

# ESSO STANDARD OIL (AUSTRALIA) LTD

## DRILLING PROGRAM

DEPT. NAT. RES & ENV



PE905652

FIELD MARLIN WELL NAME A - 6 BOTTOM HOLE LOCATION 5352' S 52° E @ 15000' TVD

DRILLING SLOT 22 PROJECTED T.D. 15000' TVD TARGET DESCRIPTION 

TVD	DISTANCE OUT	SIZE
6900'	4600'	600' radius circle
8500'	5200'	" " "
15000'	6000'	" " "

PREPARED BY R.L. WOOD

DATE 1/7/68.

(M.D.) DEPTH	DRILLING TIME ESTIMATE, DAYS											BIT PROGRAM.					HYDRAULICS.				MUD PROPERTIES.								
	6	12	18	24	48	72	96	120	144	168			SIZE	TYPE	JETS	WEIGHT	RPM	OPERATION	LINER	STROKES	PRESSURE	RATE	WEIGHT	VISCOSITY	PV/YP	WATER LOSS	SOLIDS	OIL	TREATMENT
1000'												12 1/4"	OSC-3A		50	150-200	N1300	7 1/2"	68	2650	640	8.4	36	3/10			0	Spud w/sea water and salt gel. Treat out hardness w/1#/bbl. Soda Ash & 1 1/2#/bbl. Caustic	
2000'												17 1/2"	H.O.	2-12			(Use both pumps at 65 SPM for 17 1/2" hole for A.V. of 110)											0	Run desanders continuously. Use fresh water for make up below surface pipe. At 3000' add 25#/bbl.
3000'												12 1/4"	OSC-3A		50	150	N1300	7 1/2"	65	2800	608	8.8	5/15					0	At 3000' add 25#/bbl. bentonite, 6#/bbl. Lignosulfonate
4000'												12 1/4"	Hughes X	2-13	50	150	N1100	7"	65	2565	562		5/2					0	3#/bbl. CC-16, 1 1/2#/bbl. caustic and 1#/bbl. Soda Ash. Continue adding 7 sacks bentonite per 100'/hole or 25 sacks per day minimum.
5000'												ODV		1-14			(Nozzles are designed on 2800 psi)					9.5	7/2	6	8	0	0	Recommend Contract mud engineer below 3000' TVD.	
6000'												ODV		2-14	60	100	N-1300	7 1/2"	65	2600	608	10.0	10/2	6			0	Run HPHT @ 300° F and 300 psi.	
7000'												OSC or ODV		1-13	75						2700	10.0	12/4	5			0	To control Y.P., may be necessary to rebuild system with Barites & Bentonite.	
8000'												ODV		3-14						2650	10.0	16/	4	5	8	0	0	At first sign of temp. degradation of Lignosulfonate, convert to surfact system. Add 6#/bbl. DMS and 1/2#/bbl. Salt	
9000'												ODV		2-14	80		N-1300	7 1/2"	65	2675	2750	10.0	20/6	5			0		
10000'												ODV		1-15						2750	AV = 118 fps @ 608 GPM	10.0	40/20/6	5			10	0	
11000'												8 1/2"		3-11	60	70	N-1300 or N-1100	5 1/2"	65	2600	355	12.5	20/8	8	8	16	0		
12000'												ODV or As Req.								2700	AV = 185 fps @ 355 GPM								
13000'														1-12						2600									
14000'														2-11						2650									
15000'																													
16000'																													
17000'																													

**REMARKS**

- Use Baker 'F' drill pipe float on surface and intermediate hole.
- On first 12 1/4" bit, run 1-22/32 and 2-blank nozzles. To jet deflect have 3 engines on compound driving only N-1300 at 68 SPM. On first trip out change nozzles to above program and drive N-1300 at 65 SPM.
- All bits should have Hughes 'X' hardfacing on gage teeth.
- The major problems anticipated are differential sticking or swabbing atrobe on bit trips. Do not use oil in mud until hole problems dictate. Keep pipe moving at all times except for 1-2 minutes on surveys. Maintain Black Magic or equivalent on platform to spot around collars in the event of differential sticking.
- Stop pump and check for flow on all drilling breaks below 8500' TVD. Use mud logger to check for swabbing on trips.