

Company: Esso Australia Pty. Ltd.

Well: A7

Field: Tuna

Rig: Rig 22 / Prod 2 Country: Australia

2-7/8" PURE HSD Perforation
2782m to 2785m MDKB
MAXIS Operating System

Rig 22 / Prod 2
Tuna
Gippsland
A7
Esso Australia Pty. Ltd.

LOCATION			
Gippsland	Elev.: K.B. 32.1 m		
Basin	G.L. -59 m		
Bass Strait	D.F. 32.1 m		
Permanent Datum:	Mean Sea Level		
Log Measured From:	Kelly Bushing		
Drilling Measured From:	Kelly Bushing		

State: Victoria	Max. Well Deviation 57 deg	Longitude 148°25' 05.29"E	Latitude 38°10' 16.00"S
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Logging Date	10-Apr-2006			11-Apr-2006		
Run Number	1			3		
Depth Driller	2825 m			2825 m		
Schlumberger Depth	2809 m			2809 m		
Bottom Log Interval	2800 m			2785 m		
Top Log Interval	2713 m			2782 m		
Casing Fluid Type	Sea Water			Sea Water		
Salinity	120000 ppm			120000 ppm		
Density	1 g/cm3			1 g/cm3		
Fluid Level	0 m			0 m		
BIT/CASING/TUBING STRING						
Bit Size	8.500 in			8.500 in		
From	1897 m			1897 m		
To	2968.1 m			2968.1 m		
Casing/Tubing Size	4.500 in			4.500 in		
Weight	12.6 lbm/ft			12.6 lbm/ft		
Grade	L-80			L-80		
From	1750 m			1750 m		
To	2825 m			2825 m		
Maximum Recorded Temperatures	102 degC			102 degC		
Logger On Bottom	10-Apr-2006	Time	21:30	11-Apr-2006		13:54
Unit Number	Location			3827	AUSL	
Recorded By	S. Potisuwan, O. Tahmistic			S. Potisuwan, O. Tahmistic		
Witnessed By	Don Broomfield, Jimmy Dean			Don Broomfield, Jimmy Dean		

PVT DATA				Run 1	Run 2	
Oil Density						
Water Salinity				120000 ppm	120000 ppm	
Gas Gravity						
Bo						
Bw						
1/Bg						
Bubble Point Pressure						
Bubble Point Temperature						
Solution GOR						
Maximum Deviation				57 deg	57 deg	
CEMENTING DATA						
Primary/Squeeze				Primary	Primary	
Casing String No						
Lead Cement Type						
Volume						
Density						
Water Loss						
Additives						
Expected Cement Top						
Logging Date						
Run Number						
Depth Driller						
Schlumberger Depth						
Bottom Log Interval						
Top Log Interval						
Casing Fluid Type						
Salinity						
Density						
Fluid Level						
BIT/CASING/TUBING STRING						
Bit Size						
From						
To						
Casing/Tubing Size						
Weight						
Grade						
From						
To						
Maximum Recorded Temperatures						
Logger On Bottom			Time			
Unit Number		Location				
Recorded By						
Witnessed By						

Date Created: 17-APR-2006 1:57:45

Logging Cable

Type:	2-32ZT
Serial Number:	4202
Length:	6274.92 M
Conveyance Method:	Wireline
Rig Type:	Offshore Fixed

Log Sequence:	Subsequent Trip To the Well
Reference Log Name:	TUNA A7 Petrophysical Analysis
Reference Log Run Number:	
Reference Log Date:	
Subsequent Trip Down Log Correction:	

1. All Schlumberger Depth Control Policies followed.
2. Gamma Ray response used for correlation.
3. Correlated to reference log provided by Esso.
4. IDW used as Primary Depth Control.
5. Z-Chart used as Secondary Depth Control.
- 6.

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OTHER SERVICES2
OS1: Drift Run
OS2: RST-C Sigma Log
OS3:
OS4:
OS5:

REMARKS: RUN NUMBER 2

Log objectives: Perforate well from 2782 to 2785m MDKB
with 2-7/8" PURE HSD Gun

Correlated to "TUNA A7 Petrophysical Analysis".



















Gun used: 2-7/8" PURE HSD [2906 PJ Omega HMX Charges,
4.6 snf, 60 deg]

	4.0 spi, 60 deg]
	API RP 19B Data: Penetration = 36.0 in; Ent. Hole = 0.34 in.
	CCL to Top Shot = 3.46m
Tool string as per enclosed sketch.	CCL Stop Depth = 2778.55m MDKB
Well sketch copied from Workover Program (10-Feb-2006)	Actual Top Shot = 2782.01m MDKB
	Actual Bottom Shot = 2784.81m MDKB
Hang up depth = 2809m MDKB.	PURE design allowed only 2.8m from Top to Bottom Shot.
	42 HMX charges, 6 PURE punchers used in total
Day crew: B. Glover and S. McGee	Day crew: B. Glover and S. McGee
Night crew: D. Stuckey and S. Kiss	Night crew: D. Stuckey and S. Kiss
Performed by Schlumberger.	Performed by Schlumberger.

RUN 1			RUN 2		
SERVICE ORDER #: AUSL06185777			SERVICE ORDER #: AUSL06185777		
PROGRAM VERSION: 14C0-302			PROGRAM VERSION: 14C0-302		
FLUID LEVEL: 0 m			FLUID LEVEL: 0 m		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION					
RUN 1			RUN 2		

SURFACE EQUIPMENT			SURFACE EQUIPMENT		
WITM (SHM) 415			WITM (SHM) 415		

DOWNHOLE EQUIPMENT			DOWNHOLE EQUIPMENT		
MH-22 MH-22		12.97	MH-22 MH-22		12.97
AH-38		12.49	AH-38		12.49
EQF-43 EQF-43 281		12.40	EQF-43 EQF-43 281		12.40
PGGT-CC PGGC PGGH-A 136		10.57	PGGT-CC PGGC PGGH-A 136		10.57
Gamma Ray Casing Co Tension		___ 0.48 ___ TOOL ZERO	Gamma Ray Casing Co Tension		___ 0.48 ___ TOOL ZERO
AH-122		8.62	AH-122		8.62
AH-WPSA AH-WPSA 4001		8.48	AH-WPSA AH-WPSA 4001		8.48
AH-ESIC-H AH-ESIC-H 6		7.91	AH-ESIC AH-ESIC 16031932		7.91
AH-FiringHead		7.48	AH-FiringHead		7.48
SHM_GUN GUN-20ft_Dummy_Gun		7.33	SHM_GUN GUN-20ft_PURE_HSD_Gun		7.33

A diagram of a tool consisting of a long, thin vertical shaft and a small rectangular base. The base is labeled "TOOL BOTTOM" at the bottom. A small vertical line segment connects the base to the shaft.

0.99

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MAXIMUM STRING DIAMETER 2.88 IN
MEASUREMENTS RELATIVE TO TOOL ZERO
ALL LENGTHS IN METERS

17/4/2006

Rig Name: Rig 22

Elevation: 32.9 m

Elevation: 32.9 m

Elevation: 32.9 m

Production String			Well Schematic			Casing String			
	(in) OD	(in) ID MD				(m) MD	(in) OD	(in) ID	
						14.4 14.8	9.625 13.375	8.835 12.615	Casing String, 40.00 lbs/ft, K-55 Casing String, 54.50 lbs/ft, K-55
						735.5	13.375	12.615	Casing Shoe

<div>Bridge Plug</div>					1750.0	4.500	3.950	Casing String, 12.6 lbs/ft, L-80
					1750.0	9.625	4.500	Tie Back Extension
					1765.2	7.000	6.366	Casing String, 23.00 lbs/ft, K-55
					1765.2	9.625	7.000	Liner Hanger
					1897.0	9.625	8.835	Casing Shoe
					2305.0			Old Perforation, 2,305.0–2,309.0 mKB
					2709.0			Old Perforation, 2,709.0–2,715.0 mKB
					2782.0			New 2-7/8" PURE HSD Perforation 2782.0–2784.8 mKB
					2791.5			Old Perforation, 2791.5–2794 mKB
					2803.5			Old Perforation, 2,803.5–2806.0 mKB
					2809.0			Old Perforation, 2,809.0–2,815.5 mKB
					2825.0	4.500	3.950	Casing Shoe
					2825.0			Isolation, 2,050.0–2825.0 mKB
					2918.1	7.000	6.366	Casing Shoe
	7.000	0.000	2890.0					