

**MAGELLAN PETROLEUM  
DRILLING FLUID RECAP  
PALM VALLEY-10 & 10A  
AMADEUS BASIN  
N. T. , AUSTRALIA**



Prepared by : C. Wallace, D. Indarsingh  
Date : November 1994

*"All information, recommendations and suggestions herein concerning our products are based on tests and data believed to be reliable. However, it is the user's responsibility to determine the safety, toxicity and suitability for their own use of the products described herein."*

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### WELL SUMMARY

Operator	:	Magellan Petroleum (N.T)
Well Name	:	Palm Valley -10, Palm Valley -10A (Sidetrack)
Location	:	O.L 3, Amadeus Basin, N.T
Contractor	:	O.D. & E.
Rig	:	Mereenie Rig 1
Rig On Location	:	16th November, 1994
Start Date	:	18th November, 1994
RKB Elevation	:	6 m
Total Depth	:	2343 m
Average Angle	:	To 59 degrees
Date Reached T.D.	:	3rd February, 1995
Total Days Drilling	:	78 Days

Drilling Fluid Type	Interval	Hole Size	Cost (A\$)
Air	0 - 18 m	17-1/2"	\$ 0.00
Air/Mist/Foam	18 - 398 m	12-1/4"	\$ 1527.56
Air/Mist/Foam-Aerated Water	398 - 1453 m	8-1/2"	\$ 9451.45
Air/Mist/Foam (PV-10)	1453 - 2143 m	6"	\$ 14797.03
KCl/Polymer-Air/Mist/Foam (PV-10A)	1471 - 2343 m	6"	\$ 18631.72
<b>Mud Materials Charged To Drilling</b>	<b>TOTAL</b>		<b>\$ 44407.76</b>
Engineer On Location From	:	29/11/94 To 6/2/95	
Drilling Fluid Engineering	:	70 Days @ \$ 500/Day	\$ 35000.00
Drilling Fluid Laboratory	:	70 Days @ \$ 25/Day	\$ 1750.00
<b>Total Cost Of Drilling Materials &amp; Engineering</b>			<b>\$ 81157.76</b>
Mud Material Not Charged To Drilling			\$ 894.00
Casing Program	:	13-3/8" Conductor @ 18 m	
	:	9-5/8" @ 396.5 m	
	:	7" @ 1451.55 m	
Drilling Supervisors	:	Bernie Grinke, Cyril Davison	
Baroid Mud Engineers	:	Chris Wallace, Davey Indarsingh	

## INTRODUCTION

Palm Valley-10 was spudded on the 18 November 1994 using O.D. & E. Mereenie Rig 1.

Drilling commenced with an 8-1/2" pilot hole that was opened to 17-1/2" with an air hammer bit to the 13-3/8" casing point of 18 m. After running casing, drilling continued with 12-1/4" hole to 398 m. 130 bbl gel mud was pumped prior to running the 9-5/8" casing.

At 445 m the hammer bit broke off and subsequent overshoots were unsuccessful. A cement plug was set at 400 m and a sidetrack from 403 m drilled. A total of 3 days were lost with a materials cost of \$482.81.

Water was encountered at 590 m and a BARA-SWELL Pill was pumped unsuccessfully to plug the influx zone. Air/Mist/Foam drilling continued to 849 m when the water influx became excessive. Aerated water was then implemented without problems to the casing depth of 1453 m.

The 6" hole was initially drilled using an air motor to build angle. The penetration rate was low at 0.6 m/hr due to an inability to get weight on the bit without the motor stalling. At 1573 m, rotary drilling with air commenced at a rate of 5 m/hr, building angle as programmed.

TD of 2143 m was reached with extensive reaming required. The hole was displaced to mud for the five log programme. A DST at 1901 m recorded GTS @ 0.45 MMCFD. Four cement plugs were then set to seal off the hole.

Palm Valley-10A was kicked off at 1471 m. Angle was built to 46 degrees at 1692 m with extensive reaming required. The hole was displaced to water and Air/Mist/Foam drilling commenced. The penetration rate with mud was 1 m/hr and 5 m/hr with rotary air drilling.

The pipe became stuck at 1833 m on pulling out at 1873 m, and again at 1557 m while running back in. After extensive reaming, the hole was displaced to water at 1609 m to continue reaming to bottom. Air/ Mist/Foam was then re-introduced to drill to TD of 2343 m.

Upon displacing the well to mud to log at TD, lost circulation occurred and 225 bbls of new mud was required. A program of four logs were run successfully and tubing was set without incident.

**CONCLUSIONS & RECOMMENDATIONS**

- The BARA-SWELL pill was pumped as described in Appendix 3. From the results of this it can be recommended that the pill be pumped at pressure to initiate a squeeze to force the particles into the formation before swelling is initiated. Results indicate the pill swelled correctly and held for several minutes before being washed away by the force of the Mereenie water.
- EZ-MUD was not required as there were no problems with hole cleaning or cuttings transport from these formations.
- The concentration of QUIK-FOAM was kept constant at 1.33 lpb and that of BARACOR 1635L at 0.3 lpb, which was adequate and economical.
- Lost circulation occurred while pumping the logging pill at TD and was simultaneous with both pumps going down due to bugs blocking the screens. New mud was made at a cost of \$2377 and without any LCM. A contingency plan for lost circulation was included with the Baroid Drilling Fluid Programme when submitted. The chemicals were never ordered to the site as it was deemed unnecessary by Magellan management. Future wells should have some LCM on site for this purpose.
- The well cost, excluding the sidetrack after TD was reached, of \$ 25776 was 40% lower than the programmed cost. This was due to the use of aerated water and because EZ MUD was not required. The concentration of QUIK-FOAM at 1.3 lpb instead of the programmed 2 lpb was a significant saving. The sidetrack cost of \$ 18631 including the extra mud required, due to down hole losses, was 20% lower than the programmed 6" interval. This was due to the decreased KCl content of the final logging fluid and the fact the mud required only minor maintenance costs as fluid properties were relaxed.

**DISCUSSION BY INTERVAL**

**17-1/2" Hole : Surface to 18 m (18 m drilled - 1 Day)**  
**Formations : Surface sands.**

**Drilling Fluid : Air**

Palm Valley-10 was spudded on the 18th November 1994. An 8-1/2" pilot hole was drilled and then opened to 17-1/2" with an air hammer bit to 18 m. The 13-3/8" conductor was cemented in place at 18 m. The Baroid mud engineer was not on location at this stage of the operations and no mud materials were used. There were no problems encountered while drilling this interval.

**12-1/4" Hole : 18 m to 398 m (380 m drilled - 5 Days)**  
**Formations : Surface sands, Parke Siltstone.**

**Drilling Fluid : Air/Mist**

This interval was air hammer drilled with 2 bits in 23 rotating hours. A 130 bbl Hi-Vis Gel mud was circulated prior to running casing to ensure float equipment was open. Tight hole occurred from 149 to 175 m.

The hole was blown clean using Air/Mist/Foam at 12 bbl/hr and 2400 cfm. Casing was run without incident.

The Baroid mud engineer was not on location for this stage of the operations.

**8 1/2" Hole** : **398 m to 1453 m (1055 m drilled - 22 Days)**  
**Formations** : **Park Siltstone to Upper Stairway**

**Drilling Fluid** : **Air/Mist/Foam**  
**Aerated Water**  
**3% KCl logging fluid**

The 8-1/2" hole section was drilled with air, air/mist/foam, and aerated water. The section took 22 days to drill ( 238 rotating hours).

After drilling out the cement, an 8-1/2" air hammer bit was used to drill to 445 m, when the hammer bit broke off. Subsequent overshoots were unsuccessful. A cement plug was set at 400 m and a sidetrack from 403 m drilled. A total of 3 days were lost in this procedure at a materials cost of \$482.81.

The 8-1/2" hole was then air/mist drilled to 641 m using two hammer bits. The Mereenie Water Influx was encountered at 590 m. On the bit change at 641 m, a BARA-SWELL Pill was pumped to plug off the water zone (See Appendix 3). The pill was unsuccessful, and air/mist drilling continued to 849 m. The injection rate was 8 bbl/hr with an air rate of 2400 cfm using QUIK-FOAM @ 1.33 lpb, BARACOR 1635L, a foam corrosion inhibitor @ 0.3 lpb, and small amounts of caustic soda to maintain pH.

The zone was producing water at approximately 500 to 600 bbl/hr with this water being transported off site with tankers. Aerated water was introduced at 849 m, and water production was controlled by regulating pump strokes at around 76 spm and compression of 350 psi. The hole was then successfully drilled to casing point, unloading the well and adjusting the air to water on connections.

A 50 bbl Hi-Vis pill was pumped prior to blowing the well clean. The 3% KCl brine logging pill was pumped to displace the hole and another 50 bbl Hi-Vis pill was spotted on bottom. Three logging runs were successfully completed. The 7" casing was run and set without incident after spotting a 50 bbl Hi-Vis pill on bottom.

## **HOLE CONDITIONS**

A near gauge hole was indicated by the caliper log. Washout occurred between 740 to 850 m, and 925 to 960 m.

## **SOLIDS CONTROL**

The shale shaker with B80/B100 screens was bypassed due to it's inability to handle the flow rates. The desander and desilter were run continuously, while circulating, unless under repair. The centrifuge was not operational during the early stages of the interval due to an electrical fault. This was fixed at 1420 m but the centrifuge was not required.

6" Hole : 1453 m to 2143 m ( 690 m Drilled - 21 Days)  
 Formations : Upper Stairway to TD  
 Drilling Fluid : Air  
                   Air/Mist  
                   Air/Mist/Foam  
                   4% KCl/PAC-R/Polymer logging fluid

After drilling out the cement shoe with water using a 3-1/2" assembly, the hole was blown dry and drilling continued with Air.

The down hole motor was run into the hole, orientated and drilling continued with air/mist. From 1484 m, foam was injected at the rate of 7-10 bbl/hr at a QUIK-FOAM concentration of 1.33 lpb.

The drilling rate was around 0.6 m/hr at an inclination of 19 degrees at 1573 m when it was decided to go to rotary drilling. The ROP picked up to over 5 m/hr. At 1901 m the well was shut in and tested resulting in GTS of 0.45 MMCFD. Drilling continued to the TD of 2143 m, blowing the well clean on connections with some reaming required.

300 bbl KCl/Polymer kill mud of 8.8 ppg was kept in reserve for this section in case the well needed to be displaced. This was then treated and used for logging. Five logs were run without problems. The hole was then abandoned and sidetracked, setting 4 cement plugs.

#### TYPICAL PROPERTIES

Palm Valley-10	Kill mud in Reserve	Logging	
Depth	1625	2143	m
Mud Weight	8.8	8.8	ppg
Viscosity	51	45	sec
Plastic Viscosity	17	18	cPs
Yield Point	14	10	lb/100ft <sup>2</sup>
API Filtrate	4.4	3.8	ml
Solids	2.3	2.3	%
M.B.C.	6	6	ppb
pH	11	11	
Chlorides	20,000	20,000	mg/l
Total Hardness	100	100	mg/l
KCl	4.0	4	% Wt Soln
Sulfite Res.	10	80	mg/l

#### HOLE CONDITIONS

Tight hole was experienced from 1468 to 1473 m and from 1486 to 1490 m. At the bit trip at 1742 m, there was 5 m of fill running back in which was blown clean. Reaming was required from 1794 to 1805 m, 1954 to 1957 m, and from 2037 to 2087 m.

#### SOLIDS CONTROL

The shale shaker with B80/B100 screens was only used while circulating the logging fluid.



**6" Hole** : 1471 m to 2343 m (872 m Drilled - 33 Days)  
**Formations** : Middle Stairway to TD  
  
**Drilling Fluid** : KCl/Polymer  
 Air/Mist/Foam  
 2.6% KCl/PAC-R/Polymer logging fluid

Palm Valley 10A was kicked off on the 5th January, 1995 from 1471 m using a mud motor with MWD to build and assess angle and direction. Extensive reaming was required during drilling. At 1546m, the mud weight was increased from 8.7 to 8.9 ppg with additions of BARACARB 35. Alternate periods of drilling/reaming continued. The hole was displaced to water at 1692 m and Air/Mist/Foam drilling continued.

Rates of penetration with the mud motor averaged 1 m/hr not including the significant reaming time. Air penetration rates were in the order of 5 m/hr.

QUIK-FOAM (from 1 to 1.6 lpb) and BARACOR 1635L (0.3 lpb) were added to the water as well as Caustic Soda to produce a pH of 9. Injection rates varied according to the table in the Appendix and were administered by OILTOOLS operators.

At the TD of 2343 m, the well was displaced to mud for logging. Total loss of returns occurred with 275 bbls mud lost. 225 bbls new mud were mixed at a cost of \$ 2377.72 and a wiper trip to the shoe run. Running back into the hole produced returns with 35 bbls recovered while circulating on bottom. A 50 bbl EZ-MUD Hi-Vis pill was spotted on bottom and the four log program completed without incident.

#### TYPICAL PROPERTIES

Palm Valley-10A		Kill mud in Reserve		Logging	
Depth	:	1773	2343	m	
Mud Weight	:	9.0	8.7	ppg	
Viscosity	:	41	38	sec	
Plastic Viscosity	:	16	5	cPs	
Yield Point	:	10	5	lb/100ft <sup>2</sup>	
API Filtrate	:	3.6	6.8	ml	
Solids	:	2.9	1.8	%	
M.B.C.	:	3	2	ppb	
pH	:	9.5	9		
Chlorides	:	13,000	14,000	mg/l	
Total Hardness	:	80	80	mg/l	
KCl	:	2.6	2.8	% Wt Soln	
Sulfite Res.	:	10	10	mg/l	

**HOLE CONDITIONS**

Extensive reaming was required from 1471 to 1484 m, 1513 to 1527 m, 1585 to 1586.1 m, 1528 to 1589, and 1566 to 1594 m. A reaming assembly was run at 1626 m when tight hole occurred. This was used to ream from 1471 to 1626 m. Drilling with reaming continued from 1640 to 1660 m and 1682 to 1692 m.

Logs at TD showed good gauge hole with fine filter cake built up. A large washout zone was evident from 1850 to 1940 m with the largest section being 10" diameter in the 1900 to 1925 m depths.

**SOLIDS CONTROL**

The mud weight was reduced from 9.1 to 9.0 by use of the desilter at 1626 m. The centrifuge was used to decrease the weight from 9.1 to 9.0 ppg at 1689 m and was working efficiently at 1400 RPM discharging 14.5 ppg mud until a hydraulic seal failed. The parts required to fix it were sent for but did not arrive in time for it to be used again.

The shaker screen combination of 80 and 100 mesh was adequate throughout the interval with only minor losses.

## **RECAP TABLES**



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## MATERIAL RECAP

Page 1.

COMPANY MAGELLAN PETROLEUM (N.T.) PTY. LTD.  
WELL PALM VALLEY-10 A  
LOCATION AMADEUS BASIN

HOLE SIZE 17-1/2"  
CONTRACTOR/RIG O.D. & E. Mereenie Rig 1  
MUD TYPE Air

INTERVAL TO (m) 18 DRILLING DAYS 1 COST/DAY  
FROM (m) ROTATING HRS 6 COST/m  
DRILLED (m) 18 COST/bbl  
DATE 18-11-94 CONSUMPTION FACTOR (bbl/m)

MATERIAL	UNIT SIZE	UNIT COST	QUANTITY		CONC (lb/bbl)		TOTAL COSTS	
			EST	ACT	EST	ACT	ESTIMATE	ACTUAL

COST LESS BARITE :  
COST WITH BARITE :

### VOLUMES

Sea W.	bbl
Drill W.	bbl
other	bbl
other	bbl
Chemical	bbl
Salvaged Mud	bbl
TOTAL MUD USED	bbl

### COMMENTS



# Baroid Australia Pty Ltd

## MATERIAL RECAP

Page 2.

COMPANY MAGELLAN PETROLEUM (N.T.) PTY. LTD.

HOLE SIZE 12-1/4"

WELL PALM VALLEY-10 A

CONTRACTOR/RIG O.D. & E. Mereenie Rig 1

LOCATION AMADEUS BASIN

MUD TYPE Air/Mist/Foam

INTERVAL TO (m)	398	DRILLING DAYS	5	COST/DAY	A\$305.51
FROM (m)	18	ROTATING HRS	23	COST/m	A\$4.02
DRILLED (m)	380			COST/bbl	A\$305.51
DATE	23-11-94			CONSUMPTION FACTOR (bbl/m)	0.01

MATERIAL	UNIT SIZE	UNIT COST	QUANTITY		CONC (lb/bbl)		TOTAL COSTS	
			EST	ACT	EST	ACT	ESTIMATE	ACTUAL
EZ MUD (liq)	19 lt	74.07	8	3	0.6	25.1	592.56	222.21
QUIK-FOAM	205 lt	542.31	5	1	4.2	90.4	2,711.55	542.31
BARACOR 1635L	205 lt	574.55	1		0.8		574.55	
Caustic Soda	25 kg	18.04		1		11.0		18.04
AQUAGEL, sx	25 kg	14.9		50		551.2		745.00

	COST LESS BARITE :	A\$3,878.66	A\$1,527.56
	COST WITH BARITE :	A\$3,878.66	A\$1,527.56

### VOLUMES

Sea W.	bbl		
Drill W.	bbl		
other	bbl	530	
other	bbl		
Chemical	bbl	8.7	5
Salvaged Mud	bbl		
TOTAL MUD USED	bbl	539	5

### COMMENTS



# Baroid Australia Pty Ltd

## MATERIAL RECAP

Page 3.

COMPANY MAGELLAN PETROLEUM (N.T.) PTY. LTD.

HOLE SIZE 8-1/2"

WELL PALM VALLEY-10 A

CONTRACTOR/RIG O.D. & E. Mereenie Rig 1

LOCATION AMADEUS BASIN

MUD TYPE Air/Mist/Foam

INTERVAL TO (m)	1453	DRILLING DAYS	22	COST/DAY	A\$429.61
FROM (m)	398	ROTATING HRS	238	COST/m	A\$8.96
DRILLED (m)	1055			COST/bbl	A\$3.36
DATE	14-12-94			CONSUMPTION FACTOR (bbl/m)	2.66

MATERIAL	UNIT SIZE	UNIT COST	QUANTITY		CONC (lb/bbl)		TOTAL COSTS	
			EST	ACT	EST	ACT	ESTIMATE	ACTUAL
EZ MUD (liq)	19 lt	74.07	35	4	0.6	0.1	2,592.45	296.28
QUIK-FOAM	205 lt	542.31	22	4	4.4	0.6	11,930.82	2,169.24
BARACOR 1635L	205 lt	574.55	5	1	1.0	0.2	2,872.75	574.55
KCL, Tech(sx)	25 kg	14.44	55	83	1.3	1.6	794.20	1,198.52
Caustic Soda	25 kg	18.04		3		0.1		54.12
AQUAGEL, sx	25 kg	14.9		117		2.3		1,743.30
BARA-SWELL F	20 kg	275		2		0.0		550.00
BARA-SWELL C	20 kg	275		2		0.0		550.00
Surdyne L116	208 lt	904.8		2		0.3		1,809.60
BARADEFOAM W300	25 lt	110.26		2		0.0		220.52
BARACOR-129	25 kg	71.33		4		0.1		285.32

				COST LESS BARITE :	A\$18,190.22	A\$9,451.45
				COST WITH BARITE :	A\$18,190.22	A\$9,451.45
VOLUMES						
Sea W.	bbl					
Drill W.	bbl					
other	bbl	2230	2786			
other	bbl					
Chemical	bbl	43.3	25			
Salvaged Mud	bbl					
TOTAL MUD USED	bbl	2273	2811			

COMMENTS



# Baroid Australia Pty Ltd

## MATERIAL RECAP

Page 4.

COMPANY MAGELLAN PETROLEUM (N.T.) PTY. LTD.  
WELL PALM VALLEY-10 A  
LOCATION AMADEUS BASIN

HOLE SIZE 6"  
CONTRACTOR/RIG O.D. & E. Mereenie Rig 1  
MUD TYPE Air/Mist/Foam-KCl/Polymer

INTERVAL TO (m)	2143	DRILLING DAYS	21	COST/DAY	A\$704.62
FROM (m)	1453	ROTATING HRS	203.5	COST/m	A\$21.44
DRILLED (m)	690			COST/bbl	A\$9.24
DATE	04-1-95			CONSUMPTION FACTOR (bbl/m)	2.32

MATERIAL	UNIT SIZE	UNIT COST	QUANTITY		CONC (lb/bbl)		TOTAL COSTS	
			EST	ACT	EST	ACT	ESTIMATE	ACTUAL
EZ MUD (liq)	19 lt	74.07	25	2	0.6	0.1	1,851.75	148.14
QUIK-FOAM	205 lt	542.31	19	10	5.2	2.8	10,303.89	5,423.10
BARACOR 1635L	205 lt	574.55	4	3	1.1	0.8	2,298.20	1,723.65
KCL,Tech(sx)	25 kg	14.44	164	82	5.5	2.8	2,368.16	1,184.08
Soda Ash	25 kg	18.04	2	2	0.1	0.1	36.08	36.08
Caustic Soda	25 kg	18.04	3	4	0.1	0.1	54.12	72.16
AQUAGEL,sx	25 kg	14.9	27	31	0.9	1.1	402.30	461.90
PAC-R	50 lb	130.47	20	17	0.6	0.5	2,609.40	2,217.99
DEXTRID	25 kg	48.61	60	36	2.0	1.2	2,916.60	1,749.96
BARACARB 35	25 kg	10.67	91	73	3.0	2.5	970.97	778.91
BARACOR-129	25 kg	71.33		7		0.2		499.31
BARACIDE	25 kg	501.75		1		0.0		501.75

			COST LESS BARITE :		A\$23,811.47	A\$14,797.03
			COST WITH BARITE :		A\$23,811.47	A\$14,797.03
VOLUMES						
Sea W.	bbl					
Drill W.	bbl	1590	1564			
other	bbl					
other	bbl					
Chemical	bbl	60.9	37			
Salvaged Mud	bbl					
TOTAL MUD USED	bbl	1651	1601			
COMMENTS						



# Baroid Australia Pty Ltd

## MATERIAL RECAP

Page 5.

COMPANY MAGELLAN PETROLEUM (N.T.) PTY. LTD.  
WELL PALM VALLEY-10 A  
LOCATION AMADEUS BASIN

HOLE SIZE 10A 6"  
CONTRACTOR/RIG O.D. & E. Mereenie Rig 1  
MUD TYPE Air/Mist/Foam-KCl/Polymer

INTERVAL TO (m)	2343	DRILLING DAYS	33	COST/DAY	A\$564.60
FROM (m)	1471	ROTATING HRS	366	COST/m	A\$21.37
DRILLED (m)	872			COST/bbl	A\$22.56
DATE	05-2-95			CONSUMPTION FACTOR (bbl/m)	0.95

MATERIAL	UNIT SIZE	UNIT COST	QUANTITY		CONC (lb/bbl)		TOTAL COSTS	
			EST	ACT	EST	ACT	ESTIMATE	ACTUAL
EZ MUD (liq)	19 lt	74.07		4		0.2		296.28
QUIK-FOAM	205 lt	542.31		7		3.8		3,796.17
BARACOR 1635L	205 lt	574.55		2		1.1		1,149.10
KCL,Tech(sx)	25 kg	14.44		116		7.7		1,675.04
Soda Ash	25 kg	18.04		3		0.2		54.12
AQUAGEL,sx	25 kg	14.9		4		0.3		59.60
PAC-R	50 lb	130.47		30		1.8		3,914.10
DEXTRID	25 kg	48.61		63		4.2		3,062.43
BARACARB 35	25 kg	10.67		93		6.2		992.31
XCD Polymer	25 kg	478.06		1		0.1		478.06
BARADEFOAM W300	25 lt	110.26		1		0.1		110.26
BARACOR-129	25 kg	71.33		12		0.8		855.96
BARACIDE	25 kg	501.75		3		0.2		1,505.25
BARACARB 35	33.3 kg	14.23		48		4.3		683.04

	COST LESS BARITE :	A\$18,631.72
	COST WITH BARITE :	A\$18,631.72

### VOLUMES

Sea W.	bbl	
Drill W.	bbl	506
other	bbl	9
other	bbl	
Chemical	bbl	43
Salvaged Mud	bbl	268
TOTAL MUD USED	bbl	826

### COMMENTS





# Baroid Australia Pty Ltd

## MATERIAL RECAP

NON-DRILLING

COMPANY MAGELLAN PETROLEUM (N.T.) PTY. LTD.  
WELL PALM VALLEY-10 A  
LOCATION AMADEUS BASIN

HOLE SIZE  
CONTRACTOR/RIG O.D. & E. Mereenie Rig 1  
USED FOR

MATERIAL	UNIT SIZE	UNIT COST	QUANTITY		CONC (lb/bbl)		TOTAL COSTS	
			EST	ACT	EST	ACT	ESTIMATE	ACTUAL
AQUAGEL.sx	25 kg	14.9		60				894.00

### VOLUMES

Sea W.                      bbl  
Drill W.                    bbl  
other                        bbl  
other                        bbl  
Chemical                   bbl  
Salvaged Mud              bbl  
TOTAL MUD USED          bbl

COST LESS BARITE :  
COST WITH BARITE :

A\$894.00  
A\$894.00

### COMMENTS



# Baroid Australia Pty Ltd

COMPANY MAGELLAN PETROLEUM (N.T.) PTY. LTD.  
WELL PALM VALLEY-10 A

## MATERIAL SUMMARY

LOCATION AMADEUS BASIN

CONTRACTOR/RIG O.D. & E. Mereenie Rig 1

INTERVAL MUD TYPES	SIZE	m	DAYS	HOURS	WELL DURATION	
Air	17-1/2"	18	1	6	FROM :	29-Nov-94
Air/Mist/Foam	12-1/4"	380	5	23	TO :	05-Feb-95
Air/Mist/Foam	8-1/2"	1055	22	238		
Air/Mist/Foam-KCl/Polymer	6"	690	21	203.5		
Air/Mist/Foam-KCl/Polymer	10A 6"	872	33	366		

COST/DAY A\$541.56

COST/m A\$14.73

COST/bbl A\$8.93

TOTALS 3015 82 836.5

CONSUMPTION FACTOR (bbl/m) 1.65

RECAP BY C. Wallace, M. Olejniczak

MATERIAL	UNIT SIZE	UNIT COST	QUANTITY		TOTAL COSTS	
			ESTIMATE	ACTUAL	ESTIMATE	ACTUAL
EZ MUD (liq)	19 lt	74.07	68	13	5,036.76	962.91
QUIK-FOAM	205 lt	542.31	46	22	24,946.26	11,930.82
BARACOR 1635L	205 lt	574.55	10	6	5,745.50	3,447.30
KCL Tech(sx)	25 kg	14.44	219	281	3,162.36	4,057.64
Soda Ash	25 kg	18.04	2	5	36.08	90.20
Caustic Soda	25 kg	18.04	3	8	54.12	144.32
AQUAGEL, sx	25 kg	14.9	27	202	402.30	3,009.80
PAC-R	50 lb	130.47	20	47	2,609.40	6,132.09
DEXTRID	25 kg	48.61	60	99	2,916.60	4,812.39
BARACARB 35	25 kg	10.67	91	166	970.97	1,771.22
BARA-SWELL F	20 kg	275		2		550.00
BARA-SWELL C	20 kg	275		2		550.00
Surdyne L116	208 lt	904.8		2		1,809.60
XCD Polymer	25 kg	478.06		1		478.06
BARADEFOAM W300	25 lt	110.26		3		330.78
BARACOR-129	25 kg	71.33		23		1,640.59
BARACIDE	25 kg	501.75		4		2,007.00
BARACARB 35	33.3 kg	14.23		48		683.04

		COST LESS BARITE :	A\$45,880.35	A\$44,407.76
		COST WITH BARITE :	A\$45,880.35	A\$44,407.76

### VOLUMES

Sea W.	bbl		
Drill W.	bbl	1590	2070
other	bbl	2760	2795
other	bbl		
Chemical	bbl	112.9	110
Salvaged Mud	bbl		
TOTAL MUD USED	bbl	4463	4975

### COMMENTS



LOCATION AMADEUS BASIN  
CONT/RIG O.D.& E. Mereenie Rig 1

**DATES : FROM** 29-Nov-94  
**TO** 05-Feb-95

[illegible]



# Baroid Australia Pty Ltd

COMPANY MAGELLAN PETROLEUM (N.T.) PTY. LTD.

WELL PALM VALLEY-10

LOCATION AMADEUS BASIN

CONT/RIG O.D. & E. Meeenie Rig 1

## BIT RECORD

DATES : FROM 29-Nov-94  
TO 03-Jan-95

BIT NO.	BIT SIZE ins	MAKE	TYPE	JETS	DPTH IN m	DPTH OUT m	DRLD m	HRS ON BIT	RATE m/hr	ACC DRLG HRS	WOB x1000 lb	RPM	VERT DEV. deg.	PUMP PRES psi	PUMP RATE bbl/min	MUD WT ppg	MUD VIS sec	CONDITION & REMARKS
1	17.5			OPEN		18	18		ERR									PILOT HOLE 13-7/8"
2	12.25	DQ	SD12	OPEN	18	218	200	11.5	17.4	11.5	5	24		320				HFNB
3	12.25	DQ	SD12	OPEN	218	398	180	11.5	15.7	23	5	18		320				HF 9-5/8"
4	8.5	HTC	ATJ	OPEN	398	405	7	1.5	4.7	24.5	25	75		760	5.78			1 1 I HF HAMMER
5	8.5	QD	J17	OPEN	405	445	40	4	10	28.5	2/3	18		185	AIR			FISH LOST ON HOLE
6	8.5	HTC	ATJ222	20 18 18	376	410	34	25.5	1.3	54	4/7	94		450	6.54			6 6 I SIDE TRACK
7	8.5	HTC	RG7J	OPEN	444	522	78	14.5	5.4	68.5	25	85		240	AIR			3 7 I HF New BHA
8	8.5	HTC	ATM33D	OPEN	522	641	119	13.5	8.8	82	25/30	70/75		300	AIR			4 5 1/16 HFNB
9	8.5	HTC	ATJ33	OPEN	641	803	162	26	6.2	108	30	70		750	AIR			6 6 I HFNB
10	8.5	HTC	ATM22GD	OPEN	803	967	164	29	5.7	137	25	85		580	AIR 3.8			7 3 I HFNB
11	8.5	HTC	ATJ44	OPEN	967	1009	42	20.5	2	157.5	25	85		350	AIR 5.78			7 2 I HFNB
12	8.5	HTC	ATJ44	OPEN	1009	1175	166	28	5.9	185.5	25	55		350	400 CFM			5 4 I HFNB
13	8.5	HTC	ATJ44	OPEN	1175	1296	121	35.5	3.4	221	25/30	70/75		350	400 CFM			4 3 I HFNB
14	8.5	HTC	ATJ44	OPEN	1296	1322	26	6.5	4	227.5	22/20	70/85		360	400 CFM			3 3 I BHA CHANGE
15	8.5	HTC	ATJ44	OPEN	1322	1453	131	33.5	3.9	261	20/30	70/55		340/360	800 CFM			4 3 I T & S CASING
16	6	HTC	J2	OPEN	1453	1457	4	2	2	263	15	60		950	6.08			8 2 I HFNB
17	6	HTC	ATJ44CD	OPEN	1457	1468	11	6.5	1.7	269.5	8/12	40		800	1600CFM			4 3 I HFNB
18	6	HTC	ATJ55D	OPEN	1468	1468		3.5		273	1/28			800	1600CFM			1 1 I HFNB
RR 18	6	HTC	ATJ55D	OPEN	1468	1484	16	12	1.3	285	12/14			490	1500CFM			5 4 I HFNB
RR 17	6	HTC	ATJ44CD	OPEN	1484	1490	6	1.5	4	286.5	18	50		490	1500CFM			4 4 I HFNB
19	6	HTC	ATJ55	OPEN	1490	1490								540	1600CFM			2 2 I MOTOR TAIL SHAFT WORN
20	6	HTC	ATJ55	OPEN	1490	1522	32	14.5	2.2	301	9			480	1600CFM			5 3 I HFNB
21	6	HTC	ATJ55	OPEN	1522	1541	19	18.5	1	319.5	4/6			450	1500CFM			8 2 I HFNB
22	6	HTC	ATJ55	OPEN	1541	1558	17	17	1	336.5	4/8			450	1400CFM			8 3 I HFNB
23	6	HTC	ATJP55D	OPEN	1558	1569	11	10.5	1	347	4/8			450	1400CFM			8 3 I HFNB
24	6	HTC	ATJ44CD	OPEN	1569	1573	4	11	0.4	358	4/8			520	1600CFM			4 2 I HFNB & ASSEMBLY
25	6	HTC	ATJ44CD	OPEN	1573	1672	99	18	5.5	376	25	60		410	1500CFM			4 3 I HFNB & ASSEMBLY
26	6	HTC	ATJ44CD	OPEN	1672	1805	133	23.5	5.7	399.5	25	60		420	1500CFM			7 3 I HFNB
27	6	HTC	ATJ55D	OPEN	1805	1957	152	21.5	7.1	421	25	60		440	1500CFM			3 2 I HFNB
28	6	HTC	ATJ55D	OPEN	1957	2087	130	26.5	4.9	447.5	25	60		440	1500CFM			5 3 I HFNB
29	6	HTC	ATJ55	OPEN	2087	2143	56	17	3.3	464.5	25	50/60		440/480	1500CFM			7 4 1/16 HF LOG
RR 29	6	HTC	ATJ55	OPEN	2143	2143						20		1000	5.32	8.8	46	
RR 30	6	HTC	OSGIGJ	OPEN												8.7	39	DRILL CEMENT PLUG
31	6	HTC	ATJ22	OPEN	1471	1471										8.7	39	DRILL CEMENT T/- KICK OFF POINT.



# Baroid Australia Pty Ltd

COMPANY MAGELLAN PETROLEUM (N.T.) PTY. LTD.

WELL PALM VALLEY-10

LOCATION AMADEUS BASIN

CONT/RIG O.D. & E. Mereenie Rig 1

## BIT RECORD

DATES : FROM 29-Nov-94  
TO 03-Jan-95

BIT NO.	BIT SIZE ins	MAKE	TYPE	JETS	DPTH IN m	DPTH OUT m	DRLD m	HRS ON BIT	RATE m/hr	ACC DRLG HRS	WOB x1000 lb	RPM	VERT DEV. deg.	PUMP PRES psi	PUMP RATE bbl/min	MUD WT ppg	MUD VIS sec	CONDITION & REMARKS
32	6	CHRIS	D411ST	OPEN	1471	1471					MIS-RUN WITH					8.7	40	3 % WORN HF CHECK BHA.
RR 32	6	CHRIS	D411ST	OPEN	1471	1484	13	22.5	0.6	487	4	161		740	3.57	8.7	39	10 % WORN. HF SPERRY
33	6	HTC	ATJP55D	OPEN	1484	1513	29	19.5	1.5	506.5	10/15			720/800	3.27	8.7	39	4 5 I HFNB
RR32	6	CHRIS	D411ST	OPEN	1513	1527	14	16.5	0.8	523	15			1500	4.4	8.7	42	20 % WORN.
34	6	HTC	ATJP55	OPEN	1527	1541	14	11.5	1.2	534.5	17			1125	3.95	8.7	39	5 5 I HFNB & MOTOR
35	6	CHRIS	D331	OPEN	1541	1566	25	25.5	1	560	15			1640	4.41	8.9	44	15 % WORN. HF ANGLE
RR 35	6	CHRIS	D331	OPEN	1566	1586	20	23.5	0.9	583.5	17			1660	4.41	8.9	43	75 % WORN. HFNB
RR 32	6	CHRIS	D411ST	OPEN	1586	1589	3	8	0.4	591.5	13/17			1550	4.48	8.9	39	25 % WORN. HFNB
36	6	HTC	ATJP55D	OPEN	1589	1594	5	4	1.3	595.5	17			1150	3.42	8.9	39	4 2 I HFNB & MOTOR.
37	6	HTC	ATJP55	OPEN	1594	1606	12	10	1.2	605.5	10/12			1170	3.65	9	43	5 4 I HFNB & MOTOR.
38	6	CHRIS	D331	OPEN	1606	1626	20	20	1	625.5	15/16			1175	4.56	9	40	10 % WORN. HFNB & BHA.
39	6	HTC	ATJ55	OPEN	1626	1626					REAM RUN							4 4 I HFNB & BHA
RR 38	6	CHRIS	D331	OPEN	1626	1654	28	44	0.6	669.5	24			1840	4.48	9	40	GUAGE WORN HFNB & MOTOR
40	6	HTC	ATJP55	OPEN	1654	1660	6	9.5	0.6	679	30			1450	4.18	9	48	2 4 I HFNB & MOTOR
41	6	CHRIS	D331	OPEN	1660	1671	11	14.5	0.8	693.5	20	200		2000	4.71	9	47	20% WORN. HF ANGLE CHANGE.
RR 41	6	CHRIS	D331	OPEN	1671	1692	21	18	1.2	711.5	20	200		2000	4.71	9	42	75% WORN. HFNB & BHA
42	6	HTC	ATJ55	OPEN	1692	1732	40	8	5	719.5	25	60		360	1600CFM			5 4 1/8 HFNB
43	6	HTC	ATJP55	OPEN	1732	1773	41	8.5	4.8	728	23	60/65		460	2400CFM			5 5 I HFNB
44	6	HTC	ATJP55	OPEN	1773	1873	100	14	7.1	742	25	65		460	2400CFM			D N S HFNB
45	6	HTC	ATJ55	OPEN	1873	1873					REAM RUN							PINCHED HFNB
46	6	HTC	ATJ55	OPEN	1873	1898	25	4	6.3	746	22	65		620	2400CFM			4 2 I HFNB
RR 19	6	HTC	ATJP55D	OPEN	1898	2079	181	25.5	7.1	771.5	22	65		580	2400CFM			5 2 I HFNB
47	6	HTC	ATJP55	OPEN	2079	2199	120	24	5	795.5	22	65		500	1600CFM			7 5 1/16 HFNB
48	6	HTC	ATJ55	OPEN	2199	2199					REAM RUN							
RR 48	6	HTC	ATJ55	OPEN	2199	2243	44	11	4	806.5	22	68		500	1600CFM			7 3 1/8 HFNB
49	6	HTC	J55	OPEN	2243	2311	68	11.5	5.9	818	22	68		600	2400CFM			5 7 I HFNB
RR 33	6	HTC	ATJP55D	OPEN	2311	2343	32	12.5	2.6	830.5	22	68		600	2400CFM			8 3 3/8 TD

**Baroid Australia Pty Ltd**

COMPANY MAGELLAN PETROLEUM (N.T.) PTY. LTD.

WELL PALM VALLEY-10 A

LOCATION AMADEUS BASIN

CONT/RIG O.D. &amp; E. Mereenie Rig 1

**DIRECTIONAL SURVEYS**

PAGE-1

MD m	TVD m	INCL°	DIR °	DISP m
42	42	0.25		
104	104	1.5		
159	159	2		
196	196	2.75		
216	216	4		
235	235	3		
264	264	2		
283	283	1		
350	350	0.5		
416	416	2.1	N44E	
436	436	3.5	N36E	
458	458	3.5	N39E	
478	478	3	N34E	
517	517	2.75	N30E	
551	551	2		
619	619	2		
694	694	1.75		
771	771	3.75		
800	800	4.5		
817	817	4.5		
856	856	4.25		
933	933	4.75		
962	962	4.75		
973	973	4.75		
992	992	5.25		
1002	1002	4.75		
1023	1023	3.75		
1052	1052	3.75		
1129	1129	3.75		
1177	1177	3.75		
1225	1225	5.5		
1254	1254	5.25		
1283	1283	6.25		
1293	1293	6.25		
1312	1312	7		
1328	1328	7.5		
1347	1347	7.75		
1366	1366	8.25		
1395	1395	7.25		
1414	1414	7		
1434	1434	6.75		
1449	1449	6.75		
1463	1460	6.2	225.3	
1474	1471	5.5	216.4	
1481	1478	5.7	205.5	
1483	1480	5.2	205.4	
1493	1490	6.3	204.5	
1502	1499	8.5	205.3	
1512	1509	10.1	209.1	
1521	1517.45	11.8	215.4	
1531	1527	14.2	217.6	
1540	1536	16.2	217.1	
1550.5	1545	17.9	216.7	
1560	1554	19.1	218.5	
1581	1574	19	219	
1591	1583.7	19	211	
1598	1591	19	203	
1607	1598.8	19	195	

**Baroid Australia Pty Ltd****DIRECTIONAL SURVEYS**

COMPANY MAGELLAN PETROLEUM (N.T.) PTY. LTD.

WELL PALM VALLEY-10 A

PAGE-2

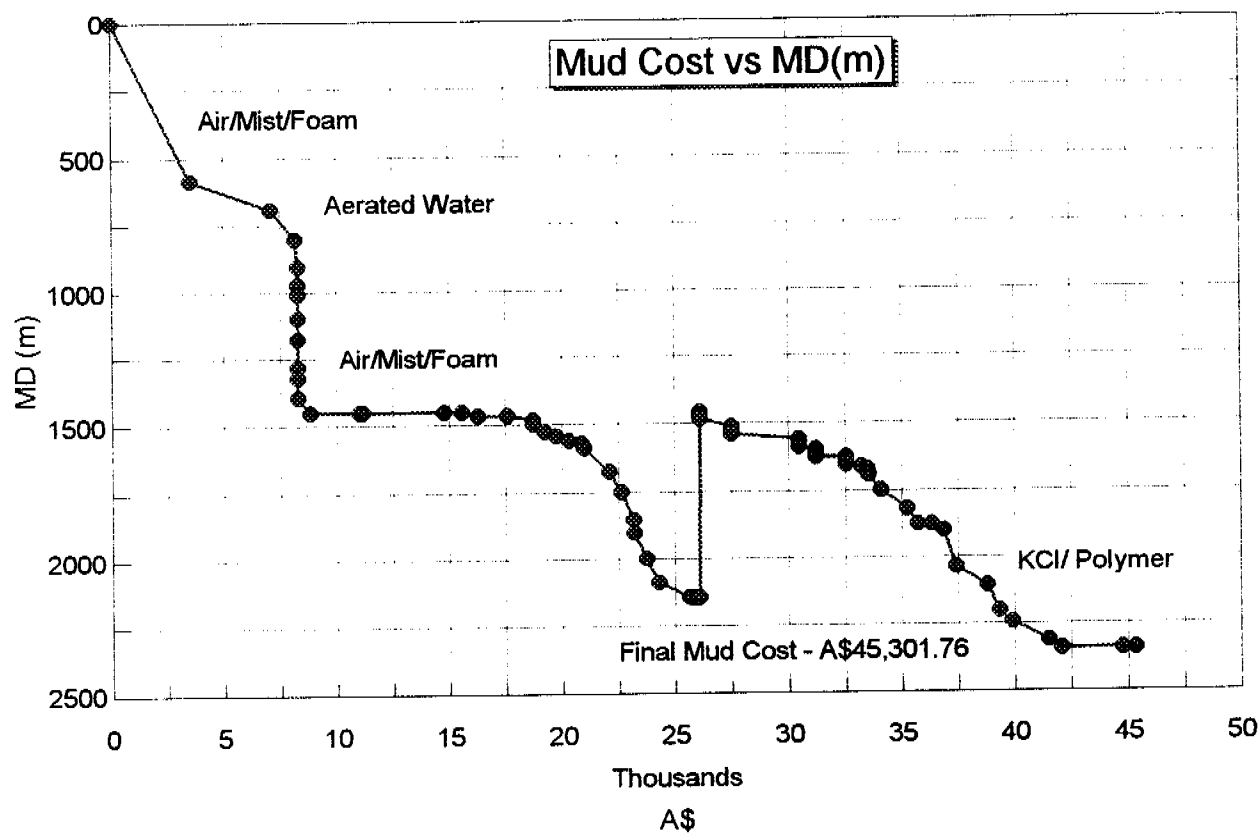
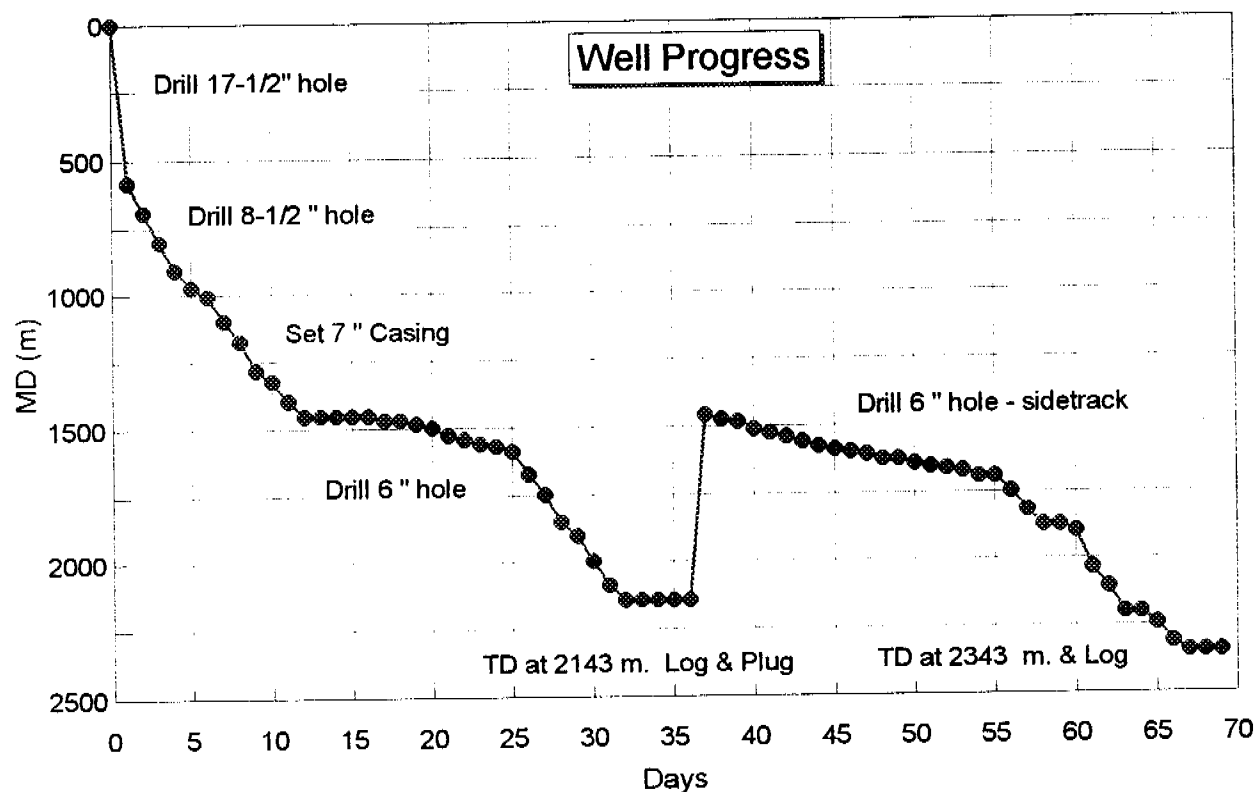
LOCATION AMADEUS BASIN

CONT/RIG O.D. &amp; E. Mearns Rig 1

MD m	TVD m	INCL°	DIR °	DISP m
1617	1608	19	190	
1627	1617.7	19	185	
1637	1627.2	19.25	178	
1646	1635.7	19.75	170	
1656	1643	20	163	
1692	1679.6	21.25	145	
1712	1698.5	22.25	144	
1740	1723.3	24	143	
1769	1749.5	25	142	
1797	1774	26.25	142	
1869		30		
1883	1848	29.25		
1948	1907.42	27.25		
2032		33		
1488.67	1484.71	9	224.6	
1498.32	1494.22	10.6	223.6	
1507.96	1503.67	12.2	223.5	
1516.99	1512.45	14.3	224.9	
1526		16.7	228.1	
1536	1530.86	18.4	231.3	
1545	1539.9	19.9	231.6	
1555.43	1549.28	21.7	231.5	
1565.09	1557.86	23.6	230.3	
1572.51	1564.6	25.7	229.9	
1582.98	1573.89	28.8	227.7	
1603.37	1591.95	26.5	224.3	
1613.9	1600.52	28.2	223.1	
1621.7	1608.1	30.2	223.2	
1631.91	1616.8	32.7	225.5	
1641.32	1624.61	35.1	227.9	
1649.22	1630.97	37.9	227.1	
1658.19	1638.06	37.8	224.3	
1667.8	1645.6	39.1	224.7	
1695.43	1665.67	46.9	228.5	
1714.79	1678.61	49.25	228	
1743.31	1696.72	51.9	226.5	
1771.27	1713.58	53.9	226	
1799.49	1729.79	56	225	
1836.95	1750.22	57.9	222	
1865.06	1765.01	58.6	220	
1885.64	1775.61	59.4	219	
1913.2	1789.67	59.25	218.5	
1951.16	1809.32	58.4	219	
1998.88	1835.17	56	218	
2046.19	1862.39	53.75	219.5	
2093.17	1890.81	51.8	220	
2140.32	1920.29	50.8	221	
2177.79	1944.18	50	222	
2224.74	1974.67	49	221	
2271.9	2006.25	46.9	220	
2328.13	2045.7	44	220	

# GRAPHS





## APPENDIX 1.

FORMATION TOPS

FORMATION	PV-10 LOG DEPTH m	PV-10 PROGNOSED DEPTH m	PV-10A LOG DEPTH m
Park Siltstone	370	476	
Mereenie Sandstone	413	503	
Carmichael Sandstone	1013	1077	
Stokes Siltstone	1104	1161	
Upper Stairway	1440	1483	
Middle Stairway	1466.5	1503	
Lower Stairway	1664.5	1689	1676
Horn Valley	1761.5	1780	1815.5
Pacoota P1	1847.2	1856	1951
Pacoota P2	2051	2047	2233.5
TD	2143	2406	2343

## APPENDIX 2

HOLE CALLIPER DATA PV-10A

DEPTH m	HOLE SIZE ins
1451	7.0
1453	7.9
1460	6.2
1480	6.5
1500	7.0
1520	6.0
1540	6.0
1560	6.0
1580	6.0
1600	6.1
1620	6.0
1640	6.5
1660	6.0
1680	6.2
1700	5.9
1775	5.9
1825	5.9
1840	7.0
1860	7.2
1870	6.8
1880	6.6
1900	7.8
1910	10.2
1920	10.0
1925	9.0
1940	6.0
1960	5.9
2000	5.9
2075	5.9
2150	5.9
2200	5.8
2225	5.8
2245	5.5
2260	5.6
2275	5.8
2300	5.6
2325	5.6

## APPENDIX 3.

**BARA-SWELL PILL FORMULATION AND PUMPING PROCEDURE.**

- 1) Run in Hole and hang open nozzled bit at 590 m.
- 2) Pump drill string volume plus 25% water using the rig pump.[28.25 bbls = 372 strokes]
- 3) Howco mix and pump 5 bbls BARA-SWELL mix.

**PROCEDURE.**

Use mask, goggles, and gloves.

- Load Howco displacement tank with 2.5 bbls water.
- Add 2 x 208 l drums Surdyne and blend.
- Add 2 x 20 kg sx AQUAGEL and blend.
- Add 2 x 20 kg pails BARA-SWELL F.
- Add 2 x 20 kg pails BARA-SWELL C. and blend.

- 4) Howco mix and pump 5 bbls Hi-Vis pill.
- 5) Howco displace BARA-SWELL mix out bottom of the bit.[17.6 bbls = 232 strokes]
- 6) Immediately pump 10 bbls water into annulus.[10 bbl = 132 strokes]
- 7) Pull two stands.
- 8) Circulate string volume plus 10% with water using the rig pump.[24.86 bbl = 327 strokes]
- 9) Stand for 30 minutes.
- 10) Circulate string volume plus 10% with water using the rig pump at a high rate.[24.86 bbl = 327 strokes @ 100 spm]
- 11) Stand for 30 minutes.
- 12) Blow hole and drill ahead.

## APPENDIX 4.

AIR DRILLING PARAMETERS

DEPTH (m)	AIR PRESS. (psi)	AIR INJ. RATE (cfm) (bbl/hr)	FOAM/WATER RATE (bbl)	TOTAL VOL. INJ. (lpb)	Q.FOAM CONC.
18	210-240	1600			
<b>AIR HAMMER DRILL 12-1/4" HOLE</b>					
67	150-240	2400			
103	150-200	1600			
209	300-320	3200			
350	270-360	3200			
398	280-300	3200			
<b>AIR/MIST/FOAM USED TO CLEAN HOLE PRIOR TO RUNNING CASING.</b>					
398	300	2400	12	15	1.33
<b>RUN 9-5/8" CASING</b>					
408	240-360	1600	8	45	1.33
<b>CIRCULATE FOR FISH</b>					
445	280-300	3200	8	30	1.33
<b>CEMENT FOR SIDETRACK</b>					
<b>BEGIN BARACOR 1635L ADDITIONS</b>					
444 to 474	260	2400	8	90	1.33
474 to 526	170-260	2400	8	60	1.33
526 to 583	170-260	2400	8	60	1.33
583 to 604	260	2400	8	15	1.33
604 to 623	260-280	2400	8	15	1.33
623 to 638	290-310	2400	8	15	1.33
<b>PUMP BARA-SWELL PILL</b>					
642 to 670	290	2400	8	45	1.33
670 to 691	300-400	2400	8	30	1.33
691 to 709	310-480	2400	8	30	1.33
709 to 731	330-425	2400	8	30	1.33
731 to 745	390-630	2400	8	15	1.33
745 to 764	500-700	2400	8	15	1.66
764 to 795	560-800	2400	8	45	1.66
803 to 812	690-820	2400	10	15	1.66
812 to 837	740-795	2400	10	15	1.66
830 to 840	740-795	2400	10	15	1.33
<b>AERATED WATER FROM 849 m</b>					
849	160-410	900			
863	300-360	150			
888	400	800			
926	430-445	1200			
955	480-730	800			
<b>AIR/MIST DRILLING FROM 958 m.</b>					
958 to 963	220-320	600			
963 to 973	360-480	800			

DEPTH (m)	AIR PRESS. (psi) (cfm)	AIR INJ. RATE (bbl/hr)	FOAM/WATER RATE (bbl)	TOTAL VOL. INJ. (lpb)	Q.FOAM CONC.
973 to 983	300-330	400			
983 to 993	290-360	350			
993 to 1017	325-350	400			
1017 to 1094	300-360	400			
1094 to 1132	330-360	400			
1140 to 1171	300-330	400			
1171 to 1286	270-320	400			
1286 to 1322	290-370	400			
1315 to 1322	300-480	400			
1322 to 1361	300-330	400			
1361 to 1397	270-300	400			
1397 to 1425	290-480	400			
1425 to 1453	280-300	400			
<b>CASING POINT</b>					
<b>RUN AIR MOTOR, DIRECTIONAL DRILL</b>					
1457 to 1459	180-210	800			
1459 to 1468	330-340	1500			
1468 to 1470	400-500	1450	5	15	1.33
1470 to 1476	420-460	1500	5	30	1.33
1476 to 1483	390-480	1500	5	45	1.33
1483 to 1484	390-480	1600	8	15	1.33
1484 to 1490	300-340	1600	8	45	1.33
1490 to 1498	390-420	1550	7.38	30	1.33
1498 to 1504	390	1470	7.38	15	1.33
1504 to 1521	370-440	1470	8	75	1.33
1521 to 1527	360-400	1400	8	45	1.33
1527 to 1543	360-390	1400	7	105	1.33
1543 to 1548	350-420	1400	7	45	1.33
1548 to 1563	360-480	1400	8	135	1.33
1563 to 1569	360-430	1400	7	45	1.33
1569 to 1573	360-420	1600	7	60	2.0
<b>ROTARY DRILLING</b>					
1573 to 1597	330-350	1500	7	75	1.33
1597 to 1605	330-350	1500	8	15	1.33
1605 to 1643	330-350	1500	10	75	1.73-1.66
1643 to 1656	330-350	1500	10	30	0.8
1656 to 1672	330-350	1500	10	15	1.0
1672 to 1709	360-370	1500	8	60	1.33
1709 to 1880	360-380	1500	9	240	1.33
1880 to 1901	360-390	1600	9	30	1.33
1901	360-390	1600	15,12	15	1.33
1910 to 1923	390-410	1600	9	30	1.33
1923 to 1957	380-390	1500	10	30	1.33
1957 to 1961	310-420	1500	15	15	1.33
1961 to 2084	370-390	1500	10	240	1.33

DEPTH (m)	AIR PRESS. (psi)	AIR INJ. RATE (cfm) (bbl/hr)	FOAM/WATER RATE (bbl)	TOTAL VOL. INJ. (lpb)	Q.FOAM CONC.
2084 to 2087	390-410	1500	15	15	1.33
2087 to 2143	370-380	1500	10	165	1.33
LOGGING RUNS					
DST					
PLUG HOLE AND SIDETRACK					
DRILL 6" HOLE WITH MUD FROM 1471 TO 1692 m.					
1692 to 1702	390-420	1600	6	30	1.33
1702 to 1729	390-420	1600	8	30	1.33
1729 to 1751	360-440	1600	14	75	1.33
1751 to 1761	450-510	2400	8	30	0.33
1761 to 1806	510-530	2400	13	135	1.0
1806 to 1854	510-540	2400	8	75	1.0
1854 to 1873	510-540	2400	10	120	1.0
WATER REAMING					
1876 to 1925	510-540	2400	8	195	1.33
1925 to 2143	510-540	2400	8	300	1.5
2143 to 2167	510-540	1600	8	15	1.5
2167 to 2179	530-550	2400	9	30	1.5
2179 to 2199	450-460	1600	9	45	1.33
2199 to 2202	390-510	2400	9	30	1.33
2202 to 2221	410-420	1600	9	30	1.33
2221 to 2231	540-550	2400	9	30	1.33
2231 to 2243	450-460	1600	9	15	1.33
2243 to 2246	500-510	2400	9	30	1.33
2246 to 2313	510-540	2400	8	120	1.33
2313 to 2343	510-540	2400	8	90	1.0

# **DAILY MUD REPORTS**





MUD REPORT NO. 4 up to 24:00 hrs, 2/12/94

DATE 3/12/94

DEPTH-m	MD 907	TVD
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START DATE

## ACTIVITY

29-Nov-94

### Aerated Water Drilling

**CONTRACTOR / RIG**  
O.D.& E. Moreenie Rig 1

COUNTRY

**AUSTRALIA**

**REPORT FOR**  
**B. GRINKE**

**REPORT FOR**  
**W. SCHAFER**

**TOWNSHIP**  
**ALICE SPRINGS**

WELL NAME AND NO.  
PALM VALLEY-10

FIELD OR BLOCK NO.  
O.L. 3 NORTHERN TERRITORY

LOCATION	AMADEUS BASIN
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BIT DATA			DRILLING STRING			CASINGS		PUMP DATA						
Size 8.500 ins			OD ins	ID ins	Length m	Size ins	Depth m	Pump Make	ins x ins	Eff %	bbl/stk	spm	bbl/min	
Type ATM22CD			Pipe 1	4.5	3.82	656.1	Riser	Set @	EMSCO F800	6	9	97	0.076	
Nozzles 32nds			Pipe 2	4.5	2.25	55	13 3/8"	Set @	EMSCO F800	6	9	97	0.076	
OPEN			Pipe 3			9 5/8"	Set @	396.52						
			Col 1	6.25	2.75	195.9	Set @		Pump Press 500 psi	TOTAL bbl/min				
			Col 2				Set @		MUD VOL	bbl	CIRCULATING DATA			
Noz Area ins²			OPEN HOLE SECTIONS				Set @	Downhole 179		Total circ	- mins	AV m/min		
TFA ins²			Sect 1				Set @	Active		Bottoms up	- mins	DP		
NV m/sec			Sect 2			Liner	Set @	Total Circ		Surface-bit	- mins	DC		
Impact lb f			Current		8.5	510.5	Top @	Reserve 640	ECD ppg			Riser		

Impact No.		MUD PROPERTIES				MUD PROPERTY SPECIFICATIONS					
Sample Location	IN or OUT					WEIGHT	ppg	VIS	sec	YP	lb/100 ft <sup>2</sup>
Time Sample Taken	hrs					API Filtr	ml	HTHP	mi	KCL	%
Depth	m					BY AUTHORITY					
Flowline Temp	°C					<b>REMARKS</b>					
Weight	ppg										
Funnel Viscosity	sec/qt										
Plastic Viscosity	cP										
Yield Point	lb/100 ft <sup>2</sup>										
Gels 10 sec/10min/30 min	lb/100 ft <sup>2</sup>										
API Filtrate	ml/30min										
HPHT Filtrate	ml/30min										
API/HPHT Filter Cake	32nd ins										
Solids	% Vol										
Dissolved Salts	% Vol										
Oil/Water Content	% Vol										
Sand	% Vol										
Methylene Blue cap	ppb										
pH	meter										
Alk. Mud Pm	ml										
Alk. Filtrate, Pt/Mf	ml										
Chlorides	mg/Lx10 <sup>3</sup>										
Total Hardness/Calcium	mg/L										
Rheometer	600 rpm/300 rpm										
lb/100 ft <sup>2</sup>	200 rpm/100 rpm										
	6 rpm/3 rpm										

INVENTORY AND CONSUMPTION					MUD TYPE      Aerated Water				CONSUMPTION		
PRODUCT DESCRIPTION		USED	REC	BAL	COST	SOLIDS CONTROL EQUIPMENT				Additions	bbl
BARADEFOAM W30I	25 lt	1		4	110.26					Sea W.	
						Make      screen size      hrs				Drill W.	
						Shaker 1				other	54
						Shaker 2				other	
						Shaker 3				Barite	
						Shaker 4				Chemicals	
						ppg	bbl/hr	hrs	bbl	Losses	bbl
						Desander		12.5		Sol. Con.	
						Desilter		12.5		Lost/Dumped	
						Mud Cleaner 2				Down Hole	
						Centrifuge 1				Newhole	24
						Centrifuge 2				NET GAIN	54
						Solids Control Effic.      %				Discharged	

BAROID Engineer		OFFICE	WAREHOUSE	DAILY COST	CUMULATIVE COST
Chris Wallace		MELBOURNE	ALICE SPRINGS	A\$ 110.26	A\$ 8277.75
Tel. 03-6213311		03-6213311			

THE RECOMMENDATIONS MADE HEREON SHALL NOT BE CONSTRUED AS AUTHORIZING THE INFRINGEMENT OF ANY VALID PATENT, AND ARE MADE WITHOUT ASSUMPTION OF ANY LIABILITY BY BAROID DRILLING FLUIDS, INC OR IT'S AGENTS, AND ARE STATEMENTS OF OPINION ONLY.

RESERVE PITS			SURVEY DATA					SOLIDS ANALYSIS		TIME BREAKDOWN		hrs
NO	TYPE	bbl	MD m	TVD m	INCL°	DIR °	DISP m	Low Grav. Solids	% Vol	Drilling		17.5
1	Water	75	42	42	0.25			Low Grav. Solids	ppb	Circulating		0.5
2	Water	75	104	104	1.5			High Grav. Solids	% Vol	Reaming In		
3	Water	80	159	159	2			High Grav. Solids	ppb	Reaming out		
4	Water	80	196	196	2.75			ASG of Solids	g/cc	Tripping		1.5
5	Water	80	216	216	4			Cuttings Volume	bbl 24.0	Surveys		1
6	Water	80	235	235	3			Interval Dilution	bbl/m 0.2	Unload water		3
7	Water	85	264	264	2			Interval Consumption	bbl/m 0.9	Other		0.5
8	Water	85	283	283	1					AVE ROP	m/hr	5.94

**Baroid Australia Pty Ltd**

MUD REPORT NO. 5 up to 24:00 hrs, 3/12/94

DATE 4/12/94

DEPTH-m	MD 972	TVD
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START DATE

29 - Nov - 94

## ACTIVITY

### Aerated Water Drilling

OPERATOR  
MAGELLAN PETROLEUM (N.T.) PTY. LTD.

**CONTRACTOR / RIG**  
O.D.& E. Mereenie Rig 1

COUNTRY

AUSTRALIA

REPORT FOR  
C. DAVISON

REPORT FOR  
W. SCHAFFER

**TOWNSHIP**  
**ALICE SPRINGS**

LOCATION

WELL NAME AND NO.  
PALM VALLEY-10

FIELD OR BLOCK NO.  
O.L. 3 NORTHERN TERRITORY

LOCATION

AMADEUS BASIN

BIT DATA		DRILLING STRING			CASINGS		PUMP DATA							
Size 8.500 ins		OD ins	ID ins	Length m	Size ins	Depth m	Pump Make	ins	x	ins	Eff %	bbl/stk	spr	bbl/min
Type ATJ44		Pipe 1	4.5	3.82	719.7	Riser	Set @	EMSCO F800	6	9	97	0.076	60	4.56
Nozzles 32nds		Pipe 2	4.5	2.25	55	13 3/8"	Set @	18	EMSCO F800	6	9	97	0.076	
OPEN		Pipe 3				9 5/8"	Set @	396.52						
		Col 1	6.25	2.75	197.3		Set @		Pump Press	440 psi		TOTAL bbl/min		4.56
		Col 2					Set @		MUD VOL	bbl	CIRCULATING DATA			
Noz Area ins <sup>2</sup>		OPEN HOLE SECTIONS					Set @	Downhole	192	Total circ 205 mins			AV	m/min
TFA ins <sup>2</sup>		Sect 1					Set @	Active	745	Bottoms up 34 mins			DP	27.5
NV m/sec		Sect 2				Liner	Set @	Total Circ	937	Surface -bit 9 mins			DC	43.1
Impact lb f		Current					Top @	Reserve		ECD ppg			Riser	

		MUD PROPERTIES				MUD PROPERTY SPECIFICATIONS					
Sample Location	IN or OUT					WEIGHT	ppg	VIS	sec	YP	lb/100 ft <sup>2</sup>
Time Sample Taken	hrs					API Filt	ml	HTHP	ml	KCL	%
Depth	m					BY AUTHORITY					
Flowline Temp	°C					REMARKS					
Weight	PPG										
Funnel Viscosity	sec/qt										
Plastic Viscosity	cP										
Yield Point	lb/100 ft <sup>2</sup>										
Gels 10 sec/10min/30 min	lb/100 ft <sup>2</sup>										
API Filtrate	ml/30min										
HPHT Filtrate	ml/30min										
API/HPHT Filter Cake	32nd ins										
Solids	% Vol										
Dissolved Salts	% Vol										
Oil/Water Content	% Vol										
Sand	% Vol										
Methylene Blue cap	ppb										
pH	meter										
Alk. Mud Pm	ml										
Alk. Filtrate, Pt/Mf	ml										
Chlorides	mg/Lx10 <sup>3</sup>										
Total Hardness/Calcium	mg/L										
						<b>ACTIVITY</b> Drill 8 – 1/2" hole from 907 to 967m with surveys, and unloading well on connections. Pull out of hole. Change BHA. Run in Hole. Drill to 972 m with surveys, unloading on connections.					
Rheometer	600 rpm/300 rpm										
lb/100 ft <sup>2</sup>	200 rpm/100 rpm										
	6 rpm/3 rpm										

INVENTORY AND CONSUMPTION											
PRODUCT DESCRIPTION	USED	REC	BAL	COST	MUD TYPE	Aerated Water			CONSUMPTION		
					SOLIDS CONTROL EQUIPMENT					Additions	bbl
						Make	screen size	hrs	Sea W.		
					Shaker 1				Drill W.		
					Shaker 2				other	297	
					Shaker 3				other		
					Shaker 4				Barite		
						ppg	bbl/hr	hrs	bbl	Chemicals	
					Desander			18.5	Losses	bbl	
					Desilter			18.5	Sol. Con.		
					Mud Cleaner 2.				Lost/Dumped		
					Centrifuge 1				Down Hole		
					Centrifuge 2				Newhole	15	
										NET GAIN	297
					Solids Control Effic. %					Discharged	

BAROID Engineer		OFFICE	WAREHOUSE	DAILY COST	CUMULATIVE COST
Chris Wallace		MELBOURNE	ALICE SPRINGS	A\$ 0.00	A\$ 8277.75
Tel 03-6213311		03-6213311			

THE RECOMMENDATIONS MADE HEREON SHALL NOT BE CONSTRUED AS AUTHORIZING THE INFRINGEMENT OF ANY VALID PATENT, AND ARE MADE WITHOUT ASSUMPTION OF ANY LIABILITY BY BAROID DRILLING FLUIDS, INC OR IT'S AGENTS, AND ARE STATEMENTS OF OPINION ONLY.

RESERVE PITS			SURVEY DATA				SOLIDS ANALYSIS		TIME BREAKDOWN		hrs
NO	TYPE	bbl	MD m	TVD m	INCL°	DIR °	DISP m	Low Grav. Solids	% Vol	Drilling	
			350	350	0.5			Low Grav. Solids	ppb	Circulating	2.5
			416	416	2.1	N44E		High Grav. Solids	% Vol	Reaming In	
			436	436	3.5	N36E		High Grav. Solids	ppb	Reaming out	
			458	458	3.5	N39E		ASG of Solids	g/cc	Tripping	5.5
			478	478	3	N34E		Cuttings Volume	bbl 15.0	Surveys	1
			517	517	2.75	N30E		Interval Dilution	bbl/m 0.2	Other	
			551	551	2			Interval Consumption	bbl/m 1.2	Other	
			619	619	2					AVE ROP	m/hr 4.33



# Baroid Australia Pty Ltd

MUD REPORT NO. 6 up to 24:00 hrs, 4/12/94

DATE 5/12/94 DEPTH-m MD 1007 TVD

START DATE 29-Nov-94 ACTIVITY Run In Hole

OPERATOR  
MAGELLAN PETROLEUM (N.T.) PTY. LTD.

CONTRACTOR / RIG  
O.D. & E. Mereenie Rig 1

COUNTRY  
AUSTRALIA

REPORT FOR  
C. DAVISON

REPORT FOR  
W. SCHAFER

TOWNSHIP  
ALICE SPRINGS

WELL NAME AND NO.  
PALM VALLEY-10

FIELD OR BLOCK NO.  
O.L. 3 NORTHERN TERRITORY

LOCATION  
AMADEUS BASIN

BIT DATA		DRILLING STRING		CASINGS		PUMP DATA					
Size 8.500 ins		OD ins	ID ins	Length m	Size ins	Depth m	Pump Make	ins. x ins	Eff %	bbl/stk	spm bbl/min
Type ATJ44		Pipe 1	4.5	3.82	Riser	Set @	EMSCO F800	6 9	97	0.076	76 5.776
Nozzles 32nds		Pipe 2	4.5	2.25	13 3/8"	Set @ 18	EMSCO F800	6 9	97	0.076	
OPEN		Pipe 3			9 5/8"	Set @ 396.52					
		Col 1	6.25	2.75		Set @	Pump Press 350 psi			TOTAL bbl/min	5.776
		Col 2				Set @	MUD VOL bbl			CIRCULATING DATA	
Noz Area ins <sup>2</sup>		OPEN HOLE SECTIONS				Set @	Downhole 236		Total circ 170 mins	AV	m/min
TFA ins <sup>2</sup>		Sect 1				Set @	Active 745		Bottoms up - mins	DP	
NV m/sec		Sect 2			Liner	Set @	Total Circ 981		Surface-bit - mins	DC	
Impact lb f		Current	8.5	610.5		Top @	Reserve		ECD ppg	Riser	

MUD PROPERTIES		MUD PROPERTY SPECIFICATIONS			
Sample Location	IN or OUT	WEIGHT	ppg	VIS	sec YP
Time Sample Taken	hrs	API Filtr	ml	HTHP	ml KCL
Depth	m	BY AUTHORITY			
Flowline Temp	°C	REMARKS			
Weight	ppg	<p>ACTIVITY</p> <p>Drill 8-1/2" hole from 972 to 1007 m with surveys.</p> <p>Pull out of hole. Change bit. Run in Hole.</p>			
Funnel Viscosity	sec/qt				
Plastic Viscosity	cP				
Yield Point	lb/100 ft <sup>2</sup>				
Gels 10 sec/10min/30 min	lb/100 ft <sup>2</sup>				
API Filtrate	ml/30min				
HPHT Filtrate	ml/30min				
API/HPHT Filter Cake	32nd ins				
Solids	% Vol				
Dissolved Salts	% Vol				
Oil/Water Content	% Vol				
Sand	% Vol				
Methylene Blue cap	ppb				
pH	meter				
Alk. Mud Pm	ml				
Alk. Filtrate, Pf/Mf	ml				
Chlorides	mg/Lx10 <sup>3</sup>				
Total Hardness/Calcium	mg/L				
Rheometer	600 rpm/300 rpm				
lb/100 ft <sup>2</sup>	200 rpm/100 rpm				
	6 rpm/3 rpm				

## INVENTORY AND CONSUMPTION

PRODUCT DESCRIPTION	USED	REC	BAL	COST	MUD TYPE	Aerated Water	CONSUMPTION	
					SOLIDS CONTROL EQUIPMENT		Additions	bbl
					Make	screen size hrs	Sea W.	
					Shaker 1		Drill W.	
					Shaker 2		other	232
					Shaker 3		other	
					Shaker 4		Barite	
						ppg bbl/hr hrs bbl	Chemicals	
					Desander	12.4 0.6 20.5 12	Losses	bbl
					Desilter	9.8 8.6 20.5 176	Sol. Con.	188
					Mud Cleaner 2.		Lost/Dumped	
					Centrifuge 1		Down Hole	
					Centrifuge 2		Newhole	8
							NET GAIN	44
					Solids Control Effic.	%	Discharged	188

BAROID Engineer		OFFICE	WAREHOUSE	DAILY COST	CUMULATIVE COST
Chris Wallace		MELBOURNE	ALICE SPRINGS	A\$ 0.00	A\$ 8277.75
Tel. 03-6213311		03-6213311			

THE RECOMMENDATIONS MADE HEREON SHALL NOT BE CONSTRUED AS AUTHORIZING THE INFRINGEMENT OF ANY VALID PATENT, AND ARE MADE WITHOUT ASSUMPTION OF ANY LIABILITY BY BAROID DRILLING FLUIDS, INC OR IT'S AGENTS, AND ARE STATEMENTS OF OPINION ONLY.

RESERVE PITS		SURVEY DATA				SOLIDS ANALYSIS		TIME BREAKDOWN		hrs
NO	TYPE	bbl	MD m	TVD m	INCL°	DIR °	DISP m	Low Grav. Solids	% Vol	Drilling
			694	694	1.75			Low Grav. Solids	ppb	Circulating
			771	771	3.75			High Grav. Solids	% Vol	Reaming In
			800	800	4.5			High Grav. Solids	ppb	Reaming out
			817	817	4.5			ASG of Solids	g/cc	Tripping
			856	856	4.25			Cuttings Volume	bbl 8.0	Surveys
			933	933	4.75			Interval Dilution	bbl/m 0.4	Other
			962	962	4.75			Interval Consumption	bbl/m 1.4	Other
			973	973	4.75			AVE ROP		m/hr 1.84



# Baroid Australia Pty Ltd

MUD REPORT NO. 7 up to 24:00 hrs, 5/12/94

DATE 6/12/94 DEPTH-m MD 1098 TVD  
START DATE 29-Nov-94 ACTIVITY Aerated Water Drilling

OPERATOR  
MAGELLAN PETROLEUM (N.T.) PTY. LTD.

CONTRACTOR / RIG  
O.D. & E. Mereneie Rig 1

REPORT FOR  
C. DAVISON

REPORT FOR  
W. SCHAFER

WELL NAME AND NO.  
PALM VALLEY-10

FIELD OR BLOCK NO.  
O.L. 3 NORTHERN TERRITORY

COUNTRY  
AUSTRALIA  
TOWNSHIP  
ALICE SPRINGS  
LOCATION  
AMADEUS BASIN

BIT DATA		DRILLING STRING			CASINGS		PUMP DATA							
Size 8.500 ins		OD ins	ID ins	Length m	Size ins	Depth m	Pump Make	ins x ins	Eff %	bbl/stk	spm	bbl/min		
Type ATJ44		Pipe 1	4.5	3.82	843.3	Riser	Set @	EMSCO F800	6	9	97	0.076	70	5.32
Nozzles 32nds		Pipe 2	4.5	2.25	55	13 3/8"	Set @	18	EMSCO F800	6	9	97	0.076	AIR
OPEN		Pipe 3			9 5/8"	Set @	396.52							
		Col 1	6.25	2.75	199.68	Set @		Pump Press	350 psi	TOTAL bbl/min		5.32		
		Col 2				Set @		MUD VOL	bbl	CIRCULATING DATA				
Noz Area ins <sup>2</sup>		OPEN HOLE SECTIONS				Set @		Downhole	219	Total circ 137 mins		AV	m/min	
TFA ins <sup>2</sup>		Sect 1				Set @		Active	508	Bottoms up 33 mins		DP	32.1	
NV m/sec		Sect 2			Liner	Set @		Total Circ	727	Surface-bit 8 mins		DC	50.3	
Impact lb f		Current		8.5	701.5	Top @		Reserve		ECD ppg		Riser		

		MUD PROPERTIES				MUD PROPERTY SPECIFICATIONS					
Sample Location	IN or OUT					WEIGHT	ppg	VIS	sec	YP	lb/100 ft <sup>3</sup>
Time Sample Taken	hrs					API Filtr	ml	HTHP	ml	KCL	%
Depth	m					BY AUTHORITY					
Flowline Temp	°C					REMARKS					
Weight	ppg					Centrifuge still not functioning. Cleaning out pits.					
Funnel Viscosity	sec/qt										
Plastic Viscosity	cP										
Yield Point	lb/100 ft <sup>2</sup>										
Gels 10 sec/10min/30 min	lb/100 ft <sup>2</sup>										
API Filtrate	ml/30min										
HPHT Filtrate	ml/30min										
API/HPHT Filter Cake	32nd ins										
Solids	% Vol										
Dissolved Salts	% Vol										
Oil/Water Content	% Vol					ACTIVITY Run in Hole to 1004 m. Pick up kelly & unload well. Pick up kelly and unload well. Aerated water drill 8–1/2" hole to 1098 m with surveys.					
Sand	% Vol										
Methylene Blue cap	ppb										
pH	meter										
Alk. Mud Pm	ml										
Alk. Filtrate, P/Mf	ml										
Chlorides	mg/Lx10 <sup>3</sup>										
Total Hardness/Calcium	mg/L										

INVENTORY AND CONSUMPTION											
PRODUCT DESCRIPTION	USED	REC	BAL	COST	MUD TYPE	Aerated Water			CONSUMPTION		
					SOLIDS CONTROL EQUIPMENT					Additions	bbl
					Make	screen size	hrs		Sea W.		
					Shaker 1	B80/B100	3		Drill W.		
					Shaker 2				other		
					Shaker 3				other		
					Shaker 4				Barite		
						ppg	bbl/hr	hrs	bbl	Chemicals	
					Desander	12.5	0.75	20	15	Losses	bbl
					Desilter	10.1	8.9	20	178	Sol. Con.	193
					Mud Cleaner 2.					Lost/Dumped	61
					Centrifuge 1					Down Hole	
					Centrifuge 2					Newhole	21
										NET LOSS	254
					Solids Control Effic.			%		Discharged	254

BAROID Engineer		OFFICE	WAREHOUSE	DAILY COST	CUMULATIVE COST
Chris Wallace		MELBOURNE	ALICE SPRINGS	A\$ 0.00	A\$ 8277.75
Tel. 03-6213311		03-6213311			

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RESERVE PITS			SURVEY DATA					SOLIDS ANALYSIS		TIME BREAKDOWN		hrs	
NO	TYPE	bbl	MD m	TVD m	INCL°	DIR °	DISP m	Low Grav. Solids	% Vol	Drilling		20	
			992	992	5.25			Low Grav. Solids	ppb	Circulating		1	
			1002	1002	4.75			High Grav. Solids	% Vol	Reaming In			
			1023	1023	3.75			High Grav. Solids	ppb	Reaming out			
			1052	1052	3.75			ASG of Solids	g/cc	Tripping		2	
								Cuttings Volume	bbl	21.0	Surveys	1	
								Interval Dilution	bbl/m	0.5	Other		
								Interval Consumption	bbl/m	1.2	Other		
											AVE ROP	m/hr	4.55



Baroid Australia Pty Ltd

**MUD REPORT NO.** 9 up to 24:00 hrs, 7/12/94

**DATE** 8/12/94

DEPTH-m	MD 1282	TVD
10.0	10.0	10.0
10.1	10.1	10.1
10.2	10.2	10.2
10.3	10.3	10.3
10.4	10.4	10.4
10.5	10.5	10.5
10.6	10.6	10.6
10.7	10.7	10.7
10.8	10.8	10.8
10.9	10.9	10.9
11.0	11.0	11.0
11.1	11.1	11.1
11.2	11.2	11.2
11.3	11.3	11.3
11.4	11.4	11.4
11.5	11.5	11.5
11.6	11.6	11.6
11.7	11.7	11.7
11.8	11.8	11.8
11.9	11.9	11.9
12.0	12.0	12.0
12.1	12.1	12.1
12.2	12.2	12.2
12.3	12.3	12.3
12.4	12.4	12.4
12.5	12.5	12.5
12.6	12.6	12.6
12.7	12.7	12.7
12.8	12.8	12.8
12.9	12.9	12.9
13.0	13.0	13.0
13.1	13.1	13.1
13.2	13.2	13.2
13.3	13.3	13.3
13.4	13.4	13.4
13.5	13.5	13.5
13.6	13.6	13.6
13.7	13.7	13.7
13.8	13.8	13.8
13.9	13.9	13.9
14.0	14.0	14.0
14.1	14.1	14.1
14.2	14.2	14.2
14.3	14.3	14.3
14.4	14.4	14.4
14.5	14.5	14.5
14.6	14.6	14.6
14.7	14.7	14.7
14.8	14.8	14.8
14.9	14.9	14.9
15.0	15.0	15.0
15.1	15.1	15.1
15.2	15.2	15.2
15.3	15.3	15.3
15.4	15.4	15.4
15.5	15.5	15.5
15.6	15.6	15.6
15.7	15.7	15.7
15.8	15.8	15.8
15.9	15.9	15.9
16.0	16.0	16.0
16.1	16.1	16.1
16.2	16.2	16.2
16.3	16.3	16.3
16.4	16.4	16.4
16.5	16.5	16.5
16.6	16.6	16.6
16.7	16.7	16.7
16.8	16.8	16.8
16.9	16.9	16.9
17.0	17.0	17.0
17.1	17.1	17.1
17.2	17.2	17.2
17.3	17.3	17.3
17.4	17.4	17.4
17.5	17.5	17.5
17.6	17.6	17.6
17.7	17.7	17.7
17.8	17.8	17.8
17.9	17.9	17.9
18.0	18.0	18.0
18.1	18.1	18.1
18.2	18.2	18.2
18.3	18.3	18.3
18.4	18.4	18.4
18.5	18.5	18.5
18.6	18.6	18.6
18.7	18.7	18.7
18.8	18.8	18.8
18.9	18.9	18.9
19.0	19.0	19.0
19.1	19.1	19.1
19.2	19.2	19.2
19.3	19.3	19.3
19.4	19.4	19.4
19.5	19.5	19.5
19.6	19.6	19.6
19.7	19.7	19.7
19.8	19.8	19.8
19.9	19.9	19.9
20.0	20.0	20.0
20.1	20.1	20.1
20.2	20.2	20.2
20.3	20.3	20.3
20.4	20.4	20.4
20.5	20.5	20.5
20.6	20.6	20.6
20.7	20.7	20.7
20.8	20.8	20.8
20.9		

START DATE

## ACTIVITY

29 Nov -94

### Aerated Water Drilling

**OPERATOR**

MAGELLAN PETROLEUM (N.T.) PTY. LTD.

**CONTRACTOR / RIG**

O.D.& E. Mereenie Rig 1

# REPORT FOR

C. DAVISON

## REPORT FOR

R. MURRAY

## WELL NAME AND NO.

PALM VALLEY-10

## FIELD OR BLOCK NO.

O.L. 3 NORTHERN TERRITORY

## LOCATION

AMADEUS BASIN

### BIT DATA

## DRILLING STRING

## CASINGS

### PUMP DATA

BIT DATA		DRILLING DATA				PUMP MAKE		ins	x ins	Eff %	bbl/stk	spm	bbl/min	
Size 8.500 ins		OD ins	ID ins	Length m	Size ins	Depth m								
Type ATJ44		Pipe 1	4.5	3.82	1027.3	Riser	Set @	EMSCO F800	6	9	97	0.076	75	5.7
Nozzles 32nds		Pipe 2	4.5	2.25	55	13 3/8"	Set @ 18	EMSCO F800	6	9	97	0.076	AJR	
OPEN		Pipe 3				9 5/8"	Set @ 396.52							
		Col 1	6.25	2.75	199.7		Set @	Pump Press 350 psi	TOTAL bbl/min				5.7	
		Col 2					Set @	MUD VOL bbl	CIRCULATING DATA					
Noz Area ins²		OPEN HOLE SECTIONS					Set @	Downhole 258	Total circ 171 mins		AV m/min			
TFA ins²		Sect 1					Set @	Active 717	Bottoms up 36 mins		DP 34.4			
NV m/sec		Sect 2				Liner	Set @	Total Circ 975	Surface-bit 9 mins		DC 53.9			
Impact lb f		Current	8.5	885.5			Top @	Reserve	ECD ppg		Riser			

MUD PROPERTIES		MUD PROPERTY SPECIFICATIONS					
Sample Location	IN or OUT	WEIGHT	ppg	VIS	sec	YP	lb/100 ft²
Time Sample Taken	hrs	API Filt	ml	HTHP	ml	KCL	%
Depth	m	BY AUTHORITY					
Flowline Temp	°C	REMARKS					
Weight	ppg						
Funnel Viscosity	sec/qt						
Plastic Viscosity	cP						
Yield Point	lb/100 ft²						
Gels 10 sec/10min/30 min	lb/100 ft²						
API Filtrate	ml/30min						
HPHT Filtrate	ml/30min						
API/HPHT Filter Cake	32nd ins						
Solids	% Vol						
Dissolved Salts	% Vol						
Oil/Water Content	% Vol						
Sand	% Vol						
Methylene Blue cap	ppb						
pH	meter						
Alk. Mud Pm	ml						
Alk. Filtrate, Pt/Mf	ml	ACTIVITY					
Chlorides	mg/Lx10³	Drill 8 – 1/2" hole from 1175 to 1282 m with surveys.					
Total Hardness/Calcium	mg/L						

INVENTORY AND CONSUMPTION					Aerated Water					CONSUMPTION	
PRODUCT DESCRIPTION	USED	REC	BAL	COST	SOUDS CONTROL EQUIPMENT				Additions	bbl	
KCL,Tech(sx) 25 kg		150	310		Make	screen size	hrs		Sea W.		
					Shaker 1	B80/B100			Drill W.		
					Shaker 2				other	527	
					Shaker 3				other		
					Shaker 4				Barite		
						ppg	bbl/hr	hrs	bbl	Chemicals	
					Desander	13.9	3.42	23.5	80	Losses	bbl
					Desilter	9.4	12.1	23.5	284	Sol. Con.	364
					Mud Cleaner 2.					Lost/Dumped	
					Centrifuge 1					Down Hole	
					Centrifuge 2					Newhole	25
										NET GAIN	163
					Solids Control Effic.			%		Discharged	364

BAROID Engineer		OFFICE	WAREHOUSE	DAILY COST	CUMULATIVE COST
Chris Wallace		MELBOURNE	ALICE SPRINGS	A\$ 0.00	A\$ 8277.75
Tel 03-6213311		03-6213311			

tel. 03-6213311 03-6213311

THE RECOMMENDATIONS MADE HEREON SHALL NOT BE CONSTRUED AS AUTHORIZING THE INFRINGEMENT OF ANY VALID PATENT, AND ARE MADE WITHOUT ASSUMPTION OF ANY LIABILITY BY BAROID DRILLING FLUIDS, INC OR IT'S AGENTS, AND ARE STATEMENTS OF OPINION ONLY.

RESERVE PITS														SURVEY DATA			SOLIDS ANALYSIS			TIME BREAKDOWN		hrs
NO	TYPE	bbl	MD m	TVD m	INCL°	DIR °	DISP m	Low Grav. Solids	% Vol		Drilling											
			1177	1177	3.75			Low Grav. Solids	ppb		Circulating					22.5						
			1225	1225	5.5			High Grav. Solids	% Vol		Reaming In											
			1254	1254	5.25			High Grav. Solids	ppb		Reaming out											
								ASG of Solids	g/cc		Tripping											
								Cuttings Volume	bbl	25.0	Surveys					1.5						
								Interval Dilution	bbl/m	0.9	Other											
								Interval Consumption	bbl/m	1.7	Other											
											AVE ROP	m/hr				4.76						



**MUD REPORT NO.** 10 up to 24:00 hrs, 8/12/94

DATE 9/12/04

DEPTH-m	MD 1322	TVD
100		
101		
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START DATE

## ACTIVITY

29-Nov-94

**Pull Out Of Hole.**

<b>COUNTRY</b>	AUSTRALIA
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**TOWNSHIP**  
**ALICE SPRINGS**

**LOCATION**  
AMADEUS BASIN

BIT DATA				DRILLING STRING				CASINGS				PUMP DATA					
Size	8.500 ins	OD ins	ID ins	Length m	Size ins	Depth m	Pump Make	ins	x	ins	Eff %	bbbl/stk	spm	bbbl/min			
Type	ATJ44	Pipe 1	4.5	3.82	Riser	Set @	EMSCO F800	6	9	97	0.076		70	5.32			
Nozzles	32nds	Pipe 2	4.5	2.25	13 3/8"	Set @ 18	EMSCO F800	6	9	97	0.076	AIR					
OPEN		Pipe 3			9 5/8"	Set @ 396.52											
		Col 1	6.25	2.75		Set @	Pump Press 360 psi	TOTAL bbl/min						5.32			
		Col 2				Set @	MUD VOL bbl	CIRCULATING DATA									
Noz Area	ins²	OPEN HOLE SECTIONS				Set @	Downhole 308	Total circ 186 mins				AV m/min					
TFA	ins²	Sect 1				Set @	Active 680	Bottoms up - mins				DP					
NV	m/sec	Sect 2			Liner	Set @	Total Circ 988	Surface-bit - mins				DC					
Impact lb f		Current	8.5	925.5		Top @	Reserve	ECD ppg				Riser					

Sample Location		IN or OUT	MUD PROPERTIES				MUD PROPERTY SPECIFICATIONS					
Time Sample Taken	hrs						WEIGHT	ppg	VIS	sec	YP	lb/100 ft <sup>2</sup>
Depth	m						API Filtr	ml	HTHP	ml	KCL	%
Flowline Temp	°C						BY AUTHORITY					
Weight	ppg						REMARKS					
Funnel Viscosity	sec/qt											
Plastic Viscosity	cP											
Yield Point	lb/100 ft <sup>2</sup>											
Gels 10 sec/10min/30 min	lb/100 ft <sup>2</sup>											
API Filtrate	ml/30min											
HPHT Filtrate	ml/30min											
API/HPHT Filter Cake	32nd ins											
Solids	% Vol											
Dissolved Salts	% Vol											
Oil/Water Content	% Vol											
Sand	% Vol						<b>ACTIVITY</b> Drill 8 – 1/2" hole from 1282 to 1296 m with surveys. Pull out of hole for bit change. Run in Hole. Unload well. Drill 8 – 1/2" hole from 1296 to 1314 m with surveys. Blow hole. Drill from 1314 to 1322 m. Pull Out of Hole for BHA change.					
Methylene Blue cap	ppb											
pH	meter											
Alk. Mud Pm	ml											
Alk. Filtrate, Pt/Mf	ml											
Chlorides	mg/Lx10 <sup>3</sup>											
Total Hardness/Calcium	mg/L											
Rheometer	600 rpm/300 rpm											
lb/100 ft <sup>2</sup>	200 rpm/100 rpm											
	6 rpm/3 rpm											

INVENTORY AND CONSUMPTION												
PRODUCT DESCRIPTION		USED	REC	BAL	COST	MUD TYPE Aerated Water					CONSUMPTION	
PAC-R	50 lb		20	40		SOLIDS CONTROL EQUIPMENT					Additions	bbl
DEXTRID	25 kg		40	100		Make		screen size	hrs		Sea W.	
BARACARB 35	25 kg		48	144		Shaker 1		B80/B100			Drill W.	
BARACOR-129	25 kg		16	16		Shaker 2					other	185
						Shaker 3					other	
						Shaker 4					Barite	
							ppg	bbl/hr	hrs	bbl	Chemicals	
						Desander	14.1	3.6	11	40	Losses	bbl
						Desilter	9.6	12	11	132	Sol. Con.	172
						Mud Cleaner 2.					Lost/Dumped	
						Centrifuge 1					Down Hole	
						Centrifuge 2					Newhole	9
											NET GAIN	13
						Solids Control Effic.			%		Discharged	172

**BAROID Engineer**

OFFICE

WAREHOUSE

**DAILY COST**

**CUMULATIVE COST**

ALICE SPRINGS

**A\$ 0.00**

**A\$ 8277.75**

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RESERVE PITS			SURVEY DATA					SOLIDS ANALYSIS		TIME BREAKDOWN		hrs
NO	TYPE	bbl	MD m	TVD m	INCL°	DIR °	DISP m	Low Grav. Solids	% Vol	Drilling		
			1283	1283	6.25			Low Grav. Solids	ppb	Circulating	0.5	
			1293	1293	6.25			High Grav. Solids	% Vol	Reaming In		
			1312	1312	7			High Grav. Solids	ppb	Reaming out		
								ASG of Solids	g/cc	Tripping	10	
								Cuttings Volume	bbl 9.0	Surveys	2.5	
								Interval Dilution	bbl/m 1.0	Other		
								Interval Consumption	bbl/m 1.8	Other		
										AVE ROP	m/hr 3.64	



**MUD REPORT NO.** 11 up to 24:00 hrs, 9/12/94

DATE	10/12/94	DEPTH-m	MD 1396	TVD
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<b>START DATE</b> 29-Nov-94	<b>ACTIVITY</b> Aerated Water Drilling
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OPERATOR  
MAGELLAN PETROLEUM (N.T.) PTY. LTD.

**CONTRACTOR / RIG**  
O.D.& E. Mereenie Rig 1

REPORT FOR  
C. DAVISON

REPORT FOR  
R. MURRAY

WELL NAME AND NO.  
PALM VALLEY-10

FIELD OR BLOCK NO.  
O.L. 3 NORTHERN TERRITORY

**LOCATION**  
AMADEUS BASIN

Impact Pressure		Current	MUD PROPERTIES			MUD PROPERTY SPECIFICATIONS					
Sample Location		IN or OUT				WEIGHT	ppg	VIS	sec	YP	lb/100 ft <sup>2</sup>
Time Sample Taken		hrs				API Filtr	ml	HTHP	ml	KCL	%
Depth		m				<b>BY AUTHORITY</b>					
Flowline Temp		°C				<b>REMARKS</b>					
Weight		ppg									
Funnel Viscosity		sec/qt									
Plastic Viscosity		cP									
Yield Point		lb/100 ft <sup>2</sup>									
Gels 10 sec/10min/30 min		lb/100 ft <sup>2</sup>									
API Filtrate		ml/30min									
HPHT Filtrate		ml/30min									
API/HPHT Filter Cake		32nd ins									
Solids		% Vol									
Dissolved Salts		% Vol									
Oil/Water Content		% Vol									
Sand		% Vol									
Methylene Blue cap		ppb									
pH		meter									
Alk. Mud Pm		ml				<b>ACTIVITY</b>					
Alk. Filtrate, Pt/Mf		ml				Make Up new BHA. Run In Hole. Unload well.					
Chlorides		mg/Lx10 <sup>3</sup>				Drill 8-1/2" hole from 1322 to 1395 m with surveys.					
Total Hardness/Calcium		mg/L									
Rheometer		600 rpm/300 rpm									
lb/100 ft <sup>2</sup>		200 rpm/100 rpm									
		6 rpm/3 rpm									

## INVENTORY AND CONSUMPTION

INVENTORY AND CONSUMPTION					MUD TYPE					Aerated Water		CONSUMPTION	
PRODUCT DESCRIPTION	USED	REC	BAL	COST	SOLIDS CONTROL EQUIPMENT					Additions	bbl		
					Make	screen size	hrs			Sea W.			
					Shaker 1	B80/B100		2		Drill W.			
					Shaker 2					other	124		
					Shaker 3					other			
					Shaker 4					Barite			
						ppg	bbl/hr	hrs	bbl	Chemicals			
					Desander	14.5	1.6	21	34	Losses	bbl		
					Desilter	8.9	8.6	21	181	Sol. Con.	215		
					Mud Cleaner 2.					Lost/Dumped			
					Centrifuge 1					Down Hole			
					Centrifuge 2					Newhole	17		
										NET LOSS	91		
					Solids Control Effic.					%	Discharged	215	

BAROID Engineer		OFFICE	WAREHOUSE	DAILY COST	CUMULATIVE COST
Chris Wallace		MELBOURNE	ALICE SPRINGS	A\$ 0.00	A\$ 8277.75
Tel. 03-6213311		03-6213311			

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RESERVE PITS			SURVEY DATA					SOLIDS ANALYSIS		TIME BREAKDOWN		hrs
NO	TYPE	bbf	MD m	TVD m	INCL °	DIR °	DISP m	Low Grav. Solids	% Vol	Drilling		16.5
			1328	1328	7.5			Low Grav. Solids	ppb	Circulating		
			1347	1347	7.75			High Grav. Solids	% Vol	Reaming In		
			1366	1366	8.25			High Grav. Solids	ppb	Reaming out		
								ASG of Solids	g/cc	Tripping		2.5
								Cuttings Volume	bbf 17.0	Surveys		2.5
								Interval Dilution	bbf/m 1.1	Blow hole		2
								Interval Consumption	bbf/m 1.8	Other		0.5
										AVE ROP	m/hr	4.48





# Baroid Australia Pty Ltd

MUD REPORT NO. 12 up to 24:00 hrs, 10/12/94

DATE 11/12/94

DEPTH-m MD 1453 TVD

START DATE

29-Nov-94

ACTIVITY

Pull Out Of Hole

**OPERATOR**

MAGELLAN PETROLEUM (N.T.) PTY. LTD.

**CONTRACTOR / RIG**

O.D. &amp; E. Mereneie Rig 1

**COUNTRY**

AUSTRALIA

**REPORT FOR**

C. DAVISON

**REPORT FOR**

R. MURRAY

**TOWNSHIP**

ALICE SPRINGS

**WELL NAME AND NO.**

PALM VALLEY-10

**FIELD OR BLOCK NO.**

O.L. 3 NORTHERN TERRITORY

**LOCATION**

AMADEUS BASIN

**BIT DATA****DRILLING STRING****CASINGS****PUMP DATA**

Size 8.500 ins	OD ins	ID ins	Length m	Size ins	Depth m	Pump Make	ins x ins	Eff %	bbl/stk	spm	bbl/min
Type ATJ44	Pipe 1	4.5	3.82	1049	Riser	Set @	EMSCO F800	6	9	97	0.076 76 5.776
Nozzles 32nds	Pipe 2	4.5	2.25	55	13 3/8"	Set @ 18	EMSCO F800	6	9	97	0.076 AIR
OPEN	Pipe 3				9 5/8"	Set @ 396.52					
	Col 1	6.25	2.75	196		Set @	Pump Press 340 psi	TOTAL bbl/min 5.776			
	Col 2					Set @	MUD VOL bbl	CIRCULATING DATA			
Noz Area ins²	OPEN HOLE SECTIONS					Set @	Downhole 297	Total circ 150 mins		AV m/min	
TFA ins²	Sect 1					Set @	Active 568	Bottoms up 36 mins		DP 34.8	
NV m/sec	Sect 2				Liner	Set @	Total Circ 865	Surface-bit 9 mins		DC 54.6	
Impact lb f	Current	8.5	1056.5			Top @	Reserve 166	ECD ppg	ERR	Riser	

MUD PROPERTIES				MUD PROPERTY SPECIFICATIONS						
Sample Location	IN or OUT		PILL		WEIGHT	ppg	VIS	sec	YP	lb/100 ft²
Time Sample Taken	hrs		19:30		API Filt	ml	HTHP	mi	KCL	%
Depth	m		1453		BY AUTHORITY					
Flowline Temp	°C				REMARKS					
Weight	ppg		8.50		Mixed 165 bbl 3% KCl logging pill in pits 7 & 8.					
Funnel Viscosity	sec/gt		28		Centrifuge functioning.					
Plastic Viscosity	cP									
Yield Point	lb/100 ft²									
Gels 10 sec/10min/30 min	lb/100 ft²									
API Filtrate	ml/30min		NC							
HPHT Filtrate	ml/30min									
API/HPHT Filter Cake	32nd ins									
Solids	% Vol		0.7							
Dissolved Salts	% Vol		1.3							
Oil/Water Content	% Vol		~98.0							
Sand	% Vol		TR		ACTIVITY					
Methylene Blue cap	ppb		Nil							
pH	meter		10.5							
Alk. Mud Pm	ml		0.05							
Alk. Filtrate, Pt/Mf	ml		0.05/0.10							
Chlorides	mg/Lx10³		15.0							
Total Hardness/Calcium	mg/L		100/80							
KCL	% Wt Soln		3.0							
Sulfite Res.	mg/L		50							
					Pull out of hole.					

**INVENTORY AND CONSUMPTION**

PRODUCT DESCRIPTION	USED	REC	BAL	COST	MUD TYPE	Aerated Water	CONSUMPTION
KCL Tech(sx)	25 kg	32	278	462.08	<b>SOLIDS CONTROL EQUIPMENT</b>		<b>Additions</b> bbl
Caustic Soda	25 kg	1	12	18.04	<b>Make</b> screen size hrs		Sea W.
BARACOR-129	25 kg	1	15	71.33	Shaker 1	880/B100	Drill W.
					Shaker 2		other
					Shaker 3		345
					Shaker 4		other
							Barite
						ppg bbl/hr hrs bbl	Chemicals
					Desander	14.1 1.7 20 34	3
					Desilter	8.8 9 20 180	Losses bbl
					Mud Cleaner 2		Sol. Con.
					Centrifuge 1		214
					Centrifuge 2		Lost/Dumped
							Down Hole
							Newhole
							13
							NET GAIN
							134
							Discharged
							214

<b>BAROID Engineer</b>		<b>OFFICE</b>		<b>WAREHOUSE</b>		<b>DAILY COST</b>		<b>CUMULATIVE COST</b>	
Chris Wallace		MELBOURNE		ALICE SPRINGS		A\$ 551.45		A\$ 8829.20	
Tel. 03-6213311		03-6213311							

THE RECOMMENDATIONS MADE HEREON SHALL NOT BE CONSTRUED AS AUTHORIZING THE INFRINGEMENT OF ANY VALID PATENT, AND ARE MADE WITHOUT ASSUMPTION OF ANY LIABILITY BY BAROID DRILLING FLUIDS, INC OR IT'S AGENTS, AND ARE STATEMENTS OF OPINION ONLY.

<b>RESERVE PITS</b>		<b>SURVEY DATA</b>				<b>SOLIDS ANALYSIS</b>		<b>TIME BREAKDOWN</b>		hrs
NO	TYPE	bbl	MD m	TVD m	INCL°	DIR°	DISP m	Low Grav. Solids	% Vol	1.1
7	KCI	83	1395	1395	7.25			Low Grav. Solids	ppb	10.0
8	KCI	83	1414	1414	7			High Grav. Solids	% Vol	
			1434	1434	6.75			High Grav. Solids	ppb	
			1449	1449	6.75			ASG of Solids	g/cc	1.60
								Cuttings Volume	bbl	13.0
								Interval Dilution	bbl/m	1.2
								Interval Consumption	bbl/m	1.9
								Other		
								AVE ROP	m/hr	3.56

**Baroid Australia Pty Ltd**

**MUD REPORT NO.** 13 up to 24:00 hrs, 11/12/94

DATE 12/12/94

DEPTH-m MD 1453 TVD

**START DATE**  
29 - Nov - 94

<b>ACTIVITY</b>	
Logging	

OPERATOR  
MAGELLAN PETROLEUM (N.T.) PTY. LTD.

**CONTRACTOR / RIG**  
O.D.& E. Mereenie Rig 1

**COUNTRY**  
**AUSTRALIA**

**REPORT FOR**  
**C. DAVISON**

REPORT FOR  
R. MURRAY

**TOWNSHIP**  
**ALICE SPRINGS**

WELL NAME AND NO.  
PALM VALLEY-10

FIELD OR BLOCK NO.  
O.L. 3 NORTHERN TERRITORY

**LOCATION**  
**AMADEUS BASIN**

BIT DATA				DRILLING STRING			CASINGS			PUMP DATA					
Size 8.500 ins	OD ins		ID ins	Length m	Size ins	Depth m		Pump Make	ins x ins	Eff %	bbl/stk	spm	bbl/min		
Type ATJ44	Pipe 1	4.5	3.82		Riser	Set @		EMSCO F800	6	9	97	0.076			
Nozzles 32nds	Pipe 2	4.5	2.25		13 3/8"	Set @ 18		EMSCO F800	6	9	97	0.076			
OPEN	Pipe 3				9 5/8"	Set @ 396.52									
	Col 1	6.25	2.75			Set @		Pump Press	- psi		TOTAL bbl/min				
	Col 2					Set @		MUD VOL	bbl		CIRCULATING DATA				
Noz Area ins²	OPEN HOLE SECTIONS					Set @		Downhole	339	Total circ - mins		AV m/min			
TFA ins²	Sect 1					Set @		Active	393	Bottoms up - mins		DP			
NV m/sec	Sect 2				Liner	Set @		Total Circ	732	Surface-bit - mins		DC			
Impact lb f	Current		8.5	1056.5		Top @		Reserve	137	ECD ppg		Riser			

Impact 101		MUD PROPERTIES				MUD PROPERTY SPECIFICATIONS					
Sample Location	IN or OUT					WEIGHT	ppg	VIS	sec	YP	lb/100 ft <sup>2</sup>
Time Sample Taken	hrs					API Filt	ml	HTHP	ml	KCL	%
Depth	m					BY AUTHORITY					
Flowline Temp	°C					REMARKS					
Weight	ppg					Mixed additional 220 bbl 3% KCl logging pill.					
Funnel Viscosity	sec/qt					Mixed 3 x 50 bbl Hi-Vis pills with AQUAGEL and EZ-MUD.					
Plastic Viscosity	cP										
Yield Point	lb/100 ft <sup>2</sup>										
Gels 10 sec/10min/30 min	lb/100 ft <sup>2</sup>										
API Filtrate	ml/30min										
HPHT Filtrate	ml/30min										
API/HPHT Filter Cake	32nd ins										
Solids	% Vol										
Dissolved Salts	% Vol										
Oil/Water Content	% Vol										
Sand	% Vol										
Methylene Blue cap	ppb										
pH	meter										
Alk. Mud Pm	ml					ACTIVITY					
Alk. Filtrate, Pt/Mf	ml					POH. RIH to shoe. Service rig.					
Chlorides	mg/Lx10 <sup>3</sup>					RIH to bottom. Blow hole clean.					
Total Hardness/Calcium	mg/L					Mix KCl and Hi-Vis pills. Pump Hi-Vis pill. Blow clean.					
KCL	% Wt Soln					Pump KCl mud. Fill hole.					
Sulfite Res.	mg/L					Spot a Hi-Vis pill on bottom. Lost circ. @ 2280 strokes.					
						POH to log. Lay out stab.					
						Rig up Schlumberger.					
						Run # 1. FMS-GR.					
						Run # 2. GR-AS.					
						Run # 3. DL-MSFL-DLL-GR-SP.					
Rheometer	600 rpm/300 rpm										
lb/100 ft <sup>2</sup>	200 rpm/100 rpm										
	6 rpm/3 rpm										

[illegible]

BAROID Engineer		OFFICE	WAREHOUSE	DAILY COST	CUMULATIVE COST
Chris Wallace		MELBOURNE	ALICE SPRINGS	A\$ 2173.65	A\$ 11002.85
Tel. 03-6213311		03-6213311			

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RESERVE PITS													SURVEY DATA				SOLIDS ANALYSIS				TIME BREAKDOWN		hrs
NO	TYPE	bbl	MD m	TVD m	INCL°	DIR °	DISP m	Low Grav. Solids	% Vol	Drilling													
6	KCI	72						Low Grav. Solids	ppb	Circulating			4										
7	Hi-Vis	65						High Grav. Solids	% Vol	Reaming In													
								High Grav. Solids	ppb	Reaming out													
								ASG of Solids	g/cc	Tripping			5.5										
								Cuttings Volume	bbl	Logging			14										
								Interval Dilution	bbl/m 1.3	Blow hole													
								Interval Consumption	bbl/m 1.9	Other			0.5										
										AVE ROP	m/hr												

**Baroid Australia Pty Ltd**

**MUD REPORT NO.** 14 up to 24:00 hrs, 12/12/94

DATE 13/12/94

DEPTH--m	MD 1453	TVD
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START DATE

## ACTIVITY

29-Nov-94

Run Casing.

**OPERATOR**  
MAGELLAN PETROLEUM (N.T.) PTY. LTD.

**CONTRACTOR / RIG**  
O.D.& E. Mereenie Rig 1

<b>COUNTRY</b>	USA
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**AUSTRALIA**

REPORT FOR

REPORT FOR

TOWNSHIP

ALICE SPRINGS

WELL NAME AND NO.  
PALM VALLEY-10

FIELD OR BLOCK NO.  
O.L. 3 NORTHERN TERRITORY

**LOCATION**

**AMADEUS BASIN**

BIT DATA		DRILLING STRING			CASINGS		PUMP DATA						
Size 8,500 ins		OD ins	ID ins	Length m	Size ins	Depth m	Pump Make	ins	x ins	Eff %	bbl/stk	sprn	bbl/min
Type ATJ44		Pipe 1	4.5	3.82	Riser	Set @	EMSCO F800	6	9	97	0.076		
Nozzles 32nds		Pipe 2	4.5	2.25	13 3/8"	Set @ 18	EMSCO F800	6	9	97	0.076		
OPEN		Pipe 3			9 5/8"	Set @ 396.52							
		Col 1	6.25	2.75		Set @	Pump Press	- psi TOTAL bbl/min					
		Col 2				Set @	MUD VOL	bbl		CIRCULATING DATA			
Noz Area ins <sup>2</sup>		OPEN HOLE SECTIONS				Set @	Downhole	339	Total circ - mins			AV m/min	
TFA ins <sup>2</sup>		Sect 1				Set @	Active	412	Bottoms up - mins			DP	
NV m/sec		Sect 2			Liner	Set @	Total Circ	751	Surface-bit - mins			DC	
Impact lb f		Current		8.5	1056.5	Top @	Reserve		ECO ppg			Riser	

[illegible]

INVENTORY AND CONSUMPTION						MUD TYPE						CONSUMPTION	
PRODUCT DESCRIPTION		USED	REC	BAL	COST	SOLIDS CONTROL EQUIPMENT					Additions	bbl	
AQUAGEL,sx	25 kg	10		54	149						Sea W.		
						Make	screen size	hrs			Drill W.		
						Shaker 1	B80/B100				other		
						Shaker 2					other		
						Shaker 3					Barite		
						Shaker 4					Chemicals	1	
							ppg	bbl/hr	hrs	bbl	Losses	bbl	
						Desander	14.2	1.6	3	5	Sol. Con.	31	
						Desilter	8.9	8.5	3	26	Lost/Dumped	88	
						Mud Cleaner 2.					Down Hole		
						Centrifuge 1					Newhole		
						Centrifuge 2					NET LOSS	118	
						Solids Control Effic.			%		Discharged	119	

BAROID Engineer		OFFICE	WAREHOUSE	DAILY COST	CUMULATIVE COST
Chris Wallace		MELBOURNE	ALICE SPRINGS	A\$ 149.00	A\$ 11151.85
Tel. 03-6213311		03-6213311			

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[illegible]



**MUD REPORT NO.** 15 up to 24:00 hrs, 13/12/94

DATE 14/12/94

DEPTH--m	MD 1453	TVD
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START DATE

### ACTIVITY

29-Nov-94

### Change Out Pipe Rams.

**OPERATOR**  
MAGELLAN PETROLEUM (N.T.) PTY. LTD.

**CONTRACTOR / RIG**  
O.D.& E. Mereenie Rig 1

COUNTRY	UNITED STATES
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**AUSTRALIA**

**REPORT FOR**

REPORT FOR

TOWNSHIP

**ALICE SPRINGS**

WELL NAME AND NO.  
PALM VALLEY-10

FIELD OR BLOCK NO.  
O.L. 3 NORTHERN TERRITORY

**LOCATION**

### AMADEUS BASIN

BIT DATA		DRILLING STRING			CASINGS		PUMP DATA					
Size ins		OD ins	ID ins	Length m	Size ins	Depth m	Pump Make	ins x ins	Eff %	bbl/stk	spr	bbl/min
Type		Pipe 1			Riser	Set @	EMSCO F80C	6	9	97	0.076	
Nozzles 32nds		Pipe 2			13 3/8"	Set @ 18	EMSCO F80C	6	9	97	0.076	
OPEN		Pipe 3			9 5/8"	Set @ 396.52						
		Col 1				Set @	Pump Press — psi		TOTAL bbl/min			
		Col 2				Set @	MUD VOL bbl		CIRCULATING DATA			
Noz Area ins²		OPEN HOLE SECTIONS				Set @	Downhole 339	Total circ — mins		AV m/min		
TFA ins²		Sect 1				Set @	Active	Bottoms up — mins		DP		
NV m/sec		Sect 2			Liner	Set @	Total Circ 339	Surface—bit — mins		DC		
Impact lbf		Current	8.5	1056.5		Top @	Reserve 302	ECD ppg		Riser		

Impact No 1		Current				MUD PROPERTIES				MUD PROPERTY SPECIFICATIONS					
Sample Location	IN or OUT					WEIGHT	ppg	VIS	sec	YP		lb/100 ft²			
Time Sample Taken	hrs					API Filtr	ml	HTHP	ml	KCL		%			
Depth	m					BY AUTHORITY									
Flowline Temp	°C					REMARKS									
Weight	ppg					Begin building 300 bbl 3% KCl/Polymer kill mud in pits 5, 6, 7, & 8.									
Funnel Viscosity	sec/qt					At 24:00, still to mix BARACARB & BARACOR-129.									
Plastic Viscosity	cP														
Yield Point	lb/100 ft²														
Gels 10 sec/10min/30 min	lb/100 ft²														
API Filtrate	ml/30min														
HPHT Filtrate	ml/30min														
API/HPHT Filter Cake	32nd ins														
Solids	% Vol														
Dissolved Salts	% Vol														
Oil/Water Content	% Vol					Received 1 x 25 lt can BARAFILM.									
Sand	% Vol					Sump water analysis -- 4000 mg/l Chlorides, pH - 7.5									
Methylene Blue cap	ppb					Clean mud pits.									
pH	meter					ACTIVITY									
Alk. Mud Pm	ml					Run 7" casing to bottom.									
Alk. Filtrate, Pf/Mf	ml					Rig up Howco. Circ. and work casing.									
Chlorides	mg/Lx10³					Cement 7" casing.									
Total Hardness/Calcium	mg/L					Nipple down BOP and flow line.									
KCL	% Wt Soln					Mix mud.									
Sulfite Res.	mg/L					Set 7" casing slips, wt. 135000 lb.									
						Pick up BOP, cut casing and lay out.									
						Lay out Rot. head and cut and dress 7" casing stump.									
						Pressure test B section failed. Attempt to fill 7" to 9-5/8"									
						with water. No go. Remove B section, energise casing slip seals.									
						Pressure test to 3000 psi.									
						Change out pipe rams to 3-1/2". Rig up scaffolding and sit									
Rheometer	600 rpm/300 rpm														
lb/100 ft²	200 rpm/100 rpm														
	6 rpm/3 rpm														

INVENTORY AND CONSUMPTION					rotating head. Mix mud.						
PRODUCT DESCRIPTION		USED	REC	BAL	COST	MUD TYPE				CONSUMPTION	
						SOLIDS CONTROL EQUIPMENT				Additions	bbl
						Make	screen size	hrs		Sea W.	
KCL, Tech(sx)	25 kg	82			145	Shaker 1				Drill W.	
Caustic Soda	25 kg	1			10	Shaker 2				other	
AQUAGEL,sx	25 kg	11			43	Shaker 3				other	
PAC -R	50 lb	9			31	Shaker 4				Barite	
DEXTRID	25 kg	22			78						
BARAFILM	25 lt		1	1							
							ppg	bbl/hr	hrs	bbl	Chemicals
						Desander					10
						Desilter				Losses	bbl
						Mud Cleaner 2.				Sol. Con.	
						Centrifuge 1				Lost/Dumped	120
						Centrifuge 2				Down Hole	
										Newhole	
										NET LOSS	110
						Solids Control Effic.			%	Discharged	120

BAROID Engineer		OFFICE	WAREHOUSE	DAILY COST	CUMULATIVE COST
Chris Wallace		MELBOURNE	ALICE SPRINGS	A\$ 3609.67	A\$ 14761.52
Tel. 03-6213311		03-6213311			

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RESERVE PITS			SURVEY DATA					SOLIDS ANALYSIS		TIME BREAKDOWN		hrs
NO	TYPE	bbl	MD m	TVD m	INCL°	DIR °	DISP m	Low Grav. Solids	% Vol	Drilling		
5	Kill	68						Low Grav. Solids	ppb	Circulating		1
6	Kill	76						High Grav. Solids	% Vol	Reaming in		
7	Kill	79						High Grav. Solids	ppb	Reaming out		
8	Kill	79						ASG of Solids	g/cc	Tripping		
								Cuttings Volume	bbl	Logging		
								Interval Dilution	bbl/m 1.5	Nipple up BOP		19
								Interval Consumption	bbl/m 2.0	Run Casing, Cement		4
										AVE ROP	m/hr	



# Baroid Australia Pty Ltd

MUD REPORT NO. 16 up to 24:00 hrs, 14/12/94

DATE 15/12/94 DEPTH-m MD 1453 TVD

START DATE 29-Nov-94 ACTIVITY Run In Hole

OPERATOR  
MAGELLAN PETROLEUM (N.T.) PTY. LTD.CONTRACTOR / RIG  
O.D. & E. Mereneie Rig 1COUNTRY  
AUSTRALIAREPORT FOR  
C. DAVISONREPORT FOR  
R. MURRAYTOWNSHIP  
ALICE SPRINGSWELL NAME AND NO.  
PALM VALLEY-10FIELD OR BLOCK NO.  
O.L. 3 NORTHERN TERRITORYLOCATION  
AMADEUS BASIN

BIT DATA				DRILLING STRING			CASINGS			PUMP DATA					
Size 5.000 ins		OD ins		ID ins	Length m	Size ins		Depth m	Pump Make	ins x ins		Eff %	bbl/stk	spr	bbl/min
Type J2		Pipe 1		3.5	2.764	Riser		Set @	EMSCO F800	6	9	97	0.076		
Nozzles 32nds		Pipe 2		3.5		13 3/8"		Set @ 18	EMSCO F800	6	9	97	0.076		
OPEN		Pipe 3				9 5/8"		Set @ 396.52							
		Col 1		4.75	2.25	7"		Set @ 1451.55	Pump Press - psi		TOTAL bbl/min				
		Col 2						Set @	MUD VOL bbl		CIRCULATING DATA				
Noz Area ins²		OPEN HOLE SECTIONS					Set @		Downhole 177	Total circ - mins			AV m/min		
TFA ins²		Sect 1					Set @		Active 140	Bottoms up - mins			DP		
NV m/sec		Sect 2					Liner Set @		Total Circ 317	Surface-bit - mins			DC		
Impact lb f		Current 8.5 1.5					Top @		Reserve 305	ECD ppg			Riser		

MUD PROPERTIES				MUD PROPERTY SPECIFICATIONS			
Sample Location	IN or OUT	KILL		WEIGHT	ppg	VIS	sec YP lb/100 ft <sup>2</sup>
Time Sample Taken	hrs	7:30		API Filt	ml	HTHP	ml KCL %
Depth	m	1453		BY AUTHORITY			
Flowline Temp	°C			REMARKS			
Weight	ppg	8.80		Added BARACARB 35 and BARACOR-129 to kill mud for weight and corrosion inhibition.			
Funnel Viscosity	sec/qt	47					
Plastic Viscosity	cP	15		At 24:00 hrs, adding PAC-R for filtration control and Yield Point.			
Yield Point	lb/100 ft <sup>2</sup>	12					
Gels 10 sec/10min/30 min	lb/100 ft <sup>2</sup>			166 x 94 lb sacks Cement on site.			
API Filtrate	ml/30min	4.0					
HPHT Filtrate	ml/30min						
API/HPHT Filter Cake	32nd ins	1/-					
Solids	% Vol	2.3					
Dissolved Salts	% Vol	1.7					
Oil/Water Content	% Vol	-/96.0					
Sand	% Vol	TR					
Methylene Blue cap	ppb	3					
pH	meter	10.0					
Alk. Mud Pm	ml	0.50		ACTIVITY Cut and weld flow line and rig up. Pressure test Blind rams and flare line 200-1000 psi. OK. Pressure test BOP. Change out Kellys. Caliper and clean 3-1/2" Heavy Weight pipe. Run in hole. Strap 3-1/2" Drill pipe. Run in hole.			
Alk. Filtrate, P/Mf	ml	0.20/0.50					
Chlorides	mg/Lx10 <sup>3</sup>	19.0					
Total Hardness/Calcium	mg/L	120/100					
KCL	% Wt Soln	3.8					
Sulfite Res.	mg/L	80					
Rheometer	600 rpm/300 rpm	42/27					
lb/100 ft <sup>2</sup>	200 rpm/100 rpm						
	6 rpm/3 rpm						

INVENTORY AND CONSUMPTION					MUD TYPE				CONSUMPTION	
PRODUCT DESCRIPTION	USED	REC	BAL	COST	SOLIDS CONTROL EQUIPMENT				Additions	bbl
BARACARB 35	25 kg	48	96	512.16	Make	screen size	hrs		Sea W.	
BARACOR-129	25 kg	4	8	285.32	Shaker 1				Drill W.	
					Shaker 2				other	
					Shaker 3				other	
					Shaker 4				Barte	
					ppg	bbl/hr	hrs	bbl	Chemicals	3
					Desander				Losses	bbl
					Desilter				Sol. Con.	
					Mud Cleaner 2.				Lost/Dumped	22
					Centrifuge 1				Down Hole	
					Centrifuge 2				Newhole	
									NET LOSS	19
					Solids Control Effic.	%			Discharged	22

BAROID Engineer		OFFICE	WAREHOUSE	DAILY COST	CUMULATIVE COST
Chris Wallace		MELBOURNE	ALICE SPRINGS	A\$ 797.48	A\$ 15559.00
Tel. 03-6213311		03-6213311			

THE RECOMMENDATIONS MADE HEREON SHALL NOT BE CONSTRUED AS AUTHORIZING THE INFRINGEMENT OF ANY VALID PATENT, AND ARE MADE WITHOUT ASSUMPTION OF ANY LIABILITY BY BAROID DRILLING FLUIDS, INC OR IT'S AGENTS, AND ARE STATEMENTS OF OPINION ONLY.

RESERVE PITS			SURVEY DATA				SOLIDS ANALYSIS			TIME BREAKDOWN	
NO	TYPE	bbl	MD m	TVD m	INCL°	DIR°	DISP m	Low Grav. Solids	% Vol	2.4	Drilling
5	Kill	71						Low Grav. Solids	ppb	21.8	Circulating
6	Kill	76						High Grav. Solids	% Vol		Reaming In
7	Kill	79						High Grav. Solids	ppb		Reaming out
8	Kill	79						ASG of Solids	g/cc	2.50	Tripping
								Cuttings Volume	bbl		P.U BHA
								Interval Dilution	bb/m	1.5	Test BOP
								Interval Consumption	bb/m	2.0	Other
								AVE ROP		m/hr	



MUD REPORT NO. 17 up to 24:00 hrs, 15/12/94

DATE 16/12/94

DEPTH-m	MD 1468	TVD
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START DATE

## ACTIVITY

29 - Nov - 94

### Pull Out of Hole

[illegible]

**AUSTRALIA**

TOWNSHIP

**ALICE SPRINGS**

**LOCATION**

AMADEUS BASIN

Impact lb f	Current	MUD PROPERTIES			MUD PROPERTY SPECIFICATIONS					
Sample Location	IN or OUT		KILL		WEIGHT	ppg	VIS	sec	YP	lb/100 ft²
Time Sample Taken	hrs		22:30		API Filt	ml	HHP	ml	KCL	%
Depth	m		1465		BY AUTHORITY					
Flowline Temp	°C				<b>REMARKS</b>					
Weight	ppg		8.80		Mix 50 bbl 22 ppb AQUAGEL. Will add after 24:00 hrs.					
Funnel Viscosity	sec/qt		47							
Plastic Viscosity	cP		14							
Yield Point	lb/100 ft²		14							
Gels 10 sec/10min/30 min	lb/100 ft²									
API Filtrate	ml/30min		4.0							
HPHT Filtrate	ml/30min									
API/HPHT Filter Cake	32nd ins		1/-							
Solids	% Vol		2.3							
Dissolved Salts	% Vol		1.7							
Oil/Water Content	% Vol		-/96.0							
Sand	% Vol		Tr							
Methylene Blue cap	ppb		3		166 x 94 lb sacks cement on site.					
pH	meter		10.0							
Alk. Mud Pm	ml		0.50		<b>ACTIVITY</b>					
Alk. Filtrate, Pf/Mf	ml		0.20/0.50		RIH. Tag 1423.93 m. Drill out cement.					
Chlorides	mg/Lx10³		19.0		Drill 6" hole 1453 to 1457.44 m. Blow well dry.					
Total Hardness/Calcium	mg/L		120/100		Pull Out of Hole for BHA and bit change.					
KCL	% Wt Soln		3.8		Make Up Baker motor and BHA and Run in Hole.					
Sulfite Res.	mg/L		80		Air drill 6" hole 1457 to 1468 m.					
					Pull Out of Hole.					
Rheometer	600 rpm/300 rpm		42/28							
lb/100 ft²	200 rpm/100 rpm									
	6 rpm/3 rpm									

INVENTORY AND CONSUMPTION						MUD TYPE AIR				CONSUMPTION	
PRODUCT DESCRIPTION		USED	REC	BAL	COST	SOLIDS CONTROL EQUIPMENT				Additions	bbl
						Make	screen size	hrs			
Caustic Soda	25 kg	1		9	18.04					Sea W.	
AQUAGEL.sx	25 kg	20		23	298					Drill W.	43
PAC-R	50 lb	3		28	391.41	Shaker 1				other	
						Shaker 2				other	
						Shaker 3				Barite	
						Shaker 4				Chemicals	2
							ppg	bbl/hr	hrs	bbl	Losses bbl
						Desander				Sol. Con.	
						Desilter				Lost/Dumped	57
						Mud Cleaner 2.				Down Hole	
						Centrifuge 1				Newhole	2
						Centrifuge 2				NET LOSS	12
						Solids Control Effic. %				Discharged	57

BAROID Engineer		OFFICE	WAREHOUSE	DAILY COST	CUMULATIVE COST
Chris Wallace		MELBOURNE	ALICE SPRINGS	A\$ 707.45	A\$ 16266.45
Tel. 03-6213311		03-6213311			

Tel. 03-6213311 03-6213311

THE RECOMMENDATIONS MADE HEREON SHALL NOT BE CONSTRUED AS AUTHORIZING THE INFRINGEMENT OF ANY VALID PATENT, AND ARE MADE WITHOUT ASSUMPTION OF ANY LIABILITY BY BAROID DRILLING FLUIDS, INC OR ITS AGENTS, AND ARE STATEMENTS OF OPINION ONLY.

RESERVE PITS		SURVEY DATA						SOLIDS ANALYSIS		TIME BREAKDOWN		hrs
NO	TYPE	bbl	MD m	TVD m	INCL°	DIR °	DISP m	Low Grav. Solids	% Vol	2.4	Drilling	8.5
4	Kill	78						Low Grav. Solids	ppb	21.8	Circulating	1.5
5	Kill	78						High Grav. Solids	% Vol		Reaming In	
6	Kill	72						High Grav. Solids	ppb		Reaming out	
7	Kill	68						ASG of Solids	g/cc	2.50	Tripping	7.5
								Cuttings Volume	bbl	2.0	BHA	0.5
8	Gel	54						Interval Dilution	bbl/m	1.5	Drill cement	2.5
								Interval Consumption	bbl/m	2.0	Other	3.5
											AVE ROP	m/hr 1.70



# Baroid Australia Pty Ltd

MUD REPORT NO. 18 up to 24:00 hrs, 16/12/94

DATE 17/12/94

DEPTH-m MD 1468 TVD 1465

START DATE

29-Nov-94

ACTIVITY

Run In Hole

**OPERATOR**

MAGELLAN PETROLEUM (N.T.) PTY. LTD.

**CONTRACTOR / RIG**

O.D. &amp; E. Mereenie Rig 1

**REPORT FOR**

C. DAVISON

**REPORT FOR**

R. MURRAY

**COUNTRY**

AUSTRALIA

**TOWNSHIP**

ALICE SPRINGS

**WELL NAME AND NO.**

PALM VALLEY-10

**FIELD OR BLOCK NO.**

O.L. 3 NORTHERN TERRITORY

**LOCATION**

AMADEUS BASIN

BIT DATA				DRILLING STRING				CASINGS				PUMP DATA			
Size 6.000 ins	OD ins	ID ins	Length m	Size ins	Depth m	Pump Make	ins x ins	Eff %	bbl/stk	spr	bbl/min				
Type ATJ55	Pipe 1	3.5	2.764	Riser	Set @	EMSCO F800	6 9	97	0.076	22000					
Nozzles 32nds	Pipe 2	3.5	2.25	277	13 3/8"	Set @ 18	EMSCO F800	6 9	97	0.076					
OPEN	Pipe 3			9 5/8"	Set @ 396.52										
	Col 1	4.75	2.25	39.58	7"	Set @ 1451.55	Pump Press 600 psi	TOTAL bbl/min							
	Col 2				Set @		MUD VOL bbl	CIRCULATING DATA							
Noz Area ins <sup>2</sup>	OPEN HOLE SECTIONS				Set @	Downhole 170	Total circ - mins	AV m/min							
TFA ins <sup>2</sup>	Sect 1				Set @	Active 117	Bottoms up - mins	DP							
NV m/sec	Sect 2				Liner	Total Circ 287	Surface - bit - mins	DC							
Impact lb f	Current	6	16.5		Top @	Reserve 336	ECD ppg	8.8	Riser						

MUD PROPERTIES				MUD PROPERTY SPECIFICATIONS			
Sample Location	IN or OUT		KILL	WEIGHT	ppg	VIS	sec YP lb/100 ft <sup>2</sup>
Time Sample Taken	hrs		22:30	API Filtr	ml	HTHP	ml KCL %
Depth	m		1468	BY AUTHORITY			
Flowline Temp	°C			REMARKS			
Weight	ppg		8.80	Added AQUAGEL to the 3.8% KCl/Polymer Kill mud. Add PAC-R and Dextrid.			
Funnel Viscosity	sec/qt		46				
Plastic Viscosity	cP		15	166 x 94 lb sacks cement on site.			
Yield Point	lb/100 ft <sup>2</sup>		15				
Gels 10 sec/10min/30 min	lb/100 ft <sup>2</sup>						
API Filtrate	ml/30min		4.0				
HPHT Filtrate	ml/30min						
API/HPHT Filter Cake	32nd ins		1/-				
Solids	% Vol		2.3				
Dissolved Salts	% Vol		1.7				
Oil/Water Content	% Vol		-/96.0				
Sand	% Vol		TR				
Methylene Blue cap	ppb		6				
pH	meter		11.0				
Alk. Mud Pm	ml		1.10				
Alk. Filtrate, Pt/Mf	ml		0.40/0.80				
Chlorides	mg/Lx10 <sup>3</sup>		19.0				
Total Hardness/Calcium	mg/L		100/80				
KCL	% Wt Soln		3.8				
Sulfite Res.	mg/L		80				
				ACTIVITY			
				Continue to Pull Out of Hole.			
				Make up bit and adjust motor angle.			
				Run In Hole to 1430 m. Make up circ. head and Kelly hose.			
				Rig up OilServ. Run In Hole and tag bottom.			
				Run wireline to orientate motor. Attempt drill 1468 m. No Go.			
				Pull Out of Hole to inspect assembly and motor.			
				Pick up new BHA and motor.			
				Run In Hole.			
Rheometer	600 rpm/300 rpm		45/30				
lb/100 ft <sup>2</sup>	200 rpm/100 rpm						
	6 rpm/3 rpm						

INVENTORY AND CONSUMPTION					MUD TYPE				CONSUMPTION	
PRODUCT DESCRIPTION	USED	REC	BAL	COST	Air/Mist				Additions	bbl
PAC-R	50 lb	5	23	652.35	SOLIDS CONTROL EQUIPMENT				Sea W.	
DEXTRID	25 kg	14	64	680.54	Make	screen size	hrs		Drill W.	
					Shaker 1				other	
					Shaker 2				other	
					Shaker 3				Barite	
					Shaker 4				Chemicals	2
					ppg	bbl/hr	hrs	bbl	Losses	bbl
					Desander				Sol. Con.	
					Desilter				Lost/Dumped	5
					Mud Cleaner 2				Down Hole	
					Centrifuge 1				Newhole	
					Centrifuge 2				NET LOSS	3
					Solids Control Effic.		%		Discharged	5

BAROID Engineer		OFFICE	WAREHOUSE	DAILY COST	CUMULATIVE COST
Chris Wallace		MELBOURNE	ALICE SPRINGS	A\$ 1332.89	A\$ 17599.34
Tel. 03-6213311		03-6213311			

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RESERVE PITS			SURVEY DATA					SOLIDS ANALYSIS		TIME BREAKDOWN	
NO	TYPE	bbl	MD m	TVD m	INCL°	DIR°	DISP m	Low Grav. Solids	% Vol	Drilling	hrs
4	Kill	41						Low Grav. Solids	ppb 21.8	Circulating	3.5
5	Kill	68						High Grav. Solids	% Vol	Reaming In	
6	Kill	67						High Grav. Solids	ppb	Reaming out	
7	Kill	74						ASG of Solids	g/cc 2.50	Tripping	6
8	Kill	86						Cuttings Volume	bbl	W.Line logs	7.5
								Interval Dilution	bbl/m 1.6	Other	7
								Interval Consumption	bbl/m 2.0	Other	
								AVE ROP		m/hr	

**Baroid Australia Pty Ltd**

MUD REPORT NO. 19 up to 24:00 hrs, 17/12/94

DATE 18/12/04

DEPTH-m MD 1484 TVD 1480

START DATE

## ACTIVITY

### Run In Hole.

**OPERATOR**

MAGELLAN PETROLEUM (N.T.) PTY. LTD.

**CONTRACTOR / RIG**

O.D. & E. Mearns Rig 1

## COUNTRY

AUSTRALIA

# REPORT FOR

C. DAVISON

## REPORT FOR

R. MURRAY

## TOWNSHIP

**ALICE SPRINGS**

## WELL NAME AND NO.

PALM VALLEY-10

## FIELD OR BLOCK NO.

O.L. 3 NORTHERN TERRITORY

**LOCATION**

## AMADEUS BASIN

**BIT DATA**

## DRILLING STRING

## CASINGS

### PUMP DATA

Size 6.000 ins	OD ins	ID ins	Length m	Size ins	Depth m	Pump Make	ins x ins	Eff %	bbl/stk	spr	bbl/min
Type 44 CD	Pipe 1	3.5	2.764	1092.1	Riser	Set @	EMSCO F800	6 9	97	0.076	1500C
Nozzles 32nds	Pipe 2	3.5	2.25	277	13 3/8"	Set @ 18	EMSCO F800	6 9	97	0.076	
OPEN	Pipe 3			9 5/8"	Set @	396.52					
	Col 1	4.75	2.25	30.93	7"	Set @ 1451.55	Pump Press 500 psi	TOTAL bbl/min			
	Col 2				Set @		MUD VOL	bbl	CIRCULATING DATA		
Noz Area ins <sup>2</sup>	OPEN HOLE SECTIONS				Set @		Downhole	157	Total circ - mins		AV m/min
TFA ins <sup>2</sup>	Sect 1				Set @		Active	117	Bottoms up - mins		DP
NV m/sec	Sect 2			Liner	Set @		Total Circ	274	Surface-bit - mins		DC
Impact lb f	Current		6	32.5	Top @		Reserve	336	ECD ppg	8.8	Riser

## MUD PROPERTIES

### MUD PROPERTY SPECIFICATIONS

Sample Location	IN or OUT	KILL	WEIGHT	ppg	VIS	sec	YP	lb/100 ft³
Time Sample Taken	hrs	18:00	API Filtr	ml	HTHP	ml	KCL	%
Depth	m	1482	BY AUTHORITY					
Flowline Temp	°C		REMARKS					
Weight	ppg	8.80	Reserve is 3.8% KCl/Polymer kill mud.					
Funnel Viscosity	sec/qt	54	Adding QUIK-FOAM @ 1.3 lpb, BARACOR 1635L @ 0.3 lpb.					
Plastic Viscosity	cP	20	Injection rate 8 bbl/hr.					
Yield Point	lb/100 ft²	15						
Gels 10 sec/10min/30 min	lb/100 ft²							
API Filtrate	ml/30min	4.8						
HPHT Filtrate	ml/30min							
API/HPHT Filter Cake	32nd ins	1/-						
Solids	% Vol	2.3						
Dissolved Salts	% Vol	1.7						
Oil/Water Content	% Vol	-/96.0						
Sand	% Vol	TR						
Methylene Blue cap	ppb	6	166 x 94 lb sacks cement on site.					
pH	meter	11.0						
Alk. Mud Pm	ml	1.10	ACTIVITY					
Alk. Filtrate, Pf/Mf	ml	0.40/0.80	Rig up kelly hose and bleed off line.					
Chlorides	mg/Lx10³	19.0	Run In Hole. Rig up sheaves and Run In steering tool.					
Total Hardness/Calcium	mg/L	100/80	Mist drill 6" hole from 1468 to 1473 m.					
KCL	% Wt Soln	3.8	Work and ream tight hole 1468 to 1473 m.					
Sulfite Res.	mg/L	80	Drill 6" hole 1473 to 1484 m with surveys.					
			Pull Out of Hole for BHA change.					
			Run In Hole.					
Rheometer	600 rpm/300 rpm	55/35						
lb/100 ft²	200 rpm/100 rpm							
	6 rpm/3 rpm							

## INVENTORY AND CONSUMPTION

PRODUCT DESCRIPTION		USED	REC	BAL	COST	MUD TYPE      Air/Mist/Foam				CONSUMPTION	
						SOLIDS CONTROL EQUIPMENT				Additions	bbl
						Make	screen size	hrs		Sea W.	
QUIK-FOAM	205 lt	1		14	542.31						
BARACOR 1635L	205 lt	1		2	574.55						
						Shaker 1				Drill W.	90
						Shaker 2				other	
						Shaker 3				other	
						Shaker 4				Barite	
							ppg	bbl/hr	hrs	bbl	Chemicals
											3
						Desander				Losses	bbl
						Desilter				Sol. Con.	
						Mud Cleaner 2.				Lost/Dumped	90
						Centrifuge 1				Down Hole	
						Centrifuge 2				Newhole	
										NET GAIN	3
						Solids Control Effic.			%	Discharged	90

## BAROID Engineer

## OFFICE

WAREHOUSE

Chris Wallace	MELBOURNE	ALICE SPRINGS
Tel. 03-6213311	03-6213311	

### DAILY COST

**CUMULATIVE COST**

**A\$ 1116.86**

**A\$ 18716.20**

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## RESERVE PITS

## SURVEY DATA

## SOLIDS ANALYSIS

### TIME BREAKDOWN

NO	TYPE	bbl	MD m	TVD m	INCL°	DIR °	DISP m	Low Grav. Solids	% Vol	2.4	Drilling	12	
4	Kill	80	1463	1460	6.2	225.3		Low Grav. Solids	ppb	21.8	Circulating	0.5	
5	Kill	75						High Grav. Solids	% Vol		Reaming In	0.5	
6	Kill	67						High Grav. Solids	ppb		Reaming out		
7	Kill	63						ASG of Solids	g/cc	2.50	Tripping	4.5	
8	Kill	51						Cuttings Volume	bbl	2.0	W.Line logs	1	
								Interval Dilution	bbl/m	1.6	OILSERV	3	
								Interval Consumption	bbl/m	2.0	Other	2.5	
											AVE ROP	m/hr	1.33



**Baroid Australia Pty Ltd**

**MUD REPORT NO.** 20 up to 24:00 hrs, 18/12/94

**DATE** 19/12/94

DEPTH-m MD 1498 TVD 1495

START DATE

## ACTIVITY

### Air/Mist/Foam Drilling.

**OPERATOR**  
MAGELLAN PETROLEUM (N.T.) PTY. LTD.

**CONTRACTOR / RIG**  
O.D. & E. Mereenie Rig 1

**REPORT FOR**  
**C. DAVISON**

REPORT FOR  
R. MURRAY

COUNTRY

AUSTRALIA

TOWNSHIP

WELL NAME AND NO.  
PALM VALLEY-10

FIELD OR BLOCK NO.  
O.L. 3 NORTHERN TERRITORY

**LOCATION****AMADEUS BASIN**

BIT DATA		DRILLING STRING			CASINGS		PUMP DATA						
Size 6.000 ins		OD ins	ID ins	Length m	Size ins	Depth m	Pump Make	ins x ins	Eff %	bbl/stk	sprn	bbl/min	
Type ATJ55		Pipe 1	3.5	2.764	1181.4	Riser	Set @	EMSCO F80C	6	9	97	0.076	1600C
Nozzles 32nds		Pipe 2	3.5	2.25	277	13 3/8"	Set @	EMSCO F80C	6	9	97	0.076	
OPEN		Pipe 3				9 5/8"	Set @	396.52					
		Col 1	4.75	2.25	39.58	7"	Set @	1451.55	Pump Press 480 psi	TOTAL bbl/min			
		Col 2					Set @	MUD VOL	bbl	CIRCULATING DATA			
Noz Area ins²		OPEN HOLE SECTIONS					Set @	Downhole	156	Total circ	- mins	AV	m/min
TFA ins²		Sect 1					Set @	Active	117	Bottoms up	- mins	DP	
NV m/sec		Sect 2				Liner	Set @	Total Circ	273	Surface-bit	- mins	DC	
Impact lb f		Current		6	46.5		Top @	Reserve	336	ECD ppg	8.8	Riser	

Impact/10'		Current		MUD PROPERTIES		MUD PROPERTY SPECIFICATIONS					
Sample Location	IN or OUT			KILL		WEIGHT	ppg	VIS	sec	YP	lb/100 ft <sup>3</sup>
Time Sample Taken	hrs			21:30		API Filtr	ml	HTHP	ml	KCL	%
Depth	m			1494		BY AUTHORITY					
Flowline Temp	°C					REMARKS					
Weight	ppg			8.80		Reserve is 3.8% KCl/Polymer kill mud.					
Funnel Viscosity	sec/qt			50		Adding QUIK-FOAM @ 1.3 lpb, BARACOR 1635L @ 0.3 lpb.					
Plastic Viscosity	cP			18		Injection rate 8 bbl/hr.					
Yield Point	lb/100 ft <sup>2</sup>			14							
Gels 10 sec/10min/30 min	lb/100 ft <sup>2</sup>										
API Filtrate	ml/30min			4.2							
HPHT Filtrate	ml/30min										
API/HPHT Filter Cake	32nd ins			1/-							
Solids	% Vol			2.3							
Dissolved Salts	% Vol			1.7							
Oil/Water Content	% Vol			-/96.0							
Sand	% Vol			TR							
Methylene Blue cap	ppb			6		166 x 94 lb sacks cement on site.					
pH	meter			11.0							
Alk. Mud Pm	ml			1.10		ACTIVITY					
Alk. Filtrate, Pt/Mf	ml			0.40/0.80		Continue to Run In Hole.					
Chlorides	mg/Lx10 <sup>3</sup>			19.0		Blow well and work over junk.					
Total Hardness/Calcium	mg/L			100/80		Air/Mist/Foam drill 6" hole from 1484 to 1490 m with surveys.					
KCL	% Wt Soln			3.8		Pull Out of Hole.					
Sulfite Res.	mg/L			80		Run In Hole to 1486 m. Work tight hole from 1486 to 1490 m.					
						Run survey, break circ. high press. Work string.					
						Pull Out of Hole 1 stand.					
						Attempt to circ. High press.					
						Pull Out of Hole to inspect BHA.					
						Change bit & adjust motor.					
Rheometer	600 rpm/300 rpm			50/32		Run In Hole. Run survey. Drill to 1498 m.					
lb/100 ft <sup>2</sup>	200 rpm/100 rpm										
	6 rpm/3 rpm										

INVENTORY AND CONSUMPTION					MUD TYPE <i>Air/Mist/Foam</i>				CONSUMPTION	
PRODUCT DESCRIPTION	USED	REC	BAL	COST	SOLIDS CONTROL EQUIPMENT				Additions	bbl
					Make	screen size	hrs		Sea W.	
					Shaker 1				Drill W.	60
					Shaker 2				other	
					Shaker 3				other	
					Shaker 4				Barite	
						ppg	bbl/hr	hrs	bbl	Chemicals
					Desander				Losses	bbl
					Desilter				Sol. Con.	
					Mud Cleaner 2.				Lost/Dumped	51
					Centrifuge 1				Down Hole	
					Centrifuge 2				Newhole	2
									NET LOSS	1
					Solids Control Effic. %				Discharged	61

BAROID Engineer		OFFICE	WAREHOUSE	DAILY COST	CUMULATIVE COST
Chris Wallace		MELBOURNE	ALICE SPRINGS	A\$ 0.00	A\$ 18716.20
Tel	03-6213311	03-6213311			

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RESERVE PITS			SURVEY DATA					SOLIDS ANALYSIS			TIME BREAKDOWN		hrs
NO	TYPE	bbl	MD m	TVD m	INCL°	DIR °	DISP m	Low Grav. Solids	% Vol	2.4	Drilling	6	
4	Kill	85	1474	1471	5.5	216.4		Low Grav. Solids	ppb	21.8	Circulating	2.5	
5	Kill	71	1481	1478	5.7	205.5		High Grav. Solids	% Vol		Reaming in	0.5	
6	Kill	68	1483	1480	5.2	205.4		High Grav. Solids	ppb		Reaming out		
7	Kill	59						ASG of Solids	g/cc	2.50	Tripping	7.5	
8	Kill	53						Cuttings Volume	bbl	2.0	W.Line logs	2	
								Interval Dilution	bbl/m	1.6	Dev. Surv.	2	
								Interval Consumption	bbl/m	2.0	Other	3.5	
											AVE ROP	m/hr 2.33	



**MUD REPORT NO.** 21 up to 24:00 hrs, 19/12/94

DATE 20/12/94

DEPTH-m MD 1526 TVD 1522

START DATE

### ACTIVITY

29-Nov-94

### Air/Mist/Foam Drilling

**OPERATOR**  
MAGELLAN PETROLEUM (N.T.) PTY. LTD.

**CONTRACTOR / RIG**  
O.D.& E. Mereenie Rig 1

COUNTRY

**AUSTRALIA**

REPORT FOR

REPORT FOR

TOWNSHIP

**ALICE SPRINGS**

WELL NAME AND NO.  
PALM VALLEY-10

FIELD OR BLOCK NO.  
O.L. 3 NORTHERN TERRITORY

**LOCATION**

## AMADEUS BASIN

BIT DATA		DRILLING STRING			CASINGS		PUMP DATA						
Size 6.000 ins		OD ins	ID ins	Length m	Size ins	Depth m	Pump Make	ins x ins	Eff %	bbl/stk	spm	bbl/min	
Type ATJ55		Pipe 1	3.5	2.764	1209.4	Riser	Set @	EMSCO F800	6	9	97	0.076	15000
Nozzles 32nds		Pipe 2	3.5	2.25	277	13 3/8"	Set @ 18	EMSCO F800	6	9	97	0.076	
OPEN		Pipe 3			9 5/8"	Set @ 396.52							
		Col 1	4.75	2.25	39.59	7"	Set @ 1451.55	Pump Press 480 psi	TOTAL bbl/min				
		Col 2				Set @		MUD VOL bbl	CIRCULATING DATA				
Noz Area ins <sup>2</sup>		OPEN HOLE SECTIONS					Set @	Downhole 159	Total circ - mins		AV m/min		
TFA ins <sup>2</sup>		Sect 1					Set @	Active 117	Bottoms up - mins		DP		
NV m/sec		Sect 2				Liner	Set @	Total Circ 276	Surface-bit - mins		DC		
Impact lb f		Current 6 74.5					Top @	Reserve 329	ECD ppg 8.8		Riser		

Sample Location		IN or OUT	MUD PROPERTIES		MUD PROPERTY SPECIFICATIONS					
Time Sample Taken	hrs			KILL	WEIGHT	ppg	VIS	sec	YP	lb/100 ft²
Depth	m			19:00	API Filtr	ml	HTHP	ml	KCL	%
Flowline Temp	°C			1522	BY AUTHORITY					
Weight	ppg			8.80	REMARKS					
Funnel Viscosity	sec/qt			51	Reserve is 3.8% KCl/Polymer kill mud.					
Plastic Viscosity	cP			18	Adding QUIK-FOAM @ 1.3 lpb, BARACOR 1635L @ 0.3 lpb.					
Yield Point	lb/100 ft²			14	Injection rate 8 bbl/hr at 1500 cfm.					
Gels 10 sec/10min/30 min	lb/100 ft²									
API Filtrate	ml/30min			4.2						
HPHT Filtrate	ml/30min									
API/HPHT Filter Cake	32nd ins			1/-						
Solids	% Vol			2.3						
Dissolved Salts	% Vol			1.7						
Oil/Water Content	% Vol			-/96.0						
Sand	% Vol			TR						
Methylene Blue cap	ppb			6	166 x 94 lb sacks cement on site.					
pH	meter			11.0						
Alk. Mud Pm	ml			1.00	ACTIVITY					
Alk. Filtrate, Pf/Mf	ml			0.45/1.00	Blow well @ 1498 m.					
Chlorides	mg/Lx10³			19.0	Drill 6" hole from 1498 to 1522 m with surveys.					
Total Hardness/Calcium	mg/L			100/80	Pull Out of Hole for BHA change.					
KCL	% Wt Soln			3.8	Press. test rams, kill ann. and flare.					
Sulfite Res.	mg/L			40	Run In Hole.					
					Run W.Line survey and orientate motor.					
					Drill 6" hole to 1526 m.					
Rheometer	600 rpm/300 rpm			50/32						
lb/100 ft²	200 rpm/100 rpm									
	6 rpm/3 rpm									

## INVENTORY AND CONSUMPTION

PRODUCT DESCRIPTION	USED	REC	BAL	COST	MUD TYPE	Air/Mist/Foam	CONSUMPTION	
QUIK-FOAM 205 lt	1		13	542.31	SOLIDS CONTROL EQUIPMENT			Additions bbl
					Make	screen size	hrs	Sea W.
					Shaker 1			Drill W.
					Shaker 2			other
					Shaker 3			other
					Shaker 4			Bante
						ppg	bbl/hr	hrs
							bbl	Chemicals
					Desander			Losses
					Desilter			Sol. Con.
					Mud Cleaner 2.			Lost/Dumped
					Centrifuge 1			Down Hole
					Centrifuge 2			Newhole
								NET LOSS
					Solids Control Effic.		%	Discharged

BAROID Engineer		OFFICE	WAREHOUSE	DAILY COST	CUMULATIVE COST
Chris Wallace		MELBOURNE	ALICE SPRINGS	A\$ 542.31	A\$ 19258.51
Tel. 03-6213311		03-6213311			

THE RECOMMENDATIONS MADE HEREON SHALL NOT BE CONSTRUED AS AUTHORIZING THE INFRINGEMENT OF ANY VALID PATENT, AND ARE MADE WITHOUT ASSUMPTION OF ANY LIABILITY BY BAROID DRILLING FLUIDS, INC OR ITS AGENTS, AND ARE STATEMENTS OF OPINION ONLY.

RESERVE PITS			SURVEY DATA					SOLIDS ANALYSIS			TIME BREAKDOWN		hrs
NO	TYPE	bbl	MD m	TVD m	INCL°	DIR °	DISP m	Low Grav. Solids	% Vol	2.4	Drilling	14.5	
4	Kill	68	1493	1490	6.3	204.5		Low Grav. Solids	ppb	21.8	Circulating	0.5	
5	Kill	68	1502	1499	8.5	205.3		High Grav. Solids	% Vol		Reaming In		
6	Kill	67	1512	1509	10.1	209.1		High Grav. Solids	ppb		Reaming out		
7	Kill	63						ASG of Solids	g/cc	2.50	Tripping	4	
8	Kill	63						Cuttings Volume	bbl	3.0	Dev. Surv.	3	
								Interval Dilution	bbl/m	1.7	Test BOPs	1	
								Interval Consumption	bbl/m	2.1	Other	1	
											AVE ROP	m/hr	1.99







# Baroid Australia Pty Ltd

MUD REPORT NO. 24 up to 24:00 hrs, 22/12/94  
 DATE 23/12/94 DEPTH—m MD 1569 TVD 1564  
 START DATE 29—Nov—94 ACTIVITY Air/Mist/Foam Drilling.

OPERATOR MACELLAN PETROLEUM (N.T.) PTY. LTD. CONTRACTOR / RIG O.D. & E. Mereenie Rig 1  
 REPORT FOR C. DAVISON REPORT FOR R. MURRAY  
 WELL NAME AND NO. PALM VALLEY—10 FIELD OR BLOCK NO. O.L. 3 NORTHERN TERRITORY  
 COUNTRY AUSTRALIA  
 TOWNSHIP ALICE SPRINGS  
 LOCATION AMADEUS BASIN

BIT DATA				DRILLING STRING				CASINGS				PUMP DATA			
Size 6.000 ins	OD ins	ID ins	Length m	Size ins	Depth m	Pump Make	ins x ins	Eff %	bbl/stk	spm	bbl/min				
Type ATJ44	Pipe 1	3.5	2.75	1252.4	Riser	Set @			EMSCO F800	6	9	97	0.076	1400C	
Nozzles 32nds	Pipe 2	3.5	2.75	277	13 3/8"	Set @	18		EMSCO F800	6	9	97	0.076		
OPEN	Pipe 3				9 5/8"	Set @	395.52								
	Col 1	4.75	2.25	39.59	7"	Set @	1451.55		Pump Press 450 psi	TOTAL bbl/min					
	Col 2					Set @			MUD VOL	bbl	CIRCULATING DATA				
Noz Area ins <sup>2</sup>	OPEN HOLE SECTIONS					Set @			Downhole	165	Total circ	— mins	AV	m/min	
TFA ins <sup>2</sup>	Sect 1					Set @			Active	117	Bottoms up	— mins	DP		
NV m/sec	Sect 2				Liner	Set @			Total Circ	282	Surface—bit	— mins	DC		
Impact lb f	Current		6	117.5		Top @			Reserve	311	ECD ppg	8.8	Riser		

MUD PROPERTIES				MUD PROPERTY SPECIFICATIONS			
Sample Location	IN or OUT	KILL		WEIGHT	ppg	VIS	sec YP lb/100 R <sup>2</sup>
Time Sample Taken	hrs	10:30		API Filt	ml	HTHP	ml KCL %
Depth	m	1564		BY AUTHORITY			

Flowline Temp °C  
 Weight ppg 8.80  
 Funnel Viscosity sec/qt 49  
 Plastic Viscosity cP 15  
 Yield Point lb/100 ft<sup>2</sup> 12  
 Gels 10 sec/10min/30 min lb/100 ft<sup>2</sup>  
 API Filtrate ml/30min 4.6  
 HPHT Filtrate ml/30min  
 API/HPHT Filter Cake 32nd ins 1/—  
 Solids % Vol 2.3  
 Dissolved Salts % Vol 1.7  
 Oil/Water Content % Vol —/96.0  
 Sand % Vol TR  
 Methylene Blue cap ppb 6  
 pH meter 11.0  
 Alk. Mud Pm ml 0.85  
 Alk. Filtrate, Pt/Mf ml 0.40/0.80  
 Chlorides mg/Lx10<sup>3</sup> 20.0  
 Total Hardness: Calcium mg/L 100/80  
 KCL % Wt Soln 4.0  
 Sulfite Res. mg/L 40

REMARKS  
 Reserve is 4% KCl/Polymer kill mud.  
 Adding QUIK—FOAM @ 1.3 lpb, BARACOR 1635L @ 0.3 lpb.  
 Injection rate 7 bbl/hr at 1400 cfm.

156 x 94 lb sacks cement, 2 x 50 lb sacks HR7, on site.

Rheometer 600 rpm/300 rpm	42/27		
lb/100 ft <sup>2</sup> 200 rpm/100 rpm			
6 rpm/3 rpm			

ACTIVITY  
 Drill 6" hole from 1559 to 1569 m with surveys.  
 Pull Out of Hole.  
 Change motor and test.  
 Run In Hole.  
 Rig up and orientate drill string.

INVENTORY AND CONSUMPTION					MUD TYPE Air/Mist/Foam				CONSUMPTION	
PRODUCT DESCRIPTION	USED	REC	BAL	COST	SOLIDS CONTROL EQUIPMENT				Additions	bbl
QUIK—FOAM 205 it	1		11	542.31	Make	screen size	hrs		Sea W.	
					Shaker 1				Drill W.	105
					Shaker 2				other	
					Shaker 3				other	
					Shaker 4				Barite	
					ppg	bbl/hr	hrs	bbl	Chemicals	1
					Desander				Losses	bbl
					Desilter				Sol. Con.	
					Mud Cleaner 2.				Lost/Dumped	109
					Centrifuge 1				Down Hole	
					Centrifuge 2				Newhole	1
					NET LOSS					3
					Solids Control Effic. %				Discharged	109

BAROID Engineer		OFFICE	WAREHOUSE	DAILY COST	CUMULATIVE COST
Chris Wallace		MELBOURNE	ALICE SPRINGS	A\$ 542.31	A\$ 20862.92
Tel. 03-6213311		03-6213311			

THE RECOMMENDATIONS MADE HEREON SHALL NOT BE CONSTRUED AS AUTHORIZING THE INFRINGEMENT OF ANY VALID PATENT, AND ARE MADE WITHOUT ASSUMPTION OF ANY LIABILITY BY BAROID DRILLING FLUIDS, INC OR IT'S AGENTS, AND ARE STATEMENTS OF OPINION ONLY.

RESERVE PITS			SURVEY DATA				SOLIDS ANALYSIS			TIME BREAKDOWN		hrs
NO	TYPE	bbl	MD m	TVD m	INCL°	DIR°	DISP m	Low Grav. Solids	% Vol	2.4	Drilling	16
4	Kill	49	1550.5	1545	17.9	216.7		Low Grav. Solids	ppb	21.8	Circulating	
5	Kill	66						High Grav. Solids	% Vol		Reaming In	
6	Kill	66						High Grav. Solids	ppb		Reaming out	
7	Kill	65						ASG of Solids	g/cc	2.50	Tripping	4.5
8	Kill	65						Cuttings Volume	bbl	1.0	Dev. Surv.	1
								Interval Dilution	bbl/m	1.8	Motor	1
								Interval Consumption	bbl/m	2.2	Other	1.5
								AVE ROP		m/hr		0.63

**Baroid Australia Pty Ltd**

**MUD REPORT NO.** 25 up to 24:00 hrs, 23/12/94

DATE	24/12/94	DEPTH-m	MD 1587	TVD 1580
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START DATE

## ACTIVITY

Run WLS.

COUNTRY

**OPERATOR**  
MAGELLAN PETROLEUM (N.T.) PTY. LTD.

**CONTRACTOR / RIG:**  
O.D.& E. Mereenie Rig 1

COUNTRY

**AUSTRALIA**

REPORT FOR

REPORT FOR

TOWNSHIP

ALICE SPRINGS

WELL NAME AND NO.

FIELD OR BLOCK NO.

**LOCATION**

## AMADEUS BASIN

## BIT DATA

## DRILLING STRING

## CASINGS

### PUMP DATA

Size 6.000 ins	OD ins	ID ins	Length m	Size ins	Depth m	Pump Make	ins x ins	Eff %	bbl/stk	spm	bbl/min	
Type ATJ44CD	Pipe 1	3.5	2.75	1239.5	Riser	Set @	EMSCO F800	6	9	97	0.076	15000
Nozzles 32nds	Pipe 2	3.5	2.75	313.67	13 3/8"	Set @	EMSCO F800	6	9	97	0.076	
OPEN	Pipe 3				9 5/8"	Set @	396.52					
	Col 1	4.75	2.25	33.84	7"	Set @	1451.55	Pump Press	450 psi	TOTAL bbl/min		
	Col 2					Set @		MUD VOL	bbl	CIRCULATING DATA		
Noz Area ins²	OPEN HOLE SECTIONS					Set @	Downhole	167	Total circ	-- mins	AV	m/min
TFA ins²	Sect 1					Set @	Active	117	Bottoms up	-- mins	DP	
NV m/sec	Sect 2				Liner	Set @	Total Circ	284	Surface-bit	-- mins	DC	
Impact lb f	Current		6	135.5		Top @	Reserve	310	ECD ppg	8.8	Riser	

### MUD PROPERTIES

### MUD PROPERTY SPECIFICATIONS

Sample Location	IN or OUT	KILL			WEIGHT	ppg	VIS	sec	YP	lb/100 ft <sup>2</sup>
Time Sample Taken	hrs	10:30			API Filt	ml	HTHP	ml	KCL	%
Depth	m	1573			BY AUTHORITY					
Flowline Temp	°C				REMARKS					
Weight	ppg	8.80			Reserve is 4% KCl/Polymer kill mud.					
Funnel Viscosity	sec/qt	50			Adding QUIK-FOAM @ 2.0 then 1.3 lpb, BARACOR 1635L @ 0.3 lpb.					
Plastic Viscosity	cP	17			Injection rate 7 bbl/hr at 1500 cfm.					
Yield Point	lb/100 ft <sup>2</sup>	14								
Gels 10 sec/10min/30 min	lb/100 ft <sup>2</sup>				Stock correction - 1 x 25 lb BARADEFOAM-W300 - \$110.26					
API Filtrate	ml/30min	4.4			allocated to 8-1/2" interval.					
HPHT Filtrate	ml/30min									
API/HPHT Filter Cake	32nd ins	1/-			Conducted pH and Chloride analysis on 4 water samples.					
Solids	% Vol	2.3								
Dissolved Salts	% Vol	1.7								
Oil/Water Content	% Vol	-96.0								
Sand	% Vol	TR								
Methylene Blue cap	ppb	6			165 x 94 lb sacks cement, 2 x 50 lb sacks HR7 on site.					
pH	meter	11.0								
Alk. Mud Pm	ml	0.85			ACTIVITY					
Alk. Filtrate, Pf/Mf	ml	0.35/0.70			Unload well.					
Chlorides	mg/Lx10 <sup>3</sup>	20.0			Drill 6" hole from 1569 to 1573 m with surveys.					
Total Hardness/Calcium	mg/L	100/80			Pull Out of Hole. Remove air motor and change BHA.					
KCL	% Wt Soln	4.0			Run In Hole to 1570 m.					
Sulfite Res.	mg/L	40			Blow well.					
					Ream 1570 to 1573 m.					
					Drill 6" hole 1573 to 1587 m.					
					Blow well. Run WLS.					
Rheometer	600 rpm/300 rpm	48/31								
lb/100 ft <sup>2</sup>	200 rpm/100 rpm									
	6 rpm/3 rpm									

## INVENTORY AND CONSUMPTION

PRODUCT DESCRIPTION	USED	REC	BAL	COST	MUD TYPE	Air/Mist/Foam	CONSUMPTION		
BARADEFOAM W30i 25 lt	1		3	110.26	SOLIDS CONTROL EQUIPMENT			Additions	bbl
					Make	screen size	hrs	Sea W.	
					Shaker 1			Drill W.	120
					Shaker 2			other	
					Shaker 3			other	
					Shaker 4			Banite	
						ppg	bbl/hr	hrs	bbl
					Desander			Chemicals	
					Desilter			Losses	bbl
					Mud Cleaner 2.			Sol. Con.	
					Centrifuge 1			Lost/Dumped	119
					Centrifuge 2			Down Hole	
								Newhole	2
								NET GAIN	1
					Solids Control Effic.		%	Discharged	119

**BAROID Engineer**

OFFICE

WAREHOUSE

Chris Wallace

MELBOURNE

ALICE SPRINGS

### DAILY COST

**A\$ 110.26**

**CUMULATIVE COST**

**A\$ 20973.18**

THE RECOMMENDATIONS MADE HEREON SHALL NOT BE CONSTRUED AS AUTHORIZING THE INFRINGEMENT OF ANY VALID PATENT, AND ARE MADE WITHOUT ASSUMPTION OF ANY LIABILITY BY BAROID DRILLING FLUIDS, INC OR ITS AGENTS, AND ARE STATEMENTS OF OPINION ONLY.

## RESERVE PITS

## SURVEY DATA

## SOLIDS ANALYSIS

## TIME BREAKDOWN hrs

RESERVE PRO													
NO	TYPE	bbl	MD m	TVD m	INCL °	DIR °	DISP m	Low Grav. Solids	% Vol	2.4	Drilling	14.5	
4	Kill	50	1560	1554	19.1	218.5		Low Grav. Solids	ppb	21.8	Circulating	1	
5	Kill	65						High Grav. Solids	% Vol		Reaming In		
6	Kill	66						High Grav. Solids	ppb		Reaming out		
7	Kill	64						ASG of Solids	g/cc	2.50	Tripping	6	
8	Kill	65						Cuttings Volume	bbl	2.0	Dev. Surv.	1.5	
								Interval Dilution	bbl/m	1.9	Other	1	
								Interval Consumption	bbl/m	2.3	Other		
											AVE ROP	m/hr	1.24

**Baroid Australia Pty Ltd**

**MUD REPORT NO.** 26 up to 24:00 hrs, 24/12/94

DATE 25/12/94

DEPTH--m MD 1672 TVD 1662

START DATE

## ACTIVITY

29-Nov-94

**Pull Out of Hole.**

**OPERATOR**

MAGELLAN PETROLEUM (N.T.) PTY. LTD.

**CONTRACTOR / RIG**

O.D. &amp; E. Mereenie Rig 1

## COUNTRY

**AUSTRALIA**

## REPORT FOR

C. DAVISON

## REPORT FOR

R. MURRAY

## TOWNSHIP

ALICE SPRINGS

## WELL NAME AND NO.

PALM VALLEY-10

## FIELD OR BLOCK NO.

O.L. 3 NORTHERN TERRITORY

**LOCATION**

## AMADEUS BASIN

BIT DATA		DRILLING STRING			CASINGS			PUMP DATA					
Size 6.000 ins		OD ins	ID ins	Length m	Size ins	Depth m		ins x ins	Eff %	bbl/stk	spr	bbl/min	
Type ATJ44		Pipe 1	3.5	2.75	1324.5	Riser	Set @	EMSCO F800	6	9	97	0.076	15000
Nozzles 32nds		Pipe 2	3.5	2.75	313.67	13 3/8"	Set @	EMSCO F800	6	9	97	0.076	
OPEN		Pipe 3			9 5/8"	Set @	396.52						
		Col 1	4.75	2.25	33.84	7"	Set @	1451.55	Pump Press	400 psi	TOTAL bbl/min		
		Col 2				Set @		MUD VOL	bbl	CIRCULATING DATA			
Noz Area ins <sup>2</sup>		OPEN HOLE SECTIONS					Set @	Downhole	176	Total circ - mins		AV	m/min
TFA ins <sup>2</sup>		Sect 1					Set @	Active	117	Bottoms up - mins		DP	
NV m/sec		Sect 2				Liner	Set @	Total Circ	293	Surface-bit - mins		DC	
Impact lb f		Current		6	220.5		Top @	Reserve	322	ECD ppg	8.8	Riser	

			MUD PROPERTIES			MUD PROPERTY SPECIFICATIONS					
Sample Location	IN or OUT	KILL				WEIGHT	ppg	VIS	sec	YP	lb/100 ft²
Time Sample Taken	hrs	10:30				API Filtr	ml	HTHP	ml	KCL	%
Depth	m	1625				BY AUTHORITY					
Flowline Temp	°C					<b>REMARKS</b>					
Weight	ppg	8.80				Reserve is 4% KCl/Polymer kill mud.					
Funnel Viscosity	sec/qt	51				Adding QUIK-FOAM @ 1.7 to 1.3 lpb, BARACOR 1635L @ 0.3 lpb.					
Plastic Viscosity	cP	18				Injection rate 10 bbl/hr at 1500 cfm.					
Yield Point	lb/100 ft²	12				Added 20 bbl water to reserve to maintain volume.					
Gels 10 sec/10min/30 min	lb/100 ft²										
API Filtrate	ml/30min	4.2									
HPHT Filtrate	ml/30min										
API/HPHT Filter Cake	32nd ins	1/-									
Solids	% Vol	2.3									
Dissolved Salts	% Vol	1.7									
Oil/Water Content	% Vol	-/96.0									
Sand	% Vol	TR									
Methylene Blue cap	ppb	6				166 x 94 lb sacks cement, 2 x 50 lb sacks HR7, on site.					
pH	meter	11.0				<b>ACTIVITY</b>					
Alk. Mud Pm	ml	0.85									
Alk. Filtrate, Pt/Mf	ml	0.35/0.75				Run WLS at 1581 m.					
Chlorides	mg/Lx10³	20.0				Drill 6" hole from 1587 to 1643 m with surveys.					
Total Hardness/Calcium	mg/L	100/80				Blow hole and work pipe and attempt to blow to bottom.					
KCL	% Wt Soln	4.0				Ream 3 m to bottom.					
Sulfite Res.	mg/L	10				Drill from 1643 to 1672 m with surveys.					
						Blow well and Pull Out of Hole.					
Rheometer	600 rpm/300 rpm	48/30									
lb/100 ft²	200 rpm/100 rpm										
	6 rpm/3 rpm										

INVENTORY AND CONSUMPTION													
PRODUCT DESCRIPTION		USED	REC	BAL	COST	MUD TYPE      Air/Mist/Foam				CONSUMPTION			
QUIK-FOAM	205 lt	1		10	\$42.31	SOLIDS CONTROL EQUIPMENT				Additions		bbl	
BARACOR 1635L	205 lt	1		2	\$74.55	Make		screen size	hrs	Seq W.			
						Shaker 1				Drift W.		185	
						Shaker 2				other			
						Shaker 3				other			
						Shaker 4				Barite			
						ppg		bbl/hr	hrs	bbl	Chemicals		3
						Desander					Losses		bbl
						Desilter					Sol. Con.		
						Mud Cleaner 2.					Lost/Dumped		164
						Centrifuge 1					Down Hole		
						Centrifuge 2					Newhole		10
										NET GAIN		24	
						Solids Control Effic.				%	Discharged		164

BAROID Engineer		OFFICE	WAREHOUSE	DAILY COST	CUMULATIVE COST
Chris Wallace		MELBOURNE	ALICE SPRINGS	A\$ 1116.86	A\$ 22090.04
Tel. 03-6213311		03-6213311			

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RESERVE PITS			SURVEY DATA					SOLIDS ANALYSIS			TIME BREAKDOWN		hrs
NO	TYPE	bbl	MD m	TVD m	INCL°	DIR °	DISP m	Low Grav. Solids	% Vol	2.4	Drilling	14.5	
4	Kill	75	1581	1574	19	219		Low Grav. Solids	ppb	21.8	Circulating		
5	Kill	71	1591	1583.7	19	211		High Grav. Solids	% Vol		Reaming In		
6	Kill	66	1598	1591	19	203		High Grav. Solids	ppb		Reaming out		
7	Kill	58	1607	1598.8	19	195		ASG of Solids	g/cc	2.50	Tripping	0.5	
8	Kill	52	1617	1608	19	190		Cuttings Volume	bbl	10.0	Dev. Surv.	8	
			1627	1617.7	19	185		Interval Dilution	bbl/m	1.9	Other	1	
			1637	1627.2	19.25	178		Interval Consumption	bbl/m	2.3	Other		
			1646	1635.7	19.75	170					AVE ROP	m/hr 5.86	











**MUD REPORT NO.** 30 up to 24:00 hrs, 28/12/94

DATE 29/12/94

DEPTH-m MD 1997 TVD 1951

START DATE

### ACTIVITY

29-Nov-94

### Air/Mist/Foam Drilling

**OPERATOR**

MAGELLAN PETROLEUM (N.T.) PTY. LTD.

**CONTRACTOR / RIG**

O.D. & E. Mereenie Rig 1

REPORT FOR

REPORT FOR

COUNTRY

AUSTRALIA

TOWNSHIP

WELL NAME AND NO.

FIELD OR BLOCK NO.

**LOCATION**

PALM VALLEY-10

O.L. 3 NORTHERN TERRITORY

## AMADEUS BASIN

MUD PROPERTIES			MUD PROPERTY SPECIFICATIONS								
Sample Location	IN or OUT	KILL				WEIGHT	ppg	VIS	sec	YP	lb/100 ft²
Time Sample Taken	hrs					API Filtr	ml	HTHP	ml	KCL	%
Depth	m	1957				BY AUTHORITY					
Flowline Temp	°C					REMARKS					
Weight	ppg	8.80				Reserve is 4% KCL/Polymer kill mud.					
Funnel Viscosity	sec/qt	49				Adding QUIK FOAM @ 1.3 lpb and BARACOR 1635L @.3 lpb.					
Plastic Viscosity	cP	18									
Yield Point	lb/100 ft²	12									
Gels 10 sec/10min/30 min	lb/100 ft²	3/10/-									
API Filtrate	ml/30min	3.8									
HPHT Filtrate	ml/30min										
API/HPHT Filter Cake	32nd ins	1/-									
Solids	% Vol	2.3									
Dissolved Salts	% Vol	1.7									
Oil/Water Content	% Vol	-/96.0									
Sand	% Vol	TR									
Methylene Blue cap	ppb	6				Cement stock : 166 x 94 lb sacks cement and 2 x 50 lb sacks HR7.					
pH	meter	11.0									
Alk. Mud Pm	ml	1.00				ACTIVITY					
Alk. Filtrate, Pt/Mf	ml	0.40/0.90				Continue monitoring well pressure. Bleed down and blow well.					
Chlorides	mg/Lx10³	20.0				Drill 6" hole to 1957 m. Blow well and wire line survey at 1949 m					
Total Hardness/Calcium	mg/L	100/80				POH. Lay out monel. Change bit and RIH. Slip 25' drilling line.					
KCL	% Wt Soln	4.0				Continue RIH to 1954 m.Ream to 1957 m. Drill ahead to 1997 m.					
Sulfite Res.	mg/L	10									
Rheometer	600 rpm/300 rpm	48/30									
lb/100 ft²	200 rpm/100 rpm										
	6 rpm/3 rpm										

## INVENTORY AND CONSUMPTION

BAROID Engineer		OFFICE	WAREHOUSE	DAILY COST	CUMULATIVE COST
Davey Indarsingh		MELBOURNE	ALICE SPRINGS	A\$ 542.31	A\$ 23735.01
Tel.		03-6213311	089-525463		

THE RECOMMENDATIONS MADE HEREON SHALL NOT BE CONSTRUED AS AUTHORIZING THE INFRINGEMENT OF ANY VALID PATENT, AND ARE MADE WITHOUT ASSUMPTION OF ANY LIABILITY BY BAROID DRILLING FLUIDS, INC OR IT'S AGENTS, AND ARE STATEMENTS OF OPINION ONLY.

RESERVE PITS			SURVEY DATA					SOLIDS ANALYSIS			TIME BREAKDOWN		hrs
NO	TYPE	bbl	MD m	TVD m	INCL°	DIR °	DISP m	Low Grav. Solids	% Vol	2.4	Drilling	14.5	
4	Kill	82	1883	1848	29.25			Low Grav. Solids	ppb	21.8	Circulating	0.5	
5	Kill	82	1948	1907.42	27.25			High Grav. Solids	% Vol		Reaming In	0.5	
6	Kill	78						High Grav. Solids	ppb		Reaming out		
7	Kill	73						ASG of Solids	g/cc	2.50	Tripping	5	
8	Water							Cuttings Volume	bbl	11.0	Dev. Surv.		
								Interval Dilution	bbl/m	1.8	Test BOP		
								Interval Consumption	bbl/m	2.1	Other	3.5	
											AVE ROP	m/hr 5.62	



MUD REPORT NO. 31 up to 24:00 hrs, 29/12/94

DATE	30/12/94	DEPTH-m	MD 2087	TVD 2028
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START DATE	ACTIVITY
29--Nov--94	POH

**OPERATOR**  
MAGELLAN PETROLEUM (N.T.) PTY. LTD.

**CONTRACTOR / RIG**  
O.D. & E. Mereenie Rig 1

**COUNTRY**  
AUSTRALIA

REPORT FOR  
C. DAVISON

REPORT FOR  
R. MURRAY

**TOWNSHIP**  
**ALICE SPRINGS**

WELL NAME AND NO.  
PALM VALLEY-10

FIELD OR BLOCK NO.  
O.L. 3 NORTHERN TERRITORY

**LOCATION**  
AMADEUS BASIN

BIT DATA				DRILLING STRING			CASINGS			PUMP DATA							
Size 6.000 ins				OD ins	ID ins	Length m	Size ins	Depth m		Pump Make	ins x ins		Eff %	bbl/stk	spm	bbl/min	
Type ATJ55D				Pipe 1	3.5	2.75	1773.3	Riser	Set @		EMSCO F800	6	9	97	0.1781	1600	284.96
Nozzles 32nds				Pipe 2	3.5	2.75	313.67	13 3/8"	Set @ 18		EMSCO F800	6	9	97	0.076		
30	30		30	Pipe 3				9 5/8"	Set @ 396.52								
				Col 1				7"	Set @ 1451.55		Pump Press 450 psi			TOTAL bbl/min 284.96			
				Col 2					Set @		MUD VOL	bbl	CIRCULATING DATA				
Noz Area 2.07 ins²				OPEN HOLE SECTIONS					Set @		Downhole	219	Total circ 1 mins			AV m/min	
TFA ins²				Set 1					Set @		Active	117	Bottoms up 1 mins			DP 3763.2	
NV m/sec 563.7				Set 2				Liner	Set @		Total Circ	336	Surface-bit - mins			DC	
Impact lb f 100817				Current 6 635.5					Top @		Reserve	315	ECD ppg	152.17	Riser		

Sample Location		IN or OUT	KILL	MUD PROPERTIES			MUD PROPERTY SPECIFICATIONS					
Time Sample Taken	hrs						WEIGHT	ppg	VIS	sec	YP	lb/100 ft²
Depth	m	2087					API Filt	ml	HTHP	ml	KCL	%
Flowline Temp	°C						BY AUTHORITY					
Weight	ppg	8.80					REMARKS					
Funnel Viscosity	sec/qt	48					Reserve is 4% KCL/Polymer kill mud.					
Plastic Viscosity	cP	18					Adding QUIK FOAM @ 1.3 lpb and BARACOR 1635I @ .3 lpb.					
Yield Point	lb/100 ft²	12										
Gels 10 sec/10min/30 min	lb/100 ft²	3/9/-										
API Filtrate	ml/30min	3.6										
HPHT Filtrate	ml/30min											
API/HPHT Filter Cake	32nd ins	1/-										
Solids	% Vol	2.3										
Dissolved Salts	% Vol	1.7										
Oil/Water Content	% Vol	-/96.0										
Sand	% Vol	TR										
Methylene Blue cap	ppb	6					Cement stock:166 x94 lb sacks cement and 2 x 50 lb sacks HR7.					
pH	meter	11.0					ACTIVITY					
Alk. Mud Pm	ml	1.00					Continue drilling 6" hole to 2039m. Blow well. Wire line survey at 2032m. Drill ahead to 2087m. Blow well and POH. HOLE tight at 2075m. Work string and lay out 2 singles.					
Alk. Filtrate, Pf/Mf	ml	0.50/0.90										
Chlorides	mg/Lx10³	20.0										
Total Hardness/Calcium	mg/L	100/80										
KCL	% Wt Soln	4.0										
Sulfite Res.	mg/L	10										
Rheometer	600 rpm/300 rpm	48/30										
lb/100 ft²	200 rpm/100 rpm											
	6 rpm/3 rpm											

INVENTORY AND CONSUMPTION						MUD TYPE Air/Mist/Foam				CONSUMPTION	
PRODUCT DESCRIPTION		USED	REC	BAL	COST	SOLIDS CONTROL EQUIPMENT				Additions	bbl
						Make	screen size	hrs		Sea W.	
QUIK-FOAM	205 lt	1		6	542.31					Drill W.	
						Shaker 1				other	
						Shaker 2				other	
						Shaker 3				Barite	
						Shaker 4					
							ppg	bbl/hr	hrs	bbl	Chemicals
						Desander					1
						Desilter				Losses	bbl
						Mud Cleaner 2.				Sol. Con.	
						Centrifuge 1				Lost/Dumped	
						Centrifuge 2				Down Hole	
										Newhole	10
										NET GAIN	1
						Solids Control Effic.			%	Discharged	

BAROID Engineer		OFFICE	WAREHOUSE	DAILY COST	CUMULATIVE COST
Davey Indarsingh		MELBOURNE	ALICE SPRINGS	A\$ 542.31	A\$ 24277.32
Tel		03-6213311	089-525463		

THE RECOMMENDATIONS MADE HEREON SHALL NOT BE CONSTRUED AS AUTHORIZING THE INFRINGEMENT OF ANY VALID PATENT, AND ARE MADE WITHOUT ASSUMPTION OF ANY LIABILITY BY BAROID DRILLING FLUIDS, INC OR ITS AGENTS, AND ARE STATEMENTS OF OPINION ONLY.

RESERVE PITS																	SURVEY DATA				SOLIDS ANALYSIS				TIME BREAKDOWN		hrs
NO	TYPE	bbl	MD m	TVD m	INCL°	DIR °	DISP m	Low Grav. Solids	% Vol	2.4	Drilling																
4	Kill	82	2032		33			Low Grav. Solids	ppb	21.8	Circulating					1											
5	Kill	82						High Grav. Solids	% Vol		Reaming In																
6	Kill	78						High Grav. Solids	ppb		Reaming out																
7	Kill	73						ASG of Solids	g/cc	2.50	Tripping					3											
8	Water							Cuttings Volume	bbl	10.0	Dev. Surv.																
								Interval Dilution	bbl/m	1.7	Test BOP																
								Interval Consumption	bbl/m	2.0	Other																
											AVE ROP	m/hr				4.5											

**Baroid Australia Pty Ltd**

**MUD REPORT NO.** 32 up to 24:00 hrs, 30/12/94

DATE	31/12/94	DEPTH-m	MD 2142	TVD
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<b>START DATE</b> 29 - Nov - 94	<b>ACTIVITY</b> Air/Mist/Foam Drilling
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OPERATOR  
MAGELLAN PETROLEUM (N.T.) PTY. LTD.

**CONTRACTOR / RIG**  
O.D.& E. Mereenie Rig 1

COUNTRY

## AUSTRALIA

REPORT FOR  
C. DAVISON

REPORT FOR  
D. WALDRON

**TOWNSHIP**  
**ALICE SPRINGS**

WELL NAME AND NO.  
PALM VALLEY-10

FIELD OR BLOCK NO.  
O.L. 3 NORTHERN TERRITORY

**LOCATION**  
**AMADEUS BASIN**

BIT DATA			DRILLING STRING			CASINGS		PUMP DATA							
Size 6.000 ins			OD ins	ID ins	Length m	Size ins	Depth m	Pump Make	ins	x ins	Eff %	bbl/stk	spm	bbl/min	
Type ATAJ55D			Pipe 1	3.5	2.75	1828.3	Riser	Set @	EMSCO F800	6	9	97	0.1781	1500	267.15
Nozzles 32nds			Pipe 2	3.5	2.75	313.67	13 3/8"	Set @	18 EMSCO F800	6	9	97	0.076		
30	30	30	Pipe 3				9 5/8"	Set @	396.52						
			Col 1				7"	Set @	1451.55	Pump Press	460 psi	TOTAL bbl/min			267.15
			Col 2					Set @		MUD VOL	bbl	CIRCULATING DATA			
Noz Area 2.07 ins²			OPEN HOLE SECTIONS					Set @	Downhole	224	Total circ 1 mins			AV	m/min
TFA ins²			Sect 1					Set @	Active	117	Bottoms up 1 mins			DP	3528
NV m/sec 528.5			Sect 2				Liner	Set @	Total Circ	341	Surface-bit - mins			DC	
Impact lb f 88608			Current		6	690.5		Top @	Reserve	325	ECD ppg			ERR	Riser

			MUD PROPERTIES			MUD PROPERTY SPECIFICATIONS					
Sample Location	IN or OUT	KILL				WEIGHT	ppg	VIS	sec	YP	lb/100 ft²
Time Sample Taken	hrs					API Filtr	ml	HTHP	ml	KCL	%
Depth	m	2095				BY AUTHORITY					
Flowline Temp	°C					REMARKS					
Weight	ppg	8.80				Reserve is 4% KCL/Polymer kill mud.					
Funnel Viscosity	sec/qt	46				Treated reserve mud with .5 ppb Baracor 129 to increase residual sulphites to > 50 mg/l.					
Plastic Viscosity	cP	19				Added 35 bbls water to reserve mud to maintain volume.					
Yield Point	lb/100 ft²	10									
Gels 10 sec/10min/30 min	lb/100 ft²	3/8/—									
API Filtrate	ml/30min	3.8									
HPHT Filtrate	ml/30min										
API/HPHT Filter Cake	32nd ins	1/—									
Solids	% Vol	2.3									
Dissolved Salts	% Vol	1.7									
Oil/Water Content	% Vol	—96.0				Cement stock: 166 x 94 lb sacks cement, 2 x 50 lb sacks HR7					
Sand	% Vol	TR				3 x 50 lb sacks CFR 3, 2 x 50 lb sacks HR4					
Methylene Blue cap	ppb	6				Received 36 x 80 lb sacks cement					
pH	meter	11.0									
Alk. Mud Pm	ml	1.20				ACTIVITY					
Alk. Filtrate, Pt/Mf	ml	0.50/1.00				POH and change bit. RIH to 2037 m. Work stuck pipe free. blow well.					
Chlorides	mg/Lx10³	20.0				Ream from 2037 to 2087 m. Drill 6" hole to 2142m.					
Total Hardness/Calcium	mg/L	100/80									
KCL	% Wt Soln	4.0									
Sulfite Res.	mg/L	80									
Rheometer	600 rpm/300 rpm	48/29									
lb/100 ft²	200 rpm/100 rpm										
	6 rpm/3 rpm										

INVENTORY AND CONSUMPTION						MUD TYPE      Air/Mis/Foam				CONSUMPTION	
PRODUCT DESCRIPTION		USED	REC	BAL	COST	SOLIDS CONTROL EQUIPMENT				Additions	bbl
						Make	screen size	hrs		Sea W.	
QUIK-FOAM	205 lt	1		5	542.31	Shaker 1				Drill W.	120
BARACOR 1635L	205 lt	1		1	574.55	Shaker 2				other	
BARACOR-129	25 kg	3		5	213.99	Shaker 3				other	
						Shaker 4				Barite	
							ppg	bbl/hr	hrs	bbl	Chemicals
						Desander					3
						Desilter				Losses	bbl
						Mud Cleaner 2.				Sol. Con.	
						Centrifuge 1				Lost/Dumped	99
						Centrifuge 2				Down Hole	
										Newhole	6
										NET GAIN	24
						Solids Control Effic.			%	Discharged	99

BAROID Engineer		OFFICE	WAREHOUSE	DAILY COST	CUMULATIVE COST
Davey Indarsingh		MELBOURNE	ALICE SPRINGS	A\$ 1330.85	A\$ 25608.17
Tel		03-6213311	089-525463		

THE RECOMMENDATIONS MADE HEREON SHALL NOT BE CONSTRUED AS AUTHORIZING THE INFRINGEMENT OF ANY VALID PATENT, AND ARE MADE WITHOUT ASSUMPTION OF ANY LIABILITY BY BARDIC DRILLING FLUIDS, INC OR IT'S AGENTS, AND ARE STATEMENTS OF OPINION ONLY.

RESERVE PITS			SURVEY DATA					SOLIDS ANALYSIS			TIME BREAKDOWN		hrs
NO	TYPE	bbl	MD m	TVD m	INCL°	DIR °	DISP m	Low Grav. Solids	% Vol	2.4	Drilling		16
4	Kill	85						Low Grav. Solids	ppb	21.8	Circulating		0.5
5	Kill	85						High Grav. Solids	% Vol		Reaming In		1
6	Kill	80						High Grav. Solids	ppb		Reaming out		
7	Kill	75						ASG of Solids	g/cc	2.50	Tripping		3
8	Water							Cuttings Volume	bbl	6.0	Dev. Surv.		
								Interval Dilution	bbl/m	1.7	Test BOP		
								Interval Consumption	bbl/m	2.0	Other		3.5
											AVE ROP	m/hr	3.44



MUD REPORT NO. 33 up to 24:00 hrs, 31/12/94

DATE 1/1/95

DEPTH-m MD 2143 TVD

START DATE

### ACTIVITY

29-Nov-94

## Logging

**OPERATOR**

MAGELLAN PETROLEUM (N.T.) PTY. LTD.

**CONTRACTOR / RIG**

O.D.& E. Mereenie Rig 1

COUNTRY

**AUSTRALIA**

## REPORT FOR

REPORT FOR

TOWNSHIP

C. DAVISON

D. WALDRON

ALICE SPRING

WELL NAME AND

FIELD OR BLOCK NO.

[illegible]

MUD PROPERTY SPECIFICATIONS		
Sample Location	IN or OUT	KILL
Time Sample Taken	hrs	
Depth	m	2143
Flowline Temp	°C	
Weight	ppg	8.80
Funnel Viscosity	sec/qt	46
Plastic Viscosity	cP	18
Yield Point	lb/100 ft²	10
Gels 10 sec/10min/30 min	lb/100 ft²	3/8/-
API Filtrate	ml/30min	3.8
HPHT Filtrate	ml/30min	
API/HPHT Filter Cake	32nd ins	1/-
Solids	% Vol	2.3
Dissolved Salts	% Vol	1.7
Oil/Water Content	% Vol	-/96.0
Sand	% Vol	TR
Methylene Blue cap	ppb	6
pH	meter	11.0
Alk. Mud Pm	ml	1.00
Alk. Filtrate, Pt/Mf	ml	0.50/1.00
Chlorides	mg/Lx10³	20.0
Total Hardness/Calcium	mg/L	100/80
KCL	% Wt Soln	4.0
Sulfite Res.	mg/L	80
Rheometer	600 rpm/300 rpm	46/28
lb/100 ft²	200 rpm/100 rpm	
	6 rpm/3 rpm	

## INVENTORY AND CONSUMPTION

INVENTORY AND CONSUMPTION					MUD TYPE				CONSUMPTION	
PRODUCT DESCRIPTION		USED	REC	BAL	Air/Mist/Foam				Additions	bbl
EZ MUD (liq)	19 lt	2		54	148.14					
					<b>SOLIDS CONTROL EQUIPMENT</b>					
					<b>Make</b>				<b>screen size</b>	<b>hrs</b>
									2.5	
					Shaker 1				80/100	Drill W.
					Shaker 2					other
					Shaker 3					other
					Shaker 4					Barite
										Chemicals
									<b>ppg</b>	<b>bbl/hr</b>
									<b>hrs</b>	<b>bbl</b>
					Desander					Losses
					Desilter					Sol. Con.
					Mud Cleaner 2.					Lost/Dumped
					Centrifuge 1					Down Hole
					Centrifuge 2					Newhole
										<b>NET LOSS</b>
										117
					Solids Control Effic.				%	<b>Discharged</b>
										117

BAROID Engineer		OFFICE	WAREHOUSE	DAILY COST	CUMULATIVE COST
Davey Indarsingh		MELBOURNE	ALICE SPRINGS	A\$ 148.14	A\$ 25756.31
Tel.		03-6213311	089-525463		

THE RECOMMENDATIONS MADE HEREON SHALL NOT BE CONSTRUED AS AUTHORIZING THE INFRINGEMENT OF ANY VALID PATENT, AND ARE MADE WITHOUT ASSUMPTION OF ANY LIABILITY BY BAROID DRILLING FLUIDS, INC OR ITS AGENTS, AND ARE STATEMENTS OF OPINION ONLY.

RESERVE PITS		SURVEY DATA						SOLIDS ANALYSIS			TIME BREAKDOWN		hrs
NO	TYPE	bbl	MD m	TVD m	INCL°	DIR °	DISP m	Low Grav. Solids	% Vol	2.4	Drilling		1
4	Kill							Low Grav. Solids	ppb	21.8	Circulating		3.5
5	Kill							High Grav. Solids	% Vol		Reaming in		
6	Kill	64						High Grav. Solids	ppb		Reaming out		
7	Kill							ASG of Solids	g/cc	2.50	Tripping		5
8	Water							Cuttings Volume	bbl		Dev. Surv.		
								Interval Dilution	bbl/m	1.8	Test BOP		
								Interval Consumption	bbl/m	2.0	Other		14.5
											AVE ROP	m/hr	



# Baroid Australia Pty Ltd

MUD REPORT NO. 34 up to 24:00 hrs, 1/1/95

DATE 2/1/95 DEPTH-m MD 2143 TVD  
START DATE 29-Nov-94 ACTIVITY  
POH

OPERATOR  
MAGELLAN PETROLEUM (N.T.) PTY. LTD.

CONTRACTOR / RIG  
O.D. & E. Marenie Rig 1

COUNTRY

AUSTRALIA

REPORT FOR

C. DAVISON

REPORT FOR

D. WALDRON

TOWNSHIP

ALICE SPRINGS

WELL NAME AND NO.

PALM VALLEY-10

FIELD OR BLOCK NO.

O.L. 3 NORTHERN TERRITORY

LOCATION

AMADEUS BASIN

BIT DATA			DRILLING STRING			CASINGS			PUMP DATA						
Size 6.000 ins			OD ins	ID ins	Length m	Size ins	Depth m		Pump Make	ins x ins	Eff %	bbl/stk	spr	bbl/min	
Type ATJ55D			Pipe 1	3.5	2.75	1829.3	Riser	Set @	EMSCO F800	6	9	97	0.076	70	5.32
Nozzles 32nds			Pipe 2	3.5	2.75	313.67	13 3/8"	Set @	18	EMSCO F800	6	9	97	0.076	
30	30	30	Pipe 3				9 5/8"	Set @	396.52						
			Col 1				7"	Set @	1451.55	Pump Press	1000 psi	TOTAL bbl/min			5.32
			Col 2					Set @		MUD VOL		bbl	CIRCULATING DATA		
Noz Area 2.07 ins²			OPEN HOLE SECTIONS					Set @	Downhole	224	Total circ 42 mins			AV	m/min
TFA ins²			Sect 1					Set @	Active		Bottoms up 32 mins			DP	70.3
NV m/sec			Sect 2				Liner	Set @	Total Circ	224	Surface-bit 10 mins			DC	
Impact lb f			Current			6	691.5	Top @	Reserve	64	ECD ppg			ERR	Riser

MUD PROPERTIES				MUD PROPERTY SPECIFICATIONS			
Sample Location	IN or OUT	KILL		WEIGHT	ppg	VIS	sec YP
Time Sample Taken	hrs			API Filtr	ml	HTHP	ml KCL
Depth	m	2143		BY AUTHORITY			
Flowline Temp	°C			REMARKS			
Weight	ppg	8.80		Cement stock : 166 x 94 lb sacks and 36 x 80 lb sacks cement. Additives : 2 x 50 lbs HR7, 3 x 50 lbs CFR3, 2 x 50 lbs HR4.			
Funnel Viscosity	sec/qt	45					
Plastic Viscosity	cP	18		ACTIVITY Schlum continue logging. Log # 4 PI - DLL - MSFL - GR Log # 5 WSS Rig down Schlum. M/U 6" bit and RIH to 2131m. Fill DP and wash to bottom - no fill. Circ hole clean. POH to shoe. Slip 25' drtg line. Continue POH.			
Yield Point	lb/100 ft <sup>2</sup>	10					
Gels 10 sec/10min/30 min	lb/100 ft <sup>2</sup>	3/8/-					
API Filtrate	ml/30min	3.8					
HPHT Filtrate	ml/30min						
API/HPHT Filter Cake	32nd ins	1/-					
Solids	% Vol	2.3					
Dissolved Salts	% Vol	1.7					
Oil/Water Content	% Vol	-/96.0					
Sand	% Vol	TR					
Methylene Blue cap	ppb	6					
pH	meter	11.0					
Alk. Mud Pm	ml	1.00					
Alk. Filtrate, P/Mf	ml	0.50/1.00					
Chlorides	mg/Lx10 <sup>3</sup>	20.0					
Total Hardness/Calcium	mg/L	100/80					
KCL	% Wt Soln	4.0					
Sulfite Res.	mg/L	80					
Rheometer	600 rpm/300 rpm	46/28					
lb/100 ft <sup>2</sup>	200 rpm/100 rpm						
	6 rpm/3 rpm						

INVENTORY AND CONSUMPTION					MUD TYPE KCL/Polymer				CONSUMPTION	
PRODUCT DESCRIPTION	USED	REC	BAL	COST	SOLIDS CONTROL EQUIPMENT				Additions	bbl
					Make	screen size	hrs		Sea W.	
					Shaker 1	80/100	2.5		Drill W.	
					Shaker 2				other	
					Shaker 3				other	
					Shaker 4				Barte	
					ppg	bbl/hr	hrs	bbl	Chemicals	
					Desander				Losses	bbl
					Desilter				Sol. Con.	
					Mud Cleaner 2.				Lost/Dumped	
					Centrifuge 1				Down Hole	
					Centrifuge 2				Newhole	
					NET GAIN					
					Solids Control Effic.		%		Discharged	

BAROID Engineer		OFFICE	WAREHOUSE	DAILY COST	CUMULATIVE COST
Davey Indarsingh		MELBOURNE	ALICE SPRINGS	A\$ 0.00	A\$ 25756.31
Tel		03-6213311	089-525463		

THE RECOMMENDATIONS MADE HEREON SHALL NOT BE CONSTRUED AS AUTHORIZING THE INFRINGEMENT OF ANY VALID PATENT, AND ARE MADE WITHOUT ASSUMPTION OF ANY LIABILITY BY BAROID DRILLING FLUIDS, INC OR IT'S AGENTS, AND ARE STATEMENTS OF OPINION ONLY.

RESERVE PITS		SURVEY DATA					SOLIDS ANALYSIS			TIME BREAKDOWN	
NO	TYPE	bbl	MD m	TVD m	INCL°	DIR°	DISP m	Low Grav. Solids	% Vol	2.4	hrs
4								Low Grav. Solids	ppb	21.8	2.5
5								High Grav. Solids	% Vol		
6	Kill	64						High Grav. Solids	ppb		
7								ASG of Solids	g/cc	2.50	5
8								Cuttings Volume	bbl		
								Interval Dilution	bbl/m	1.8	
								Interval Consumption	bbl/m	2.0	
								AVE ROP		m/hr	

**Baroid Australia Pty Ltd**

**MUD REPORT NO.** 35 up to 24:00 hrs, 2/1/95

DATE 3/1/95

DEPTH-m	MD 2143	TVD
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START DATE

### ACTIVITY

29 - Nov - 94

Circulating.

OPERATOR  
MAGELLAN PETROLEUM (N.T.) PTY. LTD.

**CONTRACTOR / RIG**  
O.D.& E. Mereenie Rig 1

COUNTRY

**AUSTRALIA**

REPORT FOR

REPORT FOR

TOWNSHIP

ALICE SPRINGS

WELL NAME AND NO.  
PALM VALLEY-10

FIELD OR BLOCK NO.  
Q.L. 3 NORTHERN TERRITORY

LOCATION  
AMADEUS BASIN

BIT DATA				DRILLING STRING			CASINGS			PUMP DATA					
Size ins		OD ins		ID ins	Length m	Size ins	Depth m		Pump Make	ins x ins		Eff %	bbl/stk	sprn	bbl/min
Type		Pipe 1	3.5	2.75	1829.3	Riser	Set @		EMSCO F800	6	9	97	0.076		
Nozzles 32nds		Pipe 2	3.5	2.75	313.67	13 3/8"	Set @ 18		EMSCO F800	6	9	97	0.076		
		Pipe 3				9 5/8"	Set @ 396.52								
		Col 1				7"	Set @ 1451.55		Pump Press - psi		TOTAL bbl/min				
		Col 2					Set @		MUD VOL	bbl	CIRCULATING DATA				
Noz Area ins²		OPEN HOLE SECTIONS					Set @		Downhole	224	Total circ - mins		AV m/min		
TFA ins²		Sect 1					Set @		Active		Bottoms up - mins		DP		
NV m/sec		Sect 2				Liner	Set @		Total Circ	224	Surface-bit - mins		DC		
Impact lb f		Current 6 691.5					Top @		Reserve	74	ECD ppg	ERR	Riser		

			MUD PROPERTY SPECIFICATIONS			MUD PROPERTY SPECIFICATIONS					
Sample Location	IN or OUT	IN				WEIGHT	ppg	VIS	sec	YP	lb/100 ft²
Time Sample Taken	hrs					API Filt	ml	HTHP	ml	KCL	%
Depth	m	2143				BY AUTHORITY					
Flowline Temp	°C					REMARKS					
Weight	ppg	8.80				Cement stock: 166 x 94 lb sacks and 36 x 80 lbs sacks cement.					
Funnel Viscosity	sec/qt	45				Additives : 2 x50 lbs HR7, 3 x 50 lbs CFR3, 2 x 50 lbs HR4.					
Plastic Viscosity	cP	18									
Yield Point	lb/100 ft²	10				Used Baracarb to mix slug.					
Gels 10 sec/10min/30 min	lb/100 ft²	3/8/-									
API Filtrate	ml/30min	4.0									
HPHT Filtrate	ml/30min										
API/HPHT Filter Cake	32nd ins	1/-									
Solids	% Vol	2.3									
Dissolved Salts	% Vol	1.7									
Oil/Water Content	% Vol	-/96.0									
Sand	% Vol	TR									
Methylene Blue cap	ppb	6									
pH	meter	10.0									
Alk. Mud Pm	ml	0.90				ACTIVITY					
Alk. Filtrate, Pt/Mf	ml	0.40/0.80				Complete POH. M/U cup tester and test BOP eqpt.					
Chlorides	mg/Lx10³	20.0				M/U DST tools and RIH. Perform DST.					
Total Hardness/Calcium	mg/L	100/80				POH. RIH with O/Ended drill pipe to 1975m.					
KCL	% Wt Soln	4.0				Circulate.					
Sulfite Res.	mg/L	40									
Rheometer	600 rpm/300 rpm	46/28									
lb/100 ft²	200 rpm/100 rpm										
	6 rpm/3 rpm										

INVENTORY AND CONSUMPTION					MUD TYPE KCL/Polymer				CONSUMPTION	
PRODUCT DESCRIPTION		USED	REC	BAL	SOLIDS CONTROL EQUIPMENT				Additions	bbl
BARACARB 35	25 kg	25		71					Sea W.	
					Make	screen size	hrs		Drill W.	10
					Shaker 1	80/100	0.5		other	
					Shaker 2				other	
					Shaker 3				Barite	
					Shaker 4				Chemicals	2
						ppg	bbl/hr	hrs	bbl	Losses
					Desander					bbl
					Desilter				Sol. Con.	
					Mud Cleaner 2				Lost/Dumped	
					Centrifuge 1				Down Hole	
					Centrifuge 2				Newhole	
									NET GAIN	12
					Solids Control Effic. %				Discharged	

BAROID Engineer		OFFICE	WAREHOUSE	DAILY COST	CUMULATIVE COST
Davey Indarsingh		MELBOURNE	ALICE SPRINGS	A\$ 266.75	A\$ 26023.06
Tel.		03-6213311	089-525463		

THE RECOMMENDATIONS MADE HEREON SHALL NOT BE CONSTRUED AS AUTHORIZING THE INFRINGEMENT OF ANY VALID PATENT, AND ARE MADE WITHOUT ASSUMPTION OF ANY LIABILITY BY BAROID DRILLING FLUIDS, INC OR IT'S AGENTS, AND ARE STATEMENTS OF OPINION ONLY.

[illegible]





# Baroid Australia Pty Ltd

MUD REPORT NO.	36	up to 24:00 hrs,	3/1/95
DATE	4/1/95	DEPTH-m	MD 2143 TVD
START DATE	29-Nov-94	ACTIVITY	W O C

OPERATOR MAGELLAN PETROLEUM (N.T.) PTY. LTD.	CONTRACTOR / RIG O.D. & E. Mereenie Rig 1	COUNTRY AUSTRALIA
REPORT FOR C. DAVISON / B. GRINKE	REPORT FOR D. WALDRON	TOWNSHIP ALICE SPRINGS
WELL NAME AND NO. PALM VALLEY-10	FIELD OR BLOCK NO. O.L. 3 NORTHERN TERRITORY	LOCATION AMADEUS BASIN

BIT DATA			DRILLING STRING			CASINGS			PUMP DATA		
Size ins	OD ins	ID ins	Length m	Size ins	Depth m	Pump Make	ins x ins	Eff %	bbl/stk	spm	bbl/min
Type	Pipe 1	3.5	2.75	1829.3	Riser	Set @	EMSCO F800	6	9	97	0.076
Nozzles 32nds	Pipe 2	3.5	2.75	313.87	13 3/8"	Set @	18	EMSCO F800	6	9	97
	Pipe 3				9 5/8"	Set @	396.52				
	Col 1				7"	Set @	1451.55	Pump Press - psi	TOTAL bbl/min		
	Col 2					Set @		MUD VOL bbl	CIRCULATING DATA		
Noz Area ins <sup>2</sup>	OPEN HOLE SECTIONS					Set @		Downhole	224	Total circ - mins	AV m/min
TFA ins <sup>2</sup>	Sect 1					Set @		Active		Bottoms up - mins	DP
NV m/sec	Sect 2					Set @		Total Circ	224	Surface-bit - mins	DC
Impact lb f	Current		6	691.5		Top @		Reserve	118	ECD ppg	ERR Riser

MUD PROPERTIES			MUD PROPERTY SPECIFICATIONS			
Sample Location	IN or OUT	IN	WEIGHT	ppg	VIS	sec YP
Time Sample Taken	hrs		API Filtr	ml	HTHP	ml KCL
Depth	m	2143	BY AUTHORITY			
Flowline Temp	°C		REMARKS			
Weight	ppg	8.70	Cement stock : 36 x 80 lbs sack cement. Additives : 2 x 50 lbs HR7, 72 lbs HR4, 67 LBS CRF3.			
Funnel Viscosity	sec/qt	39				
Plastic Viscosity	cP	11				
Yield Point	lb/100 ft <sup>2</sup>	7				
Gels 10 sec/10min/30 min	lb/100 ft <sup>2</sup>	2/6/-				
API Filtrate	ml/30min	4.6				
HPHT Filtrate	ml/30min					
API/HPHT Filter Cake	32nd ins	1/-				
Solids	% Vol	2.5				
Dissolved Salts	% Vol	1.5				
Oil/Water Content	% Vol	~96.0				
Sand	% Vol	TR				
Methylene Blue cap	ppb	6				
pH	meter	12.0				
Alk. Mud Pm	ml	2.60				
Alk. Filtrate, Pt/Mf	ml	1.20/2.10	ACTIVITY Circ out gas. R/U circ head and R/U Howco. Pressure test and set first cement plug at 1925m. POH 4 stds and set second cmt plug. POH 5stds and single and set third cmt plug. POH 6 stds. Circ out cmt. Dump contaminated returns. POH. Lay down DP. M/U 6" bit and RIH to 1398m. Circ and WOC. RIH to 1582m. Circ btms up. Dump contaminated mud and cement. Added 35 bbls water to maintain volume. POH and RIH with O/E DP to 1674m. Circ. R/U and pressure test. Set fourth cmt plug. POH 5 stds and back circ 2 btms up. Dump cmt and contaminated mud. POH. L/O xs DP. WOC.			
Chlorides	mg/Lx10 <sup>3</sup>	17.0				
Total Hardness/Calcium	mg/L	200/160				
KCL	% Wt Soln	3.0				
Sulfite Res.	mg/L	40				
Rheometer	600 rpm/300 rpm	29/18				
lb/100 ft <sup>2</sup>	200 rpm/100 rpm					
	6 rpm/3 rpm					

INVENTORY AND CONSUMPTION					MUD TYPE		CONSUMPTION		
PRODUCT DESCRIPTION	USED	REC	BAL	COST	KCL/Polymer		Additions		bbl
Soda Ash	25 kg	2	6	6	36.08		Sea W.		
					SOLIDS CONTROL EQUIPMENT		Drill W.		35
					Make	screen size	other		
					Shaker 1	80/100	other		
					Shaker 2		Barte		
					Shaker 3		Chemicals		
					Shaker 4		Losses		bbl
						ppg	bbl/hr	hrs	bbl
					Desander				
					Desilter				
					Mud Cleaner 2.				75
					Centrifuge 1				
					Centrifuge 2				
					NET LOSS		40		
					Solids Control Effic.		%		
					Discharged		75		

BAROID Engineer			OFFICE		WAREHOUSE			DAILY COST	CUMULATIVE COST
Davey Indarsingh			MELBOURNE		ALICE SPRINGS			A\$ 36.08	A\$ 26059.14
Tel.			03-6213311		089-525463				

THE RECOMMENDATIONS MADE HEREON SHALL NOT BE CONSTRUED AS AUTHORIZING THE INFRINGEMENT OF ANY VALID PATENT, AND ARE MADE WITHOUT ASSUMPTION OF ANY LIABILITY BY BAROID DRILLING FLUIDS, INC OR ITS AGENTS, AND ARE STATEMENTS OF OPINION ONLY.

RESERVE PITS			SURVEY DATA				SOLIDS ANALYSIS		TIME BREAKDOWN		hrs
NO	TYPE	bbl	MD m	TVD m	INCL°	DIR°	DISP m	Low Grav. Solids	% Vol	3.4	Drilling
4								Low Grav. Solids	ppb	30.9	Circulating
5								High Grav. Solids	% Vol		Reaming In
6		61						High Grav. Solids	ppb		Reaming out
7		57						ASG of Solids	g/cc	2.00	Tripping
8								Cuttings Volume	bbl		Dev. Surv.
								Interval Dilution	bbl/m	1.8	Test BOP
								Interval Consumption	bbl/m	2.1	Other
								AVE ROP		m/hr	5



# Baroid Australia Pty Ltd

MUD REPORT NO. 37 up to 24:00 hrs, 4/1/95

DATE 5/1/95 DEPTH--m MD 1457 TVD  
START DATE 29-Nov-94 ACTIVITY  
CirculatingOPERATOR  
MAGELLAN PETROLEUM (N.T.) PTY. LTD.CONTRACTOR / RIG  
O.D. & E. Mereenie Rig 1REPORT FOR  
B. GRINKEREPORT FOR  
D. WALDRONWELL NAME AND NO.  
PALM VALLEY-10FIELD OR BLOCK NO.  
O.L. 3 NORTHERN TERRITORYCOUNTRY  
AUSTRALIA  
TOWNSHIP  
ALICE SPRINGS  
LOCATION  
AMADEUS BASIN

BIT DATA			DRILLING STRING			CASINGS			PUMP DATA					
Size	6.000 ins		OD ins	ID ins	Length m	Size ins	Depth m	Pump Make	ins x ins	Eff %	bbl/stk	spr	bbl/min	
Type	ATJ 22		Pipe 1	3.5	2.75	1152.6	Riser	Set @	EMSCO F800	6	9	97	0.076	
Nozzles	32nds		Pipe 2	3.5	2.75	304.36	13 3/8"	Set @	EMSCO F800	6	9	97	0.076	57
	30	30	Pipe 3				9 5/8"	Set @	396.52					
			Col 1				7"	Set @	1451.55					
			Col 2					Set @						
Noz Area	2.07 ins <sup>2</sup>		OPEN HOLE SECTIONS					Set @						
TFA	ins <sup>2</sup>		Sect 1					Set @						
NV m/sec	8.6		Sect 2			Liner		Set @						
Impact lb f	23		Current			6	5.5	Top @						

MUD PROPERTIES				MUD PROPERTY SPECIFICATIONS			
Sample Location	IN or OUT	IN		WEIGHT	ppg	VIS	sec YP
Time Sample Taken	hrs	20.45		API Filt	ml	HTHP	ml KCL
Depth	m	1457		BY AUTHORITY			
Flowline Temp	°C			REMARKS			
Weight	ppg	8.70		Cement stock : 36 x 80 lbs sack cement.			
Funnel Viscosity	sec/qt	39		Additives : 2 x 50 lbs HR7, 72 lbs HR4, 67 lbs CFR3.			
Plastic Viscosity	cP	11		Treated system with .5 ppb Soda Ash to reduce calcium content			
Yield Point	lb/100 ft <sup>2</sup>	6		from cement drilled.			
Gels 10 sec/10min/30 min	lb/100 ft <sup>2</sup>	2/5/-		ACTIVITY			
API Filtrate	ml/30min	4.8					
HPHT Filtrate	ml/30min						
API/HPHT Filter Cake	32nd ins	1/-					
Solids	% Vol	2.8					
Dissolved Salts	% Vol	1.2					
Oil/Water Content	% Vol	~96.0					
Sand	% Vol	TR					
Methylene Blue cap	ppb	6					
pH	meter	13.0					
Alk. Mud Pm	ml	4.80		Rig down rotating head and blowline. Install new bag on Hydril. N/U rotating head and flowline and function test. M/U cup tester on HWP. Function and work annular bag several times and test. No Go. Broke off cup tester. P/U drill pipe and test BOP eqpt. M/U 6" bit and BHA and RIH. Slip and cut 25' drilg line. RIH. Tag cement at 1421m. Drill firm cement to 1471m. Circulating 2 cycles.			
Alk. Filtrate, Pt/Mf	ml	2.30/4.20					
Chlorides	mg/Lx10 <sup>3</sup>	14.0					
Total Hardness/Calcium	mg/L	104/96					
KCL	% Wt Soln	3.0					
Sulfite Res.	mg/L	40					
Rheometer	600 rpm/300 rpm	28/17					
lb/100 ft <sup>2</sup>	200 rpm/100 rpm						
	6 rpm/3 rpm						

INVENTORY AND CONSUMPTION					MUD TYPE KCL/Polymer				CONSUMPTION	
PRODUCT DESCRIPTION	USED	REC	BAL	COST	SOLIDS CONTROL EQUIPMENT				Additions	bbl
Soda Ash	25 kg	3		3	Make screen size hrs				Sea W.	
					Shaker 1 80/100 5.5				Drill W.	6
					Shaker 2				other	
					Shaker 3				other	
					Shaker 4				Barite	
					ppg bbl/hr hrs bbl				Chemicals	
					Desander				Losses	bbl
					Desilter				Sol. Con.	
					Mud Cleaner 2.				Lost/Dumped	
					Centrifuge 1				Down Hole	
					Centrifuge 2				Newhole	
					NET GAIN					6
					Solids Control Effic.				Discharged	

BAROID Engineer		OFFICE	WAREHOUSE	DAILY COST	CUMULATIVE COST
Davey Indarsingh		MELBOURNE	ALICE SPRINGS	A\$ 54.12	A\$ 26113.26
Tel.		03-6213311	089-525463		

THE RECOMMENDATIONS MADE HEREON SHALL NOT BE CONSTRUED AS AUTHORIZING THE INFRINGEMENT OF ANY VALID PATENT, AND ARE MADE WITHOUT ASSUMPTION OF ANY LIABILITY BY BAROID DRILLING FLUIDS, INC OR ITS AGENTS, AND ARE STATEMENTS OF OPINION ONLY.

RESERVE PITS			SURVEY DATA					SOLIDS ANALYSIS		TIME BREAKDOWN	
NO	TYPE	bbl	MD m	TVD m	INCL °	DIR °	DISP m	Low Grav. Solids	% Vol	Drilling	hrs
4								Low Grav. Solids	ppb 33.7	Circulating	2
5								High Grav. Solids	% Vol	Reaming In	
6	64							High Grav. Solids	ppb	Reaming out	
7	60							ASG of Solids	g/cc 2.10	Tripping	
8								Cuttings Volume	bbl	Dev. Surv.	
								Interval Dilution	bbl/m 1.8	Test BOP	2.5
								Interval Consumption	bbl/m 2.1	Other	16
								AVE ROP		m/hr	



# Baroid Australia Pty Ltd

MUD REPORT NO. 38 up to 24:00 hrs, 5/1/95

DATE 6/1/95 DEPTH—m MD 1474 TVD

START DATE 29—Nov—94 ACTIVITY Circulating

OPERATOR  
MAGELLAN PETROLEUM (N.T.) PTY. LTD.

CONTRACTOR / RIG  
O.D. & E. Mereenie Rig 1

COUNTRY  
AUSTRALIA

REPORT FOR  
B. GRINKE

REPORT FOR  
D. WALDRON

TOWNSHIP  
ALICE SPRINGS

WELL NAME AND NO.  
PALM VALLEY—10

FIELD OR BLOCK NO.  
O.L. 3 NORTHERN TERRITORY

LOCATION  
AMADEUS BASIN

BIT DATA			DRILLING STRING			CASINGS			PUMP DATA						
Size 6.000 ins			OD ins	ID ins	Length m	Size ins	Depth m		Pump Make	ins x ins	Eff %	bbl/stk	spm	bbl/min	
Type DH11ST			Pipe 1	3.5	2.75	1143.4	Riser	Set @	EMSCO F800	6	9	97	0.076	47	3.572
Nozzles 32nds			Pipe 2	3.5	2.75	295.3	13 3/8"	Set @	18	EMSCO F800	6	9	97	0.076	
30	30	30	Pipe 3				9 5/8"	Set @	396.52						
			Col 1	4.75	2.25	35.32	7"	Set @	1451.55	Pump Press 720 psi			TOTAL bbl/min 3.572		
			Col 2					Set @		MUD VOL bbl			CIRCULATING DATA		
Noz Area 2.07 ins²			OPEN HOLE SECTIONS					Set @	Downhole	156	Total circ 75 mins			AV m/min	
TFA ins²			Sect 1					Set @	Active	112	Bottoms up 34 mins			DP 43.1	
NV m/sec			Sect 2				Liner	Set @	Total Circ	268	Surface—bit 10 mins			DC 83.4	
Impact lb f			Current		6	22.5		Top @	Reserve		ECD ppg			ERR Riser	

MUD PROPERTIES			MUD PROPERTY SPECIFICATIONS		
Sample Location	IN or OUT	IN	WEIGHT	ppg	VIS
Time Sample Taken	hrs	20:00	API Filtr	ml	HTHP
Depth	m	1457	BY AUTHORITY		
Flowline Temp	°C		REMARKS		
Weight	ppg	8.70	Cement stock : 36 x 80 lbs sack cement. Additives : 2 x 50 lbs HR7, 72 lbs HR4, 67 lbs CFR3.		
Funnel Viscosity	sec/qt	39			
Plastic Viscosity	cP	11	Using existing mud to kick off and achieve angle. Will address mud properties on surface after displacing to foam.		
Yield Point	lb/100 ft <sup>2</sup>	6			
Gels 10 sec/10min/30 min	lb/100 ft <sup>2</sup>	2/5/—	ACTIVITY		
API Filtrate	ml/30min	5.4			
HPHT Filtrate	ml/30min		Completed circ 2 cycles. POH. M/U 6" bit on mud motor and RIH to 1456m. Wash and work from 1456 to 1471m. Run single shot survey at 1464m. Same held up at 1230m. Run W.L.S. — not engaging. POH. Service BHA. RIH. L/O 1 jt HWP. Run WLS and orient motor. Slide from 1471 to 1474m.		
API/HPHT Filter Cake	32nd ins	1/—			
Solids	% Vol	2.8			
Dissolved Salts	% Vol	1.2			
Oil/Water Content	% Vol	—/96.0			
Sand	% Vol	TR			
Methylene Blue cap	ppb	6			
pH	meter	13.0			
Alk. Mud Pm	ml	4.70			
Alk. Filtrate, Pf/Mf	ml	1.80/2.60			
Chlorides	mg/Lx10 <sup>3</sup>	14.0			
Total Hardness/Calcium	mg/L	104/96			
KCL	% Wt Soln	3.0			
Sulfite Res.	mg/L	40			
Rheometer	600 rpm/300 rpm	28/17			
lb/100 ft <sup>2</sup>	200 rpm/100 rpm				
	6 rpm/3 rpm				

INVENTORY AND CONSUMPTION					MUD TYPE KCL/Polymer				CONSUMPTION	
PRODUCT DESCRIPTION	USED	REC	BAL	COST	SOLIDS CONTROL EQUIPMENT				Additions	bbl
QUIK—FOAM	205 lt		8	13	Make screen size hrs				Sea W.	
					Shaker 1	80/100	4.5		Drill W.	
					Shaker 2				other	
					Shaker 3				other	
					Shaker 4				Barite	
					ppg bbl/hr hrs bbl				Chemicals	
					Desander				Losses	bbl
					Desilter				Sol. Con.	
					Mud Cleaner 2.				Lost/Dumped	257
					Centrifuge 1				Down Hole	
					Centrifuge 2				Newhole	2
									NET LOSS	257
					Solids Control Effic. %				Discharged	257

BAROID Engineer			OFFICE		WAREHOUSE		DAILY COST		CUMULATIVE COST	
Davey Indarsingh			MELBOURNE		ALICE SPRINGS		A\$ 0.00		A\$ 26113.26	
Tel.			03—6213311		089—525463					

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RESERVE PITS		SURVEY DATA				SOLIDS ANALYSIS		TIME BREAKDOWN		hrs
NO	TYPE	bbl	MD m	TVD m	INCL°	DIR °	DISP m	Low Grav. Solids	% Vol	3.7
								Low Grav. Solids	ppb	33.7
								High Grav. Solids	% Vol	
								High Grav. Solids	ppb	
								ASG of Solids	g/cc	2.10
								Cuttings Volume	bbl	2.0
								Interval Dilution	bbl/m	1.9
								Interval Consumption	bbl/m	2.0
								Drilling		3.5
								Circulating		1
								Reaming in		
								Reaming out		
								Tripping		7.5
								Dev. Surv.		
								Test BOP		
								Other		12
								AVE ROP		4.86





# Baroid Australia Pty Ltd

MUD REPORT NO. 40 up to 24:00 hrs, 7/1/95

DATE 8/1/95 DEPTH-m MD 1511 TVD

START DATE 29-Nov-94 ACTIVITY Drilling

OPERATOR MAGELLAN PETROLEUM (N.T.) PTY. LTD.	CONTRACTOR / RIG O.D. & E. Mereenie Rig 1	COUNTRY AUSTRALIA
REPORT FOR B. GRINKE	REPORT FOR D. WALDRON	TOWNSHIP ALICE SPRINGS
WELL NAME AND NO. PALM VALLEY-10 A	FIELD OR BLOCK NO. O.L. 3 NORTHERN TERRITORY	LOCATION AMADEUS BASIN

BIT DATA			DRILLING STRING			CASINGS			PUMP DATA			
Size 6.000 ins	OD ins	ID ins	Length m	Size ins	Depth m	Pump Make	ins x ins	Eff %	bbl/stk	spr	bbl/min	
Type ATSP55D	Pipe 1 3.5	2.75	1204	Riser	Set @	EMSCO F800	6	9	97	0.076		
Nozzles 32nds	Pipe 2 3.5	2.75	295.3	13 3/8"	Set @	EMSCO F800	6	9	97	0.076	43	3.268
30 30 30	Pipe 3			9 5/8"	Set @	396.52						
	Col 1 4.75	2.25	11.75	7"	Set @	1451.55	Pump Press	850 psi	TOTAL bbl/min 3.268			
	Col 2				Set @		MUD VOL	bbl	CIRCULATING DATA			
Noz Area 2.07 ins <sup>2</sup>	OPEN HOLE SECTIONS				Set @	Downhole	161	Total circ	92 mins	AV	m/min	
TFA ins <sup>2</sup>	Sect 1			Liner	Set @	Active	140	Bottoms up	38 mins	DP	43.2	
NV m/sec 6.5	Sect 2				Set @	Total Circ	301	Surface-bit	11 mins	DC	76.3	
Impact lb f 13	Current	6	59.5	Top @		Reserve		ECD ppg	ERR	Riser		

MUD PROPERTIES				MUD PROPERTY SPECIFICATIONS			
Sample Location	IN or OUT	IN	IN	WEIGHT	ppg	VIS	sec YP
Time Sample Taken	hrs	10:00	20:00	API Filt	ml	HTHP	ml KCL
Depth	m	1489	1503	BY AUTHORITY			

Flowline Temp	°C	25	26	REMARKS	
Weight	ppg	8.70	8.70	Cement stock : 36 x 80 lbs sack cement.	
Funnel Viscosity	sec/qt	39	45	Additives : 2 x 50 lbs HR7, 72 lbs HR4, 67 lbs CFR3.	
Plastic Viscosity	cP	11	15		
Yield Point	lb/100 ft <sup>2</sup>	6	10		

Gels 10 sec/10min/30 min	lb/100 ft <sup>2</sup>	2/5/-	3/8/-	Added 10 bbls water to system while drilling.	
API Filtrate	ml/30min	7.0	5.4	Treated mud with PAC R and DEXTRID to reduce fluid loss and increase viscosity and yield point.	
HPHT Filtrate	ml/30min				
API/HPHT Filter Cake	32nd ins	1/-	1/-		

Solids	% Vol	2.8	2.8		
Dissolved Salts	% Vol	1.2	1.2		
Oil/Water Content	% Vol	-/96.0	-/96.0		
Sand	% Vol	TR	TR		
Methylene Blue cap	ppb	6	6		
pH	meter	12.5	12.5		

Alk. Mud Pm	ml	4.50	4.50	ACTIVITY	
Alk. Filtrate, Pt/Mf	ml	1.80/2.40	1.80/2.40	Continue RIH to 1471m. Orientate motor with MWD.	
Chlorides	mg/Lx10 <sup>3</sup>	14.0	14.0	Circ gas cut mud. Ream from 1471 to 1484m.	
Total Hardness/Calcium	mg/L	100/80	100/80	Drill to 1511m.	
KCL	% Wt Soln	3.0	3.0		
Sulfite Res.	mg/L	40	40		

Rheometer	600 rpm/300 rpm	28/17	40/25		
lb/100 ft <sup>2</sup>	200 rpm/100 rpm				
	6 rpm/3 rpm				

INVENTORY AND CONSUMPTION					MUD TYPE	KCL/Polymer	CONSUMPTION
PRODUCT DESCRIPTION	USED	REC	BAL	COST	SOLIDS CONTROL EQUIPMENT		Additions
PAC-R	50 lb	6	17	782.82	Make	screen size	bbl
DEXTRID	25 kg	12	52	583.32		hrs	

Shaker 1	80/100	18	Drill W.	10
Shaker 2			other	
Shaker 3			other	
Shaker 4			Barite	
	ppg	bbl/hr	hrs	bbl
Desander			Chemicals	2
Desilter			Losses	bbl
Mud Cleaner 2			Sol. Con.	
Centrifuge 1			Lost/Dumped	3
Centrifuge 2			Down Hole	
			Newhole	3
			NET GAIN	9
			Discharged	3

BAROID Engineer	OFFICE	WAREHOUSE	DAILY COST	CUMULATIVE COST
Davey Indarsingh	MELBOURNE	ALICE SPRINGS	A\$ 1366.14	A\$ 27479.40
Tel.	03-6213311	089-525463		

THE RECOMMENDATIONS MADE HEREON SHALL NOT BE CONSTRUED AS AUTHORIZING THE INFRINGEMENT OF ANY VALID PATENT, AND ARE MADE WITHOUT ASSUMPTION OF ANY LIABILITY BY BAROID DRILLING FLUIDS, INC OR IT'S AGENTS, AND ARE STATEMENTS OF OPINION ONLY.

RESERVE PITS			SURVEY DATA					SOLIDS ANALYSIS			TIME BREAKDOWN	
NO	TYPE	bbl	MD m	TVD m	INCL °	DIR °	DISP m	Low Grav. Solids	% Vol	3.7	Drilling	17.5
								Low Grav. Solids	ppb	33.7	Circulating	0.5
								High Grav. Solids	% Vol		Reaming In	0.5
								High Grav. Solids	ppb		Reaming out	
								ASG of Solids	g/cc	2.10	Tripping	1.5
								Cuttings Volume	bbl	3.0	Dev. Surv.	
								Interval Dilution	bbl/m	1.9	Test BOP	
								Interval Consumption	bbl/m	2.0	Other	4
											AVE ROP	m/hr 1.54





**MUD REPORT NO.** 42 up to 24:00 hrs, 9/1/95

DATE 10/1/95

DEPTH--m MD 1541 TVD

START DATE

### ACTIVITY

29-Nov-94

**Pull Out of Hole.**

**COUNTRY**  
AUSTRALIA

**TOWNSHIP**  
**ALICE SPRINGS**

LOCATION	AMADEUS BASIN
----------	---------------

BIT DATA			DRILLING STRING			CASINGS			PUMP DATA						
Size 6.000 ins			OD ins	ID ins	Length m	Size ins	Depth m	Pump Make	ins	x ins	Eff %	bbl/stk	spr	bbl/min	
Type	ATJP55		Pipe 1	3.5	2.75	1201.8	Riser	Set @	EMSCO F800	6	9	97	0.076	52	3.952
Nozzles	32nds		Pipe 2	3.5	2.75	295.3	13 3/8"	Set @	18 EMSCO F800	6	9	97	0.076		
	30	30	30	Pipe 3			9 5/8"	Set @	396.52						
				Col 1	4.75	2.25	43.94	7"	Set @	1451.55					
				Col 2				Set @							
Noz Area 2.07 ins²			OPEN HOLE SECTIONS					Set @	Downhole	162	Total circ 75 mins			AV	m/min
TFA ins²			Sect 1					Set @	Active	134	Bottoms up 32 mins			DP	52.2
NV m/sec			Sect 2				Liner	Set @	Total Circ	296	Surface-bit 9 mins			DC	92.2
Impact lb f			19				Current	6	89.5	Top @		Reserve	ECD ppq	ERR	Riser

MUD PROPERTIES		MUD PROPERTY SPECIFICATIONS								
Sample Location	IN or OUT		IN		WEIGHT	ppg	VIS	sec	YP	lb/100 ft <sup>2</sup>
Time Sample Taken	hrs		22:00		API Filt	ml	HTHP	ml	KCL	%
Depth	m		1541		BY AUTHORITY					
Flowline Temp	°C		30		REMARKS					
Weight	ppg		8.70		Cement Stock : 36 x 80 lb sacks cement.					
Funnel Viscosity	sec/qt		39		Additives : 2 x 50 lb HR7, 72 lb HR4, 67 lb CFR3.					
Plastic Viscosity	cP		8							
Yield Point	lb/100 R <sup>2</sup>		7							
Gels 10 sec/10min/30 min	lb/100 ft <sup>2</sup>									
API Filtrate	ml/30min		4.8							
HPHT Filtrate	ml/30min									
API/HPHT Filter Cake	32nd ins		1/-							
Solids	% Vol		2.9							
Dissolved Salts	% Vol		1.1							
Oil/Water Content	% Vol		-/96.0							
Sand	% Vol		TR							
Methylene Blue cap	ppb		5							
pH	meter		12.5							
Alk. Mud Pm	ml		4.50		ACTIVITY					
Alk. Filtrate, Pf/Mf	ml		1.15/1.80		Motor drill 6" hole from 1526 to 1527 m.					
Chlorides	mg/Lx10 <sup>3</sup>		12.5		Pull Out of Hole.					
Total Hardness/Calcium	mg/L		80/40		Work on MWD. Make up Bit #34. Adjust bent sub to 0.78.					
KCL	% Wt Soln		2.5		Install MWD. Run In Hole. Test MWD OK.					
Sulfite Res.	mg/L		10		Continue to RIH to 1513.					
					Ream from 1513 to 1527 m.					
					Motor drill 6" hole from 1527 to 1541 m.					
					Pull Out of Hole for bit change.					
Rheometer	600 rpm/300 rpm		23/15							
lb/100 ft <sup>2</sup>	200 rpm/100 rpm									
	6 rpm/3 rpm									

INVENTORY AND CONSUMPTION					KCL/Polymer					CONSUMPTION	
PRODUCT DESCRIPTION	USED	REC	BAL	COST	SOLIDS CONTROL EQUIPMENT					Additions	bbl
					Make	screen size	hrs			Sea W.	
					Shaker 1	80/100	13.5			Drill W.	
					Shaker 2					other	
					Shaker 3					other	
					Shaker 4					Bante	
						ppg	bbl/hr	hrs	bbl	Chemicals	
					Desander					Losses	bbl
					Desilter					Sol. Con.	
					Mud Cleaner 2.					Lost/Dumped	5
					Centrifuge 1					Down Hole	
					Centrifuge 2					Newhole	2
										NET LOSS	5
					Solids Control Effic.			%		Discharged	5

BAROID Engineer		OFFICE	WAREHOUSE	DAILY COST	CUMULATIVE COST
Chris Wallace		MELBOURNE	ALICE SPRINGS	A\$ 0.00	A\$ 27479.40
Tel 03-6213311		03-6213311	089-525463		

THE RECOMMENDATIONS MADE HEREON SHALL NOT BE CONSTRUED AS AUTHORIZING THE INFRINGEMENT OF ANY VALID PATENT, AND ARE MADE WITHOUT ASSUMPTION OF ANY LIABILITY BY BAROID DRILLING FLUIDS, INC OR ITS AGENTS, AND ARE STATEMENTS OF OPINION ONLY.

RESERVE PITS			SURVEY DATA					SOLIDS ANALYSIS		TIME BREAKDOWN		hrs
NO	TYPE	bbl	MD m	TVD m	INCL°	DIR °	DISP m	Low Grav. Solids	% Vol	3.8	Drilling	13.5
			1516.99	1512.45	14.3	224.9		Low Grav. Solids	ppb	34.6	Circulating	
			1526		16.7	228.1		High Grav. Solids	% Vol		Reaming In	2
								High Grav. Solids	ppb		Reaming out	
								ASG of Solids	g/cc	2.10	Tripping	7.5
								Cuttings Volume	bbl	2.0	Dev. Surv.	
								Interval Dilution	bbl/m	1.9	BHA	1
								Interval Consumption	bbl/m	2.0	Other	
											AVE ROP	m/hr 1.11

**Baroid Australia Pty Ltd**

**MUD REPORT NO.** 43 up to 24:00 hrs, 10/1/95

DATE 11/1/95

DEPTH-m MD 1560 TVD 1553

START DATE

## ACTIVITY

29 - Nov - 94

Drilling.

**OPERATOR**  
**MAGELLAN PETROLEUM (N.T.) PTY. LTD.**

**CONTRACTOR / RIG**  
O.D.& E. Mereenie Rig 1

COUNTRY

**AUSTRALIA**

**REPORT FOR**  
**B. GRINKE**

REPORT FOR  
D. WALDRON

**TOWNSHIP**  
**ALICE SPRINGS**

WELL NAME AND NO.  
PALM VALLEY-10A

FIELD OR BLOCK NO.  
O.L. 3 NORTHERN TERRITORY

LOCATION  
AMADEUS BASIN

BIT DATA			DRILLING STRING			CASINGS			PUMP DATA							
Size 5.000 ins			OD ins	ID ins	Length m	Size ins	Depth m		ins x ins		Eff %	bbl/stk	spm	bbl/min		
Type D331			Pipe 1	3.5	2.75	1220.8	Riser	Set @	EMSCO F800		6	9	97	0.076	58	4.408
Nozzles 32nds			Pipe 2	3.5	2.75	295.3	13 3/8"	Set @	18	EMSCO F800	6	9	97	0.076		
30	30	30	Pipe 3				9 5/8"	Set @	396.52							
			Col 1	4.75	2.25	43.94	7"	Set @	1451.55	Pump Press	1450 psi	TOTAL bbl/min			4.408	
			Col 2					Set @		MUD VOL	bbl	CIRCULATING DATA				
Noz Area 2.07 ins²			OPEN HOLE SECTIONS					Set @	Downhole	164	Total circ 72 mins			AV		m/min
TFA ins²			Sect 1					Set @	Active	152	Bottoms up 29 mins			DP		58.2
NV m/sec			Sect 2				Liner	Set @	Total Circ	315	Surface - bit 8 mins			DC		102.9
Impact lb f			Current					Top @	Reserve	60	ECD ppg			8.99	Riser	

MUD PROPERTIES		MUD PROPERTY SPECIFICATIONS	
Sample Location	IN or OUT	IN	IN
Time Sample Taken	hrs	9:00	21:30
Depth	m	1546	1559
Flowline Temp	°C	30	32
Weight	ppg	8.70	8.90
Funnel Viscosity	sec/qt	46	44
Plastic Viscosity	cP	16	13
Yield Point	lb/100 ft²	10	9
Gels 10 sec/10min/30 min	lb/100 ft²		
API Filtrate	ml/30min	4.4	4.0
HPHT Filtrate	ml/30min		
API/HPHT Filter Cake	32nd ins	1/-	1/-
Solids	% Vol	2.9	2.9
Dissolved Salts	% Vol	1.1	1.1
Oil/Water Content	% Vol	-/96.0	-/96.0
Sand	% Vol	TR	TR
Methylene Blue cap	ppb	5	5
pH	meter	12.5	12.5
Alk. Mud Pm	ml	4.50	4.50
Alk. Filtrate, Pt/Mf	ml	1.15/1.80	1.15/1.80
Chlorides	mg/Lx10³	12.5	12.5
Total Hardness/Calcium	mg/L	80/40	80/40
KCL	% Wt Soln	2.5	2.5
Sulfite Res.	mg/L	10	80
Rheometer	600 rpm/300 rpm	42/26	35/22
lb/100 ft²	200 rpm/100 rpm		
	6 rpm/3 rpm		

**REMARKS**

Cement Stock : 36 x 80 lb sacks cement.

Additives : 2 x 50 lb HR7, 72 lb HR4, 67 lb CFR3.

Mix 60 bbl mud for trip tank.

Add PAC-R and DEXTRID to active to increase yield point and filtration control.

Weighted up active to 8.9 ppg with BARACARB 35.

**ACTIVITY**

Handle BHA.

Pick up new motor and set bend to 0.78.

Make up motor and bit # 35.

Install MWD and Run In Hole. Test MWD, OK.

Continue to Run In Hole to 1538 m.

Break circulation and tag bottom. No fill.

Gas cut mud peak 7200 units.

Motor drill 6" hole from 1541 to 1560 m.

[illegible]

<b>BAROID Engineer</b>			<b>OFFICE</b>	<b>WAREHOUSE</b>	<b>DAILY COST</b>	<b>CUMULATIVE COST</b>
Chris Wallace			MELBOURNE	ALICE SPRINGS	<b>A\$ 2964.78</b>	<b>A\$ 30444.18</b>
Tel. 03-6213311			03-6213311	089-525463		

THE RECOMMENDATIONS MADE HEREON SHALL NOT BE CONSTRUED AS AUTHORIZING THE INFRINGEMENT OF ANY VALID PATENT, AND ARE MADE WITHOUT ASSUMPTION OF ANY LIABILITY BY BAROID DRILLING FLUIDS, INC OR ITS AGENTS, AND ARE STATEMENTS OF OPINION ONLY.

RESERVE PITS			SURVEY DATA					SOLIDS ANALYSIS			TIME BREAKDOWN		hrs
NO	TYPE	bbl	MD m	TVD m	INCL°	DIR °	DISP m	Low Grav. Solids	% Vol	2.4	Drilling		18.5
1	TRIP	60	1536	1530.86	18.4	231.3		Low Grav. Solids	ppb	21.8	Circulating		0.5
2			1545	1539.9	19.9	231.6		High Grav. Solids	% Vol	0.5	Reaming In		
3								High Grav. Solids	ppb	7.3	Reaming out		
4								ASG of Solids	g/cc	2.90	Tripping		3
5								Cuttings Volume	bbl	2.0	Dev. Surv.		
6								Interval Dilution	bbl/m	1.9	BHA		2
7								Interval Consumption	bbl/m	2.0	Other		
8											AVE ROP	m/hr	1.03





**MUD REPORT NO.** 44 up to 24:00 hrs, 11/1/95

DATE	12/1/95	DEPTH-m	MD 1575	TVD 1567
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<b>START DATE</b>	<b>ACTIVITY</b>
29-Nov-94	Drilling

**CONTRACTOR / RIG**  
O.D.& E. Mereenie Rig 1

**COUNTRY**  
**AUSTRALIA**

**REPORT FOR**  
**W. SCHAFFER**

**TOWNSHIP**  
**ALICE SPRINGS**

FIELD OR BLOCK NO.  
O.L. 3 NORTHERN TERRITORY

**LOCATION**  
AMADEUS BASIN

BIT DATA				DRILLING STRING			CASINGS		PUMP DATA								
Size 6.000 ins				OD ins	ID ins	Length m	Size ins	Depth m	Pump Make	ins	x ins	Eff %	bbl/stk	spm	bbl/min		
Type D331				Pipe 1	3.5	2.75	1235.7	Riser	Set @	EMSCO F800	6	9	97	0.076	59	4.484	
Nozzles 32nds				Pipe 2	3.5	2.75	295.3	13 3/8"	Set @	EMSCO F800	6	9	97	0.076			
30	30		30	Pipe 3			9 5/8"	Set @	396.52								
				Col 1	4.75	2.25	43.97	7"	Set @	1451.55	Pump Press 1640 psi			TOTAL bbl/min		4.484	
				Col 2				Set @		MUD VOL	bbl	CIRCULATING DATA					
Noz Area 2.07 ins²				OPEN HOLE SECTIONS				Set @	Downhole	166	Total circ 70 mins			AV		m/min	
TFA ins²				Sect 1				Set @	Active	147	Bottoms up 29 mins			DP		59.2	
NV m/sec 8.9				Sect 2				Liner	Set @	Total Circ	313	Surface-bit 8 mins			DC		104.7
Impact lb f 25				Current					Top @	Reserve	58	ECD ppg		8.99	Riser		

Sample Location		IN or OUT	IN	IN
Time Sample Taken	hrs	9:30	22:00	
Depth	m	1566	1573	
Flowline Temp	°C	32	32	
Weight	ppg	8.90	8.90	
Funnel Viscosity	sec/qt	43	43	
Plastic Viscosity	cP	12	13	
Yield Point	lb/100 ft²	10	9	
Gels 10 sec/10min/30 min	lb/100 ft²			
API Filtrate	ml/30min	4.0	4.0	
HPHT Filtrate	ml/30min			
API/HPHT Filter Cake	32nd ins	1/-	1/-	
Solids	% Vol	2.9	2.9	
Dissolved Salts	% Vol	1.1	1.1	
Oil/Water Content	% Vol	-/96.0	-/96.0	
Sand	% Vol	TR	TR	
Methylene Blue cap	ppb	5	5	
pH	meter	12.0	12.0	
Alk. Mud Pm	ml	4.20	4.20	
Alk. Filtrate, P1/Mf	ml	1.10/1.70	1.10/1.70	
Chlorides	mg/Lx10³	12.5	12.5	
Total Hardness/Calcium	mg/L	80/40	80/40	
KCL	% Wt Soln	2.5	2.5	
Sulfite Res.	mg/L	80	50	
Rheometer	600 rpm/300 rpm	34/22	35/22	
lb/100 ft²	200 rpm/100 rpm			
	6 rpm/3 rpm			

INVENTORY AND CONSUMPTION					KCL/Polymer					CONSUMPTION	
PRODUCT DESCRIPTION	USED	REC	BAL	COST	SOLIDS CONTROL EQUIPMENT				Additions		
					Make	screen size	hrs		Sea W.	bbl	
					Shaker 1	80/100	17.5		Drill W.		
					Shaker 2				other		
					Shaker 3				other		
					Shaker 4				Barite		
						ppg	bbl/hr	hrs	bbl	Chemicals	
					Desander					Losses	
					Desilter					Sol. Con.	
					Mud Cleaner 2.					Lost/Dumped	
					Centrifuge 1					Down Hole	
					Centrifuge 2					Newhole	
									NET LOSS	5	
					Solids Control Effic.				%	Discharged	
										5	

BAROID Engineer			OFFICE	WAREHOUSE	DAILY COST	CUMULATIVE COST
Chris Wallace			MELBOURNE	ALICE SPRINGS	A\$ 0.00	A\$ 30444.18
Tel. 03-6213311			03-6213311	089-525463		

THE RECOMMENDATIONS MADE HEREON SHALL NOT BE CONSTRUED AS AUTHORIZING THE INFRINGEMENT OF ANY VALID PATENT, AND ARE MADE WITHOUT ASSUMPTION OF ANY LIABILITY BY BAROID DRILLING FLUIDS, INC OR IT'S AGENTS, AND ARE STATEMENTS OF OPINION ONLY.

RESERVE PITS			SURVEY DATA					SOLIDS ANALYSIS			TIME BREAKDOWN		hrs
NO	TYPE	bbl	MD m	TVD m	INCL°	DIR °	DISP m	Low Grav. Solids	% Vol	2.4	Drilling	17.5	
1	TRIP	58	1555.43	1549.28	21.7	231.5		Low Grav. Solids	ppb	21.8	Circulating	0.5	
2								High Grav. Solids	% Vol	0.5	Reaming In	0.5	
3								High Grav. Solids	ppb	7.3	Reaming out		
4								ASG of Solids	g/cc	2.90	Tripping	4	
5								Cuttings Volume	bbl	2.0	Dev. Surv.		
6								Interval Dilution	bbl/m	1.8	BHA	1	
7								Interval Consumption	bbl/m	2.0	Other	0.5	
8											AVE ROP	m/hr 0.80	



# Baroid Australia Pty Ltd

MUD REPORT NO. 45 up to 24:00 hrs, 12/1/95

DATE 13/1/95 DEPTH -m MD 1587 TVD

START DATE 29-Nov-94 ACTIVITY Drilling

OPERATOR  
MAGELLAN PETROLEUM (N.T.) PTY. LTD.

CONTRACTOR / RIG  
O.D. & E. Mereenie Rig 1

COUNTRY  
AUSTRALIA

REPORT FOR  
B. GRINKE

REPORT FOR  
W. SCHAFER

TOWNSHIP  
ALICE SPRINGS

WELL NAME AND NO.  
PALM VALLEY-10 A

FIELD OR BLOCK NO.  
O.L. 3 NORTHERN TERRITORY

LOCATION  
AMADEUS BASIN

BIT DATA				DRILLING STRING				CASINGS				PUMP DATA			
Size 6,000 ins	OD ins	ID ins	Length m	Size ins	Depth m	Pump Make	ins x ins	Eff %	bbl/stk	spm	bbl/min				
Type D411ST	Pipe 1	3.5	2.75	1252.8	Riser	Set @			EMSCO F800	6	9	97	0.076	59	4.484
Nozzles 32nds	Pipe 2	3.5	2.75	295.3	13 3/8"	Set @	18		EMSCO F800	6	9	97	0.076		
30	30	30	Pipe 3		9 5/8"	Set @	396.52								
	Col 1	4.75	2.25	38.91	7"	Set @	1451.55		Pump Press	1475 psi	TOTAL bbl/min 4.484				
	Col 2					Set @			MUD VOL	bbl	CIRCULATING DATA				
Noz Area 2.07 ins <sup>2</sup>	OPEN HOLE SECTIONS					Set @			Downhole	167	Total circ	68 mins	AV	m/min	
TFA ins <sup>2</sup>	Sect 1					Set @			Active	140	Bottoms up	29 mins	DP	59.2	
NV m/sec 8.9	Sect 2				Liner	Set @			Total Circ	307	Surface-bit	8 mins	DC	104.7	
Impact lb f 25	Current		6	135.5		Top @			Reserve	60	ECD ppg		ERR	Riser	

MUD PROPERTIES				MUD PROPERTY SPECIFICATIONS			
Sample Location	IN or OUT	IN	IN	WEIGHT	ppg	VIS	sec YP lb/100 ft <sup>2</sup>
Time Sample Taken	hrs	10:00	22:15	API Filtr	ml	HTHP	ml KCL %
Depth	m	1584	1587	BY AUTHORITY			
Flowline Temp	°C	33	33	REMARKS			
Weight	ppg	8.90	8.90	Cement stock : 36 x 80 lb sacks cement.			
Funnel Viscosity	sec/gt	39	36	Additives : 2 x 50 lb HR7, 72 lb HR4, 67 lb CFR3.			
Plastic Viscosity	cP	12	10	No treatment today.			
Yield Point	lb/100 ft <sup>2</sup>	8	8				
Gels 10 sec/10min/30 min	lb/100 ft <sup>2</sup>						
API Filtrate	ml/30min	4.0	4.0				
HPHT Filtrate	ml/30min						
API/HPHT Filter Cake	32nd ins	1/-	1/-				
Solids	% Vol	2.9	2.9				
Dissolved Salts	% Vol	1.1	1.1				
Oil/Water Content	% Vol	-/96.0	-/96.0				
Sand	% Vol	TR	TR				
Methylene Blue cap	ppb	5	5	ACTIVITY			
pH	meter	12.0	12.0				
Alk. Mud Pm	ml	3.70	3.50				
Alk. Filtrate, Pt/Ml	ml	0.70/1.40	0.65/1.30				
Chlorides	mg/Lx10 <sup>3</sup>	13.0	13.0				
Total Hardness/Calcium	mg/L	80/40	80/40				
KCL	% Wt Soln	2.6	2.6				
Sulfite Res.	mg/L	50	40				
Rheometer	600 rpm/300 rpm	32/20	26/18	Motor drill 6" hole from 1575 to 1586 m. Pull Out of Hole for bit change. Run In Hole. Motor drill 6" hole from 1586 to 1586.1 m. Ream from 1585 to 1586.1 m. Motor drill 6" hole from 1586 to 1587 m.			
lb/100 ft <sup>2</sup>	200 rpm/100 rpm						
	6 rpm/3 rpm						

INVENTORY AND CONSUMPTION					MUD TYPE KCL/Polymer				CONSUMPTION	
PRODUCT DESCRIPTION	USED	REC	BAL	COST	SOLIDS CONTROL EQUIPMENT				Additions	bbl
					Make	screen size	hrs		Sea W.	
					Shaker 1	80/100	18		Drill W.	
					Shaker 2				other	
					Shaker 3				other	
					Shaker 4				Barite	
						ppg	bbl/hr	hrs	Chemicals	
					Desander				Losses	bbl
					Desilter				Sol. Con.	
					Mud Cleaner 2				Lost/Dumped	4
					Centrifuge 1				Down Hole	
					Centrifuge 2				Newhole	1
									NET LOSS	4
					Solids Control Effic.		%		Discharged	4

BAROID Engineer			OFFICE		WAREHOUSE		DAILY COST		CUMULATIVE COST	
Chris Wallace			MELBOURNE		ALICE SPRINGS		A\$ 0.00		A\$ 30444.18	
Tel. 03-6213311			03-6213311		089-525463					

THE RECOMMENDATIONS MADE HEREON SHALL NOT BE CONSTRUED AS AUTHORIZING THE INFRINGEMENT OF ANY VALID PATENT, AND ARE MADE WITHOUT ASSUMPTION OF ANY LIABILITY BY BAROID DRILLING FLUIDS, INC OR IT'S AGENTS, AND ARE STATEMENTS OF OPINION ONLY.

RESERVE PITS			SURVEY DATA				SOLIDS ANALYSIS			TIME BREAKDOWN	
NO	TYPE	bbl	MD m	TVD m	INCL °	DIR °	DISP m	Low Grav. Solids	% Vol	Drilling	hrs
1	TRIP	60	1565.09	1557.86	23.6	230.3		Low Grav. Solids	ppb 21.8	Circulating	
2			1572.51	1564.6	25.7	229.9		High Grav. Solids	% Vol 0.5	Reaming in	0.5
3								High Grav. Solids	ppb 7.3	Reaming out	
4								ASG of Solids	g/cc 2.90	Tripping	5.5
5								Cuttings Volume	bbl 1.0	Dev. Surv.	0.5
6								Interval Dilution	bbl/m 1.8	BHA	
7								Interval Consumption	bbl/m 2.0	Other	
8										AVE ROP	m/hr 0.69

**Baroid Australia Pty Ltd**

**MUD REPORT NO.** 46 up to 24:00 hrs, 13/1/95

DATE	14/1/95	DEPTH-m	MD 1594	TVD
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<b>START DATE</b> 29-Nov-94	<b>ACTIVITY</b> Pull Out of Hole
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**OPERATOR**  
MAGELLAN PETROLEUM (N.T.) PTY. LTD.

**CONTRACTOR / RIG**  
O.D.& E. Moreenie Rig 1

COUNTRY

**AUSTRALIA**

**REPORT FOR**  
**R. GRINKE**

REPORT FOR  
W. SCHAFFER

**TOWNSHIP**  
**ALICE SPRINGS**

WELL NAME AND NO.  
PALM VALLEY-10A

FIELD OR BLOCK NO.  
O.L. 3 NORTHERN TERRITORY

**LOCATION**  
AMADEUS BASIN

BIT DATA				DRILLING STRING			CASINGS			PUMP DATA							
Size 5.000 ins				OD ins	ID ins	Length m	Size ins	Depth m		Pump Make	ins x ins		Eff %	bbl/stk	sprn	bbl/min	
Type ATJP55				Pipe 1	3.5	2.75	1254.8	Riser	Set @		EMSCO F800	6	9	97	0.076	45	3.42
Nozzles 32nds				Pipe 2	3.5	2.75	295.3	13 3/8"	Set @ 18		EMSCO F800	6	9	97	0.076		
30	30	30		Pipe 3				9 5/8"	Set @ 396.52								
				Col 1	4.75	2.25	43.91	7"	Set @ 1451.55		Pump Press - psi				TOTAL bbl/min 3.42		
				Col 2					Set @		MUD VOL	bbl	CIRCULATING DATA				
Noz Area 2.07 ins²				OPEN HOLE SECTIONS					Set @		Downhole	169	Total circ 93 mins		AV m/min		
TFA ins²				Sect 1					Set @		Active	149	Bottoms up 36 mins		DP 48.2		
NV m/sec				Sect 2				Liner	Set @		Total Circ	318	Surface-bit 11 mins		DC 85.1		
Impact lb f 17				Current					Top @		Reserve	60	ECD ppg		ERR	Riser	

Impact No. 17		MUD PROPERTIES				MUD PROPERTY SPECIFICATIONS					
Sample Location	IN or OUT	IN		IN		WEIGHT	ppg	VIS	sec	YP	lb/100 ft²
Time Sample Taken	hrs	9:30		10:30		API Filt	ml	HTHP	ml	KCL	%
Depth	m	1589		1594		BY AUTHORITY					
Flowline Temp	°C	33		34		REMARKS					
Weight	ppg	8.95		8.95		Cement stock: 36 x 80 lb sacks cement.					
Funnel Viscosity	sec/qt	39		42		Additives: 2 x 50 lb HR7, 72 lb HR4, 67 lb CFR3.					
Plastic Viscosity	cP	12		20		Added PAC – R and DEXTRID to active to increase yield point and filtration control. Added BARACOR 129 for corrosion inhibition.					
Yield Point	lb/100 ft²	8		13		Added water to active to maintain volume					
Gels 10 sec/10min/30 min	lb/100 ft²										
API Filtrate	ml/30min	4.0		4.4							
HPHT Filtrate	ml/30min										
API/HPHT Filter Cake	32nd ins	1/-		1/-							
Solids	% Vol	2.9		2.9							
Dissolved Salts	% Vol	1.1		1.1							
Oil/Water Content	% Vol	-/96.0		-/96.0							
Sand	% Vol	TR		TR							
Methylene Blue cap	ppb	4		4							
pH	meter	12.0		12.0							
Alk. Mud Pm	ml	3.50		3.10		ACTIVITY					
Alk. Filtrate, Pf/Mf	ml	0.60/1.20		0.45/1.10		Motor drill 6" hole from 1587 to 1589 m.					
Chlorides	mg/Lx10³	13.0		13.0		Pull Out of Hole for bit change.					
Total Hardness/Calcium	mg/L	80/40		80/40		Adjust angle to 0.78. Change out MWD.					
KCL	% Wt Soln	2.6		2.6		Run In Hole to 1528 m.					
Sulfite Res.	mg/L	40		80		Ream from 1528 to 1589 m.					
						Drill 6" hole from 1589 to 1594 m.					
						Pull Out of Hole.					
Rheometer	600 rpm/300 rpm	32/20		53/33							
lb/100 ft²	200 rpm/100 rpm										
	6 rpm/3 rpm										

INVENTORY AND CONSUMPTION						MUD TYPE KCL/Polymer				CONSUMPTION	
PRODUCT DESCRIPTION		USED	REC	BAL	COST	SOLIDS CONTROL EQUIPMENT				Additions	bbl
						Make	screen size	hrs		Sea W.	
PAC-R	50 lb	3		8	391.41	Shaker 1	80/100	16		Drill W.	9
Dextrid	25 kg	6		33	291.66	Shaker 2				other	
						Shaker 3				other	
BARACOR-129	25 kg	1		2	71.33	Shaker 4				Barite	
							ppg	bbl/hr	hrs	bbl	Chemicals
						Desander					1
						Desilter				Losses	bbl
						Mud Cleaner 2.				Sol. Con.	
						Centrifuge 1				Lost/Dumped	
						Centrifuge 2				Down Hole	
										Newhole	1
										NET GAIN	10
						Solids Control Effic.		%		Discharged	

BAROID Engineer		OFFICE	WAREHOUSE	DAILY COST	CUMULATIVE COST
Chris Wallace		MELBOURNE	ALICE SPRINGS	A\$ 754.40	A\$ 31198.58
Tel. 03-6213311		03-6213311	089-525463		

THE RECOMMENDATIONS MADE HEREON SHALL NOT BE CONSTRUED AS AUTHORIZING THE INFRINGEMENT OF ANY VALID PATENT, AND ARE MADE WITHOUT ASSUMPTION OF ANY LIABILITY BY BAIROD DRILLING FLUIDS, INC OR IT'S AGENTS, AND ARE STATEMENTS OF OPINION ONLY.

RESERVE PITS			SURVEY DATA					SOLIDS ANALYSIS			TIME BREAKDOWN		hrs
NO	TYPE	bbl	MD m	TVD m	INCL°	DIR °	DISP m	Low Grav. Solids	% Vol	2.0	Drilling		7.5
1	TRIP	60						Low Grav. Solids	ppb	18.2	Circulating		
2								High Grav. Solids	% Vol	0.9	Reaming In		8.5
3								High Grav. Solids	ppb	13.2	Reaming out		
4								ASG of Solids	g/cc	3.10	Tripping		6.5
5								Cuttings Volume	bbl	1.0	Dev. Surv.		
6								Interval Dilution	bbl/m	1.8	BHA		1.5
7								Interval Consumption	bbl/m	2.0	Other		
8											AVE ROP	m/hr	0.93



# Baroid Australia Pty Ltd

MUD REPORT NO. 47 up to 24:00 hrs. 14/1/95

DATE 15/1/95 DEPTH--m MD 1606 TVD

START DATE 29-Nov-94 ACTIVITY Run In Hole.

OPERATOR  
MAGELLAN PETROLEUM (N.T.) PTY. LTD.CONTRACTOR / RIG  
O.D. & E. Meresnie Rig 1

COUNTRY

AUSTRALIA

REPORT FOR

REPORT FOR

TOWNSHIP

ALICE SPRINGS

WELL NAME AND NO.

FIELD OR BLOCK NO.

LOCATION

PALM VALLEY-10 A

O.L. 3 NORTHERN TERRITORY

AMADEUS BASIN

BIT DATA			DRILLING STRING			CASINGS		PUMP DATA							
Size 6.000 ins			OD ins	ID ins	Length m	Size ins	Depth m	Pump Make	ins x ins	Eff %	bbl/stk	spm	bbl/min		
Type D331			Pipe 1	3.5	2.75	1266.8	Riser	Set @	EMSCO F80C	6	9	97	0.076	48	3.648
Nozzles 32nds			Pipe 2	3.5	2.75	295.3	13 3/8"	Set @	18	EMSCO F80C	6	9	97	0.076	
30	30	30	Pipe 3				9 5/8"	Set @	396.52						
			Col 1	4.75	2.25	43.91	7"	Set @	1451.55	Pump Press 1400 psi	TOTAL bbl/min			3.648	
			Col 2					Set @		MUD VOL	bbl	CIRCULATING DATA			
Noz Area 2.07 ins²			OPEN HOLE SECTIONS					Set @	Downhole	169	Total circ 82 mins		AV m/min		
TFA ins²			Sect 1					Set @	Active	130	Bottoms up 36 mins		DP 48.2		
NV m/sec			Sect 2				Liner	Set @	Total Circ	299	Surface-bit 11 mins		DC 85.1		
Impact lb f			Current			6	154.5	Top @	Reserve	60	ECD ppg	ERR	Riser		

MUD PROPERTIES				MUD PROPERTY SPECIFICATIONS					
Sample Location	IN or OUT	IN	IN	WEIGHT	ppg	VIS	sec	YP	lb/100 ft³
Time Sample Taken	hrs	9:00	22:30	API Filtr	ml	HTHP	ml	KCL	%
Depth	m	1596	1606	BY AUTHORITY					
Flowline Temp	°C	34	34	REMARKS					
Weight	ppg	9.00	9.00	36 x 80 lb sacks cement.					
Funnel Viscosity	sec/qt	43	43	2 x 50 lb HR7, 72 lb HR4, 67 lb CFR3.					
Plastic Viscosity	cP	21	21	No treatment today.					
Yield Point	lb/100 ft²	13	11						
Gels 10 sec/10min/30 min	lb/100 ft²								
API Filtrate	ml/30min	4.2	4.0						
HPHT Filtrate	ml/30min								
API/HPHT Filter Cake	32nd ins	1/-	1/-						
Solids	% Vol	2.9	2.9						
Dissolved Salts	% Vol	1.1	1.1						
Oil/Water Content	% Vol	-/96.0	-/96.0						
Sand	% Vol	TR	TR						
Methylene Blue cap	ppb	3	3	ACTIVITY					
pH	meter	12.0	12.0						
Alk. Mud Pm	ml	3.00	3.00						
Alk. Filtrate, PI/Mf	ml	0.45/1.10	0.45/1.10						
Chlorides	mg/Lx10³	13.0	13.0						
Total Hardness/Calcium	mg/L	80/40	80/40						
KCL	% Wt Soln	2.6	2.6						
Sulfite Res.	mg/L	40	40						
Rheometer	600 rpm/300 rpm	55/34	53/32	Continue to Pull Out of Hole.					
lb/100 ft²	200 rpm/100 rpm			Change motors, set angle to 0.78.					
	6 rpm/3 rpm			Run In with Bit # 37 to shoe. Test MWD.					
				Circulate gas cut mud. Max 8000 units.					
				Work and ream from 1565 to 1594 m.					
				Drill 6" hole from 1594 to 1606 m.					
				Pull Out of hole.					
				Run In Hole with Bit # 38.					

INVENTORY AND CONSUMPTION					MUD TYPE KCL/Polymer				CONSUMPTION	
PRODUCT DESCRIPTION	USED	REC	BAL	COST	SOLIDS CONTROL EQUIPMENT				Additions	bbl
					Make	screen size	hrs		Sea W.	
					Shaker 1	80/100	12.5		Drill W.	
					Shaker 2				other	
					Shaker 3				other	
					Shaker 4				Barite	
					ppg	bbl/hr	hrs	bbl	Chemicals	
					Desander				Losses	bbl
					Desilter				Sol. Con.	
					Mud Cleaner 2.				Lost/Dumped	18
					Centrifuge 1				Down Hole	
					Centrifuge 2				Newhole	1
									NET LOSS	18
					Solids Control Effic.			%	Discharged	18

BAROID Engineer		OFFICE	WAREHOUSE	DAILY COST		CUMULATIVE COST	
Chris Wallace		MELBOURNE	ALICE SPRINGS	A\$ 0.00		A\$ 31198.58	
Tel. 03-6213311		03-6213311	089-525463				

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RESERVE PITS			SURVEY DATA					SOLIDS ANALYSIS			TIME BREAKDOWN		hrs
NO	TYPE	bbl	MD m	TVD m	INCL°	DIR °	DISP m	Low Grav. Solids	% Vol	1.6	Drilling		10
1	TRIP	60	1582.98	1573.89	28.8	227.7		Low Grav. Solids	ppb	14.6	Circulating		0.5
2								High Grav. Solids	% Vol	1.3	Reaming In		2
3								High Grav. Solids	ppb	19.1	Reaming out		
4								ASG of Solids	g/cc	3.30	Tripping		7
5								Cuttings Volume	bbl	1.0	Dev. Surv.		
6								Interval Dilution	bb/m	1.8	Motors.		3.5
7								Interval Consumption	bb/m	2.0	Other		1
8											AVE ROP	m/hr	1.2



MUD REPORT NO. 48 up to 24:00 hrs, 15/1/95

DATE	16/1/95	DEPTH—m	MD 1626	TVD
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<b>START DATE</b> 29-Nov-94	<b>ACTIVITY</b> Pull Out of Hole.
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**OPERATOR**  
MAGELLAN PETROLEUM (N.T.) PTY. LTD.

**CONTRACTOR / RIG**  
O.D. & E. Mereenie Rig 1

COUNTRY

**AUSTRALIA**

REPORT FOR

REPORT FOR

TOWNSHIP

ALICE SPRINGS

WELL NAME AND NO.

FIELD OR BLOCK NO.

LOCATION

**AMADEUS BASIN**

PALM VALLEY-10 A

01 3 NORTHERN TERRITORY

BIT DATA	DRILLING STRING
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28
29	29
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83	83
84	84
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86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

## CASINGS

### PUMP DATA

BIT DATA				DRILLING STRING			CASINGS			PUMP DATA							CIRCULATING DATA		
Size 6.000 ins Type D331				OD ins	ID ins	Length m	Size ins	Depth m		Pump Make	ins	x ins	Eff %	bbl/stk	spm	bbl/min			
Nozzles 32nds				Pipe 1	3.5	2.75	1286.8	Riser	Set @	EMSCO F800	6	9	97	0.076	60	4.56			
				Pipe 2	3.5	2.75	295.3	13 3/8"	Set @ 18	EMSCO F800	6	9	97	0.076					
30	30	30		Pipe 3				9 5/8"	Set @ 396.52										
				Col 1	4.75	2.25	43.91	7"	Set @ 1451.55	Pump Press 1975 psi	TOTAL bbl/min				4.56				
				Col 2					Set @	MUD VOL bbl	CIRCULATING DATA								
Noz Area 2.07 ins²				OPEN HOLE SECTIONS					Set @	Downhole 171	Total circ 66 mins				AV m/min				
TFA ins²				Sect 1					Set @	Active 130	Bottoms up 29 mins				DP 60.2				
NV m/sec 9.0				Sect 2				Liner	Set @	Total Circ 301	Surface-bit 9 mins				DC 106.4				
Impact lb ft 25				Current 6 174.5					Top @	Reserve 60	ECD ppg ERR				Riser				

Impact lb/ft		Current	MUD PROPERTIES		MUD PROPERTY SPECIFICATIONS					
Sample Location	IN or OUT	IN		IN	WEIGHT	ppg	VIS	sec	YP	lb/100 ft²
Time Sample Taken	hrs	9:00		21:30	API Filtr	ml	HTHP	ml	KCL	%
Depth	m	1613		1626	BY AUTHORITY					
Flowline Temp	°C	34		34	REMARKS					
Weight	ppg	9.00		9.00	36 x 80 lb sacks cement.					
Funnel Viscosity	sec/qt	40		39	2 x 50 lb HR7, 72 lb HR4, 67 lb CFR3.					
Plastic Viscosity	cP	15		15	Added water to active to maintain volume.					
Yield Point	lb/100 ft²	10		9						
Gels 10 sec/10min/30 min	lb/100 ft²									
API Filtrate	ml/30min	4.0		4.0						
HPHT Filtrate	ml/30min				Attended safety meeting.					
API/HPHT Filter Cake	32nd ins	1/-		1/-						
Solids	% Vol	2.9		2.9						
Dissolved Salts	% Vol	1.1		1.1						
Oil/Water Content	% Vol	-/96.0		-/96.0	ACTIVITY					
Sand	% Vol	TR		TR						
Methylene Blue cap	ppb	3		3						
pH	meter	11.5		11.5						
Alk. Mud Pm	ml	2.45		2.40	Continue to Run In Hole to 1595 m.					
Alk. Filtrate, P1/Mf	ml	0.45/1.00		0.45/1.00	PU kelly. Work and ream to bottom. 1 m fill.					
Chlorides	mg/Lx10³	13.0		13.0	Circ. out gas cut mud. 9000 units.					
Total Hardness/Calcium	mg/L	80/40		80/40	Drill 6" hole from 1606 to 1607 m.					
KCL	% Wt Soln	2.6		2.6	Work tight hole at 1607 m.					
Sulfite Res.	mg/L	40		40	Drill from 1607 to 1626 m.					
					Pull Out of Hole for reaming assembly.					
Rheometer	600 rpm/300 rpm	40/25		39/24						
lb/100 ft²	200 rpm/100 rpm									
	6 rpm/3 rpm									

INVENTORY AND CONSUMPTION					MUD TYPE KCL/Polymer					CONSUMPTION	
PRODUCT DESCRIPTION	USED	REC	BAL	COST	SOLIDS CONTROL EQUIPMENT				Additions	bbl	
					Make	screen size	hrs		Sea W.		
					Shaker 1	80/100	21		Drill W.	7	
					Shaker 2				other		
					Shaker 3				other		
					Shaker 4				Barite		
					ppg	bbl/hr	hrs	bbl	Chemicals		
					Desander				Losses	bbl	
					Desilter				Sol. Con.		
					Mud Cleaner 2.				Lost/Dumped	5	
					Centrifuge 1				Down Hole		
					Centrifuge 2				Newhole	2	
									NET GAIN	2	
					Solids Control Effic.		%		Discharged	5	

BAROID Engineer			OFFICE	WAREHOUSE	DAILY COST	CUMULATIVE COST
Chris Wallace			MELBOURNE	ALICE SPRINGS	A\$ 0.00	A\$ 31198.58
Tel 03-6213311			03-6213311	089-525463		

tel. 03-6213311 03-6213311 089-525403

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RESERVE PITS			SURVEY DATA					SOLIDS ANALYSIS			TIME BREAKDOWN		hrs
NO	TYPE	bbl	MD m	TVD m	INCL°	DIR °	DISP m	Low Grav. Solids	% Vol	1.6	Drilling		20
1	TRIP	60	1603.37	1591.95	26.5	224.3		Low Grav. Solids	ppb	14.6	Circulating		0.5
2			1613.9	1600.52	28.2	223.1		High Grav. Solids	% Vol	1.3	Reaming In		
3								High Grav. Solids	ppb	19.1	Reaming out		
4								ASG of Solids	g/cc	3.30	Tripping		3
5								Cuttings Volume	bbl	2.0	Dev. Surv.		
6								Interval Dilution	bbl/m	1.8	Work tight hole.		0.5
7								Interval Consumption	bbl/m	2.0	Other		
8											AVE ROP	m/hr	1





MUD REPORT NO. 50 up to 24:00 hrs, 17/1/95

DATE 18/1/95

DEPTH-m	MD 1641	TVD
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START DATE

## ACTIVITY

29-Nov-94

**Drilling.**

COUNTRY

**AUSTRALIA**

TOWNSHIP

ALICE SPRING

**LOCATION**

**AMADEUS BASIN**

		MUD PROPERTIES				MUD PROPERTY SPECIFICATIONS					
Sample Location	IN or OUT	IN		IN		WEIGHT	ppg	VIS	sec	YP	lb/100 #2
Time Sample Taken	hrs	10:00		23:00		API Filtr	ml	HTHP	ml	KCL	%
Depth	m	1633		1640		BY AUTHORITY					

pH	meter	11.0	11.0	<b>ACTIVITY</b> Continue to Run in Hole. PU kelly & circ. off bottom. Circ. out gas cut mud. (8500 units)
Alk. Mud Pm	ml	1.30	1.25	
Alk. Filtrate, P1/Mf	ml	0.25/0.70	0.25/0.70	
Chlorides	mg/Lx10 <sup>3</sup>	14.0	14.0	
Total Hardness/Calcium	mg/L	80/40	80/40	

[illegible]

BAROID Engineer		OFFICE	WAREHOUSE	DAILY COST	CUMULATIVE COST
	Chris Wallace	MELBOURNE	ALICE SPRINGS	A\$ 0.00	A\$ 32526.06
Tel	03-6213311	03-6213311	089-525463		

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RESERVE PITS							SURVEY DATA			SOLIDS ANALYSIS			TIME BREAKDOWN		hrs
NO	TYPE	bbl	MD m	TVD m	INCL°	DIR °	DISP m	Low Grav. Solids	% Vol	1.6	Drilling		22.5		
1			1621.7	1608.1	30.2	223.2		Low Grav. Solids	ppb	14.6	Circulating		1		
2								High Grav. Solids	% Vol	1.2	Reaming In				
3								High Grav. Solids	ppb	17.6	Reaming out				
4								ASG of Solids	g/cc	3.30	Tripping		0.5		
5								Cuttings Volume	bbl	2.0	Motor				
6								Interval Dilution	bbl/m	1.8	BHA				
7								Interval Consumption	bbl/m	2.0	Other				
8											AVE ROP	m/hr	0.87		



# Baroid Australia Pty Ltd

MUD REPORT NO. 51 up to 24:00 hrs, 18/1/95

DATE 19/1/95 DEPTH-m MD 1654 TVD

START DATE 29-Nov-94 ACTIVITY Drilling.

OPERATOR  
MAGELLAN PETROLEUM (N.T.) PTY. LTD.

CONTRACTOR / RIG  
O.D. & E. Mereenie Rig 1

REPORT FOR  
B. GRINKE

REPORT FOR  
W. SCHAFER

COUNTRY

AUSTRALIA

TOWNSHIP

ALICE SPRINGS

WELL NAME AND NO.  
PALM VALLEY-10 A

FIELD OR BLOCK NO.  
O.L. 3 NORTHERN TERRITORY

LOCATION

AMADEUS BASIN

BIT DATA			DRILLING STRING			CASINGS			PUMP DATA						
Size 6.000 ins			OD ins	ID ins	Length m	Size ins		Depth m	Pump Make	ins x ins	Eff %	bbl/stk	spm	bbl/min	
Type D331			Pipe 1	3.5	2.75	1296.5	Riser	Set @	EMSCO F80C	6	9	97	0.076	59	4.484
Nozzles 32nds			Pipe 2	3.5	2.75	295.3	13 3/8"	Set @	EMSCO F80C	6	9	97	0.076		
30	30	30	Pipe 3				9 5/8"	Set @							
			Col 1	4.75	2.25	62.25	7"	Set @							
			Col 2					Set @							
Noz Area 2.07 ins <sup>2</sup>			OPEN HOLE SECTIONS					Set @							
TFA ins <sup>2</sup>			Sect 1					Set @	Downhole	173		Total circ	84 mins	AV	m/min
NV m/sec 8.9			Sect 2					Set @	Active	202		Bottoms up	30 mins	DP	59.2
Impact lb f 26			Current		6	202.5	Liner	Set @	Total Circ	375		Surface-bit	9 mins	DC	104.7
							Top @		Reserve			ECD ppg	ERR	Riser	

MUD PROPERTIES				MUD PROPERTY SPECIFICATIONS			
Sample Location	IN or OUT	IN		IN		WEIGHT	ppg VIS
Time Sample Taken	hrs	9:00		11:00		API Filt	ml HTHP
Depth	m	1645		1654		BY AUTHORITY	
Flowline Temp	°C	34		35		REMARKS	
Weight	ppg	9.00		9.00		36 x 80 lb sacks cement.	
Funnel Viscosity	sec/qt	40		40		2 x 50 lb HR7, 72 lb HR4, 67 lb CFR3.	
Plastic Viscosity	cP	18		18			
Yield Point	lb/100 ft <sup>2</sup>	9		8			
Gels 10 sec/10min/30 min	lb/100 ft <sup>2</sup>						
API Filtrate	ml/30min	4.0		4.2		No treatment today.	
HPHT Filtrate	ml/30min						
API/HPHT Filter Cake	32nd ins	1/-		1/-			
Solids	% Vol	2.8		2.8			
Dissolved Salts	% Vol	1.2		1.2			
Oil/Water Content	% Vol	-/96.0		-/96.0			
Sand	% Vol	TR		TR			
Methylene Blue cap	ppb	3		3			
pH	meter	10.5		10.5			
Alk. Mud Pm	ml	1.20		1.20		ACTIVITY	
Alk. Filtrate, Pf/Mf	ml	0.25/0.65		0.25/0.60		Drill 6" hole from 1641 to 1642 m.	
Chlorides	mg/Lx10 <sup>3</sup>	14.0		14.0		Ream ledges from 1640 to 1642 m.	
Total Hardness/Calcium	mg/L	80/40		80/40		Drill then ream 1642 - 1644 m.	
KCL	% Wt Soln	2.8		2.8		Drill then ream 1644 - 1646 m.	
Sulfite Res.	mg/L	40		40		Drill then ream 1646 - 1648.5 m.	
						Drill then ream 1648 - 1650 m.	
						Drill 1650 - 1650.5 m. Ream 1648 - 1650.5 m.	
						Drill 1650.5 - 1653 m. Ream 1650 - 1653 m.	
						Drill 1653 - 1654.6 m.	
Rheometer	600 rpm/300 rpm	45/27		44/26			
lb/100 ft <sup>2</sup>	200 rpm/100 rpm						
	6 rpm/3 rpm						

INVENTORY AND CONSUMPTION					MUD TYPE KCL/Polymer				CONSUMPTION	
PRODUCT DESCRIPTION	USED	REC	BAL	COST	SOLIDS CONTROL EQUIPMENT				Additions	bbl
					Make	screen size	hrs		Sea W.	
					Shaker 1	80/100	24		Drill W.	
					Shaker 2				other	
					Shaker 3				other	
					Shaker 4				Barite	
						ppg	bbl/hr	hrs	Chemicals	
					Desander				Losses	bbl
					Desilter				Sol. Con.	
					Mud Cleaner 2.				Lost/Dumped	5
					Centrifuge 1				Down Hole	
					Centrifuge 2				Newhole	1
									NET LOSS	5
					Solids Control Effic.		%		Discharged	5

BAROID Engineer		OFFICE		WAREHOUSE		DAILY COST		CUMULATIVE COST	
Chris Wallace		MELBOURNE		ALICE SPRINGS		A\$ 0.00		A\$ 32526.06	
Tel. 03-6213311		03-6213311		089-525463					

THE RECOMMENDATIONS MADE HEREON SHALL NOT BE CONSTRUED AS AUTHORIZING THE INFRINGEMENT OF ANY VALID PATENT, AND ARE MADE WITHOUT ASSUMPTION OF ANY LIABILITY BY BAROID DRILLING FLUIDS, INC OR IT'S AGENTS, AND ARE STATEMENTS OF OPINION ONLY.

RESERVE PITS			SURVEY DATA				SOLIDS ANALYSIS			TIME BREAKDOWN		hrs
NO	TYPE	bbl	MD m	TVD m	INCL°	DIR°	DISP m	Low Grav. Solids	% Vol	1.6	Drilling	20
1			1631.91	1616.8	32.7	225.5		Low Grav. Solids	ppb	14.6	Circulating	
2			1641.32	1624.61	35.1	227.9		High Grav. Solids	% Vol	1.2	Reaming In	4
3								High Grav. Solids	ppb	17.6	Reaming out	
4								ASG of Solids	g/cc	3.30	Tripping	
5								Cuttings Volume	bbl	1.0	Motor	
6								Interval Dilution	bbl/m	1.8	BHA	
7								Interval Consumption	bbl/m	2.0	Other	
8											AVE ROP	m/hr 0.65





# Baroid Australia Pty Ltd

MUD REPORT NO. 52 up to 24:00 hrs, 19/1/95

DATE 20/1/95

DEPTH-m MD 1660 TVD

START DATE

29-Nov-94

ACTIVITY

Drilling

OPERATOR  
MAGELLAN PETROLEUM (N.T.) PTY. LTD.

CONTRACTOR / RIG  
O.D. & E. Mereenie Rig 1

COUNTRY

AUSTRALIA

REPORT FOR  
B. GRINKE

REPORT FOR  
W. SCHAFER

TOWNSHIP

ALICE SPRINGS

WELL NAME AND NO.  
PALM VALLEY-10 A

FIELD OR BLOCK NO.  
O.L. 3 NORTHERN TERRITORY

LOCATION

AMADEUS BASIN

BIT DATA				DRILLING STRING				CASINGS				PUMP DATA			
Size	6.000 ins	OD ins	ID ins	Length m	Size ins	Depth m	Pump Make	ins x ins	Eff %	bbl/stk	spr	bbl/min			
Type	ATJP55	Pipe 1	3.5	2.75	1256.1	Riser	Set @	EMSCO F800	6	9	97	0.076	55	4.18	
Nozzles	32nds	Pipe 2	3.5	2.75	295.3	13 3/8"	Set @	EMSCO F800	6	9	97	0.076			
	30	Pipe 3			9 5/8"	Set @	396.52								
		Col 1	4.75	2.25	108.6	7"	Set @	1451.55							
		Col 2				Set @		Pump Press	1450 psi			TOTAL bbl/min	4.18		
Noz Area	2.07 ins <sup>2</sup>	OPEN HOLE SECTIONS				Set @		MUD VOL	bbl	CIRCULATING DATA					
TFA	ins <sup>2</sup>	Sect 1				Set @		Downhole	172	Total circ	72 mins	AV	m/min		
NV m/sec	8.3	Sect 2				Set @		Active	130	Bottoms up	32 mins	DP	55.2		
Impact lb f	22	Current	6	208.5		Top @		Total Circ	302	Surface-bit	9 mins	DC	97.6		
								Reserve	100	ECD ppg	ERR	Riser			

MUD PROPERTIES				MUD PROPERTY SPECIFICATIONS			
Sample Location	IN or OUT	IN	IN	WEIGHT	ppg	VIS	sec YP
Time Sample Taken	hrs	9:00	22:45	API Filtr	ml	HTHP	ml KCL
Depth	m	1654	1660	BY AUTHORITY			
Flowline Temp	°C	35	36	REMARKS			
Weight	ppg	9.00	9.00	36 X 80 lb sacks cement.			
Funnel Viscosity	sec/qt	50	48	2 x 50 lb HR7, 72 lb HR4, 67 lb CFR3.			
Plastic Viscosity	cP	25	25				
Yield Point	lb/100 ft <sup>2</sup>	15	15				
Gels 10 sec/10min/30 min	lb/100 ft <sup>2</sup>			Added PAC-R and DEXTRID to active to increase yield point and filtration control.			
API Filtrate	ml/30min	4.0	4.0				
HPHT Filtrate	ml/30min						
API/HPHT Filter Cake	32nd ins	1/-	1/-				
Solids	% Vol	2.8	2.8				
Dissolved Salts	% Vol	1.2	1.2				
Oil/Water Content	% Vol	-/96.0	-/96.0				
Sand	% Vol	TR	TR				
Methylene Blue cap	ppb	3	3				
pH	meter	10.5	10.5				
Alk. Mud Pm	ml	1.10	1.10	ACTIVITY			
Alk. Filtrate, P/MI	ml	0.25/0.60	0.25/0.60	Ream from 1652 to 1654 m.			
Chlorides	mg/Lx10 <sup>3</sup>	13.5	13.5	Pull Out of Hole for bit change.			
Total Hardness/Calcium	mg/L	80/40	80/40	Change out MWD and realign angle.			
KCL	% Wt Soln	2.7	2.7	Make Up Bit # 40 and Run In Hole.			
Sulfite Res.	mg/L	10	10	RIH to 1626 m.			
				Circ. out gas cut mud. (8000 units)			
				Wash and ream from 1626 to 1654 m.			
				Motor drill 6" hole from 1654 to 1660 m.			
Rheometer	600 rpm/300 rpm	65/40	65/40				
lb/100 ft <sup>2</sup>	200 rpm/100 rpm						
	6 rpm/3 rpm						

INVENTORY AND CONSUMPTION				MUD TYPE				CONSUMPTION			
PRODUCT DESCRIPTION	USED	REC	BAL	COST	KCL/Polymer				Additions		bbl
PAC-R	50 lb	3	2	391.41	SOLIDS CONTROL EQUIPMENT						
DEXTRID	25 kg	6	21	291.66	Make screen size hrs				Sea W.		
					Shaker 1	80/100	16.5	Drill W.	26		
					Shaker 2			other			
					Shaker 3			other			
					Shaker 4			Barite			
					ppg bbl/hr hrs bbl				Chemicals		1
					Desander			Losses	bbl		
					Desilter			Sol. Con.			
					Mud Cleaner 2.			Lost/Dumped			
					Centrifuge 1			Down Hole			
					Centrifuge 2			Newhole	1		
					Solids Control Effic.				NET GAIN		27
									Discharged		

BAROID Engineer		OFFICE		WAREHOUSE		DAILY COST		CUMULATIVE COST	
Chris Wallace		MELBOURNE		ALICE SPRINGS		A\$ 683.07		A\$ 33209.13	
Tel. 03-6213311		03-6213311		089-525463					

THE RECOMMENDATIONS MADE HEREON SHALL NOT BE CONSTRUED AS AUTHORIZING THE INFRINGEMENT OF ANY VALID PATENT, AND ARE MADE WITHOUT ASSUMPTION OF ANY LIABILITY BY BAROID DRILLING FLUIDS, INC OR ITS AGENTS, AND ARE STATEMENTS OF OPINION ONLY.

RESERVE PITS				SURVEY DATA				SOLIDS ANALYSIS				TIME BREAKDOWN		hrs
NO	TYPE	bbl	MD m	TVD m	INCL °	DIR °	DISP m	Low Grav. Solids	% Vol	1.6	Drilling	9.5		
1								Low Grav. Solids	ppb	14.6	Circulating	0.5		
2	TRIP	68						High Grav. Solids	% Vol	1.2	Reaming In	6.5		
3	KCl/Poly.	32						High Grav. Solids	ppb	17.6	Reaming out			
4								ASG of Solids	g/cc	3.30	Tripping	6		
5								Cuttings Volume	bbl	1.0	Motor	0.5		
6								Interval Dilution	bbl/m	1.8	MWD	1		
7								Interval Consumption	bbl/m	2.0	Other			
8								AVE ROP				m/hr	0.63	



# Baroid Australia Pty Ltd

MUD REPORT NO. 53 up to 24:00 hrs, 20/1/95

DATE 21/1/95

DEPTH-m MD 1671 TVD

START DATE

29-Nov-94

ACTIVITY

Run In Hole.

## OPERATOR

MAGELLAN PETROLEUM (N.T.) PTY. LTD.

## CONTRACTOR / RIG

O.D. &amp; E. Mereenie Rig 1

## COUNTRY

AUSTRALIA

## REPORT FOR

B. GRINKE

## REPORT FOR

W. SCHAFER

## TOWNSHIP

ALICE SPRINGS

## WELL NAME AND NO.

PALM VALLEY-10A

## FIELD OR BLOCK NO.

O.L. 3 NORTHERN TERRITORY

## LOCATION

AMADEUS BASIN

BIT DATA			DRILLING STRING			CASINGS			PUMP DATA						
Size 6.000 ins			OD ins	ID ins	Length m	Size ins	Depth m	Pump Make	ins x ins	Eff %	bbl/stk	spr	bbl/min		
Type D331			Pipe 1	3.5	2.75	1267.1	Riser	Set @	EMSCO F800	6	9	97	0.076	62	4.712
Nozzles 32nds			Pipe 2	3.5	2.75	295.3	13 3/8"	Set @	18	EMSCO F800	6	9	97	0.076	
30	30	30	Pipe 3				9 5/8"	Set @	396.52						
			Col 1	4.75	2.25	108.6	7"	Set @	1451.55	Pump Press 2000 psi	TOTAL bbl/min				4.712
			Col 2					Set @		MUD VOL	bbl	CIRCULATING DATA			
Noz Area 2.07 ins²			OPEN HOLE SECTIONS					Set @	Downhole	173	Total circ 71 mins		AV m/min		
TFA ins²			Sect 1					Set @	Active	160	Bottoms up 28 mins		DP 62.2		
NV m/sec			Sect 2				Liner	Set @	Total Circ	333	Surface-bit 8 mins		DC 110		
Impact lb f			Current					Top @	Reserve	68	ECD ppg	ERR	Riser		

MUD PROPERTIES				MUD PROPERTY SPECIFICATIONS			
Sample Location	IN or OUT	IN		IN		WEIGHT	ppg
Time Sample Taken	hrs	9:30		23:00		API Filtr	mi
Depth	m	1662		1671		HTHP	mi
Flowline Temp	°C	36		36		sec YP	lb/100 ft <sup>2</sup>
Weight	ppg	9.00		9.00		ml KCL	%
Funnel Viscosity	sec/qt	48		47		REMARKS	
Plastic Viscosity	cP	26		24		36 x 80 lb sacks cement.	
Yield Point	lb/100 ft <sup>2</sup>	16		14		2 x 50 lb HR7, 72 lb HR4, 67 lb CFR3.	
Gels 10 sec/10min/30 min	lb/100 ft <sup>2</sup>					Added BARACOR-129 to active for corrosion inhibition.	
API Filtrate	ml/30min	3.8		3.6		Mud chemicals arrived today.	
HPHT Filtrate	ml/30min					ACTIVITY	
API/HPHT Filter Cake	32nd ins	1/-		1/-		Take survey.	
Solids	% Vol	2.8		2.8		Pull Out of Hole.	
Dissolved Salts	% Vol	1.2		1.2		MU bit # 41. Change motor and MWD.	
Oil/Water Content	% Vol	-/96.0		-/96.0		Run In Hole to 1660 m. No Fill.	
Sand	% Vol	TR		TR		Circ. out gas cut mud. (3000 units)	
Methylene Blue cap	ppb	3		3		Motor drill 6" hole from 1660 to 1671 m.	
pH	meter	10.0		10.0		Pull Out of Hole.	
Alk. Mud Pm	ml	1.00		1.00		Change out MWD and adjust bent sub to 1.5.	
Alk. Filtrate, Pf/Mf	ml	0.20/0.55		0.20/0.50		Run In Hole.	
Chlorides	mg/Lx10 <sup>3</sup>	13.5		13.5			
Total Hardness/Calcium	mg/L	80/40		80/40			
KCL	% Wt Soln	2.7		2.7			
Sulfite Res.	mg/L	10		40			
Rheometer	600 rpm/300 rpm	68/42		62/38			
lb/100 ft <sup>2</sup>	200 rpm/100 rpm						
	6 rpm/3 rpm						

INVENTORY AND CONSUMPTION				MUD TYPE				CONSUMPTION			
PRODUCT DESCRIPTION	USED	REC	BAL	COST	KCL/Polymer				Additions		
BARACOR 1635L	205 lt		2	3	SOLIDS CONTROL EQUIPMENT				bbl		
PAC-R	50 lb		20	22	Make screen size hrs				Sea W.		
DEXTRID	25 kg		40	61	Shaker 1	80/100	9		Drill W.		
BARACARB 35	25 kg		48	48	Shaker 2				other		
BARADEFOAM W30i	25 lt	1	2	110.26	Shaker 3				other		
BARACOR-129	25 kg	2	16	142.66	Shaker 4				Barite		
BARACIDE	25 kg		2	2	ppg bbl/hr hrs bbl				Chemicals		
BARACARB 35	33.3 kg		48	48	Desander				Losses		
					Desilter				Sol. Con.		
					Mud Cleaner 2.				Lost/Dumped		
					Centrifuge 1				Down Hole		
					Centrifuge 2				Newhole		
					Solids Control Effic.				NET LOSS		
					%				Discharged		

BAROID Engineer		OFFICE	WAREHOUSE	DAILY COST	CUMULATIVE COST
Chris Wallace		MELBOURNE	ALICE SPRINGS	A\$ 252.92	A\$ 33462.05
Tel	03-6213311	03-6213311	089-525463		

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RESERVE PITS				SURVEY DATA				SOLIDS ANALYSIS				TIME BREAKDOWN		hrs
NO	TYPE	bbl	MD m	TVD m	INCL°	DIR°	DISP m	Low Grav. Solids	% Vol	1.6	ppb	Drilling		
1			1649.22	1630.97	37.9	227.1		Low Grav. Solids	ppb	14.6		Circulating		
2	TRIP	68	1658.19	1638.06	37.8	224.3		High Grav. Solids	% Vol	1.2		Reaming In		
3	KCl/Poly.							High Grav. Solids	ppb	17.5		Reaming out		
4								ASG of Solids	g/cc	3.30		Tripping		
5								Cuttings Volume	bbl	1.0		Motor		
6								Interval Dilution	bbl/m	1.8		Surveys		
7								Interval Consumption	bbl/m	2.0		Other		
8								AVE ROP				my/hr		



# Baroid Australia Pty Ltd

MUD REPORT NO. 54 up to 24:00 hrs, 21/1/95

DATE 22/1/95

DEPTH-m MD 1691 TVD

START DATE

29-Nov-94

ACTIVITY

Drilling

OPERATOR  
MAGELLAN PETROLEUM (N.T.) PTY. LTD.CONTRACTOR / RIG  
O.D. & E. Mereenie Rig 1

COUNTRY

AUSTRALIA

REPORT FOR

B. GRINKE

REPORT FOR

W. SCHAFER

TOWNSHIP

ALICE SPRINGS

WELL NAME AND NO.

PALM VALLEY-10 A

FIELD OR BLOCK NO.

O.L. 3 NORTHERN TERRITORY

LOCATION

AMADEUS BASIN

BIT DATA				DRILLING STRING				CASINGS				PUMP DATA			
Size	6.000 ins			OD ins	ID ins	Length m		Size ins	Depth m			Pump Make	ins x ins	Eff %	bbl/stk
Type	D331			Pipe 1	3.5	2.75	1287.1	Riser	Set @			EMSCO F800	6	9	97
Nozzles	32nds			Pipe 2	3.5	2.75	295.3	13 3/8"	Set @	18		EMSCO F800	6	9	97
	30	30	30	Pipe 3				9 5/8"	Set @	396.52					
				Col 1	4.75	2.25	108.6	7"	Set @	1451.55		Pump Press	2000 psi		TOTAL bbl/min
				Col 2					Set @						4.712
Noz Area	2.07 ins <sup>2</sup>			OPEN HOLE SECTIONS					Set @			MUD VOL	bbl	CIRCULATING DATA	
TFA	ins <sup>2</sup>			Sect 1					Set @			Downhole	175	Total circ	80 mins
NV	m/sec	9.3		Sect 2				Liner	Set @			Active	204	Bottoms up	29 mins
Impact	lb f	28		Current		6	239.5	Top @				Total Circ	379	Surface-bit	8 mins
												Reserve		ECD	ppg
														ERR	Riser

MUD PROPERTIES				MUD PROPERTY SPECIFICATIONS			
Sample Location	IN or OUT	IN	IN	WEIGHT	ppg	VIS	sec YP
Time Sample Taken	hrs	10:00	23:00	API Filtr	mi	HTHP	mi KCL
Depth	m	1683	1690	BY AUTHORITY			
Flowline Temp	°C	36	36	REMARKS			
Weight	ppg	9.05	9.00	36 x 80 lb sacks cement.			
Funnel Viscosity	sec/qt	42	39	2 x 50 lb HR7, 72 lb HR4, 67 lb CFR3.			
Plastic Viscosity	cP	17	16	Added BARACOR-129 to active for corrosion inhibition.			
Yield Point	lb/100 ft <sup>2</sup>	13	9				
Gels 10 sec/10min/30 min	lb/100 ft <sup>2</sup>						
API Filtrate	ml/30min	3.4	3.4				
HPHT Filtrate	ml/30min						
API/HPHT Filter Cake	32nd ins	1/-	1/-				
Solids	% Vol	2.8	2.8				
Dissolved Salts	% Vol	1.2	1.2				
Oil/Water Content	% Vol	-/96.0	-/96.0				
Sand	% Vol	TR	TR				
Methylene Blue cap	ppb	3	3	Ran centrifuge to reduce weight to 9 ppg.			
pH	meter	10.0	10.0				
Alk. Mud Pm	ml	0.70	0.70				
Alk. Filtrate, P/Mt	ml	0.20/0.65	0.20/0.60				
Chlorides	mg/Lx10 <sup>3</sup>	13.5	13.5				
Total Hardness/Calcium	mg/L	80/40	80/40				
KCL	% Wt Soln	2.7	2.7				
Sulfite Res.	mg/L	40	80				
Rheometer	600 rpm/300 rpm	47/30	41/25	ACTIVITY			
lb/100 ft <sup>2</sup>	200 rpm/100 rpm						
	6 rpm/3 rpm						

INVENTORY AND CONSUMPTION				MUD TYPE				CONSUMPTION			
PRODUCT DESCRIPTION	USED	REC	BAL	COST	KCL/Polymer				Additions		
BARACOR-129	25 kg	1	13	71.33	SOLIDS CONTROL EQUIPMENT				bbl		
					Make screen size hrs				Sea W.		
					Shaker 1	80/100	21		Drill W.		
					Shaker 2				other		
					Shaker 3				other		
					Shaker 4				Barite		
						ppg	bbl/hr	hrs	Chemicals		
					Desander				Losses		
					Desilter				Sol. Con.		
					Mud Cleaner 2.				Lost/Dumped		
					Centrifuge 1	14.5	1.1	3	Down Hole		
					Centrifuge 2				Newhole		
									NET LOSS		
									Discharged		

BAROID Engineer		OFFICE		WAREHOUSE		DAILY COST		CUMULATIVE COST	
Chris Wallace		MELBOURNE		ALICE SPRINGS		A\$ 71.33		A\$ 33533.38	
Tel. 03-6213311		03-6213311		089-525463					

THE RECOMMENDATIONS MADE HEREON SHALL NOT BE CONSTRUED AS AUTHORIZING THE INFRINGEMENT OF ANY VALID PATENT, AND ARE MADE WITHOUT ASSUMPTION OF ANY LIABILITY BY BAROID DRILLING FLUIDS, INC OR ITS AGENTS, AND ARE STATEMENTS OF OPINION ONLY.

RESERVE PITS				SURVEY DATA				SOLIDS ANALYSIS				TIME BREAKDOWN		hrs
NO	TYPE	bbl	MD m	TVD m	INCL°	DIR°	DISP m	Low Grav. Solids	% Vol	1.6		Drilling		
1			1667.8	1645.6	39.1	224.7		Low Grav. Solids	ppb	14.6		Circulating		
2								High Grav. Solids	% Vol	1.2		Reaming In		
3								High Grav. Solids	ppb	17.6		Reaming out		
4								ASG of Solids	g/cc	3.30		Tripping		
5								Cuttings Volume	bbl	2.0		Motor		
6								Interval Dilution	bbl/m	1.8		Surveys		
7								Interval Consumption	bbl/m	1.9		Other		
8												AVE ROP	m/hr	1.21

**Baroid Australia Pty Ltd**

**MUD REPORT NO.** 55 up to 24:00 hrs, 22/1/95

DATE 23/1/95

DEPTH—m	MD 1692	TVD
10.0		
10.1		
10.2		
10.3		
10.4		
10.5		
10.6		
10.7		
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23.0		
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23.4		
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23.7		
23.8		
23.9		
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24.1		
24.2		
24.3		
24.4		
24.5		
24.6		
24.7		
24.8		
24.9		

START DATE

<b>ACTIVITY</b>
-----------------

**Displace to Water.**

OPERATOR  
MAGELLAN PETROLEUM (N.T.) PTY. LTD.

**CONTRACTOR / RIG**  
O.D.& E. Meresenie Rig 1

COUNTRY

## AUSTRALIA

REPORT FOR

REPORT FOR

**TOWNSHIP**  
**ALICE SPRINGS**

WELL NAME AND NO.  
PALM VALLEY-10A

FIELD OR BLOCK NO.  
O.L. 3 NORTHERN TERRITORY

**LOCATION**

## AMADEUS BASIN

BIT DATA			DRILLING STRING			CASINGS		PUMP DATA							
Size 6.000 ins			OD ins	ID ins	Length m	Size ins	Depth m	Pump Make	ins x ins	Eff %	bbl/stk	spm	bbl/min		
Type ATJ55			Pipe 1	3.5	2.75	1372.5	Riser	Set @	EMSCO F800	6	9	97	0.076	56	4.256
Nozzles 32nds			Pipe 2	3.5	2.25	304.47	13 3/8"	Set @ 18	EMSCO F800	6	9	97	0.076		
30	30	30	Pipe 3				9 5/8"	Set @ 396.52							
			Col 1	4.75	2.25	15.02	7"	Set @ 1451.55	Pump Press 1900 psi	TOTAL bbl/min			4.256		
			Col 2				Set @		MUD VOL	bbl	CIRCULATING DATA				
Noz Area 2.07 ins²			OPEN HOLE SECTIONS					Set @	Downhole	176	Total circ 41 mins		AV m/min		
TFA ins²			Sect 1					Set @	Active		Bottoms up 32 mins		DP 56.2		
NV m/sec			Sect 2					Set @	Total Circ	176	Surface - bit 9 mins		DC 99.3		
Impact lb f 23			Current					Top @	Reserve	385	ECD ppg	ERR	Riser		

Sample Location		IN or OUT	MUD PROPERTIES		MUD PROPERTY SPECIFICATIONS					
Time Sample Taken	hrs	10:00		23:00	WEIGHT	ppg	VIS	sec	YP	lb/100 ft²
Depth	m	1692		1692	API Filt	ml	HTHP	ml	KCL	%
Flowline Temp	°C	36		36	<b>REMARKS</b> 36 x 80 lb cement. 2 x 50 lb HR7, 72 lb HR4, 67 lb CFR3.          Filled pits 4,5,6,7 & 8 with mud as hole was displaced to water in preparation for Air drilling..					
Weight	ppg	9.00		9.00						
Funnel Viscosity	sec/qt	41		39						
Plastic Viscosity	cP	17		18						
Yield Point	lb/100 ft²	11		9						
Gels 10 sec/10min/30 min	lb/100 ft²									
API Filtrate	ml/30min	3.6		3.6						
HPHT Filtrate	ml/30min									
API/HPHT Filter Cake	32nd ins	1/--		1/--						
Solids	% Vol	2.9		2.9						
Dissolved Salts	% Vol	1.1		1.1						
Oil/Water Content	% Vol	--/96.0		--/96.0						
Sand	% Vol	TR		TR						
Methylene Blue cap	ppb	3		3						
pH	meter	10.0		10.0						
Alk. Mud Pm	ml	0.70		0.65						
Alk. Filtrate, Pt/Mf	ml	0.20/0.60		0.20/0.60						
Chlorides	mg/Lx10³	13.0		13.0						
Total Hardness/Calcium	mg/L	80/40		80/40						
KCL	% Wt Soln	2.6		2.6						
Sulfite Res.	mg/L	80		80						
Rheometer	600 rpm/300 rpm	45/28		45/27						
lb/100 ft²	200 rpm/100 rpm									
	6 rpm/3 rpm									

INVENTORY AND CONSUMPTION					MUD TYPE KCL/Polymer					CONSUMPTION	
PRODUCT DESCRIPTION	USED	REC	BAL	COST	SOLIDS CONTROL EQUIPMENT					Additions	bbf
					Make	screen size	hrs			Sea W.	
					Shaker 1	80/100	9.5			Drill W.	182
					Shaker 2					other	
					Shaker 3					other	
					Shaker 4					Barite	
						ppg	bbf/hr	hrs	bbf	Chemicals	
					Desander					Losses	bbf
					Desilter					Sol. Con.	
					Mud Cleaner 2					Lost/Dumped	
					Centrifuge 1					Down Hole	
					Centrifuge 2					Newhole	
										NET GAIN	182
					Solids Control Effic.				%	Discharged	

BAROID Engineer		OFFICE	WAREHOUSE	DAILY COST	CUMULATIVE COST
Chris Wallace		MELBOURNE	ALICE SPRINGS	A\$ 0.00	A\$ 33533.38
Tel. 03-6213311		03-6213311	089-525463		

THE RECOMMENDATIONS MADE HEREON SHALL NOT BE CONSTRUED AS AUTHORIZING THE INFRINGEMENT OF ANY VALID PATENT, AND ARE MADE WITHOUT ASSUMPTION OF ANY LIABILITY BY BAROID DRILLING FLUIDS, INC OR ITS AGENTS, AND ARE STATEMENTS OF OPINION ONLY.

RESERVE PITS			SURVEY DATA					SOLIDS ANALYSIS			TIME BREAKDOWN		hrs
NO	TYPE	bbl	MD m	TVD m	INCL°	DIR °	DISP m	Low Grav. Solids	% Vol	1.6	Drilling		1.5
1								Low Grav. Solids	ppb	14.6	Circulating		1
2								High Grav. Solids	% Vol	1.3	Reaming In		7
3								High Grav. Solids	ppb	19.1	Reaming out		
4	KCl/Poly.	82						ASG of Solids	g/cc	3.30	Tripping		6
5	KCl/Poly.	82						Cuttings Volume	bbl		Motor		1
6	KCl/Poly.	77						Interval Dilution	bbl/m	1.8	BOP		5
7	KCl/Poly.	72						Interval Consumption	bbl/m	2.0	Other		2.5
8	KCl/Poly.	72									AVE ROP	m/hr	0.67





# Baroid Australia Pty Ltd

MUD REPORT NO. 57 up to 24:00 hrs, 24/1/95

DATE 25/1/95 DEPTH-m MD 1817 TVD

START DATE 29-Nov-94 ACTIVITY Air/Mist/Foam Drilling.

OPERATOR  
MAGELLAN PETROLEUM (N.T.) PTY. LTD.

CONTRACTOR / RIG  
O.D. & E. Mereenie Rig 1

REPORT FOR  
C. DAVISON

REPORT FOR  
W. SCHAFER

COUNTRY

AUSTRALIA

TOWNSHIP

ALICE SPRINGS

LOCATION

AMADEUS BASIN

WELL NAME AND NO.  
PALM VALLEY-10 A

FIELD OR BLOCK NO.  
O.L. 3 NORTHERN TERRITORY

BIT DATA				DRILLING STRING				CASINGS				PUMP DATA			
Size 6.000 ins				OD ins	ID ins	Length m		Size ins	Depth m	Pump Make	ins x ins	Eff %	bbl/stk	spm	bbl/min
Type ATJP55				Pipe 1	3.5	2.75	1495.4	Riser	Set @	EMSCO F80C	6	9	97	0.1781	600
Nozzles 32nds				Pipe 2	3.5	2.25	304.47	13 3/8"	Set @	EMSCO F80C	6	9	97	0.076	
30	30	30		Pipe 3				9 5/8"	Set @	396.52					
				Col 1	4.75	2.25	15.18	7"	Set @	1451.55	Pump Press	610 psi	TOTAL bbl/min		
				Col 2					Set @						106.86
Noz Area 2.07 ins <sup>2</sup>				OPEN HOLE SECTIONS					Set @	Downhole	199	Total circ	2 mins	AV	m/min
TFA ins <sup>2</sup>				Sect 1					Set @	Active		Bottoms up	1 mins	DP	1411.2
NV m/sec	211.4			Sect 2				Liner	Set @	Total Circ	199	Surface-bit	- mins	DC	2494.2
Impact lb f	14500			Current	6	355.5		Top @		Reserve	363	ECD ppg		ERR	Riser

MUD PROPERTIES				MUD PROPERTY SPECIFICATIONS			
Sample Location	IN or OUT	KILL		WEIGHT	ppg	VIS	sec YP
Time Sample Taken	hrs	9:30		API Filtr	ml	HTHP	ml KCL
Depth	m	1773		BY AUTHORITY			
Flowline Temp	°C			REMARKS			
Weight	ppg	9.00		36 X 80 lb cement.			
Funnel Viscosity	sec/qt	41		2 x 50 lb HR7, 72 lb HR4, 67 lb CFR3.			
Plastic Viscosity	cP	16		Reserve is 2.6 % KCl/Polymer kill mud.			
Yield Point	lb/100 ft <sup>2</sup>	10		Adding QUIK-FOAM @ 0.6 to 1 lpb, BARACOR 1635L @ 0.3 lpb.			
Gels 10 sec/10min/30 min	lb/100 ft <sup>2</sup>			Injection rate 8 to 13 bbl/hr at 2400 CFM.			
API Filtrate	ml/30min	3.6		40 sacks AQUAGEL used to seal flare pit and sump.			
HPHT Filtrate	ml/30min			Hydraulics calculations based on 600 ACFM to produce a			
API/HPHT Filter Cake	32nd ins	1/-		cuttings lag of 1 min.			
Solids	% Vol	2.9		ACTIVITY			
Dissolved Salts	% Vol	1.1		Air/Mist/Foam drill 6" hole from 1749 to 1773 m with surveys.			
Oil/Water Content	% Vol	-/96.0		Pull Out of Hole for bit change.			
Sand	% Vol	TR		Run In Hole to shoe. Cut drill line. RIH to 1711 m.			
Methylene Blue cap	ppb	3		Ream 1711 m and wash down.			
pH	meter	9.5		RIH to 1773 m. No Fill.			
Alk. Mud Pm	ml	0.60		Drill from 1773 to 1779 m with surveys.			
Alk. Filtrate, P1/Mf	ml	0.10/0.40		Attempt to seal & gel flare pit.			
Chlorides	mg/Lx10 <sup>3</sup>	13.0		Drill from 1779 to 1817 m with surveys.			
Total Hardness/Calcium	mg/L	80/40					
KCL	% Wt Soln	2.6					
Sulfite Res.	mg/L	10					
Rheometer	600 rpm/300 rpm	42/26					
lb/100 ft <sup>2</sup>	200 rpm/100 rpm						
	6 rpm/3 rpm						

INVENTORY AND CONSUMPTION					MUD TYPE KCL/Polymer				CONSUMPTION	
PRODUCT DESCRIPTION	USED	REC	BAL	COST	SOLIDS CONTROL EQUIPMENT				Additions	bbl
QUIK-FOAM	205 lt	1	11	542.31	Make	screen size	hrs		Sea W.	
AQUAGEL, sx	25 kg	40	23	596	Shaker 1				Drill W.	165
					Shaker 2				other	
					Shaker 3				other	
					Shaker 4				Barte	
					ppg	bbl/hr	hrs	bbl	Chemicals	4
					Desander				Losses	bbl
					Desilter				Sol. Con.	
					Mud Cleaner 2.				Lost/Dumped	166
					Centrifuge 1				Down Hole	
					Centrifuge 2				Newhole	8
									NET GAIN	3
					Solids Control Effic.		%		Discharged	166

BAROID Engineer		OFFICE	WAREHOUSE	DAILY COST		CUMULATIVE COST	
Chris Wallace		MELBOURNE	ALICE SPRINGS	A\$ 1138.31		A\$ 35214.00	
Tel. 03-6213311		03-6213311	089-525463				

THE RECOMMENDATIONS MADE HEREON SHALL NOT BE CONSTRUED AS AUTHORIZING THE INFRINGEMENT OF ANY VALID PATENT, AND ARE MADE WITHOUT ASSUMPTION OF ANY LIABILITY BY BAROID DRILLING FLUIDS, INC OR IT'S AGENTS, AND ARE STATEMENTS OF OPINION ONLY.

RESERVE PITS				SURVEY DATA				SOLIDS ANALYSIS				TIME BREAKDOWN		hrs
NO	TYPE	bbl	MD m	TVD m	INCL °	DIR °	DISP m	Low Grav. Solids	% Vol	1.6		Drilling		13
1			1743.31	1696.72	51.9	226.5		Low Grav. Solids	ppb	14.6		Circulating		
2			1771.27	1713.58	53.9	226		High Grav. Solids	% Vol	1.3		Reaming In		0.5
3	KCl/Poly.		1799.49	1729.79	56	225		High Grav. Solids	ppb	19.1		Reaming out		
4	KCl/Poly.	75						ASG of Solids	g/cc	3.30		Tripping		5.5
5	KCl/Poly.	75						Cuttings Volume	bbl	8.0		Survey		2.5
6	KCl/Poly.	71						Interval Dilution	bbl/m	1.8		Motor		0.5
7	KCl/Poly.	71						Interval Consumption	bbl/m	2.0		Other		2
8	KCl/Poly.	71										AVE ROP	m/hr	5.23













# Baroid Australia Pty Ltd

MUD REPORT NO. 62 up to 24:00 hrs, 29/1/95

DATE 30/1/95

DEPTH-m MD 2105 TVD

START DATE

29-Nov-94

ACTIVITY

Drilling

**OPERATOR**

MAGELLAN PETROLEUM (N.T.) PTY. LTD.

**CONTRACTOR / RIG**

O.D. &amp; E. Meresenie Rig 1

**COUNTRY**

AUSTRALIA

**REPORT FOR**

C. DAVISON

**REPORT FOR**

W. SCHAFER

**TOWNSHIP**

ALICE SPRINGS

**WELL NAME AND NO.**

PALM VALLEY-10 A

**FIELD OR BLOCK NO.**

O.L. 3 NORTHERN TERRITORY

**LOCATION**

AMADEUS BASIN

BIT DATA			DRILLING STRING			CASINGS			PUMP DATA		
Size	6.000 ins		OD ins	ID ins	Length m	Size ins	Depth m		Pump Make	ins x ins	Eff % bbl/stk spm bbl/min
Type	ATJP55D		Pipe 1	3.5	2.75	1780.1	Riser	Set @	EMSCO F800	6 9	97 0.1781 650 115.76
Nozzles	32nds		Pipe 2	3.5	2.25	304.47	13 3/8"	Set @	EMSCO F800	6 9	97 0.076
	30 30 30		Pipe 3				9 5/8"	Set @			
			Col 1	4.75	2.25	20.46	7"	Set @	Pump Press 580 psi		TOTAL bbl/min 115.76
			Col 2					Set @			
Noz Area	2.07 ins <sup>2</sup>		OPEN HOLE SECTIONS					Set @	Downhole	217	Total circ 3 mins AV m/min
TFA	ins <sup>2</sup>		Sect 1					Set @	Active	156	Bottoms up 1 mins DP 1528.8
NV m/sec	229.0		Sect 2				Liner	Set @	Total Circ	373	Surface-bit - mins DC 2702.1
Impact lb f	17017		Current	6	653.5			Top @	Reserve	344	ECD ppq ERR Riser

MUD PROPERTIES			MUD PROPERTY SPECIFICATIONS		
Sample Location	IN or OUT		WEIGHT	ppg	sec YP
Time Sample Taken	hrs		API Filtr	ml	HTHP
Depth	m		BY AUTHORITY		
Flowline Temp	°C		REMARKS		
Weight	ppg		36 x 80 lb cement.		
Funnel Viscosity	sec/qt		2 x 50 lb HR7, 72 lb HR4, 67 lb CFR3.		
Plastic Viscosity	cP				
Yield Point	lb/100 ft <sup>2</sup>				
Gels 10 sec/10min/30 min	lb/100 ft <sup>2</sup>		Mix 300 bbl logging pill.		
API Filtrate	ml/30min				
HPHT Filtrate	ml/30min				
API/HPHT Filter Cake	32nd ins				
Solids	% Vol		Adding QUIK-FOAM @ 1.5 lpb, BARACOR 1635L @ 0.3 lpb.		
Dissolved Salts	% Vol		Injection rate 8 bbl/hr at 2400 CFM.		
Oil/Water Content	% Vol				
Sand	% Vol				
Methylene Blue cap	ppb				
pH	meter				
Alk. Mud Pm	ml		ACTIVITY		
Alk. Filtrate, Pt/Mf	ml		Drill 6" hole from 2035 to 2040 m.		
Chlorides	mg/Lx10 <sup>3</sup>		Circ. and work string.		
Total Hardness/Calcium	mg/L		Flow test well.		
KCL	% Wt Soln		Drill from 2040 to 2079 with surveys.		
Sulfite Res.	mg/L		Circ. and clean hole.		
			Pull Out of Hole for bit and BHA change.		
			RIH Bit # 47 to shoe.		
			BOP drill. RIH to bottom. Hole good.		
			Drill from 2079 to 2105 m.		
Rheometer	600 rpm/300 rpm				
lb/100 ft <sup>2</sup>	200 rpm/100 rpm				
	6 rpm/3 rpm				

INVENTORY AND CONSUMPTION					MUD TYPE			CONSUMPTION	
PRODUCT DESCRIPTION	USED	REC	BAL	COST	KCL/Polymer			Additions	bbl
KCL, Tech(sx)	25 kg	11	89	158.84	SOLIDS CONTROL EQUIPMENT			Sea W.	
PAC-R	50 lb	4	18	521.88	Make screen size hrs			Drill W.	90
DEXTRID	25 kg	12	49	583.32	Shaker 1			other	
BARACOR-129	25 kg	2	11	142.66	Shaker 2			other	
					Shaker 3			Barite	
					Shaker 4			Chemicals	3
					ppg bbl/hr hrs bbl			Losses	bbl
					Desander			Sol. Con.	
					Desilter			Lost/Dumped	90
					Mud Cleaner 2			Down Hole	
					Centrifuge 1			Newhole	8
					Centrifuge 2			NET GAIN	3
					Solids Control Effic. %			Discharged	90

BAROID Engineer			OFFICE		WAREHOUSE			DAILY COST		CUMULATIVE COST	
Chris Wallace			MELBOURNE		ALICE SPRINGS			A\$ 1406.70		A\$ 38796.52	
Tel. 03-6213311			03-6213311		089-525463						

THE RECOMMENDATIONS MADE HEREON SHALL NOT BE CONSTRUED AS AUTHORIZING THE INFRINGEMENT OF ANY VALID PATENT, AND ARE MADE WITHOUT ASSUMPTION OF ANY LIABILITY BY BAROID DRILLING FLUIDS, INC OR IT'S AGENTS, AND ARE STATEMENTS OF OPINION ONLY.

RESERVE PITS			SURVEY DATA					SOLIDS ANALYSIS			TIME BREAKDOWN		hrs
NO	TYPE	bbl	MD m	TVD m	INCL°	DIR°	DISP m	Low Grav. Solids	% Vol	1.4	Drilling		12
1			2046.19	1862.39	53.75	219.5		Low Grav. Solids	ppb	12.7	Circulating		2
2								High Grav. Solids	% Vol	1.3	Reaming In		
3								High Grav. Solids	ppb	19.1	Reaming out		
4	KCl/Poly.	77						ASG of Solids	g/cc	3.40	Tripping		6
5	KCl/Poly.	77						Cuttings Volume	bbl	8.0	Dev. Survey.		1
6	KCl/Poly.	77						Interval Dilution	bbl/m	1.8	DST		2
7	KCl/Poly.	71						Interval Consumption	bt/m	2.1	Other		1
8	KILL	42									AVE ROP	m/hr	5.83





# Baroid Australia Pty Ltd

MUD REPORT NO. 64 up to 24:00 hrs, 31/1/95

DATE 1/2/95 DEPTH-m MD 2199 TVD

START DATE 29-Nov-94 ACTIVITY Nipple Up BOP.

OPERATOR  
MAGELLAN PETROLEUM (N.T.) PTY. LTD.

CONTRACTOR / RIG  
O.D. & E. Mereneie Rig 1

REPORT FOR  
C. DAVISON

REPORT FOR  
W. SCHAFER

COUNTRY  
AUSTRALIA  
TOWNSHIP  
ALICE SPRINGS

WELL NAME AND NO.  
PALM VALLEY-10 A

FIELD OR BLOCK NO.  
O.L. 3 NORTHERN TERRITORY

LOCATION  
AMADEUS BASIN

BIT DATA				DRILLING STRING			CASINGS			PUMP DATA						
Size 6.000 ins				OD ins	ID ins	Length m	Size ins	Depth m		Pump Make	ins x ins		Eff %	bbl/stk	spm	bbl/min
Type ATJ55				Pipe 1	3.5	2.75	1874.1	Riser	Set @	EMSCO F800	6	9	97	0.1781		
Nozzles 32nds				Pipe 2	3.5	2.25	304.47	13 3/8"	Set @	EMSCO F800	6	9	97	0.076		
30	30	30		Pipe 3				9 5/8"	Set @	396.52						
				Col 1	4.75	2.25	20.48	7"	Set @	1451.55	Pump Press - psi		TOTAL bbl/min			
				Col 2					Set @		MUD VOL	bbl	CIRCULATING DATA			
Noz Area 2.07 ins²				OPEN HOLE SECTIONS					Set @	Downhole	227	Total circ - mins		AV m/min		
TFA ins²				Sect 1					Set @	Active	162	Bottoms up - mins		DP		
NV m/sec				Sect 2				Liner	Set @	Total Circ	389	Surface-bit - mins		DC		
Impact lb f				Current		6	747.5		Top @	Reserve	339	ECD ppg	ERR	Riser		

MUD PROPERTIES				MUD PROPERTY SPECIFICATIONS			
Sample Location	IN or OUT		KILL	WEIGHT	ppg	VIS	sec YP
Time Sample Taken	hrs		17:30	API Filtr	ml	HTHP	ml KCL
Depth	m		2199	BY AUTHORITY			
Flowline Temp	°C			REMARKS			
Weight	ppg		9.00	36 x 80 lb cement. 2 x 50 lb HR7, 72 lb HR4, 67 lb CFR3.  Reserve is 3 % KCl/Polymer kill mud.			
Funnel Viscosity	sec/qt		56				
Plastic Viscosity	cP		28				
Yield Point	lb/100 ft <sup>2</sup>		21				
Gels 10 sec/10min/30 min	lb/100 ft <sup>2</sup>						
API Filtrate	ml/30min		3.8				
HPHT Filtrate	ml/30min						
API/HPHT Filter Cake	32nd ins		1/-				
Solids	% Vol		2.7				
Dissolved Salts	% Vol		1.3				
Oil/Water Content	% Vol		-/96.0				
Sand	% Vol		TR				
Methylene Blue cap	ppb		3				
pH	meter		9.5				
Alk. Mud Pm	ml		0.50	ACTIVITY			
Alk. Filtrate, Pt/Mf	ml		0.25/0.45	Cont. to Pull Out of Hole. Tight 1979 to 1949 m. Brk. bit & MU Bit # 48. RIH to 2169 m. Break circ. and blow well Wash and ream 2169 to 2181 m. Circ. hole clean. POH to change out rotating head. Tight @ 1949 m. POH. Nip. down and lay out oiltools rot. head and bluey line. Weld cracked line. Nipple down and re-weld.			
Chlorides	mg/Lx10 <sup>3</sup>		15.0				
Total Hardness/Calcium	mg/L		80/40				
KCL	% Wt Soln		3.0				
Sulfite Res.	mg/L		40				
Rheometer	600 rpm/300 rpm		77/49				
lb/100 ft <sup>2</sup>	200 rpm/100 rpm						
	6 rpm/3 rpm						

INVENTORY AND CONSUMPTION					MUD TYPE KCL/Polymer				CONSUMPTION	
PRODUCT DESCRIPTION	USED	REC	BAL	COST	SOLIDS CONTROL EQUIPMENT				Additions	bbl
					Make	screen size	hrs		Sea W.	
					Shaker 1				Drill W.	1
					Shaker 2				other	
					Shaker 3				other	
					Shaker 4				Bante	
						ppg	bbl/hr	hrs	Chemicals	
					Desander				Losses	bbl
					Desilter				Sol. Con.	
					Mud Cleaner 2				Lost/Dumped	
					Centrifuge 1				Down Hole	
					Centrifuge 2				Newhole	
									NET GAIN	1
					Solids Control Effic.		%		Discharged	

BAROID Engineer		OFFICE	WAREHOUSE	DAILY COST	CUMULATIVE COST
Chris Wallace		MELBOURNE	ALICE SPRINGS	A\$ 0.00	A\$ 39338.83
Tel. 03-6213311		03-6213311	089-525463		

THE RECOMMENDATIONS MADE HEREON SHALL NOT BE CONSTRUED AS AUTHORIZING THE INFRINGEMENT OF ANY VALID PATENT, AND ARE MADE WITHOUT ASSUMPTION OF ANY LIABILITY BY BAROID DRILLING FLUIDS, INC OR IT'S AGENTS, AND ARE STATEMENTS OF OPINION ONLY.

RESERVE PITS			SURVEY DATA				SOLIDS ANALYSIS			TIME BREAKDOWN	
NO	TYPE	bbl	MD m	TVD m	INCL °	DIR °	DISP m	Low Grav. Solids	% Vol	Drilling	hrs
1								Low Grav. Solids	ppb 12.7	Circulating	1
2								High Grav. Solids	% Vol 1.3	Reaming in	0.5
3								High Grav. Solids	ppb 19.1	Reaming out	
4	KCl/Poly.	77						ASG of Solids	g/cc 3.40	Tripping	11.5
5	KCl/Poly.	77						Cuttings Volume	bbl	Nipple up BOP	9.5
6	KCl/Poly.	73						Interval Dilution	bbl/m 1.8	BHA	1
7	KCl/Poly.	71						Interval Consumption	bbl/m 2.0	Other	0.5
8	KILL	41									AVE ROP m/hr



**MUD REPORT NO.** 65 up to 24:00 hrs, 1/2/95

DATE 2/2/95

DEPTH--m MD 2243 TVD

START DATE

### ACTIVITY

29-Nov-94

### Pull Out of Hole

**OPERATOR**

**CONTRACTOR / RIG**

MAGELLAN PETROLEUM (N.T.) PTY. LTD.

O.D. & E. Mereneie Rig 1

REPORT FOR

REPORT FOR

C. DAVISON

W. SCHAFFER

WELL NAME AND NO.

FIELD OR BLOCK NO.

PALM VALLEY-10 A

O.L. 3 NORTHERN TERRITORY

<b>COUNTRY</b>	
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## AUSTRALIA

TOWNSHIP

ALICE SPRINGS

<b>LOCATION</b>	LAKE CHARLES, MISSISSIPPI
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### AMADEUS BASIN

BIT DATA			DRILLING STRING			CASINGS			PUMP DATA						
Size	6.000 ins		OD ins	ID ins	Length m	Size ins	Depth m	Pump Make	ins x ins	Eff %	bbl/stk	sprn	bbl/min		
Type	ATJ55		Pipe 1	3.5	2.75	1918.1	Riser	Set @	EMSCO F800	6	9	97	0.1781	650	115.76
Nozzles	32nds		Pipe 2	3.5	2.25	304.47	13 3/8"	Set @	18	EMSCO F800	6	9	97	0.076	
30	30	30	Pipe 3				9 5/8"	Set @	396.52						
			Col 1	4.75	2.25	20.46	7"	Set @	1451.55	Pump Press	500 psi	TOTAL bbl/min		115.76	
			Col 2				Set @			MUD VOL	bbl	CIRCULATING DATA			
Noz Area	2.07 ins²		OPEN HOLE SECTIONS					Set @	Downhole	231	Total circ 3 mins		AV	m/min	
TFA	ins²		Sect 1					Set @	Active	162	Bottoms up 2 mins		DP	1528.8	
NV m/sec	229.0		Sect 2				Liner	Set @	Total Circ	393	Surface-bit - mins		DC	2702.1	
Impact lb f	17017		Current					Top @	Reserve	336	ECD ppg		ERR	Riser	

## MUD PROPERTIES

### MUD PROPERTY SPECIFICATIONS

Sample Location	IN or OUT	KILL				WEIGHT	ppg	VIS	sec	YP	lb/100 ft²
Time Sample Taken	hrs	9:30				API Filt	ml	HTHP	ml	KCL	%
Depth	m	2200				BY AUTHORITY					
Flowline Temp	°C					REMARKS					
Weight	ppg	9.00				35 x 80 lb cement.					
Funnel Viscosity	sec/qt	57				2 x 50 lb HR7, 72 lb HR4, 67 lb CFR3.					
Plastic Viscosity	cP	29				Reserve is 3% KCl/Polymer kill mud.					
Yield Point	lb/100 ft²	21									
Gels 10 sec/10min/30 min	lb/100 ft²					Adding QUIK-FOAM @ 1.3 lpb, BARACOR 1635L @ 0.3 lpb. Injection rate 9 bbl/hr at 1600 CFM.					
API Filtrate	ml/30min	4.0									
HPHT Filtrate	ml/30min					ACTIVITY					
API/HPHT Filter Cake	32nd ins	1/-									
Solids	% Vol	2.7									
Dissolved Salts	% Vol	1.3									
Oil/Water Content	% Vol	-/96.0									
Sand	% Vol	TR									
Methylene Blue cap	ppb	3									
pH	meter	9.5									
Alk. Mud Pm	ml	0.50									
Alk. Filtrate, Pt/Mt	ml	0.25/0.45									
Chlorides	mg/Lx10³	15.0				Cont. to fabricate bluey line and install rot. rubber.					
Total Hardness/Calcium	mg/L	80/40				RIH to shoe. Cut and slip.					
KCL	% Wt Soln	3.0				RIH. Wash and ream 2169 to 2199 m.					
Sulfite Res.	mg/L	40				Drill from 2199 to 2243 m with surveys.					
						Blow hole clean.					
						Pull Out of Hole.					
Rheometer	600 rpm/300 rpm	79/50									
lb/100 ft²	200 rpm/100 rpm										
	6 rpm/3 rpm										

## INVENTORY AND CONSUMPTION

PRODUCT DESCRIPTION		USED	REC	BAL	COST	MUD TYPE KCL/Polymer				CONSUMPTION		
QUICK-FOAM 205 lt		1		7	542.31	SOLIDS CONTROL EQUIPMENT				Additions	bbl	
						Make		screen size	hrs	Sea W.		
						Shaker 1				Drill W.	105	
						Shaker 2				other		
						Shaker 3				other		
						Shaker 4				Barite		
							ppg	bbl/hr	hrs	bbl	Chemicals	1
						Desander				Losses	bbl	
						Desilter				Sol. Con.		
						Mud Cleaner 2.				Lost/Dumped	104	
						Centrifuge 1				Down Hole		
						Centrifuge 2				Newhole	5	
										NET GAIN	2	
						Solids Control Effic.				%	Discharged	104

BAROID Engineer		OFFICE	WAREHOUSE	DAILY COST	CUMULATIVE COST
Chris Wallace		MELBOURNE	ALICE SPRINGS	A\$ 542.31	A\$ 39881.14
Tel 03-6213311		03-6213311	089-525463		

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RESERVE PITS			SURVEY DATA					SOLIDS ANALYSIS			TIME BREAKDOWN		hrs
NO	TYPE	bbl	MD m	TVD m	INCL°	DIR °	DISP m	Low Grav. Solids	% Vol	1.4	Drilling		11
1			2224.74	1974.67	49	221		Low Grav. Solids	ppb	12.7	Circulating		
2								High Grav. Solids	% Vol	1.3	Reaming In		2
3								High Grav. Solids	ppb	19.1	Reaming out		
4	KCl/Poly.	77						ASG of Solids	g/cc	3.40	Tripping		5
5	KCl/Poly.	77						Cuttings Volume	bbl	5.0	Nipple up BOP		3
6	KCl/Poly.	71						Interval Dilution	bbl/m	1.8	Survey.		1
7	KCl/Poly.	67						Interval Consumption	bbl/m	2.1	Other		2
8	KILL	44									AVE ROP	m/hr	4

**Baroid Australia Pty Ltd**

**MUD REPORT NO.** 66 up to 24:00 hrs, 2/2/95

DATE 3/2/95

DEPTH-m	MD 2311	TVD
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TVD

START DATE

## ACTIVITY

29-Nov-94

**Pull Out Of Hole.**

**OPERATOR**  
MAGELLAN PETROLEUM (N.T.) PTY. LTD.

**CONTRACTOR / RIG**  
O.D. & E. Mereenie Rig 1

COUNTRY

**AUSTRALIA**

**REPORT FOR**  
**C. DAVISON**

REPORT FOR  
W. SCHAFER

TOWNSHIP

ALICE SPRINGS

WELL NAME AND NO.  
PALM VALLEY-10A

FIELD OR BLOCK NO.  
O.L. 3 NORTHERN TERRITORY

LOCATION	
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**AMADEUS BASIN**

### BIT DATA

## DRILLING STRING

## CASINGS

### PUMP DATA

Size 6.000 ins	OD ins		ID ins	Length m	Size ins	Depth m	Pump Make	ins x ins	Eff %	bb/stk	spm	bb/min	
Type J55	Pipe 1	3.5	2.75	1986.1	Riser	Set @	EMSCO F800	6	9	97	0.1781	700	124.67
Nozzles 32nds	Pipe 2	3.5	2.25	304.47	13 3/8"	Set @	EMSCO F800	6	9	97	0.076		
30	30	30	Pipe 3		9 5/8"	Set @	396.52						
	Col 1	4.75	2.25	20.46	7"	Set @	1451.55	Pump Press	600 psi	TOTAL bbl/min		124.67	
	Col 2					Set @		MUD VOL bbl		CIRCULATING DATA			
Noz Area 2.07 ins²	OPEN HOLE SECTIONS					Set @	Downhole	238	Total circ 2 mins		AV	m/min	
TFA ins²	Sect 1					Set @	Active		Bottoms up 1 mins		DP	1646.4	
NV m/sec	Sect 2				Liner	Set @	Total Circ	238	Surface-bit – mins		DC	2909.9	
Impact lb ft	Current		6	859.5		Top @	Reserve	328	ECO ppg	ERR	Riser		

## MUD PROPERTIES

## MUD PROPERTY SPECIFICATIONS

Sample Location	IN or OUT	KILL	WEIGHT	ppg	VIS	sec	YP	lb/100 ft <sup>2</sup>
Time Sample Taken	hrs	20:30	API Filtr	ml	HTHP	ml	KCL	%
Depth	m	2310	BY AUTHORITY					
Flowline Temp	°C		REMARKS					
Weight	ppg	9.00	36 x 50 lb cement.					
Funnel Viscosity	sec/qt	50	2 x 50 lb HR7, 72 lb HR4, 67 lb CFR3.					
Plastic Viscosity	cP	22						
Yield Point	lb/100 ft <sup>2</sup>	15	Reserve is 3% KCl/Polymer kill mud.					
Gels 10 sec/10min/30 min	lb/100 ft <sup>2</sup>							
API Filtrate	ml/30min	3.8	Adding QUIK—FOAM @ 1.3 lpb, BARACOR 1635L @ 0.3 lpb.					
HPHT Filtrate	ml/30min		Injection rate 9 then 8 bbl/hr at 2400 CFM.					
API/HPHT Filter Cake	32nd ins	1/-						
Solids	% Vol	2.7						
Dissolved Salts	% Vol	1.3	XCD Polymer returned on report # 63 was determined					
Oil/Water Content	% Vol	-/96.0	not to be in a resalable condition.					
Sand	% Vol	TR						
Methylene Blue cap	ppb	3	Clean and dump bug infested pits # 1, 2, & 8.					
pH	meter	9.0						
Alk. Mud Pm	ml	0.50	ACTIVITY					
Alk. Filtrate, Pt/Mf	ml	0.10/0.20	Cont. to POH.					
Chlorides	mg/Lx10 <sup>3</sup>	15.0	Change bit and service BHA.					
Total Hardness/Calcium	mg/L	80/40	RIH to 2204 m. Tight.					
KCL	% Wt Soln	3.0	Wash and ream 2206 to 2243 m.					
Sulfite Res.	mg/L	10	Drill 6" hole from 2243 to 2311 m with surveys.					
			Blow well clean.					
			Pull Out Of Hole.					
Rheometer	600 rpm/300 rpm	59/37						
lb/100 ft <sup>2</sup>	200 rpm/100 rpm							
	6 rpm/3 rpm							

## INVENTORY AND CONSUMPTION

PRODUCT DESCRIPTION		USED	REC	BAL	COST	MUD TYPE KCL/Polymer				CONSUMPTION	
						SOLIDS CONTROL EQUIPMENT				Additions	bbf
						Make	screen size	hrs		Sea W.	
QUIK-FOAM	205 lt	1		6	542.31					Drill W.	130
BARACOR 1635L	205 lt	1		1	574.55					other	
XCD Polymer	25 kg	1	1		478.06	Shaker 1				other	
						Shaker 2				other	
						Shaker 3				Barite	
						Shaker 4				Chemicals	3
							ppg	bbf/hr	hrs	bbf	
						Desander				Losses	bbf
						Desilter				Sol. Con.	
						Mud Cleaner 2.				Lost/Dumped	296
						Centrifuge 1				Down Hole	
						Centrifuge 2				Newhole	8
										NET LOSS	163
						Solids Control Effic.		%		Discharged	296

**BAROID Engineer**

OFFICE

**WAREHOUSE**

### DAILY COST

**CUMULATIVE COST**

Chris Wallace  
03-6213311

MELBOURNE  
03-6213311

ALICE SPRINGS  
089-525463

**A\$ 1594.92**

**A\$ 41476.06**

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## RESERVE PITS

## SURVEY DATA

## SOLIDS ANALYSIS

### TIME BREAKDOWN

NO	TYPE	bbl	MD m	TVD m	INCL °	DIR °	DISP m	Low Grav. Solids	% Vol	1.4	Drilling	11.5
1			2271.9	2006.25	46.9	220		Low Grav. Solids	ppb	12.7	Circulating	
2								High Grav. Solids	% Vol	1.3	Reaming In	2.5
3								High Grav. Solids	ppb	19.1	Reaming out	
4	KCl/Poly.	88						ASG of Solids	g/cc	3.40	Tripping	7
5	KCl/Poly.	89						Cuttings Volume	bbl	8.0	BHA	1
6	KCl/Poly.	82						Interval Dilution	bb/m	1.9	Survey.	1.5
7	KCl/Poly.	69						Interval Consumption	bb/m	2.1	Other	0.5
8											AVE ROP	m/hr 5.91

**Baroid Australia Pty Ltd**

**MUD REPORT NO.** 67 up to 24:00 hrs, 3/2/95

DATE	4/2/95	DEPTH--m	MD 2343	TVD
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<b>START DATE</b> 29 - Nov - 94	<b>ACTIVITY</b> Displace to Mud.
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OPERATOR  
MAGELLAN PETROLEUM (N.T.) PTY. LTD.

**CONTRACTOR / RIG**  
O.D.& E. Mereenie Rig 1

**COUNTRY**  
**AUSTRALIA**

**REPORT FOR**  
**C. DAVISON**

REPORT FOR  
W. SCHAFER

**TOWNSHIP**  
**ALICE SPRINGS**

WELL NAME AND NO.  
PALM VALLEY-10 A

FIELD OR BLOCK NO.  
O.L. 3 NORTHERN TERRITORY

**LOCATION**  
AMADEUS BASIN

BIT DATA			DRILLING STRING			CASINGS		PUMP DATA							
Size 6.000 ins			OD ins	ID ins	Length m	Size ins	Depth m	Pump Make	ins x ins	Eff %	bbl/stk	spm	bbl/min		
Type ATPJ55D			Pipe 1	3.5	2.75	2018.1	Riser	Set @	EMSCO F800	6	9	97	0.1781	700	124.67
Nozzles 32nds			Pipe 2	3.5	2.25	304.47	13 3/8"	Set @	18	EMSCO F800	6	9	97	0.076	
30	30	30	Pipe 3				9 5/8"	Set @	396.52						
			Col 1	4.75	2.25	20.46	7"	Set @	1451.55	Pump Press	600 psi	TOTAL bbl/min			124.67
			Col 2					Set @		MUD VOL	bbl	CIRCULATING DATA			
Noz Area 2.07 ins²			OPEN HOLE SECTIONS					Set @	Downhole	241	Total circ 2 mins		AV m/min		
TFA ins²			Sect 1					Set @	Active		Bottoms up 2 mins		DP 1646.4		
NV m/sec 246.6			Sect 2				Liner	Set @	Total Circ	241	Surface-bit - mins		DC 2909.9		
Impact lb ft 19736			Current					Top @	Reserve	392	ECD ppg		ERR Riser		

Sample Location		IN or OUT	MUD PROPERTIES		MUD PROPERTY SPECIFICATIONS					
Time Sample Taken	hrs		KILL		WEIGHT	ppg	VIS	sec	YP	lb/100 ft <sup>3</sup>
Depth	m		17:30		API Filtr	ml	HTHP	ml	KCL	%
Flowline Temp	°C		2340		BY AUTHORITY					
Weight	ppg		9.00		REMARKS					
Funnel Viscosity	sec/qt		45		36 x 80 lb cement.					
Plastic Viscosity	cP		16		2 x 50 lb HR7, 72 lb HR4, 67 lb CFR3.					
Yield Point	lb/100 ft <sup>2</sup>		10		Reserve is 2.8 % KCl/Polymer kill mud.					
Gels 10 sec/10min/30 min	lb/100 ft <sup>2</sup>									
API Filtrate	ml/30min		4.8		Adding QUIK—FOAM @ 1.0 lpb, BARACOR 1635L @ 0.3 lpb.					
HPHT Filtrate	ml/30min				Injection rate 8 bbl/hr at 2400 CFM.					
API/HPHT Filter Cake	32nd ins		1/—							
Solids	% Vol		2.8		Added water to kill mud to increase volume.					
Dissolved Salts	% Vol		1.2		Added BARACOR 129 and BARACIDE to reserve ready for logging.					
Oil/Water Content	% Vol		—/96.0							
Sand	% Vol		TR							
Methylene Blue cap	ppb		3		ACTIVITY					
pH	meter		9.0		Cont. to POH for bit change.					
Alk. Mud Pm	ml		0.30		RtH bit # RR33 to 2244 m.					
Alk. Filtrate, Pf/Mf	ml		0.10/0.25		Wash and ream 2244 to 2256 m.					
Chlorides	mg/Lx10 <sup>3</sup>		14.0		RtH to 2291 m. Wash and ream to bottom.					
Total Hardness/Calcium	mg/L		80/40		Drill 6" hole from 2311 to 2343 m with surveys.					
KCL	% Wt Soln		2.8		Pump 40 bbl water pill then kill mud and circ. gas cut mud.					
Sulfite Res.	mg/L		50		Check mud pump and clean.					
Rheometer	600 rpm/300 rpm		42/26							
lb/100 ft <sup>2</sup>	200 rpm/100 rpm									
	6 rpm/3 rpm									

INVENTORY AND CONSUMPTION					MUD TYPE KCL/Polymar				CONSUMPTION	
PRODUCT DESCRIPTION		USED	REC	BAL	SOLIDS CONTROL EQUIPMENT				Additions	bbl
					Make	screen size	hrs		Sea W.	
BARACOR-129	25 kg	1		10						
BARACIDE	25 kg	1								
					Shaker 1	80/100	3		Drill W.	169
					Shaker 2				other	
					Shaker 3				other	
					Shaker 4				Barite	
						ppg	bbl/hr	hrs	bbl	Chemicals
					Desander					Losses bbl
					Desilter					Sol. Con.
					Mud Cleaner 2					Lost/Dumped 102
					Centrifuge 1					Down Hole
					Centrifuge 2					Newhole 4
									NET GAIN	67
					Solids Control Effic. %				Discharged	102

BAROID Engineer			OFFICE	WAREHOUSE	DAILY COST	CUMULATIVE COST
Chris Wallace			MELBOURNE	ALICE SPRINGS	A\$ 573.08	A\$ 42049.14
Tel	03-6213311		03-6213311	089-525463		

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RESERVE PITS														SURVEY DATA				SOLIDS ANALYSIS				TIME BREAKDOWN		hrs
NO	TYPE	bbl	MD m	TVD m	INCL°	DIR °	DISP m	Low Grav. Solids	% Vol	1.6	Drilling		12.5											
1			2328.13	2045.7	44	220		Low Grav. Solids	ppb	14.6	Circulating		2											
2								High Grav. Solids	% Vol	1.2	Reaming In		1.5											
3								High Grav. Solids	ppb	17.6	Reaming out													
4	KCl/Poly.	91						ASG of Solids	g/cc	3.30	Tripping		5.5											
5	KCl/Poly.	91						Cuttings Volume	bbl	4.0	BHA													
6	KCl/Poly.	85						Interval Dilution	bbl/m	1.9	Survey.		1.5											
7	KCl/Poly.	80						Interval Consumption	bbl/m	2.1	Other		1											
8	WATER	45									AVE ROP	m/hr	2.5											





**MUD REPORT NO.** 68 up to 24:00 hrs, 4/2/95

DATE 5/2/95

DEPTH-m	MD 2343	TVD
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START DATE

## ACTIVITY

29-Nov-94

### Logging.

COUNTRY	AUSTRALIA
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**TOWNSHIP**  
**ALICE SPRINGS**

**LOCATION**  
**AMADEUS BASIN**

MUD PROPERTIES			MUD PROPERTY SPECIFICATIONS				
Sample Location	IN or OUT	KILL	WEIGHT ppg VIS sec YP lb/100 ft <sup>3</sup>				
Time Sample Taken	hrs	10:30	API Filtr ml HTHP ml KCL %				
Depth	m	2343	BY AUTHORITY				
Flowline Temp	°C		REMARKS				
Weight	ppg	8.70	24 x 88 lb cement.				
Funnel Viscosity	sec/qt	38	2 1/2 x 50 lb CFR3, 1 x 50 lb HR4, Water damaged HR7.				
Plastic Viscosity	cP	5					
Yield Point	lb/100 ft <sup>2</sup>	5	Pumped 190 bbl 9 ppg mud with no returns.				
Gels 10 sec/10min/30 min	lb/100 ft <sup>2</sup>		Mix 75 bbl 8.9 ppg mud using KCl, PAC-R, DEXTRID,				
API Filtrate	ml/30min	6.8	and weighted with BARACARB 35..				
HPHT Filtrate	ml/30min		Pumped 60 bbl. No returns.				
API/HPHT Filter Cake	32nd ins	1/-	Mix 100 bbl 8.6 ppg mud with KCl, PAC-R, DEXTRID,				
Solids	% Vol	1.8	and BARACARB 35.				
Dissolved Salts	% Vol	1.2	Pump 35 bbl. No returns.				
Oil/Water Content	% Vol	-/97.0	Mix 50 bbl KCl for volume when POH.				
Sand	% Vol	TR	Add water while circ. to drop weight.				
Methylene Blue cap	ppb	2	Mix 50 bbl Hi-Vis pill with EZ-MUD.				
pH	meter	9.0					
Alk. Mud Pm	ml	0.10	ACTIVITY				
Alk. Filtrate, Pt/Mf	ml	0.10/0.15	Circ. 190 bbl 9 ppg mud. (Lost circ.)				
Chlorides	mg/Lx10 <sup>3</sup>	14.0	Mix 75 bbl 8.9 ppg mud.				
Total Hardness/Calcium	mg/L	80/40	Circ. 60 bbl 8.9 ppg mud. (Lost circ.)				
KCL	% Wt Soln	2.8	Mix 100 bbl 8.6 ppg mud.				
Sulfite Res.	mg/L	10	Circ. 35 bbl 8.6 ppg mud. (Lost circ.)				
			POH to shoe.				
			RIH to 2328 m. Tight hole.				
			Wash and ream 2328 to 2341 m.				
			Mix Hi-Vis pill. Pump and displace.				
			POH to log.				
Rheometer	600 rpm/300 rpm	15/10	Rig up Schlumberger.				
lb/100 ft <sup>2</sup>	200 rpm/100 rpm		Run #1:- FMS. Run #2:- DLT-MSFL-GR-AMS. Hole took 3 bbls.				
	6 rpm/3 rpm						

## INVENTORY AND CONSUMPTION

BAROID Engineer		OFFICE	WAREHOUSE	DAILY COST	CUMULATIVE COST
Chris Wallace		MELBOURNE	ALICE SPRINGS	<b>A\$ 2674.35</b>	<b>A\$ 44723.49</b>
Tel.	03-6213311	03-6213311	089-525463		

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