		No Core recovered – all clays with occasional small subrounded rock (10cm)						
	EOH										

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[redacted] C.R.A. EXPLORATION PTY. LIMITED [redacted]

DRILL CORE LOG

[redacted] No. [redacted]8717

600 366655 E

CO-ORDINATES 5436184 N AZIMUTH 270° DRILLERS P. SHARP COMMENCED 13/12/89

RL COLLAR 327.0 INCLINATION -70° DRILL TYPE LONGYEAR 38 COMPLETED 13/12/89

PLAN – MAP REFERENCE BURNIE SK 55-3

DEPTH 31.0 m HOLE No. DD89 LR 356

CASING LEFT — DPO No(s) —

ASSAY VALUES (Analysed by CLASSIC LABS)

DEPTH From (M)	DEPTH To (M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES
0	31	—	—		No Core recovered all clays with occasional small suspended rocks (< 5cm)						

518040

[redacted] C.R.A. EXPLORATION PTY. LIMITED [redacted] No [redacted]

DRILL CORE LOG

CO-ORDINATES 366658E 5436183N AZIMUTH 90° DRILLERS P. SHARP COMMENCED 13/12/89 PLAN – MAP REFERENCE

RL COLLAR 327.0m INCLINATION -55° DRILL TYPE LONGYEAR 38 COMPLETED 14/12/89 CASING LEFT —— DPO No(s) 50656

DEPTH From (M)	DEPTH To (M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by CLASSIC LABS)
0	16.5	–	–		NO CORE – CLAYS ONLY.						
16.5	17.7	1.2	NQ		MAGNESITE – White porcellanous rock with numerous veinlets of sparry crystalline material ~60% porcellanous, 40% sparry		2767918	16.5	17.7	1.2	
17.7	26.2	0	–		Barren clays.						
26.2	29.3	–			clays with occasional rock fragments – including Qtz, magnesite and pale grey schists.						
29.3	30.0 EOH	0.7	NQ		MAGNESITE – Porcellanous ~65% porcellanous, 35% sparry. White to creamy white in colour.		2767919	29.3	30.0	0.7	

518041

[redacted] C.R.A. EXPLORATION PTY. LIMITED [redacted] ME[redacted]AME[redacted]ONL[redacted] No[redacted] 3117

DRILL CORE LOG

PLAN – MAP REFERENCE

CO-ORDINATES C[illegible] 366683E 5436175N AZIMUTH 90° DRILLERS P. SHARP COMMENCED 14/12/89 DEPTH 40.0 m HOLE No. DD89LR37

RL COLLAR 336.0 m INCLINATION -50° DRILL TYPE LONGYEAR 38 COMPLETED 15/12/89 CASING LEFT — DPO No(s) 50656

DEPTH From (M)	DEPTH To (M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by CLASSIC LABS)
0	19.7	–	–		CLAYS – No Core – NOTE:- TREE ROOT HIT AT 3.1m ∴ CONTINUED AS NQ "CORE" thro' clays - Several rock fragments of dominantly qtz from 16.2-19.7m. 1 fragment of pale green schist.						
19.7	20.9	0.8	NQ		DOLOMITE – Pale Grey to white in colour – fairly fine grained.	Trace pyrite noted. Minor Fe-Ox staining along fractures. Patchy calcite development.					
20.9	26.3	–	–		CLAYS - (Cavity)						
26.3	27.9	1.6	NQ		DOLOMITE – Light grey – Coarse, sandy texture. Minor, patchy MAGNESITE development. (creamy white patches)	Trace of remnant banding. Common quartz and calcite veining.	2767920	26.3	29.9	3.6	
27.9	28.2	–	–		CLAY filled Cavity.						
28.2	29.9	1.7	NQ		DOLOMITE – as above, grading into a slightly darker grey colour, and finer grained and then back to a light grey but remaining fine grained – Weak trace MAGNESITE.	Occasional, rare, quartz + calcite veins. Trace of remnant banding –					
29.9	34.6	2.6	NQ		DOLOMITE + MAGNESITE. Strongly weathered, banded, Coarse textured, pale grey to white with ~30% magnesite.		2767921	29.9	34.4	2.6	

518042

[redacted] C.R.A. EXPLORATION PTY. LIMITED [redacted]

DRILL CORE LOG

[redacted] TENEMENT NAME [redacted] No. [redacted] 8717

366683 E

PLAN – MAP REFERENCE

CO-ORDINATES 6436175 N AZIMUTH 90° DRILLERS P. SHARP COMMENCED 14/12/89 DEPTH 40.0m HOLE No. DD89CR37

RL COLLAR 336.0m INCLINATION -50° DRILL TYPE LONGYEAR 38 COMPLETED 15/12/89 CASING LEFT — DPO No(s) 50656

DEPTH From M)	DEPTH To(M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by CLASSIC LABS)
34.4	35.4				CLAY filled Cavity.						
							2767922	35.4	38.5	2.6	
35.4	37.9	2.4	NQ		MAGNESITE - 40% porcellanous white to creamy white magnesite in pale grey crystalline/spary rock.						
37.9	38.3	-	-		CLAY filled Cavity						
38.3	38.5	0.2	NQ		MAGNESITE - pale grey, + weathered. Not porcellanous.						
38.5	40.0 EOH.	-	-		CLAY filled Cavity						

518043

[redacted] C.R.A. EXPLORATION PTY. LIMITED [redacted] TENEMENT [redacted] NO [redacted]3717

DRILL CORE LOG

CO-ORDINATES 366683 E 5436175 N AZIMUTH — DRILLERS P. SHARP COMMENCED 15/12/89 DEPTH 29.3 HOLE No. DD89 LR38

PLAN – MAP REFERENCE

RL COLLAR 336.0 INCLINATION 90° DRILL TYPE LONGYEAR 38 COMPLETED 16/12/89 CASING LEFT — DPO No(s) 50656

DEPTH From M)	DEPTH To(M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by CLASSIC LABS)
0	23.5	-	-		No Core - clays only						
23.5	26.1	-	-		Broken rock fragments in clay (dominantly clays) with siliceous fragments of magnesite.						
26.1	26.5	0.4	NQ		MAGNESITE - white rock with ~ 40% porcellanous 60% sparry magnesite.						
26.5	27.1	-	-		Clay + rubble filled cavity.						
27.1	27.3	0.2	NQ		MAGNESITE - Silicified sparry magnesite - Weakly Fe-Ox stained.		2767923	26.1	27.3	0.6	
27.3	29.3 EOH	-	-		Clay filled cavity with occasional fragments of siliceous magnesite.						
					NOTE. HOLE ABANDONED AT 29.3m due to rods sticking in broken ground.						

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0' 064

518045

APPENDIX II

ASSAY RESULTS HOLES DD89LR14-38

LYONS RIVER ASSAY RESULTS

SAMPLE No	FROM	TO	INT/VL	SIO2	TIO2	AL203	FE203	MN0	MG0	CA0	NA20	K20	P205	L0I	TOTAL
DD 89 LR 15															
2583801	3.3	3.75	0.45	5.55	<0.01	0.04	0.67	0.08	45.1	0.49	0.03	<0.01	<0.02	48.9	100.8
2583802	3.75	6.75	3	1.87	0.05	0.23	0.52	0.06	26.8	24	0.06	0.03	0.02	47	100.6
2583803	6.75	10.5	3.75	4.54	0.01	0.08	0.34	0.05	21.8	28.1	0.03	0.01	0.02	44.4	99.4
2583804	10.5	13.5	3	25.6	<0.01	0.04	0.74	0.07	34.3	6.6	0.03	<0.01	<0.02	33.3	100.6
2583805	13.5	16.5	3	23.8	<0.01	0.06	0.98	0.08	35.4	1.15	0.03	0.01	<0.02	37	98.5
2583806	16.5	19.5	3	10.9	0.03	0.63	1.04	0.09	38.7	2.08	0.05	<0.01	0.04	44.5	98
2583807	19.5	22.5	3	10.4	<0.01	0.03	1.64	0.12	39.1	1.81	0.03	<0.01	0.02	45.7	98.8
2583808	22.5	25.5	3	5.56	0.03	0.04	1.4	0.09	42.8	2.26	0.02	0.01	0.02	48	100.3
2583809	25.5	28.5	3	2.28	<0.01	0.03	2.12	0.11	41.5	3.84	0.02	0.01	0.03	49.7	99.6
2583810	28.5	31.5	3	2.78	<0.01	0.01	1.77	0.1	43.8	0.85	0.01	0.01	0.02	50	99.3
2583811	31.5	34.5	3	4.12	0.03	0.02	1.2	0.11	43.1	1.5	0.03	<0.01	<0.02	48.8	98.9
2583812	34.5	37.5	3	4.06	<0.01	0.04	1.34	0.11	44	0.03	0.04	0.02	0.02	49.1	98.8
2583813	37.5	40	2.5	4.62	<0.01	0.03	1.33	0.12	43	0.38	0.04	0.01	<0.02	48.8	98.3
DD 89 LR 16															
2583814	8	11	3	41.9	<0.01	0.07	0.22	0.04	17.4	10.8	0.05	0.01	0.02	27.6	98.1
2583815	11	14.4	3.4	32.3	<0.01	0.14	0.22	0.05	23.1	9.5	0.03	0.03	0.03	32.8	98.2
2583816	14.4	17	2.6	9.3	0.04	0.02	0.62	0.06	42.9	0.98	0.21	0.03	<0.02	46	100.1
2583817	17	20	3	8.85	<0.01	0.01	0.48	0.07	42.7	0.57	0.05	0.02	0.02	46.2	99
2583818	20	23	3	4.94	<0.01	0.02	0.59	0.08	43.4	0.36	0.04	0.01	<0.02	48.6	98
2583819	23	26	3	18.3	<0.01	0.03	0.48	0.06	35.2	3.35	0.03	0.01	0.03	41.8	99.5
2583820	26	28.5	2.5	14.7	<0.01	0.03	0.68	0.07	34.7	5.6	0.03	0.01	<0.02	43.5	99.3
2583821	28.5	32	3.5	14.8	<0.01	0.08	0.36	0.05	25.4	17.4	0.04	0.01	0.04	41.4	99.6
2583822	32	35	3	23.9	<0.01	0.12	0.19	0.04	16.4	23.9	0.03	0.03	<0.02	35.6	100.2
DD 89 LR 17															
2583823	4	7.7	3.7	20.5	<0.01	0.09	0.24	0.04	19.1	21.3	0.05	<0.01	<0.02	37.5	98.8
2583824	7.7	10.5	2.8	54.5	<0.01	0.03	0.3	0.05	16.5	4.04	0.01	<0.01	<0.02	22.6	98
2583825	10.5	13.5	3	22.3	<0.01	0.04	0.81	0.08	33.6	1.87	0.03	0.01	0.05	39.6	98.4
2583826	13.5	16.5	3	10	<0.01	0.01	0.69	0.09	40.7	1	0.02	<0.01	0.02	46.6	99.1
2583827	16.5	19.5	3	3.4	<0.01	0.01	0.81	0.08	42.9	0.9	0.03	<0.01	<0.02	49.9	98
2583828	19.5	22.5	3	10.7	0.01	0.02	0.69	0.09	41	0.43	0.02	<0.01	<0.02	46.2	99.1
2583829	22.5	25.5	3	6.85	<0.01	0.01	0.59	0.08	42.7	0.21	0.01	0.01	0.02	48.4	98.9
2583830	25.5	28.5	3	4.98	0.01	0.03	1.21	0.09	43.4	0.46	0.02	0.01	<0.02	49	99.2
2583831	28.5	31.5	3	15.6	<0.01	0.02	0.96	0.09	36	2.98	0.02	0.01	0.02	42.8	98.5
2583832	31.5	35	3.5	2.7	<0.01	0.01	0.9	0.1	46	0.02	0.03	0.01	<0.02	49.7	99.4
DD 89 LR 18															
2583833	20.4	23	2.6	20.9	<0.01	0.03	2.12	0.12	34.4	2.92	0.22	0.01	0.04	39.7	100.4
2583882	23	26	3	21.9	<0.01	0.01	1.66	0.12	34.2	2.42	0.21	0.02	0.03	39.7	100.3
2583883	26	30	4	21.4	<0.01	0.05	1.22	0.12	31.4	5.1	0.21	0.01	0.03	39.3	98.8

518046

LYONS RIVER ASSAY RESULTS

SAMPLE NO	COLOUR	%CRYPT	CR	ZN	BA	V	CU	LA	NI	ZR	Y	SR	AU ppb	PT ppb	PD ppb
DD 89 LR 15													**<1**	**<5**	**<1**
2583801	WHITE	80	<0.002	<0.002	<0.002	<0.002	0.007	<0.005	<0.002	<0.005	<0.002	<0.002			
2583802	GREY	-	0.002	<0.002	<0.002	<0.002	0.005	<0.005	0.002	<0.005	<0.002	0.013			
2583803	GREY	-	<0.002	<0.002	<0.002	<0.002	0.006	<0.005	0.002	<0.005	<0.002	0.017			
2583804	BUFF	0	<0.002	0.002	<0.002	<0.002	<0.005	<0.005	<0.002	<0.005	<0.002	0.005			
2583805	BUFF	40	<0.002	0.003	<0.002	<0.002	0.007	<0.005	<0.002	<0.005	<0.002	<0.002			
2583806	WHITE	60	<0.002	0.003	<0.002	<0.002	0.011	<0.005	0.009	<0.005	<0.002	0.003			
2583807	WHITE	60	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.002	<0.005	<0.002	<0.002			
2583808	WHITE	60	<0.002	0.002	<0.002	<0.002	0.015	<0.005	<0.002	<0.005	<0.002	<0.002			
2583809	WHITE	60	<0.002	0.002	<0.002	<0.002	0.008	<0.005	0.002	<0.005	<0.002	0.002			
2583810	WHITE	60	<0.002	0.002	<0.002	<0.002	0.018	<0.005	<0.002	<0.005	<0.002	<0.002			
2583811	WHITE	60	<0.002	<0.002	<0.002	<0.002	0.01	<0.005	<0.002	<0.005	<0.002	0.002			
2583812	WHITE	60	<0.002	0.002	<0.002	<0.002	0.009	<0.005	0.003	<0.005	<0.002	<0.002			
2583813	WHITE	60	<0.002	<0.002	<0.002	<0.002	0.009	<0.005	<0.002	<0.005	<0.002	<0.002			
DD 89 LR 16													**2**	**<5**	**<1**
2583814	GREY	-	<0.002	<0.002	<0.002	<0.002	0.008	<0.005	<0.002	<0.005	<0.002	0.01			
2583815	GREY	-	<0.002	<0.002	<0.002	<0.002	0.007	<0.005	<0.002	<0.005	<0.002	0.008			
2583816	WHITE	20	<0.002	0.006	<0.002	<0.002	0.016	<0.005	0.003	<0.005	<0.002	<0.002			
2583817	WHITE	20	<0.002	0.003	<0.002	<0.002	<0.005	<0.005	0.004	<0.005	<0.002	<0.002			
2583818	WHITE	20	<0.002	<0.002	<0.002	<0.002	0.006	<0.005	<0.002	<0.005	<0.002	<0.002			
2583819	GR +WH	-	0.002	0.003	<0.002	<0.002	0.005	<0.005	<0.002	<0.005	<0.002	0.003			
2583820	GR +WH	-	0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.002	<0.005	<0.002	0.004			
2583821	GREY	-	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.002	<0.005	<0.002	0.013			
2583822	GREY	-	0.002	0.003	<0.002	<0.002	<0.005	<0.005	<0.002	<0.005	<0.002	0.017			
DD 89 LR 17													**<1**	**<5**	**1**
2583823	GREY	-	0.005	<0.002	<0.002	<0.002	<0.005	<0.005	0.004	<0.005	<0.002	0.014			
2583824	GREY	-	<0.002	<0.002	<0.002	<0.002	0.006	<0.005	<0.002	<0.005	<0.002	0.003			
2583825	BUFF	60	<0.002	0.002	<0.002	<0.002	<0.005	<0.005	<0.002	<0.005	<0.002	0.002			
2583826	BUFF	60	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	0.003	<0.005	<0.002	<0.002			
2583827	BUFF	60	<0.002	0.002	<0.002	0.003	0.013	<0.005	<0.002	<0.005	<0.002	<0.002			
2583828	BUFF	60	0.003	<0.002	<0.002	<0.002	0.006	<0.005	<0.002	<0.005	<0.002	<0.002			
2583829	BUFF	60	<0.002	<0.002	<0.002	<0.002	0.011	<0.005	<0.002	<0.005	<0.002	<0.002			
2583830	BUFF	60	<0.002	0.005	<0.002	<0.002	0.006	<0.005	0.002	<0.005	<0.002	<0.002			
2583831	BUFF	60	<0.002	0.003	<0.002	<0.002	0.005	<0.005	<0.002	<0.005	<0.002	0.002			
2583832	WHITE	60	<0.002	0.005	<0.002	<0.002	0.006	<0.005	<0.002	<0.005	<0.002	<0.002			
DD 89 LR 18													**<1**	**<5**	**<1**
2583881	BUFF	70	0.003	0.004	<0.002	<0.002	0.009	<0.005	<0.002	<0.005	<0.002	0.003			
2583882	BUFF	70	<0.002	0.002	<0.002	<0.002	0.006	<0.005	0.003	<0.005	<0.002	0.002			
2583883	BUFF		<0.002	0.002	<0.002	<0.002	0.007	<0.005	<0.002	<0.005	<0.002	0.008			

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LYONS RIVER ASSAY RESULTS

SAMPLE No	FROM	TO	INT/VL	SIO2	TIO2	AL203	FE203	MN0	MG0	CA0	NA20	K20	P205	L0I	TOTAL
DD 89 LR 19															
2583858	26	27.8	1.8	17.2	<0.01	0.03	1.22	0.13	33.4	4.48	0.22	<0.01	0.04	41.9	98.6
2583859	27.8	32	4.2	8.3	<0.01	0.06	0.82	0.11	28.4	15	0.23	<0.01	0.04	45.1	98
2583860	32	35	3	8.7	<0.01	0.07	0.88	0.09	26.4	17.1	0.22	0.01	0.04	44.5	98
2583861	35	38	3	20.6	<0.01	0.12	0.85	0.09	20.7	17.6	0.23	0.01	0.05	37.8	98
2583862	38	42.2	4.2	1.84	<0.01	0.18	0.5	0.07	23.6	24.7	0.22	0.01	0.03	47	98.1
2583863	42.2	43.5	1.3	37.1	<0.01	0.09	0.35	0.06	19.6	11.6	0.22	0.02	0.05	30.7	99.8
2583864	43.5	45	1.5	9.45	<0.01	0.04	0.94	0.11	38.2	3.82	0.21	<0.01	0.03	46.2	99
DD 89 LR 20															
2583841	11.5	14	2.5	5.95	<0.01	0.03	2.46	0.18	38.6	3.22	0.04	0.05	<0.02	47.9	98.4
2583842	23	26.7	3.7	17.5	<0.01	0.04	1.36	0.1	37.1	1.17	0.02	<0.01	<0.02	41.9	98.9
2583843	26.7	27.6	0.9	17.8	<0.01	0.02	1.45	0.1	35.4	0.62	0.62	<0.01	<0.02	42.7	98.1
2583844	27.6	30.5	2.9	12.8	<0.01	0.03	2.62	0.14	36.4	2.12	0.03	<0.01	0.04	44.2	98.4
2583845	32	35	3	16.3	<0.01	0.09	0.76	0.1	18.6	22.5	0.05	<0.01	<0.02	39.6	98
2583846	35	38	3	14.9	0.09	0.08	0.59	0.07	19	22.6	0.04	<0.01	<0.02	40.7	98
2583847	38	40	2	22.9	0.09	0.08	0.75	0.07	18.5	19.4	0.02	<0.01	0.03	36.7	98.5
DD 89 LR 21															
2583848	2	4	2	4.66	<0.01	0.04	0.79	0.1	39.9	2.4	0.06	0.01	<0.02	50.1	98
2583849	4	7.2	3.2	17	<0.01	0.02	1.65	0.17	34.3	2.52	0.23	0.01	<0.02	42.2	98.1
2583850	7.2	10	2.8	12.7	<0.01	0.03	0.91	0.12	32.2	8.7	0.24	<0.01	0.03	43.5	98.4
2583851	10	13	3	8.45	<0.01	0.02	1.28	0.16	37.4	3.98	0.24	0.02	<0.02	46.6	98.1
2583852	13	16	3	5.05	0.12	0.04	2.06	0.18	39.3	2.88	0.96	0.04	0.03	48.2	98.9
2583853	16	19.4	3.4	3.94	<0.01	0.1	1.46	0.2	25.4	20.5	0.22	0.01	0.05	46.2	98.1
2583854	19.4	22	2.6	4	<0.01	0.07	1.7	0.2	28.7	16.4	0.23	0.02	0.03	47	98.3
2583855	22	25	3	12.9	<0.01	0.05	1.1	0.11	21.2	20.4	0.23	0.03	<0.02	42	98
2583856	25	28	3	20.5	0.02	0.2	1.82	0.15	16.3	21.3	0.23	0.03	0.04	37.5	98.1
2583857	28	30	2	19.7	<0.01	0.09	1.1	0.13	17.7	21.1	0.24	0.02	0.03	37.9	98
DD 89 LR 22															
2583884	15.5	20.3	4.8	24.7	<0.01	0.04	2.4	0.13	28	6.45	0.20	0.01	0.04	37.3	99.3
2583885	20.3	20.8	0.5	24.4	<0.01	0.07	1.11	0.09	28.5	8.6	0.21	0.03	0.03	37.6	100.6
2583886	20.8	25.4	4.6	3.16	<0.01	0.16	1.27	0.11	25.6	23.4	0.22	0.02	<0.02	46.1	100
2583887	25.4	32	6.6	2.4	<0.01	0.08	1.02	0.1	25.5	23.9	0.23	0.04	0.04	46.4	99.7
2583888	32	35	3	2.66	<0.01	0.19	0.93	0.09	21.5	28.2	0.25	0.01	0.05	45.7	99.6

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LYONS RIVER ASSAY RESULTS

SAMPLE NO	COLOUR	%CRYPT	CR	ZN	BA	V	CU	LA	NI	ZR	Y	SR	AU ppb	PT ppb	PD ppb
DD 89 LR 19													**<1**	**<5**	**<1**
2583858	BUFF	70	<0.002	0.002	<0.002	<0.002	<0.005	<0.005	0.003	<0.005	<0.002	0.005			
2583859	BUFF	50	<0.002	0.002	<0.002	<0.002	<0.005	<0.005	<0.002	<0.005	<0.002	0.016			
2583860	GREY	-	0.003	0.002	<0.002	<0.002	0.014	<0.005	<0.002	0.006	<0.002	0.014			
2583861	GREY	-	<0.002	0.002	<0.002	<0.002	0.067	<0.005	0.044	<0.005	<0.002	0.017			
2583862	GREY	-	0.004	<0.002	<0.002	<0.002	<0.005	<0.005	0.003	<0.005	<0.002	0.021			
2583863	GREY	-	<0.002	<0.002	<0.002	0.01	<0.005	<0.005	0.003	<0.005	<0.002	0.011			
2583864	BUFF	50	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	0.006	<0.005	<0.002	0.005			
DD 89 LR 20													**2**	**<5**	**<1**
2583841	PINK	70	0.004	0.014	<0.002	<0.002	0.01	<0.005	0.015	<0.005	<0.002	0.004			
2583842	BUFF	60	<0.002	0.002	<0.002	<0.002	<0.005	<0.005	0.005	<0.005	<0.002	<0.002			
2583843	GREY	-	0.003	0.002	<0.002	<0.002	<0.005	<0.005	0.006	<0.005	<0.002	<0.002			
2583844	GREY	-	<0.002	0.022	<0.002	<0.002	<0.005	<0.005	0.006	<0.005	<0.002	0.003			
2583845	GREY	10	<0.002	0.002	<0.002	<0.002	0.007	<0.005	0.005	<0.005	<0.002	0.016			
2583846	GREY	10	<0.002	0.017	<0.002	<0.002	0.011	<0.005	0.004	<0.005	<0.002	0.016			
2583847	GREY	10	<0.002	<0.002	<0.002	<0.002	0.012	<0.005	0.003	<0.005	<0.002	0.012			
DD 89 LR 21													**<1**	**<5**	**<1**
2583848	PINK	50	<0.002	0.035	<0.002	<0.002	0.006	<0.005	0.004	<0.005	<0.002	0.003			
2583849	BROWN	80	0.003	0.002	<0.002	<0.002	0.007	<0.005	0.003	<0.005	<0.002	0.003			
2583850	BUFF	70	0.002	<0.002	<0.002	<0.002	0.006	<0.005	<0.002	<0.005	<0.002	0.008			
2583851	BUFF	70	0.003	0.003	<0.002	<0.002	0.014	<0.005	0.004	<0.005	<0.002	0.005			
2583852	BUFF	70	0.003	0.007	<0.002	<0.002	0.053	<0.005	0.008	<0.005	<0.002	0.003			
2583853	GREY	-	0.003	<0.002	0.013	<0.002	<0.005	<0.005	<0.002	<0.005	<0.002	0.018			
2583854	GREY	-	0.004	0.004	0.002	<0.002	0.01	<0.005	0.004	<0.005	<0.002	0.019			
2583855	GREY	-	<0.002	0.003	0.03	<0.002	<0.005	<0.005	0.004	<0.005	<0.002	0.02			
2583856	GREY	-	0.002	0.004	0.007	<0.002	<0.005	<0.005	0.004	<0.005	<0.002	0.021			
2583857	GREY	-	0.002	0.003	0.006	<0.002	0.016	<0.005	<0.002	<0.005	<0.002	0.013			
DD 98 LR 22													**1**	**<5**	**<1**
2583884	BUFF	65	<0.002	0.004	<0.002	<0.002	0.006	<0.005	0.003	<0.005	<0.002	0.008			
2583885	GREY	-	<0.002	0.005	<0.002	<0.002	0.017	<0.005	<0.002	<0.005	<0.002	0.009			
2583886	BUFF	-	<0.002	0.004	<0.002	<0.002	0.023	<0.005	0.005	0.006	<0.002	0.02			
2583887	GREY	-	<0.002	0.003	<0.002	<0.002	0.005	<0.005	<0.002	<0.005	<0.002	0.022			
2583888	GREY	-	0.002	0.005	<0.002	<0.002	0.01	<0.005	0.003	<0.005	<0.002	0.017			

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LYONS RIVER ASSAY RESULTS

SAMPLE No	FROM	TO	INT/VL	SIO2	TIO2	AL203	FE203	MNO	MGO	CAO	NA20	K20	P205	L01	TOTAL
DD 89 LR 23															
2583833	8	10.6	2.6	35.5	"<0.01	0.04	1.24	0.11	20.1	9.65	0.04	<0.01	0.08	31.3	98
2583834	10.6	13.8	3.2	17.8	<0.01	0.05	1.39	0.14	21.3	17.9	0.04	<0.01	<0.02	39.4	98
2583835	13.8	17	3.2	18.2	<0.01	0.1	1.48	0.13	36.8	1.06	0.04	<0.01	0.03	42	99.8
2583836	17	20	3	19.3	0.01	0.04	1.45	0.15	34.8	1.74	0.03	0.01	<0.02	40.9	98.4
2583837	20	21.7	1.7	19.7	<0.01	0.03	0.69	0.1	34.6	1.6	0.02	0.02	<0.02	42	98.7
2583838	21.7	25	3.3	12.2	0.03	0.03	0.58	0.07	38	1.48	0.03	0.02	<0.02	45.7	98.1
2583839	25	28	3	12	<0.01	0.02	0.95	0.09	38.5	0.88	0.03	0.01	<0.02	45.6	98
2583840	28	29	1	9.7	<0.01	0.03	0.43	0.06	38.3	1.26	0.02	0.01	<0.02	48.2	98
DD 89 LR 25															
2583865	24	25	1	25.8	<0.01	0.03	1.44	0.15	29.1	5.8	0.21	0.03	<0.02	37.5	100
2583866	25	26.7	1.7	11.2	<0.01	0.08	1.79	0.18	20.4	23.1	0.20	0.02	0.06	42.3	99.3
2583867	26.7	30.1	3.4	7.15	<0.01	0.02	1.33	0.12	37.5	4.68	0.21	0.02	0.03	47	98
2583868	30.1	33.5	3.4	8.55	<0.01	0.02	1.72	0.16	34.7	9	0.24	0.01	<0.02	45.7	100.1
2583869	33.5	37	2.5	23.5	<0.01	0.02	1.78	0.14	34.7	1.67	0.32	<0.01	0.03	38.7	100.8
2583870	37	40	3	24.7	<0.01	0.03	1.77	0.12	34.2	1.28	0.30	0.02	0.03	38.4	100.8
DD 89 LR 26															
2583871	21	23	2	9.15	0.02	0.02	1.4	0.09	41.1	1.54	0.23	0.02	0.11	46.8	100.5
2583872	23	26	3	23.7	<0.01	0.02	1.49	0.15	34.5	1.28	0.26	0.02	0.03	39	100.4
2583873	26	29	3	21.7	0.01	0.01	0.97	0.06	33.7	1.38	0.23	0.01	0.03	39.9	98
2583874	29	30	1	19.9	<0.01	0.01	0.96	0.08	34.1	1.72	0.23	0.02	<0.02	41.1	98.1
DD 89 LR 27															
2583875	11	14.8	3.8	32.1	0.33	0.11	1.94	0.16	21.8	10	2.46	<0.01	0.05	31.8	100.7
2583876	20.6	23.3	2.7	17.9	<0.01	0.03	1.08	0.11	34.3	2.2	0.27	0.03	0.04	42.1	98
2583877	23.3	25	1.7	37.9	<0.01	0.01	1.71	0.09	26.3	1.98	0.2	0.02	0.05	30.5	98.7
2583878	25	28	3	19.5	<0.01	0.02	1.86	0.11	35.2	1.39	0.2	0.02	0.03	41.1	99.4
2583879	28	31.9	3.9	21	<0.01	0.03	1.17	0.13	28.2	9.4	0.2	0.01	0.04	39.4	99.6
2583880	31.9	35	3.1	19.2	<0.01	0.01	0.64	0.08	34.4	2.52	0.21	0.01	<0.02	41.2	98.2
DD 89 LR 28															
2583889	9	10.5	1.5	29.7	<0.01	0.01	0.76	0.07	31.5	1.67	0.21	0.03	0.03	36.1	100.1
2583890	15	17	2	4.68	<0.01	<0.01	0.42	0.06	42.5	1.02	0.21	0.02	<0.02	49.1	98
2583891	19	20	1	9.6	0.01	0.14	1.72	0.11	41.4	0.4	0.24	0.01	0.03	44.7	98.4
DD 89 LR 29															
2583892	2.8	6	3.2	1.17	<0.01	0.1	0.49	0.05	21.1	30.1	0.23	<0.01	<0.02	46.3	99.5
2583893	6	10	4	2.82	0.01	0.07	0.51	0.06	27.1	23.2	0.26	0.01	0.03	46.4	100.5
2583894	11	12	1	43	<0.01	0.12	0.44	0.06	20.9	5.75	0.25	0.02	0.03	27.8	98.4

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LYONS RIVER ASSAY RESULTS

SAMPLE NO	COLOUR	%CRYPT	CR	ZN	BA	V	CU	LA	NI	ZR	Y	SR	AU ppb	PT ppb	PD ppb
DD 89 LR 23													**<1**	**<5**	**2**
2583833	WHITE	80	<0.002	0.004	0.003	<0.002	0.131	<0.005	0.103	<0.005	<0.002	0.008			
2583834	WHITE	85	<0.002	0.002	0.008	<0.002	<0.005	<0.005	0.005	<0.005	<0.002	0.015			
2583835	BUFF	50	0.004	0.003	0.003	<0.002	0.018	<0.005	0.012	0.02	<0.002	<0.002			
2583836	BUFF	50	0.003	<0.002	<0.002	<0.002	0.006	<0.005	0.004	<0.005	<0.002	<0.002			
2583837	BUFF	50	<0.002	<0.002	<0.002	<0.002	0.013	<0.005	0.009	<0.005	<0.002	<0.002			
2583838	CREAM	70	<0.002	0.002	<0.002	<0.002	<0.005	<0.005	<0.002	<0.005	<0.002	<0.002			
2583839	CREAM	70	0.003	0.016	<0.002	0.003	0.006	<0.005	0.006	<0.005	<0.002	<0.002			
2583840	CREAM	70	<0.002	0.004	<0.002	<0.002	0.006	<0.005	0.005	<0.005	<0.002	<0.002			
DD 89 LR 25													**<1**	**<5**	**<1**
2583865	BUFF	60	0.003	<0.002	<0.002	<0.002	<0.005	<0.005	0.005	0.05	<0.002	0.006			
2583866	GREY	-	0.002	0.002	0.006	<0.002	<0.005	<0.005	<0.002	<0.005	<0.002	0.025			
2583867	BUFF	80	<0.002	<0.002	<0.002	<0.002	0.005	<0.005	<0.002	<0.005	<0.002	0.004			
2583868	BUFF	60	<0.002	0.002	<0.002	<0.002	0.007	<0.005	<0.002	<0.005	<0.002	0.006			
2583869	BUFF	40	<0.002	0.012	0.003	<0.002	0.01	<0.005	<0.002	<0.005	<0.002	0.002			
2583870	BUFF	20	0.002	0.01	0.051	<0.002	0.011	<0.005	<0.002	<0.005	<0.002	0.005			
DD 89 LR 26													**<1**	**<5**	**<1**
2583871	CREAM	85	0.002	0.026	<0.002	0.003	0.095	<0.005	0.007	<0.005	<0.002	<0.002			
2583872	CREAM	70	<0.002	0.009	<0.002	<0.002	0.037	<0.005	0.006	<0.005	<0.002	<0.002			
2583873	CREAM	80	0.003	0.004	<0.002	<0.002	0.017	<0.005	0.016	<0.005	<0.002	<0.002			
2583874	CREAM	70	0.003	0.022	<0.002	0.002	0.029	<0.005	0.006	<0.005	<0.002	<0.002			
DD 89 LR27													**<1**	**<5**	**<1**
2583875	BUFF	50	<0.002	0.01	0.177	0.006	0.052	<0.005	0.003	<0.005	<0.002	0.012			
2583876	PINK	60	0.003	0.009	<0.002	<0.002	0.012	<0.005	0.002	<0.005	<0.002	0.004			
2583877	GREY	5	<0.002	0.003	<0.002	0.002	0.062	<0.005	0.031	<0.005	<0.002	0.004			
2583878	PINK	60	<0.002	0.007	<0.002	0.004	<0.005	<0.005	<0.002	<0.005	<0.002	0.003			
2583879	BUFF	60	<0.002	0.002	<0.002	<0.002	0.008	<0.005	0.003	<0.005	<0.002	0.009			
2583880	BUFF	60	0.002	0.004	<0.002	<0.002	<0.005	<0.005	0.003	0.013	<0.002	0.003			
DD 89 LR 28													**<1**	**<5**	**3**
2583889	GREY	50	<0.002	0.002	<0.002	<0.002	<0.005	<0.005	<0.002	<0.005	<0.002	0.002			
2583890	WHITE	-	<0.002	0.005	<0.002	<0.002	0.006	<0.005	0.003	<0.005	<0.002	<0.002			
2583891	WHITE	-	0.002	0.005	<0.002	<0.002	0.02	<0.005	<0.002	<0.005	<0.002	<0.002			
DD 89 LR 29													**<1**	**<5**	**<1**
2583892	GREY	-	<0.002	0.002	<0.002	<0.002	<0.005	<0.005	<0.002	<0.005	<0.002	0.022			
2583893	GREY	-	<0.002	0.004	<0.002	<0.002	0.034	<0.005	<0.002	<0.005	<0.002	0.019			
2583894	BUFF	40	<0.002	0.005	<0.002	<0.002	0.012	<0.005	0.004	<0.005	<0.002	0.005			

518051

05L

LYONS RIVER ASSAY RESULTS

SAMPLE No	FROM	TO	INT/VL	SiO2	TiO2	Al2O3	Fe2O3	MnO	MgO	CaO	Na2O	K2O	P2O5	LOI	TOTAL
DD 89 LR 30															
2767901	20.1	22.3	2.1	3.38	<0.01	0.18	2.22	0.13	40.1	8.45	0.01	0.01	0.03	46	100.5
2767902	26	29	2.3	2.66	0.03	0.21	0.85	0.06	22.9	29.1	0.04	0.01	0.05	44.8	100.7
2767903	29	32	2.6	3.56	<0.01	0.13	0.69	0.06	22.6	28.9	0.04	<0.01	0.03	44.7	100.7
2767904	32	35	2.7	2.52	0.01	0.15	0.54	0.06	23.2	29.3	0.04	0.02	0.03	45.1	101
2767905	37	40.3	1.3	29.2	<0.01	0.17	0.62	0.06	19	18.6	0.03	0.03	0.02	33.2	100.9
DD 89 LR 31															
2767906	21.7	24.7	3	1.27	<0.01	0.17	2.2	0.17	43.2	6.15	2.02	0.03	0.03	47.5	100.7
2767907	24.7	27.7	2.4	3.02	<0.01	0.14	1.87	0.16	39.8	9.2	0.02	0.01	0.02	46	100.2
2767908	27.7	30.7	3	1.81	<0.01	0.13	2.02	0.16	43.4	6	0.02	<0.01	0.03	46.9	100.4
2767909	30.7	33.7	1.9	2.06	<0.01	0.18	1.95	0.17	40.6	9	0.02	0.03	0.03	46.3	100.3
2767910	33.7	35.7	1.6	3.26	<0.01	0.17	1.33	0.13	42.2	6.9	0.03	0.04	0.03	46.9	100.9
DD 89 LR 32															
2767911	28.4	29.6	1.2	3.82	<0.01	0.15	0.31	0.06	23.1	28.1	0.03	0.04	0.04	44.4	100
2767912	32.15	34.55	1.8	3.48	<0.01	0.13	0.36	0.06	23.1	28.5	0.04	0.01	0.03	44.8	100.5
DD 89 LR 33															
2767913	10.4	13.2	2.4	12.2	0.01	0.14	0.56	0.05	29.3	16.8	0.02	0.02	0.04	41.6	100.7
2767914	19.2	21.9	1.7	4.56	0.01	0.22	0.91	0.06	22.4	27.1	0.03	0.01	0.04	45.4	100.7
2767915	21.9	23.9	2	23.3	0.03	0.33	2.9	0.07	17.6	21.4	0.02	0.02	0.04	34.2	99.9
2767916	23.9	26.9	2.9	5.35	<0.01	0.15	0.82	0.07	22.9	27.4	0.03	<0.01	0.02	43.7	100.4
2767917	26.9	29.2	2.3	14.2	<0.01	0.12	0.67	0.06	21	24.8	0.03	<0.01	0.03	39.9	100.8
DD 89 LR 34															
NOT SAMPLED															
DD 89 LR 35															
NOT SAMPLED															
DD 89 LR 36															
2767918	16.5	17.7	1.2	16.3	<0.01	<0.01	0.58	0.06	38.3	1.45	<0.01	<0.01	<0.01	41.8	98.4
2767919	29.3	30	0.7	6.45	<0.01	<0.01	0.74	0.07	42.2	2.08	<0.01	<0.01	<0.01	47.7	99.2

518052

LYONS RIVER ASSAY RESULTS

SAMPLE No	FROM	TO	INT/VL	SiO2	TiO2	Al2O3	Fe2O3	MnO	MgO	CaO	Na2O	K2O	P2O5	LOI	TOTAL
DD 89 LR 37															
2767920	26.3	29.9	3.6	8.6	<0.01	<0.01	0.44	0.07	21.2	26.4	<0.01	<0.01	<0.01	42	98.7
2767921	29.9	34.4	2.6	13	<0.01	<0.01	0.55	0.08	21.2	23.6	<0.01	<0.01	0.02	39.9	98.3
2767922	35.4	38.5	2.6	32.4	<0.01	<0.01	0.37	0.05	26	7	<0.01	<0.01	0.01	32.6	98.4
DD 89 LR 38															
2767923	26.1	27.3	0.6	32	<0.01	0.14	0.59	0.07	29.3	2.4	0.34	<0.01	<0.01	34.5	99.3

518053

518054

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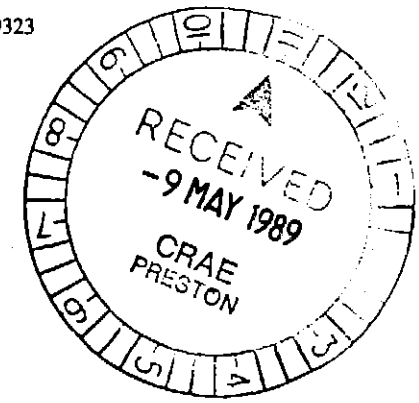

Mr. Tom Dickson
CRA Exploration Pty Ltd
54 Raglan Street
PRESTON
VIC 3072 Australia

Job Number: 9AD0697

Your Reference: 50651
Number of Samples: 6

Date Received: 27-APR-1989
Date Reported: 05-MAY-1989

This 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. Please address any enquiries to Mr. Trevor Francis.

Please find enclosed an Amdel Report for Job No. 9AD0697.

Approved Signature:

for

Dr. John Kikkert
General Manager - Adelaide.
CLASSIC COMLABS LTD

CC Chief Geologist A.C.T.

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

Distribution Codes:
CC - Carbon Copy
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Job: 9AD0697
O/N: 50651

ANALYTICAL REPORT

SAMPLE	Au	Pt	Pd
COMP 1	<1	<5	<1
COMP 2	2	<5	1
COMP 3	<1	<5	1
UNITS	ppb	ppb	ppb
SCHEME	FA3	FA3	FA3

518056

amdel
technology and enterprise

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NATA CERTIFICATE

5 May 1989

Mr Trevor Francis
Classic Comlabs Limited
305 South Road
MILE END SOUTH SA 5031

REPORT AC 2398/89

YOUR REFERENCE:	9AD0697
REPORT COMPRISING:	Cover sheet Pages I1 - I7
DATE RECEIVED:	28 April 1989
Approved Signatory:	Martin R. Hanckel

Manager, Chemistry Services: Dr Brian G. Steveson

for Dr William G. Spencer
General Manager
Applied Sciences Group

The report relates specifically to the sample tested and also the entire batch in so far as the sample is truly representative of the sample source.

hy

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518057

Analysis code ORE2/1,2 Report AC 2398/89 Page I1

NATA Certificate Results in percentages

	2583801	2583802	2583803	2583804	2583805
SiO2	5.55	1.87	4.54	25.6	23.8
TiO2	<0.01	0.05	<0.01	<0.01	<0.01
Al2O3	0.04	0.23	0.08	0.04	0.06
Fe2O3	0.67	0.52	0.34	0.74	0.98
MnO	0.08	0.06	0.05	0.07	0.08
MgO	45.1	26.8	21.8	34.3	35.4
CaO	0.49	24.0	28.1	6.60	1.15
Na2O	0.03	0.06	0.03	0.03	0.03
K2O	<0.01	0.03	0.01	<0.01	0.01
P2O5	<0.02	0.02	0.02	<0.02	<0.02
LOI	48.9	47.0	44.4	33.3	37.0
Totals	100.8	100.6	99.4	100.6	98.5
Cr	<0.002	0.002	<0.002	<0.002	<0.002
Zn	<0.002	<0.002	<0.002	0.002	0.003
Ba	<0.002	<0.002	<0.002	<0.002	<0.002
V	<0.002	<0.002	<0.002	<0.002	<0.002
Cu	0.007	0.005	0.006	<0.005	0.007
La	<0.005	<0.005	<0.005	<0.005	<0.005
Ni	<0.002	0.002	0.002	<0.002	<0.002
Zr	<0.005	<0.005	<0.005	<0.005	<0.005
Y	<0.002	<0.002	<0.002	<0.002	<0.002
Sr	<0.002	0.013	0.017	0.005	<0.002

Total FE as Fe2O3

amdel

518058

05.

Analysis code ORE2/1,2 Report AC 2398/89 Page I2

NATA Certificate Results in percentages

	2583806	2583807	2583808	2583809	2583810
SiO2	10.9	10.4	5.65	2.28	2.78
TiO2	0.03	<0.01	0.03	<0.01	<0.01
Al2O3	0.63	0.03	0.04	0.03	0.01
Fe2O3	1.04	1.64	1.40	2.12	1.77
MnO	0.09	0.12	0.09	0.11	0.10
MgO	38.7	39.1	42.8	41.5	43.8
CaO	2.08	1.81	2.26	3.84	0.85
Na2O	0.05	0.03	0.02	0.02	0.01
K2O	<0.01	<0.01	0.01	0.01	0.01
P2O5	0.04	0.02	0.02	0.03	0.02
LOI	44.5	45.7	48.0	49.7	50.0
Totals	98.0	98.8	100.3	99.6	99.3
Cr	<0.002	<0.002	<0.002	<0.002	<0.002
Zn	0.003	<0.002	0.002	0.002	0.002
Ba	<0.002	<0.002	<0.002	<0.002	<0.002
V	<0.002	<0.002	<0.002	<0.002	<0.002
Cu	0.011	<0.005	0.015	0.008	0.018
La	<0.005	<0.005	<0.005	<0.005	<0.005
Ni	0.009	<0.002	<0.002	0.002	<0.002
Zr	<0.005	<0.005	<0.005	<0.005	<0.005
Y	<0.002	<0.002	<0.002	<0.002	<0.002
Sr	0.003	<0.002	<0.002	0.002	<0.002

Total FE as Fe2O3

amdel

518059

Analysis code ORE2/1,2 Report AC 2398/89 Page I3

NATA Certificate Results in percentages

	2583811	2583812	2583813	2583814	2583815
SiO2	4.12	4.06	4.62	41.9	32.3
TiO2	0.03	<0.01	<0.01	<0.01	<0.01
Al2O3	0.02	0.04	0.03	0.07	0.14
Fe2O3	1.20	1.34	1.33	0.22	0.22
MnO	0.11	0.11	0.12	0.04	0.05
MgO	43.1	44.0	43.0	17.4	23.1
CaO	1.50	0.03	0.38	10.8	9.50
Na2O	0.03	0.04	0.04	0.05	0.03
K2O	<0.01	0.02	0.01	0.01	0.03
P2O5	<0.02	0.02	<0.02	0.02	0.03
LOI	48.8	49.1	48.8	27.6	32.8
Totals	98.9	98.7	98.3	98.1	98.2
Cr	<0.002	<0.002	<0.002	<0.002	<0.002
Zn	<0.002	0.002	<0.002	<0.002	<0.002
Ba	<0.002	<0.002	<0.002	<0.002	<0.002
V	<0.002	<0.002	<0.002	<0.002	<0.002
Cu	0.010	0.009	0.009	0.008	0.007
La	<0.005	<0.005	<0.005	<0.005	<0.005
Ni	<0.002	0.003	<0.002	<0.002	<0.002
Zr	<0.005	<0.005	<0.005	<0.005	<0.005
Y	<0.002	<0.002	<0.002	<0.002	<0.002
Sr	0.002	<0.002	<0.002	0.010	0.008

Total FE as Fe2O3

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518060

Analysis code ORE2/1,2 Report AC 2398/89 Page I4

NATA Certificate Results in percentages

	2583816	2583817	2583818	2583819	2583820
SiO2	9.30	8.85	4.94	18.3	14.7
TiO2	0.04	<0.01	<0.01	<0.01	<0.01
Al2O3	0.02	0.01	0.02	0.03	0.03
Fe2O3	0.62	0.48	0.59	0.48	0.68
MnO	0.06	0.07	0.08	0.06	0.07
MgO	42.9	42.7	43.4	35.2	34.7
CaO	0.99	0.57	0.36	3.58	5.60
Na2O	0.21	0.05	0.04	0.03	0.03
K2O	0.03	0.02	0.01	0.01	0.01
P2O5	<0.02	0.02	<0.02	0.03	<0.02
LOI	46.0	46.2	48.6	41.8	43.5
Totals	100.1	99.0	98.0	99.5	99.3
Cr	<0.002	<0.002	<0.002	0.002	0.002
Zn	0.006	0.003	<0.002	0.003	<0.002
Ba	<0.002	<0.002	<0.002	<0.002	<0.002
V	<0.002	<0.002	<0.002	<0.002	<0.002
Cu	0.016	<0.005	0.006	0.005	<0.005
La	<0.005	<0.005	<0.005	<0.005	<0.005
Ni	0.003	0.004	<0.002	<0.002	<0.002
Zr	<0.005	<0.005	<0.005	<0.005	<0.005
Y	<0.002	<0.002	<0.002	<0.002	<0.002
Sr	<0.002	<0.002	<0.002	0.003	0.004

Total FE as Fe2O3

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518061

Analysis code ORE2/1,2 Report AC 2398/89 Page I5

NATA Certificate Results in percentages

	2583821	2583822	2583823	2583824	2583825
SiO2	14.8	23.9	20.5	54.5	22.3
TiO2	<0.01	<0.01	<0.01	<0.01	<0.01
Al2O3	0.08	0.12	0.09	0.03	0.04
Fe2O3	0.36	0.19	0.24	0.30	0.81
MnO	0.05	0.04	0.04	0.05	0.08
MgO	25.4	16.4	19.1	16.5	33.6
CaO	17.4	23.9	21.3	4.04	1.87
Na2O	0.04	0.03	0.05	0.01	0.03
K2O	0.01	0.03	<0.01	<0.01	0.01
P2O5	0.04	<0.02	<0.02	<0.02	0.05
LOI	41.4	35.6	37.5	22.6	39.6
Totals	99.6	100.2	98.8	98.0	98.4
Cr	<0.002	0.002	0.005	<0.002	<0.002
Zn	<0.002	0.003	<0.002	<0.002	0.002
Ba	<0.002	<0.002	<0.002	<0.002	<0.002
V	<0.002	<0.002	<0.002	<0.002	<0.002
Cu	<0.005	<0.005	<0.005	0.006	<0.005
La	<0.005	<0.005	<0.005	<0.005	<0.005
Ni	<0.002	<0.002	0.004	<0.002	<0.002
Zr	<0.005	<0.005	<0.005	<0.005	<0.005
Y	<0.002	<0.002	<0.002	<0.002	<0.002
Sr	0.013	0.017	0.014	0.003	0.002

Total FE as Fe2O3

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518062

Analysis code ORE2/1,2 Report AC 2398/89 Page I6

NATA Certificate Results in percentages

	2583826	2583827	2583828	2583829	2583830
SiO2	10.0	3.40	10.7	6.85	4.98
TiO2	<0.01	<0.01	<0.01	<0.01	<0.01
Al2O3	0.01	0.01	0.02	0.01	0.03
Fe2O3	0.69	0.81	0.69	0.59	1.21
MnO	0.09	0.08	0.09	0.08	0.09
MgO	40.7	42.9	41.0	42.7	43.4
CaO	1.00	0.90	0.43	0.21	0.46
Na2O	0.02	0.03	0.02	0.01	0.02
K2O	<0.01	<0.01	<0.01	0.01	0.01
P2O5	0.02	<0.02	<0.02	0.02	<0.02
LOI	46.6	49.9	46.2	48.4	49.0
Totals	99.1	98.0	99.1	98.9	99.2
Cr	<0.002	<0.002	0.003	<0.002	<0.002
Zn	<0.002	0.002	<0.002	<0.002	0.005
Ba	<0.002	<0.002	<0.002	<0.002	<0.002
V	<0.002	0.003	<0.002	<0.002	<0.002
Cu	<0.005	0.013	0.006	0.011	0.006
La	<0.005	<0.005	<0.005	<0.005	<0.005
Ni	0.003	<0.002	0.002	<0.002	0.002
Zr	<0.005	<0.005	<0.005	<0.005	<0.005
Y	<0.002	<0.002	<0.002	<0.002	<0.002
Sr	<0.002	<0.002	<0.002	<0.002	<0.002

Total FE as Fe2O3

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518063

Analysis code ORE2/1,2 Report AC 2398/89 Page I7

NATA Certificate Results in percentages

	2583831	2583832
SiO2	15.6	2.70
TiO2	<0.01	<0.01
Al2O3	0.02	0.01
Fe2O3	0.96	0.90
MnO	0.09	0.10
MgO	36.0	46.0
CaO	2.98	0.02
Na2O	0.02	0.03
K2O	0.01	0.01
P2O5	0.02	<0.02
LOI	42.8	49.7
Totals	98.5	99.4
Cr	<0.002	<0.002
Zn	0.003	0.005
Ba	<0.002	<0.002
V	<0.002	<0.002
Cu	0.005	0.006
La	<0.005	<0.005
Ni	<0.002	<0.002
Zr	<0.005	<0.005
Y	<0.002	<0.002
Sr	0.002	<0.002

Total FE as Fe2O3

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technology and enterprise

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Facsimile: (08) 79 6623

518064

NATA CERTIFICATE
9 May 1989

Mr Trevor Francis
Classic Comlabs Limited
305 South Road
MILE END SOUTH SA 5031

REPORT AC 2438/89

YOUR REFERENCE:	9AD0730
REPORT COMPRISING:	Cover sheet Pages I1 - I13
DATE RECEIVED:	3 May 1989
Approved Signatory:	Martin R. Hanckel

Manager, Chemistry Services: Dr Brian G. Steveson

for Dr William G. Spencer
General Manager
Applied Sciences Group

The report relates specifically to the sample tested and also the entire batch in so far as the sample is truly representative of the sample source.

hy

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518065

GC1

Analysis code ORE2/1,2 Report AC 2438/89 Page I1

NATA Certificate Results in percentages

	2583833	2583834	2583835	2583836	2583837
SiO2	35.5	17.8	18.2	19.3	19.7
TiO2	<0.01	<0.01	<0.01	0.01	<0.01
Al2O3	0.04	0.05	0.10	0.04	0.03
Fe2O3	1.24	1.39	1.48	1.45	0.69
MnO	0.11	0.14	0.13	0.15	0.10
MgO	20.1	21.3	36.8	34.8	34.6
CaO	9.65	17.9	1.06	1.74	1.60
Na2O	0.04	0.04	0.04	0.03	0.02
K2O	<0.01	<0.01	<0.01	0.01	0.02
P2O5	0.08	<0.02	0.03	<0.02	<0.02
LOI	31.3	39.4	42.0	40.9	42.0
Totals	98.0	98.0	99.8	98.4	98.7
Cr	<0.002	<0.002	0.004	0.003	<0.002
Zn	0.004	0.002	0.003	<0.002	<0.002
Ba	0.003	0.008	0.003	<0.002	<0.002
V	<0.002	<0.002	<0.002	<0.002	<0.002
Cu	0.131	<0.005	0.018	0.006	0.013
La	<0.005	<0.005	<0.005	<0.005	<0.005
Ni	0.103	0.005	0.012	0.004	0.009
Zr	<0.005	<0.005	0.020	<0.005	<0.005
Y	<0.002	<0.002	<0.002	<0.002	<0.002
Sr	0.008	0.015	<0.002	<0.002	<0.002

Total FE as Fe2O3

amdel

518066

Analysis code ORE2/1,2 Report AC 2438/89 Page I2

NATA Certificate Results in percentages

	2583838	2583839	2583840	2583841	2583842
SiO2	12.2	12.0	9.70	5.95	17.3
TiO2	0.03	<0.01	<0.01	<0.01	<0.01
Al2O3	0.03	0.02	0.03	0.03	0.04
Fe2O3	0.58	0.95	0.43	2.46	1.36
MnO	0.07	0.09	0.06	0.18	0.10
MgO	38.0	38.5	38.3	38.6	37.1
CaO	1.48	0.88	1.26	3.22	1.17
Na2O	0.03	0.03	0.02	0.04	0.02
K2O	0.02	0.01	0.01	0.05	<0.01
P2O5	<0.02	<0.02	<0.02	<0.02	<0.02
LOI	45.7	45.6	48.2	47.9	41.9
Totals	98.1	98.0	98.0	98.4	98.9
Cr	<0.002	0.003	<0.002	0.004	<0.002
Zn	0.002	0.016	0.004	0.014	0.002
Ba	<0.002	<0.002	<0.002	<0.002	<0.002
V	<0.002	0.003	<0.002	<0.002	<0.002
Cu	<0.005	0.006	0.006	0.010	<0.005
La	<0.005	<0.005	<0.005	<0.005	<0.005
Ni	<0.002	0.006	0.005	0.015	0.005
Zr	<0.005	<0.005	<0.005	<0.005	<0.005
Y	<0.002	<0.002	<0.002	<0.002	<0.002
Sr	<0.002	<0.002	<0.002	0.004	<0.002

Total FE as Fe2O3

amdel

518067

Analysis code ORE2/1,2 Report AC 2438/89 Page I3

NATA Certificate Results in percentages

	2583843	2583844	2583845	2583846	2583847
SiO2	17.8	12.8	16.3	14.9	22.9
TiO2	<0.01	<0.01	<0.01	0.09	0.09
Al2O3	0.02	0.03	0.09	0.08	0.08
Fe2O3	1.45	2.62	0.76	0.59	0.75
MnO	0.10	0.14	0.10	0.07	0.07
MgO	35.4	36.4	18.6	19.0	18.5
CaO	0.62	2.12	22.5	22.6	19.4
Na2O	0.02	0.03	0.05	0.04	0.02
K2O	<0.01	<0.01	<0.01	<0.01	<0.01
P2O5	<0.02	0.04	<0.02	<0.02	0.03
LOI	42.7	44.2	39.6	40.7	36.7
Totals	98.1	98.4	98.0	98.0	98.5
Cr	0.003	<0.002	<0.002	<0.002	<0.002
Zn	0.002	0.022	0.022	0.017	<0.002
Ba	<0.002	<0.002	<0.002	<0.002	<0.002
V	<0.002	<0.002	0.022	<0.002	<0.002
Cu	<0.005	<0.005	0.007	0.011	0.012
La	<0.005	<0.005	<0.005	<0.005	<0.005
Ni	0.006	0.006	0.005	0.004	0.003
Zr	<0.005	<0.005	<0.005	<0.005	<0.005
Y	<0.002	<0.002	<0.002	<0.002	<0.002
Sr	<0.002	0.003	0.016	0.016	0.012

Total FE as Fe2O3

amdel

518068

Analysis code ORE2/1,2 Report AC 2438/89 Page I4

NATA Certificate Results in percentages

	2583848	2583849	2583850	2583851	2583852
SiO2	4.66	17.0	12.7	8.45	5.05
TiO2	<0.01	<0.01	<0.01	<0.01	0.12
Al2O3	0.04	0.02	0.03	0.02	0.04
Fe2O3	0.79	1.65	0.91	1.28	2.06
MnO	0.10	0.17	0.12	0.16	0.18
MgO	39.9	34.3	32.2	37.4	39.3
CaO	2.40	2.52	8.70	3.98	2.88
Na2O	0.06	0.23	0.24	0.24	0.96
K2O	0.01	0.01	<0.01	0.02	0.04
P2O5	<0.02	<0.02	0.03	<0.02	0.03
LOI	50.1	42.2	43.5	46.6	48.2
Totals	98.0	98.1	98.4	98.1	98.9
Cr	<0.002	0.003	0.002	0.003	0.003
Zn	0.035	0.002	<0.002	0.003	0.007
Ba	<0.002	<0.002	<0.002	<0.002	<0.002
V	<0.002	<0.002	<0.002	<0.002	<0.002
Cu	0.006	0.007	0.006	0.014	0.053
La	<0.005	<0.005	<0.005	<0.005	<0.005
Ni	0.004	0.003	<0.002	0.004	0.008
Zr	<0.005	<0.005	<0.005	<0.005	<0.005
Y	<0.002	<0.002	<0.002	<0.002	<0.002
Sr	0.003	0.003	0.008	0.005	0.003

Total FE as Fe2O3

amdel

518069

Analysis code ORE2/1,2 Report AC 2438/89 Page I5

NATA Certificate Results in percentages

	2583853	2583854	2583855	2583856	2583857
SiO2	3.94	4.00	12.9	20.5	19.7
TiO2	<0.01	<0.01	<0.01	0.02	<0.01
Al2O3	0.10	0.07	0.05	0.20	0.09
Fe2O3	1.46	1.70	1.10	1.82	1.10
MnO	0.20	0.20	0.11	0.15	0.13
MgO	25.4	28.7	21.2	16.3	17.7
CaO	20.5	16.4	20.4	21.3	21.1
Na2O	0.22	0.23	0.23	0.23	0.24
K2O	0.01	0.02	0.03	0.03	0.02
P2O5	0.05	0.03	<0.02	0.04	0.03
LOI	46.2	47.0	42.0	37.5	37.9
Totals	98.1	98.3	98.0	98.1	98.0
Cr	0.003	0.004	<0.002	0.002	0.002
Zn	<0.002	0.004	0.003	0.004	0.003
Ba	0.013	0.002	0.030	0.007	0.006
V	<0.002	<0.002	<0.002	<0.002	<0.002
Cu	<0.005	0.010	<0.005	<0.005	0.016
La	<0.005	<0.005	<0.005	<0.005	<0.005
Ni	<0.002	0.004	0.004	0.004	<0.002
Zr	<0.005	<0.005	<0.005	<0.005	<0.005
Y	<0.002	<0.002	<0.002	<0.002	<0.002
Sr	0.018	0.019	0.020	0.021	0.013

Total FE as Fe2O3

amdel

518070

Analysis code ORE2/1,2 Report AC 2438/89 Page I6

NATA Certificate Results in percentages

	2583858	2583859	2583860	2583861	2583862
SiO2	17.2	8.30	8.70	20.6	1.84
TiO2	<0.01	<0.01	<0.01	<0.01	<0.01
Al2O3	0.03	0.06	0.07	0.12	0.18
Fe2O3	1.22	0.82	0.88	0.85	0.50
MnO	0.13	0.11	0.09	0.09	0.07
MgO	33.4	28.4	26.4	20.7	23.6
CaO	4.48	15.0	17.1	17.6	24.7
Na2O	0.22	0.23	0.22	0.23	0.22
K2O	<0.01	<0.01	0.01	0.01	0.01
P2O5	0.04	0.04	0.04	0.05	0.03
LOI	41.9	45.1	44.5	37.8	47.0
Totals	98.6	98.0	98.0	98.0	98.1
Cr	<0.002	<0.002	0.003	<0.002	0.004
Zn	0.002	<0.002	0.002	0.002	<0.002
Ba	<0.002	<0.002	<0.002	<0.002	<0.002
V	<0.002	<0.002	<0.002	<0.002	<0.002
Cu	<0.005	<0.005	0.014	0.067	<0.005
La	<0.005	<0.005	<0.005	<0.005	<0.005
Ni	0.003	<0.002	<0.002	0.044	0.003
Zr	<0.005	<0.005	0.006	<0.005	<0.005
Y	<0.002	<0.002	<0.002	<0.002	<0.002
Sr	0.005	0.016	0.014	0.017	0.021

Total FE as Fe2O3

amdel

518071

Analysis code ORE2/1,2 Report AC 2438/89 Page I7

NATA Certificate Results in percentages

	2583863	2583864	2583865	2583866	2583867
SiO2	37.1	9.45	25.8	11.2	7.15
TiO2	<0.01	<0.01	<0.01	<0.01	<0.01
Al2O3	0.09	0.04	0.03	0.08	0.02
Fe2O3	0.35	0.94	1.44	1.79	1.33
MnO	0.06	0.11	0.15	0.18	0.12
MgO	19.6	38.2	29.1	20.4	37.5
CaO	11.6	3.82	5.80	23.1	4.68
Na2O	0.22	0.21	0.21	0.20	0.21
K2O	0.02	<0.01	0.03	0.02	0.02
P2O5	0.05	0.03	<0.02	0.06	0.03
LOI	30.7	46.2	37.5	42.3	47.0
Totals	99.8	99.0	100.0	99.3	98.0
Cr	<0.002	<0.002	0.003	0.002	<0.002
Zn	<0.002	<0.002	<0.002	0.002	<0.002
Ba	<0.002	<0.002	<0.002	0.006	<0.002
V	0.010	<0.002	<0.002	<0.002	<0.002
Cu	<0.005	<0.005	<0.005	<0.005	0.005
La	<0.005	<0.005	<0.005	<0.005	<0.005
Ni	0.003	0.006	0.005	<0.002	<0.002
Zr	<0.005	<0.005	0.050	<0.005	<0.005
Y	<0.002	<0.002	<0.002	<0.002	<0.002
Sr	0.011	0.005	0.006	0.025	0.004

Total FE as Fe2O3

amdel

518072

Analysis code ORE2/1,2 Report AC 2438/89 Page I8

NATA Certificate Results in percentages

	2583868	2583869	2583870	2583871	2583872
SiO2	8.55	23.5	24.7	9.15	23.7
TiO2	<0.01	<0.01	<0.01	0.02	<0.01
Al2O3	0.02	0.02	0.03	0.02	0.02
Fe2O3	1.72	1.78	1.77	1.40	1.49
MnO	0.16	0.14	0.12	0.09	0.15
MgO	34.7	34.7	34.2	41.1	34.5
CaO	9.00	1.67	1.28	1.54	1.28
Na2O	0.24	0.32	0.30	0.23	0.26
K2O	0.01	<0.01	0.02	0.02	0.02
P2O5	<0.02	0.03	0.03	0.11	0.03
LOI	45.7	38.7	38.4	46.8	39.0
Totals	100.1	100.8	100.8	100.5	100.4
Cr	<0.002	<0.002	0.002	0.002	<0.002
Zn	0.002	0.012	0.010	0.026	0.009
Ba	<0.002	0.003	0.051	<0.002	<0.002
V	<0.002	<0.002	<0.002	0.003	<0.002
Cu	0.007	0.010	0.011	0.095	0.037
La	<0.005	<0.005	<0.005	<0.005	<0.005
Ni	<0.002	<0.002	<0.002	0.007	0.006
Zr	<0.005	<0.005	<0.005	<0.005	<0.005
Y	<0.002	<0.002	<0.002	<0.002	<0.002
Sr	0.006	0.002	0.005	<0.002	<0.002

Total FE as Fe2O3

amdel

518073

Analysis code ORE2/1,2 Report AC 2438/89 Page I9

NATA Certificate Results in percentages

	2583873	2583874	2583875	2583876	2583877
SiO2	21.7	19.9	32.1	17.9	37.9
TiO2	0.01	<0.01	0.33	<0.01	<0.01
Al2O3	0.01	0.01	0.11	0.03	0.01
Fe2O3	0.97	0.96	1.94	1.08	1.71
MnO	0.06	0.08	0.16	0.11	0.09
MgO	33.7	34.1	21.8	34.3	26.3
CaO	1.38	1.72	10.0	2.20	1.98
Na2O	0.23	0.23	2.46	0.27	0.20
K2O	0.01	0.02	<0.01	0.03	0.02
P2O5	0.03	<0.02	0.05	0.04	0.05
LOI	39.9	41.1	31.8	42.1	30.5
Totals	98.0	98.1	100.7	98.0	98.7
Cr	0.003	0.003	<0.002	0.003	<0.002
Zn	0.004	0.022	0.010	0.009	0.003
Ba	<0.002	<0.002	0.177	<0.002	<0.002
V	<0.002	0.002	0.006	<0.002	0.002
Cu	0.017	0.029	0.052	0.012	0.062
La	<0.005	<0.005	<0.005	<0.005	<0.005
Ni	0.016	0.006	0.003	0.002	0.031
Zr	<0.005	<0.005	<0.005	<0.005	<0.005
Y	<0.002	<0.002	<0.002	<0.002	<0.002
Sr	<0.002	<0.002	0.012	0.004	0.004

Total FE as Fe2O3

amdel

518074

Analysis code ORE2/1,2 Report AC 2438/89 Page I10

NATA Certificate Results in percentages

	2583878	2583879	2583880	2583881	2583882
SiO2	19.5	21.0	19.2	20.9	21.9
TiO2	<0.01	<0.01	<0.01	<0.01	<0.01
Al2O3	0.02	0.03	0.01	0.03	0.01
Fe2O3	1.86	1.17	0.64	2.12	1.66
MnO	0.11	0.13	0.08	0.12	0.12
MgO	35.2	28.2	34.4	34.4	34.2
CaO	1.39	9.40	2.52	2.92	2.42
Na2O	0.20	0.20	0.21	0.22	0.21
K2O	0.02	0.01	0.01	0.01	0.02
P2O5	0.03	0.04	<0.02	0.04	0.03
LOI	41.1	39.4	41.2	39.7	39.7
Totals	99.4	99.6	98.2	100.4	100.3
Cr	<0.002	<0.002	0.002	0.003	<0.002
Zn	0.007	0.002	0.004	0.004	0.002
Ba	<0.002	<0.002	<0.002	<0.002	<0.002
V	0.004	<0.002	<0.002	<0.002	<0.002
Cu	<0.005	0.008	<0.005	0.009	0.006
La	<0.005	<0.005	<0.005	<0.005	<0.005
Ni	<0.002	0.003	0.003	<0.002	0.003
Zr	<0.005	<0.005	0.013	<0.005	<0.005
Y	<0.002	<0.002	<0.002	<0.002	<0.002
Sr	0.003	0.009	0.003	0.003	0.002

Total FE as Fe2O3

amdel

518075

Analysis code ORE2/1,2 Report AC 2438/89 Page I11

NATA Certificate Results in percentages

	2583883	2583884	2583885	2583886	2583887
SiO2	21.4	24.7	24.4	3.16	2.40
TiO2	<0.01	<0.01	<0.01	<0.01	<0.01
Al2O3	0.05	0.04	0.07	0.16	0.08
Fe2O3	1.22	2.40	1.11	1.27	1.02
MnO	0.12	0.13	0.09	0.11	0.10
MgO	31.4	28.0	28.5	25.6	25.5
CaO	5.10	6.45	8.60	23.4	23.9
Na2O	0.21	0.20	0.21	0.22	0.23
K2O	0.01	0.01	0.03	0.02	0.04
P2O5	0.03	0.04	0.03	<0.02	0.04
LOI	39.3	37.3	37.6	46.1	46.4
Totals	98.8	99.3	100.6	100.0	99.7
Cr	<0.002	<0.002	<0.002	<0.002	<0.002
Zn	0.002	0.004	0.005	0.004	0.003
Ba	<0.002	<0.002	<0.002	<0.002	<0.002
V	<0.002	<0.002	<0.002	<0.002	<0.002
Cu	0.007	0.006	0.017	0.023	0.005
La	<0.005	<0.005	<0.005	<0.005	<0.005
Ni	<0.002	0.003	<0.002	0.005	<0.002
Zr	<0.005	<0.005	<0.005	0.006	<0.005
Y	<0.002	<0.002	<0.002	<0.002	<0.002
Sr	0.008	0.008	0.009	0.020	0.022

Total FE as Fe2O3

amdel

518076

Analysis code ORE2/1,2 Report AC 2438/89 Page I12

NATA Certificate Results in percentages

	2583888	2583889	2583890	2583891	2583892
SiO2	2.66	29.7	4.68	9.60	1.17
TiO2	<0.01	<0.01	<0.01	0.01	<0.01
Al2O3	0.19	0.01	<0.01	0.14	0.10
Fe2O3	0.93	0.76	0.42	1.72	0.49
MnO	0.09	0.07	0.06	0.11	0.05
MgO	21.5	31.5	42.5	41.4	21.1
CaO	28.2	1.67	1.02	0.40	30.1
Na2O	0.25	0.21	0.21	0.24	0.23
K2O	0.01	0.03	0.02	0.01	<0.01
P2O5	0.05	0.03	<0.02	0.03	<0.02
LOI	45.7	36.1	49.1	44.7	46.3
Totals	99.6	100.1	98.0	98.4	99.5
Cr	0.002	<0.002	<0.002	0.002	<0.002
Zn	0.005	0.002	0.005	0.005	0.002
Ba	<0.002	<0.002	<0.002	<0.002	<0.002
V	<0.002	<0.002	<0.002	<0.002	<0.002
Cu	0.010	<0.005	0.006	0.020	<0.005
La	<0.005	<0.005	<0.005	<0.005	<0.005
Ni	0.003	<0.002	0.003	<0.002	<0.002
Zr	<0.005	<0.005	<0.005	<0.005	<0.005
Y	<0.002	<0.002	<0.002	<0.002	<0.002
Sr	0.017	0.002	<0.002	<0.002	0.022

Total FE as Fe2O3

amdel

518077

Analysis code ORE2/1,2 Report AC 2438/89 Page I13

NATA Certificate Results in percentages

	2583893	2583894
SiO2	2.82	43.0
TiO2	0.01	<0.01
Al2O3	0.07	0.12
Fe2O3	0.51	0.44
MnO	0.06	0.06
MgO	27.1	20.9
CaO	23.2	5.75
Na2O	0.26	0.25
K2O	0.01	0.02
P2O5	0.03	0.03
LOI	46.4	27.8
Totals	100.5	98.4
Cr	<0.002	<0.002
Zn	0.004	0.005
Ba	<0.002	<0.002
V	<0.002	<0.002
Cu	0.034	0.012
La	<0.005	<0.005
Ni	<0.002	0.004
Zr	<0.005	<0.005
Y	<0.002	<0.002
Sr	0.019	0.005

Total FE as Fe2O3

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518078

Mr. Doug Brewster
CRA Exploration Pty Ltd
54 Raglan Street
PRESTON
VIC 3072 Australia

Job Number: 9AD0730

Your Reference: DPO 50652/3
Number of Samples: 11

Date Received: 03-MAY-1989
Date Reported: 10-MAY-1989

This 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. Please address any enquiries to Mr. Trevor Francis.

Please find enclosed an Amdel Report for Job No. 9AD0730.

Approved Signature:

for

Dr. John Kikkert
General Manager - Adelaide.
CLASSIC COMLABS LTD

CC Chief Geologist Fyshwick

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

Distribution Codes:
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Job: 9AD0730
O/N: DPO 50652/3

ANALYTICAL REPORT

SAMPLE	Au	Pt	Pd
2583833-840	<1	<5	2
2583841-847	2	<5	<1
2583848-857	<1	<5	<1
2583858-864	<1	<5	<1
2583865-870	<1	<5	<1
2583871-874	<1	<5	<1
25838875-880	<1	<5	<1
25838881-883	<1	<5	<1
25838884-889	1	<5	<1
25838889-891	<1	<5	3
25838892-895	<1	<5	<1
UNITS	ppb	ppb	ppb
SCHEME	FA3	FA3	FA3

518080

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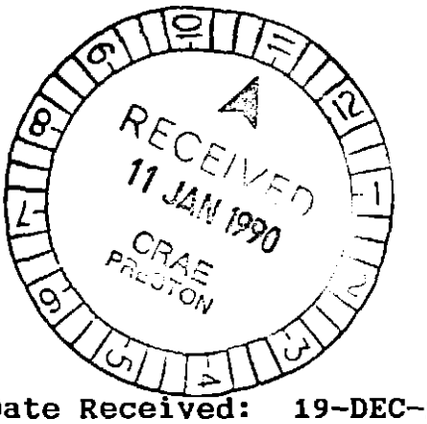
PRESTON
VIC 3072



Job Number: 9AD3879

Your Reference: 50655
Number of Samples: 17
Extra Samples : 0

Date Received: 19-DEC-1989
Date Reported: 08-JAN-1990

This report comprises a cover sheet and pages 1 to 1, I1 to I4

This report relates specifically to the samples tested in so far as that the samples as supplied are truly representative of the sample source. Please address any enquiries to Mr. Trevor Francis.

Approved Signature:

for

Dr. John Kikkert
General Manager - Adelaide.

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

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

518081

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Job: 9AD3879
O/N: 50655

ANALYTICAL REPORT

Sample	Au	Pt	Pd
2767901-905	60	<5	13
2767906-910	70	<5	13
2767911-912	85	<5	17
2767913-917	40	<5	13
Units	ppb	ppb	ppb
Detn Limit	1	5	1
Scheme	FA3	FA3	FA3

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Analysis code ICP5 Report AC 9AD3879

NATA Certificate Results in percentages

	2767901	2767902	2767903	2767904	2767905
SiO2	3.38	2.66	3.56	2.52	29.2
TiO2	<0.01	0.03	<0.01	0.01	<0.01
Al2O3	0.18	0.21	0.13	0.15	0.17
Fe2O3	2.22	0.85	0.69	0.54	0.62
MnO	0.13	0.06	0.06	0.06	0.06
MgO	40.1	22.9	22.6	23.2	19.0
CaO	8.45	29.1	28.9	29.3	18.6
Na2O	0.01	0.04	0.04	0.04	0.03
K2O	0.01	0.01	<0.01	0.02	0.03
P2O5	0.03	0.05	0.03	0.03	0.02
LOI	46.0	44.8	44.7	45.1	33.2
Totals	100.5	100.7	100.7	101.0	100.9

Total FE as Fe2O3

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Analysis code ICP5 Report AC 9AD3879 Page I2

NATA Certificate Results in percentages

C32

	2767906	2767907	2767908	2767909	2767910
SiO2	1.27	3.02	1.81	2.06	3.26
TiO2	<0.01	<0.01	<0.01	<0.01	<0.01
Al2O3	0.17	0.14	0.13	0.18	0.17
Fe2O3	2.20	1.87	2.02	1.95	1.33
MnO	0.17	0.16	0.16	0.17	0.13
MgO	43.2	39.8	43.4	40.6	42.2
CaO	6.15	9.20	6.00	9.00	6.90
Na2O	0.02	0.02	0.02	0.02	0.03
K2O	0.03	0.01	<0.01	0.03	0.04
P2O5	0.03	0.02	0.03	0.03	0.03
LOI	47.5	46.0	46.9	46.3	46.7
Totals	100.7	100.2	100.4	100.3	100.8

Total FE as Fe2O3

513084

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Analysis code ICP5 Report AC 9AD3879

NATA Certificate Results in percentages

	2767911	2767912	2767913	2767914	2767915
SiO2	3.82	3.48	12.2	4.56	23.3
TiO2	<0.01	<0.01	0.01	0.01	0.03
Al2O3	0.15	0.13	0.14	0.22	0.33
Fe2O3	0.31	0.36	0.56	0.91	2.90
MnO	0.06	0.06	0.05	0.06	0.07
MgO	23.1	23.1	29.3	22.4	17.6
CaO	28.1	28.5	16.8	27.1	21.4
Na2O	0.03	0.04	0.02	0.03	0.02
K2O	0.04	0.01	0.02	0.01	0.02
P2O5	0.04	0.03	0.04	0.04	0.04
LOI	44.4	44.8	41.6	45.4	34.2
Totals	100.0	100.5	100.7	100.7	99.9

Total FE as Fe2O3

518035

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Analysis code ICP5 Report AC 9AD3879

NATA Certificate Results in percentages

	2767916	2767917
SiO2	5.35	14.2
TiO2	<0.01	<0.01
Al2O3	0.15	0.12
Fe2O3	0.82	0.67
MnO	0.07	0.06
MgO	22.9	21.0
CaO	27.4	24.8
Na2O	0.03	0.03
K2O	<0.01	<0.01
P2O5	0.02	0.03
LOI	43.7	39.9
Totals	100.4	100.8

Total FE as Fe2O3

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Osman Place, Thebarton, South Australia 5031
Telephone: (08) 43 5722 Facsimile: (08) 234 03251

518036

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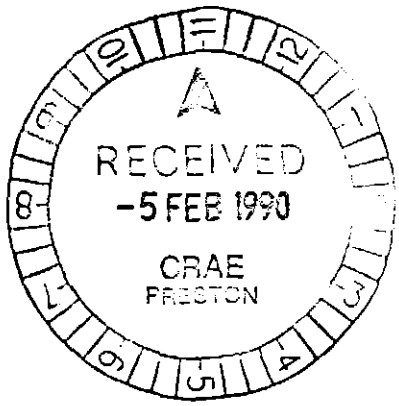

Mr Tom Dickson
CRA Exploration Pty Limited
54 Raglan Street
PRESTON
VIC 3072

Job Number: 0AD0060

Your Reference: 50656
Number of Samples: 9
Extra Samples : 0

Date Received: 09-JAN-1990
Date Reported: 01-FEB-1990

This 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. Please address any enquiries to Mr. Trevor Francis.

Approved Signature:

for

Dr. John Kikkert
General Manager - Adelaide.

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L.N.R. - Listed But Not Received.
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Job: 0AD0060

ANALYTICAL REPORT O/N: 50656

Sample	SiO2	TiO2	Al2O3	Fe2O3	MnO	MgO	CaO
2767918	16.3	<0.01	<0.01	0.58	0.06	38.3	1.45
2767919	6.45	<0.01	<0.01	0.74	0.07	42.2	2.08
2767920	8.60	<0.01	<0.01	0.44	0.07	21.2	26.4
2767921	13.0	<0.01	<0.01	0.55	0.08	21.2	23.6
2767922	32.4	<0.01	<0.01	0.37	0.05	26.0	7.00
2767923	32.0	<0.01	0.14	0.59	0.07	29.3	2.40
Units	%	%	%	%	%	%	%
Detn Limit	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Scheme	ICP5	ICP5	ICP5	ICP5	ICP5	ICP5	ICP5

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Job: OAD0060

ANALYTICAL REPORT O/N: 50656

Sample	Na2O	K2O	P2O5	LOI	Total
2767918	<0.01	<0.01	<0.01	41.8	98.4
2767919	<0.01	<0.01	<0.01	47.7	99.2
2767920	<0.01	<0.01	<0.01	42.0	98.7
2767921	<0.01	<0.01	0.02	39.9	98.3
2767922	<0.01	<0.01	0.01	32.6	98.4
2767923	0.34	<0.01	<0.01	34.5	99.3
Units	%	%	%	%	%
Detn Limit	0.01	0.01	0.01	0.01	0.01
Scheme	ICP5	ICP5	ICP5	ICP5	ICP5

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C93

Job: 0AD0060
O/N: 50656

ANALYTICAL REPORT

Sample	Au	Pt	Pd
2767918-919	15	<5	<1
2767920-922	210	<5	<1
2767923	<1	<5	<1
Units	ppb	ppb	ppb
Detn Limit	1	5	1
Scheme	FA3	FA3	FA3