



**3D Oil**

**West Seahorse-3**

**End of Well Report**

	Name	Signature	Date
Schlumberger QC	David de Freitas		
Client approval			

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## General Information

<b>Client:</b>	<b>3D Oil</b>	
<b>Well Name:</b>	<b>West Seahorse-3</b>	
<b>Rig:</b>	<b>West Triton</b>	
<b>Field:</b>	<b>West Seahorse</b>	
<b>Location:</b>	<b>Bass Strait</b>	
<b>Country:</b>	<b>Australia</b>	
<b>Cell Members:</b>	<b>Patrick Dassens (DD) Punniamoorthy Sellathurai (DD) Kevin Stroud (DDT) Jun Ikeda (MWD) San Thida Aung (MWD)</b>	
<b>Town Contacts:</b>	<b>David de Freitas</b> <b>Mee Yean Tan</b>	Directional Drilling Coordinator Field Services Manager
<b>Company Representatives:</b>	<b>S. Corless</b> <b>R. Rossouw</b> <b>M. Ngatai</b>	Company Representative Company Representative Wellsite Geologist



## Geomagnetic and Survey Reference Criteria

### Geomagnetic Data

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<b>Magnetic Model:</b>	BGGM 2007
<b>Magnetic Date:</b>	April 29 <sup>th</sup> 2008
<b>Magnetic Field Strength:</b>	59946.745 nT
<b>Magnetic Declination:</b>	12.844°
<b>Magnetic Dip:</b>	-68.778°

### Survey Reference Criteria

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<b>Reference G:</b>	1000.02 mG
<b>Reference H:</b>	1198.93HCNT
<b>Reference Dip:</b>	-68.778°
<b>G value Tolerance:</b>	2.50 mG
<b>H value Tolerance:</b>	6.00 HCNT
<b>Dip Tolerance:</b>	0.45°

### Survey Corrections Applied

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<b>Reference North:</b>	Grid North
<b>Magnetic Declination:</b>	12.844°
<b>Grid Convergence:</b>	-0.38311463°
<b>Total Azimuth Correction:</b>	+13.227°
<b>Vertical Section Azimuth:</b>	62.960°

### Survey Reference Location

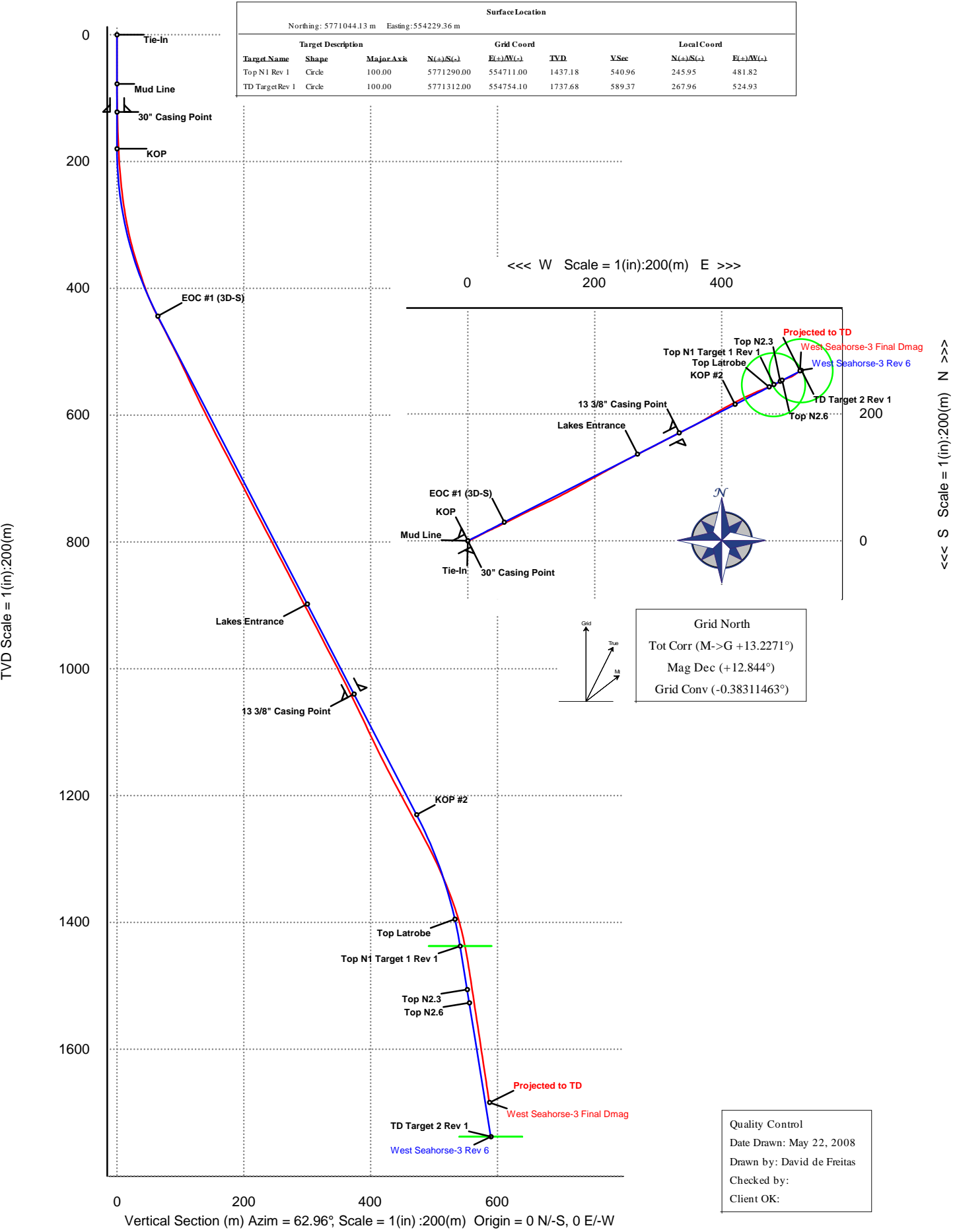
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#### Location Coordinates

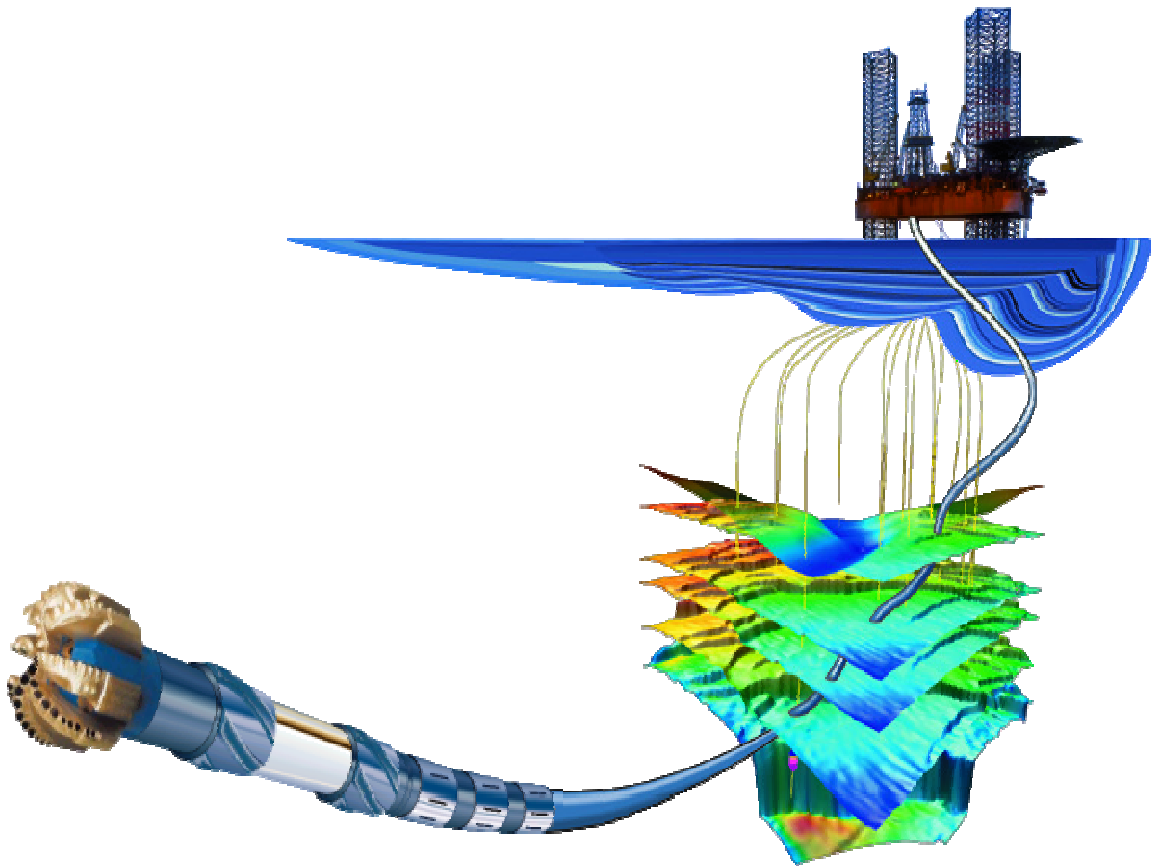
<b>Latitude:</b>	38° 12' 24.942" South
<b>Longitude:</b>	147° 37' 9.865" East
<b>Easting:</b>	554229.358m
<b>Northing:</b>	5771044.135m
<b>Reference System:</b>	

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WELL	West Seahorse-3	FIELD	3D Oil - West Seahorse	STRUCTURE	West Seahorse	
Magnetic Parameters Model: BGM 2007		Dip: -68.778° Mag Dec: +12.844°	Date: April 29, 2008 FS: 59946.7 nT	Surface Location GDA94/MGA94 Zone 55 Lat: S38 12 24.942 Lon: E147 37 9.865 Northing: 5771044.13 m Easting: 554229.36 m Grid Conv: -0.38311463° Scale Fact: 9996362174		Miscellaneous Slot: 1 Plan: West Seahorse-3 Final Srvy Date: April 29, 2008 TVD Ref: RKB (37.68 m above MSL)



## Definitive Survey



## West Seahorse-3 Final DMAG Survey

<b>Report Date:</b> May 21, 2008	<b>Survey / DLS Computation Method:</b> Minimum Curvature / Lubinski
<b>Client:</b> 3D Oil Ltd	<b>Vertical Section Azimuth:</b> 62.960°
<b>Field:</b> 3D Oil - West Seahorse	<b>Vertical Section Origin:</b> N 0.000 m, E 0.000 m
<b>Structure / Slot:</b> West Seahorse / 1	<b>TVD Reference Datum:</b> RKB
<b>Well:</b> West Seahorse-3	<b>TVD Reference Elevation:</b> 37.7 m relative to MSL
<b>Borehole:</b> West Seahorse-3	<b>Sea Bed / Ground Level Elevation:</b> -39.500 m relative to MSL
<b>UWI/API#:</b>	<b>Magnetic Declination:</b> 12.844°
<b>Survey Name / Date:</b> West Seahorse-3 Final Dmag / April 29, 2008	<b>Total Field Strength:</b> 59946.745 nT
<b>Tort / AHD / DDI / ERD ratio:</b> 73.430° / 587.54 m / 5.182 / 0.349	<b>Magnetic Dip:</b> -68.778°
<b>Grid Coordinate System:</b> GDA94/MGA94 Zone 55	<b>Declination Date:</b> April 29, 2008
<b>Location Lat/Long:</b> S 38 12 24.942, E 147 37 9.865	<b>Magnetic Declination Model:</b> BGGM 2007
<b>Location Grid N/E Y/X:</b> N 5771044.135 m, E 554229.358 m	<b>North Reference:</b> Grid North
<b>Grid Convergence Angle:</b> -0.38311463°	<b>Total Corr Mag North -&gt; Grid North:</b> +13.227°
<b>Grid Scale Factor:</b> 0.99963622	<b>Local Coordinates Referenced To:</b> Well Head

Comments	Measured Depth (m)	Inclination (deg)	Azimuth Grid (deg)	Course Length (m)	TVD (m)	Vertical Section (m)	NS Grid North (m)	EW Grid North (m)	Closure (m)	Closure Azimuth (deg)	DLS (deg/30 m)	Mag / Grav Tool Face (deg)
Tie-In	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---
Mud Line	77.50	0.00	0.00	77.50	77.50	0.00	0.00	0.00	0.00	0.00	0.00	71.37M
	182.42	2.71	71.37	104.92	182.38	2.45	0.79	2.35	2.48	71.37	0.77	68.61M
	210.69	4.37	68.61	28.27	210.60	4.19	1.40	3.99	4.23	70.67	1.77	65.93M
	240.38	6.29	65.93	29.69	240.16	6.94	2.47	6.53	6.98	69.23	1.96	7.93L
	269.55	8.46	63.88	29.17	269.08	10.68	4.07	9.91	10.72	67.67	2.25	2.08L
	299.18	10.91	63.41	29.63	298.29	15.66	6.29	14.38	15.69	66.38	2.48	9.23L
	328.89	13.72	61.49	29.71	327.31	22.00	9.23	19.99	22.02	65.22	2.87	9.02R
	358.27	17.82	63.61	29.38	355.58	29.98	12.89	27.08	29.99	64.55	4.23	87.82R
	388.46	17.83	64.35	30.19	384.32	39.22	16.94	35.38	39.23	64.41	0.23	0.81R
	417.21	21.75	64.50	28.75	411.37	48.95	21.14	44.16	48.96	64.42	4.09	6.26L
	446.30	26.47	63.34	29.09	437.91	60.83	26.38	54.83	60.84	64.31	4.89	5.72R
	476.28	27.58	63.58	29.98	464.62	74.45	32.46	67.01	74.46	64.15	1.12	153.10L
	505.67	26.63	62.50	29.39	490.78	87.84	38.53	78.95	87.85	63.99	1.09	127.44R
	534.94	25.97	64.51	29.27	517.02	100.80	44.32	90.55	100.82	63.92	1.14	179.19L
	564.20	25.07	64.48	29.26	543.43	113.41	49.75	101.93	113.42	63.99	0.92	15.00R
	622.88	26.33	65.24	58.68	596.30	138.84	60.55	124.97	138.87	64.15	0.67	61.41L
	653.06	26.86	63.15	30.18	623.29	152.34	66.44	137.13	152.38	64.15	1.07	35.71L
	682.20	27.68	61.89	29.14	649.19	165.69	72.60	148.97	165.72	64.02	1.03	154.70R
	711.65	27.35	62.23	29.45	675.31	179.30	78.97	160.99	179.32	63.87	0.37	53.29L
	740.89	27.59	61.54	29.24	701.25	192.78	85.33	172.89	192.80	63.73	0.41	100.84L
	771.14	27.55	61.08	30.25	728.07	206.78	92.05	185.17	206.79	63.57	0.21	143.92L
	800.56	27.43	60.89	29.42	754.17	220.35	98.64	197.05	220.36	63.41	0.15	27.14R
	829.48	27.85	61.35	28.92	779.78	233.76	105.12	208.79	233.76	63.28	0.49	173.09L
	858.79	27.32	61.21	29.31	805.76	247.32	111.64	220.70	247.33	63.17	0.55	32.51R
	888.16	27.56	61.54	29.37	831.83	260.85	118.12	232.58	260.85	63.07	0.29	134.05R
	917.34	27.23	62.29	29.18	857.74	274.28	124.44	244.42	274.28	63.02	0.49	106.23R
	947.31	27.18	62.67	29.97	884.39	287.98	130.77	256.57	287.98	62.99	0.18	8.31R
	975.78	28.05	62.94	28.47	909.62	301.18	136.81	268.31	301.18	62.98	0.93	150.13R
	1005.05	27.38	63.78	29.27	935.53	314.79	142.91	280.48	314.79	63.00	0.79	113.70L
	1034.76	27.21	62.92	29.71	961.93	328.41	149.02	292.65	328.41	63.01	0.43	41.49L
	1064.70	27.86	61.70	29.94	988.48	342.25	155.45	304.91	342.25	62.99	0.86	149.68R
	1094.42	27.04	62.76	29.72	1014.85	355.95	161.84	317.03	355.95	62.96	0.96	166.79R
	1143.32	25.87	63.39	48.90	1058.63	377.73	171.70	336.45	377.73	62.96	0.74	158.21L
	1155.24	25.60	63.14	11.92	1069.37	382.91	174.03	341.07	382.91	62.97	0.73	133.66L
	1184.95	25.36	62.55	29.71	1096.19	395.69	179.87	352.45	395.69	62.96	0.35	37.50L

1214.47	26.04	61.37	29.52	1122.79	408.49	185.88	363.74	408.49	62.93	0.86	31.66L
1244.37	26.98	60.10	29.90	1149.55	421.82	192.41	375.38	421.82	62.86	1.10	22.19L
1273.71	27.90	59.30	29.34	1175.59	435.32	199.23	387.06	435.32	62.76	1.01	38.25R
1303.22	28.28	59.93	29.51	1201.62	449.19	206.26	399.04	449.20	62.67	0.49	85.80R
1333.07	28.34	61.42	29.85	1227.90	463.34	213.19	411.38	463.34	62.61	0.71	101.29R
1362.30	28.22	62.76	29.23	1253.64	477.18	219.68	423.62	477.19	62.59	0.66	154.80R
1392.46	27.26	63.75	30.16	1280.33	491.22	225.99	436.16	491.23	62.61	1.06	156.70R
1421.70	25.28	65.76	29.24	1306.55	504.15	231.52	447.86	504.16	62.66	2.23	165.32R
1451.62	22.71	67.51	29.92	1333.89	516.29	236.35	459.02	516.30	62.76	2.67	171.38R
1481.39	20.37	68.53	29.77	1361.58	527.18	240.45	469.15	527.18	62.86	2.39	174.73L
1511.23	17.28	67.57	29.84	1389.82	536.77	244.04	478.08	536.77	62.96	3.12	170.35L
1540.81	13.06	64.38	29.58	1418.36	544.49	247.16	485.16	544.49	63.00	4.36	161.40L
1570.48	10.61	59.84	29.67	1447.40	550.57	249.99	490.55	550.57	63.00	2.65	171.93L
1600.19	8.73	58.08	29.71	1476.68	555.55	252.55	494.83	555.55	62.96	1.92	94.34R
1629.88	8.74	67.66	29.69	1506.03	560.04	254.60	498.83	560.04	62.96	1.47	107.14R
1658.96	8.56	72.15	29.08	1534.78	564.38	256.10	502.93	564.38	63.01	0.72	55.59L
1688.35	8.90	69.06	29.39	1563.83	568.80	257.59	507.13	568.80	63.07	0.59	110.77L
1717.96	8.56	61.83	29.61	1593.10	573.28	259.45	511.22	573.28	63.09	1.16	92.10L
1747.50	8.58	55.23	29.54	1622.31	577.66	261.74	514.97	577.67	63.06	1.00	43.20L
1777.39	8.69	54.55	29.89	1651.86	582.11	264.32	518.64	582.11	62.99	0.15	78.07R
1789.31	8.74	56.02	11.92	1663.64	583.90	265.35	520.12	583.90	62.97	0.57	---
1810.00	8.74	56.02	20.69	1684.09	587.02	267.11	522.73	587.02	62.93	0.00	---

**Survey Type:** Definitive Survey

**Survey Error Model:** SLB ISCWSA version 24 \*\*\* 3-D 95.00% Confidence 2.7955 sigma

**Surveying Prog:**

**MD From ( m )**

**MD To ( m )**

**EOU Freq**

**Survey Tool Type**

**Borehole -> Survey**

0.00	77.18	Act-Stns	SLB_ZERO-Depth Only	West Seahorse-3 -> West Seahorse-3 Final Dmag
77.18	77.50	Act-Stns	SLB_ZERO	West Seahorse-3 -> West Seahorse-3 Final Dmag
77.50	1094.42	Act-Stns	SLB_MWD+DMAG	West Seahorse-3 -> West Seahorse-3 Final Dmag
1094.42	1789.31	Act-Stns	SLB_MWD-STD	West Seahorse-3 -> West Seahorse-3 Final Dmag
1789.31	1810.00	Act-Stns	SLB_BLIND+TREND	West Seahorse-3 -> West Seahorse-3 Final Dmag



## West Seahorse-3 Final Dmag Geodetic Survey

<b>Report Date:</b> May 21, 2008 <b>Client:</b> 3D Oil Ltd <b>Field:</b> 3D Oil - West Seahorse <b>Structure / Slot:</b> West Seahorse / 1 <b>Well:</b> West Seahorse-3 <b>Borehole:</b> West Seahorse-3 <b>UWI/API#:</b> <b>Survey Name / Date:</b> West Seahorse-3 Final Dmag / April 29, 2008 <b>Tort / AHD / DDI / ERD ratio:</b> 73.430° / 587.54 m / 5.182 / 0.349 <b>Grid Coordinate System:</b> GDA94/MGA94 Zone 55 <b>Location Lat/Long:</b> S 38 12 24.942, E 147 37 9.865 <b>Location Grid N/E Y/X:</b> N 5771044.135 m, E 554229.358 m <b>Grid Convergence Angle:</b> -0.38311463° <b>Grid Scale Factor:</b> 0.99963622	<b>Survey / DLS Computation Method:</b> Minimum Curvature / Lubinski <b>Vertical Section Azimuth:</b> 62.960° <b>Vertical Section Origin:</b> N 0.000 m, E 0.000 m <b>TVD Reference Datum:</b> RKB <b>TVD Reference Elevation:</b> 37.7 m relative to MSL <b>Sea Bed / Ground Level Elevation:</b> -39.500 m relative to MSL <b>Magnetic Declination:</b> 12.844° <b>Total Field Strength:</b> 59946.745 nT <b>Magnetic Dip:</b> -68.778° <b>Declination Date:</b> April 29, 2008 <b>Magnetic Declination Model:</b> BGGM 2007 <b>North Reference:</b> Grid North <b>Total Corr Mag North -&gt; Grid North:</b> +13.227° <b>Local Coordinates Referenced To:</b> Well Head
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Comments	Measured Depth (m)	Inclination (deg)	Azimuth Grid (deg)	TVD (m)	Vertical Section (m)	NS Grid North (m)	EW Grid North (m)	DLS (deg/30 m)	Northing (m)	Easting (m)	Latitude	Longitude
Tie-In	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5771044.14	554229.36	S 38 12 24.942	E 147 37 9.865
Mud Line	77.50	0.00	0.00	77.50	0.00	0.00	0.00	0.00	5771044.14	554229.36	S 38 12 24.942	E 147 37 9.865
	182.42	2.71	71.37	182.38	2.45	0.79	2.35	0.77	5771044.93	554231.71	S 38 12 24.916	E 147 37 9.961
	210.69	4.37	68.61	210.60	4.19	1.40	3.99	1.77	5771045.53	554233.34	S 38 12 24.896	E 147 37 10.028
	240.38	6.29	65.93	240.16	6.94	2.47	6.53	1.96	5771046.61	554235.88	S 38 12 24.861	E 147 37 10.132
	269.55	8.46	63.88	269.08	10.68	4.07	9.91	2.25	5771048.20	554239.27	S 38 12 24.808	E 147 37 10.271
	299.18	10.91	63.41	298.29	15.66	6.29	14.38	2.48	5771050.42	554243.73	S 38 12 24.735	E 147 37 10.454
	328.89	13.72	61.49	327.31	22.00	9.23	19.99	2.87	5771053.36	554249.34	S 38 12 24.639	E 147 37 10.684
	358.27	17.82	63.61	355.58	29.98	12.89	27.08	4.23	5771057.02	554256.43	S 38 12 24.518	E 147 37 10.974
	388.46	17.83	64.35	384.32	39.22	16.94	35.38	0.23	5771061.07	554264.73	S 38 12 24.385	E 147 37 11.315
	417.21	21.75	64.50	411.37	48.95	21.14	44.16	4.09	5771065.27	554273.51	S 38 12 24.247	E 147 37 11.674
	446.30	26.47	63.34	437.91	60.83	26.38	54.83	4.89	5771070.50	554284.17	S 38 12 24.075	E 147 37 12.111
	476.28	27.58	63.58	464.62	74.45	32.46	67.01	1.12	5771076.59	554296.35	S 38 12 23.875	E 147 37 12.610
	505.67	26.63	62.50	490.78	87.84	38.53	78.95	1.09	5771082.65	554308.28	S 38 12 23.675	E 147 37 13.099
	534.94	25.97	64.51	517.02	100.80	44.32	90.55	1.14	5771088.44	554319.88	S 38 12 23.485	E 147 37 13.575
	564.20	25.07	64.48	543.43	113.41	49.75	101.93	0.92	5771093.86	554331.25	S 38 12 23.307	E 147 37 14.041
	622.88	26.33	65.24	596.30	138.84	60.55	124.97	0.67	5771104.67	554354.28	S 38 12 22.951	E 147 37 14.985
	653.06	26.86	63.15	623.29	152.34	66.44	137.13	1.07	5771110.55	554366.44	S 38 12 22.758	E 147 37 15.483
	682.20	27.68	61.89	649.19	165.69	72.60	148.97	1.03	5771116.71	554378.28	S 38 12 22.555	E 147 37 15.968
	711.65	27.35	62.23	675.31	179.30	78.97	160.99	0.37	5771123.08	554390.29	S 38 12 22.346	E 147 37 16.460
	740.89	27.59	61.54	701.25	192.78	85.33	172.89	0.41	5771129.43	554402.18	S 38 12 22.137	E 147 37 16.947
	771.14	27.55	61.08	728.07	206.78	92.05	185.17	0.21	5771136.15	554414.46	S 38 12 21.917	E 147 37 17.450
	800.56	27.43	60.89	754.17	220.35	98.64	197.05	0.15	5771142.74	554426.33	S 38 12 21.700	E 147 37 17.937
	829.48	27.85	61.35	779.78	233.76	105.12	208.79	0.49	5771149.21	554438.08	S 38 12 21.488	E 147 37 18.418
	858.79	27.32	61.21	805.76	247.32	111.64	220.70	0.55	5771155.73	554449.97	S 38 12 21.274	E 147 37 18.905
	888.16	27.56	61.54	831.83	260.85	118.12	232.58	0.29	5771162.21	554461.85	S 38 12 21.061	E 147 37 19.392
	917.34	27.23	62.29	857.74	274.28	124.44	244.42	0.49	5771168.53	554473.69	S 38 12 20.853	E 147 37 19.877
	947.31	27.18	62.67	884.39	287.98	130.77	256.57	0.18	5771174.86	554485.84	S 38 12 20.645	E 147 37 20.374
	975.78	28.05	62.94	909.62	301.18	136.81	268.31	0.93	5771180.89	554497.57	S 38 12 20.447	E 147 37 20.855
	1005.05	27.38	63.78	935.53	314.79	142.91	280.48	0.79	5771186.99	554509.73	S 38 12 20.246	E 147 37 21.354
	1034.76	27.21	62.92	961.93	328.41	149.02	292.65	0.43	5771193.10	554521.91	S 38 12 20.046	E 147 37 21.852
	1064.70	27.86	61.70	988.48	342.25	155.45	304.91	0.86	5771199.53	554534.16	S 38 12 19.834	E 147 37 22.354
	1094.42	27.04	62.76	1014.85	355.95	161.84	317.03	0.96	5771205.91	554546.27	S 38 12 19.625	E 147 37 22.851
	1143.32	25.87	63.39	1058.63	377.73	171.70	336.45	0.74	5771215.78	554565.69	S 38 12 19.300	E 147 37 23.646
	1155.24	25.60	63.14	1069.37	382.91	174.03	341.07	0.73	5771218.10	554570.31	S 38 12 19.224	E 147 37 23.836
	1184.95	25.36	62.55	1096.19	395.69	179.87	352.45	0.35	5771223.93	554581.68	S 38 12 19.032	E 147 37 24.301
	1214.47	26.04	61.37	1122.79	408.49	185.88	363.74	0.86	5771229.95	554592.97	S 38 12 18.835	E 147 37 24.764
	1244.37	26.98	60.10	1149.55	421.82	192.41	375.38	1.10	5771236.48	554604.61	S 38 12 18.620	E 147 37 25.241
	1273.71	27.90	59.30	1175.59	435.32	199.23	387.06	1.01	5771243.30	554616.27	S 38 12 18.397	E 147 37 25.719
	1303.22	28.28	59.93	1201.62	449.19	206.26	399.04	0.49	5771250.32	554628.26	S 38 12 18.166	E 147 37 26.209
	1333.07	28.34	61.42	1227.90	463.34	213.19	411.38	0.71	5771257.25	554640.59	S 38 12 17.938	E 147 37 26.715

1362.30	28.22	62.76	1253.64	477.18	219.68	423.62	0.66	5771263.73	554652.83	S 38 12 17.726	E 147 37 27.216
1392.46	27.26	63.75	1280.33	491.22	225.99	436.16	1.06	5771270.05	554665.36	S 38 12 17.518	E 147 37 27.729
1421.70	25.28	65.76	1306.55	504.15	231.52	447.86	2.23	5771275.57	554677.05	S 38 12 17.336	E 147 37 28.209
1451.62	22.71	67.51	1333.89	516.29	236.35	459.02	2.67	5771280.40	554688.21	S 38 12 17.177	E 147 37 28.666
1481.39	20.37	68.53	1361.58	527.18	240.45	469.15	2.39	5771284.50	554698.34	S 38 12 17.042	E 147 37 29.081
1511.23	17.28	67.57	1389.82	536.77	244.04	478.08	3.12	5771288.09	554707.27	S 38 12 16.923	E 147 37 29.447
1540.81	13.06	64.38	1418.36	544.49	247.16	485.16	4.36	5771291.21	554714.34	S 38 12 16.821	E 147 37 29.737
1570.48	10.61	59.84	1447.40	550.57	249.99	490.55	2.65	5771294.03	554719.73	S 38 12 16.728	E 147 37 29.958
1600.19	8.73	58.08	1476.68	555.55	252.55	494.83	1.92	5771296.60	554724.00	S 38 12 16.644	E 147 37 30.133
1629.88	8.74	67.66	1506.03	560.04	254.60	498.83	1.47	5771298.64	554728.00	S 38 12 16.576	E 147 37 30.297
1658.96	8.56	72.15	1534.78	564.38	256.10	502.93	0.72	5771300.15	554732.10	S 38 12 16.527	E 147 37 30.465
1688.35	8.90	69.06	1563.83	568.80	257.59	507.13	0.59	5771301.63	554736.31	S 38 12 16.478	E 147 37 30.638
1717.96	8.56	61.83	1593.10	573.28	259.45	511.22	1.16	5771303.49	554740.39	S 38 12 16.417	E 147 37 30.805
1747.50	8.58	55.23	1622.31	577.66	261.74	514.97	1.00	5771305.78	554744.14	S 38 12 16.341	E 147 37 30.958
1777.39	8.69	54.55	1651.86	582.11	264.32	518.64	0.15	5771308.36	554747.81	S 38 12 16.257	E 147 37 31.109
1789.31	8.74	56.02	1663.64	583.90	265.35	520.12	0.57	5771309.39	554749.29	S 38 12 16.223	E 147 37 31.169
Projected to TD	1810.00	8.74	1684.09	587.02	267.11	522.73	0.00	5771311.15	554751.90	S 38 12 16.166	E 147 37 31.276

**Survey Type:** Definitive Survey

**Survey Error Model:** SLB ISCWSA version 24 \*\*\* 3-D 95.00% Confidence 2.7955 sigma

**Surveying Prog:**

MD From ( m )	MD To ( m )	EOU Freq	Survey Tool Type	Borehole -> Survey
0.00	77.18	Act-Stns	SLB_ZERO-Depth Only	West Seahorse-3 -> West Seahorse-3 Final Dmag
77.18	77.50	Act-Stns	SLB_ZERO	West Seahorse-3 -> West Seahorse-3 Final Dmag
77.50	1094.42	Act-Stns	SLB_MWD+DMAG	West Seahorse-3 -> West Seahorse-3 Final Dmag
1094.42	1789.31	Act-Stns	SLB_MWD-STD	West Seahorse-3 -> West Seahorse-3 Final Dmag
1789.31	1810.00	Act-Stns	SLB_BLIND+TREND	West Seahorse-3 -> West Seahorse-3 Final Dmag

# West Seahorse-3 Final Dmag EOU Report

<b>Report Date:</b> May 21, 2008 <b>Client:</b> 3D Oil Ltd <b>Field:</b> 3D Oil - West Seahorse <b>Structure / Slot:</b> West Seahorse / 1 <b>Well:</b> West Seahorse-3 <b>Borehole:</b> West Seahorse-3 <b>UWI/API#:</b> <b>Survey Name / Date:</b> West Seahorse-3 Final Dmag / April 29, 2008 <b>Tort / AHD / DDI / ERD ratio:</b> 73.430° / 587.54 m / 5.182 / 0.349 <b>Grid Coordinate System:</b> GDA94/MGA94 Zone 55 <b>Location Lat/Long:</b> S 38 12 24.942, E 147 37 9.865 <b>Location Grid N/E Y/X:</b> N 5771044.135 m, E 554229.358 m <b>Grid Convergence Angle:</b> -0.38311463° <b>Grid Scale Factor:</b> 0.99963622	<b>Survey / DLS Computation Method:</b> Minimum Curvature / Lubinski <b>Vertical Section Azimuth:</b> 62.960° <b>Vertical Section Origin:</b> N 0.000 m, E 0.000 m <b>TVD Reference Datum:</b> RKB <b>TVD Reference Elevation:</b> 37.7 m relative to MSL <b>Sea Bed / Ground Level Elevation:</b> -39.500 m relative to MSL <b>Magnetic Declination:</b> 12.844° <b>Total Field Strength:</b> 59946.745 nT <b>Magnetic Dip:</b> -68.778° <b>Declination Date:</b> April 29, 2008 <b>Magnetic Declination Model:</b> BGGM 2007 <b>North Reference:</b> Grid North <b>Total Corr Mag North -&gt; Grid North:</b> +13.227° <b>Local Coordinates Referenced To:</b> Well Head
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Comments	Measured Depth (m)	Inclination (deg)	Azimuth Grid (deg)	TVD (m)	Vertical Section (m)	NS Grid North (m)	EW Grid North (m)	DLS (deg/30 m)	Semi-Axis Major NEV (m)	Semi-Axis Minor NEV (m)	EOU Unc Vertical (m)	Major Axis Azimuth NEV (deg)	Survey Tool Model
Tie-In	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.16	0.00	90.00	SLB_ZERO-Depth Only
Mud Line	77.50	0.00	0.00	77.50	0.00	0.00	0.00	0.00	0.16	0.16	0.00	90.00	SLB_ZERO
	182.42	2.71	71.37	182.38	2.45	0.79	2.35	0.77	0.43	0.42	0.99	152.82	SLB_MWD+DMAG
	210.69	4.37	68.61	210.60	4.19	1.40	3.99	1.77	0.52	0.51	0.99	153.30	SLB_MWD+DMAG
	240.38	6.29	65.93	240.16	6.94	2.47	6.53	1.96	0.63	0.61	0.99	153.47	SLB_MWD+DMAG
	269.55	8.46	63.88	269.08	10.68	4.07	9.91	2.25	0.76	0.71	0.99	153.14	SLB_MWD+DMAG
	299.18	10.91	63.41	298.29	15.66	6.29	14.38	2.48	0.90	0.81	0.99	152.80	SLB_MWD+DMAG
	328.89	13.72	61.49	327.31	22.00	9.23	19.99	2.87	1.07	0.92	0.99	152.07	SLB_MWD+DMAG
	358.27	17.82	63.61	355.58	29.98	12.89	27.08	4.23	1.26	1.03	0.99	152.17	SLB_MWD+DMAG
	388.46	17.83	64.35	384.32	39.22	16.94	35.38	0.23	1.45	1.12	0.99	152.16	SLB_MWD+DMAG
	417.21	21.75	64.50	411.37	48.95	21.14	44.16	4.09	1.65	1.20	1.00	152.38	SLB_MWD+DMAG
	446.30	26.47	63.34	437.91	60.83	26.38	54.83	4.89	1.95	1.33	1.01	152.40	SLB_MWD+DMAG
	476.28	27.58	63.58	464.62	74.45	32.46	67.01	1.12	2.29	1.47	1.02	152.48	SLB_MWD+DMAG
	505.67	26.63	62.50	490.78	87.84	38.53	78.95	1.09	2.56	1.54	1.04	152.51	SLB_MWD+DMAG
	534.94	25.97	64.51	517.02	100.80	44.32	90.55	1.14	2.77	1.57	1.06	152.83	SLB_MWD+DMAG
	564.20	25.07	64.48	543.43	113.41	49.75	101.93	0.92	2.99	1.61	1.09	152.95	SLB_MWD+DMAG
	622.88	26.33	65.24	596.30	138.84	60.55	124.97	0.67	3.55	1.78	1.15	153.23	SLB_MWD+DMAG
	653.06	26.86	63.15	623.29	152.34	66.44	137.13	1.07	3.88	1.91	1.19	153.15	SLB_MWD+DMAG
	682.20	27.68	61.89	649.19	165.69	72.60	148.97	1.03	4.19	2.03	1.23	153.03	SLB_MWD+DMAG
	711.65	27.35	62.23	675.31	179.30	78.97	160.99	0.37	4.49	2.12	1.27	152.95	SLB_MWD+DMAG
	740.89	27.59	61.54	701.25	192.78	85.33	172.89	0.41	4.78	2.22	1.32	152.83	SLB_MWD+DMAG
	771.14	27.55	61.08	728.07	206.78	92.05	185.17	0.21	5.10	2.33	1.36	152.70	SLB_MWD+DMAG
	800.56	27.43	60.89	754.17	220.35	98.64	197.05	0.15	5.39	2.41	1.41	152.59	SLB_MWD+DMAG
	829.48	27.85	61.35	779.78	233.76	105.12	208.79	0.49	5.70	2.52	1.46	152.48	SLB_MWD+DMAG
	858.79	27.32	61.21	805.76	247.32	111.64	220.70	0.55	6.01	2.63	1.51	152.37	SLB_MWD+DMAG
	888.16	27.56	61.54	831.83	260.85	118.12	232.58	0.29	6.32	2.73	1.56	152.29	SLB_MWD+DMAG
	917.34	27.23	62.29	857.74	274.28	124.44	244.42	0.49	6.63	2.84	1.61	152.24	SLB_MWD+DMAG
	947.31	27.18	62.67	884.39	287.98	130.77	256.57	0.18	6.92	2.94	1.66	152.23	SLB_MWD+DMAG
	975.78	28.05	62.94	909.62	301.18	136.81	268.31	0.93	7.23	3.06	1.72	152.22	SLB_MWD+DMAG
	1005.05	27.38	63.78	935.53	314.79	142.91	280.48	0.79	7.55	3.18	1.77	152.25	SLB_MWD+DMAG
	1034.76	27.21	62.92	961.93	328.41	149.02	292.65	0.43	7.85	3.27	1.82	152.25	SLB_MWD+DMAG
	1064.70	27.86	61.70	988.48	342.25	155.45	304.91	0.86	8.17	3.39	1.88	152.20	SLB_MWD+DMAG
	1094.42	27.04	62.76	1014.85	355.95	161.84	317.03	0.96	8.48	3.51	1.93	152.21	SLB_MWD+DMAG
	1143.32	25.87	63.39	1058.63	377.73	171.70	336.45	0.74	8.93	3.60	1.97	152.25	SLB_MWD-STD
	1155.24	25.60	63.14	1069.37	382.91	174.03	341.07	0.73	9.03	3.60	1.98	152.25	SLB_MWD-STD
	1184.95	25.36	62.55	1096.19	395.69	179.87	352.45	0.35	9.28	3.61	1.99	152.25	SLB_MWD-STD
	1214.47	26.04	61.37	1122.79	408.49	185.88	363.74	0.86	9.53	3.62	2.00	152.21	SLB_MWD-STD
	1244.37	26.98	60.10	1149.55	421.82	192.41	375.38	1.10	9.80	3.63	2.02	152.13	SLB_MWD-STD
	1273.71	27.90	59.30	1175.59	435.32	199.23	387.06	1.01	10.08	3.65	2.03	152.03	SLB_MWD-STD
	1303.22	28.28	59.93	1201.62	449.19	206.26	399.04	0.49	10.37	3.68	2.05	151.96	SLB_MWD-STD
	1333.07	28.34	61.42	1227.90	463.34	213.19	411.38	0.71	10.67	3.71	2.07	151.95	SLB_MWD-STD
	1362.30	28.22	62.76	1253.64	477.18	219.68	423.62	0.66	10.96	3.74	2.09	151.97	SLB_MWD-STD
	1392.46	27.26	63.75	1280.33	491.22	225.99	436.16	1.06	11.27	3.77	2.11	152.01	SLB_MWD-STD

1421.70	25.28	65.76	1306.55	504.15	231.52	447.86	2.23	11.56	3.82	2.13	152.12 SLB_MWD-STD
1451.62	22.71	67.51	1333.89	516.29	236.35	459.02	2.67	11.83	3.86	2.15	152.25 SLB_MWD-STD
1481.39	20.37	68.53	1361.58	527.18	240.45	469.15	2.39	12.07	3.91	2.17	152.38 SLB_MWD-STD
1511.23	17.28	67.57	1389.82	536.77	244.04	478.08	3.12	12.29	3.95	2.19	152.46 SLB_MWD-STD
1540.81	13.06	64.38	1418.36	544.49	247.16	485.16	4.36	12.47	3.98	2.20	152.46 SLB_MWD-STD
1570.48	10.61	59.84	1447.40	550.57	249.99	490.55	2.65	12.61	4.02	2.22	152.37 SLB_MWD-STD
1600.19	8.73	58.08	1476.68	555.55	252.55	494.83	1.92	12.72	4.05	2.23	152.31 SLB_MWD-STD
1629.88	8.74	67.66	1506.03	560.04	254.60	498.83	1.47	12.82	4.08	2.24	152.48 SLB_MWD-STD
1658.96	8.56	72.15	1534.78	564.38	256.10	502.93	0.72	12.92	4.12	2.25	152.60 SLB_MWD-STD
1688.35	8.90	69.06	1563.83	568.80	257.59	507.13	0.59	13.02	4.13	2.26	152.61 SLB_MWD-STD
1717.96	8.56	61.83	1593.10	573.28	259.45	511.22	1.16	13.12	4.13	2.27	152.51 SLB_MWD-STD
1747.50	8.58	55.23	1622.31	577.66	261.74	514.97	1.00	13.21	4.17	2.29	152.37 SLB_MWD-STD
1777.39	8.69	54.55	1651.86	582.11	264.32	518.64	0.15	13.31	4.19	2.30	152.30 SLB_MWD-STD
1789.31	8.74	56.02	1663.64	583.90	265.35	520.12	0.57	13.35	4.19	2.30	152.30 SLB_MWD-STD
Projected to TD	1810.00	8.74	1684.09	587.02	267.11	522.73	0.00	13.91	4.47	2.37	151.81 SLB_BLIND+TREND

**Survey Type:** Definitive Survey

**NOTES:** Only depth error sources are used from surface to mud-line.

**Structure Uncertainty:** 0.00 m Included

**Slot Uncertainty:** 0.00 m Included

**Hole Diameter:** 12.25 in Included

**Global Error Sources Used:** YES

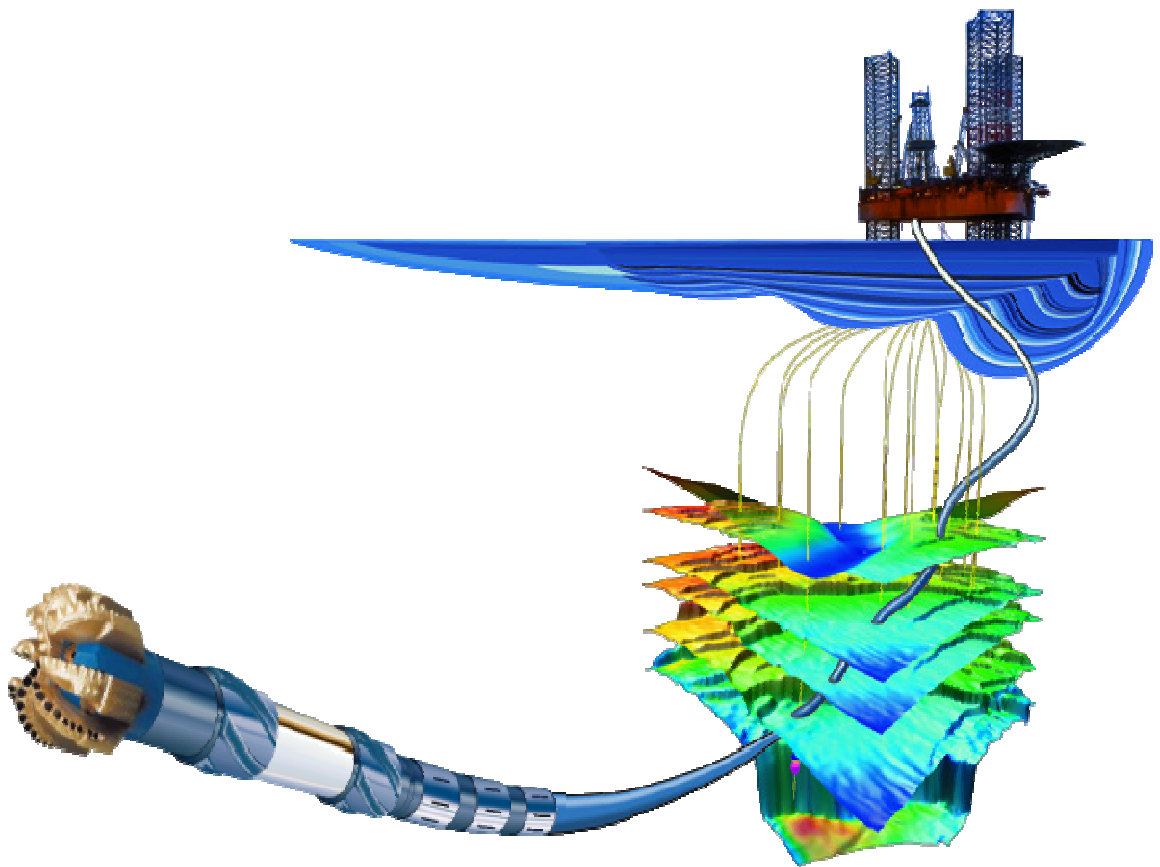
**Along-Hole Depth Uncertainty:** At survey stations

**Survey Error Model:** SLB ISCWSA version 24 \*\*\* 3-D 95.00% Confidence 2.7955 sigma

**Surveying Prog:**

<b>MD From ( m )</b>	<b>MD To ( m )</b>	<b>EOU Freq</b>	<b>Survey Tool Type</b>	<b>Borehole -&gt; Survey</b>
0.00	77.18	Act-Stns	SLB_ZERO-Depth Only	West Seahorse-3 -> West Seahorse-3 Final Dmag
77.18	77.50	Act-Stns	SLB_ZERO	West Seahorse-3 -> West Seahorse-3 Final Dmag
77.50	1094.42	Act-Stns	SLB_MWD+DMAG	West Seahorse-3 -> West Seahorse-3 Final Dmag
1094.42	1789.31	Act-Stns	SLB_MWD-STD	West Seahorse-3 -> West Seahorse-3 Final Dmag
1789.31	1810.00	Act-Stns	SLB_BLIND+TREND	West Seahorse-3 -> West Seahorse-3 Final Dmag

## Performance Drilling Report





## **BHA 1 / Bit 2**

17 ½" (445 mm) Steerable Motor Assembly  
125m – 1123m MD

### **BHA**

17 ½" Hughes MXL-T1V Tooth Bit (3 x 20 jets)  
9 5/8 PowerPak Motor (5:6 lobe, 4.0 stage, 17 ¼ sleeve and 1.5° bend)  
17" String Stab  
Crossover Sub  
Float Sub  
3 x 8" Pony NMDC  
Crossover Sub  
PowerPulse MWD (800-1200 gpm)  
2 x 8" NMDC  
8 ¼" Spiral Drill Collars (5 joints)  
Hydraulic Jar  
8 ¼" Spiral Drill Collar (2 joints)  
Crossover Sub  
5 ½" HW Drill Pipe (12 joints)  
5 ½" Drill Pipe to Surface

### **Drilling Summary**

Drilled cement and float equipment, cleaned out rat hole. Rotary drilled to kick off point at 172m. The kick off section was directionally drilled, mainly sliding (and rotating when required), building at 3°/30m to 27.4°.

At 386m, in the kick off section, a full stand was back reamed and reamed down once between 386m to 350m to smoothen and reduce a higher than expected dogleg severity. The dogleg severity was reduced from 5.3°/30m to 4.2°/30m and this process took about 1 hour of rig time which involved racking back a stand which was already made to drill ahead.

The tangent section was rotary drilled with minor slides (7-10m every 2-3 stands) to counter the general dropping tendency of 0.3° to 0.6°/30m and there was also a slight right hand walk.

From 0° - 8° the motor was able to build at 2.5 °/30m.  
From 8° - 27° the motor was able to build at 3.8 °/30m.

Reactive torque was about 30° with 25 klbs WOB

No hole problems were encountered or reported and all directional requirements were met. Trip out of the hole was uneventful. Hole was cased and cemented.



## Drilling Performance

Interval	Distance (m)	Time (hrs)	ROP (m/hr)
Total Drilled	998	28.81	34.64
Total Drilled in rotary	668	20.88	31.99
Total Drilled in slide mode	330	7.93	41.61
Bit Graded	2 – 2 – WT – A – E – In – BT - TD		

## Section Breakdown

Section	Rotary m (%)	Slide m (%)
Start of run to KOP (125-170m)	45 (100%)	-
KOP to EOC (170-465m)	48 (16%)	247 (84%)
EOC to section TD (465-1123m)	575 (87%)	83 (13%)



## **BHA 2 / Bit 3**

12 ¼" (311 mm) Rotary Steerable Assembly  
1123m – 1810 m MD (687m)

### **BHA**

12 ¼" Reed Hycalog RSX616 MA 16 PDC Bit (3 x 15 & 3 x 16 jets)  
PowerDrive 900 X5 (without flow restrictor)  
PowerDrive 900 Receiver (with ported float) and Flex Collar  
8 ¼" GVR  
PowerPulse MWD (600-1200 gpm)  
1 x 8" NMDC  
8 ¼" Spiral Drill Collar  
Hydraulic Jar  
8 ¼" Spiral Drill Collar  
Crossover Sub  
5 ½" HW Drill Pipe (12 joints)  
5 ½" Drill Pipe to Surface

### **Drilling Summary**

The cement was tagged early at 285m and drilled out, drilling the float equipment was difficult and time consuming. Three meters of new formation was drill out and a formation integrity test was performed.

Once out of the shoe the PowerDrive assembly had a slight dropping tendency in neutral steering mode. The rate of penetration was held to about 30 m/hr until the BHA was clear of the shoe and rat hole and then the drilling parameters were increased. A 50% steering ratio was required to hold the assembly in the tangent section. A rate of penetration of about 60 m/hr was achieved for most of the tangent section and the start of the drop section.

At the start of the drop section the tool was initially placed in a 25% drop with a right bias to counteract a left turn tendency. The drop rate was much lower than expected so steering ratio was increased to eventually 100% low side. Drop rates of only low 2 °/30m was achieved in the Lakes Entrance formation. Once into the Latrobe Group formation drops rates increased to low 4 °/30m and the required drop angle could be achieved. The rate of penetration was held back to 30 m/hr for logging purposes and this may have helped to improve the drop rate.

Once the drop was achieved the PowerDrive was placed in Inclination Hold mode for the remainder of the tangent section to TD at 1810m MDRT. Both geological targets were successfully penetrated within the allowed tolerance.

A moderate stick-slip was observed for most of the run but it did not affect the steering ability. Stick-slip was considerably lower in the Latrobe Group formation.

The bit was graded as 3-1-CT-A-X-I-WT-TD.

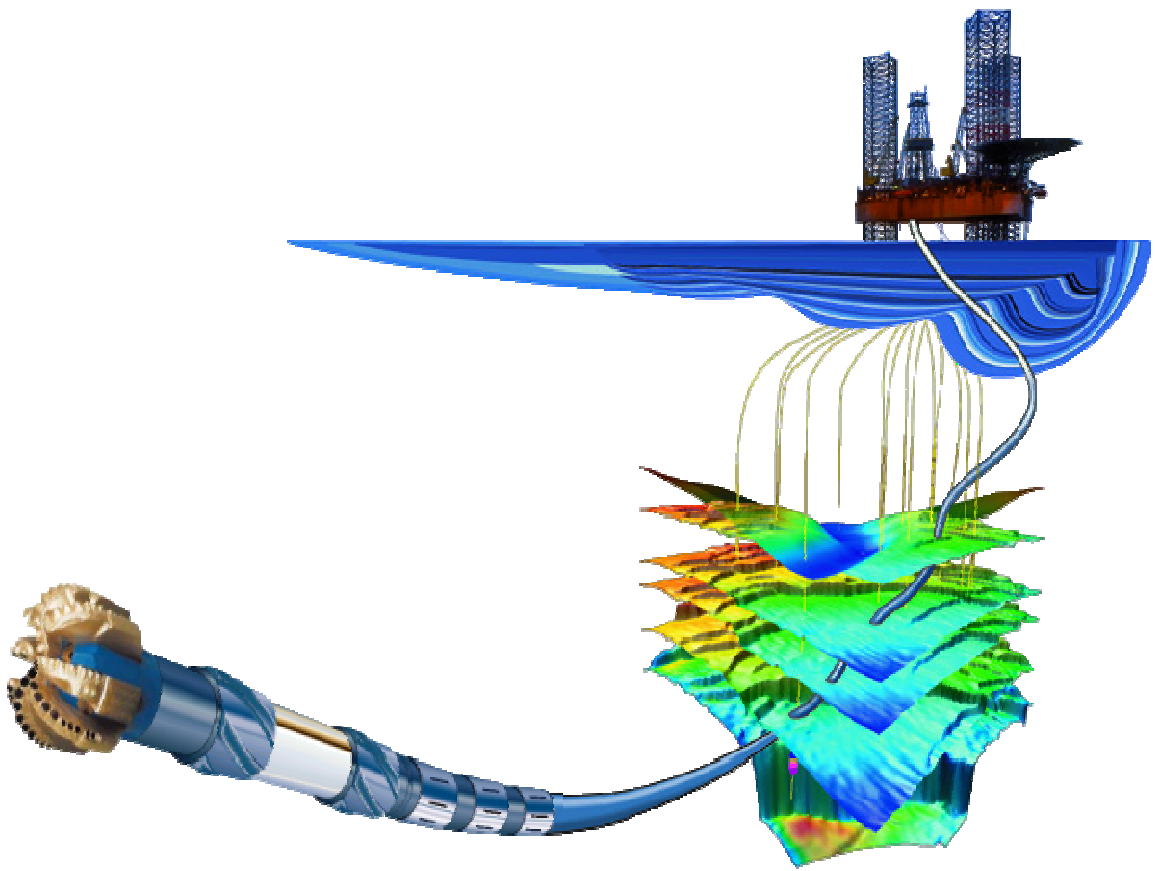




**Drilling Performance;**

Interval	Distance (m)	Time (hrs)	ROP (m/hr)
Rotary mode	687	19.62	35.0

## BHA Reports



## 3D Oil Ltd - West Seahorse-3

<b>BHA #</b>	17 1/2" Motor BHA
<b>Field</b>	3D Oil - West Seahorse
<b>Structure</b>	West Seahorse

<b>Date</b>	April 28, 2008
<b>Well</b>	West Seahorse-3
<b>Borehole</b>	West Seahorse-3

				Fish. Neck OD (in)/ Length (m)	OD (in)/ ID (in)	Max OD (in)	Bottom/ Top Connection	Length (m)	Cum. Length (m)
Item	Name	Vendor/ Model	Serial #						
1	17 1/2 " Bit	Hughes Christensen	60654689		8.75	17.50		0.41	0.41
		MXL T1V			3.75		7.63 Reg Pin		
2	PowerPak Motor (1.5 deg)	Schlumberger	5659		9.63	17.25	7.63 Reg Box	10.10	10.51
		A962M5640XP			7.88		7.63 Reg Box		
3	17" String Stab	Schlumberger	OSS061172A		9.50	17.00	7.63 Reg Pin	2.42	12.93
					3.00		7.63 Reg Box		
4	Crossover	Seadrill	SSD7124	8.00	9.50	9.50	7.63 Reg Pin	1.23	14.16
				0.62	3.00		6.63 Reg Box		
5	Float Sub	Schlumberger	ASQ 8037		8.00	8.00	6.63 Reg Pin	0.80	14.96
					2.88		6.63 Reg Box		
6	8" Pony NMDC	Schlumberger	7505		7.94	7.94	6.63 Reg Pin	2.45	17.41
					2.88		6.63 Reg Box		
7	8" Pony NMDC	Schlumberger	ASQ 8020		8.00	8.00	6.63 Reg Pin	3.00	20.41
					2.88		6.63 Reg Box		
8	8" Pony NMDC	Schlumberger	9504216		7.88	7.88	6.63 Reg Pin	1.55	21.96
					2.81		6.63 Reg Box		
9	Cross over sub	Schlumberger	42755		8.50	8.50	6.63 Reg Pin	0.47	22.43
					2.88		6.63 FH Box		
10	PowerPulse HF MWD	Schlumberger	VA77		8.25	8.25	6.63 FH Pin	8.49	30.92
		PowerPulse HF			5.90		6.63 Reg Box		
11	8" NMDC	Schlumberger	N688		8.00	8.00	6.63 Reg Pin	8.65	39.57
					2.81		6.63 Reg Box		
12	8" NMDC	Schlumberger	SBD 5555		8.25	8.25	6.63 Reg Pin	9.45	49.02
					3.25		6.63 Reg Box		
13	8" Collar (5 joints)				8.00	8.00	6.63 Reg Pin	46.99	96.01
					2.81		6.63 Reg Box		
14	Hydraulic Jar	Dailey Petroleum S	1762-1339		8.00	8.00	6.63 Reg Pin	9.68	105.69
		HDL-100			3.00		6.63 Reg Box		
15	8" Collar (2 joints)				8.00	8.00	6.63 Reg Pin	18.90	124.59
					2.81		6.63 Reg Box		
16	Crossover	Seadrill	SSD 7131		8.25	8.25	6.63 Reg Pin	1.22	125.81
					2.81		5.50 XT57 Box		
17	5 1/2" HWDP (12 joints)				5.50	7.00	5.50 XT57 Pin	112.84	238.65
					3.25		5.50 XT57 Box		
18	5-1/2 " 24.70 DPS, 10% Wear				5.42	7.00	5.50 XT57 Pin	to surface	
					4.67		5.50 XT57 Box		
					Total Weight (lbf)	84063	Total Len.	238.65	
					Below Jar (lbf)	48666.7			

BHA Comments:	

<b>Stabilizer</b>	
<b>Blade Length (m)</b>	<b>Mid-Pt. To Bit (m)</b>
0.46	1.13
0.60	11.54
<b>Bend To Bottom</b>	
<b>Bent Housing Angle (deg)</b>	<b>Connection (m)</b>
1.50	2.78

[illegible]

Bit Nozzles	
Count	Size(1/32 in)
3	20.00
TFA (in2)	0.92

Quality Control	
Created By:	PSellathurai
Checked By:	

**3D Oil Ltd  
West Seahorse-3  
West Seahorse  
3D Oil - West Seahorse  
West Seahorse-3  
17 1/2" Motor BHA**

	Cum. Len. (m)
5-1/2 " 24.70 DPS, 10% Wear	to surface
5 1/2" HWDP (12 joints)	238.65
Crossover	125.81
8" Collar (2 joints)	124.59
Hydraulic Jar	105.69
8" Collar (5 joints)	96.01
8" NMDC	49.02
8" NMDC	39.57
PowerPulse HF MWD	30.92
Cross over sub	22.43
8" Pony NMDC	21.96
8" Pony NMDC	20.41
8" Pony NMDC	17.41
Float Sub	14.96
Crossover	14.16
17" String Stab	12.93
PowerPak Motor (1.5 deg)	10.51
17 1/2 " Bit	0.41

**BHA DESCRIPTION**

ELEMENT	LENGTH (m)	OD (in)	ID (in)	MAX OD (in)
17 1/2 " Bit	0.41	17.50	3.75	17.50
PowerPak Motor (1.5 deg)	10.10	9.63	7.88	17.25
17" String Stab	2.42	9.50	3.00	17.00
Crossover	1.23	9.50	3.00	9.50
Float Sub	0.80	8.00	2.88	8.00
8" Pony NMDC	2.45	7.94	2.88	7.94
8" Pony NMDC	3.00	8.00	2.88	8.00
8" Pony NMDC	1.55	7.88	2.81	7.88
Cross over sub	0.47	8.50	2.88	8.50
PowerPulse HF MWD	8.49	8.25	5.90	8.25
8" NMDC	8.65	8.00	2.81	8.00
8" NMDC	9.45	8.25	3.25	8.25
8" Collar (5 joints)	46.99	8.00	2.81	8.00
Hydraulic Jar	9.68	8.00	3.00	8.00
8" Collar (2 joints)	18.90	8.00	2.81	8.00
Crossover	1.22	8.25	2.81	8.25
5 1/2" HWDP (12 joints)	112.84	5.50	3.25	7.00
5-1/2 " 24.70 DPS, 10% Wear	to surface	5.42	4.67	7.00

Bit to Direction & Inclination Sensor = 26.56 m

**DRILLING OVERVIEW**

During the kickoff from 0° - 8° the motor was able to build at 2.5 °/30m, and from 8° - 27° the motor was able to build at 3.8 °/30m.

The tangent section was rotary drilled with minor slides (7-10m every 2-3 stands) to counter the general dropping tendency.

Depth in:	125.00 m	Depth out:	1123.00 m
Inclination in:	0.83°	To:	27.05°
Direction in:	65.83°	To:	63.32°
Total Drilled	998.00 m	Dogleg:	3.0

**Schlumberger**

Quality Control

Created by: PSellathurai Date: 28/04/2008

Checked by: Date:

## 3D Oil Ltd - West Seahorse-3

<b>BHA #</b>	12 1/4" RSS/LWD BHA
<b>Field</b>	3D Oil - West Seahorse
<b>Structure</b>	West Seahorse

<b>Date</b>	May 02, 2008
<b>Well</b>	West Seahorse-3
<b>Borehole</b>	West Seahorse-3

[illegible]

BHA Comments:	

<b>Stabilizer</b>	
<b>Blade Length (m)</b>	<b>Mid-Pt. To Bit (m)</b>
0.20	5.25
	<b>Bend To Bottom</b>
<b>Bent Housing Angle (deg)</b>	<b>Connection (m)</b>

[illegible]

Bit Nozzles	
Count	Size(1/32 in)
3	15.00
3	16.00
TFA (in2)	1.11

Quality Control	
Created By:	PSellathurai
Checked By:	

**3D Oil Ltd  
West Seahorse-3  
West Seahorse  
3D Oil - West Seahorse  
West Seahorse-3  
12 1/4" RSS/LWD BHA**

	Cum. Len. (m)
5-1/2 " 24.70 DPS, 10% Wear (to surface)	
12 x 5 1/2" HWDP	173.31
Crossover	60.47
1x 8" Collar	59.25
Hydraulic Jar	49.81
1 x 8" Collar	40.13
8" NMDC	30.68
PowerPulse HF	22.03
GVR-8	13.54
PD900 Flex Collar	9.32
PD900 Receiver w/float	6.37
PD 900 AA 12 1/4"	4.50
12 1/4 " PDC Bit	0.3

**BHA DESCRIPTION**

ELEMENT	LENGTH (m)	OD (in)	ID (in)	MAX OD (in)
12 1/4 " PDC Bit	0.30	12.25	3.25	12.25
PD 900 AA 12 1/4"	4.20	9.25	3.00	11.80
PD900 Receiver w/float	1.87	9.50	6.00	9.50
PD900 Flex Collar	2.95	8.25	5.00	8.25
GVR-8	4.22	8.25	3.90	12.13
PowerPulse HF	8.49	8.25	5.90	8.49
8" NMDC	8.65	8.00	2.81	8.00
1 x 8" Collar	9.45	8.00	2.81	8.00
Hydraulic Jar	9.68	8.00	3.00	8.00
1x 8" Collar	9.44	8.00	2.81	8.00
Crossover	1.22	8.00	2.81	8.00
12 x 5 1/2" HWDP	112.84	5.50	3.25	7.00
5-1/2 " 24.70 DPS, 10% Wear (184 joints)		5.42	4.67	7.00

Bit to MWD D&I Sensor = 17.67 m  
 Bit to RAB Resistivity Sensor = 11.13 m  
 Bit to PD Inclination Sensor = 2.66 m

**DRILLING OVERVIEW**

Depth in: 1123.00 m      Depth out: 1810.00 m

Inclination in: 25.87°      To: 8.75°

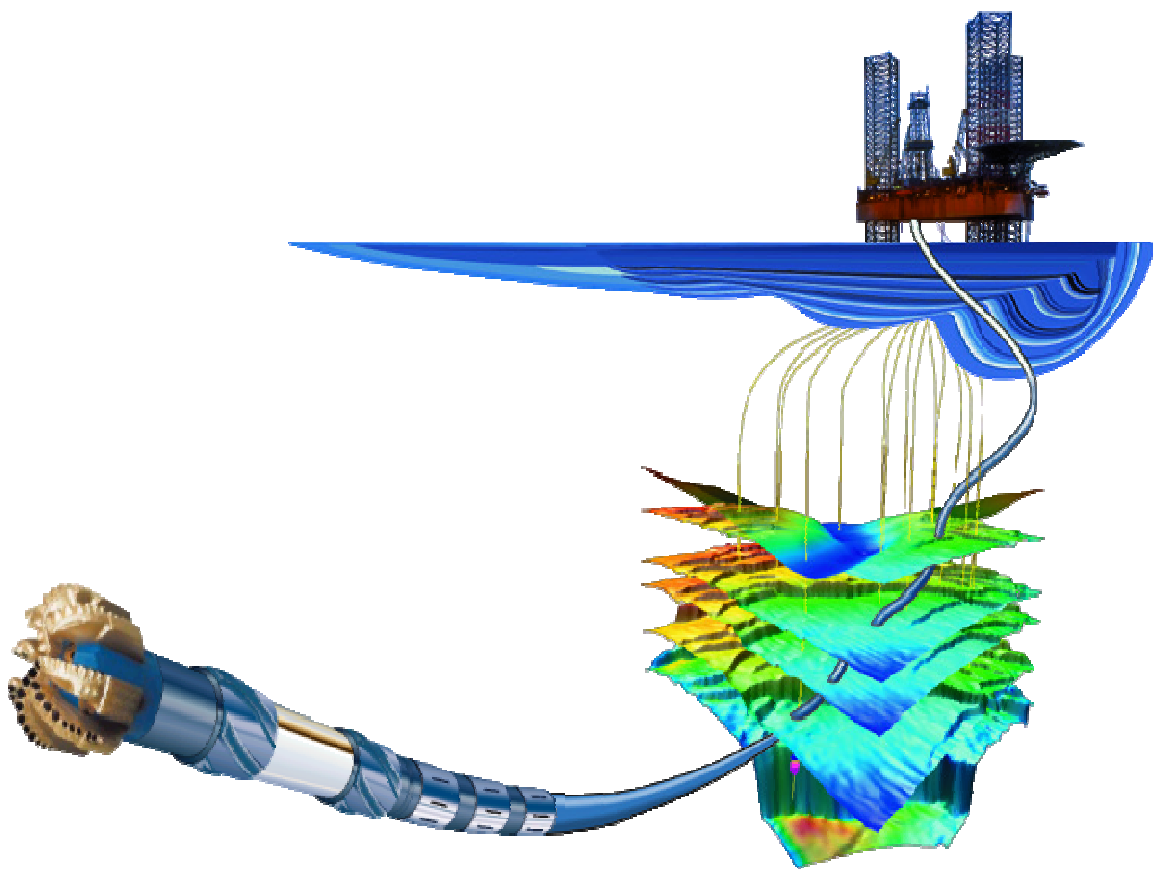
Direction in: 63.90°      To: 55.97°

Total Drilled 687.00 m      Dogleg: 0.09 to 4.38 deg/30m

**Schlumberger**

Quality Control  
 Created by: PSellathurai      Date: 2/05/2008  
 Checked by:      Date:

## Drilling Parameter Sheets



WELL#	West Seahorse-3		DATE:	26-Apr-08		Depth In :		125.0 m MD		Pump Output: 5.850 Gal / stk				Planned Angle : 27.4°				Page 1 of 3							
										Motor Speed: 0.11 Rev / Gal				Planned Direction : 63.0°											
BHA #	2		BIT#	2		BHA : 17 1/2" Bit, PowerPak Motor (1.5 deg), 17" String Stab, XO, Float Sub, 3x8" Pony NMDC, XO, PowerPulse, 2x8" NMDC, 5x8" DC's, Hydraulic Jar, 2x8" DC, XO, 12x5 1/2" HWDP, DP to surface																			
SURVEY SPACING = 26.56 m MD				Last Casing : 20" @122mRT				DLS 1=°/100Ft, 2=°/30Mts, 3=°/10Mts: 2																	
	DRILLING TIME			Motor Work Sheet				Tool	SURVEY			TENDENCY °/30mts			STK / MIN	FLOW RATE	Surf RPM	Motor RPM			ROP (m/hr)	PRESSURE		REMARKS	
R / S	START	STOP	SUM	FROM	TO	Meters Rotated	Meters Slide	Face	DEPTH	INCL	AZM	B / D	TR	Dogleg							Off Bottom	On Bottom			
S	4:15	4:24	0:09	115	121		6		88.57	0.26						111	649	0	71			40	800		Tag cement at 121 mRT
R	4:27	4:56	0:29	121	122	1			98.46	0.42						121	708	35	78	3-6	1-3	2	800	850	Drill out shoe
R	4:56	4:59	0:03	122	125	3										135	790	35	87	3		60		1,200	Drill out rat hole
R	4:59	5:15	0:16	125	143	18			126.00	0.27						154	901	52	99	3-4	2-3	68	1,400	1,450	Drill new formation
R	6:35	6:41	0:06	143	154	11			140.93	0.49						159	930	70	102	3-5	2-3	110	1,520	1,570	Drill new formation
R	6:55	7:10	0:15	154	170	16			154.20	0.83	65.83	0.16	12.81	0.16		160	936	70	103	3-7	2-4	64	1,550	1,600	Drill new formation
S	7:15	7:40	0:25	170	181		11	60								144	842		93	3-7		26	1,400	1,350	170-175m 45M, 175-181m 81M
S	7:59	8:12	0:13	181	197		16	62	182.42	2.72	71.56	2.01	6.09	2.02		144	842		93	6-7		74	1,350	1,400	181-187m-77M, 187-197m 53M
R	8:15	8:25	0:10	197	210	13										144	842	40	93	3-5	2-4	78	1,350	1,400	
S	8:47	8:58	0:11	210	228		18	53	210.69	4.37	68.83	1.75	-2.90	1.76		162	948		104	4-5		98	1,730	1,780	Increase flow to 950 gpm
R	8:59	9:05	0:06	228	237	9										162	948	40	104	4-5	2-5	90	1,730	1,780	
S	9:25	9:48	0:23	237	262		25	HS	240.38	6.29	66.14	1.94	-2.72	1.96		172	1006		111	6		65	2,000	2,050	237-240m 30L; 240-262m HS-L
R	9:48	9:56	0:08	262	266	4										172	1006	40	111	2	3-5	30	2,000	2,050	
S	10:09	10:29	0:20	266	292		26	HS	269.55	8.46	64.16	2.23	-2.04	2.25		172	1006		111	6		78	2,000	2,050	
R	10:29	10:35	0:06	292	296	4										172	1006	40	111	2-3	3-5	40	2,000	2,050	
S	10:50	11:10	0:20	296	323		27	25L	299.18	10.92	63.65	2.49	-0.52	2.49		160	936		103	5		81	1,750	1,800	
R	11:10	11:20	0:10	323	326	3										158	924	40	102	10	5-7	18	1,750	1,800	
S	11:34	12:10	0:36	326	355		29	10L	328.89	13.72	61.80	2.83	-1.87	2.85		149	872		96	10		48	1,600	1,675	Reduce flow to enhance build
S	12:34	13:00	0:26	355	386		31	HS	358.27	17.82	63.93	4.19	2.17	4.23		140	819		90	10-25		72	1,500	1,575	Reduce flow to enhance build
R	14:30	14:45	0:15	386	392	6			388.46	17.84	64.65	0.02	0.72	0.22		170	995	40	109	10	5-7	24	2,000	2,050	Ream full stand prior to drilling ahead
S	14:45	15:10	0:25	392	415		23	HS								162	948		104	15		55	1,925	1,975	
R	15:23	15:26	0:03	415	419	4			417.21	21.76	64.94	4.09	0.30	4.09		163	954	40	105	5	5-7	80	1,925	1,975	
S	15:30	16:08	0:38	419	444		25	HS								141	825		91	10-15		39	1,600	1,675	
R	16:20	16:25	0:05	444	449	5			446.30	26.49	63.72	4.88	-1.26	4.90		141	825	40	91	12	3-5	60	1,600	1,675	
S	16:27	16:50	0:23	449	465		16	25L								141	825		91	10-30		42	1,600	1,700	
R	16:50	17:10	0:20	465	473	8										141	825	40	91	15	3-5	24	1,600	1,675	
R	17:30	17:35	0:05	473	477	4			476.28	27.59	64.07	1.10	0.35	1.11		153	895	70	98	10	3-5	48	1,800	1,900	
R	17:35	17:47	0:12	477	489	12										172	1006	70	111	10	3-5	60	2,100	2,200	
TIME BREAKDOWN: (for new formation only)																									
Rotated Time : 2.28										Meters Rotated : 117										Rotating ROP: 51.2 m/hr					
Slide Time : 4.33										Meters Slide : 247										Sliding ROP: 57.0 m/hr					
Total Time : 6.62										Meters Drilled : 364										Average ROP: 55.0 m/hr					



WELL#	West Seahorse-3	DATE:	26-Apr-08	Depth In :	125.0 m MD	Pump Output:	5.850 Gal / stk	Planned Angle :	27.4°	Page 2 of 3
BHA #	2	BIT#	2	BHA :	17 1/2" Bit, PowerPak Motor (1.5 deg), 17" String Stab, XO, Float Sub, 3x8" Pony NMDC, XO, PowerPulse, 2x8" NMDC, 5x8" DC's, Hydraulic Jar, 2x8" DC, XO, 12x5 1/2" HWDP, DP to surface	Motor Speed:	0.11 Rev / Gal	Planned Direction :	63.0°	
SURVEY SPACING = 26.56 m MD				Last Casing : 20" @122mRT		DLS 1=°/100Ft, 2=°/30Mts, 3=°/10Mts: 2				

R / S	DRILLING TIME			Motor Work Sheet				Tool Face	SURVEY DEPTH	INCL	AZM	TENDENCY /30mts			STK / MIN	FLOW RATE	Surf RPM	Motor RPM	WOB	TORQ	ROP (m/hr)	PRESSURE		REMARKS
	START	STOP	SUM	FROM	TO	Meters Rotated	Meters Slide					B / D	TR	Dogleg								Off Bottom	On Bottom	
R	17:47	18:03	0:16	489	503	14								171	1000	70	110	10	2-4	53	2,100	2,200		
R	18:15	18:38	0:23	503	533	30			505.67	26.62	62.93	-0.99	-1.16	1.12	188	1100	80	121	10-15	2-4	78	2,500	2,650	PU 145, SO 129, Rot WT 142, Rot tor 1.3
R	18:52	19:13	0:21	533	562	29			534.94	25.98	64.99	-0.66	2.11	1.14	205	1199	90	132	5-10	2-4	83	2,900	2,950	Limited ROP to 90 m/hr
R	19:22	19:46	0:24	562	592	30			564.20	25.09	64.81	-0.91	-0.18	0.92	203	1188	85	131	5	2-4	75	2,900	2,950	Limited ROP to 100 m/hr
S	19:58	20:06	0:08	592	607		15	20L							203	1188	-	131	20	-	113	2,950	3,050	
R	20:06	20:19	0:13	607	622	15									203	1188	80	131	5-15	2-4	69	2,950	3,050	PU 158, SO 130, Rot WT 144
R	20:30	20:52	0:22	622	651	29			622.88	26.34	65.72	0.64	0.47	0.67	203	1188	60	131	20-25	3-5	79	2,950	3,100	
S	21:03	21:15	0:12	651	666		15	45L	653.06	26.88	63.47	0.54	-2.24	1.14	188	1100	-	121	25	-	75	2,700	2,850	Reduced flow rate due to losses over shaker
R	21:15	21:26	0:11	666	680	14									188	1100	60	121	15-20	4-6	76	2,700	2,800	
R	21:42	22:14	0:32	680	710	30			682.20	27.67	62.30	0.81	-1.20	0.98	188	1100	60	121	20-25	4-6	56	2,650	2,850	PU 165, SO 132, Rot WT 151, Rot tor 2.4
R	22:27	22:48	0:21	710	739	29			711.65	27.35	62.78	-0.33	0.49	0.40	188	1100	60	121	25	4-6	83	2,650	2,850	
S	23:04	23:12	0:08	739	746		7	30L	740.89	27.59	61.96	0.25	-0.84	0.46	188	1100	-	121	20	-	53	2,700	2,850	
R	23:13	23:32	0:19	746	769	23									188	1100	60	121	25	4-6	73	2,750	2,900	
R	23:46	0:18	0:32	769	798	29			771.14	27.57	61.42	-0.02	-0.54	0.25	188	1100	60	121	25	6-7	54	2,700	2,850	PU 173, SO 132, Rot WT 153
R	0:40	0:46	0:06	798	804	6			800.56	27.44	61.28	-0.13	-0.14	0.15	188	1100	60	121	20	4-7	60	2,700	2,850	Problem to start slide, rotate 5-6m
S	0:55	1:22	0:27	804	814		10	HS							188	1100	-	121	25-30	-	22	2,700	2,850	BHA hung up at 808m, difficult TF control
R	1:23	1:40	0:17	814	828	14									188	1100	60	121	25-30	5-7	49	2,700	2,950	PU 171, SO 140
R	1:55	2:42	0:47	828	857	29			829.48	27.87	61.73	0.45	0.47	0.50	203	1188	95	131	30	8-10	37	3,050	3,300	
R	2:53	3:48	0:55	857	886	29			858.79	27.34	61.53	-0.54	-0.20	0.55	203	1188	95	131	30	7-9	32	3,100	3,350	
S	4:01	4:27	0:26	886	893		7	HS	888.16	27.56	61.95	0.22	0.43	0.30	203	1188	-	131	30	-	16	3,150	3,400	
R	4:28	5:25	0:57	893	915	22									203	1188	100	131	35	7-9	23	3,150	3,400	
R	5:38	7:17	1:39	915	944	29			917.34	27.22	62.80	-0.35	0.87	0.53	203	1188	100	131	35	8-9	18	3,150	3,350	
R	7:30	7:40	0:10	944	947	3									203	1188	100	131	35	8-10	18	3,150	3,350	
S	7:45	8:40	0:55	947	960		13	30L							203	1188		131	20-35		14	3,200	3,400	
R	8:40	9:24	0:44	960	970	10			947.31	27.19	62.99	-0.03	0.19	0.09	203	1188	40	131	35	8-10	14	3,200	3,400	
R	9:44	9:58	0:14	970	974	4									203	1188	100	131	35	12-14	17	3,200	3,400	MWD tool shutting down. P/U recycle @ reduced flow
R	10:16	12:15	1:59	974	1003	29			975.78	28.07	63.33	0.93	0.36	0.94	196	1147	100	126	28-34	9-10	15	2,900	3,100	Reduce flow to 1150 to prevent further shutdown of MWD.
R	12:33	14:10	1:37	1003	1032	29			1005.05	27.39	64.28	-0.70	0.97	0.83	196	1147	100	126	35	7-9	18	2,950	3,100	

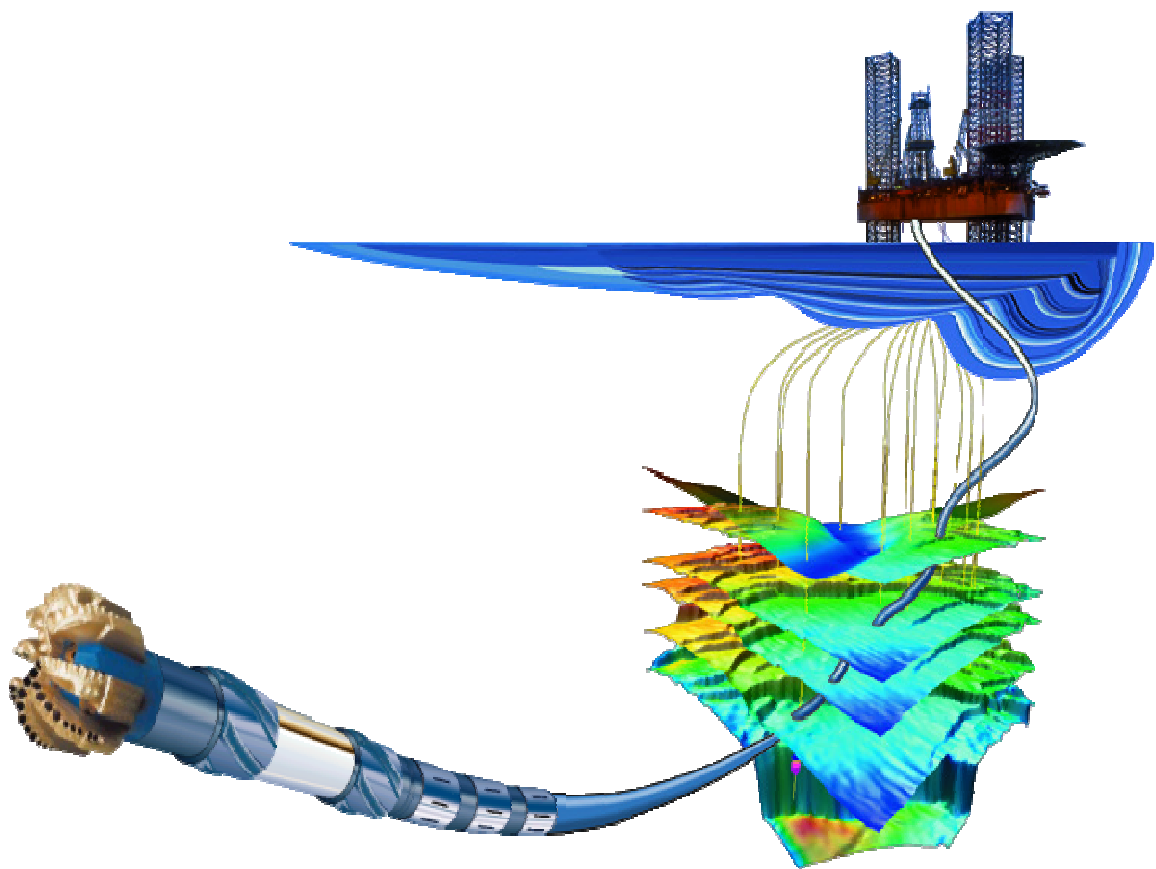
TIME BREAKDOWN: (for new formation only)																							
Rotated Time :				13.32				Meters Rotated :				476				Rotating ROP:				35.7 m/hr			
Slide Time :				2.27				Meters Slide :				67				Sliding ROP:				29.6 m/hr			
Total Time :				15.58				Meters Drilled :				543				Average ROP:				34.8 m/hr			



WELL#	West Seahorse-3		DATE:	3-May-08		Depth In :		1123.0 m MD		Pump Output: 5.850 Gal / stk		Planned Angle : 27.00°		Page 1 of 2										
BHA #	3		BIT# 3	12.25		BHA : 12 1/4" PDC Bit, PD 900, Receiver, 6 5/8" In Line Flex, XO, GVR8, PowerPulse MWD, 8 1/4" NMDC, 8" Collar, Hydraulic Jar, 8" collar, 12 x 5 1/2" HWDP, DP to surface										Planned Direction : 63.00°								
WD SURVEY SPACING =			17.67		m		Last Casing : 13 3/8" @ 1117m			DLS 1=°/100Ft, 2=°/30Mts, 3=°/10Mts=			2											
PD SURVEY SPACING =			2.66		m																			
DRILLING TIME			RSS Work Sheet			Des T/F	Steer %	SURVEY DEPTH	INCL	AZM	TENDENCY °/30mts			STK / MIN	FLOW RATE	Surf RPM		WOB	TORQ	ROP (m/hr)	PRESSURE		REMARKS	
R / S	START	STOP	SUM	FROM	TO						DIST	B / D	TR								Dogleg	Off Bottom		On Bottom
R	13:35	13:40	0:05	1123	1126	3			1125.63	26.35					170	995	50		5-10	5-8	36	1,400	1,425	CBU.
R	15:30	15:35	0:05	1126	1128	2									170	995	50		5-10	5-8	24	1,400	1,425	DL PD Steer 219
R	15:46	16:00	0:14	1128	1132	4	0	0							170	995	80		10-25	5-10	17	1,400	1,425	Control ROP @ 30 m/hr
R	16:10	16:15	0:05	1132	1135	3	0	0							170	995	80		10-15	5-10	36	1,400	1,425	
R	16:15	16:21	0:06	1135	1141	6	0	0							170	995	100		8-10	5-10	60	1,400	1,425	
R	16:21	16:29	0:08	1141	1144	3	0	0	1143.32	25.87	63.90	-0.72	0.70	0.78	170	995	140		8-10	5-12	23	1,400	1,425	
R	16:58	17:16	0:18	1144	1155	11	0	25							170	995	140		8-10	5-12	37	1,400	1,425	
R	17:16	17:28	0:12	1155	1162	7	0	25	1155.24	25.58	63.60	-0.73	-0.76	0.80	162	948	140		8-10	5-12	35	1,300	1,325	Loosing mud over shakers. Reduce flow by 50 gpm
R	17:44	18:10	0:26	1162	1174	12	0	50							170	995	150		9-15	9-10	28	1,400	1,425	P/U 184; S/O 136
R	18:25	18:38	0:13	1174	1181	7									170	995	150		7	5-11	32	1,475	1,450	
R	18:38	19:03	0:25	1181	1203	22	0	75	1184.95	25.36	62.41	-0.22	-1.20	0.56	170	995	150		10-12	6-11	53	1,475	1,450	P/U 189, S/O 136, RotWT 163
R	19:22	19:53	0:31	1203	1233	30			1214.47	26.03	61.94	0.68	-0.48	0.71	170	995	150		10-12	9-14	58	1,500	1,500	P/U 193, S/O 136, RotWT 166, Rot Tor 4-11
R	20:04	20:35	0:31	1233	1263	30			1244.37	26.97	60.72	0.94	-1.22	1.09	170	995	150		6-12	2-16	58	1,500	1,500	P/U 193, S/O 138, Rot Tor 0-10
R	20:46	20:54	0:08	1263	1270	7									170	995	150		8-10	8-15	53	1,525	1,525	
R	20:54	21:20	0:26	1270	1293	23	36R	50	1273.71	27.88	59.68	0.93	-1.06	1.05	170	995	150		8-10	7-11	53	1,525	1,525	P/U 202, S/O 140, RotWT 167
R	21:31	21:39	0:08	1293	1302	9									170	995	150		8-9	4-13	68	1,575	1,575	
R	21:39	22:00	0:21	1302	1322	20			1303.22	28.07	60.45	0.19	0.78	0.41	170	995	150		7-8	5-12	57	1,575	1,550	P/U 193, S/O 136, RotWT 169, Rot Tor 3-12
R	22:12	22:42	0:30	1322	1352	30			1333.07	28.34	61.52	0.27	1.08	0.58	170	995	150		7-8	5-12	60	1,575	1,575	P/U 207, S/O 135, RotWT 170, Rot Tor 1-12
R	22:53	23:01	0:08	1352	1360	8									170	995	150		7-10	4-12	60	1,600	1,600	
R	23:01	23:10	0:09	1360	1368	8	135R	25	1362.30	28.20	62.55	-0.14	1.06	0.52	170	995	150		7-11	4-12	53	1,600	1,600	
R	23:10	23:24	0:14	1368	1381	13	135R	35							170	995	150		7-11	4-13	56	1,600	1,600	P/U 207, S/O 142, RotWT 171, Rot Tor 2-13
R	23:36	23:46	0:10	1381	1392	11									170	995	150		7-8	5-13	66	1,600	1,600	
R	23:46	0:07	0:21	1392	1411	19	162R	75	1392.53	27.26	63.55	-0.93	0.99	1.04	170	995	150		8	6-13	54	1,600	1,600	
R	0:23	0:42	0:19	1411	1429	18			1421.70	25.27	66.37	-2.05	2.90	2.42	170	995	150		7-8	5-13	57	1,600	1,600	4th May
R	0:42	0:56	0:14	1429	1440	11	180	100							180	1053	150		9-11	3-13	47	1,800	1,800	P/U 210, S/O 142, RotWT 175
R	1:20	1:42	0:22	1440	1461	21			1451.65	22.20	68.06	-3.08	1.69	3.15	180	1053	150		11	5-13	57	1,800	1,800	
R	1:42	1:52	0:10	1461	1470	9	168L	100							180	1053	150		10-11	5-13	54	1,800	1,800	P/U 209, S/O 145, RotWT 175
R	2:06	2:16	0:10	1470	1480	10									180	1053	150		8-10	5-12	60	1,850	1,825	
TIME BREAKDOWN: (for new formation only)																								
Rotated Time : 7.07												Meters Rotated : 357				Rotating ROP: 50.5 m/hr								
Total Time : 7.07												Meters Drilled : 357				Average ROP: 50.5 m/hr								

WELL#			West Seahorse-3		DATE:		4-May-08		Depth In :			1123.0 m MD			Pump Output: 5.850 Gal / stk				Planned Angle : 27.00°				Page 2 of 2			
BHA #			3		BIT # 3		12.25		BHA : 12 1/4" PDC Bit, PD 900, Receiver, 6 5/8" In Line Flex, XO, GVR8, PowerPulse MWD, 8 1/4" NMDC, 8" Collar, Hydraulic Jar, 8" collar, 12 x 5 1/2" HWDP, DP to surface												Planned Direction : 63.00°					
WD SURVEY SPACING =			17.67		m		Last Casing : 13 3/8" @ 1117m			DLS 1=°/100Ft, 2=°/30Mts, 3=°/10Mts:												2				
PD SURVEY SPACING =			2.66		m																					
DRILLING TIME				RSS Work Sheet			Des	Steer	SURVEY			TENDENCY °/30mts			STK /	FLOW	Surf			WOB	TORQ	ROP	PRESSURE		REMARKS	
R / S	START	STOP	SUM	FROM	TO	Dist	T/F	%	DEPTH	INCL	AZM	B / D	TR	Dogleg	MIN	RATE	RPM					Off Bottom	On Bottom			
R	2:16	2:40	0:24	1480	1500	20	156L	100	1481.39	20.36	68.27	-1.86	0.21	1.86	180	1053	150			10-11	6-14	50	1,850	1,825		
R	2:52	4:03	1:11	1500	1530	30			1511.23	17.26	67.69	-3.12	-0.58	3.12	180	1053	150			7-8	6-14	25	1,825	1,825	Limit ROP to 30 m/hr for LWD logs	
R	4:18	4:43	0:25	1530	1542	12			1540.81	13.04	64.12	-4.28	-3.62	4.38	180	1053	150			5-6	5-13	29	1,875	1,875		
R	4:43	5:16	0:33	1542	1559	17	144L	50							180	1053	150			6-7	6-13	31	1,875	1,875	Shut in well due to gas and some flow P/U 209; S/O 159	
R	6:35	7:20	0:45	1559	1579	20			1570.48	10.60	59.53	-2.47	-4.64	2.64	180	1053	150			6-7	6-13	27	1,875	1,875		
R	7:20	7:45	0:25	1579	1589	10	180	50							180	1053	150			6-7	6-13	24	1,900	1,900	P/O 218; S/O 160	
R	8:05	8:20	0:15	1589	1593	4									180	1053	150			6-7	6-13	16	1,900	1,900	Stick slip level 3 on PD. Increase RPM	
R	8:20	8:32	0:12	1593	1597	4									180	1053	160			6-7	6-13	20	1,900	1,900		
R	8:32	9:26	0:54	1597	1608	11	25R	IH	1600.19	8.72	58.21	-1.90	-1.33	1.91	180	1053	170			6-7	6-13	12	1,900	1,900	Hard drilling interval @ 1598m. Red RPM and inc WT=25	
R	9:26	9:55	0:29	1608	1618	10	50R	IH							180	1053	140			6-7	6-13	21	1,900	1,900	Inclination hold. 50 right	
R	10:10	10:17	0:07	1618	1624	6	50R	IH							180	1053	160			6-7	6-13	51	1,900	1,900		
R	10:17	11:10	0:53	1624	1648	24	144	50	1629.88	8.74	68.10	0.02	9.99	1.52	180	1053	160			5-10	7-15	27	1,800	1,825		
R	11:25	12:11	0:46	1648	1670	22	0	IH	1658.96	8.55	72.75	-0.20	4.80	0.75	180	1053	160			5-10	7-15	29	1,900	1,900		
R	12:11	12:30	0:19	1670	1673	3	0	IH							180	1053	140			25	7-20	9	1,900	1,900	Hard drilling interval @ 1673m lower RPM and inc WT=25	
R	12:30	12:40	0:10	1673	1678	5	0	IH							180	1053	160			5-10	7-15	30	1,900	1,900	P/U235 S/O 162	
R	13:10	13:20	0:10	1678	1682	4	0	IH							180	1053	160			5-10	7-15	24	1,900	1,900		
R	13:20	14:35	1:15	1682	1706	24	270	25	1688.35	8.90	69.00	0.36	-3.83	0.68	180	1053	160			5-10	7-15	19	1,900	1,900		
R	14:45	15:59	1:14	1706	1736	30	270	25	1717.96	8.56	61.35	-0.34	-7.75	1.22	180	1053	165			5-10	7-15	24	1,925	1,925	P/U238 S/O 163 ROT=200	
R	16:05	16:20	0:15	1736	1742	6	270	25							171	1000	165			2-5	7-12	24	1,700	1,700	46gpm drop recognises DL (5% flow reduction)	
R	16:20	17:15	0:55	1742	1766	24	0	IH	1747.50	8.59	54.77	0.03	-6.68	1.00	171	1000	160			2-5	7-12	26	1,800	1,800	Inc. Hold. No Azimuth	
R	17:30	18:19	0:49	1766	1796	30	0	IH	1777.39	8.68	54.87	0.09	0.10	0.09	171	1000	160			2-5	7-12	37	1,800	1,800	60 m/hr. Stick slip. Reduce ROP to 40 m/hr in stages.	
R	18:29	19:00	0:31	1796	1810	14	0	0	1789.31	8.75	55.97	0.18	2.77	0.45	171	1000	160			11	6-20	27	1,725	1,725	TD at 1810m MD, set PD to neutral	
TIME BREAKDOWN: (for new formation only)																										
Rotated Time : 12.55										Meters Rotated : 330					Rotating ROP: 26.3 m/hr											
Total Time : 12.55										Meters Drilled : 330					Average ROP: 26.3 m/hr											

## Drilling Tool Run Reports



Job Number: O8ASQ0005  
Company Rep: Shaughan Corless  
Run Number: 1

Company: 3D OIL AND GAS  
Location: MEA-APG-ASQ

Rig Name: West Triton  
Well Name: West Seahorse-3

Run Information

Date In	Date Out	Drilling Distance:	Drilling Hours:
25-Apr-2008 10:30PM	28-Apr-2008 8:30AM	998.00 m	28.81 hrs
Depth (MD): 122.0 m to 1123.2 m	Rotary Drilling Distance: 668.00 m	Rotary Drilling Hrs: 20.88 hrs	
Depth (TVD): 122.0 m to 1040.3 m	Sliding Distance: 330.00 m	Sliding Hours: 3.00 hrs	
Inclination: 0.00 deg to 27.05 deg	Reaming Distance: 29.00 m	Reaming Hours: 0.45 hrs	
Azimuth: 0.00 deg to 63.32 deg		Hrs Below Rotary: 58.00 hrs	
		Total Pumping Hrs: 36.90 hrs	
Hole Size: 17.50 in		Min DLS: 0.15 deg/30 m	
Last Casing Size: 20.000 in	North Ref Used: Grid North	Max DLS: 4.89 deg/30 m	
Last Casing Depth: 122.0 m (MD)	Magnetic Dec: 12.844 deg	Max DLS Depth: 446.3 m	
	Grid Correction: -0.383 deg	Surface Screen: No	
Tool Face Arc:	Total Correction: -13.227 deg	DFS Used: No	
Total Face Angle: 163.50 deg	Est. Mag. Int: 0.45 deg	Inline Filter: No	

Rig Information

Rig Type: Jack Up	Pump Type: Triplex
Water Depth: 39.50 m	Pulse Damp Press: psi
Air Gap: 38.00m	Number of Pumps: 3
RKB Height: 38.00 m	Pump Line ID: 6.50 in
Ground Elevation: -39.50 m	Pump Output: 0.14 galUS/stroke
	Pump Stroke Len: 14.00 in

Run Objective

RIH with MWD and Steerable motor assembly. Tag cement, and drill to 180mMD and kick off , then build to 27degrees inclination at 453mMDand hold to 1126m MD.

D&M Crew List:

Cell Manager: Jun Ikeda  
Crew: San thida Aung, MWD  
Patrick Dassens, DD  
Jun Ikeda, Cell Manager  
Punniamoorthy Sellathurai, DD  
Kevin Stroud, DD

DH Motor Information

Manufacturer: D&M	Bit to Bend Dist: 2.78 m
Motor Type: PowerPak	Bearing Play In: in
Motor Size: 9.50	Bearing Play Out: in
Serial No.: 5659	Bent Sub Angle: 1.5003 deg
Lobe Config: 5:6	Bent HSG Angle: deg
Stage Length: 4.00 m	
Rubber: RM100	
Sleeve Position:	
Sleeve Size: 17.25 in	
Bearing Type: Mud Lubricated	

RSS Information

RSS Manufacturer:
RSS Type:
RSS SN:
RSS Size:
Pulse Ht Threshold:
Min Pulse Width:
Max Pulse Width:
Conn Phase Angle: deg
Rise Time Const:
Fall Time Const:
Digit Time:

MWD Configuration

Mod Type: QPSK	Int Tool Face Offset: 165.00 deg	Bit Rate: 3 bps	Slimpulse Pulser Config:
Mod Gap: 0.12500 in	Turbine Config: 600-1200 galUS/min	Frequency: 12 Hz	Pred Sig Strength @ TD: psi
SPT Type: HA			

**Rig Name:** West Triton  
**Well Name:** West Seahorse-3

## 2 of 3

Job Number: O8ASQ0005  
Company Rep: Shaughan Corless  
Run Number: 1

Company: 3-D OIL AND GAS  
Location: MEA-APG-ASQ

Rig Name: West Triton  
Well Name: West Seahorse-3

Equipment on the Run

Equipment	Pump Hours		Software Version	Tool Size
	Start	Cumulative		
A962M-5659	0.00 hrs	36.90 hrs	9.2CO2	9.00 in
FS800-ASQ8037	0.00 hrs	36.90 hrs		8.25 in
MDC-DE-VA77	0.00 hrs	36.90 hrs		8.25 in
MSSB-JB-42755	0.00 hrs	36.90 hrs		8.25 in
NMDC800L-N688	0.00 hrs	36.90 hrs		8.25 in
NMDC800S-7505	0.00 hrs	36.90 hrs		8.25 in
NMDC800S-9504216	0.00 hrs	36.90 hrs		8.25 in
NMDC800S-ASQ8020	0.00 hrs	36.90 hrs		8.25 in
NMDC825L-SBD5555	0.00 hrs	36.90 hrs		8.25 in
SZSS-IBSP-17A-OSS 061172A	0.00 hrs	36.90 hrs		8.25 in

Services on the Run

Equipment	Service	Tool Name	Real Time			Recorded Mode			CAF
			Hours	Failed	Depth	Hours	Failed	Depth	
MOTORS	PowerPak	PowerPak	36.90 hrs		998.0 m	hrs			
MWD	Shock and Vibration	TeleScope	36.90 hrs		998.0 m	58.00 hrs		998.0 m	
MWD	Cont D&I	TeleScope	36.90 hrs		998.0 m	hrs			
MWD	D&I	TeleScope	36.90 hrs		998.0 m	58.00 hrs		998.0 m	



Job Number: 08ASQ0005

Company: 3-D OIL AND GAS

Rig Name: West Triton

Company Rep: Shaughan Corless

Location: MEA-APG-ASQ

Well Name: West Seahorse-3

Run Number: 1

BHA Type: Steerable Motor

Item	Description	Vendor	Tool Name	Serial Number	Length	OD	ID	Fishing Neck		Stab	Bottom Connection		Top Connection		Cumul Len
								OD	Len, m	OD	Size	Type	Size	Type	
1	BIT		Milltooth	6064689	0.41 m	17.50							7 5/8"	REG PIN	0.41 m
2	MOTORS	D&M	PowerPak	5659	10.10 m	9.00	7.88				7 5/8"	REG BOX	7 5/8"	REG BOX	10.51 m
3	STABILIZER	D&M	Stabilizer	OSS 061172A	2.42 m	8.25	3.00				7 5/8"	REG PIN	7 5/8"	REG BOX	12.93 m
4	CROSSOVER	ADA		SSD7124	1.23 m	9.50	3.00				7 5/8"	REG PIN	6 5/8"	REG BOX	14.16 m
5	FLOAT SUB	D&M	Float Sub	ASQ8037	0.80 m	8.25	2.88				6 5/8"	REG PIN	6 5/8"	REG BOX	14.96 m
6	MONEL	D&M	NMDC	ASQ8020	7.00 m	8.25	2.88				6 5/8"	REG PIN	6 5/8"	REG BOX	21.96 m
7	CROSSOVER	D&M	X/O	42755	0.47 m	8.25	2.88				6 5/8"	REG PIN	6 5/8"	FH BOX	22.43 m
8	MWD	D&M	TeleScope	VA77	8.49 m	8.25	5.90				6 5/8"	FH PIN	6 5/8"	REG BOX	30.92 m
9	DRILL COLLAR - NONMAG	D&M	NMDC	N688	8.65 m	8.25					6 5/8"	REG BOX	6 5/8"	REG PIN	39.57 m
10	DRILL COLLAR - NONMAG	D&M	NMDC	SBD5555	9.45 m	8.25					6 5/8"	REG BOX	6 5/8"	REG PIN	49.02 m
11	DRILL COLLAR	ADA		ADA	46.99 m						6 5/8"	REG BOX	6 5/8"	REG PIN	96.01 m
12	JAR	Daileys		Daileys	9.68 m						6 5/8"	REG BOX	6 5/8"	REG PIN	105.69 m
13	DRILL COLLAR	ADA		ADA	18.90 m						6 5/8"	REG BOX	6 5/8"	REG PIN	124.59 m
14	CROSSOVER	ADA		ADA	1.22 m						5 1/2"	XT57	5 1/2"	XT57	125.81 m
15	HWDP	ADA		ADA	112.84 m							XT57		API FH BOX	238.65 m

Predicted BHA Tendency:

Hookload Out: 116

Wt Below Jars:

Pickup Out:

Wt Above Jars:

Slack Weight:

Total Air Wt:

Stab Description	Mid Pt to Bit	Blade			Gauge			Bit to Read Out Port			Bit to Measurement Port		
		Type	Len	Width	Len	In	Out						
								MOTORS-PowerPak	0.40	m	TeleScope-D&I	26.56	m
								MWD-TeleScope	24.20	m			

Job Number:

O8ASQ0005

Company Rep:

Shaughan Corless

Run No:

1

Company:

3D OIL AND GAS

Location:

MEA-APG-ASQ

Rig Name:

West Triton

Well Name:

West Seahorse-3

			Depth inm		IADC Activity	Description
From	To	Elapsed	From	To		
<b>6-Apr-2008</b>						
00:00	01:47	1.78	0.0	17.0	Other	Pick up BHA and measured tool face,
01:47	04:20	2.55	17.0	122.0	PU / LD BHA / Tripping	Continue Picking up BHA to top of float collar
04:20	05:18	0.97	122.0	142.0	Drilling	Start drilling with 650 gpm and 76 pumps stroke each
05:18	18:00	12.70	142.0	503.0	Drilling	Drilling ahead with 110 strokes per minutes in each pump
18:00	21:46	3.77	503.0	687.0	Drilling	Drilling ahead , at depth 677m MD built and turned to maintain tangent, current ROP is maximum 90
21:46	00:00	2.23	687.0	775.5	Drilling	Continue Drilling ahead
<b>7-Apr-2008</b>						
00:00	03:00	3.00	775.5	861.0	Drilling	Mid night depth is 785mMD. Sliding to build at 812 mMD, Drilling ahead with good signals , total flow rate is 1175, CRPM 94, Stick slip is 9
03:00	21:50	18.83	861.0	1123.2	Drilling	TD @ 1123.16mMD, @ 977 mMD , Lost the communication from the tool and check the flow rate , recycle again . Signal back @979m MD



Drilling Parameters Report

30-Apr-2008

8:42:47AM

Job Number: O8ASQ0005

Company Rep: Shaughan Corless

Run Number: 1

Company: 3D OIL AND GAS

Location: MEA-APG-ASQ

Rig Name: West Triton

Well Name: West Seahorse-3

	27-Apr-2008 10:40 PM	27-Apr-2008 1:03 PM	27-Apr-2008 11:03 AM	27-Apr-2008 1:10 AM	26-Apr-2008 2:58 PM	26-Apr-2008 8:20 AM
Field Engineer	San thida Aung	Jun Ikeda	Jun Ikeda	San thida Aung	Jun Ikeda	San thida Aung
Depth	1,123.00 m	1,010.00 m	989.00 m	808.00 m	404.00 m	204.00 m
Avg ROP	14.49 m/hr	14.49 m/hr	14.49 m/hr	14.49 m/hr	27.23 m/hr	27.23 m/hr
On Bottom ROP	15.93 m/hr	15.93 m/hr	15.93 m/hr	15.93 m/hr	33.23 m/hr	33.23 m/hr
Flow Rate	1,150.00 galUS/min	1,160.00 galUS/min	1,146.00 galUS/min	1,099.00 galUS/min	947.00 galUS/min	830.00 galUS/min
Turbine RPM	4,101 rpm	4,101 rpm	4,101 rpm	3,945 rpm	3,320 rpm	2,851 rpm
Surface RPM	95 rpm	95 rpm	97 rpm			42 rpm
WOB Rotating	35.00 klbm	37.00 klbm	31.00 klbm			
WOB Sliding						
DH WOB						
Surface Torque	7.30 kft.lbf	7.30 kft.lbf	7.10 kft.lbf	10.66 kft.lbf	2.30 kft.lbf	2.10 kft.lbf
DH Torque						
Hookload	173 klbm	170 klbm	168 klbm	159 klbm	127 klbm	116 klbm
PickUp Weight						
Slack Weight						
Friction						
SPP On Bottom	3,122.00 psi	3,061.00 psi	3,092.00 psi	2,855.10 psi	1,954.00 psi	1,452.10 psi
SPP Off Bottom						
Diff Pressure						
BH Temperature						
Total Shocks (k)						
Max Shock Level		3				
Max Shock Duration						
Torsional Vib						
Lateral Vib						
Axial Vib			1			
CRPM			100 rpm	1 rpm		42 rpm
Stick/Slip			27		45	
Formation	Limestone	Limestone	Limestone	Limestone	Limestone	Limestone
Signal Strength	40.00 psi	58.00 psi	40.00 psi	67.00 psi	34.00 psi	31.00 psi
Percent Signal Conf	70 %	66 %	70 %	94 %	95 %	96 %

**Job Number:** 08ASQ0005  
**Company Rep:** Shaughan Corless  
**Run Number:** 1

**Company:** 3D OIL AND GAS  
**Location:** MEA-APG-ASQ

**Rig Name:** West Triton  
**Well Name:** West Seahorse-3

Date/Time	Depth	Description
26-Apr-2008 1:46AM	0.0 m	Measured Tool face correction
26-Apr-2008 4:20AM	115.0 m	Start drilling , take SHT , flow rate 650gpm
26-Apr-2008 4:40AM	120.0 m	Signal fluctuation because of motor
26-Apr-2008 5:16AM	142.0 m	Come back to normal signal with pump1=76 and pump2=78, total flow rate is 900
26-Apr-2008 7:36AM	179.0 m	Sliding with MTF tool face
26-Apr-2008 8:05AM	186.0 m	Drilling ahead with ROP 90, pumps stroke 71 each,
26-Apr-2008 8:35AM	209.0 m	Drilling ahead
26-Apr-2008 9:56AM	267.5 m	First Stand of Drill Pipe Drilled Down
26-Apr-2008 2:07PM	385.0 m	Experienced High Dogleg of 5.45 degrees in 1 stand. Repeated Survey, with same result. Informed Company man, and reamed back 1 stand. Repeated Previous survey, same result as previous survey. Reamed back down, and Repeated 385m survey. Inclination decreased by 1 degree. Continued drilling with reduced slides and higher flow rate.
26-Apr-2008 4:58PM	460.0 m	End of Curvature section. Commenced Rotating.
26-Apr-2008 6:55PM	540.0 m	Drilling ahead with pump strokes 101 each, total flow rate is 1101.52
26-Apr-2008 7:37PM	583.0 m	Drilling ahead with pump1 99 and pump2 101 spm,
26-Apr-2008 8:40PM	637.0 m	Drilling ahead with 60 rpm, with good signal
26-Apr-2008 9:24PM	677.0 m	Drilling ahead , building and turn to maintain tangent
26-Apr-2008 11:51PM	775.0 m	Drilling ahead
27-Apr-2008 12:00AM	785.0 m	Rotating for Sliding
27-Apr-2008 1:18AM	812.2 m	Sliding with flow rate 1105, pump pressure is 2918 psi
27-Apr-2008 1:59AM	830.0 m	Rotating with 60 RPM, flow rate 1101
27-Apr-2008 2:58AM	859.3 m	Drilling ahead (build) with RPM93 , pump strokes 101 spm,
27-Apr-2008 3:37AM	881.8 m	Rotating with RPM 93 ,
27-Apr-2008 4:32AM	894.0 m	Start Sliding at 886 m MD, Rotating with RPM 91
27-Apr-2008 7:34AM	947.0 m	Start Sliding at 947 m MD
27-Apr-2008 8:42AM	959.0 m	Resumed rotation at 40 rpm
27-Apr-2008 8:44AM	960.0 m	Experienced low level shocks and stick slip due to low rpm. Reduced WOB after connection
27-Apr-2008 9:32AM	977.0 m	MWD tool turned off. Recycled pumps and tool turned back on.
27-Apr-2008 9:47AM	979.0 m	MWD tool turned off again. Suspected that the increase in mud weight from 9.2 ppg to 10.5 ppg may have increased turbine rpm to tool turn off point. Informed company man and reduced flow by 50 gpm. Recycled pumps and regained tool signal. Tool did not turn off following reduction in flow.
27-Apr-2008 2:27PM	1034.0 m	Commenced Slide
27-Apr-2008 3:46PM	1048.0 m	Completed Slide, picked up of bottom and resumed drilling with rotation at 40rpm
27-Apr-2008 9:47PM	1123.2 m	TD @ 1123.16m MD
27-Apr-2008 10:50PM	1123.0 m	Circulating bottoms up

Job Number: O8ASQ0005  
Company Rep: Shaughan Corless  
Run Number: 2  
Company: 3-D OIL AND GAS  
Location: MEA-APG-ASQ

Rig Name: West Triton  
Well Name: West Seahorse-3

Run Information

Date In		Date Out		Drilling Distance:	687.00 m	Drilling Hours:	31.00 hrs
2-May-2008	5:30PM	5-May-2008	6:00AM	Rotary Drilling Distance:	687.00 m	Rotary Drilling Hrs:	31.00 hrs
Depth (MD):	1123.0 m	to	1810.0 m	Sliding Distance:	0.00 m	Sliding Hours:	0.00 hrs
Depth (TVD):	1040.3 m	to	1684.1 m	Reaming Distance:	474.00 m	Reaming Hours:	10.48 hrs
Inclination:	27.05 deg	to	8.75 deg			Hrs Below Rotary:	60.50 hrs
Azimuth:	63.32 deg	to	55.97 deg			Total Pumping Hrs:	41.48 hrs
Hole Size:	12.25 in					Min DLS:	0.15 deg/30 m
Last Casing Size:	13.380 in			North Ref Used:	Grid North	Max DLS:	4.38 deg/30 m
Last Casing Depth:	1117.0 m	(MD)		Magnetic Dec:	12.844 deg	Max DLS Depth:	1,540.8 m
Tool Face Arc:				Grid Correction:	-0.383 deg	Surface Screen:	No
Total Face Angle:		deg		Total Correction:	-13.227 deg	DFS Used:	No
				Est. Mag. Int:	0.37 deg	Inline Filter:	No

Rig Information

Rig Type:	Jack Up	Pump Type:	Triplex
Water Depth:	39.50 m	Pulse Damp Press:	psi
Air Gap:	m	Number of Pumps:	3
RKB Height:	38.00 m	Pump Line ID:	6.50 in
Ground Elevation:	-39.50 m	Pump Output:	0.14 galUS/stroke
		Pump Stroke Len:	14.00 in

Run Objective

RIH to 1093 m and drill out cement to 1126m.  
Pull back into shoe, and circulate until mud weight is even.  
Conduct FIT to 13.6 ppg EMW with drill water.  
Drill ahead as per DD's instructions, dropping to 9.15 degrees inclination through reservoir.  
Drill to predicted TD of 1985m MD.

D&M Crew List:

Cell Manager: Jun Ikeda  
Crew: San thida Aung, MWD  
Patrick Dassens, DD  
Jun Ikeda, Cell Manager  
Punniamoorthy Sellathurai, DD  
Kevin Stroud, DD

DH Motor Information

Manufacturer:	Bit to Bend Dist:	m
Motor Type:	Bearing Play In:	in
Motor Size:	Bearing Play Out:	in
Serial No.:	Bent Sub Angle:	deg
Lobe Config:	Bent HSG Angle:	deg
Stage Length:		m
Rubber:		
Sleeve Position:		
Sleeve Size:		in
Bearing Type:		

RSS Information

RSS Manufacturer:	D&M	
RSS Type:	PowerDrive X5	
RSS SN:	49461	
RSS Size:		9.00
Pulse Ht Threshold:		
Min Pulse Width:		
Max Pulse Width:		
Conn Phase Angle:	120.00 deg	
Rise Time Const:		
Fall Time Const:		
Digit Time:		

MWD Configuration

Mod Type:	QPSK	Int Tool Face Offset:	deg	Bit Rate:	6 bps	Slimpulse Pulser Config:	
Mod Gap:	0.12500 in	Turbine Config:	600-1200 galUS/min	Frequency:	13.5 Hz	Pred Sig Strength @ TD:	psi
SPT Type:	HA						

**Rig Name:** West Triton  
**Well Name:** West Seahorse-3

	<u>Min</u>	<u>Max</u>	<u>Avg</u>	Total DH Shocks (k):	0 k
BH Temperature:	46.70 degC	58.00 degC	51.64 degC	Max Shock Level:	2
Surface RPM:	65.00 rpm	171.00 rpm	138.00 rpm	Max Shock Duration:	0 sec
ROP:	1.50 m/hr	33.40 m/hr	22.16 m/hr	Checkshot Type:	
Surface Torque:	0.06 kft.lbf	12.00 kft.lbf	7.32 kft.lbf	Checkshot Depth:	m
Flow Rate:	982.00 galUS/min	1,046.00 galUS/min	1,013.60 galUS/min	Checkshot Ind:	deg
WOB Sliding:				Checkshot Azim:	deg
				H2S In Well:	No
Average Pump Pressure:	psi				
Turbine RPM @ Min Flow Rate:	3,427 rpm	Min Flow Rate:	982.00galUS/min	SPP Off Bottom:	psi
Turbine RPM @ Max Flow Rate:	3,671 rpm	Max Flow Rate:	1,046.00galUS/min	SPP On Bottom:	1,447.00 psi

Mud Type:	Water Base	Mud Clean:	Yes	pH:	9.00
Mud Company:	Baroid Fluid Services	LCM Type:		Chlorides:	36,000.00 ppm
Mud Brand:		LCM Size:		Sand Content:	1.00 %
Funnel Viscosity:	44.00 s/qt	LCM Concentration:	lbs/bbl	Solids:	5.10 %
Plastic Viscosity:	10.00 cp	Weighting Material:		Percent Oil:	%
Yield Point:	25.00 lbm/100ft2	Mud Weight:	9.60 lbm/galUS		
Mud Resistivity:	ohm-m				

Manufacturer: Hycalog	Total Revs:	IADC Code:	M422
Model: RSX616 MA 16	Stick/Slip:	Jets ( / 32 in):	3X15 3X16
Type: PDC	Reason Pulled: Total Depth/Casing Depth	Bit TFA:	1.11 in2

Sync Hours:	51.56	hrs	Downhole Noise:	No	Run Failed:	No	
Jamming:	No	0.00 hrs	Surface System Failure:	No	D&M Trip:	No	
Surface Vibration:	No		Surface Noise:	No	Low Oil Flag:	No	0.00 hrs
Trans Fail:	No		H2S in Well:	No	Filter Screen/Plug Shear:	No	

**If not, why?:**

2 of 3

Job Number:

O8ASQ0005

Company Rep:

Shaughan Corless

Run Number:

2

Company:

3-D OIL AND GAS

Location:

MEA-APG-ASQ

Rig Name:

West Triton

Well Name:

West Seahorse-3

Equipment on the Run

Equipment	Pump Hours		Software Version	Tool Size
	Start	Cumulative		
MDC-DE-VA77	36.90 hrs	78.38 hrs	9.2CO2	8.25 in
NMDC800L-N688	36.90 hrs	78.38 hrs		8.25 in
PDSC9-BA-49461	0.00 hrs	41.48 hrs		9.00 in
PLF9C-AA-51767	0.00 hrs	41.48 hrs		9.00 in
RBDC-CA-034	0.00 hrs	41.48 hrs		8.25 in

Services on the Run

Equipment	Service	Tool Name	Real Time			Recorded Mode			CAF
			Hours	Failed	Depth	Hours	Failed	Depth	
RSS	PowerDrive X5	PowerDrive X5	41.48 hrs		687.0 m	hrs			
RSS	D&I	PowerDrive X5	41.48 hrs		687.0 m	hrs			
RSS	T/F	PowerDrive X5	41.48 hrs		687.0 m	hrs			
RSS	Cont D&I	PowerDrive X5	41.48 hrs		687.0 m	hrs			
RSS	Stick/Slip risk	PowerDrive X5	41.48 hrs		687.0 m	hrs			
RSS	E-Mag Link	PowerDrive X5	41.48 hrs		687.0 m	hrs			
LWD	Ring Resistivity	GeoVision	41.48 hrs		687.0 m	60.50 hrs		687.0 m	
LWD	Button Resistivity	GeoVision	41.48 hrs		687.0 m	60.50 hrs		687.0 m	
LWD	GammaRay	GeoVision	41.48 hrs		687.0 m	60.50 hrs		687.0 m	
MWD	Shock and Vibration	TeleScope	41.48 hrs		687.0 m	60.50 hrs		687.0 m	
MWD	Cont D&I	TeleScope	41.48 hrs		687.0 m	hrs			
MWD	D&I	TeleScope	41.48 hrs		687.0 m	60.50 hrs		687.0 m	

**Job Number:** O8ASQ0005  
**Company Rep:** Shaughan Corless  
**Run Number:** 2  
**Company:** 3-D OIL AND GAS  
**Location:** MEA-APG-ASQ  
**BHA Type:** Rotary Steerable

**Rig Name:** West Triton  
**Well Name:** West Seahorse-3

Item	Description	Vendor	Tool Name	Serial Number	Length	OD	ID	Fishing Neck		Stab	Bottom Connection		Top Connection		Cumul Length
								OD	Len, m	OD	Size	Type	Size	Type	
1	BIT	Hycalog	PDC	218662	0.30 m	12.25	3.25						6 5/8"	REG PIN	0.30
2	RSS	D&M	PowerDrive X5	49461	4.20 m	9.25	3.00				6 5/8"	REG BOX	6 5/8"	REG BOX	4.50
3	FLEX COLLAR	D&M		51767	4.82 m	8.25	5.00	8.38	0.48		6 5/8"	REG PIN	6 5/8"	FH BOX	9.32
4	LWD	D&M	GeoVISION	034	4.22 m	8.25	3.90				6 5/8"	FH PIN	6 5/8"	FH BOX	13.54
5	MWD	D&M	TeleScope	VA77	8.49 m	8.25	5.90				6 5/8"	FH PIN	6 5/8"	REG BOX	22.03
6	DRILL COLLAR - NONMAG	D&M	NMDC	N688	8.65 m	8.25	2.81				6 5/8"	REG PIN	6 5/8"	REG BOX	30.68
7	DRILL COLLAR	SeaDrill	Drill Collar	Sea Drill	9.45 m	8.00	2.81				6 5/8"	REG PIN	6 5/8"	REG BOX	40.13
8	JAR	Dailey	Hydraulic Jar	Dailey	9.68 m	8.00	3.00				6 5/8"	REG PIN	6 5/8"	REG BOX	49.81
9	DRILL COLLAR	Sea Drill	Drill Collar	Sea Drill	9.44 m	8.00	2.81				6 5/8"	REG PIN	6 5/8"	REG BOX	59.25
10	CROSSOVER	Sea Drill	Cross Over	Sea Drill	1.22 m	8.00	2.81				6 5/8"	REG PIN	5 1/2"	XT57BOX	60.47
11	HWDP	Sea Drill	HWDP	Sea Drill	112.84 m	5.50	3.25				5 1/2"	XT57PIN	5 1/2"	XT57BOX	173.31

Predicted BHA Tendency:

Hookload Out: 116  
Pickup Out:  
Slack Weight:  
Wt Below Jars:  
Wt Above Jars:  
Total Air Wt:

Stab Description	Mid Pt to Bit	Blade			Gauge			Bit to Read Out Port			Bit to Measurement Port		
		Type	Len	Width	Len	In	Out						
								LWD-GeoVISION	10.50	m	TeleScope-D&I	17.67	m
								MWD-TeleScope	15.30	m	GeoVISION-Ring Resistivity	10.75	m
								RSS-PowerDrive X5	0.30	m	GeoVISION-Button Resistivity	11.13	m
											GeoVISION-GammaRay	10.49	m
											PowerDrive X5-D&I	2.34	m
											PowerDrive X5-T/F	2.34	m
											PowerDrive X5-Cont D&I	2.34	m
											PowerDrive X5-Stick/Slip risk	2.34	m



**Job Number:** O8ASQ0005  
**Company Rep:** Shaughan Corless  
**Run Number:** 2

**Company:** 3-D OIL AND GAS  
**Location:** MEA-APG-ASQ

**Rig Name:** West Triton  
**Well Name:** West Seahorse-3

Date/Time	Depth	Description
29-Apr-2008 12:00AM		
1-May-2008 12:00AM	0.0 m	continue Fishing
1-May-2008 10:30AM	0.0 m	Pressure Testing Casing
1-May-2008 11:00AM	0.0 m	Experienced Pressure Loss
1-May-2008 12:00PM	0.0 m	Test Mud Line Hanger Seals
1-May-2008 1:00PM	0.0 m	Install Adjustable Landing Ring
1-May-2008 1:30PM	0.0 m	Attempt to close wellhead running tool
1-May-2008 4:00PM	0.0 m	Raise Texas Deck
1-May-2008 7:30PM	0.0 m	Begin Nippling up BOP and Choke line
2-May-2008 12:00AM	0.0 m	Continue Nippling up BOP and overshot, but experienced problem with choke line.
2-May-2008 2:30AM	0.0 m	Trouble shooting choke line.
2-May-2008 4:00PM	0.0 m	Picking up BHA
2-May-2008 5:30PM	0.0 m	Bit Below Rotary Table
2-May-2008 7:20PM	35.0 m	Conducted Shallow hole test. Experienced lack of signal from Powerdrive due to emag interference from casing and rotary table. Brought tool above rotary and tool began communicating. Successful shallow hole test.
2-May-2008 10:45PM	319.5 m	Still Cementing, stuck with cementing in the hole
3-May-2008 12:30AM	526.5 m	Stuck cementing in the hole,
3-May-2008 4:55AM	1056.4 m	Still tripping in and circulating
3-May-2008 5:26AM	1103.0 m	Began drilling Plugs.
3-May-2008 6:00AM	1103.0 m	Experienced difficulties drilling out plugs. torque fluctuations seen. DD attempted to vary parameters, but was instructed to return to written parameters.
3-May-2008 12:56PM	1105.0 m	Drilled through plugs, and out of shoe to 1125.99m MD, before pulling back into shoe to conduct FIT
3-May-2008 1:45PM	1126.0 m	Conduct FIT
3-May-2008 3:46PM	1132.0 m	Downlink for changing MTF to GTF
3-May-2008 4:58PM	1144.0 m	Downlink for changing Steering ratio 0~ 25%
3-May-2008 5:44PM	1162.0 m	Downlink for changing Steering ratio 25~ 50%
3-May-2008 7:34PM	1215.6 m	Drilling ahead with total flow rate 982 with pump strokes 84 for each pump.
3-May-2008 8:07PM	1235.0 m	Drilling ahead with good signal,
3-May-2008 9:18PM	1292.2 m	Drilling ahead with good signal and downlink the powerdrive tool at 20:50 pm.
3-May-2008 10:35PM	1344.0 m	Drilling ahead with 145 rpm, 84 pump strokes each, with good signal
3-May-2008 11:02PM	1360.0 m	Drilling ahead with RPM 150, ROP 60, total flow rate is 988, 330 psi loss for MWD tool
3-May-2008 11:59PM	1392.0 m	Mid night depth, RPM 143, with 84 pump stroke each.
4-May-2008 12:32AM	1420.0 m	Drilling ahead with flow rate 994, ROP 60, RPM is 145, stick slips 52
4-May-2008 12:51AM	1438.0 m	Stick slips is 72 and higher than a few minutes ago
4-May-2008 1:08AM	1440.0 m	stop rotating @ 1am due to high stick slips. Commenced SCR's
4-May-2008 1:34AM	1453.0 m	Stick slip between 72~84, told DD, off bottom a while xoz of high stick slips
4-May-2008 2:22AM	1484.0 m	Drilling ahead with high stick slips 81, downlink at @2:13 am
4-May-2008 3:05AM	1506.0 m	Drilling ahead with stand pipe pressure 1857, 15 SWOB, ROP 30
4-May-2008 6:17AM	1558.0 m	Shut in well due to gas in mud.
4-May-2008 7:28AM	1577.0 m	Downlinked to PD to change TF desired to 180 and Steering % to 50
4-May-2008 8:10AM	1592.0 m	Observed high stick slip (144 stickslip 141 crpm). Informed DD, who then Picked up off bottom and increased RPM to 170.
4-May-2008 8:11AM	1592.0 m	Drill water down.
4-May-2008 8:13AM	1592.0 m	Drill water back on.
4-May-2008 8:28AM	1596.0 m	Downlinked to PD to change to inclination hold, and steering % to 25

Date/Time	Depth		Description
4-May-2008 9:28AM	1608.0	m	Downlinked to PD to change Steering % to 50
4-May-2008 10:08AM	1620.0	m	Downlinked to PD to change TF Desired to 144 degrees.
4-May-2008 10:41AM	1636.0	m	Observed high stick slip. Informed DD who then advised Driller to PU off bottom and increase rpm to 170, then feather down to bottom again.
4-May-2008 10:55AM	1638.0	m	Decreased flow rate due to temporary loss of 1 generator.
4-May-2008 12:55PM	1677.0	m	Conducted SCR's
4-May-2008 1:11PM	1679.0	m	Downlinked to PD
4-May-2008 3:00PM	1711.0	m	Observed high stick slip. Informed DD who then advised driller to increase RPM.
4-May-2008 4:18PM	1740.0	m	Downlinked to PD
4-May-2008 5:22PM	1766.0	m	Decision to call TD at 1810m MD
4-May-2008 7:02PM	1810.0	m	TD, download PD to reset at neutral
5-May-2008 6:00AM	0.0	m	Above Rotary Table.



Job Number: O8ASQ0005  
Company Rep: Shaughan Corless  
Run Number: 2

Company: 3-D OIL AND GAS  
Location: MEA-APG-ASQ

Rig Name: West Triton  
Well Name: West Seahorse-3

	05-May-2008 12:29 AM	04-May-2008 8:23 AM	04-May-2008 4:24 AM	03-May-2008 9:19 PM	03-May-2008 9:46 AM
Field Engineer	San thida Aung	Jun Ikeda	San thida Aung	San thida Aung	Jun Ikeda
Depth	1,810.00 m	1,595.00 m	1,532.07 m	1,292.64 m	1,103.59 m
Avg ROP		17.42 m/hr	17.42 m/hr	11.21 m/hr	11.21 m/hr
On Bottom ROP		22.00 m/hr	22.00 m/hr	14.54 m/hr	14.54 m/hr
Flow Rate	1,000.00 galUS/min	1,046.00 galUS/min	1,046.00 galUS/min	982.00 galUS/min	994.00 galUS/min
Turbine RPM	3,476 rpm	3,671 rpm	3,710 rpm	3,427 rpm	3,398 rpm
Surface RPM	160 rpm	171 rpm	146 rpm	148 rpm	65 rpm
WOB Rotating	11.00 klbm	14.00 klbm	14.00 klbm	15.00 klbm	5.60 klbm
WOB Sliding					
DH WOB					
Surface Torque	12.00 kft.lbf	5.60 kft.lbf	11.26 kft.lbf	7.70 kft.lbf	.06 kft.lbf
DH Torque					
Hookload					
PickUp Weight					
Slack Weight					
Friction					
SPP On Bottom	1,725.00 psi	1,873.00 psi	1,937.00 psi	1,595.00 psi	1,447.00 psi
SPP Off Bottom					
Diff Pressure					
BH Temperature	58.00 degC	50.22 degC	46.70 degC		
Total Shocks (k)					
Max Shock Level	2				
Max Shock Duration					
Torsional Vib					
Lateral Vib					
Axial Vib					
CRPM	160 rpm	168 rpm	148 rpm	148 rpm	71 rpm
Stick/Slip	100	21	24	75	100
Formation	Siltstone	Other	Other	Other	Other
Signal Strength	48.00 psi	48.00 psi	46.00 psi	41.00 psi	40.00 psi
Percent Signal Conf	86 %	86 %	84 %	92 %	86 %

**Job Number:** O8ASQ0005  
**Company Rep:** Shaughan Corless  
**Run No:** 2

**Company:** 3-D OIL AND GAS  
**Location:** MEA-APG-ASQ

**Rig Name:** West Triton  
**Well Name:** West Seahorse-3

		Depth in m				
From	To	Elapsed	From	To	IADC Activity	Description
<b><u>28-Apr-2008</u></b>						
00:00	02:30	2.50	1070.0	739.0	PU / LD BHA / Tripping	Contiue to POOH with 5.5" Drillpipe
02:30	06:30	4.00	739.0	124.0	PU / LD BHA / Tripping	Contiue POOH with 5.5" drillpipe. Pump 20bbl
06:30	09:00	2.50	124.0	38.0	PU / LD BHA / Tripping	Continue POOH with 17.5" and laid out string stabilizer
09:00	12:00	3.00	0.0	0.0	PU / LD BHA / Tripping	Make up jet sub, RIH to 87m , Jet landing ring, clear RIH floor of excess equip, RIG for runnning 13 3/8" casing
12:00	14:00	2.00	0.0	0.0	Run casing / cement	Continue rigging up to run 13 3/8" casing , change bails, install elevators and flush mounted slips. remove diverter and insert
14:00	23:54	9.90	0.0	0.0	Run casing / cement	Run casing as per tally to 854m MD, install centralisers as required fill every joint. break circulation at 650m MD ,and washdown through tight spot
<b><u>29-Apr-2008</u></b>						
00:00	02:00	2.00	0.0	0.0	PU / LD BHA / Tripping	Continue RIH with 13 3/8" casing 854m to 1029 m MD
02:00	02:30	0.50	0.0	0.0	PU / LD BHA / Tripping	Pick up MLS, break out and make up . change out FMS
02:30	03:03	0.55	0.0	0.0	PU / LD BHA / Tripping	Contunue RIH with 13 3/8" CSG
03:03	05:30	2.45	0.0	0.0	PU / LD BHA / Tripping	RIH down casing spiders, break out circ tool , chec , change bills to drill pipe bails and 5.5" manual elevators
05:30	09:30	4.00	0.0	0.0	Run casing / cement	RIH , continue circulat to clean the hole and make up cement head, rig up cement
09:30	12:00	2.50	0.0	0.0	Run casing / cement	Wash down wellhead and landed off, circulate and condition mud , test cementing lines to 4000psi/5 mins. commence cement job.
12:00	14:00	2.00			Run casing / cement	Continue with cement job as per program,
14:00	00:00	10.00			Nipple up BOPs	Rig up BOP, lay out overshot and drill pipe
<b><u>30-Apr-2008</u></b>						
00:00	04:30	4.50	0.0	0.0	PU / LD BHA / Tripping	continue lay out diverter , pick up wellhead assy, break out 17.5" BHA
04:30	12:00	7.50	0.0	0.0	Run casing / cement	Make up 13 3/8" water boshing conductor, attempt to rotary from MLS
12:00	16:30	4.50	0.0	0.0	Run casing / cement	Water bushing in top of 13 3/8" casing, attempt to reach out mud line , unable to readh out top drive , toruble shoot
16:30	20:30	4.00	0.0	0.0	Run casing / cement	Prepare to make up 13 3/8" casing spear , bumper sub, RIH same
20:30	00:00	3.50	0.0	0.0	Run casing / cement	latch onto 13 3/8" casing @ 48 m , reach out landing ring @89m, pull to surface and attempt to unlatch spear from casing , not success
<b><u>1-May-2008</u></b>						
00:00	02:30	2.50	0.0	0.0	Fishing	Continue to Retrieve Landing String
02:30	10:30	8.00	0.0	0.0	Run casing / cement	RIH w/ spare MLH , tack welding casing joints
10:30	11:00	0.50	0.0	0.0	Other	Prepare to pressure test casing
11:00	12:00	1.00	0.0	0.0	Other	Experienced Pressure Loss
12:00	13:00	1.00	0.0	0.0	Other	Test Mudline Hanger Seals
13:00	13:30	0.50	0.0	0.0	Other	Install Adjustable landing ring
13:30	16:00	2.50	0.0	0.0	Other	Attempt to Close Well Head running tool
16:00	19:30	3.50	0.0	0.0	Other	Raise Deck on Texas Deck
19:30	00:00	4.50	0.0	0.0	Nipple up BOPs	Nipple up BOP and Rig up Choke Line
<b><u>2-May-2008</u></b>						
00:00	02:30	2.50	0.0	0.0	Nipple up BOPs	Continue Nipling Up BOP and Overshot. Problem with Choke Connection.
02:30	12:00	9.50	0.0	0.0	Test BOP	Trouble Shoot Choke Hose Connection. Multiple Attempts
12:00	12:30	0.50	0.0	0.0	Test BOP	Continue testing BOP
12:30	14:30	2.00	0.0	0.0	Lubricate rig / Service	Service TDS
14:30	15:00	0.50	0.0	0.0	Repair rig	Held PJSM change out tugger

Job Number:

O8ASQ0005

Company Rep:

Shaughan Corless

Run No:

2

Company:

3-D OIL AND GAS

Location:

MEA-APG-ASQ

Rig Name:

West Triton

Well Name:

West Seahorse-3

			Depth in m		IADC Activity	Description
From	To	Elapsed	From	To		
15:00	16:00	1.00	0.0	0.0	Other	Install Nominal Bore Protector
16:00	19:00	3.00	0.0	35.0	PU / LD BHA / Tripping	Pick up 12.25 in BHA
19:00	19:30	0.50	35.0	35.0	MWD/LWD service quality	Shallow Hole Test MWD/LWD tools
19:30	21:00	1.50	35.0	200.0	PU / LD BHA / Tripping	Install Auto Elevators and RIH with HWDP to 200 m
21:00	22:00	1.00	200.0	285.0	PU / LD BHA / Tripping	Continue RIH to 285m
22:00	00:00	2.00	285.0	486.0	Reaming / Hole opener / Unc	Wash down & ream from 285 to 468 and confirm cement returns

3-May-2008

00:00	02:34	2.57	526.0	585.0	PU / LD BHA / Tripping	Cementing stuck in the hole about 200 m and still tripping in.
02:34	03:31	0.95	585.0	850.0	PU / LD BHA / Tripping	Continue Tripping in.
03:31	05:30	1.98	850.0	1100.0	Reaming / Hole opener / Unc	Continue washdown and ream from 468m to 1100 @ 100spm, 585gpm , 40 rpm , 700 psi
05:30	12:00	6.50	1100.0	1123.0	Reaming / Hole opener / Unc	Commence drill out cementing plugs and float from 1100 , displacing well to 900 psi, 26 kWOB, and continue drilling out float. Then drill out cement to casing shoe @1117m, then continue to end of rathole @1123mMD
12:00	14:00	2.00	1123.0	1126.0	Drilling	Drill 3 m of new formation to 1126m
14:00	15:30	1.50	1126.0	1132.0	Drilling	Rig up lines, flush same test to 2000 psi. Perform FIT with 9.4 ppg mud to TSO psi. @1035m, First down link to powerdrive@15:45
15:30	00:00	8.50	1132.0	1392.0	Drilling	Commence drilling 12.25" hole from 1126 m to 1392m as per DD instructions, Take survey every stands

4-May-2008

00:00	05:00	5.00	1392.0	1559.0	Drilling	Drilling ahead 12.25" from 1392 m to 1559m MD as per DD instruction
05:00	12:00	7.00	1559.0	1660.0	Drilling	Continuous drilling from 1559m to 1660m MD , 180 spm, 1050 gpm,1900 psi,150rpm, 10WOB
12:00	19:00	7.00	1660.0	1810.0	Drilling	Continue drilling as per DD instruction up to TD
19:00	00:00	5.00	1810.0	1530.0	PU / LD BHA / Tripping	POOH from 1810-1530m MD, wipe trip

5-May-2008

00:00	03:00	3.00	1530.0	173.0	PU / LD BHA / Tripping	Continue POOH
03:00	06:00	3.00	173.0	0.0	PU / LD BHA / Tripping	Lay out BHA

## DOWN-HOLE MOTOR RUN REPORT

RUN N<sup>o</sup> 1

Motor Size 9 5/8"

Serial No 5659

Measurements are in M

**Company** 3D Oil Ltd. **Well** West Seahorse-3 **Slot** n/a **Field** Wildcat / exploration  
**Location** Bass Strait, Gippsland Basin **Country** Australia  
**Operator** Australian Drilling Associates **Rig** Seadrill - West Triton **Engineer** Moorthy/Patrick **Date** 25-Apr-08

Bit Size	Make	Type	IADC	Jets	Jets	Jets	TFA
17 1/2	Hughes Christensen	MXL-T1V	1-1-5	3 x 20			0.910

## IADC CUTTING STRUCTURE

Inner Row	Outer Row	Dull Char'	Location	Brg/Seals	Gauge	Others	Reason for Trip
2	2	WT	A	E	I	BT	TD

Motor Made By	Size	Model / Type	Rot'/Stat' Stages	Serial No	Hsg Stab OD	°Bent Hsg	°Bent Sub	
Schlumberger	9 5/8"	A962M5640XP	5/6 4.0	5659	17 1/4"	1.5	nil	
Type	1 = Straight; 2 = Steerable; 3 = Double Bend 2			Rotor S/N°	5224	Stator S/N°	6230	
Drlg Cmt, W/Ream		0.70	Drlg Hrs	27.80	Circ Hrs	8.40	Total Motor Circ Hrs	36.90

**Purpose of Run** Drilled cement and float equipment, cleaned out rat hole. Rotary drilled to kick off point at 180m. Kick off building at 3°/30m to 27.4°m along the azimuth of 62.96° azimuth. Continue drilling tangent section to casing point @ 1125m MDDF.

## BHA#

17 1/2" Bit  
PowerPak Motor (1.5 deg)  
17" String Stab  
Crossover  
Float Sub  
3x8" Pony NMDC  
Cross over sub  
PowerPulse HF MWD  
2x8" NMDC  
8" Collar (5 joints)  
Hydraulic Jar  
8" Collar (2 joints)  
Crossover  
5 1/2" HWDP (12 joints)  
5-1/2" DP

Depth In	Depth Out	Inter'l Drid
125.00	1123.00	998.00
Date In	Date Out	Inter'l ROP
25-Apr-08	28-Apr-08	34.60
Time In	Time Out	Time BRT
22:30	8:30	58.00 Hrs

Surveys	MD IN	Inclin	Azim
	154.20	0.83	65.83
MD OUT	Inclin	Azim	
1094.42	27.05	63.32	

Flow Rate	Off Bttm Press	On Bttm Press	RPM	WOB
GPM	PSI	PSI	Surface	KLbs
1150	2900	3100	100	35

Mud Type	Mud Wt	Mud Grad'	Vis
Seawater - Bentonite	9.4 ppg	n/a	36 sec
PV	Filtrate	% Solids	pH
5 cP	n/a	4.1	8
YP	% Oil/Water	% Sand	Circ Temp
15	n/a	0.5	53 deg C

FAILURE? No

Slide (m) 330

Previous Hrs 0

Cumulative Hrs 36.90

## Remarks / Failure Report.

Reason for POOH : TD hole section

Failure : Category = -

Did Motor Stall?	
no	yes
Slide	Rty
0	2

Bearing Play	
In	3.0 mm
Out	3.0 mm
Condition	



## PowerDrive X5 Summary



Rev 3: Please do not make any changes to this form !!!

JOB NUMBER	COMPANY REP.	DATE IN	DATE OUT	PowerDrive Run #	MWD Run #	Rig Bit Run #	PD Engineer						
08ASQ005	Shaughan Corless	17-Sep-07	17-Sep-07	1	2	3	Moorthy / Pat						
CLIENT	Hole Depth - FROM		TO		Flex/ILF SN (ft/m)	Xtra Receiver #	Control Unit #						
3D Oil Ltd	1123.0 m MD		1810.0 m MD		51767	49245	958						
RIG NAME	Inclination - FROM		TO		Control Collar #	Ext Sub #	Bias Unit #						
Seadrill - West Triton	25.87 deg		8.75 deg		49461	51368	51330						
WELL NAME	Azimuth - FROM		TO		Bit Mfg	Bit Type	Bit SN						
West Seahorse-3	63.90 deg		55.97 deg		Reed	RSX616-A16	218662						
LOCATION	Hole Size		Bit to D&I	Bit to PD D&I	Dull Grade - IADC Cutting Structure								
Bass Strait	12 1/4"		17.67 m	2.66 m									
Map file name	Mag Dec / Grid Cor / Total Corr.	Connector Phase Angle	Downlink response ?		On Bottom Hours	Last Casing size/wt / depth							
n/a (fast downlink)	+ 12.844 - 0.383 13.227	120	Good		19.62	13 3/8' 1117 m							
Bit to Bottom of BU Pad	Bit to Midpoint of Stab	Flex Lgth	WOB MIN / MAX	Ave. RPM	Ave. WOB	Off Bottom Circulating Hours	ft / M Drilled this run						
0.60 m	3.67 m	2.95 m	5 20	150	8	19.58	687.0						
PD MIN/MAX	Initial / Final Battery Voltage	RPM MIN / MAX	MWD Min/Max Flow Rating		Below Rotary Table Hours	PD ft/M Drilled (Operating)							
484 1483	3.78	50 160	600 1200		60.50	687.0							
Pulse Width MIN/MAX	Pulse height thre	Digit Time	Actual Flow MIN / MAX	Pump Output / Type	PowerDrive Operating Hours	On Btm ROP	Ave ROP						
n/a	n/a	18 sec	950 1055	5.85 Triplex	39.20	35.0	35.0						
Tool Response			Stab gauge before/after run		Run Objective								
Max DLS	4.3	Max BUR	4.3	Max Turn Rt	12 1/8 12 1/8 Maintain 27 deg tangent then drop to 9 deg at target and TD								
SOFTWARE VERSION				Reason for POOH									
TSIM	AC	Comms mod	CMF523H15	Sensor mod	SMV507RN	MWD	9.2C02 IDEAL 13_0c_08						
Bit Hydraulics Calculations				PowerDrive Serial No.		PUMP HOURS		Motor Run Information					
Enter data in blue areas		Bit Nozzle Size and TFA		PART	PFIX	SN	START	CUM	Motor type	Seiral number			
Pump Flow	1055	Nozzle	/ 32	TFA	Control Unit	CU	958	0.00	39.20	N/A	N/A		
Mud Weight	9.7	1	15	0.173	Control Collar	CC	49461	0.00	39.20	Bend type	Bend Angle		
Bit Diameter	12.25	2	15	0.173	Ext Sub	ES	51368	0.00	39.20	N/A	N/A		
Bit Flow	1038	3	15	0.173	Bias Unit	BU	51330	0.00	39.20	Stab type	Stab Gauge		
Bit Pressure Drop	785	4	16	0.196	Flex/ILF	PD9RX-AA	51767	0.00	39.20	N/A	N/A		
Hydraulic HP	475	5	16	0.196	Xtra Receiver		49245	0.00	39.20	Off Bottom pressure	On Bottom pressure		
HSI	4.0	6	16	0.196	Upper Torquer		49846	0.00	39.20	N/A	N/A		
Impact Press.	1419	7			Lower Torquer		34624	0.00	39.20	Backreaming Hours	Total Reaming Hours		
Note: Rock compressive strength should be greater than the Impact Pressure.		8			Comms Module		730	0.00	39.20	N/A	N/A		
		9								Bearing Play after run (mm)	N/A		
		10			Motor					Mud properties			
		Bit TFA =	1.107	Downward Telemetry Calculations									
Flow Restrictor Pressure Drop				Enter data in the blue areas				Mud Company				Baroid	
Nozzle size (32nd)				TFA	Press. Drop	Digit Time	18	secs	Mud Type		KCL Polymer		
						Falling Time Constant (FTC)	n/a	secs	MW at start of run		9.7 ppg		
						Rising Time Constant (RTC)	n/a	secs	MW at end of run		9.7 ppg		
Total Pressure Drop Below PowerDrive				Driller's Pulse - High / Low				1000 900		Funnel Viscosity		44 sec	
785 psi				Driller's Pulse Height				5-10		Plastic Viscosity		10 cP	
Note: If the box above is red, the total pressure drop below the PowerDrive is not in the optimal range for pad operation. Confirm restrictor and bit nozzle selection is correct such that the total pressure drop below the PowerDrive is between 500 psi an				Pulse Amplitude				n/a		Yield Point		25 lbs/100ft^2	
				Minimum Recoverable Pulse				n/a		Maximum DH Temp. deg C		58 degC	
				Minimum Threshold				n/a		Sand %		1.00 %	
										Solid %		5.10 %	

### Run Summary

Drilled out cement and float equipment without any problems. Three meters of new formation was drill out and a formation integrity test was performed.

Once out of the shoe the PowerDrive assembly had a slight dropping tendency in neutral steering mode. The rate of penetration was held to about 30 m/hr until the BHA was clear on the shoe and rat hole and then drilling parameters were increased. A 50% steering ratio was required to hold the assembly in the tangent section. A rate of penetration of about 60 m/hr was achieved for must of the tangent section and the start of the drop section.

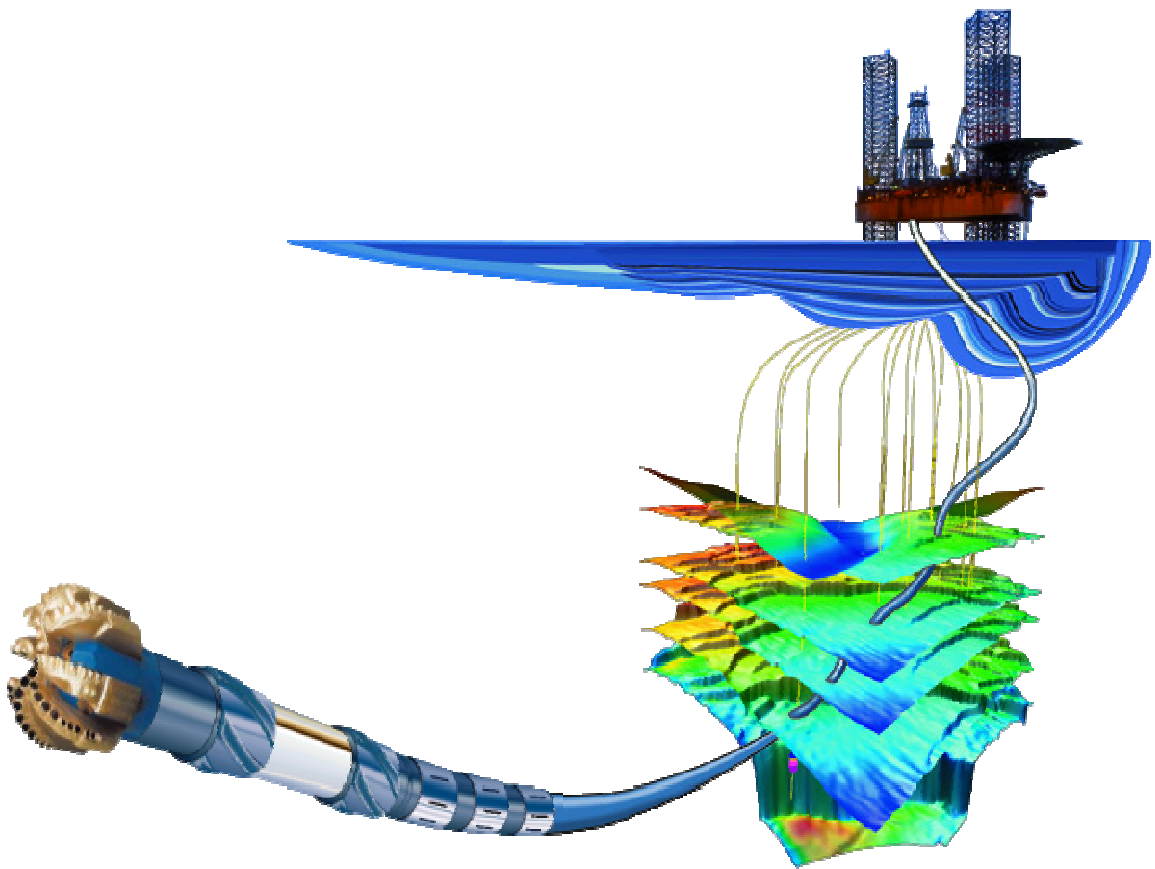
At the start of the drop section the tool was initially placed in a 25% drop with a right bias to counteract a left turn tendency. The drop rate was much lower than expected so steering ratio was increased to eventually 100% low side. Drop rates of only low 2 %/30m was achieved in the Lakes Entrance formation. Once into the Latrobe Group formation drops rates increased to low 4 %/30m and the required drop angle could be achieved. The rate of penetration was held back to 30 m/hr for logging purposes and this may of helped to improve the drop rate.

Once the drop was achieved the PowerDrive was placed in Inclination Hold mode for the remainder of the tangent section to TD at 1810m MDRT. Both geological targets were successfully penetrated.

A moderate stick-slip was observed for most of the run but it did not affect the steering ability. Stick-slip was considerably lower in the Latrobe Group formation.

The bit was graded as 3-1-CT-A-X-I-WT-TD.

## Drill Bit Gradings





# ROCK BIT GRADING CHART

## BIT RUN DATA # 2

Bit Size:	17 1/2"
Manufacturer:	Hughes Christensen
Bit Type:	MXL-T1V
Serial Number:	60654689
New Bit:	Yes
IADC Code:	1-1-5
Number of Nozzles:	3
Size of Nozzles:	3 x 20
T.F.A. (sq. in.):	0.91
W.O.B. :	5-35
Depth Out:	1123.0
Depth In:	125.0
Meters Drilled:	998.0
Drilling Hours:	28.80

## WELL DATA

Date:	28-Apr-08
Drilling Supervisor:	Shaughan Corless/Ro
Platform:	West Triton
Well Number:	West Seahorse-3
Rig Contractor:	Seadrill
Final Hole Angle:	27.0°
Date in:	25-Apr-08
Date Out:	28-Apr-08
BHA #	2

## MUD AND LITHOLOGY DATA

Majority Formation:	Limestone
Other Formation:	
% Formation:	
Mud Type:	Seawater - Bentonite
Mud Weight:	9.4 ppg
PV:	5 cP
YP:	15 lbs/100 ft <sup>2</sup>
% Solids:	4.10
% Oil / Water:	n/a
Circulating Temperature (deg c):	53 deg C

COMMENTS:

## IADC ROCK BIT GRADING

(A)	(A)	(B)	(C)	(D)	(E)	(B)	(F)
2	2	WT	A	E	I	BT	TD

## GRADING CHART AS PER IADC NOMENCLATURE

CUTTING STRUCTURE				Cone		REMARKS	
INNER ROWS	OUTER ROWS	DULL CHAR.	LOCATION	BEARING / SEALS	GAUGE	OTHER CHAR.	REASON PULLED
(A)	(A)	(B)	(C)	(D)	(E)	(B)	(F)

(A) Inner cutting structure = all inner rows. (A) Outer cutting structure = gauge row only.

In columns 1 and 2 (A), a linear scale from 0 to 8 is used to describe the condition of the cutting structure according to the following -

Steel Tooth Bits - A measure of lost tooth height due to abrasion and or damage. 0 = No loss of tooth height, 8 = total loss of tooth height.

Insert Bits - A measure of total cutting structure reduction due to lost, worn and broken inserts. 0 = As new, 8 = all inserts lost, worn and / or broken.

(A)	
0	No Wear
8	No Cutting structure

(B)	
BC *	Broken Cone
BF	Bond Failure
BT	Broken Teeth/Cutters
BU	Balled Up
CC *	Cracked Cone
CD *	Cone Dragged
CI	Cone Interference
CR	Cored
CT	Chipped Cutters
ER	Erosion
FC	Flat Crested Wear
HC	Heat Checking
JD	Junk Damage
LC *	Lost Cone
LN	Lost Nozzle
LT	Lost Teeth / Cutters
OC	Off-Center Wear
PB	Pinched Bit
PN	Plugged Nozzle / Flow Passage
RG	Rounded Gauge
RO	Ring Out
SD	Shirrtail Damage
SS	Self-Sharpening Wear
TR	Tracking
WO	Washed Out Bit
WT	Worn Teeth / Cutters
NO	No Dull Characteristics

(C)	
N	Nose Row
M	Middle Row
G	Gauge Row
A	All Rows
CONE #	
1	
2	
3	

(D)	
NON - SEALED BEARINGS	
A linear scale estimating bearing life.	
0 - No life used,	
8 - No bearing life remaining.	
SEALED BEARINGS	
E - Effective bearings	
F - Failed Bearings	

(E)	
In - In gauge, 1 - 1/16", 2 - 2/16", 3 - 3/16" UG etc	

(F)	
BHA	Change BHA
CM	Condition mud
CP	Core Point
DMF	Downhole Motor Fail
DP	Drill Plug
DSF	Drill String Failure
DST	Drill Stem Test
DTF	Downhole Tool Fail
FM	Formation Change
HP	Hole Problems/ LIH
HR	Hours on Bit
LIH	Lost in Hole
LOG	Run Logs
PP	Pump Pressure
PR	Penetration Rate
PR	Penetration Rate
RIG	Rig Repair
TD	Total Depth
TQ	Torque
TW	Twist-Off
WC	Weather Conditions
WO	Washout/Drill String

\* Show cone number or numbers under location (C).

## PDC GRADING CHART

## BIT RUN DATA #3 BHA 3

Bit Size:	311mm (12 1/4")
Manufacturer:	Reed
Bit Model:	RSX616-A16
Serial Number:	218662
New Bit:	Yes
IADC Code:	M422
Number of Nozzles:	6
Size of Nozzles:	3 x 15 3 x 16
Number of Blades:	6
Number of Cutters:	59
Size of Cutters:	16,13
T.F.A. ( sq ins ):	1.110
W.O.B. :	5-25 Klfs
Depth In:	1123.0 m
Depth Out:	1810.0 m
Meters Drilled:	687.0 m
Rotating Hours:	39.20 hrs
Metres Rotary:	687.00 m
On bottom hours:	19.62 hrs
Average R.O.P:	35.00 m/hr
Circulation Rate:	1055 GPM
R.P.M. at Bit:	160 rpm
Motor Used:	No
Motor Size:	N/a
Bit Good for Rerun:	No

## WELL DATA

Date:	5-May-08
Drilling Supervisor:	Shaughan Corless
Rig:	West Triton
Well Number:	West Seahorse-3
Rig Contractor:	Seadrill
Hole Angle:	27.00°
Date in:	3-May-08
Date Out:	5-May-08
SLB BHA #	2

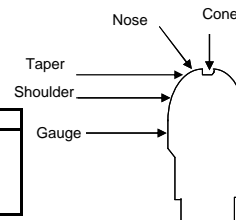
## MUD AND LITHOLOGY DATA

Majority Formation:	Silt stone
Other Formation:	
% Formation:	
Mud Type:	KCL Polymer
Mud Weight:	9.7
PV:	10 cP
YP:	25 lbs/100ft <sup>2</sup>
Corrected solid:	5.10
% Oil / Water:	n/a
Circulating Temperature:	58 deg C

COMMENTS:

## PDC GRADING

(A)	(A)	(B)	(C)	(D)	(E)	(B)	(F)
3	1	CT	A	X	I	WT	TD



## PDC GRADING CHART AS PER IADC NOMENCLATURE

CUTTING STRUCTURE				B	G	REMARKS	
INNER ROWS	OUTER ROWS	DULL CHAR.	LOC ATION.	BRING SEALS	GAUGE 1/16"	OTHER CHAR.	REASON PULLED
(A)	(A)	(B)	(C)	(D)	(E)	(B)	(F)

(A)	0	No Wear
	8	No Cutting structure

(B)	BT	Broken Cutters
	BU	Balled Up
	CR	Cored
	CT	Chipped Cutters
	ER	Erosion
	HC	Heat Checking
	JD	Junk Damage
	LN	Lost Nozzle
	LT	Lost Cutters
	OC	Off-Center Wear
	PN	Plugged Nozzle/ Waterway Passage
	RG	Rounded Gauge
	RO	Ring Out
	WO	Washed Out - Bit
	WT	Worn Cutters
	NO	Bit is Green
	IM	Impact
	DEL	Delamination
	SPL	Spalling
	BF	Bond Failure

(C)	C	Cone
	N	Nose
	T	Taper
	S	Shoulder
	G	Gauge
	A	All Angles

(D)	X	Fixed Cutter Bits
-----	---	-------------------

(E)	1	In Gauge
	1/16	1/16" Undergauge
	2/16	1/8" Undergauge etc.

(F)	BHA	Change BHA
	DMF	Downhole Motor Fail
	DSF	Drill String Fail
	DST	Drill Stem Test
	DTF	Downhole Tool Fail
	LOG	Run Logs
	RIG	Rig Repair
	CM	Condition mud
	CP	Core Point
	DP	Drill Plug
	FM	Formation Change
	HP	Hole Problems
	HR	Hours
	PP	Pump Pressure
	PR	Penetration Rate
	TD	Total Depth
	TQ	Torque
	TW	Twist-Off
	WC	Weather Conditions
	WO	Washout/Drill String