THE SHELL COMPANY OF AUSTRALIA LIMITED
METALS DIVISION

ANNUAL REPORT ON EL 1203, LEILA YARD, NTH TERRITORY.

7th September, 1980 - 6th September, 1981

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1.0 INTRODUCTION

Exploration Licence (EL) 1203, located in the McArthur River region (Figure 1, page 2), was initially granted on the 7th September, 1976 over and area of 497.3 square miles. This was subsequently successively reduced to the present 59.54 square miles (154.21 sq km). An application has been lodged with the Department of Mines and Energy for renewal of the licence for a further 12 months. As this will be the final year of tenure the size of the licence area will be unchanged.

This report represents a summary of exploration activities in EL 1203 during the period 7th September, 1980 to 6th September, 1981.

Access to the area is by way of the Carpentaria Highway which passes through the Mt. Lynott portion of the EL and by way of station tracks branching off this highway to the Myrtle Basin portion of the EL.

2.0 TENURE AND JOINT VENTURE

2.1 Title

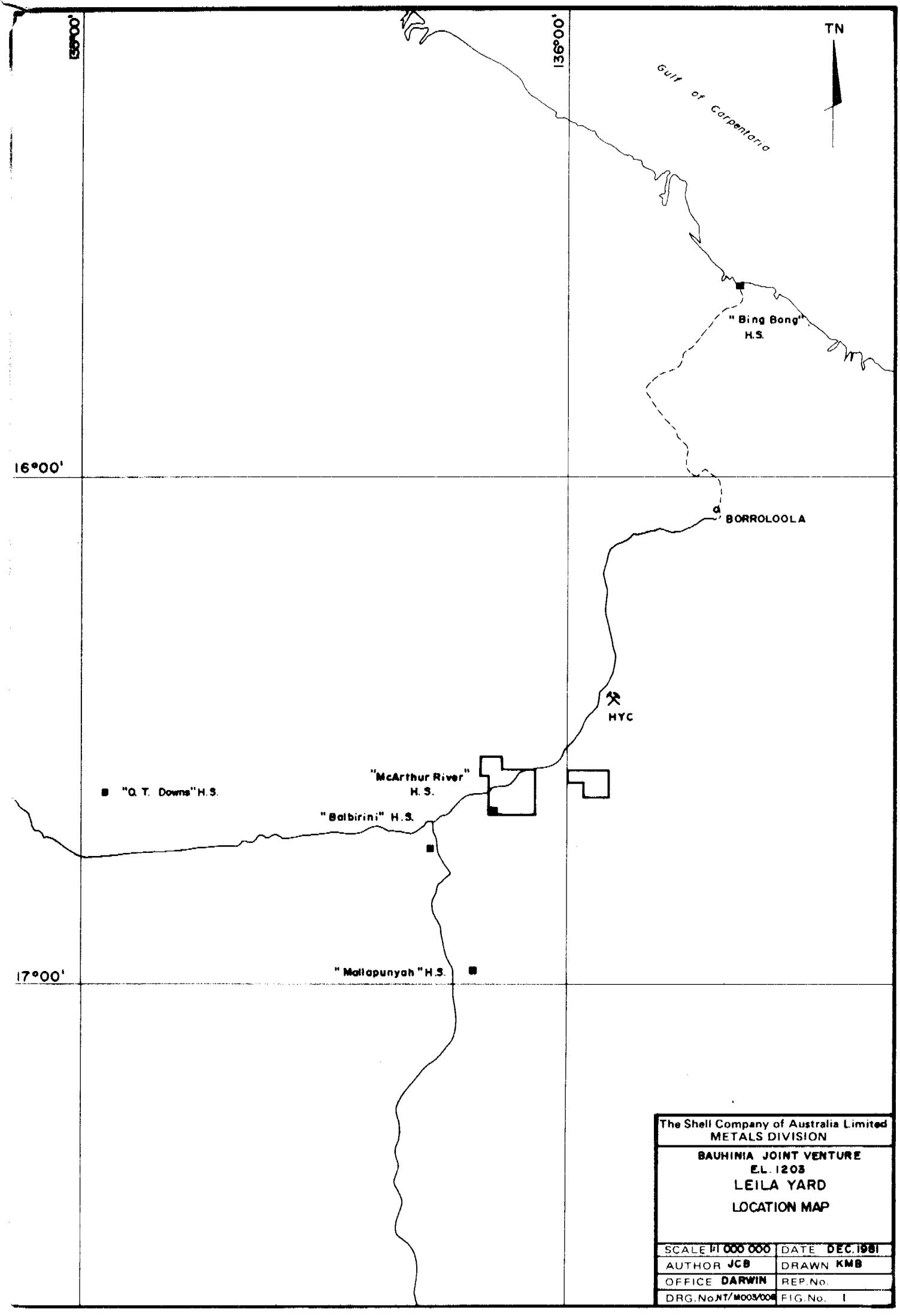
Refer to figure 2 (back pocket) for an outline of the licence area during the period of tenure.

2.2 Bauhinia Joint Venture

Exploration Licence 1203 is one of a number of licences in the McArthur River region which are the subject of the Bauhinia Joint Venture in which the following companies are participants:

The Shell Company of Australia Limited.
A.O. (Australia) Pty Ltd.
Electrolytic Zinc Company Ltd.
Penarroya (Australia) Pty Ltd.
Preussag Australia Ltd.

The Joint Venture was formed in November, 1976 with the aim of locating economic lead-zinc mineralisation of the HYC-type within the McArthur River region. The Agreement was approved and registered under the Northern Territory Mining Ordinance on the 28th January, 1977 with A.O. (Australia) Pty Ltd as Manager. On the 9th July, 1979, The Shell Company of Australia Limited entered into an agreement with the four above-mentioned companies by which is could earn a fifty percent interest in the Bauhinia Joint Venture and became the manager on the 1st April, 1981.



The Shell Company of Australia Limited
METALS DIVISION

BAUHINIA JOINT VENTURE
E.L. 1203
LEILA YARD
LOCATION MAP

SCALE 1:1 000 000	DATE DEC. 1981
AUTHOR JCB	DRAWN KMB
OFFICE DARWIN	REP. No.
DRG. No. NT/M003/004	FIG. No. 1

3.0 PHYSIOGRAPHY

Topographically the area falls within the Gulf fall physiographic unit. The area is drained by the McArthur river and its tributaries. Vegetation is medium density scrub and forest.

4.0 STRATIGRAPHY

Formation present within the licence area belong to the Proterozoic McArthur group sediments. Figure 3 and 4 (back pockets) present the detailed geology of the Mt Lynott and Amelia Basin portions of the licence area respectively.

5.0 PREVIOUS INVESTIGATIONS

Previous investigations in this EL has consisted of air photo interpretation, INPUT surveys, ground geophysical surveys (magnetics, I.P., and gravity) geological mapping and associated rock chip sampling and diamond drilling. Diamond drilling activities were concentrated in areas that were subsequently relinquished.

6.0 EXPLORATION ACTIVITIES SEPT. 1980 - SEPT. 1981.

Activities during this period of tenure consisted entirely of diamond drilling. Two holes, DDH MY 4 and DDH MY 5 were completed in the Myrtle Basin area and one hole DDH L 1 in the Mt. Lynott area.

B. Downs DDH MY 4 was drilled on Line 6 S, 1200 W (Figure 4, backpocket) to test a gravity anomaly of approximately 1.5 milligals. The hole was terminated at a depth of 137 metres. The following stratigraphic subdivisions have been made:

0 -	3.00 m	Non-core drilling
3.00-	4.90 m	Reward Dolomite
4.90-	19.00 m	Upper Surprise Creek Dolomite
19.00-	22.90 m	Upper Surprise Creek Pyritic Shale
22.90-	43.42 m	Lower Surprise Creek Dolomite
43.42-	85.57 m	Barney Creek Formation
87.57-	125.00 m	Teena Dolomite
125.00-	137.00 m	Mara Dolomite

Detailed logs and assays are presented in the Appendix 1, and Figure 5 (back pocket) provides a summary of the lithologies of DDH MY 4. Split core samples contained low levels of copper, lead and zinc; all samples assaying below 50 ppm Cu, 100 ppm Pb and 80 ppm Zn with two exceptions- a 0.10 metre section of weakly pyritic carbonaceous shale near the top of the Barney Creek Formation assayed 250 ppm Zn and a 0.86 metre section of pyritic shale near the base of the same formation assayed 480 ppm Pb and 0.20% Zn.

Millap DDH L 1 was drilled on a 2 milligal gravity anomaly on the Highway line at 1400 W (Figure 3, back pocket). The hole was terminated at 527.0 m and the following stratigraphic subdivisions have been made:

0 - 9.00 m	Non-core drilling
9.00 - 217.75 m	Lynott Formation (L 4)
217.75 - 260.50 m	" " (L 3)
260.50 - 339.85 m	" " (L 2)
399.85 - 364.05 m	" " (L 1)
364.05 - 369.02 m	Reward Dolomite
369.02 - 377.82 m	? Upper Surprise Creek Dolomite
377.82 - 515.90 m	Barney Creek Formation (including Surprise Creek Pyritic Shale)
515.90 - 519.45 m	Teena Dolomite (T4)
519.45 - 527.00 m	" " (T3)

Detailed lithological descriptions and analytical results are presented in Appendix 2 and a lithocolumn in Figure 6 (back pocket). Maximum assay values obtained averaged 33, 130 and 35 ppm respectively for Cu, Pb and Zn over a 4.88 m section between 359.00 and 363.88 m. A 10 cm interval between 356.03 and 356.13 m and located, as the previous interval, in the Lynott Formation produced 388 ppm Zn. The rest of the sequence produced uniformly low values and average assays for the Barney Creek Formation were 21,43 and 37 ppm for Cu Pb and Zn respectively.

B. Owens DDH MY 5 located at 4.44 S, 2140 W in the Myrtle Basin area (Figure 4, back pocket) was completed to 387.30 m. This hole was designed to test the possible extension of mineralisation to the south and east of DDH Myrtle no 1 which intersected 35.7 m of 0.09% Pb and 0.6% Zn within the Barney Creek Formation.

Stratigraphic subdivisions were made as follows:

0	-	60.39 m	Reward Dolomite (R2)
60.39	-	136.07 m	Reward Dolomite (R1)
136.07	-	187.60 m	Upper Surprise Creek Dolomite
187.60	-	193.15 m	Surprise Creek Pyritic Shale
193.15	-	193.70 m	Lower Surprise Creek Dolomite
193.70	-	323.38 m	Barney Creek Formation
323.38	-	330.66 m	B.C.F. Pyritic Shale
330.66	-	333.54 m	Barney Creek Formation
333.54	-	369.20 m	W-fold shale
369.20	-	387.30 m	Teena Dolomite

A graphic lithocolumn is presented in Figure 7 (back pocket) and detailed lithological descriptions and drilling information are presented in Appendix 3. Drill hole correlations for the Myrtle Basin area are presented in Figure 8 (back pocket).

DDH MY 5 intersected a significant thickness of Barney Creek Formation (233.13 m) and it is evident from the drill hole correlations that drill holes 4 and 1 and to a lesser extent drillhole 3 represent shelf facies close to the edge of the basin with holes 2 and 5 located in the deeper parts of the basin.

Analytical results received after the 6th September, 1981, are also included in Appendix 3.

7.00 CONCLUSIONS

Poor results from DDH L1 has downgraded the potential of the Mt. Lynott portion of the EL.

Information from DDH MY 4 and MY 5 have indicated a thickening of the Barney Creek Formation towards DDH MY 5 and some relatively anomalous analytical results. Despite the small size of the deeper parts of the Myrtle Basin, significant mineralisation may still be located here.

APPENDIX 1

EL 1203, LEILA YARD

DDH MY 4 DETAILED LOGS AND ASSAYS

A.O.(AUSTRALIA) PTY LTD

GEOLOGICAL LOG	Mine Code	Ms Code	Page 1
Mine/Prospect:	Name: MYRTLE DRILL HOLE NO.4		core
Level:	Northing: LINE 6 S	Easting: 1200W	Collar R.L. ground/pipe:
Bearing M/T/G:	Incline:	Length: 137m	Started: / Finished:
Hole/Core size: HQ: NQ: BQ	Intervals assayed:		
Interval	Recov.y	Down Hole Survey - Method:	date: / by: / Logged by:

from	to	length	M/kg	DESCRIPTION
0	3.0			Non core drilling
3.0	4.90	1.90	1.20	Dusky yellow thin to medium bedded dolomitic siltstone and dololutite. Thin (up to 10mm thick), broken or displaced light grey cherty silt bands. Rare conspicuously rounded nodular concretions. Fresher cores occasionally exhibit thin often discontinuous or mildly disrupted laminated shaley dolomite bands. Fe oxide staining and fracture and bedding coatings prominant. Well developed stylolites. C.B.A.70°
4.90	13.60	8.70	8.68	
(4.90	9.10)			Dusky yellow and mottled greyish orange and fresher light grey predominantly thin bedded dolomitic siltstone. Minor thin yellowish orange dololutite bands. Numerous disrupted medium grey thinly laminated and nonlaminated shaley dolomite and dolomite silt as discontinuous strands or microfaulted wavey interbeds. Very minor sandstone. Rare cherty silt bands as above. Stylolites and Fe oxide staining.
(9.10	13.60)			Continuation of above with intermittent thin (up to 10 mm thick) thinly laminated orange brown shaley bands interbedded with medium light grey siltstone. Wavey or poorly bedded medium grey and medium dark grey dolomitic shale or shaley dolomite. Minor light grey and grey coarser grained thin dolomite layers with associated trace pyrite.
13.60	15.60	2.00	2.00	Transitional interval. Medium light grey siltstone (weathering stains as above). Laminated shale component c.f. above, some with well defined bedding margins, and mildly deformed shale strands or laminae less disrupted and more abundant. C.B.A. approx. 75°

A.O.(AUSTRALIA) PTY LTD

GEOLOGICAL LOG	Mine Code	Ms Code	Page 2
Mine/Prospect:	Name:	core	
Level:	Northing:	Easting:	Collar R.L. ground/pipe:
Bearing M/T/G:	Incline:	Length:	Started: / Finished:
Hole/Core size: HQ: NQ: BQ	Intervals assayed:		
Interval	Recov.y	Down Hole Survey - Method:	date: / by: / Logged by:

from	to	length	M/kg.	DESCRIPTION
15.60	19.00	3.40	3.40	Predominantly thin interbedded dolomitic siltstone and dolomitic shale. From 17.50, siltstone/shale commonly ≤ 20mm thick and numerous laminated slightly oxidised shale partings frequent with depth. Light greyish white dolomite bands often streaky or discontinuous or especially towards 19.00 as disrupted discidal masses. Minor associated coarse grained pyrite. Minor slumping and microfaulting evident throughout some interbedded units. CBA 72-74°.
19.00	22.90	3.90	3.77	Medium dark grey laminated moderately pyritic dolomitic carbonaceous shale. Pyrite delicately layered throughout in bands to 100mm thick. Interbedded medium light grey siltstone and minor light grey dolomite and weakly or non-pyritic shale to 5.0mm thick. Siltstone interbeds more abundant near base. Minor small scale slumping and microfaulting. Pyritic laminae exhibit mild plastic deformation with associated poorly bedded dolomite bands. Minor Fe oxidation within thin rare shaley bands and as surface bedding coatings. Pyrite content 20 - 25%: CBA 72°
22.90	26.55	3.65	3.65	Medium light grey and dark grey interbedded dolomitic siltstone and dolomitic shale. Thin poorly bedded commonly disrupted light grey dolomite and rare probable dolomite/tuff bands. Bedding throughout plastically deformed or slumped and some contortion near base. Occasional ?dolarenite or light grey laminated or thin bedded dolomite bands or disrupted masses enclosing broken fragments or 1.0 - 2.0mm thick 'lathes' - ?flakes of medium dark grey dolomitic shale. Minor sparsely disseminated and coarser grained or rare < 2.0mm thick discrete pyrite bands - content < 2% C.B.A. 72o

A.O.(AUSTRALIA) PTY LTD

GEOLOGICAL LOG	Mine Code	Ms Code	Page 3
Mine/Prospect:	Name:	core	
Level:	Northing:	Easting:	Collar R.L. ground/pipe:
Bearing M/T/G:	Incline:	Length:	Started: / Finished:
Hole/Core size: HQ: NQ: BQ	Intervals assayed:		
Down Hole Survey - Method:	date:	by:	Logged by:

Interval from	Interval to	length	Recov.y M/kg	DESCRIPTION
26.55	43.15	16.60	16.56	
(26.55	27.30)			
				Poorly bedded interbedded light to medium grey dolomitic siltstone and laminated silty dolomite. Bedding commonly disrupted. Minor ?dolarenite breccia - broken fragments and large shale 'flakes' c.f. above and thin contorted dolomitic shale bands. Minor fine fractures or recrystallized dolomite veining.
(27.30	43.15)			Light grey to medium grey dolomitic siltstone and interbedded very light grey silty dololutite. Regular thin laminated shaley dolomite and medium dark grey very weakly pyritic dolomitic shale approx. spaced every 20-44mm and up to 5mm thick. Vague evidence of grading through some intervals. Coarser grained silty dolomite (probable dolomite/tuff stringers) or thin slightly disrupted layers or strands evident throughout. Rare brecciated intervals exhibit larger shale fragments or broken thin beds aligned parallel to bedding. Stylolites common along bedding outlined in pyritic carbonaceous material. Larger fractures prominent especially towards the base, and infilled with white crystalline dolomite. Minor pyrite blebs and fracture coatings. Trace recrystallized sphalerite. CBA 71-76°.
43.15	43.42	0.27	0.27	Planar fracture 45° CBA sharply delineates this interval from above. Minor associated Fe oxide staining and weathering of fracture margins. Abundant recrystallized dolomite filled fractures and veining in brecciated and/or disrupted medium grey dolomite. Thin contorted dark grey shale bands or clasts, very pale pinkish greenish grey cherty dolomite/tuff and siltstone bands. Minor sand-

A.O. (AUSTRALIA) PTY LTD

GEOLOGICAL LOG	Mine Code	Ms Code	Page 4
Mine/Prospect:	Name:	core	
Level:	Northing:	Easting:	Collar R.L. ground/pipe:
Bearing M/T/G:	Incline:	Length:	Started: / Finished:
Hole/Core size: HQ: NQ: BQ	Intervals assayed:		
Interval	Recov.y	Down Hole Survey - Method:	date: / by: / Logged by:

from	to	length	M/kg.	DESCRIPTION
43.15	43.42	0.27	0.27 (Contd.)	dolarenite matrix. Minor pyrite as blebs or coarse grained aggregates
43.42	45.92	2.50	2.50	Medium dark and dark grey interbedded weakly pyritic dolomitic and carbonaceous shale and medium grey tuffaceous siltstone with fine spindle laminations, up to 100mm thick. Grading occasionally evident with graded tuffaceous siltstone units as based or near basal components. Numerous light greenish grey and occasionally pinkish grey laminated cherty dolomite/ tuff bands and thin stringers interlaminated with tuffaceous siltstone and dark grey shale. Dolomite/tuff in bands from 2.0mm to 40.0mm thick often exhibiting some disruption or upper and lower bedding boundaries sharply terminated. Principle Dolomite/tuff bands or composite clusters recognised between 44.13 - 44.19; 45.25 - 45.31 and 46.15 - 46.21. Minor coarse grained pyrite and rare sphalerite specks evident within tuff component.
45.92	50.13	4.21	3.68	
(45.92	47.97)			Continuation of above with only minor pale pink/greenish cherty dolomite/tuff bands and stringers. Prominent tuffaceous siltstone evident between 47.59 - 47.97, vaguely graded with coarse light and grey spindle laminations. Thin ≤ 10.0mm band comprising small bedded 'oolitic' carbonate granules at 46.19. Trace associated sphalerite. CBA 70°

A.O.(AUSTRALIA) PTY LTD

GEOLOGICAL LOG	Mine Code	Ms Code	Page 5
Mine/Prospect:	Name:	core	
Level:	Northing:	Easting:	Collar R.L. ground/pipe:
Bearing M/T/G:	Incline:	Length:	Started: / Finished:
Hole/Core size: HQ: NQ: BQ	Intervals assayed:		

Interval from	Interval to	length	Recov.y M/kg	Down Hole Survey - Method: / date: / by: / Logged by: — DESCRIPTION
(47.97	50.13)			(END OF NQ CORE 48.20)
				Medium dark grey weakly pyritic silty dolomitic shale and thin interbedded tuffaceous siltstone with fine spindle laminations. Rare thin (≤ 10mm) pyritic carbonaceous shale bands. Minor pyrite blebs and dolomite fracture fills. Trace sphalerite
50.13	60.90	10.77	10.85	
(50.13	52.50)			Medium grey and medium dark grey thinly interbedded silty shale and weakly pyritic dolomitic shale, interbedded or grading to coarser tuffaceous siltstone with find spindle laminations.
				Conspicuous light and grey interlaminated coarse textured dolomite bands commonly < 3.0mm but up to 100mm thick. Bedding units predominantly thinner and better defined with depth.
				Moderately fractured throughout. Abundant crystalline dolomite veeining and fill with black pitch between 50.55 - 75. Trace sphalerite associated with fractures. Well developed stylolite normal to bedding between 51.30 - 50.
(52.50	59.00)			Continuation of above with light/grey dolomite bands remaining as frequent but with increasing depth becoming streaky or poorly defined.
				Tuffaceous siltstone less predominant and interval darker grey towards 59.00
				Well developed stylolite normal to bedding between 55.00 - 55.55.
				Sphalerite as microscopic grains within coarser textured light coloured dolomite (3.0mm) band at 54.55 and rare discrete crystalline band (1.0mm thick) at 57.57. Minor pyrite as blebs within shale component or coarser grained clots associated with fractures
				CBA 63 - 700.

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GEOLOGICAL LOG	Mine Code	Ms Code	Page 6
Mine/Prospect:	Name:	core	
Level:	Northing:	Easting:	Collar R.L. ground/pipe:
Bearing M/T/G:	Incline:	Length:	Started: / Finished:
Hole/Core size: HQ: NQ: BQ	Intervals assayed:		
Interval	Recov.y	Down Hole Survey - Method:	date: / by: / Logged by:

from	to	length	M/kg	DESCRIPTION
(59.00	60.90)			Continuation of above. Moderate to abundant fracturing and dolomite veining to 60.20. Slickenside slip surfaces common. Two thin (10-20mm) brecciated (sedimentary) bands at 59.93 and 60.77. Small shale fragments in pale greenish grey mudstone/?tuff matrix. Rare pyritic rich laminae.
(60.90	63.10	2.20	2.20	Medium grey and medium dark grey thin bedded tuffaceous siltstone. Thin interbedded and interlaminated light grey or very pale greenish grey dolomite bands (possibly with tuffaceous component), up to 20mm thick. Minor silty or dolomitic shale. Thin light grey white coarse textured dolomite stringers less abundant than above Minor post consolidation fracturing and microfaulting. CBA 75-76°.
63.10	64.07	0.97	0.95	Medium grey coarse textured silty dolarenite. Poorly interbedded silty shale and tuffaceous siltstone. Light greystreaky thin dolomite stringers or laminae. Interval mildly fractured and bedding mildly disrupted. Recrystallized sphalerite as minor small clots. Coarse crystalline pyrite blebs occasionally evident.
64.07	76.87	12.80	12.75	Medium grey tuffaceous siltstone with fine spindle laminations as thin bedded regular units (commonly 0.5 - 2.0 cm thick). Numerous thin light grey, medium grey or rarely bluish/greenish grey interbedded shaley siltstone or rare tuffaceous mudstone (5-10mm). Grading sometimes evident with lighter interbeds without laminations, grading to spindle laminated tuffaceous siltstone. Often slightly coarser textured and darker grey towards the base. Minor dark grey shale bands. Fine dilation cracks occasionally evident. Bedding regularity often interrupted by fragment small scale slumping/microfaulting, and rarer stylolitic or white crystalline dolomite filled fractures. Minor pyrite as sparse grains or fracture and bedding

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GEOLOGICAL LOG	Mine Code	Ms Code	Page 7
Mine/Prospect:	Name:	core	
Level:	Northing:	Easting:	Collar R.L. ground/pipe:
Bearing M/T/G:	Incline:	Length:	Started: / Finished:
Hole/Core size: HQ: NQ: BQ	Intervals assayed:		
Down Hole Survey - Method:	date:	by:	Logged by:

Interval from	Interval to	Interval length	Recov.y M/kg	DESCRIPTION
64.07	76.87	12.80	12.75 (contd)	coatings. Trace sphalerite. Prominant fracturing and solution collapse breccia between 68.40 - 68.70. CBA variable 78°.
76.87	83.82	6.95	6.92	Short gradational zone over 0.30m, from above, to predominantly medium dark grey dolomitic carbonaceous shale. Thin (<1-2mm) disrupted, slumped, and microfaulted lighter grey and blue grey mudstone c.f. above; commonly contorted/plastically deformed thin discontinuous and crumbled bands. Tuffaceous siltstone less distinct than above interval but evident throughout some sections. Bedding and laminations only rarely with well defined upper and lower margins. Rare thin soft greenish mudstone (?tuff) bands or interlaminated with dark grey shale - most prominent approx 20mm thick, with shale component at 77.86. Distinctive (30 mm) breccia at 78.37 with pyritic contorted greenish mudstone laminae/ matrix and small mudstone/shale fragments. Trace recrystallized sphalerite no fracture and vein infill associated recrystallized dolomite. C.B.A. 70-75° : 42° between 77.63 - 78.39.
83.82	85.57	1.75	1.75	Thin interbedded dark grey moderately pyritic carbonaceous shale and very weakly pyritic shale. Bedding invariably disrupted with microfaulted and minor slump thickened pyritic shale interbeds. Pyrite rich bands exhibiting marked decrease in pyrite content from 84.70 to base. Pyrite content 15-20% between 83.82 - 84.70. Pyritic shale interbeds delicately laminated or as fine discontinuous wisps. Minute discoidal or spindles of pyrite poor laminae with appearance of dark grey shale flecks. Interbedded weakly pyritic shale containing only sparsely fine disseminated pyrite (contd.

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GEOLOGICAL LOG	Mine Code	Ms Code	Page 8
Mine/Prospect:	Name:	core	
Level:	Northing:	Easting:	Collar R.L. ground/pipe:
Bearing M/T/G:	Incline:	Length:	Started: / Finished:
Hole/Core size: HQ: NQ: BQ	Intervals assayed:		

Interval			Recov.y	Down Hole Survey - Method:	date:	by:	Logged by:
from	to	length	M/kg	DESCRIPTION			
83.82	85.57	1.75	1.75	throughout. Minor fracturing and trace sphalerite variable CBA 50-65°.			
85.87	94.40	8.83	(contd) 8.90				
(85.57	86.05)			Greyish green to dusky green thinly bedded tuffaceous mudstone. Thin medium grey and			
				pale pink laminated shale and tuffaceous dolomite interbeds - often as undulating,			
				nodular or boudinage bedded components. Minor soft crumbly yellowish green bands.			
				Occasional large concretionary pyrite bodies up to 3 cm long.			
(86.05	87.50)			Very pale grenish pink dolomite/tuff with associated medium dark grey staining or			
				speckled mottling. Nodular bedding. Plastically deformed pale greyish green			
				mudstone/?tuff interbeds.			
(87.50	87.85)			Continuation of above but broken core with pale pinkish dolomite/tuff as contorted/			
				brecciated clasts and nodular bands within pale greenish and light buff or yellowish			
				mudstone/tuff. Rare medium dark grey shaley contorted plastic matrix or laminated			
				disrupted interbeds to 50mm. Minor coarse grained pyrite.			
(87.85	94.40)			Mudstone/?tuff : 20mm, 94.40; 10mm, 93.84; 10mm, 93.04; 50mm, 93.75; 70mm, 89.95;			
				10mm, 89.00; 70mm, 87.85: and matrix between 88.60 - 88.90, 88.20 - 88.40.			
				Very light pinkish grey, brownish pink and light grey thin bedded finely fractured			
				dolomite/tuff. Occasional thin brecciated zones and thin disrupted greyish green and			
				grey interbedded, laminated wavey mudstone and shale or as matrix. Some boudinage			
				style bedding.			
				From approximately 91.50 - 94.40, mudstone less abundant and gradational to typically			
				thin wavey or stylolitic bedding. CBA variable 70-80°			

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GEOLOGICAL LOG	Mine Code	Ms Code	Page 9
Mine/Prospect:	Name:		core
Level:	Northing:	Easting:	Collar R.L. ground/pipe:
Bearing M/T/G:	Incline:	Length:	Started: / Finished:
Hole/Core size: HQ: NQ: BQ	Intervals assayed:		
Interval	Recov.y	Down Hole Survey - Method:	date: / by: / Logged by:

from	to	length	M/kg	DESCRIPTION
94.40	97.02	2.62	2.62	Medium grey thin bedded coarse granular dolomitic siltstone or silty arenite and thinly laminated/interbedded medium dark grey - brown shale. Numerous thin (≤ 50mm) pale pink, white nonlaminated dolomite/tuff bands. Minor coarse grained pyrite. Rare stylolites. CBA 65-68°
97.02	101.60	4.58	4.60	Light and medium grey and greyish pink crystalline dolomite. Thin crinkled, light grey brown and dark grey shaley interbeds and non-laminated more massive mottled pinkish and grey bands with abundant radiating pseudomorphs after gypsum. Moderately fractured and rare solution collapse brecciated zones, viz., between 98.91 - 99.01. Frequent stylolites outlined or infilled with brownish or dark grey shale or mudstone. Crystalline dolomite filled cavities. Minor pitch.
101.60	102.92	1.32	1.32	Medium dark grey laminated shale as beds up to 100mm thick or matrix - pink/brown tuff clasts. Remainder medium grey dolomitic siltstone - numerous thin to medium pinkish dolomite and dolomite/tuff bands c.f. 94.40 - 97.02. Minor pyrite and sphalerite. Rare stylolites.
102.92	114.72	11.80	11.20	c.f. 97.02 - 101.60 above. Frequent light grey, medium grey mottled crystalline dolomite bands with radiating pseudomorphs often gypsum less abundant from 110.00 and very rare near the base. Thin bedded laminated dark grey, pinkish brown interbeds up to 15 cm, and grey coarse textured siltstone as in 94.40 - 97.02 above. Bedding laminae commonly plastically deformed if gypsum pseudomorphs developing in adjacent underlying beds. Large crystalline dolomite lined cavities between 103.35 - 60. Stylolites infilled by weakly pyritic carbonaceous mud. Small spherical bitumen (contd)

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GEOLOGICAL LOG	Mine Code	Ms Code	Page 10
Mine/Prospect:	Name:		core
Level:	Northing:	Easting:	Collar R.L. ground/pipe:
Bearing M/T/G:	Incline:	Length:	Started: / Finished:
Hole/Core size: HQ: NQ: BQ	Intervals assayed:		
Down Hole Survey - Method:	date:	by:	Logged by:

Interval from	Interval to	Interval length	Recov.y M/kg.	DESCRIPTION
102.92	114.72	11.80	11.20 (contd)	globules occasionally with platey crystalline habit. Occasional mudstone/tuff and white cherty fine grained dolomite/tuff bands to 30mm.
114.72	125.00	10.28	10.20	Medium light grey and medium grey dolomitic siltstone and laminated to thin bedded commonly brecciated or disrupted light grey dolomite. Rare medium dark grey tuffaceous siltstone and laminated dolomitic shale. Numerous intervals laminated to thin wavey bedded pale greyish green or light brownish grey shale/mudstone. Rare 'ptygmatic' mudcrack structures. From 115.70 thin sandy and sandy dolarenite lenses - most distinctive between 121.45 - 50. Stylolites CBA 60°.
125.00	128.50	3.50	3.50	Predominantly medium light grey and light grey laminated stromatolitic dolomite - algal laminae often distorted or as flat slightly raised types. Probable larger *Conophyton* stromatolites evident. Laminations weaker towards the base and stromatolites possibly extend only to 127.00. Medium grey and light grey ?dolomite/tuff and tuffaceous siltstone from 127.00. Rare small blebs sphalerite.
128.50	137.00	8.50	8.50	Light and medium grey thin bedded or laminated cherty dolomite and dolomitic siltstone. Laminations commonly outlined as fine undulating shale or shaley filled stylolites. More massive beds appear mildly mottled with small very light grey 'ghost' dolomite clasts. Thin discontinuous contorted light grey or white ?replacement bodies - occasional sparry crystalline cores. Beds up to 1.0m thick. Trace galena 135.10 CBA approx. 60°.
				END OF HOLE 137.00m

GEOCHEMISTRY AND DENSITY VALUES - MYRTLE 4

SPLIT CORE SAMPLE

Interval (metres)	Cu ppm	Pb ppm	Zn ppm
4.65 - 4.75	10	50	70
11.91 - 12.01	20	60	30
17.04 - 17.17	10	55	20
21.09 - 21.11	20	90	25
29.65 - 29.74	10	60	40
44.33 - 44.43	30	80	250
52.18 - 52.28	15	70	20
61.18 - 61.27	10	60	50
66.03 - 66.12	15	70	45
74.87 - 74.96	20	50	20
83.84 - 84.70	50	480	0.20%
87.37 - 87.46	10	45	15
97.25 - 97.36	10	60	15
115.97 - 116.05	5	70	10
136.12 - 136.23	5	60	15

DENSITY VALUES

Split Core Interval (metres)	Density g/cm^3
4.65 - 4.75	2.72
11.91 - 12.01	2.68
17.04 - 17.17	2.74
21.09 - 21.11	2.95
29.65 - 29.74	2.64
44.33 - 44.43	2.63
52.18 - 52.28	2.73
61.18 - 61.27	2.67
66.03 - 66.12	2.83
74.87 - 74.96	2.63
83.84 - 84.70	not determined
87.37 - 87.46	2.50
97.25 - 97.36	2.74
115.97 - 116.05	2.81
136.12 - 136.23	2.80

APPENDIX 2

EL 1203, LEILA YARD

DDH L1 DETAILED LOGS AND ASSAYS

DRILL HOLE: Leila D.D.H. No. 1

LOCATION: Highway Line/ 1400S - E.L. 1203

OBJECTIVE: To test an unclosed positive gravity anomaly. (approx. amplitude 2.0 milligals).

FINAL DEPTH: 527.00 metres

CORE RECOVERY: 100%

STRATIGRAPHY:

	0 - 9.0m	Non-core drilling
	9.0 - 217.75m	Lynott Formation L_4
	217.75 - 260.50m	" " L_3
	260.50 - 339.85m	" " L_2
	339.85 - 364.05m	" " L_1
?Reward Dolomite	(364.05 - 369.02m	Reward Dolomite
	(369.02 - 377.82m	?Upper Surprise Creek Dolomite
	377.82 - 515.90m	Barney Creek Formation (?incl. Surprise Ck. Pyritic Shale)
	515.90 - 519.45m	Teena Dolomite T_4
	519.45 - 527.00m	" " T_3

GEOCHEMISTRY:

D.D.H. L_1	Interval			Cu	Pb	Zn	Strat.
8900	326.86	-	326.96	41	70	47	L_2
8901	344.64	-	344.74	29	52	97	L_1
8902	347.85	-	347.94	23	62	34	L_1
8903	352.44	-	352.53	19	65	32	L_1
8904	356.03	-	356.13	20	45	388	L_1
8905	359.00	-	360.00	34	138	46	L_1
8906	360.00	-	361.00	33	137	39	L_1
8907	363.78	-	363.88	31	116	20	L_1
8908	367.21	-	367.31	8	51	15	Reward
8909	375.82	-	375.92	16	41	24	Upper Surprise Ck. Dol.
8910	380.88	-	380.99	28	37	31	B.C.F.
8911	407.24	-	407.33	16	34	40	B.C.F.
8912	427.88	-	428.00	17	51	58	B.C.F.
8913	451.90	-	452.00	16	38	32	B.C.F.
8914	476.12	-	476.22	22	57	32	B.C.F.
8915	497.00	-	497.12	26	38	27	B.C.F.
8916	497.96	-	498.07	not assayed			B.C.F.
8917	499.03	-	499.14	29	47	136	B.C.F.
8918	500.46	-	500.56	35	72	67	B.C.F.
8919	501.76	-	501.86	29	46	87	B.C.F.
8920	514.30	-	514.40	20	26	23	B.C.F.

A.O.(AUSTRALIA) PTY LTD

GEOLOGICAL LOG	Mine Code	Ms Code	Page 1
Mine/Prospect:	Name: LEILA NO. I	core	
Level:	Northing: 1400S	Easting: HIGHWAY LINE	Collar R.L. ground/pipe:
Bearing M/T/G:	Incline:	Length:	Started: / Finished:
Hole/Core size: HQ: NQ: BQ	Intervals assayed:		

Interval			Recov.y	Down Hole Survey - Method:	date:	by:	Logged by:
from	to	length	M/kg	DESCRIPTION			
0	9.0			Non-core drilling			
9.0	11.80	2.80		Pale yellowish orange thin bedded siliceous/and greyish green sandy siltstone dolomite.			
				Abundant small cherty and secondary silica blebs. Shaley green mudstone bands			
				especially near base. Manganese dendrites.			
				C.B.A. 70°			
11.80	12.10	.30		Pale yellow weathered siltstone. Rare carbonate lined cavities and grey			
				chert concretions.			
12.10	13.00	.90		Partially weathered siliceous thin poorly bedded greyish green mudstone and pale			
				pinkish siltstone and cherty siltstone. Severely leached sections porous			
				and dark yellow. Manganese mottling and staining.			
13.00	13.12	.12		Interbedded laminated medium dark grey shaley dolomite or shale and light			
				grey dololutite. ? mudcracks			
				C.B.A. 74°			
13.12	15.10	1.98		Pale yellowish pink leached mottled quartz siltstone. Frequent coarse grained			
				quartz sand components as disrupted clumps or isolated grains throughout. c.f.9.0 - 11.8			
15.10	16.70	1.60		Greyish green poorly bedded 'muddy' siltstone. Occasional thin discontinuous			
				silty or fine sandy bands. Rare shaley mudstone and coarse sandstone near base.			
				Between 15.80 - 16.00, conspicuous white crystalline rounded dolomite nodules			
				to 30mm across; Uncut surface reminiscent of 'cauliflour chert nodules'.			
				C.B.A. 70°			
16.70	17.38	.60		Greyish green thinly laminated (? algal) mudstone. Brownish cherty interlaminae.			
				Poorly interbedded pale orange siltstone. Mudcracks. Small halite casts on bedding			

A.O.(AUSTRALIA) PTY LTD

GEOLOGICAL LOG	Mine Code	Ms Code	Page 2.
line/Prospect:	Name: LEILA NO. 1		core
evel:	Northing: 1400S	Easting: HIGHWAY LINE	Collar R.L. ground/pipe:
earing M/T/G:	Incline:	Length:	Started: / Finished:
ole/Core size: HQ: NQ: BQ	Intervals assayed:		

Interval			Recov.y	Down Hole Survey - Method:	date:	by:	Logged by:
rom	to	length	M/kg	DESCRIPTION			
				surfaces and rare cherty micro-'cauliflour' nodules evident especially between			
				16.70 - 16.85.			
17.38	17.88	.50		Medium dark grey laminated shaley dolomite, dolomitic shale and thinly interbedded			
				medium grey siltstone. Probable algal laminations. Poorly bedded white/grey oolitic			
				carbonate lenses at base.			
17.88	19.60	1.72		Medium light grey thin poorly bedded dolomitic siltstone. Occasional thin (< 2mm)			
				laminated wavey shaley bands.			
				C.B.A. 75°			
19.60	20.00	.40		Medium light grey dolomitic sandstone and siltstone.			
20.00	21.15	1.15		Medium light grey and light grey to light greenish grey siltstone and interbedded			
				dololutite.Minor medium grey shaley siltstone bands. Minor intraformational brecciation.			
				Small cherty and secondary silica blebs.			
21.15	21.70	.55		Medium dark grey dolomitic shale and thinly laminated shaley dolomite. Thin			
				interbedded tuffaceous siltstone and light grey dololutite. Deformed dolarenite or			
				sandstone bands.			
21.70	23.40	1.70		c.f. 200.0 - 21.15			
				Frequent flake breccia with either disconnected shale laminae or greyish green (?)			
				mudstone in siltstone matrix. Minor dolarenite. Trace pyrite. Minor fracturing.			
23.40	25.05	1.65		Light greenish grey coarse textured siltstone and thin to medium bedded greenish			
				grey mudstone. (up to 50mm). Bands to 300mm of thinly ? algal laminated medium			
				dark grey shaley dolomite or shale. Light grey dolomite bands. Disrupted bedding			
				and brecciation common. Stellate crystalline carbonate structures (? pseudomorphs)			

A.O.(AUSTRALIA) PTY LTD

GEOLOGICAL LOG				Mine Code	Ms Code	Page 3
Line/Prospect:		Name: LEILA NO. 1			core	
Level:	Northing: 1400S		Easting: HIGHWAY LINE		Collar R.L. ground/pipe:	
Bearing M/T/G:		Incline:	Length:		Started:	Finished:
Hole/Core size: HQ:		NQ:	BQ	Intervals assayed:		

Interval			Recov.y	Down Hole Survey - Method:	date:	by:	Logged by:
From	to	length	M/kg	DESCRIPTION			
				within basal 200mm.			
25.05	28.40	3.35		Very light pinkish grey and yellowish thin bedded silty dolomite, medium grey			
				siltstone and shaley dolomite. Irregular sandy clusters or lenses common.			
				Minor recrystallized dolomite veining and cavity fill. Greenish and yellow			
				weathering stains evident.			
				C.B.A. 74°			
28.40	29.80	1.40		Thin bedded medium dark grey and medium grey laminated dolomitic shale and			
				shaley tuffaceous siltstone. Interbedded light greenish grey mudstone and silty			
				dololutite up to 200mm. Minor dolarenite. Stylolites and probable mudcracks evident.			
				Minor coarse grained pyrite associated with fractures.			
29.80	36.05	6.25		Thin poorly bedded light grey and medium grey fine and course siltstone. Bedding			
				invariably wavery or nodular. Laminated shaley dolomite bands to 3mm. Minor medium			
				dark grey dolomitic shale and light greenish grey mudstone - dololutite. Frequent			
				medium coarse grained to fine grained sandstone bands. Small secondary silica blebs			
				evident throughout some bands. Intraformational brecciation common.			
				C.B.A. 75°			
				END OF NQ CORE 33.30			
36.05	37.60	1.55		Interbedded greyish green/pinkish brown mudstone on 'muddy' dolomite and medium dark			
				grey thinly laminated and thinbedded dolomitic shale and siltstone. Minor shaley and			
				coarse sandy dolarenite. Shaley intervals commonly wavey and disrupted. Pyrite as			
				solid fracture fill over 400mm.			

A.O.(AUSTRALIA) PTY LTD

GEOLOGICAL LOG	Mine Code	Ms Code	Page 4.
Line/Prospect:	Name: LEILA NO. 1		core
Level:	Northing: 1400S	Easting: HIGHWAY LINE	Collar R.L. ground/pipe:
Bearing M/T/G:	Incline:	Length:	Started: / Finished:
Hole/Core size: HQ: NQ: BQ	Intervals assayed:		

Interval			Recov.y	Down Hole Survey - Method:	date:	by:	Logged by:
From	to	length	M/kg	DESCRIPTION			
37.60	41.12	3.52		Medium and light grey thin wavey bedded fine and coarse siltstone. Minor fine			
				and coarse sandstone and contorted medium dark grey and grey ? tuffaceous siltstone.			
				Minor crystalline dolomite veining and stylolites. Patchy dark yellow weathering/			
				dendrites and minor Fe-oxide surface coatings.			
41.12	45.90	4.78		Pale greyish green and light grey 'muddy' siltstone and laminated thin bedded medium			
				dark grey shaley dolomite and tuffaceous siltstone. Minor dolomitic shale. Light grey			
				dolomite bands to 0.20m exhibit numerous incipient fractures and occasional fine			
				shale flakes. Rare oolitic carbonate bands. Fe-oxide staining and fracture			
				coatings frequent especially with increasing depth.			
45.90	46.88	.98		Medium light grey or slightly weathered yellow mottled siltstone. Minor medium			
				coarse grained sandy bands to 50mm thick. Rare stylolites.			
				C.B.A. 72°			
46.88	47.70	.82		Pale Yellowish grey siltstone. Rare rounded grey cherty concretions. Abundant Fe-oxide			
				stained crystalline carbonate filled fractures. Basal 0.20m brecciated.			
47.70	53.00	5.30		Light grey and medium grey poorly bedded siltstone. Beds up to 0.30m apparently			
				structureless - associated minor silica blebs. Occasional intervals exhibit thin			
				bedded fine and coarse siltstone and interbedded very light pinkish grey dololutite			
				towards the base. Minor laminated medium dark-grey shaley siltstone and dolomitic			
				shale. Rarely well defined thin coarse grained sandstone bands. Disrupted bedding			
				and brecciation evident.			
53.00	53.50	3.50		Thin bedded interlaminated medium dark grey dolomitic shale and light grey siltstone			
				and dololutite. Rare stylolites. 600mm dolarenite and thin shale interbeds at			

A.O.(AUSTRALIA) PTY LTD

GEOLOGICAL LOG | Mine Code | Ms Code | Page 5.

Line/Prospect: | Name: LEILA NO. 1 | core

Level: | Northing: 1400S | Easting: HIGHWAY LINE | Collar R.L. ground/pipe:

Bearing M/T/G: | Incline: | Length: | Started: | Finished:

Hole/Core size: HQ: NQ: BQ | Intervals assayed:

Down Hole Survey - Method: | date: | by: | Logged by:

Interval			Recov.y	DESCRIPTION
from	to	length	M/kg	
				base. Minor pyrite blebs.
53.50	54.85	1.35		Light grey and medium grey predominantly thin - bedded siltstone.
				Coarse siltstone or very fine sandstone interbeds and occasional
				medium coarse sandstone bands to 500mm. Minor yellowish white
				silica and calcite blebs and layers.
54.85	55.50	.65		Medium grey siltstone and light pinkish brown thin-bedded
				dololutite with fractured bands of thin bedded medium dark grey
				dolomitic shale/shaley dolomite. Abundant 'ptygmatic' vein
				structures (? mudcracks)
55.50	60.75	5.25		Predominately medium light grey siltstone or silty dololutite with abundant
				grey coloured hairline cracks. Thin interbedded and laminated light grey dolomite and
				medium dark grey shaley dolomite. Large stylolitic fractures. 'Ptygmatic' vein
				or mudcrack structures. Towards the base cherty dolomite often with brownish
				incipient nodules or sandy chert bands. Numerous sandstone/dolarenite bands or
				clusters. Minor flat laminated stromatolitic cherty dolomite.
60.75	61.15	.40		Fine to medium coarse sandstone. Discontinuous or discoidal shaped light grey
				dololutite interbeds or lenses.
61.15	61.95	.80		Light grey siltstone interbedded and thinly inter-laminated with medium grey/dark grey

A.O.(AUSTRALIA) PTY LTD

GEOLOGICAL LOG	Mine Code	Ms Code	Page 6.
line/Prospect:	Name: LEILA NO. 1	core	
evel:	Northing: 1400S	Easting: HIGHWAY LINE	Collar R.L. ground/pipe:
earing M/T/G:	Incline:	Length:	Started: / Finished:
ole/Core size: HQ: NQ: BQ	Intervals assayed:		

Interval			Recov.y	Down Hole Survey - Method:	date:	by:	Logged by:
rom	to	length	M/kg	DESCRIPTION			
				shaley dolomite. Minor dark grey shale, shaley and sandy chert. Probable algal			
				laminae present. Oolitic carbonate bands near base.			
				C.B.A. 72°			
61.95	63.12	1.17		Very light grey and medium light grey thin poorly bedded siltstone and cherty dolomite.			
				Thin brecciated and disrupted bands. Stylolites.			
63.12	63.74	.62		Medium grey silty dolomite and medium dark grey shaley dolomite or dark grey			
				stromatolitic cherty dolomite. Abundant secondary silica blebs and characteristic			
				'ptygmatic' vein or mudcrack structures evident.			
63.74	64.42	.68		Light to medium grey laminated to thin bedded cherty dolomite, silty dololutite			
				and shaley dolomite. Bedding wavey and often nodular. Minor intraformational			
				brecciation. Large well developed stylolites outlined in dark, grey shaley			
				material. Dolomite/quartz 'cauliflour' concretions. Minor pitch. Rare coarse			
				grained pyrite aggregates.			
64.42	66.05	1.63		Light grey laminated siltstone and medium coarse grained and fine grained			
				sandstone bands especially prominent over 0.50m. Minor dololutite and Fe-oxide			
				fracture coatings.			
66.05	67.62	1.57		Thin interbedded light grey dololutite and laminated medium dark to dark grey sandy			
				or silty cherty shale. Rare algal laminations. Shale components increasing towards			
				the base with characteristic 'ptygmatic' white crystalline carbonate veining.			
				C.B.A. 72-75°			

A.O.(AUSTRALIA) PTY LTD

GEOLOGICAL LOG	Mine Code	Ms Code	Page 7.
Line/Prospect:	Name: LEILA NO. 1	core	
Level:	Northing: 1400S	Easting: HIGHWAY LINE	Collar R.L. ground/pipe:
Bearing M/T/G:	Incline:	Length:	Started: / Finished:
Hole/Core size: HQ: NQ: BQ	Intervals assayed:		

Interval			Recov.y	Down Hole Survey - Method:	date:	by:	Logged by:
from	to	length	M/kg	DESCRIPTION			
67.62	71.00	3.38		Light brownish grey thin bedded cherty dolomite with frequent medium dark grey laminated shaley and stromatolitic cherty dolomite. Abundant contorted laminae with distinctive siliceous and white carbonate blebs. Fe-oxide fracture coatings between 67.60 - 68.60			
71.00	72.20	1.20		Light grey dolomite. Minor coarse grained sandstone and cherty dolomite.			
72.20	74.95	2.72		Light grey and greenish grey medium bedded dolomite. Thin interbeds of laminated medium grey and dark grey and brownish cherty dolomite. Dark grey cherty shale dominant from approx. 74.00. Laminated stromatolitic cherty bands. Conspicuous ptygmatic veining and silica blebs. Minor oolitic carbonate bands and mudstone.			
74.95	76.45	1.50		Light and medium grey thinbedded and inter-laminated dolomite and shaley dolomite. Minor thin algal bands.			
76.45	77.26	.81		Minor dark grey algal laminated shaley dolomite. Remainder medium grey cherty dolomite. Rare brownish ? sandy chert concretions or nodules. Minor dolarenite.			
77.26	79.23	1.97		Light grey cherty dolomite. Pale greyish green mudstone and siltstone with interbedded grey algal laminated bands.			
79.23	79.90	.67		Dark brownish grey ? sandy stromatolitic cherty dolomite.			
79.90	81.30	1.40		Light grey or pale pinkish grey laminated and non-laminated dolomite and minor green mudstone. Distinctive coarse grained sandstone clumps and bands to 80.40. C.B.A. 75°			
81.30	82.35	1.05		Thin bedded and laminated light grey dolomite and interlaminated medium dark grey shaley cherty dolomite and dolomitic shale. Minor laminated stromatolitic (? conophyton) chert. Conspicuous 'ptygmatic' dolomite veining.			

A.O.(AUSTRALIA) PTY LTD

GEOLOGICAL LOG				Mine Code	Ms Code	Page 8
Line/Prospect:		Name: LEILA NO. 1			core	
Level:	Northing: 1400S	Easting: HIGHWAY LINE		Collar R.L. ground/pipe:		
Bearing M/T/G:		Incline:	Length:	Started:		Finished:
Hole/Core size: HQ:		NQ:	BQ	Intervals assayed:		

Interval			Recov.y	Down Hole Survey - Method:	date:	by:	Logged by:
From	to	length	M/kg	DESCRIPTION			
82.35	85.67	3.32		Very light yellowish, pinkish and greenish grey thin bedded dololutite, 'muddy' siltstone and cherty dolomite and interbedded medium grey siltstone. Sandstone clumps and bands common throughout and up to .30m thick.			
85.67	86.50	.83		Transitional from above to predominatelv medium dark grey and grey laminated often contorted stromatolitic cherty dolomite. Intermittent light greenish grey siltstone bands.			
86.50	89.55	3.05		Light grey dolomitic siltstone with occasional contorted algal laminations and interlaminated yellowish siliceous bands. Rare incipient nodular cherty dolomite. Thin bedded shaley mudstone and siltstone towards the base. Frequent coarse grained sandy dolomite bands.			
89.55	90.96	1.41		Medium dark grey dolomitic shale and dark brownish grey sandy or silty laminated stromatolitic chert. Disrupted light grey dolomite bands common. Minor oolitic carbonate bands.			
90.96	91.94	.98		Light grey/medium grey poorly bedded dolomitic siltstone. Minor coarse grained sandy dolomite, intraformational breccia and dolarenite bands evident. Stylolites.			
91.94	93.50	1.56		Medium grey cherty dolomite and siltstone. Medium dark grey and dark grey weakly pyritic dolomitic shale and thin interbedded light grey dolomite. Disrupted bedding and minor silica replacement. Minor recognisable algal laminations.			
93.50	100.28	6.73		Light grey and pale pinkish brown/green, siltstone and cherty dolomite. Conspicuous laminated pale cream and grey stromatolitic cherty dolomite between 98.21 - 98.48. Sandstone (medium coarse) slightly more frequent towards the base and continuous between 99.25 - 99.75. Stylolitic fractures and bedding. C.B.A. 80°			

A.O.(AUSTRALIA) PTY LTD

GEOLOGICAL LOG	Mine Code	Ms Code	Page 9
Mine/Prospect:	Name: LEILA NO. 1	core	
Level:	Northing: 1400S	Easting: HIGHWAY LINE	Collar R.L. ground/pipe:
Bearing M/T/G:	Incline:	Length:	Started: / Finished:
Hole/Core size: HQ: NQ: BQ	Intervals assayed:		

Interval			Recov.y	Down Hole Survey - Method:	date:	by:	Logged by:
From	to	length	M/kg	DESCRIPTION			
100.28	100.85	.60		Interbedded light grey dolomite and medium grey and dark grey shaley dolomite and dolomitic shale. Bedding commonly disrupted and characteristic 'ptygamatic' dolomite veining evident. Minor dolarenite at base.			
100.85	105.10	4.35		Predominantly thin poorly bedded and interlaminated very light grey siltstone and medium grey or light greenish grey mudstone or shaley dolomite. Occasional sandy 'muddy' siltstone beds to 400mm thick.			
105.10	106.75	1.65		Light grey and pale pinkish brown cherty dolomite. Intermittent thin interbedded medium grey and dark grey siltstone and shaley dolomite. Minor fine grained sandstone bands to 5mm. Probable tuff between 105.87 - 105.93.			
106.75	109.00	3.75		Light grey and light greenish grey thin poorly bedded dolomite and shaley mudstone. frequent sandy bands. Stromatolitic chert between 107.63 - 107.83.			
109.00	118.08	9.08		Light grey/medium grey thin bedded ?cherty dolomite and siltstone. Thin laminated grey and dark grey shaley dolomite bands - suspected algal laminations, between 114.00 - 116.00. Stylolitic bedding common. Thick grey sandy dolomite bands and minor grey green mudstone interbeds. C.B.A. 72 - 75°			
118.08	118.46	.38		Medium dark grey and dark grey dolomitic shale and laminated shaley dolomite. Several pale greenish mudstone bands to 600mm thick. Interlaminated streaky white/light grey sandy chert and dolomite.			
118.46	119.62	1.16		c.f. 109.00 - 118.08			
119.62	121.25	1.63		Coarse textured brownish grey ? cherty dolomite with algal laminations. Dark grey often cherty shale as thin wavey disrupted laminae and bands - more common			

A.O.(AUSTRALIA) PTY LTD

GEOLOGICAL LOG	Mine Code	Ms Code	Page 10.
Line/Prospect:	Name: LEILA NO. 1	core	
Level:	Northing: 1400S	Easting: HIGHWAY LINE	Collar R.L. ground/pipe:
Bearing M/T/G:	Incline:	Length:	Started: / Finished:
Hole/Core size: HQ: NQ: BQ	Intervals assayed:		
Interval	Recov.	Down Hole Survey - Method:	date: / by: / Logged by:

from	to	length	M/kg	DESCRIPTION
				with increasing depth to predominantly dolomitic shale.
121.25	122.55	1.30		Light greenish or greyish green 'muddy' dolomite with sandy components. Thin interbedded light grey cherty dolomite - thin shaley laminations. Minor mudstone.
				C.B.A. variable 70^{0} - 80^{0}
122.55	122.73	.18		Light yellowish grey thin bedded cherty dolomite. Disrupted/brecciated coarse grained sandy dolomite. Minor dark grey shale, crystalline dolomite veining and matrix.
122.73	123.55	.82		Medium light grey to grey poorly bedded cherty dolomite with irregular to rounded cherty concretions to 30mm across. Minor intraformational breccia/greenish grey 'muddy' dolomite.
123.55	124.13	.58		Predominantly medium dark grey laminated shaley stromatolitic chert and interlaminated light grey dolomite. Abundant small silica blebs and 'ptygmatic' replacement structures.
124.13	125.02	.89		Light grey (faint greenish tinge) 'muddy' siltstone. Occasional thin bands slightly darker in colour exhibit minor brecciation and wavey hairfine laminae.
125.02	128.49	3.47		Similar to above but bedding developing as thinner units or disrupted shaley laminae. poorly developed stylolitic bedding. Fine sandstone bands and minor flake breccia. Pale green mudstone/? tuff interbedded with siltstone between 128.00 - 128.13.
128.49	130.34	1.85		Medium dark grey and medium grey flat laminated cherty stromatolitic dolomite and shale - Brownish concretionary cherty masses. 'Ptygmatic' veined dark grey shale over 150mm at base.

A.O.(AUSTRALIA) PTY LTD

GEOLOGICAL LOG	Mine Code	Ms Code	Page 11.
Mine/Prospect:	Name: LEILA NO. 1	core	
Level:	Northing: 1400S	Easting: HIGHWAY LINE	Collar R.L. ground/pipe:
Bearing M/T/G:	Incline:	Length:	Started: / Finished:
Hole/Core size: HQ: NQ: BQ	Intervals assayed:		
Interval	Recov.y	Down Hole Survey - Method:	date: / by: / Logged by:

from	to	length	M/kg	DESCRIPTION
130.34	132.21	1.87		Light to medium grey or greenish grey thin bedded mudstone and 'muddy' siltstone. Siltstone with scattered quartz sand component. Bedding throughout irregular. Minor dolarenite breccia.
				C.B.A. 76°
132.21	135.52	3.31		Light and medium grey thin bedded cherty dolomite - Rare rounded concretions. Minor flat laminated stromatolitic dolomite, dominant towards the base. Minor 'muddy' dolomite with sandy components.
135.52	135.89	.37		Dark grey laminated ? stromatolitic shaley dolomite and interbedded medium grey dolomite. ? Mudcracks.
135.89	139.10	3.21		Thin bedded (bedding commonly deformed or displaced through mudcracking and/or fracturing), medium grey siltstone with greenish grey mudstone interbeds. Fine to medium coarse sandstone bands (up to 100mm thick) and minor pale green mudstone/? tuff layers.
139.10	140.60	1.50		Medium grey and pinkish grey thin bedded cherty dolomite. Minor recognisable algal laminations. White crystalline dolomite fracture fill. Rare dark grey cherty concretions. Minor brecciation.
140.60	143.30	2.70		Medium to thin interbedded greenish grey 'muddy' dolomitic siltstone and mudstone. Abundant thin contorted fine grained sandy bands. Bedding generally less than 10mm thick over the basal section, but wavey and discontinuous.
143.30	144.18	.88		Medium light grey siltstone with frequent large rounded or irregular shaped medium grey cherty dolomite masses often with long dimension parallel to bedding.

A.O.(AUSTRALIA) PTY LTD

GEOLOGICAL LOG	Mine Code	Ms Code	Page 12
Mine/Prospect:	Name: LEILA NO. 1	core	
Level:	Northing: 1400S	Easting: HIGHWAY LINE	Collar R.L. ground/pipe:
Bearing M/T/G:	Incline:	Length:	Started: / Finished:
Hole/Core size: HQ: NQ: BQ	Intervals assayed:		
Interval	Recov.y	Down Hole Survey - Method:	date: / by: / Logged by:

from	to	length	M/kg	DESCRIPTION
144.18	146.90	2.72		Greenish grey to medium grey massive to thin bedded 'muddy' siltstone and irregularly interbedded mudstone. Fine and minor medium coarse grained sandy lenses or bands. Minor cherty dolomite with conspicuous rounded cherty concretions and dark grey cherty shale interbeds.
146.90	149.10	2.20		Light grey thin bedded dolomite and disrupted medium grey interbedded fine sandy dolomite. Possible stromatolitic laminae especially near 149.00. White crystalline dolomite veining.
				C.B.A. 76° - 80°
149.10	150.29	1.19		Dark grey stromatolitic cherty dolomite. Basal 0.25m dark grey thin bedded shale and interbedded medium grey dolomite. "Ptygmatic" dolomite vein structures evident.
150.29	150.63	.34		Massive and thin bedded greenish grey and medium grey 'muddy' siltstone. Thicker beds exhibit fine incipient fractures, and quartz sand components. Minor cherty shale bands.
150.63	150.82	.19		Dark grey, brown and yellowish stromatolitic chert Laminations contorted and abundant small secondary silica blebs.
150.82	151.72	.90		Medium grey stromatolitic cherty dolomite. Some evidence of large amplitude 'Conophyton' stromatolitic forms evident.
151.72	154.87	3.15		Medium grey and greenish grey 'muddy' siltstone and mudstone. Minor light grey fine grained sandy dolomite bands. Minor brownish grey cherty dolomite with undulose bedding or cherty concretions, and dark grey shaley laminations.

A.O.(AUSTRALIA) PTY LTD

GEOLOGICAL LOG	Mine Code	Ms Code	Page 13.
Mine/Prospect:	Name: LEILA NO. 1	core	
Level:	Northing: 1400S	Easting: HIGHWAY LINE	Collar R.L. ground/pipe:
Bearing M/T/G:	Incline:	Length:	Started: / Finished:
Hole/Core size: HQ: NQ: BQ	Intervals assayed:		
Down Hole Survey - Method:	date:	by:	Logged by:

Interval from	Interval to	Interval length	Recov. M/kg	DESCRIPTION
154.87	155.85	.98		Overlying 100mm brecciated brownish cherty dolomite. Clasts floating in crystalline dolomite matrix. Remainder brownish cherty dolomite and dark brown cherty concretions. Medium fine grained sandstone layers and algal laminations present towards base. Trace galena and sphalerite associated with rare pyrite blebs.
155.85	156.94	1.09		Dark grey and medium grey laminated stromatolitic dolomite and cherty concretions. Laminations slightly crinckled or raized. c.f. 149.10 - 150.29. Dark grey shale over 200mm at base.
156.94	158.85	1.91		Greenish grey interbedded 'muddy' siltstone and mudstone. Sandy lenses or thin wavey bands.
158.85	159.10	.25		Mottled stromatolitic chert and dark grey stomatolitic shaley dolomite. c.f. 150.63 - 150.82
159.10	161.26	2.16		Medium grey and light brownish grey cherty dolomite. Irregular and small rounded 'sandy' chert concretions. Intermittent thin dark grey shale bands.
161.26	162.85	.59		Medium to thin nodular bedded medium light greenish grey mudstone and 'muddy' siltstone. Minor sandy components.
162.85	164.50	1.65		Thin bedded light grey dolomite gradational from above to medium bedded medium grey cherty dolomite with rare but conspicuous darker grey rounded chert concretions.
164.50	165.86	1.36		Thin bedded greenish grey and light grey mudstone and dolomite. Incipient fractures and rare mudcracks fracturing. Thin < 10mm to 100mm fine and medium grained sandstone bands.
				C.B.A. 78°

A.O.(AUSTRALIA) PTY LTD

GEOLOGICAL LOG	Mine Code	Ms Code	Page 14.
Mine/Prospect:	Name: LEILA NO. 1	core	
Level:	Northing: 1400S	Easting: HIGHWAY LINE	Collar R.L. ground/pipe:
Bearing M/T/G:	Incline:	Length:	Started: / Finished:
Hole/Core size: HQ: NQ: BQ	Intervals assayed:		
Interval	Recov.y	Down Hole Survey - Method:	date: / by: / Logged by:

From	to	length	M/kg	DESCRIPTION
165.86	167.00	1.14		Medium light grey siltstone and brownish grey cherty dolomite. Rare dark grey shaley bands. Minor oolitic carbonate grains at base.
167.00	168.24	1.24		Very pale cream and light grey poorly bedded (fine sinuous dark grey laminae evident) and occasionally brecciated dolomite and fine sandy dolomite. Minor mudstone.
168.24	169.17	.93		Dark grey and medium grey contorted shaley stromatolitic dolomite. Abundant discoidal and elongate dolomite and silica blebs; often in 'ptygmatic' outline.
169.17	172.04	2.87		Medium grey and light creamy grey predominantly thin bedded, rarely laminated siltstone and fine grained sandstone. Minor mudstone. Stylolites.
172.04	173.90	1.86		Medium dark grey and grey contorted laminated stromatolitic shaley dolomite with large dark brown grey stromatolitic chert concretions. Abundant secondary silica blebs. c.f. 150.63 - 150.82.
173.90	175.28	1.88		Medium bedded, medium grey cherty dolomite with frequent rounded and irregular shaped darker grey chert concretions.
175.28	175.90	.62		Light grey and light greenish grey wavey thin bedded mudstone and 'muddy' dolomite. Quartz sand throughout more massive sections.
175.90	176.66	.76		Light brownish to medium dark grey laminated stromatolitic dolomite and chert. c.f. 150.63 - 150.82. Dark grey shaley components over basal 500mm.
176.66	178.95	2.29		Brownish grey slightly cherty dolomite and thin wavey bedded light greenish grey and grey mudstone and 'muddy' dolomite. Coarse grained sandy dolomite at base and intermittent thin < 10mm thick sandstone bands throughout

C.B.A. 76^{0} - 78^{0}

A.O.(AUSTRALIA) PTY LTD

GEOLOGICAL LOG	Mine Code	Ms Code	Page 15.
Line/Prospect:	Name: LEILA NO. 1	core	
Level:	Northing: 1400S	Easting: HIGHWAY LINE	Collar R.L. ground/pipe:
Bearing M/T/G:	Incline:	Length:	Started: / Finished:
Hole/Core size: HQ: NQ: BQ	Intervals assayed:		

Interval			Recov.y	Down Hole Survey - Method:	date:	by:	Logged by:
From	to	length	M/kg	DESCRIPTION			
178.95	180.65	1.70		Pinkish or brownish grey thin bedded to laminated stromatolitic chert and stromatolitic cherty dolomite.			
180.65	182.11	1.46		Medium light grey and brownish grey cherty dolomite. Rounded chert concretions. Minor thin shaley bands, thin poorly bedded siltstone, sandstone (coarse grained poorly sorted over 120mm) and flake breccia.			
182.11	183.44	1.33		Coarse sandstone 100mm overlying medium light grey and medium grey thin bedded siltstone.			
183.44	183.76	.32		Dark grey possibly algal laminated shaley dolomite and dolomite shale. Minor dolarenite.			
183.76	186.38	2.62		Medium grey siltstone with occasional brownish cherty concretions. Minor dolarenite and breccia. Rare dark grey shale bands to 10mm. Well developed stylolites.			
186.38	186.95	.57		Medium grey siltstone with basal 300mm sandy dolomite and medium grained dolomite sandstone.			
186.95	188.25	1.30		Very light grey and yellowish pink thin-bedded dolomitic siltstone and medium grey very fine sandstone interbeds. Light yellow pink ? tuff between 187.42 - 187.54			
188.25	188.45	.20		Light brownish grey and dark grey, cherty dolomite and dolomitic shale. Possible stromatolites.			
188.45	190.50	2.05		Very light grey slightly mottled siltstone or 'muddy' siltstone and interbedded or wavey laminated dark grey shaley bands increasing slightly in thickness towards base. Minor disruption.			
				C.B.A. 78^{o} - 79^{o}			

A.O.(AUSTRALIA) PTY LTD

GEOLOGICAL LOG	Mine Code	Ms Code	Page 16.
Mine/Prospect:	Name: LEILA NO. 1		core
Level:	Northing: 1400S	Easting: HIGHWAY LINE.	Collar R.L. ground/pipe:
Bearing M/T/G:	Incline:	Length:	Started: / Finished:
Hole/Core size: HQ: NQ: BQ	Intervals assayed:		
Down Hole Survey - Method:	date:	by:	Logged by:

Interval from	to	length	Recov.y M/kg	DESCRIPTION
190.50	191.70	1.20		Dark grey dolomitic shale and crumbled light pinkish grey dolomite bands. Rare brecciation. Characteristic 'ptygmatic' dolomite vein structures.
191.70	192.45	.75		Very light grey siltstone and interbedded medium grey laminated siltstone. Conspicuous green mudstone bands between 191.95 - 192.06. Minor sandstone.
192.45	193.17	.72		Predominantly thin interbedded light grey cherty dolomite and laminated stromatolitic dolomite. Basal 300mm, interbedded dark grey shale and oolitic dolarenite units between 10-20mm thick.
193.17	194.75	1.58		Light to medium, slightly greenish grey 'muddy' siltstone and thin interbedded wavey mudstone. Coarse sandy components as thin 30mm thick bands or quartz grains scattered throughout thicker siltstone beds.
194.75	196.98	2.23		Medium light grey cherty dolomitic siltstone with conspicuously rounded brownish grey chert concretions up to 40mm across and elongate with bedding.
196.98	199.50	2.68		Medium to thin irregularly bedded greenish grey/light grey 'muddy' siltstone and mudstone. Bedding often as fine interweaving laminae. Minor thin dolarenite bands and numerous mudstone filled fractures. Sandy component especially in non laminated bands to 300mm.
199.50	199.75	.25		Medium dark grey and medium grey shaley dolomite and cherty shale. Abundant conspicuous small crumbled or discoidal shaped light grey medium crystalline dolomite masses often elongate along bedding and 'ptygmatic' structures normal to bedding. (Indistinct stromatolitic laminae).
199.75	201.36	1.61		Medium and thin bedded pale greenish mudstone and siltstone. Minor shaley dolomite bands to 10mm. Fine sandstone lenses or medium grained bands to 30mm.

A.O.(AUSTRALIA) PTY LTD

GEOLOGICAL LOG	Mine Code	Ms Code	Page 17.
Mine/Prospect:	Name: LEILA NO. 1	core	
Level:	Northing: 1400S	Easting: HIGHWAY LINE	Collar R.L. ground/pipe:
Bearing M/T/G:	Incline:	Length:	Started: / Finished:
Hole/Core size: HQ:	NQ: BQ	Intervals assayed:	

Interval			Recov.y	Down Hole Survey - Method:	date:	by:	Logged by:
from	to	length	M/kg	DESCRIPTION			
201.36	202.29	.93		Contorted medium dark grey 'sandy' and shaley stromatolitic dolomite. Dark grey cherty concretions and bands. Abundant light grey dolomite blebs, recrystallized veining or cavity fill and 'ptygmatic' structures.			
202.29	202.75	.46		Light pinkish grey medium and thin bedded fine grained dolomite. Bands to 100mm thick exhibit some disruption or plastic deformation.			
202.75	203.31	.56		Laminated medium dark grey and light grey stromatolitic shaley dolomite. Medium light greenish grey 'muddy' siltstone and mudstone interbeds. Characteristic light grey dolomite blebs.			
203.31	203.91	.60		Thin wavey bedded greenish grey and light grey siltstone. Thin mudstone laminae on disrupted interbeds. Frequent thin fine grained sandstone bands.			
203.91	205.33	1.42		Medium bedded light grey siltstone. Minor fine grained sandstone. Dark grey laminated cherty stromatolitic dolomite bands to 400mm thick.			
205.33	205.88	.55		Light grey fine to coarse grained sandy dolomite/dolomitic sandstone.			
205.88	206.55	.67		Light greenish grey thin bedded siltstone. Dark grey shaley laminae increasingly abundant towards the base.			
206.55	209.08	2.53		Continuation of above with increased laminated shale component to predominantly shale or shaley dolomite. Occasional recognisable algal laminations with rare cherty stromatolitic bands. Characteristic light grey 'ptygmatic' dolomite structures.			
209.08	209.48	0.40		Pale cream, pink and brown contorted laminated stromatolitic chert.			
209.48	210.53	1.05		Pale yellowish grey, thin bedded (10-20mm), poorly sorted dolomitic sandstone. Rarely graded, with thin (< 5mm) non sandy fine grained, pale yellow dolomite interbeds.			

A.O.(AUSTRALIA) PTY LTD

GEOLOGICAL LOG	Mine Code	Ms Code	Page 18
Mine/Prospect:	Name: LEILA NO. 1	core	
Level:	Northing:	Easting:	Collar R.L. ground/pipe:
Bearing M/T/G:	Incline:	Length:	Started: / Finished:
Hole/Core size: HQ: NQ: BQ	Intervals assayed:		
Interval	Recov.y	Down Hole Survey - Method:	date: / by: / Logged by:

from	to	length	M/kg	DESCRIPTION
210.53	213.13	2.6		Very distinctive thinly interlaminated medium grey shaley dolomite and pale cream or light grey dolomite. Laminae commonly slightly crinkled or raised - possibly stromatolitic - style different to previous stromatolitic forms. Frequent plastically deformed and contorted bands. Minor dolarenite breccia C.B.A. 80°.
213.13	217.32	4.19		Dark grey laminated and thin interbedded shale, shaley ?stromatolitic dolomite and light grey siltstone. Light grey dolomite blebs and minor 'ptygmatic' structures. Dolomite content increasing with depth with probable tuffaceous siltstone bands to 100mm.
217.32	217.75	0.43		Light coloured coarse grained quartz sandstone.
217.75	218.84	1.09		Fine and medium grained dolomitic sandstone. Frequent coarse grained sandstone bands.
218.84	220.30	1.46		Thin bedded and interlaminated light grey dolomite (or fine sandy dolomite) and medium dark grey shaley algal dolomite. c.f. 210.53 - 213.13 C.B.A. 78°-82°
220.30	221.70	1.40		Continuation of above with dominant shaley component. Medium light grey thin wavey dolomite bands common.
221.70	221.85	0.15		Chert flake breccia.
221.85	222.58	0.73		Light brownish grey dolomite. Indistinct and rare fine wavey grey laminae.
222.58	222.77	0.19		Composite dark grey shale, cherty flake breccia and dolarenite, sandstone.
222.77	225.23	2.46		Coarse grained sandstone. Very rare pale yellowish ?mudstone or clay intraclasts - broken laminae. Dark grey shaley laminations common from 224.25.
225.23	228.43	3.20		Thin bedded fine grained dolomitic sandstone with abundant thin dark grey shaley laminations. Bedding units to 20mm and minor shale bands to 20mm.

A.O.(AUSTRALIA) PTY LTD

GEOLOGICAL LOG	Mine Code	Ms Code	Page 19
Mine/Prospect:	Name: LEILA NO. 1	core	
Level:	Northing:	Easting:	Collar R.L. ground/pipe:
Bearing M/T/G:	Incline:	Length:	Started: / Finished:
Hole/Core size: HQ: NQ: BQ	Intervals assayed:		
Interval	Recov.y	Down Hole Survey - Method:	date: / by: / Logged by:

from	to	length	M/kg	DESCRIPTION
228.43	229.41	0.98		Coarse to medium grained sandstone. Occasional pale brownish disconnected laminae or small irregular shaped intraclasts.
229.41	230.56	1.15		Light grey fine to medium grained sandstone and dolomite. Frequent dark grey shaley laminations c.f. 225.23 - 228.43.
230.56	231.13	0.57		Overlying 200mm cherty dolarenite. Elongate brown coloured fragments in coarse sandy matrix. Remainder medium grey and dark grey thin bedded shaley dolomite and shale.
231.13	234.05	2.92		Medium light grey pale yellowish dolomite or fine grained thinbedded sandstone. Minor medium coarse grained sandstone bands. Dark grey shaley laminations frequent with depth, usually disrupted or wavey. Rare 'ptygmatic' dolomite structures. Minor pale green ?tuff/mudstone bands. C.B.A. 81^{o}.
234.05	234.66	0.61		Dark grey shales or silty shales. Thin ($\leq$ 10mm) light grey or greenish grey mudstone and dolomite interbeds or discontinuous laminae. Basal dolarenite.
234.66	235.90	1.24		Light grey dolomite (or fine grained dolomitic sandstone). Coarse grained sandstone lenses or thin bands to 30 mm. Minor vague shaley laminae.
235.90	241.12	5.22		Medium light grey dolomitic siltstone and thin bedded medium dark grey dolomitic shale with occasional thin grey tuffaceous siltstone units. Bedding especially disrupted adjacent to small 'ptygmatic' structures. Non-laminated siltstone sections exhibit fine discontinuous contorted shale laminae. Fracturing common towards the base with conspicuous white crystalline dolomite fills. Rare small well rounded dolomite blebs evident between 240.47 - 240.72 similar style to chert ball structures. Trace sphalerite 240.00.

A.O.(AUSTRALIA) PTY LTD

GEOLOGICAL LOG	Mine Code	Ms Code	Page 20
Mine/Prospect:	Name: LEILA NO. 1	core	
Level:	Northing:	Easting:	Collar R.L. ground/pipe:
Bearing M/T/G:	Incline:	Length:	Started: / Finished:
Hole/Core size: HQ: NQ: BQ	Intervals assayed:		

Interval			Recov.y	Down Hole Survey - Method:	date:	by:	Logged by:
from	to	length	M/kg	DESCRIPTION			
241.12	244.25	3.13		Thin bedded light grey dolomite and fine grained dolomitic sandstone with interbedded laminated medium dark grey shale. Bedding units commonly to 5mm but up to 20mm. Some brecciation and contortion over 200mm sections. C.B.A. 81^{o}-82^{o}.			
244.25	246.17	1.92		Similar to above interval but thicker bedding units 20-30mm and exhibiting an overall dusky greenish (?tuffaceous) tinge. Fracturing/brecciation common throughout. Slickenside surfaces and white crystalline dolomite associated with brecciated intervals.			
246.17	251.41	5.24		Very light grey dolomitic siltstone and predominant very fine grained sandstone with depth. Occasional sections exhibit fine wavey shaley laminae. Rare coarse-grained sandy patches or bands. Minor cherty dolomite with probable stromatolitic laminae.			
251.41	252.86	1.45		Distinctive coarse-grained white or light grey quartz sandstone. Rare stylolitic fractures. Towards the base, sandstone as intermittent bands gradational to interval below.			
252.86	257.33	4.47		Very distinctively laminated to thin bedded light grey fine grained sandstone or dolomite. Medium dark grey shaley algal interlaminae. Bedding units commonly less than 2mm. Contorted cherty stromatolitic dolomite bands to 500 mm. c.g. 218.84 - 220.30. C.B.A. 81^{o}.			
257.33	260.50	3.17		Contorted, brecciated light grey coarse dolomitic sandstone. Frequent grey wavey laminations throughout, and abundant white crystalline dolomite either as matrix, irregular masses or cavity/fracture fill. Bands to 200mm thick comprising medium grey laminated algal dolomite with shaley material as matrix and stylolitic fracture fill. C.B.A. 76^{o}-78^{o}.			

A.O.(AUSTRALIA) PTY LTD

GEOLOGICAL LOG	Mine Code	Ms Code	Page 21
Mine/Prospect:	Name: LEILA NO. 1	core	
Level:	Northing:	Easting:	Collar R.L. ground/pipe:
Bearing M/T/G:	Incline:	Length:	Started: / Finished:
Hole/Core size: HQ: NQ: BQ	Intervals assayed:		
Interval	Recov.y	Down Hole Survey - Method:	date: / by: / Logged by:

from	to	length	M/kg	DESCRIPTION
260.50	261.32	0.82		Thin poorly bedded medium dark greenish grey fine grained ?feldspathic sandstone and interbedded dark grey silty shale. c.f. 244.25 - 246.17.
261.32	263.28	1.96		Thin bedded medium dark grey silty shale and thin wavey dark grey shale interbeds, medium light grey dolomite and rare possible stromatolitic bands. Fine white crystalline dolomite veining and fractures characteristic.
263.28	265.50	2.22		Medium light grey siltstone with thin interbedded laminated (?stromatolitic) shaley dolomite or tuffaceous siltstone. Conspicuous irregular crystalline masses and veining.
265.50	268.22	2.72		Medium light grey to medium grey crystalline dolomite as disrupted large nodular bands with intermittent dark grey shale bands. Shale component distinctive as fine inter-twining threads or as more discrete wavey bands up to 20mm thick. Stylolites. Minor coarse grained pyrite esp. on fracture surfaces.
268.22	268.85	0.63		Very light grey massive dolomite - ?dolomite/tuff. Minor greenish bands near base. Minor pyrite on fractures.
268.85	271.20	2.35		Medium grey and fine sandy dolomite and thin interbedded medium dark grey shale or shaley siltstone. Solution breccia between 268.95 - 269.10. Pyrite as minor matrix mineral or rimming clasts. CBA 78°.
271.20	272.10	0.90		Medium dark grey shaley siltstone (occasionally interbedded tuffaceous siltstone with fine spindle laminations) Sporadic fine dark grey shale flakes evident.
272.10	274.05	1.95		Medium grey dolomitic siltstone with abundant dark grey shale flakes and rare larger disconnected shale laminae. Minor, light grey siltstone bands.

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GEOLOGICAL LOG	Mine Code	Ms Code	Page 22
Mine/Prospect:	Name: LEILA NO. 1		core
Level:	Northing:	Easting:	Collar R.L. ground/pipe:
Bearing M/T/G:	Incline:	Length:	Started: / Finished:
Hole/Core size: HQ: NQ: BQ	Intervals assayed:		
Interval	Recov.y	Down Hole Survey - Method:	date: / by: / Logged by:

from	to	length	M/kg	DESCRIPTION
274.05	277.00	2.95		Medium dark and dark grey shale . Minor thin carbonaceous shale bands. Light and medium grey dolomitic siltstone and dololutite as thin often poorly bedded, streaky or laminated units and rarerbands to 100mm thick exhibiting mild slumping and occasional shale flakes. Minor fracturing and associated dolomite veining/pyrite.
277.00	279.05	2.05		Medium grey and medium dark grey thin poorly interbedded shale, dolomite and tuffaceous siltstone. Minor slumping and rare disconnected shale laminae. Between 277.00 - 277.30, 278.55 - 278.67, conspicuous coarse sandy dolarenite with light grey siliceous matrix. These bands often interrupted by thin dark grey shale layers. Minor pyritization of dolarenite particles.
279.05	282.03	2.98		Thin bedded light pinkish grey dolomite. Interbedded medium grey laminated shaley siltstone and tuffaceous siltstone. This unit has a vague slightly mottled appearance resembling dolomite/tuff. Rare shale flakes. Conspicuous siliceous dolarenite as intermittent bands up to 150 mm thick. Pyrite associated with fractures and evident between 279.00 - 279.50. CBA 76^{o}-80^{o}.
282.03	285.60	3.57		Similar to above, but plastically contorted turbidite slumped bedding throughout.
285.60	297.20	11.60		Predominantly medium to thin bedded, light medium grey and medium grey dolomitic siltstone. Bands to 100mm of medium grey tuffaceous siltstone exhibiting coarse spindle laminations. Minor dolomitic shale and very light grey dolomite. Occasional bands with disrupted and contorted bedding (especially between 296.00-297.20). Rare shale flakes and fragments. Minor dolarenite/breccia CBA 82^{o}-83^{o}.

A.O.(AUSTRALIA) PTY LTD

GEOLOGICAL LOG	Mine Code	Ms Code	Page 23
Mine/Prospect:	Name: LEILA NO. 1		core
Level:	Northing:	Easting:	Collar R.L. ground/pipe:
Bearing M/T/G:	Incline:	Length:	Started: / Finished:
Hole/Core size: HQ: NQ: BQ	Intervals assayed:		
Interval	Recov.y	Down Hole Survey - Method:	date: / by: / Logged by:

from	to	length	M/kg	DESCRIPTION
297.20	298.83	1.63		Very pale cream and light grey siltstone. Laminations indicate mild slumping and plastic deformation. Basal 200mm with pale green mudstone/tuff and pinkish cream dolomite/tuff bands.
298.83	305.60	6.77		Medium grey thin to medium bedded dolomitic and tuffaceous siltstone. Thin medium dark grey dolomitic shale interbeds. Numerous thin streaky carbonate bands and light bluish and cream dolomite/tuff bands to 150 mm thick. CBA 78°-80°.
305.60	308.22	2.62		Medium grey tuffaceous siltstone (fine spindle laminations). Bedding disrupted throughout with dark grey shale interbeds, turbidite flakes and fragments. Light bluish green slightly cherty dolomite/tuff bands as above interval.
308.22	313.50	5.28		Medium grey dolomitic and tuffaceous siltstone rarely as thin graded units. Frequent dark grey shale interbeds. Conspicuous light grey slightly cherty wavey carbonate and ?dolomite/tuff bands up to 200 mm thick. Minor white recrystallized dolomite veining. Trade pyrite CBA 76-80°.
313.50	315.03	1.53		Predominantly light to medium grey dolarenite. Wavey dark grey shale and medium grey siltstone bands or breccia clasts.
315.03	334.80	19.77		Medium light grey dolomitic siltstone with finer grained similarly coloured pale bluish grey mudstone rock. Medium dark grey shale bands with poorly defined wavey bedding surfaces frequent throughout.
				Minor finely bedded pyrite associated with shale component - max. 5% between 326.43 - 327.33. Very thin light grey dolomite bands evident.
				Siltstone units contain disrupted shaley material and rarer shale flakes. Occasional thin siltstone bands with small (0.5mm - 1.5mm) light coloured rhombic structures

A.O.(AUSTRALIA) PTY LTD

GEOLOGICAL LOG	Mine ode	Ms Code	Page 24
Mine/Prospect:	Name: LEILA NO. 1	core	
Level:	Northing:	Easting:	Collar R.L. ground/pipe:
Bearing M/T/G:	Incline:	Length:	Started: / Finished:
Hole/Core size: HQ: NQ: BQ	Intervals assayed:		
Interval	Recov.y	Down Hole Survey - Method:	date: / by: / Logged by:

from	to	length	M/kg	DESCRIPTION
315.03	334.80	19.77 (Contd.)		(2pseudomorphs). Trace sphalerite. Basal 3.0m exhibits rare small chert balls. CBA 82-83°.
334.80	339.85	5.05		Gradational from above interval but with dark grey shale component dominant. Irregular bedding surfaces. Chert balls conspicuous throughout siltstone bands. Pyrite content < 1%.
339.85	350.65	10.80		Dark grey and medium dark grey poorly pyritic shale. Pyrite content < 2% but up to 5% over rare 200mm sections. Infrequent light grey laminated carbonate bands to 150 mm thick. Rare medium grey siltstone bands up to 100 mm thick exhibit small chert balls. CBA 83-84°.
350.65	351.23	0.58		Medium grey and dark grey dolomitic shale and flinty siltstone - dolomite content increasing with depth.
351.23	355.70	4.47		Thin poorly interbedded medium grey and dark grey shaley dolomite and shale. Some disruption throughout and minor shale flakes and fragments. Pyrite content < 1%.
355.70	358.10	2.40		Dark grey shale with increasing medium grey dolomitic siltstone bands. Bedding irregular and often disrupted. Conspicuous small white oolitic carbonate granules scattered throughout shale, often concentrated in poorly defined sedimentary layers to 100 mm thick.
358.10	364.05	5.95		Finely laminated dark grey pyritic shale with thin medium grey shaley dolomite and siltstone, commonly as irregular or discontinuous streaks or bands towards the base. Minor oolitic carbonate granules scattered throughout. Disseminated pyrite as finely layered bands up to 12% between 359.08 - 363.56. ~ CBA 80°

A.O.(AUSTRALIA) PTY LTD

GEOLOGICAL LOG	Mine Code	Ms Code	Page 25
Mine/Prospect:	Name: LEILA NO. 1	core	
Level:	Northing:	Easting:	Collar R.L. ground/pipe:
Bearing M/T/G:	Incline:	Length:	Started: / Finished:
Hole/Core size: HQ: NQ: BQ	Intervals assayed:		
Down Hole Survey - Method:	date:	by:	Logged by:

Interval from	Interval to	Interval length	Recov.y M/kg	DESCRIPTION
364.05	365.30	1.25		Medium grey to medium light grey dolomite. Intermittent thin poorly defined shaley bands and occasional (10-20mm thick) dolarenite bands.
365.30	366.13	0.83		Light grey and medium light grey disrupted and brecciated dolomite. Large medium grey siltstone, pinkish cream dolomite/?tuff clasts in finer granular sized cherty dolarenite and sandy matrix. Minor secondary silica blebs. Rare stylolites, small chert balls and minor blebs of pyrite.
366.13	366.43	0.30		Light grey laminated stromatolitic dolomite - laminations speckled grey and slightly undulating or raised appearance.
366.43	367.26	0.83		Medium light grey cherty dolarenite breccia. Rare large light pinkish grey dolomite/ tuff clasts. Minor medium grey shale layers to 20 mm. Very rare chert balls and occasional well developed stylolites.
367.26	369.02	1.76		Light grey silty dololutite, intraformational or 'ghost' brecciation. Rare thin discontinuous medium grey siltstone strands. Bedding poorly developed throughout with minor coarse grained pyrite.
369.02	377.82	8.80		Light grey medium to thin bedded dolomite. Medium grey laminated siltstone and shaley tuffaceous siltstone either as well bedded units with light grey interlaminated dolomite up to 40 mm but more commonly as contorted and slumped bands. Occasional dolomite bands comprise brecciated or fragmented grey siltstone clasts and finer flakes. Conspicuous dark grey poorly pyritic shale bands between 10mm - 100mm thick as minor component throughout. Minor fracturing towards base - white recrystallized dolomite with associated crystalline pyrite and sphalerite. CBA 82-83°.

A.O.(AUSTRALIA) PTY LTD

GEOLOGICAL LOG	Mine Code	Ms Code	Page 26
Mine/Prospect:	Name: LEILA NO. 1	core	
Level:	Northing:	Easting:	Collar R.L. ground/pipe:
Bearing M/T/G:	Incline:	Length:	Started: / Finished:
Hole/Core size: HQ: NQ: BQ	Intervals assayed:		
Interval	Recov.y	Down Hole Survey - Method:	date: / by: / Logged by:

from	to	length	M/kg	DESCRIPTION
377.82	383.10	5.28		Rapidly gradational from above to dark grey dolomitic, carbonaceous shale. Very vague, streaky thin interbedded tuffaceous siltstone units evident and rarely graded. Minor fine light grey wavey carbonate bands. Very finely disseminated pyritic smears evident along rare bands.
383.10	392.34	9.24		Continuation of above and although remaining intermittent, white poorly bedded, streaky carbonate bands are noticeably more frequent. Some associated coarse grained pyrite. CBA 84°.
392.34	400.83	8.49		Distinctive interval of thin bedded (2-10mm) dolomitic and carbonaceous shale with abundant white/light grey and bluish grey often cherty (?dolomite/tuff) dolomite bands to 150mm, and interbedded medium grey siltstone. Dolomite layers often slumped or contorted with thinner beds disrupted and crumbled. Minor brecciation with conspicuous dark grey shale fragments and flakes. From 399.00, white dolomite bands abruptly dimish to predominantly thin poorly bedded dolomitic siltstone and shaley or dolomitic shale.
400.83	410.15	9.32		Thin to medium bedded, medium dark grey and dark grey dolomitic shale and shaley siltstone. Minor slumping and irregular bedded units evident. Section characterised by minor influx of dolarenite as intermittent disrupted clusters, thin bands or isolated small rounded particles up to 2mm diameter. Minor medium grey siltstone bands with rare shale flakes. Occasional carbonaceous shale grading from dolomitic shale units exhibit minor blebs of pyrite. Minor pyritization of dolarenite fragments. CBA 84°.

A.O.(AUSTRALIA) PTY LTD

GEOLOGICAL LOG	Mine Code	Ms Code	Page 27
Mine/Prospect:	Name: LEILA NO. 1	core	
Level:	Northing:	Easting:	Collar R.L. ground/pipe:
Bearing M/T/G:	Incline:	Length:	Started: / Finished:
Hole/Core size: HQ: NQ: BQ	Intervals assayed:		
Down Hole Survey - Method:	date:	by:	Logged by:

Interval from	Interval to	Interval length	Recov.y M/kg	DESCRIPTION
410.15	429.43	19.28		Essentially a continuation from above but with major exotic component comprising small rounded and angular medium grey dolomite particles to 3mm, larger dolarenite fragments either in thin (5-30mm) concentrated sedimentary bands, or as loosely to medium packed, moderately well sorted particles set in a medium dark grey, medium grey, dolomitic shale and shaley siltstone matrix. Intermittent thin bedded shale and siltstone and rare dark grey poorly pyritic carbonaceous shale bands interrupt the above turbidite dolarenite/breccia sequences. Minor pyrite only. CBA 83^{o}-85^{o}.
429.43	439.90	10.47		Medium grey and medium dark grey finely laminated tuffaceous dolomitic siltstone and thin interbedded and interlaminated shaley dolomitic siltstone and medium dark grey dolomitic shale. Rare dark grey weakly pyritic carbonaceous shale bands to 100mm. Bedding units between <5mm - 40mm thick with vague evidence of grading. Intermittent thin wavey light grey carbonate and rare green mudstone/?tuff bands to 10mm. Minor dolarenite as above intervals.
439.90	442.63	2.73		Predominantly medium bedded, medium light grey dolomitic siltstone with frequent dark grey and medium grey laminated dolomitic carbonaceous shale and tuffaceous dolomitic siltstone bands to 150mm thick. Rare thin greenish mudstone bands to 10mm.
442.63	475.32	32.69		Uniformly thin bedded, medium grey and medium dark grey shaley dolomitic tuffaceous siltstone units (commonly 10-20mm thick) exhibiting fine spindle laminations. Regular thin light grey streaky dolomitic siltstone laminae or thin interbeds up to 5mm. Rare dark grey carbonaceous dolomitic shale bands. Macroscopic grading of units only occasionally evident. Sequence becoming slightly darker with depth to predominantly

A.O.(AUSTRALIA) PTY LTD

GEOLOGICAL LOG	Mine Code	Ms Code	Page 28
Mine/Prospect:	Name: LEILA NO. 1	core	
Level:	Northing:	Easting:	Collar R.L. ground/pipe:
Bearing M/T/G:	Incline:	Length:	Started: / Finished:
Hole/Core size: HQ: NQ: BQ	Intervals assayed:		
Interval	Recov.y	Down Hole Survey - Method:	date: / by: / Logged by:

from	to	length	M/kg	DESCRIPTION
442.63	475.32	32.69		medium dark grey dolomitic shale. Conspicuous rare pale green mudstone/tuff bands
		(Contd.		to 25mm slightly more frequent towards 475.00. Minor pyrite associated with fractures
				and minor small blebs. CBA 85°.
475.32	482.52	7.2		Medium dark grey and dark grey laminated dolomitic and carbonaceous shale.
				Abundant fracturing with minor brecciation. Dominant matrix and fracture fill
				mineral, white crystalline dolomite.
				Minor dolomitic tuffaceous siltstone bands and light grey thin, often discontinuous
				dolomite bands as above interval.
				Between 475.32-475.68, pale green mudstone/tuff. Minor coarse grained and rare well
				developed pyrite crystals associated with fractures. Trace sphalerite.
482.52	496.27	13.75		Predominantly thin well-bedded medium dark and dark grey dolomitic and medium grey
				laminated tuffaceous siltstone. Thin < 5mm thick light grey siltstone bands frequent
				at irregular intervals throughout slightly less common over basal 1.00m. Distinctive
				grey black carbonaceous shale bands evident as minor component throughout. Numerous
				thin < 10mm thick blue green mudstone/tuff bands throughout, with prominent layers
				between 482.10-482.13; 486.42-486.60; 488.03-488.02; 489.25-489.34; 492.68-492.74;
				492.91-492.97; 493.21-493.25 CBA 84-85°.
496.27	502.14	5.87		Grey black pyritic carbonaceous shale. Finely disseminated pyrite up to 3% over some
				sections or as thin wispy strands and rare thin lightly smeared bands.
				Pale greenish mudstone/tuff evident between 496.78 - 496.81; 500.00 - 500.10;
				Minor slickenside fractures and white crystalline dolomite. CBA 82-83°.

A.O.(AUSTRALIA) PTY LTD

GEOLOGICAL LOG	Mine Code	Ms Code	Page 29
Line/Prospect:	Name: LEILA NO. 1	core	
Level:	Northing:	Easting:	Collar R.L. ground/pipe:
Bearing M/T/G:	Incline:	Length:	Started: / Finished:
Hole/Core size: HQ: NQ: BQ	Intervals assayed:		
Down Hole Survey - Method:	date:	by:	Logged by:

Interval from	Interval to	length	Recov. M/kg	DESCRIPTION
502.14	510.43	8.29		Medium dark grey thin bedded slightly brittle silty dolomitic and carbonaceous shale. Frequent thin < 5mm thick, light grey siltstone bands and bluey grey dolomite/tuff bands. Rare pyrite associated with fine fracture cracks. Pale green mudstone/tuff as rarer thin < 20mm thick bands. CBA 76-78°.
510.43	511.49	1.06		Similar to above interval but slightly increasing dolomitic content. Medium grey silty dolomite bands occasionally as conspicuous large rounded concretionary masses and thin beds. Minor thin < 5mm thick pale cream/green dolomite, mudstone/tuff bands. CBA 77°.
511.49	514.45	2.96		Medium grey and medium dark grey silty dolomite and dolomitic shale. Abundant thin blue/cream and green slightly ?cherty tuff and mudstone bands to 10mm. Prominant green mudstone/tuff bands between 512.80 - 512.87; 513.10 - 513.28; 513.83 - 514.26. CBA 75° - 77°.
514.45	515.90	1.45		Gradational from above to thin interbedded medium dark grey dolomitic shale and blue/green grey mudstone, cherty dolomite/tuff and laminated muddy dolomitic siltstone. CBA 77°-78°.
515.90	519.45	3.55		Thin bedded 'sandy' textured pinkish dolomite/tuff and dusky green grey muddy siltstone and mudstone. Pinkish dolomite exhibits minor boudinage and wavey bedding becoming predominant with increasing depth and transitional to white/pink crystalline dolomite. CBA 70°.
519.45	527.00	7.55		Predominantly white, pink, very light grey mottled medium crystalline dolomite, laminated to massive dolomite/tuff and pale green mudstone bands. Well developed greenish clay filled fractures and stylolites common throughout.

A.O.(AUSTRALIA) PTY LT[illegible]

GEOLOGICAL LOG	Mine Code	Ms Code	Page 30
Mine/Prospect:	Name: LEILA NO. 1		core
Level:	Northing:	Easting:	Collar R.L. ground/pipe:
Bearing M/T/G:	Incline:	Length:	Started: / Finished:
Hole/Core size: HQ: NQ: BQ	Intervals assayed:		
Interval	Recov.y	Down Hole Survey - Method:	date: / by: / Logged by:

from	to	length	M/kg	DESCRIPTION
519.45	527.00	7.55	(Contd.)	Radiating pseudomorphs after gypsum evident throughout mottled coarser crystalline sections. Minor pyrite coating fracture surfaces. CBA 60°.
				527.00m END OF HOLE
				NOTE: Recovery throughout approx. 100%.

APPENDIX 3

EL 1203, LEILA YARD

DDH MY 5

DETAILED LOGS AND ASSAYS

The Shell Company of Australia Limited
METALS DIVISION

DRILL LOG SHEET

PROJECT: BAUHINIA JOINT VENTURE

Hole No : MY 5

COLLAR CO-ORDINATES: 4,44S/2140W

LOCATION CODE: MD03

COLLAR R.L.:

LOCATION: EL 1203 MYRTLE BASIN AREA

MAP/PHOTO REFERENCE:

DATE STARTED	1.8.81	HOLE SIZE		FROM	TO	TOTAL	CORE STORAGE	DARWIN
DATE FINISHED	11.8.81	NON CORE	NW	0	23	23	Nº OF TRAYS	47
TOTAL DEPTH	387.3m.						SAMPLE STORAGE	AMDEL
LOGGED BY	J.C. BORNMAN	CORE	NQ	23	96	73	ASSAY LAB.	AMDEL
CONTRACTOR	ROCKDRILL		BQ	96	387.3	291.3	ASSAY REPORTS	AC 1357/82
RIG	FOX							
DRILL CREW		CASING	NW	0	23	23	MIN. & PET. LAB.	CMS
			NQ	0	96	96	MIN. & PET. REPORTS	CMS 81/11/41
		CASING LEFT	NW	0	24	24		

HOLE SURVEY DATA

INSTRUMENT:

DEPTH	INSTRUMENT INCL.	INSTRUMENT AZ.	ACID ETCH INCL.	ACID ETCH AZ	REMARKS
COLLAR					

GRAPHIC/LETTER SYMBOL LOGGING KEY

	N	NON-CORE DRILLING	D	R	DOLORUDITE
D	B	DOLOMITE BRECCIA	C	S	CARBONACEOUS SHALE
S	D	SHALE (DOLOMITIC)	P	S	PYRITIC SHALE
D	S	DOLOMITIC SILTSTONE	T	S	TUFFACEOUS SHALE
D	A	DOLAPENITE	D	O	DOLOMITE

STRUCTURE / ALTERATION CODE

B BEDDING
J JOINTING
C CLEAVAGE
F FOLIATION
sh SHEARING
q QUARTZ VEINS
O OXIDATION

DRILLING SUMMARY:

PROJECT : BAUHINIA JV SCALE : 1:400 HOLE NO : DDH MY5

From	To	Inter'l (m)	Core Rec'd	% Rec'd	Sample No	Geo'c Log	Assays	Weighted Assays/Ratios	% Estimates	Core Angles	AH	T.S. P.S.	Description
0	2.00	2				N							
2.00	4.00					N							
4.00	6.00					N							
6.00	8.00					N							
8.00	10.00					N							Non-core drilling
10.00	12.00					N							
12.00	14.00					N							
14.00	16.00					N							
16.00	18.00					N							
18.00	20.00					N							
20.00	22.00					N							
22.00	24.00			100		DB							23.00
24.00	26.00					DB							
26.00	28.00					DB							Breccia with dolomite, dolomitic siltstone, dolarenite and
28.00	30.00					DB							occasional chert and carbonaceous shale (pyritic) fragments
30.00	32.00					DB							in dolomite matrix.
32.00	34.00					DB							
34.00	36.00					DB							
36.00	38.00					DB							
38.00	40.00					DB							
40.00	42.00					DB							
42.00	44.00					DB							
44.00	46.00					DB							
46.00	48.00					DB							
48.00	50.00					DB							
50.00	52.00					DB							
52.00	54.00					DB							
54.00	56.00					DB							
56.00	58.00					DB							58.76
58.00	60.00					SD							60.39 Shaley facies of the above unit. Disturbed bedding, slumping.
60.00	62.00					DS				S 0			
62.00	64.00					DS							
64.00	66.00					DS							
66.00	68.00					DS							
68.00	70.00					DS							
70.00	72.00					DS							Grey dolomitic siltstone with carbonaceous shale and shale
72.00	74.00					DS							flake interbeds. Thick (up to 1.16m) dolarenite bands.
74.00	76.00					DS							Unit becomes more shaley towards the base. Minor pyrite
76.00	78.00					DS							associated with carbonaceous shale bands.
78.00	80.00					DS							
80.00	82.00					DS							
82.00	84.00					DS							
84.00	86.00					DS							
86.00	88.00					DS							
88.00	90.00					DS							
90.00	92.00					DS							
92.00	94.00					DS							
94.00	96.00					DS							
96.00	98.00					DS							
98.00	100.00	2				DS							

HOLE No : DDH MY5

PROJECT : BAUHINIA JOINT VENTURE SCALE : 1:400 HOLE NO : DDH MY 5

From	To	Inter'l (m)	Core Rec'd	% Rec'd	Sample No	Geo's Log	Assays ppm Cu	Pb	Zn	Ag	As	Weighted Assays/Ratios Cu	Pb	Zn	% Estimates	Core Angles	A.H.	T.S. P.S.	Description
100.00	102.00	2		100		DS										80			
102.00	104.00					DS													
104.00	106.00					DS													
106.00	108.00					DS													
108.00	110.00					DS													
110.00	112.00					DS													
112.00	114.00					DS													
114.00	116.00					DS													
116.00	118.00					DS													
118.00	120.00					DS													
120.00	122.00					DS													
122.00	124.00					DS													
124.00	126.00					DS													
126.00	128.00					DS													
128.00	130.00					DS													
130.00	132.00					DS													
132.00	134.00					DS													
134.00	136.00					DS													136.07
136.00	138.00					SD													Dark grey dolomitic shale with dolomitic siltstone and dolarenite interbeds. More silty towards base.
138.00	140.00					SD													
140.00	142.00					SD													
142.00	144.00					DA													143.40
144.00	146.00					DA													Interbedded dolarenite, dolomitic siltstone and dolomite with occasional thin carbonaceous shale and dolomitic shale
146.00	148.00					DA													bands. Dolorudite bands up to 94 cm thick.
148.00	150.00					DA													Occasional pyrite nodules.
150.00	152.00					DA													
152.00	154.00					DA													
154.00	156.00					DA													
156.00	158.00					DA													
158.00	160.00					DA													
160.00	162.00					DA													
162.00	164.00					DA													
164.00	166.00					DA													
166.00	168.00					DR													166.81
168.00	170.00					DR													Dolorudite with thin shaley dolomitic siltstone, dolarenite and carbonaceous shale interbeds.
170.00	172.00					DR													
172.00	174.00					DR													
174.00	176.00					DR													
176.00	178.00					DR													
178.00	180.00					DR													
180.00	182.00					DR													
182.00	184.00					DR													
184.00	186.00					DR													187.60
186.00	188.00					SD													Laminated, interbedded dolomitic shale and dolarenite
188.00	190.00					SD													Minor pyrite associated with thin carbonaceous shale bands.
190.00	192.00					SD													Slumps.
192.00	194.00					DR													193.15 Light grey dolorudite with breccia fragments.
194.00	196.00					CS													193.70 Pyrite nodules.
196.00	198.00					CS													
198.00	200.00	2			MY5001	CS	410	35	130	500	<20								

HOLE NO : DDH MY 5

PROJECT : BAUHINIA JV SCALE : 1:400 HOLE Nº : DDH MY 5

From	To	Inter'l (m)	Core Rec'd	% Rec'd	Sample Nº	Geol's Log	Assays ppm Cu	Pb	Zn	Ag	Au	Weighted Assays/Metres Cu	Pb	Zn	% Estimates	Core Angles	Alt.	T.S. P.S.	Description
200.00	202.00	2		100		CS										0 10			
202.00	204.00					CS						325	28	285					
204.00	206.00					CS													
207.00	209.00	3			002	CS	240	20	240	400	<20								
						CS													
210.00	212.00	2				CS													
212.00	214.00	2				CS													
214.00	216.00	2			003	CS	85	20	150	60	<20								
216.00	218.00	2				CS													
218.00	220.00	2				CS													
220.00	222.00	2				CS													
222.00	224.00	2				CS													
224.00	226.00	2			004	CS	55	15	130	4	<20								Carbonaceous and dolomitic shale grading to silty shale, slightly pyritic. Cyclic grading.
226.00	228.00					CS													Tuff bands at 236.52 - 238.59; 283.05 - 286.49;
228.00	230.00					CS													298.57 - 301.04; 309.52 - 310.88;
230.00	232.00					CS													312.76 - 313.53; 314.42 - 314.87.
232.00	234.00				005	CS	42	20	330	3	<20								Unit becomes more shaley and carbonaceous towards the base.
234.00	236.00					CS													
236.00	238.00					CS													
238.00	240.00					CS													
241	243				006	CS	42	15	120	31	<20								
						CS						49	28	165					
244.00	246.00					CS													
246.00	248.00					CS													
248.00	250.00					CS													
250.00	252.00				007	CS	110	20	160	280	<20								
252.00	254.00				008	CS	100	20	170	220	<20								
254.00	256.00				009	CS	60	20	130	130	<20								
256.00	258.00				010	CS	85	25	200	220	<20								
258.00	260.00				011	CS	30	25	110	11	<20								
260.00	262.00				012	CS	24	25	140	1	<20								
262.00	264.00				013	CS	30	25	120	28	<20								
264.00	266.00				014	CS	18	20	75	6	<20								
266.00	268.00				015	CS	22	20	240	1	<20								
268.00	270.00				016	CS	30	25	120	36	<20								
270.00	272.00				017	CS	32	25	120	33	<20								
272.00	274.00				018	CS	24	35	230	<1	<20								
274.00	276.00				019	CS	24	30	120	1	<20								
276.00	278.00				020	CS	65	45	170	160	<20								
278.00	280.00	2			021	CS	28	30	190	7	20								
280.00	283.05	1.05			022	CS	26	35	230	10	<20								
					023		26	25	90	26	<20								
283.05	284.77	1.72			024	CS	180	5	200	400	<20								
284.77	286.49	1.72			025	CS	75	25	75	4	90								
286.49	288.00	1.51			026	CS	36	40	180	4	50								
288.00	290.00	2			027	CS	30	70	260	1	40								
290.00	292.00	2			028	CS	24	40	180	<1	40								
292.00	294.00	2			029	CS	42	25	170	1	40								
294.00	296.00	2			030	CS	38	75	230	46	30								
296.00	298.57	2.57			031	CS	38	30	200	24	30								
298.57	301.04	2.47			032	CS	50	5	100	3	30								

HOLE Nº DDH MY 5

PROJECT : BAUHINIA JV SCALE : 1:400 HOLE N°: DDH MY 5

From	To	Inter'l (m)	Core Rec'd	% Rec'd	Sample N°	Geo'c Log	Assays ppm Cu	Pb	Zn	Ag	As	Weighted Assays/Ratios Cu	Pb	Zn	% Estimates	Core Angles	AH.	T.S. P.S.	Description
301.04	303.00	1.96		100	033	CS	48	120	260	70	40					B 0			
303.00	305.00	2			034	CS	38	70	560	21	40								
305.00	307.00				035	CS	32	95	720	2	40								
307.00	309.00				036	CS	48	160	2900	60	40								
309.00	311.00				037	CS	160	85	320	170	40	55	12	1058					
311.00	313.00				038	CS	60	120	1500	1	70								
313.00	315.00				039	CS	60	150	990	21	90								
315.00	317.00				040	CS	36	110	910	<1	60								
317.00	319.00				041	CS	32	160	720	1	110								
319.00	321.00				042	CS	38	140	1700	14	100								
321.00	323.00				043	CS	42	560	3300	2	120								
323.00	325.00				044	PS	40	890	5500	3	220								323.38
325.00	327.00				045	PS	50	1000	4400	5	240	54	3518	4700					Pyritic carbonaceous shale (slightly dolomitic). Nodules and fracture fills of pyrite, galena, sphalerite and occasional chalco-pyrite. Ground mass containing fine grained galena and sphalerite. Unit more silty and less pyritic towards the base. Mineralisation in microfaults, joints and small nodules extends to some extent above and below this unit.
327.00	329.00	2			046	PS	60	740	4200	5	130								
329.00	330.66	1.66			047	PS	80	4400	6100	37	70								330.66
330.66	333.54	2.88			048	TS	55	760	170	29	60	55	760	170					Tuffaceous carbonaceous shale with green and white tuff bands becomming more common towards the base, minor galena in fractures and in the groundmass.
333.54	335.00	1.46			049	TS	24	15	75	9	<20								333.54
335.00	337.00	2.00			050	TS	16	35	90	1	<20								
337.00	340.00	2.00				TS													White to greenish white and pink boundinage bedded dolomitic tuffaceous shale and tuffaceous dolomite with abundant green and pink tuff bands. Finely interbedded shale and shale flake units. Pyrite nodules throughout, associated with tuff bands and as fracture fill. Unit becomes more dolomitic and less shaley towards base.
340.00	342.00	2.00			051	TS	20	90	200	22	<20								
342.00	344.00	2.00				TS													
344.00	346.00					TS													
346.00	348.00					TS													
348.00	350.00				052	TS	26	45	150	45	<20	30	11	125					
350.00	352.00					TS													
352.00	354.00					TS													
354.00	356.00					TS													
356.00	358.00					TS													
358.00	360.00				053	TS	70	5	110	90	<20								
360.00	362.00					TS													
362.00	364.00					TS													
364.00	366.00				054	TS	10	5	44	1	20								
	367.00					TS													
367.00	369.00					DO													369.20
369.00	371.00					DO													Pink dolomite/tuffaceous dolomite with finely interbedded shale units. Evaporite pseudomorphs. Disturbed bedding.
371.00	373.00					DO													
373.00	375.00					DO													
375.00	377.00					DO													
377.00	379.00					DO													
379.00	381.00					DO													
381.00	383.00					DO													
383.00	385.00					DO													384.00
385.00	387.30	2.30				DO										B 0			Dolomite and pink tuffaceous dolomite with evaporite pseudomorphs. Occasional green tuff bands.
																			387.30

HOLE N° DDH MY5

APPENDIX 4

STATEMENT OF EXPENDITURE

EXPLORATION LICENCE 1203, LEILA YARD.

EXPENDITURE 7th SEPTEMBER, 1980 - 6th SEPTEMBER, 1981.

Staff and Support	$ 11 651
Field Expenses	$ 62 089
Miscellaneous	$ 7 729
Total	$ 81 469

ACCESSION OF DOCUMENTS & DATA

FILE/REPORT NO. 08.1076

AUTHOR J.C. Bornman

DATE OF PUBLICATION January, 1982

FILE HEADING/TITLE Annual report on EL 1203 LEILA YARD, N.T., 7th September 1980 - 6th Spetember, 1981.

SOURCE (if Non-SCOA) S.C.O.A.

SUBJECT Annual report to N.T. Department of Mines and Energy

OTHER INFORMATION IF AVAILABLE:-

PROSPECT/PROJECT NAME EL 1203, LEILA YARD.

KEYWORDS (Gold, Miogeosyncline, Mining, Pollution, etc.)

1. Exploration Licences 2. Mineral Exploration
3. Stratiform deposits 4. Sulphide deposits
5. Copper 6. Lead
7. Zinc 8.
9. 10.

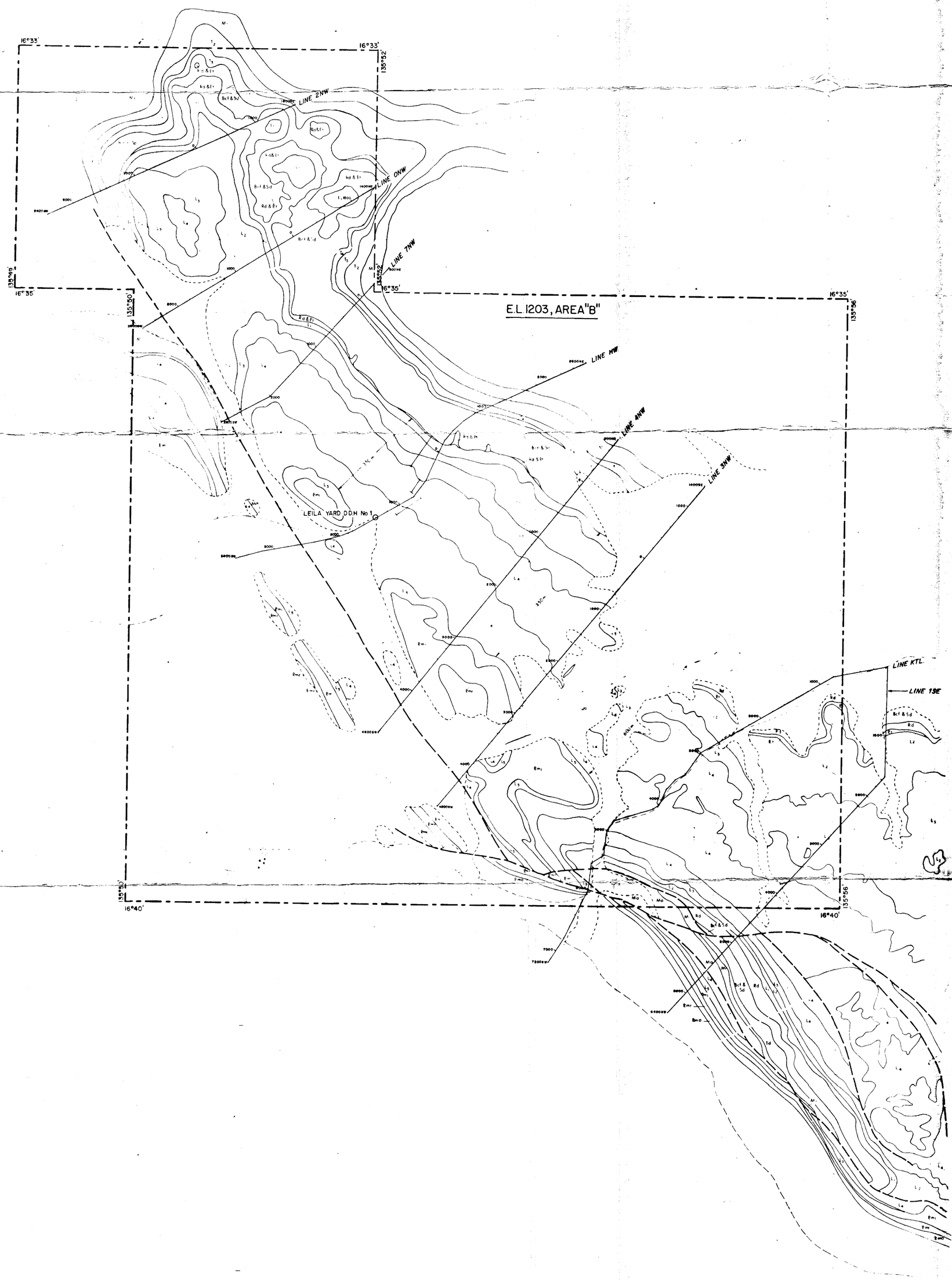
GEOGRAPHICAL LOCATION

STATE NORTHERN TERRITORY

MAP REFERENCE 1:250,000 Sheet Ref. Name SE 53-3 BAUHINIA DOWNS

SIGNED. J C Bornman

MY2
MY1
MY5
MY4
MY3
St George
Shannon
LSCD & BCF
BCF Py sh
BCF Tuff free Zone
TUFF A
TUFF B
T4
R
R2
R1
USCD
SCPS
SCD
LSCD (not present)
LSCD & BCF
BCF Py sh
BCF
BCF Tuff free Zone
TUFF
BCF Basal tuffs T4
BCF (Tuff Zone)
BCF Py SH
T3
T2
M
BCF TUFFS
BCF (w-fold shale)
LSCD & BCF to Base of Tuff Bands
TUFF FREE
T2
V:H = 1:1
REWARD DOLOMITE
BARNEY CREEK FORMATION
TEENA DOLOMITE
MARA DOLOMITE
355.7m
102.5m
387.30m
137m
273.4m
LEGEND
R Reward Dolomite
USCD Upper Surprise Creek Dolomite
SCPS Surprise Creek Pyritic Shale
LSCD Lower Surprise Creek Dolomite
BCF Barney Creek Formation
T Teena Dolomite
M Mara Dolomite
The Shell Company of Australia Limited
METALS DIVISION
BAUHINIA JOINT VENTURE
E.L. 1203
MYRTLE BASIN
DRILL HOLE CORRELATIONS
Scale 1:10 000 (hor.)
FIG. No. 8
REPORT No.
ENCL. No.
DRG No. NT./M003/004
DATE DEC 1981
AUTHOR J.C.B.
DRAWN K.M.B.
OFFICE DARWIN
CR82/20



GEOLOGICAL EXPLANATION

	Qa	Alluvium
BUKALARA SANDSTONE	€Ib	Quartz sandstone
McARTHUR GROUP		
BATTEN SUB-GROUP		
LOOKING GLASS FORMATION	Pmu	Stromatolitic chert
STRETTON SANDSTONE	Pmr	Thin bedded fine grained sandstone
YALCO FORMATION	Pmj	Stromatolitic chert, basal nodular chert
LYNOTT FORMATION		
DONNEGAN MEMBER	L_5	Lithic sandstone, pink tuff
	L_4	Stromatolitic chert and dolomite, dolomitic siltstone, dolomitic sandstone cliff forming marker indicated basal white quartz sandstone
	L_3	Stromatolitic and sandy dolomite, dolomitic siltstone and sandstone
	L_2	Albitic shale flake turbidite, laminated to thinbedded dolomitic siltstone, rare basal sandstone lenses
	L_1	Pyritic shale, crystal tuff
UMBALOOGA SUB-GROUP "REWARD FORMATION"		
REWARD DOLOMITE & PASTAL TUFF	Rd & Pt	Nodular dolomite, dolarenite, chert bat dolomite Dolomite, dolomite breccia, thin bedded dolomite & tuff, replacement chert, chert breccia strom chert/dol rock, silty nodule dol, leached albitic dol sst
BARNEY CK FORMATION & SURPRISE CK DOLOMITE	Bcf & Sd	Laminated carbonaceous dol sst yellow weathering flaggy dol, pyritic shale, albitic dolomitic sst, thin tuff beds, near base
TEENA DOLOMITE		
	T_4	Laminated bituminous dol & interbedded tuff
CUYCO DOLOMITE (restricted sense)	T_3	Massive dolomite
	T_2	Dolomite, laminated dolomitic tuff dolomitic sst & shale
MITCHELL YARD DOLOMITE		
	T	Laminated yellow dol, minor tuff
	M	Massive grey dol, rare tuff
MARA CK DOLOMITE		
	Ma	Cherty dol, chert dolarenite, laminated dol, cherty stromatolitic dol
MARA CK SHALE	Ms	Purple shale
[illegible] FORMATION	Pmr	Dolomitic sandstone shale

MISCELLANEOUS LEGEND

- GEOLOGICAL BOUNDARY
- FAULT
- DRAINAGE
- TRACK
- 350m — ESTIMATED STRATIGRAPHIC SECTION
- MEASURED SECTION
- GRAVITY LINE AND STATION
- DIAMOND DRILL HOLE
- PRESENT BOUNDARY E.L. 1203 (MT LYNOTT AREA)

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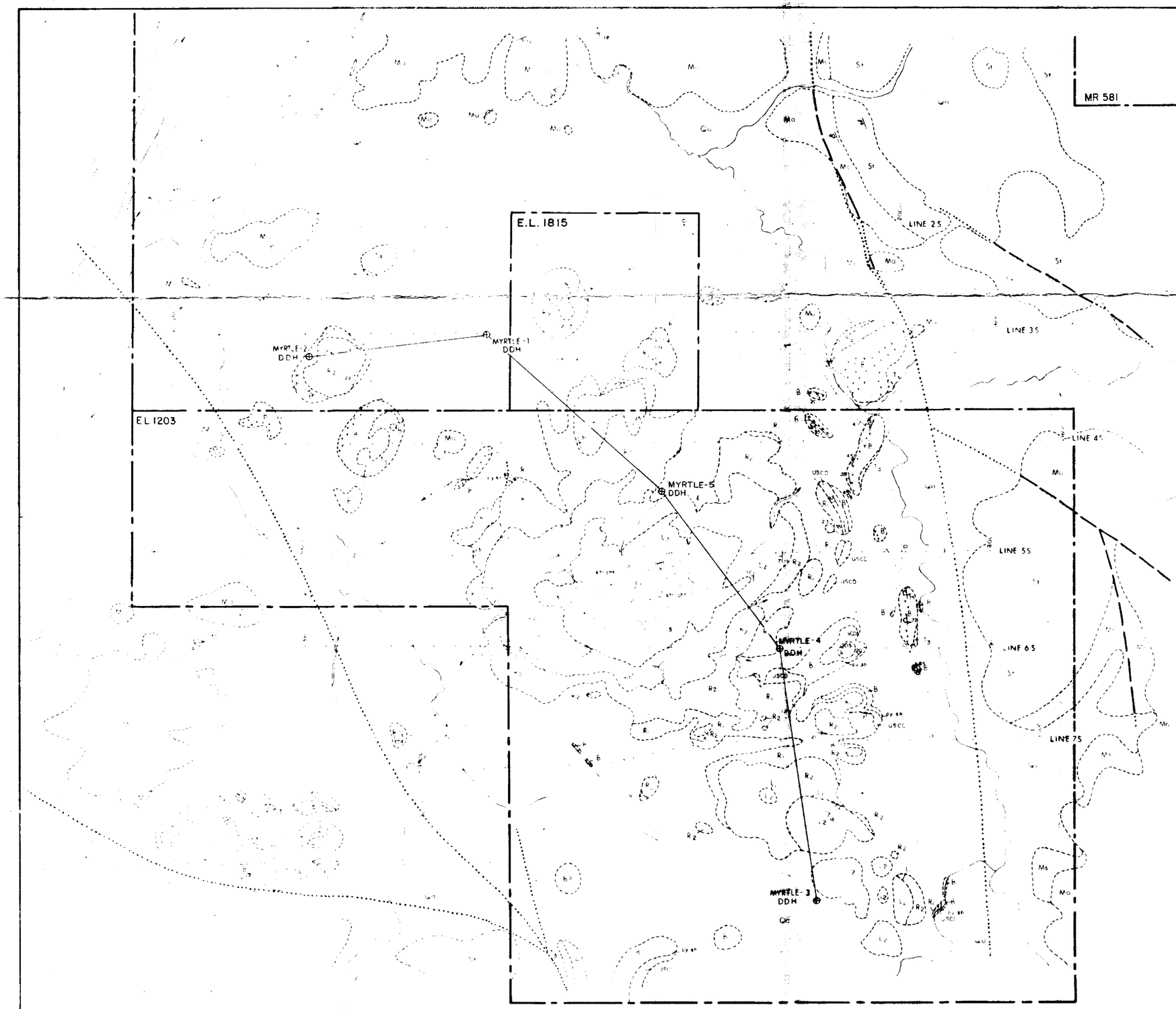
METALS DIVISION

BAUHINIA JOINT VENTURE
E.L. 1203
LEILA YARD - MT LYNOTT AREA
GEOLOGY & GRAVITY LINES

SCALE 1:25 000	DATE JAN 1982
AUTHOR J.C.B.	DRAWN K.M.B.
OFFICE DARWIN	REF No.
ORG No. NT MC03-206	FIG No. 3

CR82-20



GEOLOGICAL EXPLANATION

Qa — Alluvium, Colluvium

LYNOTT FORMATION

L_3 — muddy dolomites with sandstone and minor stromatolitic chert - indicated by symbol str cht

L_{1-2} — muddy dolomites, some with chert balls, basal pyritic mudstone (L_1)

REWARD FORMATION

R_2 — dolomite breccia, muddy dolomite, dolarenite, distinctive dolomite breccia at base & distinctive regularly spaced chert intercalations near top, chert balls common

R_1 — dolomite with chert nodules, dolorudite & dolarenite, minor dolomitic shale, chert balls common except near base

BARNEY CREEK FORMATION

[illegible] — weathering dolomite with regular bedding

[illegible] — carbonaceous dolomite siltstone with "tuff" beds, some dolorudite near top (Lower Surprise Creek Dolomite) & pyritic shale [illegible] top, principal tuff beds indicated by symbol

TEENA DOLOMITE

[illegible] — interbedded contorted dolomite & "tuff" grading to ochre weathering mudstone "W-Fold" member

[illegible] — massive white to pink crystalline dolomite, acicular gypsum pseudomorphs common in some outcrops

MITCHELL YARD DOLOMITE

M — grey, blocky weathering dolomite, minor chert

MARA DOLOMITE

[illegible] — grey to yellow cherty dolomite, often stromatolitic

MYRTLE SHALE

[illegible] — purple shale

"SLAB TOP DOLOMITE" TOOGANGINIE FORMATION

[illegible] — yellow stromatolitic & massive dolomite interbedded with doloiutite, some sandstone, gypsum pseudomorphs common

MISCELLANEOUS LEGEND

GEOLOGICAL BOUNDARY

FAULT

FAULT - projected below cover

TREND LINE

STRIKE & DIP OF BEDDING – REVERSE DIP

E.L. BOUNDARY

LINE 25 — GRAVITY LINE showing line number and stations

⊕ MYRTLE-3 DDH — DIAMOND DRILLHOLE LOCATION

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BAUHINIA JOINT VENTURE
E.L. 1203 & E.L. 1815
MYRTLE BASIN AREA

GEOLOGY & GRAVITY LINES

SCALE 1 25 000	DATE JANUARY 1982
AUTHOR JCB	DRAWN TEE
OFFICE DARWIN	REP No.
DRG No. NT M003 009	FIG No. 4

CR82120

AVERAGE ASSAYS
Cu/Pb/Zn (ppm)

SPLIT CORE — FILLET

CORE BEDDING ANGLE

0

NON-CORE DRILLING

23.00

BRECCIA

58.76

SHALEY

60.39

SHALE AND SHALE-FLAKE INTERBEDS

80°

SHALEY

70°

136.07

DOL SILTSTONE AND DOLARENITE INTERBEDS

143.40

80°

OCC SHALE AND DOLORUDITE INTERBEDS

166.81

80°

OCC THIN SHALE & DOLARENITE INTERBEDS

80°

187.60

DOLARENITE INTERBEDS TR PYRITE

193.15

193.70

TUFF

80°

TUFF

TUFF

TUFF

TUFF

80°

323.38

TR SPHALERITE & GALENA

80°

330.66

TR GALENA

333.64

BOUDINAGE BEDDED OCC THIN SHALE AND SHALE-FLAKE INTERBEDS

70°

369.20

OCC THIN SHALE INTERBEDS

EVAPORITE PSEUDOMORPHS

384.00

387.30

END OF HOLE 387.30m

REWARD DOLOMITE (R_2)

REWARD DOLOMITE (R_1)

UPPER SURPRISE CREEK DOLOMITE

SURPRISE CREEK PYRITIC SHALE

LOWER SURPRISE CREEK DOLOMITE

BARNEY CREEK FORMATION

BCF PYRITIC SHALE

B C F.

W-FOLD SHALE

TEENA DOLOMITE

15/31/44 325/28/285

49/28/165

55/12/1058

46/1002/3356 54/1518/4700

55/760/170

30/33/125

LEGEND

- Dolomite
- Dolomitic siltstone and dolarenite
- Dolomitic shale
- Dolorudite
- Carbonaceous dolomitic shale grading cyclically to silty shale
- Pyritic carbonaceous shale
- Tuffaceous shale and tuffs
- Dolomitic tuffaceous shale and tuffaceous dolomite with tuff bands
- Dolomite and tuffaceous dolomite

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METALS DIVISION

BAUHINIA JOINT VENTURE
E L 1203

LEILA YARD-
MYRTLE CREEK AREA

DDH MY 5

CR82/20

SCALE 1 1000	DATE OCT 1981
AUTHOR J C B	DRAWN K M B
OFFICE DARWIN	REP No
DRG No NT/M003/003	FIG No 7

CORE BEDDING ANGLE

AVERAGE ASSAYS
Cu/Pb/Zn (ppm)

NON-CORE DRILLING

INTERBEDDED SHALE AND CHERTY OCC STROMATOLIC DOLOMITE. OCC. SAND-STONE, DOLARENITE AND DOLOLUTITE UNITS

LYNOTT FORMATION (L4)

70° 80°

217·50

OCC DOLARENITE, SHALE AND SILTSTONE INTERBEDS. OCC CHERT BRECCIAS

LYNOTT FORMATION (L3)

81°

260·50

OCC SANDSTONE INTERBEDS & TUFFACEOUS UNITS. OCC SLUMPING & BRECCIATION

LYNOTT FORMATION (L2)

80°

41/70/47
(single assay)

339·85

1 – 5% PYRITE

LYNOTT (L1)

27/88/94

82°

364·05

BRECCIAS DOLARENITE.

REWARD DOLOMITE

8/51/15

82°

369·02

SILTSTONE AND SHALE INTERBEDS

UPPER SURPRISE CREEK DOLOMITE ?

16/41/24

82°

377·82

FORMATION

OCC TUFFACEOUS UNITS AND TUFF BANDS THROUGHOUT

24/45/53

CREEK

BARNEY

84°

82°

496·27

B.C.F. PYRITIC SHALE

502·14

77°

INCREASED TUFF COMPONENT

B.C.F.

70°

515·90

TUFFACEOUS BOUDINAGE BEDDED

TEENA DOLOMITE (T4)

60°

519·45

GYPSUM PSEUDOMORPHS

TEENA DOLOMITE (T3)

527·00

END OF HOLE 527·00m

LEGEND

- Dolomitic siltstone
- Sandstone (Dolomitic)
- Interbedded Dolomite, Shale, Siltstone and Dolarenite
- Dolomitic shale and siltstone
- Dolomite
- Carbonaceous dolomitic shale grading cyclically to silty shale
- Pyritic carbonaceous shale
- Dolomite and tuffaceous dolomite

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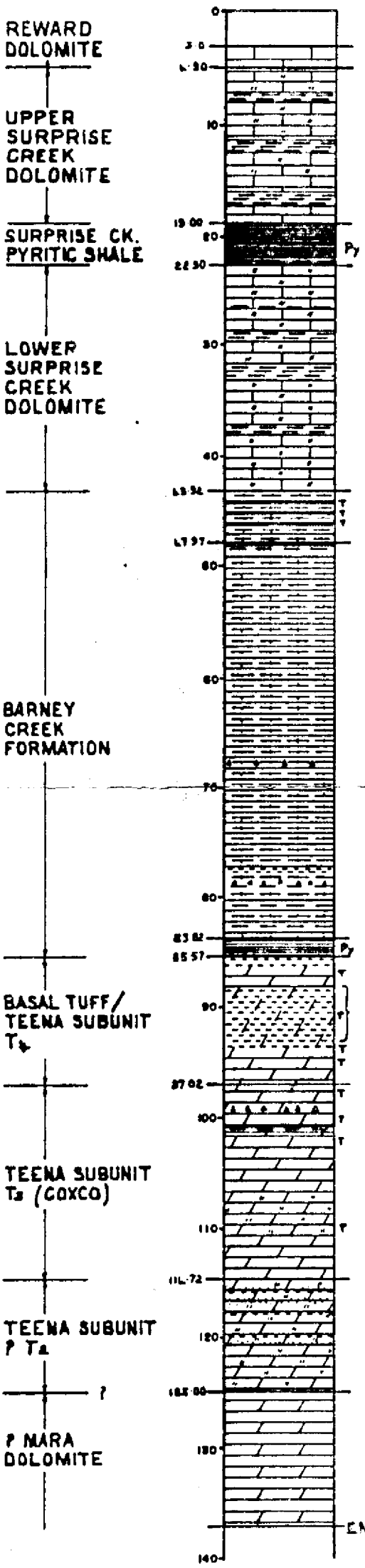
BAUHINIA JOINT VENTURE
E.L. 1203

LEILA YARD-
MT LYNOTT AREA

DDH L1

CR82/20

SCALE 1:1000	DATE JAN 1982
AUTHOR J.C.B.	DRAWN TEE/KMB
OFFICE DARWIN	REF. No.
DRG No. NT/M003/007	FIG No. 6



NON-CORE DRILLING

ROUNDED CONCRETIONS / THIN CHERTY BANDS

SHALE INTERBEDS INCREASINGLY ABUNDANT WITH DEPTH.

RARE THIN TUFF STRINGERS

DOLOMITE / TUFF BANDS
COARSE SPINDLE LAMINATED TUFFACEOUS SILTSTONE

TR. SPHALERITE

MINOR THIN MUDSTONE / TUFF

MUDSTONE / TUFF

MUDSTONE / TUFF. MINOR BOUDINAGE BEDDED DOLOMITE / TUFF

NUMEROUS THIN MUDSTONE / TUFF BANDS
DOLOMITE / TUFF

MINOR SILTSTONE / SHALE

RADIATING GYPSUM PSEUDOMORPHS

TR. Py / SPHALERITE / SHALE
CRYSTALLINE DOLOMITE CAVITIES

RADIATING GYPSUM PSEUDOMORPHS

GYPSUM PSEUDOMORPHS RARE TOWARDS 116.00

THIN SANDY BANDS / LENSES
MUDSTONE / SHALE BANDS

? ALGAL LAMINATIONS

ALGAL LAMINATIONS

TR. GALENA

END OF HOLE – 137.00

CORE RECOVERY THROUGHOUT 100%

THIN + MEDIUM BEDDED DOLOMITIC SILTSTONE + DOLOLUTITE

DOLOMITIC SHALE INTERBEDS. POORLY BEDDED SILTY DOLOMITE BANDS

DOLOMITIC CARBONACEOUS PYRITIC SHALE

MEDIUM GREY + DARK MEDIUM GREY WEAKLY PYRITIC SHALE, INTERBEDDED OR GRADING TO TUFFACEOUS DOLOMITIC SILTSTONE WITH FINE SPINDLE LAMINATIONS.

LIGHT TO MEDIUM GREY MOTTLED, LAMINATED + MASSIVE CRYSTALLINE DOLOMITE

PINKISH BROWN DOLOMITE

THIN BEDDED / LAMINATED DOLOMITE / CHERTY DOLOMITE

DOLOMITIC SILTSTONE

DOLOMITIC SHALE

MUDSTONE / TUFF

T DOLOMITE / TUFF

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BAUHINIA JOINT VENTURE
E.L. 1203

LEILA YARD
DDH MY 4

CR82/20

SCALE 1:500	DATE JAN. 1982
AUTHOR J.C.B.	DRAWN K.M.B.
OFFICE DARWIN	REP.No.
DRG.No. NT/M003/010	FIG.No 6

135°50'

136°00'

16°33'

135°49'

135°52'

16°35'

16°35'

16°35'

136°00'

16°36'

136°02'

136°05'

135°50'

135°56'

16°38'

16°40'

16°40'

16°40'

135°50'

136°00'

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METALS DIVISION

BAUHINIA JOINT VENTURE
E.L. 1203
LEILA YARD

CR82/20

SCALE 1:100 000	DATE JAN. 1982
AUTHOR J.C.B	DRAWN K.M.B
OFFICE DARWIN	REP. No.
DRG No. NT/M003/005	FIG. No. 2