

Company: Esso Australia Pty Ltd.

Well: A-3a

Field: Hailbut

Rig: CWU / Prod 2

Country: Australia

Gamma Ray Survey
2-1/8" Phased Enerjet
MAXIS Operating System

Rig: CWU / Prod 2
Field: Halibut
Location: Gippsland
Well: A-3a
Company: Esso Australia Pty Ltd.

LOCATION	
Gippsland	Elev.: K.B. 29.32 m
Basin	G.L. -73 m
Bass Strait	D.F. 29.32 m
Permanent Datum:	Mean Sea Level
Log Measured From:	Kelly Bushing
Drilling Measured From:	Kelly Bushing

State: Victoria	Max. Well Deviation 54 deg	Longitude 148°19' 07.62"E	Latitude 38°24' 20.36"S
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Logging Date	22-May-2006	23-May-2006	
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Run Number	1	2	
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Depth Driller	3060 m	3060 m	
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Schlumberger Depth	3062.2 m	not tagged	
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Bottom Log Interval	3061.7 m	3020 m	
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Top Log Interval	2915 m	3016.5 m	
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Casing Fluid Type	Production Fluids	Production Fluids	
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Salinity			
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Density	0.72 g/cm3		
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Fluid Level			
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BIT/CASING/TUBING STRING			
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Bit Size	6.625 in	6.625 in	
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From	2194 m	2194 m	
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To	3154 m	3154 m	
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Casing/Tubing Size	4.500 in	4.500 in	
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Weight	12.6 lbm/ft	12.6 lbm/ft	
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Grade	J-55	J-55	
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From	2050 m	2050 m	
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To	2862 m	2862 m	
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Maximum Recorded Temperatures	107 degC		
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Logger On Bottom	22-May-2006	23:35	23-May-2006
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Unit Number	3827	AUSL	3827
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Recorded By	O. Tahmisiic, P. Tarrant	O. Tahmisiic, P. Tarrant	
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Witnessed By	B. Woodward, M. Wilson	B. Woodward, M. Wilson	
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				Run 1	Run 2	
OIL DATA						
Oil Density						
Water Salinity						
Gas Gravity						
Bo						
Bw						
1/Bg						
Bubble Point Pressure						
Bubble Point Temperature						
Solution GOR						
Maximum Deviation				54 deg	54 deg	
CEMENTING DATA						
Primary/Squeeze				Primary	Primary	
Casing String No						
Lead Cement Type						
Volume						
Density						
Water Loss						
Additives						
Tail 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						
Unit Number						
Recorded By						
Witnessed By						

Run 4

Date Created: 26-MAY-2006 22:47:27

Type:	2-32ZT
Serial Number:	24031
Length:	2699.92 M
Conveyance Method:	Wireline
Rig Type:	Offshore Fixed











Log Sequence:	Subsequent Trip To the Well
Reference Log Name:	"HALIBUT A3A Correlation Logs"
Reference Log Run Number:	
Reference Log Date:	
Subsequent Trip Down Log Correction:	2.00 M

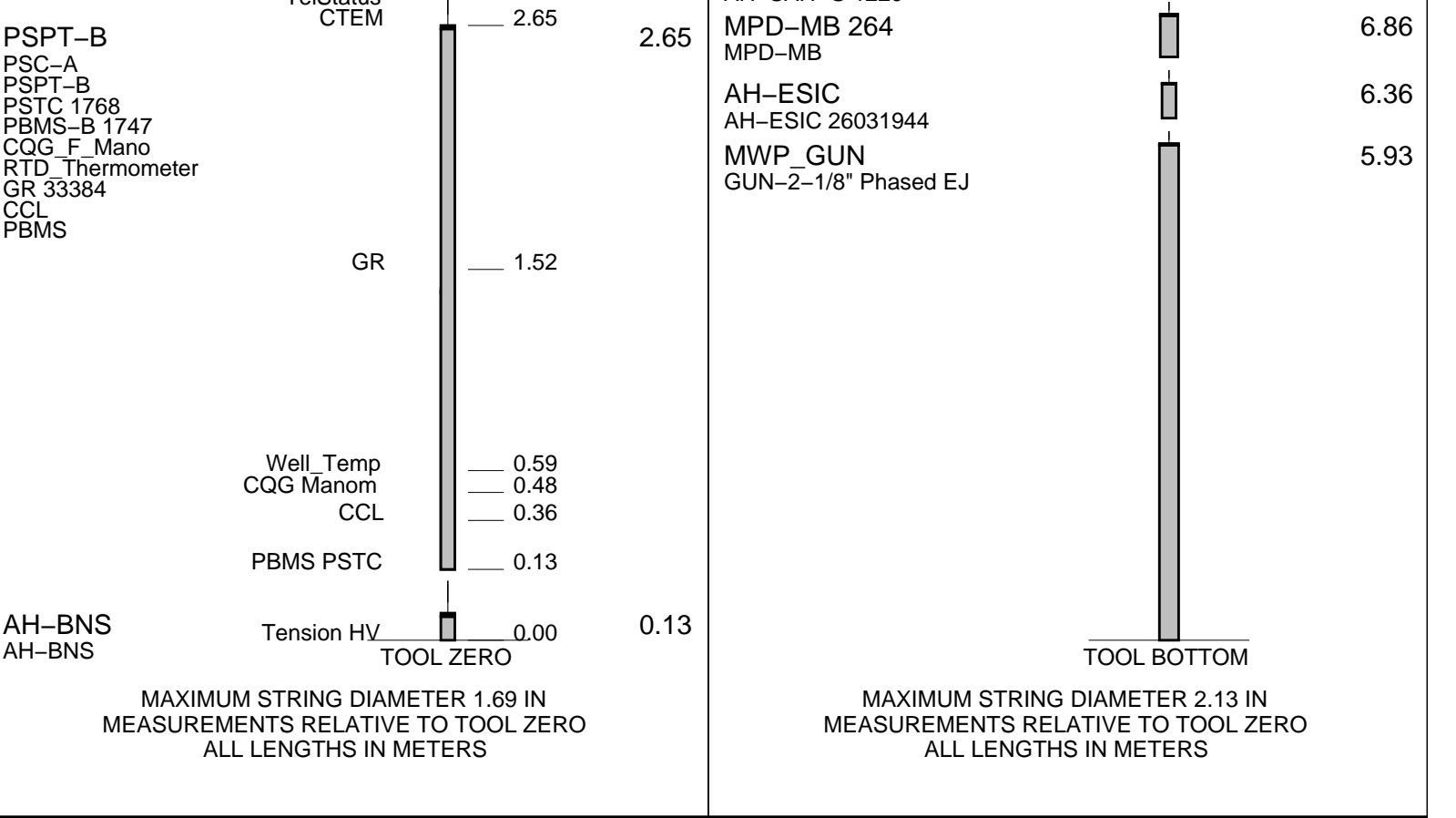
1. All Schlumberger Depth Control Policies followed.
2. Gamma Ray response used for correlation.
3. Correlation log provided by Esso.
4. IDW used as Primary Depth Control.
5. Z-Chart used as Secondary Depth Control.
- 6.

THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED-DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE OF AND RELIANCE UPON THE RECORDED-DATA; AND (c) CUSTOMER'S FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISION MADE IN CONNECTION WITH THE USE OF THIS RECORDED-DATA.

OS1: Gamma Ray Survey
OS2:
OS3:
OS4:
OS5:

underbalance and perforate the well and record BHP with MWPT for at least 10 minutes.

THP: 840 psi THT: 54 degF; BHP: 3450 psi BHT: 225 degF			by Esso. (no date provided)		
Pressure and temperature data gathered from PBMS sensors.			Gun used: 2-1/8" PowerSpirol HMX, 6spf, +/-45 deg		
Tool string as per enclosed sketch.			API Data:		
Well sketch copied out from workover program (5-May-2006)			Penetration: 27.2" Entrance Hole: 0.32"		
Hang Up Depth = 3062m MDKB			Top Shot = 3016.5m MDKB		
			CCL to Top Shot = 4.00m		
Main pass logged from 3062m to 2910m MDKB.			CCL Stop Depth = 3012.5m MDKB		
			Total Charges used = 70		
Day crew: B. Glover and N. Simmons			Day crew: B. Glover and N. Simmons		
Night crew: D. Stuckey and S. McGee			Night crew: D. Stuckey and S. McGee		
Performed by Schlumberger.			Performed by Schlumberger.		
<div>RUN 1</div> <div>SERVICE ORDER #: AUSL06185780</div> <div>PROGRAM VERSION: 14C0-302</div> <div>FLUID LEVEL:</div>			<div>RUN 2</div> <div>SERVICE ORDER #: AUSL06185780</div> <div>PROGRAM VERSION: 14C0-302</div> <div>FLUID LEVEL:</div>		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP
EQUIPMENT DESCRIPTION					
RUN 1			RUN 2		
SURFACE EQUIPMENT			SURFACE EQUIPMENT		
WITM-A 415 PSC_16MHZ			MWPM-AA 3005		
DOWNHOLE EQUIPMENT			DOWNHOLE EQUIPMENT		
<div>MH-SWHS-A</div> <div>MH-SWHS-A 754</div> <div>6.70</div> <div>  </div> <div>EQF-43</div> <div>EQF-43 201</div> <div>6.30</div> <div>  </div> <div>EQF-43</div> <div>EQF-43 281</div> <div>4.48</div> <div>  </div> <div>Detail MT</div>			<div>MH-SWHS-A</div> <div>MH-SWHS-A 754</div> <div>16.00</div> <div>  </div> <div>EQF-43</div> <div>EQF-43</div> <div>15.60</div> <div>  </div> <div>EQF-43</div> <div>EQF-43</div> <div>13.77</div> <div>  </div> <div>AH-124 VEA</div> <div>MWGT-AA</div> <div>MWPG-AA</div> <div>MWGH-BA</div> <div>MWPG GR</div> <div>2.41</div> <div>11.94</div> <div>11.73</div> <div>MWPT-CA</div> <div>MWPH-BA 10</div> <div>MWPS-BA 93</div> <div>10.75</div> <div>  </div> <div>CCL</div> <div>SMWP Pres</div> <div>SMWP Temp</div> <div>Tension</div> <div>TOOL ZERO</div> <div>AH-Tool Saver</div> <div>AH-Tool Saver 2</div> <div>7.93</div> <div>  </div> <div>AH-122</div> <div>7.39</div> <div>  </div> <div>AH-SAH-G</div> <div>7.26</div> <div>  </div>		



Client: Esso Australia Pty Ltd.

Well: A3a

Field: Halibut

State: Victoria





Country: Australia

Rig Name: CWU / Prod 2

Reference Datum: Mean Sea Level

Elevation: 29.3 m

Drawing Date: 5/27/2006

Production String	(in)		(m)	Well Schematic	(m)	(in)		Casing String
	OD	ID	MD		MD	OD	ID	
Tubing, 9.3 lbs/ft, J-55	3.500	2.992	12.0		11.8	10.750	10.050	Casing String, 40.05 lbs/ft, J-55 Casing String, 29.7 lbs/ft, L-80
					11.7	7.625	6.875	
Gas Lift Mandrel	3.500		724.4		533.1	10.750	10.050	Casing Shoe
Gas Lift Mandrel	3.500		1217.2					
Gas Lift Mandrel	3.500		1429.5					

Equipment	Top Depth (m)	Bottom Depth (m)	Depth (m)	Diagram	Weight (kg/m)	Length (m)	Notes
Packer	7.625	3.500	2011.0				
Nipple	3.500		2028.2				
Tubing Bottom	3.500	2.992	2036.1				
Tubing, 12.6 lbs/ft, J-55	4.500	3.958	2036.1				
Tubing Bottom	4.500		2046.1				
			2043.0		4.500	3.958	Casing String, 12.6 lbs/ft
			2043.0		7.625	4.500	Liner Hanger
			2194.0		7.625	6.875	Casing Shoe
			2951.7				Old Perforation Zone 2951.7 – 2954.9m MDKB
			2964.8				Old Perforation Zone 2964.8 – 2970.0m MDKB
			3016.5				Perforation Zone, 6.0 SPM, 70 3016.5 – 3020m MDKB 23-May-2006
Bridge Plug	4.500		3082.5				
			3104.0		4.500	3.958	Casing Shoe