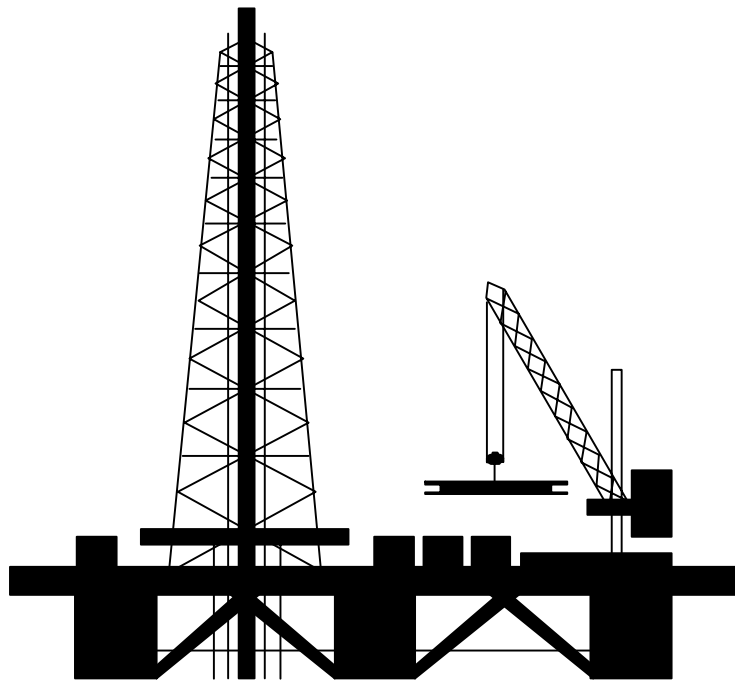




Woodside Energy Ltd.



Directional Drilling End of Well Report

Well : Halladale #1 DW2

Date: April 2005

HALLIBURTON
Sperry Drilling Services

Table of Contents

1. Well Summary
 2. Definitive Survey Report and A4 Plot
 3. Survey and Drilling Parameters
 4. BHA Data
 5. Motor Performance Reports
 6. Daily Directional Drilling Reports
-

Client : Woodside Energy Ltd.

Well Name : Halladale #1 DW-2

Job Objectives:

The objective of Halladale #1 DW-2 is to confirm the presence of gas in the Warre C and determine gas/water pressures in Warre C and Warre A+B reservoirs for the purpose of reserves determination and development decision making.

Summary of Results:

The 8 1/2" GeoPilot assembly performed to expectations, sidetracking from 853m and drilled to coring point at 1808m allowing for a tight tolerance to be maintained along the proposed wellpath. Coring point was picked at 1808m to 1835mMD by the Wellsite Geologist using the MWD Gamma data.

Whilst attempting to POOH with the GeoPilot assembly, a number of tight spots were encountered. Some backreaming was done on the trip out. A limit of 40 klbs overpull was set, but this was difficult to keep a handle on due to the 4m+ rig heave. However, the trip proved less troublesome than DW-1.

MWD hydraulic failure was experienced on the first run after drilling to 1514m MD.

After the coring run a simple rotary assembly with MWD was used to TD the well.

Discussion:

BHA Summary:

Run1: GP7600 sidetracked from 853m and drilled to 1514m MD POOH due to MWD detection.

Run2: GP7600 directional drilled to coring point at 1808m.

Run3: Coring run from 1808m to 1835m MD

Run4: Rotary FEWD BHA drilled remaining section to TD @ 1941m MD

BHA #	Bit #	Motor Run #	Hole Size (in)	MD In (m)	MD Out (m)	TVD In (m)	TVD Out (m)	Inc In (deg)	Inc Out (deg)	Azi In (deg)	Azi Out (deg)	Drlg hrs	Circ hrs
8	8	?	8.500	853	1514	853	1482	4.7	21.3	218	347	45	10
9	5rr1	?	8.500	1514	1808	1482	1755	21.3	21.3	347	343	32	4
10	?		8.500	1808	1835	1755	1780	21.3	20.9	343	344	6	3
11	6rr1		8.500	1835	1941	1780	1880	20.9	19.0	344	343	6	7

Table 1 - BHA Summary

Motor Run #	Manufacturer	Type	Lobe	OD (in)	Gauge (in)	Bend (deg)	Adj	DLS (Ori) (°/30m)	ROP (Ori) (m/hr)	ROP (Rot) (m/hr)
?	SSDS	GeoPilot	6/7	6.750		0.00	N		19	9
?	SSDS	GeoPilot	6/7	6.750		0.00	N		27	7

Table 2 - Motor Run Summary

Bit Run Summary:

Run1: SMT MA89B(TVPX) 6x16/32")

Run2: SDBS FMF 3553 (5 x 17/32")

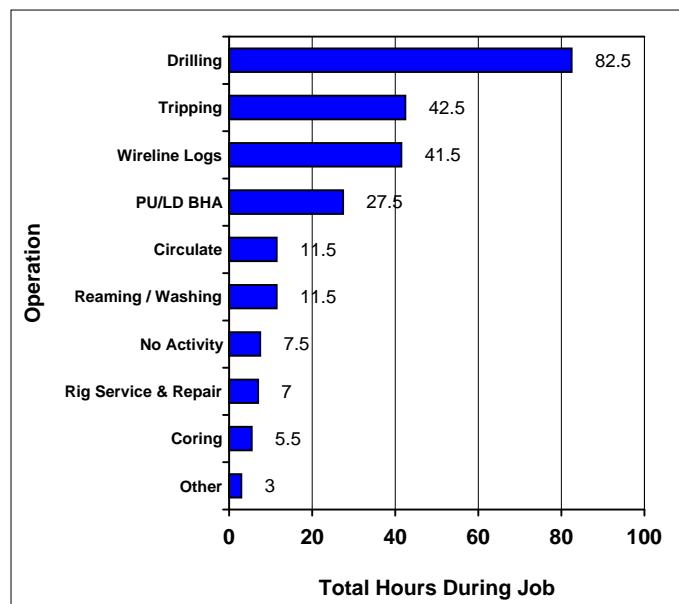
Run3: 8-1/2" Coring bit FC274LI

Run4: SDBS FMX 3653 (5x17/32", 1x18/32")

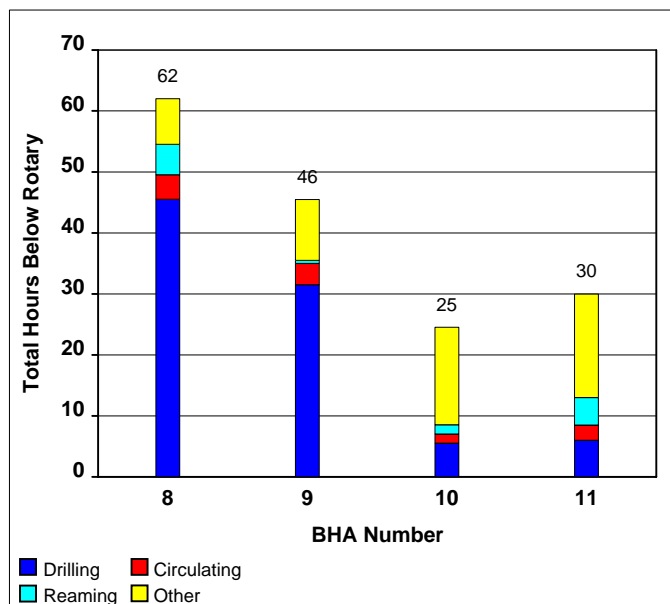
Bit #	Manufacturer	Style	OD (in)	Gge Len (in)	Nozzles (/32's)	TFA (in²)	Dull Grades I O D L B G O R	Ftge (m)	Drlg hrs	ROP (m/hr)
8	Smith	MA89BCTVPX	8.500	12.000	6x16	1.178	1-2-WT-A -X-I-CT-DTF	661	45.00	15
5rr1	DBS	FMF3553	8.500	11.250	5x17	1.108	1-1-WT-A -X-I-NO-CP	294	31.50	9
?	DBS	FC274LI	8.500			0.000		27	5.50	5
6rr1	DBS	FMX3653	8.500		5x17, 1x18	1.357	0-1-WT-S -X-I-NO-TD	106	6.00	18

Table 3 - Bit Run Summary

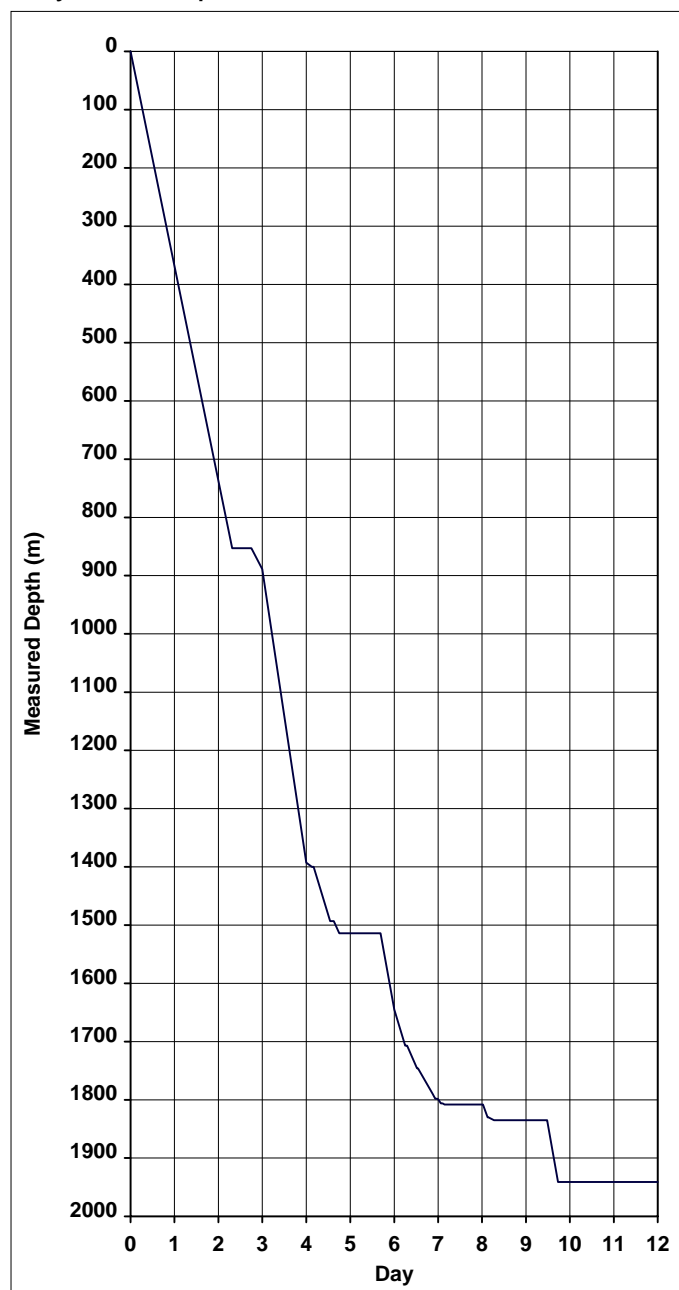
Hours by Operation Summary



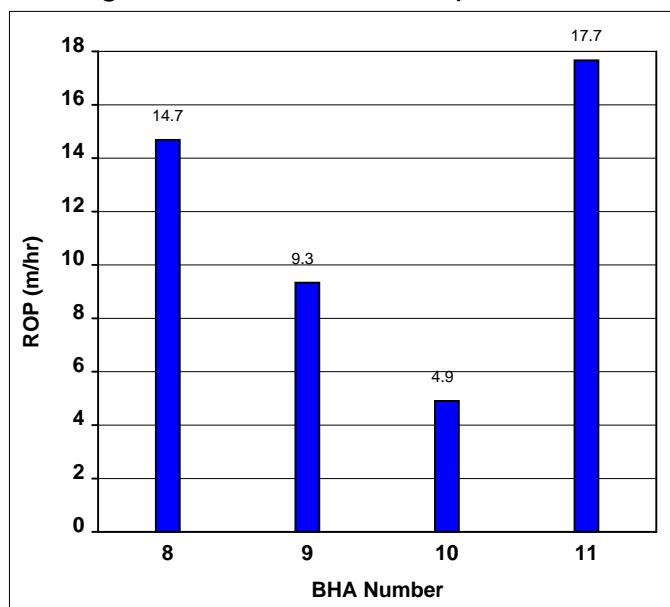
Hours per BHA Breakdown



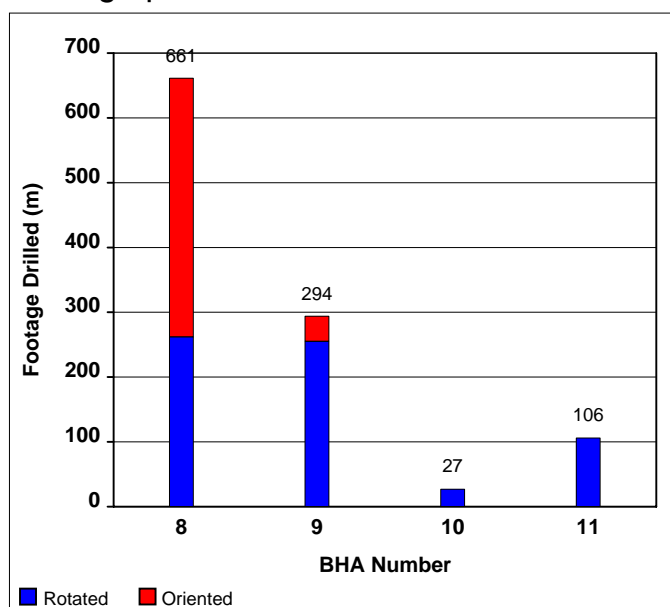
Days vs. Depth



Average Rate of Penetration per BHA



Footage per BHA



MD (m)	Formation Name MD/TVD	Inclination — DLS —	Bit Data	Drilling Parameters	Motor	BHA Stabilizers	Comments	BHA ID
0		0 5 10 15 20 25						@ 0
100								
200	Gellibrand Marl 206 / 810							
300								
400								
500	Clifton 499 / 810							
600	Narrawturk 509 / 810							
700	Mepunga 561 / 810							
800	Dilwyn 630 / 810							
900	Pember 802 / 810							
1000	Pebble Point 886 / 885							
1100	Parratte 948 / 947							
1200								
1300								
1400	Skull Creek 1386 / 1364							
1500								
1600	Nullawarre 1539 / 1505							
1700	Belfast 1591 / 1553							
1800	Flaxman 1750 / 1701							
1900	Waare A + B 1804 / 1751							
2000	Eumeralla 1870 / 1813							

Halliburton Company

Survey Report

Company: WOODSIDE ENERGY				Date: 24/05/2005		Time: 10:24:28		Page: 1		
Field: Otway Basin				Co-ordinate(NE) Reference:		Site: Halladale Exploration, Grid North				
Site: Halladale Exploration				Vertical (TVD) Reference:		SITE 21.5				
Well: Halladale				Section (VS) Reference:		Well (0.00N,0.00E,20.90Azi)				
Wellpath: Halladale 1 DW2 (Halladale-2)				Survey Calculation Method:		Minimum Curvature		Db: Sybase		
Field: Otway Basin South East Margin Australia										
Map System: Universal Transverse Mercator				Map Zone:		UTM Zone 54, South 138E to 144E				
Geo Datum: GDA94 - Australia (GRS80)				Coordinate System:		Site Centre				
Sys Datum: Mean Sea Level				Geomagnetic Model:		bggm2004				
Site: Halladale Exploration VICP37V South East Margin										
Site Position:		Northing: 5728485.20 m		Latitude:		38 34 45.538 S				
From: Map		Easting: 650763.20 m		Longitude:		142 43 50.947 E				
Position Uncertainty:		10.00 m		North Reference:		Grid				
Water Depth:		45.90 m		Grid Convergence:		-1.08 deg				
Well: Halladale 3 x subsurface targets penetrated 1 surface locn										
Well Position:		+N/-S 0.00 m		Northing: 5728485.20 m		Latitude:		38 34 45.538 S		
+E/-W 0.00 m		Easting : 650763.20 m		Longitude:		142 43 50.947 E				
Position Uncertainty:		5.00 m								
Wellpath: Halladale 1 DW2 (Halladale-2) Build & Hold; Sidetrack from Halladale-1				Drilled From:		Halladale 1 DW1 (Blackwatch-1)				
Current Datum: SITE				Tie-on Depth:		861.50 m				
Magnetic Data: 13/12/2004				Above System Datum:		Mean Sea Level				
Field Strength: 60824 nT				Declination:		10.89 deg				
Vertical Section: Depth From (TVD)				Mag Dip Angle:		-69.82 deg				
m				+N/-S		Direction		m		
				m		deg				
0.00				0.00		0.00		20.90		
Survey Program for Definitive Wellpath										
Date: 15/04/2005		Validated: No		Version: 9						
Actual From		To		Toolcode		Tool Name				
m		m								
0.00		413.76		17½" EMS (0.00-413.76) (2)		good magnetic		orig WdeW tool		
436.82		810.51		12¼" MWD + SAG (436.82-810.51)		SSMWD		Sperry-sun MWD		
852.56		1936.36		8.5 MWD Surveys (852.56-1936.3)		SSMWD		Sperry-sun MWD		
Survey										
MD	Incl	Azim	TVD	+N/-S	+E/-W	VS	DLS	Build	Turn	Tool/Comment
m	deg	deg	m	m	m	m	deg/30m	deg/30m	deg/30m	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	TIE LINE
66.30	0.00	0.00	66.30	0.00	0.00	0.00	0.000	0.000	0.000	good magnetic
103.40	0.44	6.73	103.40	0.14	0.02	0.14	0.359	0.359	0.000	30" Conductor
128.10	0.74	6.73	128.10	0.40	0.05	0.39	0.359	0.359	0.000	good magnetic
156.03	0.54	3.81	156.03	0.71	0.08	0.69	0.218	-0.215	-3.136	good magnetic
184.12	0.46	12.06	184.12	0.95	0.11	0.93	0.115	-0.085	8.811	good magnetic
206.00	0.59	7.99	205.99	1.15	0.14	1.12	0.185	0.178	-5.582	Gellibrand Marl
212.77	0.63	7.07	212.76	1.22	0.15	1.19	0.185	0.179	-4.072	good magnetic
241.48	0.51	359.79	241.47	1.50	0.17	1.46	0.146	-0.125	-7.607	good magnetic
270.27	0.49	358.43	270.26	1.75	0.17	1.70	0.024	-0.021	-1.417	good magnetic
298.97	0.46	348.09	298.96	1.99	0.14	1.91	0.095	-0.031	-10.808	good magnetic
327.62	0.81	2.30	327.61	2.30	0.12	2.20	0.399	0.366	14.880	good magnetic
356.37	0.61	10.58	356.36	2.66	0.16	2.54	0.234	-0.209	8.640	good magnetic
385.05	0.69	350.26	385.03	2.98	0.16	2.84	0.254	0.084	-21.255	good magnetic
413.76	0.70	346.34	413.74	3.32	0.09	3.13	0.051	0.010	-4.096	good magnetic
421.00	0.83	343.17	420.98	3.41	0.06	3.21	0.554	0.526	-13.152	13 3/8" Surface Casing
436.82	1.11	338.79	436.80	3.66	-0.02	3.41	0.554	0.537	-8.298	SSMWD
465.91	1.21	260.09	465.89	3.87	-0.43	3.47	1.519	0.103	-81.162	SSMWD
494.67	1.15	254.40	494.64	3.74	-1.01	3.14	0.137	-0.063	-5.935	SSMWD
499.00	1.19	254.72	498.97	3.72	-1.09	3.09	0.247	0.243	2.208	Clifton Fm
509.00	1.27	255.39	508.97	3.66	-1.30	2.96	0.247	0.243	2.005	Narrawaturk Marl
522.99	1.38	256.19	522.95	3.59	-1.61	2.77	0.247	0.244	1.722	SSMWD
552.40	1.33	268.81	552.35	3.49	-2.30	2.44	0.308	-0.051	12.873	SSMWD
561.50	1.27	267.84	561.45	3.49	-2.50	2.37	0.223	-0.211	-3.212	Mepunga
581.06	1.13	265.37	581.01	3.46	-2.91	2.20	0.223	-0.209	-3.782	SSMWD
609.44	1.26	275.79	609.38	3.47	-3.50	2.00	0.267	0.137	11.015	SSMWD

Halliburton Company

Survey Report

Company: WOODSIDE ENERGY	Date: 24/05/2005	Time: 10:24:28	Page: 2
Field: Otway Basin	Co-ordinate(NE) Reference:	Site: Halladale Exploration, Grid North	
Site: Halladale Exploration	Vertical (TVD) Reference:	SITE 21.5	
Well: Halladale	Section (VS) Reference:	Well (0.00N,0.00E,20.90Azi)	
Wellpath: Halladale 1 DW2 (Halladale-2)	Survey Calculation Method:	Minimum Curvature	Db: Sybase

Survey

MD m	Incl deg	Azim deg	TVD m	+N/-S m	+E/-W m	VS m	DLS deg/30m	Build deg/30m	Turn deg/30m	Tool/Comment
629.50	1.14	274.31	629.44	3.51	-3.92	1.88	0.183	-0.177	-2.217	Dilwyn
638.37	1.09	273.55	638.31	3.52	-4.09	1.83	0.183	-0.176	-2.562	SSMWD
667.10	1.36	258.51	667.03	3.47	-4.70	1.57	0.436	0.282	-15.705	SSMWD
695.51	2.10	241.02	695.43	3.15	-5.48	0.99	0.951	0.781	-18.469	SSMWD
724.03	2.15	237.24	723.93	2.61	-6.39	0.16	0.157	0.053	-3.976	SSMWD
752.64	2.88	218.67	752.51	1.76	-7.29	-0.96	1.138	0.765	-19.472	SSMWD
781.23	4.56	213.05	781.04	0.24	-8.36	-2.75	1.802	1.763	-5.897	SSMWD
801.50	4.58	213.24	801.24	-1.11	-9.24	-4.33	0.038	0.031	0.277	Pember
810.51	4.59	213.32	810.22	-1.71	-9.64	-5.04	0.038	0.031	0.275	SSMWD
833.80	4.67	216.12	833.44	-3.25	-10.71	-6.86	0.309	0.101	3.611	9 5/8" Intermediate Casin
852.56	4.74	218.31	852.14	-4.48	-11.64	-8.34	0.309	0.114	3.497	SSMWD
881.04	3.38	227.59	880.54	-5.97	-12.99	-10.21	1.586	-1.433	9.775	SSMWD
886.00	3.08	233.24	885.50	-6.15	-13.20	-10.45	2.629	-1.792	34.168	Pebble Point
909.54	2.36	275.21	909.01	-6.48	-14.19	-11.12	2.629	-0.922	53.489	SSMWD
938.46	2.99	330.60	937.90	-5.77	-15.16	-10.80	2.643	0.654	57.459	SSMWD
948.00	3.36	341.41	947.43	-5.29	-15.37	-10.42	2.217	1.177	34.006	Paaratte Fm
967.34	4.38	356.47	966.73	-4.01	-15.59	-9.31	2.217	1.576	23.355	SSMWD
996.06	7.12	4.58	995.30	-1.14	-15.52	-6.61	2.978	2.862	8.471	SSMWD
1024.96	9.29	0.02	1023.90	2.97	-15.38	-2.71	2.350	2.253	-4.734	SSMWD
1055.56	12.32	353.37	1053.96	8.69	-15.75	2.50	3.207	2.971	-6.520	SSMWD
1084.42	14.52	350.57	1082.03	15.32	-16.70	8.35	2.384	2.287	-2.911	SSMWD
1112.89	16.05	349.61	1109.49	22.71	-18.00	14.79	1.634	1.612	-1.012	SSMWD
1141.34	17.92	346.59	1136.70	30.84	-19.72	21.77	2.180	1.972	-3.185	SSMWD
1169.86	20.36	343.90	1163.64	39.87	-22.11	29.36	2.729	2.567	-2.830	SSMWD
1198.20	21.57	340.05	1190.10	49.51	-25.26	37.24	1.940	1.281	-4.076	SSMWD
1226.91	21.90	339.02	1216.77	59.47	-28.98	45.22	0.527	0.345	-1.076	SSMWD
1256.08	22.21	337.21	1243.81	69.63	-33.06	53.25	0.768	0.319	-1.862	SSMWD
1284.96	21.89	340.96	1270.58	79.75	-36.93	61.33	1.499	-0.332	3.895	SSMWD
1311.61	23.12	342.06	1295.20	89.42	-40.16	69.21	1.463	1.385	1.238	SSMWD
1340.28	23.01	345.53	1321.58	100.21	-43.30	78.17	1.427	-0.115	3.631	SSMWD
1368.83	22.99	346.35	1347.86	111.03	-46.01	87.31	0.337	-0.021	0.862	SSMWD
1386.00	23.41	346.46	1363.64	117.60	-47.60	92.88	0.738	0.735	0.188	Skull Creek
1397.82	23.70	346.53	1374.47	122.19	-48.70	96.78	0.738	0.735	0.183	SSMWD
1426.75	22.93	345.84	1401.04	133.31	-51.43	106.19	0.847	-0.798	-0.716	SSMWD
1454.77	22.79	347.81	1426.86	143.91	-53.91	115.21	0.833	-0.150	2.109	SSMWD
1503.00	21.72	346.50	1471.50	161.72	-57.97	130.40	0.734	-0.666	-0.815	SSMWD
1510.75	21.22	346.89	1478.71	164.48	-58.62	132.74	2.013	-1.935	1.510	SSMWD
1539.00	21.90	348.01	1504.98	174.61	-60.88	141.41	0.841	0.718	1.188	Nullawaarre Sst
1539.56	21.91	348.03	1505.50	174.82	-60.92	141.58	0.841	0.722	1.152	SSMWD
1568.70	21.37	347.26	1532.59	185.31	-63.22	150.57	0.628	-0.556	-0.793	SSMWD
1591.00	21.77	345.49	1553.33	193.28	-65.15	157.32	1.030	0.540	-2.387	Belfast
1597.38	21.89	344.99	1559.25	195.57	-65.76	159.25	1.030	0.556	-2.332	SSMWD
1625.95	22.06	342.29	1585.75	205.83	-68.77	167.75	1.076	0.179	-2.835	SSMWD
1654.30	21.71	343.30	1612.05	215.92	-71.89	176.07	0.544	-0.370	1.069	SSMWD
1683.20	21.55	344.71	1638.92	226.16	-74.83	184.59	0.564	-0.166	1.464	SSMWD
1714.56	21.72	343.34	1668.07	237.28	-78.01	193.84	0.510	0.163	-1.311	SSMWD
1742.32	21.67	344.05	1693.86	247.13	-80.89	202.01	0.289	-0.054	0.767	SSMWD
1750.00	21.56	343.94	1701.00	249.85	-81.67	204.27	0.450	-0.423	-0.417	Flaxmans
1771.45	21.26	343.64	1720.97	257.36	-83.86	210.52	0.450	-0.422	-0.424	SSMWD
1795.60	21.51	343.38	1743.46	265.81	-86.36	217.51	0.332	0.311	-0.323	SSMWD
1804.00	21.38	343.43	1751.28	268.75	-87.24	219.95	0.470	-0.464	0.193	Waarre A+B
1825.69	21.04	343.58	1771.50	276.28	-89.46	226.18	0.470	-0.464	0.197	H1DW2 Revised Drill
1855.71	20.58	343.78	1799.56	286.51	-92.46	234.68	0.470	-0.464	0.204	SSMWD
1870.00	20.00	343.22	1812.96	291.26	-93.87	238.61	1.282	-1.216	-1.170	Eumeralla
1884.13	19.43	342.64	1826.26	295.82	-95.27	242.37	1.282	-1.212	-1.237	SSMWD
1912.69	19.24	343.45	1853.21	304.87	-98.03	249.84	0.345	-0.200	0.851	SSMWD
1936.36	19.03	343.20	1875.58	312.30	-100.25	255.99	0.286	-0.266	-0.317	SSMWD

Halliburton Company

Survey Report

Company: WOODSIDE ENERGY Field: Otway Basin Site: Halladale Exploration Well: Halladale Wellpath: Halladale 1 DW2 (Halladale-2)	Date: 24/05/2005 Co-ordinate(NE) Reference: Vertical (TVD) Reference: Section (VS) Reference: Survey Calculation Method:	Time: 10:24:28 Site: Halladale Exploration, Grid North SITE 21.5 Well (0.00N,0.00E,20.90Azi) Minimum Curvature	Page: 3 Db: Sybase
--	---	---	-------------------------------------

Targets

Name	Description Dip.	Dir.	TVD m	+N/-S m	+E/-W m	Map Northing m	Map Easting m	<---- Latitude ----> Deg Min Sec			<--- Longitude ---> Deg Min Sec		
H1DW2 Revised			1771.50	278.80	-88.20	5728764.00	650675.00	38	34	36.551 S	142	43	47.086 E
-Rectangle (70x40)													
H1DW2 Revised Drill			1771.50	278.80	-88.20	5728764.00	650675.00	38	34	36.551 S	142	43	47.086 E
-Rectangle (48x18)													

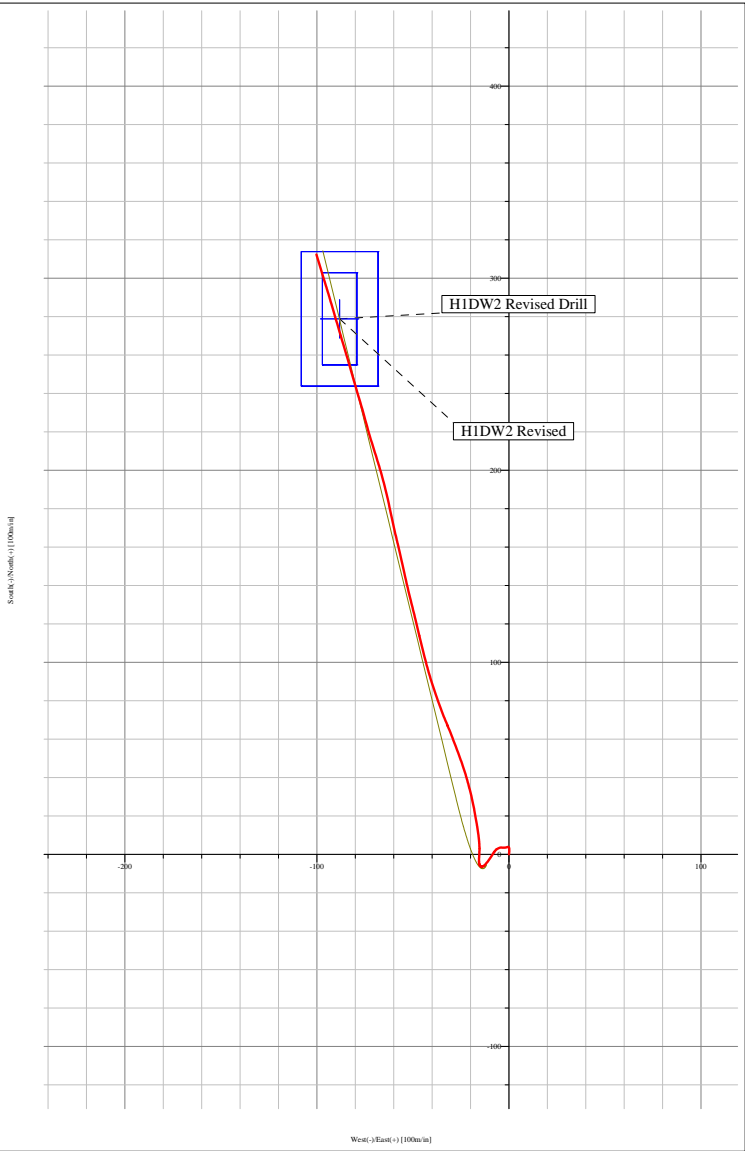
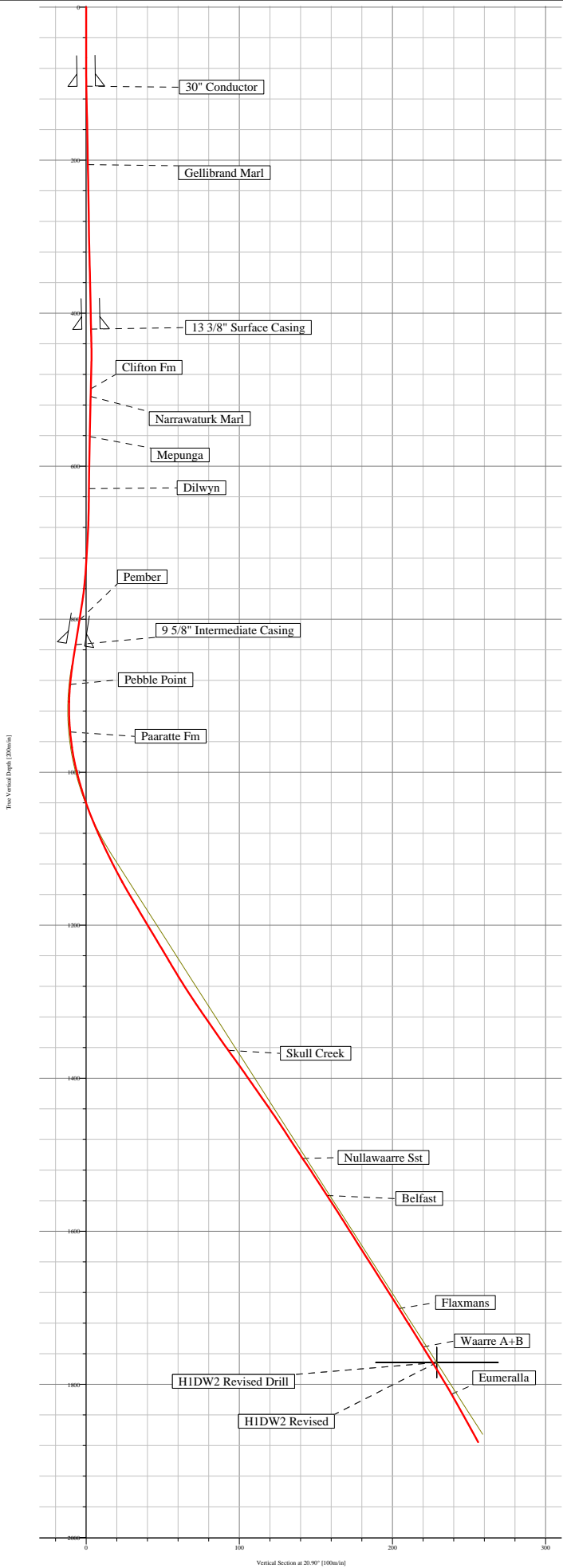
Casing Points

MD m	TVD m	Diameter in	Hole Size in	Name
103.40	103.40	30.000	36.000	30" Conductor
421.00	420.98	13.375	17.500	13 3/8" Surface Casing
833.80	833.44	9.625	12.250	9 5/8" Intermediate Casing

Formations

MD m	TVD m	Formations	Lithology	Dip Angle deg	Dip Direction deg
206.00	205.99	Gellibrand Marl		0.00	0.00
499.00	498.97	Clifton Fm		0.00	0.00
509.00	508.97	Narrawaturk Marl		0.00	0.00
561.50	561.45	Mepunga		0.00	0.00
629.50	629.44	Dilwyn		0.00	0.00
801.50	801.24	Pember		0.00	0.00
886.00	885.50	Pebble Point		0.00	0.00
948.00	947.43	Paaratte Fm		0.00	0.00
1386.00	1363.64	Skull Creek		0.00	0.00
1539.00	1504.98	Nullawaarre Sst		0.00	0.00
1591.00	1553.33	Belfast		0.00	0.00
1750.00	1701.00	Flaxmans		0.00	0.00
1804.00	1751.28	Waarre A+B		0.00	0.00
1870.00	1812.96	Eumeralla		0.00	0.00

Field: Otway Basin
Site: Halladale Exploration
Well: Halladale
Wellpath: Halladale 1 DW2 (Halladale-2)



WELLBORE SURVEY										DRILLING PARAMETERS									
Measured Depth (m)	Incl Angle (deg)	Azi Dir (deg)	Vertical Depth (m)	Vertical Section (m)	Coordinates N/S (m) E/W (m)		DLS (°/30m)	Build Rate (°/30m)	Turn Rate (°/30m)	WOB (klbs)	RPM	Flow Rate (gpm)	Stand Pipe (psi)	Orientation From (m) To (m)		Tool Face (deg)	ROP (m/hr)	BHA No. (#)	Comment
810.51	4.59	213.32	810.2	-5.0	-1.7	-9.6	0.00	0.00	0.00										
852.56	4.74	218.31	852.1	-8.3	-4.5	-11.6	0.31	0.11	3.56	15	100	620	2000				15		
881.04	3.38	227.59	880.5	-10.2	-6.0	-13.0	1.59	-1.43	9.78	12		700	2690	864	881	144R	25	8	
909.54	2.36	275.21	909.0	-11.1	-6.5	-14.2	2.63	-1.07	50.13	8		710	2780	881	895	144R	30	8	
														895	910	66R		8	
938.46	2.99	330.60	937.9	-10.8	-5.8	-15.2	2.64	0.65	57.46	8		710	2780	910	938	66R	30	8	
967.34	4.38	356.47	966.7	-9.3	-4.0	-15.6	2.22	1.44	26.87	6		730	2910	938	953	66R	40	8	
														953	967	10R		8	
996.06	7.12	4.58	995.3	-6.6	-1.1	-15.5	2.98	2.86	8.47	6		750	3020	967	982	10R	45	8	
														982	996	10L		8	
1024.96	9.29	0.02	1023.9	-2.7	3.0	-15.4	2.35	2.25	-4.73	15		750	3150	996	1010	10L	25	8	
														1010	1025	30L		8	
1055.56	12.32	353.37	1054.0	2.5	8.7	-15.8	3.21	2.97	-6.52	10		740	3050	1025	1039	30L	50	8	
														1039	1056	40L		8	
1084.42	14.52	350.57	1082.0	8.4	15.3	-16.7	2.38	2.29	-2.91	10		740	3050	1056	1084	40L	50	8	
1112.89	16.05	349.61	1109.5	14.8	22.7	-18.0	1.63	1.61	-1.01	10		740	3050	1084	1113	40L	50	8	
1141.34	17.92	346.59	1136.7	21.8	30.8	-19.7	2.18	1.97	-3.18	10		740	3050	1113	1141	40L	50	8	
1169.86	20.36	343.90	1163.6	29.4	39.9	-22.1	2.73	2.57	-2.83	10		740	3050	1141	1170	40L	50	8	
1198.20	21.57	340.05	1190.1	37.2	49.5	-25.3	1.94	1.28	-4.08	10		740	3050	1170	1198	40L	50	8	
1226.91	21.90	339.02	1216.8	45.2	59.5	-29.0	0.53	0.34	-1.08	10	130	50	2800	1198	1211	40L	20	8	
1256.08	22.21	337.21	1243.8	53.3	69.6	-33.1	0.77	0.32	-1.86	10	130	50	2800				20	8	
1284.96	21.89	340.96	1270.6	61.3	79.8	-36.9	1.50	-0.33	3.90	10		740	3050	1268	1285	90R	50	8	
1311.61	23.12	342.06	1295.2	69.2	89.4	-40.2	1.46	1.38	1.24	25	130	700	3200	1285	1297	90R	18	8	
1340.28	23.01	345.53	1321.6	78.2	100.2	-43.3	1.43	-0.12	3.63	25	130	700	3200				18	8	
1368.83	22.99	346.35	1347.9	87.3	111.0	-46.0	0.34	-0.02	0.86	25	130	700	3200				18	8	
1397.82	23.70	346.53	1374.5	96.8	122.2	-48.7	0.74	0.73	0.19	25	130	700	3200				18	8	
1426.75	22.93	345.84	1401.0	106.2	133.3	-51.4	0.85	-0.80	-0.72	25	130	700	3200				18	8	
1454.77	22.79	347.81	1426.9	115.2	143.9	-53.9	0.83	-0.15	2.11	25	130	700	3200				18	8	
1503.00	21.72	346.50	1471.5	130.4	161.7	-58.0	0.73	-0.67	-0.81	15	130	700	3200	1469	1492	90L	20	8	
1510.75	21.22	346.89	1478.7	132.7	164.5	-58.6	2.01	-1.94	1.51	15	130	700	3200				20	8	

Client : Woodside Energy Ltd.
Well Name : Halladale #1 DW-2
Rig : Ocean Patriot

Field : Otway Basin
Location : Halladale 1
Job # : AU-DD-0003325468

North Ref : Grid

Declination : °

VS Dir : 20.90° (from Wellhead)

WELLBORE SURVEY										DRILLING PARAMETERS										Comment	
Measured Depth (m)	Incl Angle (deg)	Azi Dir (deg)	Vertical Depth (m)	Vertical Section (m)	Coordinates		DLS (°/30m)	Build Rate (°/30m)	Turn Rate (°/30m)	WOB (klbs)	RPM	Flow Rate (gpm)	Stand Pipe (psi)	Orientation		Tool Face (deg)	ROP (m/hr)	BHA No. (#)			
					N/S (m)	E/W (m)								From (m)	To (m)						
1539.56	21.91	348.03	1505.5	141.6	174.8	-60.9	0.84	0.72	1.19	15	130	700	3200	1755	1765	90L	20	9			
1568.70	21.37	347.26	1532.6	150.6	185.3	-63.2	0.63	-0.56	-0.79	10		730	3600				1554	1569	90L	45	9
1597.38	21.89	344.99	1559.2	159.2	195.6	-65.8	1.03	0.54	-2.37	28	120	720	3600				1569	1583	90L	12	9
1625.95	22.06	342.29	1585.7	167.8	205.8	-68.8	1.08	0.18	-2.84	28	120	720	3600							12	9
1654.30	21.71	343.30	1612.0	176.1	215.9	-71.9	0.54	-0.37	1.07	28	120	720	3600							12	9
1683.20	21.55	344.71	1638.9	184.6	226.2	-74.8	0.56	-0.17	1.46	28	120	700	3400							8	9
1714.56	21.72	343.34	1668.1	193.8	237.3	-78.0	0.51	0.16	-1.31	28	120	700	3400							8	9
1742.32	21.67	344.05	1693.9	202.0	247.1	-80.9	0.29	-0.05	0.77	28	120	700	3400							8	9
1771.45	21.26	343.64	1721.0	210.5	257.4	-83.9	0.45	-0.42	-0.42	25	120	600	3400							7	9
1795.60	21.51	343.38	1743.5	217.5	265.8	-86.4	0.33	0.31	-0.32	25	120	600	3400							7	9
1855.71	20.58	343.78	1799.6	234.7	286.5	-92.5	0.47	-0.46	0.20	16	120	700	3400							30	11
1884.13	19.43	342.64	1826.3	242.4	295.8	-95.3	1.28	-1.21	-1.20	16	120	700	3400							30	11
1912.69	19.24	343.45	1853.2	249.8	304.9	-98.0	0.35	-0.20	0.85	18	120	700	3400							35	11
1936.36	19.03	343.20	1875.6	256.0	312.3	-100.3	0.29	-0.27	-0.32	18	120	700	3400							35	11

sperry-sun

DRILLING SERVICES

BHA Report

Client : Woodside Energy Ltd.
Well Name : Halladale #1 DW-2
Field : Otway Basin
Location : Halladale 1
Rig : Ocean Patriot
Job # : AU-DD-0003325468

BHA# 8

BHA# 8 : Date In :10/04/200 MD In (m) : 853 TVD In (m) : 853 Date Out 13/04/200 MD Out (m): 1514 TVD Out (m): 1482

BIT DATA

Bit #	OD (in)	MFR	Style	Serial#	Nozzles (/32's)	TFA (in²)	Dull Condition
8	8.500	Smith	MA89BCTVPX	JT8391	6x16	1.178	1-2-WT-A -X-I-CT-DTF

MOTOR DATA

Run #	OD (in)	MFR	Model	Serial#	Bend	Nzl (/32's)	Avg Dif (psi)	Cum Circ Hrs
	6.750	SSDS	GeoPilot	GP850TL088	0.00°		0	54.50

COMPONENT DATA

Item #	Description	Serial #	OD (in)	ID (in)	Gauge (in)	Weight (lbs/ft)	Top Con	Length (m)	Bit - Center Blade (m)
1	MA89BCTVPX PDC (6x16)	JT8391	8.500	3.000	8.500	169.30	B 4-1/2" IF	0.41	39.07
2	6-3/4" Geo-Pilot 7600 Series	GP850TL088	6.750	1.625		114.89	B 4-1/2" IF	7.09	
3	Non-Mag Flex Pony collar w/dir	CP850TL084	6.750	2.250		108.00	B 4-1/2" IF	2.80	
4	6-3/4" RLL w/DGR + EWR + PWD	90088311	6.750	1.920	8.404	112.09	B 4-1/2" IF	8.58	
5	6-3/4" RLL w/ SLD + CTN	90069866	6.750	1.920	7.400	112.09	B 4-1/2" IF	8.66	
6	6-3/4" Bat Sonic	6702406	6.750	1.920		112.09	B 4-1/2" IF	6.75	
7	6-3/4" HOC w/ TM	203842	6.750	3.250		93.68	B 4-1/2" IF	3.06	
8	Non-Mag Float Sub	A-225	6.750	2.810		100.82	B 4-1/2" IF	0.62	
9	3-Point String Roller Reamer	GU2460	6.750	2.810	8.375	100.82	B 4-1/2" IF	2.02	
10	PBL Circulating Sub	235661	6.750	2.500		105.23	B 4-1/2" IF	2.28	
11	9 x Spiral Drill collar		6.750	2.813		101.00	B 4-1/2" IF	83.88	
12	Drilling Jar	00213	6.500	2.500		96.36	B 4-1/2" IF	9.80	
13	2x Spiral Drill collar		6.750	2.813		101.00	B 4-1/2" IF	18.69	
14	15x HWDP		5.000	3.000		49.30	B 4-1/2" IF	138.71	
								293.35	

Parameter	Min	Max	Ave
WOB (klbs) :	6	25	14
RPM (rpm) :	100	130	129
Flow (gpm) :	50	750	661
SPP (psi) :	2000	3300	3020

Activity	Hrs
Drilling :	45.00
Reaming :	5.00
Circ-Other :	4.50
Total :	54.50

BHA Weight	(lb)
in Air (Total) :	74837
in Mud (Total) :	62950
in Air (Bel Jars) :	43110
in Mud (Bel Jars) :	36262

Drill String	OD(in)	Len(m)
DP(S)-NC50(XH)-19.50#	5.000	1221

PERFORMANCE

	In	Out
Inclination (deg)	4.72	21.30
Azimuth (deg)	218.41	347.02

	Distance(m)	ROP (m/hr)	Build (°/30m)	Turn (°/30m)	DLS (°/30m)
Oriented :	399.00	19			
Rotated :	262.00	9			
Total :	661.00	15	0.75	5.84	1.11

COMMENTS

OBJECTIVES:

This assembly was almost identical to the one successfully run on DW-1. On this BHA we chose a Smith bit instead of a DBS. Also, a three point roller reamer was placed (above the MWD) on top of the float sub to help ream out any ledges which may occur while drilling. Hopefully we would see the benefit of this on the trip out.

RESULTS:

Cement was tagged some 26m inside the shoe, at 808m. With the GeoPilot set in 'home' mode, the plan was to rotate down and commence the sidetrack at a proposed 860m. At 853m a survey, and 100% formation samples, confirmed that we had approximately 0.4m displacement from DW-1.

At 864m the build and turn was commenced. With the deflection set at 80%, the well dropped 2 degrees and turned right, then built and turned round to the proposed target trajectory. Dogleg severity on this well was slightly lower than DW-1 despite the deflection setting being 10% higher. Directionally this wasn't a problem as we knew we could make up vertical section once into the tangent.

While drilling in the Parratte formation it became evident that the ROP was significantly down on the previous run. This may also have been a contributing factor to the lower than expected doglegs seen. At 1210m the well was lined up on the target and the tool was set in cruise mode. Only the declining ROP was of any concern, from 30m per hour at 1210m down to almost 3m at 1400m (which was 14m into the Skull Creek formation). The opinion on the rig was that the bit was either balled up or worn out. Assuming that balling was the problem it was decided to pump a 20bbl caustic pill and let it soak around the bit in an attempt to clean it up. This proved successful, in as much as the rop increased to 12m-15m per hour.

At 1493m the MWD stopped pulsing and we were unable to fix this from surface. The GeoPilot was then set in the neutral position and drilled on to 1514m. A change in torque at 1511m suggested we were now in the Nullawarre sand and it was decided this was as good a place as any to trip for the MWD and a bit type change.

Some backreaming was done on the trip out. A limit of 40 klbs overpull was set, but this was difficult to keep a handle on due to the 4m+ rig heave. However, the trip proved less troublesome than DW-1. Once on surface the bit was seen to have three of the six junk slots packed solid with formation. very little wear was seen on the cutters and only one was chipped. One roller on the reamer had some radial play and this was changed out as a precaution. Further investigation of the MWD showed a hydraulic failure in the pulser.

RECOMMENDATIONS:

We recommended, and decided to re-run the DBS FMF3553 bit for the next run.

sperry-sun

DRILLING SERVICES

BHA Report

Client : Woodside Energy Ltd.
Well Name : Halladale #1 DW-2
Field : Otway Basin
Location : Halladale 1
Rig : Ocean Patriot
Job # : AU-DD-0003325468

BHA# 9

BHA# 9 : Date In :13/04/200 MD In (m) : 1514 TVD In (m) : 1482 Date Out 15/04/200 MD Out (m): 1808 TVD Out (m): 1755

BIT DATA

Bit #	OD (in)	MFR	Style	Serial#	Nozzles (/32's)	TFA (in²)	Dull Condition
5rr1	8.500	DBS	FMF3553	10702626	5x17	1.108	1-1-WT-A-X-I-NO-CP

MOTOR DATA

Run #	OD (in)	MFR	Model	Serial#	Bend	Nzl (/32's)	Avg Dif (psi)	Cum Circ Hrs
6.750		SSDS	GeoPilot	GP850TL088	0.00°		0	90.00

COMPONENT DATA

Item #	Description	Serial #	OD (in)	ID (in)	Gauge (in)	Weight (lbs/ft)	Top Con	Length (m)	Bit - Center Blade (m)
1	FMF3553 PDC (5x17)	10702626	8.500	3.000	8.500	169.30	B 4-1/2" IF	0.43	
2	6-3/4" Geo-Pilot 7600 Series	GP850TL088	6.750	1.625		114.89	B 4-1/2" IF	7.09	
3	Non-Mag Flex Pony collar w/dir	CP850TL084	6.750	2.250		108.00	B 4-1/2" IF	2.80	
4	6-3/4" RLL w/DGR + EWR + PWD	90088311	6.750	1.920	8.404	112.09	B 4-1/2" IF	8.58	
5	6-3/4" RLL w/ SLD + CTN	90069866	6.750	1.920	7.400	112.09	B 4-1/2" IF	8.66	
6	6-3/4" Bat Sonic	6702306	6.750	1.920		112.09	B 4-1/2" IF	6.75	
7	6-3/4" HOC w\ TM	203846	6.750	3.250		93.68	B 4-1/2" IF	3.06	
8	Non-Mag Float Sub	A-225	6.750	2.810		100.82	B 4-1/2" IF	0.62	
9	3-Point String Roller Reamer	GU798	6.750	2.810	8.375	100.82	B 4-1/2" IF	1.61	39.09
10	PBL Circulating Sub	235661	6.750	2.500		105.23	B 4-1/2" IF	2.28	
11	12x Spiral Drill collar		6.750	2.813		101.00	B 4-1/2" IF	111.84	
12	Drilling Jar	02381	6.500	2.500		96.36	B 4-1/2" IF	9.73	
13	2x Spiral Drill collar		6.750	2.813		101.00	B 4-1/2" IF	18.69	
14	15x HWDP		5.000	3.000		49.30	B 4-1/2" IF	138.71	
								320.85	

Parameter	Min	Max	Ave
WOB (klbs) :	10	28	23
RPM (rpm) :	120	130	122
Flow (gpm) :	600	730	695
SPP (psi) :	3200	3600	3458

Activity	Hrs
Drilling :	31.50
Reaming :	0.50
Circ-Other :	3.50
Total :	35.50

BHA Weight	(lb)
in Air (Total) :	83955
in Mud (Total) :	70620
in Air (Bel Jars) :	52251
in Mud (Bel Jars) :	43951

Drill String	OD(in)	Len (m)
DP(S)-NC50(XH)-19.50#	5.000	1487

PERFORMANCE

	In	Out
Inclination (deg)	21.30	21.32
Azimuth (deg)	347.02	343.46

	Distance(m)	ROP (m/hr)	Build (°/30m)	Turn (°/30m)	DLS (°/30m)
Oriented :	39.00	27			
Rotated :	255.00	7			
Total :	294.00	9	0.00	-0.36	0.13

COMMENTS

OBJECTIVES:

This assembly was identical to the previous except for the bit change. Plan was to drill to core point.

RESULTS:

No problems tripping in. Some 9m of fill was seen and washed to bottom.

The GeoPilot was set in cruise mode. Initially the ROP was encouraging and up to 50m per hour was seen. However once into the Belfast formation 1591mMD this slowed down to 25m per hour. Three stands later we were down to 5 - 10m per hour. This coincides with drilling through a reported fault at 1610m. Again caustic pills were pumped in case the bit was balled but this appeared not to be the case here, as the ROP showed no significant signs of improvement.

The Flaxmans formation was penetrated at 1804m md and control drilled to confirm core point at 1808m.

At the time of writing the slower than expected rop was attributed to drilling 'up dip' on this azimuth as opposed to 'down dip' on DW-1.

RECOMMENDATIONS:

At the time of writing the slower than expected ROP was attributed to drilling 'up dip' on this azimuth as opposed to 'down dip' on DW-1.

sperry-sun

DRILLING SERVICES

BHA Report

Client : Woodside Energy Ltd.
Well Name : Halladale #1 DW-2
Field : Otway Basin
Location : Halladale 1
Rig : Ocean Patriot
Job # : AU-DD-0003325468

BHA# 10

BHA# 10 : Date In :15/04/200 MD In (m) : 1808 TVD In (m) : 1755 Date Out 16/04/200 MD Out (m): 1835 TVD Out (m): 1780

BIT DATA

Bit #	OD (in)	MFR	Style	Serial#	Nozzles (/32's)	TFA (in ²)	Dull Condition
8.500	DBS	FC274LI	10627829			0.000	

MOTOR DATA

Run #	OD (in)	MFR	Model	Serial#	Bend	Nzl (/32's)	Avg Dif (psi)	Cum Circ Hrs

COMPONENT DATA

Item #	Description	Serial #	OD (in)	ID (in)	Gauge (in)	Weight (lbs/ft)	Top Con	Length (m)	Bit - Center Blade (m)
1	PDC Coring Bit	10627829	8.500	3.000	8.500	169.30	P HDT	0.37	
2	NB Sleeve Type Stabilizer	9983105	6.750	4.250	8.470	73.61	B HDT	1.22	0.98
3	CoreBarrel	6003HD	6.750	4.250		73.61	B HDT	7.93	
4	Sleeve Type Stabilizer	996822503	6.750	4.250	8.470	73.61	B HDT	1.22	10.13
5	CoreBarrel	6009HD	6.750	4.250		73.61	B HDT	7.93	
6	Integral Blade Stabilizer	983105307	6.750	4.250	8.470	73.61	B HDT	1.22	19.28
7	CoreBarrel	6007HD	6.750	4.250		73.61	B HDT	7.93	
8	Coupling Integral Blade Stabilizer	997844006	6.750	4.250	8.470	73.61	B HDT	1.22	28.43
9	CoreBarrel safety Joint		6.750	4.250		73.61	B HDT	1.44	
10	12x Spiral Drill collar		6.750	2.813		101.00	B 4-1/2" IF	111.84	
11	Drilling Jar	02381	6.500	2.500		96.36	B 4-1/2" IF	9.73	
12	2x Spiral Drill collar		6.750	2.813		101.00	B 4-1/2" IF	18.69	
13	15x HWDP		5.000	3.000		49.30	B 4-1/2" IF	138.71	
								309.45	

Parameter	Min	Max	Ave
WOB (klbs) :	16	16	16
RPM (rpm) :	120	120	120
Flow (gpm) :	700	700	700
SPP (psi) :	3400	3400	3400

Activity	Hrs
Drilling :	5.50
Reaming :	1.50
Circ-Other :	1.50
Total :	8.50

BHA Weight (lb)
in Air (Total) : 76242
in Mud (Total) : 64131
in Air (Bel Jars) : 44537
in Mud (Bel Jars) : 37463

Drill String	OD(in)	Len(m)
DP(S)-NC50(XH)-19.50#	5.000	1526

PERFORMANCE

	In	Out
Inclination (deg)	21.32	20.90
Azimuth (deg)	343.46	343.64

	Distance(m)	ROP (m/hr)	Build (°/30m)	Turn (°/30m)	DLS (°/30m)
Oriented :	0.00	0			
Rotated :	27.00	5			
Total :	27.00	5	-0.46	0.20	0.47

COMMENTS

OBJECTIVES:

Core assembly, plan was to cut a 27m core.

RESULTS:

No problems coring from 1808m to 1835m.

sperry-sun

DRILLING SERVICES

BHA Report

Client : Woodside Energy Ltd.
Well Name : Halladale #1 DW-2
Field : Otway Basin
Location : Halladale 1
Rig : Ocean Patriot
Job # : AU-DD-0003325468

BHA# 11

BHA# 11 : Date In :16/04/200 MD In (m) : 1835 TVD In (m) : 1780 Date Cur: 19/04/200 MD Cur (m): 1941 TVD Cur (m): 1880

BIT DATA

Bit #	OD (in)	MFR	Style	Serial#	Nozzles (/32's)	TFA (in²)	Dull Condition
6rr1	8.500	DBS	FMX3653	10705898	5x17, 1x18	1.357	0-1-WT-S -X-I-NO-TD

MOTOR DATA

Run #	OD (in)	MFR	Model	Serial#	Bend	Nzl (/32's)	Avg Dif (psi)	Cum Circ Hrs

COMPONENT DATA

Item #	Description	Serial #	OD (in)	ID (in)	Gauge (in)	Weight (lbs/ft)	Top Con	Length (m)	Bit - Center Blade (m)
1	FMX3653 (5x17 , 1x18)	10705898	8.500	3.000	8.500	169.30	P 4-1/2" Reg	0.30	1.30
2	NB Integral Blade Stabilizer	3145	6.750	2.500	8.250	105.23	B 4-1/2" IF	1.37	
3	HOC w\DM	30534076	6.750	2.813		101.00	B 4-1/2" IF	2.71	
4	6-3/4" RLL w/DGR + EWR + PWD	90088312	6.750	1.920	8.404	112.09	B 4-1/2" IF	8.48	
5	6-3/4" RLL w/ SLD + CTN	90069866	6.750	1.920	7.400	112.09	B 4-1/2" IF	8.66	
6	6-3/4" Bat Sonic	6702306	6.750	1.920		112.09	B 4-1/2" IF	6.75	
7	6-3/4" HOC w\ TM	203846	6.750	3.250		93.68	B 4-1/2" IF	3.06	
8	Non-Mag Float Sub	A-225	6.750	2.810		100.82	B 4-1/2" IF	0.62	
9	PBL Circulating Sub	235661	6.750	2.500		105.23	B 4-1/2" IF	2.28	
10	12x Spiral Drill collar	02381	6.750	2.813		101.00	B 4-1/2" IF	111.84	
11	Drilling Jar		6.500	2.500		96.36	B 4-1/2" IF	9.73	
12	2x Spiral Drill collar		6.750	2.813		101.00	B 4-1/2" IF	18.69	
13	15x HWDP		5.000	3.000		49.30	B 4-1/2" IF	138.71	
								313.20	

Parameter	Min	Max	Ave
WOB (klbs) :	16	18	17
RPM (rpm) :	120	120	120
Flow (gpm) :	700	700	700
SPP (psi) :	3400	3400	3400

Activity	Hrs
Drilling :	6.00
Reaming :	4.50
Circ-Other :	2.50
Total :	13.00

BHA Weight	(lb)
in Air (Total) :	81020
in Mud (Total) :	68048
in Air (Bel Jars) :	49315
in Mud (Bel Jars) :	41420

Drill String	OD(in)	Len(m)
DP(S)-NC50(XH)-19.50#	5.000	1628

PERFORMANCE

	In	Out
Inclination (deg)	20.90	18.99
Azimuth (deg)	343.64	343.15

	Distance(m)	ROP (m/hr)	Build (°/30m)	Turn (°/30m)	DLS (°/30m)
Oriented :	0.00	0			
Rotated :	106.00	18			
Total :	106.00	18	-0.54	-0.14	0.54

COMMENTS

OBJECTIVES:

To log over the cored section and complete drilling of the 8-1/2" hole through the Waarre A,B,C and Eumeralla formations plus 40m of rat hole for wire line tool strings, a distance of approximately 100m.

RESULTS:

This final 100m section was drilled with a rotary assembly to a TD of 1941m. The section drilled at an average of 35m/hr using 120rpm and 15 to 20 klbs WOB. The assembly dropped 2 degrees over the 100m but held direction. No problems were encountered drilling this short section.

A short trip back to 1750m was made prior to finally pulling out to run wireline logs. No significant problems were seen on the trip out.

Motor Serial # : GP850TL088	Job # : AU-DD-0003325468
Directional Driller(s) : Tommy Adams, Andrew Pritchett	Client : Woodside Energy Ltd.
Location : Halladale 1	Rig : Ocean Patriot
Well Name : Halladale #1 DW-2	Bit Run # : 8 BHA # : 8
Depth In/Out : 853 / 1514 m	Date In/Out : 10/04/2005 / 13/04/2005
Application Details : Rotary steerable	Motor Run # : Hole Size : 8.500 in

MOTOR CONFIGURATION

	From Bit (m)	Component	Type	Diam In/Out (in)
1	7.50	Sleeve Stab/Pad	No	
2		Bent Housing	No	
3		Housing Tool Used	No	
4		Stator Elastomer		
5		Bent Sub / 2nd Bent Hsg	No	
6		Lower String Stab	No	
7		Upper String Stab	No	

Additional Features : Flex Collar : Yes Short Brg Pack : No Rtr Noz / Size : /32's Brg Cfg (Off/On) : Lobe Cfg : 6/7 BHA OD/ID : 6.750 / 2.250 in	Arr Ret Pick Up Sub : No No Bit Box Protr : No No
--	--

MOTOR RUN DATA

Max Dogleg While Rotating : 3.21 °/30m	RPM : 140	Motor Stalled : No	Prev Job/Well Hrs : 0.00
Max Dogleg Overpulled In : °/30m	Force : lbf	Float Valve : Yes	Drilling Hrs : 45.00
Max Dogleg Pushed Through : °/30m	Force : lbf	DP Filter : No	Circ Hrs : 4.50
Hole Azimuth Start / End : 218.41° / 347.02°	Inc Start / End : 4.72° / 21.30°		Reaming Hrs : 5.00
Interval Oriented / Rot. : 399 / 262 m	Directional Perf Ori / Rot : / °/30m		Total Hrs This Run : 54.50
Jarring Occured : No			New Cumulative Hrs : 54.50

	Diff Press (psi)	Str RPM	Rotn Torque (ft-lbs)	Drag Up/Dn (lbf)	WOB (klbs)	ROP Oriented (m/hr)	ROP Rotated (m/hr)
Avg :	0	129	3000	/	14	19	9
Max :	0	130	4000	/	25	50	20

PRE-RUN TESTS

Motor Tested Pre-Run : No	with :
Dump Sub Operating : N/A	Brg Play : mm
Flow 1 : gpm	Pressure 1 : psi
Flow 2 : gpm	Pressure 2 : psi
Driveshaft Rotation Observed : No	
Bearing Leakage Observed : No	

POST-RUN TESTS

Motor Tested Post-Run : No	with :
Dump Sub Operating : N/A	Brg Play : mm
Flow 1 : gpm	Pressure 1 : psi
Flow 2 : gpm	Pressure 2 : psi
Driveshaft Rotation Observed : No	
Bearing Leakage Observed : No	
Driveshaft Rotated to Drain Mud : No	
Fluid Flushed : No	Fluid Used :

MUD DATA

Base : Water	Additives :	Mud Wt : 1.25 sg	SPP Start/End : 2690 / 3200 psi
% Oil/Water : /	% Solids : 8.34	% Sand : 0.80	PV : 39 cp YP : 32.0 lbf/100ft² pH : 10.5
DH Temp Avg/Max : /	FlowRate Avg/Max : 661 / 750 gpm	Chloride Content : 50000 ppm	
Principle Formation Name(s) : Pember, Pebble Point, Parratte, Skull Creek	Lithology : Mudstone, Sst/Clyst, Sst/Mudstone, Mudst		

BIT DATA

Make : Smith	Type : MA89BCTVPX	Serial # : JT8391	Dull Grade	1	2	3	4	5	6	7	8
Pre Existing Hours From Other Wells:			In	NEW							
Prev Drilling Hrs : 0.00	Prev Reaming Hrs : 0.00	No of Runs This Bit : 1	Out	1	2	WT	A	X	I	CT	DTF
Jet Sizes (/32's) : 6x16	TFA : 1.178 in²	Gage Length : 12.000 in									

PERFORMANCE COMMENTS

Problem Perceived : No	Problem Date :	Service Interrupt : No	Service Interrupt Hrs :
Performance Motor : Yes	Tandem Motor : No	LIH : No	PPR Ref # :

Customer Representative's Signature (optional) : Date:

Motor Serial # : GP850TL088	Job # : AU-DD-0003325468
Directional Driller(s) : Tommy Adams, Andrew Pritchett	Client : Woodside Energy Ltd.
Location : Halladale 1	Rig : Ocean Patriot
Well Name : Halladale #1 DW-2	Bit Run # : 5rr1 BHA # : 9
Depth In/Out : 1514 / 1808 m	Date In/Out : 13/04/2005 / 15/04/2005
Application Details : Rotary Steerable	Motor Run # : Hole Size : 8.500 in

MOTOR CONFIGURATION

	From Bit (m)	Component	Type	Diam In/Out (in)
1	7.52	Sleeve Stab/Pad	No	
2		Bent Housing	No	
3		Housing Tool Used	No	
4		Stator Elastomer		
5		Bent Sub / 2nd Bent Hsg	No	
6		Lower String Stab	No	
7		Upper String Stab	No	

Additional Features :	Arr	Ret
Flex Collar : No	Pick Up Sub : No	No
Short Brg Pack : No	Bit Box Protr : No	No
Rtr Noz / Size : /32's		
Brg Cfg (Off/On) :		
Lobe Cfg : 6/7		
BHA OD/ID : 6.750 / 2.250 in		

MOTOR RUN DATA

Max Dogleg While Rotating : 1.07 °/30m	RPM :	Motor Stalled : No	Prev Job/Well Hrs : 54.50
Max Dogleg Overpulled In : 2.00 °/30m	Force : 40000 lbf	Float Valve : Yes	Drilling Hrs : 31.50
Max Dogleg Pushed Through : 2.00 °/30m	Force : lbf	DP Filter : No	Circ Hrs : 3.50
Hole Azimuth Start / End : 347.02° / 343.46°	Inc Start / End : 21.30° / 21.32°		Reaming Hrs : 0.50
Interval Oriented / Rot. : 39 / 255 m	Directional Perf Ori / Rot : / °/30m		Total Hrs This Run : 35.50
Jarring Occured : No			New Cumulative Hrs : 90.00

	Diff Press (psi)	Str RPM	Rotn Torque (ft-lbs)	Drag Up/Dn (lbf)	WOB (klbs)	ROP Oriented (m/hr)	ROP Rotated (m/hr)
Avg :	0	122	5750	10000 / 5000	23	27	7
Max :	0	130	6500	40000 / 10000	28	45	20

PRE-RUN TESTS

Motor Tested Pre-Run : No	with :
Dump Sub Operating : N/A	Brg Play : mm
Flow 1 : gpm	Pressure 1 : psi
Flow 2 : gpm	Pressure 2 : psi
Driveshaft Rotation Observed : No	
Bearing Leakage Observed : No	

POST-RUN TESTS

Motor Tested Post-Run : No	with :
Dump Sub Operating : N/A	Brg Play : mm
Flow 1 : gpm	Pressure 1 : psi
Flow 2 : gpm	Pressure 2 : psi
Driveshaft Rotation Observed : No	
Bearing Leakage Observed : No	
Driveshaft Rotated to Drain Mud : No	
Fluid Flushed : No	Fluid Used :

MUD DATA

Base : Water	Additives :	Mud Wt : 1.25 sg	SPP Start/End : 3600 / 3400 psi
% Oil/Water : /	% Solids : 8.29	% Sand : 0.75	PV : 38 cp YP : 30.0 lbf/100ft² pH : 9.5
DH Temp Avg/Max : /	FlowRate Avg/Max : 695 / 730 gpm	Chloride Content : 51000 ppm	
Principle Formation Name(s) : Skull Creek, Nullawarre, Belfast, Flaxman, Waare A + B	Lithology : Mudstone, Sandstone, Mudstone, Sst/Mud:		

BIT DATA

Make : DBS	Type : FMF3553	Serial # : 10702626	Dull Grade	1	2	3	4	5	6	7	8
Pre Existing Hours From Other Wells:			In	0	1	ER	G	X	I	NO	CP
Prev Drilling Hrs : 0.00	Prev Reaming Hrs : 0.00	No of Runs This Bit : 1	Out	1	1	WT	A	X	I	NO	CP
Jet Sizes (/32's) : 5x17	TFA : 1.108 in²	Gage Length : 11.250 in									

PERFORMANCE COMMENTS

Problem Perceived : No	Problem Date :	Service Interrupt : No	Service Interrupt Hrs :
Performance Motor : Yes	Tandem Motor : No	LIH : No	PPR Ref # :
Customer Representative's Signature (optional) :			
Date:			

sperry-sun

DRILLING SERVICES

Daily Drilling Report

Client : Woodside Energy Ltd.
 Well Name : Halladale #1 DW-2
 Field : Otway Basin
 Location : Halladale 1
 Rig : Ocean Patriot
 Job # : AU-DD-0003325468

CURRENT STATUS Report # 1 10/04/2005

Total Depth (m) :	889	Casing Depth (m) :	833.80	Operator Reps :	Dave Thorpe, Andrew Clennett
Drilled last 24 hrs (m) :	889	Casing Diameter (in) :	9.625	SSDS Reps :	Tommy Adams (1), Andrew Pritchett (1)
Hole Size (in) :	8.500	Casing ID (in) :	8.681		

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
881.04	3.38	227.59	880.54	14.30	S65.32W

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)
Pebble Point	886.00	885.49

BHA SUMMARY

BHA 8: 293.35 m; Bit #8 (0.5 hrs), PDM # (0.5 hrs), Pony, MWD, MWD, MWD, MWD, Sub, Ream, Sub, 9 x DC, Jar, 2x DC, 15x HWDP

MUD DATA

Type	Weight (sg)	FV (sec)	PV (cp)	YP (lbf/100ft²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
KCl/Polymer	1.25	63	34	27.0	4.0 / 20.0	5	12.0	7.54	0.80	

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	07:30	7.50	853.00		Previous activity on DW-1.
07:30	10:30	3.00	853.00	8	Pick up and build GeoPilot BHA.
10:30	12:30	2.00	853.00	8	Load MWD data. Install nuclear sources.
12:30	16:30	4.00	853.00	8	RIH. Shallow test at 293m, ok. Continue rih and tag cement at 808m.
16:30	17:00	0.50	853.00	8	rotate and 'break in' GeoPilot seals.
17:00	17:30	0.50	853.00	8	Drill cement from 808m to 818m.
17:30	18:00	0.50	853.00	8	Work on electrical SCR system, due to mud pumps tripping out.
18:00	00:00	6.00	889.00	8	Drill to 889m. 100% formation at 852m.

COMMENTS

Official sidetrack depth 852m.

GP serial no	Todays hours	Cum hours
GP850TL088	7.3	7.3



Client : Woodside Energy Ltd.
Well Name : Halladale #1 DW-2
Field : Otway Basin
Location : Halladale 1
Rig : Ocean Patriot
Job # : AU-DD-0003325468

Total Depth	(m)	: 1393	Casing Depth	(m)	: 833.80	Operator Reps	: Dave Thorpe, Andrew Clennett
Drilled last 24 hrs	(m)	: 504	Casing Diameter	(in)	: 9.625	SSDS Reps	: Tommy Adams (2), Andrew Pritchett (2)
Hole Size	(in)	: 8.500	Casing ID	(in)	: 8.681		

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
1368.83	22.99	346.35	1347.85	120.18	N22.51W

Formation Name	MD Top (m)	TVD Top (m)
Skull Creek	1386.00	1363.63

BHA 8: 293.35 m; Bit #8 (0.5 hrs), PDM # (0.5 hrs), Pony, MWD, MWD, MWD, MWD, Sub, Ream, Sub, 9 x DC, Jar, 2x DC, 15x HWDP

Type	Weight (sg)	FV (sec)	PV (cp)	YP (lbf/100ft ²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
KCl/Polymer	1.25	69	41	40.0	5.0 / 17.0	4	11.0	8.40	1.00	

From	To	Hours	TMD (m)	BHA #	Activity
00:00	00:00	24.00	1393.00	8	Drill (DW-2) 8½" hole from 889m to 1393m.

GP serial no	Todays hours	Cum hours
GP850TL088	22.3	29.6

sperry-sun

DRILLING SERVICES

Daily Drilling Report

Client : Woodside Energy Ltd.
 Well Name : Halladale #1 DW-2
 Field : Otway Basin
 Location : Halladale 1
 Rig : Ocean Patriot
 Job # : AU-DD-0003325468

CURRENT STATUS Report # 3 12/04/2005

Total Depth (m) :	1514	Casing Depth (m) :	833.80	Operator Reps :	Dave Thorpe, Andrew Clennett
Drilled last 24 hrs (m) :	121	Casing Diameter (in) :	9.625	SSDS Reps :	Tommy Adams (3), Andrew Pritchett (3)
Hole Size (in) :	8.500	Casing ID (in) :	8.681		

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
1510.75	21.22	346.89	1478.71	174.62	N19.62W

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)
Skull Creek	1386.00	1363.63

BHA SUMMARY

BHA 8: 293.35 m; Bit #8 (6.5 hrs), PDM # (6.5 hrs), Pony, MWD, MWD, MWD, MWD, Sub, Ream, Sub, 9 x DC, Jar, 2x DC, 15x HWDP

MUD DATA

Type	Weight (sg)	FV (sec)	PV (cp)	YP (lbf/100ft ²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
KCl/Polymer	1.25	62	39	32.0	4.0 / 17.0	4	10.5	8.34	0.80	

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	03:00	3.00	1400.00	8	Drill from 1393m to 1400m. Low ROP, assume bit balled. Pump 30bbbls water.
03:00	04:00	1.00	1400.00	8	Spot 20bbbl caustic pill around bit. Let pill soak.
04:00	13:00	9.00	1493.00	8	Continue drill from 1400m to 1493m.
13:00	15:00	2.00	1493.00	8	Troubleshoot MWD pulse problem. Change out standpipe transducer. No good.
15:00	18:00	3.00	1514.00	8	Continue drill from 1493m to 1514m.
18:00	19:00	1.00	1514.00	8	Circulate hole clean.
19:00	00:00	5.00	1514.00	8	Pooh, backreaming as required. Max overpull 40 klbs.

COMMENTS

GP serial no	Todays hours	Cum hours
GP850TL088	18.3	47.9

sperry-sun

DRILLING SERVICES

Daily Drilling Report

Client : Woodside Energy Ltd.
 Well Name : Halladale #1 DW-2
 Field : Otway Basin
 Location : Halladale 1
 Rig : Ocean Patriot
 Job # : AU-DD-0003325468

CURRENT STATUS Report # 4 13/04/2005

Total Depth (m) :	1645	Casing Depth (m) :	833.80	Operator Reps :	Dave Thorpe, Andrew Clennett
Drilled last 24 hrs (m) :	131	Casing Diameter (in) :	9.625	SSDS Reps :	Tommy Adams (4), Andrew Pritchett (4)
Hole Size (in) :	8.500	Casing ID (in) :	8.681		

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
1625.95	22.06	342.29	1585.74	217.01	N18.47W

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)
Belfast	1591.00	1553.32

BHA SUMMARY

BHA 8: 293.35 m; Bit #8 (30.5 hrs), PDM # (30.5 hrs), Pony, MWD, MWD, MWD, MWD, Sub, Ream, Sub, 9 x DC, Jar, 2x DC, 15x HWDP
 BHA 9: 320.85 m; Bit #5rr1 (0.5 hrs), PDM # (55. hrs), Pony, MWD, MWD, MWD, MWD, Sub, Ream, Sub, 12x DC, Jar, 2x DC, 15x HWDP

MUD DATA

Type	Weight (sg)	FV (sec)	PV (cp)	YP (lbf/100ft ²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
KCl/Polymer	1.25	62	39	32.0	4.0 / 17.0	4	10.5	8.34	0.80	

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	02:30	2.50	1514.00	8	Pooh to MWD. Lay out jars and float sub.
02:30	03:00	0.50	1514.00	8	Remove nuclear sources.
03:00	05:00	2.00	1514.00	8	Download MWD and troubleshoot fault.
05:00	06:00	1.00	1514.00	8	Lay out suspect Batsonic and pulser. Pooh and lay out bit (balled).
06:00	08:00	2.00	1514.00	9	Make up new bit, batsonic, hang off collar and float sub. Load MWD data.
08:00	09:30	1.50	1514.00	9	Derrick inspection. Service blocks and top drive.
09:30	10:00	0.50	1514.00	9	Load nuclear sources.
10:00	12:00	2.00	1514.00	9	Run remainder of BHA. New roller reamer and jars. Pick up 3 more drill collars.
12:00	16:00	4.00	1514.00	9	Shallow test MWD, ok. RIH to 1497m.
16:00	16:30	0.50	1514.00	9	Wash down and tag fill at 1505m (9m). Wash and ream to bottom.
16:30	00:00	7.50	1645.00	9	Drill 8½" hole from 1514m to 1645m.

COMMENTS

Checked Geopilot oil level prior to re-run tool. None required.

GP serial no	Todays hours	Cum hours
GP850TL088	8.1	56.0

sperry-sun

DRILLING SERVICES

Daily Drilling Report

Client : Woodside Energy Ltd.
Well Name : Halladale #1 DW-2
Field : Otway Basin
Location : Halladale 1
Rig : Ocean Patriot
Job # : AU-DD-0003325468

CURRENT STATUS Report # 5 14/04/2005

Total Depth (m) :	1799	Casing Depth (m) :	833.80	Operator Reps :	Dave Thorpe, Andrew Clennett
Drilled last 24 hrs (m) :	154	Casing Diameter (in) :	9.625	SSDS Reps :	Tommy Adams (5), Andrew Pritchett (5)
Hole Size (in) :	8.500	Casing ID (in) :	8.681		

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
1795.60	21.51	343.38	1743.46	279.49	N18.00W

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)
Flaxman	1750.00	1701.00

BHA SUMMARY

BHA 9: 320.85 m; Bit #5rr1 (0.5 hrs), PDM # (55. hrs), Pony, MWD, MWD, MWD, MWD, Sub, Ream, Sub, 12x DC, Jar, 2x DC, 15x HWDP

MUD DATA

Type	Weight (sg)	FV (sec)	PV (cp)	YP (lbf/100ft ²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
KCl/Polymer	1.25	64	38	30.0	4.0 / 20.0	4	9.5	8.29	0.75	

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	06:00	6.00	1707.00	9	Continue drill from 1645m to 1707m. Vary drilling parameters to maximise rop.
06:00	07:00	1.00	1707.00	9	Spot 20 bbl caustic pill around bit. Let soak.
07:00	12:30	5.50	1746.00	9	Continue drill from 1707m to 1746m. Vary drilling parameters to maximise rop.
12:30	13:00	0.50	1746.00	9	Spot 30 bbl caustic pill around bit. Let soak.
13:00	21:00	8.00	1790.00	9	Continue drill from 1746m to 1790m. No apparent change in ROP
21:00	22:30	1.50	1798.00	9	Drilling break at 1790m. Drill at 5m/hr as per geologist's request.
22:30	23:30	1.00	1798.00	9	Note flow return increase. Flow check, +4.3 bbls/15 mins.
					Note inconsistent mud weights. Circulate until 1.25 sg mud all round.
23:30	00:00	0.50	1799.00	9	Controlled drilling as per geology from 1798m to 1799m.

COMMENTS

GP serial no Todays hours Cum hours
GP850TL088 20.9 76.9

sperry-sun

DRILLING SERVICES

Daily Drilling Report

Client : Woodside Energy Ltd.
Well Name : Halladale #1 DW-2
Field : Otway Basin
Location : Halladale 1
Rig : Ocean Patriot
Job # : AU-DD-0003325468

CURRENT STATUS Report # 6 15/04/2005

Total Depth (m) :	1808	Casing Depth (m) :	833.80	Operator Reps :	Dave Thorpe, Andrew Clennett
Drilled last 24 hrs (m) :	9	Casing Diameter (in) :	9.625	SSDS Reps :	Tommy Adams (6), Andrew Pritchett (6)
Hole Size (in) :	8.500	Casing ID (in) :	8.681		

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
1795.60	21.51	343.38	1743.46	279.49	N18.00W

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)
Waare A + B	1804.00	1751.27

BHA SUMMARY

BHA 9: 320.85 m; Bit #5rr1 (8. hrs), PDM # (62.5 hrs), Pony, MWD, MWD, MWD, MWD, Sub, Ream, Sub, 12x DC, Jar, 2x DC, 15x HWDP
BHA 10: 309.45 m; Bit # (1.5 hrs), Stab, Other, Stab, Other, Stab, Other, Stab, Other, 12x DC, Jar, 2x DC, 15x HWDP

MUD DATA

Type	Weight (sg)	FV (sec)	PV (cp)	YP (lbf/100ft ²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
KCl/Polymer	1.25	64	38	30.0	4.0 / 20.0	4	9.5	8.29	0.75	

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	01:30	1.50	1806.00	9	Drill 8-1/2" directional hole from 1799m to 1806m at a controlled rate of 5 m/hr
01:30	02:30	1.00	1806.00	9	Circulate bottoms up
02:30	03:30	1.00	1808.00	9	Drill 8-1/2" directional hole from 1806m to 1808m at a controlled rate of 5 m/hr
03:30	09:30	6.00	1808.00	9	POOH from 1808m to BHA at 320m
09:30	10:30	1.00	1808.00	9	Rack back HWDP and drill collars
10:30	11:00	0.50	1808.00	9	Remove radioactive sources from LWD tools
11:00	12:30	1.50	1808.00	9	Down load data from FEWD tools
12:30	13:30	1.00	1808.00	9	Rack back LWD string and lay out Geo-Pilot
13:30	14:30	1.00	1808.00	10	Hold JSA and make up Core Barrel assembly
14:30	18:30	4.00	1808.00	10	RIH to shoe.
18:30	19:00	0.50	1808.00	10	Break circulation at shoe.
19:00	22:00	3.00	1808.00	10	Continue rih coring assembly to 1782m.
22:00	23:30	1.50	1808.00	10	Wash and light ream from 1782m to bottom at 1808m.
23:30	00:00	0.50	1808.00	10	Circulate bottoms up.

COMMENTS

GP serial no Todays hours Cum hours
GP850TL088 4.0 80.9

sperry-sun

DRILLING SERVICES

Daily Drilling Report

Client : Woodside Energy Ltd.
Well Name : Halladale #1 DW-2
Field : Otway Basin
Location : Halladale 1
Rig : Ocean Patriot
Job # : AU-DD-0003325468

CURRENT STATUS Report # 7 16/04/2005

Total Depth (m) :	1835	Casing Depth (m) :	833.80	Operator Reps :	Dave Thorpe, Andrew Clennett
Drilled last 24 hrs (m) :	27	Casing Diameter (in) :	9.625	SSDS Reps :	Tommy Adams (7), Andrew Pritchett (7)
Hole Size (in) :	8.500	Casing ID (in) :	8.681		

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
1795.60	21.51	343.38	1743.46	279.49	N18.00W

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)
Waare A + B	1804.00	1751.27

BHA SUMMARY

BHA 10: 309.45 m; Bit # (1.5 hrs), Stab, Other, Stab, Other, Stab, Other, Stab, Other, 12x DC, Jar, 2x DC, 15x HWDP
BHA 11: 313.20 m; Bit #6rr1 (3. hrs), Stab, Pony, MWD, MWD, MWD, MWD, Sub, Sub, 12x DC, Jar, 2x DC, 15x HWDP

MUD DATA

Type	Weight (sg)	FV (sec)	PV (cp)	YP (lbf/100ft ²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
KCl/Polymer	1.26	89	39	34.0	5.0 / 13.0	4	9.0	11.50	0.60	

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	00:30	0.50	1808.00	10	Establish circulating pressure. Drop ball and activate coring.
00:30	03:00	2.50	1830.00	10	Cut core from 1808m to 1830m.
03:00	03:30	0.50	1830.00	10	Troubleshoot and rectify rig power loss.
03:30	06:30	3.00	1835.00	10	Continue coring from 1830m to 1835m.
06:30	13:00	6.50	1835.00	10	Break core with 35k overpull.. Flow check, ok. Pooh to 300m.
13:00	15:00	2.00	1835.00	10	Flow check prior to pull through BOP. Pooh and rack bha in derrick.
15:00	16:30	1.50	1835.00	10	Hold JSA. Lay out inner core barrel.
16:30	17:30	1.00	1835.00	10	Break down and lay out outer core barrel assy.
17:30	19:00	1.50	1835.00	11	Download Batsonic tool. Lay out RLL.
19:00	21:00	2.00	1835.00	11	Make up rotary BHA, pick up new RLL.
21:00	22:30	1.50	1835.00	11	Load MWD data. Install nuclear sources.
22:30	00:00	1.50	1835.00	11	RIH 8½" rotary assembly. Shallow test, ok.

COMMENTS

sperry-sun

DRILLING SERVICES

Daily Drilling Report

Client : Woodside Energy Ltd.
Well Name : Halladale #1 DW-2
Field : Otway Basin
Location : Halladale 1
Rig : Ocean Patriot
Job # : AU-DD-0003325468

CURRENT STATUS Report # 8 17/04/2005

Total Depth (m) :	1941	Casing Depth (m) :	833.80	Operator Reps :	Dave Thorpe, Andrew Clennett
Drilled last 24 hrs (m) :	106	Casing Diameter (in) :	9.625	SSDS Reps :	Tommy Adams (8), Andrew Pritchett (8)
Hole Size (in) :	8.500	Casing ID (in) :	8.681		

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
1936.36	19.03	343.20	1875.57	328.00	N17.80W

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)
Eumeralla	1870.00	1812.96

BHA SUMMARY

BHA 11: 313.20 m; Bit #6rr1 (3. hrs), Stab, Pony, MWD, MWD, MWD, MWD, Sub, Sub, 12x DC, Jar, 2x DC, 15x HWDP

MUD DATA

Type	Weight (sg)	FV (sec)	PV (cp)	YP (lbf/100ft ²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
KCl/Polymer	1.26	89	39	34.0	5.0 / 13.0	4	9.0	11.50	0.60	

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	00:30	0.50	1835.00	11	Service Rig
00:30	02:30	2.00	1835.00	11	Hold JSA. Slip and cut drill line.
02:30	04:30	2.00	1835.00	11	Problems resetting crown-o-matic. Dismantle and rebuild toggle. Test same, ok.
04:30	08:30	4.00	1835.00	11	Rih to 1800m.
08:30	11:30	3.00	1835.00	11	Ream down from 1800m to 1835m (bit depths) for logging info.
11:30	17:30	6.00	1941.00	11	Drill 8½" hole from 1835m to well td at 1941m.
17:30	18:00	0.50	1941.00	11	Pooh. Note 20k overpull at 1900m. Backream to 1891m.
18:00	19:00	1.00	1941.00	11	Relog from 1891m to 1862m. Run back to bottom at 1941m.
19:00	20:30	1.50	1941.00	11	Circulate 3 x bottoms up until shakers clean.
20:30	22:00	1.50	1941.00	11	Trip out from 1941m to 1750m. (Light backream at 1871m and 1856m).
22:00	22:30	0.50	1941.00	11	Run back to bottom at 1941m.
22:30	23:30	1.00	1941.00	11	Circulate until shakers clean.
23:30	00:00	0.50	1941.00	11	Pooh.

COMMENTS

sperry-sun

DRILLING SERVICES

Daily Drilling Report

Client : Woodside Energy Ltd.
Well Name : Halladale #1 DW-2
Field : Otway Basin
Location : Halladale 1
Rig : Ocean Patriot
Job # : AU-DD-0003325468

CURRENT STATUS Report # 9 18/04/2005

Total Depth (m) :	1941	Casing Depth (m) :	833.80	Operator Reps :	Dave Thorpe, Andrew Clennett
Drilled last 24 hrs (m) :	0	Casing Diameter (in) :	9.625	SSDS Reps :	Tommy Adams (9), Andrew Pritchett (9)
Hole Size (in) :	8.500	Casing ID (in) :	8.681		

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
1936.36	19.03	343.20	1875.57	328.00	N17.80W

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)
Eumeralla	1870.00	1812.96

BHA SUMMARY

BHA 11: 313.20 m; Bit #6rr1 (3. hrs), Stab, Pony, MWD, MWD, MWD, MWD, Sub, Sub, 12x DC, Jar, 2x DC, 15x HWDP

MUD DATA

Type	Weight (sg)	FV (sec)	PV (cp)	YP (lbf/100ft ²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
KCl/Polymer	1.26	89	39	34.0	5.0 / 13.0	4	9.0	11.50	0.60	

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	04:30	4.50	1941.00	11	Continue pooh. Flow check at BOP stack, ok.
04:30	05:00	0.50	1941.00	11	Remove nuclear sources.
05:00	06:30	1.50	1941.00	11	Break off bit and HOC. Plug in, rack MWd in derrick and read data.
06:30	07:00	0.50	1941.00	11	Hold JSA and rig up for wireline operations.
07:00	00:00	17.00	1941.00	11	Run wireline logs as per Woodside programme.

COMMENTS



Client : Woodside Energy Ltd.
Well Name : Halladale #1 DW-2
Field : Otway Basin
Location : Halladale 1
Rig : Ocean Patriot
Job # : AU-DD-0003325468

Total Depth	(m)	: 1941	Casing Depth	(m)	: 833.80	Operator Reps	: Dave Thorpe, Andrew Clennett
Drilled last 24 hrs	(m)	: 0	Casing Diameter	(in)	: 9.625	SSDS Reps	: Tommy Adams (10), Andrew Pritchett (10)
Hole Size	(in)	: 8.500	Casing ID	(in)	: 8.681		

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
1936.36	19.03	343.20	1875.57	328.00	N17.80W

Formation Name	MD Top (m)	TVD Top (m)
Eumeralla	1870.00	1812.96

BHA 11: 313.20 m; Bit #6rr1 (10.5 hrs), Stab, Pony, MWD, MWD, MWD, MWD, Sub, Sub, 12x DC, Jar, 2x DC, 15x HWDP

Type	Weight (sg)	FV (sec)	PV (cp)	YP (lbf/100ft²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
KCl/Polymer	1.26	89	39	34.0	5.0 / 13.0	4	9.0	11.50	0.60	

From	To	Hours	TMD (m)	BHA #	Activity
00:00	12:00	12.00	1941.00	11	Wireline becoming stuck before reaching bottom
12:00	00:00	12.00	1941.00	11	Run wireline tools on drill pipe

--