

BASS STRAIT OIL COMPANY LTD



WELL COMPLETION REPORT (Basic Data) Volume 1 of 1

ZANEGREY-1/ST1/ST2

September 2005

BASS STRAIT OIL COMPANY LTD



ZANEGREY-1/ST1/ST2 WELL COMPLETION REPORT VOLUME 1 OF 1 (BASIC DATA)

VIC/P42
GIPPSLAND BASIN

OFFSHORE
VICTORIA

Date: September 2005
Compiled by: R. Fisher
Reviewed by: Ian Reid

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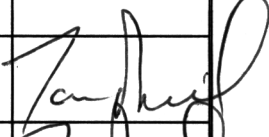

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1. Overview

1.1 Well Data Summary

Well Name		ZaneGrey-1/ST1/ST2
Operator		Bass Strait Oil Company Ltd
Equity Partners		Bass Strait Oil Company Ltd. (50%) Inpex Corporation (50%)
Permit		VIC/P42
Basin		Gippsland Basin
Type of Well		Exploration
Well Status		Plugged & Abandoned as Non-Commercial Gas Condensate Discovery
Surface Well Location	Easting	586049.89m E
	Northing	5,729,856.42m N
	Latitude	38° 34' 31.64" S
	Longitude	147° 59' 16.27" E
	Datum	AGD 84
Map Reference		SJ 55 1:1,000,000 Melbourne Map Sheet; Graticular Block 2208
Objectives	Primary	Kingfish Fm (Nannygai Zone)
	Secondary	Volador Fm (Roundhead Mbr)
Total Depth	mRT	2772mRT (ZaneGrey-1)
Total Depth	mRT	3107mRT (ZaneGrey-1/ST1)
Total Depth	mRT	3675mRT (ZaneGrey-1/ST2)
	mSS	3653.5mSS
Elevations	Water Depth	72.5m (MSL)
	Rotary Table	+21.5m
Rig on Contract		27 th January 2005; 05:00 hours
Spud Date		29 th January 2005; 14:30 hours
Well Reach TD		10 th March 2005; 17:00 hours
Rig Released		18 th March 2005; 19:20 hours

1.2 Personnel and Contractors Summary

OFFSHORE PERSONNEL	
Drilling Supervisors	Chris Wilson/Greg Harms/Peter Dane/Steve Hodgetts/Stuart Douglas
Drilling Engineers	James Gilmour/Paul O'Shea
Geologists	Geoff Geary/Andre Thangam/Don MacFarlan

ONSHORE PERSONNEL	
Project Advisor (Perth)	Tom Brand
Drilling Superintendent (Perth)	Colin Allport
Drilling Engineers (Perth)	Paul O'Shea/James Gilmour
General Manager, Exploration – BAS (Melbourne)	Ian Reid
Operations Geologist (Perth)	Robert Fisher
HSE Co-ordinator (Perth)	Jim Embury
Shorebase Materials and Logistics Coordinators	Glen Osment (Melbourne) Alex Edwards (Perth)

SERVICE	CONTRACTOR
Mobile Offshore Drilling Unit	Diamond Offshore General Company "Ocean Patriot" - Steve Ramsey
Project Advisor	Labrador Petro-Management – Tom Brand
Drilling Fluids	MiSwaco - Nigel Warman
Mudlogging	Halliburton/Sperry Drilling Services – Mario Shelford
MWD/LWD	Halliburton/Sperry Drilling Services – Peter Sammann
Directional Drilling	Halliburton/Sperry Drilling Services – Stewart Swick
Wireline/VSP	Baker Atlas – David Thorne
Tracer/Fluid Samples	Petrotech Knowledge – Robyn Tamke
Cementing	Dowell Schlumberger – Matt Cazalet
Drill Bits	Smith Bits – Doug Ferguson Reed Hycalog – Les Szalai
Drilling Tools	Smith International – Colin Hankinson
Casing Handling	Weatherford – Aaron Sinnott
Wellhead	Cameron – Vince Marino

SERVICE	CONTRACTOR
Anchor Handling and Support Vessels	Swire Pacific - "Pacific Wrangler" – Sam Pullan Farstad - "Far Grip" – Dick Hall
Helicopters/Type	Bristows/Supa Puma - Paul Giddon
Fixed Wing Services	Bristows - Paul Giddon
ROV	Fugro - Norman Mackay
Down Hole Rental Tools	Tasman Oil Tools – Ross Luck
Shore Base (Wharf 27 Melbourne)	Dent Group – Phil Dent
Transportation	Bonnie Rock – Jim Currie
Rig Positioning	Fugro Survey – Ian Hobbs
Rig Positioning QC	RPS Hydrosearch – John Thompson
Weather Reporting	Bureau of Meteorology – David Bebee
Centrifuge	DFE – Toby Lecher
Communications	Diamond Offshore General Company

LOGISTICS	
Project Advisor	Labrador Petro-Management – Tom Brand
Shorebase Materials and Logistics Coordinators	Glen Osment (Melbourne) Alex Edwards (Perth)
Supply Base Location	Port Melbourne, Victoria – Wharf 27
Helicopter Base	Essendon Airport - Melbourne
Fixed Wing Services	Essendon Airport - Melbourne

1.3 Well Operations Summary

ZaneGrey-1 operations commenced at 05:00 hrs 27th January 2005 when towing of the Diamond Offshore General Company MODU "Ocean Patriot" commenced with two AHSV's ("Far Grip" & "Pacific Wrangler") from the Apache Energy's Grayling-1 location. The MODU was towed to the ZaneGrey-1 location (Figures 1 and 2) at an average speed of 6.1 k/hr (3.3 knots), a distance of 72km (39nm). The MODU arrived on location at 15:30 hrs 27th January 2005 when anchor handling operations commenced, with first anchor down at 16:55 hrs. Positioning the rig on location was completed by 04:20 hrs 28th January 2005 at which time the rig was ballasted down to drilling draft at 23:00 hrs. The final location for ZaneGrey-1 was confirmed as being 1.7m from the proposed location on a bearing of 216.2° grid. The final position for ZaneGrey-1 was:

Latitude: 38° 34' 31.64" S

Longitude: 147° 59' 16.27" E

Easting: 586,049.89m

Northing: 5, 729,856.42m

Rig Heading: 43.2° (True)

DATUM: AGD 84; Zone 55S; Central Meridian 147° East.

The 914mm (36") BHA made up and run in hole tagging the seafloor at 94m corrected to Mean Sea Level (MSL). The water depth at MSL was recorded as 72.5m, with a drill floor elevation of 21.5m. ZaneGrey-1 was spudded at 14:30 hrs on 29th January 2005 with a 914mm (36") hole drilled from seafloor (94mMD RT) to a depth of 129.5mMD RT, pumping 200 bbl guar gum and 50 bbl hi-vis mud on connection. Conducted wiper trip to 96mMD RT. Pumped 200 bbl gel mud and dropped TOTCO survey and pulled out of hole. Made up 762mm (30") housing running tool to 762mm (30") conductor and PGB in moonpool. Ran 762mm (30") conductor with ROV assistance placing the shoe at 127.75mMD RT and which was cemented in place using 792 sacks (168 bbls) of cement slurry at 15.8 ppg, returns to seafloor.

The 406mm (16") BHA was made up, orienting mud motor and programming LWD tools in the process. The BHA was then run in hole using the ROV to assist entering the hole. The cement was tagged at 124.7mMD RT. The shoe track was then drilled and cleaned out and new hole was drilled from 124.7m to 129.5mMD RT. Drilling continued ahead to 486mMD RT at which point the well was kicked off. Directionally drilled from 486m to 1095mMD RT (section TD), building inclination to maximum 34.99° with an azimuth of 14.71° at 1080.74mMD RT. Pumped 150 bbl hi-vis pill and circulated this out of the hole. Pumped 1000 bbl hi-vis pill followed by 200 bbls of 9.6 ppg KCl mud. Pulled out of hole with 406mm (16") BHA and racked same prior to downloading LWD tools. Ran 340mm (13 3/8") casing, setting shoe at 1090.61mMD RT and cemented with 417 sacks (166 bbls) of 12.5 ppg lead slurry and 327 sacks (67 bbls) of 15.8 ppg tail slurry. No surface indication of top plug shearing. Displaced cement using rig pump, bumping plug early at 3862 strokes and 15858kPa (2300 psi). Ran BOPs and marine riser, waited on weather for 22.5hrs before successfully landing BOP stack. Ran diverter and tested BOPs.

The 311mm (12 1/4") BHA was made up, orienting mud motor and programming LWD tools in the process. The BHA was then run in hole to 251mMD RT at which point the LWD tools were shallow pulse tested. The LWD tools failed the shallow pulse test. Performed 4,500 psi connector test and then pulled out of the hole laying out the LWD tools and the backup LWD tools were picked up. This BHA was then run in hole successfully shallow pulse testing the LWD tools. Continued to run in hole tagging cement at 1058.77mMD RT. Drilled cement, shoe track and shoe from 1058.77m to 1095mMD RT and then 3m of new hole to 1098mMD RT. Circulated hole clean and conducted Formation Integrity Test (FIT) with 1.03sg (8.6 ppg) mud against lower pipe rams to 815 psi (1.6 SG) equivalent. Directionally drilled ahead to 2103mMD RT. An incident with the dynamic break (on the top drive system) inadvertently releasing caused excessive weight to be set down on the drill string, bending 3 joints of drill pipe (an incident report can be found in Appendix 20 & 22). The bent stand was racked back and the motor alignment cylinder on the top drive system was replaced. A decision to pull out of the hole to inspect all drill pipe on the way out was made. On surface, the LWD pulser was changed out and the bend in the motor decreased to 0.78°. Surface tested MWD, motor and adjustable gauge stabiliser. This BHA was then run in the hole to the 340mm (13 3/8") casing shoe at which point the mud was circulated and conditioned. Continued to run in the hole having to wash and ream down from 1916 to 2103mMD RT due to tight hole. Drilled ahead to 2702mMD RT and due to difficult drilling with high torque on bottom, the BHA was pulled out of the hole. On surface the motor was laid out to run in hole with a rotary drilling assembly due to the motor stalling out on regular occasions. Ran in the hole having to wash and ream from 1767m to 2702mMD RT due to tight hole. Drilled ahead from 2702 to 2725mMD RT. Repaired swivel packing and pumps. Drilled ahead from 2725 to 2772mMD RT which was reached at 09:00 hrs on the 11th February 2005. Pulled out of the hole performing a short wiper trip from 1968mMD RT back to bottom due to tight hole conditions. Pulled out of hole racking back the BHA in the derrick. The ROV observed traces of fluid (suspected to be drilling fluid) seeping from the wellhead.

The 244mm (9 5/8") casing was run to 1776mMD RT (127 joints) at which point the casing was unable to pass. 127 mm (5") drill pipe handling gear was rigged up to enable circulation. The casing was then circulated and reamed from 1776m to 1778mMD RT. At this stage it was decided to pull the casing out of the hole. A 311mm (12 1/4") rotary clean out assembly was then run in the hole to perform a wiper trip. Washed and reamed down from 1777 to 2284mMD RT. Circulated and back reamed out of the hole from 2284 to 1740mMD RT. Circulated bottoms up and commenced washing and reaming back in the hole to 2283mMD RT. Circulated while raising the mud weight to 1.20sg (10.0ppg). Washed and reamed back into the hole to 2735mMD RT. Circulated hole clean and pulled out of hole. Ran 244mm (9 5/8") casing down to 2194mMD RT washing down past tight spots. Unable to get casing beyond this depth, so 8 joints were pulled back out of the hole and the casing hanger was run. The casing shoe was set at 2184mMD RT and cemented with 321 sacks (128 bbls) of 12.5 ppg lead slurry and 249 sacks (51 bbls) of 15.8 ppg tail slurry. The cement job went well with both the top and bottom plugs observed shearing. Displacement was then performed to the maximum calculated volume and no bump was observed.

The 216mm (8 1/2") BHA was made up, orienting the mud motor and programming the LWD tools in the process. The BHA was then run in the hole to 251mMDRT, where a successful shallow pulse test of the LWD tools was performed. Continued to run in the hole, tagging cement at 2158mMD RT. Drilled float, plugs, cement and shoe track from 2158 to 2184mMD RT. Drilled to 2192mMD RT and then washed down to 2260mMD RT (in the original 311mm (12 1/4") hole). Circulated hole clean and pulled into the shoe conducting a Formation Integrity Test (FIT) with 1.1sg (9.2 ppg) mud resulting in an FIT of 1.65sg (13.7ppg). Pulled out of the hole to set a balanced kick off plug. Pumped a 54m (203 sacks) balanced cement plug.

At this time, ZaneGrey-1/ST1 was commenced. Ran in the hole with 216mm (8 ½”) BHA and tagged firm cement at 2184mMDRT. Time drilled to kick off well and directionally drilled ahead to 3107mMDRT at which depth the BHA was pulled out of the hole due to poor rate of penetration. On surface it was found that the bit, motor bit box and motor drive shaft were left in the hole. It was decided that fishing for the tools left in the hole would prove difficult. An 80m (97sacks) balanced plug was set from 3106 to 3026mMDRT to kick off and sidetrack around the fish.

At this time, ZaneGrey-1/ST2 was commenced. Ran in the hole with 216mm (8 ½”) BHA, washing and reaming from 2996 to 3075mMD RT with no hard cement being tagged. Eventually the fish was tagged at 3107mMD RT. The BHA was then pulled out of the hole to set another cement plug. A 160m (195sacks) balanced plug was set from 3106 to 2946mMD RT. The bend on the motor was increased to 1.5° and the bit changed to aid kick off. This assembly was unable to kick off due to cement not being hard enough. Attempted to open hole sidetrack the well by time drilling while waiting on cement to harden; this proved unsuccessful. The BHA was then pulled out of the hole. The bit and BHA configuration were altered to aid kicking off. This new BHA was then run in the hole and the cement was still not hard enough to sidetrack. This BHA was then pulled out of the hole after time drilling to sidetrack again proved unsuccessful. A sidetracking bit was then used to successfully kick off the well. This BHA was then pulled out of the hole (a detailed breakdown of the sidetracking operations can be found in Appendix 20). A conventional directional BHA was then run in the hole and drilled to 3162 mMD RT at which depth the top drive system (TDS) on the rig failed. A short trip to the casing shoe was performed and the TDS was repaired over the next three days (a failure report can be found in Appendix 20). After repairing the TDS, the BHA was tripped back to bottom and the well drilled ahead to total depth (TD) at 3675mMD RT which was reached at 17:00 hrs on the 10th March 2005. The BHA was then pulled out of hole.

Rigged up BakerAtlas for running wireline logs and ran the following logs; RUN#1: DLL-MLL-MAC-ORIT-ZDL-CNL-DSL-TTRM over the interval 3764m to 2184mMD RT with MAC pulled through casing to 1983mMD RT and GR through casing to 94mMD RT and RUN#2: RCI-GR over the gross interval 3179.6m to 3622.8mMD RT for pressures and samples; while logging with the RCI-GR tool string, the tool became stuck at 3185mMD RT and unable to free; pulled 80% of weak point and tool came out of rope socket; rigged down BakerAtlas. Tensioned wireline and cut cable. Made up and tested wireline surface latching equipment. RIH with 86mm (3 ⅜”) grapple on drill pipe, stripping over wireline to top of ‘fish’; circulated above and latched onto ‘fish’; rigged up for ‘logging while fishing’ and resumed RCI-GR programme on drill pipe; RCI tool failure occurred when on depth at 3627m due to overheating of electronics in the gamma ray sonde, resulting in no further communications with the tool; the remainder of the tests were aborted and POOH with wireline tool on drill pipe; rigged down BakerAtlas.

Commenced plug and abandonment operations at 15:30 hrs 14th March 2005. Picked up and ran in hole with 73mm (2 ⅞”) tubing cement stinger on 127mm (5”) drill pipe to 3390 mMD RT and pumped 30 bbls of 15.8 ppg Class G cement slurry, setting Plug#1 from 3350mMD RT to 3250mMD RT. Tagged top of cement plug at 3203mMD RT with 0.9Mt (2klbs). Pulled out of hole to 2230mMD RT and pumped 30 bbls of 15.8 ppg Class G cement slurry setting Plug#2 from 2230mMD RT to 2130mMD RT. Tagged top of cement Plug#2 at 2153mMD RT with 0.9Mt (2klbs). Pulled out of hole. Cut 244mm (9 ⅝”) casing, retrieving and laying out same. Picked up 340mm (13 ⅜”) bridge plug and ran in hole to 176mMD RT and set same. Displaced the hole to 1.15sg (9.6ppg) inhibited mud. Set cement Plug#3 from top of the bridge plug to 125mMD RT. Picked up wellhead jetting tool and ran in hole to clean stack and wellhead. Pulled riser and BOP’s and secured same. Picked up 508mm x 762mm (20” x 30”) spear and cutting assembly and ran in hole, stabbing into the 18 ¾” wellhead and cut 508mm (20”) casing at 96.42mMD RT and pulled out of hole with casing cut-off stub and housing due to the 508mm (20”) rotating inside the 762mm (30”) conductor. Re-dressed spear and RIH, stabbing into 762mm (30”) housing, cutting 762mm (30”) casing at 95.94mMD RT. Conducted final seabed survey while pulling anchors.

Commenced anchor handling operations at 03:40 hrs 18th March 2005. Last anchor racked at 19:20 hrs 18th March 2005 and the rig released to Woodside Energy Ltd. Total time on ZaneGrey-1/ST1/ST2 location was 50.52 days.

1.4 Hole and Casing Data Summary

A summary of hole sizes and depths is provided in Table 1 and a summary of casing sizes and setting depths is presented in Table 2.

Table 1: Hole Size Summary

ZaneGrey-1				
Hole Size		Depth To		Length
(in)	(mm)	mMD RT	mTVD SS	(m)
26" x 36"	660 x 914	129.5	108.0	26.5
16"	406	1095	1012.0	965.5
12 1/4"	311	2772	2399	1677
ZaneGrey-1ST1		KOP at 2208mMDRT		
8 1/2"	216	3107	2684.4	899
ZaneGrey-1ST2		KOP at 3075mMDRT		
8 1/2"	216	3675	3198.3	600

Table 2: Casing Summary

Casing Size		Grade	Weight (ppf)	LOT (sg)	Cement	Depth	
(in)	(mm)					mMD RT	mTVD SS
20" x 30"	508 x 762	X52/X58	310	n/a	Seabed	127.75	106.2
13 3/8"	340	K55/N80	68	1.60	490.6	1090.61	1008.4
9 5/8"	244	N80/L80	47	1.65	1534.6	2184.14	1914.8

1.5 Well Overview

1.5.1 Drilling

ZaneGrey-1/ST1/ST2 reached total depth (TD) at 3675mMD RT (3198.3mTVD SS) with operations lasting 50.52 days. The budget time for ZaneGrey-1 was 29.7 days, with several problems throughout the course of the well causing the well to run 20.82 days over budget. The major sources of lost time were:

- waiting on weather
- being unable to run 9 5/8" casing due to poor hole conditions
- downhole motor twist off (including the problems associated with kicking-off the ST2 wellbore)
- top drive system electrical failure
- The RCI wireline tool being stuck in hole and subsequent stripping over wireline and logging while fishing operation.

1.6 Detailed Drilling Performance Review

1.6.1 Mobilise Rig to ZaneGrey-1/ST1/ST2 Location

The rig was mobilised from Apache Energy Ltd's Grayling-1 location to Bass Strait Oil Company's ZaneGrey-1 location by two AHSVs ("Far Grip" & "Pacific Wrangler").

Actual time:	12 hours	Trouble time:	0 hours
Productive Time:	12 hours	Technical Limit:	24 hours
Budgeted time:	28.8 hours	Under Budget:	58.3%

1.6.2 Run Anchors & Prepare to Spud

The time breakdown for running anchors was as follows:

Actual time:	43.5 hours	Trouble time:	0 hours
Productive Time:	43.5 hours	Technical Limit:	25.5 hours
Budgeted time:	30.72 hours	Over Budget:	41.6%

1.6.3 Drill 660 x 914mm (26" x 36") Hole Section

The time breakdown for drilling the 26" x 36" hole was as follows:

Actual time:	4.5 hours	Trouble time:	0 hours
Productive Time:	4.5 hours	Technical Limit:	6.75 hours
Budgeted time:	7.92 hours	Under Budget:	43.2 %

1.6.4 Run and Cement 508 x 762mm (20" x 30") Conductor

The time breakdown for running and cementing casing was as follows:

Actual time:	14 hours	Trouble time:	0 hours
Productive Time:	14 hours	Technical Limit:	16.75 hours
Budgeted time:	20.16 hours	Under Budget:	30.6 %

1.6.5 Drill 406mm (16") Hole Section

The time breakdown for drilling the 406mm (16") hole was as follows:

Actual time:	49.5 hours	Trouble time:	0.5 hours
Productive Time:	49.0 hours	Technical Limit:	71.5 hours
Budgeted time:	85.92 hours	Under Budget:	42.4 %

1.6.6 Run and Cement 340mm (13 3/8") Casing

The time breakdown for running and cementing casing was as follows:

Actual time:	19 hours	Trouble time:	0.5 hours
Productive Time:	18.5 hours	Technical Limit:	20 Hours
Budgeted time:	24 hours	Under Budget:	20.8 %

1.6.7 Run BOP and Riser

Time breakdown for running and testing BOPs and running the seal bore protector are as follows:

Actual time:	48 hours	Trouble time:	25 hours
Productive Time:	23 hours	Technical Limit:	24 hours
Budgeted time:	28.8 hours	Over Budget:	66.7 %

1.6.8 Drill 311mm (12 ¼") Hole section

The time breakdown for drilling the 311mm (12 ¼") hole was as follows:

Actual time:	191.5 hours	Trouble time:	41 hours
Productive Time:	150.5 hours	Technical Limit:	137.5 hours
Budgeted time:	164.88 hours	Over Budget:	16.1 %

1.6.9 Run and Cement 244mm (9 ⅝") Casing

The time breakdown for running and cementing casing was as follows:

Actual time:	171.5 hours	Trouble time:	97 hours
Productive Time:	74.5 hours	Technical Limit:	37.5 Hours
Budgeted time:	45.12 hours	Over Budget:	280 %

1.6.10 Drill 216mm (8 ½") Hole section

The time breakdown for drilling the 216mm (8 ½") hole was as follows:

Actual time:	480.5 hours	Trouble time:	263 hours
Productive Time:	217.5 hours	Technical Limit:	180.5 hours
Budgeted time:	216.48 hours	Over Budget:	122.0 %

1.6.11 Wireline Logging of 216mm (8 ½") Hole Section

No wireline logging was programmed for ZaneGrey-1/ST1/ST2:

Actual time:	94.6 hours	Trouble time:	44.5 hours
Productive Time:	50.1 hours	Technical Limit:	36 hours
Budgeted time:	n/a	Budget:	n/a

1.6.12 Well Abandonment

The plug and abandonment plugs were set using 73mm (2 ⅞") tubing stinger and summarised in Table 3.

Table 3: Plug and Abandonment Cement Plug Summary

Plug No.	Amount Pumped [bbl]	From (mMD RT)	To (mMD RT)	Tagged (mMD RT)
1	30	3350	3250	3203
2	31	2230	2130	2153
3	25	176	125	n/a

A time breakdown for the abandonment operations is as follows:

Actual time:	78.5 hours	Trouble time:	0 hours
Productive Time:	78.5 hours	Technical Limit:	51.75 hours
Budgeted time:	79.44 hours	Under Budget:	1.2 %

1.6.13 Pull Anchors

The time breakdown for the pulling of the anchors is as follows.

Actual time:	17.5 hours	Trouble time:	0 hours
Productive Time:	17.5 hours	Technical Limit:	14.5 hours
Budgeted time:	18.48 hours	Under Budget:	5.3 %

The rig was released at 19:20 hours on the 18th March 2005.

The Time versus Depth curve forms Figure 3 of this report.

2. Geological Report

2.1 Formation Sampling

2.1.1 Ditch Cuttings

Four sets of washed and air dried sample splits each of 200gm were collected at 10m, 5m or 3m intervals depending upon the stratigraphic section and rate of penetration (ROP) from 1095m to 2772.5mMD RT in ZaneGrey-1, 2184m to 3107mMD RT in ZaneGrey-1 ST1 and 3075m to 3675mMD RT in ZaneGrey-1 ST2 and retained in plastic bags. One set (Set D) was dispatched to GeoScience Australia (GA), Core and Cuttings Repository, Symonston, ACT, another set (Set C) was dispatched to the Victorian DPI Core Library South Road, Werribee, Vic 3030 and another set (Set B) was dispatched to INPEX Corporation in Tokyo, Japan. BAS has retained the remaining set (Set A) which is stored at Kestrel Information Management Pty Ltd, 578-590, Somerville Road, Sunshine, Vic 3020

In addition, one set of cuttings samples was collected in “samplex” trays which are also stored at Kestrel Information Management, Victoria.

The cuttings sampling interval and number of samples collected for ZaneGrey-1/ST1/ST2 is tabulated below in Table 4.

Table-4: Cuttings Sample Interval

WELL NAME	HOLE SIZE (mm)	FROM (mMD RT)	TO (mMD RT)	INTERVAL (m)	NUMBER OF SAMPLES
ZG-1	311	1095	1340	5	49
		1340	1510	10	17
		1510	1570	5	12
		1570	2370	10	80
		2370	2690	5	64
		2690	2772	3	28
ZG-1ST1	216	2190	3105	5	23
ZG-1ST2	216	3075	3081	6	1
		3081	3095	3	5
		3095	3675	5	116
				TOTAL	395

2.1.2 Conventional Cores

No conventional cores were cut in ZaneGrey-1/ST1/ST2.

2.1.3 Sidewall Cores (SWC)

No sidewall cores were cut ZaneGrey-1/ST1/ST2.

2.1.4 Rotary Sidewall Cores

No rotary sidewall cores were acquired in ZaneGrey-1/ST1/ST2.

2.2 Surveys, Logging and Testing Services

2.2.1 Directional Surveys

LWD directional surveys were conducted throughout the ZaneGrey-1/ST1/ST2 well bores. The resulting final definitive survey data report is included in Section “3.5 Well Trajectory” and the Directional Drilling End of Well Reports are included as Appendices 12-14. It should be noted that these directional reports are based upon a surface location datumed to AGD 66, unlike the official surface location included in this report which is datumed to AGD 84. Halliburton translated the location to AGD 66 for their directional reports because the offset well locations and the adjacent pipeline locations are also referenced to AGD 66.

2.2.2 Mudlogging

Halliburton (Sperry-Sun) Drilling Services provided mudlogging services for the drilling of ZaneGrey-1/ST1/ST2 from spud to total depth at 3675mMD RT using a crew of two (2) data engineers, two (2) mudloggers and two (2) sample catchers. A fully pressurised and computerised Surface Data Logging Unit was maintained throughout the drilling and wireline log evaluation phase of ZaneGrey-1/ST1/ST2. A fully computerised data acquisition service operated down to the 340mm (13 3/8”) casing shoe at 1090.61 mMD RT and a fully computerised mudlogging and data acquisition service operated for the 311mm (12 1/4”) and 216mm (8 1/2”) hole sections (i.e. from 1095m to total depth at 3675 mMD RT).

The full mudlogging service included the continuous evaluation of pore pressure and drilling parameters as an aid to optimising drilling costs and ensuring that drilling continued with maximum safety to personnel, the well and equipment. The information obtained while drilling was visually displayed and stored both as hard copy printouts and on hard disc. Details of the services, together with printouts and plots of the results of these services, are contained in the Halliburton End of Well Report (Appendix 10). The Formation Evaluation Log (mudlog) displays the rate of penetration (ROP), total gas, chromatographic analyses and wellsite interpreted lithologies. The Formation Evaluation Logs, Drilling Logs, Pressure Log and Gas Ratio Log are included herein as Enclosures 1-8 respectively.

Drilling Parameters, Monitoring and Recording

- **Drilling Parameters** – ROP, hole depth, bit depth, hookload, WOB, top drive RPM, top drive torque, pipe speed/block position
- **Mud Parameters** – pump rates, flow rates (IN/OUT), pit volumes, mud density (IN/OUT) and mud temperature (IN/OUT)
- **Pressure Parameters** – Pump pressure and casing pressure
- **Ditch Gas Parameters** – Total gas, chromatographic gas, H₂S and CO₂ detection.
- **Data Engineers** – calculate and monitor the Equivalent Circulating Density (ECD), the drilling exponent, formation pore pressure and cuttings lag time and depth.

Sampling and Analysis

- The Halliburton mudloggers organised the collection, bagging and dispatch of ditch cuttings as defined in Section 4.5 and 4.6

(Appendix 10) accompanied by lithological and microscopic examination and;

- Calcimetry measurements on ditch cuttings as required and;
- Isotube gas samples (18 collected) and;
- Drilling mud sample collection as required for geochemistry

2.2.3 Lithological Logging

Cuttings were described by the Wellsite Geologists from 1095 m to 3675 mMD RT in ZaneGrey-1/ST1/ST2. A cuttings description report is included herein as Appendices 1, 2 & 3.

2.2.4 Hydrocarbon Indications

Ditch Gas Readings:

Total gas, chromatographic breakdown of the ditch gas and trip gas was recorded from 1095 m to 3675 mMD RT throughout the 311mm (12 ¼") and 216mm (8 ½") hole sections, the results of which are included herein as Appendix 10. Trace to minor amounts of total gas consisting predominantly of methane (C₁), together with trace to minor amounts of ethane (C₂), propane (C₃) and butane (iC₄ & nC₄) was recorded upon commencement of first drilling returns in the 311mm (12 ¼") hole section below 1095mMD RT. Below approximately 1800m MD RT, nil to trace amounts of pentane (iC₅ & nC₅) was also recorded. Background gas levels remained at these levels throughout the remainder of the 311mm (12 ¼") hole section to section TD at 2772m MD RT in ZaneGrey-1. Maximum gas recorded in ZaneGrey-1 was 1.0% total gas which consisted of 11000ppm (C₁), 266ppm (C₂), 108ppm (C₃), 26ppm (iC₄) and 16ppm (nC₄). A number of slightly higher levels of total gas to 1.07% were recorded between 1800m and 2034m MDRT, however the chromatograph was malfunctioning during these intervals and no chromatographic data was recorded. The 244mm (9 ⅝") casing was subsequently set at 2184.1m MD RT after failing to reach section TD and ZaneGrey-1/ST1 was commenced in sidetrack hole at this depth in 216mm (8 ½") hole.

Background gas levels were moderately uniform throughout the drilling of ZaneGrey-1/ST1 over the gross interval 2184-3107m MD RT and consisted of trace to minor amounts of total gas, composed mainly of methane (C₁) and ethane (C₂) along with low levels of propane (C₃), butane (iC₄ & nC₄) and pentane (iC₅ & nC₅). Maximum gas recorded in ZaneGrey-1ST1 was 1.59% total gas at 2751m MD RT and consisted of 6895ppm C₁, 2036ppm C₂, 71ppm C₃, 177ppm iC₄, 255ppm nC₄ and 910ppm iC₅.

ZaneGrey-1/ST2 commenced after kicking off in 216mm (8 ½") hole at 3075m MD RT. Background gas levels recorded initially were low to moderate and locally increased in response to the volume of coal being cut in the stratigraphic section. Background levels consisted of trace to minor amounts of C₁ to C₅ from 3075m to 3306m MD RT. Below this depth, a prominent gas peak of 18.08% total gas (above a background of 0.5%) was recorded over the interval 3306-3319m MD RT and consisted of 84,479ppm C₁, 11,492ppm C₂, 6,960ppm C₃, 84ppm iC₄, 1,517ppm nC₄, 639ppm iC₅ and 542ppm nC₅. The centre of the gas peak occurred at 3314m MD RT in association with a sandstone that exhibited nil direct fluorescence, however displayed a slow, faint bluish yellow cut fluorescence with a faint patchy bluish yellow residual ring fluorescence. An isotube gas sample was also

collected from this gas peak, however at the time of writing this report, no further analyses have been attempted on this sample.

Below 3319m to total depth at 3675m MD RT, gas levels were moderately uniform and consisted of low to minor amounts of total gas consisting of C₁-C₅. No further significant gas peaks were recorded.

Average ditch gas readings recorded throughout the drilling of ZaneGrey-1, ZaneGrey-1/ST1 and ZaneGrey-1/ST2 are summarised below in Tables 5, 6 and 8 respectively, while gas peaks recorded in ZaneGrey-1/ST1 and ZaneGrey-1/ST2 are summarised below in Tables 7 & 9 respectively.

Table 5: Summary of Average Ditch Gas Readings Recorded in ZaneGrey-1

Depth Range (mMD RT)	Total Gas (%)	Methane (C1) ppm	Ethane (C2) ppm	Propane (C3) ppm	Iso- Butane (i- C4) ppm	Normal- Butane (n-C4) ppm	Iso- Pentane (i-C5) ppm	Normal Pentane (n-C5) ppm
1098-1200	0.10	1589	34	16	5	4	0	0
1200-1250	0.01	267	7	7	4	5	0	0
1250-1320	0.10	4212	57	29	7	5	0	0
1320-1385	0.20	9000	120	35	10	8	0	0
1385-1560	1.00	11000	266	108	26	16	0	0
1560-1660	0.85	8164	94	37	9	8	0	0
1660-1800	0.92		No data – chromatograph not functioning					
1800-1955	1.05	10117	260	73	17	11	9	16
1955-2034	1.07		No data – chromatograph not functioning					
2034-2103	0.98	5870	244	60	19	14	10	15
2103-2150	0.25	2565	50	14	2	0	0	0
2150-2315	0.55	5106	106	31	8	0	2	0
2315-2350	0.70	8458	203	68	24	10	9	0
2350-2475	0.52	6823	212	149	36	16	17	2
2475-2521	0.25	2237	110	49	15	7	11	0
2521-2580	0.33	2754	235	121	17	26	8	1
2580-2697	0.22	1050	164	76	13	26	5	5
2697-2741	0.15	713	81	26	1	2	0	0
2741-2772	0.20	2412	381	201	22	42	5	3

Table 6: Summary of Average Ditch Gas Readings Recorded in ZaneGrey-1/ST1

Depth Range (mMD RT)	Total Gas (%)	Methane (C1) ppm	Ethane (C2) ppm	Propane (C3) ppm	Iso- Butane (i- C4) ppm	Normal- Butane (n-C4) ppm	Iso- Pentane (i-C5) ppm	Normal Pentane (n-C5) ppm
2184-2232	0.03	183	20	3	1	1	1	2
2232-2291	0.08	628	14	6	3	1	1	2
2291-2330	0.10	975	22	5	2	0	0	0
2330-2575	0.17	1359	100	8	14	19	6	0
2575-2629	0.24	1587	293	10	27	41	16	0
2629-2665	0.15	1500	180	13		46	20	0
2665-2710	0.25	1730	382	24	45	60	29	0
2710-2740	0.17	1163	157	12	14	19	8	0
2740-2760	0.83	5412	1546	54	138	200	74	0
2760-2793	0.36	2027	438	48	4	12	17	10
2793-2854	0.09	1287	137	67	12	16	2	6
2854-2886	0.08	393	80	62	15	22	5	5
2886-2920	0.22	752	91	128	9	16	7	17
2920-2990	0.18	1424	461	242	39	53	9	16

Depth Range (mMD RT)	Total Gas (%)	Methane (C1) ppm	Ethane (C2) ppm	Propane (C3) ppm	Iso- Butane (i- C4) ppm	Normal- Butane (n-C4) ppm	Iso- Pentane (i-C5) ppm	Normal Pentane (n-C5) ppm
2990-3030	0.10	353	69	58	20	41	12	20
3030-3046	0.39	2702	699	365	57	88	24	24
3046-3107	0.14	600	138	103	16	30	13	14

Table 7: Summary of Gas Peaks Recorded in ZaneGrey-1/ST1

Depth Range (mMD RT)	Total Gas (%)	Methane (C1) ppm	Ethane (C2) ppm	Propane (C3) ppm	Iso- Butane (i- C4) ppm	Normal- Butane (n-C4) ppm	Iso- Pentane (i-C5) ppm	Normal Pentane (n-C5) ppm
2593	0.66	5421	1115	23	77	102	28	0
2672	0.50	4501	958	39	81	110	43	0
2751	1.59	6895	2036	71	177	255	910	0
2800	0.30	2564	450	182	24	30	4	9
2940	0.62	4247	1067	972	157	252	47	14
3043.5	0.63	5131	1450	663	86	123	32	30
3083	0.66	6190	937	443	20	63	29	30

Table 8: Summary of Average Ditch Gas Readings Recorded in ZaneGrey-1/ST2

Depth Range (mMD RT)	Total Gas (%)	Methane (C1) ppm	Ethane (C2) ppm	Propane (C3) ppm	Iso- Butane (i- C4) ppm	Normal- Butane (n-C4) ppm	Iso- Pentane (i-C5) ppm	Normal Pentane (n-C5) ppm
3075-3079	0.03	204	48	31	7	16	5	10
3080-3098	0.06	329	38	18	5	8	2	3
3099-3126	0.24	1589	166	63	12	19	7	8
3128-3134	0.56	6325	794	301	43	60	20	18
3144-3164-	0.81	7582	734	231	35	44	17	14
3173-3231	0.30	2659	323	173	454	23	18	7
3231-3240	0.11	794	107	59	17	7	8	2
3240-3306	0.29	2421	321	141	5	24	13	11
3319-3329	1.0	3050	380	169	11	18	10	15
3336-3359	1.53	3286	482	253	11	55	41	48
3359-3463	0.52	6216	628	301	26	49	31	40
3468-3533	0.30	1759	264	81	18	15	12	22
3533-3609	0.45	2324	303	133	5	23	12	10
3609-3675	0.90	5426	944	284	126	38	25	85

Table 9: Summary of Gas Peaks Recorded in ZaneGrey-1/ST2

Depth Range (mMD RT)	Total Gas (%)	Methane (C1) ppm	Ethane (C2) ppm	Propane (C3) ppm	Iso- Butane (i- C4) ppm	Normal- Butane (n-C4) ppm	Iso- Pentane (i-C5) ppm	Normal Pentane (n-C5) ppm
3078-3080	0.45	2326	383	220	37	90	25	41
3126-3128	0.98	9778	1130	423	67	94	29	26
3134-3144	2.95	22369	2782	759	118	104	57	32
3164-3173	2.62	22880	1739	516	142	93	36	24
3306-3319	18.08	84479	11492	6960	84	1517	639	542
3329-3336	4.81	22164	3135	1843	33	401	177	159
3463-3468	2.19	21565	1853	675	49	150	77	86
3511-3513	0.58	5422	566	152	54	23	19	39

Isotube Gas samples

Eighteen (18) Isotube gas samples were collected in ZaneGrey-1/ST1/ST2. These samples were collected at the depths listed below in Table 10 however at time of writing this report no analyses have been performed. These samples are currently being held by Bass Strait Oil Company Ltd if further compositional and carbon isotopic analysis is required.

Table 10: Isotube Gas Sample Depths

Isotube#	Depth (mMD RT)	Well
Tube 1	1955	ZaneGrey-1
Tube 2	2108	ZaneGrey-1
Tube 3	2534	ZaneGrey-1
Tube 4	2750	ZaneGrey-1
Tube 5	2753	ZaneGrey-1
Tube 6	1925	ZaneGrey-1
Tube 7	2134	ZaneGrey-1
Tube 8	2743	ZaneGrey-1/ST1
Tube 9	2751	ZaneGrey-1/ST1
Tube 10	2595	ZaneGrey-1/ST1
Tube 11	3168	ZaneGrey-1/ST2
Tube 12	3266	ZaneGrey-1/ST2
Tube 13	3303.4	ZaneGrey-1/ST2
Tube 14	3303.4	ZaneGrey-1/ST2
Tube 15	3257	ZaneGrey-1/ST2
Tube 16	3314	ZaneGrey-1/ST2
Tube 17	3628	ZaneGrey-1/ST2
Tube 18	3654.5	ZaneGrey-1/ST2

Sample Shows

- (i) Cuttings: No evidence of direct sample fluorescence was observed in cuttings during the drilling of ZaneGrey-1 over the gross interval 1095-2772.5mMD RT. The only sample show recorded in ZaneGrey-1/ST1 occurred at a depth of 2960mMD RT (~ 2559m TVDSS) in which a coal displayed nil direct fluorescence, however it exhibited a very slow yellowish-blue cut with a bright, solid bluish yellow residual cut fluorescence. This show represents the shallowest recording of any evidence of possible hydrocarbons recorded in the ZaneGrey well. The only sample show associated with reservoir sandstone occurred in ZaneGrey-1/ST2 where aggregates of sandstone over the interval 3300–3310mMD RT (~2854-2863m TVDSS) exhibited slow, faint bluish yellow cut fluorescence and faint patchy bluish yellow residual cut fluorescence. The only other sample shows evident during the drilling of ZaneGrey-1/ST2, also occurred in association with coals over the gross interval 3092-3470m MDRT (~2671-3008m TVDSS). These shows typically consisted of very slow yellowish blue cut fluorescence with a bright, solid bluish yellow residual cut fluorescence. Trace evidence of amber also occurred in association

with coal and sandstone aggregates which exhibited bright yellow white direct fluorescence and nil cut fluorescence.

2.2.5 Measurement and Logging While Drilling (MWD/LWD)

LWD services were provided by Halliburton, Sperry-Sun Drilling Services on ZaneGrey-1/ST1/ST2 and full details of there operation are recorded in their End of Well Report included herein as Appendix 11.

All MWD/LWD operations are briefly summarised in Table 11 and a summary of MWD/LWD log prints/image logs is included as Table 12.

Well Completion Report (Basic Data)- ZaneGrey-1/ST1/ST2

Table 11: Summary of MWD/LWD Logging Runs

Run #	Well Name	Hole Size (mm)	Start Depth (m)	End Depth (m)	Operating Hours	Circulating Hours	Maximum Circulating Temperature (°C)
0200	ZaneGrey-1	406	129.5	1095	44.34	35.15	33.00
0300	ZaneGrey-1	311	1095	1095	7.36	0.96	26.00
0400	ZaneGrey-1	311	1095	2103	63.19	43.00	65.00
0500	ZaneGrey-1	311	2103	2702	52.90	35.78	77.00
0600	ZaneGrey-1	311	2702	2772.5	63.18	39.25	76.00
0700	ZaneGrey-1/ST1	216	2190	3107	108.12	89.69	82.00
0800	ZaneGrey-1/ST1	216	3107	3107	23.62	10.00	96.00
0900	ZaneGrey-1/ST2	216	2970	3031	56.93	40.85	91.00
1000	ZaneGrey-1/ST2	216	3031	3070	36.88	25.41	94.00
1100	ZaneGrey-1/ST2	216	3070	3092	26.57	12.81	96.00
1200	ZaneGrey-1/ST2	216	3092	3675	130.66	39.64	104.00

Table 12: Summary of MWD/LWD Log Prints

Run No.	Log Print/Type	Scale	Depth Interval (m)
0200, 0400, 0500, 0600	ZaneGrey-1 EWR-DGR (MD)	1:200	129.5-2772.5
0200, 0400, 0500, 0600	ZaneGrey-1 EWR-DGR (MD)	1:500	129.5-2772.5
0200, 0400, 0500, 0600	ZaneGrey-1 EWR-DGR (TVD)	1:200	129.5-2353
0200, 0400, 0500, 0600	ZaneGrey-1 EWR-DGR (TVD)	1:500	129.5-2353
0700	ZaneGrey-1/ST1 EWR-DGR (MD)	1:200	2190-3090
0700	ZaneGrey-1/ST1 EWR-DGR (MD)	1:500	2190-3090
0700	ZaneGrey-1/ST1 EWR-DGR (TVD)	1:200	1941-2692
0700	ZaneGrey-1/ST1 EWR-DGR (TVD)	1:500	1941-2692
1100, 1200	ZaneGrey-1/ST2 EWR-DGR (MD)	1:200	3075-3660
1100, 1200	ZaneGrey-1/ST2 EWR-DGR (MD)	1:500	3075-3660
1100, 1200	ZaneGrey-1/ST2 EWR-DGR (TVD)	1:200	2660-3206
1100, 1200	ZaneGrey-1/ST2 EWR-DGR (TVD)	1:500	2660-3206

2.2.6 Wireline Logging

Wireline services were provided by BakerAtlas on ZaneGrey-1/ST1/ST2 and full details of their operation are recorded in their End of Well Report included herein as Appendix 4.

One open hole logging suite (Suite 1) was recorded in ZaneGrey-1/ST1/ST2. Suite-1 was recorded across the 216mm (8 ½”) open hole section and consisted of two (2) attempted logging runs.

All wireline operations are briefly summarized in Table 13 and more detailed reports are included herein as Appendices 6 and 7. Furthermore, a summary of wireline log prints/image logs is included as Table 14.

Well Completion Report (Basic Data)- ZaneGrey-1/ST1/ST2

Table 13: Summary of Wireline Logging Runs

Suite /Run	Wireline Log	Interval mMD RT	Last Circulation Time	Circulation Stopped	Time Logger on Bottom	Max. Recorded Temp (°C) @ mTVDSS (corrected to top of tool string)
1/1	DLL-MLL-MAC-ORIT-ZDL-CN-GR-TTRM	3674-2184m; MAC to 1983m &	1.1	10 th March 2005; 23:00 Hrs	11 th March 2005; 15:38 Hrs	121.7 @ 3194.5
1/2	RCI-GR (Pressure & Samples)	558.3-612.8	1.1	10 th March 2005; 22:20 Hrs	13 th March 2005; 22:20 Hrs	135.3 @ 3149.4

Table 14: Summary of Wireline Log Prints

Suite/Run No.	Log Print	Scale	Depth Interval (mMD RT)
1/1	DLL-MLL-MAC-GR-TTRM (Resistivity-Sonic)	1:500	3671-2184 (MAC to 1983m; GR to 94m)
1/1	DLL-MLL-MAC-GR-TTRM Resistivity-Sonic)	1:200	3671-2184 (MAC to 1983m; GR to 94m)
1/1	ZDL-CN-GR (Nuclear)	1:500	3671-2184
1/1	ZDL-CN-GR (Nuclear)	1:200	3671-2184
1/1	SPECTRALOG-TTRM	1:500	3671-2184
1/1	SPECTRALOG-TTRM	1:200	3671-2184
1/2	RCI-GR-TTRM (Formation pre-test pressures and sampling)	1:200	3622.8-3179.5

2.2.7 Borehole Seismic

No checkshot or VSP survey was acquired in ZaneGrey-1/ST1/ST2.

2.2.8 Wireline Testing

All the required wireline testing data in ZaneGrey-1/ST1/ST2 were acquired in one run of the *BakerAtlas* Reservoir Characterization Instrument (RCI). The tool was configured with a single large diameter probe, a Pump-out Module (PO), and Near Infra-red Detector (NIR).

A total of 26 pre-tests were attempted and 13 repeat draw-downs; 17 were successful and 1 x lost seal and 4 x curtailed tests. A summary of the wireline pressure data is presented in Table 15 below.

The sample chamber configuration consisted of:

- 6 x 840cc DOT/PVT multi-tank carrier (MRMS) and;
- 1 x 10 litre tank and;
- 1 x 4 litre tank.

A total of 2 x 840cc samples at 3307 mMD RT were attempted and recovered.

Petrotech provided on-site validation and analysis of RCI gas samples and preliminary analysis of formation water samples. Draeger tubes were unable to detect hydrogen sulphide in any of the samples. The results of their work and of RCI water sample analyses are presented herein as Appendix 7.

Core Laboratories provided onshore laboratory analysis of RCI gas samples. The results of their work, including PVT analyses, are presented herein as Appendix 8.

An interpretation of the RCI results is presented in the final Petrophysical Report (by the Saros Group) and in the FRA/PTA Analysis Report (by BakerAtlas), both of which are included in the ZaneGrey-1/ST1/ST2 Interpretative Data Well Completion Report issued under separate cover.

Well Completion Report (Basic Data)- ZaneGrey-1/ST1/ST2

Table 15: RCI Pre-test Pressure and Sampling Results

No.	DEPTH	DEPTH	DEPTH	Time	IHP	FFP	FHP	VOL	D. MOB	Temp	Comments
	(mMDRT)	(mTVDRT)	(mTVDSS)	(hrs:min)	(PSIA)	(PSIA)	(PSIA)	(CC)	(mD/cp)	(deg C)	
INTERIM REPORT - TIGHT, SUPERCHARGED AND LOST SEAL CLASSIFICATIONS TO BE REVIEWED											
1	3179.60	2768.80	2747.30	7:25	4665.70		4665.10	10.0	0.0	111.2	tight, lost seal. Hole sticky
2	3181.60	2770.70	2749.20	7:39	4669.89	3829.70	4669.30	10.0	6	113.4	Test
2R	3181.60	2770.70	2749.20	7:43	4669.90	3829.70	4669.30	10.0	8	113.4	Repeat
3	3185.75	2774.30	2752.80	7:51	4676	3837.14	4675.8	10.4	0.7	114.2	Test
3R	3185.75	2774.30	2752.80	7:55	4676.00	3836.60	4675.80	9.8	0.7	114.2	Repeat good test
4	3190.40	2778.33	2756.83	10:55	4678.60	3840.40	4672.90	10.6	29.6	117.9	First LWF point 13/03/05
4R	3190.40	2778.33	2756.83	11:00	4678.60	3840.30	4672.90	10.2	33.3	117.9	Repeat good test
5	3192.20	2779.90	2758.40	11:12	4674.40	3843.00	4674.80	9.2	182.2	118.3	Good test
5R	3192.20	2779.90	2758.40	11:15	4674.40	3843.10	4674.80	10.2	192.2	118.3	Repeat good test
6	3234.60	2817.17	2795.67	11:40	4747.30	3896.90	4741.40	11.0	30.3	120.4	Test
6R	3234.60	2817.17	2795.67	12:00	4747.30	3896.90	4741.40	10.6	30	120.4	Repeat good test
6RR	3234.60	2817.17	2795.67	12:00	4747.30	3897.00	4741.40	10.5	30.6	120.4	Repeat good test
7	3239.80	2821.80	2800.30	12:10	4750.80	3903.30	4747.90	11.2	14.3	121.0	Test
7R	3239.80	2821.80	2800.30	12:15	4750.80	3903.30	4747.90	11.0	14.5	121.0	Repeat good test
8	3259.70	2839.40	2817.90	12:35	4795.60	3930.40	4780.20	10.6	70.4	121.5	Test
8R	3259.70	2839.40	2817.90	12:40	4795.60	3929.70	4780.20	10.3	71.7	121.5	Repeat good test
9	3268.70	2847.40	2825.90	12:48	4798.80	3940.70	4793.30	10.9	152.7	122.0	Good test
10	3307.00	2881.50	2860.00	13:07	4827.90	3992.90	4848.50	11.1	10.6	125.8	Good test. Sample - (GR depth correlation OK)
10R1	3307.00	2881.50	2860.00	13:10	4827.90	3992.90	4848.50	10.9	11	125.8	Repeat good test. Sample
10R2	3307.90	2882.30	2860.80	14:25	4847.90	3995.40	4847.90	10.2	136.3	125.7	Repeat good test
10R3	3307.90	2882.30	2860.80	14:28	4847.90	3995.30	4847.90	10.3	137.5	125.7	Repeat good test
11	3309.10	2883.40	2861.90	14:35	4864.10	3996.30	4855.40	20.1	46.9	125.5	Test
11R	3309.10	2883.40	2861.90	14:40	4864.10	3995.80	4855.40	10.1	40.3	125.5	Repeat good test
12	3311.40	2885.40	2863.90	14:48	4856.90	4000.90	4857.20	20.1	40	127.3	Test - no sample
13	3309.40	2883.70	2862.20	16:15	4857.30	3996.30	4855.10	21.8	21.4	129.1	Test
14	3309.20	2883.40	2862.00	16:50	4857.40	3995.80	4856.40	19.9	17.1	129.1	Test - no sample
15	3312.80	2886.70	2865.20	17:40	4866.30		4861.40			129.2	Tight - no test
16	3319.40	2892.60	2871.10	17:25	4874.60	4009.40	4871.30	19.7	14.8	127.3	Test (GR depth correlation/correction +1.0m)
17	3320.90	2893.90	2872.40	17:40	4882.50	4011.70	4874.00	20.0	107.4	127.1	Good test
18	3323.70	2896.30	2874.80	17:55	4880.60	4014.70	4875.80	20.6	97.5	128.9	Good test
19	3326.10	2898.60	2877.10	19:10	4883.60	4018.00	4879.70	20.5	235.6	126.8	Good test
20	3328.70	2900.90	2879.40	19:25	4888.80	4021.10	4882.70	22.5	45.3	126.6	Good test
21	3345.20	2915.70	2894.20	19:40	4910.80	4041.30	4904.80	19.8	22.3	126.2	Test
21R	3345.20	2915.70	2894.20	19:40	4910.80	4041.00	4904.80	11.2	15.3	126.2	Repeat good test
22	3349.20	2919.30	2897.80	19:50	4913.70	4046.40	4911.30	20.0	31.1	126.1	Test
23	3351.00	2920.94	2899.44	20:02	4921.6	4050.5	4914.40	16.9	127.6	126	Test
23R	3351.00	2920.94	2899.44	20:15	4921.6	4048.10	4914.40	20.0	93.2	126	Repeat good test
24	3357.00	2926.30	2904.80	20:25	4930.60	4055.80	4925.30	19.5	26.3	126.2	Test
25	3360.70	2929.70	2908.20	20:30	4936.90	4060.80	4929.50	20.2	23.7	126.2	Test
25R	3360.70	2929.70	2908.20	20:35	4936.90	4060.50	4929.50	20.7	22.6	126.2	Repeat good test
26	3366.30	2934.50	2913.00	20:40	4937.80	4068.6	4935.20	20.5	19.9	126.3	Test
26R	3366.30	2934.50	2913.00	20:50	4937.80	4067.1	4935.20	4.8	19	126.3	Repeat good test
27	3548.10	3101.60	3080.10	21:00	5236.50	4314.8	5234.30	20.2	11.1	131.6	Test (GR depth correlation/correction -0.75m)
27R	3548.10	3101.60	3080.10	21:00	5236.50	4314.6	5234.30	5.3	15	131.6	Repeat good test
28	3560.90	3113.40	3091.90	22:10	5238.20	4342.4	5247.50	21.1	19.6	132.6	Test
29	3574.00	3125.60	3104.10	22:40	5288.1	4345.00	5282.8	20.7	57.7	132.8	Test
30	3622.80	3170.90	3149.40	23:05	5342.20	4438.3	5343.6	20.6	18.6	134.2	Test

2.2.9 Drill Stem Testing

No DST was conducted in ZaneGrey-1/ST1/ST2.

2.2.10 Temperature, Drilling and Mud Property Data

There were no temperature surveys run in ZaneGrey-1/ST1/ST2. Three maximum recording thermometers were used on all wireline logging runs to record the temperature. The following temperatures were recorded on both open hole logging runs conducted at final TD (3675mMD RT):

Table 16: Wireline Recorded Temperature Data

Run No.	Wireline Log	Max. Recorded Temperature (°C)	Depth (mTVDSS) (corrected to top of tool string)	Hours Since Last Circulation	t/(Tx+t)
1	DLL-MLL-MAC-ORIT-ZDL-CN-GR-TTRM	121.7°C	3617m	16.75 hrs	0.9347
2	RCI-GR (Pressure & Samples)	135°C	3622m	32.4 hrs	0.9651

Note: t = Time Since Circulation Stopped; Tx=Last Circulation

A discussion of the extrapolated bottom-hole temperature and calculated present day geothermal gradients using various techniques is presented in the ZaneGrey-1/ST1/ST2 Well Completion Report - Interpretative Data, issued under separate cover.

2.3 Formation Evaluation

2.3.1 Biostratigraphy

A total of 15 ditch cutting samples from the gross interval 2515-3670 metres were examined palynologically by *Dr Alan Partridge of Biostrata Pty Ltd.* These samples are listed below in Table 17. The results of this work are presented in Appendix 9 and a discussion of the results is presented in the ZaneGrey-1/ST1/ST2 Well Completion Report - Interpretative Data issued under separate cover.

Table 17: Samples submitted for Palynology

Sample Type	Well Name	Depth (mMD RT)
Cuttings	ZaneGrey-1/ST1	2515-2520
Cuttings	ZaneGrey-1/ST1	2525-2530
Cuttings	ZaneGrey-1/ST1	2550-2555
Cuttings	ZaneGrey-1/ST2	3290-3300
Cuttings	ZaneGrey-1/ST2	3300-3310
Cuttings	ZaneGrey-1/ST2	3330-3340
Cuttings	ZaneGrey-1/ST2	3340-3350
Cuttings	ZaneGrey-1/ST2	3440-3445
Cuttings	ZaneGrey-1/ST2	3505-3510

Sample Type	Well Name	Depth (mMD RT)
Cuttings	ZaneGrey-1/ST2	3510-3515
Cuttings	ZaneGrey-1/ST2	3525-3530
Cuttings	ZaneGrey-1/ST2	3540-3545
Cuttings	ZaneGrey-1/ST2	3590-3595
Cuttings	ZaneGrey-1/ST2	3630-3640
Cuttings	ZaneGrey-1/ST2	3660-3670

2.3.2 Petrology

No petrology was conducted on samples from ZaneGrey-1/ST1/ST2

2.3.3 Core Analysis

No core analysis was conducted on samples from ZaneGrey-1/ST1/ST2

2.3.4 Geochemistry

No geochemistry was conducted on samples from ZaneGrey-1/ST1/ST2

3. Drilling Records

3.1 *Operational Reports*

Daily operational reports are summarised in Appendices 20-22 and Daily Drilling Reports are included herein as Appendices 23-25.

3.2 *Bit and BHA Reports*

Bit and BHA reports are summarised in Appendices 20-22.

3.3 *Casing and Cementing Reports*

Casing and Cementing Reports are presented in Appendices 15 and 16.

3.4 *Drilling Fluids Reports*

The MI Swaco Drilling Fluids report is presented in Appendix 19.

3.5 Well Trajectory

The trajectory for the well is presented in Table 18.

Table 18: Well Trajectory

Measured Depth (metres)	Inclination (degrees)	Direction (degrees)	Vertical Depth (metres)	Latitude (metres)	Departure (metres)	Vertical Section (metres)	Dogleg (deg/30m)
152.20	0.41	162.66	152.20	0.53 S	0.16 E	-0.47	TIE-IN
180.10	0.41	187.76	180.10	0.72 S	0.18 E	-0.65	0.19
208.30	0.52	134.85	208.30	0.91 S	0.26 E	-0.82	0.46
236.30	0.50	145.41	236.30	1.10 S	0.42 E	-0.96	0.10
265.10	0.48	133.55	265.09	1.29 S	0.58 E	-1.10	0.11
291.20	0.53	112.32	291.19	1.41 S	0.77 E	-1.17	0.22
322.80	0.31	122.92	322.79	1.52 S	0.98 E	-1.21	0.22
351.10	0.61	108.04	351.09	1.60 S	1.18 E	-1.24	0.34
379.50	0.62	106.95	379.49	1.69 S	1.47 E	-1.26	0.02
408.30	0.57	109.17	408.29	1.79 S	1.76 E	-1.27	0.06
436.40	0.50	108.39	436.39	1.87 S	2.01 E	-1.29	0.07
463.05	0.56	101.29	463.04	1.93 S	2.24 E	-1.29	0.10
493.81	1.55	39.19	493.79	1.64 S	2.65 E	-0.90	1.35
521.53	3.74	26.59	521.48	0.54 S	3.29 E	0.32	2.44
550.66	6.40	18.10	550.49	1.85 N	4.22 E	2.88	2.84
578.94	9.49	11.85	578.50	5.63 N	5.19 E	6.78	3.40
605.39	12.27	11.47	604.47	10.52 N	6.20 E	11.76	3.15
637.30	15.11	10.93	635.47	17.93 N	7.66 E	19.30	2.67
663.37	17.26	12.12	660.51	25.04 N	9.12 E	26.55	2.50
693.68	19.03	13.97	689.31	34.24 N	11.26 E	35.98	1.85
722.25	21.58	14.47	716.10	43.85 N	13.69 E	45.89	2.68
750.29	24.88	14.62	741.87	54.55 N	16.47 E	56.95	3.53
778.24	28.18	15.54	766.87	66.60 N	19.73 E	69.43	3.57
806.45	30.29	16.23	791.48	79.85 N	23.50 E	83.21	2.27
836.21	31.18	15.90	817.06	94.47 N	27.71 E	98.42	0.92
864.47	31.47	15.91	841.20	108.60 N	31.73 E	113.10	0.31
892.94	32.20	16.13	865.39	123.03 N	35.88 E	128.12	0.78
921.51	32.69	14.67	889.50	137.81 N	39.95 E	143.44	0.98
950.02	32.88	14.70	913.47	152.74 N	43.86 E	158.88	0.20
979.03	33.35	14.25	937.77	168.09 N	47.82 E	174.73	0.55
1009.22	34.05	15.10	962.89	184.29 N	52.07 E	191.48	0.84
1037.20	34.42	14.39	986.02	199.51 N	56.07 E	207.22	0.58
1065.76	34.72	14.47	1009.54	215.20 N	60.11 E	223.43	0.32
1080.74	34.99	14.71	1021.83	223.49 N	62.27 E	231.99	0.61
1123.52	34.54	14.36	1056.97	247.10 N	68.39 E	256.38	0.34
1150.74	34.23	14.27	1079.44	262.00 N	72.19 E	271.75	0.34
1178.17	33.67	14.48	1102.19	276.84 N	76.00 E	287.07	0.63
1208.00	33.51	14.74	1127.04	292.80 N	80.16 E	303.57	0.22
1237.02	33.62	14.39	1151.22	308.33 N	84.19 E	319.62	0.23
1265.61	34.21	14.57	1174.95	323.78 N	88.18 E	335.57	0.62

Well Completion Report (Basic Data)- ZaneGrey-1/ST1/ST2

Measured Depth (metres)	Inclination (degrees)	Direction (degrees)	Vertical Depth (metres)	Latitude (metres)	Departure (metres)	Vertical Section (metres)	Dogleg (deg/30m)
1294.54	34.67	13.93	1198.80	339.64 N	92.21 E	351.93	0.61
1323.50	34.51	14.39	1222.64	355.58 N	96.23 E	368.37	0.32
1353.04	34.37	13.93	1247.00	371.78 N	100.32 E	385.08	0.30
1380.92	34.26	13.78	1270.03	387.04 N	104.08 E	400.79	0.15
1409.67	34.18	13.29	1293.80	402.76 N	107.87 E	416.96	0.30
1438.12	34.52	13.61	1317.29	418.38 N	111.60 E	433.01	0.40
1466.41	34.41	12.82	1340.62	433.96 N	115.26 E	449.01	0.49
1494.65	34.39	12.29	1363.92	449.53 N	118.73 E	464.95	0.32
1523.37	34.16	12.03	1387.65	465.34 N	122.14 E	481.10	0.28
1551.88	34.03	12.09	1411.26	480.97 N	125.48 E	497.06	0.14
1580.92	34.34	13.28	1435.29	496.89 N	129.06 E	513.36	0.76
1609.62	34.68	16.07	1458.94	512.61 N	133.18 E	529.62	1.69
1638.56	34.32	16.67	1482.79	528.34 N	137.80 E	546.00	0.50
1667.52	34.04	16.13	1506.75	543.94 N	142.39 E	562.27	0.43
1696.00	34.16	16.42	1530.33	559.27 N	146.87 E	578.23	0.22
1724.70	33.80	16.03	1554.13	574.67 N	151.35 E	594.27	0.44
1752.98	34.20	16.92	1577.57	589.84 N	155.84 E	610.08	0.67
1782.83	34.14	16.52	1602.27	605.89 N	160.66 E	626.83	0.23
1811.25	34.44	17.46	1625.75	621.21 N	165.34 E	642.83	0.64
1840.08	34.47	17.39	1649.52	636.77 N	170.22 E	659.13	0.05
1868.47	34.23	17.07	1672.96	652.07 N	174.97 E	675.14	0.32
1897.13	34.16	16.74	1696.67	667.48 N	179.65 E	691.23	0.20
1926.10	34.12	16.89	1720.64	683.04 N	184.36 E	707.48	0.09
1954.43	34.05	17.19	1744.11	698.22 N	189.01 E	723.35	0.19
1983.37	33.95	17.51	1768.10	713.67 N	193.83 E	739.52	0.21
2012.16	33.49	17.02	1792.05	728.93 N	198.58 E	755.48	0.56
2041.58	33.41	17.63	1816.59	744.41 N	203.41 E	771.69	0.35
2070.37	33.42	17.42	1840.63	759.53 N	208.18 E	787.52	0.12
2095.75	33.16	17.24	1861.84	772.83 N	212.33 E	801.44	0.32
2126.37	32.90	16.85	1887.51	788.78 N	217.22 E	818.12	0.33
2154.80	32.52	16.76	1911.44	803.49 N	221.66 E	833.47	0.40
2183.17	32.39	16.46	1935.38	818.08 N	226.01 E	848.69	0.22
2211.78	32.45	17.62	1959.75	832.54 N	229.91 E	863.67	2.34
2240.33	32.59	16.80	1984.25	846.84 N	233.15 E	878.32	0.19
2270.20	32.81	17.81	2009.91	861.87 N	235.90 E	893.55	2.46
2299.48	33.11	17.19	2035.11	876.58 N	238.33 E	908.39	0.53
2328.25	33.62	17.37	2059.98	890.79 N	241.03 E	922.81	1.12
2356.67	33.96	17.39	2084.46	904.95 N	243.79 E	937.21	1.85
2385.20	34.38	17.88	2108.79	919.48 N	247.06 E	952.10	1.94
2413.79	35.02	17.69	2132.82	934.47 N	251.02 E	967.60	1.94

Well Completion Report (Basic Data)- ZaneGrey-1/ST1/ST2

Measured Depth (metres)	Inclination (degrees)	Direction (degrees)	Vertical Depth (metres)	Latitude (metres)	Departure (metres)	Vertical Section (metres)	Dogleg (deg/30m)
2441.91	35.26	17.86	2156.24	949.49 N	255.06 E	983.15	0.66
2470.30	35.23	17.62	2179.93	964.64 N	259.01 E	998.80	0.16
2499.57	35.12	18.26	2204.21	980.45 N	263.15 E	1015.15	0.42
2528.66	34.89	17.69	2228.19	996.41 N	267.21 E	1031.62	0.86
2558.30	35.04	18.16	2252.50	1012.85 N	271.34 E	1048.57	1.13
2587.39	35.34	18.00	2276.08	1029.37 N	275.50 E	1065.60	0.81
2615.66	35.78	18.12	2298.76	1045.72 N	279.72 E	1082.48	0.06
2643.79	35.92	18.69	2321.23	1062.07 N	284.05 E	1099.40	0.31
2670.24	35.63	18.92	2342.32	1077.50 N	288.15 E	1115.37	0.31
2193.14	31.67	15.75	1943.83	823.16 N	227.48 E	853.97	2.44
2214.58	30.95	12.84	1962.15	833.95 N	230.23 E	865.11	2.34
2241.00	30.80	12.66	1984.82	847.17 N	233.23 E	878.66	0.19
2270.43	30.81	7.95	2010.11	861.99 N	235.92 E	893.67	2.46
2298.37	30.44	10.70	2034.15	876.03 N	238.22 E	907.83	1.56
2326.97	29.94	10.85	2058.87	890.16 N	240.91 E	922.18	0.53
2355.80	31.00	11.14	2083.72	904.51 N	243.70 E	936.76	1.12
2381.72	31.82	13.78	2105.84	917.70 N	246.62 E	950.26	1.85
2414.16	33.68	15.58	2133.12	934.67 N	251.07 E	967.80	1.94
2442.70	33.48	14.49	2156.90	949.92 N	255.17 E	983.59	0.66
2470.32	33.42	14.73	2179.94	964.65 N	259.01 E	998.81	0.16
2499.52	34.48	14.63	2204.17	980.42 N	263.14 E	1015.12	1.09
2528.50	34.47	13.92	2228.06	996.32 N	267.19 E	1031.53	0.42
2557.49	35.28	14.28	2251.84	1012.40 N	271.23 E	1048.10	0.86
2585.36	36.32	14.03	2274.44	1028.20 N	275.21 E	1064.40	1.13
2614.39	36.94	14.82	2297.74	1044.98 N	279.53 E	1081.72	0.81
2643.01	37.00	14.81	2320.61	1061.62 N	283.93 E	1098.93	0.06
2671.57	37.27	15.01	2343.38	1078.28 N	288.36 E	1116.17	0.31
2700.11	37.52	15.54	2366.05	1095.00 N	292.93 E	1133.50	0.43
2729.08	37.31	15.09	2389.06	1111.98 N	297.58 E	1151.10	0.36
2758.57	35.90	14.65	2412.73	1128.97 N	302.09 E	1168.69	1.46
2786.53	35.55	13.38	2435.43	1144.81 N	306.05 E	1185.01	0.88
2815.67	34.36	13.52	2459.32	1161.05 N	309.93 E	1201.70	1.23
2844.06	33.47	13.48	2482.88	1176.45 N	313.63 E	1217.53	0.95
2872.61	33.20	13.34	2506.73	1191.71 N	317.26 E	1233.22	0.29
2901.47	33.09	12.82	2530.89	1207.08 N	320.84 E	1248.99	0.32
2930.23	32.02	12.69	2555.14	1222.17 N	324.25 E	1264.45	1.12
2959.08	31.79	13.21	2579.63	1237.03 N	327.67 E	1279.69	0.37
2987.28	30.50	13.51	2603.76	1251.22 N	331.04 E	1294.27	1.39
3015.71	31.54	13.03	2628.13	1265.48 N	334.40 E	1308.91	1.13
3044.57	31.02	13.23	2652.79	1280.07 N	337.80 E	1323.89	0.55

Well Completion Report (Basic Data)- ZaneGrey-1/ST1/ST2

Measured Depth (metres)	Inclination (degrees)	Direction (degrees)	Vertical Depth (metres)	Latitude (metres)	Departure (metres)	Vertical Section (metres)	Dogleg (deg/30m)
3073.76	31.11	12.81	2677.92	1294.46 N	341.44 E	1338.73	1.36
3092.90	31.08	12.66	2694.43	1303.77 N	344.12 E	1348.42	1.81
3074.64	30.11	15.22	2678.68	1294.89 N	341.55 E	1339.17	1.36
3114.34	31.52	18.99	2712.78	1314.31 N	347.54 E	1359.49	1.81
3131.12	31.15	19.18	2727.12	1322.56 N	350.40 E	1368.19	0.68
3159.25	30.31	18.05	2751.30	1336.18 N	354.99 E	1382.53	1.09
3188.52	29.22	18.57	2776.70	1349.98 N	359.55 E	1397.04	1.15
3217.29	28.31	18.36	2801.92	1363.11 N	363.93 E	1410.85	0.95
3276.11	27.28	18.20	2853.96	1389.15 N	372.54 E	1438.23	0.53
3333.29	26.11	18.07	2905.04	1413.56 N	380.54 E	1463.88	0.61
3389.79	25.74	18.35	2955.85	1437.03 N	388.25 E	1488.54	0.21
3417.10	24.21	17.99	2980.61	1447.98 N	391.85 E	1500.05	1.69
3445.51	22.63	17.53	3006.68	1458.74 N	395.30 E	1511.33	1.67
3475.40	22.06	18.18	3034.32	1469.55 N	398.78 E	1522.68	0.63
3504.57	22.33	18.72	3061.33	1480.00 N	402.27 E	1533.68	0.35
3533.24	22.23	18.84	3087.86	1490.30 N	405.77 E	1544.52	0.12
3562.17	22.34	19.85	3114.63	1500.64 N	409.40 E	1555.46	0.41
3619.85	21.30	20.71	3168.18	1520.76 N	416.83 E	1576.80	0.56
3649.53	20.38	21.41	3195.92	1530.61 N	420.62 E	1587.30	0.96
3662.14	19.70	21.54	3207.76	1534.63 N	422.20 E	1591.60	1.62
3675.00	19.70	21.54	3219.87	1538.66 N	423.80 E	1595.90	0.00

CALCULATION BASED ON Minimum Curvature METHOD

SURVEY COORDINATES RELATIVE TO WELL SYSTEM REFERENCE POINT

TVD VALUES GIVEN RELATIVE TO DRILLING MEASUREMENT POINT

VERTICAL SECTION RELATIVE TO WELL HEAD

VERTICAL SECTION IS COMPUTED ALONG A DIRECTION OF 14.91 DEGREES (GRID)

A TOTAL CORRECTION OF 13.82 DEG FROM MAGNETIC NORTH TO GRID NORTH HAS BEEN APPLIED

HORIZONTAL DISPLACEMENT IS RELATIVE TO THE WELL HEAD.

HORIZONTAL DISPLACEMENT(CLOSURE) AT 3675.00 METRES

IS 1595.96 METRES ALONG 15.40 DEGREES (GRID)

RT - MSL = 21.5m

Final survey projected to TD.

Surveys from surface to 2183.17 mMDRT are from ZaneGrey-1

Kick-off point for ZaneGrey-1 ST1 is at 2190.0 mMDRT

Kick-off point for ZaneGrey-1 ST2 is at 3075.0 mMDRT

3.6 LOT/FIT Reports

Formation Integrity Test details for the well are summarised in Table 19.

Table 19: Formation Integrity Test Summary

Casing		Depth	Formation Integrity Test Pressure		EMW		LOT EMW
<i>In</i>	<i>mm</i>	<i>mMD RT</i>	<i>psi</i>	<i>Kpa</i>	<i>ppg</i>	<i>sg</i>	<i>sg</i>
13 ³ / ₈ "	340	1091.61	815	5619	8.6	1.03	1.60
9 ⁵ / ₈ "	244	2184.14	1440	9928	9.2	1.1	1.65

3.7 Project Logistics

3.7.1 Mobilisation

All contractors used on Apache's Grayling well were kept on board for BAS's ZaneGrey-1 well. The initial equipment load out went on the AHSV "Far Grip" while Apache were in control of the rig.

3.7.2 Shorebase

Wharf 27 in Port Melbourne was the central shorebase with equipment being trucked from Portland on the final backload from the Woodside location.

3.7.3 Helicopters / Crew Changes

Crew changes were conducted out of Bristows Essendon helicopter base. Fixed wing airplanes were used to fly to Sale Airport on days with multiple trips to the Ocean Patriot.

3.8 Communications

Communications for the operations were supplied using Diamond Offshore General Company (DOGC) satellite dish. Newsys provided the receiving satellite dish situated in Bayswater Western Australia. This signal was sent to Telstra's Lansdale facility where Santos's Router was utilized to provide 4 telephone lines and a data line. This system provided successful communications throughout the drilling operation.

3.9 Weather Forecasting

Weather forecasts were supplied by the Bureau of Meteorology to BAS's satisfaction.

4. Unscheduled Events

4.1 *Pre-Spud*

Mobilisation and tensioning anchors went to plan with no unscheduled time being lost.

4.2 *Drilling*

ZaneGrey-1 encountered several major problems throughout the drilling programme.

The first problem occurred when the rig was forced to wait on weather to enable the BOP stack to be landed out.

The second problem encountered was a brake on the top drive system failing causing a stand of drill pipe to be bent. A trip to surface was performed to check all connections and the BHA before drilling ahead.

The 9 5/8" casing was unable to be run to hole TD due to poor hole conditions. The casing was then pulled out of the hole and a wiper trip performed. The casing was set high again as it was unable to get to bottom. A sidetrack (ST1) was performed just below the shoe.

During the 216mm (8 1/2") hole section the bit box of the down hole motor twisted off and the well had to be sidetracked again (ST2). This sidetrack required 2 cement plugs and 4 bit runs to successfully sidetrack the well due to problems kicking off. The top drive system then failed causing 3 days of downtime.

During the wireline programme the RCI tool became stuck while taking formation pressures and a stripping operation was required to retrieve the tool. The RCI programme of pressures and samples then continued on drill pipe, until the gamma ray portion of the tool overheated near TD, thereby terminating the final few levels of the programmed RCI points.

4.3 *Post Drilling*

The 476mm (18 3/4") wellhead housing spun 1/4 turn while cutting the 508mm (20") extension causing the 476mm (18 3/4") housing to pull free and rotating on top of cutters. The 476mm (18 3/4") wellhead stump had to be tripped out of hole and the 762mm (30") conductor had to be cut by itself requiring an additional trip.

4.4 *Downtime Analysis*

Downtime analysis can be found in Appendices 20-22.

FIGURES

Figure 1
ZaneGrey-1/ST1/ST2 Location Map

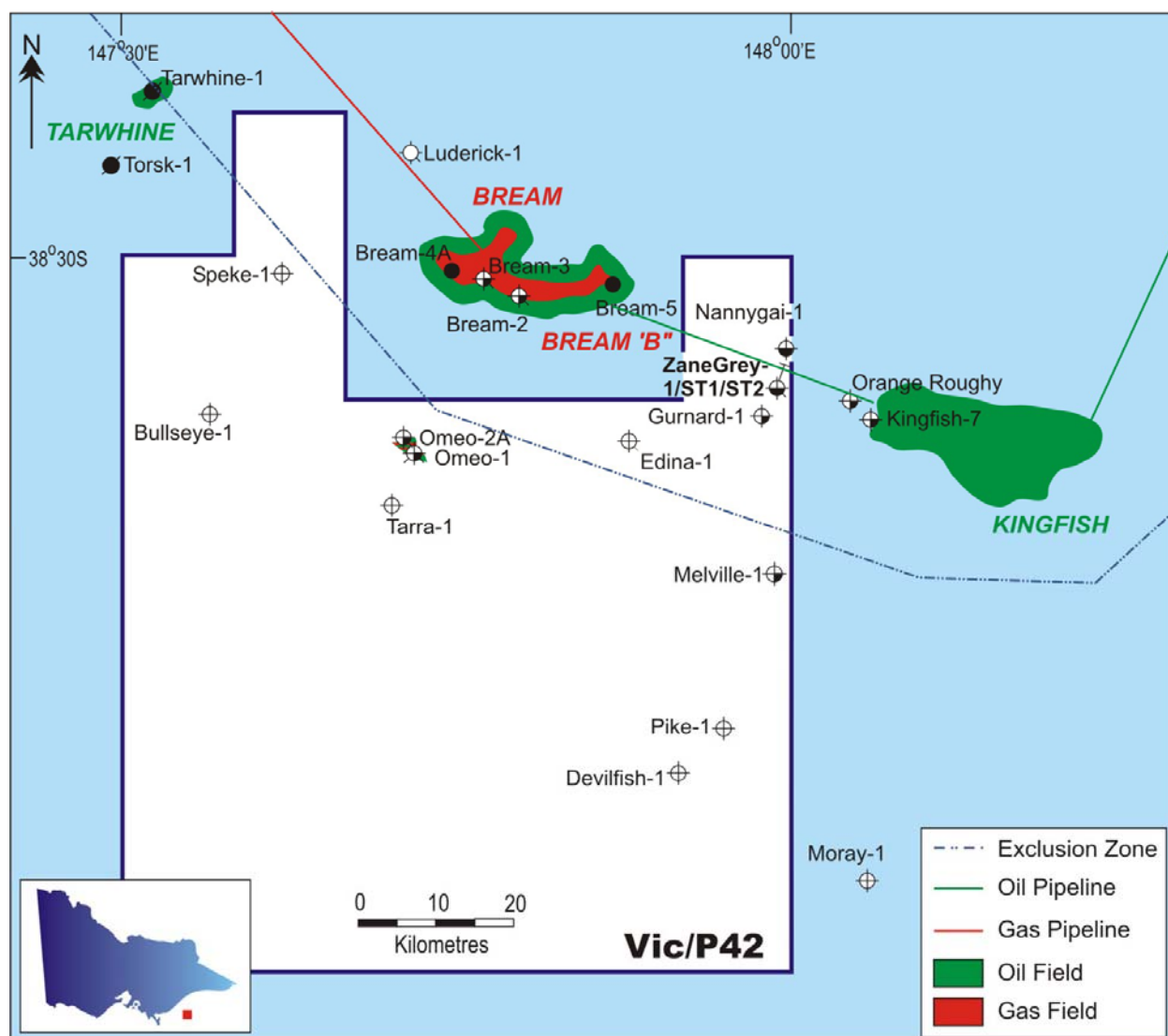


Figure 2
Vic/P42 Location Map

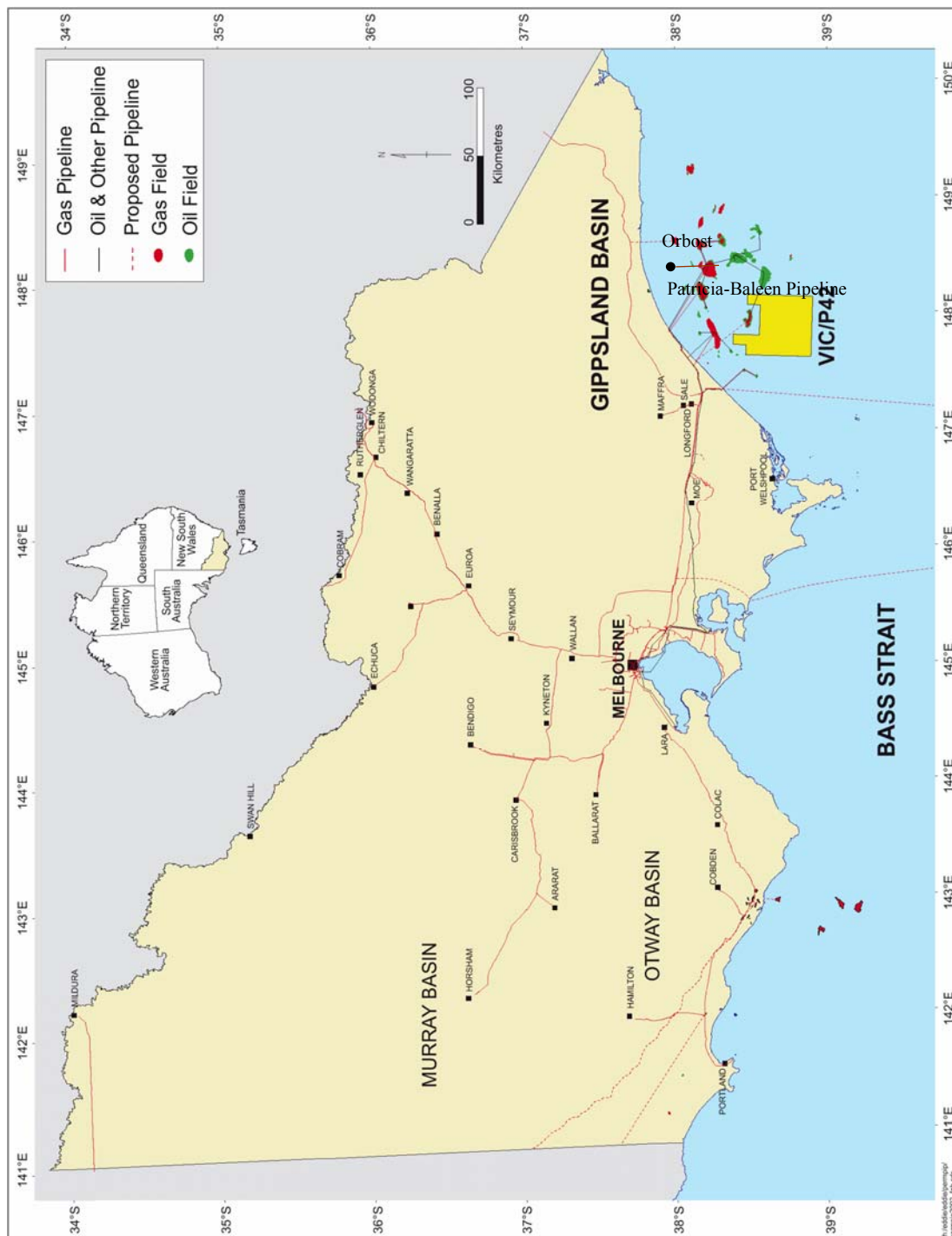
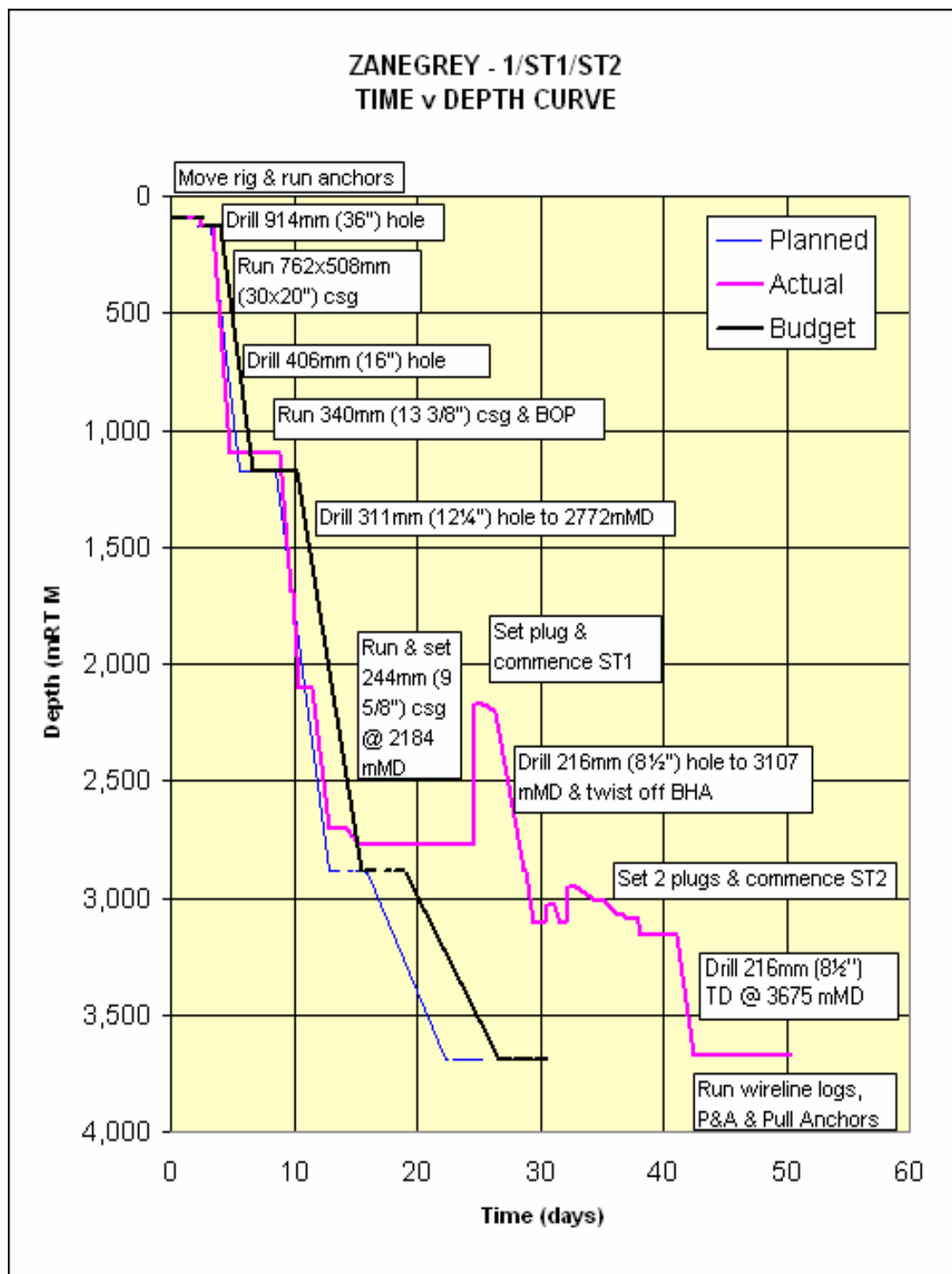


Figure 3
Time versus Depth Curve



APPENDIX 1

CUTTINGS SAMPLE DESCRIPTIONS ZANEGREY-1

(By Bass Strait Oil Company Ltd)

ZANEGREY-1 - CUTTINGS DESCRIPTION SHEET

From 1095m to 2733 m

Wellsite Geologists: Geoff Geary, Andre Thangam

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
1100	80 5 5 10	<p>Cement. Calcareenite, light grey, pale yellowish brown to pale greenish yellow, firm - hard, predominantly fine to very fine grained, partly recrystallised, trace - 10% clay matrix, trace shell fragments, trace very fine dark green glauconite grains.</p> <p>Calcsiltite, light - medium grey to light brownish grey, soft - firm, calcareous silt with trace -10% very fine calcareous sand, micritic (10 - 20%) and argillaceous matrix (5 - 10%) grading to calcilutite and calcareenite, trace very fine dark green glauconite grains.</p> <p>Calcilutite, argillaceous, white to light grey, light brownish grey, very soft to soft, amorphous, micritic (65-75%) and argillaceous (20-30%) matrix, trace fossil fragments (spicules and indeterminate shell fragments), trace-20% calcsiltite grading to calcsiltite in part, trace very fine dark green glauconite grains.</p>		
1105	30 40 35 5	<p>Cement. Calcilutite, argillaceous, white to light grey, light brownish grey, very soft to soft, amorphous, micritic (65-75%) and argillaceous (20-30%) matrix, trace-20% calcsiltite grading to calcsiltite in part, trace very fine dark green glauconite grains.</p> <p>Calcsiltite, light - medium grey to light brownish grey, soft - firm, calcareous silt with trace - 10% very fine calcareous sand, micritic (10 - 20%) and argillaceous matrix (5 - 10%) grading to calcilutite.</p> <p>Calcareenite, light grey, pale yellowish brown to pale greenish yellow, firm - hard, predominantly fine to very fine grained, partly recrystallised, trace - 20% clay matrix, trace shell fragments, trace very fine dark green glauconite grains.</p>		
1110	60 40 Trace	<p>Calcsiltite, as above.</p> <p>Calcilutite, argillaceous, as above.</p> <p>Sandstone, quartzose, firm to moderately hard, pale yellowish orange, clear to translucent iron stained grains, fine grained (fL), well sorted, moderately well to well rounded, high sphericity, 5% calcareous cement, interbedded with calcareous lithologies, poor inferred porosity.</p>		
1115	80 20	<p>Calcsiltite, medium light to medium grey, light brownish grey, firm - moderately hard, calcareous silt with trace - 10% very fine calcareous sand, micritic (10 - 20%) and argillaceous matrix (5 - 10%) grading to calcilutite, trace very fine dark green glauconite grains, trace carbonaceous fragments, trace fossil fragments incl. spicules.</p> <p>Calcilutite, argillaceous, light grey, light brownish grey, soft to firm, blocky, micritic (65-80%) and argillaceous (20 - 35%) matrix, trace - 20% calcsilutite grading to calcsiltite in part, trace very fine dark green glauconite grains.</p>		

ZANEGREY-1 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
1120	80 20	Calcsiltite , as above. Calcilutite , as above.	65.3	2.2
1125	70 30	Calcsiltite , as above, grading to calcilutite . Calcilutite, argillaceous , as above.		
1130	70 30	Calcsiltite , as above, calcsiltite grading to calcilutite . Calcilutite, argillaceous , as above.		
1135	80 20	Calcsiltite , medium grey to medium dark grey, brownish grey, firm – moderately hard, blocky, calcareous silt with trace very fine calcareous sand, micritic (10 – 20%) and argillaceous matrix (5 - 10%), grading to calcilutite , trace very fine dark green glauconite grains, trace fossil fragments incl. spicules. Calcilutite, argillaceous , light to medium grey, light brownish grey, soft to firm, blocky, micritic (65 - 80%) and argillaceous (20 – 35%) matrix, trace - 30% calcsilutite grading to calcsiltite in part, trace very fine dark green glauconite grains.		
1140	90 10	Calcsiltite , as above. Calcilutite, argillaceous , as above.	53.2	2.6
1145	80 20	Calcsiltite , as above. Calcilutite, argillaceous , as above.		
1150	90 10	Calcsiltite , as above, becoming very hard in part. Calcilutite, argillaceous , as above.		
1155	70 30	Calcsiltite , as above. Calcilutite, argillaceous , as above.		
1160	70 30	Calcsiltite , light to medium grey, medium dark grey, firm - hard, blocky, calcareous silt, micritic (10 – 20%) and argillaceous matrix (5 - 10%), grading to calcilutite , trace very fine dark green glauconite grains. Calcilutite, argillaceous , light to medium grey, light brownish grey, soft to firm, hard in part, blocky, micritic (65 - 80%) and argillaceous (20 – 35%) matrix, trace - 30% calcsilutite grading to calcsiltite in part, trace very fine dark green glauconite grains in part.	55.6	2.2
1165	70 30	Calcsiltite , as above. Calcilutite, argillaceous , as above.		
1170	80 20	Calcsiltite , as above. Calcilutite, argillaceous , as above.		
1175	60 40	Calcsiltite , as above. Calcilutite, argillaceous , as above.		
1180	60 40	Calcsiltite , as above. Calcilutite, argillaceous , as above.	55.6	3.6
1185	80 20	Calcsiltite , light to medium grey, medium dark grey, firm - hard, blocky, calcareous silt, micritic (10 – 20%) and argillaceous matrix (5 - 10%) grading to calcilutite , trace very fine dark green glauconite grains. Calcilutite, argillaceous , light to medium grey, light brownish grey, soft to firm, hard in part, blocky, micritic (65 - 80%) and argillaceous (20 – 35%) matrix, trace - 30% calcsilutite grading to calcsiltite in part, trace very fine dark green glauconite grains in part.		
1190	80 20	Calcsiltite , as above. Calcilutite, argillaceous , as above.		

ZANEGREY-1 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
1195	60 40	Calcsiltite , as above. Calcilutite, argillaceous , as above.		
1200	80 20 10	Calcsiltite , as above. Calcilutite, argillaceous , as above. Calcarenite , light grey, pale yellowish brown in part, firm - hard, very fine to fine grained (fL-vfU), 10-15% calcareous cement, trace - 5% clay matrix, trace - 15% fine glauconite grains, trace shell fragments and large forams.	62.9	2.2
1205	70 25 5	Calcsiltite , as above. Calcilutite, argillaceous , as above. Calcarenite , as above.		
1210	50 45 5	Calcsiltite , as above. Calcilutite, argillaceous , as above. Calcarenite , as above.		
1215	40 50 10	Calcsiltite , light to medium grey, light grey brown, firm - hard, blocky, calcareous silt, micritic (10 - 20%) and argillaceous matrix (5 - 10%) grading to calcilutite , trace very fine dark green glauconite grains. Calcilutite, argillaceous , light to medium grey, light brownish grey, soft to firm, hard in part, blocky, micritic (65 - 80%) and argillaceous (20 - 35%) matrix, trace - 30% calcsilutite grading to calcsiltite in part, trace very fine dark green glauconite grains in part. Calcarenite , as above.		
1220	75 20 5	Calcsiltite , as above. Calcilutite, argillaceous , as above. Calcarenite , light grey, pale yellowish brown in part, firm - hard, very fine to fine grained (fL-vfU), 10-15% calcareous cement, trace - 5% clay matrix, trace - 15% fine glauconite grains, trace coarse shell fragments and large forams.	60.5	4.5
1225	80 20 Trace	Calcsiltite , as above. Calcilutite, argillaceous , as above. Calcarenite , as above.		
1230	70 30 Trace	Calcsiltite , as above. Calcilutite, argillaceous , as above. Calcarenite , as above.		
1235	60 40	Calcsiltite , as above. Calcilutite, argillaceous , as above.		
1240	60 40	Calcsiltite , as above. Calcilutite, argillaceous , as above.	60.9	1.8
1245	60 40	Calcsiltite , as above. Calcilutite, argillaceous , as above.		
1250	50 50	Calcsiltite , light to medium grey, firm - hard, blocky, calcareous silt, micritic (10 - 20%) and argillaceous matrix (5 - 10%) grading to calcilutite , trace very fine dark green glauconite grains. Calcilutite, argillaceous , white, light to medium grey, light brownish grey, soft to firm, blocky, micritic (65 - 70%) and argillaceous (20 - 35%) matrix, trace - 30% calcsilutite grading to calcsiltite in part, trace very fine dark green glauconite grains in part.		
1255	60	Calcilutite, argillaceous , as above.		

ZANEGREY-1 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
	40	Calcsiltite , as above.		
1260	60	Calcilutite, argillaceous , as above.	62.9	3.6
	40	Calcsiltite , as above.		
1265	40	Calcsiltite , as above.		
	60	Calcilutite, argillaceous , as above.		
1270	50	Calcsiltite , as above.		
	50	Calcilutite, argillaceous , as above.		
1275	60	Calcsiltite , as above.		
	40	Calcilutite, argillaceous , as above.		
1280	50	Calcsiltite , as above, trace forams.	60.5	4.5
	50	Calcilutite, argillaceous , as above.		
1285	60	Calcsiltite , as above.		
	40	Calcilutite, argillaceous , as above.		
1290	60	Calcilutite, argillaceous , as above.		
	40	Calcsiltite , as above.		
1295	60	Calcilutite, argillaceous , as above.		
	40	Calcsiltite , as above.		
1300	50	Calcsiltite , light to medium grey, firm, blocky, calcareous silt, micritic (10 – 20%) and argillaceous matrix (5 - 20%), grading to and finely interbedded with calcilutite , trace very fine dark green glauconite grains.	78.4	8.0
	50	Calcilutite, argillaceous , off-white, light to medium grey, , soft, dispersive to firm, blocky, micritic (60 - 80%) and argillaceous (20 – 40%) matrix, trace - 20% calcsilutite grading to calcsiltite in part, trace very fine dark green glauconite grains in part.		
1305	40	Calcilutite, argillaceous , as above.		
	60	Calcsiltite , as above.		
1310	40	Calcilutite, argillaceous , as above.	58	5.3
	60	Calcsiltite , as above.		
1315	40	Calcilutite, argillaceous , as above.		
	60	Calcsiltite , as above.		
1320	30	Calcilutite, argillaceous , as above.	61.4	7.1
	70	Calcsiltite , light to medium grey, firm to hard, occasionally blocky to sub blocky, calcareous silt, micritic (10 – 20%) and argillaceous matrix (20 - 35%), grading to calcilutite in part, trace very fine dark green glauconite grains.		
1325	35	Calcilutite , , off-white, light grey, soft, sub blocky, commonly crumbly, micritic (60 - 80%) and less argillaceous (5 – 10%) matrix, occasionally trace very fine dark green glauconite grains in part, trace carbonaceous flakes	43.5	2.2
	65	Calcsiltite , as above.		
1330	30	Calcilutite , as above.		
	70	Calcsiltite , as above, predominantly firm, seldom hard.		
1335	35	Calcilutite , , off-white, very light grey, soft, predominantly crumbly, micritic (50 - 70%) and argillaceous (5 – 10%) matrix, grading to calcsiltite in part, occasionally trace very fine dark green glauconite grains in part, trace fine carbonaceous flakes		
	65	Calcsiltite , as above		
1340	60	Calcilutite , , off-white, very light grey, grading into	67.7	4.5

ZANEGREY-1 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
	40	medium light grey in parts, soft, predominantly crumbly, occasionally slightly amorphous, micritic (40 - 50%) and argillaceous (5 - 10%) matrix, common grading to calcisiltite in part, occasionally trace very fine dark green glauconite grains in part, trace fine carbonaceous flakes Calcisiltite , as above *****Switch to 10m sampling*****		
1350	30	Calcilutite , off-white, very light grey, grading into medium light grey in parts, soft, predominantly crumbly, micritic (50 - 60%) and argillaceous (5 - 10%) matrix, common grading to calcisiltite in part, occasionally trace very fine dark green glauconite grains in part, isolated amber crystal		
	70	Calcisiltite , as above		
1360	45	Calcilutite , as above, common grading to calcisiltite	55.6	4.5
	55	Calcisiltite , light grey to light medium grey, occasionally light olive grey, soft to firm, occasionally moderately hard, crumbly, micritic (5-10%) and argillaceous matrix (20 - 35%), grading to calcilutite in part, trace very fine dark green glauconite grains, trace fine black carbonaceous flakes.		
1370	30	Calcilutite , off-white, very light grey, soft, predominantly crumbly, micritic (50 - 60%) and argillaceous (5 - 15%) matrix, occasional trace very fine black carbonaceous flakes		
	70	Calcisiltite , as above, commonly grading to calcilutite .		
1380	25	Calcilutite , as above, trace carbonaceous flakes and specks, isolated fossil.	58	4.5
	75	Calcisiltite , as above, commonly grading to calcilutite .		
1390	15	Calcilutite , off-white, very light grey, soft, predominantly crumbly, micritic (60 - 70%) and slightly argillaceous (5 - 10%) matrix, occasional trace very fine black carbonaceous flakes		
	85	Calcisiltite , light grey to light medium grey, increasing amounts of light olive grey, soft to firm, occasionally moderately hard, crumbly, micritic (5-10%) and argillaceous matrix (30 - 40%), grading to calcilutite in part, trace very fine dark green glauconite grains, trace fine black carbonaceous flakes.		
1400	20	Calcilutite , as above with trace very fine dark green glauconite grains,	67.7	5.3
	80	Calcisiltite , as above		
1410	30	Calcilutite , off-white, very light grey, soft, predominantly crumbly, micritic (40 - 50%) and slightly argillaceous (15 - 25%) matrix, occasional trace very fine black carbonaceous flakes, with increase in glauconite staining.		
	70	Calcisiltite , as above, trace fossils & forams		
1420	25	Calcilutite , as above, with increase in glauconite staining, trace calcite crystals.	65.3	8.9
	75	Calcisiltite , light grey to light medium grey, light olive grey to olive grey, soft to firm, occasionally moderately hard, crumbly, micritic (5-10%) and argillaceous matrix (35 - 45%), trace very fine dark green glauconite grains,		

ZANEGREY-1 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
		trace fine black carbonaceous flakes, trace to rare fossils fragments and forams, trace calcite veins		
1430	20 80	Calcilutite , as above. Calcsiltite , as above.		
1440	25 75	Calcilutite , as above. Calcsiltite , as above. Grading to Calcarenite in parts, firm, sucrosic texture. Trace to rare fossil fragments, trace forams. trace calcite crystals	67.7	8.9
1450	30 70	Calcilutite , as above. Calcsiltite , as above, trace dark blue green Calcsiltite, soft, good trace dark green glauconite grains.	60.4	7.4
1452 Spot	45 55	Calcilutite , as above Calcsiltite , as above, increase in trace fossils & forams. Trace dark blue green to dark greenish grey Calcsiltite, firm to hard, blocky, good trace dark green glauconite grains, trace calcite crystals.		
1460	30 65 5	Calcilutite , as above. Calcsiltite , as above, trace clear-translucent, loose calcite grains, mU, well sorted, subrounded. Calcarenite , pale yellowish brown, light grey, light olive grey, firm-hard, partly recrystallised clasts, shell fragments and forams.	58.0	4.5
1470	35 65	Calcilutite , as above. Calcsiltite , as above		
1480	30 70	Calcilutite , as above, commonly grading into a Calcsiltite Calcsiltite , as above	62.9	8.9
1490	20 80	Calcilutite , as above. Calcsiltite , very light grey to medium light grey, light olive grey to olive grey, soft to firm, occasionally moderately hard, crumbly, micritic (5-10%) and argillaceous matrix (30 - 40%), less glauconitic, occasional trace in part very fine dark green glauconite grains, trace fine black carbonaceous flakes, trace to rare fossils fragments and forams, isolated light pink stained mU subrounded quartz grain		
1500	20 80 Trace	Calcilutite , off-white, very light grey, soft, predominantly crumbly, increasingly homogeneous, micritic (20 - 30%) and slightly argillaceous (5 – 15%) matrix, occasional trace very fine black carbonaceous flakes, trace glauconite staining. Calcsiltite , as above, Sandstone , isolated light pink stained quartz grains, loose, medium grained (mU) subrounded.	79.8	10.2
1510	10 90	Calcilutite , as above. Calcsiltite , as above.	53.2	1
1515	10 90	Calcilutite , as above grading to Calcsiltite in part. Calcsiltite , as above, trace to rare fossils fragments and forams.		
1520	15 85	Calcilutite , as above. Calcsiltite , light olive grey to olive grey, soft to firm, crumbly, minor argillaceous matrix (5-10%), trace glauconite in part as very fine dark green glauconite grains, trace fine black carbonaceous flakes, trace to rare	87.1	10.7

ZANEGREY-1 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
	Trace	fossil fragments and forams. Sandstone , isolated light pink stained quartz grains, loose, medium grained (mU) subrounded.		
1525	15 80 5 Trace	Calcilutite , as above. Calcsiltite , as above, trace-5% forams and fossil fragments, occasional trace glauconite grains. Calcarenite , pale yellowish brown, light grey, light olive grey, firm-hard, partly recrystallised clasts, shell fragments and forams. Sandstone , as above.		
1530	20 80	Calcilutite , as above. Calcsiltite , as above	59	3.5
1535	20 80	Calcilutite , as above. Calcsiltite , as above		
1540	20 70 10 Trace	Calcilutite , off-white, light grey, soft, crumbly, increasingly homogeneous, micritic (75 - 85%) and slightly argillaceous (5 - 10%) matrix, calcisiltite (tr-10%) grains in part, occasional trace very fine black carbonaceous flakes, trace glauconite staining. Calcsiltite , light olive grey to olive grey, soft to firm, blocky to angular fragments, minor argillaceous matrix (5-10%), grading to calcarenite , trace glauconite in part as very fine dark green glauconite grains, trace fine black carbonaceous flakes, trace to rare fossil fragments and forams. Calcarenite , pale yellowish brown, light grey, light olive grey, firm-hard, partly recrystallised clasts, trace shell fragments and forams. Sandstone , isolated light pink stained quartz grains, loose, medium - coarse (mU-cU) angular-subrounded.	77.4	8.8
1545	10 70 20	Calcilutite , as above. Calcsiltite , as above. Calcarenite , as above, increasing forams.		
1550	10 60 30	Calcilutite , as above. Calcsiltite , as above. Calcarenite , as above.		
1555	30 50 20	Calcilutite , off-white, light grey, soft, blocky, homogeneous, micritic (75 - 85%) and slightly argillaceous (5 - 10%) matrix, calcisiltite (tr-10%) grains in part, occasional trace very fine black carbonaceous flakes. Calcsiltite , as above. Calcarenite , as above.		
1560	20 50	Marl , very light to light medium grey, very soft - soft, dispersive in part, amorphous, clay matrix (35-45%) grading to argillaceous calcilutite in part, trace to 5% calcisilt, trace very fine black carbonaceous flakes and stain, trace very fine dark green disseminated glauconite, trace fossil fragments and forams. Calcilutite , off-white, light grey, soft, blocky, platy in part, homogeneous, micritic (40 - 85%) and increasingly argillaceous (15 - 40%) matrix, grading to argillaceous calcilutite and marl , calcisiltite (tr-10%) grains in part, trace very fine black carbonaceous flakes and stain.	72.6	11.1

ZANEGREY-1 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
	20	Calcsiltite , light brownish grey to brownish grey, light olive grey to olive grey, soft to firm, blocky to angular fragments, minor argillaceous matrix (5-10%), grading to calcareenite , trace glauconite in part as very fine dark green glauconite grains, trace fine black carbonaceous flakes, trace to rare fossil fragments and forams, trace coarse pyrite nodules.		
	10	Calcareenite , pale yellowish brown, light grey, light olive grey, firm-hard, partly recrystallised clasts, trace shell fragments and forams, trace coarse pyrite nodules.		
1565	50	Marl , very light to light medium grey, very soft - soft, dispersive in part, amorphous, clay matrix (35-45%) grading to argillaceous calcilutite in part, trace to 5% calcsilt, trace very fine black carbonaceous flakes, trace very fine dark green disseminated glauconite, trace fossil fragments and forams.		
	30	Calcilutite, argillaceous , off-white, light grey, soft, blocky, platy in part, homogeneous, micritic (50-70%) and argillaceous (20 – 30%) matrix, grading to marl , calcsiltite (tr-10%) grains in part, trace very fine black carbonaceous flakes, trace very fine dark green disseminated glauconite, trace fossil fragments and forams.		
	10	Calcsiltite , light brownish grey to brownish grey, light olive grey to olive grey, soft to firm, blocky to angular fragments, minor argillaceous matrix (5-10%), grading to calcareenite , trace glauconite in part as very fine dark green glauconite grains, trace fine black carbonaceous flakes, trace to rare fossil fragments and forams, trace coarse pyrite nodules.		
	10	Calcareenite , as above.		
1570	50	Marl , as above.		
	30	Calcilutite, argillaceous , as above.		
	20	Calcsiltite , as above.		
1580	50	Marl , as above.	55.6	6.7
	30	Calcilutite, argillaceous , as above.		
	20	Calcsiltite , as above.		
1590	40	Marl , very light to light medium grey, very soft - soft, dispersive in part, amorphous, clay matrix (35-45%) grading to argillaceous calcilutite in part, trace to 5% calcsilt, trace very fine black carbonaceous flakes, trace very fine dark green disseminated glauconite, trace fossil fragments and forams.		
	30	Calcilutite argillaceous , soft-slightly firm, very light to medium grey, trace dark grey, argillaceous matrix (20-30%), trace to 20% calcsilt grading to argillaceous calcsiltite in part, trace fossil fragments incl. coral debris, bryozoa, spicules, shell fragments and forams, trace fine dark green disseminated glauconite and nodular glauconite, trace fine pyrite.		
	20	Claystone, calcareous , light grey to brownish grey, trace light greenish grey, soft, amorphous to blocky, 20-25% calcareous matrix, trace – 5% calcsilt, trace light brownish yellow fossil fragments, trace fine dark green disseminated glauconite and nodular glauconite, trace		

ZANEGREY-1 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
	10	fine pyrite, trace coarse nodular pyrite. Calcareenite , light grey, light olive grey, firm-hard, partly recrystallised clasts, trace shell fragments and forams, trace glauconite, trace coarse pyrite nodules.		
1600	40 30 20 10	Claystone, calcareous , as above. Marl , as above. Calcilutite argillaceous , as above. Calcareenite , as above.	43.5	8.9
1610	40 30 30 Trace	Claystone, calcareous , as above. Marl , as above. Calcilutite argillaceous , as above. Calcareenite , as above.		
1620	30 40 30 Trace	Claystone, calcareous , as above. Marl , as above. Calcilutite argillaceous , as above. Calcareenite , as above.	37.7	0.9
1630	40 40 20	Claystone, calcareous , light grey to brownish grey, soft, amorphous to blocky, 20 - 35% calcareous matrix, trace calcisilt, trace fossil fragments, trace fine dark green disseminated glauconite and nodular glauconite, trace fine pyrite. Marl , light to medium light grey, very soft - soft, dispersive in part, amorphous, clay matrix (35-45%) grading to argillaceous calcilutite in part, trace calcisilt in part, trace very fine black carbonaceous flakes, trace very fine dark green disseminated glauconite, trace fossil fragments and forams. Calcilutite argillaceous , soft-slightly firm, very light to medium grey, argillaceous matrix (20-30%), trace to 10% calcisilt, trace fossil fragments incl. coral debris, bryozoa, spicules, shell fragments and forams, trace fine dark green disseminated glauconite and nodular glauconite, trace fine pyrite.		
1640	60 40	Claystone, calcareous , light to medium light grey, soft to moderately firm, sub blocky to blocky, 20-35% calcareous matrix, trace – 5% calcisilt, trace carbonaceous specks, trace very fine disseminated pyrite, nil to trace very fine grained glauconite. Marl , light to medium dark grey, very soft - soft, dispersive in part, amorphous, clay matrix (35-45%) grading to argillaceous calcilutite in part, trace calcisilt in part, nil - trace very fine dark green disseminated glauconite in part, trace fossil fragments and forams.	36.8	0.9
1650	70 30	Claystone, calcareous , as above, light brownish grey in part. Marl , as above.		
1660	70 30	Claystone, calcareous , as above, light brownish grey in part. Marl , as above.	33.9	0.9
1670	80 20	Claystone, calcareous , as above. Marl , as above.		
1680	70	Claystone, calcareous , as above.	38.7	0.0

ZANEGREY-1 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
	30	Marl, as above.		
1690	80	Claystone, calcareous, as above.		
	20	Marl, as above.		
1700	90	Claystone, calcareous, light to medium light grey, soft to moderately firm, sub blocky to blocky, 20 - 40% calcareous matrix, trace calcisilt in part, trace carbonaceous specks, trace very fine disseminated pyrite, nil to trace very fine grained glauconite.	38.7	1.8
	10	Marl, as above.		
1710	100	Claystone, calcareous, as above.		
1720	100	Claystone, calcareous, as above. Note: abundant cavings due to working pipe when repairing standpipe.	40.2	2.1
1730	100	Claystone, calcareous, as above. Note: abundant cavings due to working pipe when repairing standpipe.		
1740	100	Claystone, calcareous, as above. Note: abundant cavings due to working pipe when repairing standpipe.	33.9	0.9
1750	100	Claystone, calcareous, as above. Note: abundant cavings due to working pipe when repairing standpipe.		
1760	100	Claystone, calcareous, light to medium dark grey, soft to firm, sub blocky to blocky, 20 - 40% calcareous matrix, trace - 5% calcisilt in part, trace very fine disseminated pyrite and nodular pyrite, nil to trace very fine grained glauconite.	36.8	0.9
1770	100	Claystone, calcareous, as above.		
1780	90	Claystone, calcareous, light to medium light grey, soft to firm, sub blocky to blocky, 20 - 40% calcareous matrix, grading to Claystone, trace - 5% calcisilt in part, trace very fine disseminated pyrite and nodular pyrite, nil to trace very fine grained glauconite.	30.0	0.9
	10	Claystone, light to medium dark grey, soft to firm, sub blocky to blocky, 10 - 20% calcareous matrix, grading to Calcareous Claystone, trace very fine disseminated pyrite and nodular pyrite, nil to trace very fine grained glauconite.		
1790	70	Claystone, calcareous, as above.		
	30	Claystone, as above.		
1800	60	Claystone, calcareous, as above.	26.6	0.0
	40	Claystone, as above.		
1810	60	Claystone, calcareous, as above.		
	40	Claystone, as above.		
1820	70	Claystone, calcareous, as above.		
	30	Claystone, as above.		
1830	70	Claystone, calcareous, as above.		
	30	Claystone, as above.		
1840	70	Claystone, calcareous, as above.	37.9	0.7
	30	Claystone, as above.		
1850	60	Claystone, calcareous, very light to medium light grey, soft to firm, sub blocky to blocky, 20 - 40% calcareous matrix, grading to Claystone, trace - 5% calcisilt in part,		

ZANEGREY-1 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
	40	trace very fine disseminated pyrite and nodular pyrite, nil to trace very fine grained glauconite, trace forams. Claystone , medium light to medium dark grey, soft to firm, sub blocky to blocky, 10 - 20% calcareous matrix, grading to Calcareous Claystone , trace very fine disseminated pyrite and nodular pyrite, nil to trace very fine grained glauconite.		
1860	50 50	Claystone, calcareous , as above. Claystone , as above.	28.7	0.3
1870	60 40	Claystone, calcareous , as above. Claystone , as above.		
1880	70 30	Claystone, calcareous , as above. Claystone , as above.		
1890	60 40	Claystone, calcareous , as above. Claystone , as above.		
1900	60 40	Claystone, calcareous , as above. Claystone , as above.	17.4	0
1910	30 70	Claystone, calcareous , very light to medium light grey, soft to firm, sub blocky to blocky, 20 - 35% calcareous matrix, grading to Claystone , trace - 10% calcisilt in part, trace very fine disseminated pyrite and nodular pyrite, nil to trace very fine grained glauconite, nil - trace light brownish yellow fossil fragments. Claystone , medium light to medium dark grey, soft to firm, dispersive in part, sub blocky to blocky, 5 - 20% calcareous matrix, grading to Calcareous Claystone , trace very fine disseminated pyrite and nodular pyrite, nil to trace very fine grained glauconite.	16.4	3.6
1920	50 50	Claystone, calcareous , as above. Claystone , as above.	27.8	1.2
1930	60 40	Claystone, calcareous , as above. Claystone , as above.		
1940	50 50	Claystone, calcareous , as above. Claystone , as above.	19.4	2.2
1950	30 70	Claystone, calcareous , as above. Claystone , as above.		
1960	40 60	Claystone, calcareous , white, very light to medium light grey, soft to firm, sub blocky to blocky, 20 - 35% calcareous matrix, grading to Claystone , trace - % calcisilt in part, trace very fine disseminated pyrite and coarse nodular pyrite, nil to trace very fine grained glauconite, nil - trace light brownish yellow fossil fragments incl. bryozoa spine, shell fragments and forams. Claystone , medium light to medium dark grey, soft to firm, dispersive in part, sub blocky to blocky, 5 - 20% calcareous matrix, grading to Calcareous Claystone , trace very fine disseminated pyrite and nodular pyrite, nil to trace very fine grained glauconite.	24.2	2.2
1970	30 70	Claystone, calcareous , as above. Claystone , as above.		
1980	60 40	Claystone, calcareous , as above. Claystone , as above.	33.9	3.6

ZANEGREY-1 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
1980	40 60	Claystone, calcareous , as above. Claystone , as above.	19.4	4.5
1990	30 70	Claystone, calcareous , white, very light to medium grey, very soft to soft, sub blocky, 20 - 35% calcareous matrix, grading to Claystone , trace - 10% calcisilt in part, trace nil to trace very fine grained glauconite, trace light brownish yellow fossil fragments incl. bryozoa spine, shell fragments and forams. Claystone , as above, nil pyrite		
2000	40 60	Claystone, calcareous , as above. Claystone , medium light to medium grey, olive grey, soft to firm, sub blocky to blocky, 5 - 20% calcareous matrix, grading to Calcareous Claystone , nil to trace very fine grained glauconite, trace fossil fragments and forams, trace carbonaceous flakes	29.0	5.3
2010	30 70	Claystone, calcareous , as above. Claystone , as above. Occasional trace mica flakes, isolated light pink stained quartz grains, loose, medium grained (mU) subangular		
2020	30 70	Claystone, calcareous , off white, very light to medium grey, increasing greyish in colour, very soft to soft, sub blocky, 20 - 35% calcareous matrix, grading to Claystone , trace - 20% calcisilt in part, nil to trace very fine grained glauconite, trace fossil fragments and forams, nil to trace very fine disseminated pyrite and nodular pyrite. Claystone , as above, grading to Calcareous Claystone , predominately sub blocky, starting to see blocky cuttings.	23.2	3.6
2030	40 60 Trace	Claystone, calcareous , as above. Claystone , as above. Sandstone , translucent, light pink quartz grains, loose, medium grained (mU) rounded, trace very fine disseminated and nodular pyrite	20.6	3.47
2040	60 40 Trace	Claystone, calcareous , as above. Claystone , as above. Sandstone , as above.	26.6	3.1
2050	70 30	Claystone, calcareous , as above, predominantly sub blocky, slightly amorphous in part, trace carbonaceous flakes, nil-trace very fine grained glauconite. Claystone , light to medium grey, light olive grey to olive grey, soft to firm, sub blocky to blocky, 5 - 20% calcareous matrix, grading to Calcareous Claystone , trace very fine grained glauconite, trace-rare fossil fragments incl. bryozoa spine, shell fragments and forams, trace carbonaceous flakes, trace very fine disseminated and nodular pyrite	27.1	3.0
2060	70 30	Claystone, calcareous , as above. Claystone , as above.	29.0	1.0
2070	70	Claystone, calcareous , (becoming increasingly darker in colour) predominantly medium grey, common medium light grey, soft to firm, sub blocky to blocky, 20 - 35% matrix, grading to Calcareous Claystone , trace nil to trace very fine grained glauconite, trace fossil fragments	19.4	1.6

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Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
	30	and forams, nil to trace very fine disseminated pyrite and nodular pyrite, nil-trace very fine grained glauconite, Claystone , as above, medium grey-olive grey, sub blocky-blocky, occasional sub splintery, trace very fine disseminated and nodular pyrite, tr micro-micaceous flakes, trace carbonaceous flakes,		
2080	80 20	Claystone, calcareous , as above. Claystone , as above,	29.8	0.4
2090	80 20	Claystone, calcareous , as above. Claystone , as above	28.1	0.9
2100	70 30	Claystone, calcareous , very light to medium grey, light olive grey, very soft to soft, sub blocky, slightly amorphous in part, 20 - 35% calcareous matrix grading to Claystone , trace nil to trace very fine grained glauconite, trace fossil fragments and forams, nil to trace very fine disseminated pyrite and nodular pyrite, Claystone , medium grey, olive grey, soft to firm, sub blocky to blocky, occasional sub splintery, 5 - 20% calcareous matrix, grading to Calcareous Claystone , trace very fine grained glauconite, trace-rare fossil fragments and forams, trace carbonaceous flakes, trace very fine disseminated and nodular pyrite, tr micro-micaceous flakes	25.4	4.5
2103		POOH to check drill sting, Circulate and condition mud before commence drilling Start adding PHPA into mud before drilling ahead		
2110	60 40	Claystone, calcareous , as above. Claystone , as above		
2120	40 60	Claystone, calcareous , as above, No Glauconite seen Claystone , as above	14.5	1.3
2130	70 30	Claystone, calcareous , very light grey to yellowish grey, light olive grey very soft to soft, rare firm, sub blocky, commonly amorphous and plastic, increasingly homogenous 20 - 35% calcareous matrix grading to Claystone , trace fossil fragments and forams, nil to trace very carbonaceous flakes, fine disseminated pyrite and coarse nodular pyrite, Claystone , medium grey-medium dark grey, olive grey, firm, occasionally moderately hard, blocky, common sub splintery, 5 - 15% calcareous matrix, grading to Calcareous Claystone , trace-rare fossil fragments and forams, trace carbonaceous flakes, trace very fine disseminated and nodular pyrite, tr micro-micaceous flakes.		
2140	80 20	Claystone, calcareous , as above. Claystone , as above, predominantly blocky, hardly any splintery cuttings.	19.4	3.6
2150	70 30	Claystone, calcareous , as above, trace-5% silt, silty in part Claystone , as above, predominantly blocky, hardly any splintery cuttings.		
2160	85	Claystone, calcareous , as above, trace-5% silt, silty in part.	24.2	0.9

ZANEGREY-1 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
	15	Claystone , as above, predominantly blocky, trace-5% silt, silty in part, nil- occasional trace very fine grained glauconite.		
2170	75 25 Trace	Claystone, calcareous , as above. Claystone , as above Siltstone , pale yellowish brown, hard angular-blocky fragments, micritic, calcareous, trace very fine grained glauconite, trace siliceous silt, trace carbonaceous specks		
2180	90 10	Claystone, calcareous , as above. Claystone , as above, trace sub splintery cuttings.	28.1	0.9
2190	80 20 Trace	Claystone, calcareous , very light grey to medium light grey, light olive grey very soft to soft, rare firm, sub blocky-blocky, occasionally amorphous, increasingly silty and slightly arenaceous in part, 20 - 30% calcareous matrix grading to Claystone , trace fossil fragments and forams, nil to trace very carbonaceous flakes, fine disseminated pyrite and coarse nodular pyrite, Claystone , medium grey-medium dark grey, olive grey, soft to firm, rarely moderately hard, blocky, trace sub splintery, 5 - 15% calcareous matrix, grading to Calcareous Claystone , trace-rare fossil fragments and forams, trace carbonaceous flakes, trace very fine disseminated and nodular pyrite, tr micro-micaceous flakes. Sandstone , light olive grey, hard, vfu, well sorted, subangular-angular, calcite matrix, poor inferred porosity, grading to siltstone, no fluor.		
2200	90 10 Trace	Claystone, calcareous , as above, soft-increasingly firm Claystone , as above Siltstone , olive grey, firm, sub blocky fragments, 5-10% calcareous cement, trace siliceous silt, trace carbonaceous specks	33.9	0.9
2210	80 20 Trace	Claystone, calcareous , as above, Claystone , as above Sandstone , light olive grey to medium grey, hard, vfl, well sorted, subangular-angular, 20% calcite matrix, poor inferred porosity, grading to siltstone, no fluor.		
2220	90 10 Trace	Claystone, calcareous , as above, soft – firm, predominantly sub-blocky, less amorphous, commonly silty (20 - 30%) grading into siltstone in part, commonly grading into claystone. Claystone , as above Sandstone , transparent loose quartz grains, cL, angular, elongated	37.7	0.0
2230	90 10 Trace	Claystone, calcareous , very light grey to medium light grey, light olive grey, very soft to soft, occasionally firm, sub blocky - blocky, slightly arenaceous in part, 20 - 40% calcareous matrix grading to Claystone , 1 - 5% calcisiltite, quartz silt (5 - 15%) in part, trace fossil fragments and forams, nil to trace very fine carbonaceous flakes, fine disseminated pyrite and coarse nodular pyrite, trace micro-micaceous flakes. Claystone , as above. Sandstone , light olive grey to medium grey, hard, vfl,		

ZANEGREY-1 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
		well sorted, subangular, 20% calcite matrix, poor inferred porosity, grading to siltstone, trace micro-micaceous flakes, occasional loose, transparent and pink quartz grains (cL), angular, elongated no fluorescence.		
2240	80 10 10 Trace	Claystone, calcareous , as above. Marl , very light grey, very soft to soft, blocky to amorphous, 35-45% calcareous matrix, grading to Calcareous Claystone . Claystone , medium grey - medium dark grey, olive grey, firm, occasionally moderately hard, blocky, common sub splintery, 1 - 5% calcisiltite, 5 - 20% calcareous matrix, grading to Calcareous Claystone , trace - 2% very fine to fine glauconite, trace fossil fragments and forams, trace very fine carbonaceous flakes, trace very fine disseminated and nodular pyrite, trace micro-micaceous flakes. Sandstone , as above, trace glauconite grains	36.3	0.4
2250	80 10 10	Claystone, calcareous , as above. Marl , as above. Claystone , as above.		
2260	90 10	Claystone, calcareous , as above. Claystone , as above.	27.3	0.7
2270	70 10 20	Claystone, calcareous , very light grey to medium light grey, very soft to soft, occasionally firm, sub blocky - blocky, 1 - 5% calcisiltite, trace - 5% quartz silt, 20 - 35% calcareous matrix grading to Marl and Claystone , nil to trace very fine carbonaceous flakes, very fine disseminated pyrite and coarse nodular pyrite, trace micro-micaceous flakes. Marl , as above. Claystone , as above.		
2280	60 20 20	Claystone, calcareous , as above. Marl , as above. Claystone , as above.	31.0	0.0
2290	70 10 20	Claystone, calcareous , as above. Marl , as above. Claystone , as above.		
2300	50 20 30	Claystone, calcareous , as above. Marl , as above Claystone , as above.	23.2	0.9
2310	50 20 30	Claystone, calcareous , very light grey to medium light grey, very soft to soft, occasionally firm, sub blocky - blocky, 1 - 5% calcisilt, trace - 5% quartz silt, 20 - 35% calcareous matrix grading to Marl and Claystone , trace fossil fragments and forams, nil to trace very fine carbonaceous flakes, fine disseminated pyrite and coarse nodular pyrite, trace micro-micaceous flakes. Marl , as above Claystone , as above.		
2320	60 20 20	Claystone, calcareous , as above. Marl , as above Claystone , medium grey - medium dark grey, firm, blocky, 1 - 5% calcisiltite, 5 - 20% calcareous matrix,	29.0	0.0

ZANEGREY-1 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
		grading to Calcareous Claystone , trace very fine to fine glauconite, trace fossil fragments and forams, trace – 5% quartz silt, trace very fine carbonaceous flakes, trace very fine disseminated and nodular pyrite, trace micro-micaceous flakes.		
2330	70 20 10	Claystone, calcareous , as above. Marl , very light grey, very soft to soft, blocky to amorphous, 35 - 45% calcareous matrix, grading to Calcareous Claystone , trace carbonaceous flecks. Claystone , as above.		
2340	30 10 60	Claystone, calcareous , as above. Marl , as above. Claystone , as above.	23.7	0.4
2350	50 10 40	Claystone, calcareous , very light grey to medium light grey, very soft to firm, sub blocky - blocky, 1 - 5% calcisilt, trace quartz silt, 20 - 35% calcareous matrix grading to Marl and Claystone , nil to trace very fine carbonaceous flakes, trace very fine disseminated pyrite and coarse nodular pyrite, trace micro-micaceous flakes. Marl , as above. Claystone , medium grey - medium dark grey, olive grey, firm, occasionally moderately hard, blocky, 1 - 5% calcisiltite, 10 - 20% calcareous matrix, grading to Calcareous Claystone , trace very fine to fine glauconite, trace fossil fragments and forams, trace very fine carbonaceous flakes, trace very fine disseminated and coarse nodular pyrite, trace micro-micaceous flakes.		
2360	60 40	Claystone, calcareous , as above. Claystone , as above.	30.0	0.9
2370	50 50	Claystone, calcareous , as above. Claystone , as above.		
3275	40 60	Claystone, calcareous , very light grey to medium light grey, very soft to firm, sub blocky - blocky, 1 - 10% calcisiltite, 20 - 35% calcareous matrix grading to Claystone , nil to trace very fine carbonaceous flakes, trace very fine disseminated pyrite and coarse nodular pyrite, trace micro-micaceous flakes, trace forams. Claystone , medium grey - medium dark grey, firm, occasionally moderately hard, blocky, 1 - 5% calcisiltite, 5 - 20% calcareous matrix, grading to Calcareous Claystone , trace very fine carbonaceous flakes, trace very fine disseminated and coarse nodular pyrite, trace micro-micaceous flakes, trace forams.		
2380	30 70	Claystone, calcareous , as above. Claystone , as above.	24.2	0.0
2380	20 80	Claystone, calcareous , as above. Claystone , as above.		
2390	20 80	Claystone, calcareous , as above. Claystone , as above.		
2395	20 80	Claystone, calcareous , as above. Claystone , as above.		
2400	30	Claystone, calcareous , very light grey to medium light grey, very soft to firm, sub blocky - blocky, 1 - 10%	27.1	0.0

ZANEGREY-1 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
	70	calcsiltite, 20 - 35% calcareous matrix grading to Claystone , nil to trace very fine carbonaceous flakes, trace very fine disseminated pyrite and coarse nodular pyrite, trace micro-micaceous flakes, trace forams. Claystone , light grey - medium dark grey, light olive grey, yellowish grey to dusky yellow, mottled in part, firm, occasionally moderately hard, blocky, 1 - 10% calcsilt, 5 - 20% calcareous matrix, grading to Calcareous Claystone , trace very fine carbonaceous flakes, trace very fine disseminated and coarse nodular pyrite, trace very fine glauconite, trace micro-micaceous flakes, trace forams.		
2410	20 80	Claystone, calcareous , as above. Claystone , as above.		
2415	40 60	Claystone, calcareous , as above. Claystone , as above.		
2420	30 70	Claystone, calcareous , as above. Claystone , as above.	24.2	0.0
2425	30 70	Claystone, calcareous , as above. Claystone , as above.		
2430	20 80	Claystone, calcareous , as above. Claystone , as above.		
2435	30 60	Claystone, calcareous , as above. Claystone , as above.		
2440	80 20	Claystone, calcareous , as above. Claystone , as above.	25.2	2.7
2445	30 70	Claystone, calcareous , very light grey to medium light grey, very soft (amorphous in part) to firm, sub blocky - blocky, 5 - 20% calcsilt in part, 20 - 35% calcareous matrix grading to Claystone , nil to trace very fine carbonaceous flakes, trace very fine disseminated pyrite and as fine darker laminations, trace coarse nodular pyrite. Claystone , light grey - medium dark grey, light olive grey, yellowish grey to dusky yellow, mottled in part, firm, occasionally moderately hard, blocky, 1 - 10% calcsiltite, 5 - 20% calcareous matrix, grading to Calcareous Claystone , trace very fine carbonaceous flakes, trace very fine disseminated and coarse nodular pyrite.		
2450	20 80	Claystone, calcareous , as above. Claystone , as above.		
2455	40 60	Claystone, calcareous , as above. Claystone , as above.		
2460	40 60	Claystone, calcareous , as above. Claystone , as above.	29.0	0.0
2465	50 50	Claystone, calcareous , as above. Claystone , as above.		
2470	30 70	Claystone, calcareous , as above, increasingly firm-hard in part. Claystone , as above.		
2475	40 60	Claystone, calcareous , as above. Claystone , as above.		
2480	30	Claystone, calcareous , very light grey to medium light	21.3	0.4

ZANEGREY-1 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
	10 60	grey, very soft (amorphous in part) to firm, sub blocky - blocky, 5 - 20% calcisilt in part, 20 - 35% calcareous matrix grading to Marl and Claystone , nil to trace very fine carbonaceous flakes, trace very fine disseminated pyrite and as fine darker laminations, trace coarse nodular pyrite, trace fine glauconite in part, nil - trace light brownish yellow fossil fragments. Marl , white - very light grey, soft to firm, blocky to amorphous, 35 - 45% calcareous matrix, grading to Calcareous Claystone , trace carbonaceous flecks. Claystone , light grey - medium dark grey, brownish grey, firm - moderately hard, splintery, blocky, 1 - 15% calcisilt, 5 - 20% calcareous matrix, grading to Calcareous Claystone , trace very fine carbonaceous flakes, trace very fine disseminated and coarse nodular pyrite, trace fine glauconite in part, nil - trace light brownish yellow fossil fragments.		
2485	50 10 40	Claystone, calcareous , as above. Marl , as above. Claystone , as above.	25.2	0.9
2490	40 10 50	Claystone, calcareous , as above. Marl , as above. Claystone , as above.	24.2	0.0
2495	60 20 30	Claystone, calcareous , as above. Marl , as above. Claystone , as above.		
2500	70 30	Claystone, calcareous , as above. Claystone , as above.	30.5	0.0
2505	60 40	Claystone, calcareous , as above. Claystone , as above.		
2510	70 30	Claystone, calcareous , as above. Claystone , as above, increasing calcisilt, nil - 5% quartz silt with trace medium to coarse (cU) sand grains, slightly increasing glauconite.		
2515	55 40 5	Claystone, calcareous , very light grey to medium light grey, very soft (amorphous in part) to firm, sub blocky - blocky, 5 - 20% calcisilt in part, 20 - 35% calcareous matrix grading to Marl and Claystone , nil to trace very fine carbonaceous flakes, trace very fine disseminated pyrite and as fine darker laminations, trace coarse nodular pyrite, trace fine glauconite in part, nil - trace light brownish yellow fossil fragments. Claystone , light grey - medium dark grey, brownish grey, firm - moderately hard, splintery, blocky, 5 - 15% calcisilt, 5 - 20% calcareous matrix, grading to Calcareous Claystone , nil - 5% quartz silt with rare medium to coarse (cU) sand grains, trace very fine carbonaceous flakes, trace very fine disseminated and coarse nodular pyrite, trace fine glauconite in part. Siltstone, calcareous , light brown to brownish grey, firm, friable, to hard, abundant (20 - 30%) calcareous matrix/cement, trace very fine subangular subspherical quartz grains, trace glauconite.		
2520	40	Claystone, calcareous , as above, abundant glauconite		

ZANEGREY-1 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
	50	(up to 35%) in part grading to Glauconitic Calcareous Claystone .		
	10	Claystone , as above.		
2525	40	Siltstone, calcareous , as above.		
	40	Claystone , light grey - medium dark grey, brownish grey, firm - moderately hard, splintery, blocky, 5 - 15% calcisilt, 5 - 20% calcareous matrix, as above, abundant glauconite (up to 35%) in part grading to Glauconitic Claystone and Glauconitic Calcareous Claystone , trace very fine disseminated and coarse nodular pyrite, trace fine glauconite in part.		
	40	Greensand , dark yellowish green to dusky green in a white to light grey matrix, soft, loose in part, 50 - 75% glauconite, very fine to coarse grained (vfU-cU), loose glauconite grains in part, trace nodular glauconite, trace - 20% quartz sand, 10 - 20% calcareous matrix, trace shell fragments, nil visual porosity..		
	20	Siltstone argillaceous , dark brownish grey, soft, friable, with 20-30% clay matrix, 10% very fine quartz sand, common (5-20%) medium to coarse glauconite grains and diffuse glauconite patches, trace very fine white mica, nil visual porosity. Note: abundant cavings up to 50%		
2530	50	Claystone , light grey - medium dark grey, pale reddish brown to moderate reddish orange, light brown to moderate brown, mottled, soft, dispersive, generally amorphous, 5 - 15% calcisilt, 5 - 20% calcareous matrix, as above, abundant glauconite (up to 35%) in part grading to Glauconitic Claystone and Glauconitic Calcareous Claystone , trace very fine disseminated and coarse nodular pyrite.		
	30	Greensand , as above.		
	20	Siltstone argillaceous , as above. Note: abundant cavings up to 50%		
2535	65	Claystone , light grey, light olive grey - brownish grey, olive grey, mottled, soft, dispersive, generally amorphous, 5 - 15% calcisilt, 5 - 20% calcareous matrix, abundant glauconite (up to 35%) in part grading to Glauconitic Claystone and Glauconitic Calcareous Claystone , commonly arenaceous with imbedded with vfL-vfU quartz grains, grading into a Argillaceous Sandstone , trace very fine disseminated and coarse nodular pyrite, trace fine glauconite in part.		
	10	Greensand , dark yellowish green to dusky green in a white to light grey matrix, soft, loose in part, very fine to medium quartz grains (vfL-mL), commonly silty, 20 - 35% glauconite grains (fL-fU), loose glauconite grains in part, 20 - 40% quartz sand, 10 - 20% calcareous matrix, trace shell fragments, nil visual porosity..		
	25	Siltstone argillaceous , as above. Note: abundant cavings up to 40%		
2540	65	Claystone , as above.		
	10	Greensand , as above.		
	25	Siltstone argillaceous , as above.		

ZANEGREY-1 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
		Note: abundant cavings up to 40%		
2545	60 15 25	Claystone , as above Greensand , as above, With trace to rare moderate brown, soft, friable, very fine to fine (dom vFL), subangular-subrounded, moderately sorted, with trace-5% clay matrix, appears to be stained quartz, poor inferred porosity Siltstone argillaceous , as above. Note: abundant cavings up to 40%		
2550	60 30 10	Claystone , as above Greensand , becoming less glauconitic, grading into a glauconitic sandstone, brownish grey, dark yellowish green to dusky green, soft to firm, occasionally moderately hard, loose in part, very fine to medium quartz grains (vFL-mL), predominantly vFL-vfU, commonly silty, moderately well sorted, subangular-subrounded, 30-70% quartz sand, commonly in a white to light grey matrix, 10 - 20% calcareous matrix, trace loose quartz grains, fL-mL subrounded, 5 - 20% glauconite grains (predominantly fL-fU, occasionally cL), loose glauconite grains in part, poor visual porosity.. Siltstone argillaceous , as above. Note: abundant cavings up to 40%		
2555	55 20 25	Claystone , as above Greensand , very argillaceous, much less glauconitic, grading into siltstone Siltstone, argillaceous , light olive grey to olive grey, common light brownish grey to brownish grey, very soft-soft, amorphous in part, slightly to moderately calcareous, 20-30% argillaceous matrix, common arenaceous, common glauconite nodules, trace carbonaceous flakes. Note: abundant cavings up to 40%		
2560	30 20 50	Claystone , light grey, light olive grey - brownish grey, medium grey, olive grey, mottled, soft, dispersive, generally amorphous, slightly calcareous, 5 - 10% calcareous matrix, trace glauconite (up to 10%), commonly silty and grading into a Argillaceous Siltstone , commonly arenaceous with imbedded with vFL-vfU quartz grains, grading into a Argillaceous Sandstone , trace very fine disseminated and coarse nodular pyrite. Sandstone , 10% loose quartz grains, transparent to translucent, occasionally frosted, trace very light orange/brown, vFL-cL, predominantly fU-mU, moderately sorted, subangular, no show. 10% argillaceous sandstone grading into a arenaceous sandstone, as above Siltstone argillaceous , as above Note: abundant cavings up to 30%		
2565	30 20 50	Claystone , as above Sandstone , as above, vFL-cU, predominantly fU-mU, increasing traces of very light brown stained quartz grains, trace pyrite cemented sandstone. Siltstone argillaceous , tr pyrite nodules.		

ZANEGREY-1 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
		Note: abundant cavings up to 25%		
2570	10	Claystone , light olive grey, light brownish grey to moderate brown, minor dark yellowish brown, mottled, soft, generally amorphous, minor quartz silt, nil - slightly calcareous, nil to trace glauconite. 20% cavings (glauconitic claystone)		
	80	Sandstone , loose grains, very light grey, clear to translucent grains, occasionally frosted, trace very light orange/brown (iron stained), fine to very coarse grained (vfL-vcL), predominantly medium to very coarse grained (mL-cL), sub rounded to rounded, occasionally angular, moderate to high sphericity, poorly sorted quartz, coarse pyrite nodules, no shows.		
	10	Siltstone argillaceous , dark yellowish brown. Note: abundant cavings up to 20%		
2575	40	Claystone , light olive grey, light brownish grey to moderate brown, minor dark yellowish brown, mottled, soft, generally amorphous, minor quartz silt, nil - slightly calcareous, nil to trace glauconite.		
	35	Sandstone , as above.		
	25	Siltstone argillaceous , as above. Note: abundant cavings up to 20%		
2580	5	Claystone , as above.		
	85	Sandstone , loose quartz grains, predominantly translucent, common, clear, very light grey, occasionally frosted, fine to coarse grained (fU-cL), predominantly (mL-cL), moderately sorted, sub rounded to rounded, occasionally angular, moderate to high sphericity, trace cU pyrite nodules, very good inferred porosity No Shows.		
	10	Siltstone argillaceous , as above. Note: cavings up to 15% (glauconitic and calcareous lithologies)		
2590	95	Sandstone , as above, fL-vcU, predominantly mU-cU, rounded-subrounded, commonly fractured quartz grains, well sorted, very good inferred porosity no fluorescence or cut		
	5	Siltstone argillaceous , as above. Note: cavings up to 10% (glauconitic and calcareous lithologies)		
2595	95	Sandstone , as above, fU-vcL, predominantly mL-cL, rounded-subrounded, commonly fractured quartz grains, well sorted, very good inferred porosity no fluorescence or cut		
	5	Siltstone argillaceous , as above Note: cavings up to 10% (glauconitic and calcareous lithologies)		
2600	70	Sandstone , as above, very good inferred porosity no fluorescence or cut		
	15	Siltstone argillaceous , dark yellowish brown-light olive grey, very soft-soft, amorphous in part, nil- slightly calcareous, common arenaceous, rare-common carbonaceous flakes.		
	15	Coal , brownish black, firm-moderately hard, sub blocky, earthy to sub vitreous lustre.		

ZANEGREY-1 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
		Note: cavings up to 5% (glauconitic and calcareous lithologies)		
2605	90	Sandstone , as above, vfU-vcU, predominantly cL-cU, very good inferred porosity no fluorescence or cut Trace very light orange/brown (iron stained) grains. Trace disseminated pyrite and nodular pyrite, trace pyrite cemented grains' very good inferred porosity no fluorescence or cut.		
	10	Siltstone argillaceous , as above, common carbonaceous flakes.		
	Trace	Coal , as above. Note: cavings up to 10% (glauconitic and calcareous lithologies)		
2610	70	Sandstone , as above, fU-vcU, predominantly mL-cL, very good inferred porosity no fluorescence or cut		
	20	Claystone , light olive grey, light brownish grey to dark yellowish brown, mottled, soft, generally amorphous, washing out, trace-10% quartz silt and sand grains, non-calcareous.		
	10	Siltstone, argillaceous , dark yellowish brown-light olive grey, very soft-soft, amorphous in part, washing out, 20-30% argillaceous matrix, common arenaceous, micaceous, rare-common carbonaceous flakes, trace coarse nodular pyrite.		
	Trace	Coal , brownish black, firm-moderately hard, sub blocky, earthy to sub vitreous lustre. Note: cavings up to 5% (glauconitic and calcareous lithologies)		
2615	90	Sandstone , as above, vfU-vcU, predominantly mU-cL, very good inferred porosity no fluorescence or cut		
	10	Siltstone , greyish brown, dark yellowish brown-light olive grey, soft, friable, crumbly, washing out, micaceous, common to abundant carbonaceous material and laminae, minor very fine quartz grains.		
	Trace	Claystone : as above.		
2620	95	Sandstone , loose quartz grains, predominantly translucent-frosted, very light grey, occasionally clear, trace opaque, traced very pale orange, fU-vcU, predominantly mL-cL, moderately sorted, sub rounded to occasionally angular, moderate to high sphericity, trace pyrite nodules, very good inferred porosity no fluorescence or cut.		
	5	Siltstone , as above, trace carbonaceous material and carbonaceous laminae.		
2625	80	Sandstone , loose quartz grains, predominantly translucent-frosted, very light grey, occasionally clear, trace opaque, trace very pale orange, vfU-vcL, predominantly mU-cL, moderately sorted, predominately sub angular to angular, common subrounded-rounded coarse grains, very good inferred porosity, no fluorescence or cut.		
	20	Siltstone , greyish brown, dark yellowish brown, dark yellowish orange, soft, friable, crumbly, washing out, 5-20% argillaceous matrix grading to Argillaceous		

ZANEGREY-1 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
		Claystone , micaceous, trace carbonaceous material and laminae, minor very fine quartz grains.		
2630	70	Sandstone , as above, fL-pebbles, predominantly mL-cL, moderately sorted, predominately sub angular to angular, common subrounded-rounded coarse grains with angular fractures, trace pyrite cemented aggregates, very good inferred porosity no fluorescence or cut		
	20	Siltstone , as above, minor very fine quartz grains and grading into fine Argillaceous Sandstone in part, common to abundant carbonaceous material.		
	10	Claystone , light brownish grey to moderate brown, dark yellowish orange, soft, dispersive, generally amorphous, washing out, silty with trace – 10% quartz silt, trace carbonaceous material, trace pyrite, trace to rare very fine to fine quartz grains, non calcareous.		
2635	70	Sandstone , as above, fL-pebbles, predominantly mL-cL, moderately sorted, predominately sub angular to angular, common subrounded-rounded coarse grains with angular fractures, trace pyrite cemented aggregates, very good inferred porosity no fluorescence or cut		
	20	Siltstone , greyish brown, dark yellowish brown, dark yellowish orange, soft, friable, sub blocky, washing out, 5-20% argillaceous matrix grading to Argillaceous		
	10	Claystone , micaceous, trace carbonaceous material and laminae, minor very fine quartz grains.		
		Claystone , as above.		
2640	20	Claystone , light brownish grey to moderate brown, dark yellowish orange, soft, dispersive, generally amorphous, washing out, silty with trace – 10% quartz silt, trace carbonaceous material, trace pyrite, trace to rare very fine to fine quartz grains, non calcareous.		
	50	Sandstone , loose quartz grains, predominantly translucent-frosted, very light grey, occasionally clear, trace opaque, trace very pale orange, fL-pebbles, predominantly mL-cL, moderately sorted, predominately sub angular to angular, common subrounded-rounded coarse grains with angular fractures, trace pyrite cemented aggregates, very good inferred porosity no fluorescence or cut.		
	30	Siltstone argillaceous , greyish brown, dark yellowish brown, dark yellowish orange, soft, friable, sub blocky, washing out, 20-30% argillaceous matrix, micaceous, abundant carbonaceous material and laminae, minor very fine quartz grains, trace coarse pyrite nodules.		
2645	80	Sandstone , loose quartz grains, predominantly translucent-frosted, very light grey, occasionally clear, trace opaque, trace very pale orange, fL-pebbles, predominantly mL-cL, moderately sorted, predominately sub angular to angular, common subrounded-rounded coarse grains with angular fractures, trace pyrite cemented aggregates, very good inferred porosity, no fluorescence or cut.		
	10	Siltstone argillaceous , as above.		
	10	Claystone , as above.		

ZANEGREY-1 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
2650	90 10	Sandstone , as above, fL-pebbles, predominantly mL-cL Siltstone argillaceous , as above, trace to abundant carbonaceous material.		
2655	70 30	Sandstone , as above, fL-pebbles, predominantly mL-cL Siltstone argillaceous , greyish brown, moderate to dark yellowish brown, dark yellowish orange, soft, friable, sub-blocky, washing out, 20-30% argillaceous matrix, micaceous, abundant carbonaceous material and laminae, arenaceous with 5-10% very fine to fine quartz grains, trace coarse pyrite nodules.		
2660	60 40	Sandstone , loose quartz grains, predominantly translucent-frosted, very light grey, occasionally clear, trace opaque, trace very pale orange, dark yellowish orange clay coating and stain in part, fine to very coarse grained (fL-vcU), predominantly mL-cL, poorly sorted, predominately sub angular to angular, common subrounded-rounded coarse grains with angular fractures, trace pyrite cemented aggregates, trace coarse mica flakes (muscovite), very good inferred porosity, no fluorescence or cut. Siltstone, argillaceous , greyish brown, moderate to dark yellowish brown, dark yellowish orange, soft, friable, sub-blocky, washing out, 20-30% argillaceous matrix, micaceous, abundant carbonaceous material and laminae, arenaceous with 5-10% very fine to fine quartz grains, trace coarse pyrite nodules, non calcareous. Note: Siltstone under represented in sample because of severe washing out in drilling mud. Cavings up to 5% (glauconitic and calcareous lithologies).		
2665	60 40	Sandstone , as above, fL-pebbles, predominantly mL-cL Siltstone argillaceous , as above. Note: Cavings up to 2% (glauconitic and calcareous lithologies).		
2670	85 10 5	Sandstone , as above, increase in coarse grain, predominantly vfU-cL, no fluorescence or cut. Siltstone argillaceous , as above. Claystone , light brownish grey to moderate brown, dark yellowish orange, soft, dispersive, generally amorphous, washing out, silty with trace – 10% quartz silt, trace carbonaceous material, trace pyrite, trace to rare very fine to fine quartz grains, non calcareous. Note: Cavings up to 2% (glauconitic and calcareous lithologies).		
2675	85 10 5	Sandstone , loose quartz grains, translucent-frosted, very light grey, occasionally clear, trace opaque, trace very pale orange, dark yellowish orange clay coating and stain in part, vfL-pebbles, predominantly medium to coarse (mU-cL), poorly sorted, sub-angular, rounded pebbles, abundant argillaceous matrix, trace carbonaceous matter and flakes, trace micro-micaceous, trace pyrite cemented aggregates, trace coarse mica flakes (muscovite), very good inferred porosity, no fluorescence or cut. Siltstone argillaceous , as above. Coal , brownish black to black, moderately firm, sub		

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ZANEGREY-1 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
	5	Siltstone, argillaceous , as above. Note: Siltstone significantly under represented in sample, 20% cavings (glauconitic and calcareous lithologies).		
2703	100	Sandstone , loose quartz grains, translucent-frosted, very light grey, occasionally clear, trace opaque, trace very pale orange, dark yellowish orange clay coating and stain in part, fine to very coarse grained (fU-vcU), predominantly medium to coarse (mU-cL), poorly sorted, predominately sub angular to angular, common subrounded-rounded coarse grains with angular fractures, trace pyrite cemented aggregates, trace coarse mica flakes (muscovite), very good inferred porosity, no fluorescence or cut. Note: 40% Cavings, olive grey calcareous claystone.		
2705	90	Sandstone , as above, (fL-vcU), predominantly (mL-cL), no angular-subangular, moderately well sorted, fluorescence or cut.		
	10	Siltstone, argillaceous , as above Note: 40% Cavings, olive grey calcareous claystone.		
2709	80	Sandstone , loose quartz grains, translucent-frosted, very light grey, occasionally clear, trace opaque, trace very pale orange stain in part, fine to very coarse grained (fU-vcL), predominantly medium to coarse (fU-cU), moderately sorted, predominately sub angular to angular, common subrounded-rounded coarse grains with angular fractures, trace pyrite cemented aggregates and nodules, trace mica flakes, very good inferred porosity, no fluorescence or cut.		
	20	Siltstone, argillaceous , moderate to dark yellowish brown, dark yellowish orange, soft, friable, sub-blocky, washing out, 20-30% argillaceous matrix, micaceous, abundant carbonaceous material and laminae, arenaceous in places, trace coarse pyrite nodules, non calcareous.		
	Trace	Coal , brownish black to black, moderately firm, sub blocky-subfissile, earthy to sub vitreous lustre. Note: 40% Cavings, olive grey calcareous claystone.		
2712	75	Sandstone , as above, (fU-vcU), predominantly (mU-cU), no angular-subangular, moderately well sorted, no fluorescence or cut.		
	25	Siltstone, argillaceous , as above		
	Trace	Coal , as above Note: 40% Cavings, olive grey calcareous claystone.		
2715	85	Sandstone , as above, (fU-vcU), predominantly (mL-cL), no angular-subangular, moderately well sorted, no fluorescence or cut.		
	15	Siltstone, argillaceous , as above, trace disseminated pyrite Note: 40% Cavings, olive grey calcareous claystone.		
2718	80	Sandstone , loose quartz grains, translucent-frosted, very light grey, occasionally clear, trace opaque, isolated very pale orange, (fL-vcL), predominantly (mL-cL), angular-subangular, occasionally sub rounded-rounded coarse		

ZANEGREY-1 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
	20	grains with angular fractures, moderately well sorted, trace coarse mica (muscovite) flakes, no fluorescence or cut. Siltstone, argillaceous , as above, traces greyish orange, trace disseminated pyrite Note: 40% cavings, olive grey calcareous claystone.		
2721	80	Sandstone , as above, (fL-cU), predominantly (mL-cL), moderately sorted, angular-sub angular, common sub rounded-rounded coarse grains with angular fractures, trace coarse mica (muscovite) flakes, trace fossils and foram (cavings?), no fluorescence or cut.		
	20	Siltstone, argillaceous , as above. Note: 30% cavings, olive grey calcareous claystone.		
2724	85	Sandstone , as above, (vfU-cU), predominantly (mL-cL), moderately well sorted, angular-sub angular, common sub rounded-rounded coarse grains with angular fractures, trace coarse mica (muscovite) flakes, trace fossils and foram (cavings?), no fluorescence or cut. Trace light brownish grey aggregates, soft, vfU, well sorted, sub angular-sub rounded, 1-5% argillaceous matrix, moderately poor visible porosity, grading into Siltstone in places.		
	15	Siltstone, argillaceous , as above. Note: 20% cavings, olive grey calcareous claystone.		
2727	80	Sandstone , loose quartz grains, translucent-frosted, very light grey, occasionally clear, trace opaque, isolated very pale orange, (fU-cU), predominantly (mL-cL), moderately well sorted, angular-sub angular, common sub rounded-rounded coarse grains with angular fractures, trace coarse mica (muscovite) flakes, trace disseminated and coarse pyrite nodules, trace fossils and foram (cavings?), no fluorescence or cut.		
	20	Siltstone, argillaceous , as above. Note: 60% cavings, olive grey calcareous claystone.		
2730	80	Sandstone , as above, (fL-vcU), predominantly (mL-cL), moderately well sorted, angular-sub angular, common sub rounded-rounded coarse grains with angular fractures, trace pyrite nodules, trace fossils and foram (cavings?), no fluorescence or cut.		
	20	Siltstone, argillaceous , as above Note: 50% cavings, olive grey calcareous claystone.		
2733	90	Sandstone , as above, (fU-vcL), predominantly (mL-cL), moderately well sorted, angular-sub angular, common sub rounded-rounded coarse grains with angular fractures, trace pyrite nodules, trace fossils and foram (cavings?), no fluorescence or cut.		
	10	Siltstone, argillaceous , as above Note: 20% cavings, olive grey calcareous claystone.		

APPENDIX 2

CUTTINGS SAMPLE DESCRIPTIONS ZANEGREY-1/ST1

(By Bass Strait Oil Company Ltd)

ZANEGREY-1 ST1 - CUTTINGS DESCRIPTION SHEET

From 2190m to 3107m

Wellsite Geos: Geoff Geary, Andre Thangam

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
2191	100	Cement.		
2192	100	Cement.		
2193	100	Cement.		
2193.6	95 3 2	Cement. Claystone, calcareous , very light grey to medium light grey, soft to firm, blocky, 20 - 30% calcareous matrix grading to Claystone , nil to trace very carbonaceous flakes, trace nodular and finely laminated pyrite. Claystone , medium grey-medium dark grey, soft to firm, blocky, 5 - 15% calcareous matrix, grading to Calcareous Claystone , trace-rare fossil fragments and forams, trace very finely disseminated and nodular pyrite.		
2195	100 Trace Trace	Cement. Claystone, calcareous , as above. Claystone , as above.		
2200	100 Trace Trace	Cement. Claystone, calcareous , as above. Claystone , as above.		
2205	90 10	Cement. Claystone, calcareous , very light grey to medium light grey, soft – dispersive, to firm, blocky, 20 - 30% calcareous matrix grading to Claystone in part, nil to trace very carbonaceous flakes, trace nodular and finely laminated pyrite.		
2210	50 45 5	Cement. Claystone, calcareous , very light grey to medium light grey, soft – dispersive, to firm, blocky, 20 - 30% calcareous matrix grading to Claystone in part, nil to trace very carbonaceous flakes, trace-rare fossil fragments and forams, trace nodular and finely laminated pyrite. Claystone , medium grey-medium dark grey, olive grey, firm, commonly moderately hard, blocky, trace sub splintery, 5 - 15% calcareous matrix, grading to Calcareous Claystone , trace-rare fossil fragments and forams, trace carbonaceous flakes, trace micro-micaceous flakes.		
2215	10 80 10	Cement. Claystone, calcareous , light grey to medium light grey, medium grey, trace pale yellowish brown, soft – dispersive, amorphous, rare firm, 20 - 35% calcareous matrix grading to Claystone in part, nil to trace very carbonaceous flakes, trace fossil fragments and forams, trace nodular pyrite. Claystone , medium grey-medium dark grey, olive grey, firm, occasionally moderately hard, blocky, trace sub splintery, 5 - 15% calcareous matrix, grading to Calcareous Claystone , silty and slightly arenaceous in part with very fine quartz grains, grading into a siltstone in parts, trace-rare fossil fragments and forams, trace		

ZANEGREY-1 ST1 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
		carbonaceous flakes, trace micro-micaceous flakes.		
2220	Trace 90 10	Cement. Claystone, calcareous , as above, trace disseminated pyrite Claystone , as above, commonly silty (trace - 5%) grading into siltstone in places, slightly arenaceous in part.		
2225	Trace 90 10	Cement. Claystone, calcareous , light olive grey-yellowish grey, medium grey, as above, silty, grading into a siltstone in parts, and slightly arenaceous in part with very fine quartz grains, trace disseminated pyrite, trace fossil fragment and forams Claystone , as above, commonly silty (trace - 5%) grading into siltstone in places, slightly arenaceous in part.		
2230	Trace 90 10	Cement. Claystone, calcareous , as above, very amorphous, increasingly homogenous, less silty, less micro-micaceous, less carbonaceous Claystone , as above,		
2235	Trace 90 10	Cement. Claystone, calcareous , very light grey to medium light grey, light olive grey-yellowish grey, very soft to soft (mushy), amorphous, common, silty, quartz silt (5 - 15%) grading into a siltstone in parts, slightly arenaceous in places with very fine quartz grains, 20 - 40% calcareous matrix grading to Claystone , in part, trace fossil fragments and forams, nil to trace very fine carbonaceous flakes, fine disseminated pyrite, trace micro-micaceous flakes. Claystone , as above,		
2240	80 10 10	Claystone, calcareous , as above. Claystone , as above. Marl , very light grey, very soft to soft, blocky to amorphous, 35-45% calcareous matrix, grading to Calcareous Claystone .		
2245	60 20 20	Claystone, calcareous , as above. Claystone , as above. Marl , as above.		
2250	60 30 10	Claystone, calcareous , as above. Claystone , as above. Marl , as above.		
2255	70 20 10	Claystone, calcareous , as above. Claystone , as above. Marl , as above.		
2260	60	Claystone, calcareous , very light grey to medium light grey, very soft to soft, amorphous, in part, 1 - 5% calcisiltite, 20 - 35% calcareous matrix grading to Marl and Claystone , nil to trace very fine carbonaceous flakes, very fine disseminated pyrite, trace micro-micaceous flakes.		

ZANEGREY-1 ST1 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
	30	Claystone , medium grey - medium dark grey, olive grey, soft to moderately firm, to blocky, 1 - 5% calcisiltite, 5 - 20% calcareous matrix, trace quartz silt, grading to Calcareous Claystone , trace very fine glauconite, trace very fine carbonaceous flakes, trace very fine disseminated and nodular pyrite, trace micro-micaceous flakes, very finely laminated.		
	10	Marl , very light grey, very soft to slightly firm, amorphous to blocky, 35-45% calcareous matrix, grading to Calcareous Claystone , very fine pyritic lamination in part, trace coarse pyrite nodules, trace fossil fragments.		
2265	50	Claystone, calcareous , as above.		
	40	Claystone , as above.		
	10	Marl , as above.		
2270	40	Claystone, calcareous , as above.		
	20	Claystone , as above.		
	40	Marl , as above.		
2275	60	Claystone, calcareous , as above.		
	20	Claystone , as above.		
	20	Marl , as above.		
2280	70	Claystone, calcareous , as above.		
	20	Claystone , as above.		
	10	Marl , as above.		
2285	80	Claystone, calcareous , as above.		
	10	Claystone , as above.		
	10	Marl , as above.		
2290	70	Claystone, calcareous , as above.		
	20	Claystone , as above.		
	10	Marl , as above.		
2295	80	Claystone, calcareous , as above, very dispersive.		
	20	Claystone , as above.		
	Trace	Marl , as above.		
2300	80	Claystone, calcareous , as above, very dispersive.		
	20	Claystone , as above.		
2305	50	Claystone, calcareous , as above, very dispersive, trace very coarse pyrite nodules.		
	10	Claystone , as above.		
	40	Marl , very light grey, very soft, amorphous, dispersive, 35-45% calcareous matrix, grading to Calcareous Claystone , very fine pyritic lamination in part, trace very coarse pyrite nodules, trace fossil fragments.		
2310	70	Claystone, calcareous , very light grey to medium light grey, very soft to soft, amorphous, dispersive, 1 - 5% calcisiltite, 20 - 35% calcareous matrix grading to Marl and Claystone , nil to trace very fine carbonaceous flakes, trace very fine disseminated pyrite, trace very coarse pyrite nodules, trace fossil fragments.		
	10	Claystone , as above.		
	20	Marl , as above.		
2315	60	Claystone, calcareous , as above.		
	10	Claystone , as above.		
	30	Marl , as above.		

ZANEGREY-1 ST1 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
2320	80 10 10	Claystone, calcareous , as above. Claystone , as above. Marl , as above.		
2325	70 10 20	Claystone, calcareous , as above. Claystone , as above. Marl , as above.		
2330	70 20 10	Claystone, calcareous , very light grey to medium light grey, very soft to soft, amorphous, dispersive, 1 - 5% calcisiltite, 20 - 35% calcareous matrix grading to Marl and Claystone , nil to trace very fine carbonaceous flakes, trace very fine disseminated pyrite, trace very coarse pyrite nodules. Claystone , medium grey - medium dark grey, soft, dispersive, to moderately firm, sub-blocky, 1 - 5% calcisiltite, 5 - 20% calcareous matrix, trace - 5% quartz silt, grading to Calcareous Claystone , trace very fine glauconite, trace very fine carbonaceous flakes, trace very fine disseminated and nodular pyrite, trace micro-micaceous flakes, very finely laminated. Marl , very light grey, very soft to slightly firm, amorphous sub-blocky, 35-45% calcareous matrix, grading to Calcareous Claystone , very fine pyritic lamination in part, trace coarse pyrite nodules.		
2335	60 30 10	Claystone, calcareous , as above. Claystone , as above. Marl , as above.		
2340	40 50 10	Claystone, calcareous , as above. Claystone , as above, soft, sticky, amorphous. Marl , as above.		
2345	50 40 10	Claystone, calcareous , as above, soft, sticky, amorphous. Claystone , as above, soft, sticky, amorphous. Marl , as above.		
2350	50 50	Claystone, calcareous , as above. Claystone , as above.		
2355	60 40	Claystone, calcareous , as above. Claystone , as above.		
2360	60 40	Claystone, calcareous , as above. Claystone , as above.		
2365	55 45	Claystone, calcareous , as above, trace forams, trace - 5% quartz silt, grading to very fine quartz grains, subrounded, isolated vcL translucent quartz grain, angular, Claystone , as above.		
2370	40 60	Claystone, calcareous , as above. Claystone , as above, trace very fine disseminated and pyrite, nil - trace micro-micaceous flakes.		
2375	60 40	Claystone, calcareous , as above, soft-very soft, amorphous, common soft-firm sub blocky, trace forams, silty in part, 1-5% quartz silt with nil-trace very fine (cfL) to very fine (vfU) quartz grains. Claystone , as above, trace very fine disseminated and		

ZANEGREY-1 ST1 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
		pyrite, nil - trace micro-micaceous flakes.		
2380	40	Claystone, calcareous , very light grey to medium light grey, very soft to soft, amorphous, dispersive, common soft-firm, subblocky, 1 - 5% calcisiltite, 20 - 35% calcareous matrix grading to Claystone , trace forams, trace micro-micaceous flakes, trace very fine disseminated pyrite, nil to occasional trace very fine carbonaceous flakes.		
	60	Claystone , very light grey - medium grey, medium dark grey, soft, dispersive, to moderately firm, sub-blocky, silty in places trace – 5% quartz silt, with nil-trace very fL-vfU, quartz grains, isolated vcL angular quartz, 1 - 5% calcisiltite, 10 - 20% calcareous matrix, grading to Calcareous Claystone , nil to occasional trace very fine carbonaceous flakes, trace very fine disseminated pyrite, trace micro-micaceous flakes.		
2385	30	Claystone, calcareous , as above, less amorphous, predominantly, isolated very light grey quartz pebble, rounded.		
	70	Claystone , as above, trace very fine disseminated and nodular pyrite, nil - trace micro-micaceous flakes, isolated very fine glauconite grain.		
2390	20	Claystone, calcareous , as above.		
	80	Claystone , as above, less amorphous, predominantly less silty, trace forams.		
2395	30	Claystone, calcareous , as above, trace light brownish grey to olive grey.		
	65	Claystone , as above, less amorphous, predominantly less silty, trace forams.		
	5	Siltstone , dark grey-olive black, moderately hard-hard, blocky – angular fragments, abundant carbonaceous matter, very calcareous.		
2400	30	Claystone, calcareous , as above,		
	70	Claystone , as above, increasingly amorphous, , less silty, trace light brownish grey to olive grey silty claystone, trace forams, trace disseminated pyrite, (5% cement contamination cavings).		
2405	40	Claystone, calcareous , as above.		
	60	Claystone , light olive grey-very light grey, occasionally medium grey, trace pale yellowish brown, predominantly very soft, amorphous, dispersive, occasionally soft to moderately firm, sub-blocky, trace silty in places, grading to Calcareous Claystone , trace very fine carbonaceous flakes and laminar, trace very fine disseminated pyrite, trace micro-micaceous flakes. Isolated very fine glauconite grains.		
2410	50	Claystone, calcareous , as above, 1–2% calcisiltite		
	50	Claystone , as above, predominantly -commonly amorphous, isolated very fine glauconite grains.		
2415	40	Claystone, calcareous , as above.		
	60	Claystone , as above, soft, occasionally amorphous, silty, grading into siltstone in places, trace carbonaceous		

ZANEGREY-1 ST1 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
		flakes and laminar, trace disseminated pyrite, trace forams.		
2420	50 50	Claystone, calcareous , as above. Claystone , as above, soft-firm, slightly amorphous in places, less silty, trace forams.		
2425	50 50	Claystone, calcareous , very light grey to light olive grey, medium light grey, very soft to soft, amorphous, dispersive, common soft-firm, subblocky, 1 - 5% calcisiltite, 20 - 35% calcareous matrix grading to Claystone , trace forams, trace micro-micaceous flakes, trace very fine disseminated pyrite, trace very fine carbonaceous flakes. Claystone , light olive grey-very light grey, occasionally medium grey, trace pale yellowish brown, soft, predominantly sub-blocky, occasionally amorphous, trace silty in places, 1 - 5% calcisilt, 5 - 20% calcareous matrix grading to Calcareous Claystone , trace very fine carbonaceous flakes and laminar, trace very fine disseminated pyrite, trace micro-micaceous flakes, trace forams, trace brownish grey, olive grey, mottled in part, firm, occasionally moderately hard, blocky, silty, 1 - 10% calcisilt, 10 - 30% calcareous matrix, grading to Siltstone .		
2430	60 40	Claystone, calcareous , as above with trace brownish grey, olive grey, mottled in part, firm, occasionally moderately hard, blocky-angular fragments, silty, 1 - 10% calcisilt, 20 - 30% calcareous matrix, grading to Claystone , trace disseminated and nodular pyrite.		
2435	50 50	Claystone, calcareous , as above, very soft-soft, predominantly amorphous, commonly , Claystone , as above.		
2440	40 60	Claystone, calcareous , as above. Soft to firm, predominantly sub blocky, Claystone , as above.		
2445	30 70	Claystone, calcareous , as above. Very soft-soft, predominantly amorphous, commonly sub blocky, Claystone , as above, trace-3% brownish grey, olive grey, mottled in part, firm, occasionally moderately hard, blocky, silty, 1 - 10% calcisilt, 10 - 30% calcareous matrix, grading to Siltstone .		
2450	30 70	Claystone, calcareous , as above. Very soft-soft, predominantly amorphous, occasionally , nil-trace silty in part, trace-brownish grey, olive grey, mottled in part, firm, occasionally moderately hard, blocky, silty, 1 - 10% calcisilt, grading to Siltstone , Claystone , as above.		
2455	30 70	Claystone, calcareous , as above Claystone , light olive grey-very light grey, occasionally medium grey, trace pale yellowish brown, soft, predominantly sub-blocky, occasionally amorphous, trace silty in places, 1 - 5% calcisilt, 5 - 20% calcareous matrix grading to Calcareous Claystone , trace very fine		

ZANEGREY-1 ST1 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
		carbonaceous flakes and laminar, trace very fine disseminated pyrite, trace micro-micaceous flakes, trace forams, 40% brownish grey, olive grey, mottled in part, firm, occasionally moderately hard, blocky, silty, silt-very fl quartz grains, 5 - 20% calcareous matrix, grading to Siltstone , trace very fine carbonaceous flakes.		
2460	40 60	Claystone, calcareous , as above. predominantly soft,, slightly amorphous. Claystone , as above, 5% silty brownish grey –olive grey hard blocky fragments.		
2465	30 70	Claystone, calcareous , very light grey to light olive grey, medium grey, very soft, , increasingly amorphous, 1 - 5% calcisiltite, 20 - 35% calcareous matrix grading to Claystone , trace forams, trace micro-micaceous flakes, trace very fine disseminated pyrite, trace very fine carbonaceous flakes. Claystone , as above, predominantly very soft, , increasingly amorphous, 1% silty brownish grey-light grey blocky fragments.		
2470	30 70	Claystone, calcareous , very light grey to light olive grey, medium light grey, very soft to soft, amorphous, dispersive, common soft-firm, subblocky, 1 - 5% calcisiltite, 20 - 35% calcareous matrix grading to Claystone , trace forams, trace micro-micaceous flakes, trace very fine disseminated pyrite, trace very fine carbonaceous flakes. Claystone , light olive grey-very light grey, trace pale yellowish brown, soft, predominantly sub-blocky, slightly amorphous, commonly silty (10%), 1 - 5% calcisilt, 5 - 20% calcareous matrix grading to Calcareous Claystone , trace very fine carbonaceous flakes and laminar, trace very fine disseminated pyrite, trace micro-micaceous flakes, trace forams and fossils, trace glauconite, 10% brownish grey, olive grey, firm-moderately hard, friable in parts, blocky, silty, silt-very fl quartz grains, 5 - 20% calcareous matrix, grading to Siltstone , trace very fine carbonaceous flakes. 1% silty brownish grey –olive grey hard blocky fragments	31.2	1.1
2475	40 60	Claystone, calcareous , as above. Claystone , as above, predominantly soft, , slightly amorphous, commonly silty (30%), trace glauconite grain, trace forams, fossils, trace pyrite		
2480	35 60 5	Claystone, calcareous , as above. Claystone , as above, predominantly soft, slightly amorphous, commonly silty (10%), trace glauconite grain, trace forams, fossils, isolated translucent cU angular quartz grain fragment. Marl , white - very light grey, soft, blocky to amorphous, 35 - 45% calcareous matrix, grading to Calcareous Claystone , trace carbonaceous flecks.	30.0	1.1
2485	40 50	Claystone, calcareous , as above. Claystone , light olive grey-very light grey, trace pale		

ZANEGREY-1 ST1 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
		yellowish brown, soft, predominantly sub-blocky, slightly amorphous, commonly silty (10%), 1 - 5% calcisilt, 5 - 20% calcareous matrix grading to Calcareous Claystone , trace very fine carbonaceous flakes and laminar, trace very fine disseminated pyrite, trace micro-micaceous flakes, trace forams and fossils, trace glauconite , 10% brownish grey, olive grey, firm-moderately hard, friable in parts, blocky, silty, silt-very fL quartz grains, 5 - 20% calcareous matrix, grading to Siltstone , trace very fine carbonaceous flakes. Marl , as above.		
2490	45 35 20	Claystone, calcareous , as above. Claystone , trace glauconite, silty, with very fL-vfU quartz grains, grading to argillaceous sandstone. Marl , white - very light grey, with green (glauconite) staining, soft, blocky to amorphous, 35 - 45% calcareous matrix, grading to Calcareous Claystone .		
2495	50 30 20 5 5	Claystone, calcareous , as above. Claystone , as above, Marl , as above Siltstone, calcareous , light brown to brownish grey, firm, friable, to hard, abundant (20 - 30%) calcareous matrix/cement, trace very fine subangular subspherical quartz grains, trace glauconite, grading into Sandstone . Sandstone, calcareous , pale yellowish brown, brownish grey-dark yellowish brown, firm to moderately hard, silt-vfU, predominantly very fL-vfU, subrounded, common loose quartz grains, abundant silty matrix, calcareous matrix/cement, grading into Siltstone in places, poor vis porosity, trace very fine trace glauconite, trace carbonaceous flakes, no show.		
2500	55 30 10 5	Claystone, calcareous , very light grey to light olive grey, medium grey, very soft to soft, ,1 - 5% calcisiltite, 20 - 35% calcareous matrix grading to Claystone , trace forams, trace micro-micaceous flakes, trace very fine disseminated pyrite, trace very fine carbonaceous flakes. Claystone , as above. Marl , as above. Siltstone, calcareous , as above, with very fL quartz grains.		
2505	65 30 5	Claystone, calcareous , as above, increasingly arenaceous with very fL quartz grains, trace glauconite Claystone , as above, Marl , as above		
2510	65 30 5	Claystone, calcareous , as above, increasingly arenaceous with very fL quartz grains, increasing trace glauconite Claystone , as above, Siltstone, calcareous , light brown to brownish grey, soft-firm, friable, calcareous matrix/cement, trace very fine subangular subspherical quartz grains, trace		

ZANEGREY-1 ST1 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
		glauconite,		
2515	70	Claystone, calcareous , very light grey to light olive grey, very soft to soft, amorphous, 20 - 35% calcareous matrix, grading to Marl and Claystone , arenaceous with very fL-vfU quartz grains, trace forams, trace micaceous flakes, trace very fine disseminated pyrite, trace very fine carbonaceous flakes, trace-rare glauconite.		
	30	Claystone , as above.		
2520	60	Claystone , brownish grey, moderate yellowish brown, speckled and stained with green glauconite, soft, amorphous, trace firm, blocky, 5 - 15% calcisilt, 5 - 20% calcareous matrix, abundant glauconite (up to 35%) in part grading to Glaucanitic Claystone and Glaucanitic Calcareous Claystone , trace very fine disseminated pyrite.		
	20	Greensand , dark yellowish green to dusky green in a white to moderate yellowish brown matrix, soft, amorphous, loose in part, 50 - 75% glauconite, very fine to coarse grained (vfU-cU), loose glauconite grains in part, trace nodular glauconite, trace - 20% quartz silt and sand, 10 - 20% calcareous matrix, trace shell fragments, nil visual porosity.		
	20	Siltstone, argillaceous , dark brownish grey, soft, friable, with 20-30% clay matrix, 10% very fine quartz sand, 5-20% medium to coarse glauconite grains and diffuse glauconite patches, trace very fine white mica, nil visual porosity. Note: abundant cavings up to 40%		
2525	70	Claystone , as above.		
	20	Greensand , as above.		
	10	Siltstone, argillaceous , as above.		
2530	70	Claystone , brownish grey, moderate to dark yellowish brown, olive grey, speckled and stained with green glauconite, mottled in part, soft, dispersive, generally amorphous, 5 - 15% calcisilt, 5 - 20% calcareous matrix, abundant glauconite (up to 35%) in part grading to Glaucanitic Claystone and Glaucanitic Calcareous Claystone , commonly arenaceous with very fL-vfU quartz grains grading to Argillaceous Sandstone , trace very fine disseminated and coarse nodular pyrite, trace fine glauconite in part.		
	10	Greensand , dark yellowish green to dusky green in a white to light grey matrix, soft, loose in part, very fine to medium quartz grains (very fL-mL), commonly silty, 20 - 35% glauconite grains (fL-fU), loose glauconite grains in part, 20 - 40% quartz sand, 10 - 20% calcareous matrix, trace shell fragments, nil visual porosity.		
	20	Siltstone, argillaceous , dark brownish grey, soft, amorphous, friable in part, 20-30% clay matrix, 10-20% very fine quartz sand, 5-20% medium to coarse glauconite grains and diffuse glauconite patches, trace		

ZANEGREY-1 ST1 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
		very fine white mica, nil visual porosity. Note: abundant cavings up to 25%		
2535	65 10 20 5	Claystone , as above. Greensand , as above. Siltstone, argillaceous , dark brownish grey, soft, amorphous, friable in part, 20-30% clay matrix, 10-20% very fine to fine quartz sand, 5-20% medium to coarse glauconite grains and diffuse glauconite patches, trace very fine white mica, nil visual porosity. Sandstone , dark brownish grey, soft, amorphous, transparent to translucent, occasionally frosted, yellowish orange, loose quartz grains, very fL-fU, predominantly vfU, moderately sorted, rounded to subangular, 20-30% clay matrix, silty grading to Argillaceous Sandstone and Argillaceous Siltstone , no show, poor inferred porosity. Note: cavings up to 20%		
2540	80 5 10 5	Claystone , as above. Greensand , as above. Siltstone, argillaceous , as above. Sandstone , as above. Note: cavings up to 15%		
2545	90 5 Trace	Claystone , brownish grey, dark yellowish orange, moderate to dark yellowish brown, olive grey, speckled and stained with green glauconite, mottled in part, soft, dispersive, generally amorphous, 5 - 10% calcisilt, 5 - 20% calcareous matrix, abundant glauconite (up to 35%) in part grading to Glaucinitic Claystone and Glaucinitic Calcareous Claystone , commonly arenaceous with very fL-vfU quartz grains grading to Argillaceous Sandstone , trace very fine disseminated and coarse nodular pyrite, trace fine glauconite in part. Greensand , brownish grey, dark yellowish green to dusky green, dark yellowish orange, soft, amorphous, occasionally moderately firm, very fine to medium quartz grains (very fL-mL), predominantly very fL-vfU, commonly silty, moderately well sorted, subangular-subrounded, 30-70% quartz sand, becoming less glauconitic, grading into a Glaucinitic Sandstone, commonly in a white to light grey matrix, 10 - 20% calcareous matrix, trace loose quartz grains, fL-mL subrounded, 5 - 20% glauconite grains (Predominantly fL-fU, occasionally cL), loose glauconite grains in part, poor visual porosity. Siltstone argillaceous , as above. Sandstone , as above. Note: cavings up to 10%		
2550	90 5 5 Trace	Claystone , as above. Greensand , as above. Siltstone, argillaceous , as above. Sandstone , as above. Note: cavings up to 10%		

ZANEGREY-1 ST1 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
2555	70	Claystone , dark yellowish orange, moderate to dark yellowish brown, speckled with green glauconite in part, soft, dispersive, generally amorphous, arenaceous with 5-15% very fL-vfU quartz grains, trace-5% calcisilt in part, trace calcareous matrix, trace very fine disseminated and coarse nodular pyrite, nil to trace glauconite.		
	10	Siltstone, argillaceous , white, cream, dark yellowish orange, moderate to dark yellowish brown, soft, amorphous, friable in part, 20-30% clay matrix, 10-20% very fine to fine quartz sand, 5-10% medium to coarse glauconite grains, nil visual porosity.		
	20	Sandstone , transparent to translucent, occasionally frosted, trace very light orange brown and yellowish orange stain, loose quartz grains, very fL-vcU, predominantly fU-mU, moderately sorted, subangular, argillaceous in part (20-40% matrix), white, cream, dark yellowish orange, moderate to dark yellowish brown, soft, amorphous, silty grading to Argillaceous Sandstone and Argillaceous Siltstone , no show, poor to good inferred porosity.		
2560	50	Claystone , dark yellowish orange, moderate to dark yellowish brown, soft, dispersive, generally amorphous, arenaceous with 5-15% silt and very fL-vfU quartz grains, trace-5% calcareous matrix, trace very fine disseminated and very coarse nodular pyrite.		
	30	Siltstone , as above.		
	20	Sandstone , as above.		
2565	40	Claystone , light olive grey, light brownish grey to moderate brown, minor dark yellowish brown, soft, amorphous, minor quartz silt, nil - slightly calcareous.		
	20	Siltstone , as above.		
	30	Sandstone , loose quartz grains, very light grey, clear to translucent grains, occasionally frosted, trace very light orange/brown (iron stained), fine to very coarse grained (very fL-vcL), predominantly medium to very coarse grained (mL-cl), sub rounded to rounded, occasionally angular, moderate to high sphericity, poorly sorted quartz, cU pyrite nodules, no show.		
2570	70	Sandstone , loose quartz grains, predominantly translucent, common clear, very light grey, occasionally frosted, trace yellowish orange stain, fine to very coarse grained (fU-vcU), predominantly (mL-cl), poorly sorted, sub rounded to rounded, occasionally angular, moderate to high sphericity, trace coarse pyrite nodules, very good inferred porosity, no show.		
	10	Claystone , as above.		
	20	Siltstone , as above.		
2575	90	Sandstone , as above		
	10	Siltstone argillaceous , dark yellowish orange, moderate yellowish brown, brownish grey, very soft-soft, amorphous, nil- slightly calcareous cement, arenaceous		

ZANEGREY-1 ST1 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
		with 5-20% very fine to fine sandstone, trace carbonaceous flakes.		
2580	70	Sandstone , as above, fL-vcU, predominantly mU-cU, rounded-subrounded, commonly fractured quartz grains, moderately to well sorted, very good inferred porosity, no fluorescence or cut		
	30	Siltstone argillaceous , as above.		
2585	60	Sandstone , as above, very good inferred porosity no fluorescence or cut.		
	20	Siltstone, argillaceous , as above		
	20	Claystone , predominantly white to light grey, light brownish grey to dark yellowish brown, soft, amorphous, washing out, trace-10% quartz silt and sand grains, non-calcareous.		
	Trace	Coal , brownish black, firm-moderately hard, sub blocky, earthy to sub vitreous lustre.		
2590	80	Sandstone , as above, very good inferred, porosity no fluorescence or cut.		
	10	Siltstone, argillaceous , as above		
	5	Claystone , as above.		
	5	Coal , as above		
2595	90	Sandstone , as above, abundant pyritic cement in part, very good inferred porosity, no fluorescence or cut.		
	5	Siltstone, argillaceous , as above		
	5	Claystone , as above.		
	Trace	Coal , as above		
2600	100	Sandstone , as above, fU-vcU, predominantly mL-cL, very good inferred porosity, no fluorescence or cut.		
2605	30	Sandstone , as above, fU-vcU, predominantly mL-cL, very good inferred porosity, no fluorescence or cut.		
	70	Claystone , predominantly white to light grey, light brownish grey to dark yellowish brown, soft, amorphous, washing out, trace-20% quartz silt and sand grains, non-calcareous. Note: claystone washing out in drilling mud. Losing mud over shakers.		
2610	90	Sandstone, as above.		
	10	Claystone, as above.		
2615	100	Sandstone, as above.		
2620	70	Sandstone , loose quartz grains, predominantly translucent-frosted, very light grey, occasionally clear, trace opaque, trace very pale orange (stain), vfU-vcL, predominantly mU-cL, moderately sorted, predominantly sub angular to angular, common subrounded-rounded coarse grains, very good inferred porosity, no fluorescence or cut.		
	20	Siltstone , greyish brown, dark yellowish brown, dark yellowish orange, soft, friable, crumbly, washing out, 5-20% argillaceous matrix grading to Silty Claystone , micaceous, trace carbonaceous material and laminae, minor very fine quartz grains.		
	10	Claystone , predominantly white to light grey, light		

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Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
		brownish grey to dark yellowish brown, soft, amorphous, washing out, trace-20% quartz silt and sand grains, grading to Siltstone in part, non-calcareous. Note: claystone and siltstone washing out in drilling mud. Losing mud over shakers.		
2625	40	Sandstone , as above, fL-pebbles, predominantly mL-cl., moderately sorted, predominantly sub angular to angular, common subrounded-rounded coarse grains with angular fractures, trace pyrite cemented aggregates, very good inferred porosity, no fluorescence or cut.		
	20	Siltstone , as above, minor very fine quartz grains and grading into fine Argillaceous Sandstone in part, common to abundant carbonaceous material.		
	40	Claystone , predominantly white to light grey, light brownish grey to moderate brown, dark yellowish orange in part, soft, dispersive, generally amorphous, washing out, silty with trace – 20% quartz silt, grading to Siltstone in part, trace carbonaceous material, carbonaceous laminae, trace pyrite, trace to rare very fine to fine quartz grains, non calcareous. Note: claystone and siltstone washing out in drilling mud. Losing mud over shakers.		
2630	50	Sandstone , as above.		
	30	Siltstone , as above.		
	20	Claystone , as above.		
2635	90	Sandstone , loose quartz grains, predominantly translucent-frosted, occasionally clear, trace opaque, trace very pale orange, fL-pebbles, predominantly mL-cl., moderately sorted, predominantly sub angular to angular, common subrounded-rounded coarse grains with angular fractures, trace pyrite cemented aggregates, very good inferred porosity no fluorescence or cut.		
	5	Claystone , as above.		
	5	Siltstone argillaceous, as above		
2640	100	Sandstone , as above.		
2645	100	Sandstone , as above, fL-pebbles, predominantly mL-cl.		
2650	70	Sandstone , as above, fL-pebbles, predominantly mL-cl.		
	20	Siltstone argillaceous , cream, greyish brown, moderate to dark yellowish brown, dark yellowish orange, soft, friable, sub-blocky, washing out, 20-30% argillaceous matrix, micaceous, abundant carbonaceous material, laminae, and partings, arenaceous with 5-10% very fine to fine quartz grains, trace coarse pyrite nodules.		
	10	Claystone , predominantly white to light grey, light brownish grey to moderate brown, dark yellowish orange in part, soft, dispersive, generally amorphous, washing out, silty with trace – 20% quartz silt, grading to Siltstone in part, trace carbonaceous material, carbonaceous laminae, trace pyrite, trace to rare very fine to fine quartz grains, non calcareous. Note: claystone and siltstone washing out in drilling mud. Losing mud over shakers		

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Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
2655	60 25 15	<p>Sandstone, loose quartz grains, predominantly translucent-frosted, very light grey, occasionally clear, trace opaque, trace – 5% very pale orange, dark yellowish orange clay coating and stain in part, fine to very coarse grained (fL-vcU), predominantly mL-cl, poorly sorted, predominantly sub angular to angular, common subrounded-rounded coarse grains with angular fractures, trace pyrite cemented aggregates, trace coarse mica flakes (muscovite), very good inferred porosity, no fluorescence or cut.</p> <p>Siltstone, argillaceous, greyish brown, moderate to dark yellowish brown, dark yellowish orange, soft, friable, sub-blocky, washing out, 20-30% argillaceous matrix, micaceous, abundant carbonaceous material and laminae, arenaceous with 5-10% very fine to fine quartz grains, trace coarse pyrite nodules, non calcareous.</p> <p>Claystone, predominantly white to light grey, light brownish grey to moderate brown, dark yellowish orange in part, soft, dispersive, generally amorphous, washing out, silty with trace – 20% quartz silt, grading to Siltstone in part, trace carbonaceous material, carbonaceous laminae, trace pyrite, trace to rare very fine to fine quartz grains, non calcareous.</p> <p>Note: claystone and siltstone washing out in drilling mud. Losing mud over shakers</p>		
2660	70 20 10	<p>Sandstone, as above.</p> <p>Siltstone, argillaceous, as above.</p> <p>Claystone, as above.</p> <p>Note: claystone and siltstone washing out in drilling mud. Losing mud over shakers</p>		
2665	70 10 20 Trace	<p>Sandstone, as above, stained grains in part, increase in coarse grain, predominantly vfU-cl, no fluorescence or cut.</p> <p>Siltstone, argillaceous, greyish brown, moderate to dark yellowish brown, dark yellowish orange, soft, friable, sub-blocky, washing out, 20-30% argillaceous matrix, micaceous, abundant carbonaceous material and laminae, arenaceous with 5-10% very fine to fine quartz grains, interlaminated with claystone, trace coarse pyrite nodules, non calcareous.</p> <p>Claystone, white to light grey, light brownish grey to moderate brown, dark yellowish orange, interlaminated, soft, dispersive, generally amorphous, sub blocky in part, washing out, silty with trace – 20% quartz silt, grading to Siltstone in part, trace-5% carbonaceous material, carbonaceous laminae and partings, trace pyrite, trace to rare very fine to coarse quartz grains, non calcareous.</p> <p>Coal, as above</p> <p>Note: claystone and siltstone washing out in drilling mud. Losing mud over shakers</p>		
2670	80 10	<p>Sandstone, as above.</p> <p>Siltstone, argillaceous, as above.</p>		

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Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
	10	Claystone , as above.		
2675	70	Sandstone , as above.		
	20	Siltstone, argillaceous , as above.		
	10	Claystone , as above.		
2680	80	Sandstone , as above.		
	10	Siltstone, argillaceous , as above.		
	10	Claystone , as above.		
2685	80	Sandstone , loose quartz grains, translucent-frosted, very light grey, occasionally clear, trace opaque, trace very pale orange, dark yellowish orange clay coating and stain in part, fine to very coarse grained (fU-vcU), predominantly medium to coarse (mU-cL), poorly sorted, predominantly sub angular to angular, common subrounded-rounded coarse grains with angular fractures, trace pyrite cemented aggregates, trace coarse mica flakes (muscovite), very good inferred porosity, no fluorescence or cut.		
	20	Siltstone, argillaceous , moderate to dark yellowish brown, dark yellowish orange, soft, friable, sub-blocky, washing out, 20-30% argillaceous matrix, micaceous, abundant carbonaceous material and laminae, arenaceous with 5-10% very fine to medium quartz grains, interlaminated with claystone, trace coarse pyrite nodules, non calcareous.		
2690	70	Sandstone , as above, fine to very coarse grained (fU-vcU), predominantly medium to coarse (mU-cL), very good inferred porosity, no fluorescence or cut.		
	30	Siltstone, argillaceous , as above.		
2695	90	Sandstone , as above, fine to very coarse grained (fU-vcU), predominantly medium to coarse (mU-cL), very good inferred porosity, no fluorescence or cut.		
	10	Siltstone, argillaceous , as above.		
2700	95	Sandstone , as above, no fluorescence or cut.		
	5	Siltstone, argillaceous , as above.		
2705	95	Sandstone , loose quartz grains, translucent-frosted, very light grey, occasionally clear, trace opaque, trace very pale orange stain in part, fine to very coarse grained (fU-vcL), broken grains, predominantly medium to coarse (fU-cU), (pebbly), poorly sorted, predominantly sub angular to angular, common subrounded-rounded coarse grains with angular fractures, trace pyrite cemented aggregates and nodules, trace mica flakes, very good inferred porosity, no fluorescence or cut.		
	5	Siltstone, argillaceous , as above.		
2710	90	Sandstone , as above, pebbly, increasing pyritic cement and fine grained pyrite at 2706m, trace very fine dark grey to black lithics, no fluorescence or cut.		
	10	Siltstone, argillaceous , as above. Note: claystone and siltstone washing out in drilling mud. Losing mud over shakers.		
2715	30	Sandstone , as above, pebbly, increasing pyritic cement and fine grained pyrite at 2706m, trace very fine dark		

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Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
	30	grey to black lithics, no fluorescence or cut. Siltstone, argillaceous , white, moderate to dark yellowish brown, dark yellowish orange, soft, dispersive, sub-blocky, washing out, 20-30% argillaceous matrix, micaceous, abundant carbonaceous material and laminae, arenaceous in places, trace coarse pyrite nodules, non calcareous.		
	40	Claystone , white, moderate to dark yellowish brown, soft, dispersive, washing out, silty with trace – 20% quartz silt, trace pyrite, trace very fine to fine quartz grains, non calcareous. Note: claystone and siltstone washing out in drilling mud. Significantly under represented in sample. Losing mud over shakers.		
2720	40	Sandstone , loose quartz grains, translucent-frosted, very light grey, occasionally clear, trace opaque, isolated very pale orange (stain), (fU-cU), predominantly (mL-cL), moderately well sorted, angular-sub angular, common sub rounded-rounded coarse grains with angular fractures, trace disseminated and coarse pyrite nodules, good inferred porosity, no fluorescence or cut.		
	30	Siltstone, argillaceous , as above.		
	30	Claystone , as above. Note: claystone and siltstone washing out in drilling mud. Significantly underrepresented in sample. Losing mud over shakers.		
2725	70	Sandstone , as above, fL-vcU, predominantly (mL-cU), good inferred porosity, no show.		
	10	Siltstone, argillaceous , as above.		
	20	Claystone , as above.		
2730	50	Sandstone , as above, very fL-pebbles, predominantly (fU-cL), good inferred porosity, no show.		
	20	Siltstone, argillaceous , as above.		
	30	Claystone , white, moderate to dark yellowish brown, soft, dispersive, washing out, silty with trace – 15% quartz silt, trace pyrite, trace very fine to fine quartz grains, non calcareous.		
2735	40	Sandstone , as above, very fL-pebbles, predominantly (mL-cU), fair-good inferred porosity, no show		
	30	Siltstone, argillaceous , olive grey, light brownish grey, pale yellowish brown, soft, dispersive, sub-blocky, washing out, 20-30% argillaceous matrix, micaceous, trace-abundant carbonaceous material and laminae, very arenaceous in places with very fL quartz grains, trace coarse pyrite nodules, non calcareous.		
	30	Claystone , as above.		
2740	40	Sandstone , as above, very fL-pebbles, predominantly (mL-cU), trace pyrite, fair-good inferred porosity, no show		
	40	Siltstone, argillaceous , dark yellowish brown, light brownish grey, pale yellowish brown, soft, sub-blocky, commonly dispersive, washing out, 20-30% argillaceous matrix, micaceous, trace-abundant carbonaceous		

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Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
	20	material and laminae, arenaceous in places, trace coarse pyrite nodules, non calcareous. Claystone , as above.		
2745	5	Sandstone , as above, fU-cU, predominantly (mL-mU), fair inferred porosity, no show.		
	45	Siltstone, argillaceous , moderate to dark yellowish brown, light brownish grey, pale yellowish brown, soft, sub-blocky, commonly amorphous and dispersive, washing out, 20-30% argillaceous matrix, micaceous, trace-abundant carbonaceous material and laminae, trace coarse pyrite nodules, non calcareous.		
	10	Claystone , as above.		
	40	Coal , brownish black to black, firm, occasionally soft, sub blocky-subfissile, sub vitreous lustre, earthy in places.		
2750	5	Sandstone , loose quartz grains, translucent-frosted, very light grey, pale orange (stain) (vfU-cU), predominantly (fU-mU), moderately sorted, sub rounded-sub angular, coarse grains with angular fractures, trace disseminated and coarse pyrite nodules, fair inferred porosity, no fluorescence or cut.		
	65	Siltstone, argillaceous , as above.		
	10	Claystone , greyish white-olive grey, moderate yellowish brown, soft, amorphous, dispersive, washing out, silty with trace – 20% quartz silt, trace carbonaceous specks and , non calcareous.		
	20	Coal , brownish black to black, firm, occasionally soft, sub blocky-subfissile, sub vitreous lustre, earthy in places.		
2755	5	Sandstone , predominantly loose quartz grain, very fL-vcU, predominantly (mL-cL), trace aggregates, very fL-mU, poorly sorted, sub angular, poor inferred porosity, 10-30% silty yellowish brown matrix, trace carbonaceous flakes, no show		
	65	Siltstone, argillaceous , as above.		
	20	Claystone , as above		
	10	Coal , as above		
2760	10	Sandstone , predominantly loose coarse quartz grain, translucent-frosted, trace transparent, pale orange (stain) mU-pebbles, predominantly (vcL-vcU), moderately well sorted, subrounded-rounded, common angular fractures, increase in pyrite nodules and trace pyrite cement, fair inferred porosity, no show.		
	70	Siltstone, argillaceous , as above.		
	20	Claystone , as above.		
	Trace	Coal , as above.		
2765	5	Sandstone , as above, mL-pebbles, predominantly (mU-cL), less pyrite nodules, trace aggregates, very fL-mU, poorly sorted, sub angular, 10-20% silty yellowish brown matrix, trace carbonaceous flakes, no show.		
	70	Siltstone, argillaceous , moderate to dark yellowish brown, light brownish grey, pale yellowish brown, soft, sub-blocky, slightly amorphous, 20-30% argillaceous matrix, micaceous, abundant carbonaceous material and		

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Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
	20 5	laminae, trace coarse pyrite nodules, non calcareous. Claystone , as above. Coal , as above.		
2770	20 20 55 5	Sandstone , predominantly loose coarse quartz grain, translucent-frosted, trace transparent, very fL-vcU, predominantly (fU-cL), poorly sorted, sub angular, fair inferred porosity, no show. Siltstone, argillaceous , as above. Claystone , white-greyish white, pale yellowish brown, soft, amorphous, dispersive, washing out, very arenaceous with 10 – 40% vfU-fL quartz grains, subrounded, well sorted, grading to Argillaceous Sandstone , trace carbonaceous specks and , trace disseminated pyrite, non calcareous. Coal , as above.		
2775	60 5 35 Trace	Sandstone , loose coarse quartz grain, transparent-translucent-frosted, fU-vcL, predominantly (fU-mU), well sorted, subrounded, common angular fractures, trace pyrite nodules, very good visual porosity, no show. Siltstone, argillaceous , as above. (possible cavings) Claystone , as above Coal , as above.		
2780	65 25 10	Sandstone , as above, very fL-vcU, predominantly (mL-cL), trace pyrite nodules, very good visual porosity no show. Claystone , as above. Coal , black to brownish black, firm-moderately hard, sub splintery-subfissile, sub bituminous.		
2785	40 30 30	Sandstone , as above, vL-vcU, predominantly (mL-cL), moderately well sorted, sub rounded-sub angular, trace pyrite nodules, occasional trace pyrite cement, very good visual porosity, no show. Claystone , as above, still arenaceous. Coal , black to brownish black, firm-moderately hard, sub splintery-subfissile, sub bituminous.		
2790	10 65 20 5	Sandstone , as above, vfU-pebbles, predominantly (mL-cL), moderately sorted, sub rounded-sub angular, trace pyrite nodules, fair visual porosity, no show. Siltstone, argillaceous , moderate to dark yellowish brown, light brownish grey, pale yellowish brown, soft, sub-blocky, slightly amorphous, 15-25% argillaceous matrix, grading to Claystone in places, micaceous, abundant carbonaceous material and laminae, non calcareous. Claystone , pale yellowish brown, greyish white soft, amorphous, dispersive, washing out, arenaceous in places with trace – 5% vfU-fL quartz grains, subrounded, trace carbonaceous specks and , trace disseminated pyrite, non calcareous. Coal , as above.		
2795	Trace 60	Sandstone , as above, loose quartz grains. Siltstone, argillaceous , as above.		

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Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
	10	Claystone , as above.		
	20	Coal , as above.		
2800	5	Sandstone , loose quartz grains, transparent-translucent, very fL-vcU, predominantly (fU-mU), poorly sorted, sub angular, poor inferred porosity, no show.		
	35	Siltstone, argillaceous , as above.		
	20	Claystone , as above, silty, with trace-2% very fL quartz grains, non calc		
	40	Coal , as above.		
2805	5	Sandstone , as above, loose quartz grains.		
	30	Siltstone, argillaceous , as above.		
	40	Claystone , as above.		
	25	Coal , as above.		
2810	20	Sandstone , as above, loose quartz grains.		
	25	Siltstone, argillaceous , as above.		
	50	Claystone , as above, becoming increasingly yellowish brownish, grading into Siltstone in places.		
	5	Coal , as above.		
2815	15	Sandstone , loose coarse quartz grain, transparent-translucent, opaque, vfU-vcL, predominantly (fU-mL), very well sorted, sub rounded, trace pyrite nodules, very good visual porosity, no show.		
	35	Siltstone, argillaceous , as above.		
	45	Claystone , as above, becoming increasingly white-greyish white, sub amorphous, swelling, increasingly arenaceous.		
	5	Coal , as above.		
2820	5	Sandstone , as above, loose quartz grains, very fL-pebble, predominantly (fL-fU), poor inferred porosity, no show.		
	30	Siltstone, argillaceous , as above.		
	60	Claystone , as above.		
	5	Coal , as above.		
2825	5	Sandstone , as above, loose quartz grains, very fL-pebble, predominantly (fL-fU), poor inferred porosity, no show..		
	30	Siltstone, argillaceous , as above.		
	55	Claystone , as above, amorphous to sub blocky, trace-20% very fL quartz grains, grading into Argillaceous Sandstone in places		
	10	Coal , as above.		
2830	10	Sandstone , as above, loose quartz grains, very fL-vcU, predominantly (fL-fU), poor inferred porosity, no show.		
	25	Siltstone, argillaceous , as above.		
	55	Claystone , white-greyish white, pale yellowish brownish, amorphous to sub blocky, dispersive in places, washing out, arenaceous, trace-20% very fL quartz grains, sub rounded, grading into Argillaceous trace carbonaceous specks and , trace disseminated pyrite, non calcareous.		
	10	Coal , black to brownish black, firm-moderately hard, sub splintery-sub fissile, sub bituminous		
2835	5	Sandstone , as above, loose quartz grains.		

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Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
	30 40 25	Siltstone, argillaceous , as above, very carbonaceous in places, grading into Carbonaceous Siltstone in places. Claystone , as above. Coal , as above.		
2840	Trace 55 45 5	Sandstone , as above, loose quartz grains, trace pyrite cement. Siltstone, argillaceous , moderate to dark yellowish brown, light brownish grey, pale yellowish brown, predominantly soft, occasionally firm, sub-blocky, slightly amorphous, 15-25% argillaceous matrix, grading to Claystone in places, interlaminated with claystone, arenaceous with 5-20% very fine to medium quartz grains, grading into argillaceous Sandstone in places, micaceous, abundant carbonaceous material and laminae, non calcareous. Claystone , as above. Coal , as above		
2845	2 55 43 5	Sandstone , as above, very fL-cL, predominantly (mL), poor inferred porosity, no show. Siltstone, argillaceous , as above. Claystone , as above. Coal , as above		
2850	Trace 75 20 5	Sandstone , as above, very fL-cL, predominantly (mL), poor inferred porosity, no show. Siltstone, argillaceous , as above. Increasing light brownish grey, soft, sub blocky to slightly amorphous, slightly dispersive, interlaminated with claystone, Claystone , as above. Coal , as above		
2855	2 45 48 5	Sandstone , as above, poor inferred porosity, no show. Siltstone, argillaceous , as above. Claystone , as above. Coal , as above		
2860	25 20 50 5	Sandstone , as above, good visual porosity, no show. Siltstone, argillaceous , as above. Claystone , as above. Coal , as above		
2865	65 5 25 5	Sandstone , loose coarse quartz grain, transparent-translucent, very light grey, vfU-cU, predominantly (mL-cL), subangular, moderately well sorted, good visual porosity, no show. Siltstone, argillaceous , as above. Claystone , as above. Coal , black to brownish black, firm-moderately hard, sub splintery-subfissile, sub bituminous		
2870	45 15 20	Sandstone , as above, good visual porosity, no show. Siltstone, argillaceous , as above. Claystone , white-greyish white, common pale yellowish brown, soft, locally dispersive, amorphous to sub blocky, 5-15% very fL quartz grains, sub rounded, commonly grading to argillaceous siltstone, trace-rare carbonaceous specks, trace micromica, nil-trace		

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Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
	20	disseminated pyrite, non calcareous. Coal , as above		
2875	60	Sandstone , as above, poor inferred porosity, trace mineral fluor, no cut, no show.		
	5	Siltstone, argillaceous , as above.		
	5	Claystone , as above.		
	30	Coal , as above.		
2880	5	Sandstone , as above, poor inferred porosity, no show.		
	60	Siltstone, argillaceous , moderate-dark yellowish brown, light to medium brownish grey, soft-firm, sub blocky, locally amorphous, 15-30% argillaceous matrix, grading to claystone in places, trace-rare micro-micaceous, common-abundant carbonaceous specks, flecks and laminar, non calcareous.		
	25	Claystone , as above.		
	10	Coal , as above.		
2885	100	Sandstone , loose, transparent-translucent, very light grey, fine to very coarse grained (fU-vcU), predominantly medium to coarse (mU-cl), subangular to angular (very coarse grains broken), trace carbonaceous partings, moderately well sorted, good visual porosity, no show. Note: Short trip. Heavily contaminated with cavings.		
2890	100	Sandstone , as above, no show.		
2895	80	Sandstone , as above, no show.		
	20	Siltstone, argillaceous , white-greyish white, light to medium brownish grey and brownish black in part, soft, amorphous, to firm in part, 15-30% argillaceous matrix, grading to Silty Claystone in part, trace-rare micro-micaceous, common-abundant carbonaceous specks, laminae and partings, trace coarse pyrite nodules, non calcareous.		
	Trace	Claystone, silty , white-greyish white, soft, dispersive, amorphous, 20-40% silt to very fine (very fL) quartz grains, sub rounded, grading to Argillaceous Siltstone in part, trace-rare carbonaceous specks, trace micromica, nil-trace disseminated pyrite, non calcareous.		
2900	80	Siltstone, argillaceous , as above.		
	20	Claystone, silty , as above.		
2905	50	Siltstone, argillaceous , as above, predominantly white-greyish white.		
	50	Claystone, silty , as above.		
2910	40	Siltstone, argillaceous , as above.		
	60	Claystone, silty , white-greyish white to light brownish grey, finely laminated in part, soft, dispersive, amorphous, to slightly firm, sub blocky, 10-35% silt to very fine (very fL) quartz grains, sub rounded, grading to Argillaceous Siltstone and Claystone in part, trace-rare carbonaceous specks and laminae, trace micromica, nil-trace disseminated pyrite, non calcareous.		
2915	60	Siltstone, argillaceous , white-greyish white, light to medium brownish grey, brownish grey, brownish black in part, soft, amorphous, to firm in part, 15-30%		

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Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
	40	argillaceous matrix, grading to Silty Claystone in part, common to abundant (5-15%) micro-mica in part, trace-abundant carbonaceous specks, laminae and partings, trace coarse pyrite nodules, non calcareous. Claystone, silty , as above.		
2920	75 20 5	Siltstone, argillaceous , as above. Claystone, silty , as above. Coal , black to brownish black, firm-moderately hard, sub splintery-sub fissile, sub bituminous, thin laminae in siltstone in part, very fine pyrite and coarse pyrite nodules.		
2925	60 30 10	Siltstone, argillaceous , predominantly greyish orange to dark yellowish orange and moderate yellowish brown, light to medium brownish grey, brownish grey, brownish black in part, soft, amorphous, to firm in part, 15-30% argillaceous matrix, grading to Silty Claystone in part, common to abundant (5-15%) micro-mica in part, trace-abundant carbonaceous specks, fragments laminae and partings, grading to Carbonaceous Siltstone in part, trace coarse pyrite nodules, non calcareous. Claystone, silty , as above. Coal , as above.		
2930	50 45 5	Siltstone, argillaceous , as above. Claystone, silty , white-greyish white to light brownish grey, dark yellowish orange, finely laminated in part, soft, dispersive, amorphous, to slightly firm, sub blocky, 10-35% silt to very fine (very fL) quartz grains, sub rounded, grading to Argillaceous Siltstone and Claystone in part, trace-common carbonaceous specks and laminae, trace micromica, nil-trace disseminated pyrite, non calcareous. Coal , as above.		
2935	60 30 10	Siltstone, argillaceous , as above. Claystone, silty , as above. Coal , as above.		
2940	20 60 20 Trace	Sandstone , loose, transparent-translucent, very light grey, fine to coarse grained (fU-cU), predominantly medium (mL-mU), subangular to angular, moderately well sorted, good visual porosity, no show. Siltstone, argillaceous , as above. Claystone, silty , as above. Coal , as above.		
2945	10 70 20	Sandstone , as above. Siltstone, argillaceous , as above. Claystone, silty , as above.		
2950	40 40	Sandstone , loose, transparent-translucent, very light grey, fine to very coarse grained (fU-vcU), pebbly, predominantly medium to coarse (mU-cU), subangular to angular (broken very coarse grains), trace well rounded, poorly sorted, trace pyrite cementing grains, good visual porosity, no show. Siltstone, argillaceous , as above.		

ZANEGREY-1 ST1 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
	20	Claystone, silty , as above.		
2955	10	Sandstone , loose, transparent-translucent, very light grey, fine to coarse grained (fU-cU), predominantly fine to medium (fU-mL), subrounded to angular, moderately well sorted, good visual porosity, no show.		
	30	Siltstone, argillaceous , predominantly greyish orange to dark yellowish orange and moderate yellowish brown, light to medium brownish grey, brownish grey, brownish black in part, soft, amorphous, to firm in part, 15-30% argillaceous matrix, grading to Silty Claystone in part, common to abundant (5-15%) micro-mica in part, trace-abundant carbonaceous specks, fragments laminae and partings, grading to Carbonaceous Siltstone in part, trace coarse pyrite nodules, non calcareous.		
	60	Claystone, silty , predominantly white to greyish white, trace light brownish grey and dark yellowish orange, finely laminated in part, soft, dispersive, amorphous, to slightly firm, sub blocky, 10-35% silt to very fine (very fL) quartz grains, grading to Argillaceous Siltstone and Claystone in part, trace-common carbonaceous specks and laminae, trace micromica, nil-trace disseminated pyrite, non calcareous.		
	Trace	Coal , as above.		
2960	20	Sandstone , transparent-translucent, very light grey, loose, consolidated in part, firm, friable, fine to medium grained (fU-cU), predominantly fine to medium (fU-mL), subrounded to angular, moderately well sorted, well sorted in part, good visual porosity, no fluorescence, consolidated grains display a very slow, faint yellowish-blue cut, very faint bluish yellow residual residue.		
	20	Siltstone, argillaceous , as above.		
	20	Claystone, silty , as above.		
	40	Coal , black to brownish black, firm to hard, brittle, splintery-sub fissile, blocky, sub bituminous, very slow yellowish-blue cut, bright, solid bluish yellow residual ring residue.		
2965	10	Sandstone , as above, predominantly very fine to medium (vfU-mL).		
	40	Siltstone, argillaceous , light grey, greyish orange to dark yellowish orange and moderate yellowish brown, light to medium brownish grey, brownish grey, brownish black in part, soft, amorphous, to firm in part, 15-40% argillaceous matrix, grading to Silty Claystone in part, common to abundant (5-15%) micro-mica in part, trace-abundant carbonaceous specks, fragments laminae and partings, grading to Carbonaceous Siltstone in part, trace coarse pyrite nodules, non calcareous.		
	40	Claystone, silty , predominantly white to greyish white, trace light brownish grey and dark yellowish orange, finely laminated in part, soft, dispersive, amorphous, to slightly firm, sub blocky, 10-35% silt to very fine (very fL) quartz grains, grading to Argillaceous Siltstone and		

ZANEGREY-1 ST1 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
	10	Claystone in part, trace-common carbonaceous specks and laminae, trace micromica, nil-trace disseminated pyrite, non calcareous. Coal , as above.		
2970	10 50 30 10	Sandstone , as above. Siltstone, argillaceous , as above. Claystone, silty , as above. Coal , as above.		
2975	20 50 20 10	Sandstone , transparent-translucent, very light grey, loose, consolidated in part, soft-friable, silt - fine grained (very fL-fU), predominantly fine grained (fL-fU), subrounded to subangular, well sorted, trace-10% argillaceous matrix, fair visual porosity, no fluorescence, no cut. Siltstone, argillaceous , as above. Claystone, silty , as above. Coal , as above. Note: fine grained sandstone washing through shakers. Poorly represented in sample.		
2980	30 40 20 10	Sandstone , as above, no fluorescence, no cut. Siltstone, argillaceous , as above. Claystone, silty , as above. Coal , as above. Note: fine grained sandstone washing through shakers. Poorly represented in sample.		
2985	40 40 20 Trace	Sandstone , as above, no fluorescence, no cut. Siltstone, argillaceous , as above. Claystone, silty , as above. Coal , as above. Note: fine grained sandstone washing through shakers. Poorly represented in sample.		
2990	10 50 30 10	Sandstone , as above, no fluorescence, no cut. Siltstone, argillaceous , light grey, greyish orange to dark yellowish orange and moderate yellowish brown, light to medium brownish grey, brownish grey, brownish black in part, soft, amorphous, to firm in part, 15-40% argillaceous matrix, grading to Silty Claystone in part, common to abundant (5-15%) micro-mica in part, trace-abundant carbonaceous specks, fragments laminae and partings, grading to Carbonaceous Siltstone in part, trace coarse pyrite nodules, non calcareous. Claystone, silty , white to greyish white, light brownish grey to dark yellowish brown, soft, dispersive, amorphous, to slightly firm, sub blocky, 10-35% silt to very fine (very fL) quartz grains, grading to Argillaceous Siltstone and Claystone in part, trace-common carbonaceous specks and laminae, trace micromica, nil-trace disseminated pyrite. Claystone , light brownish grey to dark yellowish brown, soft to slightly firm, sub blocky, trace-20% silt, grading to Argillaceous Siltstone in part, trace-abundant (trace-20%) carbonaceous specks, laminae and partings		

ZANEGREY-1 ST1 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
		grading to Carbonaceous Claystone in part, trace micromica, nil-trace disseminated pyrite.		
2995	20 30 30 20 Trace	Sandstone , as above, no fluorescence, no cut. Siltstone, argillaceous , as above. Claystone, silty , as above. Claystone , as above. Coal , as above.		
3000	20 20 20 40 Trace	Sandstone , as above, no fluorescence, no cut. Siltstone, argillaceous , as above. Claystone, silty , as above. Claystone , as above. Coal , as above. Note: fine grained sandstone/siltstone washing through shakers. Poorly represented in sample.		
3005	50 30 10 10 Trace	Sandstone , transparent-translucent, very light grey, pale to dark yellowish orange (stained), loose, consolidated in part, soft-friable, very fine to coarse grained (very fL-cL), predominantly fine to medium (fU-mL), subrounded to angular, moderately well sorted, good visual porosity, no fluorescence, no cut. Siltstone, argillaceous , as above. Claystone, silty , as above. Claystone , as above. Coal , as above.		
3010	20 50 20 10	Sandstone , as above, no fluorescence, no cut. Siltstone, argillaceous , predominantly white to light grey, greyish orange to brownish black in part, soft, amorphous, to firm in part, 15-40% argillaceous matrix, grading to Silty Claystone in part, trace micro-mica in part, trace carbonaceous specks, fragments laminae and partings in part, grading to Carbonaceous Siltstone in part. Claystone, silty , white to greyish white, light brownish grey to dark yellowish brown, soft, dispersive, amorphous, to slightly firm, sub blocky, 10-35% silt to very fine (very fL) quartz grains, grading to Argillaceous Siltstone and Claystone in part, trace-common carbonaceous specks and laminae, trace micromica, nil-trace disseminated pyrite. Claystone , as above.		
3015	90 10 Trace	Sandstone , transparent-translucent, very light grey, pale loose, very fine to coarse grained (very fL-cu), predominantly fine to medium (fU-mU), subrounded to angular, poorly sorted, good visual porosity, no fluorescence, no cut. Siltstone, argillaceous , as above. Coal , as above.		
3020	100	Sandstone , as above, no fluorescence, no cut. Note: drilling in sliding mode. Low ROP.		
3025	100	Sandstone , as above, no fluorescence, no cut. Note: drilling in sliding mode. Low ROP.		
3030	15	Sandstone , loose, transparent-translucent, very light		

ZANEGREY-1 ST1 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
	50	grey, fine to coarse grained (very fL-cU), predominantly fine to medium (fU-mL), sub angular to angular, poorly sorted, poor inferred porosity, no show. Siltstone, argillaceous , as above, light grey, dark grey, olive black, dark yellowish brown.		
	35	Claystone , as above.		
3035	15	Sandstone , as above, no fluorescence, no cut.		
	30	Siltstone, argillaceous , as above.		
	50	Claystone, silty , white to greyish white, light brownish grey to dark yellowish brown, soft, dispersive, amorphous, to slightly firm, sub blocky, 10-35% silt to very fine (very fL) quartz grains, grading to Argillaceous Siltstone and Claystone in part, trace-common carbonaceous specks and laminae, trace micro-mica, nil-trace disseminated pyrite.		
	5	Coal , as above.		
3040	10	Sandstone , as above, very fL-pebbles, no fluorescence, no cut.		
	60	Siltstone, argillaceous , light grey, dark yellowish orange to moderate yellowish brown, olive black to brownish black in part, soft, amorphous, to firm and sub blocky in part, 15-40% argillaceous matrix, grading to Silty Claystone in part, common micro-mica in part, trace-abundant carbonaceous specks, fragments laminae and partings, grading to Carbonaceous Siltstone in part, trace coarse pyrite nodules, non calcareous.		
	20	Claystone, silty , as above.		
	10	Coal , as above.		
3045	5	Sandstone , as above, no fluorescence, no cut.		
	30	Siltstone, argillaceous , as above.		
	60	Claystone, silty , white to greyish white, light brownish grey, soft, dispersive, amorphous, trace firm, sub blocky, very arenaceous, 10-35% silt to very fine (very fL) quartz grains, trace carbonaceous specks, trace micromica, nil-trace disseminated pyrite.		
	5	Coal , as above.		
3050	70	Sandstone , translucent-very light grey, trace transparent, loose, fine to coarse grained (fL-vcU), predominantly medium (mL-mU), sub angular to angular, well sorted, good visual porosity, no fluorescence, no cut.		
	10	Siltstone, argillaceous , as above, very carbonaceous and laminated.		
	20	Claystone , as above.		
	Trace	Coal , as above.		
3055	80	Sandstone , as above, (very fL-vcU), predominantly fine to medium (mL-mU), sub angular to angular, well sorted, good visual porosity, no fluorescence, no cut.		
	Trace	Siltstone, argillaceous , as above.		
	20	Claystone , as above.		
3060	80	Sandstone , translucent-very light grey, trace transparent, loose, (vfU-vcU), predominantly medium to		

ZANEGREY-1 ST1 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
	5	coarse (mL-cL), sub angular to angular, well sorted, good visual porosity, no fluorescence, no cut. Siltstone, argillaceous , light grey, dusky yellowish brown, pale yellowish brown to brownish grey, olive black to brownish black in part, soft to occasional firm, sub blocky, commonly amorphous, 15-20% argillaceous matrix, grading to Silty Claystone in part, common micro-mica in part, trace-abundant carbonaceous specks, fragments laminae and partings, non calcareous.		
	15	Claystone , as above.		
	Trace	Coal , as above.		
3065	20	Sandstone , predominantly loose quartz grains, (vfU-cU), predominantly medium to coarse (mL-cL), sub angular to angular, moderately sorted, poor inferred porosity, trace poorly consolidated aggregates, soft-friable, silt – very fine grained (very fL), subrounded well sorted, trace-20% argillaceous matrix, grading to siltstone in places, fair visual porosity, no fluorescence, no cut.		
	20	Siltstone, argillaceous , as above, abundant carbonaceous specks, fragments laminae and partings, grading to Carbonaceous Siltstone in part,		
	60	Claystone , as above, very carbonaceous,		
	Trace	Coal , as above.		
3070	60	Sandstone , translucent-very light grey, trace transparent, loose, very fine to coarse grained (vfU-cU), predominantly medium to coarse (mL-cL), sub angular to angular, moderately well sorted, good visual porosity, trace mica flakes, no fluorescence, no cut.		
	5	Siltstone, argillaceous , as above.		
	30	Claystone , as above.		
	5	Coal , as above.		
3075	20	Sandstone , predominantly loose quartz grains, (vfU-cU), predominantly medium to coarse (mL-cL), sub angular to angular, moderately sorted, poor inferred porosity, 5% light grey to light olive grey, soft-firm, friable, poorly consolidated aggregates, silt – very fine grained (very fL), sub rounded well, well sorted, trace-20% argillaceous matrix, grading to siltstone in places, fair visual porosity, no fluorescence, no cut.		
	10	Siltstone, argillaceous , as above, very carbonaceous with carbonaceous laminar.		
	60	Claystone , as above, very carbonaceous, with carbonaceous flakes and laminar.		
	10	Coal , as above.		
3080	15	Sandstone , as above, (silt-vCL), predominantly medium (mL-mU), sub angular to angular, well sorted, good visual porosity, no fluorescence, no cut.		
	25	Siltstone, argillaceous , as above, arenaceous in places and grading into an Argillaceous Sandstone , trace-abundant carbonaceous matter, grading into Carbonaceous Siltstone in places.		
	50	Claystone , as above.		

ZANEGREY-1 ST1 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
	5	Coal , as above.		
3085	20	Sandstone , translucent-very light grey, trace transparent, loose, (silt-vcl), predominantly fine to medium (fL-mU), sub angular to angular, occasional light grey to light olive grey, soft-firm, friable, poorly consolidated aggregates, silt – very fine grained (very fL), sub rounded, well sorted, trace-20% argillaceous matrix, grading to siltstone in places, fair visual porosity, trace pebble in very fine sandstone matrix, no fluorescence, no cut.		
	15	Siltstone, argillaceous , increasing light brownish grey to brownish grey, increasingly medium dark grey, less dusky yellowish brown, soft to occasional firm, sub blocky, commonly amorphous, 15-20% argillaceous matrix, grading to Silty Claystone in part, common micro-mica in part, trace-abundant carbonaceous specks, fragments laminae and partings, non calcareous.		
	60	Claystone , white to greyish white, light grey, light brownish grey, soft, dispersive, amorphous, trace firm, sub blocky, very arenaceous, 10-20% silt to very fine (very fL) quartz grains, trace-abundant carbonaceous specks, trace micro-mica.		
	5	Coal , as above.		
3090	50	Sandstone , as above, 5% very fine grained, poorly consolidated aggregates, no fluorescence, no cut.		
	5	Siltstone, argillaceous , as above.		
	45	Claystone , as above, very carbonaceous, carbonaceous flakes and laminar.		
	Trace	Coal , as above.		
3095	20	Sandstone , as above, (silt-vcl), predominantly fine to coarse (fL-cl), sub angular to angular, no fluorescence, no cut.		
	5	Siltstone, argillaceous , as above, trace medium light grey.		
	75	Claystone , as above, common carbonaceous laminar.		
3100	30	Sandstone , as above, (silt-vcl), predominantly medium (mL-mU), sub angular to angular, moderately well sorted, good visual porosity, no fluorescence, no cut.		
	10	Siltstone, argillaceous , as above, trace medium dark grey, firm, blocky, arenaceous, carbonaceous, trace micromica.		
	55	Claystone , as above, still arenaceous.		
	5	Coal , as above.		
3105	5	Sandstone , as above, with very fine sandstone laminated with carbonaceous matter, no fluorescence, no cut.		
	5	Siltstone, argillaceous , as above.		
	90	Claystone , as above.		
3106 (spot)	30	Sandstone , as above, with very fine sandstone laminated with carbonaceous matter, no fluorescence, no cut.		
	10	Siltstone, argillaceous , as above, trace micro-mica.		

ZANEGREY-1 ST1 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
	60	Claystone , as above, trace mica flakes, occasionally trace disseminated pyrite.		
	Trace	Coal , as above.		
3107 (spot)	35	Sandstone , translucent-very light grey, trace transparent, loose, (very fL-cU), predominantly medium to coarse (mL-cL), sub angular to angular, moderately well sorted, trace mica flakes, good inferred porosity, occasional light grey to light olive grey, soft-firm, friable, poorly consolidated aggregates, silt – very fine grained (very fL), sub rounded, well sorted, trace-20% argillaceous matrix, grading to siltstone in places, trace carbonaceous laminar, fair visual porosity, no fluorescence, no cut.		
	20	Siltstone, argillaceous , as above, increasingly sub blocky, very carbonaceous and grading to a Carbonaceous Siltstone.		
	35	Claystone , as above.		
	10	Coal , as above		
3107.3 (spot)		Hardly any sample coming over the shakers. Majority were cavings.		

APPENDIX 3

CUTTINGS SAMPLE DESCRIPTIONS ZANEGREY-1/ST2

(By Bass Strait Oil Company Ltd)

ZANEGREY-1 ST2 - CUTTINGS DESCRIPTION SHEET

From 2988 to 3675 m TD

Wellsite Geologists: Geoff Geary & Andre Thangam

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
2989	97 3	Cement. Lithology, Siltstone and Claystone		
2990	97 3	Cement. Lithology, as above.		
2991	97 3	Cement. Lithology, as above.		
2992	96 4	Cement. Lithology, as above.		
2993	96 4	Cement. Lithology, as above.		
2993.2	85 15	Cement. Lithology, Siltstone and Claystone.		
2993.8	93 7	Cement. Lithology, as above.		
2994.3	85 15	Cement. Lithology, as above. Increase pump rate 472 gpm		
2993.8	84 6	Cement. Lithology, as above.		
2994.3	85 15	Cement. Lithology, as above.		
2995	94 6	Cement. Lithology, Siltstone and Claystone		
2996	97 3	Cement. Lithology, as above. Note: Abundant cement cuttings over shaker.		
2997	98 2	Cement. Lithology, as above.		
2998	99 1	Cement. Lithology, as above.		
2999	99 1	Cement. Lithology, Siltstone and Claystone		
3000	99 1	Cement, soft to slightly firm, occasionalasionaly hard. Lithology, as above. Note: Abundant cement cuttings over shaker. Note: Pumping at 470 gpm		
3001	99 1	Cement. Lithology, as above.		
3002	99 1	Cement. Lithology, as above.		
3004	99 1	Cement. Lithology, as above.		
3006	99 1	Cement. Lithology, as above.		
3007	99 1	Cement. Lithology Siltstone and Claystone		
3008	99 1	Cement. Lithology, as above.		
3009	99 1	Cement. Lithology, as above.		

ZANEGREY-1 ST2 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
3010	99 1	Cement. Lithology, Siltstone and Claystone		
3011	99 1	Cement. Lithology, as above. Note: Pumping at 550gpm		
3012	97 3	Cement. Lithology, as above, trace loose fine to medium sandstone Note: Cuttings better formed, look like being cut. Much less cement over shakers by volume.		
3013	98 2	Cement. Lithology, sandstone, siltstone and claystone Note: Shakers clogging up. Losing mud. Fine grained sandstone/siltstone possibly washing through shakers and poorly represented in sample..		
3013.2	85 15	Cement. Lithology, sandstone, siltstone and claystone, trace loose fine to medium sandstone.		
3014	85 15	Cement. Lithology, as above, trace loose fine to medium sandstone.		
3015	90 10	Cement. Lithology, claystone, trace siltstone, trace loose sandstone		
3016	90 10	Cement. Lithology, claystone, trace siltstone, trace loose sandstone		
3017	93 7	Cement. Lithology, claystone, trace siltstone, trace loose sandstone		
3018	93 7	Cement. Lithology, claystone, trace siltstone, trace loose sandstone		
3019	93 7	Cement. Lithology, claystone, trace siltstone, 1% loose sandstone		
3020	90 10	Cement. Lithology, claystone, trace siltstone, 2% loose sandstone		
3021	93 7	Cement. Lithology, claystone, trace siltstone, 3% loose sandstone		
3022	85 15	Cement. Lithology, claystone, trace siltstone, 3% loose sandstone		
3024	90 10	Cement. Lithology, claystone, trace siltstone, 2% loose sandstone		
3025	90 10	Cement. Lithology, claystone, trace siltstone, 2% loose sandstone		
3027	95 5	Cement. Lithology, claystone, trace siltstone and loose sandstone		
3028	95 5	Cement. Lithology, claystone, trace siltstone and loose sandstone		
3030	-	Note: trip sample.		
3031	95 5	Cement. Lithology, claystone, trace siltstone, coal and loose sandstone. Note: abundant uphole cavings (10%)		
3032	98 2	Cement. Lithology, claystone, trace siltstone, coal and loose		

ZANEGREY-1 ST2 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
		sandstone. Note: abundant uphole cavings (10%)		
3033	99 1	Cement. predominantly firm-hard, angular fragments. Lithology , claystone, siltstone and coal.		
3033.5	99 1	Cement. Lithology , claystone, siltstone, loose sand grains and coal.		
3034	98 2	Cement. Lithology , claystone, siltstone, loose sand grains and coal.		
3035	99 1	Cement. Lithology , claystone, siltstone		
3036	99 1	Cement. Lithology , claystone, siltstone, trace coal		
3037	99 1	Cement. Lithology , claystone, siltstone		
3038	99 1	Cement. Lithology , claystone, siltstone		
3039	90 10	Cement. Lithology , claystone, siltstone, trace sandstone, 1% coal		
3040	95 5	Cement. Lithology , claystone, siltstone, trace sandstone, 1% coal		
3041	93 7	Cement. Lithology , 2% claystone, 2% siltstone, trace sandstone, 3% coal		
3042	95 5	Cement. Lithology , 3% claystone, 1% siltstone, trace sandstone, 1% coal		
3043	97 3	Cement. Lithology , 1% claystone, 1% siltstone, 1% coal		
3044	93 7	Cement. Lithology , 7% claystone, 1% siltstone, 1% coal		
3045	95 5	Cement. Lithology , 3% claystone, 1% siltstone, Trace sandstone, 1% coal		
3046	97 3	Cement. Lithology , 2% claystone, 1% siltstone, Trace sandstone, trace coal		
3047	94 6	Cement. Lithology , 3% claystone, 1% siltstone, 2% sandstone, trace coal		
3048	96 4	Cement. Lithology , 2% claystone, 2% siltstone, trace sandstone, trace coal		
3049	94 6	Cement. Lithology , 2% claystone, 2% siltstone, 2% sandstone, trace coal		
3050	96 4	Cement. Lithology , 2% claystone, 1% siltstone, 1% sandstone, trace coal		
3051	96 4	Cement. Lithology , 2% claystone, 1% siltstone, 1% sandstone, trace coal		

ZANEGREY-1 ST2 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
3052	97 3	Cement. Lithology , 2% claystone, Trace siltstone, Trace sandstone, 1% coal		
3053	97 3	Cement. Lithology , 2% claystone, 1% siltstone, Gd Trace sandstone, Trace coal		
3054	96 4	Cement. Lithology , 2% claystone, 1% siltstone, 1% sandstone, Trace coal		
3055	97 3	Cement. Lithology , 2% claystone, Trace siltstone, 1% sandstone, Trace coal		
3056	98 2	Cement. Lithology , 1% claystone, 1% siltstone, Trace sandstone, Trace coal		
3057	98 2	Cement. Lithology , 1% claystone, 1% siltstone, Trace sandstone, Trace coal		
3058	98 2	Cement. Lithology , 1% claystone, 1% siltstone, Trace sandstone, Trace coal		
3059	98 2	Cement. Lithology , 1% claystone, 1% siltstone, Trace sandstone, Trace coal		
3060	99 1	Cement. Lithology , trace claystone, siltstone, sandstone. Note: Slow drilling.		
3061	99 1	Cement. Lithology , trace claystone, siltstone, sandstone. Note: Slow drilling.		
3062	99 1	Cement. Lithology , trace claystone, siltstone, sandstone.		
3063	99 1	Cement. Lithology , trace claystone, siltstone, sandstone.		
3064	99 Trace	Cement. Lithology , trace claystone, siltstone, sandstone.		
3065	99 Trace	Cement. Lithology , trace claystone, siltstone, sandstone.		
3066	99 Trace	Cement. Lithology , trace claystone, siltstone, sandstone.		
3067	99 Trace	Cement. Lithology , trace claystone, siltstone, sandstone.		
3068	99 Trace	Cement. Lithology , trace claystone, siltstone, sandstone.		
3069	99 Trace	Cement. Lithology , trace claystone, siltstone, sandstone.		
3070	100	Cement, Bottoms up, abundant cavings		
3071	100	Cement. Note: very slow drilling. Cutting ledge.		
3072	98	Cement.		

ZANEGREY-1 ST2 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
	2	Lithology , claystone, cavings?		
3072.5	95	Cement.		
	5	Lithology , claystone, siltstone, loose sandstone.		
	93	Cement.		
	7	Lithology , claystone, siltstone, loose sandstone.		
3073	93	Cement.		
	7	Lithology , claystone, siltstone, loose sandstone.		
3073.5	92	Cement.		
	8	Lithology , trace claystone, siltstone, loose sandstone. Note: Boost riser. Abundant cavings.		
3074	30	Claystone , light brownish grey to brownish grey and dark yellowish brown, soft to slightly firm, sub blocky, trace-20% silt, grading to Argillaceous Siltstone in part, trace-abundant (trace-20%) carbonaceous specks, laminae and partings grading to Carbonaceous Claystone in part, trace micromica, nil-trace disseminated pyrite.		
	70	Coal , black to brownish black, firm-moderately hard, sub splintery-sub fissile, sub bituminous, as thin laminae in claystone in part, very slow yellowish-blue cut, bright, solid bluish yellow residual ring residue. Note: 60% cement in sample.		
3075	50	Sandstone , predominantly loose quartz grains, translucent to very light grey, clear, very fine to coarse grained (vfU-cL), predominantly medium to coarse (mL-cL), sub angular to angular, moderately sorted, 10% light grey to light brownish grey, consolidated aggregates, soft to firm, friable, silt - very fine grained (vfL), sub rounded, moderately to well sorted, trace-20% argillaceous matrix, grading to Siltstone in part, trace coarse pyrite nodules, trace micromica and coarse flakes, fair - good visual and inferred porosity, no fluorescence, no cut.		
	30	Claystone , silty, white to greyish white, light brownish grey, soft, dispersive, amorphous, soft-firm in part, sub blocky, arenaceous with 20-35% silt to very fine (vfL) quartz grains, trace carbonaceous specks and partings, trace micromica, nil-trace disseminated pyrite.		
	20	Claystone , light brownish grey to brownish grey and dark yellowish brown, soft to slightly firm, sub blocky, trace-20% silt, grading to Argillaceous Siltstone in part, trace-abundant (trace-20%) carbonaceous specks, laminae and partings grading to Carbonaceous Claystone in part, trace micromica, nil-trace disseminated pyrite.		
	Trace	Coal , black to brownish black, firm-moderately hard, sub splintery-sub fissile, sub bituminous, as thin laminae in claystone in part, very slow yellowish-blue cut, bright, solid bluish yellow residual ring residue. Note: 50% cement in sample.		
3076	70	Sandstone , as above.		
	20	Claystone , silty, as above.		
	10	Claystone , as above. Note: 40% cement in sample.		
3077	50	Sandstone , light grey to light olive grey, light brownish		

ZANEGREY-1 ST2 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
	30 20 Trace	<p>grey, translucent, firm, friable, consolidated aggregates to loose quartz grains, very fine to coarse (vfL-cL), predominantly fine to medium (fU-mL), sub angular to sub rounded, moderately to poorly sorted, sub rounded, trace-20% argillaceous matrix, grading to Siltstone in part, trace coarse pyrite nodules, trace micromica and coarse flakes, trace carbonaceous partings, poor - good visual and inferred porosity, no fluorescence, no cut.</p> <p>Claystone, silty, as above.</p> <p>Claystone, as above.</p> <p>Coal, black to brownish black, firm-moderately hard, sub splintery-sub fissile, sub bituminous, as thin laminae in claystone in part.</p> <p>Note: 30% cement in sample.</p>		
3078	60 20 30 Trace	<p>Sandstone, predominantly loose quartz grains, translucent to very light grey, clear, very fine to coarse grained (vfU-cL), predominantly medium (mL-mU), sub angular to angular, moderately sorted, 15% light grey to light brownish grey, firm, friable, consolidated, very fine to medium grained (vfL-mU), predominantly fine to medium (fL-mL), sub angular to sub rounded, moderately to poorly sorted, sub rounded, trace-20% argillaceous matrix, grading to Siltstone in part, trace coarse pyrite nodules, trace micromica and coarse flakes, trace carbonaceous partings, poor - good visual porosity, no fluorescence, no cut.</p> <p>Claystone, silty, as above.</p> <p>Claystone, as above.</p> <p>Coal, as above.</p> <p>Note: 10% cement in sample.</p>		
3081	80 10 5 5	<p>Sandstone, as above</p> <p>Claystone, silty, as above.</p> <p>Claystone, as above.</p> <p>Coal, black to brownish black, firm-moderately hard, sub splintery-sub fissile, sub bituminous, as thin laminae in claystone in part, very slow yellowish-blue cut, bright, solid bluish yellow residual ring residue.</p> <p>Note: 5% cement in sample.</p>		
3084	80 10 5 5	<p>Sandstone, predominantly loose quartz grains, translucent to very light grey, clear, trace pale to dark yellowish orange and dark grey, very fine to coarse grained (vfU-cU), pebbly in part, predominantly medium to coarse (mL-cL), sub angular to angular, moderately to poorly sorted, 15% light grey to light brownish grey, consolidated, firm, friable, very fine to medium grained (vfL-mU), predominantly fine to medium (fL-mL), angular to sub rounded, moderately sorted, trace-10% argillaceous matrix, trace coarse pyrite nodules, trace micromica and coarse mica flakes, trace rock fragments, good inferred porosity, no fluorescence, no cut.</p> <p>Claystone, silty, as above.</p> <p>Claystone, as above.</p> <p>Coal, as above.</p>		

ZANEGREY-1 ST2 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
		Note: 5% cement in sample.		
3087	90	Sandstone , predominantly loose quartz grains, translucent to very light grey, clear, trace pale to dark yellowish orange, very fine to coarse grained (vfU-cU), predominantly medium to coarse (mL-cL), sub angular to angular, moderately sorted, trace coarse pyrite nodules, trace micromica and coarse mica flakes, trace rock fragments, good inferred porosity, no fluorescence, no cut.		
	5	Claystone, silty , as above.		
	5	Claystone , as above.		
		Note: 1% cement in sample.		
3090	100	Sandstone , as above.		
		Note: trace cement in sample.		
3095	100	Sandstone , as above.		
		Note: Bottoms up sample. Predominantly mud cake and cement, 5% lithology.		
3100	70	Sandstone , loose quartz grains, translucent to very light grey, clear, trace pale to dark yellowish orange, very fine to coarse grained (vfU-cU), pebbly in part, predominantly medium to coarse (mL-cL), sub angular to angular, moderately sorted, trace coarse pyrite nodules, trace micromica and coarse mica flakes, trace rock fragments, good inferred porosity, no fluorescence, no cut.		
	20	Siltstone, argillaceous , white to greyish white, light brownish grey, soft to occasional firm, sub blocky, commonly amorphous (washing out), silt to fine grained sand, 15-35% argillaceous matrix, grading to Silty Claystone in part, common micro-mica in part, trace-abundant carbonaceous specks, fragments and laminae.		
	10	Claystone, silty , white to greyish white, light brownish grey, soft, dispersive, amorphous, firm in part, sub blocky, arenaceous with 20-35% silt to very fine (vfL) quartz grains, trace carbonaceous specks and partings, trace micromica, nil-trace disseminated pyrite.		
3105	40	Sandstone , as above.		
	40	Siltstone, argillaceous , as above.		
	20	Claystone, silty , white to greyish white, increasing light brownish grey to brownish grey and medium brownish grey, soft, dispersive, amorphous, to firm, sub blocky, arenaceous with 20-35% silt to very fine (vfL) quartz grains, trace – 5% carbonaceous specks and partings, trace micromica, nil-trace disseminated pyrite.		
3110	75	Sandstone , as above.		
	20	Siltstone, argillaceous , as above.		
	5	Claystone, silty , as above.		
3115	95	Sandstone , loose quartz grains, translucent to very light grey, clear, trace pale to dark yellowish orange, fine to coarse grained (fL-cU), pebbly in part, predominantly medium to coarse (mL-cL), sub angular to angular, moderately sorted, trace micromica and coarse mica flakes, good inferred porosity, no fluorescence, no cut.		
	5	Siltstone, argillaceous , as above.		

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Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
3120	95	Sandstone , as above, no fluorescence, no cut.		
	5	Siltstone, argillaceous , as above.		
3125	50	Sandstone , loose quartz grains, translucent to very light grey, clear, trace pale to dark yellowish orange and dark grey, very fine to coarse grained (vfl-cU), predominantly fine to medium (fU - mU), sub angular to angular, moderately to poorly sorted, 50% light grey to light brownish grey, consolidated, firm, friable, very fine to medium grained (vfl-mU), predominantly fine to medium (fL-mL), angular to sub rounded, moderately sorted, trace-20% argillaceous matrix, trace coarse pyrite nodules, trace micromica and coarse mica flakes, trace rock fragments, good inferred porosity, no fluorescence, no cut.		
	30	Siltstone, argillaceous , as above.		
	10	Claystone, silty , as above.		
	10	Coal , black to brownish black, firm-moderately hard, sub splintery-sub fissile, sub bituminous, as thin laminae in claystone in part, very slow yellowish-blue cut, bright, solid bluish yellow residual ring residue.		
3130	5	Sandstone , as above, predominantly very fine to medium grained (vfU-mU).		
	15	Siltstone, argillaceous , as above.		
	20	Claystone, silty , as above.		
	50	Claystone , light brownish grey to brownish grey and moderate to dark yellowish brown, soft to firm, sub blocky, trace-20% silt, grading to Argillaceous Siltstone in part, trace-abundant (trace-20%) carbonaceous specks, laminae and partings grading to Carbonaceous Claystone in part, trace micromica, nil-trace disseminated pyrite.		
	10	Coal , as above.		
3135	5	Sandstone , as above.		
	10	Siltstone, argillaceous , white to greyish white, light to medium brownish grey, soft to occasional firm, sub blocky, commonly amorphous (washing out), silt to fine grained sand, 15-35% argillaceous matrix, grading to Silty Claystone in part, common micro-mica in part, trace-abundant carbonaceous specks, fragments and laminae.		
	15	Claystone, silty , white to greyish white, increasing light to medium brownish grey, soft, dispersive, amorphous, to firm, sub blocky, arenaceous with 20-35% silt to very fine (vfl) quartz grains, trace – 5% carbonaceous specks and partings, trace micromica, nil-trace disseminated pyrite, as above.		
	40	Claystone , as above.		
	20	Coal , black to brownish black, firm-moderately hard, sub splintery-sub fissile, sub bituminous, as thin laminae in claystone in part, trace amber, very slow yellowish-blue cut, bright, solid bluish yellow residual ring residue.		
	Trace	Amber , light to moderate reddish orange to reddish brown nodular fragments, translucent to slightly transparent, coarse, angular, broken fragments, resinous, interbedded with coal and sandstone (sandstone grains adhering),		

ZANEGREY-1 ST2 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
		bright yellowish white fluorescence, no cut.		
3140	5 30 45 20 Trace	Siltstone, argillaceous , as above. Claystone, silty , as above. Claystone , as above. Coal , as above. Amber , as above.		
3145	10 35 50 5	Siltstone, argillaceous , as above. Claystone, silty , as above. Claystone , as above. Coal , as above.		
3150	80 10 5 5	Sandstone , predominantly loose quartz grains, translucent to very light grey, clear, trace pale to dark yellowish orange and dark grey, very fine to coarse grained (vFL-cU), pebbly in part, predominantly medium to coarse (mL-cL), sub angular to angular, moderately sorted, trace white to light grey and light brownish grey, consolidated, firm, friable, very fine to medium grained (vFL-mU), predominantly fine to medium (fL-mL), angular to sub rounded, moderately sorted, trace-20% argillaceous matrix, trace coarse pyrite nodules, trace micromica and coarse mica flakes, trace rock fragments and lithics, good inferred porosity, no fluorescence, no cut. Siltstone, argillaceous , as above. Claystone, silty , as above. Claystone , as above.		
3155	70 10 5 5 10 Trace	Sandstone , as above. Siltstone, argillaceous , as above. Claystone, silty , as above. Claystone , as above. Coal , black to brownish black, firm-moderately hard, sub splintery-sub fissile, sub bituminous, as thin laminae in claystone in part, trace amber, very slow yellowish-blue cut, bright, solid bluish yellow residual ring residue. Amber , as above.		
3160	70 10 5	Sandstone , predominantly loose quartz grains, translucent to very light grey, clear, trace dark grey, very fine to coarse grained (vFL-cU), predominantly medium to coarse (fL-mU), poorly sorted, trace-5% greyish orange to pale yellowish brown, dark yellowish brown, consolidated, soft-firm, friable, silt-very fine grained (silt-vfL), well sorted, sub-angular, with nil-5% argillaceous matrix, trace micro-mica, nil-trace carbonaceous flakes, moderately good visible porosity, no cut. Siltstone, argillaceous , as above. light to medium brownish grey, dark yellowish brown, soft to occasional firm, sub blocky-sub splintery, trace amorphous (washing out), silt to fine grained sand, 10-20% argillaceous matrix, grading to Silty Claystone in part, common micro-mica in part, trace-abundant carbonaceous specks, fragments and laminae, grading to Carbonaceous Siltstone in part, interbedded with Coal. Claystone, silty , as above.		

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Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
	5	Claystone , white-greyish white, light brownish grey, as above.		
	10	Coal , as above		
3165	Trace	Sandstone , quartz, as loose grains, as above		
	10	Claystone , silty , medium to dark brownish grey, firm, arenaceous with 20-35% silt to very fine (vfL) quartz grains carbonaceous with fine coaly laminae, as above.		
	10	Claystone , white-greyish white, light brownish grey, as above, with occasional fine carbonaceous laminae.		
	80	Coal , brownish black to black, as above		
3170	Trace	Sandstone as above – occasional loose, very coarse fractured grains		
	10	Claystone , silty , medium to dark brownish grey, firm, carbonaceous with fine coaly laminae, as above		
	20	Claystone , white-greyish white, light brownish grey, very soft, as above, grading to silty claystone		
	Trace	Siltstone , as above.		
	80	Coal , as above.		
3175	20	Sandstone , as above, firm, friable or as loose quartz grains, translucent to very light grey, clear, very fine to coarse grained (vfL-cU), predominantly very fine to fine (vfU-fU) sub-angular-rounded, poorly sorted, as above, with nil-5% argillaceous matrix, trace micro-mica, moderately good visible porosity, no cut		
	40	Claystone , silty , medium to dark brownish grey, firm, carbonaceous with fine coaly laminae, in part silty, as above.		
	30	Claystone , white-greyish white, light brownish grey, as above, with occasional fine carbonaceous laminae		
	10	Coal as above.		
3180	10	Sandstone , as above, as loose quartz grains, medium to very coarse.		
	30	Claystone , medium to dark brownish grey, firm, carbonaceous with fine coaly laminae, in part silty, as above		
	30	Claystone , white-greyish white, light brownish grey, as above, with occasional fine carbonaceous laminae		
	Trace	Siltstone , firm, light grey, argillaceous as above		
	30	Coal as above.		
3185	80	Sandstone , translucent to very light grey, clear, very fine to very coarse grained (vfL-vcU), predominantly very fine to fine (vfU-fL) subangular-rounded, poorly sorted, as above, no cut		
	10	Claystone , silty , medium to dark brownish grey, firm, carbonaceous with fine coaly laminae, in part silty, as above.		
	10	Claystone , white-greyish white, light brownish grey, as above, with occasional fine carbonaceous laminae.		
	Trace	Siltstone , firm, light grey, argillaceous as above.		
	Trace	Coal as above.		
3190	90	Sandstone , translucent to very light grey, clear, very fine to very coarse grained (vfL-vcU), predominantly fine to		

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Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
	5	medium (fU-mL) subrounded to rounded, poorly sorted, as above, no cut Claystone , medium to dark brownish grey, firm, carbonaceous with fine coaly laminae, in part silty, as above		
	5	Claystone, silty , white-greyish white, light brownish grey, as above, with occasional fine carbonaceous laminae		
3195	80	Sandstone , translucent to very light grey, clear, very fine to very coarse grained (vfL-vcU), predominantly very fine to fine (vfU-fU) subrounded to rounded, poorly sorted, as above, no cut.		
	10	Claystone , medium to dark brownish grey, firm, carbonaceous with fine coaly laminae, in part silty, as above.		
	10	Claystone, silty , white-greyish white, light brownish grey, as above, with occasional fine carbonaceous laminae.		
3200	60	Sandstone , translucent to very light grey, clear, very fine to very coarse grained (vfL-vcU), predominantly very fine to fine (vfU-fU) subangular to rounded, poorly sorted, as above, no cut. Coarser grains in part fractured.		
	20	Claystone , medium to dark brownish grey, firm, carbonaceous with fine coaly laminae, in part silty, as above.		
	20	Claystone, silty , white-greyish white, light brownish grey, as above, with occasional fine carbonaceous laminae.		
3205	70	Sandstone , translucent to very light grey, clear, very fine to very coarse grained (vfL-vcU), predominantly fine to medium (fU-mL) subrounded to rounded, poorly sorted, as above, occasionally hard, with 5-10% clay matrix, nil – poor visible porosity, no cut.		
	20	Claystone , medium to dark brownish grey, firm, carbonaceous with fine coaly laminae, in part silty, as above.		
	10	Claystone , white-greyish white, light brownish grey, as above, with occasional fine carbonaceous laminae.		
3210	50	Sandstone , translucent to very light grey, clear, very fine to very coarse grained (vfL-vcL), predominantly very fine to fine (vfU-fU) subrounded to rounded, poorly sorted, as above, no cut.		
	20	Claystone , medium to dark brownish grey, firm, carbonaceous with fine coaly laminae, in part silty, as above.		
	30	Claystone , white-greyish white, light brownish grey, as above, with occasional fine carbonaceous laminae, trace fine mica.		
	Trace	Coal , black, as above.		
3215	40	Sandstone , translucent to very light grey, clear, very fine to very coarse grained (vfL-cU), predominantly very fine to fine (vfU-fU) subangular to subrounded, poorly sorted, as above, no cut.		
	50	Claystone , medium to dark brownish grey, firm, carbonaceous with fine coaly laminae, in part silty and with		

ZANEGREY-1 ST2 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
	30	fine siltstone laminae, with rare pyrite as above Claystone , white-greyish white, light brownish grey, as above.		
	Trace	Coal , black, as above.		
3220	70	Sandstone , translucent to very light grey, clear, very fine to coarse grained (vFL-cL), predominantly very fine to fine (vfU-fL) subrounded to rounded, poorly sorted, as above, no cut.		
	20	Claystone , medium to dark brownish grey, firm, carbonaceous with fine coaly laminae, in part silty, as above.		
	10	Claystone , white-greyish white, light brownish grey, as above, with occasional fine carbonaceous laminae.		
	Trace	Coal , black, as above.		
3225	70	Sandstone , translucent to very light grey, clear, very fine to coarse grained (vFL-cL), predominantly fine to medium (fL-mL) subrounded to rounded, poorly sorted, as above, no cut.		
	20	Claystone , medium to dark brownish grey, firm, carbonaceous, in part silty, as above Claystone , white-greyish white, light brownish grey, as above, with occasional fine carbonaceous laminae.		
	10	Siltstone , light to medium grey, argillaceous, as above		
	Trace	Coal , black, as above.		
3230	80	Sandstone , translucent to very light grey, clear, very fine to very coarse grained (vFL-vcL), predominantly fine (fL-fU) subangular to rounded, poorly sorted, as above, no cut.		
	20	Claystone , silty, medium to dark brownish grey, firm, moderately to highly carbonaceous, in part silty, as above.		
	5	Claystone , white-greyish white, light brownish grey, as above, with occasional fine carbonaceous laminae.		
	Trace	Coal , black, as above, in part as fine laminae, with trace pyrite.		
3235	80	Sandstone , translucent to very light grey, clear, very fine to coarse grained (vFL-cL), predominantly very fine to fine (vfU-fU) subangular to rounded, poorly sorted, as above, no cut.		
	20	Claystone , silty, medium to dark brownish grey and brownish black, firm, moderately to highly carbonaceous with fine coaly laminae grading to Carbonaceous Claystone, in part silty.		
	Trace	Claystone , white-greyish white, light brownish grey, as above, with occasional fine carbonaceous laminae.		
	Trace	Coal , black, as above.		
3240	80	Sandstone , translucent to very light grey, clear, very fine to coarse grained (vFL-cL), predominantly very fine to fine (vfU-fL) subangular to subrounded, poorly sorted, as above, no cut.		
	20	Claystone , silty, medium to dark brownish grey, firm, moderately to highly carbonaceous with fine coaly laminae, as above.		
	Trace	Coal , black, as above.		

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Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
3245	30	Sandstone , translucent to very light grey, clear, very fine to coarse grained (vfL-cL), predominantly very fine to fine (vfU-fL) subrounded to rounded, poorly sorted, as above, no cut.		
	45	Claystone , medium to dark brownish grey, firm, silty, carbonaceous with fine coaly laminae, as above		
	5	Claystone , white-greyish white, light brownish grey, as above, with occasional fine carbonaceous laminae.		
	10	Siltstone , light to medium grey, argillaceous, as above		
	10	Coal , black, as above.		
3250	20	Sandstone , as above, no fluorescence or cut.		
	40	Claystone , silty , medium to dark brownish grey, firm, arenaceous with 20-35% silt to very fine (vfL) quartz grains, carbonaceous with fine coaly laminae.		
	15	Claystone , white-greyish white, light brownish grey, as above, with occasional fine carbonaceous laminae.		
	20	Siltstone , argillaceous , light to medium brownish grey, dark yellowish brown, firm, sub blocky, silt to fine grained sand, 10-20% argillaceous matrix, grading to Silty Claystone in part, common micro-mica in part, trace-abundant carbonaceous specks, fragments and laminae, grading to Carbonaceous Siltstone in part, interbedded with Coal .		
	5	Coal , black, as above.		
3255	30	Sandstone , translucent to very light grey, clear, predominantly loose, 5% consolidated, very fine to very coarse grained (vfL-vcU), predominantly fine to medium (fU-mU), subrounded to angular, poorly sorted, , no fluorescence, no cut.		
	10	Siltstone , light to medium grey, argillaceous, as above.		
	40	Claystone , silty , medium to dark brownish grey, firm, arenaceous with 20-35% silt to very fine (vfL) quartz grains, carbonaceous with fine coaly laminae.		
	10	Claystone , white-greyish white, light brownish grey, as above, with occasional fine carbonaceous laminae.		
	5	Coal , black, as above.		
3260	10	Sandstone , light grey, clear, consolidated, soft-firm, friable, silt- fine grained (silt-fU), predominantly fine grained (fL), well sorted, sub-angular, with nil-5% argillaceous matrix, trace micro-mica, nil-trace carbonaceous flakes, fair visible porosity, no fluorescence, very slow, faint bluish yellow cut, faint patchy bluish yellow ring residue.		
	10	Siltstone , light to medium grey, argillaceous, as above.		
	20	Claystone , silty , white to greyish white, medium to dark brownish grey, firm, arenaceous with 20-35% silt to very fine (vfL) quartz grains, carbonaceous with fine coaly laminae.		
	60	Claystone , light to dark brownish grey, soft to firm, sub blocky to blocky, trace-20% silt, grading to Argillaceous Siltstone in part, trace-abundant (trace-25%) carbonaceous specks, laminae and partings grading to Carbonaceous Claystone in part, trace micromica, nil-		

ZANEGREY-1 ST2 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
		trace disseminated pyrite.		
3265	95	Sandstone , loose quartz grains, clear to translucent, white to very light grey, trace pale to dark yellowish orange, fine to coarse grained (fU-cU), predominantly medium to coarse (mU-cL), sub rounded to angular, moderately sorted, trace coarse pyrite nodules, good inferred porosity, no fluorescence, no cut.		
	5	Siltstone, argillaceous , white to light grey, soft, dispersive, washing out, to slightly firm, silt to fine grained sand, 10-30% argillaceous matrix, grading to Silty Claystone in part.		
3270	90	Sandstone , as above, increasing coarse grained, fine to very coarse grained (fU-vcU), fractured grains, pebbly, predominantly medium to coarse (mU-cL), no fluorescence, no cut.		
	10	Siltstone , as above.		
3275	30	Sandstone , as above, fine to very coarse grained (fU-vcU), fractured grains, pebbly.		
	10	Siltstone, argillaceous , white, light to medium grey, soft, dispersive, washing out, to slightly firm, silt to fine grained sand, 10-30% argillaceous matrix, grading to Silty Claystone in part.		
	5	Claystone, silty , white to greyish white, medium to dark brownish grey, firm, arenaceous with 20-35% silt to very fine (vfL) quartz grains, carbonaceous with fine coaly partings and laminae.		
	35	Claystone , brownish grey to brownish black, firm, blocky, trace-20% silt in part grading to Argillaceous Siltstone , trace-abundant (trace-20%) carbonaceous specks, laminae and partings grading to Carbonaceous Claystone in part, trace micromica, nil-trace disseminated pyrite.		
	20	Coal , black to brownish black, firm-moderately hard, sub splintery-sub fissile, sub bituminous, as thin laminae in claystone in part, very slow yellowish-blue cut, bright, solid bluish yellow residual ring residue.		
3280	30	Sandstone , loose as above, consolidated (20%) in part, light grey to brownish grey, soft-firm, friable, silt-fine grained (silt-fU), predominantly fine grained (fL), well sorted, sub-angular, with nil-5% argillaceous matrix, trace micro-mica, nil-trace carbonaceous flakes and laminae, fair visible porosity, no fluorescence, very slow, faint bluish yellow cut, faint patchy bluish yellow ring residue.		
	10	Siltstone , light to medium grey, argillaceous, as above.		
	10	Claystone, silty , medium to dark brownish grey, firm, arenaceous with 20-35% silt to very fine (vfL) quartz grains, carbonaceous with fine coaly laminae.		
	40	Claystone , white to greyish white, brownish grey to brownish black, firm, blocky, trace-20% silt in part grading to Argillaceous Siltstone , trace-abundant (trace-20%) carbonaceous specks, laminae and partings grading to Carbonaceous Claystone in part, trace micromica, nil-trace disseminated pyrite.		

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Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
	10	Coal , as above.		
3285	70	Sandstone , loose quartz grains, clear to translucent, white to very light grey, trace pale to dark yellowish orange, fine to coarse grained (fU-cU), predominantly medium to coarse (mU-cl), sub rounded to angular, moderately sorted, trace coarse pyrite nodules, good inferred porosity, no fluorescence, no cut.		
	10	Claystone , silty, as above.		
	20	Claystone , as above.		
	Trace	Coal , as above.		
3290	50	Sandstone , predominantly loose quartz grains, clear to translucent, white to very light grey, trace pale to dark yellowish orange, fine to coarse grained (fU-cU), predominantly medium to coarse (mU-cl), sub rounded to angular, moderately sorted, trace coarse pyrite nodules, good inferred porosity, no fluorescence, no cut.		
	20	Claystone , silty, as above.		
	30	Claystone , as above, soft, dispersive, washing out.		
	Trace	Coal , as above.		
3300	10	Sandstone , predominantly loose quartz grains, as above.		
	30	Claystone , silty, white to greyish white, moderate to dark yellowish brown, medium to dark brownish grey, soft, dispersive to firm, sub blocky, arenaceous with 20-30% silt to very fine (vFL) quartz grains, carbonaceous with fine coaly partings and laminae.		
	50	Claystone , white to greyish white, dark yellowish orange, moderate to dark yellowish brown, brownish grey to brownish black, soft, dispersive to firm, blocky, trace-20% silt in part grading to Argillaceous Siltstone , trace-abundant (trace-20%) carbonaceous specks, laminae and partings grading to Carbonaceous Claystone in part, trace micromica, nil-trace disseminated pyrite.		
	10	Coal , black to brownish black, firm-moderately hard, sub splintery-sub fissile, sub bituminous, as thin laminae in claystone in part, very slow yellowish-blue cut, faint bluish yellow cut, faint patchy bluish yellow ring residue.		
3305	5	Sandstone , predominantly loose quartz grains, translucent to very light grey, clear, very fine to coarse grained (vFL-cU), predominantly medium to coarse (fL-mU), poorly sorted, consolidated, (20%) in part, light grey to brownish grey, soft-firm, friable, silt-medium grained (silt-fU), predominantly fine grained (fL), well sorted, sub-angular, with Trace-20% argillaceous matrix, trace micro-mica, nil-trace carbonaceous flakes and laminae, poor to good visible porosity, no fluorescence, consolidated grains show slow, faint bluish yellow cut, faint patchy bluish yellow ring residue.		
	10	Siltstone , argillaceous, white, light to medium grey, soft, dispersive, washing out, to slightly firm, silt to fine grained sand, 10-30% argillaceous matrix, grading to Silty Claystone in part.		
	30	Claystone , silty, as above.		

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Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
	55	Claystone, Claystone , as above.		
3310	20	Sandstone , predominantly loose quartz grains, translucent to very light grey, clear, very fine to coarse grained (vfL-cU), predominantly medium to coarse (mL-cL), poorly sorted, consolidated, (10%) in part, light grey to brownish grey, soft-firm, friable, silt-medium grained (silt-mL), predominantly fine grained (fL), well sorted, sub-angular, with trace-20% argillaceous matrix, trace micro-mica, nil-trace carbonaceous flakes and laminae, poor to good visible porosity, no fluorescence, consolidated grains show slow, faint bluish yellow cut, faint solid bluish yellow ring residue.		
	20	Siltstone, argillaceous , as above.		
	20	Claystone, silty , as above.		
	30	Claystone , as above.		
3315	60	Sandstone , as above, no fluorescence, consolidated grains show slow, faint bluish yellow cut, faint solid bluish yellow ring residue.		
	10	Siltstone, argillaceous , as above.		
	10	Claystone, silty , as above.		
	15	Claystone , as above.		
	10	Coal , black to brownish black, firm-moderately hard, sub splintery-sub fissile, blocky, sub bituminous, as thin laminae in claystone in part, very slow yellowish-blue cut, faint bluish yellow cut, faint patchy bluish yellow ring residue.		
3320	80	Sandstone , predominantly loose quartz grains, clear to translucent, very light grey, fine to very coarse grained (fL-vcU), fractured grains, pebbly, predominantly medium to coarse (mL-cL), poorly sorted, consolidated (5%) in part, light grey to brownish grey, soft-firm, friable, fine-medium grained (fL-mL), predominantly fine grained (fU), well sorted, sub-angular, with trace-20% argillaceous matrix, trace micro-mica, nil-trace carbonaceous flakes and laminae, poor to good visible porosity, no fluorescence, consolidated grains show slow, faint bluish yellow cut, faint solid bluish yellow ring residue.		
	5	Siltstone, argillaceous , as above.		
	5	Claystone, silty , as above.		
	10	Claystone , as above.		
3325	80	Sandstone , predominantly loose quartz grains, clear to translucent, very light grey, fine to very coarse grained (fL-vcU), fractured grains, pebbly, predominantly medium to coarse (mL-cL), poorly sorted, good visible porosity, no fluorescence, no cut.		
	5	Siltstone, argillaceous , as above.		
	5	Claystone, silty , as above.		
	10	Claystone , as above.		
3330	60	Sandstone , predominantly loose quartz grains, clear to translucent, very light grey, fine to very coarse grained (fL-vcU), fractured grains, pebbly, predominantly medium to coarse (mL-cL), poorly sorted, good visible porosity, no fluorescence, no cut.		

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Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
	5 5 10 20	Siltstone, argillaceous , as above. Claystone, silty , as above. Claystone , as above. Coal , black to brownish black, firm-moderately hard, sub splintery-sub fissile, sub bituminous, as thin laminae in claystone in part, very slow yellowish-blue cut, faint bluish yellow cut, faint patchy bluish yellow ring residue.		
3335	20 10 10 20 40	Sandstone , predominantly loose quartz grains, clear to translucent, very light grey, fine to very coarse grained (fL-vcU), predominantly medium to coarse (mL-cL), poorly sorted, consolidated (30%) in part, light grey to brownish grey, soft-firm, friable, fine-medium grained (fL-mL), predominantly fine grained (fU), well sorted, sub-angular, with trace-20% argillaceous matrix, trace micro-mica, nil-trace carbonaceous flakes and laminae, poor to good visible porosity, no fluorescence, consolidated grains show slow, faint bluish yellow cut, faint solid bluish yellow ring residue. Siltstone, argillaceous , as above. Claystone, silty , as above. Claystone , as above. Coal , black to brownish black, firm-moderately hard, sub splintery-sub fissile, sub bituminous, as thin laminae in claystone in part, very slow yellowish-blue cut, slow bluish yellow cut, strong bluish yellow ring residue.		
3340	5 10 20 70 5	Sandstone, Sandstone , as above. Siltstone, argillaceous , as above. Claystone, silty , as above. Claystone , white to greyish white, dark yellowish orange, moderate to dark yellowish brown, brownish grey to brownish black, soft, dispersive to firm, blocky, trace-20% silt in part grading to Argillaceous Siltstone , trace-abundant (trace-20%) carbonaceous specks, laminae and partings grading to Carbonaceous Claystone in part, trace micromica, nil-trace disseminated pyrite. Coal , as above		
3345	5 30 20 40 5	Sandstone , as above, no fluorescence, no cut Siltstone, argillaceous , white, light to medium grey, soft, dispersive, washing out, to slightly firm, silt to fine grained sand, 10-30% argillaceous matrix, grading to Silty Claystone in part. Claystone, silty , white to greyish white, moderate to dark yellowish brown, medium to dark brownish grey, soft, dispersive to firm, sub blocky, arenaceous with 20-30% silt to very fine (vFL) quartz grains, carbonaceous with fine coaly partings and laminae. Claystone , as above. Coal , as above		
3350	30	Sandstone , loose quartz grains, clear to translucent, very light grey, pale to dark yellowish orange, fine to coarse grained (fL-cL), predominantly medium (mL-mU), moderately sorted, consolidated (40%) in part, light grey to		

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Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
	30	brownish grey, soft-firm, friable, fine-medium grained (fL-mL), predominantly fine grained (fU), well sorted, sub-angular, trace-25% argillaceous matrix, trace micro-mica, nil-trace carbonaceous flakes and laminae, good visible porosity, no fluorescence, no cut. Siltstone, argillaceous , white, light to medium grey, brownish grey, soft, dispersive, washing out, to slightly firm, silt to fine grained sand, 10-40% argillaceous matrix, grading to Silty Claystone in part.		
	30	Claystone, silty , white to greyish white, moderate to dark yellowish brown and medium to dark brownish grey in part, soft, dispersive to firm, sub blocky, arenaceous with 20-30% silt to very fine (vFL) quartz grains, carbonaceous with fine coaly partings and laminae.		
	10	Claystone , as above.		
3355	100	Sandstone , loose quartz grains, clear to translucent, very light grey, greyish orange, pale to dark yellowish orange, medium to very coarse grained (mL-vcU), abundant fractured, pebbly, predominantly medium to coarse (mU-cL), poorly sorted, trace micro-mica, nil-trace carbonaceous flakes and laminae, good visible porosity, no fluorescence, no cut.		
3360	100	Sandstone , as above, no fluorescence, no cut.		
3365	100	Sandstone , as above, increasingly coarse grained, no fluorescence, no cut.		
3370	100	Sandstone , as above, predominantly very coarse grained (vcU), abundant fractured, pebbly, poorly sorted, no fluorescence, no cut.		
3375	70	Sandstone , loose quartz grains, clear to translucent, very light grey, pale to dark yellowish orange, fine to coarse grained (fL-cL), predominantly medium (mL-mU), moderately sorted, consolidated (40%) in part, light grey to brownish grey, soft-firm, friable, fine-medium grained (fL-mL), predominantly fine grained (fU), well sorted, sub-angular, with trace-25% argillaceous matrix, trace micro-mica, nil-trace carbonaceous flakes and laminae, good visible porosity, no fluorescence, no cut.		
	10	Claystone, silty , white to greyish white, moderate to dark yellowish brown and medium to dark brownish grey in part, soft, dispersive to firm, sub blocky, arenaceous with 20-30% silt to very fine (vFL) quartz grains, carbonaceous in part with fine coaly partings and laminae.		
	20	Claystone , white to greyish white, dark yellowish orange, moderate to dark yellowish brown, brownish grey to brownish black, soft, dispersive to firm, blocky, trace-20% silt in part grading to Argillaceous Siltstone , trace-abundant (trace-20%) carbonaceous specks, laminae and partings grading to Carbonaceous Claystone in part, trace micromica, nil-trace disseminated pyrite.		
3380	20	Claystone, silty , as above.		
	60	Claystone , as above.		
	10	Coal , black to brownish black, firm-moderately hard, sub		

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Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
		splintery-sub fissile, sub bituminous, as thin laminae in claystone in part, very slow yellowish-blue cut, slow bluish yellow cut, strong bluish yellow ring residue.		
3385	20 60 20	Claystone, silty , as above. Claystone , as above. Coal , as above.		
3390	20 60 20	Claystone, silty , as above. Claystone , as above. Coal , as above.		
3400	10 20 60 20	Sandstone Claystone, silty , as above. Claystone , as above. Coal , as above.		
3405	10 20 60 20	Sandstone Claystone, silty , as above. Claystone , as above. Coal , as above.		
3410	5 10 75 10	Siltstone , white, light to medium grey, brownish grey, soft to firm, friable, silt to fine grained sand (silt-fU), 10-25% argillaceous matrix, grading to Argillaceous Siltstone in part. Claystone, silty , as above. Claystone , dark yellowish orange, moderate to dark yellowish brown, brownish grey to brownish black, soft to firm, blocky, trace-20% silt in part grading to Argillaceous Siltstone , trace-abundant (trace-20%) carbonaceous specks, laminae and partings grading to Carbonaceous Claystone in part, trace micromica, nil-trace disseminated pyrite. Coal , as above.		
3415	30 10 20 40	Sandstone , loose quartz grains, clear to translucent, very light grey, pale to dark yellowish orange, fine to medium grained (fL-mU), predominantly medium (mL), moderately sorted, consolidated (40%) in part, light grey to brownish grey, soft-firm, friable, fine-medium grained (fL-mL), predominantly fine grained (fU), well sorted, sub-angular, with trace-25% argillaceous matrix, trace micro-mica, nil-trace carbonaceous flakes and laminae, good visible porosity, no fluorescence, no cut. Siltstone , as above. Claystone, silty , white to greyish white, moderate to dark yellowish brown and medium to dark brownish grey in part, soft, dispersive to firm, sub blocky, arenaceous with 20-30% silt to very fine (vfL) quartz grains, carbonaceous in part with fine coaly partings and laminae. Claystone , as above.		
3420	40 10 15 25	Sandstone , as above Siltstone , as above. Claystone, silty , as above. Claystone , as above.		
3425	20 5	Sandstone , as above Siltstone , as above.		

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Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
	10 60	Claystone, silty , as above. Claystone , moderate to dark yellowish brown, brownish grey to brownish black, soft to firm, blocky, trace-20% silt in part grading to Argillaceous Siltstone , trace-abundant (trace-30%) carbonaceous specks, laminae and partings grading to Carbonaceous Claystone in part, trace micromica, nil-trace disseminated pyrite.		
	5	Coal , as above.		
3430	35	Sandstone , light grey, brownish grey, fine to medium, predominantly consolidated, firm to hard, friable, fine to medium grained (fL-mU), predominantly fine to medium (fU-mL), moderately to well sorted, sub-angular, with trace-25% argillaceous matrix, trace micro-mica, nil-trace carbonaceous flakes and laminae, poor visible porosity, no fluorescence, no cut.		
	5	Siltstone , as above.		
	10	Claystone, silty , as above.		
	40	Claystone , as above.		
	10	Coal , as above.		
3435	10	Sandstone , as above.		
	10	Siltstone , white, light to medium grey, brownish grey, yellowish orange, firm, friable, silt to fine grained sand (silt-fU), 10-25% argillaceous matrix, grading to Argillaceous Siltstone in part.		
	20	Claystone, silty , as above.		
	55	Claystone , dark yellowish orange, moderate to dark yellowish brown, brownish grey to brownish black, soft to firm, blocky, trace-20% silt in part grading to Argillaceous Siltstone , trace-abundant (trace-20%) carbonaceous specks, laminae and partings grading to Carbonaceous Claystone in part, trace micromica, nil-trace disseminated pyrite.		
	5	Coal , as above.		
3440	30	Sandstone , light grey, brownish grey, predominantly consolidated, firm to hard, friable, fine to medium grained (fL-mU), predominantly fine to medium (fU-mL), moderately to well sorted, sub-angular, with trace-25% argillaceous matrix, trace micro-mica, nil-trace carbonaceous flakes and laminae, poor visual porosity, no fluorescence, no cut.		
	20	Siltstone , light to medium grey, brownish grey, firm, friable, loose in part, silt to coarse grained (silt-cU), 10-25% argillaceous matrix, grading to Argillaceous Siltstone in part.		
	10	Claystone, silty , as above.		
	35	Claystone , dark yellowish orange, moderate to dark yellowish brown, brownish grey to brownish black, soft to firm, blocky, trace-20% silt in part grading to Argillaceous Siltstone , trace-abundant (trace-20%) carbonaceous specks, laminae and partings grading to Carbonaceous Claystone in part, trace micromica, nil-trace disseminated pyrite.		
	5	Coal , as above.		

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Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
3445	10 90	Sandstone , as above. Claystone , dark yellowish brown, brownish grey to brownish black, soft to firm, blocky, trace silt in part, trace carbonaceous flakes, trace micromica, nil-trace very fine disseminated pyrite.		
3450	30 70	Sandstone , white to light grey, brownish grey, consolidated, firm to hard, friable, fine to medium grained (fU-mU), predominantly medium (mL), well sorted, sub-angular, with trace-10% argillaceous matrix, trace micro-mica, nil-trace carbonaceous flakes and laminae, poor visual porosity, no fluorescence, no cut. Claystone , as above.		
3455	40 60	Sandstone , white to light grey, brownish grey, consolidated, firm to hard, friable, very fine to medium grained (vfU-mU), predominantly fine ((fL-fU), well sorted, sub-angular, with trace-10% argillaceous matrix, trace micro-mica, nil-trace carbonaceous flakes and laminae, poor visual porosity, no fluorescence, no cut. Claystone , as above		
3460	60 40	Sandstone , white to light grey, brownish grey, consolidated, firm to hard, friable, or as loose grains, very fine to medium grained (vfU-mL), predominantly fine (fL), well sorted, sub-angular, with trace-10% argillaceous matrix, trace micro-mica, nil-trace carbonaceous flakes and laminae, poor visual porosity, no fluorescence, no cut. Claystone , as above		
3465	30 70	Sandstone , white to light grey, brownish grey, consolidated, firm to hard, friable, in part loose, very fine to fine (vfL-fU), predominantly fine (fL), with rare very coarse grains, moderately well sorted, sub-angular, as above, with poor visual porosity, no fluorescence, no cut. Claystone , as above, generally silty, with fine carbonaceous flakes and laminae		
3470	60 40	Sandstone , white to light grey, brownish grey, consolidated, firm to hard, friable, in part loose, fine to very coarse (fL-vcL), predominantly fine (fL-fU), with coarse-very coarse grained, commonly fractured, moderately sorted, sub-angular, as above, with poor visual porosity, no fluorescence, no cut. Claystone , dark to dusky yellowish brown, moderately to highly carbonaceous, as above, generally silty, with fine carbonaceous flakes and laminae		
3475	40 60	Sandstone , white to light grey, generally loose, very fine to fine (vfL-fU), predominantly fine (fL), with occasional coarse-very coarse grains, moderately sorted, sub-angular, as above, with poor visual porosity, no fluorescence, no cut. Claystone , dark to dusky yellowish brown, moderately to highly carbonaceous, as above, generally silty, with fine carbonaceous flakes and laminae.		
3475	90	Sandstone , white to light grey, translucent-transparent, as loose grains, fine to coarse (fL-cU) subrounded to rounded,		

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Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
	10	poorly sorted, as above, no fluorescence, no cut. Claystone as above		
3480	100	Sandstone , white to light grey, translucent-transparent, as loose grains, very fine to very coarse (vfU-vcU) subangular to subrounded, poorly sorted, as above, no fluorescence, no cut.		
	Trace	Claystone , dark to dusky yellowish brown, moderately to highly carbonaceous, as above, generally silty, with fine carbonaceous flakes and laminae.		
3485	100	Sandstone , white to light grey, translucent-transparent, as loose grains, very fine to very coarse (vfU-vcU) subrounded to rounded, poorly sorted, as above, no fluorescence, no cut.		
	Trace	Claystone as above		
3490	100	Sandstone , white to light grey, translucent-transparent, as loose grains, very fine to coarse (vfU-cU) , predominantly fine to medium (fL-mL) subrounded to rounded, moderately sorted, as above, no fluorescence, no cut.		
	Trace	Claystone as above		
3495	100	Sandstone , white to light grey, translucent-transparent, as loose grains, very fine to coarse (vfU-cL) , predominantly fine (fL-fU), subrounded to rounded, moderately sorted, as above, no fluorescence, no cut.		
	Trace	Claystone light grey, very soft, silty.		
3500	90	Sandstone , white to light grey, translucent to transparent, loose, very fine to medium (vfU-mU) , predominantly fine (fL-fU), subrounded to rounded, moderately sorted, no fluorescence, no cut.		
	10	Claystone light grey, very soft, dispersive, silty with 10-20% silt grains grading to Silty Claystone in part, occasional very fine carbonaceous laminae.		
3505	80	Sandstone , white to light grey, translucent to transparent, loose, very fine to coarse (vfU-cU) , predominantly fine (fL-fU) subrounded to rounded, moderately sorted, no fluorescence, no cut.		
	20	Claystone light grey, very soft, dispersive, silty with 10-20% silt grains grading to Silty Claystone in part, occasional very fine carbonaceous laminae.		
3510	30	Sandstone , white to light grey, translucent to transparent, loose, very fine to coarse (vfU-cU) , predominantly fine (fL) subrounded to rounded, moderately sorted, no fluorescence, no cut.		
	70	Claystone , predominantly medium to dark yellowish brown, light grey in part, soft-firm, silty in part with 10-20% silt grains grading to Silty Claystone , slightly to moderately carbonaceous with fine black carbonaceous flakes and laminae, trace brown mica.		
3515	20	Sandstone , white to light grey, translucent to transparent, loose, very fine to very coarse (vfU-vcU), pebbly with fractured grains in part, predominantly fine to medium (fU-mL) subrounded to rounded, angular in part, moderately to poorly sorted, no fluorescence, no cut.		

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Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
	80	Claystone light to medium brownish grey, medium to dark yellowish brown, trace moderate green speckles in part, very soft to soft, amorphous, slightly to moderately carbonaceous in part with fine black carbonaceous flakes and laminae, trace pyrite, trace glauconite.		
3520	80	Sandstone , white to light grey, translucent to transparent, pale yellowish orange in part, loose, very fine to very coarse (vfU-vcU), pebbly with very coarse grains commonly fractured, predominantly medium to coarse (mL-cL), subrounded to angular, trace coarse mica (muscovite and biotite flakes), poorly sorted, no fluorescence, no cut.		
	20	Claystone white to yellowish grey, pale yellowish brown, very soft, amorphous, trace pyrite, silty in part with 10-20% silt grading to Silty Claystone , slightly carbonaceous with fine black carbonaceous flakes and laminae, trace brown mica.		
3525	40	Sandstone , as above.		
	20	Sandstone, argillaceous , white to light grey, trace moderate green (glauconite) speckles in part, soft, amorphous - washing out - very fine to fine grained (vfU-fL), subrounded, abundant argillaceous matrix (20-35%), very rare glauconite.		
	40	Claystone , white to yellowish grey, pale yellowish brown, light to dark grey, dark brownish black, trace moderate green speckles in part, very soft, amorphous, silty in part with 10-20% silt grading to Silty Claystone , trace carbonaceous flakes, very rare glauconite as interspersed medium to coarse grains. Note: claystone and argillaceous claystone under-represented in sample. – washing out.		
3530	10	Sandstone, argillaceous , white to light grey, trace moderate green (glauconite) speckles in part, soft, amorphous - washing out - very fine to fine grained (vfU-fL), subrounded, abundant argillaceous matrix (20-35%), trace glauconite.		
	90	Claystone , white to off-white and light grey, trace moderate green (glauconite) speckles in part, very soft, amorphous, silty in part with 10-20% silt grading to Silty Claystone , trace carbonaceous flakes, very rare glauconite as interspersed medium to coarse grains. Note: claystone and argillaceous claystone under-represented in sample. – washing out.		
3535	30	Sandstone, argillaceous , white to light grey, trace moderate green (glauconite) speckles in part, loose to soft, amorphous - washing out - very fine to fine grained (vfL-fL), predominantly very fine (fU), rounded to subrounded, abundant argillaceous matrix (20-35%), very rare glauconite.		
	70	Claystone , white to off-white and light grey, light brownish grey, pale to dark yellowish brown, very rare moderate green (glauconite) speckles in part, very soft, amorphous, silty in part with 10-20% silt grading to Silty Claystone .		

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Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
		trace carbonaceous flakes, very rare glauconite as interspersed medium to coarse grains.		
3540	20 80	Sandstone, argillaceous , as above. Claystone , white to off-white and light grey, light brownish grey and pale to dark yellowish brown in part, very soft, amorphous, occasionally slightly firm, silty in part with 10-20% silt grading to Silty Claystone , carbonaceous in part with common fine carbonaceous flakes and laminae, trace mica and very fine interspersed pyrite.		
3545	30 70	Sandstone , translucent to transparent, pale yellowish orange in part, white to light grey in part, quartzose, predominantly loose, soft, poorly consolidated in part, very fine to coarse (vfU-cU), predominantly fine to medium (fU-mU), rounded to sub angular, poorly sorted, abundant argillaceous matrix (10-35%) in part, no fluorescence, no cut. Claystone , white to off-white and light grey, light brownish grey, pale to dark yellowish brown, very soft, amorphous, occasionally slightly firm, silty in part with 10-20% silt grading to Silty Claystone , carbonaceous in part with common fine carbonaceous flakes and laminae, trace mica and very fine interspersed pyrite.		
3550	80 20	Sandstone , as above, very fine to medium (vfU-mU) with occasional coarse grains. Claystone as above, medium light grey, very soft to soft, amorphous, silty, grading to Silty Claystone , slightly carbonaceous, with trace very fine sand.		
3555	80 20	Sandstone , translucent to transparent, pale yellowish orange in part, white to light grey in part, quartzose, predominantly loose, soft, poorly consolidated in part, very fine to very coarse (vfU-vcL), predominantly fine to medium (fU-mU), rounded to sub angular, poorly sorted, argillaceous matrix (10-20%), in part no fluorescence, no cut. Claystone , as above, medium light grey, medium brownish grey, occasional, dark yellowish brown, very soft to soft, occasional. firm, silty, carbonaceous, with common fine carbonaceous flakes and laminae.		
3560	80 20	Sandstone , translucent to transparent, pale yellowish orange in part, white to light grey in part, quartzose, predominantly loose, soft, poorly consolidated in part, fine to very coarse (fU-vcL), pebbly, predominantly coarse to very coarse (cU-vcU), rounded to sub angular, angular fractured grains in part, poorly sorted, argillaceous matrix (10-20%), in part no fluorescence, no cut. Claystone , white to light grey, very soft, amorphous, occasionally slightly firm, silty in part with 5-10% silt occasional fine carbonaceous flakes and laminae, trace mica.		
3565	70	Sandstone , as above, loose, fine to very coarse, (fU-vcU), pebbly in part, generally medium to very coarse (mU-vcU), trace mica (biotite) flakes.		

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Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
	30	Claystone , white to light grey, occasional brownish grey, very soft, amorphous, occasionally slightly firm, silty in part with 5-20% silt, trace brown mica flakes (biotite), trace fine carbonaceous flakes.		
3570	80	Sandstone , as above, loose, fine to very coarse, (fU-vcU, generally cL-vcU), pebbly in part, very coarse grains generally fractured.		
	20	Claystone , white to light grey, very soft, amorphous, occasionally slightly firm, silty in part with 5-20% silt, trace brown mica flakes (biotite), trace fine carbonaceous flakes.		
3575	70	Sandstone , as above, loose, fine to very coarse, (fU-vcU, generally cL-vcU), subrounded to rounded, pebbly in part, very coarse grains generally fractured.		
	30	Claystone , as above, white to light grey, occasional brownish grey, very soft, with occasional fine carbonaceous flakes		
3580	80	Sandstone , translucent to transparent, pale yellowish orange in part, white to light grey in part, predominantly loose, quartzose, soft, poorly consolidated in part, fine to very coarse, (fU-vcU), pebbly in part, very coarse grains generally fractured, predominantly (cL-vcU), subrounded to rounded, angular fractured grains in part, poorly sorted, argillaceous matrix (trace-10%), in part no fluorescence, no cut.		
	20	Claystone , white to light grey, light to medium brownish grey, very soft, amorphous, occasionally slightly firm, silty in part with 5-15% silt, trace fine carbonaceous flakes.		
3585	20	Sandstone , as above, loose, very fine to very coarse, (vfU-vcU), generally fine (fL-fU), subrounded to rounded, poorly sorted, very coarse grains generally fractured.		
	80	Claystone , white to light grey, light to medium brownish grey, very soft, amorphous, occasionally slightly firm, silty in part with 5-15% silt, trace fine carbonaceous flakes.		
3590	5	Sandstone , as above, loose, very fine to coarse, generally fine, as above		
	95	Claystone , white to light grey, light to medium brownish grey, very soft, amorphous, occasionally slightly firm, silty in part with 5-15% silt, trace fine carbonaceous flakes and laminae.		
3595	10	Sandstone , loose, very fine to coarse, (vfU-cU, generally fine (fL-fU) subrounded to rounded, poorly sorted.		
	90	Claystone , white to light grey, light to medium brownish grey, very soft, amorphous, occasionally slightly firm, silty in part with 5-15% silt, trace fine carbonaceous flakes and laminae.		
3600	80	Sandstone , translucent to transparent, white to light grey in part, predominantly loose, quartzose, soft, poorly consolidated in part, very fine to medium, (vfU-mU), predominantly fine to medium (fU-mL), subrounded to rounded, moderately sorted, argillaceous matrix (trace-20%), in part, no fluorescence, no cut.		
	20	Claystone , white to off-white, light to medium brownish		

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Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
		grey, very soft, silty (5-20%) in part, slightly to moderately carbonaceous, with common fine black carbonaceous flakes and laminae.		
3605	80 20	Sandstone , as above, loose, very fine to medium, (vfU-mU), generally fine to medium (fU-mL) subrounded to rounded, moderately sorted, quartz, as above, Claystone , white to off-white, light to medium brownish grey, very soft, silty (5-20%) in part, slightly to moderately carbonaceous, occasional highly carbonaceous, with common fine black carbonaceous flakes and laminae.		
3610	80 20	Sandstone , translucent to transparent, white to light grey in part, predominantly loose, quartzose, fine to coarse, (fU-cL), generally fine to medium (fU-mL) subrounded to rounded, moderately sorted, occasional fractured grains, trace pyrite. Claystone , white to off-white, light to medium brownish grey, very soft to soft, in part silty, slightly to moderately carbonaceous, occasional highly carbonaceous, with occasional fine black carbonaceous flakes and lamellae		
3610	80 20	Sandstone , loose, fine to coarse, (fU-cL), generally fine to medium (fU-mL) subrounded to rounded, moderately sorted, quartz, as above, with occasional fractured grain, trace pyrite. Claystone , white to off-white, light to medium brownish grey, very soft to soft, in part silty, slightly to moderately carbonaceous, occasional highly carbonaceous, with occasional fine black carbonaceous flakes and lamellae		
3615	20 80	Sandstone , translucent to transparent, white to light grey in part, predominantly loose, quartzose, fine to medium, (fU-mU), predominantly fine to medium (fU-mL), subrounded to rounded, moderately sorted, quartz, as above, with occasional fractured grains, trace pyrite. Claystone , white to off-white, light to medium brownish grey, dark yellowish brown, very soft to soft, in part silty, slightly to moderately carbonaceous, occasional highly carbonaceous, with occasional fine black carbonaceous flakes and lamellae		
3620	40 60	Sandstone , translucent to transparent, white to light grey in part, predominantly loose, fine to medium, (fU-mU), generally fine (fU), subrounded to rounded, moderately sorted, quartz, as above, with occasional fractured grain, trace pyrite. Occasional hard grain aggregates, fine, with nil visual porosity Claystone , white to off-white, light to medium brownish grey, dark yellowish brown, very soft to soft, in part silty, slightly to moderately carbonaceous, occasional highly carbonaceous, with fine black carbonaceous flakes and wispy lamellae		
3625	60	Sandstone , translucent to transparent, white to light grey in part, predominantly loose,, fine to coarse, (fU-cU), generally medium (mL-mU), subrounded to rounded, angular in part, poorly sorted, quartz, as above, with		

ZANEGREY-1 ST2 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
	40	occasional fractured grains. Claystone , white to off-white, light to medium brownish grey, dark yellowish brown, very soft to soft, in part silty, slightly to moderately carbonaceous, occasional highly carbonaceous, with fine black carbonaceous flakes and wispy lamellae.		
3630	10	Sandstone , translucent to transparent, white to light grey in part, predominantly loose, fine to coarse, (fU-cU), generally medium (mL-mU), subrounded to angular, poorly sorted, quartz, as above, with occasional fractured grains.		
	90	Claystone , white to off-white, light to medium brownish grey, dark yellowish brown, very soft to soft, in part silty, slightly to moderately carbonaceous, occasional highly carbonaceous, with fine black carbonaceous flakes and wispy lamellae.		
3635	5	Sandstone , white to light grey and brownish grey, loose to consolidated, firm, friable, fine to medium, (fL-mL), predominantly fine (fU), subrounded to angular, moderately sorted, quartzose, argillaceous matrix in part with trace-20% clay matrix, grading to Argillaceous Sandstone in part, Trace carbonaceous flecks in part, no fluorescence, no cut.		
	95	Claystone , predominantly dark yellowish brown to brownish grey and brownish black, trace white to off-white, soft to firm, hard in part, silty in part (5-20%) grading to Silty Claystone , slightly to moderately carbonaceous, occasionally highly carbonaceous grading to Carbonaceous Claystone with fine black carbonaceous flakes and wispy lamellae.		
3640	20	Sandstone , white to light grey and brownish grey, loose to consolidated, firm, friable, hard in part, fine to coarse, (fL-cL), predominantly fine (fU), subrounded to angular, moderately sorted, quartzose, argillaceous matrix in part (trace-10%), trace carbonaceous flecks in part, no fluorescence, no cut.		
	80	Claystone , as above.		
3645	90	Sandstone , white to light grey, minor brownish grey, predominantly loose, consolidated in part, firm, friable, hard in part, fine to coarse, (fL-cU), predominantly fine to medium (fU-mL), subrounded to angular, fractured grains in part, moderately to poorly sorted, quartzose, argillaceous matrix in part (trace-10%), trace carbonaceous flecks in part, no fluorescence, no cut.		
	10	Claystone , as above. Note: Abundant claystone cavings in drilling mud. Sandstone under-represented.		
3650	90	Sandstone , as above, no fluorescence, no cut.		
	10	Claystone , as above. Note: Abundant claystone cavings in drilling mud. Sandstone under-represented.		
3655	20	Sandstone , as above		
	70	Claystone , predominantly moderate to dark yellowish		

ZANEGREY-1 ST2 - CUTTINGS DESCRIPTION SHEET

Depth m	%	Lithology and Show Descriptions	Ca%	Mg%
	10	brown, brownish grey and brownish black, trace white to off-white, soft to firm, hard in part, silty in part (5-20%) grading to Silty Claystone , slightly to moderately carbonaceous, occasionally highly carbonaceous grading to Carbonaceous Claystone with fine black carbonaceous flakes and wispy lamellae. Coal , black, hard, brittle, blocky, sub bituminous.		
3660	95	Claystone , predominantly dark yellowish brown to brownish grey and brownish black, trace white to off-white, soft to firm, hard in part, silty in part (5-20%) grading to Silty Claystone , slightly to moderately carbonaceous, occasionally highly carbonaceous grading to Carbonaceous Claystone with fine black carbonaceous flakes and wispy lamellae. Coal , as above.		
	5			
3665	5	Sandstone , white to light grey, minor brownish grey, predominantly loose, consolidated in part, firm, friable, hard in part, fine to medium (fL-mL), predominantly fine (fL-fU), subrounded, moderately sorted, quartzose, argillaceous matrix in part (trace-20%) grading to Argillaceous Sandstone , trace carbonaceous flecks in part, no fluorescence, no cut. Claystone , as above.		
	90			
	5	Coal , black, hard, brittle, blocky, sub bituminous.		
3670	5	Sandstone , as above.		
	70	Claystone, silty , white to off-white, soft, amorphous, silty (20-30%), slightly carbonaceous in part with fine black carbonaceous flakes and wispy lamellae.		
	20	Claystone , predominantly dark yellowish brown to brownish grey and brownish black, white to off-white in part, soft to firm, hard in part, silty in part (5-20%) grading to Silty Claystone , slightly to moderately carbonaceous, occasionally highly carbonaceous grading to Carbonaceous Claystone with fine black carbonaceous flakes and wispy lamellae.		
	5	Coal , black, hard, brittle, blocky, sub bituminous.		
3675 TD	Trace	Sandstone , as above.		
	30	Claystone, silty , white to off-white, soft, amorphous, silty (20-30%), slightly carbonaceous in part with fine black carbonaceous flakes and wispy lamellae.		
	70	Claystone , predominantly dark yellowish brown to brownish grey and brownish black, white to off-white in part, soft to firm, hard in part, silty in part (5-20%) grading to Silty Claystone , slightly to moderately carbonaceous, occasionally highly carbonaceous grading to Carbonaceous Claystone with fine black carbonaceous flakes and wispy lamellae.		
	Trace	Coal , black, hard, brittle, blocky, sub bituminous.		

APPENDIX 4

WIRELINE END of WELL REPORT

(By BakerAtlas)

Baker Atlas
End of Well Report for:

BASS STRAIT OIL COMPANY LTD.

ZANE GREY – 1/ST1/ST2

Prepared by:
Dave Thorne
Customer Service Manager
Perth, Australia
April 2005



Baker Atlas



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A. HSE Performance

No Baker Atlas incidents or accidents occurred during this well.

HSE plan for this well was achieved.

All JSAs held at rig floor prior to rig up of each tool string.

B. Actual time versus technical limit comparison

Suite 1

Rig Up: 11-Mar-05 @ 08:00 Rig Down: 14-Mar-05 @ 13:00

Section TD 216mm (8 1/2") hole - logs @ 3674m (244.5mm (9 5/8") casing @ 2184m):

Run	Logs	Tech. Limit	Actual Time	B. A. DT	Other LT	Comments
1	DLL/MLL/MAC/ORIT/ZDL/CN/DSL/TTRM	11.09	18.65	3.42	0.25	See comments below.
2	RCI/ORIT/GR/TTRM	18.32	58.00	0.0	0.0	No comparison possible. Tool stuck. Cable cut – Logging While Fishing
Tot. Job		29.41	77.00	3.41	0.25	

Technical Limit Calculations / Discrepancies:

- Run 1 (DLL/MLL/MAC/ORIT/ZDL/CN/DSL/TTRM) – The technical limit time was calculated as 11.09 hours but this assumed that an intermediate logging run would have been made from 2800m to 75m. This did not take place and casing had to be set early. As such, the open hole logging interval was 1496m instead of the technical limit value of 900m. In addition, the GR was recorded up to 75m whereas the technical limit assumed that this would have been performed during the intermediate logging. The recalculated technical limit for the actual conditions encountered would have been 16.8 hours so actual time is 1.85 hours longer. One hour of this difference can be attributed to the requirement to process the data once the tool string had entered casing. Upon completion of the processing, recording resumed.

There were two issues during this run which are attributable to engineer error.

- Firstly, the main pass was not recorded in high resolution mode from TD to approximately 3250m. This resulted in the need to run back down to re-log the zone of interest. Lost time calculated by Baker Atlas from the Job Notes is 2.08 hours. Lost time calculated by BSOC is 3.42 hours.
- The second issue was that the engineer had neglected to open the density caliper. The crew re-drove the data and confirmed that the recorded data was good (attributable to the hole deviation). The re-logged section of the hole was performed with the caliper open.

- Run 2 (RCI/ORIT/GR/TTRM) – Technical limit for a 20 pressure, 6 sample program was calculated as 17.98 hours. However, the tool became stuck and a Logging While Fishing operation took place so no comparison can be made between technical limit and actual logging time. Whilst running into the hole, the tool hung up at 2195m, 2250m, 2415m and 2485m but in each case the engineer was able to work the tool down. Three pressures were successfully taken before the tool became stuck at 3185.7m and the decision was made to fish. During the Logging While Fishing operation, a further 28 pressures and 2 samples were successfully taken and a further 2 samples were attempted and aborted before completion due to very slow pump-through.

C. Learning Points

- The engineer responsible for the errors during the GSLAM run acknowledges that he was at fault and is highly unlikely to repeat such errors. These errors occurred despite having clear acquisition guidelines before the job commenced and having already acquired a portion of the log in the required mode. It has been stressed to all engineers the importance of QC'ing the data during the logging run. A Log the Well On Paper (LWOP) exercise should be implemented for all future BSOC wells. The intent of such an exercise is to get the field engineers involved in the planning of the logging job and there should then be no misunderstandings on what sections are to be recorded in high resolution mode etc.

D. Summary

- Operating Efficiency ($[\text{Total Operating Time} - \text{Lost Time}] / \text{Total Operating Time}$) was 95.6% and is calculated using BSOC's figure of 3.41 hours for Lost time.

E. Crew Members

Stuart Mitchell	Engineer
Peter Ristau	Engineer
Alisdair Douglas	RCI Specialist
Madriaga Lovington	Operator
Ernesto McCall	Operator
Norman Hay	Operator
Orlando Cruz	Operator

OVERVIEW/SUMMARY

- Total Zane Grey-1/ST1/ST2 operating time: 77.00 Hours
- Total Zane Grey-1/ST1/ST2 lost time: 0.25 Hours
- Total Baker Atlas down time: 3.41 Hours
- Total wireline jobs: 1
- Total wireline runs: 2
- Total lost time incidents: 0
- Total near miss incidents: 0
- Requested log data were recorded, recovered, and presented with available tools.

APPENDIX 5

WIRELINE LOGGING WITNESS/MUD RECORD REPORT

(By Bass Strait Oil Company Ltd)

WIRELINE LOGGING WITNESS / MUD RECORD

Well	ZaneGrey-1		Suite	1	
Location	586049.89 mE		Witness	G Geary	
	5729856.42 mN			D. MacFarlan	
Datum of Measured Depth	RT		Contractor	Baker Atlas	
Elevation of Datum	21.5m MSL		Engineers	Stuart Mitchell Peter Ristau	
Driller's TD	3675mMD		Time Record		
Loggers TD	3674mMD		- Stop Drilling	16:59 hrs 10/03/2005	
Bit Size	216mm		- Stop Circ. @ TD	23:00 hrs 10/03/2005	
Last CSG Size	244mm		- Last Circulation	1 hr 6 mins	
Last CSG ID	220.49		- Start R/U	08:00 hrs 11/03/2005	
Drillers CSG Shoe Depth	2184mMD		- Start RIH	10:10 hrs 11/03/2005	
Loggers CSG Shoe Depth	2184mMD		- Finish Final POOH	12:42 hrs 14/03/2005	
Days Last CSG to TD	22		- Finish R/D	13:00 hrs 14/03/2005	
Open Hole Interval	1491		Hours Logging	77 hrs	
Maximum Deviation	37.52° at 2700m		Down Time	17 mins	
Magnetic Declination	13.209°		Lost Time	15 mins	

Circulating Mud (Active Pit)		Logging Pill (if used)	
Mud Type	KCl-polymer-glycol	Mud Type	
Mud Density	1.2	Mud Density (SG)	
Mud Viscosity (Funnel)	58	Mud Viscosity	
Barite Content in Mud	2.2	Barite Content in Mud	
pH	9.0	pH	
Fluid Loss	4.4	Fluid Loss	
Chlorides, mg/l	36500	Salinity, ppm	
Solid by Volume (%)	8.3	Solid by Volume (%)	
Water by Volume (%)	92	Water by Volume (%)	
Glycol by Volume (%)	4	Glycol by Volume (%)	
Average S. G. of Solids	3.2	Average S. G. of Solids	

Run #	1	2		
Logging Tool	DLL/MLL/MAC/ORIT/ ZDL/CNL/DSL/GR/TTRM	RCI-GR		
Date	11 March 2005	12 March 2005		
Start Rig Up	08:00 hrs 11/03/2005	02:41 hrs 12/03/2005		
Time RIH Start	10:10 hrs 11/03/2005	05:15 hrs 12/03/2005		
Time on BTM	15:38 hrs 11/03/2005	n/a		
Log Speed (min/m)	n/a	n/a		
Time on Surface	00:45 hrs 12/03/2005	12:42 hrs 14/03/2005		
Finish Rig Down	2:41 hrs 12/03/2005	13:00 hrs 14/03/2005		
Log Hours	18 hrs 41 mins	67 hrs 19 minutes		
Logger's TD (m)	3671m	n/a		
Logger's CSG Shoe (m)	3184	n/a		
Logged (m)	From	3179.6	3179.6	
	To	3674m	3622m	
	Interval	1490m	442.4m	
Max.Temp. (°C) / Thermom. depth (mTVDRT)	121.7° C (3216.1 m)	135.3° C (3170.9m)		
Time Since Circ. Stop	16 hrs 38 minutes	72 hrs		

APPENDIX 6

WIRELINE LOGGING DIARY

(By Bass Strait Oil Company Ltd)

WIRELINE LOGGING DIARY

Date/Time		ZaneGrey-1/ST1/ST2 Comments	Lost Time (minutes)	Down Time (minutes)
From	To			
Run#1 MLL/DLL/MAC/ORIT/ZDL/CNL/DSL/TTRM				
11 th March 2005				
08:00	08:05	JSA on rig floor		
08:10	09:55	Baker Atlas rig up, make up tools		
09:55	10:10	Load sources, zero tool, subtract 0.67m tide correction		
10:10	11:10	RIH, set compensator at 65m, RIH to 2110m.		
11:10	11:30	Casing checks, RIH to 2230m		
11:30	11:40	Log across casing shoe, log at 2177.8m (Driller's Depth 2184m). Set to Driller's Depth 2184m.		
11:40	11:53	RIH recording downlog.		
11:53	12:00	Depth not advancing on computer system at 2449.1m. Check depth system and cable, reboot acquisition system.		7
12:00	12:17	POOH to shoe to verify Shoe Depth.		17
12:17	12:37	RIH. Verify shoe depth and set to Driller's Depth of 2184mMD.		
12:37	12:40	RIH. Log downhole. Record time instead of depth scale.		3
12:40	12:50	Pull back to 2150m.		10
12:50	13:04	Log downhole. Stop for pickup weight/tension at 3000m.		
13:05	13:51	Log downhole to 3410m.		
13:51	14:28	Log Repeat Section No. 1 (3410-3290m) in high resolution mode.		
14:28	14:51	Log downhole to 3630m.		
14:51	15:28	Log Repeat Section No. 2 (3630-3540m) in high resolution mode.		
15:28	15:38	Log downhole to 3670m. Stop for pickup weight/tension at 3670m. Add 2.5m for stretch.		
15:38	15:44	Log downhole to 3674m TD (depth adjusted).		
15:44	17:07	Log up Main Pass in normal resolution mode to 3015m. Note: density caliper did not open through this interval.		
17:07	17:20	Run back to 3410m.		13
17:20	19:55	Log up Main Pass in high resolution to 3250m and normal resolution mode above. Note: density caliper open through this interval.		155
19:55	20:01	Stop. Take 70% overpull. Close		

WIRELINE LOGGING DIARY

Date/Time		ZaneGrey-1/ST1/ST2 Comments	Lost Time (minutes)	Down Time (minutes)
From	To			
20:01	20:45	calipers. Pull up to 2400m.		
20:45	20:50	Continue logging Main Pass to 2128m.		
20:50	21:10	RIH to verify logs.		
21:10	21:20	Verify logs		
21:20	22:50	Pull up to behind casing		
		Depth adjust to Driller's Depth of 2184mMD. Produce ASCII and pdf files of logs and email to town		
22:50	23:24	Continue logging up through casing GR/MAC to 1983m. Lose acoustic signal. Turn off MAC.		
23:24	12 March 2005	Continue logging up through casing GR only to 97m		
00:45	02:41	Decompensate, POOH, rig down Grand Slam		
Run # 2 RCI-GR-ORIT				
02:41	03:05	Rig up RCI,		
03:05	04:30	tool checks		
04:30	04:45	Wait on rig to establish certification of shackle holding sheave	15	
04:45	05:15	Zero tool, check packer, RIH and set compensator at 70.249m -0.45m tidal correction		
05:15	05:55	RIH to shoe		
05:55	06:25	Wait at shoe to allow tool to stabilise		
06:25	06:30	RIH, held up just below shoe.		
06:35	06:40	Work through obstruction; pull 5000lb at cable head. Drilling supervisor called. Work free		
06:40	06:45	RIH, hung up at 2416m, work through.		
06:45	07:20	RIH to 3210m, run correlation log		
07:20	07:35	Go to first RCI point at 3179m. Tight test, hole sticky, go to point 2		
07:35	08:30	RCI points 2 and 3, valid tests, both repeated		
08:30	08:45	Stuck in hole while coming off point 3 at 3185m. Pull 80% of weak point, cablehead tension failure. Drilling supervisor called and town advised.		

WIRELINE LOGGING DIARY

Date/Time		ZaneGrey-1/ST1/ST2 Comments	Lost Time (minutes)	Down Time (minutes)
From	To			
08:45	09:00	Attempt sample, abort this after discussion with town.		
09:00	10:00	Rig down wireline equipment and compensator line		
10:00	11:30	Rig up to strip over wireline cable, with intention to carry out logging-while-fishing procedure		
11:30	14:30	Tension wireline, cut wireline cable, make up and test wireline surface latching equipment		
14:30	13 th March 2005	RIH with 3.375" grapple, stripping over wireline to 3145m		
	03:30			
03:30	04:00	Troubleshoot top drive problem		
04:00	05:00	Circulate slowly above RCI logging tool		
05:00	05:30	Latch onto RCI tool		
05:30	09:00	Pull back 2 joints, re-terminate wireline cable.		
09:00	09:40	Rig up side-entry sub		
09:40	09:50	JSA on rig floor		
09:50	10:20	Install SES and prepare to RIH		
10:20	10:45	RIH for correlation run, correct depth		
10:45	13:00	Take pretests 3190.4 – 3268.7m		
13:00	14:20	Correlation run (depth OK) pretests and sample at 3307.0m		
14:20	23:20	Continue down hole taking pretests		
23:20	23:30	At 3622m, tool failure in GR module due to excessive temperature, communications failure.		
		Completed: 30 pressure tests/16 repeats/2 fluid formation samples.		
23:30	14 th March	POOH to SES with RCI-GR		
	02:45			
02:45	05:30	Rig down SES, Pull weak point and retrieve wireline cable		
05:30	12:42	POOH with RCI on drillpipe. Meanwhile, change out cable drum on Baker-Atlas unit.		
12:42	13:00	On surface. Lay out RCI-GR tool. Complete rigging down.		
		TOTAL LOGGING TIME: 72 Hrs	15	205

APPENDIX 7

VALIDITY CHECKS, TRACER, WATER AND RCI SAMPLE ANALYSES

(By Petrotech Knowledge)

WELL: ZANE GREY-1/ST1/ST2

VALIDITY CHECKS, TRACER, AND RCI SAMPLE ANALYSES

REPORT TYPE: Final

Client : Bass Strait Oil Company Ltd
Well : Zane Grey-1/ST1/ST2
Permit : Vic/P42
Date : 4 February - 15 March 2005
Client Representative : Bob Fisher

Date of reporting : April 2005
Project number : 55827
Project co-ordinator : Robyn Tamke
Participants : Mark Anderson
Arvinder Manik

Report prepared by : Mark Anderson
Report reviewed by : David Roberts

Number of issues : 3
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SUMMARY

A Petrotech representative onsite maintained regular monitoring of sodium thiocyanate tracer in the drilling mud during drilling through the zone of interest, such that mud contamination of aqueous fluids obtained during wireline fluid sampling could be evaluated. In addition, to validate the quality of samples taken by the Baker Atlas RCI wireline fluid sampling (WFS) tool, Petrotech performed a programme of validity checks and analysis on the retrieved samples.

The Baker Atlas RCI logging program originally comprised of six 840cc PVT sample chambers, plus two larger bulk chambers for sampling at various depths within oil and water bearing sand units. Due to difficulties experienced in obtaining samples, a total of two 840cc samples were collected from the same depth (3307.0mMDRT). A detailed breakdown of how each sample was processed, including chamber opening pressures, is presented in Table 4.1 of this report.

Petrotech performed single-phase sample transfer on one of the retrieved samples from the Baker Atlas RCI tool into a Petrotech shipping cylinder. The other sample was drained at surface and its contents metered. In addition, Dräger tube measurements for H₂S and CO₂ were conducted onsite on small gas volumes flashed from each chamber. Aqueous fluid drained from each sample was tested for presence of sodium thiocyanate tracer at this stage.

All live and depressurised samples obtained from both chambers were sent onshore for further analysis.

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1. INTRODUCTION

During the period 4 February – 15 March 2005, Petrotech supplied technical equipment and personnel to perform the following analyses on the Ocean Patriot rig for the Zane Grey-1 drilling and logging programme.

- Monitoring of sodium thiocyanate in drilling mud
- Opening pressures of RCI (WFS) chambers
- Single phase fluid transfers of RCI (WFS) samples
- Hydrogen Sulphide measurement of gas samples
- Carbon Dioxide measurement of gas samples
- Determination of mud filtrate contamination in RCI aqueous samples
- Dead oil density (hence API gravity) measurement

In order to obtain the highest quality of well-site data from the RCI tool, Petrotech confirmed the quality of samples retrieved by initially carrying out opening pressure measurements. Where appropriate, drained fluid volumes were measured and recorded. Basic offshore analysis was performed on the drained samples. The purpose of these checks is to provide onsite confirmation of the quality of WFS samples retrieved.

This report presents the supporting methods, results and other ancillary information pertinent to the Zane Grey-1 project.

2. OFFSHORE ANALYSIS PROGRAMME

Mud Tracer (Thiocyanate Ion) Monitoring

During the drilling through zones of interest, a thiocyanate salt compound was added to the drilling mud by Petrotech at a concentration of approximately 400mg/L. Petrotech monitored thiocyanate concentration from various mud pits and returns, the results of which are presented in tabular and graphical form in Section 4 of this report. Note that although monitoring was carried out for both 12¼” and 8½” hole sections, results are shown here only for the 8½” section, as the upper section was not logged.

Each mud sample collected was initially filtered to 0.45 microns. The resulting filtrate was evaluated for thiocyanate content using a UV/Visible spectrophotometer. The method used is based on ASTM D4193-89. Samples were retained in the event that full ion analyses of mud filtrate and WFS water samples was required.

Wireline Fluid Sampling

The RCI tool configuration consisted of six 840cc chambers and one US gallon chamber and one 2¾ gallon chamber. Due to difficulties in obtaining samples, only two 840cc samples were retrieved at one depth (3307.0mMDRT).

Sample Handling

A detailed breakdown of the sample transfers and compositional analyses carried out on the samples is detailed in the results section of this report.

Following collection of the wireline fluid samples the tools were brought back to the surface. Baker Atlas personnel isolated and removed the sample chambers from the tool and passed them on to Petrotech for sampling and analysis. Prior to sampling/analysis the opening pressure of each chamber was determined (Table 4.1).

At the request of the BSOC representative onsite, one sample was nominated for draining and metering onsite. The other sample was retained for pressurised transfer. In order to obtain information in a short time frame, the sample selected for draining was handled first, as follows. With the sample outlet port of the RCI chamber oriented to the highest point, the chamber was depressurised by opening the sample end port to atmosphere in a controlled manner. A trap was used to capture liquid, with gas flowing to atmosphere via a gas meter. During this phase, balloon samples were collected for gas chromatography compositional analysis by the Halliburton mud logging unit. Dräger tube measurements for H_2S and CO_2 were conducted at this stage. Remaining dead liquid was then drained and measured by forcing the piston to the top of the chamber using compressed air. Once volumes had been measured, the density of the dead condensate liberated was measured to determine API gravity. In addition to this, the aqueous fluid obtained was analysed to quantify the presence of sodium thiocyanate tracer. All depressurised samples were then bottled for shipment onshore.

Immediately after this, the sample nominated for pressurised transfer was prepared. This requires that the sample be preconditioned at an elevated temperature and pressure to ensure that the hydrocarbon content of the samples is equilibrated in single phase before opening the chamber. Conditions for this process were selected as 60°C and 1450psi above the reservoir pressure as supplied from Baker Atlas logging data, i.e. 5400psig. The sample was maintained in this state with agitation for a period of two hours after temperature and pressure stability had been reached. Following the pre-conditioning period, sample transfer was commenced, introducing the sample into the Petrotech shipping cylinders at a slow constant rate (around 20cc per minute) intended to minimise the disruption of pressure equilibrium. Details of the sample transfer are presented in table 4.2.

Excess sample from this chamber not transferred into the Petrotech shipping bottle was flashed to atmospheric pressure, with the volume of gas and liquid being drained and measured. Dräger measurements for H_2S and CO_2 were taken during this stage. Insufficient gas was present for provision of a gas chromatography sample in this instance.

3. OFFSHORE ANALYTICAL METHODS

3.1 Analytical Methods in Gas

3.1.1 Hydrogen Sulphide (ASTM D 4810-88)

In addition to the gas chromatography analyses performed, the concentration of H₂S was determined using Dräger tubes. Gas was passed through stainless steel lines into a small open vessel where the gas was sampled with a hand pump.

The Dräger glass tubes are filled with white crystals of a copper II salt. On contact with H₂S brown copper sulphide and hydrogen ions are formed. Concentration is read directly on the tube scale in ppm(vol).

3.1.2 Carbon Dioxide (ASTM D 4984-89)

Concentration of carbon dioxide was determined using Dräger tubes. Sampling was performed as for hydrogen sulphide. The Dräger glass tubes are filled with crystal violet and hydrazine. Carbon dioxide reacts with the hydrazine to form carbonic acid monohydrazine, and crystal violet acts as a redox indicator to a blue colour change. Concentration is read directly on the tube scale in vol%.

3.2 Analytical Methods in Oil

3.2.1 Density of Oil (ASTM D 4052-91)

Density was measured with DMA-35 density meter. A fixed volume, U-shaped glass tube in contact with an oscillator is filled with sample. The oscillation frequency of the undamped glass tube is mass dependent, thus density of the sample can be determined from the oscillation frequency. The analysis was performed onsite. From the density measurement, the API gravity can be calculated

3.3 Analytical Methods in Water

3.3.1 Thiocyanate Determination (ASTM D4193-89)

Mud samples were filtered using a mud press to recover the filtrate. The filtrate was then analysed to determine the level of thiocyanate present.

Thiocyanate present in the water sample reacts with added ferric ions at a pH of <2 to form a coloured complex that can be determined colorimetrically at 460nm. The measured absorbance at this wavelength is proportional to the thiocyanate content in the sample. The determination was performed onsite.

4. RESULTS

Table 4.1 RCI Sample Data

Client	Bass Strait Oil Company Ltd
Well	Zane Grey-1/ST1/ST2
Project No.	55827

Sampling Depth (mMDRT)	WFS Chamber No.	WFS Chamber Vol.	Downhole Sampling Date	Downhole Sampling Time	Opening Pressure (psig)	Opening Temperature (°C)
3307.0	189768	840cc	13.03.05	13:10	1733	21.5
3307.0	369040	840cc	13.03.05	14:25	2741	19.1

Table 4.2 PVT Transfer Data

Client	Bass Strait Oil Company Ltd										
Well	Zane Grey-1/ST1/ST2										
Project No.	55827										
Petrotech Sample No.	Sample Depth (mMDRT)	WFS Chamber No.	Transfer Date	Transfer Time	Petrotech Cylinder No.	Transfer Volume (mL)	Transfer Pressure (psig)	Ambient Temp. (°C)	Shipping Cap Vol. (mL)	Shipping Pressure (psig)	Comments
T.01	3307.0	369040	14.03.05	20:32-21:02	TS-3505	550	5400	18.2	30	3950	Gas, filtrate presence likely

Table 4.3 RCI Sample Flash Data

Client	Bass Strait Oil Company Ltd
Well	Zane Grey-1/ST1/ST2
Project No.	55827

RCI Chamber No.	Sample Depth (mMDRT)	Total Transferred Pressurised Volume (mL @ psig)	Stabilised Oil Volume (mL)	Measured Gas Volume (L @ STP*)	Measured Water Vol. (mL)	Barometric Pressure (mBar)	Ambient Temperature (°C)	Dräger Tube	
								CO ₂ (%vol)	H ₂ S (ppmv)
189768	3307.0	N/A	124	115.68	140	1014.0	21.5	1.0	200
369040	3307.0	550 @ 5400	trace	1.78	145	1014.0	19.0	2.3**	120**

* STP – 1013.25mBar & 15°C

** Dräger tube readings for chamber 369040 taken on headspace gas from flash of sample remaining after transfer completion, when only aqueous fluid (filtrate) remained. Unlikely to be representative of reservoir composition.

Table 4.4 Hydrocarbon Sample Density Data

Client	Bass Strait Oil Company Ltd
Well	Zane Grey-1/ST1/ST2
Project No.	55827

Sample No.	RCI Chamber No.	Sample Depth (mMDRT)	Oil Density (g/cm ³ @ 15°C)	Oil Gravity (°API @ 15°C)
------------	-----------------	----------------------	--	---------------------------

A.01	189768	3307.0	0.7682	52.7
------	--------	--------	--------	------

Table 4.5 Concentration of Thiocyanate Tracer vs Lag Depth

Client	Bass Strait Oil Company Ltd
Well	Zane Grey-1/ST1/ST2
Proj. No.	55827

Date	Time	Bit Depth (mMDRT)	Lag Depth (mMDRT)	Sample Location	Concentration (SCN ⁻ mg/L)	Comments
------	------	-------------------	-------------------	-----------------	---------------------------------------	----------

8 1/2" Hole Section

24.02.05	17:48	2808.5	2800.5	Returns	470	Gradual SCN addition to active during drilling, 05:25-19:00
	20:28	2858.5	2850.5	Returns	480	
25.02.05	01:23	2915.5	2900.0	Returns	510	
	03:23	2958.0	2955.0	Returns	495	Addition of underdoped premix (pit 5) lowering level
	08:15	3002.0	2999.0	Returns	455	Pit 5 [SCN] made up to 400mg/L
	10:07	3024.5	3020.0	Returns	455	
	11:36	3047.0	3043.0	Returns	455	
	12:45	3066.0	3059.0	Returns	455	
	14:55	3096.0	3081.0	Returns	460	
	15:44	3106.0	3102.0	Returns	495	POOH - cement in sheared bit.
06.03.05	05:51	3130.0	3120.5	Returns	330	started boosting tracer level - initial 290ppm
	07:02	3148.0	3141.5	Returns	345	
	08:22	3162.0	3162.0	Returns	370	stop drilling - service top drive
09.03.05	08:57	3202.0	3178.0	Returns	355	
	09:34	3226.0	3200.5	Returns	350	
	10:15	3245.0	3215.0	Returns	350	
	11:53	3245.0	3231.0	Returns	360	Active pit moved - pit#3 to pit#2
	12:55	3246.5	3245.0	Returns	335	Start dosing system to accomodate pit #2 mud
	14:37	3280.0	3259.5	Returns	330	
	15:30	3302.5	3278.0	Returns	300	
	15:45	3317.5	3288.5	Returns	330	Addition of 50L SCN completed @ 16:30
	16:25	3337.0	3305.5	Returns	365	RCI Water sample point M.22
	17:07	3345.0	3325.0	Returns	365	
	18:46	3387.0	3373.0	Returns	390	
	19:03	3397.0	3379.5	Returns	375	
	20:39	3407.0	3391.5	Returns	360	
	21:20	3431.5	3406.0	Returns	385	
	21:58	3442.0	3421.5	Returns	415	
	22:37	3456.5	3438.5	Returns	425	
	23:20	3462.5	3450.0	Returns	430	
10.03.05	00:16	3487.0	3467.0	Returns	405	
	00:44	3489.0	3480.5	Returns	415	
	02:16	3516.5	3498.5	Returns	415	
	02:53	3522.5	3510.5	Returns	400	
	04:04	3540.5	3528.0	Returns	410	
	05:28	3553.0	3544.5	Returns	395	
	06:28	3566.0	3556.0	Returns	380	
	08:20	3581.5	3573.5	Returns	360	
	09:22	3593.5	3585.5	Returns	360	
	10:55	3614.5	3604.0	Returns	345	
	11:46	3628.5	3615.5	Returns	345	
	12:46	3637.0	3630.0	Returns	360	TD called at 3675.0mMDRT - sampling stopped

*Tracer concentrations are reported to the nearest 5mg/L SCN⁻.

Table 4.6 Contamination Calculations from RCI Water Sampling Program

Sampling Date	Sampling Time (start)	RCI Chamber No.	Sampling Depth (mMDRT)	Percentage Contamination	Concentration (SCN ⁻ mg/L)	Comments
13.03.05	13:10	189768	3307.0	71.2	260	Mud Sample Depth = 3305.5m (Sample M.22)
13.03.05	14:25	369040	3307.0	72.6	265	Mud Sample Depth = 3305.5m (Sample M.22)

Figure 1 Plot of Thiocyanate Concentration vs Lag Depth

BASS STRAIT OIL COMPANY, ZANE GREY-1/ST1/ST2
8 1/2" Hole Section

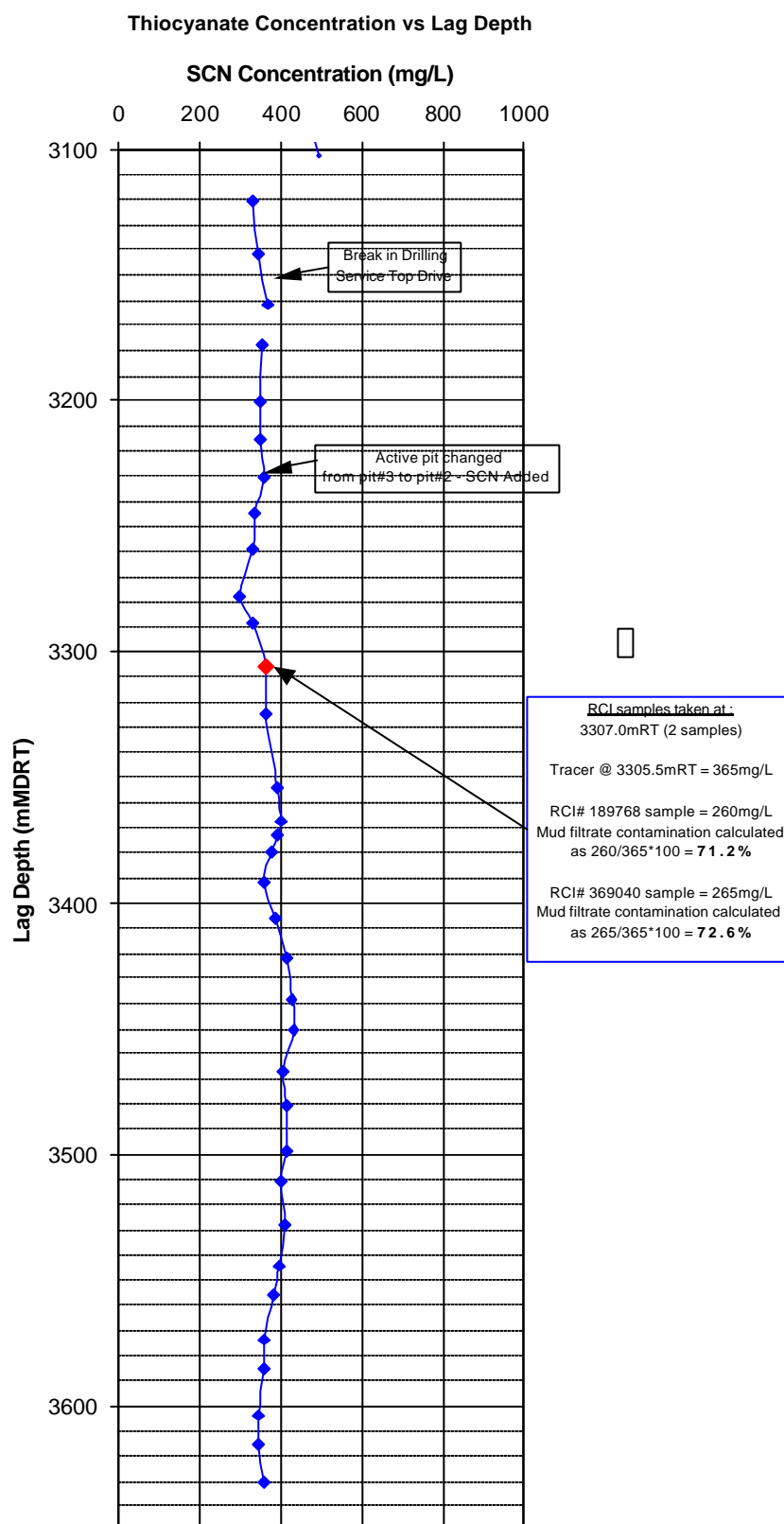


Table 4.7 Sample Lists

Table 4.7.1 Pressurised (Live) Sample List

Client	Bass Strait Oil Company Ltd
Well	Zane Grey-1/ST1/ST2
Project No.	55827

Sample No.	RCI Chamber No.	Petrotech Cylinder No.	Sample Date	Sample Time	Sample Depth (mMDRT)	Sample Volume (mL)	Comments
T.01	369040	TS-3505	13.03.05	14:25	3307.0	550	Gas, Filtrate presence likely

Table 4.7.2 Non-Pressurised Sample List

Client	Bass Strait Oil Company Ltd
Well	Zane Grey-1/ST1/ST2
Project No.	55827

Sample No.	RCI Chamber No.	Bottle	Sample Date	Contents	Sample Depth (mMDRT)	Sample Volume (mL)	Comments
A.01	189768	HDPE Bottle	13.03.05	Condensate	3307.0	120	Full Sample Flash
A.02	189768	HDPE Bottle	13.03.05	Water/Filtrate	3307.0	130	Full Sample Flash
A.03	369040	HDPE Bottle	13.03.05	Water/Filtrate	3307.0	140	Post Transfer Flash

5. DISCUSSION

When removing the RCI chambers from the carrier, the Baker Atlas operator suspected that significant pressure had been lost from chamber 189768. Chamber opening pressures confirmed this, with the chamber measuring at 1008psi lower than chamber 369040. Consequently, chamber 189768 was selected to be flashed to atmosphere in entirety for rapid visual confirmation of reservoir fluids. Flashing of this sample yielded predominantly gas with a significant volume of condensate (52.7°API) being liberated from the gas. Aqueous fluid was recovered also. Thiocyanate determination showed that this aqueous fluid was mostly mud filtrate, with a measured value equivalent to 71.2% filtrate. Any dilution of the mud filtrate is most likely to be caused by the presence of condensed water, which has existed as vapour in the reservoir gas.

The other RCI chamber was chosen for transfer to preserve the sample for onshore lab analysis. The single phase transfer conducted on the sample from RCI chamber 369040 was carried out without problem. All hydrocarbon in this chamber was transferred to the shipping cylinder, with the post transfer flash yielding aqueous fluid with minimal traces of gas or oil. The aqueous fluid from this chamber had almost identical thiocyanate concentration to that seen in chamber 189768 (equivalent to 72.6% filtrate).

Non-hydrocarbon gas determinations by Dräger tube showed that while CO₂ is relatively low (1% vol), H₂S would be a significant issue if the gas were produced to surface, with the level from the flashed sample being recorded at 200ppmv.

APPENDIX 8

PVT REPORT

(By Core Laboratories Australia Pty Ltd)

***Reservoir Fluid Analysis of a
Sub-surface Sample from
Zane Grey-1 Well
Victoria***

Prepared for
Bass Strait Oil Company Limited

May 2005

File: AFL 2005-023

Reservoir Fluid Laboratory
Core Laboratories Australia Pty Ltd
Perth
Western Australia

25 May, 2005

Bass Strait Oil Company Limited,
C/- Labrador Petro-Management Pty Ltd
Hampden House
174 Hampden Road,
Nedlands,
Western Australia, 6009

Attention: Mr Robert Fisher

Subject: Reservoir Fluid Analysis
Well: Zane Grey-1
Location: Victoria
File: AFL 2005-023

Dear Robert,

One sub-surface sample, transferred from a down-hole sampling chamber, was received for use in a reservoir fluid analysis study. This sample was validity checked prior to commencement of the analysis program. Presented in the following report are the results of the requested analyses.

Core Laboratories Australia Pty Ltd is pleased for this opportunity to be of service to Bass Strait Oil Company Limited. Should you have any questions regarding this report, or if we may be of any further assistance, please feel free to contact me at your convenience.

Yours Faithfully,
For **CORE LABORATORIES AUSTRALIA PTY LTD**

John R. Thompson
Project Coordinator

Kevin R. Daken
Laboratory Supervisor

Bass Strait Oil Company Limited
Zane Grey-1
AFL 2005-023

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Pressure-Volume Relations	
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Liquid Phase Volume	A-3

LABORATORY PROCEDURES

Sample Selection and Validation

One sub-surface sample was transferred in the field and forwarded to our Perth laboratory. Initially, the sample opening pressure was measured and compared to shipping conditions. The summary of results, shown on page 3, indicated the sample was consistent with sample data provided.

Compositional Analysis

The composition of the sample was determined by flash/separation techniques whereby a fluid sub-sample was isothermally flashed and separated into liquid and gas phases. The flashed gas was analysed according to the GPA 2286 method and the flashed liquid using temperature-programmed capillary chromatography. These flashed product compositions were mathematically recombined to the measured flash gas-oil ratio. The measured composition is presented on pages 4 of this report.

Constant Composition Expansion (Pressure-Volume Relations)

A known volume of reservoir fluid was charged to a high-pressure, visual cell and thermally expanded to the reported temperature of 125.8 °C. After equilibrating the sample in single phase, the fluid was subjected to a constant composition expansion procedure. During this process, a dew point was observed at 3775 psig. The pressure-volume relations and a retrograde liquid curve were then completed. The resultant volumetric data, pressure-volume relations and retrograde liquid volume measurements are summarised on page 5. Graphical representations of the data are depicted in figures A-1 through A-3.

Bass Strait Oil Company

Zane Grey-1

AFL 2005-023

General Well Information

Company.....	Bass Strait Oil Company
Well Name.....	Zane Grey-1
API Well Number.....	-
File Number.....	AFL 2005-023
Date Sample Collected.....	14-Mar-05
Sample Type.....	Bottom-Hole
Geographical Location.....	Victoria
Field.....	Zane Grey

Well Description

Formation.....	*	
Pool (or Zone).....	*	
Date Completed.....	*	
Elevation.....	*	m
Producing Interval.....	*	m
Total Depth.....	*	m
Tubing Size.....	*	in
Tubing Depth.....	*	m
Casing Size.....	*	in
Casing Depth.....	*	m

Pressure Survey Data

Data from Original Discovery Well (Zane Grey-1)

Date	14-Mar-05	
Reservoir Pressure	3995.4	psia
Gas / Oil Contact.....	*	m
Oil / Water Contact.....	*	m

Data at Sample Collection

Date.....	14-Mar-05	
Reservoir Pressure.....	3995.4	psia
Reservoir Temperature.....	125.8	°C
Pressure Tool.....	RCI	
Flowing Bottom-Hole Pressure.....	*	psig
Gas / Oil Contact.....	*	m
Oil / Water Contact.....	*	m

* Data not forwarded to Core Laboratories.

Bass Strait Oil Company
Zane Grey-1
AFL 2005-023

Production Data

Data from Original Discovery Well (Zane Grey-1)

Location.....	Victoria	
Date.....	14-Mar-05	
Oil Gravity @ STP.....	52.7	°API
Separator Pressure.....	*	psig
Separator Temperature.....	*	°F
Production Rates		
Gas.....	*	Mscf/D
Liquid.....	*	STbbl/D
Gas/Liquid Ratio.....	*	scf/bbl

Data at Sample Collection

Sampling Date.....	14-Mar-05		
Production Rate.....	*	bbl/D	
Produced G.O.R.	*	scf/bbl	
Liquid Gravity at 60.0 °F.....	52.7	°API	
Productivity Index.....	*	bbl/D/psi at	°F
		and	bbl/D

Sampling Information

Sample Collected at.....	3307	m
Status of Well.....		
Sampled By.....	Baker Atlas	
Type Sampler.....	RCI	
Cylinder Names/Numbers	TS-3505	

* Data not forwarded to Core Laboratories.

Bass Strait Oil & Gas Company
Zane Grey-1
AFL 2005-023

PRELIMINARY QUALITY CHECKS
of Reservoir Oil Samples Received in Laboratory

Chamber Number	Depth (m) MDRT	Reservoir Conditions		Shipping Conditions		Lab Opening Conditions		Saturation Conditions		Approximate Sample Volume (cc)	Water/ Filtrate Recovered (cc)
		psia	°C	psig	°C	psig	°C	psig	°C		
TS-3505	3307.0	3995.4	125.7	3950	18.2	3943	17.4	3775	125.8	620 #	0

Sample selected for limited PVT analysis.

Notes:

Sample volume determined at 6500 psig WP and 85 °C

COMPOSITION OF RESERVOIR FLUID SAMPLE - TS-3505
(by Flash/Extended Chromatography)

[illegible]

Bass Strait Oil Company

Zane Grey-1

AFL 2005-023

PRESSURE-VOLUME RELATIONS

(at 127.8 °C)

Pressure psig	Relative Volume (A)	Liquid Volume Percent (B)	Liquid Volume Percent (C)
6500	0.7995		
6000	0.8208		
5500	0.8461		
5000	0.8773		
4500	0.9169		
4200	0.9465		
4100	0.9576		
4000	0.9694		
3900	0.9822		
3800	0.9961		
d»3775	1.0000	0.00	0.00
3725	1.0086	1.20	1.21
3675	1.0176	2.92	2.97
3575	1.0367	5.73	5.94
3400	1.0743	9.29	9.98
3200	1.1248	11.88	13.36
3000	1.1851	13.10	15.52
2600	1.3442	12.83	17.25
2200	1.5796	10.93	17.26
1800	1.9427		
1407	2.5289		
1150	3.1451		
950	3.8627		
720	5.1834		

(A) Relative Volume: V/V_{sat} or volume at indicated pressure per volume at saturation pressure.

(B) Percent of the total volume of gas and liquid at the indicated pressure and 127.8 °C.

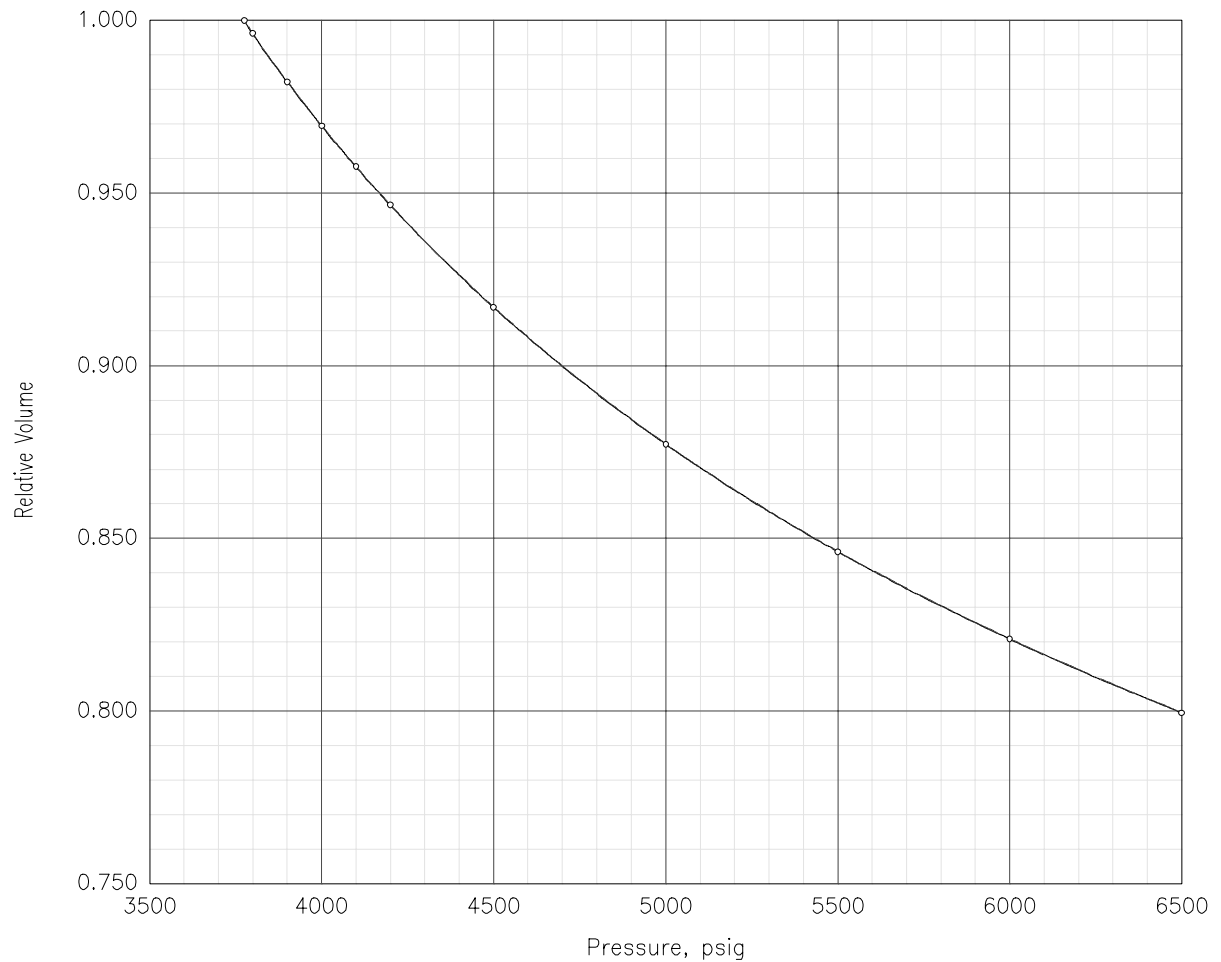
(C) Percent of hydrocarbon pore-space at saturation pressure.

Bass Strait Oil Company

Zane Grey-1

AFL 2005-023

RELATIVE VOLUME (at 125.8 °C)



Relative Volume Expression: $y = a + b (X_d)^i + c (X_d)^j + d (\log(X_d))^k$		LEGEND	
where: a= -8.81017e+ 00 i= 0.500 b= 1.57166e+ 01 j= 0.750 c= -5.90643e+ 00 k= 0.995 d= -8.98353e+ 00		Laboratory Data Confidence Limits Analytical Expression	
Note: X_d (dimensionless 'X') = P_i / P_{sat} , psig		Saturation Pressure: 3775 psig	
Confidence level: 99 % Confidence interval: +/- 0.00004 'r squared': 1		Pressure-Volume Relations Figure A-1	

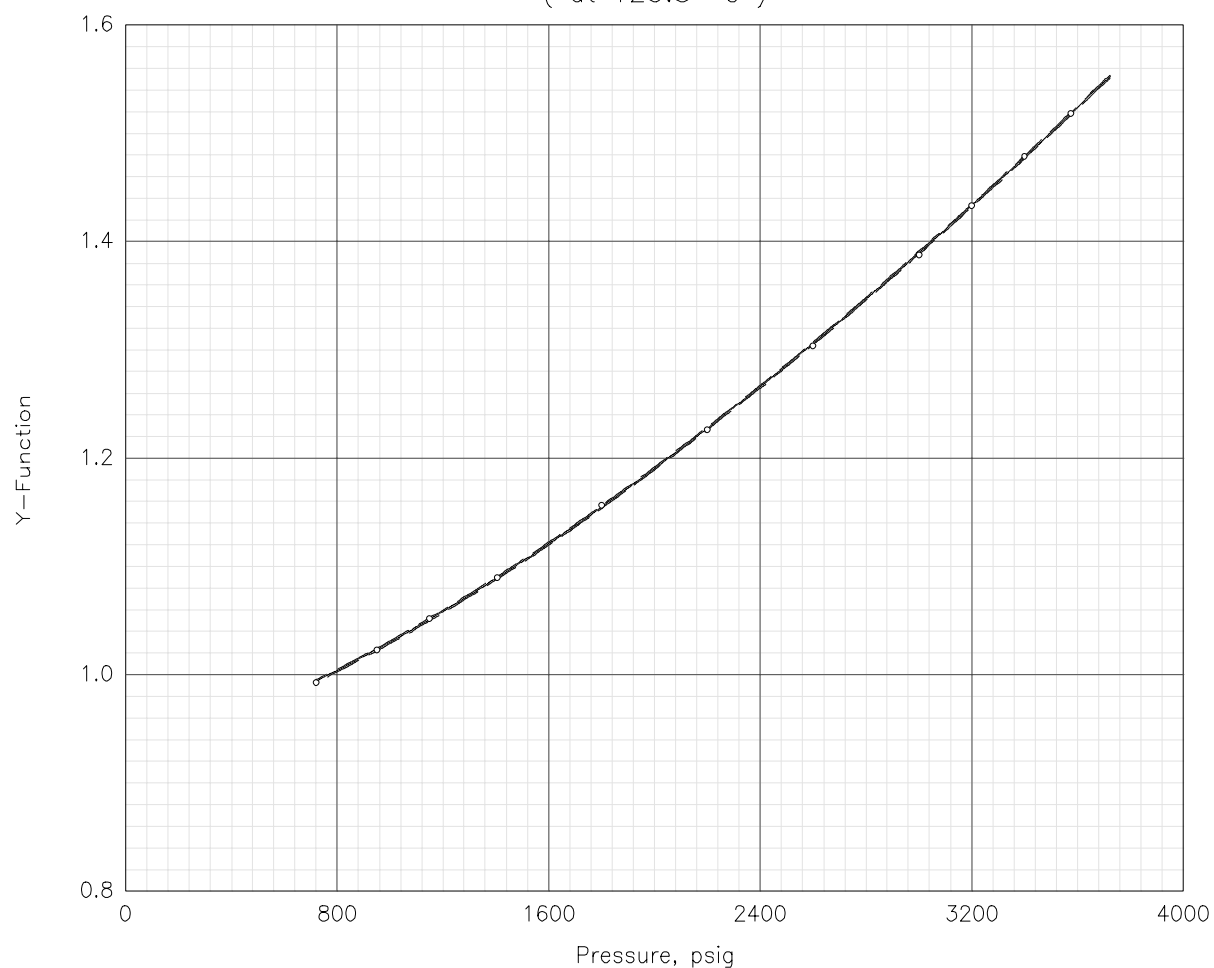
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Zane Grey-1

AFL 2005-023

Y-FUNCTION
(at 125.8 °C)



Y-Function Expression: $y = a + b (X_d)^i$	LEGEND
where: $a = 9.33784e-01$ $i = 1.418$ $b = 6.30673e-01$	\circ Laboratory Data — Confidence Limits — Analytical Expression Saturation Pressure: 3775 psig
Note: X_d (dimensionless 'X') = P_i / P_{sat} , psig	
Confidence level: 99 % Confidence interval: ± 0 'r squared': .999956	Pressure-Volume Relations Figure A-2

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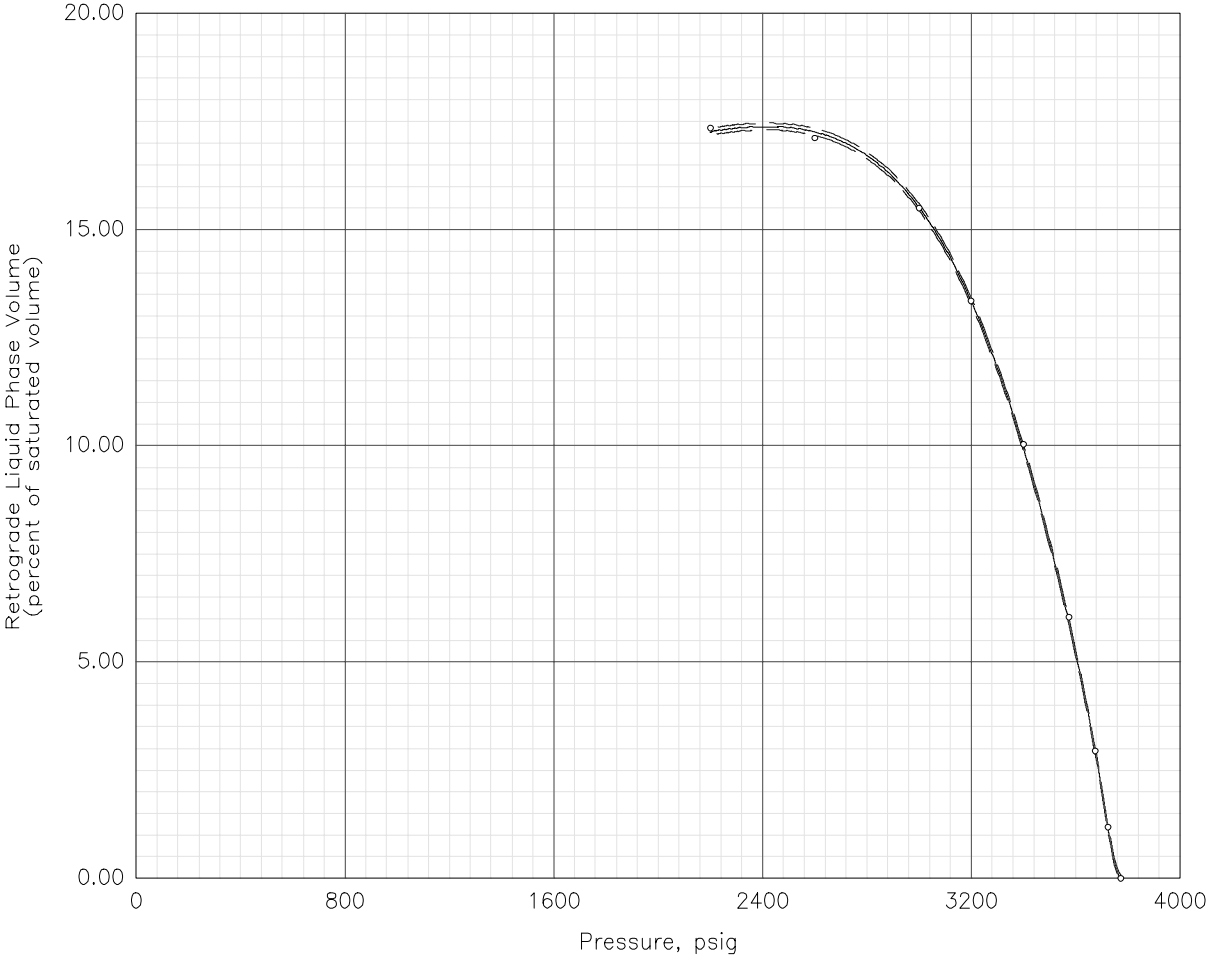
Bass Strait Oil Company

Zane Grey-1

AFL 2005-023

LIQUID PHASE VOLUME

(at 125.8 °C)



<p>Retrograde Liquid Curve Expression:</p> <p>$\sqrt{x} = a + b (X_d)^i + c (X_d)^j + d (10 - X_d)^k$</p> <p>where:</p> <table><tr><td>$a = 1.08060e+00$</td><td>$i = 8.897$</td></tr><tr><td>$b = -3.31377e+00$</td><td>$j = 68.330$</td></tr><tr><td>$c = -1.25330e+00$</td><td>$k = 0.120$</td></tr><tr><td>$d = 2.63966e+00$</td><td></td></tr></table> <p>Note: X_d (dimensionless 'X') = P_i / P_{sat}, psig</p>	$a = 1.08060e+00$	$i = 8.897$	$b = -3.31377e+00$	$j = 68.330$	$c = -1.25330e+00$	$k = 0.120$	$d = 2.63966e+00$		<p>LEGEND</p> <p>\circ Laboratory Data</p> <p>— — Confidence Limits</p> <p>— Analytical Expression</p> <p>Saturation Pressure: 3775 psig</p>
$a = 1.08060e+00$	$i = 8.897$								
$b = -3.31377e+00$	$j = 68.330$								
$c = -1.25330e+00$	$k = 0.120$								
$d = 2.63966e+00$									
<p>Confidence level: 99 %</p> <p>Confidence interval: ± 0.08</p> <p>'r squared': .999893</p>	<p>Pressure-Volume Relations</p> <p>Figure A-3</p>								

APPENDIX 9

PALYNOLOGY REPORT & DISTRIBUTION CHART – BASIC DATA

(By Biostrata Pty Ltd)

BASIC DATA
Palynological analysis of Zane Grey-1,
offshore Gippsland Basin.

by

Alan D. Partridge

Biostrata Pty Ltd

A.B.N. 39 053 800 945

Biostrata Report 2005/16B

30th June 2005

BASIC DATA

Palynological analysis of Zane Grey-1, offshore Gippsland Basin.

by Alan D. Partridge

Introduction

Fifteen cuttings samples have been analysed between 2515 and 3670mMD in the Zane Grey-1 well drilled by the Bass Strait Oil Company Ltd in permit VIC/P42 located in the central offshore Gippsland Basin. All samples have been processed in the palynological laboratory facilities of Core Laboratories Australia Pty Ltd in Perth. An initial suite of palynological slides were received on 26th May 2005, but as a consequence of the low palynomorph concentration on the slides all the samples with remaining organic residue were requested to be re-oxidised, and the additional slides that were ultimately prepared were received on 8th June 2005. The results of the microscope analysis were provided in Provisional Report No. 1 issued on 24th June 2005.

Processing Methods and Basic Analyses

The samples were selected and submitted directly to Core Laboratories Australia Pty Ltd by Robert Fisher, so consequently the lithologies of the samples were not inspected nor recorded by the author. It was however requested that all the samples be oxidised prior to the application of zinc bromide density separation used to remove the undissolved mineral matter. This modified procedure was preferred because it removes most of the finely disseminated pyrite that typically impregnate the palynomorphs recovered from the Gippsland Basin, and therefore can substantially improve both the amount of organic residue recovered and the concentration of palynomorphs.

Basic sample data comprising the weights of sample processed, the visual organic residues yields, the concentration and preservation of the palynomorphs observed on the slides, and the number of species of spore-pollen (SP) and microplankton (MP) recorded from individual samples are all provided in Table 1. The visual yield from the samples varies from negligible to high, but unfortunately the concentration of palynomorph on the slides was typically only low to very low, while the palynomorph preservation was consistently poor. The recorded spore-pollen diversity varies from very low to moderate, whereas the recorded microplankton diversity is low to very low.

Description of Range Chart.

The distribution of the palynomorphs identified in the samples are displayed on the accompanying StrataBugs™ range chart which displays the recorded palynomorph species in the samples proportional to their depth in the well and in terms of absolute abundance. The palynomorphs recorded are split between different categories. The terrestrial spore-pollen are divided between spores, gymnosperm pollen and angiosperm pollen, which are plotted in separate panels. This is followed by a panel showing the total count of marine and non-marine microplankton recorded. Absolute abundance of individual microplankton species in the count is next displayed in the panel labelled Microplankton. All Other palynomorphs are plotted in the far right panel. Because all the samples are cuttings the species are plotted within the panels according to their shallowest or youngest occurrences.

Author citations for most of the recorded spore-pollen species can be sourced from the papers by Stover & Partridge (1973, 1982) and Macphail (1999), while the author citations for the microplankton species can be sourced from the indexes for dinocysts and other organic-walled microplankton prepared by Fensome *et al.* (1990) and Williams *et al.* (1998). Manuscript species names and combinations are indicated by “sp. nov.” or “comb. nov.” on the range chart.

The following codes or abbreviations apply to the individual species occurrences and abundances on the range chart:

Numbers	=	Absolute abundance or number of specimens counted
+	=	Species outside of count
C	=	Caved species
R	=	Reworked species
?	=	Questionable identification of species.

References

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- STOVER, L.E. & PARTRIDGE, A.D., 1982. Eocene spore-pollen from the Werillup Formation, Western Australia. *Palynology* 6, p.69–95.
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Table 1: Basic data for Zane Grey-1, offshore Gippsland Basin.

Sample Type	Depth metres	Weight grams	Visual Yield	Palynomorph Concentration	Preservation	No. SP Species	No. MP Species
Cuttings	2515-20	19.4	Very low	Very low	Poor	6+	(1+)
Cuttings	2525-30	16.7	Low	Moderate	Poor	33+ (1+)	2+ (8+)
Cuttings	2550-55	18.6	Negligible	Very low	Poor	2+	
Cuttings	3290-3300	20.0	High	Low	Very poor	20+	(1+)
†Cuttings	3300-10	19.2	High	Low	Very poor	24+	2+
†Cuttings	3330-40	21.2	Moderate	Very low	Very poor	17+	2+ (3+)
†Cuttings	3340-50	21.3	Low	Low	Poor	27+	2+ (1+)
Cuttings	3440-45	19.5	Moderate	Low	Poor	22+	1+ (2+)
†Cuttings	3505-10	19.9	Low	Very low	Poor	13+	(4+)
†Cuttings	3510-15	20.4	Moderate	Low	Poor	25+	5+
†Cuttings	3525-30	18.6	Moderate	Low	Very poor	24+	(1+)
†Cuttings	3540-45	19.7	Low	Low	Poor	18+	2+ (1+)
†Cuttings	3590-95	18.9	Low	Very low	Very poor	24+	(3+)
†Cuttings	3630-40	20.2	Low	Very low	Very poor	25+	(1+)
†Cuttings	3660-70	20.0	Moderate	Very low	Poor	17+	

Average: 19.6

Averages: 19.9 2.8

† Cuttings samples given second oxidation and extra slides prepared.

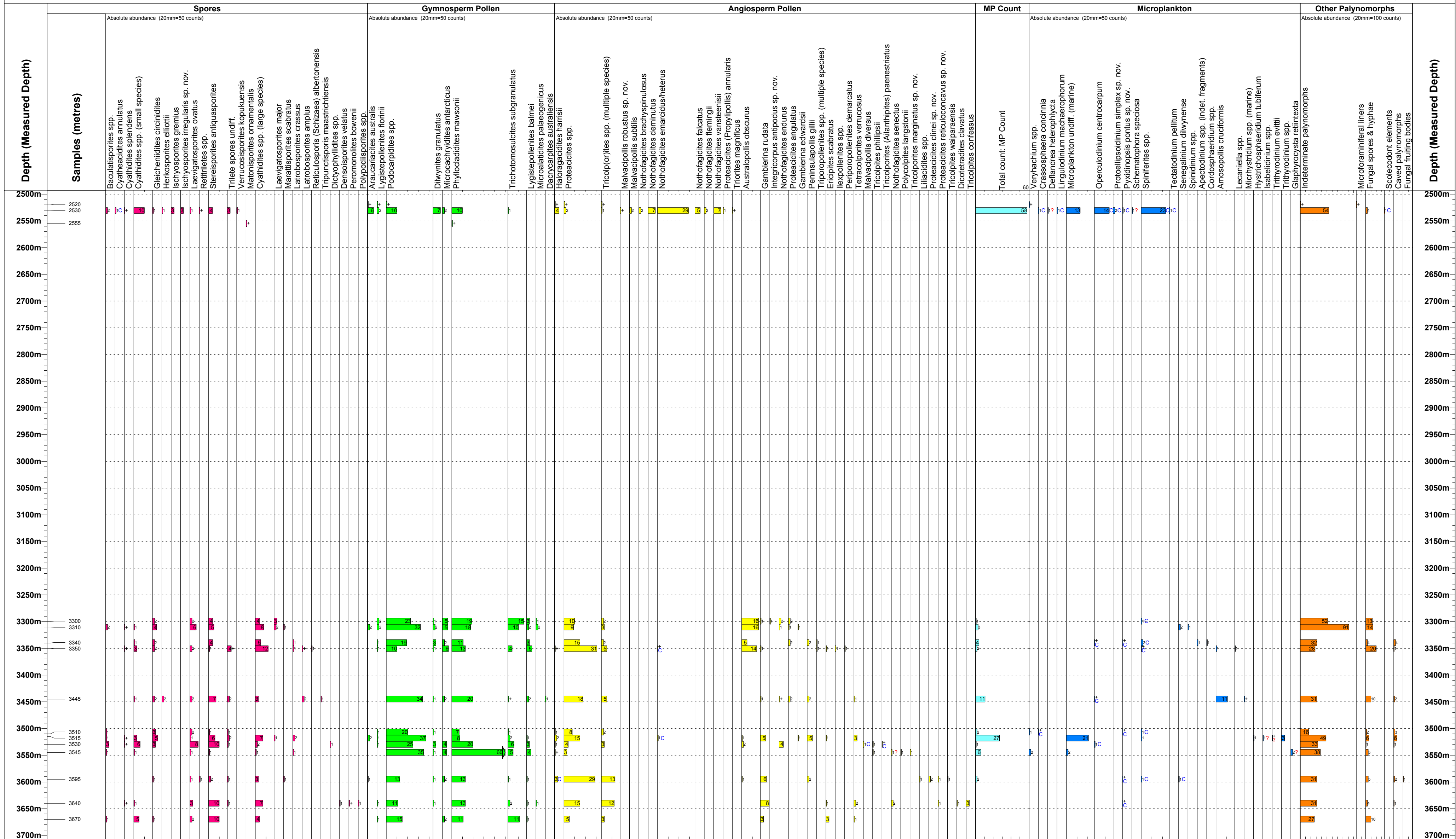
MP = Microplankton

SP = Spore-Pollen

Numbers in brackets in two right-hand columns refer to species which are caved or contaminants.

Operator : Bass Strait Oil Pty Ltd	Spudded : 29 January 2005
Well Code : ZANEGREY-1	Completed : 18 March 2005
Lat/Long : 38°34' 31.64"S 147°59' 16.27"E	
Interval : 2500m - 3700m	BASIC Palynomorph Range Chart
Scale : 1:5000	Sample interval 2515 to 3670m
Chart date: 01 July 2005	Microscope analysis by Alan D. ...

BASIC DATA chart for Biostrata Report 2005/16B

[illegible]

APPENDIX 10

SURFACE DATA LOGGING(MUDLOGGING) END of WELL REPORT

(By Halliburton)



HALLIBURTON

Sperry Drilling Services

SURFACE DATA LOGGING

END OF WELL REPORT

Bass Strait Oil Company LTD

ZaneGrey-1 & ZaneGrey-1 ST1 & ST2

Rig: Ocean Patriot

Field: ZaneGrey/Gippsland Basin

Country: Australia

Job No: AU-FE-0003415248 /

AU-FE-0003564401 / AU-FE-0003576081

Date: January 2005 – March 2005

HALLIBURTON



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1 INTRODUCTION

The Diamond Offshore Ocean Patriot semi-submersible drilling rig was used to drill ZaneGrey-1/ST1/ST2 in permit VIC/P 42.

A Sperry Drilling Services INSITE (Integrated System for Information Technology and Engineering) mud logging unit was contracted by Bass Strait Oil Company Ltd for the drilling of the ZaneGrey-1 deviated exploration well. The unit provided a full Surface Data Logging (SDL) network for the job. This included real-time and lagged data acquisition, data processing, data storage and data presentation.

Measurement While Drilling (MWD) and Directional Drilling services were included in the SDL database to provide a comprehensive real time, and post-recorded evaluation of the formations drilled.

Surface Data Logging for ZaneGrey-1 commenced when the well was spudded at 14:30 hrs on the 29th January 2005, and continued for the duration of the well. The well reached a total depth of 2772.5 mMDRT at 09:00 hrs on the 11th February 2005. Two unsuccessful attempts were made at running the 244mm (9.625") casing. The casing was finally cemented with the shoe set at 2184.0 mMDRT. After drilling out the cement, shoe and rat hole a FIT was performed. Due to a long open hole section the hole was plugged back in order to sidetrack the well. Plug-back TD for ZaneGrey-1 was 2170.0 mMDRT with drilling activities ceasing at 21:00 hrs on the 20th February 2005, whereafter the well was re-named to ZaneGrey-1 ST1.

The ZaneGrey-1 ST1 was kicked off at 2190.0 mMDRT at 21:20 hrs on 20th February 2005. The new hole was drilled with one bit run to 3107.0 mMDRT, prior to the BHA being pulled out due to the slow rate of penetration. On inspection at surface, it was found, that the bit and mud motor housing was left in the hole. A 89 mm (3½") cement stinger was subsequently run to 3098.0 mMDRT, and a cement plug was set to isolate the lost fish. The hole was plugged back in order to sidetrack the well. Plug-back TD for ZaneGrey-1 ST1 was 2996.0 mMDRT with drilling activities ceasing at 17:40 hrs on the 25th February 2005, whereafter the well was re-named to ZaneGrey-1 ST2.

The final well ZaneGrey-1 ST2 was kicked off from 3075.0 mMDRT at 07:30 hrs on 5th March 2005. The well reached a total depth of 3675.0 mMDRT at 17:00 hrs on the 10th March 2005. After running wireline logs, the well was subsequently plugged and abandoned with the first cement plug set from 3350.0 to 3250.0 mMDRT and the second plug at 2230.0 to 2130.0 mMDRT. Anchor handling operations commenced at 03:40 hrs on 18th March 2005. Last anchor was racked at 19:20 hrs on 18th March 2005 and the rig was released to Woodside Energy Ltd.

This report is intended as a summary of the information and data collected, processed and monitored as part of the INSITE service agreement.

2 WELL SUMMARY

2.1 WELL GENERAL INFORMATION

Well Name:	ZaneGrey-1/ ST1/ ST2	
Operator:	Bass Strait Oil Company Ltd	
Classification:	Deviated Exploration	
Permit:	VIC/P 42	
Surface Location:	Lat:	38° 34' 31.64" S
	Long:	147° 59' 16.27" E
	UTM Easting:	586 049.89 m
	UTM Northing:	5 729 856.42 m
	Datum:	AGD 84
Country:	Australia	
Drilling Rig:	"Ocean Patriot"	
Type of rig:	Semi submersible	
Contractor:	Diamond Offshore General Company	
Depth Measured From:	Rig Floor	
Permanent Datum:	Mean Sea Level	
RT to MSL:	21.50 m	
Water Depth:	72.50 m	
Total Depth ZaneGrey-1:	2772.5 mMDRT	2420.7 mTVDRT
Total Depth ZaneGrey-1 ST1:	3107.0 mMDRT	2706.2 mTVDRT
Total Depth ZaneGrey-1 ST2:	3675.0 mMDRT	3219.8 mTVDRT

3 SYNOPSIS: ZANEGREY-1 (ST1 & ST2)

3.1 GEOLOGICAL SUMMARY

The ZaneGrey-1 well was designed to test the ZaneGrey Prospect, primarily to test Latrobe Group reservoirs within a faulted anticline up-dip of the Nannygai-1 well drilled in 1972. The structure is interpreted from the BSOC 2002 3D survey.

The key geological issues relating to the economic success of ZaneGrey are in the depth conversion and trap integrity. Significant velocity uncertainty exists in the Gippsland Limestone Formation due to strong lateral velocity variations resulting from variable fill in the submarine canyon sequences. The occurrence of 6 m of interpreted live oil in Nannygai-1 suggested this well intersected the northern limit of a structural closure. ZaneGrey-1 will test its updip location (if on prognosis) and also a deeper sequence of reservoir/seal pairs unpenetrated by Nannygai-1.

The reservoir quality within the Latrobe Group is variable with top porosity occurring at different stratigraphic levels. The Gurnard Formation reservoir quality is unpredictable; with the sequence often a waste zone or non-reservoir. However, in the Kingfish Oil Field, an oil bearing reservoir sequence in the Gurnard Formation is present which is separate from the underlying Kingfish Formation reservoirs.

The Kingfish Formation forms the main reservoir sequence for the Kingfish Oil Field. Good quality sandstone reservoirs are present, interbedded with coals and shales. However, faulting through the sequence may have breached the top or lateral seals in this objective.

The Roundhead Member of the Volador Formation, sealed by the Kate Shale is the main reservoir objective within the well (if on depth prognosis at Top Latrobe). The Kate Shale is regionally extensive marine shale.

3.2 DRILLING SUMMARY ZANEGREY-1, ST1 & ST2

914 mm (36") Hole

ZaneGrey-1 was spudded on 29th January 2005 at 14:30 hrs. The seabed was tagged at 94.0 mMDRT and drilled to section TD at 129.5 mMDRT.

The 914 mm (36") hole section was drilled in one bit run.

The run included 660 mm (26") Smith tricone bit, dressed with 3 x 26 jets run in conjunction with a 914 mm (36") hole opener dressed with 4 x 28 jets. The BHA was a conventional rotary drilling assembly. The section was drilled using seawater with hi-vis gel sweeps.

The 762 x 508 mm (30" x 20") conductor was set at 127.75 mMDRT.

406 mm (16") Hole

The 406 mm (16") hole section was drilled in one bit run using seawater and hi-vis sweeps.

This run included a Smith GXI bit, dressed with 1 x 22 and 2 x 18 jets. This bit was run with a Sperry Drilling Services mud motor and MWD tools. Cement was tagged in the 762 x 508 mm (30" x 20") casing at 124.7 mMDRT. The cement was drilled out, and the bit was worked through the casing shoe at 127.75 mMDRT. New formation was drilled from 129.5 mMDRT to hole section TD at 1095.0 mMDRT.

The section was drilled using seawater with hi-vis gel sweeps.

At TD a 150 bbls Hi-Vis pill was pumped. The well was then displaced with seawater. This was then displaced by another 1000 bbls Hi-Vis pill, followed by 200 bbls of 1.15 sg (9.6 ppg) weighted KCl gel mud.

The 340 mm (13 ³/₈") casing was set at 1090.61 mMDRT.

311 mm (12 1/4") Hole

The 311 mm (12 1/4") hole section was drilled in three bit runs. The first run included a Security FSX563 bit, dressed with 5 X 15 and 2 x 14 jets. This bit was run with a Sperry Drilling Services mud motor and MWD tools. The initial MWD shallow pulse test failed and the MWD tools were brought to surface. The pulser was changed out and the second MWD shallow test was successful. Cement was tagged in the 340 mm (13 ³/₈") casing at 1058.8 mMDRT. The cement and cement plugs were drilled out, with the bit, worked through the casing shoe at 1090.61 mMDRT. Whilst drilling cement the hole was displaced with 1.04 sg KCl – Idcap - Glycol mud. After drilling 3.0 m of new formation from 1095.0 mMDRT to 1098.0

mMDRT, an FIT was conducted to 1.65 sg (13.3 ppg) EMW using 1.04 sg (8.6 ppg) mud. New formation

was drilled ahead from 1098.0 mMDRT to 2103.0 mMDRT at which point a stand of drill pipe in the derrick was bent due to brake failure on the top drive system. It was decided to come out of the hole to check all the tool joints.

The bit was re-run and after changing out the MWD pulser, the bit was run back to bottom with a Sperry Drilling Services mud motor and MWD tools. Resumed drilling from 2103.0 mMDRT (1867.9 mTVDRT) and drilled to 2702.0 mMDRT (2363.2 mTVDRT) at which point low ROP lead to the bit being pulled.

The third run used a new Security DBS XL12 bit, dressed with 3 x 20 jets. This bit was run with a conventional drilling assembly and drilled from 2702.0 mMDRT (2363.2 mTVDRT) to a section TD of 2772.5 mMDRT (2420.76 mTVDRT).

The 244 mm (9 $\frac{5}{8}$ ") casing was then run, but would not pass beyond 1776.0 mMDRT (1596.6 mTVDRT). It was worked and rotated without success and the casing was pulled to surface. A wiper trip was then conducted.

The wiper trip run used a new Security DBS X-54 bit, dressed with 3 x 20 jets. This bit was run with a conventional rotary assembly to 1776.0 mMDRT (1596.6 mTVDRT) without trouble. Washing and reaming from 1776.0 – 2735.0 mMDRT, the obstruction was broken through at 1780.0m. Reaming conditions were difficult throughout this run.

Running the casing a second time, it would not pass below 2195.0 mMDRT, resulting in the shoe being set and cemented at 2184.0 mMDRT, 588.5 m off bottom.

216 mm (8 $\frac{1}{2}$ ") Hole

216 mm (8 $\frac{1}{2}$ ") hole section was drilled using 7 bit runs, which included cleaning out the rat hole, drilling the cement plug to kick off the well and sidetracking the fish.

The first run included a cleanout assembly consisting of a Security DBS EBXSC1S bit, dressed with 3 X 18 jets, used for drilling the shoe, cement and rathole. This bit tagged the float in the 244 mm (9 $\frac{5}{8}$ ") casing at 2158.0 mMDRT, drilled cement then washed and reamed the rathole to 2260.0 mMDRT. After drilling cement the hole was circulated clean and the mud conditioned to 1.12 sg (9.33) Idcap D mud. The bit was pulled to the shoe and an FIT was conducted to 1440.0 psi or 1.65 sg (13.7 ppg) EMW using 1.12 sg (9.4 ppg) mud. This bit was pulled in order to set a cement plug and sidetrack around the 311 mm (12 $\frac{1}{4}$ ") hole which was not cased.

3.2.1 ZaneGrey-1 Sidetrack 1 (ST1)

The second bit, a Hycalog RSX162DGW PDC, was dressed with 6 x 15 nozzles. It was run with a Sperry Drilling Services mud motor and MWD tools and used to kick off ZaneGrey-1 ST1 from 2190.0 mMDRT (1941.0 mTVDRT). Directional drilling continued with this bit to

3107.0 mMDRT (2706.0 mTVD) and was pulled out of hole due to slow ROP's. On inspection at surface, it was found that the bit, bit box and motor drive shaft were left in the hole. A 89 mm (3½") cement stinger was subsequently run to 3098.0 m MDRT (2698.5 mTVD) and a cement plug was set above the fish to sidetrack the well. Plug-back TD for ZaneGrey-1 ST1 was set at 2996.0 mMDRT with drilling activities ceasing at 17:40 hrs on the 25th February 2005, whereafter the well was re-named to ZaneGrey-1 ST2.

3.2.2 Sidetrack 2 (ST2)

A total of 4 bits were used to drill ZaneGrey-1 ST2, starting with a Hycalog TD43AKPRDH tri-cone bit which tagged the fish at 3107.0 mMDRT (2706.0 mTVD). The bit was pulled and a second cement plug set. The next bit a Hycalog RSX162DGW PDC drilled the cement plug and was pulled out of hole as the bit was unsuccessful in kicking off to pass the fish. Another cement plug was set and a Security DBSEBXSC1S tri-cone bit was run. This bit drilled part of the cement plug and was pulled due to it failing to kickoff past the fish. A Hycalog DS43STG PDC sidetracking bit drilled out cement from 3070.0 mMDRT and was successful in kicking off the well path from 3075.0 mMDRT to 3092.0 mMDRT. On encountering new formation the bit was pulled.

The final bit run was a re-run Hycalog RSX162DGW PDC which drilled from 3092.0 mMDRT to TD at 3675.0 mMDRT on 10th March 2005 at 17:00 hrs. All the above assemblies were run with a Sperry Drilling Services mud motor and MWD tools during the drilling of ZaneGrey-1 ST2.

Prior to pull out of hole the mud was circulated and conditioned. Pulling out of hole constituted back reaming, doing MWD wipes and working the pipe over tight spots prior to running wireline logs. After two wireline runs the well was then plugged and abandoned.

3.3 PROBLEMS ON TRIPS

On running the 244 mm (9⅝") casing tight hole conditions were encountered at 1776.0 mMDRT. This prevented the casing going beyond this point. The casing was pulled and a bit run was made where the tight spot was reamed. The bit was then worked to bottom.

The casing was run again, to a depth of 2195.0 mMDRT, which could not pass beyond this point and it was decided to set the shoe at 2184.0 mMDRT. This left an extensive open hole

section, resulting in the well being plugged back and sidetracked to pass this open hole section.

The bit that was lost in the hole and the resulting numerous attempts made to sidetrack the fish, had no direct bearing on hole condition. On pulling the 216mm (8 ½”) bit at TD from 3675.0 mMDRT no tight hole conditions were experienced.

The first wireline run was successful in reaching bottom. When the second wireline run was made the tools got stuck at 3185.0 mMDRT. Fishing equipment was rigged up, stripped over the wireline and tripped in hole.

Once above the fish, the mud was circulated prior to latching onto the fish. After latching onto the fish, the wireline was re-terminated and a side entry sub was installed. Logging the hole continued in this way on drill pipe with the tool being run down to 3622.8 mMDRT where it failed and was tripped out of the hole together with the drill pipe.

3.4 WIRELINE PROGRAM

The first Wireline suite was successfully run and reached a depth of 3674.0 mMDRT. On the second Wireline run the RCI tool was differentially stuck. The cable was cut and a grapple assembly on drill pipe was stripped over the Wireline cable. The Wireline fish was latched at 3185.0 mMDRT and pulled free. The Wireline cable was re-terminated and logging continued on drill pipe. Due to a tool failure at 3622.8 mMDRT the Wireline together with drill pipe were pulled out of the hole.

Wireline logging programme was as follows:

Run # 1 - MEDIUM LOWER L-DLL-MAC-ORIT-ZDL-CN-DSL-TTRM (3674.0 to 2184.0m)

MAC (3674.0 to 1983.0m)

GR (3674.0 to 97.0m)

Run # 2 - RCI- GR (ORIT)

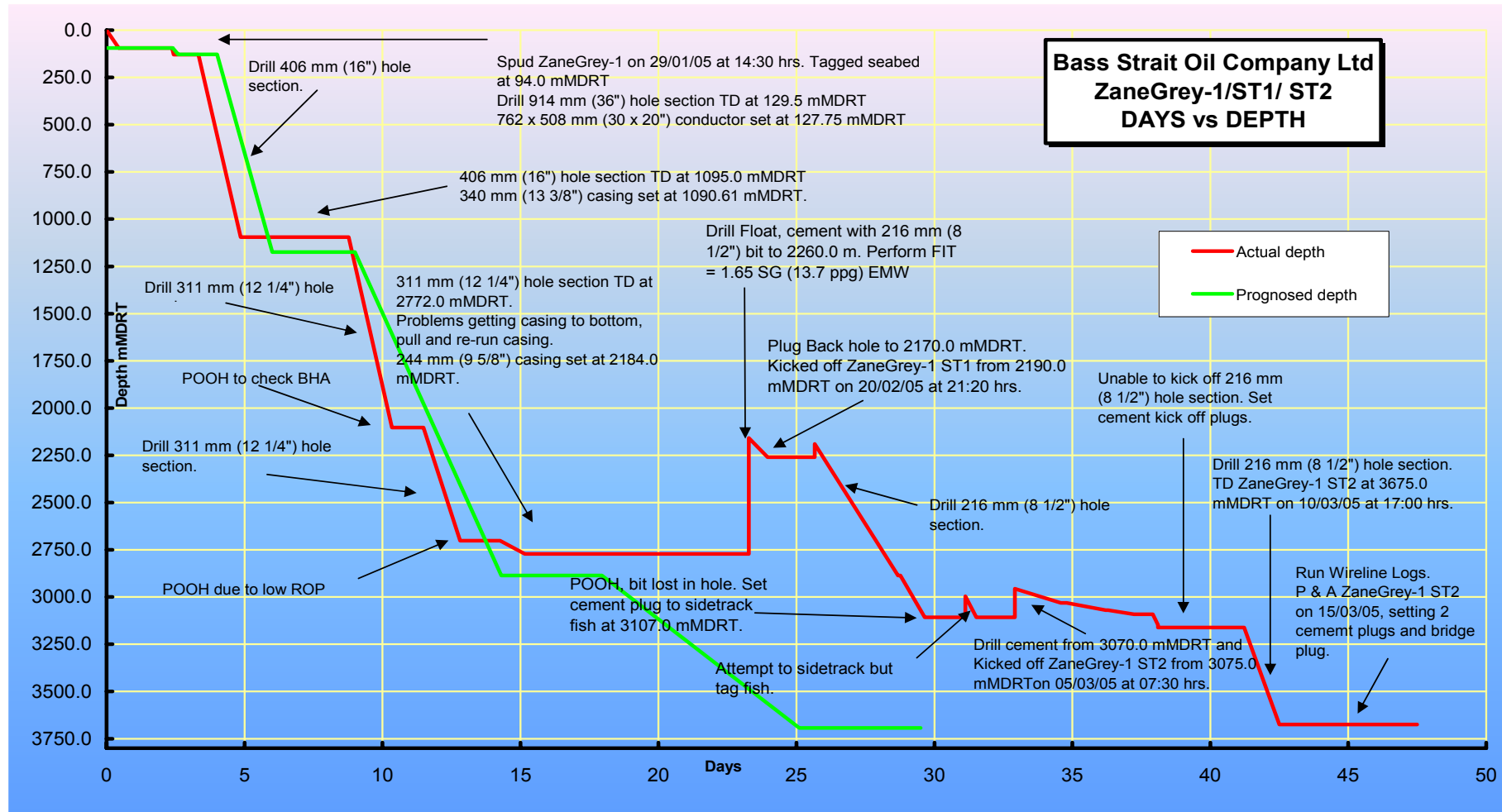
3.5 ABANDONMENT PROGRAMME

A total of two cement plugs and one bridge plug were set for the abandonment programme as follows :

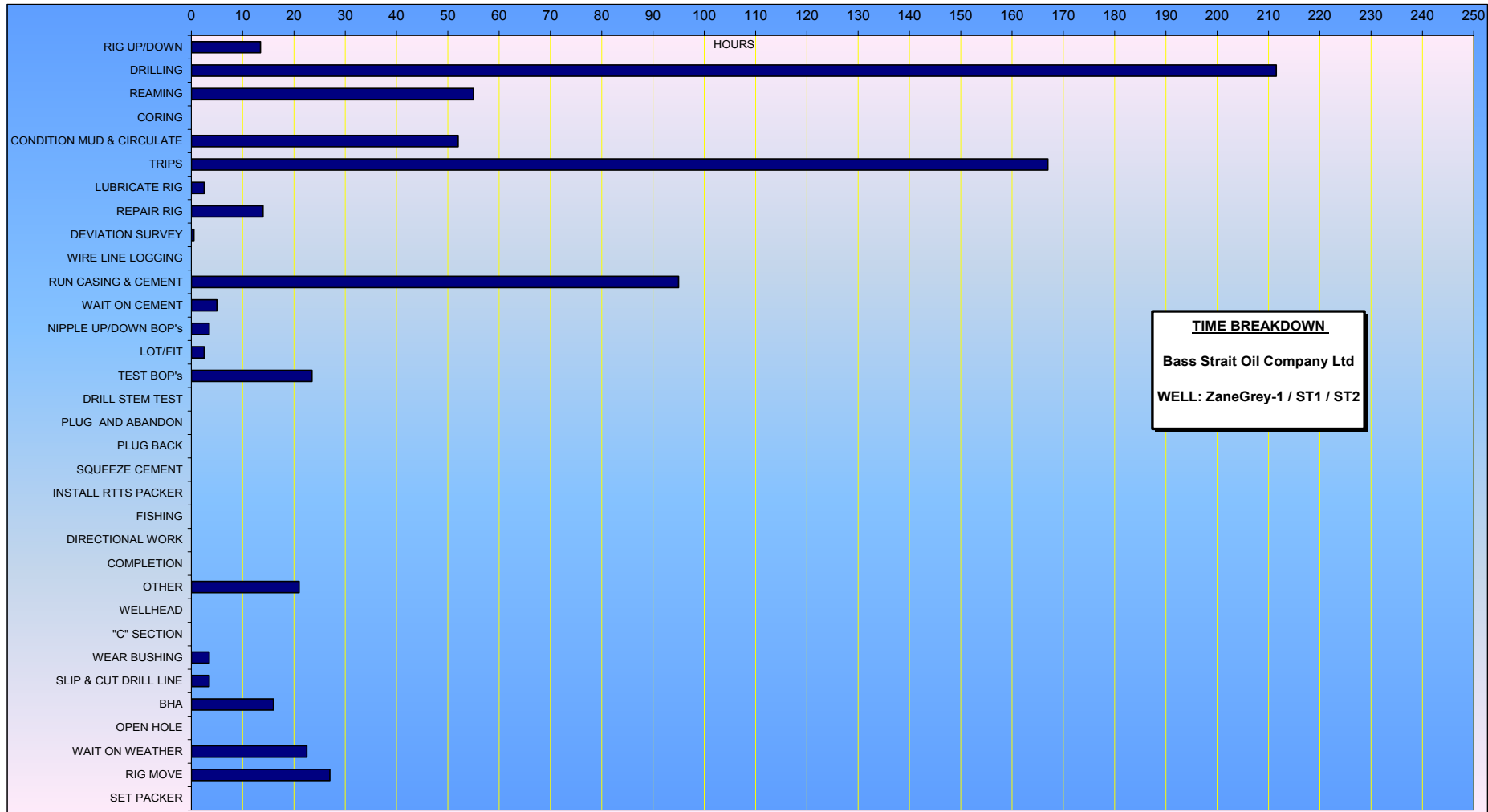
Plug # 1 3350.0 to 3250.0 mMDRT

Plug # 2 2230.0 to 2130.0 mMDRT

3.6 DAYS VS DEPTH



3.7 TIME BREAKDOWN



4.0 LOGGING SERVICES SUPPLIED

4.1 GEOLOGICAL MONITORING

EQUIPMENT

Auto calcimeter

Canon Bubble Jet Printer

Company Workstation

Database PC (ADI)

Draw works Depth Encoder

FID Chromatograph

FID Total Gas Detector

Floating Gas Trap

Flow Out Paddle

H₂S detectors (x4)

Hookload and WOB

HP Design jet Printer

Hydrometers

INSITE IRIS Data acquisition PC

Mud Density In/Out

Mud Temperature In/Out

Pit Volume Sensors (x7)

Pressure Sensors (x4)

Printrex Printer

Proximity Sensor

Pump Stroke Counters (x3)

Rig Floor Monitor (x1)

Standard Fluoroscope

Standard Stereo Microscope

Workstation PC

4.2 SERVICES PROVIDED

Data files in .pdf, ASCII (LAS) format

Formation Evaluation

Geological and Engineering Reporting

Hydraulics Analysis using Planit

Interpreted Lithology

Plots of Daily Drilling Activities

Real Time Drilling Monitoring

Real Time Log Display of MWD/LWD Data

Real Time Monitoring of Drilling Fluids

Real Time Tabular Display of Data

Real Time Trip Monitoring

Real Time Display of Data

Sample Collection and Processing

Timers for Hours in Hole and Revolutions on Drill Bit

4.3 MONITORED PARAMETERS

Block Position

Choke Pressure

Continuous Gas Percentage in Air

Hole, Bit and Lag Depth

Flow Out

Gas Analysis (C1-C5)

H₂S Gas Detection

CO₂ Gas Detection

Hookload

Hydrocarbon Shows

Formation Lithology

Mud Conductivity In and Out

Mud Temperature In and Out

Mud Density In & Out

Mud Hole and Pit Volume

LWD data

On/Off Bottom status

Pump Stroke, Flow Rate and Volume of Mud Pumped

Rate of Penetration

Top Drive RPM

Stand Pipe Pressure

Swab\Surge Calculation

Torque and Vibration

Weight on Bit including Drag and Obstructions

Well Volumes and Lag Calculations

PERSONNEL

INSITE engineers continuously monitored all operations and encountered considerable problems in maintaining the database during the early stages whilst drilling ZaneGrey-1. They provided any well and drilling data upon request, notified the appropriate personnel of any irregularities or anticipated problems, provided daily reports, print outs of data and prepared master logs and final reports.

DATA ENGINEERS

LOGGING ENGINEERS

SAMPLE CATCHERS

Norman Naidoo

Oliver Ningelgen

Adam Matuzelis

Gary Bloom

Dave Hartney

Richard Snow

Tony Wyeth

Brent Glassbarrow

Murali Vishwanathan

Dorian Kuhn

Steve McDonald

Devalpally Vidyanath

4.5 SAMPLE COLLECTION

One extra large bag (800 g) of water-washed cuttings was collected for each interval sampled from the commencement of returns below 1095.0 mMDRT. After 2500.0 mMDRT the amount collected was increased to 1300 g. A small portion of washed sample was placed into

Samplex trays (1 set) and the remainder air-dried and split into four sets x 200 g (after 2500.0 mMDRT) in plastic zip lock bags, 1 x 500 g in a cloth bag).

The splits were distributed to Bass Strait Oil Company Ltd (1 x 200 g, 1 x 500 g),

Inpex Corp (1 x 200 g), Victorian DPI (1 x 200 g) and Geoscience Australia (1 x 200 g).

The Samplex Tray set was distributed to Bass Strait Oil Company Ltd.

Mud samples were sent to Bass Strait Oil Company Ltd.

Drill water samples were sent to Bass Strait Oil Company Ltd.

Mud additive samples were sent to Bass Strait Oil Company Ltd.

Sidewall cores and Rotary SWC's were not collected.

Palynology samples were not collected.

Isotube Gas samples were sent to Bass Strait Oil Company Ltd.

Sample	Depth (m)	G.U.	Well	Date & Time
1	1955.0	4.50%	ZG-1	1-Feb-05 15:00
2	2108.0	4.80%	ZG-1	3-Feb-05 20:13
3	2534.0	0.40%	ZG-1	8-Feb-05 11:40
4	2750.0	1.00%	ZG-1	11-Feb-05 05:14
5	2753.0	1.63%	ZG-1	11-Feb-05 05:43
6	1925.0	4.53%	ZG-1	14-Feb-05 12:07
7	2134.0	6.12%	ZG-1	15-Feb-05 06:35
8	2743.0	0.55%	ST1	24-Feb-05 12:41
9	2751.0	1.47%	ST1	24-Feb-05 13:05
10	2595.0	0.60%	ST1	24-Feb-05 05:45
11	3168.0	2.00%	ST2	9-Mar-05 08:00
12	3266.0	0.11%	ST2	9-Mar-05 15:17
13	3303.4	0.53%	ST2	9-Mar-05 16:23
14	3303.4	0.53%	ST2	9-Mar-05 16:25
15	3257.0	0.17%	ST2	9-Mar-05 16:30
16	3314.0	15.00%	ST2	9-Mar-05 16:32
17	3628.0	0.81%	ST2	10-Mar-05 12:37
18	3654.5	0.69%	ST2	10-Mar-05 15:28

4.6 SAMPLE DISTRIBUTION

All samples collected were sent attention to:

Diana Giordano

Kestrel Information Management Pty Ltd

578-590 Somerville Road

Sunshine, Victoria 3020 *

Items were then on forwarded to the various relevant organisations.

Samplex Trays (1 Set)

Set A: Samplex Trays

Bass Strait Oil Company Ltd

* See Above

Washed and Dried Samples (4 Sets)

Set B & Set F: Washed/Dried Splits

Bass Strait Oil Company Ltd *

Set C: Washed/Dried Splits

Inpex Corporation

16th Floor, Ebisu Neonato

4-1-18, Ebisu

Shibuya-Ku, Tokyo 150-0013 Japan

Set D: Washed/Dried Splits

Victorian DPI

DPI Core Library

South Road

Werribee, Victoria 3030

Attention: Graeme Torr

Set E: Washed/Dried Splits

AGSO

Geoscience Australia

Cnr Jerrabomberra Ave & Hindmarsh Drv

Symonston, ACT 2609

Attention: Manager, Geoscience Australia Data Repositories

Mud Samples

Various Samples

Bass Strait Oil Company Ltd *

Drill Water Samples

Various Samples

Bass Strait Oil Company Ltd *

Mud Additive Samples

Various Samples

Bass Strait Oil Company Ltd *

Palynology Samples

Bass Strait Oil Company Ltd *

Hot Shot via helicopter directly to Bass Strait Oil Company Ltd under the direction of the Wellsite Geologist.

5.0 GEOLOGY AND SHOWS

5.1 INTRODUCTION

Sampling of drilled cuttings by Sperry Drilling Services commenced in the 311 mm (12 ¼") hole section, from 1095.0 mMDRT until the total well depth of 3675.0 mMDRT. Spot sample collection for quick inspection, as well as any changes in the programmed sampling frequency depended on the rate of penetration and were made at the discretion of the Wellsite Geologist.

Samples of washed, air-dried cuttings were collected over the following intervals:

ZaneGrey-1	
SAMPLE DEPTH mMDRT	SAMPLE FREQUENCY Metres
1095.0 – 1340.0	5
1340.0 – 1510.0	10
1510.0 – 1570.0	5
1570.0 – 2370.0	10
2370.0 – 2694.0	5
2694.0 – 3675.0	3

ZaneGrey-1 ST1	
SAMPLE DEPTH mMDRT	SAMPLE FREQUENCY Metres
2190.0 – 3105.0	5

ZaneGrey-1 ST2	
SAMPLE DEPTH mMDRT	SAMPLE FREQUENCY Metres
3075.0 – 3081.0	6
3081.0 – 3095.0	3
3090.0 – 3675.0	5

Cuttings were logged on site by Sperry Drilling Services geologists using a binocular microscope. An ultraviolet light box was used to inspect the fluorescence of cuttings.

Gas was monitored by a Total Hydrocarbon Gas detector (Flame Ionisation Detector – F.I.D), calibrated such that 50 API units, or 10,000 parts per million (ppm) is equivalent to 1% methane gas in air. An on-line F.I.D gas chromatograph recorded the gas breakdown, calibrated to analyse C1, C2, C3, iso C4, normal C4 alkanes, neo C5, iso C5 and normal C5. Regular gas system checks were performed to ensure the correct functioning of the gas

detection and measurement system. Check gas 2.5% (pure methane) and 10% (pure methane) were used to ascertain correct readings by the Total Gas detection equipment, and gas mixture was used to check the chromatograph. A successful and accurate chromatograph calibration was done prior to drilling 311 mm (12 1/4") hole. Subsequent checks with carbide to test for blockages to the gas flow line detected no blockages. When drilling with returns commenced the Chromatograph Gas detector was changed out as it became saturated with moisture.

From this point, both the Total Gas detector and Chromatograph worked well for the remainder of the well, with peaks corresponding to lithology and LWD readings. The loading of the mud header box with cuttings occasionally caused the gas trap agitator to stall, thus affecting gas readings. The gas detector equipment was thoroughly calibrated with the Wellsite geologist witnessing the process and ratifying accuracy at all times.

Below is a brief explanation to the use of different gas ratios in the enclosed Gas Ratio Plot.

C1 Ratios (C1/C2, C1/C3, C1/C4 Total, C1/C5 Total). These display the fraction of each component compared to the fraction of C1. The ratios generally decrease with depth as more mature sediments are encountered. Mature source rocks and hydrocarbon reservoirs show low ratios.

Gas Wetness Ratio (GWR): $C_2+C_3+C_4+C_5/C_{total} \times 100$. The GWR gives an indication of maturity. It will generally increase with depth as the C1 fraction will represent a smaller part of the total light HC.

Light to Heavy ratio (LHR): $C_1+C_2/C_3+C_4+C_5 \times 100$. The LHR is expected to decrease with depth.

Oil Character Qualifier (OCQ): C_4+C_5/C_3 . Under some circumstances high amounts of C1 will mask the presence of oil. GWR and LHR could then be misinterpreted. In the presence of oil, C4 will increase relative to C3, and the OCQ would increase.

Average Carbon Number (ACN): $[C_1 + (2 \times C_2) + (3 \times C_3) + (4 \times C_4)] / (C_1 + C_2 + C_3 + C_4)$.

5.2 LITHOLOGICAL SUMMARY FOR ZANEGREY-1

Following is a tabulated lithological summary of ZaneGrey-1. The intervals have been determined on the basis of cuttings lithology and drilling parameters and are consistent with those delineated by the Wellsite Geologist.

Interpretative Depth 1095.0 to 1200.0 mMDRT		Lithology Interbedded Argillaceous Calcilutite and Calcisiltite.	
ROP. (metre/hour)	Drilling Parameters (Avg)	Maximum Formation Gas: 0.10%	Average Formation Gas: 0.01%
Min. 5.7 Max. 71.3 Avg. 35.4	WOB : 5.3 MT RPM(surf): 75 RPM(mot): 123 TRQ: 25495 nM	Chromatograph Analysis: C₁ : 3660 ppm C₂ : 75 ppm C₃ : 30 ppm iC₄ : 20 ppm nC₄ : 20 ppm neoC₅ : 23 ppm iC₅ : 20 ppm nC₅ : 20 ppm	Chromatograph Analysis: C₁ : 1339 ppm C₂ : 27 ppm C₃ : 14 ppm iC₄ : 5 ppm nC₄ : 4 ppm neoC₅ : 4 ppm iC₅ : 5 ppm nC₅ : 7 ppm
<p>ARGILLACEOUS CALCILUTITE (10 - 75%): light to medium grey, light brownish grey, soft to firm, hard in parts, blocky, micritic (65 to 80%) and argillaceous (20 to 35%) matrix, trace to 30% Calcilutite grading to CALCISILTITE in part, trace very fine dark green glauconite grains in part.</p> <p>CALCARENITE (0 - Trace): light grey, pale yellowish brown to pale greenish yellow, firm to hard, predominantly fine to very fine, partly recrystallised, trace to 20% clay matrix, trace fossil fragments (shell), trace very fine dark green glauconite grains.</p> <p>CALCISILTITE (0 - 90%): light to medium grey, medium dark grey, firm to hard, blocky, calcareous silt, micritic (10 to 20%) and argillaceous matrix (5 to 10%), grading to CALCILUTITE, trace very fine dark green glauconite grains.</p>			

Interpretative Depth 1200.0 – 1250.0 mMDRT		Lithology Interbedded Argillaceous Calcilutite and Calcsiltite with minor Calcarenite.	
ROP. (metre/hour)	Drilling Parameters (Avg)	Maximum Formation Gas: 0.06%	Average Formation Gas: 0.01%
Min. 20.2 Max. 81.2 Avg. 59.8	WOB : 6.6 MT RPM(surf): 78 RPM(mot): 124 TRQ: 30851 nM	Chromatograph Analysis: C ₁ : 964 ppm C ₂ : 16 ppm C ₃ : 13 ppm iC ₄ : 7 ppm nC ₄ : 9 ppm neoC ₅ : 9 ppm iC ₅ : 8 ppm nC ₅ : 13 ppm	Chromatograph Analysis: C ₁ : 257 ppm C ₂ : 7 ppm C ₃ : 7 ppm iC ₄ : 4 ppm nC ₄ : 5 ppm neoC ₅ : 5 ppm iC ₅ : 4 ppm nC ₅ : 6 ppm
<p>ARGILLACEOUS CALCILUTITE (20 – 40%): light to medium grey, light brownish grey, soft to firm, hard in part, blocky, micritic (65 to 80%) and argillaceous (20 to 35%) matrix, trace to 30% Calcilutite grading to CALCSILTITE in part, trace very fine dark green glauconite grains in part.</p> <p>CALCSILTITE (50 – 80%): light to medium grey, light grey brown, firm to hard, blocky, calcareous silt, micritic (10 to 20%) and argillaceous matrix (5 to 10%), grading to CALCILUTITE in part, trace very fine dark green glauconite grains.</p> <p>CALCARENITE (0 – 10%): light grey, pale yellow brown in part, firm to hard, very fine Upper to fine Lower, 10 to 15% calcareous cement, trace to 5% clay matrix, trace to 15% fine glauconite grains, trace shell fragments and large Foraminifera.</p>			

Interpretative Depth 1250.0 to 1320.0 mMDRT		Lithology Interbedded Argillaceous Calcilutite and Calcsiltite.	
ROP. (metre/hour)	Drilling Parameters (Avg)	Maximum Formation Gas: 0.14%	Average Formation Gas: 0.06%
Min. 19.7 Max. 83.3 Avg. 53.8	WOB : 4.8 MT RPM(surf): 77 RPM(mot): 124 TRQ: 29075 nM	Chromatograph Analysis: C ₁ : 8947 ppm C ₂ : 113 ppm C ₃ : 683 ppm iC ₄ : 11 ppm nC ₄ : 15 ppm neoC ₅ : 8 ppm iC ₅ : 11 ppm nC ₅ : 13 ppm	Chromatograph Analysis: C ₁ : 3721 ppm C ₂ : 51 ppm C ₃ : 69 ppm iC ₄ : 6 ppm nC ₄ : 5 ppm neoC ₅ : 3 ppm iC ₅ : 5 ppm nC ₅ : 6 ppm
<p>CALCSILTITE (50 – 80%): light to medium grey, firm, blocky, calcareous silt, micritic (10 to 20%) and argillaceous matrix (5 to 20%), grading to and finely interbedded with CALCILUTITE, trace very fine dark green glauconite grains.</p> <p>ARGILLACEOUS CALCILUTITE (30 – 50%): white, light to medium grey, soft, dispersive to firm, blocky, micritic (60 to 80%) and argillaceous (20 to 40%) matrix, trace to 20% Calcilutite grading to CALCSILTITE in part, trace very fine dark green glauconite grains in part.</p>			

Interpretative Depth 1320.0 to 1560.0 mMDRT		Lithology Interbedded Calcilutite and Calcisiltite with minor Calcarenite.	
ROP. (metre/hour)	Drilling Parameters (Avg)	Maximum Formation Gas: 3.20%	Average Formation Gas: 1.09%
Min. 6.8 Max. 88.8 Avg. 53.8	WOB : 5.4 MT RPM(surf): 71 RPM(mot): 125 TRQ: 29803 nM	Chromatograph Analysis: C₁ : 41513 ppm C₂ : 486 ppm C₃ : 579 ppm iC₄ : 47 ppm nC₄ : 32 ppm neoC₅ : 12 ppm iC₅ : 32 ppm nC₅ : 18 ppm	Chromatograph Analysis: C₁ : 19876 ppm C₂ : 286 ppm C₃ : 93 ppm iC₄ : 22 ppm nC₄ : 14 ppm neoC₅ : 5 ppm iC₅ : 15 ppm nC₅ : 8 ppm
<p>CALCILUTITE (10 – 60%): off white, light grey, soft, increasingly homogenous, crumbly, micritic (75 to 85%) and slightly argillaceous (5 to 10%) matrix, calcisilt (trace to 5%) grains in part, occasionally trace very fine black carbonaceous flakes, trace glauconite staining.</p> <p>CALCISILTITE (40 – 85%): very light grey to light medium grey, light olive grey to olive grey, soft to firm, locally moderately hard, crumbly, micritic (5 to 10%) and argillaceous matrix (30 to 40%), less glauconite, trace very fine dark green glauconite grains, trace fine carbonaceous flakes, trace to rare fossil fragments & Foraminifera, isolated light pink stained medium Upper quartz grains.</p> <p>CALCARENITE (0 – 10%): pale yellowish brown, light grey, light olive grey, firm to hard, partly recrystallised, trace shell fragments & Foraminifera</p>			

Interpretative Depth 1560.0 to 1691.0 mMDRT		Lithology Interbedded Calcareous Claystone and Marl with minor Calcilutite and Calcisiltite.	
ROP. (metre/hour)	Drilling Parameters (Avg)	Maximum Formation Gas: 1.82%	Average Formation Gas: 0.97%
Min. 4.6 Max. 144.9 Avg. 87.4	WOB : 4.2 MT RPM(surf): 65 RPM(mot): 118 TRQ: 24741 nM	Chromatograph Analysis: C₁ : 22834 ppm C₂ : 249 ppm C₃ : 2194 ppm iC₄ : 16 ppm nC₄ : 18 ppm neoC₅ : 11 ppm iC₅ : 15 ppm nC₅ : 16 ppm	Chromatograph Analysis: C₁ : 6222 ppm C₂ : 72 ppm C₃ : 29 ppm iC₄ : 7 ppm nC₄ : 7 ppm neoC₅ : 3 ppm iC₅ : 7 ppm nC₅ : 6 ppm
<p>CALCAREOUS CLAYSTONE (0 – 80%): light to medium light grey, soft to moderately firm, sub-blocky to blocky, 20 to 35% calcareous matrix, trace calcisilt, trace carbonaceous specks, trace disseminated pyrite, nil to trace very fine glauconite grains.</p> <p>MARL (0 – 90%): light to medium dark grey, very soft to soft, dispersive in part, amorphous, clay matrix (35 to 45%), grading to ARGILLACEOUS CALCILUTITE in part, trace calcisilt in part, nil to trace very fine dark green disseminated glauconite, trace fossil fragments & Foraminifera.</p> <p>CALCILUTITE (5 – 20%): off white, light grey, soft, blocky, platy in part, homogenous, micritic (40 to 85%) and increasingly argillaceous (15 to 40%) matrix, grading to ARGILLACEOUS CALCILUTITE and MARL, calcisilt (trace to 10%) grains in part, trace very fine black carbonaceous flakes.</p> <p>CALCISILTITE (5 – 20%): light brownish grey to brown grey, light olive grey to olive grey, soft to firm, blocky angular fragments, minor argillaceous matrix (5 to 10%), grading to CALCARENITE, trace very fine dark green glauconite, trace fine carbonaceous flakes, trace to rare fossil fragments & Foraminifera, trace coarse pyrite nodules.</p>			

Interpretative Depth 1691.0 to 1770.0 mMDRT		Lithology Calcareous Claystone.	
ROP. (metre/hour)	Drilling Parameters (Avg)	Maximum Formation Gas: 1.54%	Average Formation Gas: 0.85%
Min. 35.6 Max. 137.6 Avg. 95.9	WOB : 3.8 MT RPM(surf): 76 RPM(mot): 125 TRQ: 27943 nM	Chromatograph Analysis: C₁ : 20 ppm C₂ : 6 ppm C₃ : 9 ppm iC₄ : 5 ppm nC₄ : 7 ppm neoC₅ : 8 ppm iC₅ : 6 ppm nC₅ : 15 ppm	Chromatograph Analysis: C₁ : 2 ppm C₂ : 1 ppm C₃ : 2 ppm iC₄ : 1 ppm nC₄ : 1 ppm neoC₅ : 2 ppm iC₅ : 3 ppm nC₅ : 4 ppm
<p>CALCAREOUS CLAYSTONE (95 – 100%): light to medium light grey, soft to moderately firm, sub-blocky to blocky, 20 to 35% calcareous matrix, trace calcisilt, trace carbonaceous specks, trace disseminated pyrite, nil to trace very fine glauconite grains.</p> <p>MARL (0 – 5%): light to medium dark grey, very soft to soft, dispersive in places, amorphous, 35-45% clay matrix, grades to ARGILLACEOUS CALCILUTITE in places, trace Calcisiltite in places, nil to trace very fine dark green disseminated glauconite, trace fossil fragments and Foraminifera.</p>			

Interpretative Depth 1770.0 to 2150.0 mMDRT		Lithology Calcareous Claystone interbedded with Claystone.	
ROP. (metre/hour)	Drilling Parameters (Avg)	Maximum Formation Gas: 2.22%	Average Formation Gas: 1.26%
Min. 7.9 Max. 145.9 Avg. 91.1	WOB : 4.0 MT RPM(surf): 76 RPM(mot): 120 TRQ: 30115 nM	Chromatograph Analysis: C₁ : 16748 ppm C₂ : 427 ppm C₃ : 153 ppm iC₄ : 70 ppm nC₄ : 108 ppm neoC₅ : 101 ppm iC₅ : 80 ppm nC₅ : 184 ppm	Chromatograph Analysis: C₁ : 5835 ppm C₂ : 174 ppm C₃ : 50 ppm iC₄ : 13 ppm nC₄ : 11 ppm neoC₅ : 8 ppm iC₅ : 9 ppm nC₅ : 17 ppm
<p>CALCAREOUS CLAYSTONE (20 – 90%): white, very light to medium grey, very soft to firm, sub-blocky to blocky, 20 to 40% calcareous matrix, grading to Claystone, trace to 20% Calcisiltite in places, trace very fine disseminated and coarse nodular pyrite, nil to trace very fine glauconite grains, nil to trace fossil fragments including Foraminifera and Bryozoa.</p> <p>CLAYSTONE (10 – 70%): light to medium dark grey, olive grey, soft to firm, dispersive in places, sub-blocky to blocky, locally sub-splintery, 5 to 20% calcareous matrix, grades to CALCAREOUS CLAYSTONE, trace very fine disseminated and nodular pyrite, nil to trace very fine glauconite grains, trace micro-mica, carbonaceous flakes and loose moderately rounded quartz grains.</p>			

Interpretative Depth 2150.0 to 2250.0 mMDRT		Lithology Interbedded Calcareous Claystone and Claystone with minor traces of Sandstone and Siltstone.	
ROP. (metre/hour) Min. 4.3 Max. 127.1 Avg. 80.4	Drilling Parameters (Avg) WOB : 5.3 MT RPM(surf): 72 RPM(mot): 113 TRQ: 33251 nM	Maximum Formation Gas: 1.29% Chromatograph Analysis: C₁ : 10636 ppm C₂ : 201 ppm C₃ : 69 ppm iC₄ : 19 ppm nC₄ : 9 ppm neoC₅ : 0 ppm iC₅ : 7 ppm nC₅ : 0 ppm	Average Formation Gas: 0.61% Chromatograph Analysis: C₁ : 4240 ppm C₂ : 83 ppm C₃ : 25 ppm iC₄ : 6 ppm nC₄ : 2 ppm neoC₅ : 0 ppm iC₅ : 1 ppm nC₅ : 0 ppm
<p>CALCAREOUS CLAYSTONE (70 – 90%): very light grey to medium light grey, light olive grey, yellowish grey, very soft to soft, rare firm, locally amorphous and plastic, increasingly silty and arenaceous in places, 15 to 35% calcareous matrix, grades to CLAYSTONE, trace fossil fragments and Foraminifera, nil to trace carbonaceous flakes, fine disseminated and coarse nodular pyrite</p> <p>CLAYSTONE (10 – 30%): medium to medium dark grey, olive grey, soft to firm, rare to locally moderately hard, blocky, locally sub-splintery, 5 to 15% calcareous matrix, grades to CALCAREOUS CLAYSTONE, trace to rare fossil fragments and Foraminifera, trace carbonaceous flakes, micro-mica, and very fine disseminated and nodular pyrite.</p>			

Interpretative Depth 2250.0 to 2350.0 mMDRT		Lithology Interbedded Calcareous Claystone, Claystone and minor Marl.	
ROP. (metre/hour)	Drilling Parameters (Avg)	Maximum Formation Gas: 1.05%	Average Formation Gas: 0.69%
Min. 21.1 Max. 134.1 Avg. 63.9	WOB : 4.4 MT RPM(surf): 64 RPM(mot): 111 TRQ: 34256 nM	Chromatograph Analysis: C₁ : 11053 ppm C₂ : 261 ppm C₃ : 90 ppm iC₄ : 33 ppm nC₄ : 16 ppm neoC₅ : 1 ppm iC₅ : 13 ppm nC₅ : 2 ppm	Chromatograph Analysis: C₁ : 5843 ppm C₂ : 136 ppm C₃ : 41 ppm iC₄ : 13 ppm nC₄ : 5 ppm neoC₅ : 0 ppm iC₅ : 5 ppm nC₅ : 0 ppm
<p>CALCAREOUS CLAYSTONE (60 – 90%): very light to medium light grey, light olive grey, very soft to soft, locally firm, sub-blocky to blocky, slightly arenaceous in places, 20 to 40% calcareous matrix, grades to CLAYSTONE and MARL in places, 1 to 5% Calcsiltite, 5 to 10% silt in parts, trace fossil fragments and Foraminifera, nil to trace very fine carbonaceous flakes, very fine disseminated and nodular pyrite and micro-mica.</p> <p>CLAYSTONE (10 – 40%): medium to medium dark grey, olive grey, soft to firm, locally moderately hard, blocky, commonly sub-splintery, 1 to 5% Calcsiltite, 5 to 20% calcareous matrix, grades to CALCAREOUS CLAYSTONE, trace to 2% very fine to fine glauconite, trace fossil fragments and Foraminifera, very fine carbonaceous flakes, very fine disseminated and nodular pyrite and micro-mica flakes.</p> <p>MARL (0 – 20%): very light grey, very soft to soft, blocky to amorphous, 35 to 45% calcareous matrix, grades to CALCAREOUS CLAYSTONE.</p>			

Interpretative Depth 2350.0 to 2475.0 mMDRT		Lithology Interbedded Calcareous Claystone and Claystone.	
ROP. (metre/hour) Min. 11.8 Max. 74.2 Avg. 42.1	Drilling Parameters (Avg) WOB : 4.3 MT RPM(surf): 66 RPM(mot): 115 TRQ: 33747 nM	Maximum Formation Gas: 1.07% Chromatograph Analysis: C₁ : 11473 ppm C₂ : 341 ppm C₃ : 3467 ppm iC₄ : 80 ppm nC₄ : 40 ppm neoC₅ : 0 ppm iC₅ : 43 ppm nC₅ : 7 ppm	Average Formation Gas: 0.71% Chromatograph Analysis: C₁ : 4944 ppm C₂ : 158 ppm C₃ : 118 ppm iC₄ : 11 ppm nC₄ : 12 ppm neoC₅ : 0 ppm iC₅ : 12 ppm nC₅ : 1 ppm
<p>CALCAREOUS CLAYSTONE (20 – 70%): very light to medium light grey, very soft to firm, amorphous in places, sub-blocky to blocky, 20 to 35% calcareous matrix, grades to CLAYSTONE, 1 to 20% Calcisiltite, trace Foraminifera, nil to trace very fine carbonaceous flakes, trace very fine disseminated and coarse nodular pyrite and micro-mica.</p> <p>CLAYSTONE (30 – 80%): light to medium dark grey, light olive grey, yellowish grey to dusky yellow mottled in places, firm, moderately hard, blocky, 1 to 10% Calcisiltite, 5 to 20% calcareous matrix, grades to CALCAREOUS CLAYSTONE, trace Foraminifera, very fine carbonaceous flakes, very fine disseminated and nodular pyrite, micro-mica flakes, very fine glauconite grains.</p>			

Interpretative Depth 2475.0 to 2521.0 mMDRT		Lithology Interbedded Calcareous Claystone, Claystone and minor Marl.	
ROP. (metre/hour)	Drilling Parameters (Avg)	Maximum Formation Gas: 0.37%	Average Formation Gas: 0.22%
Min. 7.7 Max. 49.5 Avg. 26.4	WOB : 5.4 MT RPM(surf): 74 RPM(mot): 111 TRQ: 33966 nM	Chromatograph Analysis: C₁ : 3178 ppm C₂ : 143 ppm C₃ : 76 ppm iC₄ : 28 ppm nC₄ : 14 ppm neoC₅ : 0 ppm iC₅ : 21 ppm nC₅ : 2 ppm	Chromatograph Analysis: C₁ : 1892 ppm C₂ : 96 ppm C₃ : 41 ppm iC₄ : 13 ppm nC₄ : 6 ppm neoC₅ : 0 ppm iC₅ : 10 ppm nC₅ : 0 ppm
<p>CALCAREOUS CLAYSTONE (40 – 70%): very light to medium light grey, very soft to firm, amorphous in places, sub-blocky to blocky, 20 to 35% calcareous matrix, 5 to 20% Calcisiltite, grades to CLAYSTONE and MARL, nil to trace very fine carbonaceous flakes and fine dark laminations, trace very fine disseminated pyrite, fine glauconite in places, and nil to trace light brownish yellow fossil fragments.</p> <p>MARL (0 – 20%): white to very light grey, soft to firm, amorphous, blocky, 35 to 45% calcareous matrix, grades to CALCAREOUS CLAYSTONE, and trace carbonaceous specks.</p> <p>CLAYSTONE (30 – 60%): light to medium dark grey, brownish grey, firm to moderately hard, splintery, blocky, 1 to 15% Calcisiltite, 5 to 20% calcareous matrix, grades to CALCAREOUS CLAYSTONE, trace very fine carbonaceous flakes, very fine disseminated and coarse nodular pyrite, very fine glauconite grains, nil to trace light brownish yellow fossil fragments.</p>			

Interpretative Depth 2521.0 to 2561.0 mMDRT		Lithology Interbedded Claystone and Greensand w minor Argillaceous Siltstone and Claystone.	
ROP. (metre/hour)	Drilling Parameters (Avg)	Maximum Formation Gas: 0.68%	Average Formation Gas: 0.35%
Min. 15.4 Max. 86.1 Avg. 34.3	WOB : 3.6 MT RPM(surf): 73 RPM(mot): 111 TRQ: 34577 nM	Chromatograph Analysis: C₁ : 5550 ppm C₂ : 475 ppm C₃ : 260 ppm iC₄ : 39 ppm nC₄ : 64 ppm neoC₅ : 0 ppm iC₅ : 16 ppm nC₅ : 6 ppm	Chromatograph Analysis: C₁ : 2468 ppm C₂ : 211 ppm C₃ : 107 ppm iC₄ : 15 ppm nC₄ : 23 ppm neoC₅ : 0 ppm iC₅ : 7 ppm nC₅ : 1 ppm
<p>CALCAREOUS CLAYSTONE (60 – 90%): very light grey to medium light grey, very soft to firm, amorphous in places, sub-blocky to blocky, 20 to 35% calcareous matrix, 5 to 20% Calcsiltite, grades to CLAYSTONE and MARL, nil to trace very fine carbonaceous flakes, trace very fine disseminated, fine dark laminations and coarse nodular pyrite, trace fine glauconite in places and nil to trace light brownish yellow fossil fragments.</p> <p>GREENSAND (10 – 40%): dark yellowish green to dusky green, white to light grey matrix, soft, loose in places, very fine lower to medium lower grained, commonly silty, 20 to 35% glauconite grains in places, 20 to 40% quartz sand, 10 to 20% calcareous matrix, trace shell fragments, nil visual porosity and no shows.</p> <p>CLAYSTONE (5 – 20%): light to medium dark grey, brownish grey, firm to moderately hard, splintery, blocky, 5 to 15% Calcsiltite, 5 to 20% calcareous matrix, grades to CALCAREOUS CLAYSTONE, nil to 5% quartz silt with rare medium to coarse sand, trace very fine carbonaceous flakes, very fine disseminated and coarse nodular pyrite and very fine glauconite grains.</p> <p>ARGILLACEOUS SILTSTONE (10 – 40%): greyish brown, dark yellowish brown to light olive grey, soft to firm, friable, sub-blocky, common micro micaceous, trace carbonaceous material, minor very fine quartz grains.</p>			

Interpretative Depth 2561.0 to 2660.0 mMDRT		Lithology Interbedded Sandstone, Argillaceous Siltstone and Claystone with minor Coal.	
ROP. (metre/hour)	Drilling Parameters (Avg)	Maximum Formation Gas: 0.44%	Average Formation Gas: 0.22%
Min. 4.4 Max. 46.9 Avg. 22.1	WOB : 3.0 MT RPM(surf): 70 RPM(mot): 107 TRQ: 36658 nM	Chromatograph Analysis: C₁ : 3246 ppm C₂ : 315 ppm C₃ : 175 ppm iC₄ : 26 ppm nC₄ : 51 ppm neoC₅ : 0 ppm iC₅ : 9 ppm nC₅ : 7 ppm	Chromatograph Analysis: C₁ : 1168 ppm C₂ : 148 ppm C₃ : 67 ppm iC₄ : 9 ppm nC₄ : 18 ppm neoC₅ : 0 ppm iC₅ : 2 ppm nC₅ : 2 ppm
<p>SANDSTONE (60 – 90%): transparent to translucent, locally frosty, trace very light orange brown 10% loose quartz, very fine lower to coarse lower grained, predominantly fine upper to medium upper, locally pebble sized, moderately sorted, predominantly sub-angular to angular, commonly sub-rounded to rounded coarse grains with angular fractures, trace pyrite cemented aggregates, very good inferred porosity and no shows.</p> <p>CLAYSTONE (10 – 40%): off white to medium grey, light olive grey to olive grey, brownish grey, mottled, soft dispersive generally amorphous, non to slightly calcareous, 5 to 10% calcareous matrix, trace to less than 10% glauconite, commonly silty, grades to ARGILLACEOUS SILTSTONE, commonly arenaceous, minor quartz silt, trace very fine lower to very fine upper quartz grains, grades to ARGILLACEOUS SANDSTONE and trace very fine disseminated and coarse nodular pyrite.</p> <p>ARGILLACEOUS SILTSTONE (0 – 20%): greyish brown to dark yellowish brown, light olive grey, soft to firm, friable, sub-blocky, common micro-mica, minor very fine quartz grains and trace carbonaceous material.</p> <p>COAL (0 – 20%): brownish black, firm to moderately hard, sub-blocky and earthy to sub-vitreous lustre.</p>			

Interpretative Depth 2660.0 to 2697.0 mMDRT		Lithology Sandstone interbedded with Argillaceous Siltstone and minor Coal.	
ROP. (metre/hour) Min. 4.0 Max. 29.6 Avg. 17.0	Drilling Parameters (Avg) WOB : 3.6 MT RPM(surf): 77 RPM(mot): 113 TRQ: 37962 nM	Maximum Formation Gas: 0.40% Chromatograph Analysis: C₁ : 1716 ppm C₂ : 380 ppm C₃ : 244 ppm iC₄ : 52 ppm nC₄ : 96 ppm neoC₅ : 0 ppm iC₅ : 20 ppm nC₅ : 26 ppm	Average Formation Gas: 0.21% Chromatograph Analysis: C₁ : 1030 ppm C₂ : 159 ppm C₃ : 73 ppm iC₄ : 13 ppm nC₄ : 24 ppm neoC₅ : 0 ppm iC₅ : 5 ppm nC₅ : 5 ppm
<p>SANDSTONE (60 – 100%): predominantly translucent to frosty, very light grey, occasionally clear, trace very light orange brown staining, predominantly loose quartz grains, fine lower to very coarse, predominantly medium lower to coarse lower, poor to moderately sorted, predominantly sub-angular to angular, common sub-rounded to rounded coarse grains with angular fractures trace pyrite cemented aggregates, good to very good inferred porosity, no show.</p> <p>ARGILLACEOUS SILTSTONE (0 – 40%): greyish brown, dark yellowish brown to light olive grey, soft to firm, occasionally hard, friable, sub-blocky to blocky, common micro micaceous, common carbonaceous material and laminations, minor very fine quartz grains.</p> <p>COAL (0 – 5%): brownish block to block, moderately firm, sub-blocky, earthy to sub-vitreous.</p> <p>NOTE: SILTSTONE is under represented in sample because of washing out in drilling mud.</p>			

Interpretative Depth 2697.0 to 2733.0 mMDRT		Lithology Sandstone with minor interbedded Argillaceous Siltstone, Claystone and Coal.	
ROP. (metre/hour)	Drilling Parameters (Avg)	Maximum Formation Gas: 0.25%	Average Formation Gas: 0.11%
Min. 4.4 Max. 15.7 Avg. 28.9	WOB : 4.8 MT RPM(surf): 90 RPM(mot): 111 TRQ: 36078 nM	Chromatograph Analysis: C ₁ : 1374 ppm C ₂ : 172 ppm C ₃ : 57 ppm iC ₄ : 11 ppm nC ₄ : 17 ppm neoC ₅ : 0 ppm iC ₅ : 3 ppm nC ₅ : 3 ppm	Chromatograph Analysis: C ₁ : 944 ppm C ₂ : 122 ppm C ₃ : 35 ppm iC ₄ : 5 ppm nC ₄ : 9 ppm neoC ₅ : 0 ppm iC ₅ : 1 ppm nC ₅ : 1 ppm
<p>SANDSTONE (60 – 100%): clear to translucent, frosty in part, trace very light orange brown, predominantly loose quartz grains, fine lower to pebbles, predominantly medium lower to coarse lower, poorly sorted, predominantly sub-angular to angular, trace mica flakes, common sub-rounded to rounded coarse grains with angular fractures trace pyrite cemented aggregates, good inferred porosity, no show.</p> <p>ARGILLACEOUS SILTSTONE (0 – 40%): greyish brown, dark yellowish brown to light olive grey, soft to firm, friable, sub-blocky, common micro micaceous, trace carbonaceous material, minor very fine quartz grains.</p> <p>COAL (Trace): dark yellowish brown, dark brown to black, soft to moderately firm, sub-blocky to sub-fissile, silty in part, earthy to sub-vitreous.</p>			

Interpretative Depth 2733.0 – 2772.5 mMDRT		Lithology Sandstone with minor interbedded Argillaceous Siltstone, Claystone and Coal.	
ROP. (metre/hour) Min. 2.0 Max. 42.7 Avg. 10.7	Drilling Parameters (Avg) WOB : 15.2 MT RPM(surf): 130 RPM(mot): 113 TRQ: 31959 nM	Maximum Formation Gas: 0.40% Chromatograph Analysis: C₁ : 13166 ppm C₂ : 2190 ppm C₃ : 844 ppm iC₄ : 64 ppm nC₄ : 133 ppm neoC₅: 0 ppm iC₅ : 18 ppm nC₅ : 16 ppm	Average Formation Gas: 0.21% Chromatograph Analysis: C₁ : 2384 ppm C₂ : 383 ppm C₃ : 183 ppm iC₄ : 21 ppm nC₄ : 33 ppm neoC₅: 0 ppm iC₅ : 5 ppm nC₅ : 3 ppm
<p>SANDSTONE: clear to translucent, frosty in parts, trace very light orange brown, predominantly loose quartz grains, fine Lower pebbles, predominantly medium Lower to coarse Lower, poorly sorted, predominantly sub-angular to angular, trace mica flakes, common sub-rounded to rounded coarse grains with angular fractures trace pyrite cement aggregates, good inferred porosity, no show.</p> <p>ARGILLACEOUS SILTSTONE: greyish brown, dark yellowish brown to light olive grey, soft to firm, friable, sub-blocky, common micromica, trace carbonaceous material, minor very fine quartz grains.</p> <p>CLAYSTONE: white, light grey, medium brown to brown black, brownish grey to medium brown, soft to firm, blocky, dispersive in parts, washing out, silty with trace to 10% quartz silt, trace to 30% carbonaceous material, trace pyrite, trace to rare very fine quartz grains, non calcareous.</p>			

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Interpretative Depth 2184.0 – 2310.0 mMDRT		Lithology Interbedded Calcareous Claystone with Claystone with minor Marl	
ROP. (metre/hour) Min. 1.3 Max. 256.7 Avg. 19.7	Drilling Parameters (Avg) WOB :13.7 MT RPM(surf):46 RPM(mot):173 TRQ:7960 nM	Maximum Formation Gas: 0.12% Chromatograph Analysis: C ₁ : 1562 ppm C ₂ : 36 ppm C ₃ : 9 ppm iC ₄ : 7 ppm nC ₄ : 12 ppm neoC ₅ : 15 ppm iC ₅ : 13 ppm nC ₅ : 23 ppm	Average Formation Gas: 0.06% Chromatograph Analysis: C ₁ : 646 ppm C ₂ : 17 ppm C ₃ : 5 ppm iC ₄ : 2 ppm nC ₄ : 1 ppm neoC ₅ : 2 ppm iC ₅ : 0 ppm nC ₅ : 1ppm
<p>CALCAREOUS CLAYSTONE (75 - 100%): very light grey to medium light grey, very soft to soft, firm in parts, blocky, 20 to 30% calcareous matrix, grading to CLAYSTONE in parts, nil to trace carbonaceous flakes, trace micromica, very fine disseminated pyrite.</p> <p>CLAYSTONE (5 – 15%): medium grey to medium dark grey, olive grey, soft to moderately hard, sub-blocky - blocky, trace sub-splintery, 5 to 20% calcareous matrix, grading to CALCAREOUS CLAYSTONE, trace very fine glauconitic, trace very fine disseminated and nodular pyrite, trace to rare fossil fragments and Foraminifera, trace micromica flakes, trace carbonaceous flakes.</p> <p>MARL (0 – 10%): very light grey, very soft to slightly amorphous to blocky, 35 to 45% calcareous matrix, grading to CALCAREOUS CLAYSTONE, very fine pyrite laminae in parts, trace coarse pyrite nodules, trace fossil fragments.</p>			

Interpretative Depth 2310.0 – 2470.0 mMDRT		Lithology Interbedded Calcareous Claystone and Claystone with trace Siltstone.	
ROP. (metre/hour) Min. 3.7 Max. 82.0 Avg. 25.1	Drilling Parameters (Avg) WOB :20.5 MT RPM(surf): 60 RPM(mot): 179 TRQ: 11025 nM	Maximum Formation Gas: 0.23% Chromatograph Analysis: C₁ : 6379 ppm C₂ : 2433 ppm C₃ : 972 ppm iC₄ : 202 ppm nC₄ : 286 ppm neoC₅ : 94 ppm iC₅ : 108 ppm nC₅ : 88 ppm	Average Formation Gas: 0.15% Chromatograph Analysis: C₁ : 1413 ppm C₂ : 207 ppm C₃ : 60 ppm iC₄ : 20 ppm nC₄ : 28 ppm neoC₅ : 9 ppm iC₅ : 10 ppm nC₅ : 8 ppm
<p>CLAYSTONE (30 - 70%): calcareous, very light grey to light olive grey, medium light grey, very soft to soft, amorphous, dispersive, common soft to firm, sub-blocky, 1 to 5% calcisiltite, 20 to 35% calcareous matrix grading to CLAYSTONE, trace Foraminifera, trace micro-micaceous flakes, trace very fine disseminated pyrite, trace very fine carbonaceous flakes.</p> <p>CLAYSTONE (40 – 70%): light olive grey to very light grey, occasionally medium grey, trace pale yellowish brown, soft, predominantly sub-blocky, occasionally amorphous, trace silty in places, 1 to 5% calcisilt, 5 to 20% calcareous matrix grading to CALCAREOUS CLAYSTONE, trace very fine carbonaceous flakes and laminae, trace very fine disseminated pyrite, trace micro-micaceous flakes, trace Foraminifera, trace brownish grey, olive grey, mottled in parts, firm, occasionally moderately hard, blocky, silty, 1 to 10% calcisilt, 10 to 30% calcareous matrix, grading to SILTSTONE.</p> <p>SILTSTONE (Nil - 5%): dark grey to olive black, moderately hard to hard, blocky to angular fragments, abundant carbonaceous matter, very calcareous.</p>			

Interpretative Depth 2470.0 – 2515.0 mMDRT		Lithology Interbedded Calcareous Claystone and Claystone with interbedded Marl and minor Calcareous Siltstone and Calcareous Sandstone	
ROP. (metre/hour) Min. 9.1 Max. 68.5 Avg. 31.5	Drilling Parameters (Avg) WOB :20.5 MT RPM(surf): 53 RPM(mot): 178 TRQ: 10929 nM	Maximum Formation Gas: 0.20% Chromatograph Analysis: C ₁ : 2810 ppm C ₂ : 2433 ppm C ₃ : 35 ppm iC ₄ : 17 ppm nC ₄ : 12 ppm neoC ₅ : 25 ppm iC ₅ : 8 ppm nC ₅ : 0 ppm	Average Formation Gas: 0.15% Chromatograph Analysis: C ₁ : 1274 ppm C ₂ : 238 ppm C ₃ : 14 ppm iC ₄ : 10 ppm nC ₄ : 4 ppm neoC ₅ : 13 ppm iC ₅ : 2 ppm nC ₅ : 0 ppm
<p>CLAYSTONE (30 - 65%): calcareous, very light grey to light olive grey, medium light grey, very soft to soft, amorphous, dispersive, sub-blocky, 1 to 5% calcisiltite, 20 to 35% calcareous matrix grading to Marl and Claystone, trace Foraminifera, trace micro-micaceous flakes, trace very fine disseminated pyrite, trace very fine carbonaceous flakes.</p> <p>CLAYSTONE (30 - 70%): light olive grey-very light grey, trace pale yellowish brown, soft, predominantly sub-blocky, slightly amorphous, commonly silty (10%), 1 to 5% calcisilt, 5 to 20% calcareous matrix grading to CALCAREOUS CLAYSTONE, trace very fine carbonaceous flakes and laminae, trace very fine disseminated pyrite, trace micro-micaceous flakes, trace Foraminifera and fossils, trace glauconite, 10% brownish grey, olive grey, firm to moderately hard, friable in parts, blocky, silty, silt very fine Lower quartz grains, 5 to 20% calcareous matrix, grading to SILTSTONE, trace very fine carbonaceous flakes.</p> <p>MARL (5 - 20%): white to very light grey, with green (glauconite) staining, soft, blocky to amorphous, 35 to 45% calcareous matrix, grading to CALCAREOUS CLAYSTONE.</p> <p>SILTSTONE (Nil - 5%): calcareous, light brown to brownish grey, firm, friable, to hard, abundant (20 to 30%) calcareous matrix/cement, trace very fine sub-angular sub-spherical quartz grains, trace glauconite, grading into CALCAREOUS SANDSTONE.</p> <p>SANDSTONE (Nil - 5%): calcareous, pale yellowish brown, brownish grey-dark yellowish brown, firm to moderately hard, silt-very fine Upper, predominantly very fine Lower to very fine Upper, sub-rounded, common loose quartz grains, abundant silty matrix, calcareous matrix/cement, grading into SILTSTONE in places, very fine trace glauconite, trace carbonaceous flakes, poor visual porosity, no show.</p>			

Interpretative Depth 2515.0 – 2553.0 mMDRT		Lithology Interbedded Claystone, Greensand, Argillaceous Siltstone and Sandstone	
ROP. (metre/hour) Min. 2.7 Max. 42.7 Avg. 18.5	Drilling Parameters (Avg) WOB :16.4 MT RPM(surf): 66 RPM(mot): 177 TRQ:12780 nM	Maximum Formation Gas: 0.25% Chromatograph Analysis: C₁ : 2960 ppm C₂ : 376 ppm C₃ : 13 ppm iC₄ : 26 ppm nC₄ : 39 ppm neoC₅ : 9 ppm iC₅ : 12 ppm nC₅ : 1 ppm	Average Formation Gas: 0.17% Chromatograph Analysis: C₁ : 1373 ppm C₂ : 199 ppm C₃ : 8 ppm iC₄ : 14 ppm nC₄ : 20 ppm neoC₅ : 4 ppm iC₅ : 6 ppm nC₅ : 0 ppm
<p>CLAYSTONE (65 - 80%): brownish grey, moderate yellowish brown, speckled and stained with green glauconite, soft, amorphous, trace firm, blocky, 5 to 15% calcisilt, 5 to 20% calcareous matrix, abundant glauconite (up to 35%) in part grading to GLAUCONITIC CLAYSTONE and GLAUCONITIC CALCAREOUS CLAYSTONE, trace very fine disseminated pyrite.</p> <p>GREENSAND (5 - 20%): dark yellowish green to dusky green in a white to moderate yellowish brown matrix, soft, amorphous, loose in part, 50 to 75% glauconite, very fine to coarse grained (very fine Upper to coarse Upper), loose glauconite grains in part, trace nodular glauconite, trace to 20% quartz silt and sand, 10 to 20% calcareous matrix, trace shell fragments, nil visual porosity, no show.</p> <p>SILTSTONE (10 - 20%): argillaceous, dark brownish grey, soft, friable, with 20 to 30% clay matrix, 10% very fine quartz sand, 5 to 20% medium to coarse glauconite grains and diffuse glauconite patches, trace very fine white mica, nil visual porosity.</p> <p>SANDSTONE (Nil - 5%): dark brownish grey, soft, amorphous, transparent to translucent, occasionally frosted, yellowish orange, loose quartz grains, very fine Lower to fine Upper, predominantly very fine Upper, moderately sorted, rounded to sub-angular, 20 to 30% clay matrix, silty grading to ARGILLACEOUS SANDSTONE and ARGILLACEOUS SILTSTONE, no show, poor inferred porosity.</p>			

Interpretative Depth 2553.0 – 2740.0 mMDRT		Lithology Sandstone with Claystone and minor interbedded Siltstone.	
ROP. (metre/hour) Min. 2.5 Max. 104.3 Avg. 55.5	Drilling Parameters (Avg) WOB :7.2 MT RPM(surf): 72 RPM(mot): 176 TRQ:16533 nM	Maximum Formation Gas: 0.65 % Chromatograph Analysis: C₁ : 5421 ppm C₂ : 1306 ppm C₃ : 63 ppm iC₄ : 166 ppm nC₄ : 248 ppm neoC₅ : 56 ppm iC₅ : 108 ppm nC₅ : 0 ppm	Average Formation Gas: 0.22 % Chromatograph Analysis: C₁ : 261 ppm C₂ : 287 ppm C₃ : 14 ppm iC₄ : 27 ppm nC₄ : 38 ppm neoC₅ : 7 ppm iC₅ : 16 ppm nC₅ : 0 ppm
<p>SANDSTONE (30 - 100%): loose quartz grains, predominantly translucent frosted, common clear, very light grey, trace yellowish orange stain, fine to very coarse grained (fine Lower to very coarse Upper), predominantly (medium Lower to coarse Upper), moderately sorted, sub-rounded to rounded, becoming increasingly sub-angular to angular from 2620.0 mMDRT, moderate to high sphericity, trace coarse pyrite nodules, very good inferred porosity, no show.</p> <p>CLAYSTONE (0 - 70%): predominantly white to light grey, light brownish grey to dark yellowish brown, soft, amorphous, washing out, trace to 20% quartz silt and trace to rare very fine to fine quartz grains sand, grading to SILTSTONE in part, non-calcareous</p> <p>SILTSTONE (5 - 30%): argillaceous, dark yellowish orange, moderate yellowish brown, brownish grey, greyish brown, very soft to soft, amorphous, washing out, occasionally sub-blocky, friable and crumbly in places, nil to slightly calcareous cement, 5 to 30% argillaceous matrix grading to SILTY CLAYSTONE in places, arenaceous with trace to 20% very fine to fine quartz grains and grading into fine ARGILLACEOUS SANDSTONE in places, trace to abundant carbonaceous material and laminae.</p>			

Interpretative Depth 2740.0 – 2906.0 mMDRT		Lithology Siltstone and Claystone with minor Sandstone and Coal seams	
ROP. (metre/hour) Min. Max. Avg.	Drilling Parameters (Avg) WOB : MT RPM(surf): RPM(mot): TRQ: nM	Maximum Formation Gas: % Chromatograph Analysis: C₁ : ppm C₂ : ppm C₃ : ppm iC₄ : ppm nC₄ : ppm neoC₅ : ppm iC₅ : ppm nC₅ : ppm	Average Formation Gas: % Chromatograph Analysis: C₁ : ppm C₂ : ppm C₃ : ppm iC₄ : ppm nC₄ : ppm neoC₅ : ppm iC₅ : ppm nC₅ : ppm
<p>SILTSTONE (0 - 75%): argillaceous, moderate to dark yellowish brown, light brownish grey, pale yellowish brown, soft-firm, sub-blocky, amorphous in places, 20 to 30% argillaceous matrix, grading to Claystone in places, interlaminated with Claystone, arenaceous with trace to 20% very fine to medium quartz grains, grading into ARGILLACEOUS SANDSTONE in places, micaceous, trace to abundant carbonaceous material and laminae, trace coarse pyrite nodules, non calcareous.</p> <p>CLAYSTONE (10 - 60%): white to greyish white, pale yellowish brown, soft, commonly amorphous, dispersive, washing out, very arenaceous with trace to 40% very fine Lower to fine Lower quartz grains, sub rounded, well sorted, commonly grading to ARGILLACEOUS SANDSTONE, trace carbonaceous specks and micro-mica, trace disseminated pyrite, non calcareous.</p> <p>SANDSTONE: (Trace - 65%): loose coarse quartz grains, transparent-translucent, frosted, very fine Lower pebbles, predominantly (fine Upper to coarse Lower), well to moderately sorted, sub-rounded to sub-angular, common angular fractures, trace pyrite nodules, very good to poor visual porosity, no shows.</p> <p>COAL (Trace - 60%): black to brownish black, firm-moderately hard, sub-splintery to sub-fissile, sub-bituminous.</p>			

Interpretative Depth 2906.0 – 3107.0 mMDRT		Lithology Sandstone with minor Argillaceous Siltstone, Silty Claystone and Coal seams.	
ROP. (metre/hour) Min. Max. Avg.	Drilling Parameters (Avg) WOB : MT RPM(surf): RPM(mot): TRQ: nM	Maximum Formation Gas: % Chromatograph Analysis: C₁ : ppm C₂ : ppm C₃ : ppm iC₄ : ppm nC₄ : ppm neoC₅ : ppm iC₅ : ppm nC₅ : ppm	Average Formation Gas: % Chromatograph Analysis: C₁ : ppm C₂ : ppm C₃ : ppm iC₄ : ppm nC₄ : ppm neoC₅ : ppm iC₅ : ppm nC₅ : ppm
<p>SANDSTONE (20 - 70%): translucent to very light grey, trace transparent, loose, (very fine Upper to very coarse Upper), predominantly medium to coarse (medium Lower to coarse Lower), sub-angular to angular, well sorted, good visual porosity, locally trace poorly consolidated aggregates, soft to friable, silt to very fine grained (very fine Lower), sub-rounded well sorted, trace to 20% argillaceous matrix, grading to SILTSTONE in places, fair to good visual porosity, no fluorescence, no cut.</p> <p>SILTSTONE (5 - 20%): argillaceous, light grey, dusky yellowish brown, pale yellowish brown to brownish grey, olive black to brownish black in parts, soft to occasional firm, sub-blocky, commonly amorphous, 15 to 20% argillaceous matrix, grading to SILTY CLAYSTONE in part, common micro-mica in part, trace to abundant carbonaceous specks, fragments laminae and partings, non calcareous.</p> <p>CLAYSTONE (15 - 30%): silty, white to greyish white, light brownish grey, soft, dispersive, amorphous, trace firm, sub-blocky, very arenaceous, 10-35% silt to very fine (very fine Lower) quartz grains, trace carbonaceous specks, trace micro-mica, nil to trace disseminated pyrite.</p> <p>COAL (0 - 5%): black to brownish black, firm to hard, brittle, splintery to sub-fissile, blocky, sub-bituminous.</p>			

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Interpretative Depth 3075.0 – 3162.0 mMDRT		Lithology Sandstone interbedded with Siltstone and Claystone and minor Coal. Trace Amber in part.	
ROP. (metre/hour) Min. 4.8 Max. 94.4 Avg. 39.7	Drilling Parameters (Avg) WOB :7.3 MT RPM(surf): 80 RPM(mot): 180 TRQ: 20713 nM	Maximum Formation Gas: 2.98% Chromatograph Analysis: C₁ : 22369ppm C₂ : 2782ppm C₃ : 759ppm iC₄ : 118ppm nC₄ : 134ppm neoC₅ : 48ppm iC₅ : 57ppm nC₅ : 38ppm	Average Formation Gas: 0.72% Chromatograph Analysis: C₁ : 4310 ppm C₂ : 522ppm C₃ : 186 ppm iC₄ : 30 ppm nC₄ : 39ppm neoC₅ : 10 ppm iC₅ : 16 ppm nC₅ : 14ppm
<p>SANDSTONE (0 - 100%): predominantly loose quartz grains, translucent to very light grey, clear, trace pale to dark yellowish orange and dark grey, very fine to coarse grained (very fine Lower to coarse Upper), pebbly in part, predominantly fine to medium (fine Upper to medium Upper), sub-angular to angular, moderately to poorly sorted, consolidated in parts, trace to 50% light grey to light brownish grey, firm, friable, very fine to medium grained (very fine Lower to medium Upper), predominantly fine to medium (fine Lower to medium Lower), angular to sub rounded, moderately sorted, trace to 20% argillaceous matrix, trace coarse pyrite nodules, trace micro-mica and coarse mica flakes, trace rock fragments and lithics in parts, fair to good inferred porosity, no fluorescence, no cut.</p> <p>ARGILLACEOUS SILTSTONE (5 - 40%): white to greyish white, light to medium brownish grey, soft to occasional firm, sub-blocky, commonly amorphous (washing out), silt to fine grained sand, 15 to 35% argillaceous matrix, grading to SILTY CLAYSTONE in parts, common micro-mica in part, trace to abundant carbonaceous specks, fragments and laminae.</p> <p>SILTY CLAYSTONE (0 - 20%): white to greyish white, light to medium brownish grey, soft, dispersive, amorphous, to firm, sub-blocky, arenaceous with 20 to 35% silt to very fine (very fine Lower) quartz grains, trace to 5% carbonaceous specks and partings, trace micro-mica, nil to trace disseminated pyrite.</p> <p>CLAYSTONE (0 - 50%): light brownish grey to brownish grey and moderate to dark yellowish brown, soft to firm, sub-blocky, trace to 20% silt, grading to ARGILLACEOUS SILTSTONE in parts, trace to abundant (trace to 20%) carbonaceous specks, laminae and partings grading to CARBONACEOUS CLAYSTONE in parts, trace micro-mica, nil to trace disseminated pyrite.</p> <p>COAL (0 - 30%): black to brownish black, firm-moderately hard, splintery to sub-fissile, sub-bituminous, forming thin laminae in Claystone in part, trace Amber, very slow yellowish-blue cut, bright, solid bluish yellow residual ring residue.</p> <p>AMBER (0 - trace): light to moderate reddish orange to reddish brown nodular fragments, translucent to slightly transparent, coarse, angular, broken fragments, resinous, interbedded with coal and sandstone (sandstone grains adhering), bright yellowish white fluorescence, no cut.</p>			

Interpretative Depth 3162.0 – 3200.0 mMDRT		Lithology Interbedded Claystone, Coal and Sandstone with minor Argillaceous Siltstone	
ROP. (metre/hour) Min. 24.9 Max. 118.8 Avg. 55.5	Drilling Parameters (Avg) WOB :10.0 MT RPM(surf): 82 RPM(mot): 182 TRQ: 20235 nM	Maximum Formation Gas: 2.62% Chromatograph Analysis: C₁ : 22880 ppm C₂ : 1739 ppm C₃ : 516 ppm iC₄ : 146 ppm nC₄ : 93 ppm neoC₅ : 8 ppm iC₅ : 55 ppm nC₅ : 24 ppm	Average Formation Gas: 0.70% Chromatograph Analysis: C₁ : 6045 ppm C₂ : 515 ppm C₃ : 221 ppm iC₄ : 62 ppm nC₄ : 24 ppm neoC₅ : 0 ppm iC₅ : 20 ppm nC₅ : 6 ppm
<p>SANDSTONE (Trace-90%): firm, friable or as loose quartz grains, translucent to very light grey, clear, very fine to coarse grained (very fine Lower-coarse Upper), predominantly very fine to fine (very fine Upper-fine Upper) sub-angular to rounded, poorly sorted, with nil to 5% argillaceous matrix, trace micro-mica, moderately good visible porosity, no fluorescence, no cut.</p> <p>ARGILLACEOUS SILTSTONE (Trace): as above. light to medium brownish grey, dark yellowish brown, soft to occasional firm, sub-blocky-sub-splintery, trace amorphous (washing out), silt to fine grained sand, 10 to 20% argillaceous matrix, grading to SILTY CLAYSTONE in part, common micro-mica in part, trace-abundant carbonaceous specks, fragments and laminae, grading to CARBONACEOUS SILTSTONE in part, interbedded with Coal.</p> <p>SILTY CLAYSTONE (5 - 40%): medium to dark brownish grey, firm, arenaceous with 20 to 35% silt to very fine (very fine Lower) quartz grains carbonaceous with fine coaly laminae.</p> <p>CLAYSTONE (5 - 30%): medium to dark brownish grey, firm, carbonaceous with fine coaly laminae, silty in part.</p> <p>COAL (0 - 80%): black to brownish black, firm-moderately hard, sub-splintery to sub-fissile, sub-bituminous, as thin laminae in Claystone in part, very slow yellowish-blue cut, bright, solid bluish yellow residual ring residue.</p>			

Interpretative Depth 3200.0 – 3230.0 mMDRT		Lithology Interbedded Claystone and Sandstone with trace Coal	
ROP. (metre/hour)	Drilling Parameters (Avg)	Maximum Formation Gas: 0.76%	Average Formation Gas: 0.33%
Min. 26.9 Max. 99.3 Avg. 57.9	WOB :10.3 MT RPM(surf):82 RPM(mot):186 TRQ:21381 nM	Chromatograph Analysis: C₁ : 3172 ppm C₂ : 497 ppm C₃ : 306 ppm iC₄ : 83 ppm nC₄ : 38 ppm neoC₅ : 0 ppm iC₅ : 29 ppm nC₅ : 8 ppm	Chromatograph Analysis: C₁ : 1778 ppm C₂ : 255 ppm C₃ : 143 ppm iC₄ : 39 ppm nC₄ : 18 ppm neoC₅ : 0 ppm iC₅ : 14 ppm nC₅ : 4 ppm
<p>SANDSTONE (40 - 70%): translucent to very light grey, clear, very fine to coarse grained (very fine Lower to coarse Lower), predominantly very fine to fine (very fine Upper to fine Lower) sub-rounded to rounded, poorly sorted, as above, no cut</p> <p>SILTY CLAYSTONE (20 - 50%): medium to dark brownish grey, firm, carbonaceous with fine coaly laminae.</p> <p>CLAYSTONE (10 - 30%): white to greyish white, light brownish grey, with occasional fine carbonaceous laminae.</p> <p>COAL (0 - trace): black to brownish black, firm to moderately hard, sub-splintery to sub-fissile, sub-bituminous, as thin laminae in Claystone in part, very slow yellowish blue cut, bright, solid bluish yellow residual ring residue</p>			

Interpretative Depth 3230.0 – 3260.0 mMDRT		Lithology Interbedded Sandstone, Siltstone, and Claystone with minor Coal.	
ROP. (metre/hour)	Drilling Parameters (Avg)	Maximum Formation Gas: 0.37%	Average Formation Gas: 0.16%
Min. 5.0 Max. 77.6 Avg. 50.9	WOB :9.9 MT RPM(surf):73 RPM(mot):184 TRQ:20032 nM	Chromatograph Analysis: C₁ : 3494 ppm C₂ : 374 ppm C₃ : 226 ppm iC₄ : 63 ppm nC₄ : 33 ppm neoC₅ : 25 ppm iC₅ : 19 ppm nC₅ : 7 ppm	Chromatograph Analysis: C₁ : 1002 ppm C₂ : 134 ppm C₃ : 65 ppm iC₄ : 14 ppm nC₄ : 10 ppm neoC₅ : 3 ppm iC₅ : 7 ppm nC₅ : 2 ppm
<p>SANDSTONE (10 - 80%): translucent to very light grey, clear, loose to consolidated, very fine to very coarse grained (very fine Lower to very coarse Upper), predominantly fine to medium (fine Upper to medium Upper), sub-rounded to angular, poorly sorted, no fluorescence, no cut.</p> <p>ARGILLACEOUS SILTSTONE (0 - 20): light to medium brownish grey, dark yellowish brown, firm, sub-blocky, silt to fine grained sand, 10 to 20% argillaceous matrix, grading to SILTY CLAYSTONE in part, common micro-mica in part, trace to abundant carbonaceous specks, fragments and laminae, grading to CARBONACEOUS SILTSTONE in parts, interbedded with Coal.</p> <p>SILTY CLAYSTONE (20 - 45%): medium to dark brownish grey, firm, arenaceous with 20 to 35% silt to very fine (very fine Lower) quartz grains, carbonaceous with fine coaly laminae.</p> <p>CLAYSTONE (Trace - 60%): white to greyish white, light brownish grey, with occasional fine carbonaceous laminae.</p> <p>COAL (0 - 10%): black to brownish black, firm-moderately hard, sub-splintery-sub-fissile, sub-bituminous, as thin laminae in Claystone in part, very slow yellowish-blue cut, bright, solid bluish yellow residual ring residue.</p>			

Interpretative Depth 3260.0 – 3310.0mMDRT		Lithology Interbedded Sandstone, Siltstone, and Claystone with minor Coal.	
ROP. (metre/hour) Min. 24.9 Max. 97.9 Avg. 55.4	Drilling Parameters (Avg) WOB :11.1 MT RPM(surf):79 RPM(mot):181 TRQ:22781 nM	Maximum Formation Gas: 2.58% Chromatograph Analysis: C₁ : 10902 ppm C₂ : 1604 ppm C₃ : 734 ppm iC₄ : 25 ppm nC₄ : 130 ppm neoC₅ : 157 ppm iC₅ : 56 ppm nC₅ : 57 ppm	Average Formation Gas: % Chromatograph Analysis: C₁ : 2160 ppm C₂ : 289 ppm C₃ : 127 ppm iC₄ : 4 ppm nC₄ : 22 ppm neoC₅ : 26 ppm iC₅ : 11 ppm nC₅ : 9 ppm
<p>SANDSTONE (5 - 95%): loose quartz grains, translucent to very light grey, clear, very fine to coarse grained (very fine Lower coarse Upper), predominantly medium to coarse (fine Lower-medium Upper), poorly sorted, consolidated in part, light grey to brownish grey, soft-firm, friable, silt-medium grained (silt-fine Upper), predominantly fine grained (fine Lower), well sorted, sub-angular, with trace-20% argillaceous matrix, trace micro-mica, nil to trace carbonaceous flakes and laminae, poor to good visual porosity, no fluorescence.</p> <p>SHOW: (3305 – 3310 mMDRT): consolidated grains show slow, faint bluish yellow cut, faint patchy bluish yellow ring residue.</p> <p>ARGILLACEOUS SILTSTONE (0 - 20%): white, light to medium grey, soft, dispersive, washing out in part, to slightly firm, silt to fine grained sand, 10 to 30% argillaceous matrix, grading to SILTY CLAYSTONE in part.</p> <p>SILTY CLAYSTONE (0 - 30): white to greyish white, moderate to dark yellowish brown, medium to dark brownish grey, soft, dispersive to firm, sub-blocky, arenaceous with 20 to 30% silt to very fine (very fine Lower) quartz grains, carbonaceous with fine coaly partings and laminae.</p> <p>CLAYSTONE (0 - 55%): white to greyish white, dark yellowish orange, moderate to dark yellowish brown, brownish grey to brownish black, soft, dispersive to firm, blocky, trace to 20% silt in part grading to ARGILLACEOUS SILTSTONE, trace to abundant (trace to 20%) carbonaceous specks, laminae and partings grading to CARBONACEOUS CLAYSTONE in part, trace micro-mica, nil to trace disseminated pyrite.</p> <p>COAL (0 - 20%): black to brownish black, firm to moderately hard, sub-splintery to sub-fissile, sub-bituminous, as thin laminae in Claystone in parts, very slow yellowish blue cut, faint bluish yellow cut, faint patchy bluish yellow ring residue.</p>			

Interpretative Depth 3310.0 – 3350.0 mMDRT		Lithology Sandstone with interbedded siltstone and Claystone with minor Coal.	
ROP. (metre/hour) Min. 11.3 Max. 102.8 Avg. 54.3	Drilling Parameters (Avg) WOB :7.1 MT RPM(surf):77 RPM(mot):182 TRQ:22624 nM	Maximum Formation Gas: 17.33% Chromatograph Analysis: C₁ : 84024 ppm C₂ : 11492 ppm C₃ : 6960 ppm iC₄ : 84 ppm nC₄ : 1517 ppm neoC₅ : 1619 ppm iC₅ : 639 ppm nC₅ : 542 ppm	Average Formation Gas: 4.21% Chromatograph Analysis: C₁ : 9427 ppm C₂ : 1398 ppm C₃ : 73 ppm iC₄ : 19 ppm nC₄ : 154 ppm neoC₅ : 175 ppm iC₅ : 78 ppm nC₅ : 76 ppm
<p>SANDSTONE (5 – 80%): predominantly loose quartz grains, clear to translucent, very light grey, fine to very coarse grained (fine Lower-very coarse Upper), fractured grains, pebbly, predominantly medium to coarse (medium Lower-coarse Lower), poorly sorted, consolidated (5%) in part, light grey to brownish grey, soft to firm, friable, fine to medium grained (fine Lower-medium Lower), predominantly fine grained (fine Upper), well sorted, sub-angular, with trace to 20% argillaceous matrix, trace micro-mica, nil to trace carbonaceous flakes and laminae, poor to good visible porosity, no fluorescence..</p> <p>ARGILLACEOUS SILTSTONE (5 – 10%): white, light to medium grey, soft, dispersive, washing out, to slightly firm, silt to fine grained sand, 10 to 30% argillaceous matrix, grading to SILTY CLAYSTONE in part.</p> <p>SILTY CLAYSTONE (10 – 70%): white to greyish white, medium to dark brownish grey, firm, arenaceous with 20 to 35% silt to very fine (very fine Lower) quartz grains, carbonaceous with fine coaly partings and laminae.</p> <p>CLAYSTONE (10 – 30%): brownish grey to brownish black, firm, blocky, trace to 20% silt in part grading to ARGILLACEOUS SILTSTONE, trace to abundant (trace to 20%) carbonaceous specks, laminae and partings grading to CARBONACEOUS CLAYSTONE in parts, trace micro-mica, nil to trace disseminated pyrite.</p> <p>COAL (0 – 10%, 40% at 3330.0 – 3335.0 mMDRT): black to brownish black, firm to moderately hard, sub-splintery to sub-fissile, sub-bituminous, as thin laminae in Claystone in part, very slow yellowish blue cut, bright, solid bluish yellow residual ring residue.</p>			

Interpretative Depth 3350.0 – 3370.0 mMDRT		Lithology Quartz Sandstone	
ROP. (metre/hour)	Drilling Parameters (Avg)	Maximum Formation Gas: 1.56%	Average Formation Gas: 1.05%
Min. 24.4 Max. 88.8 Avg. 54.4	WOB :6.9 MT RPM(surf):81 RPM(mot):184 TRQ:23012 nM	Chromatograph Analysis: C₁ : 3733 ppm C₂ : 524 ppm C₃ : 293 ppm iC₄ : 13 ppm nC₄ : 64 ppm neoC₅ : 89 ppm iC₅ : 48 ppm nC₅ : 57 ppm	Chromatograph Analysis: C₁ : 1977 ppm C₂ : 305 ppm C₃ : 145 ppm iC₄ : 9 ppm nC₄ : 30 ppm neoC₅ : 43 ppm iC₅ : 23 ppm nC₅ : 29 ppm
SANDSTONE (100%): loose quartz grains, clear to translucent, very light grey, greyish orange, pale to dark yellowish orange, medium to very coarse grained (medium Lower to very coarse Upper), abundant fractured, pebbly, predominantly medium to coarse (medium Upper to coarse Lower), coarsening with depth, poorly sorted, trace micro-mica, nil to trace carbonaceous flakes and laminae, good visible porosity, no fluorescence, no cut.			

Interpretative Depth 3370.0 – 3410.0 mMDRT		Lithology Sandstone with interbedded siltstone, Silty Claystone and Claystone with minor Coal.	
ROP. (metre/hour) Min. 13.3 Max. 108.1 Avg. 45.6	Drilling Parameters (Avg) WOB :8.7 MT RPM(surf):82 RPM(mot):182 TRQ:22158 nM	Maximum Formation Gas: 1.58% Chromatograph Analysis: C₁ : 16512 ppm C₂ : 1308 ppm C₃ : 517 ppm iC₄ : 34 ppm nC₄ : 106 ppm neoC₅ : 94 ppm iC₅ : 51 ppm nC₅ : 49 ppm	Average Formation Gas: 0.50% Chromatograph Analysis: C₁ : 3972 ppm C₂ : 428 ppm C₃ : 204 ppm iC₄ : 15 ppm nC₄ : 49 ppm neoC₅ : 45 ppm iC₅ : 25 ppm nC₅ : 28 ppm
<p>SANDSTONE (70% at 3370.0 – 3375.0 mMDRT, 0 – 10% below): loose quartz grains, clear to translucent, very light grey, pale to dark yellowish orange, fine to coarse grained (fine Lower to coarse Lower), predominantly medium (medium Lower to medium Upper), moderately sorted, consolidated (40%) in part, light grey to brownish grey, soft to firm, friable, fine to medium grained (fine Lower to medium Lower), predominantly fine grained (fine Upper), well sorted, sub-angular, with trace to 25% argillaceous matrix, trace micro-mica, nil to trace carbonaceous flakes and laminae, good visible porosity, no fluorescence, no cut.</p> <p>SILTY CLAYSTONE (10 - 20%): white to greyish white, moderate to dark yellowish brown and medium to dark brownish grey in part, soft, dispersive to firm, sub-blocky, arenaceous with 20 to 30% silt to very fine (very fine Lower) quartz grains, carbonaceous in part with fine coaly partings and laminae.</p> <p>CLAYSTONE (20 - 75%): white to greyish white, dark yellowish orange, moderate to dark yellowish brown, brownish grey to brownish black, soft, dispersive to firm, blocky, trace to 20% silt in part grading to ARGILLACEOUS SILTSTONE, trace to abundant (trace to 20%) carbonaceous specks, laminae and partings grading to CARBONACEOUS CLAYSTONE in parts, trace micro-mica, nil to trace disseminated pyrite.</p> <p>COAL (10 - 20% below 3375.0 mMDRT): black to brownish black, firm to moderately hard, sub-splintery to sub-fissile, sub-bituminous, as thin laminae in Claystone in part, very slow yellowish blue cut, slow bluish yellow cut, strong bluish yellow ring residue.</p>			

Interpretative Depth 3410.0 – 3480.0 mMDRT		Lithology Interbedded sandstone, silty and carbonaceous Claystone with coal seams.	
ROP. (metre/hour) Min. 12.6 Max. 77.5 Avg. 34.1	Drilling Parameters (Avg) WOB :6.7 MT RPM(surf):82 RPM(mot):185 TRQ:22462 nM	Maximum Formation Gas: 2.16% Chromatograph Analysis: C₁ : 21565 ppm C₂ : 1886 ppm C₃ : 902 ppm iC₄ : 88 ppm nC₄ : 169 ppm neoC₅ : 267 ppm iC₅ : 100 ppm nC₅ : 178 ppm	Average Formation Gas: 0.54% Chromatograph Analysis: C₁ : 6452 ppm C₂ : 659 ppm C₃ : 294 ppm iC₄ : 27 ppm nC₄ : 52 ppm neoC₅ : 68 ppm iC₅ : 31 ppm nC₅ : 42 ppm
<p>SANDSTONE (10 – 60%): as loose quartz grains, or consolidated, soft to firm, friable, clear to translucent, very to light grey, pale to dark yellowish orange, fine to medium grained (fine Lower to medium Upper), predominantly (fine Upper to medium Lower), moderately to well sorted, sub-angular, with trace to 25% argillaceous matrix, trace micro-mica, nil to trace carbonaceous flakes and laminae, good visible porosity, no fluorescence, no cut.</p> <p>SILTSTONE (trace to 20%): As above</p> <p>SILTY CLAYSTONE (trace – 20%): white to greyish white, moderate to dark yellowish brown and medium to dark brownish grey in part, soft, dispersive to firm, sub-blocky, arenaceous with 20-30% silt to very fine (very fine Lower) quartz grains, carbonaceous in part with fine coaly partings and laminae.</p> <p>CARBONACEOUS CLAYSTONE (25 – 75%): as above</p> <p>COAL (0 – 10%): black to brownish black, firm to moderately hard, sub-splintery-sub-fissile, sub-bituminous, as thin laminae in Claystone in part, very slow yellowish blue cut, slow bluish yellow cut, strong bluish yellow ring residue</p>			

Interpretative Depth 3480.0 – 3522.0 mMDRT		Lithology Sandstone with interbedded Claystone	
ROP. (metre/hour)	Drilling Parameters (Avg)	Maximum Formation Gas: 0.56%	Average Formation Gas: 0.29%
Min. 5.9 Max. 44.2 Avg. 22.6	WOB :8.9 MT RPM(surf):82 RPM(mot):188 TRQ:22581 nM	Chromatograph Analysis: C ₁ : 5637 ppm C ₂ : 566 ppm C ₃ : 152 ppm iC ₄ : 54 ppm nC ₄ : 23 ppm neoC ₅ : 36 ppm iC ₅ : 19 ppm nC ₅ : 39 ppm	Chromatograph Analysis: C ₁ : 1982 ppm C ₂ : 268 ppm C ₃ : 79 ppm iC ₄ : 18 ppm nC ₄ : 15 ppm neoC ₅ : 23 ppm iC ₅ : 11 ppm nC ₅ : 21 ppm
<p>SANDSTONE (30 - 100%): white to light grey, translucent-transparent, as loose grains, very fine to very coarse (very fine Upper-very coarse Upper) sub-rounded to rounded, poorly sorted, as above, no fluorescence, no cut.</p> <p>CLAYSTONE, (Trace - 80%): predominantly medium to dark yellowish brown, dark to dusky yellowish brown, light grey in parts, soft to firm, silty in part with 10 to 20% silt grains grading to SILTY CLAYSTONE, slightly to moderately to highly carbonaceous with fine black carbonaceous flakes and laminae, trace brown mica.</p>			

Interpretative Depth 3522.0 – 3542.0 mMDRT		Lithology Claystone with minor interbedded Argillaceous Sandstone	
ROP. (metre/hour)	Drilling Parameters (Avg)	Maximum Formation Gas: 0.56%	Average Formation Gas: 0.37%
Min. 8.3 Max. 33.8 Avg. 16.6	WOB :8.9 MT RPM(surf):82 RPM(mot):187 TRQ:22338 nM	Chromatograph Analysis: C ₁ : 3575 ppm C ₂ : 267 ppm C ₃ : 78 ppm iC ₄ : 16 ppm nC ₄ : 12 ppm neoC ₅ : 19 ppm iC ₅ : 9 ppm nC ₅ : 16 ppm	Chromatograph Analysis: C ₁ : 2244 ppm C ₂ : 196 ppm C ₃ : 49 ppm iC ₄ : 11 ppm nC ₄ : 8 ppm neoC ₅ : 12 ppm iC ₅ : 7 ppm nC ₅ : 12 ppm
<p>ARGILLACEOUS SANDSTONE (10 - 30%): white to light grey, trace moderate green (glauconite) speckles in part, soft, amorphous, washing out to very fine to fine grained (very fine Upper to fine Lower), sub-rounded, abundant argillaceous matrix (20 to 35%), very rare glauconite.</p> <p>CLAYSTONE (70 - 90%): white to yellowish grey, pale yellowish brown, light to dark grey, dark brownish black, trace moderate green (glauconite) speckles in part, very soft, amorphous, silty in part with 10 to 20% silt grading to SILTY CLAYSTONE, trace carbonaceous flakes, very rare glauconite as interspersed medium to coarse grains.</p>			
Interpretative Depth		Lithology	

3542.0 – 3586.0 mMDRT		Sandstone with interbedded and interstitial Claystone	
ROP. (metre/hour) Min. 6.4 Max. 31.1 Avg. 16.7	Drilling Parameters (Avg) WOB :6.6 MT RPM(surf): 82 RPM(mot): 185 TRQ: 22836 nM	Maximum Formation Gas: 0.57% Chromatograph Analysis: C₁ : 2538 ppm C₂ : 426 ppm C₃ : 122 ppm iC₄ : 29 ppm nC₄ : 18 ppm neoC₅ : 25 ppm iC₅ : 9 ppm nC₅ : 19 ppm	Average Formation Gas: 0.41% Chromatograph Analysis: C₁ : 1020 ppm C₂ : 178 ppm C₃ : 42 ppm iC₄ : 12 ppm nC₄ : 8 ppm neoC₅ : 11 ppm iC₅ : 5 ppm nC₅ : 10 ppm
<p>SANDSTONE (20 - 80%): translucent to transparent, pale yellowish orange in part, white to light grey in part, quartzose, predominantly loose, soft, poorly consolidated in part, fine to very coarse (fine Upper to very coarse Lower), pebbly in part, predominantly medium to coarse (medium Lower to coarse Lower), rounded to sub-angular, angular fractured grains in part, poorly sorted, argillaceous matrix (10 to 35%), no fluorescence, no cut.</p> <p>CLAYSTONE (20 – 80%): white to light grey, occasional brownish grey, very soft, amorphous, occasionally slightly firm, silty in part with 5 to 20% silt, trace brown mica flakes (biotite), trace fine carbonaceous flakes.</p>			

Interpretative Depth 3586.0 – 3635.0 mMDRT		Lithology Interbedded Sandstone and Claystone	
ROP. (metre/hour) Min. 5.5 Max. 41.1 Avg. 18.7	Drilling Parameters (Avg) WOB :8.7 MT RPM(surf): 82 RPM(mot): 179 TRQ: 23297 nM	Maximum Formation Gas: 1.06% Chromatograph Analysis: C₁ : 11893 ppm C₂ : 1400 ppm C₃ : 389 ppm iC₄ : 174 ppm nC₄ : 61 ppm neoC₅ : 85 ppm iC₅ : 45 ppm nC₅ : 93 ppm	Average Formation Gas: 0.63% Chromatograph Analysis: C₁ : 4246 ppm C₂ : 597 ppm C₃ : 159 ppm iC₄ : 52 ppm nC₄ : 25 ppm neoC₅ : 40 ppm iC₅ : 17 ppm nC₅ : 34 ppm
<p>SANDSTONE (5 - 95%): translucent to transparent, white to light grey in part, predominantly loose, quartzose, soft, poorly consolidated in part, very fine to medium, (very fine Upper to medium Upper), predominantly fine to medium (fine Upper to medium Lower), sub-rounded to rounded, moderately sorted, argillaceous matrix (trace to 20%) in part, no fluorescence, no cut.</p> <p>CLAYSTONE (5 - 95%): dark yellowish brown to brownish grey and brownish black, white to off-white, soft to firm, hard in part, silty in part (5 to 20%) grading to SILTY CLAYSTONE, slightly to moderately carbonaceous, occasionally highly carbonaceous grading to CARBONACEOUS CLAYSTONE with fine black carbonaceous flakes and wispy lamellae.</p>			

Interpretative Depth 3635.0 – 3675.0 mMDRT		Lithology Interbedded Sandstone, Silty Claystone and Claystone with minor interbedded Coal	
ROP. (metre/hour)	Drilling Parameters (Avg)	Maximum Formation Gas: 1.42%	Average Formation Gas: 0.74%
Min. 3.8 Max. 25.1 Avg. 12.4	WOB :9.5 MT RPM(surf):82 RPM(mot):188 TRQ:22371 nM	Chromatograph Analysis: C₁ : 9473 ppm C₂ : 1544 ppm C₃ : 489 ppm iC₄ : 222 ppm nC₄ : 64 ppm neoC₅ : 115 ppm iC₅ : 36 ppm nC₅ : 136 ppm	Chromatograph Analysis: C₁ : 4324 ppm C₂ : 754 ppm C₃ : 226 ppm iC₄ : 99 ppm nC₄ : 31 ppm neoC₅ : 62 ppm iC₅ : 21 ppm nC₅ : 70 ppm
<p>SANDSTONE (0 - 90%): white to light grey, brownish grey, predominantly loose, consolidated in part, firm, friable, hard in part, fine to coarse, (fine Lower to coarse Upper), predominantly fine to medium (fine Upper to medium Lower), sub-rounded to angular, fractured grains in part, moderately to poorly sorted, quartzose, argillaceous matrix in part (trace to 10%), trace carbonaceous flecks in part, no fluorescence, no cut.</p> <p>SILTY CLAYSTONE (0 - 70%): white to off-white, soft, amorphous, silty (20 to 30%), slightly carbonaceous in part with fine black carbonaceous flakes and wispy lamellae.</p> <p>CLAYSTONE (10 - 95%): dark yellowish brown to brownish grey and brownish black, white to off-white, soft to firm, hard in part, silty in part (5 to 20%) grading to SILTY CLAYSTONE, slightly to moderately carbonaceous, occasionally highly carbonaceous grading to CARBONACEOUS CLAYSTONE with fine black carbonaceous flakes and wispy lamellae.</p> <p>COAL (0 - 20%): black, hard, brittle, blocky, sub-bituminous.</p>			

6.0 CASING SUMMARY

Casing Type	Shoe Depth mMDRT
762 x 508mm (30" x 20") Casing X52 x X58, 456 kg/m, .3 joints, 35.25 m	127.75
340mm (13 3/8")Casing K-55, 101.2 kg/m, 82 joints, 999.1 m	1090.61
244mm (9 5/8")Casing N-80, 69.0 kg/m, 169 joints, 2090.0 m	2184.00

7.0 MUD RECORD

Date	Depth	Type	Weight	Vis	PV	YP	Gels	API Filtrate	Cake	Sol	Glycol	Water	Oil	pH	Chlorides	Comments
	mMD		sg	sec	cp		10 sec/min	cc	API	%	%	%	%		mg/l	
29-Jan-05	98.0	Sea Water, Guar Gel sweeps	1.03													
30-Jan-05	129.5	Sea Water, Guar Gel sweeps	1.03													
04-Feb-05	1095.0	KCL Idcap Glycol Mud	1.2	55	24	34	6/13	5.0	1	9		91	0	9.5	36000	
05-Feb-05	1550.0	KCL Idcap Glycol Mud	1.1	57	15	32	12/19	4.2	1	9		91	0	8.5	30000	
06-Feb-05	1850.0	KCL Idcap Glycol Mud	1.12	78	8	41	11/16	4.6	1	8	2.5	92	0	9.0	30000	
07-Feb-05	2111.0	KCL Idcap Glycol Mud	1.12	65	16	38	9/14	4.8	1	9		91	0	9.0	30000	
08-Feb-05	2625.0	KCL Idcap Glycol Mud	1.16	65	23	42	11/22	4.2	1	11	3	90	0	9.0	37000	
09-Feb-05	2707.0	KCL Idcap Glycol Mud	1.16	70	21	36	9/17	4.6	1	11	4	89	0	9.0	37000	
10-Feb-05	2724.0	KCL Idcap Glycol Mud	1.16	63	21	21	8/14	4.4	1	9	4	91	0	9.0	37500	
11-Feb-05	2772.5	KCL Idcap Glycol Mud	1.16	63	20	36	9/16	4.1	1	9	3.5	91	0	9.0	38000	
12-Feb-05	2772.5	KCL Idcap Glycol Mud	1.15	66	22	32	7/14	4.3	1	9	3.5	92	0	9.0	38000	
13-Feb-05	2772.5	KCL Idcap Glycol Mud	1.16	67	23	32	8/12	4.3	1	9	3	91	0	9.0	38000	
14-Feb-05	2772.5	KCL Idcap Glycol Mud	1.188	57	22	35	8/13	4.2	1	10	3.5	90	0	9.0	44000	

Date	Depth	Type	Weight	Vis	PV	YP	Gels	API Filtrate	Cake	Sol	Glycol	Water	Oil	pH	Chlorides	Comments
	mMD		sg	sec	cp		10 sec/min	cc	API	%	%	%	%		mg/l	
15-Feb-05	2772.5	KCL Idcap Glycol Mud	1.21	68	22	35	7/12	4.0	1	12	3.5	89	0	9.0	39500	
16-Feb-05	2772.5	KCL Idcap Glycol Mud	1.21	72	22	34	8/14	3.9	1	12	4.3	89	0	9.0	36000	
17-Feb-05	2735.0	KCL Idcap Glycol Mud	1.22	78	22	42	9/18	3.4	1	12	3.5	88	0	9.0	39000	
18-Feb-05	2735.0	KCL Idcap Glycol Mud	1.22	78	22	42	9/18	3.4	1	12	3.5	88	0	9.0	39000	
19-Feb-05	2189.0	KCL Idcap Glycol Mud	1.1	62	15	26	5/11	4.3	1	7	3.5	93	0	9.0	32000	
20-Feb-05	2192.0	KCL Idcap Glycol Mud	1.13	64	21	34	5/12	4.8	1	8	3.5	92	0	9.5	28000	
21-Feb-05	2192.0	KCL Idcap Glycol Mud	1.13	68	21	38	5/14	4.8	1	7	3.5	93	0	9.5	32000	
22-Feb-05	2244.0	KCL Idcap Glycol Mud	1.14	59	19	33	5/12	4.6	1	8	4.0	92	0	9.5	31500	
23-Feb-05	2532.0	KCL Idcap Glycol Mud	1.13	61	18	34	9/13	4.5	1	8	4.0	93	0	9.0	31500	
24-Feb-05	2886.7	KCL Idcap Glycol Mud	1.14	64	19	34	8/13	4.7	1	8	4.0	92	0	9.0	30000	
25-Feb-05	3107.0	KCL Idcap Glycol Mud	1.15	58	17	32	11/8	4.5	1	8	4.0	92	0	9.0	30500	
26-Feb-05	3107.0	KCL Idcap Glycol Mud	1.15	61	17	33	6/13	4.7	1	8	4.0	92	0	9.0	30500	
27-Feb-05	3107.0	KCL Idcap Glycol Mud	1.15	58	16	32	5/12	4.5	1	8	4.0	92	0	9.5	31000	

28-Feb-05	3107.0	KCL Idcap Glycol Mud	1.15	62	18	34	7/14	4.6	1	8	4.0	92	0	10.0	31000	
01-Mar-05	2995.0	KCL Idcap Glycol Mud	1.14	55	20	21	7/11	5.5	1	8	4.0	92	0	10.0	31000	Drill cement

Date	Depth	Type	Weight	Vis	PV	YP	Gels	API Filtrate	Cake	Sol	Glycol	Water	Oil	pH	Chlorides	Comments
	mMD		sg	sec	cp		10sec/min	cc	API	%	%	%	%		mg/l	
02-Mar-05	3022.0	KCL Idcap Glycol Mud	1.13	43	17	14	11/14	7.0	1	7	4.0	93	0	11.0	37500	Drill cement
03-Mar-05	3056.0	KCL Idcap Glycol Mud	1.13	38	9	7	4/7	7.0	1	7	4.0	93	0	12.0	34000	Drill cement
04-Mar-05	3070.0	KCL Idcap Glycol Mud	1.13	38	9	6	3/6	7.4	1	7	4.0	93	0	12.0	34000	Drill cement
05-Mar-05	3092.0	KCL Idcap Glycol Mud	1.13	45	18	16	4/8	5.5	1	7	4.0	93	0	9.5	32000	
06-Mar-05	3162.0	KCL Idcap Glycol Mud	1.14	50	19	17	4/9	5.5	1	7	4.0	92	0	9.5	32000	
07-Mar-05	3162.0	KCL Idcap Glycol Mud	1.14	57	18	17	4/8	7.6	1	8	4.0	92	0	9.5	32000	
08-Mar-05	3162.0	KCL Idcap Glycol Mud	1.14	58	18	18	3/8	6.0	1	8	4.0	92	0	9.5	32000	
09-Mar-05	3162.0	KCL Idcap Glycol Mud	1.17	59	15	25	3/7	4.8	1	7	4.0	92	0	9.5	34500	
10-Mar-05	3675.0	KCL Idcap Glycol Mud	1.2	58	15	26	3/8	4.4	1	8	4.0	92	0	9.0	36500	TD

8.0 BIT RECORD

Bit Size	BIT	MAKE/TYPE	TFA	JETS	DEPTH IN	Metres Drilled	Eff Hrs On Btm	AV ROP	IADC	WOB	RPM	KREV	SPP	GPM	TRQ	IADC BIT GRADING
mm			in ²		mMDRT			m/hr	hrs	MT			kpa	lpm	n-m	
914	1	Unknown	5.39	3x26, 4x28	94.0	35.5	1.2	29.6	1.5	0.9	77	8.2	3566	1025	3555	
406	2	Smith GXIVC	1.24	2x22, 2x18	129.5	965.5	22.4	43.1	37.5	8.2	59	264.3	17848	4157	7612.0	1 1 WT A I E NO TD
311	3	Security FSX563	1.16	5x15, 2x14	1095.0	1008.0	20.3	72.1	38.5	4.7	73	226.7	21318	3577	28647	1 2 BT G X I CT RR
311	3rr	Security FSX563	1.16	5x15, 2x14	2103.0	599.0	19.5	30.7	31.5	4.4	70	214.1	22879	3264	34439	2 3 BT G X 4 WT PR
311	4	Security DBS XL12	0.92	3x20	2702.0	70.0	10.9	6.4	32.5	12.7	122	79.5	24451	3375	32302	3 3 BT 2 E I WT TD
311	5	Security DBS X-S4	0.92	3x20	2772.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1 2 WT A E I HO TD
216	6	Security DBSEBXSC1S	0.92	3x20	2158.0	0.0			N/A		Clean Out BHA					

216	7	Hycalog RSX162DGW	1.04	6x15	2190.0	917.0	54.9	16.7	71.5	5.7	48	699.4	20472	2274	17239	Bit Lost In Hole (ST1)
216	8	Hycalog TD43AKPRDH	1.01	2x12, 1x32	3107.0	111.0	5.9	18.8	N/A	7.8	40	51.6	16289	1994	9242	Drilled out Cement -tagged fish (ST2)
216	9	Hycalog RSX163DGW	0.90	6X14	2956.0	75.0	24.0	14.2	N/A	14	5	355.0	16199	2056	2561	Drilled out Cement (ST2)
216	10 / 6RR	Security DBSEBXSC1S	0.92	3x20	3031.0	39.0	21.6	1.8	N/A	3.8	0	187.5	19281	2294	0	Drilled out Cement (ST2)
216	11	Hycalog DS43STG	0.92	3x20	3070.0	22.0	6.8	3.2	N/A	0.8	0	73.9	18370	2256	0	Drilled out Cement (ST2) and started sidetrack
216	12 / 9RR	Hycalog RSX163DGW	0.90	6X14	3092.0	583.0	23.4	24.9	49.5	8.4	82	370.8	22141	2332	22753	2 3 WT A X 0.63 BU TD

9.0 HYDRAULICS RECORD

PUMP 1 :		152 x305 mm (6.0x12"), .0189m3/stk (0.102 bbl/stk)	PUMP 2 :	152 x305 mm (6.0x12"), .0189m3/stk (0.102 bbl/stk)				PUMP 3 :		152 x305 mm (6.0x12"), .0189m3/stk (0.102 bbl/stk)			
Bit Size (mm)	BIT	MAKE/TYPE	DEPTH IN (mMDRT)	TFA (mm ²)	JETS	SPP (KPa)	Flow In Lpm	Jet Imp (KN)	Jet Vel (m/s)	PRESS LOSS (KPa)		ECD bit (sg)	% P Loss @ Bit
										Annulus	Strin g		
914	1	Unknown	94.0	5.39	3x26, 4x28	3566	1025	n/a	n/a	n/a	n/a	n/a	n/a
406	2	Smith GXIVC	129.5	1.24	2x22, 2x18	17848	4157	6.70	92.6	429	420 1	1.09	28.0
311	3	Security FSX563	1095.0	1.16	5x15, 2x14	21318	3576.9	5.20	79.8	389	913 7	1.11	21.8
311	3rr	Security FSX563	2103.0	1.16	5x15, 2x14	22879	3264	4.60	72.7	820	143 45	1.20	14.9
311	4	Security DBS XL12	2702.0	0.92	3x20	24451	3375						
311	5	Security DBS X-54	2772.0	0.92	3x20								
216	6	Security EBXSC1S	2158.0	0.92	3x20	8934	1918	Used to drill out Shoe track and Rat Hole					

216	7	Hycalog RSX162DGW	2190.0	1.04	6x15	20472	2274	2.65	58.0	3813	145 54	1.20	20.4
216	8	Hycalog TD43AKPRDH	3107.0	1.006	2x12, 1x32	16289	1994	1.76	49.1	2654	559 8	1.75	20.5
216	9	Hycalog RSX163DGW	2956.0	0.90	6x14	18346	2056	2.09	55.3	2925	681 4	1.78	13.0
216	10/ 6rr	Security EBXSC1S	3031.0	0.92	3x20	19418	2037	2.78	64.2	2516	646 7	1.29	23.1
216	11	Hycalog DS43STG	3070.0	0.92	3x20	18370	2256	2.25	63.1	2566	651 2	1.22	26.1
216	12/ 9rr	Hycalog RSX163DGW	3092.0	0.9	6x14	22141	2332	0.31	66.5	3455	904 4	1.28	21.2

APPENDIX 11

MWD-LWD END of WELL REPORT (By Halliburton)



HALLIBURTON
Sperry Drilling Services

End of Well Report
for
Bass Strait Oil Company

Zane Grey ST1 / ST2

Rig: Ocean Patriot

Field: Exploration

Country Australia

Job No: AJFE-000576081

Date March 2005

HALLIBURTON

Table of Contents

1. General Information
2. Operational Overview
3. Summary of MWD Runs
4. Bitrun Summary
5. Directional Survey Data
6. Service Interrupt Report

General Information

Company:	Bass Strait Oil Company Ltd		
Rig:	Ocean Patriot		
Well:	ZaneGrey-1 / ST1 /ST2		
Field:	Exploration		
Country:	Australia		
Elevations:	WD: -72.5m (MSL) / DF: +21.5m		
Sperry-Sun Job Number:	AU-FE-0003576081		
Job start date:	30-Jan-05		
Job end date:	10-Mar-05		
North reference:	Grid		
Declination:	13.209	deg	
Dip angle:	-69.062	deg	
Total magnetic field:	60166	nT	
Date of magnetic data:	29-Jan-05		
Wellhead coordinates N:	38 deg. 34 min 31.640 sec South AGD84		
Wellhead coordinates E:	147 deg. 59 min 16.270 sec East AGD84		
Vertical section direction:	14.910	deg	
MWD Engineers:	S.Allan	T.Oborne	
	A.Oraekwuotu	D.Luoni	
Company Representatives:	C.Wilson	P.Dane	
Company Geologist:	G.Geary	A.Thangam	
Lease Name:	Vic/P42		
Unit Number:	175		
State:	Victoria		
County:			

Operational Overview

Sperry Drilling Services were contracted by Bass Strait Oil Company Ltd to provide Logging While Drilling (W/D) and directional services for the drilling of exploration well ZaneGrey-1 / ST1 / ST2 from the Ocean Patriot.

ZaneGrey-1

406 mm Hole Section:

This hole section was drilled to 1095.0 mMDRT in one bit run using Sperry's Formation Evaluation tool suite (FEWD) comprising Dual Gamma Ray (DGR) and Electromagnetic Wave Resistivity (EWR-P4) for logging purposes and a Directional Monitor (DM) for directional control.

311mm Hole Section:

This hole section was drilled to 2772.5 mMDRT in four bit runs using Sperry's Formation Evaluation tool suite (FEWD) comprising Dual Gamma Ray (DGR) and Electromagnetic Wave Resistivity (EWR-P4) for logging purposes and a Directional Monitor (DM) for directional control. The first bit was tripped in to 290.0 m where a failed shallow pulse test required the MWD to be pulled to surface for replacement. The second run drilled to 2103.0 mMDRT, at which point the string was dropped on bottom and a trip was made to check the bit. The third run drilled to 2702.0 mMDRT, where low ROP necessitated a bit change. The fourth run drilled to casing point at 2772.5 mMDRT.

The casing could not be run to TD and was set at 2184.0 mMDRT.

ZaneGrey-1 ST1

216 mm Hole Section:

This hole section was kicked off from ZaneGrey-1 at 2190.0 mMDRT after a plug was set, and drilled to 3107.0 mMDRT in one bit run using Sperry's Formation Evaluation tool suite (FEWD). This comprised Dual Gamma Ray (DGR) and Electromagnetic Wave Resistivity (EWR-P4) for logging purposes and a Position Module (PM) for directional control. A trip was made when ROP dropped to zero. Part of the Mud Motor and the bit were lost in the hole. A cement plug was set to kick off ZaneGrey-1 ST2.

ZaneGrey-1 ST2

216 mm Hole Section:

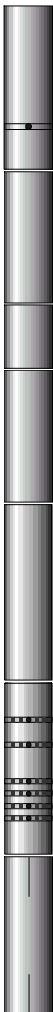

An attempt was made to kick-off ZaneGrey-1 ST2 without success. Another cement plug was set. This hole section was finally kicked off from ZaneGrey-1 ST1 at 3075.0 mMDRT, and drilled to 3675.0 mMDRT in two bit runs using Sperry's Formation Evaluation tool suite (FEWD). This comprised Dual Gamma Ray (DGR) and Electromagnetic Wave Resistivity (EWR-P4) for logging purposes and a Position Module (PM) for directional control.

Summary of MWD runs

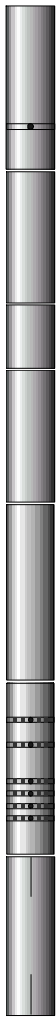

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TOTALS	====>	4265.00	613.67	613.75	372.54	1	1
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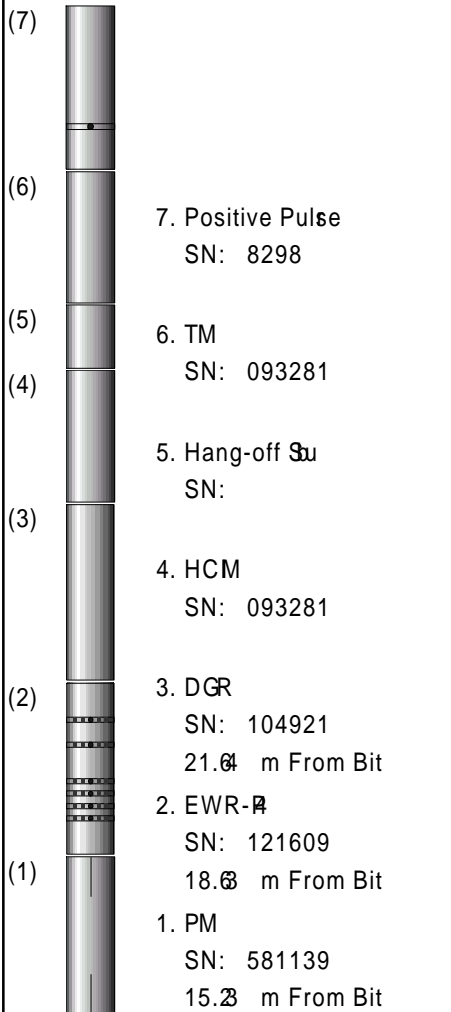
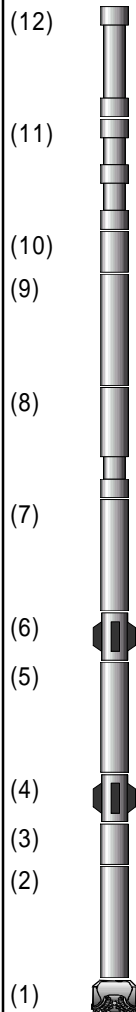
Bitrun Summary

Run Time Data		Drilling Data		Mud Data			
MWD Run :	0300	Start Depth :	1095.00 m	Mud Type : Sea water			
Rig Bit No:	3	End Depth :	1095.00 m	Weight / Visc :1.04 sg / 47.00 spl			
Hole Size :	311.00 mm	Footage :	0.00 m	Chlorides : 25000 ppm			
Run Start :	04-Feb-05 03:32	Avg. Flow Rate :	870 gpm	PV / YP : 8.00 cp / 10.00 pa			
Run End :	04-Feb-05 10:54	Avg. RPM :	0.00 rpm	Solids/Sand : 0.5 % / 0 %			
BRT Hrs :	7.36	Avg. WOB :	0.00 klb	%Oil / O:W : N/A % / N/A:100			
Circ. Hrs :	0.96	Avg. ROP :	0.00 m/hr	pH/Fluid Loss:8.80 pH / 0.00 cptm			
Oper. Hrs :	7.36	Avg. SPP :	1300.00 psig	Max. Temp. : 26.00 degC			
MWD Schematics		BHA Schematics					
<div><div>(7)</div><div></div><div>(6)</div><div>7. Positive Pulse SN: 8201</div><div>(5)</div><div>6. TM SN: 074608</div><div>(4)</div><div>5. Hang-off Sub SN:</div><div>(3)</div><div>4. HCM SN: 074608</div><div>(2)</div><div>3. DGR SN: 10505500 21.6 m From Bit</div><div>(1)</div><div>2. EWR-2 SN: 69384 18.4 m From Bit</div><div>1. PM SN: 10581139 15.3 m From Bit</div></div>		<div><div>(12)</div><div></div><div>(11)</div><div>(10)</div><div>(9)</div><div>(8)</div><div>12. Drill Pipe (E)9.40 127.00 108.610</div><div>11. HWDP157.38 127.000 76.200</div><div>(7)</div><div>10. Cross Over Sub1.09 127.000 76.200</div><div>09. Drill Collar18.15 203.200 71.438</div><div>(6)</div><div>08. Drilling Jars9.68 203.200 60.960</div><div>(5)</div><div>07. Drill Collar27.44 203.200 71.438</div><div>06. Integral Blade Stabilizer1.82 203.200 63.500</div><div>(4)</div><div>05. MWD12.97 204.220 49.252</div><div>(3)</div><div>04. Integral Blade Stabilizer3.33 203.200 76.200</div><div>(2)</div><div>03. Float Sub1.03 203.200 76.200</div><div>02. Mud Motor9.05 244.48 155.829</div><div>(1)</div><div>01. Security FSX5630.35 401.320 76.200</div></div>					
Comments				MWD Performance			
MWD SPT but had to be changed out as no data was decodable on surface.				Tool OD / Type : 203.00 mm/ MPT			
				MWD Real-time%0.00 %			
				MWD Recorded%100.00 %			
				Min. Inc. : 0.00 deg/ 0.00 m			
				Max. Inc. : 0.00 deg/ 0.00 m			
				Final Az. : 0.00 deg			
				Max Op. Press. : 450 psig			

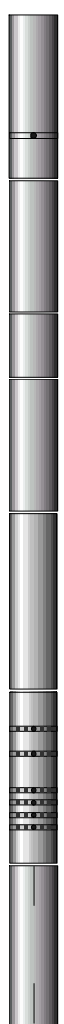
Bitrun Summary

Run Time Data		Drilling Data		Mud Data			
MWD Run :	0400	Start Depth :	1095.00 m	Mud Type : KCL Idcap			
Rig Bit No:	4	End Depth :	2103.00 m	Weight / Visc :1.10 sg / 57.00 spl			
Hole Size :	311.00 mm	Footage :	1008.00 m	Chlorides : 30000 ppm			
Run Start :	04-Feb-05 12:57	Avg. Flow Rate :	935 gpm	PV / YP : 15.00 cp / 32.00 pa			
Run End :	07-Feb-05 04:08	Avg. RPM :	73 rpm	Solids/Sand : 9 % / 1 %			
BRT Hrs :	63.19	Avg. WOB :	9.00 klb	%Oil / O:W : N/A % / N/A:91			
Circ. Hrs :	43.00	Avg. ROP :	48.70 m/hr	pH/Fluid Loss8.50 pH / 4.20 cptm			
Oper. Hrs :	63.19	Avg. SPP :	3100 psig	Max. Temp. : 65.00 degC			
MWD Schematics		BHA Schematics					
				Component	Length (m)	O.D. (mm)	I.D. (mm)
(7)		(12)					
(6)	7. Positive Pulse SN: 10524383	(11)					
(5)	6. TM SN: 093281	(10)					
(4)	5. Hang-off Sub SN:	(9)					
(3)	4. HCM SN: 093281	(8)	12. Drill Pipe (E)	9.40	127.00	108.610	
(2)	3. DGR SN: 104921 21.64 m From Bit	(7)	11. HWDP	157.38	127.000	76.200	
(1)	2. EWR-R SN: 121609 18.63 m From Bit	(6)	10. Cross Over Sub	1.09	127.000	76.200	
	1. PM SN: 581139 15.23 m From Bit	(5)	09. Drill Collar	18.15	203.200	71.438	
		(4)	08. Drilling Jars	9.68	203.200	60.960	
		(3)	07. Drill Collar	27.44	203.200	71.438	
		(2)	06. Integral Blade Stabilizer	1.82	203.200	63.500	
		(1)	05. MWD	13.01	204.220	49.252	
			04. Integral Blade Stabilizer	3.33	203.200	76.200	
			03. Float Sub	1.03	203.200	76.200	
			02. Mud Motor	9.05	244.475	155.829	
			01. Security FSX563	0.35	401.320	76.200	
Comments				MWD Performance			
Drilled 311mm hole section from 1095.0 mMDRT to 2103.0 mMDRT. POOH after dropping drillstring, all recorded data was recovered at surface.				Tool OD / Type : 203.00 mm/ MPT			
				MWD Real-time%97.75 %			
				MWD Recorded%100.00 %			
				Min. Inc. : 33.41 deg/ 2041.58 m			
				Max. Inc. : 34.67 deg/ 1294.54 m			
Final Az. : 17.42 deg							
Max Op. Press. : 3000 psig							

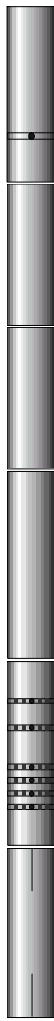

Bitrun Summary

Run Time Data		Drilling Data		Mud Data				
MWD Run :	0500	Start Depth :	2103.00 m	Mud Type : KCL Idcap				
Rig Bit No:	5	End Depth :	2702.00 m	Weight / Visc :1.16 sg / 65.00 spl				
Hole Size :	311.00 mm	Footage :	599.00 m	Chlorides : 37000 ppm				
Run Start :	07-Feb-05 06:05	Avg. Flow Rate :	860 gpm	PV / YP : 23.00 cp / 42.00 pa				
Run End :	09-Feb-05 10:59	Avg. RPM :	70 rpm	Solids/Sand : 10.5 % / 0.75 %				
BRT Hrs :	52.90	Avg. WOB :	9.80 klb	%Oil / O:W : N/A % / N/A:90				
Circ. Hrs :	35.78	Avg. ROP :	30.70 m/hr	pH/Fluid Loss:9.00 pH / 4.20 cptm				
Oper. Hrs :	52.90	Avg. SPP :	3300 psig	Max. Temp. : 77.00 degC				
MWD Schematics		BHA Schematics						
				Component		Length	O.D.	I.D.
						(m)	(mm)	(mm)
			</					

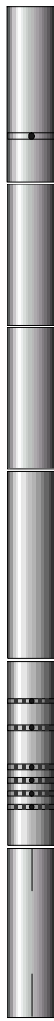

Bitrun Summary

Run Time Data		Drilling Data		Mud Data		
MWD Run :	0600	Start Depth :	2702.00 m	Mud Type :	KCL Idcap	
Rig Bit No:	6	End Depth :	2772.50 m	Weight / Visc :	1.16 sg / 66.60 spl	
Hole Size :	311.00 mm	Footage :	70.50 m	Chlorides :	29250 ppm	
Run Start :	09-Feb-05 11:46	Avg. Flow Rate :	888 gpm	PV / YP :	21.00 cp / 17.20 pa	
Run End :	12-Feb-05 02:54	Avg. RPM :	122 rpm	Solids/Sand :	9 % / 0.65 %	
BRT Hrs :	63.12	Avg. WOB :	28.00 klb	%Oil / O:W :	N/A % / N/A:91	
Circ. Hrs :	39.25	Avg. ROP :	6.40 m/hr	pH/Fluid Loss:	9.00 pH / 4.40 cpm	
Oper. Hrs :	63.18	Avg. SPP :	3546 psig	Max. Temp. :	76.00 degC	
MWD Schematics		BHA Schematics				
 <p>(7) 7. Positive Pulse SN: 8298</p> <p>(6) 6. TM SN: 093281</p> <p>(5) 5. Hang-off Sub SN:</p> <p>(4) 4. HCM SN: 093281</p> <p>(3) 3. DGR SN: 104921 16.5 m From Bit</p> <p>(2) 2. EWR-2 SN: 121609 13.5 m From Bit</p> <p>(1) 1. PM SN: 581139 10.5 m From Bit</p>		Component		Length	O.D.	I.D.
				(m)	(mm)	(mm)
		(12)				
		(11)				
		(10)				
		(9)				
		(8)	12. Drill Pipe (E)	9.40	127.00	108.610
			11. HWDP	157.38	127.000	76.200
		(7)	10. Cross Over Sub	1.09	127.000	76.200
			09. Drill Collar	18.15	203.200	71.438
		(6)	08. Drilling Jars	9.68	203.200	60.960
		(5)	07. Drill Collar	27.44	203.200	71.438
			06. Integral Blade Stabilizer	1.82	203.200	63.500
		(4)	05. MWD	13.05	204.220	49.252
		(3)	04. Integral Blade Stabilizer	1.95	203.200	76.200
			03. Pony collar	4.59	203.000	76.200
		(2)	02. Float Sub	1.78	203.200	76.200
		(1)	01. Security XL12	0.34	401.320	76.200
Comments				MWD Performance		
Drilled to casing point at 2772.5 mMDRT.				Tool OD / Type :	203.00 mm/	MPT
				MWD Real-time%	96.00	%
				MWD Recorded%	100.00	%
				Min. Inc. :	34.94 deg/	2758.61 m
				Max. Inc. :	35.56 deg/	2730.26 m
				Final Az. :	18.82 deg	
				Max Op. Press. :	3993 psig	

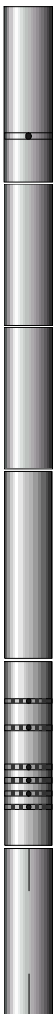

Bitrun Summary

Run Time Data		Drilling Data		Mud Data					
MWD Run :	0700	Start Depth :	2190.00 m	Mud Type : KCL/Polymer					
Rig Bit No:	7	End Depth :	3107.00 m	Weight / Visc :1.13 sg / 68.00 spl					
Hole Size :	216.00 mm	Footage :	917.00 m	Chlorides : 32000 ppm					
Run Start :	21-Feb-05 16:02	Avg. Flow Rate :	615 gpm	PV / YP : 21.00 cp / 15.30 pa					
Run End :	26-Feb-05 04:09	Avg. RPM :	60 rpm	Solids/Sand : 7.2 % / 0.25 %					
BRT Hrs :	108.12	Avg. WOB :	24.00 klb	%Oil / O:W : N/A % / N/A:93					
Circ. Hrs :	89.69	Avg. ROP :	16.70 m/hr	pH/Fluid Loss9.50 pH / 4.80 cptm					
Oper. Hrs :	108.12	Avg. SPP :	2850 psig	Max. Temp. : 82.00 degC					
MWD Schematics		BHA Schematics							
						Component	Length (m)	O.D. (mm)	I.D. (mm)
(6)		(11)							
(5)		(10)							
(4)	6. Positive Pulse SN: 8270	(9)							
(3)	5. TM SN: 091232	(8)							
(2)	4. HCM SN: 091232	(7)	11. Drill Pipe (E)	853.44	127.00	108.610			
(1)	3. DGR SN: 043350 19.00 m From Bit	(6)	10. HWDP	138.80	127.000	76.200			
	2. EWR-1 SN: 10505541 16.62 m From Bit	(5)	09. Drill Collar	18.59	165.000	70.000			
	1. PM SN: 69655 13.08 m From Bit	(4)	08. Drilling Jars	9.87	163.000	76.000			
		(3)	07. Drill Collar	55.81	165.000	70.000			
		(2)	06. Integral Blade Stabilizer	1.56	165.000	70.000			
		(1)	05. MWD	12.92	171.000	73.152			
			04. Float Sub	0.64	163.576	76.200			
			03. Adjustable Gauge Stabilizer	3.23	171.000	70.000			
			02. 7" SperryDrill Lob	7.67	171.450	66.040			
			01. Hycalog RSX162DGW	0.22	216.000	63.500			
Comments				MWD Performance					
Kicked off @ 2190.0m. Drilled and steered 216mm hole to 3107.0 mMDRT. POOH to change bit due to low ROP.				Tool OD / Type : 171.00 mm/ D/GWD					
				MWD Real-time%96.25 %					
				MWD Recorded%100.00 %					
				Min. Inc. : 29.94 deg/ 2326.97 m					
				Max. Inc. : 37.52 deg/ 2700.11 m					
				Final Az. : 12.66 deg					
				Max Op. Press. : 4340 psig					

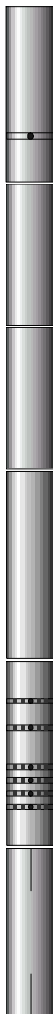

Bitrun Summary

Run Time Data		Drilling Data		Mud Data			
MWD Run :	0800	Start Depth :	3107.00 m	Mud Type : KCL/Polymer			
Rig Bit No:	8	End Depth :	3107.00 m	Weight / Visc :1.15 sg / 64.00 spl			
Hole Size :	216.00 mm	Footage :	0.00 m	Chlorides : 23790 ppm			
Run Start :	27-Feb-05 01:03	Avg. Flow Rate :	530 gpm	PV / YP : 17.00 cp / 15.80 pa			
Run End :	28-Feb-05 00:40	Avg. RPM :	40 rpm	Solids/Sand : 8.2 % / 0.25 %			
BRT Hrs :	23.62	Avg. WOB :	8.00 klb	%Oil / O:W : N/A % / N/A:92			
Circ. Hrs :	10.00	Avg. ROP :	18.80 m/hr	pH/Fluid Loss9.00 pH / 4.70 cptm			
Oper. Hrs :	23.62	Avg. SPP :	2380 psig	Max. Temp. : 96.00 degC			
MWD Schematics		BHA Schematics					
				Component	Length (m)	O.D. (mm)	I.D. (mm)
(6)		(11)					
(5)		(10)					
(4)	6. Positive Pulse SN: 8544	(9)					
(3)	5. TM SN: 091232	(8)					
(2)	4. HCM SN: 091232	(7)		11. Drill Pipe (E)	853.44	127.00	108.610
(1)	3. DGR SN: 043350 19.64 m From Bit	(6)		10. HWDP	138.80	127.000	76.200
	2. EWR-R SN: 10505541 16.66 m From Bit	(5)		09. Drill Collar	18.59	165.000	70.000
	1. PM SN: 69655 13.12 m From Bit	(4)		08. Drilling Jars	9.87	163.000	76.000
		(3)		07. Drill Collar	28.06	165.000	70.000
		(2)		06. Integral Blade Stabilizer	1.56	165.000	70.000
		(1)		05. MWD	12.92	171.000	73.152
				04. Float Sub	0.64	163.576	76.200
				03. Adjustable Gauge Stabilizer	3.23	171.000	70.000
				02. 6-3/4" SperryDrill Lobe	7.67	171.450	66.040
				01. Hycalog TD43AKPRDH	0.26	216.000	63.500
Comments				MWD Performance			
Attempted to kick-off ZaneGrey-1 ST2. Drilled plug, tagged fish. POC set another kick-off plug.				Tool Jd / Type : 171.00 mm/ MPT			
				MWD Real-time%98.00 %			
				MWD Recorded%100.00 %			
				Min. Inc. : 0.00 deg/ 0.00 m			
				Max. Inc. : 0.00 deg/ 0.00 m			
				Final Az. : 0.00 deg			
				Max Op. Press. : 4355 psig			

Bitrun Summary

Run Time Data		Drilling Data		Mud Data			
MWD Run :	0900	Start Depth :	2970.00 m	Mud Type : KCL/Polymer			
Rig Bit No:	9	End Depth :	3031.00 m	Weight / Visc :1.13 sg / 43.00 spl			
Hole Size :	216.00 mm	Footage :	61.00 m	Chlorides : 37500 ppm			
Run Start :	28-Feb-05 17:45	Avg. Flow Rate :	525 gpm	PV / YP : 17.00 cp / 14.00 pa			
Run End :	03-Mar-05 02:40	Avg. RPM :	0.00 rpm	Solids/Sand : 7.0 % / 0.25 %			
BRT Hrs :	56.93	Avg. WOB :	30.00 klb	%Oil / O:W : N/A % / N/A:93			
Circ. Hrs :	40.85	Avg. ROP :	14.20 m/hr	pH/Fluid Loss:11.00 pH / 7.00 cptm			
Oper. Hrs :	56.93	Avg. SPP :	2350 psig	Max. Temp. : 91.00 degC			
MWD Schematics		BHA Schematics					
 <div>(6)</div> <div>(5)</div> <div>(4)</div> <div>(3)</div> <div>(2)</div> <div>(1)</div> <div>6. Positive Pulse SN: 8544</div> <div>5. TM SN: 091232</div> <div>4. HCM SN: 091232</div> <div>3. DGR SN: 043350 19.0 m From Bit</div> <div>2. EWR-4 SN: 10505541 16.0 m From Bit</div> <div>1. PM SN: 69655 13.0 m From Bit</div>		 <div>(11)</div> <div>(10)</div> <div>(9)</div> <div>(8)</div> <div>(7)</div> <div>(6)</div> <div>(5)</div> <div>(4)</div> <div>(3)</div> <div>(2)</div> <div>(1)</div>		Component	Length (m)	O.D. (mm)	I.D. (mm)
				11. Drill Pipe (E)	853.44	127.00	108.610
				10. HWDP	138.80	127.000	76.200
				09. Drill Collar	18.59	165.000	70.000
				08. Drilling Jars	9.87	163.000	76.000
				07. Drill Collar	28.06	165.000	70.000
				06. Integral Blade Stabilizer	1.56	165.000	70.000
				05. MWD	12.92	171.000	73.152
				04. Float Sub	0.64	163.576	76.200
				03. Adjustable Gauge Stabilizer	3.23	171.000	70.000
				02. 6-3/4" SperryDrill Motor	7.67	171.450	66.040
01. Hycalog RX163DGW	0.22	216.000	63.500				
Comments				MWD Performance			
Tagged kick-off plug. Attempted to kick-off ZaneGrey-1 ST2. No success. Steered through cement from 2970.0 mMDRT to 3031.0 mMDRT. Had to change bit and Motor and lay out AGS stabilizer.				Tool OD / Type : 171.00 mm/ MPT			
				MWD Real-time %95.00 %			
				MWD Recorded %100.00 %			
				Min. Inc. : 30.40 deg/ 2987.54 m			
				Max. Inc. : 31.8 deg/ 3018.22 m			
				Final Az. : 13.27 deg			
				Max Op. Press. : 4257 psig			

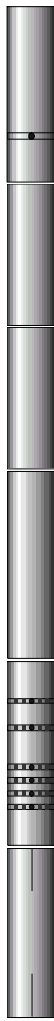

Bitrun Summary

Run Time Data		Drilling Data		Mud Data					
MWD Run :	1000	Start Depth :	3031.00 m	Mud Type : KCL/Polymer					
Rig Bit No:	10	End Depth :	3070.00 m	Weight / Visc :1.13 sg / 43.00 spl					
Hole Size :	216.00 mm	Footage :	39.00 m	Chlorides : 29250 ppm					
Run Start :	03-Mar-05 03:19	Avg. Flow Rate :	580 gpm	PV / YP : 17.00 cp / 14.00 pa					
Run End :	04-Mar-05 16:12	Avg. RPM :	0.00 rpm	Solids/Sand : 7 % / 0.25 %					
BRT Hrs :	36.88	Avg. WOB :	5.50 klb	%Oil / O:W : N/A % / N/A:93					
Circ. Hrs :	25.41	Avg. ROP :	0.00 m/hr	pH/Fluid Loss:11.00 pH / 7.00 cptm					
Oper. Hrs :	36.88	Avg. SPP :	2696 psig	Max. Temp. : 94.00 degC					
MWD Schematics		BHA Schematics							
						Component	Length (m)	O.D. (mm)	I.D. (mm)
(6)		(11)		11. Drill Pipe (E)	853.44	127.00	108.610		
(5)		(10)		10. HWDP	138.80	127.000	76.200		
(4)	6. Positive Pulse SN: 8544	(9)		09. Drill Collar	18.59	165.000	70.000		
(3)	5. TM SN: 091232	(8)		08. Drilling Jars	9.87	163.000	76.000		
(2)	4. HCM SN: 091232	(7)		07. Drill Collar	28.06	165.000	70.000		
(1)	3. DGR SN: 043350 18.14 m From Bit	(6)		06. Integral Blade Stabilizer	1.56	165.000	70.000		
	2. EWR-2 SN: 10505541 15.6 m From Bit	(5)		05. MWD	12.92	171.000	73.152		
	1. PM SN: 69655 11.6 m From Bit	(4)		04. Float Sub	0.64	163.576	76.200		
		(3)		03. Integral Blade Stabilizer	1.75	171.40	114.300		
		(2)		02. 6-3/4" SperryDrill Motor	7.67	171.450	66.040		
		(1)		01. Security DBS EBXSC1S	0.24	216.000	63.500		
Comments				MWD Performance					
Tagged cement plug. Attempted to kick-off ZaneGrey-1 ST2. Drilled 61m of cement. No success. POOH to change bit.				Tool OD / Type : 171.00 mm/ MPT					
				MWD Real-time%98.00 %					
				MWD Recorded%100.00 %					
				Min. Inc. : 0.00 deg/ 0.00 m					
				Max. Inc. : 0.00 deg/ 0.00 m					
				Final Az. : 0.00 deg					
				Max Op. Press. : 4311 psig					

Bitrun Summary

Run Time Data		Drilling Data		Mud Data			
MWD Run :	1100	Start Depth :	3070.00 m	Mud Type : KCl/Polymer			
Rig Bit No:	11	End Depth :	3092.00 m	Weight / Visc :1.13 sg / 38.00 spl			
Hole Size :	216.00 mm	Footage :	22.00 m	Chlorides : 34000 ppm			
Run Start :	04-Mar-05 16:40	Avg. Flow Rate :	600 gpm	PV / YP : 9.00 cp / 7.00 pa			
Run End :	05-Mar-05 19:14	Avg. RPM :	0.00 rpm	Solids/Sand : 7.3 % / 0.25 %			
BRT Hrs :	26.57	Avg. WOB :	6.00 klb	%Oil / O:W : N/A % / N/A:93			
Circ. Hrs :	12.81	Avg. ROP :	3.80 m/hr	pH/Fluid Loss:12.00 pH / 7.40 cptm			
Oper. Hrs :	26.57	Avg. SPP :	2930 psig	Max. Temp. : 96.00 degC			
MWD Schematics		BHA Schematics					
<div><div>(6)</div><div></div><div>(5)</div><div></div><div>(4)</div><div>6. Positive Pulse SN: 8544</div><div>(3)</div><div>5. TM SN: 091232</div><div>(2)</div><div>4. HCM SN: 091232</div><div>(1)</div><div>3. DGR SN: 043350 18.0 m From Bit</div><div>2. EWR-4 SN: 10505541 15.0 m From Bit</div><div>1. PM SN: 69655 11.5 m From Bit</div></div>		<div><div>(11)</div><div></div><div>(10)</div><div></div><div>(9)</div><div></div><div>(8)</div><div></div><div>(7)</div><div>11. Drill Pipe (E)</div><div>10. HWDP</div><div>(6)</div><div>09. Drill Collar</div><div>08. Drilling Jars</div><div>(5)</div><div>07. Drill Collar</div><div>06. Integral Blade Stabilizer</div><div>(4)</div><div>05. MWD</div><div>(3)</div><div>04. Float Sub</div><div>(2)</div><div>03. Integral Blade Stabilizer</div><div>02. 6-3/4" SperryDrill Motor</div><div>(1)</div><div>01. Hycalog DS43STG</div></div>		Component	Length (m)	O.D. (mm)	I.D. (mm)
Comments				MWD Performance			
Kicked-off ZaneGrey-1 ST2 @ 3075.0 mMDRT, and drilled to 3092.0 mMDRT. POOH to change bit, and adjust bend on Motor.				Tool OD / Type : 171.00 mm/ MPT			
				MWD Real-time%98.00 %			
				MWD Recorded%100.00 %			
				Min. Inc. :	30.0 deg/	3078.99 m	
				Max. Inc. :	30.3 deg/	3071.00 m	
				Final Az. :	15.12 deg		
				Max Op. Press. : 4320 psig			

Bitrun Summary

Run Time Data		Drilling Data		Mud Data					
MWD Run :	1200	Start Depth :	3092.00 m	Mud Type : KCl/Polymer					
Rig Bit No:	12	End Depth :	3675.00 m	Weight / Visc :1.16 sg / 59.00 spl					
Hole Size :	216.00 mm	Footage :	583.00 m	Chlorides : 34500 ppm					
Run Start :	05-Mar-05 19:39	Avg. Flow Rate :	630 gpm	PV / YP : 15.00 cp / 25.00 pa					
Run End :	11-Mar-05 06:19	Avg. RPM :	80 rpm	Solids/Sand : 8.3 % / 0.25 %					
BRT Hrs :	130.66	Avg. WOB :	10.00 klb	%Oil / O:W : N/A % / N/A:92					
Circ. Hrs :	39.64	Avg. ROP :	25.51 m/hr	pH/Fluid Loss:9.50 pH / 4.80 cptm					
Oper. Hrs :	130.66	Avg. SPP :	3070 psig	Max. Temp. : 104.00 degC					
MWD Schematics		BHA Schematics							
						Component	Length	O.D.	I.D.
(6)		(11)					(m)	(mm)	(mm)
(5)		(10)							
(4)	6. Positive Pulse SN: 8544	(8)							
(3)	5. TM SN: 091232	(7)	11. Drill Pipe (E)	853.44	127.00	108.610			
(2)	4. HCM SN: 091232	(6)	10. HWDP	138.80	127.000	76.200			
(1)	3. DGR SN: 043350 18.12 m From Bit	(5)	09. Drill Collar	18.59	165.000	70.000			
	2. EWR-1 SN: 10505541 15.14 m From Bit	(4)	08. Drilling Jars	9.87	163.000	76.000			
	1. PM SN: 69655 11.00 m From Bit	(3)	07. Drill Collar	28.06	165.000	70.000			
		(2)	06. Integral Blade Stabilizer	1.56	165.000	70.000			
		(1)	05. MWD	12.92	171.000	73.152			
			04. Float Sub	0.64	163.576	76.200			
			03. Integral Blade Stabilizer	1.75	171.400	114.300			
			02. 6-3/4" Sperry Drill Motor	7.67	171.450	66.040			
			01. Hycalog RSX163DGW	0.22	216.000	63.500			
Comments				MWD Performance					
Drilled 216 mm hole section from 3092.0 mMDRT to 3675.0 mMDRT (well TD). POOH to run wireline logs.				Top of Hole / Type : 171.00 mm/ MPT					
				MWD Real-time%75.00 %					
				MWD Recorded%100.00 %					
				Min. Inc. : 19.70 deg/ 3662.14 m					
				Max. Inc. : 31.52 deg/ 3114.34 m					
				Final Az. : 21.54 deg					
				Max Op. Press. : 5329 psig					

Directional Survey Data

Measured Depth (metres)	Inclination (degrees)	Direction (degrees)	Vertical Depth (metres)	Latitude (metres)	Departure (metres)	Vertical Section (metres)	Dogleg (deg/30m)
152.20	0.41	162.66	152.20	0.3 S	0.6 E	-0.47	TIE-IN
180.10	0.41	187.76	180.10	0.2 S	0.8 E	-0.65	0.19
208.30	0.52	134.85	208.30	0.9 S	0.6 E	-0.82	0.46
236.30	0.50	145.41	236.30	1.0 S	0.4 E	-0.96	0.10
265.10	0.48	133.55	265.09	1.2 S	0.6 E	-1.10	0.11
291.20	0.53	112.32	291.19	1.4 S	0.7 E	-1.17	0.22
322.80	0.31	122.92	322.79	1.5 S	0.9 E	-1.21	0.22
351.10	0.61	108.04	351.09	1.6 S	1.8 E	-1.24	0.34
379.50	0.62	106.95	379.49	1.6 S	1.7 E	-1.26	0.02
408.30	0.57	109.17	408.29	1.7 S	1.6 E	-1.27	0.06
436.40	0.50	108.39	436.39	1.8 S	2.0 E	-1.29	0.07
463.05	0.56	101.29	463.04	1.9 S	2.2 E	-1.29	0.10
493.81	1.55	39.19	493.79	1.9 S	2.6 E	-0.90	1.35
521.53	3.74	26.59	521.48	0.9 S	3.2 E	0.32	2.44
550.66	6.40	18.10	550.49	1.5 N	4.2 E	2.88	2.84
578.94	9.49	11.85	578.50	5.6 N	5.9 E	6.78	3.40
605.39	12.27	11.47	604.47	10.2 N	6.2 E	11.76	3.15
637.30	15.11	10.93	635.47	17.9 N	7.6 E	19.30	2.67
663.37	17.26	12.12	660.51	25.4 N	9.2 E	26.55	2.50
693.68	19.03	13.97	689.31	34.2 N	11.2 E	35.98	1.85
722.25	21.58	14.47	716.10	43.5 N	13.6 E	45.89	2.68
750.29	24.88	14.62	741.87	54.5 N	16.7 E	56.95	3.53
778.24	28.18	15.54	766.87	66.6 N	19.3 E	69.43	3.57
806.45	30.29	16.23	791.48	79.5 N	23.5 E	83.21	2.27
836.21	31.18	15.90	817.06	94.7 N	27.7 E	98.42	0.92
864.47	31.47	15.91	841.20	108.6 N	31.3 E	113.10	0.31
892.94	32.20	16.13	865.39	123.3 N	35.8 E	128.12	0.78
921.51	32.69	14.67	889.50	137.8 N	39.5 E	143.44	0.98
950.02	32.88	14.70	913.47	152.7 N	43.6 E	158.88	0.20
979.03	33.35	14.25	937.77	168.9 N	47.2 E	174.73	0.55
1009.22	34.05	15.10	962.89	184.2 N	52.7 E	191.48	0.84
1037.20	34.42	14.39	986.02	199.3 N	56.7 E	207.22	0.58
1065.76	34.72	14.47	1009.54	215.2 N	60.1 E	223.43	0.32
1080.74	34.99	14.71	1021.83	223.4 N	62.7 E	231.99	0.61
1123.52	34.54	14.36	1056.97	247.0 N	68.3 E	256.38	0.34
1150.74	34.23	14.27	1079.44	262.0 N	72.9 E	271.75	0.34
1178.17	33.67	14.48	1102.19	276.8 N	76.0 E	287.07	0.63
1208.00	33.51	14.74	1127.04	292.8 N	80.6 E	303.57	0.22
1237.02	33.62	14.39	1151.22	308.3 N	84.9 E	319.62	0.23
1265.61	34.21	14.57	1174.95	323.8 N	88.8 E	335.57	0.62

Directional Survey Data

Measured Depth (metres)	Inclination (degrees)	Direction (degrees)	Vertical Depth (metres)	Latitude (metres)	Departure (metres)	Vertical Section (metres)	Dogleg (deg/30m)
1294.54	34.67	13.93	1198.80	339.4 N	92.2 E	351.93	0.61
1323.50	34.51	14.39	1222.64	355.5 N	96.2 E	368.37	0.32
1353.04	34.37	13.93	1247.00	371.8 N	100.2 E	385.08	0.30
1380.92	34.26	13.78	1270.03	387.4 N	104.8 E	400.79	0.15
1409.67	34.18	13.29	1293.80	402.6 N	107.8 E	416.96	0.30
1438.12	34.52	13.61	1317.29	418.3 N	111.6 E	433.01	0.40
1466.41	34.41	12.82	1340.62	433.5 N	115.2 E	449.01	0.49
1494.65	34.39	12.29	1363.92	449.5 N	118.8 E	464.95	0.32
1523.37	34.16	12.03	1387.65	465.3 N	122.4 E	481.10	0.28
1551.88	34.03	12.09	1411.26	480.9 N	125.4 E	497.06	0.14
1580.92	34.34	13.28	1435.29	496.9 N	129.6 E	513.36	0.76
1609.62	34.68	16.07	1458.94	512.6 N	133.8 E	529.62	1.69
1638.56	34.32	16.67	1482.79	528.3 N	137.8 E	546.00	0.50
1667.52	34.04	16.13	1506.75	543.4 N	142.9 E	562.27	0.43
1696.00	34.16	16.42	1530.33	559.2 N	146.8 E	578.23	0.22
1724.70	33.80	16.03	1554.13	574.6 N	151.3 E	594.27	0.44
1752.98	34.20	16.92	1577.57	589.8 N	155.8 E	610.08	0.67
1782.83	34.14	16.52	1602.27	605.9 N	160.6 E	626.83	0.23
1811.25	34.44	17.46	1625.75	621.2 N	165.3 E	642.83	0.64
1840.08	34.47	17.39	1649.52	636.7 N	170.2 E	659.13	0.05
1868.47	34.23	17.07	1672.96	652.7 N	174.9 E	675.14	0.32
1897.13	34.16	16.74	1696.67	667.4 N	179.5 E	691.23	0.20
1926.10	34.12	16.89	1720.64	683.4 N	184.3 E	707.48	0.09
1954.43	34.05	17.19	1744.11	698.2 N	189.0 E	723.35	0.19
1983.37	33.95	17.51	1768.10	713.6 N	193.8 E	739.52	0.21
2012.16	33.49	17.02	1792.05	728.3 N	198.5 E	755.48	0.56
2041.58	33.41	17.63	1816.59	744.4 N	203.4 E	771.69	0.35
2070.37	33.42	17.42	1840.63	759.5 N	208.8 E	787.52	0.12
2095.75	33.16	17.24	1861.84	772.8 N	212.3 E	801.44	0.32
2126.37	32.90	16.85	1887.51	788.8 N	217.2 E	818.12	0.33
2154.80	32.52	16.76	1911.44	803.4 N	221.6 E	833.47	0.40
2183.17	32.39	16.46	1935.38	818.8 N	226.0 E	848.69	0.22
2211.78	32.45	17.62	1959.75	832.4 N	229.9 E	863.67	2.34
2240.33	32.59	16.80	1984.25	846.8 N	233.5 E	878.32	0.19
2270.20	32.81	17.81	2009.91	861.8 N	235.9 E	893.55	2.46
2299.48	33.11	17.19	2035.11	876.5 N	238.3 E	908.39	0.53
2328.25	33.62	17.37	2059.98	890.7 N	241.8 E	922.81	1.12
2356.67	33.96	17.39	2084.46	904.5 N	243.7 E	937.21	1.85
2385.20	34.38	17.88	2108.79	919.4 N	247.6 E	952.10	1.94
2413.79	35.02	17.69	2132.82	934.7 N	251.2 E	967.60	1.94

Directional Survey Data

Measured Depth (metres)	Inclination (degrees)	Direction (degrees)	Vertical Depth (metres)	Latitude (metres)	Departure (metres)	Vertical Section (metres)	Dogleg (deg/30m)
2441.91	35.26	17.86	2156.24	949.4 N	255.6 E	983.15	0.66
2470.30	35.23	17.62	2179.93	964.4 N	259.0 E	998.80	0.16
2499.57	35.12	18.26	2204.21	980.4 N	263.5 E	1015.15	0.42
2528.66	34.89	17.69	2228.19	996.4 N	267.2 E	1031.62	0.86
2558.30	35.04	18.16	2252.50	1012.8 N	271.3 E	1048.57	1.13
2587.39	35.34	18.00	2276.08	1029.3 N	275.5 E	1065.60	0.81
2615.66	35.78	18.12	2298.76	1045.2 N	279.2 E	1082.48	0.06
2643.79	35.92	18.69	2321.23	1062.0 N	284.5 E	1099.40	0.31
2670.24	35.63	18.92	2342.32	1077.5 N	288.5 E	1115.37	0.31
2193.14	31.67	15.75	1943.83	823.6 N	227.4 E	853.97	2.44
2214.58	30.95	12.84	1962.15	833.5 N	230.2 E	865.11	2.34
2241.00	30.80	12.66	1984.82	847.7 N	233.2 E	878.66	0.19
2270.43	30.81	7.95	2010.11	861.9 N	235.2 E	893.67	2.46
2298.37	30.44	10.70	2034.15	876.3 N	238.2 E	907.83	1.56
2326.97	29.94	10.85	2058.87	890.6 N	240.9 E	922.18	0.53
2355.80	31.00	11.14	2083.72	904.3 N	243.0 E	936.76	1.12
2381.72	31.82	13.78	2105.84	917.0 N	246.2 E	950.26	1.85
2414.16	33.68	15.58	2133.12	934.6 N	251.0 E	967.80	1.94
2442.70	33.48	14.49	2156.90	949.2 N	255.7 E	983.59	0.66
2470.32	33.42	14.73	2179.94	964.6 N	259.0 E	998.81	0.16
2499.52	34.48	14.63	2204.17	980.2 N	263.4 E	1015.12	1.09
2528.50	34.47	13.92	2228.06	996.2 N	267.9 E	1031.53	0.42
2557.49	35.28	14.28	2251.84	1012.0 N	271.2 E	1048.10	0.86
2585.36	36.32	14.03	2274.44	1028.0 N	275.2 E	1064.40	1.13
2614.39	36.94	14.82	2297.74	1044.8 N	279.5 E	1081.72	0.81
2643.01	37.00	14.81	2320.61	1061.0 N	283.9 E	1098.93	0.06
2671.57	37.27	15.01	2343.38	1078.2 N	288.3 E	1116.17	0.31
2700.11	37.52	15.54	2366.05	1095.0 N	292.9 E	1133.50	0.43
2729.08	37.31	15.09	2389.06	1111.8 N	297.5 E	1151.10	0.36
2758.57	35.90	14.65	2412.73	1128.9 N	302.0 E	1168.69	1.46
2786.53	35.55	13.38	2435.43	1144.8 N	306.5 E	1185.01	0.88
2815.67	34.36	13.52	2459.32	1161.6 N	309.9 E	1201.70	1.23
2844.06	33.47	13.48	2482.88	1176.5 N	313.6 E	1217.53	0.95
2872.61	33.20	13.34	2506.73	1191.7 N	317.2 E	1233.22	0.29
2901.47	33.09	12.82	2530.89	1207.8 N	320.8 E	1248.99	0.32
2930.23	32.02	12.69	2555.14	1222.7 N	324.3 E	1264.45	1.12
2959.08	31.79	13.21	2579.63	1237.0 N	327.6 E	1279.69	0.37
2987.28	30.50	13.51	2603.76	1251.2 N	331.4 E	1294.27	1.39
3015.71	31.54	13.03	2628.13	1265.8 N	334.4 E	1308.91	1.13
3044.57	31.02	13.23	2652.79	1280.0 N	337.8 E	1323.89	0.55

Directional Survey Data

Measured Depth (metres)	Inclination (degrees)	Direction (degrees)	Vertical Depth (metres)	Latitude (metres)	Departure (metres)	Vertical Section (metres)	Dogleg (deg/30m)
3073.76	31.11	12.81	2677.92	1294.6 N	341.4 E	1338.73	1.36
3092.90	31.08	12.66	2694.43	1303.7 N	344.2 E	1348.42	1.81
3074.64	30.11	15.22	2678.68	1294.9 N	341.5 E	1339.17	1.36
3114.34	31.52	18.99	2712.78	1314.3 N	347.3 E	1359.49	1.81
3131.12	31.15	19.18	2727.12	1322.6 N	350.4 E	1368.19	0.68
3159.25	30.31	18.05	2751.30	1336.8 N	354.9 E	1382.53	1.09
3188.52	29.22	18.57	2776.70	1349.8 N	359.5 E	1397.04	1.15
3217.29	28.31	18.36	2801.92	1363.1 N	363.9 E	1410.85	0.95
3276.11	27.28	18.20	2853.96	1389.5 N	372.3 E	1438.23	0.53
3333.29	26.11	18.07	2905.04	1413.6 N	380.3 E	1463.88	0.61
3389.79	25.74	18.35	2955.85	1437.0 N	388.3 E	1488.54	0.21
3417.10	24.21	17.99	2980.61	1447.9 N	391.8 E	1500.05	1.69
3445.51	22.63	17.53	3006.68	1458.7 N	395.9 E	1511.33	1.67
3475.40	22.06	18.18	3034.32	1469.5 N	398.7 E	1522.68	0.63
3504.57	22.33	18.72	3061.33	1480.0 N	402.2 E	1533.68	0.35
3533.24	22.23	18.84	3087.86	1490.9 N	405.7 E	1544.52	0.12
3562.17	22.34	19.85	3114.63	1500.9 N	409.4 E	1555.46	0.41
3619.85	21.30	20.71	3168.18	1520.7 N	416.3 E	1576.80	0.56
3649.53	20.38	21.41	3195.92	1530.6 N	420.6 E	1587.30	0.96
3662.14	19.70	21.54	3207.76	1534.6 N	422.9 E	1591.60	1.62
3675.00	19.70	21.54	3219.87	1538.6 N	423.9 E	1595.90	0.00

Directional Survey Data

CALCULATION BASED ON Minimum Curvature METHOD

SURVEY COORDINATES RELATIVE TO WELL SYSTEM REFERENCE POINT

TVD VALUES GIVEN RELATIVE TO DRILLING MEASUREMENT POINT

VERTICAL SECTION RELATIVE TO WELL HEAD

VERTICAL SECTION IS COMPUTED ALONG A DIRECTION OF 14.91 DEGREES (GRID)

A TOTAL CORRECTION OF 13.82 DEG FROM MAGNETIC NORTH TO GRID NORTH HAS BEEN APPLIED

HORIZONTAL DISPLACEMENT IS RELATIVE TO THE WELL HEAD.

HORIZONTAL DISPLACEMENT(CLOSURE) AT 3675.00 METRES

IS 1595.96 METRES ALONG 15.40 DEGREES (GRID)

RT - MSL = 21.5m

Final survey projected to TD.

Surveys from surface to 2183.17 mMDRT are from ZaneGrey-1

Kick-off point for ZaneGrey-1 ST1 is at 2190.0 mMDRT

Kick-off point for ZaneGrey-1 ST2 is at 3075.0 mMDRT

Service Interruption Report

MWD run number :	0300	Time/Date of Failure :	04-Feb-05 04:00
Rig Bit Number :	2	Depth at time of Failure	290.00 m
MWD Run start time/date	04-Feb-05 03:32	Lost Rig Hours :	4.00
MWD Run end time/date	04-Feb-05 10:54		

Rig Activity

Shallow Pulse Test MWD

Description of Failure

Failed to decode pulses from MWD tool at surface during SPT.

Action Taken

POOH and lay out MWD.

Operation Impact

Lost rig time to trip 290m back to surface and replace MWD.

Reason for Failure

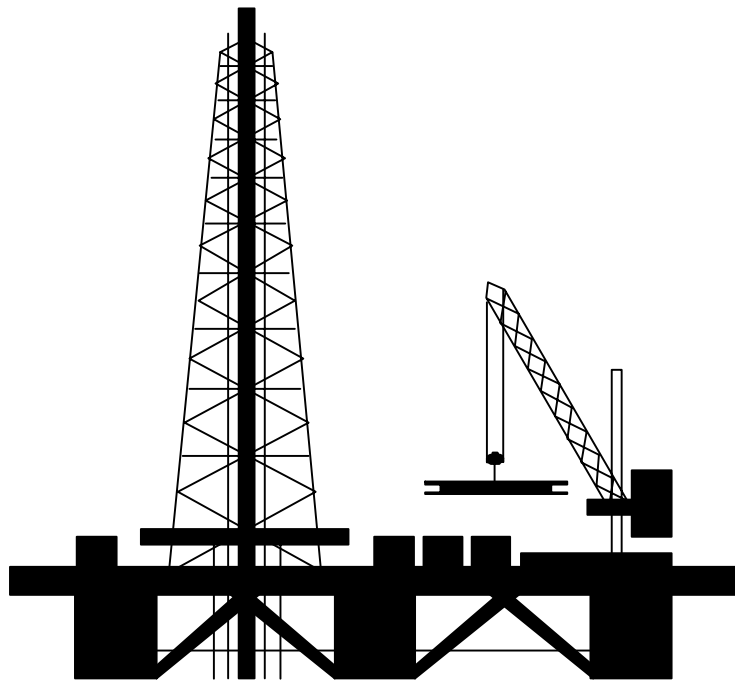
Not able to be ascertained at rig site.

APPENDIX 12

DIRECTIONAL DRILLING END of WELL REPORT: ZANEGREY-1 (By Halliburton)



Bass Strait Oil Company Ltd.



Directional Drilling End of Well Report

Well : Zane Grey #1

Date: January – February 2005

HALLIBURTON
Sperry Drilling Services

Table of Contents

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

Client : Bass Strait Oil Company Ltd.

Well Name : Zane Grey #1

Job Objectives:

Drill 16" hole vertically to kick off point at 522m, Kick off on an azimuth of 14.915deg building 3deg/30m to tangent angle of 34 421deg. Tangent is held through 12 1/4" hole section and 8 1/2" to target at 3309m (2840m TVD).
8 1/2" drilled through target to 3691m.

Summary of Results:

16" Hole Section

Good run with easily controlled tool face. Formation hardened with depth resulting in the assembly being pulled for ROP.

12 1/4" Hole Section

BHA #2.3.4

The performance drilling went well, until we drilled into the compacted fine sand, pyrite, coal and siltstone stringers of the Kingfish formation. Excessive string torque made drilling painfully slow with constant stalling of the drillstring. The bit was pulled and found to be 1/4" under gauge.

Oriented drilling was difficult due to the long open hole section, aggressive bit and powerful motor combination, therefore only the minimum slides were made to stay comfortable inside the target.

BHA #5

This packed rotary assembly had to be reamed back to bottom. Drilling progress was slow 5-10m/hr through varied interbedded formations. Stopped drilling at 2770m when ROV noticed mud escaping around conductor.

Casing could not be run deeper than 1776 metres.

BHA #6

Rotary clean out assembly as per BHA #5, but with a rock bit Ream from 1777 - 2284m. 5 stand wiper trip and ream to 2283 metres then wash to bottom.

Casing run and washed down to 2184m

BHA#7

Successfully drill a 50m pocket, to position a cement plug, preparing for a sidetrack due to the setting depth of the 9 5/8" casing. Both bit and stabiliser came out undergauge.

Discussion:

BHA #	Bit #	Motor Run #	Hole Size (in)	MD In (m)	MD Out (m)	TVD In (m)	TVD Out (m)	Inc In (deg)	Inc Out (deg)	Azi In (deg)	Azi Out (deg)	Drlg hrs	Circ hrs
1	1	1	16.000	128	1095	128	1034	0.3	34.8	163	15	37	2
2	2	2	12.250	1095	1095	1034	1034	34.8	34.8	15	15	0	0
3	2rr1	3	12.250	1095	2103	1034	1868	34.8	33.1	15	17	33	15
4	2rr2	4	12.250	2103	2702	1868	2363	33.1	35.4	17	18	32	7
5	3		12.250	2702	2773	2363	2421	35.4	34.6	18	19	16	26
6	4		12.250	2773	2773	2421	2421	34.6	34.6	19	19	0	38
7	6		8.500	2773	2773	2421	2421	34.6	34.6	19	19	0	1

Table 1 - BHA Summary

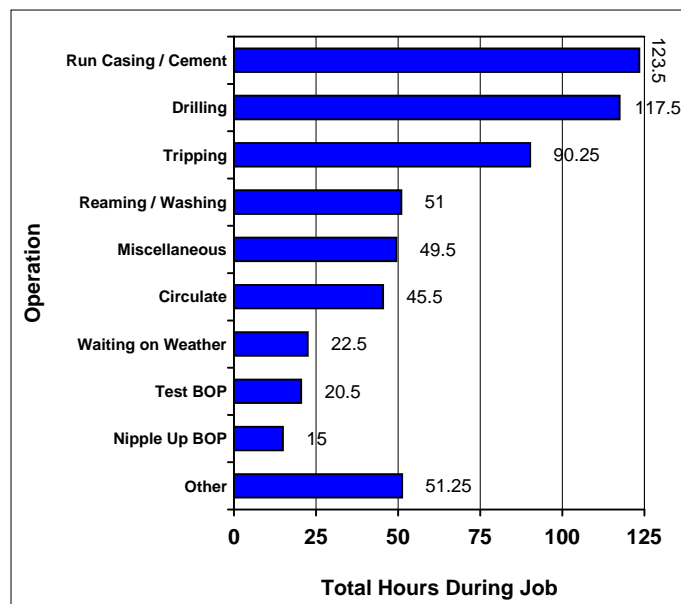
Motor Run #	Manufacturer	Type	Lobe	OD (in)	Gauge (in)	Bend (deg)	Adj	DLS (Ori) (°/30m)	ROP (Ori) (m/hr)	ROP (Rot) (m/hr)
1	SSDS	SperryDrill	6/7	9.625	15.500	1.15	Y		38	23
2	SSDS	SperryDrill	6/7	9.625	12.125	1.15	Y			
3	SSDS	SperryDrill	6/7	9.625	12.125	1.15	Y		13	31
4	SSDS	SperryDrill	6/7	9.625	12.125	0.78	Y		11	19

Table 2 - Motor Run Summary

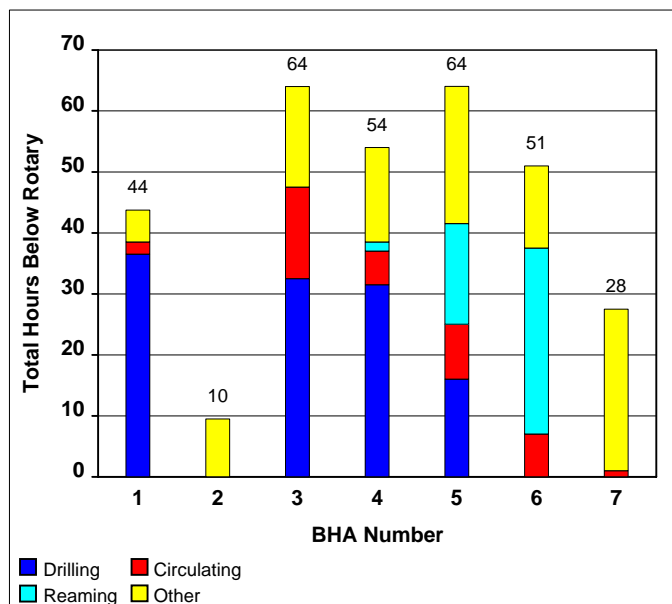
Bit #	Manufacturer	Style	OD (in)	Gge Len (in)	Nozzles (/32's)	TFA (in ²)	Dull Grades I O D L B G O R	Ftge (m)	Drlg hrs	ROP (m/hr)
1	Smith	GXI	16.000		2x22, 1x18, 1x18	1.239	1-1-NO-A -E-0-NO-PR	967	36.50	26
2	Security DBS	FSX563	12.250	4.000	5x15, 2x14	1.164		0	0.00	
2rr1	Security DBS	FSX563	12.250	4.000	5x15, 2x14	1.164	1-2-BT-G -X-I-CT-RP	1008	32.50	31
2rr2	Security DBS	FSX563	12.250	4.000	5x15, 2x14	1.164	2-3-BT-G -X-4-WT-PR	599	31.50	19
3	SDBS	XL12	12.250	4.000	3x20	0.920	3-3-BT-M -E-I-CT-TD	70	16.00	4
4	SDBS	XS4	12.250	4.000	3x20	0.920	1-2-WT-A -E-I-NO-TD	0	0.00	
6	SSDS	EBXSC1S	8.500		3x20	0.920	1-1-NO-A -E-1-NO-BHA	0	0.00	

Table 3 - Bit Run Summary

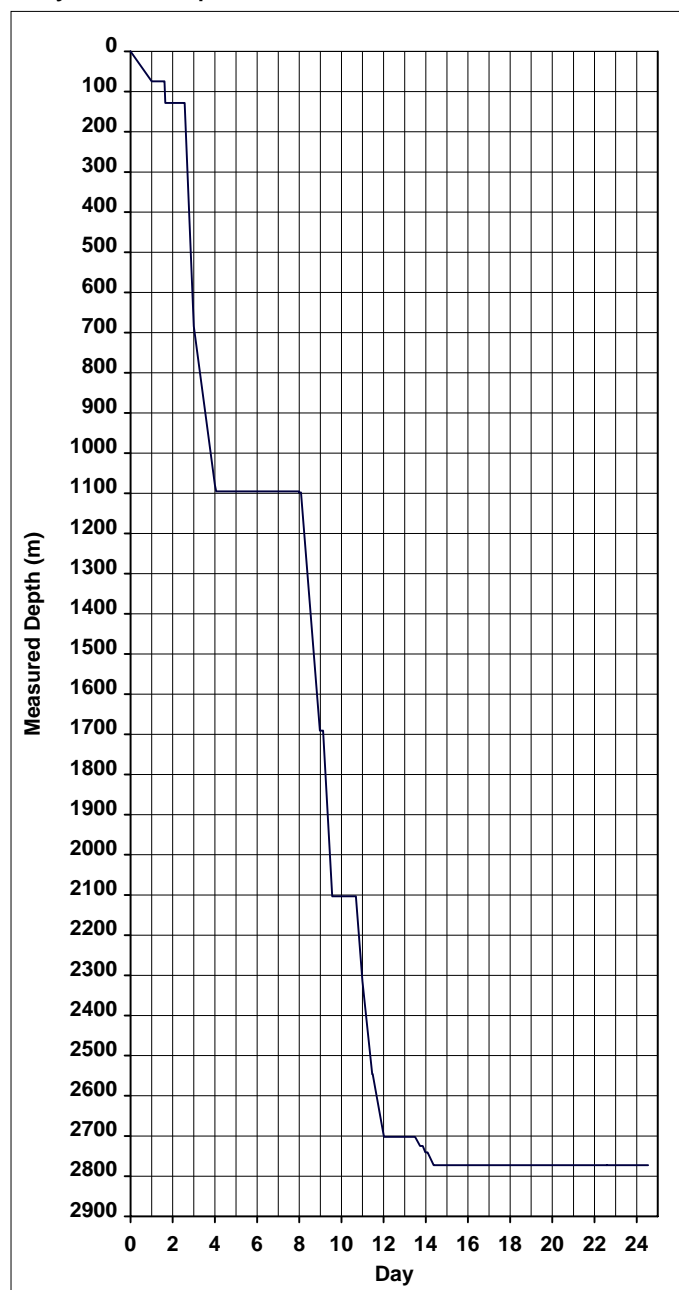
Hours by Operation Summary



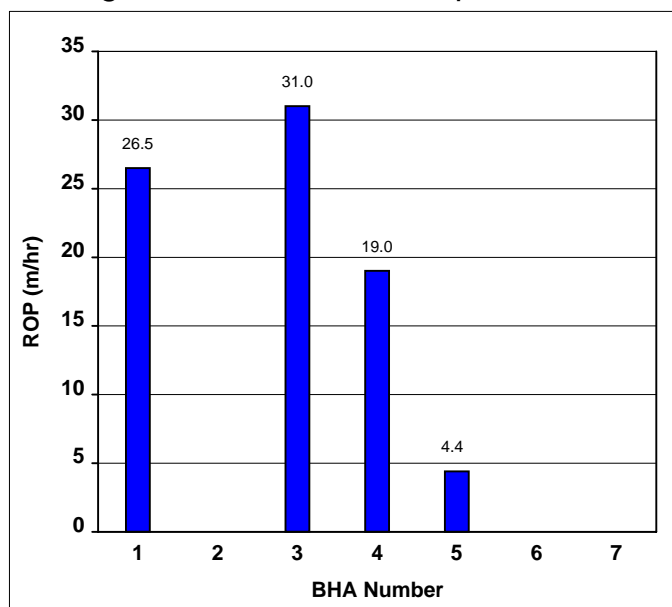
Hours per BHA Breakdown



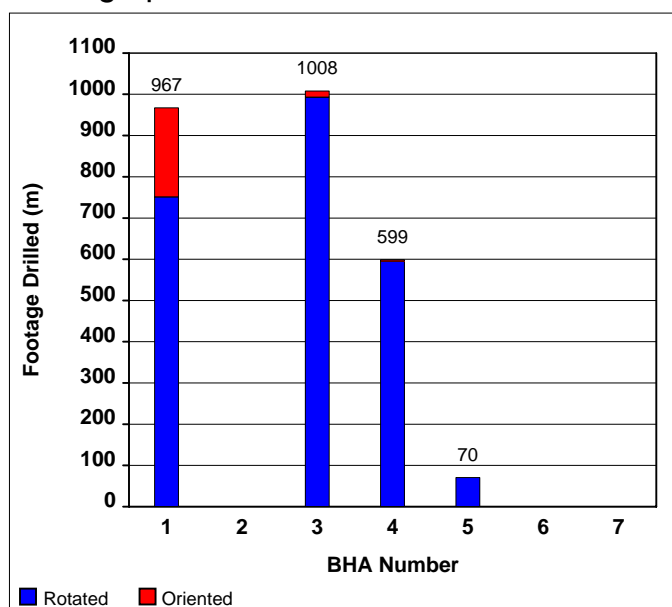
Days vs. Depth



Average Rate of Penetration per BHA



Footage per BHA



MD (m)	Formation Name MD/TVD	Inclination — DLS —	Bit Data	Drilling Parameters	Motor	BHA Stabilizers	Comments	BHA ID
0		0 10 20 30 40						@ 0
100								#1 @ 128
200			GXI 2x22,1x18,1x18 /32's 1.45 ft/min 36.50 hrs	WOB 17 klbs RPM 80 FLO 1098 gpm SPP 2776 psi	9-5/8" SperryDrill 6/7 L 1.15° ABH	15.500 in @ 1.14 m 15.000 in @ 10.96 m 11.250 in @ 20.68 m 15.000 in @ 26.00 m		
300								
400								
500								
600								#3 @ 1095
700								
800								
900								
1000								
1100			FSX563 5x15, 2x14 /32's 1.70 ft/min 32.50 hrs	WOB 17 klbs RPM 80 FLO 958 gpm SPP 3137 psi	9-5/8" SperryDrill 6/7 L 1.15° ABH	12.125 in @ 0.99 m 12.250 in @ 12.33 m 11.250 in @ 22.57 m 12.000 in @ 27.56 m	This BHA was POOH, Because Blocks dropped on string.	#4 @ 2103
1200								
1300								
1400								
1500								
1600								#5 @ 2702
1700								
1800								
1900								
2000								
2100			FSX563 5x15, 2x14 /32's 1.04 ft/min 31.50 hrs	WOB 14 klbs RPM 83 FLO 905 gpm SPP 3251 psi	9-5/8" SperryDrill 6/7 L 0.78° ABH	12.125 in @ 0.99 m 12.250 in @ 12.33 m 11.250 in @ 22.57 m 12.000 in @ 27.56 m		#5 @ 2702
2200								
2300								
2400								
2500								
2600								#5 @ 2702
2700			XL12 3x20 /32's 0.24 ft/min 16.00 hrs	WOB 30 klbs RPM 120 FLO 800 gpm SPP 3500 psi		12.250 in @ 1.19 m 12.250 in @ 7.59 m 11.250 in @ 17.49 m 12.000 in @ 22.48 m		
2800								
		0 1 2 3 4						

HALLIBURTON

Sperry Drilling Services

Bass Strait Oil Company Ltd.

Zane Grey

Zane Grey

Zane Grey #1

Zane Grey #1

Design: Zane Grey #1

Standard Survey Report

19 May, 2005

Sperry Drilling Services

Company:	Bass Strait Oil Company Ltd.	Local Co-ordinate Reference:	Site Zane Grey
Project:	Zane Grey	TVD Reference:	RT @ 21.50m (Original Well Elev)
Site:	Zane Grey	MD Reference:	RT @ 21.50m (Original Well Elev)
Well:	Zane Grey #1	North Reference:	Grid
Wellbore:	Zane Grey #1	Survey Calculation Method:	Minimum Curvature
Design:	Zane Grey #1	Database:	Perth Office Database

Project	Zane Grey, Zane Grey, Global Coordinates		
Map System:	Universal Transverse Mercator	System Datum:	Mean Sea Level
Geo Datum:	AGD66 Low Accuracy		
Map Zone:	Zone 55S (144 E to 150 E)		

Site		Zane Grey, Structure			
Site Position:		Northing:	5,729,856.42 m	Latitude:	38° 34' 31.640" S
From:	Map	Easting:	586,049.89 m	Longitude:	147° 59' 16.266" E
Position Uncertainty:	0.00 m	Slot Radius:	0.00 in	Grid Convergence:	-0.616 °

Well	Zane Grey #1					
Well Position	+N/-S	0.00 m	Northing:	5,729,856.42 m	Latitude:	38° 34' 31.640" S
	+E/-W	0.00 m	Easting:	586,049.89 m	Longitude:	147° 59' 16.266" E
Position Uncertainty		0.00 m	Wellhead Elevation:	m	Ground Level:	0.00 m

Wellbore	Zane Grey #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2004	21/01/2005	13.209	-69.062	60,166

Design	Zane Grey #1				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(m)	(m)	(m)	(°)	
	0.00	0.00	0.00	14.915	

Survey Program	Date	19/05/2005			
From (m)	To (m)	Survey (Wellbore)	Tool Name	Description	
152.20	2,758.61	Zane Grey #1 MWD (Zane Grey #1)	MWD Magnetic	MWD Magnetic Survey (Thorogood)	

Survey										
Measured Depth (m)	Inclination (°)	Azimuth (°)	Vertical Depth (m)	+N/-S (m)	+E/-W (m)	Vertical Section (m)	Dogleg Rate (°/30m)	Build Rate (°/30m)	Turn Rate (°/30m)	
0.00	0.000	0.000	0.00	0.00	0.00	0.00	0.000	0.00	0.00	
152.20	0.410	162.660	152.20	-0.52	0.16	-0.46	0.081	0.08	0.00	
180.10	0.410	187.760	180.10	-0.71	0.18	-0.64	0.192	0.00	26.99	
208.30	0.520	134.850	208.30	-0.90	0.26	-0.81	0.453	0.12	-56.29	
236.30	0.500	145.410	236.30	-1.09	0.42	-0.95	0.103	-0.02	11.31	
265.10	0.480	133.550	265.10	-1.28	0.57	-1.09	0.107	-0.02	-12.35	
291.20	0.530	112.320	291.19	-1.40	0.76	-1.16	0.221	0.06	-24.40	
322.80	0.310	122.920	322.79	-1.50	0.97	-1.20	0.221	-0.21	10.06	
351.10	0.610	108.040	351.09	-1.59	1.18	-1.24	0.340	0.32	-15.77	
379.50	0.620	106.950	379.49	-1.68	1.47	-1.25	0.016	0.01	-1.15	
408.30	0.570	109.170	408.29	-1.78	1.75	-1.27	0.057	-0.05	2.31	
436.40	0.500	108.390	436.39	-1.86	2.00	-1.28	0.075	-0.07	-0.83	
463.05	0.560	101.290	463.04	-1.92	2.24	-1.28	0.100	0.07	-7.99	

Sperry Drilling Services

Company:	Bass Strait Oil Company Ltd.	Local Co-ordinate Reference:	Site Zane Grey
Project:	Zane Grey	TVD Reference:	RT @ 21.50m (Original Well Elev)
Site:	Zane Grey	MD Reference:	RT @ 21.50m (Original Well Elev)
Well:	Zane Grey #1	North Reference:	Grid
Wellbore:	Zane Grey #1	Survey Calculation Method:	Minimum Curvature
Design:	Zane Grey #1	Database:	Perth Office Database

Survey									
Measured Depth (m)	Inclination (°)	Azimuth (°)	Vertical Depth (m)	+N/-S (m)	+E/-W (m)	Vertical Section (m)	Dogleg Rate (°/30m)	Build Rate (°/30m)	Turn Rate (°/30m)
493.81	1.550	39.190	493.79	-1.63	2.65	-0.89	1.346	0.97	-60.57
521.53	3.740	26.590	521.48	-0.53	3.29	0.33	2.438	2.37	-13.64
550.66	6.400	18.100	550.49	1.86	4.22	2.89	2.839	2.74	-8.74
578.94	9.490	11.850	578.50	5.64	5.19	6.79	3.399	3.28	-6.63
605.39	12.270	11.470	604.47	10.53	6.20	11.77	3.154	3.15	-0.43
637.30	15.110	10.930	635.47	17.94	7.66	19.31	2.673	2.67	-0.51
663.37	17.260	12.120	660.51	25.06	9.12	26.56	2.503	2.47	1.37
693.68	19.030	13.970	689.31	34.25	11.25	35.99	1.842	1.75	1.83
722.25	21.580	14.470	716.10	43.86	13.69	45.91	2.684	2.68	0.53
750.29	24.880	14.620	741.87	54.56	16.47	56.96	3.531	3.53	0.16
778.24	28.180	15.540	766.87	66.61	19.72	69.45	3.569	3.54	0.99
806.45	30.290	16.230	791.48	79.86	23.50	83.22	2.272	2.24	0.73
836.21	31.180	15.900	817.06	94.48	27.71	98.43	0.913	0.90	-0.33
864.47	31.470	15.910	841.20	108.61	31.73	113.12	0.308	0.31	0.01
892.94	32.200	16.130	865.39	123.04	35.88	128.13	0.779	0.77	0.23
921.51	32.690	14.670	889.50	137.82	39.95	143.46	0.970	0.51	-1.53
950.02	32.880	14.700	913.47	152.75	43.86	158.90	0.201	0.20	0.03
979.03	33.350	14.250	937.77	168.10	47.82	174.74	0.549	0.49	-0.47
1,009.22	34.050	15.100	962.89	184.30	52.06	191.49	0.839	0.70	0.84
1,037.20	34.420	14.390	986.02	199.53	56.07	207.23	0.584	0.40	-0.76
1,065.76	34.720	14.470	1,009.54	215.22	60.11	223.44	0.319	0.32	0.08
1,080.74	34.990	14.710	1,021.83	223.50	62.27	232.00	0.606	0.54	0.48
1,090.61	34.886	14.630	1,029.92	228.97	63.70	237.65	0.345	-0.32	-0.24
13 3/8"									
1,123.52	34.540	14.360	1,056.97	247.12	68.39	256.39	0.345	-0.32	-0.25
1,150.74	34.230	14.270	1,079.43	262.01	72.19	271.77	0.346	-0.34	-0.10
1,178.17	33.670	14.480	1,102.19	276.85	75.99	287.08	0.626	-0.61	0.23
1,208.00	33.510	14.740	1,127.04	292.82	80.15	303.59	0.216	-0.16	0.26
1,237.02	33.620	14.390	1,151.22	308.35	84.19	319.63	0.230	0.11	-0.36
1,265.61	34.210	14.570	1,174.94	323.80	88.18	335.58	0.628	0.62	0.19
1,294.54	34.670	13.930	1,198.80	339.65	92.20	351.94	0.607	0.48	-0.66
1,323.50	34.510	14.390	1,222.64	355.59	96.23	368.38	0.317	-0.17	0.48
1,353.04	34.370	13.930	1,247.01	371.79	100.31	385.09	0.300	-0.14	-0.47
1,380.92	34.260	13.780	1,270.03	387.05	104.08	400.80	0.149	-0.12	-0.16
1,409.67	34.180	13.290	1,293.81	402.77	107.86	416.96	0.299	-0.08	-0.51
1,438.12	34.520	13.610	1,317.30	418.38	111.60	433.01	0.406	0.36	0.34
1,466.41	34.410	12.820	1,340.62	433.97	115.25	449.01	0.488	-0.12	-0.84
1,494.65	34.390	12.290	1,363.92	449.54	118.72	464.95	0.319	-0.02	-0.56
1,523.37	34.160	12.030	1,387.65	465.35	122.13	481.11	0.285	-0.24	-0.27
1,551.88	34.030	12.090	1,411.26	480.98	125.47	497.07	0.141	-0.14	0.06
1,580.92	34.340	13.280	1,435.29	496.90	129.05	513.37	0.761	0.32	1.23
1,609.62	34.680	16.070	1,458.94	512.63	133.17	529.63	1.690	0.36	2.92
1,638.56	34.320	16.670	1,482.79	528.35	137.79	546.02	0.513	-0.37	0.62
1,667.52	34.040	16.130	1,506.75	543.96	142.39	562.28	0.428	-0.29	-0.56
1,696.00	34.160	16.420	1,530.33	559.29	146.86	578.24	0.213	0.13	0.31
1,724.70	33.800	16.030	1,554.13	574.69	151.34	594.28	0.440	-0.38	-0.41
1,752.98	34.200	16.920	1,577.57	589.85	155.83	610.09	0.677	0.42	0.94
1,776.00	34.154	16.612	1,596.62	602.23	159.56	623.01	0.234	-0.06	-0.40
9 5/8"									
1,782.83	34.140	16.520	1,602.27	605.91	160.65	626.84	0.234	-0.06	-0.40
1,811.25	34.440	17.460	1,625.75	621.22	165.33	642.84	0.642	0.32	0.99
1,840.08	34.470	17.390	1,649.52	636.78	170.21	659.14	0.052	0.03	-0.07
1,868.47	34.230	17.070	1,672.96	652.08	174.96	675.15	0.317	-0.25	-0.34
1,897.13	34.160	16.740	1,696.67	667.49	179.64	691.24	0.208	-0.07	-0.35

Sperry Drilling Services

Company:	Bass Strait Oil Company Ltd.	Local Co-ordinate Reference:	Site Zane Grey
Project:	Zane Grey	TVD Reference:	RT @ 21.50m (Original Well Elev)
Site:	Zane Grey	MD Reference:	RT @ 21.50m (Original Well Elev)
Well:	Zane Grey #1	North Reference:	Grid
Wellbore:	Zane Grey #1	Survey Calculation Method:	Minimum Curvature
Design:	Zane Grey #1	Database:	Perth Office Database

Survey									
Measured Depth (m)	Inclination (°)	Azimuth (°)	Vertical Depth (m)	+N/-S (m)	+E/-W (m)	Vertical Section (m)	Dogleg Rate (°/30m)	Build Rate (°/30m)	Turn Rate (°/30m)
1,926.10	34.120	16.890	1,720.65	683.06	184.35	707.49	0.097	-0.04	0.16
1,954.43	34.050	17.190	1,744.11	698.24	189.00	723.36	0.193	-0.07	0.32
1,983.37	33.950	17.510	1,768.10	713.68	193.83	739.53	0.212	-0.10	0.33
2,012.16	33.490	17.020	1,792.05	728.95	198.57	755.50	0.557	-0.48	-0.51
2,041.58	33.410	17.630	1,816.59	744.43	203.40	771.70	0.352	-0.08	0.62
2,070.37	33.420	17.420	1,840.63	759.55	208.17	787.54	0.121	0.01	-0.22
2,095.75	33.160	17.240	1,861.84	772.84	212.32	801.45	0.329	-0.31	-0.21
2,126.37	32.900	16.850	1,887.51	788.80	217.21	818.13	0.329	-0.25	-0.38
2,154.80	32.520	16.760	1,911.43	803.51	221.66	833.49	0.404	-0.40	-0.09
2,183.17	32.390	16.460	1,935.37	818.10	226.01	848.71	0.219	-0.14	-0.32
2,211.78	32.450	17.620	1,959.52	832.76	230.50	864.03	0.655	0.06	1.22
2,240.33	32.560	16.800	1,983.60	847.42	235.04	879.36	0.477	0.12	-0.86
2,270.20	32.810	17.810	2,008.74	862.82	239.84	895.48	0.603	0.25	1.01
2,299.48	33.110	17.190	2,033.31	878.01	244.63	911.39	0.463	0.31	-0.64
2,328.25	33.620	17.370	2,057.34	893.12	249.33	927.20	0.542	0.53	0.19
2,356.67	33.960	17.390	2,080.96	908.20	254.05	942.99	0.359	0.36	0.02
2,385.20	34.380	17.880	2,104.56	923.47	258.91	959.00	0.528	0.44	0.52
2,413.79	35.020	17.690	2,128.07	938.97	263.88	975.25	0.681	0.67	-0.20
2,441.91	35.260	17.860	2,151.06	954.38	268.82	991.42	0.277	0.26	0.18
2,470.30	35.230	17.620	2,174.25	969.99	273.81	1,007.78	0.150	-0.03	-0.25
2,499.57	35.120	18.260	2,198.17	986.03	279.00	1,024.62	0.394	-0.11	0.66
2,503.64	35.088	18.181	2,201.50	988.25	279.74	1,026.95	0.412	-0.24	-0.58
Top Latrobe									
2,528.66	34.890	17.690	2,222.00	1,001.90	284.15	1,041.28	0.412	-0.24	-0.59
2,558.30	35.040	18.160	2,246.29	1,018.06	289.38	1,058.24	0.312	0.15	0.48
2,587.39	35.340	18.000	2,270.06	1,034.00	294.58	1,074.98	0.324	0.31	-0.17
2,615.66	35.780	18.120	2,293.06	1,049.63	299.68	1,091.40	0.473	0.47	0.13
2,643.79	35.920	18.690	2,315.86	1,065.26	304.88	1,107.84	0.386	0.15	0.61
2,670.24	35.630	18.920	2,337.32	1,079.90	309.87	1,123.27	0.363	-0.33	0.26
2,703.11	35.350	18.340	2,364.09	1,097.98	315.96	1,142.31	0.400	-0.26	-0.53
2,730.26	35.560	18.410	2,386.20	1,112.93	320.93	1,158.03	0.236	0.23	0.08
2,758.61	34.940	18.820	2,409.35	1,128.43	326.15	1,174.36	0.702	-0.66	0.43

Sperry Drilling Services

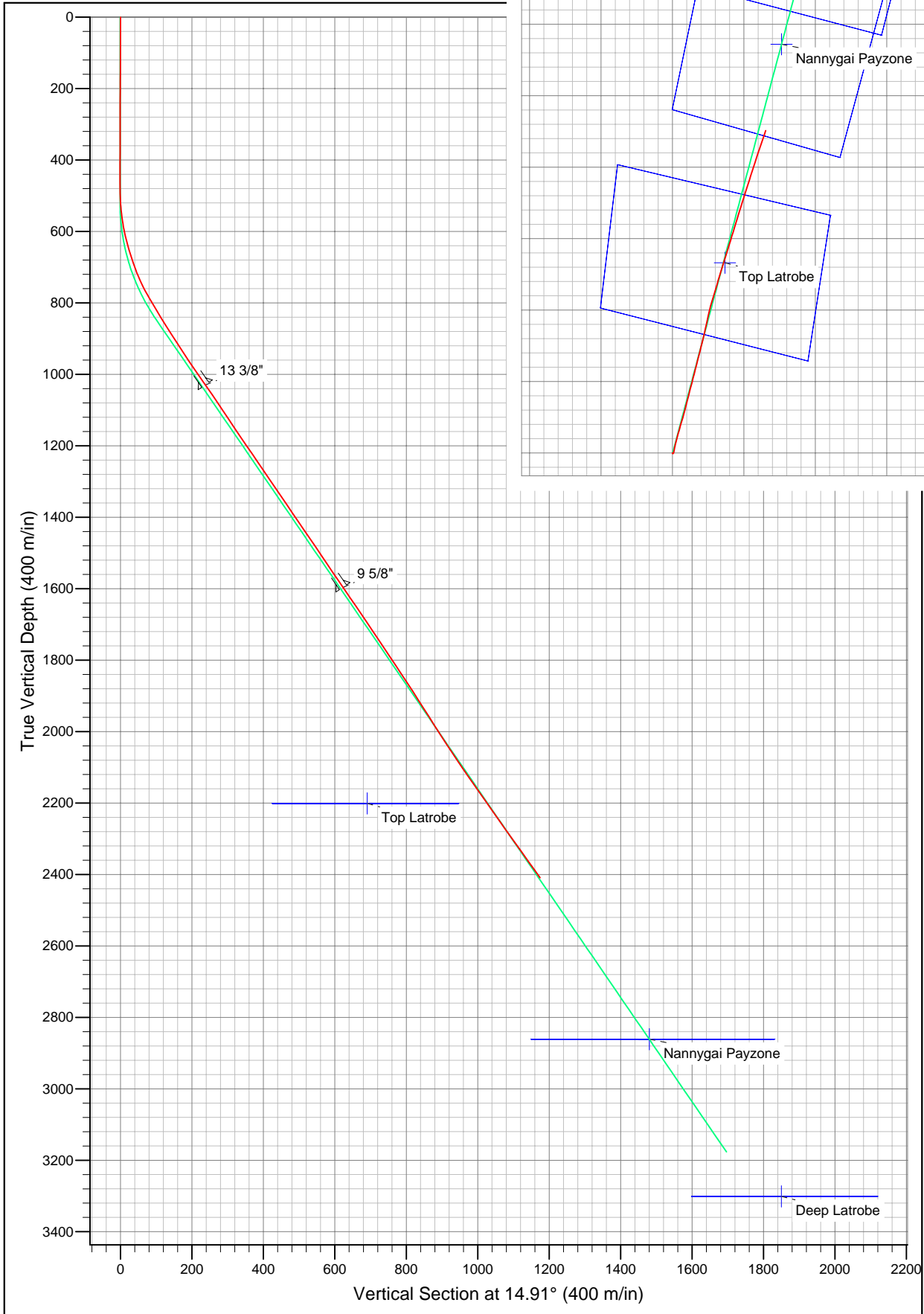
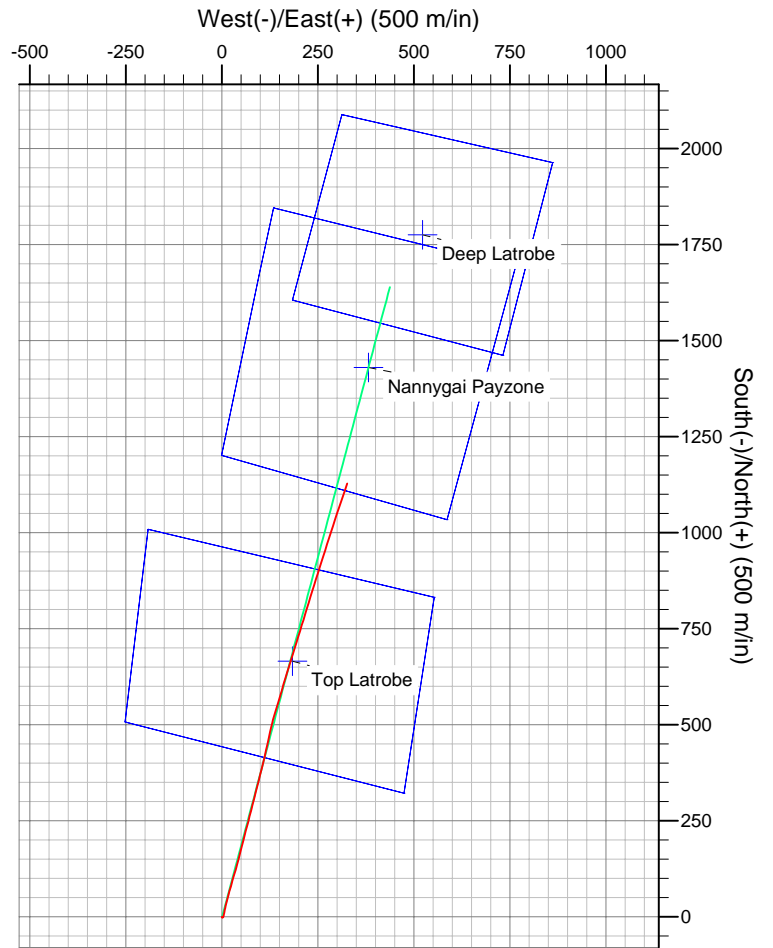
Company:	Bass Strait Oil Company Ltd.	Local Co-ordinate Reference:	Site Zane Grey
Project:	Zane Grey	TVD Reference:	RT @ 21.50m (Original Well Elev)
Site:	Zane Grey	MD Reference:	RT @ 21.50m (Original Well Elev)
Well:	Zane Grey #1	North Reference:	Grid
Wellbore:	Zane Grey #1	Survey Calculation Method:	Minimum Curvature
Design:	Zane Grey #1	Database:	Perth Office Database

Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(m)	m	m	(m)	(m)		
Nannygai Payzone	0.00	0.00	2,861.50	1,430.37	381.75	5,731,286.79	586,431.64	38° 33' 45.108" S	147° 59' 31.402" E
- actual wellpath misses by 546.53m at 2758.61m MD (2409.35 TVD, 1128.43 N, 326.15 E)									
- Polygon									
Point 1				-283.72	245.31	0.00	0.00		
Point 2				-382.70	-229.40	0.00	0.00		
Point 3				204.44	-396.48	0.00	0.00		
Point 4				382.36	260.41	0.00	0.00		
Point 5				-247.19	415.17	0.00	0.00		
Top Latrobe	0.00	0.00	2,201.50	665.92	183.41	5,730,522.34	586,233.30	38° 34' 09.975" S	147° 59' 23.548" E
- actual wellpath misses by 336.41m at 2503.64m MD (2201.50 TVD, 988.25 N, 279.74 E)									
- Polygon									
Point 1				-375.32	342.63	0.00	0.00		
Point 2				-435.56	-158.92	0.00	0.00		
Point 3				290.68	-344.16	0.00	0.00		
Point 4				369.84	165.68	0.00	0.00		
Deep Latrobe	0.00	0.00	3,301.50	1,775.55	522.40	5,731,631.97	586,572.29	38° 33' 33.862" S	147° 59' 37.059" E
- actual wellpath misses by 1119.46m at 2758.61m MD (2409.35 TVD, 1128.43 N, 326.15 E)									
- Polygon									
Point 1				-209.60	313.24	0.00	0.00		
Point 2				-339.07	-169.80	0.00	0.00		
Point 3				209.38	-314.07	0.00	0.00		
Point 4				338.89	188.08	0.00	0.00		

Casing Points					
	Measured Depth (m)	Vertical Depth (m)	Name	Casing Diameter (in)	Hole Diameter (in)
	1,090.61	1,029.92	13 3/8"	13.37	17.50
	1,776.00	1,596.62	9 5/8"	9.62	12.25

Checked By: _____	Approved By: _____	Date: _____
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Project: Zane Grey
Site: Zane Grey
Well: Zane Grey #1
Wellbore: Zane Grey #1
Design: Zane Grey #1



WELLBORE SURVEY										DRILLING PARAMETERS									Comment
Measured Depth (m)	Incl Angle (deg)	Azi Dir (deg)	Vertical Depth (m)	Vertical Section (m)	Coordinates		DLS (°/30m)	Build Rate (°/30m)	Turn Rate (°/30m)	WOB (klbs)	RPM	Flow Rate (gpm)	Stand Pipe (psi)	Orientation		Tool Face (deg)	ROP (m/hr)	BHA No. (#)	
0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00										Tieon
152.20	0.41	162.66	152.2	-0.5	-0.5	0.2	0.08	0.08	0.00									1	
180.10	0.41	187.76	180.1	-0.6	-0.7	0.2	0.19	0.00	0.00									1	
208.30	0.52	134.85	208.3	-0.8	-0.9	0.3	0.45	0.12	0.00									1	
236.30	0.50	145.41	236.3	-1.0	-1.1	0.4	0.10	-0.02	0.00									1	
265.10	0.48	133.55	265.1	-1.1	-1.3	0.6	0.11	-0.02	0.00									1	
291.20	0.53	112.32	291.2	-1.2	-1.4	0.8	0.22	0.06	0.00									1	
322.80	0.31	122.92	322.8	-1.2	-1.5	1.0	0.22	-0.21	0.00									1	
351.10	0.61	108.04	351.1	-1.2	-1.6	1.2	0.34	0.32	0.00									1	
379.50	0.62	106.95	379.5	-1.2	-1.7	1.5	0.00	0.01	0.00									1	
408.30	0.57	109.17	408.3	-1.3	-1.8	1.8	0.06	-0.05	0.00									1	
436.40	0.50	108.39	436.4	-1.3	-1.9	2.0	0.08	-0.07	0.00									1	
463.05	0.56	101.29	463.0	-1.3	-1.9	2.2	0.10	0.07	0.00									1	
493.81	1.55	39.19	493.8	-0.9	-1.6	2.7	1.35	0.97	0.00	12		1120	2600	486	494	18R	60	1	
521.53	3.74	26.59	521.5	0.3	-0.5	3.3	2.44	2.37	-13.64	12		1100	2600	494	505	18R	65	1	
														510	522	12R		1	
550.66	6.40	18.10	550.5	2.9	1.9	4.2	2.84	2.74	-8.74	14		1100	2600	522	530	12R	95	1	
														538	551	5R		1	
578.94	9.49	11.85	578.5	6.8	5.6	5.2	3.40	3.28	-6.63	14		1100	2600	551	560	5R	95	1	
														568	579	15L		1	
605.39	12.27	11.47	604.5	11.8	10.5	6.2	3.15	3.15	-0.43	14		1100	2600	579	590	15L	80	1	
														600	605	10R		1	
637.30	15.11	10.93	635.5	19.3	17.9	7.7	2.67	2.67	-0.51	12		1100	2640	605	619	10R	45	1	
														625	637	10R		1	
663.37	17.26	12.12	660.5	26.6	25.1	9.1	2.50	2.47	1.37	15		1000	2500	637	643	10R	60	1	
														658	663	10R		1	
693.68	19.03	13.97	689.3	36.0	34.3	11.3	1.84	1.75	1.83	15		1100	2700	663	673	10R	35	1	
														685	694	18R		1	
722.25	21.58	14.47	716.1	45.9	43.9	13.7	2.68	2.68	0.53	20		1100	2800	694	703	18R	20	1	
														714	722	HS		1	

WELLBORE SURVEY										DRILLING PARAMETERS										Comment
Measured Depth (m)	Incl Angle (deg)	Azi Dir (deg)	Vertical Depth (m)	Vertical Section (m)	Coordinates		DLS (°/30m)	Build Rate (°/30m)	Turn Rate (°/30m)	WOB (klbs)	RPM	Flow Rate (gpm)	Stand Pipe (psi)	Orientation		Tool Face (deg)	ROP (m/hr)	BHA No. (#)		
					N/S (m)	E/W (m)								From (m)	To (m)					
750.29	24.88	14.62	741.9	57.0	54.6	16.5	3.53	3.53	0.16	20		1100	2800	722	729	HS	40	1		
														743	750	HS		1		
778.24	28.18	15.54	766.9	69.4	66.6	19.7	3.57	3.54	0.99	20		1100	2800	750	761	HS	30	1		
														771	778	HS		1		
806.45	30.29	16.23	791.5	83.2	79.9	23.5	2.27	2.24	0.73	20		1100	2800	778	786	HS	30	1		
														800	806	10L		1		
836.21	31.18	15.90	817.1	98.4	94.5	27.7	0.91	0.90	-0.33	20	80	1100	2900	806	810	10L	25	1		
864.47	31.47	15.91	841.2	113.1	108.6	31.7	0.31	0.31	0.01	20	80	1100	2900				25	1		
892.94	32.20	16.13	865.4	128.1	123.0	35.9	0.78	0.77	0.23	20	80	1100	2900				25	1		
921.51	32.69	14.67	889.5	143.5	137.8	39.9	0.97	0.51	-1.53	20	80	1100	2900	910	915	65L	25	1		
950.02	32.88	14.70	913.5	158.9	152.8	43.9	0.20	0.20	0.03	20	80	1100	2900				25	1		
979.03	33.35	14.25	937.8	174.7	168.1	47.8	0.55	0.49	-0.47	20	80	1100	2900				25	1		
1009.22	34.05	15.10	962.9	191.5	184.3	52.1	0.84	0.70	0.84	20	80	1100	2900				25	1		
1037.20	34.42	14.39	986.0	207.2	199.5	56.1	0.58	0.40	-0.76	20	80	1100	2900				25	1		
1065.76	34.72	14.47	1009.5	223.4	215.2	60.1	0.32	0.32	0.08	20	80	1100	2900				25	1		
1080.74	34.99	14.71	1021.8	232.0	223.5	62.3	0.61	0.54	0.48	20	80	1100	2900				25	1		
1123.52	34.54	14.36	1057.0	256.4	247.1	68.4	0.35	-0.32	-0.25									3		
1150.74	34.23	14.27	1079.4	271.8	262.0	72.2	0.35	-0.34	-0.10									3		
1178.17	33.67	14.48	1102.2	287.1	276.9	76.0	0.63	-0.61	0.23									3		
1208.00	33.51	14.74	1127.0	303.6	292.8	80.2	0.22	-0.16	0.26	20	80	950	2950				50	3		
1237.02	33.62	14.39	1151.2	319.6	308.4	84.2	0.23	0.11	-0.36	20	80	950	2950				50	3		
1265.61	34.21	14.57	1174.9	335.6	323.8	88.2	0.63	0.62	0.19	20	80	950	2950				50	3		
1294.54	34.67	13.93	1198.8	351.9	339.7	92.2	0.61	0.48	-0.66	20	80	950	2950				50	3		
1323.50	34.51	14.39	1222.6	368.4	355.6	96.2	0.32	-0.17	0.48	20	80	950	2950				50	3		
1353.04	34.37	13.93	1247.0	385.1	371.8	100.3	0.30	-0.14	-0.47	20	80	950	2950				50	3		
1380.92	34.26	13.78	1270.0	400.8	387.1	104.1	0.15	-0.12	-0.16	20	80	950	2950				50	3		
1409.67	34.18	13.29	1293.8	417.0	402.8	107.9	0.30	-0.08	-0.51	20	80	950	2950				50	3		
1438.12	34.52	13.61	1317.3	433.0	418.4	111.6	0.41	0.36	0.34	20	80	950	2950				50	3		
1466.41	34.41	12.82	1340.6	449.0	434.0	115.3	0.49	-0.12	-0.84	20	80	950	2950				50	3		
1494.65	34.39	12.29	1363.9	465.0	449.5	118.7	0.32	-0.02	-0.56	20	80	950	2950				50	3		
1523.37	34.16	12.03	1387.7	481.1	465.4	122.1	0.28	-0.24	-0.27	20	80	950	2950				50	3		

sperry-sun

DRILLING SERVICES

Survey and Drilling Parameters

Client : Bass Strait Oil Company Ltd.
Well Name : Zane Grey #1
Rig : Ocean Patriot

Field : Zane Grey
Location : Bass Strait
Job # : AU-DD-0003415248

North Ref : Grid

Declination : °

VS Dir : 14.92° (from Wellhead)

WELLBORE SURVEY										DRILLING PARAMETERS									
Measured Depth (m)	Incl Angle (deg)	Azi Dir (deg)	Vertical Depth (m)	Vertical Section (m)	Coordinates		DLS (°/30m)	Build Rate (°/30m)	Turn Rate (°/30m)	WOB (klbs)	RPM	Flow Rate (gpm)	Stand Pipe (psi)	Orientation		Tool Face (deg)	ROP (m/hr)	BHA No. (#)	Comment
					N/S (m)	E/W (m)								From (m)	To (m)				
1551.88	34.03	12.09	1411.3	497.1	481.0	125.5	0.14	-0.14	0.06	15	80	960	3300	1571	1577	135L	60	3	
1580.92	34.34	13.28	1435.3	513.4	496.9	129.1	0.76	0.32	1.23	15	80	960	3300				60	3	
1609.62	34.68	16.07	1458.9	529.6	512.6	133.2	1.69	0.36	2.92	15	80	960	3300				90	3	
1638.56	34.32	16.67	1482.8	546.0	528.4	137.8	0.51	-0.37	0.62	15	80	960	3300				90	3	
1667.52	34.04	16.13	1506.7	562.3	544.0	142.4	0.43	-0.29	-0.56	15	80	960	3300				90	3	
1696.00	34.16	16.42	1530.3	578.2	559.3	146.9	0.21	0.13	0.31	15	80	960	3300				90	3	
1724.70	33.80	16.03	1554.1	594.3	574.7	151.3	0.44	-0.38	-0.41	15	80	960	3300				90	3	
1752.98	34.20	16.92	1577.6	610.1	589.9	155.8	0.68	0.42	0.94	15	80	960	3300				90	3	
1782.83	34.14	16.52	1602.3	626.8	605.9	160.7	0.23	-0.06	-0.40	15	80	960	3300				90	3	
1811.25	34.44	17.46	1625.8	642.8	621.2	165.3	0.64	0.32	0.99	15	80	960	3300				90	3	
1840.08	34.47	17.39	1649.5	659.1	636.8	170.2	0.05	0.03	-0.07	15	80	960	3300	90	3				
1868.47	34.23	17.07	1673.0	675.1	652.1	175.0	0.32	-0.25	-0.34	15	80	960	3300	90	3				
1897.13	34.16	16.74	1696.7	691.2	667.5	179.6	0.21	-0.07	-0.35	15	80	960	3300	90	3				
1926.10	34.12	16.89	1720.6	707.5	683.1	184.3	0.10	-0.04	0.16	15	80	960	3300	90	3				
1954.43	34.05	17.19	1744.1	723.4	698.2	189.0	0.19	-0.07	0.32	15	80	960	3300	90	3				
1983.37	33.95	17.51	1768.1	739.5	713.7	193.8	0.21	-0.10	0.33	15	80	960	3300	90	3				
2012.16	33.49	17.02	1792.0	755.5	728.9	198.6	0.56	-0.48	-0.51	15	80	960	3300	90	3				
2041.58	33.41	17.63	1816.6	771.7	744.4	203.4	0.35	-0.08	0.62	15	80	960	3300	90	3				
2070.37	33.42	17.42	1840.6	787.5	759.5	208.2	0.12	0.01	-0.22	15	80	960	3300	90	3				
2095.75	33.16	17.24	1861.8	801.5	772.8	212.3	0.33	-0.31	-0.21	15	80	960	3300	90	3				
2126.37	32.90	16.85	1887.5	818.1	788.8	217.2	0.33	-0.25	-0.38	15	80	960	3300	90	4				
2154.80	32.52	16.76	1911.4	833.5	803.5	221.7	0.40	-0.40	-0.09	15	80	960	3300	90	4				
2183.17	32.39	16.46	1935.4	848.7	818.1	226.0	0.22	-0.14	-0.32	15	80	960	3300	90	4				
2211.78	32.45	17.62	1959.5	864.0	832.8	230.5	0.66	0.06	1.22	15	80	960	3300	90	4				
2240.33	32.56	16.80	1983.6	879.4	847.4	235.0	0.48	0.12	-0.86	15	80	960	3300	2236	2240	30L	60	4	
2270.20	32.81	17.81	2008.7	895.5	862.8	239.8	0.60	0.25	1.01	15	80	960	3300				60	4	
2299.48	33.11	17.19	2033.3	911.4	878.0	244.6	0.46	0.31	-0.64	15	80	960	3300				60	4	
2328.25	33.62	17.37	2057.3	927.2	893.1	249.3	0.54	0.53	0.19	15	80	960	3300				60	4	
2356.67	33.96	17.39	2081.0	943.0	908.2	254.1	0.36	0.36	0.02	15	80	960	3300				60	4	
2385.20	34.38	17.88	2104.6	959.0	923.5	258.9	0.53	0.44	0.52	15	80	960	3300				60	4	
2413.79	35.02	17.69	2128.1	975.3	939.0	263.9	0.68	0.67	-0.20	15	80	960	3300				60	4	

Client : Bass Strait Oil Company Ltd.
Well Name : Zane Grey #1
Rig : Ocean Patriot

Field : Zane Grey
Location : Bass Strait
Job # : AU-DD-0003415248

Page : 4

North Ref : Grid

Declination : °

VS Dir : 14.92° (from Wellhead)

WELLBORE SURVEY										DRILLING PARAMETERS									Comment
Measured Depth (m)	Incl Angle (deg)	Azi Dir (deg)	Vertical Depth (m)	Vertical Section (m)	Coordinates		DLS	Build Rate	Turn Rate	WOB	RPM	Flow Rate (gpm)	Stand Pipe (psi)	Orientation		Tool Face (deg)	ROP (m/hr)	BHA No. (#)	
2441.91	35.26	17.86	2151.1	991.4	954.4	268.8	0.28	0.26	0.18	15	80	960	3300				60	4	
2470.30	35.23	17.62	2174.2	1007.8	970.0	273.8	0.15	-0.03	-0.25	16		850	3400				40	4	
2499.57	35.12	18.26	2198.2	1024.6	986.0	279.0	0.39	-0.11	0.66	16		850	3400				40	4	
2528.66	34.89	17.69	2222.0	1041.3	1001.9	284.2	0.41	-0.24	-0.59	16		850	3400				40	4	
2558.30	35.04	18.16	2246.3	1058.2	1018.1	289.4	0.31	0.15	0.48	10	90	800	3100				15	4	
2587.39	35.34	18.00	2270.1	1075.0	1034.0	294.6	0.32	0.31	-0.17	10	90	800	3100				15	4	
2615.66	35.78	18.12	2293.1	1091.4	1049.6	299.7	0.47	0.47	0.13	10	90	800	3100				15	4	
2643.79	35.92	18.69	2315.9	1107.8	1065.3	304.9	0.39	0.15	0.61	10	90	800	3100				15	4	
2670.24	35.63	18.92	2337.3	1123.3	1079.9	309.9	0.36	-0.33	0.26	10	90	800	3100				15	4	
2703.00	35.35	18.34	2364.0	1142.3	1097.9	315.9	0.40	-0.26	-0.53	30	120	800	3500				30	5	
2730.26	35.56	18.41	2386.2	1158.0	1112.9	320.9	0.24	0.23	0.08	30	120	800	3500				30	5	
2758.61	34.94	18.82	2409.4	1174.4	1128.4	326.2	0.70	-0.66	0.43	30	120	800	3500				10	5	

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DRILLING SERVICES

BHA Report

Client : Bass Strait Oil Company Ltd.
Well Name : Zane Grey #1
Field : Zane Grey
Location : Bass Strait
Rig : Ocean Patriot
Job # : AU-DD-0003415248

BHA# 1

BHA# 1 : Date In :30/01/200 MD In (m) : 128 TVD In (m) : 128 Date Out 1/02/2005 MD Out (m): 1095 TVD Out (m): 1034

BIT DATA

Bit #	OD (in)	MFR	Style	Serial#	Nozzles (/32's)	TFA (in²)	Dull Condition
1	16.000	Smith	GXI	MM4714	2x22, 1x18, 1x18	1.239	1-1-NO-A -E-0-NO-PR

MOTOR DATA

Run #	OD (in)	MFR	Model	Serial#	Bend	Nzl (/32's)	Avg Dif (psi)	Cum Circ Hrs
1	9.625	SSDS	SperryDrill	963367	1.15°		114	38.50

COMPONENT DATA

Item #	Description	Serial #	OD (in)	ID (in)	Gauge (in)	Weight (lbs/ft)	Top Con	Length (m)	Bit - Center Blade (m)
1	Roller Cone Insert	MM4714	16.000	3.000	16.000	661.13	P 6-5/8" Reg	0.42	1.14
2	9-5/8" SperryDrill Lobe 6/7 - 5.0 stg	963367	9.625	6.135	15.500	147.21	B 7-5/8" Reg	9.05	
3	Non-Mag Float + Bottleneck Sub	A 545	8.000	3.000		147.22	B 6-5/8" Reg	0.54	
4	Integral Blade Stabilizer NM	2362	8.000	3.000	15.000	147.22	B 6-5/8" Reg	1.86	10.96
5	Non-Mag 8" MWD PM Sub	dm67106	8.000	2.500		154.58	B 6-5/8" Reg	2.81	
6	8" RLL w/DGR + EWR	dm343gr8	8.000	2.500	11.250	154.58	B 6-5/8" Reg	7.07	
7	Non-Mag 8" MWD Pulser / TM Sub	10532336	8.000	2.500		154.58	B 6-5/8" Reg	3.11	26.00
8	Integral Blade Stabilizer Stl	47615	8.000	2.500	15.000	154.58	B 6-5/8" Reg	2.04	
9	3 x 8" Drill Collars	RIG	8.000	2.810		150.00	B 6-5/8" Reg	27.44	
10	Drilling Jar	MHA00206	8.250	2.400		166.76	B 6-5/8" Reg	9.68	
11	2 x 8" Drill Collars	Rig	8.000	2.810		150.00	B 6-5/8" Reg	18.30	
12	Cross Over Sub		8.000	2.800		150.32	B 4-1/2" IF	1.25	
13	18x HWDP		5.000	3.000		49.30	B 4-1/2" IF	166.00	
								249.57	

Parameter	Min	Max	Ave
WOB (klbs) :	10	20	17
RPM (rpm) :	80	80	80
Flow (gpm) :	1000	1120	1098
SPP (psi) :	2500	2900	2776

Activity	Hrs
Drilling :	36.50
Reaming :	0.00
Circ-Other :	2.00
Total :	38.50

BHA Weight	(lb)
in Air (Total) :	69336
in Mud (Total) :	60141
in Air (Bel Jars) :	27567
in Mud (Bel Jars) :	23912

Drill String	OD(in)	Len(m)

PERFORMANCE

	In	Out
Inclination (deg)	0.34	34.84
Azimuth (deg)	162.66	14.59

	Distance(m)	ROP (m/hr)	Build (°/30m)	Turn (°/30m)	DLS (°/30m)
Oriented :	216.00	38			
Rotated :	751.00	23			
Total :	967.00	26	1.07	0.00	1.09

COMMENTS

OBJECTIVES:

To drill out the 30" conductor cement and continue to drill vertically to kick off point at 500m.
Build angle at 3°/30m to 34.42 degrees, on an azimuth of 14.91 degrees, and hold through to section TD.

RESULTS:

Tag TOC at 124.7m, the cement and shoe track (127.5m) where we drilled with 0 - 5k WOB and 50 RPM at 800gpm without problems. Continued to rotary drill to 486m where kick off was initiated, building from 2 - 3°/30m with flow up to 1100gpm and 80 RPM in rotary. Initial slides were giving on average 3°/30m doglegs, with slide interval reducing 15-10m as angle built. Tool face control was good with 60-70deg reactive torque. Rotary performance in the tangent section was dependant on ROP but giving an average build of 0.6°/30m. ROP reduced from 800m to 1095m where section TD was called due to ROP - 3hrs to drill a stand. The BHA was pulled with no hole problems and 16" assembly racked in derrick. Minor clay on stabilisers and bit when pulled and bit in new condition.

Drilled 970.3m Avg ROP 53m/hr
Drill hrs 18.28
Circ hrs 35.15
Brt hrs 44.30
Bit Grade:- 1-1-No-A-E-0-No-PR, 264.3 Krev

RECOMMENDATIONS:

With stringers of firmer formation it would be recommended to carry more weight below the jars to prevent drilling too close to transition point.

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DRILLING SERVICES

BHA Report

Client : Bass Strait Oil Company Ltd.
Well Name : Zane Grey #1
Field : Zane Grey
Location : Bass Strait
Rig : Ocean Patriot
Job # : AU-DD-0003415248

BHA# 2

BHA# 2 : Date In :4/02/2005 MD In (m) : 1095 TVD In (m) : 1034 Date Out 4/02/2005 MD Out (m): 1095 TVD Out (m): 1034

BIT DATA

Bit #	OD (in)	MFR	Style	Serial#	Nozzles (/32's)	TFA (in²)	Dull Condition
2	12.250	Security DBS	FSX563	10648437	5x15, 2x14	1.164	

MOTOR DATA

Run #	OD (in)	MFR	Model	Serial#	Bend	Nzl (/32's)	Avg Dif (psi)	Cum Circ Hrs
2	9.625	SSDS	SperryDrill	963367	1.15°			38.50

COMPONENT DATA

Item #	Description	Serial #	OD (in)	ID (in)	Gauge (in)	Weight (lbs/ft)	Top Con	Length (m)	Bit - Center Blade (m)
1	PDC	10648437	12.250	3.000	12.250	377.57	P 6-5/8" Reg	0.35	0.99
2	9-5/8" SperryDrill Lobe 6/7 - 5.0 stg	963367	9.625	6.135	12.125	147.21	B 7-5/8" Reg	9.05	
3	NonMag Float/Bottleneck X/O	A 545	8.000	3.000		147.22	B 6-5/8" Reg	1.03	
4	Adjustable Gauge Stabilizer	513-085	8.000	3.000	12.250	147.22	B 6-5/8" Reg	3.33	12.33
5	Non-Mag 8" MWD PM Sub	dm67106	8.000	2.500		154.58	B 6-5/8" Reg	2.81	
6	8" RLL w/DGR + EWR	dm343gr8	8.000	2.500	11.250	154.58	B 6-5/8" Reg	7.07	
7	Non-Mag 8" MWD Pulser / TM Sub	10532336	8.000	2.500		154.58	B 6-5/8" Reg	3.11	27.49
8	Integral Blade Stabilizer Stl	91322	8.000	2.500	12.000	154.58	B 6-5/8" Reg	1.82	
9	3 x 8" Drill Collars	RIG	8.000	2.810		150.00	B 6-5/8" Reg	27.44	
10	Drilling Jar	MHA00206	8.250	2.400		166.76	B 6-5/8" Reg	9.68	251.24
11	2 x 8" Drill Collars	Rig	8.000	2.810		150.00	B 6-5/8" Reg	18.30	
12	Cross Over Sub		8.000	2.800		150.32	B 4-1/2" IF	1.25	
13	18x HWDP		5.000	3.000		49.30	B 4-1/2" IF	166.00	

Parameter	Min	Max	Ave
WOB (klbs) :			
RPM (rpm) :			
Flow (gpm) :			
SPP (psi) :			

Activity	Hrs
Drilling :	0.00
Reaming :	0.00
Circ-Other :	0.00
Total :	0.00

BHA Weight	(lb)
in Air (Total) :	69693
in Mud (Total) :	60452
in Air (Bel Jars) :	27925
in Mud (Bel Jars) :	24222

Drill String	OD(in)	Len (m)

PERFORMANCE

	In	Out
Inclination (deg)	34.84	34.84
Azimuth (deg)	14.59	14.59

Distance(m)	ROP (m/hr)	Build (°/30m)	Turn (°/30m)	DLS (°/30m)
Oriented :				
Rotated :				
Total :				

COMMENTS

OBJECTIVES:

Performance drill tangent with motor and AGS stabiliser.

RESULTS:

Shallow AGS, Motor, MWD Test MWD did not decode, but was pulsing
870 GPM & 204 SPM; FG= 1850 psi, UG=1650 psi
Pressure test casing , MWD decode not working. POOH to replace pulser and HCIM.

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DRILLING SERVICES

BHA Report

Client : Bass Strait Oil Company Ltd.
Well Name : Zane Grey #1
Field : Zane Grey
Location : Bass Strait
Rig : Ocean Patriot
Job # : AU-DD-0003415248

BHA# 3

BHA# 3 : Date In :4/02/2005 MD In (m) : 1095 TVD In (m) : 1034 Date Out 7/02/2005 MD Out (m): 2103 TVD Out (m): 1868

BIT DATA

Bit #	OD (in)	MFR	Style	Serial#	Nozzles (/32's)	TFA (in²)	Dull Condition
2rr1	12.250	Security DBS	FSX563	10648437	5x15, 2x14	1.164	1-2-BT-G -X-I-CT-RP

MOTOR DATA

Run #	OD (in)	MFR	Model	Serial#	Bend	Nzl (/32's)	Avg Dif (psi)	Cum Circ Hrs
3	9.625	SSDS	SperryDrill	963367	1.15°		297	86.00

COMPONENT DATA

Item #	Description	Serial #	OD (in)	ID (in)	Gauge (in)	Weight (lbs/ft)	Top Con	Length (m)	Bit - Center Blade (m)
1	PDC	10648437	12.250	3.000	12.250	377.57	P 6-5/8" Reg	0.35	
2	9-5/8" SperryDrill Lobe 6/7 - 5.0 stg	963367	9.625	6.135	12.125	147.21	B 7-5/8" Reg	9.05	0.99
3	NonMag Float/Bottleneck X/O	A 545	8.000	3.000		147.22	B 6-5/8" Reg	1.03	
4	Adjustable Gauge Stabilizer	513-085	8.000	3.000	12.250	147.22	B 6-5/8" Reg	3.33	12.33
5	Non-Mag 8" MWD PM Sub	dm67106	8.000	2.500		154.58	B 6-5/8" Reg	2.81	
6	8" RLL w/DGR + EWR	dm90056915	8.000	2.500	11.250	154.58	B 6-5/8" Reg	7.14	
7	Non-Mag 8" MWD Pulser / TM Sub	10532336	8.000	2.500		154.58	B 6-5/8" Reg	3.11	
8	Integral Blade Stabilizer Stl	91322	8.000	2.500	12.000	154.58	B 6-5/8" Reg	1.82	27.56
9	3 x 8" Drill Collars	RIG	8.000	2.810		150.00	B 6-5/8" Reg	27.44	
10	Drilling Jar	MHA00206	8.250	2.400		166.76	B 6-5/8" Reg	9.68	
11	2 x 8" Drill Collars	Rig	8.000	2.810		150.00	B 6-5/8" Reg	18.30	
12	Cross Over Sub		8.000	2.800		150.32	B 4-1/2" IF	1.25	
13	18x HWDP		5.000	3.000		49.30	B 4-1/2" IF	166.00	
								251.31	

Parameter	Min	Max	Ave
WOB (klbs) :	15	20	17
RPM (rpm) :	80	80	80
Flow (gpm) :	950	1100	958
SPP (psi) :	1700	3300	3137

Activity	Hrs
Drilling :	32.50
Reaming :	0.00
Circ-Other :	15.00
Total :	47.50

BHA Weight	(lb)
in Air (Total) :	69729
in Mud (Total) :	59632
in Air (Bel Jars) :	27960
in Mud (Bel Jars) :	23912

Drill String	OD(in)	Len(m)

PERFORMANCE

	In	Out
Inclination (deg)	34.84	33.10
Azimuth (deg)	14.59	17.15

	Distance(m)	ROP (m/hr)	Build (°/30m)	Turn (°/30m)	DLS (°/30m)
Oriented :	15.00	13			
Rotated :	993.00	31			
Total :	1008.00	31	-0.05	0.08	0.07

COMMENTS

This BHA was POOH, Because Blocks dropped on string.

OBJECTIVES:

Performance drill tangent with motor and AGS stabiliser

RESULTS:

Changing a new MWD hsim and pulser
Shallow AGS, Motor Test
800 GPM & 186 SPM; FG= 1000 psi, UG=1160 psi

RIH, Circulate last 2 stands to bottom. TOC 1063m.
Drill cement 800gpm, 80rpm. Initially drilled plug (1065.6m) with light weight and all was fine. Would not listen to reason and tried to drill with 35klbs and the start of problems with packing off, erratic torque and low ROP.
Drilled Reamer shoe 1090.6m) with light weight and it drilled well.

Drilled 2 singles with AGS in 11 1/4" position until clear of casing and continued drilling in 12 1/4" position as inclination dropped at 0.2°/30m, then drilled in 11 1/4" position with a corresponding inclination build.
Build and drop rates where some what erratic but managed the required build or drop.
BHA was weight sensitive mainly due to the very aggressive FSX563 bit, WOB over 18k would stall the motor and string rotation.

Drilled to 1543m and tried to slide to correct the now strong left hand walk, but WOB and toolface where impossible to control. A formation change at Lake Entrance and reducing flow rate to 700gpm allowed a more controllable TF with very light weight and no more than 100psi differential where needed.
From 1900m formation very soft and and dropping tendency with right hand walk.

To combat possible jetting the formation flow was reduced to 850gpm but effect of this is unknown as blocks where dropped and a stand of DP bent. POOH to examine tools.

RECOMMENDATIONS:

Drill plugs and shoe with light weight.

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DRILLING SERVICES

BHA Report

Client : Bass Strait Oil Company Ltd.
Well Name : Zane Grey #1
Field : Zane Grey
Location : Bass Strait
Rig : Ocean Patriot
Job # : AU-DD-0003415248

BHA# 4

BHA# 4 : Date In : 7/02/2005 MD In (m) : 2103 TVD In (m) : 1868 Date Out 9/02/2005 MD Out (m): 2702 TVD Out (m): 2363

BIT DATA

Bit #	OD (in)	MFR	Style	Serial#	Nozzles (/32's)	TFA (in²)	Dull Condition
2rr2	12.250	Security DBS	FSX563	10648437	5x15, 2x14	1.164	2-3-BT-G -X-4-WT-PR

MOTOR DATA

Run #	OD (in)	MFR	Model	Serial#	Bend	Nzl (/32's)	Avg Dif (psi)	Cum Circ Hrs
4	9.625	SSDS	SperryDrill	963367	0.78°		274	124.50

COMPONENT DATA

Item #	Description	Serial #	OD (in)	ID (in)	Gauge (in)	Weight (lbs/ft)	Top Con	Length (m)	Bit - Center Blade (m)
1	PDC	10648437	12.250	3.000	12.250	377.57	P 6-5/8" Reg	0.35	
2	9-5/8" SperryDrill Lobe 6/7 - 5.0 stg	963367	9.625	6.135	12.125	147.21	B 7-5/8" Reg	9.05	0.99
3	NonMag Float/Bottleneck X/O	A 545	8.000	3.000		147.22	B 6-5/8" Reg	1.03	
4	Adjustable Gauge Stabilizer	513-085	8.000	3.000	12.250	147.22	B 6-5/8" Reg	3.33	12.33
5	Non-Mag 8" MWD PM Sub	dm67106	8.000	2.500		154.58	B 6-5/8" Reg	2.81	
6	8" RLL w/DGR + EWR	dm90056915	8.000	2.500	11.250	154.58	B 6-5/8" Reg	7.14	
7	Non-Mag 8" MWD Pulser / TM Sub	10536016	8.000	2.500		154.58	B 6-5/8" Reg	3.11	
8	Integral Blade Stabilizer	91322	8.000	2.500	12.000	154.58	B 6-5/8" Reg	1.82	27.56
9	3 x 8" Drill Collars	RIG	8.000	2.810		150.00	B 6-5/8" Reg	27.44	
10	Drilling Jar	MHA00206	8.250	2.400		166.76	B 6-5/8" Reg	9.68	
11	2 x 8" Drill Collars	Rig	8.000	2.810		150.00	B 6-5/8" Reg	18.30	
12	Cross Over Sub		8.000	2.800		150.32	B 4-1/2" IF	1.25	
13	18x HWDP		5.000	3.000		49.30	B 4-1/2" IF	166.00	
								251.31	

Parameter	Min	Max	Ave
WOB (klbs) :	10	30	14
RPM (rpm) :	80	120	83
Flow (gpm) :	800	1100	905
SPP (psi) :	1700	3500	3251

Activity	Hrs
Drilling :	31.50
Reaming :	1.50
Circ-Other :	5.50
Total :	38.50

BHA Weight	(lb)
in Air (Total) :	69729
in Mud (Total) :	59420
in Air (Bel Jars) :	27960
in Mud (Bel Jars) :	23827

Drill String	OD(in)	Len(m)

PERFORMANCE

	In	Out
Inclination (deg)	33.10	35.36
Azimuth (deg)	17.15	18.36

	Distance(m)	ROP (m/hr)	Build (°/30m)	Turn (°/30m)	DLS (°/30m)
Oriented :	4.00	11			
Rotated :	595.00	19			
Total :	599.00	19	0.11	0.06	0.12

COMMENTS

OBJECTIVES:

Performance drill tangent with motor and AGS stabiliser

RESULTS:

Changed a new Pulser and adjustable motor bend to 0.78 degrees, rerun the same bit.

Motor and AGS performed correctly, but results were masked by formation effect from 2000m where ROP was 200m/hr. In an effort to gain control, flow was reduced in an attempt to get more WOB, this had little effect and finally had to slide with difficulty to initiate a building trend.

There was also strong right hand walk through the Latrobe, Gunard and Kingfish formations.

Once into the Kingfish the building trend continued, even in the 12 1/2" position (sliding was not possible).

Once into the Kingfish, off bottom string torque increased from 8k to 13k ft/lbs. This had a knock on effect with the high torque generated by this bit causing a stall of string rotation and effectively reduce ROP to 5m/hr.

BHA pulled for lack of ROP. Bit 1/4" under gauge. All other Stabilisers in gauge.

RECOMMENDATIONS:

Aggressive bit performed well in limestone, but very difficult to orient due to the high torque it generated.

Further wells in this area should consider a mid section wiper trip to condition hole. Be prepared for a second 12 1/4" bit run once into the Kingfish.

Kingfish Formation consists of interbedded well bonded fine sandstones, siltstones, pyrite, shales and coals. This would be more effectively drilled with a well protected insert bit.

To reduce torque in Kingfish, future wells consider using a rotary assembly with Near bit roller reamers.

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DRILLING SERVICES

BHA Report

Client : Bass Strait Oil Company Ltd.
Well Name : Zane Grey #1
Field : Zane Grey
Location : Bass Strait
Rig : Ocean Patriot
Job # : AU-DD-0003415248

BHA# 5

BHA# 5 : Date In :9/02/2005 MD In (m) : 2702 TVD In (m) : 2363 Date Out 12/02/2005 MD Out (m): 2773 TVD Out (m): 2421

BIT DATA

Bit #	OD (in)	MFR	Style	Serial#	Nozzles (/32's)	TFA (in²)	Dull Condition
3	12.250	SDBS	XL12	10378981	3x20	0.920	3-3-BT-M -E-I-CT-TD

MOTOR DATA

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

COMPONENT DATA

Item #	Description	Serial #	OD (in)	ID (in)	Gauge (in)	Weight (lbs/ft)	Top Con	Length (m)	Bit - Center Blade (m)
1	Roller Cone Insert	10378981	12.250	3.000	12.250	377.57	P 6-5/8" Reg	0.35	
2	NB Integral Blade Stabilizer	207A144	8.000	3.000	12.250	147.22	B 4-1/2" IF	1.77	1.19
3	1x Pony Drill collar	A502	8.000	2.810		150.00	B 4-1/2" IF	4.59	
4	Integral Blade Stabilizer	207A138	8.000	3.000	12.250	147.22	B 4-1/2" IF	1.97	7.59
5	Non-Mag 8" MWD PM Sub	dm67106	8.000	2.500		154.58	B 4-1/2" IF	2.81	
6	8" RLL w/DGR + EWR	dm90056915	8.000	2.500	11.250	154.58	B 4-1/2" IF	7.14	
7	Non-Mag 8" MWD Pulser / TM Sub	10536016	8.000	2.500		154.58	B 4-1/2" IF	3.11	
8	Integral Blade Stabilizer St	91322	8.000	2.500	12.000	154.58	B 4-1/2" IF	1.82	22.48
9	3 x 8" Drill Collars	RIG	8.000	2.810		150.00	B 4-1/2" IF	27.44	
10	Drilling Jar	MHA00206	8.250	2.400		166.76	B 4-1/2" IF	9.68	
11	2 x 8" Drill Collars	Rig	8.000	2.810		150.00	B 4-1/2" IF	18.30	
12	Cross Over Sub		8.000	2.800		150.32	B 4-1/2" IF	1.09	
13	18x HWDP		5.000	3.000		49.30	B 4-1/2" IF	166.00	
								246.07	

Parameter	Min	Max	Ave
WOB (klbs) :	30	30	30
RPM (rpm) :	120	120	120
Flow (gpm) :	800	800	800
SPP (psi) :	3500	3500	3500

Activity	Hrs
Drilling :	16.00
Reaming :	16.50
Circ-Other :	9.00
Total :	41.50

BHA Weight	(lb)
in Air (Total) :	67238
in Mud (Total) :	57297
in Air (Bel Jars) :	25549
in Mud (Bel Jars) :	21772

Drill String	OD(in)	Len(m)

PERFORMANCE

	In	Out
Inclination (deg)	35.36	34.64
Azimuth (deg)	18.36	19.03

	Distance(m)	ROP (m/hr)	Build (°/30m)	Turn (°/30m)	DLS (°/30m)
Oriented :	0.00	0			
Rotated :	70.50	4			
Total :	70.50	4	-0.31	0.28	0.35

COMMENTS

OBJECTIVES:

Drill tangent section to casing depth 2772m

RESULTS:

This packed rotary assembly with an insert bit had to be reamed into the hole from 1767m - 2702m due to poor hole conditions and under gauge hole from previous run. Drilling progress was slow as the bit was probably under gauge and hole opened to full size by the stabilizers (ROP 3-12m/hr).

Stopped drilling at 2770m when ROV noticed mud escaping around conductor.

Wiper trip to 2700m, washing out of hole from 1978 - 2772m. Only one tight spot at 2359 metres running back to bottom.

Drilling hrs 10.9

Circulating hr 39.25

Below rotary hrs 63.8

Bit Grade 3-3-BT-M-E-IN-CT-TD Krev 79

Top 12" stabilizer 1/8"UG, the rest where 1/16' worn.

RECOMMENDATIONS:

Future runs through these formations should consider roller reamers.

BHA Report

Client : Bass Strait Oil Company Ltd.
Well Name : Zane Grey #1
Field : Zane Grey
Location : Bass Strait
Rig : Ocean Patriot
Job # : AU-DD-0003415248

BHA# 6

BHA# 6 : Date In :13/02/200 MD In (m) : 2773 TVD In (m) : 2421 Date Out 16/02/200 MD Out (m): 2773 TVD Out (m): 2421

BIT DATA

Bit #	OD (in)	MFR	Style	Serial#	Nozzles (/32's)	TFA (in ²)	Dull Condition
4	12.250	SDBS	XS4	718015	3x20	0.920	1-2-WT-A -E-I-NO-TD

MOTOR DATA

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

COMPONENT DATA

Item #	Description	Serial #	OD (in)	ID (in)	Gauge (in)	Weight (lbs/ft)	Top Con	Length (m)	Bit - Center Blade (m)
1	Roller Cone Insert	718015	12.250	3.000	12.250	377.57	P 6-5/8" Reg	0.35	
2	NB Integral Blade Stabilizer	207A144	8.000	3.000	12.250	147.22	B 4-1/2" IF	1.77	1.19
3	1x Pony Drill collar	A502	8.000	2.810		150.00	B 4-1/2" IF	4.59	
4	Integral Blade Stabilizer	207A138	8.000	3.000	12.125	147.22	B 4-1/2" IF	1.97	7.59
5	Non-Mag 8" MWD PM Sub	513085	8.000	2.500		154.58	B 4-1/2" IF	2.81	
6	8" RLL w/DGR + EWR	XH1GR8	8.000	2.500	11.250	154.58	B 4-1/2" IF	7.14	
7	Non-Mag 8" MWD Pulser / TM Sub	10532336	8.000	2.500		154.58	B 4-1/2" IF	3.11	
8	Integral Blade Stabilizer St	91322	8.000	2.500	11.880	154.58	B 4-1/2" IF	1.82	22.48
9	3 x 8" Drill Collars	RIG	8.000	2.810		150.00	B 4-1/2" IF	27.44	
10	Drilling Jar	MHA00206	8.250	2.400		166.76	B 4-1/2" IF	9.68	
11	2 x 8" Drill Collars	Rig	8.000	2.810		150.00	B 4-1/2" IF	18.30	
12	Cross Over Sub		8.000	2.800		150.32	B 4-1/2" IF	1.09	
13	15x HWDP		5.000	3.000		49.30	B 4-1/2" IF	139.00	
								219.07	

Parameter	Min	Max	Ave
WOB (klbs) :			
RPM (rpm) :			
Flow (gpm) :			
SPP (psi) :			

Activity	Hrs
Drilling :	0.00
Reaming :	30.50
Circ-Other :	7.00
Total :	37.50

BHA Weight	(lb)
in Air (Total) :	62871
in Mud (Total) :	53576
in Air (Bel Jars) :	25549
in Mud (Bel Jars) :	21772

Drill String	OD(in)	Len(m)

PERFORMANCE

	In	Out
Inclination (deg)	34.64	34.64
Azimuth (deg)	19.03	19.03

Distance(m)	ROP (m/hr)	Build (°/30m)	Turn (°/30m)	DLS (°/30m)
Oriented :				
Rotated :				
Total :				

COMMENTS

OBJECTIVES:

Wash and Ream to section TD and clean hole before running 9 5/8" casing.

RESULTS:

Casing could not be run deeper than 1776 metres.
Rotary clean out assembly as per BHA #5, but with a rock bit Ream from 1777 - 2284m.
Five stand wiper trip and ream to 2232 metres, then wash to bottom.
When BHA #6 was POOH, all stabilisers came out the the same guage as when they were RIH.

Bit gauge; 1-2-WT-A-E-IN-NO-TD.
Krev 51.7
Circulating hrs 31.5 hrs.
Below rotary 56 hrs.
Drilling hrs 8 hrs

sperry-sun

DRILLING SERVICES

BHA Report

Client : Bass Strait Oil Company Ltd.
Well Name : Zane Grey #1
Field : Zane Grey
Location : Bass Strait
Rig : Ocean Patriot
Job # : AU-DD-0003415248

BHA# 7

BHA# 7 : Date In :18/02/200 MD In (m) : 2773 TVD In (m) : 2421 Date Out 19/02/200 MD Out (m): 2773 TVD Out (m): 2421

BIT DATA

Bit #	OD (in)	MFR	Style	Serial#	Nozzles (/32's)	TFA (in²)	Dull Condition
6	8.500	SSDS	EBXSC1S	10676290	3x20	0.920	1-1-NO-A -E-1-NO-BHA

MOTOR DATA

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

COMPONENT DATA

Item #	Description	Serial #	OD (in)	ID (in)	Gauge (in)	Weight (lbs/ft)	Top Con	Length (m)	Bit - Center Blade (m)
1	Roller Cone Mill Tooth	10676290	8.500	2.500	8.500	176.66	P 4-1/2" Reg	0.34	
2	Bit Sub	1860044	6.500	2.875		90.96	B 4-1/2" IF	1.00	
3	Pony collar	A366	6.500	2.813		91.91	B 4-1/2" IF	1.56	
4	Pony Drill collar	47645	6.563	2.813		94.11	B 4-1/2" IF	2.53	
5	Integral Blade Stabilizer	207A147	6.500	2.875	8.500	90.96	B 4-1/2" IF	1.49	5.96
6	3x Drill collar		6.500	2.813		92.00	B 4-1/2" IF	27.30	
7	Drilling Jar	40909	6.500	2.750		92.85	B 4-1/2" IF	9.87	
8	2x Drill collar		6.500	2.813		92.00	B 4-1/2" IF	18.20	
9	15x HWDP		5.000	3.000		49.30	B 4-1/2" IF	166.00	
								228.29	

Parameter	Min	Max	Ave
WOB (klbs) :			
RPM (rpm) :			
Flow (gpm) :			
SPP (psi) :			

Activity	Hrs
Drilling :	0.00
Reaming :	0.00
Circ-Other :	1.00
Total :	1.00

BHA Weight (lb)
in Air (Total) : 45782
in Mud (Total) : 39013
in Air (Bel Jars) : 10432
in Mud (Bel Jars) : 8890

Drill String	OD(in)	Len(m)

PERFORMANCE

	In	Out
Inclination (deg)	34.64	34.64
Azimuth (deg)	19.03	19.03

Distance(m)	ROP (m/hr)	Build (°/30m)	Turn (°/30m)	DLS (°/30m)
Oriented :				
Rotated :				
Total :				

COMMENTS

Client : Bass Strait Oil Company Ltd.**Well Name** : Zane Grey #1**Field** : Zane Grey**Location** : Bass Strait**Rig** : Ocean Patriot**Job #** : AU-DD-0003415248**BHA# 7****OBJECTIVES:**

The objective of this BHA is to drill-out the Float, Shoe cement track and a 50m pocket to enable a cement plug to be positioned to perform a sidetrack due to the setting depth of the 9 5/8" casing.

RESULTS:

Clean out 9 5/8 casing, drill 50m pocket.

IB String Stb came out with under 1/16", bit also under 1/8"

Bit Gauge 1-1-NO-A-E-1/8-NO-BHA.

Bit hrs = 20.2

Circulating hrs = 15.2

Below rotary hrs = 36.3

Krev = 64.4

Motor Serial # : 963367	Job # : AU-DD-0003415248
Directional Driller(s) : Paul Gallagher, John Smith	Client : Bass Strait Oil Company Ltd.
Location : Bass Strait	Rig : Ocean Patriot
Well Name : Zane Grey #1	Bit Run # : 1 BHA # : 1 Motor Run # : 1
Depth In/Out : 128 / 1095 m	Date In/Out : 30/01/2005 / 1/02/2005 Hole Size : 16.000 in
Application Details : Kickoff	

MOTOR CONFIGURATION

	From Bit (m)	Component	Type	Diam In/Out (in)
Upr Stab	1 1.14	Sleeve Stab/Pad	Yes	15.500 15.500
	2 2.62	Bent Housing	Yes	Adjustable: 1.15° bend
Lwr Stab or Pad Sub	3	Housing Tool Used	No	
Motor Top	4 9.47	Stator Elastomer		
Pad	5	Bent Sub / 2nd Bent Hsg	No	
Bend (Housing)	6 10.96	Lower String Stab	Yes	15.000 15.000
Sleeve Tool	7 26.00	Upper String Stab	Yes	15.000 15.000

Additional Features :	Flex Collar : No	Short Brg Pack : No	Rtr Noz / Size : /32's	Arr Ret
Brg Cfg (Off/On) :	Lobe Cfg : 6/7	BHA OD/ID : 8.000 / 3.000 in	Pick Up Sub : No	No
			Bit Box Protr : Yes	No

MOTOR RUN DATA

Max Dogleg While Rotating : 3.50 °/30m	RPM : 80	Motor Stalled : No	Prev Job/Well Hrs : 0.00
Max Dogleg Overpulled In : 0.00 °/30m	Force : 0 lbf	Float Valve : Yes	Drilling Hrs : 36.50
Max Dogleg Pushed Through : 0.00 °/30m	Force : 0 lbf	DP Filter : No	Circ Hrs : 2.00
Hole Azimuth Start / End : 162.66° / 14.59°	Inc Start / End : 0.34° / 34.84°		Reaming Hrs : 0.00
Interval Oriented / Rot. : 216 / 751 m	Directional Perf Ori / Rot : / °/30m		Total Hrs This Run : 38.50
Jarring Occured : No			New Cumulative Hrs : 38.50

	Diff Press (psi)	Str RPM	Rotn Torque (ft-lbs)	Drag Up/Dn (lbf)	WOB (klbs)	ROP Oriented (m/hr)	ROP Rotated (m/hr)
Avg :	114	80	6000	10000 / 10000	17	38	23
Max :	150	80	7000	20000 / 30000	20	95	95

PRE-RUN TESTS

Motor Tested Pre-Run : Yes	with : , Bit, MWD
Dump Sub Operating : N/A	Brg Play : 4.0 mm
Flow 1 : 800 gpm	Pressure 1 : psi
Flow 2 : gpm	Pressure 2 : psi
Driveshaft Rotation Observed : No	
Bearing Leakage Observed : No	

POST-RUN TESTS

Motor Tested Post-Run : No	with :
Dump Sub Operating : N/A	Brg Play : 4.0 mm
Flow 1 : gpm	Pressure 1 : psi
Flow 2 : gpm	Pressure 2 : psi
Driveshaft Rotation Observed : No	
Bearing Leakage Observed : No	
Driveshaft Rotated to Drain Mud : Yes	
Fluid Flushed : No	Fluid Used : Water

MUD DATA

Base : Water	Additives :	Mud Wt : 8.7 ppg	SPP Start/End : 2600 / 2900 psi
% Oil/Water : /	% Solids : 0.50	% Sand :	PV : 8 cp YP : 10.0 lbf/100ft² pH : 8.8
DH Temp Avg/Max : 50.0 / 50.0	FlowRate Avg/Max : 1098 / 1120 gpm	Chloride Content : 25000 ppm	
Principle Formation Name(s) :	Lithology :		

BIT DATA

Make : Smith	Type : GXI	Serial # : MM4714	Dull Grade	1	2	3	4	5	6	7	8
Pre Existing Hours From Other Wells:			In	NEW							
Prev Drilling Hrs : 0.00	Prev Reaming Hrs : 0.00	No of Runs This Bit : 1	Out	1	1	NO	A	E	0	NO	PR
Jet Sizes (/32's) : 2x22, 1x18, 1x18	TFA : 1.239 in²	Gage Length : in									

PERFORMANCE COMMENTS

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

Drilled 970.3m Avg ROP 53m/hr
 Drll hrs 18.28
 Circ hrs 35.15

Customer Representative's Signature (optional) : Date:

Motor Serial # : 963367	Job # : AU-DD-0003415248
Directional Driller(s) : John Smith, Sompon T.	Client : Bass Strait Oil Company Ltd.
Location : Bass Strait	Rig : Ocean Patriot
Well Name : Zane Grey #1	Bit Run # : 2 BHA # : 2 Motor Run # : 2
Depth In/Out : 1095 / 1095 m	Date In/Out : 4/02/2005 / 4/02/2005 Hole Size : 12.250 in
Application Details : Performance Drilling	

MOTOR CONFIGURATION

	From Bit (m)	Component	Type	Diam In/Out (in)
Upr Stab	1 0.99	Sleeve Stab/Pad	Yes	12.125 12.125
Lwr Stab or Pad Sub	2 2.55	Bent Housing	Yes	Adjustable: 1.15° bend
Motor Top	3	Housing Tool Used	Yes	Pad 0.125 in Th
Pad	4 9.40	Stator Elastomer		
Bend (Housing)	5	Bent Sub / 2nd Bent Hsg	No	
Sleeve Tool	6 12.33	Lower String Stab	Yes	12.250
	7 27.49	Upper String Stab	Yes	12.000 12.000
Additional Features : Flex Collar : No Short Brg Pack : No Rtr Noz / Size : /32's Brg Cfg (Off/On) : Lobe Cfg : 6/7 BHA OD/ID : 8.000 / 3.000 in				Arr Ret Pick Up Sub : No No Bit Box Protr : Yes No

MOTOR RUN DATA

Max Dogleg While Rotating		:	°/30m	RPM	:	Motor Stalled	:	No	Prev Job/Well Hrs	:	38.50		
Max Dogleg Overpulled In		:	°/30m	Force	:	Float Valve	:	No	Drilling Hrs	:	0.00		
Max Dogleg Pushed Through		:	°/30m	Force	:	DP Filter	:	No	Circ Hrs	:	0.00		
Hole Azimuth Start / End		:	14.59° / 14.59°	Inc Start / End	:	34.84° / 34.84°			Reaming Hrs	:	0.00		
Interval Oriented / Rot.		:	m	Directional Perf Ori / Rot	:	/	°/30m		Total Hrs This Run	:	0.00		
Jarring Occured		:	No						New Cumulative Hrs	:	38.50		
	Diff Press	(psi)	Str RPM	Rotn Torque	(ft-lbs)	Drag Up/Dn	(lbf)	WOB	(klbs)	ROP Oriented	(m/hr)	ROP Rotated	(m/hr)
Avg :					/								
Max :					/								

PRE-RUN TESTS

Motor Tested Pre-Run : Yes	with : , Bit, MWD
Dump Sub Operating : N/A	Brg Play : 4.0 mm
Flow 1 : 800 gpm	Pressure 1 : 1650 psi
Flow 2 : 600 gpm	Pressure 2 : 1850 psi
Driveshaft Rotation Observed : No	
Bearing Leakage Observed : No	

POST-RUN TESTS

Motor Tested Post-Run : Yes	with : , Bit, MWD
Dump Sub Operating : N/A	Brg Play : 5.0 mm
Flow 1 : 800 gpm	Pressure 1 : 1650 psi
Flow 2 : 800 gpm	Pressure 2 : 1850 psi
Driveshaft Rotation Observed : No	
Bearing Leakage Observed : No	
Driveshaft Rotated to Drain Mud : Yes	
Fluid Flushed : No	Fluid Used :

MUD DATA

Base : Water	Additives :	Mud Wt : 8.7 ppg	SPP Start/End : psi
% Oil/Water : /	% Solids : 0.50	% Sand :	PV : 8 cp YP : 10.0 lbf/100ft² pH : 8.8
DH Temp Avg/Max : /	FlowRate Avg/Max : / gpm	Chloride Content : 25000 ppm	
Principle Formation Name(s) :		Lithology :	

BIT DATA

Make : Security DBS	Type : FSX563	Serial # : 10648437	Dull Grade	1	2	3	4	5	6	7	8
Pre Existing Hours From Other Wells:			In								
Prev Drilling Hrs : 0.00	Prev Reaming Hrs : 0.00	No of Runs This Bit : 1	Out								
Jet Sizes (/32's) : 5x15, 2x14	TFA : 1.164 in²	Gage Length : 4.000 in									

PERFORMANCE COMMENTS

Problem Perceived : No	Problem Date :	Service Interrupt : No	Service Interrupt Hrs :
Performance Motor : Yes	Tandem Motor : No	LIH : No	PPR Ref # :
Shallow AGS, Motor Test 870 GPM & 204 SPM; FG= 1850 psi, UG=1650 psi POOH to replace MWD components			
Customer Representative's Signature (optional) :		Date:	

Motor Serial # : 963367	Job # : AU-DD-0003415248
Directional Driller(s) : John Smith, Sompon T.	Client : Bass Strait Oil Company Ltd.
Location : Bass Strait	Rig : Ocean Patriot
Well Name : Zane Grey #1	Bit Run # : 2rr1 BHA # : 3
Depth In/Out : 1095 / 2103 m	Date In/Out : 4/02/2005 / 7/02/2005
Application Details : Performance Drilling	Motor Run # : 3
	Hole Size : 12.250 in

MOTOR CONFIGURATION

	From Bit (m)	Component	Type	Diam In/Out (in)
Upr Stab	1 0.99	Sleeve Stab/Pad	Yes	12.125 12.125
	2 2.55	Bent Housing	Yes	
Lwr Stab or Pad Sub	3	Housing Tool Used	No	
Motor Top	4 9.40	Stator Elastomer		
Pad	5	Bent Sub / 2nd Bent Hsg	No	
Bend (Housing)	6 12.33	Lower String Stab	Yes	12.250
Sleeve Tool	7 27.56	Upper String Stab	Yes	12.000 12.000

Additional Features :	Flex Collar : No	Short Brg Pack : No	Rtr Noz / Size : /32's	Arr Ret
Brg Cfg (Off/On) :	Lobe Cfg : 6/7	BHA OD/ID : 8.000 / 3.000 in	Pick Up Sub : No	No
			Bit Box Protr : Yes	No

MOTOR RUN DATA

Max Dogleg While Rotating : 2.00 %/30m	RPM : 80	Motor Stalled : Yes	Prev Job/Well Hrs : 38.50
Max Dogleg Overpulled In : 2.00 %/30m	Force : 10000 lbf	Float Valve : No	Drilling Hrs : 32.50
Max Dogleg Pushed Through : 2.00 %/30m	Force : 10000 lbf	DP Filter : No	Circ Hrs : 15.00
Hole Azimuth Start / End : 14.59° / 17.15°	Inc Start / End : 34.84° / 33.10°		Reaming Hrs : 0.00
Interval Oriented / Rot. : 15 / 993 m	Directional Perf Ori / Rot : / %/30m		Total Hrs This Run : 47.50
Jarring Occured : No			New Cumulative Hrs : 86.00

	Diff Press (psi)	Str RPM	Rotn Torque (ft-lbs)	Drag Up/Dn (lbf)	WOB (klbs)	ROP Oriented (m/hr)	ROP Rotated (m/hr)
Avg :	297	80	11667	10000 / 20000	17	13	31
Max :	300	80	13000	20000 / 20000	20	30	90

PRE-RUN TESTS

Motor Tested Pre-Run : Yes	with : , Bit, MWD
Dump Sub Operating : N/A	Brg Play : 4.0 mm
Flow 1 : 870 gpm	Pressure 1 : 1850 psi
Flow 2 : 870 gpm	Pressure 2 : 1650 psi
Driveshaft Rotation Observed : No	
Bearing Leakage Observed : No	

POST-RUN TESTS

Motor Tested Post-Run : No	with : , Bit, MWD
Dump Sub Operating : N/A	Brg Play : 5.0 mm
Flow 1 : 800 gpm	Pressure 1 : 1250 psi
Flow 2 : 800 gpm	Pressure 2 : 1000 psi
Driveshaft Rotation Observed : No	
Bearing Leakage Observed : No	
Driveshaft Rotated to Drain Mud : Yes	
Fluid Flushed : No	Fluid Used :

MUD DATA

Base : Water	Additives :	Mud Wt : 9.5 ppg	SPP Start/End : 2950 / 3300 psi
% Oil/Water : /	% Solids : 10.00	% Sand : 1.00	PV : 19 cp
DH Temp Avg/Max : 70.0 / 70.0	FlowRate Avg/Max : 958 / 1100 gpm	YP : 32.0 lbf/100ft²	pH : 9.0
Principle Formation Name(s) :		Chloride Content : 30000 ppm	Lithology :

BIT DATA

Make : Security DBS	Type : FSX563	Serial # : 10648437	Dull Grade	1	2	3	4	5	6	7	8
Pre Existing Hours From Other Wells:			In								NEW
Prev Drilling Hrs : 0.00	Prev Reaming Hrs : 0.00	No of Runs This Bit : 2	Out	1	2	BT	G	X	I	CT	RP
Jet Sizes (/32's) : 5x15, 2x14	TFA : 1.164 in²	Gage Length : 4.000 in									

PERFORMANCE COMMENTS

Problem Perceived : No	Problem Date :	Service Interrupt : No	Service Interrupt Hrs :
Performance Motor : Yes	Tandem Motor : No	LIH : No	PPR Ref # :
This BHA was POOH, Because Blocks dropped on string.			
Drilled 1003 m			
Customer Representative's Signature (optional) :		Date:	

Motor Serial # : 963367 Directional Driller(s) : John Smith, Sompon T. Location : Bass Strait Well Name : Zane Grey #1 Depth In/Out : 2103 / 2702 m Application Details : Performance Drilling	Job # : AU-DD-0003415248 Client : Bass Strait Oil Company Ltd. Rig : Ocean Patriot Bit Run # : 2rr2 BHA # : 4 Date In/Out : 7/02/2005 / 9/02/2005 Motor Run # : 4 Hole Size : 12.250 in
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MOTOR CONFIGURATION

	From Bit (m)	Component	Type	Diam In/Out (in)
Upr Stab	1 0.99	Sleeve Stab/Pad	Yes	12.125 12.125
Lwr Stab or Pad Sub	2 2.55	Bent Housing	Yes	Adjustable: 0.78° bend
Motor Top	3	Housing Tool Used	No	
Pad	4 9.40	Stator Elastomer	Nitrile	
Bend (Housing)	5	Bent Sub / 2nd Bent Hsg	No	
	6 12.33	Lower String Stab	Yes	12.250
Sleeve Tool	7 27.56	Upper String Stab	Yes	12.000 12.000
Additional Features : Flex Collar : No Short Brg Pack : No Rtr Noz / Size : /32's Brg Cfg (Off/On) : Lobe Cfg : 6/7 BHA OD/ID : 8.000 / 3.000 in				Arr Ret Pick Up Sub : No No Bit Box Protr : Yes No

MOTOR RUN DATA

Max Dogleg While Rotating : °/30m Max Dogleg Overpulled In : °/30m Max Dogleg Pushed Through : °/30m	RPM : Force : lbf Force : lbf	Motor Stalled : Yes Float Valve : Yes DP Filter : No
Hole Azimuth Start / End : 17.15° / 18.36° Interval Oriented / Rot. : 4 / 595 m	Inc Start / End : 33.10° / 35.36° Directional Perf Ori / Rot : / °/30m	Prev Job/Well Hrs : 86.00 Drilling Hrs : 31.50 Circ Hrs : 5.50 Reaming Hrs : 1.50 Total Hrs This Run : 38.50 New Cumulative Hrs : 124.50
Jarring Occured : No		
Diff Press (psi)	Str RPM	Rotn Torque (ft-lbs)
Avg : 274	83	15333
Max : 300	120	18000

PRE-RUN TESTS

Motor Tested Pre-Run : Yes Dump Sub Operating : N/A Flow 1 : 800 gpm Flow 2 : 800 gpm Driveshaft Rotation Observed : No Bearing Leakage Observed : No	with : 2 Collars, Bit, MWD Brg Play : 5.0 mm Pressure 1 : 1250 psi Pressure 2 : 1000 psi
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POST-RUN TESTS

Motor Tested Post-Run : No Dump Sub Operating : N/A Flow 1 : 850 gpm Flow 2 : 850 gpm Driveshaft Rotation Observed : No Bearing Leakage Observed : No Driveshaft Rotated to Drain Mud : Yes	with : 2 Collars, Bit, MWD Brg Play : 7.0 mm Pressure 1 : 3350 psi Pressure 2 : 3650 psi Fluid Flushed : No Fluid Used :
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MUD DATA

Base : Water % Oil/Water : / DH Temp Avg/Max : / Principle Formation Name(s) :	Additives : % Solids : 11.00 % Sand : 1.00 FlowRate Avg/Max : 905 / 1100 gpm Lithology :	Mud Wt : 9.7 ppg PV : 21 cp YP : 36.0 lbf/100ft² pH : 5.0 SPP Start/End : 1700 / 3500 psi Chloride Content : 35000 ppm
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BIT DATA

Make : Security DBS				Type : FSX563	Serial #: 10648437		Dull Grade		1	2	3	4	5	6	7	8					
Pre Existing Hours From Other Wells:																					
Prev Drilling Hrs		: 32.50		Prev Reaming Hrs		: 0.00		No of Runs This Bit		: 3		In		1	2	BT	G	X	I	CT	RP
Jet Sizes (/32's)		: 5x15, 2x14		TFA		: 1.164 in²		Gage Length		: 4.000 in		Out		2	3	BT	G	X	4	WT	PR

PERFORMANCE COMMENTS

Problem Perceived : Yes Performance Motor : Yes	Problem Date : 9/02/2005 Tandem Motor : No	Service Interrupt : No LIH : No	Service Interrupt Hrs : PPR Ref # :
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Motor frequently stalled
 2 X Allen screws from UV joint retrieved from bit nozzles.
 Circulating hrs 35.78, Drilling hrs 18.78, Below rotating hrs 52.93 Drilled feet 599 meters, 2-3-BT-G-X-4-WT-PR Krev = 206.5

Customer Representative's Signature (optional) : Date:



Daily Drilling Report

Client : Bass Strait Oil Company Ltd.
Well Name : Zane Grey #1
Field : Zane Grey
Location : Bass Strait
Rig : Ocean Patriot
Job # : AU-DD-0003415248

CURRENT STATUS Report # 1 28/01/2005

Total Depth	(m)	:	74	Casing Depth	(m)	:	128.50	Operator Reps	:	Chris Wilson, James Gilmore
Drilled last 24 hrs	(m)	:	74	Casing Diameter	(in)	:	30.000	SSDS Reps	:	Paul Gallagher (1), John Smith (1)
Hole Size	(in)	:		Casing ID	(in)	:				

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
0.00	0.00	0.00	0.00	0.00	N00.00E

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)
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BHA SUMMARY

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lb/100ft²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
Gel/Freshwater	8.7	47	8	10.0	4.0 / 5.0	5	8.8	0.50		

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	00:00	24.00	74.50		Miscellaneous

COMMENTS

Arrive on rig and inventory check



Daily Drilling Report

Client : Bass Strait Oil Company Ltd.
Well Name : Zane Grey #1
Field : Zane Grey
Location : Bass Strait
Rig : Ocean Patriot
Job # : AU-DD-0003415248

CURRENT STATUS Report # 2 29/01/2005

Total Depth	(m)	:	128	Casing Depth	(m)	:	127.50	Operator Reps	:	Chris Wilson, Stuart, J. Gilmore
Drilled last 24 hrs	(m)	:	53	Casing Diameter	(in)	:	30.000	SSDS Reps	:	Paul Gallagher (2), John Smith (2)
Hole Size	(in)	:		Casing ID	(in)	:	27.000			

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
0.00	0.00	0.00	0.00	0.00	N00.00E

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lb/100ft²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
Gel/Freshwater	8.7	47	8	10.0	4.0 / 5.0	5	8.8	0.50		

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	14:00	14.00	74.50		Pick Up Drill pipe
14:00	14:30	0.50	74.50		Trip In With 26" Bit and 36" hole opener
14:30	15:30	1.00	128.00		Drilling 74.50 - 128m
15:30	18:00	2.50	128.00		Run Casing / Cement
18:00	21:30	3.50	128.00		Run Casing / Cement
21:30	00:00	2.50	128.00		Wait on Cement

COMMENTS

Spud well and drill to 128m. Run 30" conductor to 127.5m and cement.

sperry-sun

DRILLING SERVICES

Daily Drilling Report

Client : Bass Strait Oil Company Ltd.
Well Name : Zane Grey #1
Field : Zane Grey
Location : Bass Strait
Rig : Ocean Patriot
Job # : AU-DD-0003415248

CURRENT STATUS Report # 3 30/01/2005

Total Depth (m) :	684	Casing Depth (m) :	127.50	Operator Reps :	Chris Wilson, Stuart, J. Gilmore
Drilled last 24 hrs (m) :	556	Casing Diameter (in) :	30.000	SSDS Reps :	Paul Gallagher (3), John Smith (3)
Hole Size (in) :	16.000	Casing ID (in) :	27.000		

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
663.37	17.26	12.12	660.51	26.67	N19.99E

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

BHA 1: 249.57 m; Bit #1 (11. hrs), PDM #1 (11. hrs), Sub, Stab, Sub, MWD, Sub, Stab, 3 x DC, Jar, 2 x DC, Sub, 18x HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lb/100ft ²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
					/					

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	02:30	2.50	128.00		Wait on Cement
02:30	03:30	1.00	128.00		Trip In
03:30	05:00	1.50	128.00		Trip Out Lay out Bit and hole opener
05:00	07:00	2.00	128.00		Make up 18 3/4" Rt and express tool
07:00	12:00	5.00	128.00	1	PU BHA 1
12:00	12:30	0.50	128.00	1	Rig Repair tilt arm
12:30	13:00	0.50	128.00	1	Trip In Tag TOC 125m
13:00	13:30	0.50	128.00	1	Drilling cement and shoe track, work through same
13:30	00:00	10.50	684.00	1	Drilling 16" Hole 128 - 684m

COMMENTS

Shallow Hole Test OK.
No problems drilling cement and shoe track.



Client : Bass Strait Oil Company Ltd.
Well Name : Zane Grey #1
Field : Zane Grey
Location : Bass Strait
Rig : Ocean Patriot
Job # : AU-DD-0003415248

CURRENT STATUS	Report # 4	31/01/2005
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LAST SURVEY

LAST FORMATION TOP

BHA SUMMARY

BHA 1: 249.57 m; Bit #1 (35. hrs), PDM #1 (35. hrs), Sub, Stab, Sub, MWD, Sub, Stab, 3 x DC, Jar, 2 x DC, Sub, 18x HWDP

MUD DATA

TIME BREAKDOWN

COMMENTS

Drilling with seawater and gel sweeps.



Client : Bass Strait Oil Company Ltd.
Well Name : Zane Grey #1
Field : Zane Grey
Location : Bass Strait
Rig : Ocean Patriot
Job # : AU-DD-0003415248

Total Depth	(m)	1095	Casing Depth	(m)	1090.61	Operator Reps	Chris Wilson, Stuart, J. Gilmore
Drilled last 24 hrs	(m)	16	Casing Diameter	(in)	13.375	SSDS Reps	Paul Gallagher (5), John Smith (5)
Hole Size	(in)	16.000	Casing ID	(in)			

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
1080.74	34.99	14.71	1021.83	232.02	N15.57E

Formation Name	MD Top (m)	TVD Top (m)

BHA 1: 249.57 m; Bit #1 (36.5 hrs), PDM #1 (38.5 hrs), Sub, Stab, Sub, MWD, Sub, Stab, 3 x DC, Jar, 2 x DC, Sub, 18x HWDP

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lbf/100ft²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
Gel/Freshwater	8.7	47	8	10.0	4.0 / 5.0	5	8.8	0.50		

From	To	Hours	TMD (m)	BHA #	Activity
00:00	01:30	1.50	1095.00	1	Drilling 1079 - 1095m
01:30	03:30	2.00	1095.00	1	Circulate
03:30	05:30	2.00	1095.00	1	Trip Out
05:30	08:15	2.75	1095.00	1	Trip Out (at Surface)
08:15	08:30	0.25	1095.00	1	Rack back BHA 1
08:30	00:00	15.50	1095.00		Run Casing / Cement

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DRILLING SERVICES

Daily Drilling Report

Client : Bass Strait Oil Company Ltd.
Well Name : Zane Grey #1
Field : Zane Grey
Location : Bass Strait
Rig : Ocean Patriot
Job # : AU-DD-0003415248

CURRENT STATUS Report # 6 2/02/2005

Total Depth (m) :	1095	Casing Depth (m) :	1090.61	Operator Reps :	Chris Wilson, S Douglas, J Gilmore
Drilled last 24 hrs (m) :	0	Casing Diameter (in) :	13.375	SSDS Reps :	Paul Gallagher (6), John Smith (6)
Hole Size (in) :		Casing ID (in) :			

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
1080.74	34.99	14.71	1021.83	232.02	N15.57E

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lb/100ft ²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
Gel/Freshwater	8.7	47	8	10.0	4.0 / 5.0	5	8.8	0.50		

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	03:30	3.50	1095.00		POOH with 18 3/4" RT & cmt stinger -BkOut same
03:30	05:00	1.50	1095.00		R/U to run riser & BOP
05:00	09:30	4.50	1095.00		M/U riser & BOP
09:30	10:30	1.00	1095.00		Test choke kill line
10:30	13:00	2.50	1095.00		Cont to run marine riser & BOP
13:00	16:30	3.50	1095.00		P/ U and run slip joint and landing jt/ N/U C/k line
16:30	17:30	1.00	1095.00		Engage SDL ring
17:30	18:00	0.50	1095.00		Test C/K line.
18:00	00:00	6.00	1095.00		Waiting on Weather

COMMENTS



Client : Bass Strait Oil Company Ltd.
Well Name : Zane Grey #1
Field : Zane Grey
Location : Bass Strait
Rig : Ocean Patriot
Job # : AU-DD-0003415248

Total Depth	(m)	:	1095	Casing Depth	(m)	:	1090.61	Operator Reps	:	Chris Wilson, S Douglas, J Gilmore
Drilled last 24 hrs	(m)	:	0	Casing Diameter	(in)	:	13.375	SSDS Reps	:	Paul Gallagher (7), John Smith (7)
Hole Size	(in)	:		Casing ID	(in)	:				

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
1080.74	34.99	14.71	1021.83	232.02	N15.57E

Formation Name	MD Top (m)	TVD Top (m)

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Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lbf/100ft ²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
Gel/Freshwater	8.7	47	8	10.0	4.0 / 5.0	5	8.8	0.50		

From	To	Hours	TMD (m)	BHA #	Activity
00:00	16:30	16.50	1095.00		Waiting on Weather
16:30	19:30	3.00	1095.00		Re position rig. Install storm saddles in moonpool
19:30	21:00	1.50	1095.00		back out dogs on slip joint and scope out same
21:00	22:30	1.50	1095.00		L/D landing jt, and P/U diverters and install
22:30	00:00	1.50	1095.00		Test surface lines 3500 psi, and Csg test, R/D riser handing equipment.

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DRILLING SERVICES

Daily Drilling Report

Client : Bass Strait Oil Company Ltd.
Well Name : Zane Grey #1
Field : Zane Grey
Location : Bass Strait
Rig : Ocean Patriot
Job # : AU-DD-0003415248

CURRENT STATUS Report # 8 4/02/2005

Total Depth (m) :	1098	Casing Depth (m) :	1090.61	Operator Reps :	Chris Wilson, S Douglas, J Gilmore
Drilled last 24 hrs (m) :	3	Casing Diameter (in) :	13.375	SSDS Reps :	John Smith (8), Sompon T. (1)
Hole Size (in) :	12.250	Casing ID (in) :			

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
1080.74	34.99	14.71	1021.83	232.02	N15.57E

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

BHA 2: 251.24 m; Bit #2 (65.5 hrs), PDM #2 (38.5 hrs), Sub, AGS, Sub, MWD, Sub, Stab, 3 x DC, Jar, 2 x DC, Sub, 18x HWDP
BHA 3: 251.31 m; Bit #2rr1 (0.5 hrs), PDM #3 (45. hrs), Sub, AGS, Sub, MWD, Sub, Stab, 3 x DC, Jar, 2 x DC, Sub, 18x HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lb/100ft ²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
Gel/Freshwater	8.7	47	8	10.0	4.0 / 5.0	5	8.8	0.50		

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	05:30	5.50	1095.00	2	MU BHA 1 Shallow MWD & AGS test
05:30	06:30	1.00	1095.00	2	Trip In 342m
06:30	08:00	1.50	1095.00	2	Test BOP
08:00	08:30	0.50	1095.00	2	Re test MWD
08:30	09:00	0.50	1095.00	2	Centre rig over well
09:00	09:30	0.50	1095.00	2	Trip Out (at Surface)
09:30	13:00	3.50	1095.00	2	PU bha3/LD2 BHA and shallow hole test
13:00	17:00	4.00	1095.00	3	Trip In tag cmt 1058.77m
17:00	17:30	0.50	1095.00	3	Function test diverter
17:30	23:30	6.00	1095.00	3	Circulate drill float and shoe
23:30	00:00	0.50	1098.00	3	Drilling 1095 - 1098m

COMMENTS

Shallow AGS, Motor Test
870 GPM & 204 SPM; FG= 1850 psi, UG=1650 psi
Circ 0.96 hrs, Brt 7.36 hrs



Daily Drilling Report

Client : Bass Strait Oil Company Ltd.
Well Name : Zane Grey #1
Field : Zane Grey
Location : Bass Strait
Rig : Ocean Patriot
Job # : AU-DD-0003415248

CURRENT STATUS Report # 9 5/02/2005

Total Depth	(m)	:	1691	Casing Depth	(m)	:	1090.61	Operator Reps	:	Chris Wilson, S Douglas, J Gilmore
Drilled last 24 hrs	(m)	:	593	Casing Diameter	(in)	:	13.375	SSDS Reps	:	John Smith (9), Sompon T. (2)
Hole Size	(in)	:	12.250	Casing ID	(in)	:				

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
1667.52	34.04	16.13	1506.75	562.29	N14.67E

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)
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BHA SUMMARY

BHA 3: 251.31 m; Bit #2rr1 (22. hrs), PDM #3 (67. hrs), Sub, AGS, Sub, MWD, Sub, Stab, 3 x DC, Jar, 2 x DC, Sub, 18x HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lb/100ft ²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
Gel/Freshwater	8.7	47	8	10.0	4.0 / 5.0	5	8.8	0.50		

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	00:30	0.50	1098.00	3	Circulate bottom up
00:30	02:00	1.50	1098.00	3	Test BOP
02:00	23:30	21.50	1691.00	3	Drilling 1098 - 1691m
23:30	00:00	0.50	1691.00	3	Rig Repair, Kelly hose #2 washed out

COMMENTS

sperry-sun

DRILLING SERVICES

Daily Drilling Report

Client : Bass Strait Oil Company Ltd.
Well Name : Zane Grey #1
Field : Zane Grey
Location : Bass Strait
Rig : Ocean Patriot
Job # : AU-DD-0003415248

CURRENT STATUS Report # 10 6/02/2005

Total Depth (m) : 2103	Casing Depth (m) : 1090.61	Operator Reps : Chris Wilson, S Douglas, J Gilmore
Drilled last 24 hrs (m) : 412	Casing Diameter (in) : 13.375	SSDS Reps : John Smith (10), Sompon T. (3)
Hole Size (in) : 12.250	Casing ID (in) :	

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
2095.75	33.16	17.24	1861.84	801.48	N15.36E

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

BHA 3: 251.31 m; Bit #2rr1 (32.5 hrs), PDM #3 (85.5 hrs), Sub, AGS, Sub, MWD, Sub, Stab, 3 x DC, Jar, 2 x DC, Sub, 18x HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lbf/100ft ²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
KCl/Polymer	9.5	57	19	32.0	12.0 / 20.0	5	9.0	10.00	1.00	

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	03:00	3.00	1691.00	3	Rig Repair
03:00	13:30	10.50	2103.00	3	Drilling from 1691 - 2103m
13:30	16:00	2.50	2103.00	3	Rack back the bent stand
16:00	23:30	7.50	2103.00	3	POOH. Circ from 2103 to 1930 due to tight hole.
23:30	00:00	0.50	2103.00	3	Circulate Btm's Up

COMMENTS

sperry-sun

DRILLING SERVICES

Daily Drilling Report

Client : Bass Strait Oil Company Ltd.
Well Name : Zane Grey #1
Field : Zane Grey
Location : Bass Strait
Rig : Ocean Patriot
Job # : AU-DD-0003415248

CURRENT STATUS Report # 11 7/02/2005

Total Depth (m) : 2315	Casing Depth (m) : 2194.00	Operator Reps : Chris Wilson, S Douglas, Paul
Drilled last 24 hrs (m) : 212	Casing Diameter (in) : 9.875	SSDS Reps : John Smith (11), Sompon T. (4)
Hole Size (in) : 12.250	Casing ID (in) : 8.681	

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
2299.48	33.11	17.19	2033.31	911.45	N15.57E

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

BHA 3: 251.31 m; Bit #2rr1 (32.5 hrs), PDM #3 (86. hrs), Sub, AGS, Sub, MWD, Sub, Stab, 3 x DC, Jar, 2 x DC, Sub, 18x HWDP
 BHA 4: 251.31 m; Bit #2rr2 (41.5 hrs), PDM #4 (98.5 hrs), Sub, AGS, Sub, MWD, Sub, Stab, 3 x DC, Jar, 2 x DC, Sub, 18x HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lbf/100ft ²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
KCl/Polymer	9.5	57	19	32.0	12.0 / 20.0	5	9.0	10.00	1.00	

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	00:30	0.50	2103.00	3	Cont Circulate Btm's up
00:30	03:00	2.50	2103.00	3	Cont POOH from 1092 to 251 mtrs
03:00	05:00	2.00	2103.00	3	POOH, changed MWD, download MWD
05:00	07:00	2.00	2103.00	4	M/U new BHA#4, Changed bend of motor to 0.78
07:00	09:00	2.00	2103.00	4	Cont RIH to 1092 mtrs
09:00	10:30	1.50	2103.00	4	Circulate, condition mud
10:30	13:00	2.50	2103.00	4	Cont RIH to 1916 mtrs
13:00	14:00	1.00	2103.00	4	Reaming from 1916 to 2086 mtr
14:00	16:00	2.00	2103.00	4	Circulate, condition mud
16:00	16:30	0.50	2103.00	4	Reaming / Washing
16:30	00:00	7.50	2315.00	4	Drilling 2103 - 2315m

COMMENTS



Daily Drilling Report

Client : Bass Strait Oil Company Ltd.
Well Name : Zane Grey #1
Field : Zane Grey
Location : Bass Strait
Rig : Ocean Patriot
Job # : AU-DD-0003415248

CURRENT STATUS Report # 12 8/02/2005

Total Depth	(m)	:	2697	Casing Depth	(m)	:	2194.00	Operator Reps	:	S Douglas,, Peter Dane, Paul
Drilled last 24 hrs	(m)	:	382	Casing Diameter	(in)	:	9.875	SSDS Reps	:	John Smith (12), Sompon T. (5)
Hole Size	(in)	:	12.250	Casing ID	(in)	:	8.681			

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
2670.24	35.63	18.92	2337.32	1123.47	N16.01E

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

BHA 4: 251.31 m; Bit #2rr2 (65. hrs), PDM #4 (122. hrs), Sub, AGS, Sub, MWD, Sub, Stab, 3 x DC, Jar, 2 x DC, Sub, 18x HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lb/100ft²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
KCl/Polymer	9.5	65	16	38.0	9.0 / 14.0	6	9.0	9.00	1.00	

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	11:00	11.00	2546.00	4	Drilling 2315 - 2546m
11:00	11:30	0.50	2546.00	4	Rig Repair, Pump problem
11:30	00:00	12.50	2697.00	4	Drilling 2546 - 2697m

COMMENTS

[illegible]

sperry-sun

DRILLING SERVICES

Daily Drilling Report

Client : Bass Strait Oil Company Ltd.
Well Name : Zane Grey #1
Field : Zane Grey
Location : Bass Strait
Rig : Ocean Patriot
Job # : AU-DD-0003415248

CURRENT STATUS Report # 13 9/02/2005

Total Depth (m) :	2702	Casing Depth (m) :	2194.00	Operator Reps :	S Douglas,, Peter Dane, Paul
Drilled last 24 hrs (m) :	5	Casing Diameter (in) :	9.875	SSDS Reps :	John Smith (13), Sompon T. (6)
Hole Size (in) :	12.250	Casing ID (in) :	8.681		

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
2670.24	35.63	18.92	2337.32	1123.47	N16.01E

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

BHA 4: 251.31 m; Bit #2rr2 (65.5 hrs), PDM #4 (124.5 hrs), Sub, AGS, Sub, MWD, Sub, Stab, 3 x DC, Jar, 2 x DC, Sub, 18x HWDP
BHA 5: 246.07 m; Bit #3 (4. hrs), Stab, 1x DC, Stab, Sub, MWD, Sub, Stab, 3 x DC, Jar, 2 x DC, Sub, 18x HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lb/100ft ²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
KCl/Polymer	9.7	63	21	36.0	9.0 / 15.0		5.0	11.00	1.00	

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	00:30	0.50	2702.00	4	Drilling 2697 - 2702m
00:30	02:30	2.00	2702.00	4	Circulate, clean hole
02:30	08:30	6.00	2702.00	4	POOH, Flow check
08:30	11:00	2.50	2702.00	4	L/D MWD, AGS,mud motor and bit
11:00	15:00	4.00	2702.00	5	M/U BHA#5 shallow test MWD
15:00	15:30	0.50	2702.00	5	R/U hose to circulate down the string
15:30	17:00	1.50	2702.00	5	Circulate, slip @ cut
17:00	18:00	1.00	2702.00	5	Service Rig, TDS, pipe handler
18:00	20:00	2.00	2702.00	5	Cont RIH to 1767 mtrs
20:00	00:00	4.00	2702.00	5	Reaming / Washing to 2220 metres.

COMMENTS



Client : Bass Strait Oil Company Ltd.
Well Name : Zane Grey #1
Field : Zane Grey
Location : Bass Strait
Rig : Ocean Patriot
Job # : AU-DD-0003415248

Total Depth	(m)	2741	Casing Depth	(m)	2194.00	Operator Reps	S Douglas,, Peter Dane, Paul
Drilled last 24 hrs	(m)	39	Casing Diameter	(in)	9.875	SSDS Reps	John Smith (14), Sompon T. (7)
Hole Size	(in)	12.250	Casing ID	(in)	8.681		

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
2730.26	35.56	18.41	2386.20	1158.27	N16.09E

Formation Name	MD Top (m)	TVD Top (m)

BHA 5: 246.07 m; Bit #3 (24.5 hrs), Stab, 1x DC, Stab, Sub, MWD, Sub, Stab, 3 x DC, Jar, 2 x DC, Sub, 18x HWDP

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lbf/100ft²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
KCl/Polymer	9.7	63	21	36.0	9.0 / 15.0		5.0	11.00	1.00	

From	To	Hours	TMD (m)	BHA #	Activity
00:00	11:30	11.50	2702.00	5	Reaming / Washing to 2702mtrs
11:30	12:00	0.50	2703.00	5	Drilling and also take SCR's test
12:00	17:30	5.50	2725.00	5	Drilling 2703 - 2725m
17:30	20:30	3.00	2725.00	5	Rig Repair, Swivel package washed out on TDS
20:30	23:30	3.00	2741.00	5	Drilling 2725 - 2741m
23:30	00:00	0.50	2741.00	5	Circulate hole and work pipe while repair pumps.

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sperry-sun

DRILLING SERVICES

Daily Drilling Report

Client : Bass Strait Oil Company Ltd.
Well Name : Zane Grey #1
Field : Zane Grey
Location : Bass Strait
Rig : Ocean Patriot
Job # : AU-DD-0003415248

CURRENT STATUS Report # 15 11/02/2005

Total Depth (m) :	2773	Casing Depth (m) :	2194.00	Operator Reps :	S Douglas,, Peter Dane, Paul
Drilled last 24 hrs (m) :	32	Casing Diameter (in) :	9.875	SSDS Reps :	John Smith (15), Sompon T. (8)
Hole Size (in) :	12.250	Casing ID (in) :	8.681		

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
2758.61	34.94	18.82	2409.35	1174.62	N16.12E

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

BHA 5: 246.07 m; Bit #3 (32.5 hrs), Stab, 1x DC, Stab, Sub, MWD, Sub, Stab, 3 x DC, Jar, 2 x DC, Sub, 18x HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lb/100ft ²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
KCl/Polymer	9.7	63	21	36.0	9.0 / 15.0		5.0	11.00	1.00	

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	02:00	2.00	2741.00	5	Cont Circulate hole and repair pumps.
02:00	09:00	7.00	2772.50	5	Drilling 2741 - 2772m
09:00	11:00	2.00	2772.50	5	ROV observed mud seeping thru PGB, 2 x Circulate
11:00	11:30	0.50	2772.50	5	Wiper trip
11:30	13:00	1.50	2772.50	5	Circulate
13:00	14:00	1.00	2772.50	5	Cont POOH at 2628 mrs
14:00	15:00	1.00	2772.50	5	Backream from 2628 mtrs to 2398 mtrs.
15:00	19:00	4.00	2772.50	5	Cont POOH at 1968 mrs, 2359 mtrs Max pulled 70K.
19:00	20:30	1.50	2772.50	5	Circulate
20:30	00:00	3.50	2772.50	5	Cont POOH at 1480 mtr

COMMENTS



Daily Drilling Report

Client : Bass Strait Oil Company Ltd.
Well Name : Zane Grey #1
Field : Zane Grey
Location : Bass Strait
Rig : Ocean Patriot
Job # : AU-DD-0003415248

CURRENT STATUS Report # 16 12/02/2005

Total Depth	(m)	2773	Casing Depth	(m)	2194.00	Operator Reps	S Douglas,, Peter Dane, Paul
Drilled last 24 hrs	(m)	0	Casing Diameter	(in)	9.875	SSDS Reps	John Smith (16), Sompon T. (9)
Hole Size	(in)	12.250	Casing ID	(in)	8.681		

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
2758.61	34.94	18.82	2409.35	1174.62	N16.12E

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

BHA 5: 246.07 m; Bit #3 (32.5 hrs), Stab, 1x DC, Stab, Sub, MWD, Sub, Stab, 3 x DC, Jar, 2 x DC, Sub, 18x HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lbf/100ft²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
KCl/Polymer	9.7	63	21	36.0	9.0 / 15.0		5.0	11.00	1.00	

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	03:00	3.00	2772.50	5	POOH, L/D bit and bha
03:00	08:00	5.00	2772.50	5	M/U 9 5/8 cart
08:00	20:00	12.00	2772.50		Run Casing to 1776 mtrs, hole take 70k down.
20:00	20:30	0.50	2772.50		L/D casing jnt#104, R/D casing handling gear
20:30	00:00	3.50	2772.50		Rig Up 5" DP handling gear, MU one stand 5"DP to Circulat swedge. Ream to1777

COMMENTS



Client : Bass Strait Oil Company Ltd.
Well Name : Zane Grey #1
Field : Zane Grey
Location : Bass Strait
Rig : Ocean Patriot
Job # : AU-DD-0003415248

Total Depth	(m)	2773	Casing Depth	(m)	2194.00	Operator Reps	S Douglas,, Peter Dane, Paul
Drilled last 24 hrs	(m)	0	Casing Diameter	(in)	9.875	SSDS Reps	John Smith (17), Sompon T. (10)
Hole Size	(in)	12.250	Casing ID	(in)	8.681		

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
2758.61	34.94	18.82	2409.35	1174.62	N16.12E

Formation Name	MD Top (m)	TVD Top (m)

BHA 6: 219.07 m; Bit #4 (2. hrs), Stab, 1x DC, Stab, Sub, MWD, Sub, Stab, 3 x DC, Jar, 2 x DC, Sub, 15x HWDP

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lbf/100ft²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
KCl/Polymer	9.7	63	21	36.0	9.0 / 15.0		5.0	11.00	1.00	

From	To	Hours	TMD (m)	BHA #	Activity
00:00	19:30	19.50	2772.50	6	Working on Casing at 1779mtrs, Nipple Down and L/O 9 5/8" Csg
19:30	20:30	1.00	2772.50		R/D casing handling
20:30	21:00	0.50	2772.50		P/U and M/U Jet sub and wear bushing R/T 5" HWDP
21:00	00:00	3.00	2772.50		Set wear bushing, M/U, RIH Bha for wiper trip

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DRILLING SERVICES

Daily Drilling Report

Client : Bass Strait Oil Company Ltd.
 Well Name : Zane Grey #1
 Field : Zane Grey
 Location : Bass Strait
 Rig : Ocean Patriot
 Job # : AU-DD-0003415248

CURRENT STATUS Report # 18 14/02/2005

Total Depth (m) : 2773	Casing Depth (m) : 2194.00	Operator Reps : S Douglas,, Peter Dane, Paul
Drilled last 24 hrs (m) : 0	Casing Diameter (in) : 9.875	SSDS Reps : John Smith (18), Sompon T. (11)
Hole Size (in) : 12.250	Casing ID (in) : 8.681	

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
2758.61	34.94	18.82	2409.35	1174.62	N16.12E

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

BHA 6: 219.07 m; Bit #4 (17. hrs), Stab, 1x DC, Stab, Sub, MWD, Sub, Stab, 3 x DC, Jar, 2 x DC, Sub, 15x HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lbf/100ft ²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
KCl/Polymer	9.7	63	21	36.0	9.0 / 15.0		5.0	11.00	1.00	

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
02:30	04:30	2.00	2772.50	6	Reaming 1777 - 1795m
04:30	06:00	1.50	2772.50	6	Circulate
06:00	09:30	3.50	2772.50	6	Cont Reaming to 1910 metres
09:30	10:00	0.50	2772.50	6	Circulate
10:00	21:00	11.00	2772.50	6	Cotn Reaming to 2284 metres.
21:00	22:30	1.50	2772.50	6	Circulate
22:30	23:30	1.00	2772.50	6	POOH 5 stand
23:30	00:00	0.50	2772.50	6	Back Reaming 2284 - 2232m

COMMENTS



Daily Drilling Report

Client : Bass Strait Oil Company Ltd.
Well Name : Zane Grey #1
Field : Zane Grey
Location : Bass Strait
Rig : Ocean Patriot
Job # : AU-DD-0003415248

CURRENT STATUS Report # 19 15/02/2005

Total Depth	(m)	2773	Casing Depth	(m)	2194.00	Operator Reps	Steve Hodgets,, Peter Dane, Paul
Drilled last 24 hrs	(m)	0	Casing Diameter	(in)	9.875	SSDS Reps	John Smith (19), Sompon T. (12)
Hole Size	(in)	12.250	Casing ID	(in)	8.681		

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
2758.61	34.94	18.82	2409.35	1174.62	N16.12E

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

BHA 6: 219.07 m; Bit #4 (30.5 hrs), Stab, 1x DC, Stab, Sub, MWD, Sub, Stab, 3 x DC, Jar, 2 x DC, Sub, 15x HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lbf/100ft²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
KCl/Polymer	9.7	63	21	36.0	9.0 / 15.0		5.0	11.00	1.00	

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	02:30	2.50	2772.50	6	Back Reaming 2232 - 1740m
02:30	04:00	1.50	2772.50	6	Circulate
04:00	15:00	11.00	2772.50	6	Reaming 2283 - 2735m
15:00	17:00	2.00	2772.50	6	Circulate
17:00	00:00	7.00	2772.50	6	Flow check , static test, and POOH 1077 metres

COMMENTS



Daily Drilling Report

Client : Bass Strait Oil Company Ltd.
Well Name : Zane Grey #1
Field : Zane Grey
Location : Bass Strait
Rig : Ocean Patriot
Job # : AU-DD-0003415248

CURRENT STATUS Report # 20 16/02/2005

Total Depth	(m)	:	2773	Casing Depth	(m)	:	2194.00	Operator Reps	:	Steve Hodgets,, Peter Dane, Paul
Drilled last 24 hrs	(m)	:	0	Casing Diameter	(in)	:	9.875	SSDS Reps	:	John Smith (20), Sompon T. (13)
Hole Size	(in)	:	12.250	Casing ID	(in)	:	8.681			

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
2758.61	34.94	18.82	2409.35	1174.62	N16.12E

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

BHA 6: 219.07 m; Bit #4 (30.5 hrs), Stab, 1x DC, Stab, Sub, MWD, Sub, Stab, 3 x DC, Jar, 2 x DC, Sub, 15x HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lb/100ft ²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
KCl/Polymer	9.7	63	21	36.0	9.0 / 15.0		5.0	11.00	1.00	

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	02:30	2.50	2772.50	6	Cont POOH, rack back BHA, break bit.
02:30	04:00	1.50	2772.50	6	Retrieve wear bushing. jetting wellhead
04:00	05:00	1.00	2772.50		Run 9 5/8" Casing
05:00	06:30	1.50	2772.50		Attempt to run casing shoe track assy.
06:30	08:00	1.50	2772.50		Run in hole shoe track, function test float
08:00	12:00	4.00	2772.50		Run Casing
12:00	00:00	12.00	2772.50		Run Casing , attempt to ream 1962 - 1989m

COMMENTS

sperry-sun

DRILLING SERVICES

Daily Drilling Report

Client : Bass Strait Oil Company Ltd.
Well Name : Zane Grey #1
Field : Zane Grey
Location : Bass Strait
Rig : Ocean Patriot
Job # : AU-DD-0003415248

CURRENT STATUS Report # 21 17/02/2005

Total Depth (m) :	2773	Casing Depth (m) :	2194.00	Operator Reps :	Steve Hodgets,, Peter Dane, Paul
Drilled last 24 hrs (m) :	0	Casing Diameter (in) :	9.875	SSDS Reps :	John Smith (21), Sompon T. (14)
Hole Size (in) :		Casing ID (in) :	8.681		

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
2758.61	34.94	18.82	2409.35	1174.62	N16.12E

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lb/100ft ²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
KCl/Polymer	9.7	63	21	36.0	9.0 / 15.0		5.0	11.00	1.00	

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	13:00	13.00	2772.50		Run Casing , ream to 2194 mtrs.
13:00	14:30	1.50	2772.50		L/D 8 jts 9 5/8 csg to 2089 mtrs.
14:30	18:00	3.50	2772.50		M/U Cmt stinger, test
18:00	19:30	1.50	2772.50		Attempt to work to bottom 2195m
19:30	20:30	1.00	2772.50		Circulate 2 btm up.
20:30	21:00	0.50	2772.50		R/U cmt line and hold JSA
21:00	22:30	1.50	2772.50		Mix and Pump Cement
22:30	23:30	1.00	2772.50		Displace Cmt , rig pump, But did not bump the plug
23:30	00:00	0.50	2772.50		R/D Cmt line and back out of running tool.

COMMENTS

9 5/8" Casing is stopped at 2184 mtrs.

sperry-sun

DRILLING SERVICES

Daily Drilling Report

Client : Bass Strait Oil Company Ltd.
 Well Name : Zane Grey #1
 Field : Zane Grey
 Location : Bass Strait
 Rig : Ocean Patriot
 Job # : AU-DD-0003415248

CURRENT STATUS Report # 22 18/02/2005

Total Depth (m) :	2773	Casing Depth (m) :	2194.00	Operator Reps :	Steve Hodgets,, Peter Dane, James
Drilled last 24 hrs (m) :	0	Casing Diameter (in) :	9.875	SSDS Reps :	Tim Walton (1), Sompon T. (15)
Hole Size (in) :	8.500	Casing ID (in) :	8.681		

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
2758.61	34.94	18.82	2409.35	1174.62	N16.12E

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

BHA 7: 228.29 m; Bit #6 (0. hrs), Sub, Pony, Pony, Stab, 3x DC, Jar, 2x DC, 15x HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lbf/100ft ²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
KCl/Polymer	9.7	63	21	36.0	9.0 / 15.0		5.0	11.00	1.00	

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	02:00	2.00	2772.50		Release R/T .L/D 9 5/8" csg swedge.
02:00	02:30	0.50	2772.50		C/O 500 T bails w/ 350T bails
02:30	04:00	1.50	2772.50		P/U mill and flush tool, TIH dress off hanger neck.
04:00	06:00	2.00	2772.50		TIH seal assy, attempt to energize seal
06:00	07:00	1.00	2772.50		Test BOP and attempt energize seal again.
07:00	09:30	2.50	2772.50		POOH seal assy, checked and TIH to energize seal again.
09:30	10:30	1.00	2772.50		Test seal assy is energized.
10:30	19:00	8.50	2772.50	7	L/D 12 1/4" BHA, then M/U, TIH for 8 1/2" clean out run
19:00	00:00	5.00	2772.50	7	Test BOP

COMMENTS

sperry-sun

DRILLING SERVICES

Daily Drilling Report

Client : Bass Strait Oil Company Ltd.
 Well Name : Zane Grey #1
 Field : Zane Grey
 Location : Bass Strait
 Rig : Ocean Patriot
 Job # : AU-DD-0003415248

CURRENT STATUS Report # 23 19/02/2005

Total Depth (m) : 2773	Casing Depth (m) : 2194.00	Operator Reps : Steve Hodgets,, Peter Dane, James
Drilled last 24 hrs (m) : 0	Casing Diameter (in) : 9.875	SSDS Reps : Tim Walton (2), Sompon T. (16)
Hole Size (in) : 8.500	Casing ID (in) : 8.681	

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
2758.61	34.94	18.82	2409.35	1174.62	N16.12E

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

BHA 7: 228.29 m; Bit #6 (0. hrs), Sub, Pony, Pony, Stab, 3x DC, Jar, 2x DC, 15x HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lbf/100ft ²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
KCl/Polymer	9.7	63	21	36.0	9.0 / 15.0		5.0	11.00	1.00	

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	02:30	2.50	2772.50	7	Cotn Test BOP
02:30	03:30	1.00	2772.50	7	Unseat test plug, POOH,
03:30	06:00	2.50	2772.50	7	R/u test TDSvaleves,
06:00	11:30	5.50	2772.50	7	Trip In hole 8 1/2" clean out, Tag float@2158 mtrs
11:30	12:30	1.00	2772.50	7	Circulate condition mud.
12:30	14:00	1.50	2772.50	7	Test line -5000 psi., Pressure test 9 5/8" Csg
14:00	17:30	3.50	2772.50		drilling cmt. express plug
17:30	00:00	6.50	2772.50		Cont. drilling cmt 2158 - 2192m

COMMENTS

sperry-sun

DRILLING SERVICES

Daily Drilling Report

Client : Bass Strait Oil Company Ltd.
Well Name : Zane Grey #1
Field : Zane Grey
Location : Bass Strait
Rig : Ocean Patriot
Job # : AU-DD-0003415248

CURRENT STATUS Report # 24 20/02/2005

Total Depth (m) :	2773	Casing Depth (m) :	2194.00	Operator Reps :	Steve Hodgets, Peter Dane
Drilled last 24 hrs (m) :	0	Casing Diameter (in) :	9.875	SSDS Reps :	Tim Walton (1), Sompon T. (17)
Hole Size (in) :		Casing ID (in) :	8.681		

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
2758.61	34.94	18.82	2409.35	1174.62	N16.12E

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lbf/100ft ²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
KCl/Polymer	9.7	63	21	36.0	9.0 / 15.0		5.0	11.00	1.00	

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	02:30	2.50	2772.50		Reaming / Washing from 2192 mtrs to 2260 mtrs
02:30	03:30	1.00	2772.50		Circulate
03:30	04:00	0.50	2772.50		POOH
04:00	05:00	1.00	2772.50		Break circulation, test surface line
05:00	09:30	4.50	2772.50		Flow check, static
09:30	10:00	0.50	2772.50		Rig Repair TDS,
10:00	10:30	0.50	2772.50		R/U 2 7/8" tubing.
10:30	15:30	5.00	2772.50		Hold JSA for 2 7/8" tubing stinger. RIH to 2260 mtrs
15:30	17:00	1.50	2772.50		Circulate
17:00	17:30	0.50	2772.50		POOH from 2260 mtrs. to 2234 mtrs
17:30	18:30	1.00	2772.50		Pump Cement
18:30	19:00	0.50	2772.50		POOH to 2100 mtrs.
19:00	21:30	2.50	2772.50		Circulate, Monitor Cmt return.
21:30	22:00	0.50	2772.50		Function and Flush BOP after Cmt job.
22:00	00:00	2.00	2772.50		Trip Out from 2170 mtrs to 1240 mts.

COMMENTS

Daily Drilling Report

Client : Bass Strait Oil Company Ltd.
Well Name : Zane Grey #1
Field : Zane Grey
Location : Bass Strait
Rig : Ocean Patriot
Job # : AU-DD-0003415248

CURRENT STATUS Report # 25 21/02/2005

Total Depth	(m)	:	2773	Casing Depth	(m)	:	2194.00	Operator Reps	:	Steve Hodgets, Peter Dane
Drilled last 24 hrs	(m)	:	0	Casing Diameter	(in)	:	9.875	SSDS Reps	:	Tim Walton (2), Sompon T. (18)
Hole Size	(in)	:		Casing ID	(in)	:	8.681			

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
2758.61	34.94	18.82	2409.35	1174.62	N16.12E

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

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MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lbf/100ft²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
KCl/Polymer	9.7	63	21	36.0	9.0 / 15.0		5.0	11.00	1.00	

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	03:30	3.50	2772.50		Hold JSA meeting. R/U 5" DP
03:30	05:30	2.00	2772.50		Hold JSA. Slip and cut Drill Line
05:30	06:30	1.00	2772.50		RIH tag Cement
06:30	07:30	1.00	2772.50		Circulate
07:30	11:00	3.50	2772.50		Flow Check,POOH
11:00	13:00	2.00	2772.50		L/D 2 7/8" tubing. Pony Stabilizer

COMMENTS

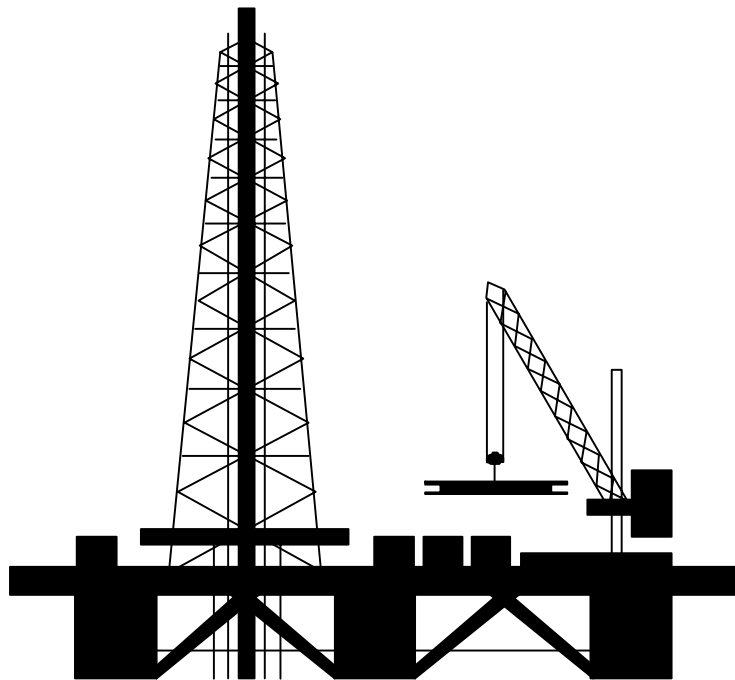
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APPENDIX 13

DIRECTIONAL DRILLING END of WELL REPORT: ZANEGREY-1/ST1 (By Halliburton)



Bass Strait Oil Company Ltd.



Directional Drilling End of Well Report

Well : Zane Grey #1 ST1

Date: February - March 2005

HALLIBURTON
Sperry Drilling Services

Table of Contents

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

Customer : Bass Strait Oil Company Ltd.

Well : Zane Grey #1 ST1

Job Objectives:

Summary of Results:

Discussion:

BHA #	Bit #	Motor Run #	Hole Size (in)	MD In (m)	MD Out (m)	TVD In (m)	TVD Out (m)	Inc In (deg)	Inc Out (deg)	Azi In (deg)	Azi Out (deg)	Drig hrs	Circ hrs
8	6	5	8.500	2190	3107	1941	2706	31.9	31.1	16	13	92	3
10	7	6	8.500	3107	3107	2706	2706	31.1	31.1	13	13	8	2
11	?		2.880	3107	3107	2706	2706	31.1	31.1	13	13	0	1
12	8	7	8.500	3107	3107	2706	2706	31.1	31.1	13	13	40	1
13	9rr1	8	8.500	3107	3107	2706	2706	31.1	31.1	13	13	0	25

Table 1 - BHA Summary

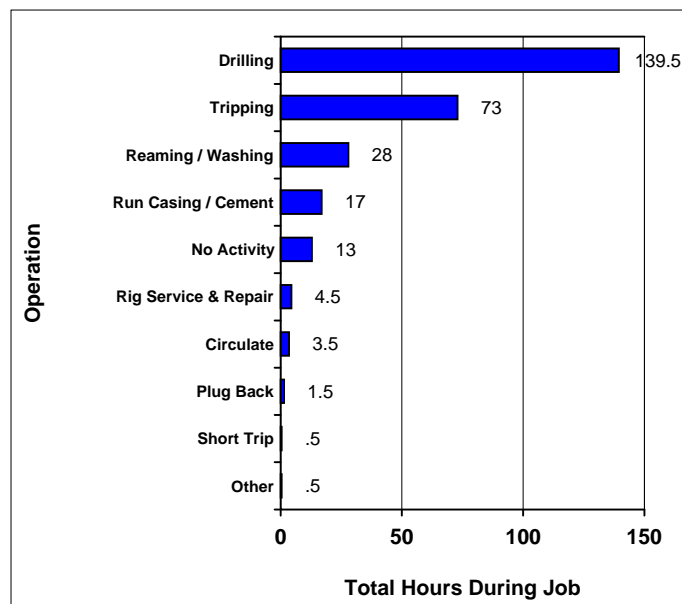
Motor Run #	Manufacturer	Type	Lobe	OD (in)	Gauge (in)	Bend (deg)	Adj	DLS (Ori) (°/30m)	ROP (Ori) (m/hr)	ROP (Rot) (m/hr)
5	SSDS	SperryDrill	7/8	7.000	8.125	1.22	Y		5	11
6	SSDS	SperryDrill	7/8	7.000	8.185	1.22	Y		0	0
7	SSDS	SperryDrill	7/8	7.000	8.185	1.50	Y		0	0
8	SSDS	SperryDrill	6/7	6.750	7.875	1.15	Y			

Table 2 - Motor Run Summary

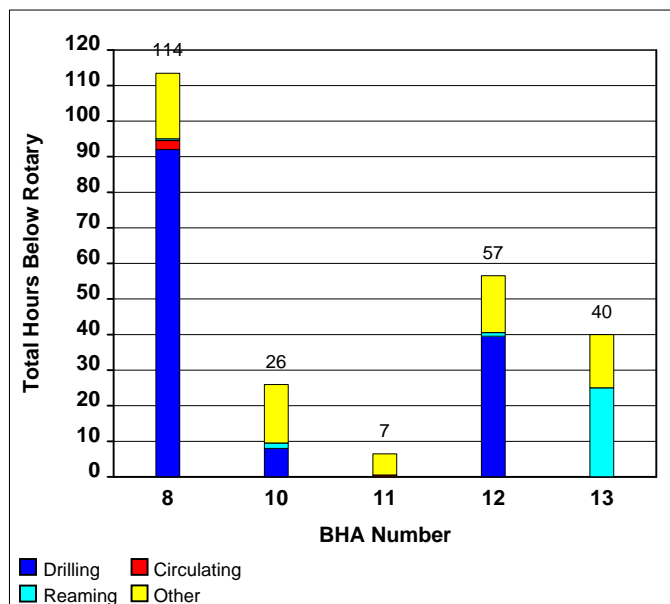
Bit #	Manufacturer	Style	OD (in)	Gge Len (in)	Nozzles (/32's)	TFA (in²)	Dull Grades I O D L B G O R	Ftge (m)	Drig hrs	ROP (m/hr)
6	Reed Hycalog	RSX163DGW	8.500	1.800	6x15	1.035	- - - - - LIH	917	92.00	10
7	Reed Hycalog	TD43AKPRD H	8.500		2x12, 1x32	1.006	2-1-JD-N -E-I-WT-BHA	0	8.00	0
8	Reed Hycalog	RSX162DGW	8.500		6x14	0.902	0-0-NO-A -X-I-PN-BHA	0	39.50	0
9rr1	Security	EBXSC1S	8.500		3x20	0.920		0	0.00	

Table 3 - Bit Run Summary

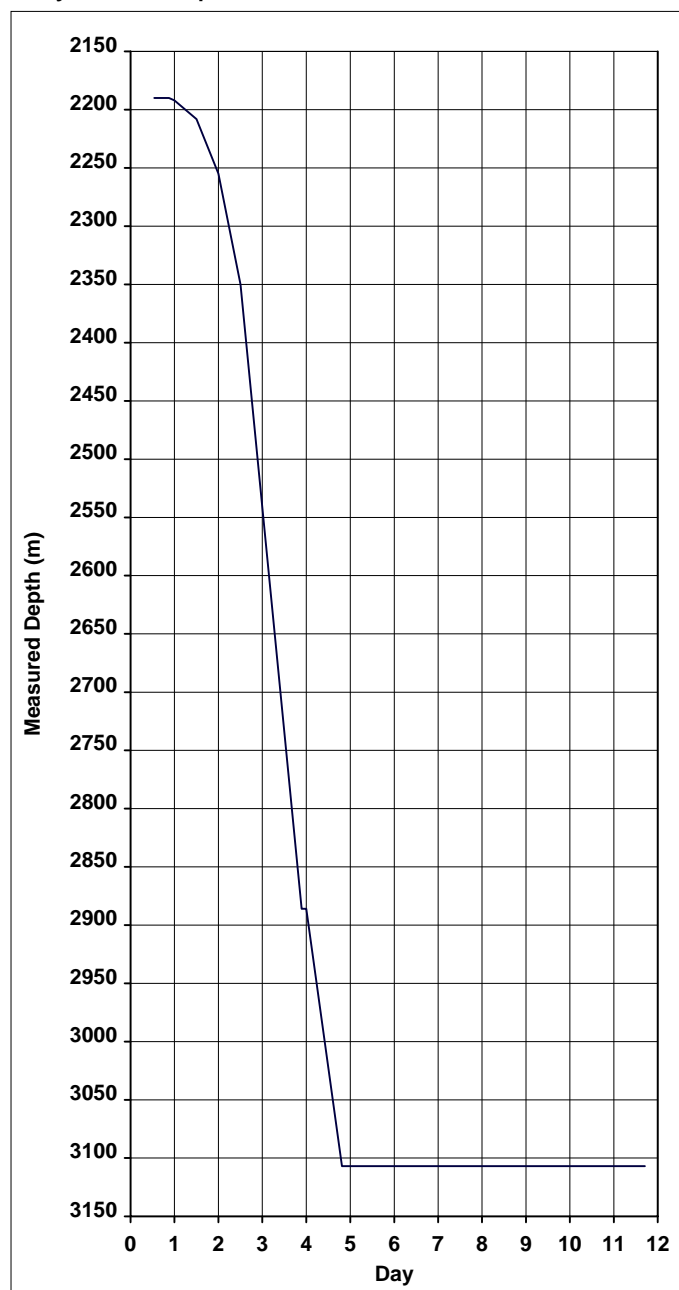
Hours by Operation Summary



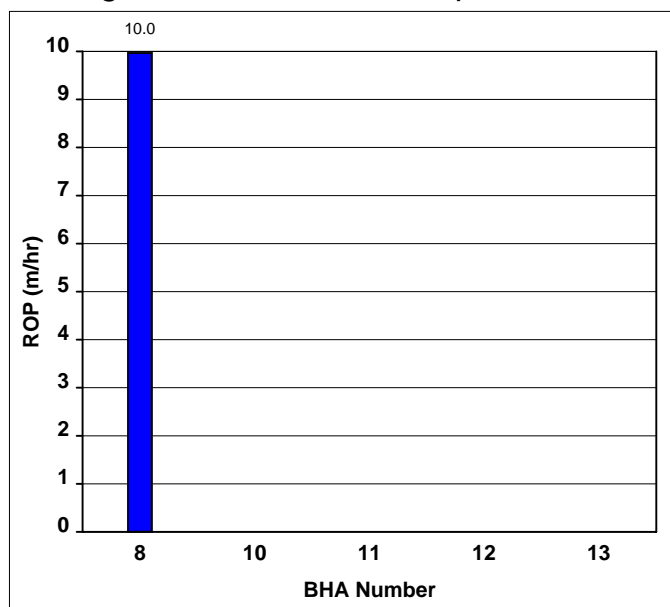
Hours per BHA Breakdown



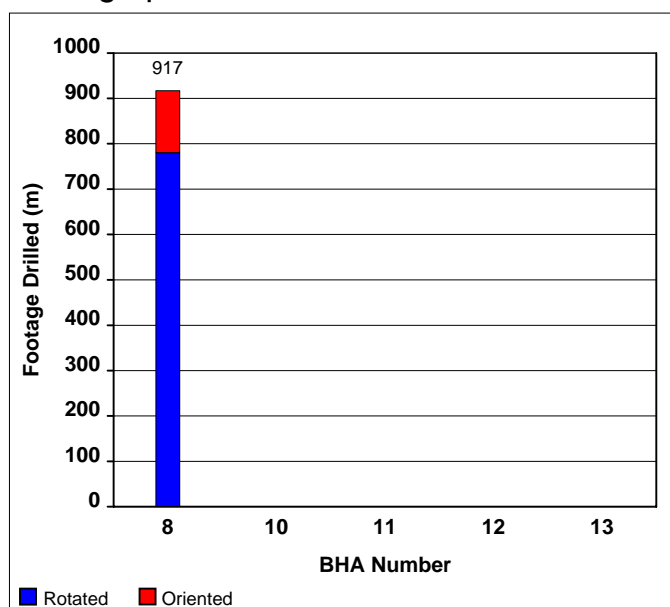
Days vs. Depth



Average Rate of Penetration per BHA



Footage per BHA



MD (m)	Formation Name MD/TVD	<div> <div>Inclination</div> <div>DLS</div> </div>	Bit Data	Drilling Parameters	Motor	BHA Stabilizers	Comments	BHA ID
2150		<div> <div>010203040</div> </div>						
2200			RSX163DGW 6x15 /32's 0.17 m/min 92.00 hrs	WOB 21 klbs RPM 80 FLO 609 gpm SPP 2934 psi	7" SperryDrill 7/8 L 1.22° ABH	8.125 in @ 0.87 m 8.500 in @ 9.79 m 8.000 in @ 25.42 m	LIH Bit and drive shaft, when hoisted to surface. AGS test 400gpm, FG 480psi, UG 300psi. Sidetrack off cement plug @ 2190m, and drilled to 3107m. Bit conn 14000ft/lbs, sleeve stab 12000ft/lbs, ABH 28000ft/lbs.	#8 @ 2190
2250								
2300								
2350								
2400								
2450								
2500								
2550								
2600								
2650								
2700								
2750								
2800								
2850								
2900								
2950								
3000								
3050								
3100								
3150		<div> <div>01234</div> </div>						

HALLIBURTON

Sperry Drilling Services

Bass Strait Oil Company Ltd.

Zane Grey

Zane Grey

Zane Grey #1

Zane Grey #1 ST1

Design: Zane Grey #1 ST1

Standard Survey Report

19 May, 2005

Sperry Drilling Services

Company:	Bass Strait Oil Company Ltd.	Local Co-ordinate Reference:	Site Zane Grey
Project:	Zane Grey	TVD Reference:	RT @ 21.50m (Original Well Elev)
Site:	Zane Grey	MD Reference:	RT @ 21.50m (Original Well Elev)
Well:	Zane Grey #1	North Reference:	Grid
Wellbore:	Zane Grey #1 ST1	Survey Calculation Method:	Minimum Curvature
Design:	Zane Grey #1 ST1	Database:	Perth Office Database

Project	Zane Grey, Zane Grey, Global Coordinates		
Map System:	Universal Transverse Mercator	System Datum:	Mean Sea Level
Geo Datum:	AGD66 Low Accuracy		
Map Zone:	Zone 55S (144 E to 150 E)		

Site		Zane Grey, Structure			
Site Position:		Northing:	5,729,856.42 m	Latitude:	38° 34' 31.640" S
From:	Map	Easting:	586,049.89 m	Longitude:	147° 59' 16.266" E
Position Uncertainty:	0.00 m	Slot Radius:	0.00 in	Grid Convergence:	-0.616 °

Well		Zane Grey #1				
Well Position	+N/-S	0.00 m	Northing:	5,729,856.42 m	Latitude:	38° 34' 31.640" S
	+E/-W	0.00 m	Easting:	586,049.89 m	Longitude:	147° 59' 16.266" E
Position Uncertainty		0.00 m	Wellhead Elevation:	m	Ground Level:	0.00 m

Wellbore	Zane Grey #1 ST1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2004	5/04/2005	13.213	-69.059	60,160

Design	Zane Grey #1 ST1				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	2,183.17
Vertical Section:	Depth From (TVD) (m)	+N/-S (m)	+E/-W (m)	Direction (°)	
	0.00	0.00	0.00	14.915	

Survey Program	Date	29/04/2005			
From (m)	To (m)	Survey (Wellbore)	Tool Name	Description	
152.20	2,183.17	Zane Grey #1 MWD (Zane Grey #1)	MWD Magnetic	MWD Magnetic Survey (Thorogood)	
2,193.14	3,107.00	ST1 MWD (Zane Grey #1 ST1)	MWD Magnetic	MWD Magnetic Survey (Thorogood)	

Survey										
Measured Depth (m)	Inclination (°)	Azimuth (°)	Vertical Depth (m)	+N/-S (m)	+E/-W (m)	Vertical Section (m)	Dogleg Rate (°/30m)	Build Rate (°/30m)	Turn Rate (°/30m)	
0.00	0.000	0.000	0.00	0.00	0.00	0.00	0.000	0.00	0.00	
152.20	0.410	162.660	152.20	-0.52	0.16	-0.46	0.081	0.08	0.00	
180.10	0.410	187.760	180.10	-0.71	0.18	-0.64	0.192	0.00	26.99	
208.30	0.520	134.850	208.30	-0.90	0.26	-0.81	0.453	0.12	-56.29	
236.30	0.500	145.410	236.30	-1.09	0.42	-0.95	0.103	-0.02	11.31	
265.10	0.480	133.550	265.10	-1.28	0.57	-1.09	0.107	-0.02	-12.35	
291.20	0.530	112.320	291.19	-1.40	0.76	-1.16	0.221	0.06	-24.40	
322.80	0.310	122.920	322.79	-1.50	0.97	-1.20	0.221	-0.21	10.06	
351.10	0.610	108.040	351.09	-1.59	1.18	-1.24	0.340	0.32	-15.77	
379.50	0.620	106.950	379.49	-1.68	1.47	-1.25	0.016	0.01	-1.15	
408.30	0.570	109.170	408.29	-1.78	1.75	-1.27	0.057	-0.05	2.31	
436.40	0.500	108.390	436.39	-1.86	2.00	-1.28	0.075	-0.07	-0.83	

Sperry Drilling Services

Company:	Bass Strait Oil Company Ltd.	Local Co-ordinate Reference:	Site Zane Grey
Project:	Zane Grey	TVD Reference:	RT @ 21.50m (Original Well Elev)
Site:	Zane Grey	MD Reference:	RT @ 21.50m (Original Well Elev)
Well:	Zane Grey #1	North Reference:	Grid
Wellbore:	Zane Grey #1 ST1	Survey Calculation Method:	Minimum Curvature
Design:	Zane Grey #1 ST1	Database:	Perth Office Database

Survey									
Measured Depth (m)	Inclination (°)	Azimuth (°)	Vertical Depth (m)	+N/-S (m)	+E/-W (m)	Vertical Section (m)	Dogleg Rate (°/30m)	Build Rate (°/30m)	Turn Rate (°/30m)
463.05	0.560	101.290	463.04	-1.92	2.24	-1.28	0.100	0.07	-7.99
493.81	1.550	39.190	493.79	-1.63	2.65	-0.89	1.346	0.97	-60.57
521.53	3.740	26.590	521.48	-0.53	3.29	0.33	2.438	2.37	-13.64
550.66	6.400	18.100	550.49	1.86	4.22	2.89	2.839	2.74	-8.74
578.94	9.490	11.850	578.50	5.64	5.19	6.79	3.399	3.28	-6.63
605.39	12.270	11.470	604.47	10.53	6.20	11.77	3.154	3.15	-0.43
637.30	15.110	10.930	635.47	17.94	7.66	19.31	2.673	2.67	-0.51
663.37	17.260	12.120	660.51	25.06	9.12	26.56	2.503	2.47	1.37
693.68	19.030	13.970	689.31	34.25	11.25	35.99	1.842	1.75	1.83
722.25	21.580	14.470	716.10	43.86	13.69	45.91	2.684	2.68	0.53
750.29	24.880	14.620	741.87	54.56	16.47	56.96	3.531	3.53	0.16
778.24	28.180	15.540	766.87	66.61	19.72	69.45	3.569	3.54	0.99
806.45	30.290	16.230	791.48	79.86	23.50	83.22	2.272	2.24	0.73
836.21	31.180	15.900	817.06	94.48	27.71	98.43	0.913	0.90	-0.33
864.47	31.470	15.910	841.20	108.61	31.73	113.12	0.308	0.31	0.01
892.94	32.200	16.130	865.39	123.04	35.88	128.13	0.779	0.77	0.23
921.51	32.690	14.670	889.50	137.82	39.95	143.46	0.970	0.51	-1.53
950.02	32.880	14.700	913.47	152.75	43.86	158.90	0.201	0.20	0.03
979.03	33.350	14.250	937.77	168.10	47.82	174.74	0.549	0.49	-0.47
1,009.22	34.050	15.100	962.89	184.30	52.06	191.49	0.839	0.70	0.84
1,037.20	34.420	14.390	986.02	199.53	56.07	207.23	0.584	0.40	-0.76
1,065.76	34.720	14.470	1,009.54	215.22	60.11	223.44	0.319	0.32	0.08
1,080.74	34.990	14.710	1,021.83	223.50	62.27	232.00	0.606	0.54	0.48
1,090.61	34.886	14.630	1,029.92	228.97	63.70	237.65	0.345	-0.32	-0.24
13 3/8"									
1,123.52	34.540	14.360	1,056.97	247.12	68.39	256.39	0.345	-0.32	-0.25
1,150.74	34.230	14.270	1,079.43	262.01	72.19	271.77	0.346	-0.34	-0.10
1,178.17	33.670	14.480	1,102.19	276.85	75.99	287.08	0.626	-0.61	0.23
1,208.00	33.510	14.740	1,127.04	292.82	80.15	303.59	0.216	-0.16	0.26
1,237.02	33.620	14.390	1,151.22	308.35	84.19	319.63	0.230	0.11	-0.36
1,265.61	34.210	14.570	1,174.94	323.80	88.18	335.58	0.628	0.62	0.19
1,294.54	34.670	13.930	1,198.80	339.65	92.20	351.94	0.607	0.48	-0.66
1,323.50	34.510	14.390	1,222.64	355.59	96.23	368.38	0.317	-0.17	0.48
1,353.04	34.370	13.930	1,247.01	371.79	100.31	385.09	0.300	-0.14	-0.47
1,380.92	34.260	13.780	1,270.03	387.05	104.08	400.80	0.149	-0.12	-0.16
1,409.67	34.180	13.290	1,293.81	402.77	107.86	416.96	0.299	-0.08	-0.51
1,438.12	34.520	13.610	1,317.30	418.38	111.60	433.01	0.406	0.36	0.34
1,466.41	34.410	12.820	1,340.62	433.97	115.25	449.01	0.488	-0.12	-0.84
1,494.65	34.390	12.290	1,363.92	449.54	118.72	464.95	0.319	-0.02	-0.56
1,523.37	34.160	12.030	1,387.65	465.35	122.13	481.11	0.285	-0.24	-0.27
1,551.88	34.030	12.090	1,411.26	480.98	125.47	497.07	0.141	-0.14	0.06
1,580.92	34.340	13.280	1,435.29	496.90	129.05	513.37	0.761	0.32	1.23
1,609.62	34.680	16.070	1,458.94	512.63	133.17	529.63	1.690	0.36	2.92
1,638.56	34.320	16.670	1,482.79	528.35	137.79	546.02	0.513	-0.37	0.62
1,667.52	34.040	16.130	1,506.75	543.96	142.39	562.28	0.428	-0.29	-0.56
1,696.00	34.160	16.420	1,530.33	559.29	146.86	578.24	0.213	0.13	0.31
1,724.70	33.800	16.030	1,554.13	574.69	151.34	594.28	0.440	-0.38	-0.41
1,752.98	34.200	16.920	1,577.57	589.85	155.83	610.09	0.677	0.42	0.94
1,776.00	34.154	16.612	1,596.62	602.23	159.56	623.01	0.234	-0.06	-0.40
9 5/8"									
1,782.83	34.140	16.520	1,602.27	605.91	160.65	626.84	0.234	-0.06	-0.40
1,811.25	34.440	17.460	1,625.75	621.22	165.33	642.84	0.642	0.32	0.99
1,840.08	34.470	17.390	1,649.52	636.78	170.21	659.14	0.052	0.03	-0.07
1,868.47	34.230	17.070	1,672.96	652.08	174.96	675.15	0.317	-0.25	-0.34

Sperry Drilling Services

Company:	Bass Strait Oil Company Ltd.	Local Co-ordinate Reference:	Site Zane Grey
Project:	Zane Grey	TVD Reference:	RT @ 21.50m (Original Well Elev)
Site:	Zane Grey	MD Reference:	RT @ 21.50m (Original Well Elev)
Well:	Zane Grey #1	North Reference:	Grid
Wellbore:	Zane Grey #1 ST1	Survey Calculation Method:	Minimum Curvature
Design:	Zane Grey #1 ST1	Database:	Perth Office Database

Survey									
Measured Depth (m)	Inclination (°)	Azimuth (°)	Vertical Depth (m)	+N/-S (m)	+E/-W (m)	Vertical Section (m)	Dogleg Rate (°/30m)	Build Rate (°/30m)	Turn Rate (°/30m)
1,897.13	34.160	16.740	1,696.67	667.49	179.64	691.24	0.208	-0.07	-0.35
1,926.10	34.120	16.890	1,720.65	683.06	184.35	707.49	0.097	-0.04	0.16
1,954.43	34.050	17.190	1,744.11	698.24	189.00	723.36	0.193	-0.07	0.32
1,983.37	33.950	17.510	1,768.10	713.68	193.83	739.53	0.212	-0.10	0.33
2,012.16	33.490	17.020	1,792.05	728.95	198.57	755.50	0.557	-0.48	-0.51
2,041.58	33.410	17.630	1,816.59	744.43	203.40	771.70	0.352	-0.08	0.62
2,070.37	33.420	17.420	1,840.63	759.55	208.17	787.54	0.121	0.01	-0.22
2,095.75	33.160	17.240	1,861.84	772.84	212.32	801.45	0.329	-0.31	-0.21
2,126.37	32.900	16.850	1,887.51	788.80	217.21	818.13	0.329	-0.25	-0.38
2,154.80	32.520	16.760	1,911.43	803.51	221.66	833.49	0.404	-0.40	-0.09
2,183.17	32.390	16.460	1,935.37	818.10	226.01	848.71	0.219	-0.14	-0.32
2,193.14	31.670	15.750	1,943.82	823.18	227.48	853.99	2.445	-2.17	-2.14
2,214.68	30.950	12.840	1,962.23	834.02	230.24	865.18	2.332	-1.00	-4.05
2,241.00	30.800	12.660	1,984.82	847.19	233.22	878.68	0.201	-0.17	-0.21
2,270.43	30.810	7.950	2,010.10	862.01	235.92	893.69	2.458	0.01	-4.80
2,298.37	30.440	10.700	2,034.14	876.05	238.22	907.85	1.556	-0.40	2.95
2,326.97	29.940	10.850	2,058.87	890.18	240.91	922.20	0.530	-0.52	0.16
2,355.80	31.000	11.140	2,083.71	904.53	243.70	936.78	1.114	1.10	0.30
2,381.72	31.820	13.780	2,105.84	917.72	246.61	950.28	1.854	0.95	3.06
2,414.16	33.680	15.580	2,133.12	934.69	251.07	967.82	1.941	1.72	1.66
2,442.70	33.490	14.490	2,156.89	949.94	255.16	983.61	0.665	-0.20	-1.15
2,470.70	33.420	14.730	2,180.26	964.87	259.06	999.04	0.160	-0.07	0.26
2,499.52	34.480	14.630	2,204.16	980.44	263.14	1,015.14	1.105	1.10	-0.10
2,528.50	34.470	13.920	2,228.05	996.34	267.18	1,031.54	0.416	-0.01	-0.73
2,557.49	35.280	14.280	2,251.84	1,012.42	271.22	1,048.12	0.865	0.84	0.37
2,585.32	36.320	14.030	2,274.41	1,028.20	275.20	1,064.39	1.132	1.12	-0.27
2,614.39	36.940	14.820	2,297.74	1,045.00	279.52	1,081.74	0.804	0.64	0.82
2,643.01	37.000	14.810	2,320.60	1,061.64	283.92	1,098.95	0.063	0.06	-0.01
2,671.57	37.270	15.010	2,343.37	1,078.30	288.36	1,116.19	0.311	0.28	0.21
2,700.11	37.520	15.540	2,366.04	1,095.02	292.93	1,133.52	0.428	0.26	0.56
2,729.08	37.310	15.090	2,389.05	1,112.00	297.57	1,151.12	0.357	-0.22	-0.47
2,758.57	35.900	14.650	2,412.73	1,128.99	302.09	1,168.71	1.459	-1.43	-0.45
2,786.53	35.550	13.380	2,435.43	1,144.83	306.04	1,185.03	0.880	-0.38	-1.36
2,815.67	34.360	13.520	2,459.31	1,161.07	309.93	1,201.72	1.228	-1.23	0.14
2,844.06	33.470	13.480	2,482.87	1,176.47	313.62	1,217.56	0.941	-0.94	-0.04
2,872.61	33.200	13.340	2,506.72	1,191.73	317.26	1,233.24	0.295	-0.28	-0.15
2,901.47	33.080	12.820	2,530.89	1,207.10	320.83	1,249.01	0.321	-0.12	-0.54
2,930.23	32.020	12.690	2,555.13	1,222.19	324.25	1,264.47	1.108	-1.11	-0.14
2,959.08	31.790	13.210	2,579.62	1,237.05	327.67	1,279.71	0.373	-0.24	0.54
2,987.28	30.500	13.510	2,603.76	1,251.24	331.04	1,294.29	1.382	-1.37	0.32
3,015.71	31.540	13.030	2,628.12	1,265.50	334.40	1,308.93	1.128	1.10	-0.51
3,044.57	31.020	13.230	2,652.78	1,280.09	337.80	1,323.91	0.551	-0.54	0.21
3,073.76	31.110	12.810	2,677.79	1,294.77	341.19	1,338.97	0.241	0.09	-0.43
3,092.90	31.080	12.660	2,694.18	1,304.41	343.37	1,348.84	0.130	-0.05	-0.24
3,107.00	31.080	12.660	2,706.25	1,311.51	344.97	1,356.12	0.000	0.00	0.00

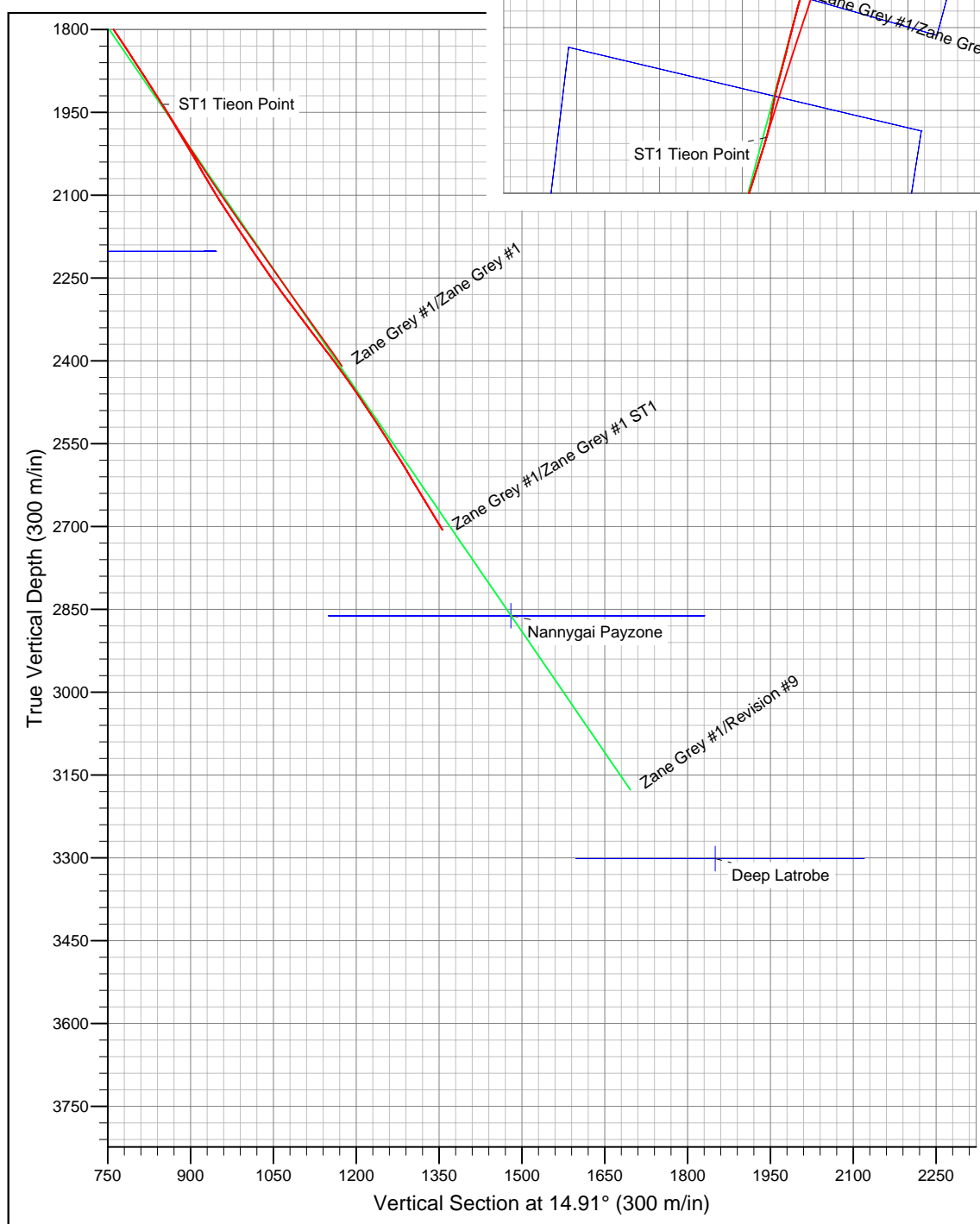
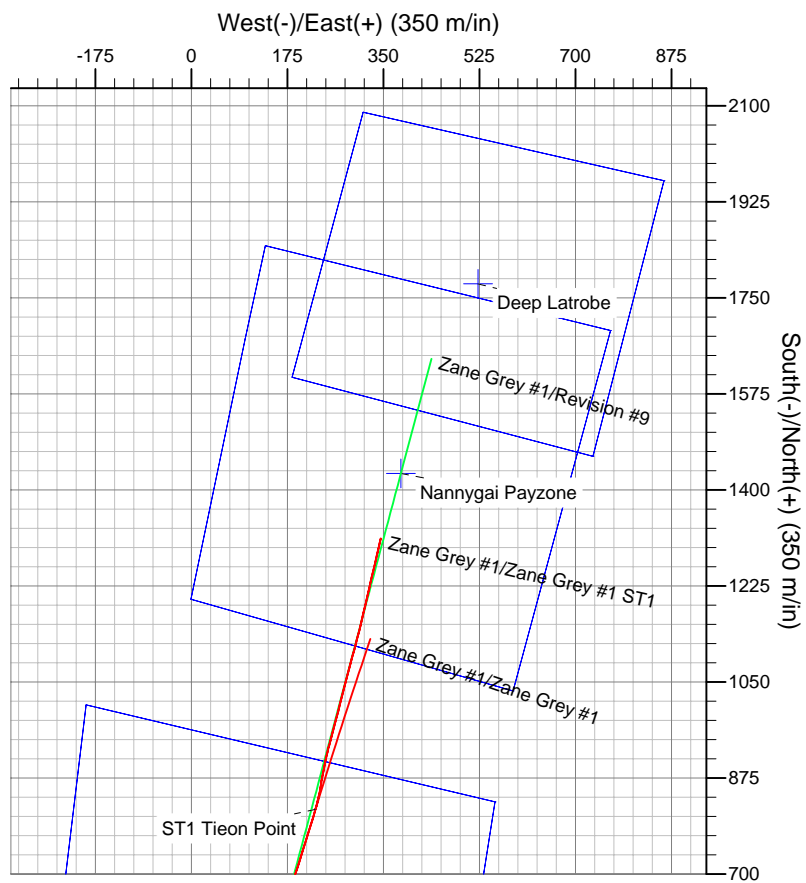
Sperry Drilling Services

Company:	Bass Strait Oil Company Ltd.	Local Co-ordinate Reference:	Site Zane Grey
Project:	Zane Grey	TVD Reference:	RT @ 21.50m (Original Well Elev)
Site:	Zane Grey	MD Reference:	RT @ 21.50m (Original Well Elev)
Well:	Zane Grey #1	North Reference:	Grid
Wellbore:	Zane Grey #1 ST1	Survey Calculation Method:	Minimum Curvature
Design:	Zane Grey #1 ST1	Database:	Perth Office Database

Casing Points					
	Measured Depth (m)	Vertical Depth (m)	Name	Casing Diameter (in)	Hole Diameter (in)
	1,090.61	1,029.92	13 3/8"	13.37	17.50
	1,776.00	1,596.62	9 5/8"	9.62	12.25

Checked By: _____ Approved By: _____ Date: _____

Project: Zane Grey
Site: Zane Grey
Well: Zane Grey #1
Wellbore: Zane Grey #1 ST1
Survey: ST1 MWD



Customer : Bass Strait Oil Company Ltd.
Well : Zane Grey #1 ST1
Rig : Ocean Patriot

Field : Zane Grey
Location : Bass Strait
Job # : AU-DD-0003564401

Page : 1

North Ref : Grid **Declination :** ° **VS Dir :** 14.92° (from Wellhead)

WELLBORE SURVEY										DRILLING PARAMETERS									
Measured Depth (m)	Incl Angle (deg)	Azi Dir (deg)	Vertical Depth (m)	Vertical Section (m)	Coordinates N/S (m) E/W (m)		DLS (°/30m)	Build Rate (°/30m)	Turn Rate (°/30m)	WOB (klbs)	RPM	Flow Rate (gpm)	Stand Pipe (psi)	Orientation From (m) To (m)		Tool Face (deg)	ROP (m/hr)	BHA No. (#)	Comment
2183.17	32.39	16.46	1935.4	848.7	818.1	226.0	0.00	0.00	0.00										
2193.14	31.67	15.75	1943.8	854.0	823.2	227.5	2.44	-2.17	-2.14	4		450	1450	2190	2193	140L	2	8	
2214.68	30.95	12.84	1962.2	865.2	834.0	230.2	2.33	-1.00	-4.05	20	45	550	2500	2193	2210	140L	5	8	
2241.00	30.80	12.66	1984.8	878.7	847.2	233.2	0.20	-0.17	-0.21	35	60	625	3200				5	8	
2270.43	30.81	7.95	2010.1	893.7	862.0	235.9	2.46	0.01	-4.80	35	60	625	3200	2258	2265	80L	5	8	
2298.37	30.44	10.70	2034.1	907.9	876.1	238.2	1.56	-0.40	2.95	35	60	625	3200	2287	2292	90R	15	8	
2326.97	29.94	10.85	2058.9	922.2	890.2	240.9	0.53	-0.52	0.16	35	80	625	3000				18	8	
2355.80	31.00	11.14	2083.7	936.8	904.5	243.7	1.11	1.10	0.30	35	80	625	3000				18	8	
2381.72	31.82	13.78	2105.8	950.3	917.7	246.6	1.85	0.95	3.06	35	80	625	3000	2360	2370	30R	30	8	
2414.16	33.68	15.58	2133.1	967.8	934.7	251.1	1.94	1.72	1.66	20		625	3200	2383	2393	40R	12	8	
														2412	2414	50L		8	
2442.70	33.49	14.49	2156.9	983.6	949.9	255.2	0.66	-0.20	-1.15	35	80	625	3000	2414	2419	50L	35	8	
2470.70	33.42	14.73	2180.3	999.0	964.9	259.1	0.16	-0.07	0.26	20		625	3200	2464	2471	20R	30	8	
2499.52	34.48	14.63	2204.2	1015.1	980.4	263.1	1.10	1.10	-0.10	35	80	625	3000	2471	2480	20R	40	8	
2528.50	34.47	13.92	2228.1	1031.5	996.3	267.2	0.42	-0.01	-0.73	20		625	3200	2526	2528	90R	45	8	
2557.49	35.28	14.28	2251.8	1048.1	1012.4	271.2	0.86	0.84	0.37	20	80	625	3000	2528	2530	90R	30	8	
														2552	2557	80L		8	
2585.32	36.32	14.03	2274.4	1064.4	1028.2	275.2	1.13	1.12	-0.27	20	80	625	3000	2560	2562	70R	50	8	
2614.39	36.94	14.82	2297.7	1081.7	1045.0	279.5	0.80	0.64	0.82	15	80	615	3000				45	8	
2643.01	37.00	14.81	2320.6	1099.0	1061.6	283.9	0.06	0.06	-0.01	15	80	615	3000				50	8	
2671.57	37.27	15.01	2343.4	1116.2	1078.3	288.4	0.31	0.28	0.21	10	85	615	2900				50	8	
2700.11	37.52	15.54	2366.0	1133.5	1095.0	292.9	0.43	0.26	0.56	10	85	600	2850				40	8	
2729.08	37.31	15.09	2389.1	1151.1	1112.0	297.6	0.36	-0.22	-0.47	20		625	3200	2726	2729	LS	20	8	
2758.57	35.90	14.65	2412.7	1168.7	1129.0	302.1	1.46	-1.43	-0.45	14	85	600	2850	2729	2736	LS	40	8	
2786.53	35.55	13.38	2435.4	1185.0	1144.8	306.0	0.88	-0.38	-1.36	14	85	600	2850				40	8	
2815.67	34.36	13.52	2459.3	1201.7	1161.1	309.9	1.23	-1.23	0.14	14	85	600	2850				40	8	
2844.06	33.47	13.48	2482.9	1217.6	1176.5	313.6	0.94	-0.94	-0.04	14	85	600	2850				40	8	
2872.61	33.20	13.34	2506.7	1233.2	1191.7	317.3	0.30	-0.28	-0.15	14	85	600	2850				40	8	
2901.47	33.08	12.82	2530.9	1249.0	1207.1	320.8	0.32	-0.12	-0.54	14	85	600	2850				40	8	
2930.23	32.02	12.69	2555.1	1264.5	1222.2	324.3	1.11	-1.11	-0.14	14	85	600	2850				40	8	



DRILLING SERVICES
Survey and Drilling Parameters

Customer : Bass Strait Oil Company Ltd.

Well : Zane Grey #1 ST1

Rig : Ocean Patriot

Field : Zane Grey

Location : Bass Strait

Job # : AU-DD-0003564401

Page : 2

North Ref : Grid

Declination : °

VS Dir : 14.92° (from Wellhead)

WELLBORE SURVEY										DRILLING PARAMETERS									Comment
Measured Depth (m)	Incl Angle (deg)	Azi Dir (deg)	Vertical Depth (m)	Vertical Section (m)	Coordinates		DLS (°/30m)	Build Rate (°/30m)	Turn Rate (°/30m)	WOB (klbs)	RPM	Flow Rate (gpm)	Stand Pipe (psi)	Orientation		Tool Face (deg)	ROP (m/hr)	BHA No. (#)	
2959.08	31.79	13.21	2579.6	1279.7	1237.1	327.7	0.37	-0.24	0.54	20		625	3200	2957	2959	90R	20	8	
2987.28	30.50	13.51	2603.8	1294.3	1251.2	331.0	1.38	-1.37	0.32	20		625	3200	2959	2965	90R	12	8	
														2985	2987	HS		8	
3015.71	31.54	13.03	2628.1	1308.9	1265.5	334.4	1.13	1.10	-0.51	20		625	3200	2987	3002	HS	12	8	
														3013	3016	HS		8	
3044.57	31.02	13.23	2652.8	1323.9	1280.1	337.8	0.55	-0.54	0.21	20		625	3200	3016	3024	HS	12	8	
														3042	3045	HS		8	
3073.76	31.11	12.81	2677.8	1339.0	1294.8	341.2	0.24	0.09	-0.43	14	85	600	2850	3045	3047	HS	40	8	
3092.90	31.08	12.66	2694.2	1348.8	1304.4	343.4	0.13	-0.05	-0.24	14	85	600	2850				40	8	

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DRILLING SERVICES

BHA Report

Customer : Bass Strait Oil Company Ltd.

Well : Zane Grey #1 ST1

Field : Zane Grey

Location : Bass Strait

Rig : Ocean Patriot

Job # : AU-DD-0003564401

BHA# 8

BHA# 8 : Date In :21/02/200 MD In (m) : 2190 TVD In (m) : 1941 Date Out 26/02/200 MD Out (m): 3107 TVD Out (m): 2706

BIT DATA

Bit #	OD (in)	MFR	Style	Serial#	Nozzles (/32's)	TFA (in ²)	Dull Condition
6	8.500	Reed Hycalog	RSX163DGW	208684	6x15	1.035	- - - - -LIH

MOTOR DATA

Run #	OD (in)	MFR	Model	Serial#	Bend	Nzl (/32's)	Avg Dif (psi)	Cum Circ Hrs
5	7.000	SSDS	SperryDrill	700041	1.22°		322	108.75

COMPONENT DATA

Item #	Description	Serial #	OD (in)	ID (in)	Gauge (in)	Weight (lbs/ft)	Top Con	Length (m)	Bit - Center Blade (m)
1	PDC	208684	8.500	2.500	8.500	176.66	P 4-1/2" Reg	0.22	
2	7" SperryDrill Lobe 7/8 - 6.0 stg	700041	7.000	4.498	8.125	77.00	B 4-1/2" IF	7.67	0.87
3	Adjustable Gauge Stabilizer	450066	6.750	2.813	8.500	100.77	B 4-1/2" IF	3.24	9.79
4	Float Sub	DA6015	6.750	3.000		97.86	B 4-1/2" IF	0.64	
5	6-3/4" PM		6.750	1.920		112.09	B 4-1/2" IF	2.77	
6	6-3/4" Resistivity w/ X/O	90057455	6.750	1.920		112.09	B 4-1/2" IF	4.23	
7	6-3/4" Gamma Ray Sensor	90057455	6.750	1.920		112.09	B 4-1/2" IF	1.33	
8	6-3/4" HCIM Sensor	90057455	6.750	1.920		112.09	B 4-1/2" IF	1.49	
9	6-3/4" Pulser/TM		6.750	1.920		112.09	B 4-1/2" IF	3.06	
10	Integral Blade Stabilizer	47697	6.750	3.000	8.000	97.86	B 4-1/2" IF	1.56	25.42
11	6x Spiral Drill collar	Dimond M	6.500	2.813		92.00	B 4-1/2" IF	54.60	
12	Drilling Jar	40909	6.500	2.750		92.85	B 4-1/2" IF	9.87	
13	2x Spiral Drill collar	Dimond M	6.500	2.813		92.00	B 4-1/2" IF	18.20	
14	15x HWDP		5.000	3.000		49.30	B 4-1/2" IF	137.00	
								245.88	

Parameter	Min	Max	Ave
WOB (klbs) :	4	35	21
RPM (rpm) :	45	85	80
Flow (gpm) :	450	625	609
SPP (psi) :	1450	3200	2934

Activity	Hrs
Drilling :	92.00
Reaming :	0.50
Circ-Other :	2.50
Total :	95.00

BHA Weight	(lb)
in Air (Total) :	55719
in Mud (Total) :	47736
in Air (Bel Jars) :	25060
in Mud (Bel Jars) :	21469

Drill String	OD(in)	Len(m)
DP(G)-NC50(XH)-19.50#	5.000	2861

PERFORMANCE

	In	Out
Inclination (deg)	31.90	31.06
Azimuth (deg)	15.98	12.55

	Distance(m)	ROP (m/hr)	Build (°/30m)	Turn (°/30m)	DLS (°/30m)
Oriented :	137.00	5			
Rotated :	780.00	11			
Total :	917.00	10	-0.03	-0.11	0.06

COMMENTS

LIH Bit and drive shaft, when hoisted to surface.

AGS test 400gpm, FG 480psi, UG 300psi.

Sidetrack off cement plug @ 2190m, and drilled to 3107m.

Bit conn 14000ft/lbs, sleeve stab 12000ft/lbs, ABH 28000ft/lbs.

OBJECTIVES:

The objective of this BHA is to perform a cement sidetrack and obtain displacement from the previous 12.25" drilled section.

RESULTS:

The motor was RIH to 2187m, with no restrictions and was run in conjunction with a Hycalog PDC bit. Cement was tagged and dressed to 2190m. The sidetrack of the cement plug was initiated at 2190m, with a toolface orientation of 140L, 450gpm.

The first two metres was drilled at 0.5m/hr, and the ROP gradually increased to 1-3m/hr. A survey was taken at 2193m, 13m behind the bit, which showed a slight drop and turn from the original 12 1/4" well path. Once the survey was known, rotation was introduced for 20m. ROP was only 2m/hr and continued at that rate for 10m. ROP improved to 25-60m/hr at 2340m. The next two surveys produced a DLS of 2.33-2.44°/30, motor output was 7.4°/30m. Throughout the sidetrack formation showed positive gains in percentage ratios.

Rotating was continued in FG @ 600gpm, 3200psi off bottom, with continued separation from the original hole. At 2353m sliding high sides was needed to bring the wellbore back on inclination and TVD. This produced DLS of 4.5°/30m. Drilling parameters during the run (10-45k WOB, 80rpm, 615gpm, with diff. pressure of 300-400psi).

The AGS showed a dropping tendency in UG and FG mode, however if the dropping tendency was slowed by reducing flow and RPM in UG, the BHA would hold inclination. At 2900m sliding was becoming a problem with constant stacking and stalling.

The decision was made to rotate ahead and maintain inclination; ROP at this stage was 50-70m/hr. At 3107m ROP stopped and it was presumed that a hard stringer had been hit as per geology well referencing. Four inches were drilled over a four hour period. High weight and slow ROP were used with reduced flow. The BHA was pulled and at surface it was discovered that the drive shaft and bit had been left down hole.

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DRILLING SERVICES

BHA Report

Customer : Bass Strait Oil Company Ltd.

Well : Zane Grey #1 ST1

Field : Zane Grey

Location : Bass Strait

Rig : Ocean Patriot

Job # : AU-DD-0003564401

BHA# 10

BHA# 10 : Date In :26/02/200 MD In (m) : 3107 TVD In (m) : 2706 Date Out 28/02/200 MD Out (m): 3107 TVD Out (m): 2706

BIT DATA

Bit #	OD (in)	MFR	Style	Serial#	Nozzles (/32's)	TFA (in²)	Dull Condition
7	8.500	Reed Hycalog	TD43AKPRDH	D80771	2x12, 1x32	1.006	2-1-JD-N -E-I-WT-BHA

MOTOR DATA

Run #	OD (in)	MFR	Model	Serial#	Bend	Nzl (/32's)	Avg Dif (psi)	Cum Circ Hrs
6	7.000	SSDS	SperryDrill	700018	1.22°			9.50

COMPONENT DATA

Item #	Description	Serial #	OD (in)	ID (in)	Gauge (in)	Weight (lbs/ft)	Top Con	Length (m)	Bit - Center Blade (m)
1	Roller Cone Insert	D80771	8.500	2.500	8.500	176.66	P 4-1/2" Reg	0.22	
2	7" SperryDrill Lobe 7/8 - 6.0 stg	700018	7.000	4.498	8.185	77.00	B 4-1/2" IF	7.67	0.73
3	Adjustable Gauge Stabilizer	450066	6.750	2.813	8.500	100.77	B 4-1/2" IF	3.24	9.79
4	Float Sub w/ ported float	DA6015	6.750	3.000		97.86	B 4-1/2" IF	0.64	
5	6-3/4" PM	DM90052756	6.750	1.920		112.09	B 4-1/2" IF	2.77	
6	6-3/4" Resistivity w/ X/O	90057455	6.750	1.920		112.09	B 4-1/2" IF	4.23	
7	6-3/4" Gamma Ray Sensor	90057455	6.750	1.920		112.09	B 4-1/2" IF	1.33	
8	6-3/4" HCIM Sensor	90057455	6.750	1.920		112.09	B 4-1/2" IF	1.49	
9	6-3/4" Pulser/TM	192198	6.750	1.920		112.09	B 4-1/2" IF	3.06	
10	Integral Blade Stabilizer	47697	6.750	3.000	8.000	97.86	B 4-1/2" IF	1.56	25.42
11	3x Spiral Drill collar	Dimond M	6.500	2.813		92.00	B 4-1/2" IF	27.30	
12	Drilling Jar	40909	6.500	2.750		92.85	B 4-1/2" IF	9.87	
13	2x Spiral Drill collar	Dimond M	6.500	2.813		92.00	B 4-1/2" IF	18.20	
14	15x HWDP		5.000	3.000		49.30	B 4-1/2" IF	137.00	
								218.58	

Parameter	Min	Max	Ave
WOB (klbs) :			
RPM (rpm) :			
Flow (gpm) :			
SPP (psi) :			

Activity	Hrs
Drilling :	8.00
Reaming :	1.50
Circ-Other :	0.00
Total :	9.50

BHA Weight	(lb)
in Air (Total) :	47479
in Mud (Total) :	40676
in Air (Bel Jars) :	16819
in Mud (Bel Jars) :	14410

Drill String	OD(in)	Len(m)
DP(G)-NC50(XH)-19.50#	5.000	2888

PERFORMANCE

	In	Out
Inclination (deg)	31.06	31.06
Azimuth (deg)	12.55	12.55

Distance(m)	ROP (m/hr)	Build (°/30m)	Turn (°/30m)	DLS (°/30m)
Oriented :	0			
Rotated :	0			
Total :	0	0.00	0.00	0.00

COMMENTS

AGS test 450gpm; FG 100psi, UG 800psi
RFO = 5
Unsuccessful attempt for sidetrack.

Customer : Bass Strait Oil Company Ltd.**Well :** Zane Grey #1 ST1**Field :** Zane Grey**Location :** Bass Strait**Rig :** Ocean Patriot**Job # :** AU-DD-0003564401**BHA# 10****OBJECTIVES:**

The objective of this BHA was to perform a sidetrack around the fish at 3107m. A cement plug of 80m will be set inside the 8.5" hole.

RESULTS:

The motor was run in conjunction with a Reed 437 insert bit. The BHA was RIH to 2949m. Soft cement was tagged with 5000ft/lbs with no flow. Circulation was initiated with 500gpm and 50 RPM, no WOB was seen and soft cement was polished to 2175m with an ROP of up to 50m/hr, torque of 22k ft/lbs was seen with continued stalling. ROP was increased to 70 RPM. At 2175m knowing no hard cement had been found, time drilling was initiated at 1m/hr at 120-170R with steady toolface control, and was performed for 12m.

At this stage toolface direction was changed to 90R for the remaining slide until connection point to 3089m. The survey showed no displacement and sliding continued with 90R to 3107m, differential at 3106m was seen of 150psi and weight of 5-10klbs. With the displacement of the fish now known, the BHA was pulled to run another cement plug.

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DRILLING SERVICES

BHA Report

Customer : Bass Strait Oil Company Ltd.

Well : Zane Grey #1 ST1

Field : Zane Grey

Location : Bass Strait

Rig : Ocean Patriot

Job # : AU-DD-0003564401

BHA# 11

BHA# 11 : Date In :28/02/200 MD In (m) : 3107 TVD In (m) : 2706 Date Out 28/02/200 MD Out (m): 3107 TVD Out (m): 2706

BIT DATA

Bit #	OD (in)	MFR	Style	Serial#	Nozzles (/32's)	TFA (in²)	Dull Condition
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MOTOR DATA

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

Item #	Description	Serial #	OD (in)	ID (in)	Gauge (in)	Weight (lbs/ft)	Top Con	Length (m)	Bit - Center Blade (m)
1	2 7/8" Mule shoe		2.880	2.500		5.47		9.57	
2	8x 2 7/8" Tubing		2.880	2.500		5.47		77.01	
3	Cross Over Sub							0.41	
								86.99	

Parameter	Min	Max	Ave
WOB (klbs) :			
RPM (rpm) :			
Flow (gpm) :			
SPP (psi) :			

Activity	Hrs
Drilling :	0.00
Reaming :	0.00
Circ-Other :	0.50
Total :	0.50

BHA Weight (lb)
in Air (Total) :
in Mud (Total) :
in Air (Bel Jars) : 0
in Mud (Bel Jars) : 0

Drill String	OD(in)	Len (m)
DP(G)-NC50(XH)-19.50#	5.000	3020

PERFORMANCE

	In	Out
Inclination (deg)	31.06	31.06
Azimuth (deg)	12.55	12.55

Distance(m)	ROP (m/hr)	Build (°/30m)	Turn (°/30m)	DLS (°/30m)
Oriented :				
Rotated :				
Total :				

COMMENTS

Second cement plug

Customer : Bass Strait Oil Company Ltd.

Well : Zane Grey #1 ST1

Field : Zane Grey

Location : Bass Strait

Rig : Ocean Patriot

Job # : AU-DD-0003564401

BHA# 11

OBJECTIVES:

Cement the old hole for a cement plug sidetrack.

RESULTS:

Cement was pumped and set to 2958mMD.

sperry-sun

DRILLING SERVICES

BHA Report

Customer : Bass Strait Oil Company Ltd.

Well : Zane Grey #1 ST1

Field : Zane Grey

Location : Bass Strait

Rig : Ocean Patriot

Job # : AU-DD-0003564401

BHA# 12

BHA# 12 : Date In :28/02/200 MD In (m) : 3107 TVD In (m) : 2706 Date Out 3/03/2005 MD Out (m): 3107 TVD Out (m): 2706

BIT DATA

Bit #	OD (in)	MFR	Style	Serial#	Nozzles (/32's)	TFA (in ²)	Dull Condition
8	8.500	Reed Hycalog	RSX162DGW	207732	6x14	0.902	0-0-NO-A -X-I-PN-BHA

MOTOR DATA

Run #	OD (in)	MFR	Model	Serial#	Bend	Nzl (/32's)	Avg Dif (psi)	Cum Circ Hrs
7	7.000	SSDS	SperryDrill	700018	1.50°			60.00

COMPONENT DATA

Item #	Description	Serial #	OD (in)	ID (in)	Gauge (in)	Weight (lbs/ft)	Top Con	Length (m)	Bit - Center Blade (m)
1	PDC	207732	8.500	2.500	8.500	176.66	P 4-1/2" Reg	0.22	
2	7" SperryDrill Lobe 7/8 - 6.0 stg	700018	7.000	4.498	8.185	77.00	B 4-1/2" IF	7.67	0.73
3	Adjustable Gauge Stabilizer	450066	6.750	2.813	8.500	100.77	B 4-1/2" IF	3.24	9.79
4	Float Sub w/ ported float	DA6015	6.750	3.000		97.86	B 4-1/2" IF	0.64	
5	6-3/4" PM	DM90052756	6.750	1.920		112.09	B 4-1/2" IF	2.77	
6	6-3/4" Resistivity w/ X/O	90057455	6.750	1.920		112.09	B 4-1/2" IF	4.23	
7	6-3/4" Gamma Ray Sensor	90057455	6.750	1.920		112.09	B 4-1/2" IF	1.33	
8	6-3/4" HCIM Sensor	90057455	6.750	1.920		112.09	B 4-1/2" IF	1.49	
9	6-3/4" Pulser/TM	192198	6.750	1.920		112.09	B 4-1/2" IF	3.06	
10	Integral Blade Stabilizer	47697	6.750	3.000	8.000	97.86	B 4-1/2" IF	1.56	25.42
11	3x Spiral Drill collar	Diamond M	6.500	2.813		92.00	B 4-1/2" IF	27.30	
12	Drilling Jar	40909	6.500	2.750		92.85	B 4-1/2" IF	9.87	
13	2x Spiral Drill collar	Diamond M	6.500	2.813		92.00	B 4-1/2" IF	18.20	
14	15x HWDP		5.000	3.000		49.30	B 4-1/2" IF	137.00	
								218.58	

Parameter	Min	Max	Ave
WOB (klbs) :			
RPM (rpm) :			
Flow (gpm) :			
SPP (psi) :			

Activity	Hrs
Drilling :	39.50
Reaming :	1.00
Circ-Other :	0.00
Total :	40.50

BHA Weight	(lb)
in Air (Total) :	47479
in Mud (Total) :	40676
in Air (Bel Jars) :	16819
in Mud (Bel Jars) :	14410

Drill String	OD(in)	Len(m)
DP(G)-NC50(XH)-19.50#	5.000	2888

PERFORMANCE

	In	Out
Inclination (deg)	31.06	31.06
Azimuth (deg)	12.55	12.55

Distance(m)	ROP (m/hr)	Build (°/30m)	Turn (°/30m)	DLS (°/30m)
Oriented :	0			
Rotated :	0			
Total :	0	0.00	0.00	0.00

COMMENTS

AGS test 500gpm; FG 1300psi, UG 1050psi

Customer : Bass Strait Oil Company Ltd.**Well :** Zane Grey #1 ST1**Field :** Zane Grey**Location :** Bass Strait**Rig :** Ocean Patriot**Job # :** AU-DD-0003564401**BHA# 12****OBJECTIVES:**

Sidetrack lowside of the cement plug and continue to TD of 3691mMD.

RESULTS:

The motor was run in conjunction with a 13mm Hycalog PDC. Cement was tagged at 2958m and washed to 2960m. The toolface setting was positioned to 180-150R and working 9 metres with 660gpm, a washed ledge was set to initiate the sidetrack. Time drilling commenced at 1-3m/hr for 15 metres, with formation shows only getting to 20%. A second ledge and attempt to time drill was performed with the same drilling parameters as above, to no avail. Surveys taken showed no displacement and a BHA change was recommended to remove the AGS and motor sleeve.

sperry-sun

DRILLING SERVICES

BHA Report

Customer : Bass Strait Oil Company Ltd.

Well : Zane Grey #1 ST1

Field : Zane Grey

Location : Bass Strait

Rig : Ocean Patriot

Job # : AU-DD-0003564401

BHA# 13

BHA# 13 : Date In :3/03/2005 MD In (m) : 3107 TVD In (m) : 2706 Date Cur: 4/03/2005 MD Cur (m): 3107 TVD Cur (m): 2706

BIT DATA

Bit #	OD (in)	MFR	Style	Serial#	Nozzles (/32's)	TFA (in²)	Dull Condition
9rr1	8.500	Security	EBXSC1S	10676290	3x20	0.920	

MOTOR DATA

Run #	OD (in)	MFR	Model	Serial#	Bend	Nzl (/32's)	Avg Dif (psi)	Cum Circ Hrs
8	6.750	SSDS	SperryDrill	675495	1.15°			25.00

COMPONENT DATA

Item #	Description	Serial #	OD (in)	ID (in)	Gauge (in)	Weight (lbs/ft)	Top Con	Length (m)	Bit - Center Blade (m)
1	Roller Cone Steel	10676290	8.500	2.500	8.500	176.66	P 4-1/2" Reg	0.34	
2	6-3/4" SperryDrill Lobe 6/7 - 5.0 stg	675495	6.750	4.498	7.875	67.81	B 4-1/2" IF	7.67	0.77
3	Integral Blade Stabilizer	A-472	6.750	2.813	7.875	100.77	B 4-1/2" IF	1.75	8.87
4	Float Sub w/ ported float	DA6015	6.750	3.000		97.86	B 4-1/2" IF	0.64	
5	6-3/4" PM	DM90052756	6.750	1.920		112.09	B 4-1/2" IF	2.77	
6	6-3/4" Resistivity w/ X/O	90057455	6.750	1.920		112.09	B 4-1/2" IF	4.23	
7	6-3/4" Gamma Ray Sensor	90057455	6.750	1.920		112.09	B 4-1/2" IF	1.33	
8	6-3/4" HCIM Sensor	90057455	6.750	1.920		112.09	B 4-1/2" IF	1.49	
9	6-3/4" Pulser/TM	192198	6.750	1.920		112.09	B 4-1/2" IF	3.06	
10	Integral Blade Stabilizer	47697	6.750	3.000	8.000	97.86	B 4-1/2" IF	1.56	24.05
11	3x Spiral Drill collar	Diamond M	6.500	2.813		92.00	B 4-1/2" IF	27.30	
12	Drilling Jar		6.500	2.750		92.85	B 4-1/2" IF	9.87	
13	2x Spiral Drill collar	Diamond M	6.500	2.813		92.00	B 4-1/2" IF	18.20	
14	15x HWDP		5.000	3.000		49.30	B 4-1/2" IF	137.00	
								217.21	

Parameter	Min	Max	Ave
WOB (klbs) :			
RPM (rpm) :			
Flow (gpm) :			
SPP (psi) :			

Activity	Hrs
Drilling :	0.00
Reaming :	25.00
Circ-Other :	0.00
Total :	25.00

BHA Weight	(lb)
in Air (Total) :	46824
in Mud (Total) :	40115
in Air (Bel Jars) :	16165
in Mud (Bel Jars) :	13849

Drill String	OD(in)	Len(m)
DP(G)-NC50(XH)-19.50#	5.000	2890

PERFORMANCE

	In	Out
Inclination (deg)	31.06	31.06
Azimuth (deg)	12.55	12.55

Distance(m)	ROP (m/hr)	Build (°/30m)	Turn (°/30m)	DLS (°/30m)
Oriented :				
Rotated :				
Total :				

COMMENTS

RFO = 97 degree, visual = 90-100 degree
 Bit conn = 120000ft/lbs
 ABH = 25000ft/lbs
 Motor top = 30000ft/lbs

Customer : Bass Strait Oil Company Ltd.

Well : Zane Grey #1 ST1

Field : Zane Grey

Location : Bass Strait

Rig : Ocean Patriot

Job # : AU-DD-0003564401

BHA# 13

OBJECTIVES:

The objective of this BHA was to sidetrack the well low side.

RESULTS:

Cement sidetrack was performed, without success.

Sidetrack started at 3032m to lowside, with time drilling procedures implemented. Cement was drilled to 3070m with survey data showing no displacement from the original wellbore. The cement plug in dynamic shows no signs of hardness. The bit came out with the gauged area showing considerable wear. The mill teeth were green.

Motor Serial # : 700041	Job # : AU-DD-0003564401
Directional Driller(s) : Tim Walton, Sompon T.	Customer : Bass Strait Oil Company Ltd.
Location : Bass Strait	Rig : Ocean Patriot
Well : Zane Grey #1 ST1	Bit Run # : 6 BHA # : 8 Motor Run # : 5
Depth In/Out : 2190 / 3107 m	Date In/Out : 21/02/2005 / 26/02/2005 Hole Size : 8.500 in
Application Details :	

MOTOR CONFIGURATION

	From Bit (m)	Component	Type	Diam In/Out (in)
Upr Stab	1 0.87	Sleeve Stab/Pad	Yes	8.125 8.125
	2 2.02	Bent Housing	Yes	
Lwr Stab or Pad Sub	3 2.04	Housing Tool Used	Yes	
Motor Top	4 7.89	Stator Elastomer		
Pad	5	Bent Sub / 2nd Bent Hsg	No	
Bend (Housing)	6 9.79	Lower String Stab	Yes	8.500
Sleeve Tool	7 25.42	Upper String Stab	Yes	8.000 8.000
Additional Features :				Arr Ret
Flex Collar : No Short Brg Pack : No Rtr Noz / Size : /32's				Pick Up Sub : Yes No
Brg Cfg (Off/On) : 4/2 Lobe Cfg : 7/8 BHA OD/ID : 6.750 / 2.813 in				Bit Box Protr : Yes No

MOTOR RUN DATA

Max Dogleg While Rotating		: 0.70	°/30m	RPM	: 80	Motor Stalled	: Yes	Prev Job/Well Hrs	: 13.75				
Max Dogleg Overpulled In		: 1.30	°/30m	Force	: 430000	lbf	Float Valve	: Yes	Drilling Hrs	: 92.00			
Max Dogleg Pushed Through		: 1.30	°/30m	Force	: 230000	lbf	DP Filter	: No	Circ Hrs	: 2.50			
Hole Azimuth Start / End		: 15.98° / 12.55°	Inc Start / End		: 31.90° / 31.06°			Reaming Hrs	: 0.50				
Interval Oriented / Rot.		: 137 / 780	m	Directional Perf Ori / Rot	: /	°/30m	Total Hrs This Run		: 95.00				
Jarring Occured		: No						New Cumulative Hrs	: 108.75				
	Diff Press	(psi)	Str RPM	Rotn Torque	(ft-lbs)	Drag Up/Dn	(lbf)	WOB	(klbs)	ROP Oriented	(m/hr)	ROP Rotated	(m/hr)
Avg :	322		80	15000		305000 / 250000		21		5		11	
Max :	400		85	22000		430000 / 230000		35		45		50	

PRE-RUN TESTS

Motor Tested Pre-Run : Yes	with : 0 Collars, Bit
Dump Sub Operating : N/A	Brg Play : mm
Flow 1 : 450 gpm	Pressure 1 : 480 psi
Flow 2 : gpm	Pressure 2 : psi
Driveshaft Rotation Observed : Yes	
Bearing Leakage Observed : Yes	

POST-RUN TESTS

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

MUD DATA

Base : Water	Additives :	Mud Wt : 9.4 ppg	SPP Start/End : 1450 / 2850 psi
% Oil/Water : /	% Solids : 8.20	% Sand : 0.25	PV : 17 cp YP : 32.0 lbf/100ft² pH : 8.5
DH Temp Avg/Max : 76.7 / 80.0	FlowRate Avg/Max : 609 / 625 gpm	Chloride Content : 31000 ppm	
Principle Formation Name(s) :	Lithology :		

BIT DATA

Make : Reed Hycalog	Type : RSX163DGW	Serial # : 208684	Dull Grade	1	2	3	4	5	6	7	8
Pre Existing Hours From Other Wells:			In	NEW							
Prev Drilling Hrs : 0.00	Prev Reaming Hrs : 0.00	No of Runs This Bit : 1	Out	LIH							
Jet Sizes (/32's) : 6x15	TFA : 1.035 in²	Gage Length : 1.800 in									

PERFORMANCE COMMENTS

Problem Perceived : Yes	Problem Date : 25/02/2005	Service Interrupt : No	Service Interrupt Hrs :
Performance Motor : No	Tandem Motor : No	LIH : Yes	PPR Ref # :

When SperryDrill motor at surface, the bit box drive shaft and bit were missing. A clean break inside the motor housing at the universal joint where the thread of the drive shaft connects.

Customer Representative's Signature (optional) : Date:

Motor Serial # : 700018	Job # : AU-DD-0003564401
Directional Driller(s) : Tim Walton, Sompon T.	Customer : Bass Strait Oil Company Ltd.
Location : Bass Strait	Rig : Ocean Patriot
Well : Zane Grey #1 ST1	Bit Run # : 7 BHA # : 10 Motor Run # : 6
Depth In/Out : 3107 / 3107 m	Date In/Out : 26/02/2005 / 28/02/2005 Hole Size : 8.500 in
Application Details :	

MOTOR CONFIGURATION

	From Bit (m)	Component	Type	Diam In/Out (in)
Upr Stab	1 0.73	Sleeve Stab/Pad	Yes	8.185 8.185
	2 2.02	Bent Housing	Yes	
Lwr Stab or Pad Sub	3 2.04	Housing Tool Used	Yes	
Motor Top	4 7.89	Stator Elastomer		
Pad	5	Bent Sub / 2nd Bent Hsg	No	
Bend (Housing)	6 9.79	Lower String Stab	Yes	8.500
Sleeve Tool	7 25.42	Upper String Stab	Yes	8.000 8.000
Additional Features : Flex Collar : No Short Brg Pack : No Rtr Noz / Size : /32's Brg Cfg (Off/On) : 4/2 Lobe Cfg : 7/8 BHA OD/ID : 6.750 / 2.813 in				Arr Ret Pick Up Sub : Yes No Bit Box Protr : Yes No

MOTOR RUN DATA

Max Dogleg While Rotating : °/30m RPM :				Motor Stalled : No		Prev Job/Well Hrs : 0.00	
Max Dogleg Overpulled In : °/30m Force : lbf				Float Valve : Yes		Drilling Hrs : 8.00	
Max Dogleg Pushed Through : °/30m Force : lbf				DP Filter : No		Circ Hrs : 0.00	
Hole Azimuth Start / End : 12.55° / 12.55° Inc Start / End : 31.06° / 31.06°						Reaming Hrs : 1.50	
Interval Oriented / Rot. : m Directional Perf Ori / Rot : / °/30m						Total Hrs This Run : 9.50	
Jarring Occured : No						New Cumulative Hrs : 9.50	
	Diff Press (psi)	Str RPM	Rotn Torque (ft-lbs)	Drag Up/Dn (lbf)	WOB (klbs)	ROP Oriented (m/hr)	ROP Rotated (m/hr)
Avg :				310000 / 250000		0	0
Max :				430000 / 230000			

PRE-RUN TESTS

Motor Tested Pre-Run : Yes	with : , Bit, MWD
Dump Sub Operating : N/A	Brg Play : 0.3 mm
Flow 1 : 450 gpm	Pressure 1 : 1000 psi
Flow 2 : 450 gpm	Pressure 2 : 800 psi
Driveshaft Rotation Observed : No	
Bearing Leakage Observed : No	

POST-RUN TESTS

Motor Tested Post-Run : Yes	with : , MWD
Dump Sub Operating : N/A	Brg Play : 0.3 mm
Flow 1 : gpm	Pressure 1 : psi
Flow 2 : gpm	Pressure 2 : psi
Driveshaft Rotation Observed : No	
Bearing Leakage Observed : No	
Driveshaft Rotated to Drain Mud : Yes	
Fluid Flushed : Yes	Fluid Used : Water

MUD DATA

Base : Water	Additives :	Mud Wt : 9.4 ppg	SPP Start/End : 2850 / 2850 psi
% Oil/Water : /	% Solids : 8.20	% Sand : 0.25	PV : 17 cp YP : 32.0 lbf/100ft² pH : 8.5
DH Temp Avg/Max : /	FlowRate Avg/Max : / gpm	Chloride Content : 31000 ppm	
Principle Formation Name(s) :	Lithology :		

BIT DATA

Make : Reed Hycalog	Type : TD43AKPRDH	Serial # : D80771	Dull Grade	1	2	3	4	5	6	7	8
Pre Existing Hours From Other Wells:			In	NEW							
Prev Drilling Hrs : 0.00	Prev Reaming Hrs : 0.00	No of Runs This Bit : 1	Out	2	1	JD	N	E	I	WT	BHA
Jet Sizes (/32's) : 2x12, 1x32	TFA : 1.006 in²	Gage Length : in									

PERFORMANCE COMMENTS

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

Customer Representative's Signature (optional) : Date:

Motor Serial # : 700018	Job # : AU-DD-0003564401
Directional Driller(s) : Tim Walton, Sompon T.	Customer : Bass Strait Oil Company Ltd.
Location : Bass Strait	Rig : Ocean Patriot
Well : Zane Grey #1 ST1	Bit Run # : 8 BHA # : 12 Motor Run # : 7
Depth In/Out : 3107 / 3107 m	Date In/Out : 28/02/2005 / 3/03/2005 Hole Size : 8.500 in
Application Details :	

MOTOR CONFIGURATION

	From Bit (m)	Component	Type	Diam In/Out (in)
Upr Stab	1 0.73	Sleeve Stab/Pad	Yes	8.185 8.185
	2 2.02	Bent Housing	Yes	
Lwr Stab or Pad Sub	3 2.15	Housing Tool Used	Yes	
Motor Top	4 7.89	Stator Elastomer	Nitrile	
Pad	5	Bent Sub / 2nd Bent Hsg	No	
Bent (Housing)	6 9.79	Lower String Stab	Yes	8.500
Sleeve Tool	7 25.42	Upper String Stab	Yes	8.000 8.000
Additional Features :				Arr Ret
Flex Collar : No	Short Brg Pack : No	Rtr Noz / Size : /32's	Pick Up Sub : Yes	No
Brg Cfg (Off/On) : 4/2	Lobe Cfg : 7/8	BHA OD/ID : 6.750 / 2.813 in	Bit Box Protr : Yes	No

MOTOR RUN DATA

Max Dogleg While Rotating : %30m RPM :				Motor Stalled : No		Prev Job/Well Hrs : 19.50	
Max Dogleg Overpulled In : %30m Force : lbf				Float Valve : No		Drilling Hrs : 39.50	
Max Dogleg Pushed Through : %30m Force : lbf				DP Filter : No		Circ Hrs : 0.00	
Hole Azimuth Start / End : 12.55° / 12.55° Inc Start / End : 31.06° / 31.06°						Reaming Hrs : 1.00	
Interval Oriented / Rot. : m Directional Perf Ori / Rot : / %30m						Total Hrs This Run : 40.50	
Jarring Occured : No						New Cumulative Hrs : 60.00	
	Diff Press (psi)	Str RPM	Rotn Torque (ft-lbs)	Drag Up/Dn (lbf)	WOB (klbs)	ROP Oriented (m/hr)	ROP Rotated (m/hr)
Avg :				310000 / 240000		0	0
Max :				450000 / 220000			

PRE-RUN TESTS

Motor Tested Pre-Run : Yes	with : 1 Collar, Bit, MWD
Dump Sub Operating : N/A	Brg Play : 0.3 mm
Flow 1 : 500 gpm	Pressure 1 : 1300 psi
Flow 2 : 500 gpm	Pressure 2 : 1050 psi
Driveshaft Rotation Observed : No	
Bearing Leakage Observed : No	

POST-RUN TESTS

Motor Tested Post-Run : No	with :
Dump Sub Operating : N/A	Brg Play : 0.3 mm
Flow 1 : gpm	Pressure 1 : psi
Flow 2 : gpm	Pressure 2 : psi
Driveshaft Rotation Observed : Yes	
Bearing Leakage Observed : Yes	
Driveshaft Rotated to Drain Mud : Yes	
Fluid Flushed : Yes	Fluid Used : Water

MUD DATA

Base : Water	Additives :	Mud Wt : 9.4 ppg	SPP Start/End : 2850 / 2850 psi
% Oil/Water : /	% Solids : 8.20	% Sand : 0.25	PV : 17 cp YP : 32.0 lbf/100ft² pH : 8.5
DH Temp Avg/Max : /	FlowRate Avg/Max : / gpm	Chloride Content : 31000 ppm	
Principle Formation Name(s) :	Lithology :		

BIT DATA

Make : Reed Hycalog	Type : RSX162DGW	Serial # : 207732	Dull Grade	1	2	3	4	5	6	7	8
Pre Existing Hours From Other Wells:			In	NEW							
Prev Drilling Hrs : 0.00	Prev Reaming Hrs : 0.00	No of Runs This Bit : 1	Out	0	0	NO	A	X	I	PN	BHA
Jet Sizes (/32's) : 6x14	TFA : 0.902 in²	Gage Length : in									

PERFORMANCE COMMENTS

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

Customer Representative's Signature (optional) : Date:

Motor Serial # : 675495	Job # : AU-DD-0003564401
Directional Driller(s) : Burt Muise, Sompon T./Tim Walton	Customer : Bass Strait Oil Company Ltd.
Location : Bass Strait	Rig : Ocean Patriot
Well : Zane Grey #1 ST1	Bit Run # : 9rr1 BHA # : 13
Depth In/Out : 3107 / 3107 m	Date In/Out : 3/03/2005 / 4/03/2005
Application Details :	Motor Run # : 8
	Hole Size : 8.500 in

MOTOR CONFIGURATION

	From Bit (m)	Component	Type	Diam In/Out (in)
Upr Stab	1 0.77	Sleeve Stab/Pad	Yes	7.875 7.875
	2 2.23	Bent Housing	Yes	Adjustable: 1.15° bend
Lwr Stab or Pad Sub	3 2.27	Housing Tool Used	Yes	Pad 0.125 in Th
Motor Top	4 8.01	Stator Elastomer	Nitrile	Stator: Standard
Pad	5	Bent Sub / 2nd Bent Hsg	No	
Bend (Housing)	6 8.87	Lower String Stab	Yes	7.875 7.875
	7 24.05	Upper String Stab	Yes	8.000 8.000
Sleeve Tool				

Additional Features :	Flex Collar : No	Short Brg Pack : No	Rtr Noz / Size : /32's	Arr Ret
Brg Cfg (Off/On) : 4/2	Lobe Cfg : 6/7	BHA OD/ID : 6.750 / 2.813 in	Pick Up Sub : Yes	No
			Bit Box Protr : Yes	No

MOTOR RUN DATA

Max Dogleg While Rotating : °/30m	RPM :	Motor Stalled : Yes	Prev Job/Well Hrs : 0.00
Max Dogleg Overpulled In : °/30m	Force : lbf	Float Valve : Yes	Drilling Hrs : 0.00
Max Dogleg Pushed Through : °/30m	Force : lbf	DP Filter : No	Circ Hrs : 0.00
Hole Azimuth Start / End : 12.55° / 12.55°	Inc Start / End : 31.06° / 31.06°		Reaming Hrs : 25.00
Interval Oriented / Rot. : m	Directional Perf Ori / Rot : / °/30m		Total Hrs This Run : 25.00
Jarring Occured : No			New Cumulative Hrs : 25.00

Diff Press (psi)	Str RPM	Rotn Torque (ft-lbs)	Drag Up/Dn (lbf)	WOB (klbs)	ROP Oriented (m/hr)	ROP Rotated (m/hr)
Avg :			310000 / 250000			
Max :			420000 / 220000			

PRE-RUN TESTS

Motor Tested Pre-Run : Yes	with : 1 Collar, Bit, MWD
Dump Sub Operating : N/A	Brg Play : 0.3 mm
Flow 1 : 450 gpm	Pressure 1 : 800 psi
Flow 2 : gpm	Pressure 2 : psi
Driveshaft Rotation Observed : No	
Bearing Leakage Observed : No	

POST-RUN TESTS

Motor Tested Post-Run : No	with :
Dump Sub Operating : N/A	Brg Play : 0.3 mm
Flow 1 : gpm	Pressure 1 : psi
Flow 2 : gpm	Pressure 2 : psi
Driveshaft Rotation Observed : Yes	
Bearing Leakage Observed : Yes	
Driveshaft Rotated to Drain Mud : Yes	
Fluid Flushed : Yes	Fluid Used : Water

MUD DATA

Base : Water	Additives :	Mud Wt : 9.4 ppg	SPP Start/End : 2850 / 2850 psi
% Oil/Water : /	% Solids : 8.20	% Sand : 0.25	PV : 17 cp YP : 32.0 lbf/100ft² pH : 8.5
DH Temp Avg/Max : /	FlowRate Avg/Max : / gpm	Chloride Content : 31000 ppm	
Principle Formation Name(s) :	Lithology :		

BIT DATA

Make : Security	Type : EBXSC1S	Serial # : 10676290	Dull Grade	1	2	3	4	5	6	7	8
Pre Existing Hours From Other Wells:			In	1	1	NO	A	E	1	NO	BHA
Prev Drilling Hrs : 0.00	Prev Reaming Hrs : 0.00	No of Runs This Bit : 1	Out								
Jet Sizes (/32's) : 3x20	TFA : 0.920 in²	Gage Length : in									

PERFORMANCE COMMENTS

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

sperry-sun

DRILLING SERVICES

Daily Drilling Report

Customer : Bass Strait Oil Company Ltd.

Well : Zane Grey #1 ST1

Field : Zane Grey

Location : Bass Strait

Rig : Ocean Patriot

Job # : AU-DD-0003564401

CURRENT STATUS Report # 1 21/02/2005

Total Depth (m) :	2192	Casing Depth (m) :	1090.61	Operator Reps :	Steve Hodgets, Peter Dane
Drilled last 24 hrs (m) :	2	Casing Diameter (in) :	13.375	SSDS Reps :	Tim Walton (1), Sompon T. (1)
Hole Size (in) :	8.500	Casing ID (in) :	12.615		

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
2183.17	32.39	16.46	1935.37	848.75	N15.44E

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

BHA 8: 245.88 m; Bit #6 (3.5 hrs), PDM #5 (17.25 hrs), AGS, Sub, MWD, MWD, MWD, MWD, MWD, Stab, 6x DC, Jar, 2x DC, 15x HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lb/100ft ²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
KCl/Polymer	9.4	58	17	32.0	5.0 / 12.0	17	8.5	8.20	0.25	

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	13:00	13.00	2190.00		No Activity - still on Zane Grey #1
13:00	14:30	1.50	2190.00	8	M/U BHA #8, changed bend angle to 1.22, test AGS
14:30	18:00	3.50	2190.00	8	P/U FEWD and test
18:00	20:30	2.50	2190.00	8	TIH to 2174m
20:30	21:00	0.50	2190.00	8	Reaming / Washing 2171 - 2190m
21:00	00:00	3.00	2192.00	8	Drilling, perform time drill f/ sidetrack

COMMENTS



Daily Drilling Report

Customer : Bass Strait Oil Company Ltd.

Well : Zane Grey #1 ST1

Field : Zane Grey

Location : Bass Strait

Rig : Ocean Patriot

Job # : AU-DD-0003564401

CURRENT STATUS Report # 2 22/02/2005

Total Depth (m) : 2255

Casing Depth (m) : 2194.00

Operator Reps : Steve Hodgets, Peter Dane

Drilled last 24 hrs (m) : 63

Casing Diameter (in) : 9.875

SSDS Reps : Tim Walton (2), Sompon T. (2)

Hole Size (in) : 8.500

Casing ID (in) : 8.681

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
-----------	-------------	---------	---------	-----------	-----------

2241.00	30.80	12.66	1984.82	878.71	N15.39E
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LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)
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BHA SUMMARY

BHA 8: 245.88 m; Bit #6 (27.5 hrs), PDM #5 (41.25 hrs), AGS, Sub, MWD, MWD, MWD, MWD, MWD, Stab, 6x DC, Jar, 2x DC, 15x HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lbf/100ft ²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
------	--------------	----------	---------	------------------------------	------	------------	----	------------	----------	---------

0.0

0

0.0

0.0 / 0.0

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
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00:00	12:00	12.00	2208.00	8	Drilling 2190 - 2208m, mud log shows 50% formation
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12:00	00:00	12.00	2255.00	8	Drilling 2208 - 2255m
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COMMENTS

[illegible]



Daily Drilling Report

Customer : Bass Strait Oil Company Ltd.

Well : Zane Grey #1 ST1

Field : Zane Grey

Location : Bass Strait

Rig : Ocean Patriot

Job # : AU-DD-0003564401

CURRENT STATUS Report # 3 23/02/2005

Total Depth (m) : 2541

Casing Depth (m) : 2194.00

Operator Reps : Steve Hodgets, Peter Dane

Drilled last 24 hrs (m) : 286

Casing Diameter (in) : 9.875

SSDS Reps : Tim Walton (3), Sompon T. (3)

Hole Size (in) : 8.500

Casing ID (in) : 8.681

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
-----------	-------------	---------	---------	-----------	-----------

2528.50	34.47	13.92	2228.05	1031.55	N15.01E
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LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)
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BHA SUMMARY

BHA 8: 245.88 m; Bit #6 (51.5 hrs), PDM #5 (65.25 hrs), AGS, Sub, MWD, MWD, MWD, MWD, MWD, Stab, 6x DC, Jar, 2x DC, 15x HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lbf/100ft ²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
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TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
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00:00	12:00	12.00	2350.00	8	Drilling 2255 - 2350m
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12:00	00:00	12.00	2541.00	8	Drilling 2350 - 2541m
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COMMENTS



Daily Drilling Report

Customer : Bass Strait Oil Company Ltd.

Well : Zane Grey #1 ST1

Field : Zane Grey

Location : Bass Strait

Rig : Ocean Patriot

Job # : AU-DD-0003564401

CURRENT STATUS Report # 4 24/02/2005

Total Depth (m) : 2886

Drilled last 24 hrs (m) : 345

Hole Size (in) : 8.500

Casing Depth (m) : 2194.00

Casing Diameter (in) : 9.875

Casing ID (in) : 8.681

Operator Reps : Steve Hodgets, Peter Dane

SSDS Reps : Tim Walton (4), Sompon T. (4)

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
-----------	-------------	---------	---------	-----------	-----------

2872.61	33.20	13.34	2506.72	1233.24	N14.91E
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LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)
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BHA SUMMARY

BHA 8: 245.88 m; Bit #6 (73. hrs), PDM #5 (86.75 hrs), AGS, Sub, MWD, MWD, MWD, MWD, MWD, Stab, 6x DC, Jar, 2x DC, 15x HWD

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lbf/100ft ²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
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TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
------	----	-------	---------	-------	----------

00:00	21:30	21.50	2886.00	8	Drilling 2541 - 2886m
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21:30	23:00	1.50	2886.00	8	Rig Repair, oiler pump on top drive
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23:00	23:30	0.50	2886.00	8	Short Trip 2886 - 2714m
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23:30	00:00	0.50	2886.00	8	RIH to 2886m
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COMMENTS

[illegible]



Daily Drilling Report

Customer : Bass Strait Oil Company Ltd.

Well : Zane Grey #1 ST1

Field : Zane Grey

Location : Bass Strait

Rig : Ocean Patriot

Job # : AU-DD-0003564401

CURRENT STATUS Report # 5 25/02/2005

Total Depth (m) : 3107

Drilled last 24 hrs (m) : 221

Hole Size (in) : 8.500

Casing Depth (m) : 2194.00

Casing Diameter (in) : 9.875

Casing ID (in) : 8.681

Operator Reps : Steve Hodgets, Peter Dane

SSDS Reps : Tim Walton (5), Sompon T. (5)

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
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3092.90	31.08	12.66	2694.18	1348.85	N14.75E
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LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)
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BHA SUMMARY

BHA 8: 245.88 m; Bit #6 (92.5 hrs), PDM #5 (108.75 hrs), AGS, Sub, MWD, MWD, MWD, MWD, MWD, Stab, 6x DC, Jar, 2x DC, 15x HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lbf/100ft ²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
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KCl/Polymer	9.4	58	17	32.0	5.0 / 12.0	17	8.5	8.20	0.25
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TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
------	----	-------	---------	-------	----------

00:00	19:30	19.50	3107.00	8	Drilling 2886 - 3107m
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19:30	20:30	1.00	3107.00	8	Flow check, POOH to 2829m
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20:30	22:30	2.00	3107.00	8	Circulate, pump slug, cont. POOH
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22:30	23:00	0.50	3107.00	8	Take survey @ 2250m, pump slug
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23:00	00:00	1.00	3107.00	8	Cont. POOH to 2250m
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COMMENTS

[illegible]

sperry-sun

DRILLING SERVICES

Daily Drilling Report

Customer : Bass Strait Oil Company Ltd.

Well : Zane Grey #1 ST1

Field : Zane Grey

Location : Bass Strait

Rig : Ocean Patriot

Job # : AU-DD-0003564401

CURRENT STATUS Report # 6 26/02/2005

Total Depth (m) :	3107	Casing Depth (m) :	2194.00	Operator Reps :	Steve Hodgets, Grey/Paul
Drilled last 24 hrs (m) :	0	Casing Diameter (in) :	9.875	SSDS Reps :	Tim Walton (6), Sompon T. (6)
Hole Size (in) :	8.500	Casing ID (in) :	8.681		

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
3092.90	31.08	12.66	2694.18	1348.85	N14.75E

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

BHA 8: 245.88 m; Bit #6 (92.5 hrs), PDM #5 (108.75 hrs), AGS, Sub, MWD, MWD, MWD, MWD, MWD, Stab, 6x DC, Jar, 2x DC, 15x HWDP
 BHA 10: 218.58 m; Bit #7 (1.5 hrs), PDM #6 (1.5 hrs), AGS, Sub, MWD, MWD, MWD, MWD, MWD, Stab, 3x DC, Jar, 2x DC, 15x HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lb/100ft ²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
KCl/Polymer	9.4	58	17	32.0	5.0 / 12.0	17	8.5	8.20	0.25	

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	04:30	4.50	3107.00	8	POOH to 1990m
04:30	06:30	2.00	3107.00	8	Download MWD, C/O MWD pulser
06:30	07:00	0.50	3107.00		M/U cmt stand, rack back same
07:00	07:30	0.50	3107.00		Run 2 7/8" tubing handling gream
07:30	14:00	6.50	3107.00		Run 2 7/8" tubing to 3106m, down, tag bottom to confirm depth
14:00	15:00	1.00	3107.00		Circulate B/up
15:00	16:30	1.50	3107.00		R/up cement line test to 1000psi and mixed, pump. R/down cmt line
16:30	17:30	1.00	3107.00		Pump and displace cmt string with 30bbls of mud to clean hole
17:30	22:30	5.00	3107.00		POOH 2 7/8" cement stinger
22:30	23:00	0.50	3107.00		B/D cmt side entry std
23:00	00:00	1.00	3107.00	10	P/U mud motor and set same

COMMENTS

sperry-sun

DRILLING SERVICES

Daily Drilling Report

Customer : Bass Strait Oil Company Ltd.

Well : Zane Grey #1 ST1

Field : Zane Grey

Location : Bass Strait

Rig : Ocean Patriot

Job # : AU-DD-0003564401

CURRENT STATUS Report # 7 27/02/2005

Total Depth (m) : 3107	Casing Depth (m) : 2194.00	Operator Reps : Steve Hodgets, Grey/Paul
Drilled last 24 hrs (m) : 0	Casing Diameter (in) : 9.875	SSDS Reps : Tim Walton (7), Sompon T. (7)
Hole Size (in) : 8.500	Casing ID (in) : 8.681	

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
3092.90	31.08	12.66	2694.18	1348.85	N14.75E

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

BHA 10: 218.58 m; Bit #7 (9.5 hrs), PDM #6 (9.5 hrs), AGS, Sub, MWD, MWD, MWD, MWD, MWD, Stab, 3x DC, Jar, 2x DC, 15x HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lb/100ft ²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
KCl/Polymer	9.4	58	17	32.0	5.0 / 12.0	17	8.5	8.20	0.25	

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	08:00	8.00	3107.00	10	Cont trip in BHA #10, shallow test AGS, MWD
08:00	09:30	1.50	3107.00	10	Polish cement 2996 - 3075m, no wt taken
09:30	17:30	8.00	3107.00	10	Drilling, attempt to open hole sidetrack
17:30	22:30	5.00	3107.00	10	POOH, failed to kick off
22:30	23:00	0.50	3107.00	10	Cont POOH BHA
23:00	23:30	0.50	3107.00	10	Rig Repair
23:30	00:00	0.50	3107.00	10	Cont POOH w/BHA

COMMENTS

sperry-sun

DRILLING SERVICES

Daily Drilling Report

Customer : Bass Strait Oil Company Ltd.

Well : Zane Grey #1 ST1

Field : Zane Grey

Location : Bass Strait

Rig : Ocean Patriot

Job # : AU-DD-0003564401

CURRENT STATUS Report # 8 28/02/2005

Total Depth (m) :	3107	Casing Depth (m) :	2194.00	Operator Reps :	Steve Hodgets, Grey/Paul
Drilled last 24 hrs (m) :	0	Casing Diameter (in) :	9.875	SSDS Reps :	Tim Walton (8), Sompon T. (8)
Hole Size (in) :	8.500	Casing ID (in) :	8.681		

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
3092.90	31.08	12.66	2694.18	1348.85	N14.75E

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

BHA 10: 218.58 m; Bit #7 (9.5 hrs), PDM #6 (9.5 hrs), AGS, Sub, MWD, MWD, MWD, MWD, MWD, Stab, 3x DC, Jar, 2x DC, 15x HWDP

BHA 11: 86.99 m; Other, Other, Sub

BHA 12: 218.58 m; Bit #8 (1. hrs), PDM #7 (20.5 hrs), AGS, Sub, MWD, MWD, MWD, MWD, MWD, Stab, 3x DC, Jar, 2x DC, 15x HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lb/100ft ²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
KCl/Polymer	9.4	58	17	32.0	5.0 / 12.0	17	8.5	8.20	0.25	

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	01:00	1.00	3107.00	10	POOH BHA
01:00	07:00	6.00	3107.00	11	P/U 2 7/8" tubing, mule shoe
07:00	07:30	0.50	3107.00	11	Circulate
07:30	08:00	0.50	3107.00		R/U cmt shoe and subs
08:00	09:30	1.50	3107.00		Beak C /dowell test line, mix and pump cmt
09:30	10:00	0.50	3107.00		POOH 3107 - 2820m
10:00	10:30	0.50	3107.00		Circulate
10:30	16:30	6.00	3107.00		POOH and L/D 2 7/8" tubing
16:30	17:30	1.00	3107.00	12	M/U bit and set motor bend 1.5 degree
17:30	21:30	4.00	3107.00	12	MWD, AGS test and cont. RIH to 2183m
21:30	23:30	2.00	3107.00	12	Cut Drill Line
23:30	00:00	0.50	3107.00	12	Service Rig, TDS

COMMENTS

sperry-sun

DRILLING SERVICES

Daily Drilling Report

Customer : Bass Strait Oil Company Ltd.

Well : Zane Grey #1 ST1

Field : Zane Grey

Location : Bass Strait

Rig : Ocean Patriot

Job # : AU-DD-0003564401

CURRENT STATUS Report # 9 1/03/2005

Total Depth (m) : 3107	Casing Depth (m) : 2194.00	Operator Reps : Steve Hodgets, Grey/Paul
Drilled last 24 hrs (m) : 0	Casing Diameter (in) : 9.875	SSDS Reps : Tim Walton (9), Sompon T. (9)
Hole Size (in) : 8.500	Casing ID (in) : 8.681	

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
3092.90	31.08	12.66	2694.18	1348.85	N14.75E

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

BHA 12: 218.58 m; Bit #8 (21.5 hrs), PDM #7 (41. hrs), AGS, Sub, MWD, MWD, MWD, MWD, MWD, Stab, 3x DC, Jar, 2x DC, 15x HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lb/100ft ²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
KCl/Polymer	9.4	58	17	32.0	5.0 / 12.0	17	8.5	8.20	0.25	

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	01:30	1.50	3107.00	12	Cont. RIH to 2850m
01:30	02:30	1.00	3107.00	12	Reaming / Washing
02:30	03:00	0.50	3107.00	12	Cont. RIH
03:00	03:30	0.50	3107.00	12	Work string to create a ledge for open hole side track
03:30	12:00	8.50	3107.00	12	Attempt to side track by time drilling
12:00	00:00	12.00	3107.00	12	Cont. attempt to side track

COMMENTS



Job # : AU-DD-0003564401

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Daily Drilling Report

Customer : Bass Strait Oil Company Ltd.

Well : Zane Grey #1 ST1

Field : Zane Grey

Location : Bass Strait

Rig : Ocean Patriot

Job # : AU-DD-0003564401

CURRENT STATUS Report # 12 4/03/2005

Total Depth (m) : 3107

Drilled last 24 hrs (m) : 0

Hole Size (in) : 8.500

Casing Depth (m) : 2194.00

Casing Diameter (in) : 9.875

Casing ID (in) : 8.681

Operator Reps : Peter Dane, Greg Hamms

SSDS Reps : Burt Muise (3), Sompon T./Tim Walton (3)

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
3092.90	31.08	12.66	2694.18	1348.85	N14.75E

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)
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BHA SUMMARY

BHA 13: 217.21 m; Bit #9rr1 (25. hrs), PDM #8 (25. hrs), Stab, Sub, MWD, MWD, MWD, MWD, MWD, Stab, 3x DC, Jar, 2x DC, 15x HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lb/100ft ²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
KCl/Polymer	9.4	58	17	32.0	5.0 / 12.0	17	8.5	8.20	0.25	

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	10:00	10.00	3107.00	13	Cont. to attempt sidetrack 3060 - 3070m
10:00	16:30	6.50	3107.00	13	POOH
16:30	17:00	0.50	3107.00	13	Cont. POOH, rack back 8 1/2" BHA, L/D bit, jars

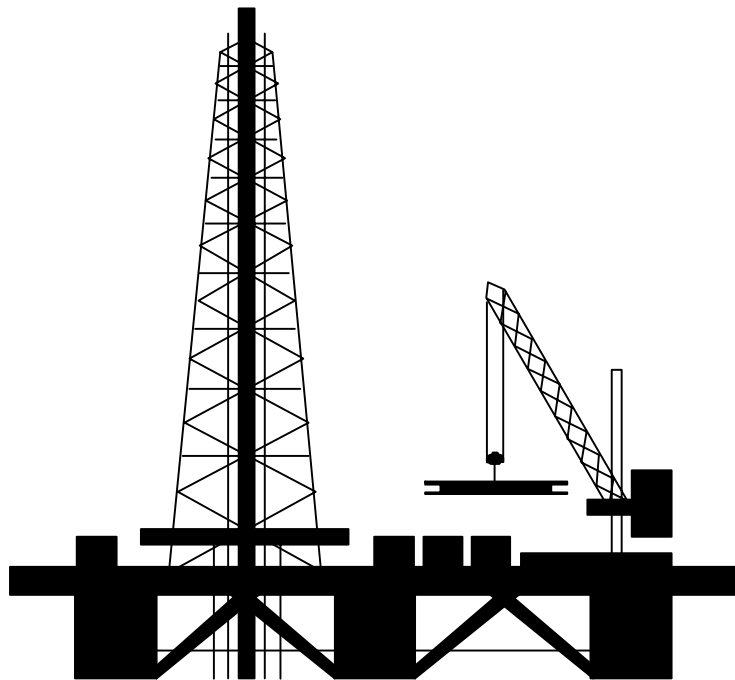
COMMENTS

APPENDIX 14

DIRECTIONAL DRILLING END of WELL REPORT: ZANEGREY-1/ST2 (By Halliburton)



Bass Strait Oil Company Ltd.



Directional Drilling End of Well Report

Well : Zane Grey #1 ST2

Date: March 2005

HALLIBURTON
Sperry Drilling Services

Table of Contents

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

Customer : Bass Strait Oil Company Ltd.

Well : Zane Grey #1 ST2

Job Objectives:

To sidetrack Zane Grey #1 ST1, and drill to prognosed TD of 3691m, intersecting our target objectives.

Summary of Results:

Discussion:

BHA #	Bit #	Motor Run #	Hole Size (in)	MD In (m)	MD Out (m)	TVD In (m)	TVD Out (m)	Inc In (deg)	Inc Out (deg)	Azi In (deg)	Azi Out (deg)	Drig hrs	Circ hrs
14	10	9	8.500	3070	3092	2675	2693	31.1	31.1	15	16	10	2
15	11rr1	10	8.500	3092	3675	2693	3220	31.1	19.7	16	22	35	3

Table 1 - BHA Summary

Motor Run #	Manufacturer	Type	Lobe	OD (in)	Gauge (in)	Bend (deg)	Adj	DLS (Ori) (°/30m)	ROP (Ori) (m/hr)	ROP (Rot) (m/hr)
9	SSDS	SperryDrill	6/7	6.750	7.875	1.50	Y		2	0
10	SSDS	SperryDrill	6/7	6.750	8.188	1.15	Y		0	17

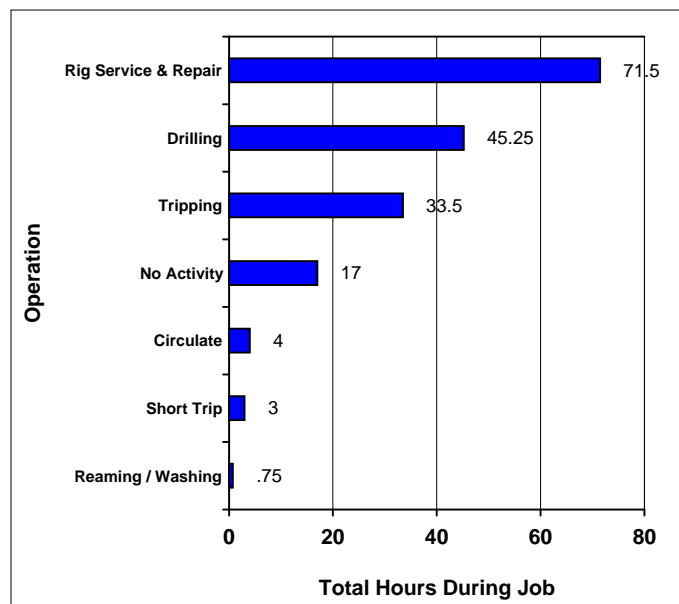
Table 2 - Motor Run Summary

Bit #	Manufacturer	Style	OD (in)	Gge Len (in)	Nozzles (/32's)	TFA (in²)	Dull Grades I O D L B G O R	Ftge (m)	Drig hrs	ROP (m/hr)
10	Hycalog	DS43SSTG	8.500		3x20	0.920	1-1-JD-N -X-I-ER-BHA	22	10.25	2
11rr1	Hycalog	RSX163DGW	8.500		6x14	0.902		583	35.00	17

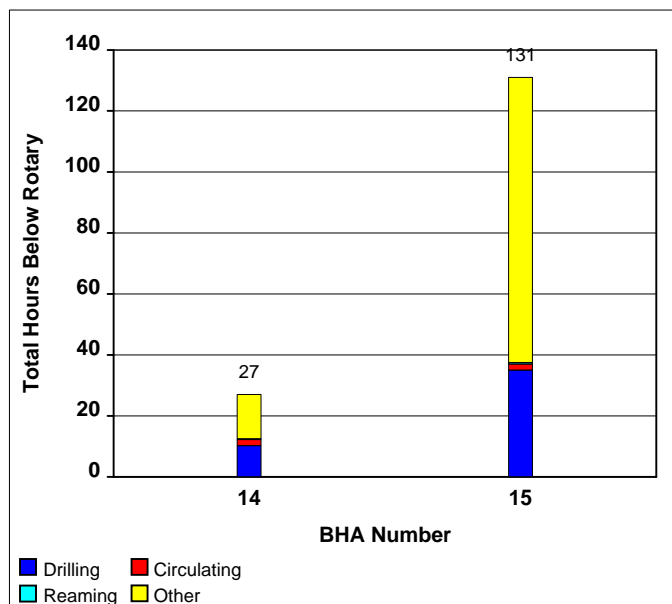
Table 3 - Bit Run Summary

MD (m)	Formation Name MD/TVD	<div>Inclination ——— DLS ———</div>	Bit Data	Drilling Parameters	Motor	BHA Stabilizers	Comments	BHA ID
3050								
3075			DS43SSTG 3x20 /32's 0.04 m/min 10.25 hrs	WOB 3 klbs RPM FLO 600 gpm SPP 2770 psi	6-3/4" SperryDrill 6/7 L 1.50° ABH	7.875 in @ 0.75 m 7.875 in @ 8.66 m 8.000 in @ 23.84 m		#14 @ 3070
3100								
3125			RSX163DGW 6x14 /32's 0.28 m/min 35.00 hrs	WOB 6 klbs RPM 80 FLO 600 gpm SPP 3200 psi	6-3/4" SperryDrill 6/7 L 1.15° ABH	8.188 in @ 0.84 m 7.875 in @ 8.75 m 8.000 in @ 23.93 m		#15 @ 3092
3150								
3175								
3200								
3225								
3250								
3275								
3300								
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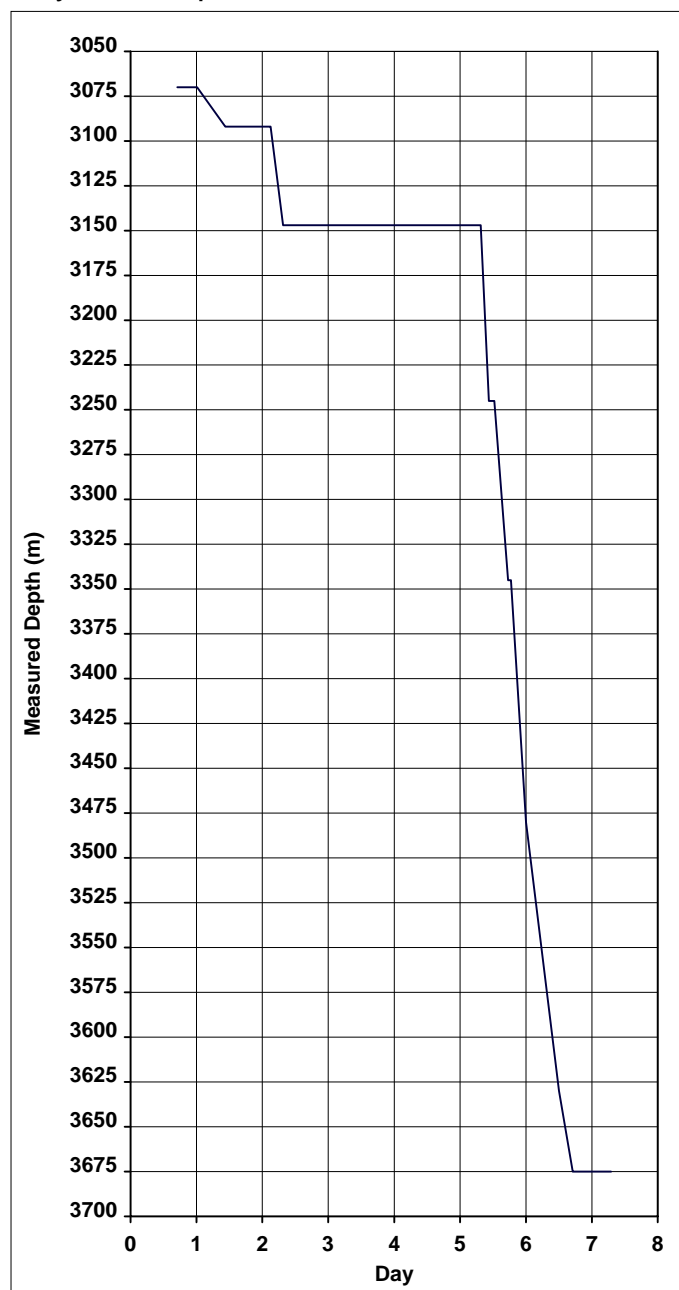
Hours by Operation Summary



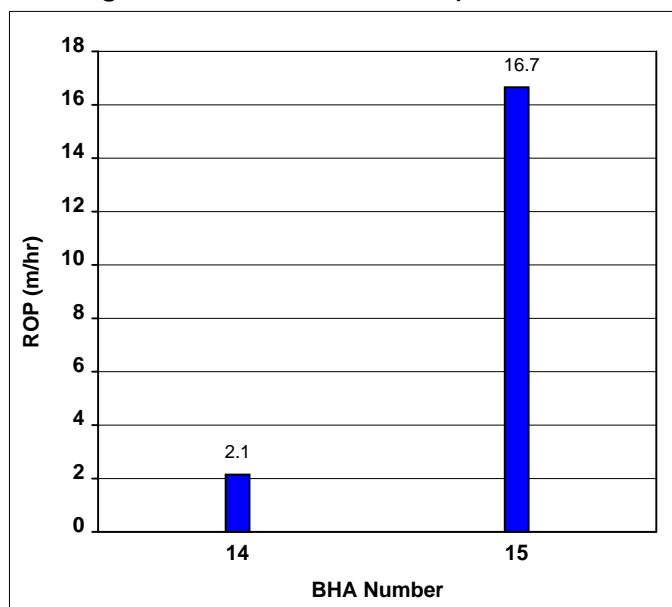
Hours per BHA Breakdown



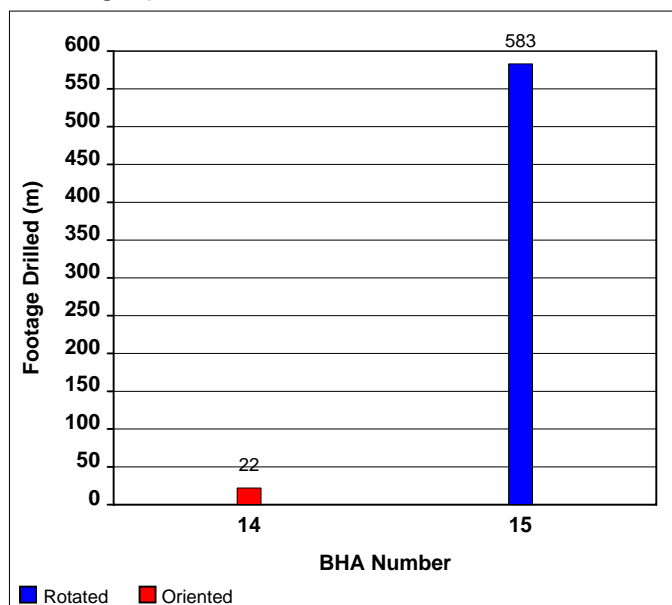
Days vs. Depth



Average Rate of Penetration per BHA



Footage per BHA



HALLIBURTON

Sperry Drilling Services

Bass Strait Oil Company Ltd.

Zane Grey

Zane Grey

Zane Grey #1

Zane Grey #1 ST2

Design: Zane Grey #1 ST2

Standard Survey Report

19 May, 2005

Sperry Drilling Services

Company:	Bass Strait Oil Company Ltd.	Local Co-ordinate Reference:	Site Zane Grey
Project:	Zane Grey	TVD Reference:	RT @ 21.50m (Original Well Elev)
Site:	Zane Grey	MD Reference:	RT @ 21.50m (Original Well Elev)
Well:	Zane Grey #1	North Reference:	Grid
Wellbore:	Zane Grey #1 ST2	Survey Calculation Method:	Minimum Curvature
Design:	Zane Grey #1 ST2	Database:	Perth Office Database

Project	Zane Grey, Zane Grey, Global Coordinates		
Map System:	Universal Transverse Mercator	System Datum:	Mean Sea Level
Geo Datum:	AGD66 Low Accuracy		
Map Zone:	Zone 55S (144 E to 150 E)		

Site		Zane Grey, Structure			
Site Position:		Northing:	5,729,856.42 m	Latitude:	38° 34' 31.640" S
From:	Map	Easting:	586,049.89 m	Longitude:	147° 59' 16.266" E
Position Uncertainty:	0.00 m	Slot Radius:	0.00 in	Grid Convergence:	-0.616 °

Well	Zane Grey #1					
Well Position	+N/-S	0.00 m	Northing:	5,729,856.42 m	Latitude:	38° 34' 31.640" S
	+E/-W	0.00 m	Easting:	586,049.89 m	Longitude:	147° 59' 16.266" E
Position Uncertainty		0.00 m	Wellhead Elevation:	m	Ground Level:	0.00 m

Wellbore	Zane Grey #1 ST2				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2004	5/04/2005	13.213	-69.059	60,160

Design	Zane Grey #1 ST2				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	3,044.57
Vertical Section:	Depth From (TVD) (m)	+N/-S (m)	+E/-W (m)	Direction (°)	
	0.00	0.00	0.00	14.915	

Survey Program	Date	19/05/2005			
From (m)	To (m)	Survey (Wellbore)	Tool Name	Description	
152.20	2,183.17	Zane Grey #1 MWD (Zane Grey #1)	MWD Magnetic	MWD Magnetic Survey (Thorogood)	
2,193.14	3,044.57	ST1 MWD (Zane Grey #1 ST1)	MWD Magnetic	MWD Magnetic Survey (Thorogood)	
3,074.64	3,675.00	ST2 MWD (Zane Grey #1 ST2)	MWD Magnetic	MWD Magnetic Survey (Thorogood)	

Survey										
Measured Depth (m)	Inclination (°)	Azimuth (°)	Vertical Depth (m)	+N/-S (m)	+E/-W (m)	Vertical Section (m)	Dogleg Rate (°/30m)	Build Rate (°/30m)	Turn Rate (°/30m)	
0.00	0.000	0.000	0.00	0.00	0.00	0.00	0.000	0.00	0.00	
152.20	0.410	162.660	152.20	-0.52	0.16	-0.46	0.081	0.08	0.00	
180.10	0.410	187.760	180.10	-0.71	0.18	-0.64	0.192	0.00	26.99	
208.30	0.520	134.850	208.30	-0.90	0.26	-0.81	0.453	0.12	-56.29	
236.30	0.500	145.410	236.30	-1.09	0.42	-0.95	0.103	-0.02	11.31	
265.10	0.480	133.550	265.10	-1.28	0.57	-1.09	0.107	-0.02	-12.35	
291.20	0.530	112.320	291.19	-1.40	0.76	-1.16	0.221	0.06	-24.40	
322.80	0.310	122.920	322.79	-1.50	0.97	-1.20	0.221	-0.21	10.06	
351.10	0.610	108.040	351.09	-1.59	1.18	-1.24	0.340	0.32	-15.77	
379.50	0.620	106.950	379.49	-1.68	1.47	-1.25	0.016	0.01	-1.15	
408.30	0.570	109.170	408.29	-1.78	1.75	-1.27	0.057	-0.05	2.31	

Sperry Drilling Services

Company:	Bass Strait Oil Company Ltd.	Local Co-ordinate Reference:	Site Zane Grey
Project:	Zane Grey	TVD Reference:	RT @ 21.50m (Original Well Elev)
Site:	Zane Grey	MD Reference:	RT @ 21.50m (Original Well Elev)
Well:	Zane Grey #1	North Reference:	Grid
Wellbore:	Zane Grey #1 ST2	Survey Calculation Method:	Minimum Curvature
Design:	Zane Grey #1 ST2	Database:	Perth Office Database

Survey									
Measured Depth (m)	Inclination (°)	Azimuth (°)	Vertical Depth (m)	+N/-S (m)	+E/-W (m)	Vertical Section (m)	Dogleg Rate (°/30m)	Build Rate (°/30m)	Turn Rate (°/30m)
436.40	0.500	108.390	436.39	-1.86	2.00	-1.28	0.075	-0.07	-0.83
463.05	0.560	101.290	463.04	-1.92	2.24	-1.28	0.100	0.07	-7.99
493.81	1.550	39.190	493.79	-1.63	2.65	-0.89	1.346	0.97	-60.57
521.53	3.740	26.590	521.48	-0.53	3.29	0.33	2.438	2.37	-13.64
550.66	6.400	18.100	550.49	1.86	4.22	2.89	2.839	2.74	-8.74
578.94	9.490	11.850	578.50	5.64	5.19	6.79	3.399	3.28	-6.63
605.39	12.270	11.470	604.47	10.53	6.20	11.77	3.154	3.15	-0.43
637.30	15.110	10.930	635.47	17.94	7.66	19.31	2.673	2.67	-0.51
663.37	17.260	12.120	660.51	25.06	9.12	26.56	2.503	2.47	1.37
693.68	19.030	13.970	689.31	34.25	11.25	35.99	1.842	1.75	1.83
722.25	21.580	14.470	716.10	43.86	13.69	45.91	2.684	2.68	0.53
750.29	24.880	14.620	741.87	54.56	16.47	56.96	3.531	3.53	0.16
778.24	28.180	15.540	766.87	66.61	19.72	69.45	3.569	3.54	0.99
806.45	30.290	16.230	791.48	79.86	23.50	83.22	2.272	2.24	0.73
836.21	31.180	15.900	817.06	94.48	27.71	98.43	0.913	0.90	-0.33
864.47	31.470	15.910	841.20	108.61	31.73	113.12	0.308	0.31	0.01
892.94	32.200	16.130	865.39	123.04	35.88	128.13	0.779	0.77	0.23
921.51	32.690	14.670	889.50	137.82	39.95	143.46	0.970	0.51	-1.53
950.02	32.880	14.700	913.47	152.75	43.86	158.90	0.201	0.20	0.03
979.03	33.350	14.250	937.77	168.10	47.82	174.74	0.549	0.49	-0.47
1,009.22	34.050	15.100	962.89	184.30	52.06	191.49	0.839	0.70	0.84
1,037.20	34.420	14.390	986.02	199.53	56.07	207.23	0.584	0.40	-0.76
1,065.76	34.720	14.470	1,009.54	215.22	60.11	223.44	0.319	0.32	0.08
1,080.74	34.990	14.710	1,021.83	223.50	62.27	232.00	0.606	0.54	0.48
1,090.61	34.886	14.630	1,029.92	228.97	63.70	237.65	0.345	-0.32	-0.24
13 3/8"									
1,123.52	34.540	14.360	1,056.97	247.12	68.39	256.39	0.345	-0.32	-0.25
1,150.74	34.230	14.270	1,079.43	262.01	72.19	271.77	0.346	-0.34	-0.10
1,178.17	33.670	14.480	1,102.19	276.85	75.99	287.08	0.626	-0.61	0.23
1,208.00	33.510	14.740	1,127.04	292.82	80.15	303.59	0.216	-0.16	0.26
1,237.02	33.620	14.390	1,151.22	308.35	84.19	319.63	0.230	0.11	-0.36
1,265.61	34.210	14.570	1,174.94	323.80	88.18	335.58	0.628	0.62	0.19
1,294.54	34.670	13.930	1,198.80	339.65	92.20	351.94	0.607	0.48	-0.66
1,323.50	34.510	14.390	1,222.64	355.59	96.23	368.38	0.317	-0.17	0.48
1,353.04	34.370	13.930	1,247.01	371.79	100.31	385.09	0.300	-0.14	-0.47
1,380.92	34.260	13.780	1,270.03	387.05	104.08	400.80	0.149	-0.12	-0.16
1,409.67	34.180	13.290	1,293.81	402.77	107.86	416.96	0.299	-0.08	-0.51
1,438.12	34.520	13.610	1,317.30	418.38	111.60	433.01	0.406	0.36	0.34
1,466.41	34.410	12.820	1,340.62	433.97	115.25	449.01	0.488	-0.12	-0.84
1,494.65	34.390	12.290	1,363.92	449.54	118.72	464.95	0.319	-0.02	-0.56
1,523.37	34.160	12.030	1,387.65	465.35	122.13	481.11	0.285	-0.24	-0.27
1,551.88	34.030	12.090	1,411.26	480.98	125.47	497.07	0.141	-0.14	0.06
1,580.92	34.340	13.280	1,435.29	496.90	129.05	513.37	0.761	0.32	1.23
1,609.62	34.680	16.070	1,458.94	512.63	133.17	529.63	1.690	0.36	2.92
1,638.56	34.320	16.670	1,482.79	528.35	137.79	546.02	0.513	-0.37	0.62
1,667.52	34.040	16.130	1,506.75	543.96	142.39	562.28	0.428	-0.29	-0.56
1,696.00	34.160	16.420	1,530.33	559.29	146.86	578.24	0.213	0.13	0.31
1,724.70	33.800	16.030	1,554.13	574.69	151.34	594.28	0.440	-0.38	-0.41
1,752.98	34.200	16.920	1,577.57	589.85	155.83	610.09	0.677	0.42	0.94
1,776.00	34.154	16.612	1,596.62	602.23	159.56	623.01	0.234	-0.06	-0.40
9 5/8"									
1,782.83	34.140	16.520	1,602.27	605.91	160.65	626.84	0.234	-0.06	-0.40
1,811.25	34.440	17.460	1,625.75	621.22	165.33	642.84	0.642	0.32	0.99
1,840.08	34.470	17.390	1,649.52	636.78	170.21	659.14	0.052	0.03	-0.07

Sperry Drilling Services

Company:	Bass Strait Oil Company Ltd.	Local Co-ordinate Reference:	Site Zane Grey
Project:	Zane Grey	TVD Reference:	RT @ 21.50m (Original Well Elev)
Site:	Zane Grey	MD Reference:	RT @ 21.50m (Original Well Elev)
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Wellbore:	Zane Grey #1 ST2	Survey Calculation Method:	Minimum Curvature
Design:	Zane Grey #1 ST2	Database:	Perth Office Database

Survey									
Measured Depth (m)	Inclination (°)	Azimuth (°)	Vertical Depth (m)	+N/-S (m)	+E/-W (m)	Vertical Section (m)	Dogleg Rate (°/30m)	Build Rate (°/30m)	Turn Rate (°/30m)
1,868.47	34.230	17.070	1,672.96	652.08	174.96	675.15	0.317	-0.25	-0.34
1,897.13	34.160	16.740	1,696.67	667.49	179.64	691.24	0.208	-0.07	-0.35
1,926.10	34.120	16.890	1,720.65	683.06	184.35	707.49	0.097	-0.04	0.16
1,954.43	34.050	17.190	1,744.11	698.24	189.00	723.36	0.193	-0.07	0.32
1,983.37	33.950	17.510	1,768.10	713.68	193.83	739.53	0.212	-0.10	0.33
2,012.16	33.490	17.020	1,792.05	728.95	198.57	755.50	0.557	-0.48	-0.51
2,041.58	33.410	17.630	1,816.59	744.43	203.40	771.70	0.352	-0.08	0.62
2,070.37	33.420	17.420	1,840.63	759.55	208.17	787.54	0.121	0.01	-0.22
2,095.75	33.160	17.240	1,861.84	772.84	212.32	801.45	0.329	-0.31	-0.21
2,126.37	32.900	16.850	1,887.51	788.80	217.21	818.13	0.329	-0.25	-0.38
2,154.80	32.520	16.760	1,911.43	803.51	221.66	833.49	0.404	-0.40	-0.09
2,183.17	32.390	16.460	1,935.37	818.10	226.01	848.71	0.219	-0.14	-0.32
2,193.14	31.670	15.750	1,943.82	823.18	227.48	853.99	2.445	-2.17	-2.14
2,214.68	30.950	12.840	1,962.23	834.02	230.24	865.18	2.332	-1.00	-4.05
2,241.00	30.800	12.660	1,984.82	847.19	233.22	878.68	0.201	-0.17	-0.21
2,270.43	30.810	7.950	2,010.10	862.01	235.92	893.69	2.458	0.01	-4.80
2,298.37	30.440	10.700	2,034.14	876.05	238.22	907.85	1.556	-0.40	2.95
2,326.97	29.940	10.850	2,058.87	890.18	240.91	922.20	0.530	-0.52	0.16
2,355.80	31.000	11.140	2,083.71	904.53	243.70	936.78	1.114	1.10	0.30
2,381.72	31.820	13.780	2,105.84	917.72	246.61	950.28	1.854	0.95	3.06
2,414.16	33.680	15.580	2,133.12	934.69	251.07	967.82	1.941	1.72	1.66
2,442.70	33.490	14.490	2,156.89	949.94	255.16	983.61	0.665	-0.20	-1.15
2,470.70	33.420	14.730	2,180.26	964.87	259.06	999.04	0.160	-0.07	0.26
2,499.52	34.480	14.630	2,204.16	980.44	263.14	1,015.14	1.105	1.10	-0.10
2,528.50	34.470	13.920	2,228.05	996.34	267.18	1,031.54	0.416	-0.01	-0.73
2,557.49	35.280	14.280	2,251.84	1,012.42	271.22	1,048.12	0.865	0.84	0.37
2,585.32	36.320	14.030	2,274.41	1,028.20	275.20	1,064.39	1.132	1.12	-0.27
2,614.39	36.940	14.820	2,297.74	1,045.00	279.52	1,081.74	0.804	0.64	0.82
2,643.01	37.000	14.810	2,320.60	1,061.64	283.92	1,098.95	0.063	0.06	-0.01
2,671.57	37.270	15.010	2,343.37	1,078.30	288.36	1,116.19	0.311	0.28	0.21
2,700.11	37.520	15.540	2,366.04	1,095.02	292.93	1,133.52	0.428	0.26	0.56
2,729.08	37.310	15.090	2,389.05	1,112.00	297.57	1,151.12	0.357	-0.22	-0.47
2,758.57	35.900	14.650	2,412.73	1,128.99	302.09	1,168.71	1.459	-1.43	-0.45
2,786.53	35.550	13.380	2,435.43	1,144.83	306.04	1,185.03	0.880	-0.38	-1.36
2,815.67	34.360	13.520	2,459.31	1,161.07	309.93	1,201.72	1.228	-1.23	0.14
2,844.06	33.470	13.480	2,482.87	1,176.47	313.62	1,217.56	0.941	-0.94	-0.04
2,872.61	33.200	13.340	2,506.72	1,191.73	317.26	1,233.24	0.295	-0.28	-0.15
2,901.47	33.080	12.820	2,530.89	1,207.10	320.83	1,249.01	0.321	-0.12	-0.54
2,930.23	32.020	12.690	2,555.13	1,222.19	324.25	1,264.47	1.108	-1.11	-0.14
2,959.08	31.790	13.210	2,579.62	1,237.05	327.67	1,279.71	0.373	-0.24	0.54
2,987.28	30.500	13.510	2,603.76	1,251.24	331.04	1,294.29	1.382	-1.37	0.32
3,015.71	31.540	13.030	2,628.12	1,265.50	334.40	1,308.93	1.128	1.10	-0.51
3,044.57	31.020	13.230	2,652.78	1,280.09	337.80	1,323.91	0.551	-0.54	0.21
3,074.64	30.110	15.220	2,678.68	1,294.92	341.55	1,339.20	1.358	-0.91	1.99
3,114.34	31.530	18.990	2,712.77	1,314.34	347.55	1,359.51	1.811	1.07	2.85
3,131.12	31.150	19.180	2,727.10	1,322.59	350.40	1,368.22	0.702	-0.68	0.34
3,159.25	30.310	18.050	2,751.28	1,336.21	354.99	1,382.56	1.087	-0.90	-1.21
3,188.52	29.220	18.570	2,776.69	1,350.01	359.55	1,397.07	1.148	-1.12	0.53
3,217.29	28.310	18.360	2,801.91	1,363.14	363.94	1,410.89	0.955	-0.95	-0.22
3,276.11	27.280	18.200	2,853.94	1,389.18	372.54	1,438.27	0.527	-0.53	-0.08
3,333.29	26.110	18.070	2,905.03	1,413.59	380.54	1,463.91	0.615	-0.61	-0.07
3,389.79	25.740	18.350	2,955.84	1,437.06	388.26	1,488.57	0.207	-0.20	0.15
3,417.10	24.210	17.990	2,980.60	1,448.01	391.85	1,500.08	1.689	-1.68	-0.40
3,445.51	22.630	17.530	3,006.67	1,458.77	395.30	1,511.36	1.680	-1.67	-0.49

Sperry Drilling Services

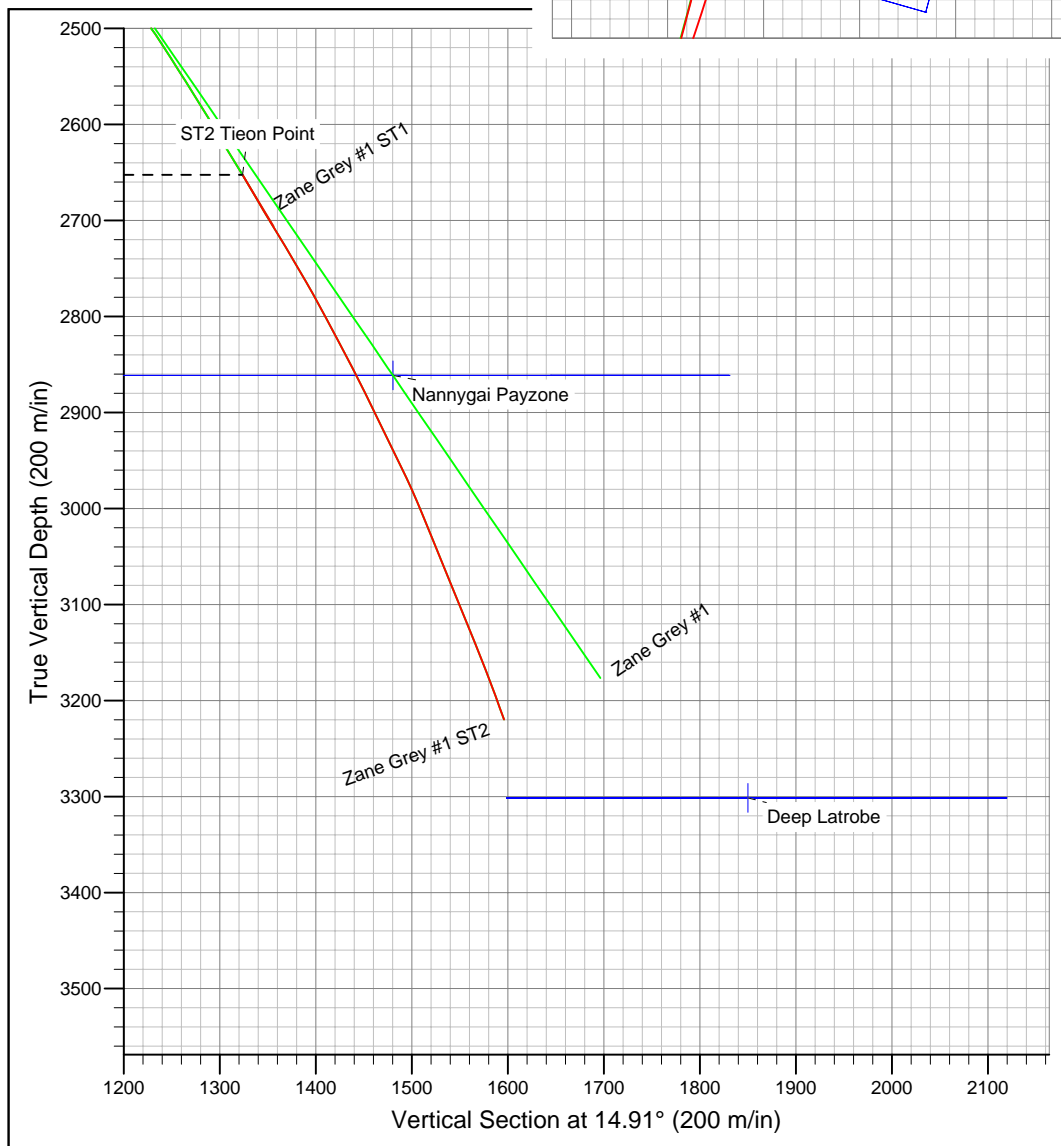
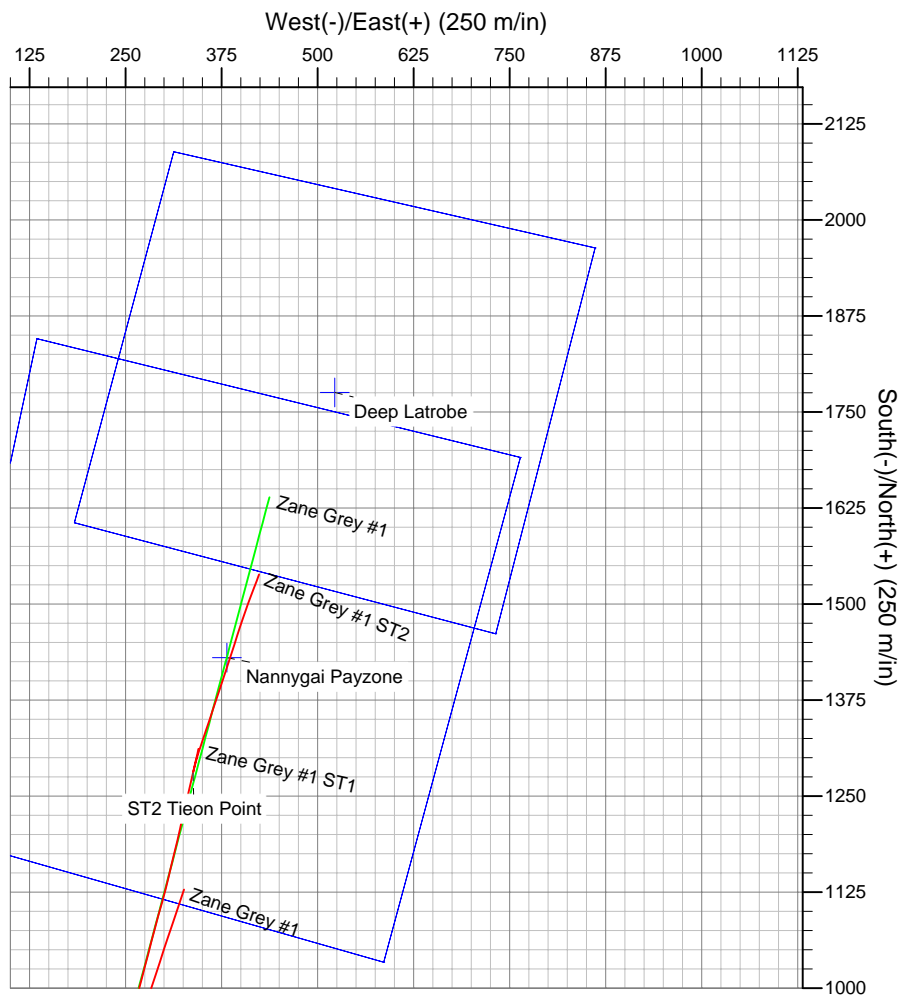
Company:	Bass Strait Oil Company Ltd.	Local Co-ordinate Reference:	Site Zane Grey
Project:	Zane Grey	TVD Reference:	RT @ 21.50m (Original Well Elev)
Site:	Zane Grey	MD Reference:	RT @ 21.50m (Original Well Elev)
Well:	Zane Grey #1	North Reference:	Grid
Wellbore:	Zane Grey #1 ST2	Survey Calculation Method:	Minimum Curvature
Design:	Zane Grey #1 ST2	Database:	Perth Office Database

Survey									
Measured Depth (m)	Inclination (°)	Azimuth (°)	Vertical Depth (m)	+N/-S (m)	+E/-W (m)	Vertical Section (m)	Dogleg Rate (°/30m)	Build Rate (°/30m)	Turn Rate (°/30m)
3,475.40	22.060	18.180	3,034.31	1,469.58	398.78	1,522.71	0.624	-0.57	0.65
3,504.57	22.330	18.720	3,061.32	1,480.03	402.27	1,533.71	0.348	0.28	0.56
3,533.24	22.230	18.840	3,087.85	1,490.33	405.77	1,544.55	0.115	-0.10	0.13
3,562.17	22.340	19.850	3,114.62	1,500.68	409.41	1,555.49	0.413	0.11	1.05
3,590.58	22.010	21.180	3,140.93	1,510.72	413.16	1,566.16	0.634	-0.35	1.40
3,619.85	21.300	20.710	3,168.13	1,520.81	417.02	1,576.90	0.749	-0.73	-0.48
3,649.53	20.380	21.410	3,195.87	1,530.66	420.82	1,587.40	0.963	-0.93	0.71
3,662.14	19.700	21.540	3,207.72	1,534.68	422.40	1,591.70	1.621	-1.62	0.31
3,675.00	19.700	21.540	3,219.83	1,538.71	423.99	1,596.00	0.000	0.00	0.00

Casing Points				
Measured Depth (m)	Vertical Depth (m)	Name	Casing Diameter (in)	Hole Diameter (in)
1,090.61	1,029.92	13 3/8"	13.37	17.50
1,776.00	1,596.62	9 5/8"	9.62	12.25

Checked By: _____ Approved By: _____ Date: _____

Project: Zane Grey
Site: Zane Grey
Well: Zane Grey #1
Wellbore: Zane Grey #1 ST2
Survey: ST2 MWD



Customer : Bass Strait Oil Company Ltd.
Well : Zane Grey #1 ST2
Rig : Ocean Patriot

Field : Zane Grey
Location : Bass Strait
Job # : AU-DD-0003576081

North Ref : Grid

Declination : °

VS Dir : 14.92° (from Wellhead)

WELLBORE SURVEY										DRILLING PARAMETERS									
Measured Depth (m)	Incl Angle (deg)	Azi Dir (deg)	Vertical Depth (m)	Vertical Section (m)	Coordinates N/S (m) E/W (m)		DLS (°/30m)	Build Rate (°/30m)	Turn Rate (°/30m)	WOB (klbs)	RPM	Flow Rate (gpm)	Stand Pipe (psi)	Orientation From (m) To (m)		Tool Face (deg)	ROP (m/hr)	BHA No. (#)	Comment
3044.57	31.02	13.23	2652.8	1323.9	1280.1	337.8	0.00	0.00	0.00										
3074.64	30.11	15.22	2678.7	1339.2	1294.9	341.6	1.36	-0.91	1.99	2		600	2750	3070	3075	175R	1	14	
3114.34	31.53	18.99	2712.8	1359.5	1314.3	347.5	1.81	1.07	2.85	5	80	600	3200	3075	3075	175R	50	15	
														3075	3083	90R		15	
														3083	3087	45R		15	
														3087	3092	20R		15	
3131.12	31.15	19.18	2727.1	1368.2	1322.6	350.4	0.70	-0.68	0.34	5	80	600	3200				50	15	
3159.25	30.31	18.05	2751.3	1382.6	1336.2	355.0	1.09	-0.90	-1.21	5	80	600	3200				50	15	
3188.52	29.22	18.57	2776.7	1397.1	1350.0	359.6	1.15	-1.12	0.53	5	80	600	3200				50	15	
3217.29	28.31	18.36	2801.9	1410.9	1363.1	363.9	0.95	-0.95	-0.22	5	80	600	3200				50	15	
3276.11	27.28	18.20	2854.0	1438.3	1389.2	372.5	0.53	-0.53	-0.08	5	80	600	3200				60	15	
3333.29	26.11	18.07	2905.0	1463.9	1413.6	380.5	0.61	-0.61	-0.07	5	80	600	3200				50	15	
3389.79	25.74	18.35	2955.8	1488.6	1437.1	388.3	0.21	-0.20	0.15	7	80	600	3200				50	15	
3417.10	24.21	17.99	2980.6	1500.1	1448.0	391.9	1.69	-1.68	-0.40	7	80	600	3200				50	15	
3445.51	22.63	17.53	3006.7	1511.4	1458.8	395.3	1.68	-1.67	-0.49	7	80	600	3200				50	15	
3475.40	22.06	18.18	3034.3	1522.7	1469.6	398.8	0.62	-0.57	0.65	7	80	600	3200				50	15	
3504.57	22.33	18.72	3061.3	1533.7	1480.0	402.3	0.35	0.28	0.56	7	80	600	3200				50	15	
3533.24	22.23	18.84	3087.9	1544.6	1490.3	405.8	0.11	-0.10	0.13	7	80	600	3200				50	15	
3562.17	22.34	19.85	3114.6	1555.5	1500.7	409.4	0.41	0.11	1.05	7	80	600	3200				50	15	
3590.58	22.01	21.18	3140.9	1566.2	1510.7	413.2	0.63	-0.35	1.40	7	80	600	3200				50	15	
3619.85	21.30	20.71	3168.1	1576.9	1520.8	417.0	0.75	-0.73	-0.48	7	80	600	3200				50	15	
3649.53	20.38	21.41	3195.9	1587.4	1530.7	420.8	0.96	-0.93	0.71	7	80	600	3200				50	15	
3662.14	19.70	21.54	3207.7	1591.7	1534.7	422.4	1.62	-1.62	0.31	7	80	600	3200				50	15	
3675.00	19.70	21.54	3219.8	1596.0	1538.7	424.0	0.00	0.00	0.00	10	80	600	3200				40	15	

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DRILLING SERVICES

BHA Report

Customer : Bass Strait Oil Company Ltd.

Well : Zane Grey #1 ST2

Field : Zane Grey

Location : Bass Strait

Rig : Ocean Patriot

Job # : AU-DD-0003576081

BHA# 14

BHA# 14 : Date In :4/03/2005 MD In (m) : 3070 TVD In (m) : 2675 Date Out 5/03/2005 MD Out (m): 3092 TVD Out (m): 2693

BIT DATA

Bit #	OD (in)	MFR	Style	Serial#	Nozzles (/32's)	TFA (in ²)	Dull Condition
10	8.500	Hycalog	DS43SSTG	22520	3x20	0.920	1-1-JD-N -X-I-ER-BHA

MOTOR DATA

Run #	OD (in)	MFR	Model	Serial#	Bend	Nzl (/32's)	Avg Dif (psi)	Cum Circ Hrs
9	6.750	SSDS	SperryDrill	675495	1.50°		70	48.50

COMPONENT DATA

Item #	Description	Serial #	OD (in)	ID (in)	Gauge (in)	Weight (lbs/ft)	Top Con	Length (m)	Bit - Center Blade (m)
1	PDC	22520	8.500	2.500	8.500	176.66	P 4-1/2" Reg	0.13	
2	6-3/4" SperryDrill Lobe 6/7 - 5.0 stg	675495	6.750	4.498	7.875	67.81	B 4-1/2" IF	7.67	0.75
3	Integral Blade Stabilizer	A-472	6.750	2.813	7.875	100.77	B 4-1/2" IF	1.75	8.66
4	Float Sub w/ ported float	DA6015	6.750	3.000		97.86	B 4-1/2" IF	0.64	
5	6-3/4" PM	DM90052756	6.750	1.920		112.09	B 4-1/2" IF	2.77	
6	6-3/4" Resistivity Sensor w/ X/O	90057455	6.750	1.920		112.09	B 4-1/2" IF	4.23	
7	6-3/4" Gamma Ray Sensor	90057455	6.750	1.920		112.09	B 4-1/2" IF	1.33	
8	6-3/4" HCIM	90057455	6.750	1.920		112.09	B 4-1/2" IF	1.49	
9	6-3/4" Pulser/TM	90057455	6.750	1.920		112.09	B 4-1/2" IF	3.06	
10	Integral Blade Stabilizer	47697	6.750	3.000	8.000	97.86	B 4-1/2" IF	1.56	23.84
11	3x Spiral Drill collar	Diamond M	6.500	2.813		92.00	B 4-1/2" IF	27.30	
12	Drilling Jar	03409D	6.500	2.750		92.85	B 4-1/2" IF	9.87	
13	2x Spiral Drill collar	Diamond M	6.500	2.813		92.00	B 4-1/2" IF	18.20	
14	15x HWDP		5.000	3.000		49.30	B 4-1/2" IF	137.00	
								217.00	

Parameter	Min	Max	Ave
WOB (klbs) :	2	4	3
RPM (rpm) :			
Flow (gpm) :	600	600	600
SPP (psi) :	2750	2800	2770

Activity	Hrs
Drilling :	10.25
Reaming :	0.25
Circ-Other :	2.00
Total :	12.50

BHA Weight (lb)
in Air (Total) : 46702
in Mud (Total) : 40011
in Air (Bel Jars) : 16043
in Mud (Bel Jars) : 13745

Drill String	OD(in)	Len(m)
DP(G)-NC50(XH)-19.50#	5.000	2875

PERFORMANCE

	In	Out
Inclination (deg)	31.09	31.11
Azimuth (deg)	14.91	16.44

	Distance(m)	ROP (m/hr)	Build (°/30m)	Turn (°/30m)	DLS (°/30m)
Oriented :	22.00	2			
Rotated :	0.00	0			
Total :	22.00	2	0.02	2.08	1.07

COMMENTS

Customer : Bass Strait Oil Company Ltd.

Well : Zane Grey #1 ST2

Field : Zane Grey

Location : Bass Strait

Rig : Ocean Patriot

Job # : AU-DD-0003576081

BHA# 14

OBJECTIVES:

Sidetrack the well from 3070m.

RESULTS:

Run the motor in conjunction with a Hycalog PDC side-tracking bit. The BHA was RIH to 3070m, where circulation was established and 100psi differential was noticed. The bit was left on bottom to wear a starting groove for time drilling. Time drilling commenced 3070 - 3077m. Differential and reactive torque was noticed within 3m of drilling. Formation shows increased from 3075m, and continued to show positive gains. Towards 3077m the toolface was set to 90-45R until 3087m, and then highside to 3092m. With 90% formation shows and a survey showing displacement 11m behind the bit, the decision was to POOH and change the bend and bit.

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DRILLING SERVICES

BHA Report

Customer : Bass Strait Oil Company Ltd.

Well : Zane Grey #1 ST2

Field : Zane Grey

Location : Bass Strait

Rig : Ocean Patriot

Job # : AU-DD-0003576081

BHA# 15

BHA# 15 : Date In : 5/03/2005 MD In (m) : 3092 TVD In (m) : 2693 Date Cur: 11/03/2005 MD Cur (m): 3675 TVD Cur (m): 3220

BIT DATA

Bit #	OD (in)	MFR	Style	Serial#	Nozzles (/32's)	TFA (in²)	Dull Condition
11rr1	8.500	Hycalog	RSX163DGW	207732	6x14	0.902	

MOTOR DATA

Run #	OD (in)	MFR	Model	Serial#	Bend	Nzl (/32's)	Avg Dif (psi)	Cum Circ Hrs
10	6.750	SSDS	SperryDrill	675495	1.15°		500	101.00

COMPONENT DATA

Item #	Description	Serial #	OD (in)	ID (in)	Gauge (in)	Weight (lbs/ft)	Top Con	Length (m)	Bit - Center Blade (m)
1	PDC	207732	8.500	2.500	8.500	176.66	P 4-1/2" Reg	0.22	
2	6-3/4" SperryDrill Lobe 6/7 - 5.0 stg	675495	6.750	4.498	8.188	67.81	B 4-1/2" IF	7.67	0.84
3	Integral Blade Stabilizer	A-472	6.750	2.813	7.875	100.77	B 4-1/2" IF	1.75	8.75
4	Float Sub w/ ported float	DA6015	6.750	3.000		97.86	B 4-1/2" IF	0.64	
5	6-3/4" PM	DM90052756	6.750	1.920		112.09	B 4-1/2" IF	2.77	
6	6-3/4" Resistivity Sensor w/ X/O	90057455	6.750	1.920		112.09	B 4-1/2" IF	4.23	
7	6-3/4" Gamma Ray Sensor	90057455	6.750	1.920		112.09	B 4-1/2" IF	1.33	
8	6-3/4" HCIM	90057455	6.750	1.920		112.09	B 4-1/2" IF	1.49	
9	6-3/4" Pulser/TM	10599296	6.750	1.920		112.09	B 4-1/2" IF	3.06	
10	Integral Blade Stabilizer	47697	6.750	3.000	8.000	97.86	B 4-1/2" IF	1.56	23.93
11	3x Spiral Drill collar	Diamond M	6.500	2.813		92.00	B 4-1/2" IF	28.06	
12	Drilling Jar	03409D	6.500	2.750		92.85	B 4-1/2" IF	9.87	
13	2x Spiral Drill collar	Diamond M	6.500	2.813		92.00	B 4-1/2" IF	18.59	
14	15x HWDP		5.000	3.000		49.30	B 4-1/2" IF	138.80	
								220.04	

Parameter	Min	Max	Ave
WOB (klbs) :	5	7	6
RPM (rpm) :	80	80	80
Flow (gpm) :	600	600	600
SPP (psi) :	3200	3200	3200

Activity	Hrs
Drilling :	35.00
Reaming :	0.50
Circ-Other :	2.00
Total :	37.50

BHA Weight	(lb)
in Air (Total) :	47393
in Mud (Total) :	40603
in Air (Bel Jars) :	16325
in Mud (Bel Jars) :	13986

Drill String	OD(in)	Len(m)
DP(G)-NC50(XH)-19.50#	5.000	3455

PERFORMANCE

	In	Out
Inclination (deg)	31.11	19.70
Azimuth (deg)	16.44	21.54

	Distance(m)	ROP (m/hr)	Build (°/30m)	Turn (°/30m)	DLS (°/30m)
Oriented :	0.00	0			
Rotated :	583.00	17			
Total :	583.00	17	-0.59	0.26	0.60

COMMENTS

Customer : Bass Strait Oil Company Ltd.

Well : Zane Grey #1 ST2

Field : Zane Grey

Location : Bass Strait

Rig : Ocean Patriot

Job # : AU-DD-0003576081

BHA# 15

OBJECTIVES:

The objective of this BHA is to drill to a depth of 3691m (prognosed TD) and intersect the required target intervals.

RESULTS:

The motor was rotated to TD @ 3675m. This BHA for the most part had a dropping tendency of between 0.5 - 1.2°/30m. Azimuth control while rotating was stable, with fluctuations of 1° except for when the bit entered the base roundhead member, where the azimuth walked right at 1°/30m.

Sliding was difficult due to stalling and pump detection issues. Whilst the inclination was dropping, we still intersected all targets.

Motor Serial # : 675495	Job # : AU-DD-0003576081
Directional Driller(s) : Burt Muise, Sompon T./Tim Walton	Customer : Bass Strait Oil Company Ltd.
Location : Bass Strait	Rig : Ocean Patriot
Well : Zane Grey #1 ST2	Bit Run # : 10 BHA # : 14 Motor Run # : 9
Depth In/Out : 3070 / 3092 m	Date In/Out : 4/03/2005 / 5/03/2005 Hole Size : 8.500 in
Application Details : Sidetrack	

MOTOR CONFIGURATION

	From Bit (m)	Component	Type	Diam In/Out (in)
Upr Stab	1 0.75	Sleeve Stab/Pad	Yes	7.875 7.875
	2 2.02	Bent Housing	Yes	
Lwr Stab or Pad Sub	3 2.05	Housing Tool Used	Yes	
Motor Top	4 7.80	Stator Elastomer	Nitrile	
Pad	5	Bent Sub / 2nd Bent Hsg	No	
Bend (Housing)	6 8.66	Lower String Stab	Yes	7.875 7.875
Sleeve Tool	7 23.84	Upper String Stab	Yes	8.000 8.000

Additional Features :				Arr Ret
Flex Collar : No	Short Brg Pack : No	Rtr Noz / Size : /32's	Pick Up Sub : Yes	No
Brg Cfg (Off/On) : 4/2	Lobe Cfg : 6/7	BHA OD/ID : 6.750 / 2.813 in	Bit Box Protr : Yes	No

MOTOR RUN DATA

Max Dogleg While Rotating : °/30m	RPM :	Motor Stalled : Yes	Prev Job/Well Hrs : 36.00
Max Dogleg Overpulled In : °/30m	Force : lbf	Float Valve : Yes	Drilling Hrs : 10.25
Max Dogleg Pushed Through : °/30m	Force : lbf	DP Filter : No	Circ Hrs : 2.00
Hole Azimuth Start / End : 14.91° / 16.44°	Inc Start / End : 31.09° / 31.11°		Reaming Hrs : 0.25
Interval Oriented / Rot. : 22 / 0 m	Directional Perf Ori / Rot : / °/30m		Total Hrs This Run : 12.50
Jarring Occured : No			New Cumulative Hrs : 48.50

	Diff Press (psi)	Str RPM	Rotn Torque (ft-lbs)	Drag Up/Dn (lbf)	WOB (klbs)	ROP Oriented (m/hr)	ROP Rotated (m/hr)
Avg :	70			310000 / 250000	3	2	0
Max :	100			430000 / 230000	4	6	

PRE-RUN TESTS

Motor Tested Pre-Run : No	with : 1 Collar, Bit, MWD
Dump Sub Operating : N/A	Brg Play : 0.3 mm
Flow 1 : 450 gpm	Pressure 1 : 800 psi
Flow 2 : gpm	Pressure 2 : psi
Driveshaft Rotation Observed : No	
Bearing Leakage Observed : No	

POST-RUN TESTS

Motor Tested Post-Run : No	with :
Dump Sub Operating : N/A	Brg Play : 0.3 mm
Flow 1 : gpm	Pressure 1 : psi
Flow 2 : gpm	Pressure 2 : psi
Driveshaft Rotation Observed : No	
Bearing Leakage Observed : No	
Driveshaft Rotated to Drain Mud : Yes	
Fluid Flushed : Yes	Fluid Used : Water

MUD DATA

Base : Water	Additives :	Mud Wt : 9.4 ppg	SPP Start/End : 2750 / 2800 psi
% Oil/Water : /	% Solids : 8.20	% Sand : 0.25	PV : 17 cp YP : 32.0 lbf/100ft² pH : 8.5
DH Temp Avg/Max : /	FlowRate Avg/Max : 600 / 600 gpm	Chloride Content : 31000 ppm	
Principle Formation Name(s) :	Lithology :		

BIT DATA

Make : Hycalog	Type : DS43SSTG	Serial # : 22520	Dull Grade	1	2	3	4	5	6	7	8
Pre Existing Hours From Other Wells:			In	NEW							
Prev Drilling Hrs : 0.00	Prev Reaming Hrs : 0.00	No of Runs This Bit : 1	Out	1	1	JD	N	X	I	ER	BHA
Jet Sizes (/32's) : 3x20	TFA : 0.920 in²	Gage Length : in									

PERFORMANCE COMMENTS

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

Motor Serial # : 675495	Job # : AU-DD-0003576081
Directional Driller(s) : Burt Muise, Sompon T./Tim Walton	Customer : Bass Strait Oil Company Ltd.
Location : Bass Strait	Rig : Ocean Patriot
Well : Zane Grey #1 ST2	Bit Run # : 11rr1 BHA # : 15
Depth In/Out : 3092 / 3675 m	Date In/Out : 5/03/2005 / 11/03/2005
Application Details : Steerable Drilling	Motor Run # : 10
	Hole Size : 8.500 in

MOTOR CONFIGURATION

	From Bit (m)	Component	Type	Diam In/Out (in)
Upr Stab	1 0.84	Sleeve Stab/Pad	Yes	8.188 8.188
	2 2.11	Bent Housing	Yes	
	3 2.15	Housing Tool Used	Yes	
	4 7.89	Stator Elastomer	Nitrile	
	5	Bent Sub / 2nd Bent Hsg	No	
	6 8.75	Lower String Stab	Yes	7.875 7.875
	7 23.93	Upper String Stab	Yes	8.000 8.000
Additional Features :				Arr Ret
Flex Collar : No	Short Brg Pack : No	Rtr Noz / Size : /32's	Pick Up Sub : Yes	No
Brg Cfg (Off/On) : 4/2	Lobe Cfg : 6/7	BHA OD/ID : 6.750 / 2.813 in	Bit Box Protr : Yes	No

MOTOR RUN DATA

Max Dogleg While Rotating		: 1.30	°/30m	RPM	: 80	Motor Stalled	: Yes	Prev Job/Well Hrs	: 63.50				
Max Dogleg Overpulled In		:	°/30m	Force	: lbf	Float Valve	: Yes	Drilling Hrs	: 35.00				
Max Dogleg Pushed Through		:	°/30m	Force	: lbf	DP Filter	: No	Circ Hrs	: 2.00				
Hole Azimuth Start / End		: 16.44° / 21.54°	Inc Start / End		: 31.11° / 19.70°			Reaming Hrs	: 0.50				
Interval Oriented / Rot.		: 0 / 583	m	Directional Perf Ori / Rot		: /	°/30m	Total Hrs This Run	: 37.50				
Jarring Occured		: No						New Cumulative Hrs	: 101.00				
	Diff Press	(psi)	Str RPM	Rotn Torque	(ft-lbs)	Drag Up/Dn	(lbf)	WOB	(klbs)	ROP Oriented	(m/hr)	ROP Rotated	(m/hr)
Avg :	500		80	19		350000 / 250000		6		0		17	
Max :	500		80	20		410000 / 230000		7				60	

PRE-RUN TESTS

Motor Tested Pre-Run : Yes	with : 1 Collar, Bit, MWD
Dump Sub Operating : N/A	Brg Play : 0.3 mm
Flow 1 : 450 gpm	Pressure 1 : 800 psi
Flow 2 : gpm	Pressure 2 : psi
Driveshaft Rotation Observed : Yes	
Bearing Leakage Observed : Yes	

POST-RUN TESTS

Motor Tested Post-Run : Yes	with : 0 Collars
Dump Sub Operating : N/A	Brg Play : 0.3 mm
Flow 1 : gpm	Pressure 1 : psi
Flow 2 : gpm	Pressure 2 : psi
Driveshaft Rotation Observed : Yes	
Bearing Leakage Observed : Yes	
Driveshaft Rotated to Drain Mud : Yes	
Fluid Flushed : Yes	Fluid Used : Water

MUD DATA

Base : Water	Additives :	Mud Wt : 9.4 ppg	SPP Start/End : 3200 / 3200 psi
% Oil/Water : /	% Solids : 8.20	% Sand : 0.25	PV : 17 cp
DH Temp Avg/Max : 75.5 / 76.0	FlowRate Avg/Max : 600 / 600 gpm	YP : 32.0 lbf/100ft²	pH : 8.5
Principle Formation Name(s) :		Chloride Content : 31000 ppm	Lithology :

BIT DATA

Make : Hycalog	Type : RSX163DGW	Serial # : 207732	Dull Grade	1	2	3	4	5	6	7	8
Pre Existing Hours From Other Wells: 39.5			In	0	0	NO	A	X	I	PN	BHA
Prev Drilling Hrs : 0.00	Prev Reaming Hrs : 0.00	No of Runs This Bit : 1	Out								
Jet Sizes (/32's) : 6x14	TFA : 0.902 in²	Gage Length : in									

PERFORMANCE COMMENTS

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

Customer Representative's Signature (optional) : Date:

sperry-sun

DRILLING SERVICES

Daily Drilling Report

Customer : Bass Strait Oil Company Ltd.

Well : Zane Grey #1 ST2

Field : Zane Grey

Location : Bass Strait

Rig : Ocean Patriot

Job # : AU-DD-0003576081

CURRENT STATUS Report # 1 4/03/2005

Total Depth (m) : 3070

Drilled last 24 hrs (m) : 0

Hole Size (in) : 8.500

Casing Depth (m) : 2194.00

Casing Diameter (in) : 9.875

Casing ID (in) : 8.681

Operator Reps : Peter Dane, Greg Harms

SSDS Reps : Burt Muise (1), Sompon T./Tim Walton (1)

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
3044.57	31.02	13.23	2652.79	1323.91	N14.78E

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

BHA 14: 217.00 m; Bit #10 (0.25 hrs), PDM #9 (37. hrs), Stab, Sub, MWD, MWD, MWD, MWD, MWD, Stab, 3x DC, Jar, 2x DC, 15x HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lbf/100ft ²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
KCl/Polymer	9.4	58	17	32.0	5.0 / 12.0	17	8.5	8.20	0.25	

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	17:00	17.00	3070.00		No Activity - Zane Grey #1 ST1
17:00	18:00	1.00	3070.00	14	RIH BHA #14, shallow MWD test
18:00	18:30	0.50	3070.00	14	Service Rig
18:30	23:00	4.50	3070.00	14	Cont RIH to 3070m
23:00	23:30	0.50	3070.00	14	Break circulation, take survey tag bottom @ 3070m
23:30	00:00	0.50	3070.00	14	Circ and wash trough on bottom for sidetrack

COMMENTS

sperry-sun

DRILLING SERVICES

Daily Drilling Report

Customer : Bass Strait Oil Company Ltd.

Well : Zane Grey #1 ST2

Field : Zane Grey

Location : Bass Strait

Rig : Ocean Patriot

Job # : AU-DD-0003576081

CURRENT STATUS Report # 3 6/03/2005

Total Depth (m) :	3147	Casing Depth (m) :	2194.00	Operator Reps :	Peter Dane, Greg Harms
Drilled last 24 hrs (m) :	55	Casing Diameter (in) :	9.875	SSDS Reps :	Burt Muise (3), Sompon T./Tim Walton (3)
Hole Size (in) :	8.500	Casing ID (in) :	8.681		

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
3131.12	31.15	19.18	2726.90	1368.58	N14.83E

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

BHA 15: 220.04 m; Bit #11rr1 (5. hrs), PDM #10 (68.5 hrs), Stab, Sub, MWD, MWD, MWD, MWD, Stab, 3x DC, Jar, 2x DC, 15x HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lbf/100ft ²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
KCl/Polymer	9.4	58	17	32.0	5.0 / 12.0	17	8.5	8.20	0.25	

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	02:30	2.50	3092.00	15	Cont. RIH
02:30	03:00	0.50	3092.00	15	Reaming / Washing to check survey @ 3092m
03:00	07:30	4.50	3147.00	15	Drilling 3092 - 3147m
07:30	12:00	4.50	3147.00	15	Top drive brake locked up while drilling, POOH to 3000m
12:00	00:00	12.00	3147.00	15	Cont. to POOH to 2140m, casing shoe. Trouble shoot on TDS

COMMENTS



Daily Drilling Report

Customer : Bass Strait Oil Company Ltd.

Well : Zane Grey #1 ST2

Field : Zane Grey

Location : Bass Strait

Rig : Ocean Patriot

Job # : AU-DD-0003576081

CURRENT STATUS Report # 4 7/03/2005

Total Depth (m) : 3147

Drilled last 24 hrs (m) : 0

Hole Size (in) : 8.500

Casing Depth (m) : 2194.00

Casing Diameter (in) : 9.875

Casing ID (in) : 8.681

Operator Reps : Peter Dane, Greg Harms

SSDS Reps : Burt Muise (4), Sompon T./Tim Walton (4)

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
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3131.12	31.15	19.18	2726.90	1368.58	N14.83E
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LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)
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BHA SUMMARY

BHA 15: 220.04 m; Bit #11rr1 (5. hrs), PDM #10 (68.5 hrs), Stab, Sub, MWD, MWD, MWD, MWD, MWD, Stab, 3x DC, Jar, 2x DC, 15x HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lbf/100ft ²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
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KCl/Polymer	9.4	58	17	32.0	5.0 / 12.0	17	8.5	8.20	0.25	
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TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
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00:00	00:00	24.00	3147.00	15	Rig Repair on top drive unit
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COMMENTS



Job # : AU-DD-0003576081

CURRENT STATUS Report # 5 8/03/2005

LAST SURVEY

LAST FORMATION TOP

BHA SUMMARY

BHA 15: 220.04 m; Bit #11rr1 (5. hrs), PDM #10 (68.5 hrs), Stab, Sub, MWD, MWD, MWD, MWD, MWD, Stab, 3x DC, Jar, 2x DC, 15x HWDP

MUD DATA

TIME BREAKDOWN

COMMENTS

[illegible]

sperry-sun

DRILLING SERVICES

Daily Drilling Report

Customer : Bass Strait Oil Company Ltd.

Well : Zane Grey #1 ST2

Field : Zane Grey

Location : Bass Strait

Rig : Ocean Patriot

Job # : AU-DD-0003576081

CURRENT STATUS Report # 6 9/03/2005

Total Depth (m) :	3480	Casing Depth (m) :	2194.00	Operator Reps :	Peter Dane, Greg Harms
Drilled last 24 hrs (m) :	333	Casing Diameter (in) :	9.875	SSDS Reps :	Tim Walton (2)
Hole Size (in) :	8.500	Casing ID (in) :	8.681		

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
3475.40	22.06	18.18	3034.11	1523.08	N15.17E

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

BHA 15: 220.04 m; Bit #11rr1 (18.5 hrs), PDM #10 (82. hrs), Stab, Sub, MWD, MWD, MWD, MWD, MWD, Stab, 3x DC, Jar, 2x DC, 15x HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lb/100ft ²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
KCl/Polymer	9.4	58	17	32.0	5.0 / 12.0	17	8.5	8.20	0.25	

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	03:00	3.00	3147.00	15	Rig Repair on top drive unit.
03:00	03:30	0.50	3147.00	15	Rig Repair, check torque on save sub.
03:30	07:30	4.00	3147.00	15	Trip In to 3162m
07:30	10:30	3.00	3245.00	15	Drilling 8 1/2" hole 3147 - 3245m
10:30	12:30	2.00	3245.00	15	Rig Repair, clean suction lines to mud pumps
12:30	17:30	5.00	3345.00	15	Drilling 8 1/2" hole 3245 - 3345m
17:30	18:30	1.00	3345.00	15	Rig Repair, p/up new saver sub.
18:30	00:00	5.50	3480.00	15	Drilling 8 1/2" hole 3345 - 3480m

COMMENTS

sperry-sun

DRILLING SERVICES

Daily Drilling Report

Customer : Bass Strait Oil Company Ltd.

Well : Zane Grey #1 ST2

Field : Zane Grey

Location : Bass Strait

Rig : Ocean Patriot

Job # : AU-DD-0003576081

CURRENT STATUS Report # 7 10/03/2005

Total Depth (m) :	3675	Casing Depth (m) :	2194.00	Operator Reps :	Peter Dane, Greg Harms
Drilled last 24 hrs (m) :	195	Casing Diameter (in) :	9.875	SSDS Reps :	Tim Walton (3)
Hole Size (in) :	8.500	Casing ID (in) :	8.681		

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
3675.00	19.70	21.54	3219.63	1596.41	N15.40E

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

BHA 15: 220.04 m; Bit #11rr1 (35.5 hrs), PDM #10 (101. hrs), Stab, Sub, MWD, MWD, MWD, MWD, MWD, Stab, 3x DC, Jar, 2x DC, 15x HWD

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lbf/100ft ²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
KCl/Polymer	9.4	58	17	32.0	5.0 / 12.0	17	8.5	8.20	0.25	

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	12:00	12.00	3630.00	15	Drilling 8 1/2" hole 3480 - 3630m
12:00	17:00	5.00	3675.00	15	Drilling 8 1/2" hole 3630 - 3675m
17:00	18:00	1.00	3675.00	15	Circulate hole clean
18:00	21:00	3.00	3675.00	15	Short Trip to 3070m
21:00	22:00	1.00	3675.00	15	Trip In to 3675m
22:00	23:00	1.00	3675.00	15	Circulate hole clean
23:00	00:00	1.00	3675.00	15	Trip Out to 3520m

COMMENTS



Daily Drilling Report

Customer : Bass Strait Oil Company Ltd.

Well : Zane Grey #1 ST2

Field : Zane Grey

Location : Bass Strait

Rig : Ocean Patriot

Job # : AU-DD-0003576081

CURRENT STATUS Report # 8 11/03/2005

Total Depth (m) : 3675

Casing Depth (m) : 2194.00

Operator Reps :

Drilled last 24 hrs (m) : 0

Casing Diameter (in) : 9.875

SSDS Reps :

Hole Size (in) : 8.500

Casing ID (in) : 8.681

LAST SURVEY

LAST FORMATION TOP

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
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Formation Name	MD Top (m)	TVD Top (m)
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3675.00	19.70	21.54	3219.63	1596.41	N15.40E
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[illegible]

BHA SUMMARY

BHA 15: 220.04 m; Bit #11rr1 (35.5 hrs), PDM #10 (101. hrs), Stab, Sub, MWD, MWD, MWD, MWD, MWD, Stab, 3x DC, Jar, 2x DC, 15x HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lbf/100ft ²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
KCl/Polymr	9.4	58	17	32.0	5.0 / 12.0	17	8.5	8.20	0.25	

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	06:00	6.00	3675.00	15	Trip Out to 30m
06:00	07:00	1.00	3675.00	15	Trip Out (at Surface), lay out BHA

COMMENTS

APPENDIX 15

CASING AND CEMENTING REPORTS

(By Bass Strait Oil Company Ltd)

30" Conductor

Casing Control Information

Well Name	Zane Grey-1	Use MLS Y/N	Y
Permit	VIC/P42	Supervisors	C. Wilson
Rig Name	Ocean Patriot		S. Douglass
Casing Size (in)	30		
Casing Weight (ppf)	310		
Casing Grade	X52		
Casing Burst (psi)	N/A		
Casing collapse (psi)	1581		
Tensile yield (lbs)	4738000		
Hole Size (in)	36		
Hole TD (m)	128		
Hole TVD (m)	128		
Date	1/29/2005		
RT to MLS (m)	92.5		
RT to Sea Bed (m)	94		
RT to wellhead	92.5		

Bass Strait Oil Company

CASING RECORD

Well Name:	Zane Grey-1	RIG:	Ocean Patriot	PERMIT:	VIC/P42	DATE:	29-Jan-05
HOLE SIZE (mm):	914	CASING (mm):	762	RT-s'bed (m):		94.00	
TD (m):	128	Shoe @ (m):	127.75	RT-MLS(m):		92.50	
TVD (m)	128			WellHead (m):		92.50	

JTS	SIZE mm	Weight Kg/m	Grade	Conn	Burst (kpa)	Collapse (kpa)	Tensile Yield (t)
3	762	461.3	X52	Lynx	#VALUE!	10893	2149728

MILL CERTIFICATE Nos./PO's

DESCRIPTION	Length (m)	Bottom (mRT)	Top (mRT)
Shoe Joint	11.58	127.75	116.17
Intermediate Joint	11.80	116.17	104.37
Wellhead Joint	11.87	104.37	92.50
Hang-off Point	0.00	92.50	92.50
Running String	92.50	92.50	0.00



Wellname: ZaneGrey-1
Company: Bass Strait Oil Company
Date: 29-Jan-05
Prepared By: Chris Wilson & Stuart Douglass
Revision: 1



Well Completion Report (Basic Data)- ZaneGrey-1/ST1/ST2

Well Data		Wellhead Housing		Seafloor		Wiper Plugs		Prev Csg Shoe		Top of Tail		Float Collar		Csg Shoe		TD	
RT	21.5 m	Wellhead Housing	0 m	Seafloor	21.5 m	Wiper Plugs	92.5 m	Prev Csg Shoe	94 m	Top of Tail	103 m	Float Collar	105.17 m	Csg Shoe	122.75 m	TD	127.75 m
Water Depth	72.5 m																
Top Wellhead	92.5 m																
Mudline	94 m																
Previous Casing Shoe	0 m																
Hole Size	36 in																
Section TD	129.5 m																

Casing Data		Running String Data		Cement Data		Capacities		Cement Calculations		Cement Properties		Displacement		Spacer		Volume of Fluorescene Spacer pumped	
Casing Shoe At	127.75 m	Running String 1 Length	92.5 m	Length of Lead	0 m	Running String 1	0.008742957 bbls/ft	Lead Slurry	OH x Casing Annulus	Lead	Lead	Yield	ft³/sk	Surface Lines	2 bbls	20 bbls	
Casing Shoe ID	18.75 in	Running String 1 ID	3 in	Length of Tail	22.58 m	Running String 2	0.028683894 bbls/m	OH x Casing Annulus	OH Excess	Tail	Tail	Mix Water	gal/sk	Running String	2.65		
Float Collar At	122.75 m	Running String 2 Length	0 m			Stinger	0.017250628 bbls/ft	OH x Casing Annulus	250%	Lead	Lead	HR6L	gal/sk	Stinger	0.59		
Casing 1 Length	6.6 m	Running String 2 ID	3 in			Casing 1	0.34152176 bbls/ft	OH x Casing Annulus	200%	Lead	Lead	S 002 1%	gal/sk	Casing ID 1	1.7927		
Casing 1 OD	20 in	Stick-up above RT	0 m			Casing 2	0.761608704 bbls/ft	OH x Casing Annulus	Total	Lead	Lead	D 047	gal/sk	Casing ID 2	45.351		
Casing 2 Length	28.65 m	Stinger Length	10.5 m			Casing 1 x OH	0.870409948 bbls/ft	OH x Casing Annulus		Lead	Lead		gal/sk		52.391		
Casing 2 OD	30 in	Stinger ID	4.214 in			Casing 2 x OH	0.384690111 bbls/ft	OH x Casing Annulus		Lead	Lead		gal/sk				
Casing 2 ID	28 in					Rathole	1.258985817 bbls/ft	OH x Casing Annulus		Lead	Lead		gal/sk				
								OH x Casing Annulus		Lead	Lead		gal/sk				

Well Data		Wellhead Housing		Seafloor		Wiper Plugs		Prev Csg Shoe		Top of Tail		Float Collar		Csg Shoe		TD	
RT	21.5 m	Wellhead Housing	0 m	Seafloor	21.5 m	Wiper Plugs	92.5 m	Prev Csg Shoe	94 m	Top of Tail	103 m	Float Collar	105.17 m	Csg Shoe	122.75 m	TD	127.75 m
Water Depth	72.5 m																
Top Wellhead	92.5 m																
Mudline	94 m																
Previous Casing Shoe	0 m																
Hole Size	36 in																
Section TD	129.5 m																

Casing Data		Running String Data		Cement Data		Capacities		Cement Calculations		Cement Properties		Displacement		Spacer		Volume of Fluorescene Spacer pumped	
Casing Shoe At	127.75 m	Running String 1 Length	92.5 m	Length of Lead	0 m	Running String 1	0.008742957 bbls/ft	Lead Slurry	OH x Casing Annulus	Lead	Lead	Yield	ft³/sk	Surface Lines	2 bbls	20 bbls	
Casing Shoe ID	18.75 in	Running String 1 ID	3 in	Length of Tail	22.58 m	Running String 2	0.028683894 bbls/m	OH x Casing Annulus	OH Excess	Tail	Tail	Mix Water	gal/sk	Running String	2.65		
Float Collar At	122.75 m	Running String 2 Length	0 m			Stinger	0.017250628 bbls/ft	OH x Casing Annulus	250%	Lead	Lead	HR6L	gal/sk	Stinger	0.59		
Casing 1 Length	6.6 m	Running String 2 ID	3 in			Casing 1	0.34152176 bbls/ft	OH x Casing Annulus	200%	Lead	Lead	S 002 1%	gal/sk	Casing ID 1	1.7927		
Casing 1 OD	20 in	Stick-up above RT	0 m			Casing 2	0.761608704 bbls/ft	OH x Casing Annulus	Total	Lead	Lead	D 047	gal/sk	Casing ID 2	45.351		
Casing 2 Length	28.65 m	Stinger Length	10.5 m			Casing 1 x OH	0.870409948 bbls/ft	OH x Casing Annulus		Lead	Lead		gal/sk		52.391		
Casing 2 OD	30 in	Stinger ID	4.214 in			Casing 2 x OH	0.384690111 bbls/ft	OH x Casing Annulus		Lead	Lead		gal/sk				
Casing 2 ID	28 in					Rathole	1.258985817 bbls/ft	OH x Casing Annulus		Lead	Lead		gal/sk				
								OH x Casing Annulus		Lead	Lead		gal/sk				

13 3/8" Casing

Casing Control Information

Well Name	ZaneGrey-1		Use MLS Y/N	Y
Permit	VIC P/42		Supervisors	C. Wilson
Rig Name	Ocean Patriot			S. Douglass
Casing Size (in)	13.365			
Casing Weight (ppf)	68	68		
Casing Grade	N80	K55		
Casing Burst (psi)	5017	3451		
Casing collapse (psi)	2262	1943		
Tensile yield (lbs)	1557000	1071000		
Hole Size (in)	16			
Hole TD (m)	1174			
Hole TVD (m)	1174			
Date	2/1/2005			
RT to MLS (m)	92.5			
RT to Sea Bed (m)	94			
RT to wellhead	92.4			

Well Completion Report (Basic Data)- ZaneGrey-1/ST1/ST2

Bass Strait Oil Company							
WELL	ZaneGrey-1	PERMIT	VIC P/42	DATE	2/1/2005		
Casing (mm)	339	Weight (kg/m)	101.2 & 101.2	Grade	N80		
Shoe @ (m)	1090.61	Jnts on Rig	150	Stick Up (m)	-0.004		
Joint	Length	Joint Top	Joint Bot	Joint	Length	Joint Top	Joint Bot
Shoe Joint (A)	13.02	1077.59	1090.61	Joint 53	11.92	584.94	596.86
Inter Joint (A)	11.6	1065.99	1077.59	Joint 52	11.9	573.04	584.94
Float collar joint (A)	12.47	1053.52	1065.99	Joint 51	11.77	561.27	573.04
Short Joint	10.96	1042.56	1053.52	Joint 50	12.05	549.22	561.27
Joint 90	12.01	1030.55	1042.56	Joint 49	12.01	537.21	549.22
Joint 89	12.05	1018.50	1030.55	Joint 48	11.93	525.28	537.21
Joint 88	12.05	1006.45	1018.50	Joint 47	12.05	513.23	525.28
Joint 87	12.66	993.79	1006.45	Joint 46	12.05	501.18	513.23
Joint 86	12.66	981.13	993.79	Joint 45	12.05	489.13	501.18
Joint 85	12.66	968.47	981.13	Joint 44	12.05	477.08	489.13
Joint 84	11.6	956.87	968.47	Joint 43	12.01	465.07	477.08
Joint 83	12.01	944.86	956.87	Joint 42	12.66	452.41	465.07
Joint 82	12.05	932.81	944.86	Joint 41	12.66	439.75	452.41
Joint 81	12.05	920.76	932.81	Joint 40	11.9	427.85	439.75
Joint 80	12.05	908.71	920.76	Joint 39	11.71	416.14	427.85
Joint 79	12.05	896.66	908.71	Joint 38	12.05	404.09	416.14
Joint 78	12.06	884.60	896.66	Joint 37	12.66	391.43	404.09
Joint 77	12.05	872.55	884.60	Joint 36	11.94	379.49	391.43
Joint 76	12.01	860.54	872.55	Joint 35	12.02	367.47	379.49
Joint 75	11.91	848.63	860.54	Joint 34	12.66	354.81	367.47
Joint 74	12.06	836.57	848.63	Joint 33	12.67	342.14	354.81
Joint 73	11.88	824.69	836.57	Joint 32	12.67	329.47	342.14
Joint 72	12.05	812.64	824.69	Joint 31	12.66	316.81	329.47
Joint 71	11.44	801.20	812.64	Joint 30	12.66	304.15	316.81
Joint 70	12.06	789.14	801.20	Joint 29	12.61	291.54	304.15
Joint 69	12.05	777.09	789.14	Joint 28	12.44	279.10	291.54
Joint 68	12.02	765.07	777.09	Joint 27	12.66	266.44	279.10
Joint 67	12.06	753.01	765.07	Joint 26	12.66	253.78	266.44
Joint 66	12.06	740.95	753.01	Joint 25	12.48	241.30	253.78
Joint 65	12.05	728.90	740.95	Joint 24	12.66	228.64	241.30
Joint 64	12.06	716.84	728.90	Joint 23	12.66	215.98	228.64
Joint 63	12.01	704.83	716.84	Joint 22	12.66	203.32	215.98
Joint 62	12.06	692.77	704.83	Joint 21	12.66	190.66	203.32
Joint 61	12.05	680.72	692.77	Joint 20	12.66	178.00	190.66
Joint 60	12.06	668.66	680.72	Joint 19	12.66	165.34	178.00
Joint 59	12.05	656.61	668.66	Joint 18	12.41	152.93	165.34
Joint 58	11.92	644.69	656.61	Joint 17	12.52	140.41	152.93
Joint 57	12.06	632.63	644.69	Joint 16	12.66	127.75	140.41
Joint 56	11.9	620.73	632.63	Joint 15	12.66	115.09	127.75
Joint 55	12.05	608.68	620.73	No-Cross Joint	12.69	102.40	115.09
Joint 54	11.82	596.86	608.68	18 3/4" Joint Below	9.9	92.50	102.40

Bass Strait Oil Company							
WELL	ZaneGrey-1	PERMIT	VIC P/42	DATE	2/1/2005		
Casing (mm)	339	Weight (kg/m)	101.2 & 101.2	Grade	N80		
Shoe @ (m)	1090.61	Jnts on Rig	30	Stick Up (m)	-0.004		
Joint	Length	Total	Joint Bot	Joint	Length	Total	Joint Bot
Hang off point	0	92.50	92.50				
18 3/4" Joint Above	0.98	91.52	92.50				
Running Tool	0.666	90.85	91.52				
Drillpipe	90.85	0.00	90.85				

Well Completion Report (Basic Data)- ZaneGrey-1/ST1/ST2

Bass Strait Oil Company CASING RECORD							
Well Name:	ZaneGrey-1	RIG:	Ocean Patriot	PERMIT:	VIC P/42	DATE:	1-Feb-05
HOLE SIZE (mm):	406	CASING (mm):	339	RT-s'bed (m):	94.00	RT-MLS(m):	92.50
TD (m):	1174	Shoe @ (m):	1090.61	WellHead (m):	92.40		
TVD (m):	1174						
JTS	SIZE mm	Weight Kg/m	Grade	Conn	Burst (lpa)	Collapse (lpa)	Tensile Yield (t)
76	339	101.2	N80 & K55	Butt	34567	15585	706443
MILL CERTIFICATE Nos./PO's							
DESCRIPTION	Length (m)	Bottom (mRT)	Top (mRT)				
Shoe Joint (A)	13.02	1090.61	1077.59				
Inter Joint (A)	11.60	1077.59	1065.99				
Float collar joint (A)	12.47	1065.99	1053.52				
76 x joints - K55 and N80	937.59	1053.52	115.93				
No-cross Coupling	12.69	115.93	103.24				
18 3/4" wellhead joint	11.55	103.24	91.69				
RT to wellhead	91.69	91.69	0.00				



Company: Bass Strait Oil Company
Date: 1-Feb-05
Prepared By: Chris Wilson & Stuart Douglass
Revision: 1

Well Completion Report (Basic Data)- ZaneGrey-1/ST1/ST2

<u>Well Data</u>		<u>Cement Calculations</u>	
RT	21.5 m	Lead Slurry	bbls
Water Depth	72.5 m	OH x Casing Annulus	50%
Top Wellhead	91.52 m	OH Excess	Total
Mudline	94 m		
Previous Casing Shoe	127.75 m		
Hole Size	16 in		
Section TD	1095 m		
<u>Casing Data</u>			
Casing Shoe At	1090.61 m		
Casing Shoe ID	12.5 in		
Float Collar At	1065.9 m		
Casing 1 Length	988.21 m		
Casing 1 OD	13.365 in		
Casing 1 ID	12.5 in		
Casing 2 Length	9.37 m		
Casing 2 OD	20 in		
Casing 2 ID	18.75 in		
<u>Running String Data</u>			
Running String 1 Length	90.85 m		
Running String 1 ID	3 in		
Running String 2 Length	0 m		
Running String 2 ID	3 in		
Stick-up above RT	0 m		
Stinger Length	12.63 m		
Stinger ID	3 in		
<u>Cement Data</u>			
Length of Lead	450 m		
Length of Tail	150 m		

<u>Well Completion Diagram</u>		<u>Capacities</u>	
RT	0 m	Running String 1	bbls/ft
Seallevel	21.5 m	Running String 2	bbls/m
Wellhead Housing	91.52 m	Stinger	0.008742957
Seafloor	94 m	Casing 1	0.028683894
Wiper Plugs	103.48 m	Casing 2	0.008742957
Prev Csg Shoe	127.75 m	Casing 1 x OH	0.151787449
Top of Lead	490.61 m	Casing 2 x OH	0.34152176
Top of Tail	940.61 m	Rathole	0.075166869
Float Collar	1065.9 m		-0.139887313
Csg Shoe	1090.61 m		0.246607464
TD	1095 m		-0.458942296

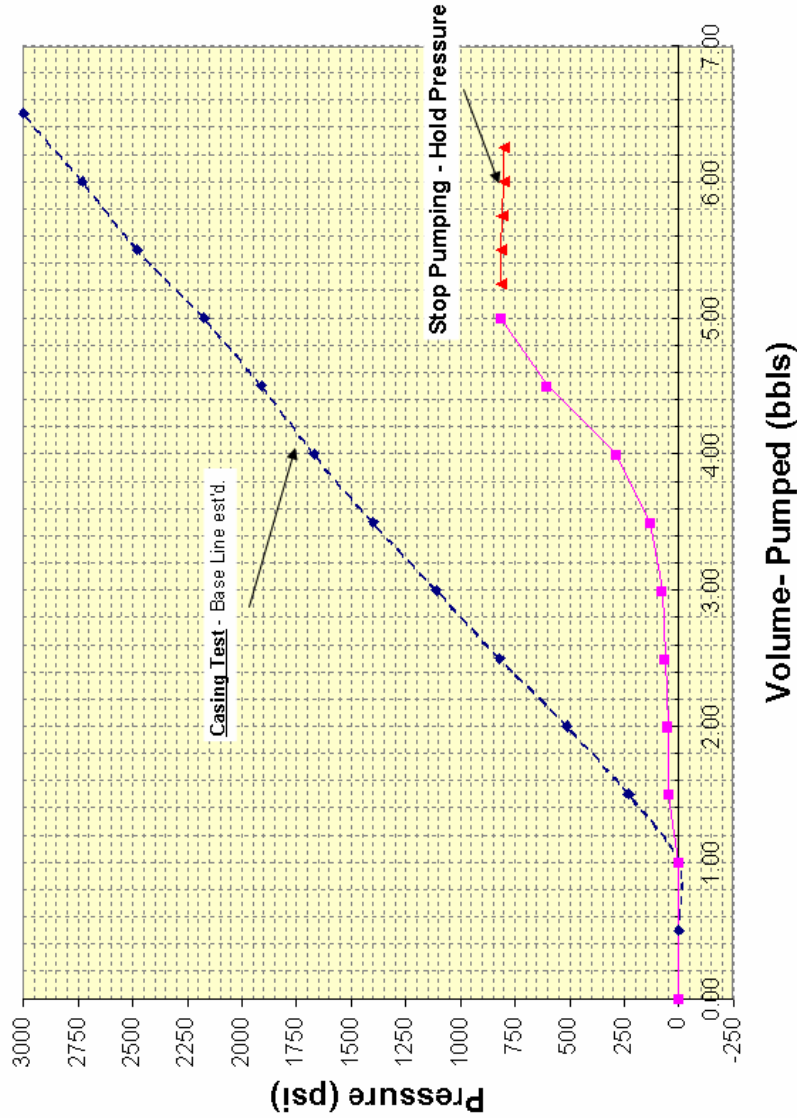
<u>Displacement</u>		<u>Spacer</u>	
Surface Lines	bbls	Volume of Fluoroscene Spacer pumped	bbls
Running String	2.61		10
Stinger	0.36		
Casing ID 1	479.808		
Casing ID 2	-3.6527		
	482.123		

WellName: ZaneGrey-1
Company: Bass Strait Oil Company
Date: 1-Feb-06
Prepared By: Chris Wilson & Stuart Douglass
Revision: 1



Leak-off / Formation Integrity Test

Casing Size: 13.365 in		Hole Size: 16 in	
Shoe Depth: 1029.9 mRT TVD		Mud Weight: 1.05 SG	
Pump Rate: 0.50 bpm		Leakoff Pressure: 815 psi	
Volume Pumped: 1.5 bbls		EMW = 1.60 SGEMW	
Casing Test	Leak Off Test	Pressure Stabilisation	
Volume	Pressure	Volume	Pressure
0.50	0	0.00	0
1.00	0	1.00	45
1.50	230	1.50	50
2.00	510	2.00	63
2.50	820	2.50	77
3.00	1110	3.00	130
3.50	1400	3.50	268
4.00	1670	4.00	603
4.50	1910	4.50	815
5.00	2175	5.00	
5.50	2480		
6.00	2730		
6.50	3000		
Maximum Volume Pumped		5	
Minutes	Pressure		
1	815		
2	815		
3	810		
4	800		
5	800		



9 5/8" Casing

Casing Control Information

Well Name	ZaneGrey-1		Use MLS Y/N	Y
Permit	VIC P/42		Supervisors	P Dane
Rig Name	Ocean Patriot			S Hodgetts
Casing Size (in)	9.625			
Casing Weight (ppf)	47			
Casing Grade	N80	L80		
Casing Burst (psi)	6870	6870		
Casing collapse (psi)	4750	4750		
Tensile yield (klbs)	1086	1086		
Hole Size (in)	12.25			
Hole TD (m)	2772.5			
Hole TVD (m)	2267			
Date	38658			
RT to MLS (m)	92.5			
RT to Sea Bed (m)	94			
RT to wellhead	91.52			

Bass Strait Oil Company							
WELL		ZaneGrey-1		PERMIT		VIC P/42	DATE 11/2/2005
Casing (mm)		244		Weight (kg/m)		70	Grade N80 & L80
Shoe @ (m)		2,184.14		Jnts on Rig		150	Stick up (m) 0.00
Joint	Length	Joint Top	Joint Bot	Joint	Length	Joint Top	Joint Bot
Shoe Joint A	13.25	2,170.89	2,184.14	Jt 198 (New Vam)	12.65	1,586.05	1,598.70
Inter Joint A	12.35	2,158.54	2,170.89	Jt 197 (New Vam)	12.65	1,573.40	1,586.05
Float collar A	11.34	2,147.20	2,158.54	Jt 196 (New Vam)	12.53	1,560.87	1,573.40
Jt 244 (BTC)	11.80	2,135.40	2,147.20	Jt 195 (New Vam)	12.65	1,548.22	1,560.87
Jt 243 (BTC)	11.87	2,123.53	2,135.40	Jt 194 (New Vam)	12.65	1,535.57	1,548.22
Jt 242 (BTC)	11.04	2,112.49	2,123.53	Jt 193 (New Vam)	12.65	1,522.92	1,535.57
Jt 241 (BTC)	11.75	2,100.74	2,112.49	Jt 192 (New Vam)	12.65	1,510.27	1,522.92
Jt 240 (BTC)	11.88	2,088.86	2,100.74	Jt 191 (New Vam)	12.65	1,497.62	1,510.27
Jt 239 (BTC)	11.68	2,077.18	2,088.86	Jt 190 (New Vam)	12.65	1,484.97	1,497.62
Jt 238 (BTC)	11.85	2,065.33	2,077.18	Jt 189 (New Vam)	12.65	1,472.32	1,484.97
Jt 237 (BTC)	11.79	2,053.54	2,065.33	Jt 188 (New Vam)	12.65	1,459.67	1,472.32
Jt 236 (BTC)	11.78	2,041.76	2,053.54	Jt 185 (New Vam)	12.65	1,447.02	1,459.67
Jt 235 (BTC)	11.84	2,029.92	2,041.76	Jt 184 (New Vam)	12.65	1,434.37	1,447.02
Jt 234 (BTC)	11.66	2,018.26	2,029.92	Jt 183 (New Vam)	12.65	1,421.72	1,434.37
Jt 233 (BTC)	11.71	2,006.55	2,018.26	Jt 182 (New Vam)	12.65	1,409.07	1,421.72
Jt 232 (BTC)	10.64	1,995.91	2,006.55	Jt 181 (New Vam)	12.65	1,396.42	1,409.07
Jt 231 (BTC)	11.73	1,984.18	1,995.91	Jt 180 (New Vam)	12.65	1,383.77	1,396.42
Jt 230 (BTC)	11.53	1,972.65	1,984.18	Jt 179 (New Vam)	12.65	1,371.12	1,383.77
Jt 229 (BTC)	11.75	1,960.90	1,972.65	Jt 178 (New Vam)	12.65	1,358.47	1,371.12
Jt 228 (BTC)	11.77	1,949.13	1,960.90	Jt 177 (New Vam)	12.65	1,345.82	1,358.47
Jt 227 (BTC)	11.66	1,937.47	1,949.13	Jt 176 (New Vam)	12.65	1,333.17	1,345.82
Jt 226 (BTC)	11.85	1,925.62	1,937.47	Jt 175 (New Vam)	12.65	1,320.52	1,333.17
Jt 225 (BTC)	11.90	1,913.72	1,925.62	Jt 174 (New Vam)	12.65	1,307.87	1,320.52
Jt 224 (BTC)	11.74	1,901.98	1,913.72	Jt 173 (New Vam)	12.42	1,295.45	1,307.87
Jt 223 (BTC)	11.75	1,890.23	1,901.98	Jt 172 (New Vam)	12.65	1,282.80	1,295.45
Jt 222 (BTC)	11.87	1,878.36	1,890.23	Jt 171 (New Vam)	12.50	1,270.30	1,282.80
Jt 221 (BTC)	11.78	1,866.58	1,878.36	Jt 170 (New Vam)	12.65	1,257.65	1,270.30
Jt 220 (BTC)	10.23	1,856.35	1,866.58	Jt 169 (New Vam)	12.65	1,245.00	1,257.65
Jt 219 (BTC)	10.82	1,845.53	1,856.35	Jt 168 (New Vam)	12.65	1,232.35	1,245.00
Jt 218 (BTC)	11.92	1,833.61	1,845.53	Jt 167 (New Vam)	12.65	1,219.70	1,232.35
Jt 217 (BTC)	11.60	1,822.01	1,833.61	Jt 166 (New Vam)	12.65	1,207.05	1,219.70
Jt 216 (BTC)	11.69	1,810.32	1,822.01	Jt 165 (New Vam)	12.65	1,194.40	1,207.05
Jt 215 (BTC)	11.79	1,798.53	1,810.32	Jt 164 (New Vam)	12.65	1,181.75	1,194.40
Jt 214 (BTC)	11.41	1,787.12	1,798.53	Jt 163 (New Vam)	12.65	1,169.10	1,181.75
Jt 213 (BTC)	11.63	1,775.49	1,787.12	Jt 162 (New Vam)	12.55	1,156.55	1,169.10
Jt 212 (BTC)	11.84	1,763.65	1,775.49	Jt 161 (New Vam)	12.65	1,143.90	1,156.55
Jt 211 (BTC)	11.83	1,751.82	1,763.65	Jt 160 (New Vam)	12.65	1,131.25	1,143.90
Jt 210 (BTC)	11.74	1,740.08	1,751.82	Jt 159 (New Vam)	12.65	1,118.60	1,131.25
Jt 209 (BTC)	11.65	1,728.43	1,740.08	Jt 158 (New Vam)	12.65	1,105.95	1,118.60
Jt 208 (BTC)	11.88	1,716.55	1,728.43	Jt 157 (New Vam)	12.65	1,093.30	1,105.95
XO B BTC / new /vam	4.00	1,712.55	1,716.55	Jt 156 (New Vam)	12.65	1,080.65	1,093.30
Jt 207 (New Vam)	12.65	1,699.90	1,712.55	Jt 155 (New Vam)	12.65	1,068.00	1,080.65
Jt 206 (New Vam)	12.65	1,687.25	1,699.90	Jt 154 (New Vam)	12.65	1,055.35	1,068.00
Jt 205 (New Vam)	12.65	1,674.60	1,687.25	Jt 153 (New Vam)	12.65	1,042.70	1,055.35
Jt 204 (New Vam)	12.65	1,661.95	1,674.60	Jt 152 (New Vam)	12.55	1,030.15	1,042.70
Jt 203 (New Vam)	12.65	1,649.30	1,661.95	Jt 151 (New Vam)	12.65	1,017.50	1,030.15
Jt 202 (New Vam)	12.65	1,636.65	1,649.30	Jt 150 (New Vam)	12.65	1,004.85	1,017.50
Jt 201 (New Vam)	12.65	1,624.00	1,636.65	Jt 149 (New Vam)	12.65	992.20	1,004.85
Jt 200 (New Vam)	12.65	1,611.35	1,624.00	Jt 148 (New Vam)	12.65	979.55	992.20
Jt 199 (New Vam)	12.65	1,598.70	1,611.35	Jt 147 (New Vam)	12.65	966.90	979.55

Bass Strait Oil Company							
WELL		ZaneGrey-1		PERMIT		VIC P/42	DATE 11/2/2005
Casing (mm)		244		Weight (kg/m)		70	Grade N80 & L80
Shoe @ (m)		2184.14		Jnts on Rig		150	Stick up (m) 0.00
Joint	Length	Joint Top	Joint Bot	Joint	Length	Joint Top	Joint Bot
Jt 146 (New Vam)	12.65	954.25	966.90	Jt 96 (New Vam)	12.65	322.66	335.31
Jt 145 (New Vam)	12.65	941.60	954.25	Jt 95 (New Vam)	12.65	310.01	322.66
Jt 144 (New Vam)	12.65	928.95	941.60	Jt 94 (New Vam)	12.65	297.36	310.01
Jt 143 (New Vam)	12.43	916.52	928.95	Jt 93 (New Vam)	12.65	284.71	297.36
Jt 142 (New Vam)	12.65	903.87	916.52	Jt 92 (New Vam)	12.64	272.07	284.71
Jt 141 (New Vam)	12.65	891.22	903.87	Jt 91 (New Vam)	12.64	259.43	272.07
Jt 140 (New Vam)	12.65	878.57	891.22	Jt 90 (New Vam)	12.65	246.78	259.43
Jt 139 (New Vam)	12.65	865.92	878.57	Jt 89 (New Vam)	12.65	234.13	246.78
Jt 138 (New Vam)	12.36	853.56	865.92	Jt 88 (New Vam)	12.65	221.48	234.13
Jt 137 (New Vam)	12.65	840.91	853.56	Jt 87 (New Vam)	12.65	208.83	221.48
Jt 136 (New Vam)	12.65	828.26	840.91	Jt 86 (New Vam)	12.64	196.19	208.83
Jt 135 (New Vam)	12.65	815.61	828.26	Jt 85 (New Vam)	12.65	183.54	196.19
Jt 134 (New Vam)	12.65	802.96	815.61	Jt 84 (New Vam)	12.65	170.89	183.54
Jt 133 (New Vam)	12.65	790.31	802.96	Jt 83 (New Vam)	12.65	158.24	170.89
Jt 132 (New Vam)	12.65	777.66	790.31	Jt 82 (New Vam)	12.65	145.59	158.24
Jt 131 (New Vam)	12.65	765.01	777.66	Jt 81 (New Vam)	12.65	132.94	145.59
Jt 130 (New Vam)	12.65	752.36	765.01	Jt 80 (New Vam)	12.50	120.44	132.94
Jt 129 (New Vam)	12.65	739.71	752.36	Jt 79 (New Vam)	12.65	107.79	120.44
Jt 128 (New Vam)	12.65	727.06	739.71	Jt 78 (New Vam)	12.65	95.14	107.79
Jt 127 (New Vam)	12.65	714.41	727.06	Jt 77 (New Vam)	12.65	92.50	95.14
Jt 126 (New Vam)	12.65	701.76	714.41	Jt 76 (New Vam)	12.65	92.50	92.50
Jt 125 (New Vam)	12.65	689.11	701.76	Jt 75 (New Vam)	1.24	91.26	92.50
Jt 124 (New Vam)	12.50	676.61	689.11	Jt 74 (New Vam)	0.73	90.53	91.26
Jt 123 (New Vam)	12.65	663.96	676.61	Jt 73 (New Vam)	90.53	0.00	90.53
Jt 122 (New Vam)	12.65	651.31	663.96	Jt 72 (New Vam)			
Jt 121 (New Vam)	12.65	638.66	651.31	Jt 71 (New Vam)			
Jt 120 (New Vam)	12.65	626.01	638.66	Jt 70 (New Vam)			
Jt 119 (New Vam)	12.64	613.37	626.01	Jt 69 (New Vam)			
Jt 118 (New Vam)	12.65	600.72	613.37	Jt 68 (New Vam)			
Jt 117 (New Vam)	12.61	588.11	600.72	Jt 67 (New Vam)			
Jt 116 (New Vam)	12.64	575.47	588.11	Jt 66 (New Vam)			
Jt 115 (New Vam)	12.65	562.82	575.47	Jt 65 (New Vam)			
Jt 114 (New Vam)	12.64	550.18	562.82	Jt 64 (New Vam)			
Jt 113 (New Vam)	12.65	537.53	550.18	Jt 63 (New Vam)			
Jt 112 (New Vam)	12.64	524.89	537.53	Jt 62 (New Vam)			
Jt 111 (New Vam)	12.65	512.24	524.89	Jt 61 (New Vam)			
Jt 110 (New Vam)	12.65	499.59	512.24	Jt 60 (New Vam)			
Jt 109 (New Vam)	12.65	486.94	499.59	Jt 59 (New Vam)			
Jt 108 (New Vam)	12.65	474.29	486.94	Jt 58 (New Vam)			
Jt 107 (New Vam)	12.52	461.77	474.29	Jt 57 (New Vam)			
Jt 106 (New Vam)	12.65	449.12	461.77	Jt 56 (New Vam)			
Jt 105 (New Vam)	12.65	436.47	449.12	Jt 55 (New Vam)			
Jt 104 (New Vam)	12.63	423.84	436.47	Jt 54 (New Vam)			
Jt 103 (New Vam)	12.64	411.20	423.84	Jt 53 (New Vam)			
Jt 102 (New Vam)	12.65	398.55	411.20	Jt 52 (New Vam)			
Jt 101 (New Vam)	12.65	385.90	398.55	Jt 51 (New Vam)			
Jt 100 (New Vam)	12.65	373.25	385.90	Jt 50 (New Vam)			
Jt 99 (New Vam)	12.65	360.60	373.25	Jt 49 (New Vam)			
Jt 98 (New Vam)	12.64	347.96	360.60	Jt 48 (New Vam)			
Jt 97 (New Vam)	12.65	335.31	347.96	Jt 47 (New Vam)			

Run Summary:

	Total	Run	Remain
Joints	244	165	79
Shoe	1	1	0
Int	1	1	0
Float	1	1	0
X/O	1	0	1
Pups	3	1	2
	251	169	82

Bass Strait Oil Company							
CASING RECORD							
Well Name:	ZaneGrey-1	RIG:	Ocean Patriot	PERMIT:	VIC P/42	DATE:	2-Nov-05
HOLE SIZE (mm):	311	CASING (mm):	244	RT-s'bed (m):	94.00	RT-MLS(m):	92.50
TD (m):	2772.5	Shoe @ (m):	2184.14	WellHead (m):	91.52		
TVD (m)	2267						
JTS	SIZE mm	Weight Kg/m	Grade	Conn	Burst (MPa)	Collapse (MPa)	Tensile Yield (t)
41	244	70	N80	Butt	47.4	32.8	492.7
129	244	70	L80	New Vam	47.4	32.8	492.7
MILL CERTIFICATE Nos./PO's							
DESCRIPTION	Length (m)	Bottom (mRT)	Top (mRT)				
Shoe Joint A	13.25	2184.14	2170.89				
Inter Joint A	12.35	2170.89	2158.54				
Float collar A	11.34	2158.54	2147.20				
37 x joints - BTC	430.65	2147.20	1716.55				
XO B BTC / new /vam	4.00	1716.55	1712.55				
128 x joints - New Vam	1617.41	1712.55	95.14				
9 5/8" Hanger Jt Below	2.64	95.14	92.50				
Landing point	0.00	92.50	92.50				
Landing point to Wellhead top	0.98	92.50	91.52				
RT to wellhead	91.52	91.52	0.00				
damaged jts							
Jt 87 (New Vam)							
Jt 88 (New Vam)							
Jt 186 (New Vam)							
Jt 187 (New Vam)							



Wellname: ZaneGrey-1
Company: Bass Strait Oil Company
Date: 16 Feb '05
Prepared By: Peter Dane & Steve Hodgetts
Revision: 3

Cement Calculations

OH x Casing Annulus

Diagram illustrating the shaft profile with the following labels and values:

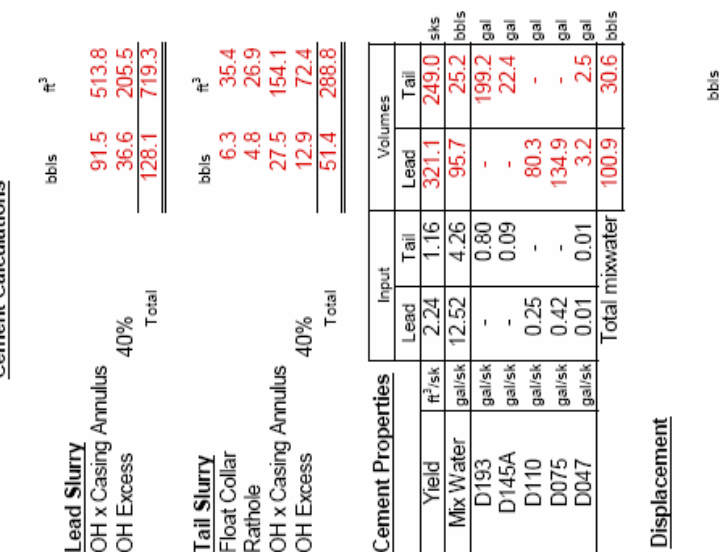
- Wiper Plugs
- Prev Csg Shoe
- Top of Lead
- 97.5 m
- 1090.61 m
- 1534.6 m

D047

Capacities	
Float Collar	2158.54 m
Csg Shoe	2184.6 m
TD	2194.6 m

0.008742957

Stinger	0.008742957	0.028683894
Casing 1	0.073832839	0.242230777
Casing 2		
Casing 1 x OH	0.055781888	0.183009217
Casing 2 x OH	0.145776666	0.478264086
Rathole	0.145776686	0.4750264086



Running String

Casing ID 1		498.04
Casing ID 2		<u>503.83</u>
<hr/>		
Spacer		
Volume of Pre-flush pumped		10 bblis
Volume of Chemical/Fluoroscene Spacer		60 bblis
Volume of water Spacer pumped		45 bblis

Cement Calculations

Lead Slurry		
OH x Casing Annulus	91.5	513.8
OH Excess	36.6	205.5
Total	128.1	719.3

Tail Slurry		
Float Collar	6.3	35.4
Rathole	4.8	26.9
OH x Casing Annulus	27.5	154.1
OH Excess	12.9	72.4
Total	51.4	288.8

Cement Properties

	Yield	R ² /sk	2.24	1.16	321.1	249.0	sk/s
Mix Water		gal/sk	12.52	4.26	95.7	25.2	bb/s
D193		gal/sk	-	0.80	-	199.2	gal
D145A		gal/sk	-	0.09	-	22.4	gal
D110		gal/sk	0.25	-	80.3	-	gal
D075		gal/sk	0.42	-	134.9	-	gal
D047		gal/sk	0.01	0.01	3.2	2.5	gal
Total mixerwater					100.9	30.6	bb/s

Displacement

Surface Lines	3
Running String	2.65
Stinger	0.14
Casing ID 1	498.04
Casing ID 2	<u>503.83</u>

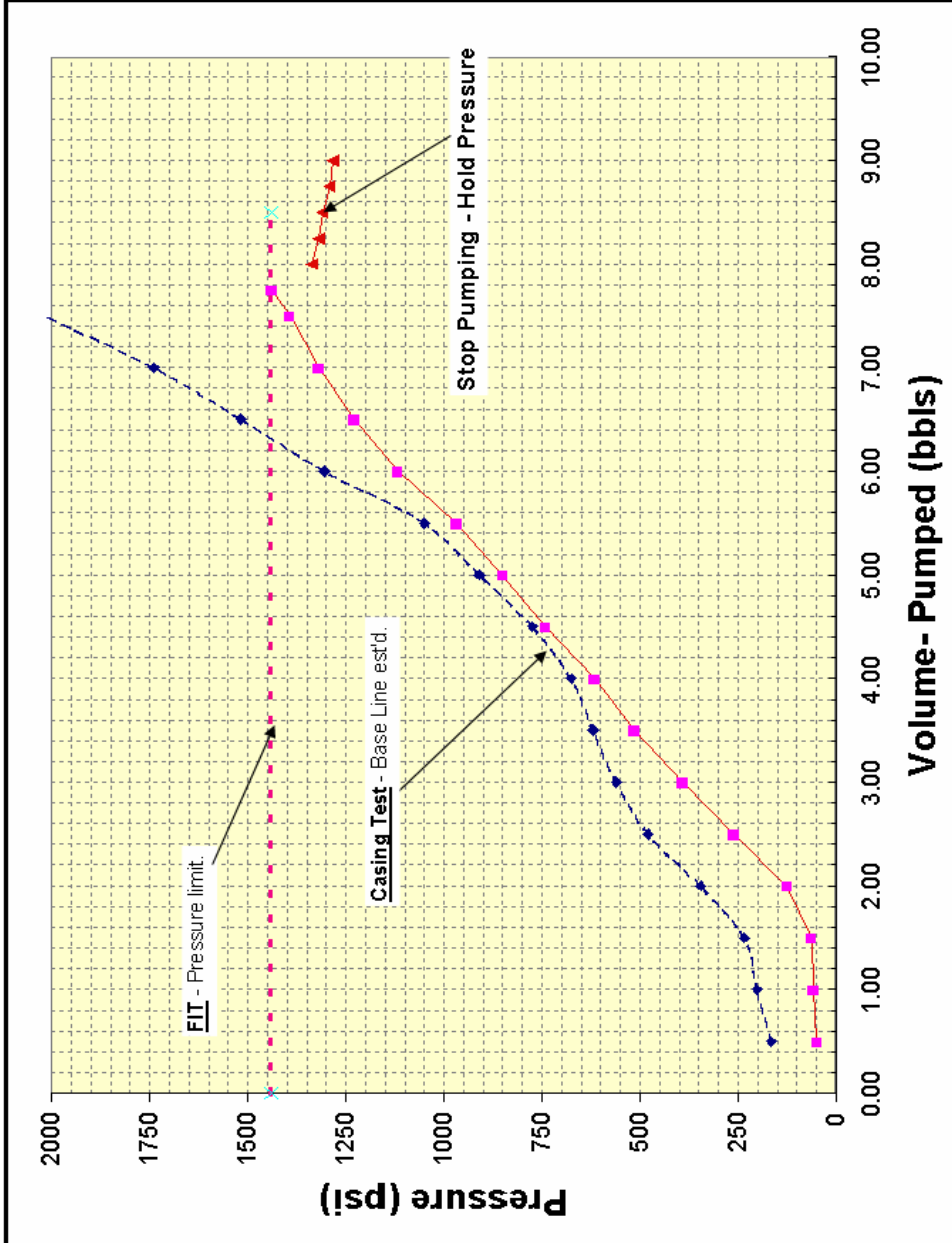
Wellname: ZaneGrey-1
Company: Bass Strait Oil Company
Date: 18-Feb-05
Prepared By: Peter Dane & Steve Hodgetts
Revision: 3

Leak-off / Formation Integrity Test

(FIT in Original hole prior to sidetracking)



Casing Size: 9.625 in		Leak Off Test	
Hole Size: 12.25 in		Vol (bbl)	
Shoe Depth TVD: 1936 mRT		Pres (psi)	
Hole Depth TVD: 2000 mRT		0.50	168
Mud Weight: 1.13 sg		1.00	202
Pump Rate: 0.50 bpm		1.50	234
Leakoff pressure: 1440 psi		2.00	346
Volume Pumped: 1.5 bbls		2.50	480
EMV = 1.65 sg		3.00	560
		3.50	620
		4.00	675
		4.50	774
		5.00	910
		5.50	1050
		6.00	1305
		6.50	1517
		7.00	1740
		7.50	2020
		8.00	2300
		8.50	2570
		Pressure Stabilisation	
Maximum Volume Pumped		7.8	
		Minutes	Pres (psi)
		1	1337
		2	1319
		3	1310
		4	1292
		5	1283



APPENDIX 16

CEMENTING END of WELL REPORT

(By Schlumberger)

Schlumberger

Cementing End Of Well Report
Zane Grey 1



Rig : Ocean Patriot
Well Type : Exploration
Customer : Bass Strait Oil and Gas
Prepared by : Mark James
e-mail mjames@perth.oilfield.slb.com
Tel (61) - 8 - 9420 4843
Fax (61) - 8 - 9420 4715
Date : April 20 2005

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Well Summary

Client Representative			
No	First Name	Last Name	Position
1	Chris	Wilson	Drilling Supervisor
2	Stuart	Douglas	Drilling Supervisor
3	Peter	Dane	Drilling Supervisor
4	Steve	Hodgetts	Drilling Supervisor

Dowell Supervisor			
No	First Name	Last Name	Position
1	Edgardo	Llagas	Service Supervisor
2	Pamela	Kosarek	Field Enginner
3	Dave	Green	Service Supervisor
4	Shane	Bilton	Cementer
5	Nori	Macatangay	Cementing Assistant

Cement Job Summary

Date	Job Type	Material	Material/Fluid Used		Cement Slurry		Displacement		Spacer		Cement Head		Plugs	
			Con.	Quantity	Density	Volume	Fluid	Volume	Type	Volume	Head	Top	Bottom	
29-Jan-05	30" Casing	G Cement D047 S001 Dye	- 0.01 gal/sk 1.0% BWOC -	796 sx 8 gal 744 lb* 5kg	15.8 ppg	168 bbl	SW	52 bbl	SW	20 bbl				
1-Feb-05	13 3/8 Casing	G Cement D047 D75 D047	- 0.01 gal/sk 0.42 gal/sk 0.01 gal/sk	726 sx 5 gal 212 gal 3 gal	12.5 ppg	161 bbl	SW	23 bbl	SW	10	DSE	1	1	
17-Feb-05	9.625 Casing	G Cement D047 D075 D110 D145A D047 D193	0.01 gps 0.42 gps 0.25 gps 0.09 gps 0.01 gps 0.8 gps	573 sx 4 gal 161 gal 96 gal 23 gal 3 gal 200	12.5 ppg	128 bbl	DW Mud	10 bbl 495 bbl	DW CW DW	10 bbl 60 bbl 50 bbl	DSE	1	1	
20-Feb-05	KOP	G Cement D47 D145A	0.01 gps 0.1 gps	203 sx 2 gal 20 gal	16.5 ppg	38.4 bbl	DW Mud	1.7 bbl 119.4 bbl	DW	20 bbl				
26-Feb-05	KOP	G Cement D047 D145A	0.01 gps 0.1 gps	97 sx 1 gal 10 gal	16.5 ppg	18.4 bbl	DW Mud	7.7 bbl 169.4 bbl	DW	20 bbl				
28-Feb-05	KOP	G Cement D047 D145A	0.01 gps 0.1 gps	100 sx 2 gal 20 gal	16.5 ppg	36.5 bbl	DW Mud	7.7 bbl 160 bbl	DW	20 bbl				
15-Mar-05	Plug	G Cement D047 D110 D193 D145A	0.01 gps 0.05 gps 0.4 gps 0.08 gps	195 sx 2 gal 10 gal 60 gal 20 gal	15.8 ppg	30 bbl	DW Mud	15.5 bbl 170 bbl	CW	40 bbl				
15-Mar-05	Plug	G Cement D047 D110 D145A	0.01 gps 0.01 gps 0.09 gps	195 sx 2 gal 5 gal 10 gal	15.8 ppg	31 bbl	DW Mud	13 bbl 107 bbl	DW	40 bbl				

Miscellaneous Pumping and Pressure Testing

Job	Job Started	Type of Fluid	Pressure Max, Psi	Job Finished
	Date			Date
Riser Test	4/02/2005	SW	5000	4/02/2005
FIT	5/02/2005	SW	820	5/02/2005
BOP Test	18/02/2005	SW	5000	19/02/2005

**END WELL REPORT
Zane Grey 1
JOB DESIGN & EXECUTION SUMMARY**

36" HOLE / 30" X 20" CASING

1.1 Drilling/Casing:

The 36" hole was drilled to a depth of 128m from seabed at 456 m with seawater and PHG sweeps. 30" Casing was run and set at 128m with a 5" DP inner string.

1.2 Design

Single 15.8ppg tail slurry was planned to provide strong cement at the 20" shoe:

Tail Slurry

G Cement: 796 sacks

Seawater: 5.313 gal/sk

D047 (antifoam): 0.01 gps

S001 (accelerator): 1.0 % BWOC

Density – 15.8 ppg

Yield – 1.19 cuft/sk

Slurry Volume – 168 bbls

TOC - Seabed

Open Hole Excess – 200%

1.3 Execution

While circulating with seawater after the casing was landed, a Job Hazard Analysis with the Rig Crews and Barge Captain was performed to inform them of their job role and the potential hazards that they may face.

Job Procedure:

- 1) Pump 3 bbl sea water to fill lines.
- 2) Pressure test lines 2000psi.
- 3) Pump 17 bbl sea water with dye
- 4) Mix & pump 168 bbls of tail slurry @ 15.8ppg
- 5) Displace with 51.8 bbls seawater.
- 6) Bleed off pressure and check floats.

1.4 Evaluation

Job executed according to procedure.

16" HOLE / 13 3/8" CASING

2.1 Drilling/Casing:

16" hole was drilled to a total depth of 1090 m with seawater and PHG sweeps. 13 3/8" casing was run and set at 1090 m. A DeepSea EXPRES cement head was used for plug release.

2.2 Design:Lead Slurry

G Cement

Sea water: 12.718 gal/sk

D047 (antifoam): 0.01 gal/sk

D75 (extender): 0.42 gal/sk

Density – 12.5 ppg

Yield – 2.23 cuft/sk

Slurry Volume – 166 bbl

Tail Slurry

G Cement

Sea water: 5.324 gal/sk

D047 (antifoam): 0.01 gal/sk

Density – 15.8 ppg

Yield – 1.18 cuft/sk

Slurry Volume – 67 bbl

2.3 Execution:

After the casing was landed and cement line rigged up, a Job Hazard Analysis with the Rig Crews and Barge Captain was performed to inform them of their job role and the potential hazards that they may face.

Job Procedure:

- 1) Pump 5bbl seawater
- 2) Pressure test lines to 3000 psi
- 3) Drop bottom dart
- 4) Pump 5 bbl seawater.
- 5) Mix & pump Lead slurry 166 bbls @ 12.5 ppg
- 6) Mix & Pump Tail slurry 67 bbls @ 15.8 ppg
- 7) Drop top dart
- 8) Displace with 23 bbl seawater.
- 9) Switch to rig pumps for final displacement
- 10) Bleed off pressure and check floats ok.

2.4 Evaluation:

Job was performed according to procedure, however plug bump occurred earlier than expected.

12 1/4" HOLE / 9 5/8" CASING

3.1 Drilling/Casing:

12 1/4" hole was drilled to a total depth of 2735 m with KCL/Polymer mud. 9 5/8" casing was run and set at 2184 m. A DeepSea EXPRES cement head was used for plug release.

3.2 Design:Lead Slurry

G Cement

Sea water: 12.521 gal/sk

D047 (antifoam): 0.01 gal/sk

D75 (extender): 0.42 gal/sk

D110 (retarder): 0.25 gal/sk

Density – 12.5 ppg

Yield – 2.24 cuft/sk

Slurry Volume – 128 bbl

Tail Slurry

G Cement

Drill water: 4.259 gal/sk

D047 (antifoam): 0.01 gal/sk

D145A (dispersant): 0.09 gal/sk

D193 (fluid loss): 0/8 gal/sk

Density – 15.8 ppg

Yield – 1.16 cuft/sk

Slurry Volume – 51 bbl

3.3 Execution:

After the casing was landed and cement line rigged up, a Job Hazard Analysis with the Rig Crews and Barge Captain was performed to inform them of their job role and the potential hazards that they may face.

Job Procedure:

- 1) Pump 10 bbl drill water
- 2) Pressure test lines to 3000 psi
- 3) Pump 60 bbl chemical wash
- 4) Pump 45 bbl drill water
- 5) Release bottom dart
- 6) Mix & Pump Lead Slurry 128 bbl @ 12.5 ppg
- 7) Mix & Pump Tail slurry 51 bbls @ 15.8 ppg
- 8) Release top dart
- 9) Pump 10 bbl drill water.
- 10) Switch to rig pumps to displace
- 11) Bleed off pressure and check floats ok.

3.4 Evaluation:

Job was performed according to procedure, 1 bbl of returns upon bleeding off pressure. Plug was not bumped after 495bbl pumped by rig.

8.5" HOLE**4.1 Drilling:**

A kick off plug (KOP) was set below the 9 5/8" shoe as the casing ended up being set high due to problems running in the hole, a 551m rat hole was left. At approximately 3110m a tool was lost in the hole and unable to be fished. An 80m KOP was placed at 3106m but could not be kicked off from even though surface samples had set. A 160m KOP was then placed at 3106m and was successfully kicked off.

A retest of the second KOP was undertaken using cement, drill water and chemical samples from the rig to determine if the cement or water differed from that used in the lab. This retest showed the cement set up as expected.

4.2 Design:KOP 1

G Cement
 Drill water: 4.2 gal/sk
 D047 (antifoam): 0.01 gal/sk
 D145A (dispersant): 0.10 gal/sk
 Density – 16.5 ppg
 Yield – 1.06 cuft/sk
 Slurry Volume – 38.4 bbl

KOP 2

G Cement
 Drill water: 4.2 gal/sk
 D047 (antifoam): 0.01 gal/sk
 D145A (dispersant): 0.10 gal/sk
 Density – 16.5 ppg
 Yield – 1.06 cuft/sk
 Slurry Volume – 18.4 bbl

KOP 3

G Cement
 Drill water: 4.2 gal/sk
 D047 (antifoam): 0.01 gal/sk
 D145A (dispersant): 0.10 gal/sk
 Density – 16.5 ppg
 Yield – 1.06 cuft/sk
 Slurry Volume – 36.5 bbl

4.3 Execution:

Before each job a Job Hazard Analysis with the Rig Crews and Barge Captain was performed to inform them of their job role and the potential hazards that they may face.

Job Procedure KOP 1:

- 1) Pump 5 bbl drill water.
- 2) Pressure test lines to 3000 psi
- 3) Pump 15 bbl drill water
- 4) Pump Tail slurry 38 bbls @ 16.5 ppg
- 5) Pump 1.7 bbl drill water.
- 6) Displace with 119.4 bbl mud

Job Procedure KOP 2:

- 1) Pump 5 bbl drill water.
- 2) Pressure test lines to 1000 psi
- 3) Pump 15 bbl drill water
- 4) Mix & Pump slurry 18.4 bbls @ 16.5 ppg
- 5) Pump 7.7 bbl drill water.
- 6) Displace with 169.4 bbl mud (Underdisplaced by 2 bbl)

Job Procedure KOP 3:

- 1) Pump 5 bbl drill water.
- 2) Pressure test lines to 1000 psi
- 3) Pump 15 bbl drill water
- 4) Mix & Pump slurry 36.5 bbls @ 16.5 ppg
- 5) Pump 7.7 bbl drill water.
- 6) Displace with 160 bbl mud (Underdisplaced by 6 bbl)

WELL ABANDONMENT

5.1 Well Abandonment

After completion of the 8 ½" hole section and formation evaluation, the well was abandoned using cement plugs.

5.2 Design:Plug 1

G Cement

Drill water: 5.16 gal/sk

D047 (antifoam): 0.01 gal/sk

D145A (dispersant): 0.08 gal/sk

D110 (retrarder): 0.05 gal/sk

D193 (fluid loss): 0.4 gal/sk

Density – 15.8 ppg

Yield – 1.16 cuft/sk

Slurry Volume – 30 bbl

Plug 2

G Cement

Drill water: 4.2 gal/sk

D047 (antifoam): 0.01 gal/sk

D145A (dispersant): 0.09 gal/sk

D110 (retrarder): 0.01 gal/sk

Density – 15.8 ppg

Yield – 1.16 cuft/sk

Slurry Volume – 31 bbl

4.4 Execution:

Before each job a Job Hazard Analysis with the Rig Crews and Barge Captain was performed to inform them of their job role and the potential hazards that they may face.

Job Procedure Plug 1:

- 1) Pump 5 bbl Chemical wash.
- 2) Pressure test lines to 1000 psi
- 3) Pump 35 bbl Chemical wash
- 4) Mix & Pump slurry 30 bbls @ 15.8 ppg
- 5) Pump 15.5 bbl drill water.
- 6) Displace with 170 bbl mud

Job Procedure Plug 2:

- 1) Pump 5 bbl drill water.
- 2) Pressure test lines to 2000 psi
- 3) Pump 35 bbl drill water
- 4) Mix & Pump slurry 31 bbls @ 15.8 ppg
- 5) Pump 13 bbl drill water.
- 6) Displace with 107 bbl mud (Underdisplaced by 6 bbl)

Evaluation

The jobs were performed as per design and procedure. Plugs placed successfully.

Section 1: Laboratory Cement Test Report-Zane Grey-1 30"

Well Data

Fluid No : AAPT 659001	Client : Bass Strait Oil	Location / Rig : Ocean Patriot	Signatures
Date : 19-01-2005	Well Name : Zane Grey-1	Field : Casing	

Job Type	Conductor	Depth	125.0 m	TVD	125.0 m
BHST	17 degC	BHCT	26 degC	BHP	329 psi
Starting Temp.	27 degC	Time to Temp.	00:01 hr:mn	Heating Rate	0.00 degF/min
Starting Pressure	35 psi	Time to Pressure	00:01 hr:mn	Schedule	()

Composition

Density	15.80 lb/gal	Yield	1.19 ft ³ /sk	Mix Fluid	5.323 gal/sk
Porosity	59.8 %	Solid Fraction	40.2 %	Slurry type	()

Code	Concentration	Component	Lot Number
G		Blend	Rig
Sea water	5.313 gal/sk	Base Fluid	Rig
D047	0.010 gal/sk	ANTI-FOAM	Dampier
S001	1.000 %BWOC	ACCELERATOR	Dampier

Rheology (Average readings)

(rpm)	(deg)
300	66.0
200	56.5
100	41.0
6	18.5
3	13.5

10 sec Gel	20
10 min Gel	28
Temperature	27 degC

k : 2.57E-2
lbf.sⁿ/ft²
n : 0.500
Ty : 9.98 lbf/100ft²

Thickening Time

Consistency	Time
40 Bc	02:20 hr:mn
100 Bc	03:38 hr:mn
(Bc)	(hr:mn)

Remark : Thickening time do not include batch time

Comments

General Comment :
Fann Reading Comment :
Thickening Time Comment :
Other test Comment : ; ; ; ;

Client :
Well :
String :
District :
Country :
Loadcase :

Schlumberger

Section 2: Laboratory Cement Test Report-Zane Grey-1 1338Lead

Well Data

Fluid No : AUPT 660001		Client : Bass Strait Oil	Location / Rig : Ocean Patriot	Signatures 	
Date : 20-01-2005		Well Name : Zane Grey-1	Field : Casing		
Job Type	casing	Depth	1148.0 m	TVD	1148.0 m
BHST	50 degC	BHCT	27 degC	BHP	329 psi
Starting Temp.	27 degC	Time to Temp.	00:18 hr:mn	Heating Rate	(degF/min)
Starting Pressure	35 psi	Time to Pressure	00:18 hr:mn	Schedule	()

Composition

Density	12.50 lb/gal	Yield	2.23 ft ³ /sk	Mix Fluid	13.148 gal/sk
Porosity	78.9 %	Solid Fraction	21.1 %	Slurry type	()
Code	Concentration	Component	Lot Number		
G		Blend	Rig		
Sea water	12.718 gal/sk	Base Fluid	Rig		
D047	0.010 gal/sk	ANTI-FOAM	Dampier		
D075	0.420 gal/sk	EXTENDER	Dampier		

Rheology (Average readings)

(rpm)	(deg)
300	28.0
200	21.5
100	18.5
6	10.5
3	3.0
10 sec Gel	11
10 min Gel	16
Temperature	27 degC
k : 1.80E-2 lb _f .s ⁿ /ft ² n : 0.436 Ty: 1.11 lb _f /100ft ²	

Thickening Time

Consistency	Time
40 Bc	05:12 hr:mn
70 Bc	06:16 hr:mn
100 Bc	07:21 hr:mn
Remark : Thickening time do not include batch time	

Comments

General Comment :
Fann Reading Comment :
Thickening Time Comment :
Other test Comment : ; ; ; ;

Client :
Well :
String :
District :
Country :
Loadcase :

Schlumberger

Section 3: Laboratory Cement Test Report-Zane Grey-1 1338Tail

Well Data

Fluid No : AUP 660002		Client : Bass Strait Oil	Location / Rig : Ocean Patriot	Signatures 	
Date : 20-01-2005		Well Name : Zane Grey-1	Field : Casing		
Job Type	casing	Depth	1148.0 m	TVD	1148.0 m
BHST	50 degC	BHCT	27 degC	BHP	329 psi
Starting Temp.	27 degC	Time to Temp.	00:01 hr:mn	Heating Rate	(degF/min)
Starting Pressure	35 psi	Time to Pressure	00:01 hr:mn	Schedule	()

Composition

Density	15.80 lb/gal	Yield	1.18 ft ³ /sk	Mix Fluid	5.334 gal/sk
Porosity	60.2 %	Solid Fraction	39.8 %	Slurry type	()
Code	Concentration	Component		Lot Number	
G		Blend		Rig	
Sea water	5.324 gal/sk	Base Fluid		Rig	
D047	0.010 gal/sk	ANTI-FOAM		Dampier	

Rheology (Average readings)

(rpm)	(deg)
300	141.0
200	120.0
100	88.5
6	31.5
3	17.0
<hr/>	
10 sec Gel	22
10 min Gel	33
<hr/>	
Temperature	27 degC
<hr/>	
k : 1.08E-1	
lbf.s^n/ft2	
n : 0.416	
Tv : 0.19 lbf/100ft2	

Thickening Time

Consistency	Time
40 Bc	02:38 hr:mn
70 Bc	03:10 hr:mn
100 Bc	03:42 hr:mn
Remark : Thickening time do not include batch time	

Comments

General Comment :
Fann Reading Comment :
Thickening Time Comment :
Other test Comment : ; ; ;

Client :
Well :
String :
District :
Country :
Loadcase :

Schlumberger

Section 4: Laboratory Cement Test Report-Zane Grey-1 9 5/8" Lead

Well Data

Fluid No : AAPT 661007	Client : Bass Strait Oil	Location / Rig : Ocean Patriot	Signatures
Date : 30-01-2005	Well Name : Zane Grey-1	Field : Bass Strait	

Job Type	Cas	Depth	2825.0 m	TVD	2825.0 m
BHST	99 degC	BHCT	72 degC	BHP	5788 psi
Starting Temp.	27 degC	Time to Temp.	00:46 hr:mn	Heating Rate	1.57 degF/min
Starting Pressure	613 psi	Time to Pressure	00:46 hr:mn	Schedule	9.7-4

Composition

Density	12.50 lb/gal	Yield	2.24 ft ³ /sk	Mix Fluid	13.201 gal/sk
Porosity	78.9 %	Solid Fraction	21.1 %	Slurry type	()

Code	Concentration	Component	Lot Number
G		Blend	Rig
Sea water	12.521 gal/sk	Base Fluid	Rig
D047	0.010 gal/sk	ANTI-FOAM	
D075	0.420 gal/sk	EXTENDER	
D110	0.250 gal/sk	RETARDER	

Rheology (Average readings)

(rpm)	(deg)	(deg)
300		38.0
200		31.5
100		27.0
60		19.5
30		15.0
6		10.5
3		5.0
10 sec Gel		11
10 min Gel		15
Temperature	27 degC	72 degC
k : (lb _f .s ⁿ /ft ²)		k : 3.75E-2 lb _f .s ⁿ /ft ²
n : ()		n : 0.371
T _y : (lb _f /100ft ²)		T _y : 0.83 lb _f /100ft ²

Thickening Time

Consistency	Time
40 Bc	04:20 hr:mn
70 Bc	04:35 hr:mn
100 Bc	04:45 hr:mn
Remark : Thickening time do not include batch time	

Free Fluid

2.5 mL/250mL	in 2 hrs
At 27 degC and 0 deg incl.	
Sedimentation	Slight

Water Analysis

Chloride	Calcium	Magnesium
2282407.75 mg/L	(lb/bbl)	(lb/bbl)

Fluid Loss

API Fluid Loss	mL
mL in 30 min at (degC)	and (psi)

Comments

General Comment :
Fann Reading Comment :
Thickening Time Comment :
Other test Comment : ; ; ;

Client :
Well :
String :
District :
Country :
Loadcase :

Schlumberger

Section 5: Laboratory Cement Test Report-Zane Grey-1 9 5/8" Tail Well Data

Fluid No : AUP T 661004	Client : Bass Strait Oil	Location / Rig : Ocean Patriot	Signatures
Date : 25-01-2005	Well Name : Zane Grey-1	Field : Bass Strait	

Job Type	Cas	Depth	2825.0 m	TVD	2825.0 m
BHST	99 degC	BHCT	72 degC	BHP	5788 psi
Starting Temp.	27 degC	Time to Temp.	00:46 hr:mn	Heating Rate	1.57 degF/min
Starting Pressure	613 psi	Time to Pressure	00:46 hr:mn	Schedule	9.7-4

Composition

Density	15.80 lb/gal	Yield	1.16 ft ³ /sk	Mix Fluid	5.159 gal/sk
Porosity	59.4 %	Solid Fraction	40.6 %	Slurry type	()

Code	Concentration	Component	Lot Number
G		Blend	Rig
Fresh water	4.259 gal/sk	Base Fluid	Rig
D047	0.010 gal/sk	ANTI FOAM	
D193	0.800 gal/sk	FLUID LOSS	
D145A	0.090 gal/sk	DISPERSANT	

Rheology (Average readings)

(rpm)	(deg)	(deg)
300	47.0	33.0
200	32.5	23.0
100	17.0	14.5
60	11.0	12.5
30	9.0	9.5
6	3.0	7.5
3	2.5	7.0

10 sec Gel	5	9
10 min Gel	9	19

Temperature	27 degC	72 degC
-------------	---------	---------

k : 9.27E-4 lbf.s ⁿ /ft ² n : 0.999 Ty : 2.88 lbf/100ft ²	k : 2.84E-4 lbf.s ⁿ /ft ² n : 1.100 Ty : 7.45 lbf/100ft ²
---	--

Thickening Time

Consistency	Time
40 Bc	03:35 hr:mn
70 Bc	03:51 hr:mn
100 Bc	04:07 hr:mn
Remark : Thickening time do not include batch time	

Free Fluid

1.0 mL/250mL	in 2 hrs
At 27 degC and 0 deg incl.	
Sedimentation	Slight

Fluid Loss

API Fluid Loss	84 mL
42 mL in 30 min at 72 degC	and 1000 psi

Comments

General Comment :
Fann Reading Comment :
Thickening Time Comment :
Other test Comment : ; ; ; ;

Client :
Well :
String :
District :
Country :
Loadcase :

Schlumberger

Section 6: Laboratory Cement Test Report-Zane Grey-1 KOP

Well Data

Fluid No : AUP T 665002	Client : Bass Strait Oil	Location / Rig : Ocean Patriot	Signatures
Date : 18-02-2005	Well Name : Zane Grey-1	Field : Bass Strait	

Job Type	Plug	Depth	2185.0 m	TVD	2185.0 m
BHST	85 degC	BHCT	67 degC	BHP	5788 psi
Starting Temp.	27 degC	Time to Temp.	00:46 hr:mn	Heating Rate	(degF/min)
Starting Pressure	613 psi	Time to Pressure	00:46 hr:mn	Schedule	9.7-4

Composition

Density	16.50 lb/gal	Yield	1.06 ft ³ /sk	Mix Fluid	4.416 gal/sk
Porosity	55.6 %	Solid Fraction	44.4 %	Slurry type	()

Code	Concentration	Component	Lot Number
G		Blend	
Fresh water	4.306 gal/sk	Base Fluid	Rig
D047	0.010 gal/sk	ANTIFOAM	
D145A	0.100 gal/sk	DISPERSANT	

Rheology (Average readings)

(rpm)	(deg)	(deg)
300	81.0	
200	74.0	
100	54.0	
60	34.0	
30	23.0	
6	18.0	
3	11.0	
10 sec Gel	20	
10 min Gel	32	
Temperature	27 degC	(degC)
	Pv : 71.947 cP	k : (lbf.s ⁿ /ft ²)
	Tv : 20.41 lbf/100ft ²	n : ()
		Tv : (lbf/100ft ²)

Thickening Time

Consistency	Time
40 Bc	02:46 hr:mn
70 Bc	02:49 hr:mn
100 Bc	02:53 hr:mn
Remark : Thickening time do not include batch time	

UCA Compressive Strength

Time	CS
06:20 hr:mn	50 psi
09:10 hr:mn	500 psi
(hr:mn)	(psi)
(24:00)	3707psi

Comments

General Comment :
Fann Reading Comment :
Thickening Time Comment :
Other test Comment : ; ; ;

Client :
Well :
String :
District :
Country :
Loadcase :

Schlumberger

Section 7: Laboratory Cement Test Report-Zane Grey-1 Plug

Well Data

					Signatures	
Fluid No : AAPT 669002		Client	: Bass Strait Oil Company	Location / Rig	: Ocean Pacific	
Date : 10-03-2005		Well Name	: Zane Grey-1	Field	: Bass Strait	
Job Type	Plug	Depth	2100.0 m	TVD	2100.0 m	
BHST	95 degC	BHCT	67 degC	BHP	5302 psi	
Starting Temp.	27 degC	Time to Temp.	00:31 hr:mn	Heating Rate	71.92 degF/min	
Starting Pressure	370 psi	Time to Pressure	00:31 hr:mn	Schedule	()	

Composition

Density	15.80 lb/gal	Yield	1.16 ft ³ /sk	Mix Fluid	5.158 gal/sk
Porosity	59.4 %	Solid Fraction	40.6 %	Slurry type	()
Code	Concentration	Component	Lot Number		
G		Blend	Rig		
Fresh water	5.048 gal/sk	Base Fluid	Rig		
D047	0.010 gal/sk	ANTIFOAM			
D145A	0.090 gal/sk	DISPERSANT			
D110	0.010 gal/sk	RETARDER			

Rheology (Average readings)

(rpm)	(deg)	(deg)
300	40.0	29.0
200	31.0	26.0
100	19.5	19.5
60	16.5	14.0
30	9.5	12.0
6	5.5	10.0
3	2.0	8.0
10 sec Gel	3	10
10 min Gel	8	17
Temperature	27 degC	67 degC
	Pv: 33.144 cP Ty: 8.01 lbf/100ft ²	Pv: 20.492 cP Ty: 10.64 lbf/100ft ²

Thickening Time

Consistency	Time
40 Bc	02:58 hr:mn
70 Bc	03:02 hr:mn
100 Bc	03:09 hr:mn
Remark : Thickening time do not include batch time	

Comments

General Comment :
Fann Reading Comment :
Thickening Time Comment :
Other test Comment : ; ; ; ;

Client :
Well :
String :
District :
Country :
Loadcase :

Schlumberger

Section 8: Laboratory Cement Test Report-Zane Grey-1 Plug 2

Well Data

Fluid No : AUPT 670001		Client : Bass Strait Oil	Location / Rig : Ocean Pacific	Signatures	
Date : 10-03-2005		Company			
Well Name : Zane Grey-1		Field : Bass Strait			
Job Type	Plug	Depth	2600.0 m	TVD	2300.0 m
BHST	100 degC	BHCT	73 degC	BHP	5806 psi
Starting Temp.	27 degC	Time to Temp.	00:33 hr:mn	Heating Rate	78.87 degF/min
Starting Pressure	404 psi	Time to Pressure	00:33 hr:mn	Schedule	()

Composition

Density	15.80 lb/gal	Yield	1.16 ft ³ /sk	Mix Fluid	5.160 gal/sk
Porosity	59.4 %	Solid Fraction	40.6 %	Slurry type	()
Code	Concentration	Component	Lot Number		
G		Blend	Rig		
Fresh water	5.040 gal/sk	Base Fluid	Rig		
D047	0.010 gal/sk	ANTIFOAM			
D145A	0.100 gal/sk	DISPERSANT			
D110	0.010 gal/sk	RETARDER			

Rheology (Average readings)

(rpm)	(deg)	(deg)
300	28.0	22.0
200	21.0	20.0
100	14.5	15.5
60	10.5	11.5
30	7.5	10.0
6	2.5	5.0
3	1.0	2.5
10 sec Gel	2	5
10 min Gel	6	9
Temperature	27 degC	73 degC
k : 6.87E-3 lb _f .s ⁿ /ft ² n : 0.599 Ty : 0.00 lb _f /100ft ²		k : 2.41E-2 lb _f .s ⁿ /ft ² n : 0.357 Ty : 0.49 lb _f /100ft ²

Thickening Time

Consistency	Time
40 Bc	03:09 hr:mn
70 Bc	03:12 hr:mn
100 Bc	03:18 hr:mn
Remark : Thickening time do not include batch time	

Comments

General Comment :
Fann Reading Comment :
Thickening Time Comment :
Other test Comment : ; ; ;

DISTRICT	STATION	TYPE SERVICE		COMPANY				
APG		P+A Cmt plug 2		Bass Strait Oil Co.				
RIG	TYPE OF WELL		FIELD	WELL No.	SERVICE REPORT			
Ocean Patriot	Exploration			Zane Grey 1				
TIME AND DATE JOB STARTED		TOTAL DEPTH	SIZE HOLE	DEVIATION	BHST	BHCT	INVOICE NUMBER	
1142 hrs 15th Mar 05		2230	8.5					
TIME & DATE JOB COMPLETED		DRILL FLUID		FORMATION		SIR NUMBER		
1229hrs 15th March 05		WBM Type	9.6 Wt. Vis					
Casing							Previous Casing	
Size	Depth	Type	Wt.	Volume	Allowable Press.	Collar at	Sbed TOP 2184m Bottom 9 5/8 Size	
Completion							BRIDGE PLUG	TAIL PIPE
Size	Depth	Type	Wt.	Packer @	top	Shoe Depth	Type Depth Type Depth	
CASING EQUIPMENT USED							MUD CIRCULATION PRIOR TO JOB	
SHOE x Float Stab	COLLAR x Float Stab	PLUG: x Top x Bottom	CENT. Qty. Type	CEMENT HEAD		Time - Min. Vol. BBLs Press - PSI		
WASH		SPACER		LEAD SLURRY		TAIL SLURRY		
Wt.	Vol. BBLs	Fill	8.3 Wt. 40 Vol. BBLs Fill	Wt.	Vol.	Mix Water	Fill	
EQUIPMENT		DURING JOB WAS PIPE		PARAMETERS RECORDED:		MUD RETURNS LOST DURING JOB		
LAS LPJ	Pump Unit Batch Mixer	Compressor RCM	4062913261 Pump Unit S/No.	Rotated Reciprocated	X Press Rate Vol Dty M/D	ON: BBLs		
LEAD SLURRY		TAIL SLURRY		MATERIALS USED				
		149skts of Class"G"neat+0.01gps D047 + 0.09gps D145A + 5.16gps Drillwater @ 15.8ppg w/ 1.16cflsk yield. 0.01gps D110		Class"G" = 195skts D047 = 2 gals D145A = 10gals 5 Gal D110.				
TIME	PRESSURE		VOLUME		LT	RECORD OF SERVICE		
	Low	High	BBL	BPM	MIN			
1130						Safety meeting on the rig floor		
1142		350	5	6		Pump 5 bbl Water Spacer ahead.		
1148		2000	0.1			Pressure test lines to the rig floor 2000 psi for 5 mins		
1155		450	35	6.5		Pump 35 bbl Water spacer ahead.		
1208		350	31	3.5		Mix and pump 31 bbl slurry at 15.8 ppg with the above recipe.		
1220		450	15.5	6.5		Pump 13 bbl Water spacer behind.		
1225		650	170	7.6		Displace the above with 107 bbl mud.		
0125						Bleed off no returns.		
No. of DS PERSONNEL ON JOB		STEM1 DONE? YES X NO		TOTAL LOST TIME	H	TOTAL OPERATING TIME	2 H	
CUSTOMER COMMENTS		DS REPRESENTATIVE						
SUP		S.S						
MECH		F.E.						
QUALITY OF SERVICE		GOOD	SATISFACTORY	POOR	CUSTOMER REPRESENTATIVE			
					Peter Dane.			

DISTRICT	STATION	TYPE SERVICE		COMPANY					
APG		KO Cement Plug # 2		Bass Strait Oil Co.					
RIG		TYPE OF WELL		FIELD		WELL No.		SERVICE REPORT	
Ocean Patriot		Exploration				Zane Grey 1			
TIME AND DATE JOB STARTED		TOTAL DEPTH		SIZE HOLE		DEVIATION		BHST	
28/02/2005 0815 hrs		3105		8.5					
TIME & DATE JOB COMPLETED		DRILL FLUID		FORMATION		SIR NUMBER			
28/02/2005 0920 hrs		Type		9.6 Wt. Vis					
Casing		Sbed		2184m		9 5/8			
Size		Depth		Type		Wt.		Volume	
Completion		BRIDGE PLUG		TAIL PIPE					
Size		Depth		Type		Wt.		Packer @	
CASING EQUIPMENT USED		CEMENT HEAD		MUD CIRCULATION PRIOR TO JOB					
SHOE x		COLLAR x		PLUG x		CENT. x			
Float Stab		Float Stab		Top Bottom		Qty. Type			
WASH		SPACER		LEAD SLURRY		TAIL SLURRY			
Wt.		Vol. BBLs		Fill		8.3 Wt. 20 Vol. BBLs 435 ft			
EQUIPMENT		DURING JOB WAS PIPE		PARAMETERS RECORDED: ON:		MUD RETURNS			
LAS LPJ		Pump Unit		Batch Mixer		Compressor RCM			
4062913261		Rotated		X		Press Rate Vol Dly M/D			
LEAD SLURRY		TAIL SLURRY		MATERIALS USED					
		195sks of Class"G"neat+0.01gps D047 +		Class"G" = 195sks					
		0.1gps D145A + 4.2gps Drillwater @ 16.5ppg		D047 = 2 gals					
		w/ 1.06cflsk yield		D145A = 20gals					
PRESSURE		VOLUME		LT		RECORD OF SERVICE			
Low High		BBL BPM		MIN					
0815						Safety meeting on the rig floor			
0825		5 5				Flush the line with 5 bbls of Drill water			
0829		1000				Pressure test line to 1000 psi - OK			
0835		15 5				Pump 15 bbls of water ahead as spacer			
0839		36.5 4				Mix and pump 36.5 bbls of cement slurry @ 16.5 ppg			
0848		7.7 6				Pump 7.7bbls of drill water behind			
0849		850 160 8				Displace with 160bbls of mud			
0918						Stop pumping, Bleed off and check return - No back flow observed			
0920						End of job			
No. OF DS PERSONNEL ON JOB		STEM1 DONE? YES X NO		TOTAL LOST TIME H		TOTAL OPERATING TIME 1 H			
SUP		S.S		CUSTOMER COMMENTS		DS REPRESENTATIVE			
MECH		F.E.		HEL X		Dave Green / B Bilton			
QUALITY OF SERVICE		GOOD		SATISFACTORY		POOR		CUSTOMER REPRESENTATIVE	

Schlumberger

DISTRICT	STATION	TYPE SERVICE		COMPANY	
APG		KO Cement Plug # 1		Bass Strait Oil Co.	
RIG	TYPE OF WELL		FIELD	WELL No.	SERVICE REPORT
Ocean Patriot	Exploration			Zane Grey 1	
TIME AND DATE JOB STARTED		TOTAL DEPTH	SIZE HOLE	DEVIATION	BHST
26/02/2005 1525 hrs		3105	8.5		
TIME & DATE JOB COMPLETED		DRILL FLUID		FORMATION	
26/02/2005 1614 hrs		Type	9.6 Wt. Vis		
Casing					Previous Casing
Size	Depth	Type	Wt.	Volume	Allowable Press. Collar at
Completion					BRIDGE PLUG TAIL PIPE
Size	Depth	Type	Wt.	Packer @ top Shoe Depth	Type Depth Type Depth
CASING EQUIPMENT USED					CEMENT HEAD MUD CIRCULATION PRIOR TO JOB
SHOE x COLLAR x PLUG x CENT.	x Float Stab	x Top Bottom	CENT.	Qty. Type	Time - Min. Vol. BBLs Press - PSI
WASH		SPACER		LEAD SLURRY	
Wt. Vol. BBLs Fill	8.3 Wt. 20 Vol. BBLs 435 ft				
EQUIPMENT		DURING JOB WAS PIPE		PARAMETERS RECORDED: ON:	
LAS LPJ Pump Unit Batch Mixer Compressor RCM	4062913261 Pump Unit S/No.	Rotated Reciprocated		X Press Rate Vol Dty M/D	
LEAD SLURRY		TAIL SLURRY		MATERIALS USED	
		97skts of Class"G"neat+0.01gps D047 + 0.1gps D145A + 4.2gps Drillwater @ 16.5ppg w/ 1.06cflsk yield		Class"G" = 97skts D047 = 1 gals D145A = 10gals	
TIME	PRESSURE		VOLUME	LT	RECORD OF SERVICE
	Low	High	BBL BPM	MIN	
1450					Safety meeting on the rig floor
1525			5 3		Flush the line with 5 bbls of Drill water
1528		1000			Pressure test line to 1000 psi - OK
1536			15 5		Pump 15 bbls of water ahead as spacer
1541			18.4 5		Mix and pump 18.4 bbls of cement slurry @ 16.5 ppg
1557			7.7 6		Pump 7.7bbls of drill water behind
1600		650	169 8		Displace with 169.4bbls of mud
1614					Stop pumping, Bleed off and check return - No back flow observed
1615					End of job
No. OF DS PERSONNEL ON JOB	CUSTOMER COMMENTS		TOTAL LOST TIME H TOTAL OPERATING TIME 1 H		
SUP SS MECH F.E. HEL x			DS REPRESENTATIVE		
QUALITY OF SERVICE GOOD SATISFACTORY POOR		CUSTOMER REPRESENTATIVE			

DISTRICT APG		STATION		TYPE SERVICE BOP Test		COMPANY Bass Strait Oil Co.		Schlumberger					
RIG Ocean Patriot		TYPE OF WELL Exploration		FIELD		WELL No. Zane Grey 1		SERVICE REPORT					
TIME AND DATE JOB STARTED 18/02/2005 19:20:00 PM		TOTAL DEPTH		SIZE HOLE		DEVIATION		BHST		BHCT		INVOICE NUMBER	
TIME & DATE JOB COMPLETED 19/02/2005 06:05:00 AM		DRILL FLUID Type		Wt.		Vis		FORMATION		SIR NUMBER			
Casing Size		Depth		Type		Wt.		Volume		Allowable Press.		Collar at	
Completion Size		Depth		Type		Wt.		Packer @		top		Shoe Depth	
SHOE Float Stab		COLLAR Float Stab		PLUGS Top Bottom		CENT. Qty. Type		CEMENT HEAD		MUD CIRCULATION PRIOR TO JOB Time - Min. Vol. BBLs Press - PSI			
WASH Wt. Vol. BBLs Fill		SPACER Wt. Vol. BBLs Fill		LEAD SLURRY Wt. Vol. Mix Water Fill		TAIL SLURRY Wt. Vol. Mix Water Fill							
EQUIPMENT LAS LPJ Pump Unit Batch Compressor RCM		4062913261 Pump Unit S/N		DURING JOB WAS PIPE Rotated Reciprocated		PARAMETERS RECORDED: ON: X Press Rate Vol Qty M/D		MUD RETURNS LOST DURING JOB BBLs					
LEAD SLURRY		TAIL SLURRY		MATERIALS USED									
TIME		PRESSURE Low High		VOLUME BBL BPM		LT MIN		RECORD OF SERVICE					
19:20								TEST BOP 18/02/05					
19:29		250 5000						Fill lines					
20:13		250 5000						Test Cement line					
20:45		250 5000						Test # 1					
21:10		250 5000						Test # 2					
21:31		250 5000						Test # 3					
21:52		250 5000						Test # 4					
22:14		250 5000						Test # 5					
22:33		250 5000						Test # 6					
23:31		250 5000						Test # 7					
23:52		250 5000						Test # 8					
								Test # 9					
								19/02/2005					
00:13		250 5000						Test # 10 FAILED					
00:32		250 5000						Test # 11					
00:50		250 5000						Test # 10					
01:15		250 5000						Test # 12					
01:41		250 5000						Test # 13					
03:45		250 5000						T I W valve # 1					
04:05		250 5000						T I W valve # 2					
04:23		250 5000						T I W valve # 3					
04:56		250 5000						Lower I B O P					
05:18		250 5000						Upper I B O P					
05:46		250 5000						Header Valve					
06:05								Job End					
No. of DS PERSONNEL ON JOB		STEM1 DONE? YES X NO		TOTAL LOST TIME		H		TOTAL OPERATING TIME		11 H			
SUP <input type="checkbox"/> S.S. <input type="checkbox"/>		MECH <input type="checkbox"/> F.E. <input type="checkbox"/> HEL <input checked="" type="checkbox"/>		CUSTOMER COMMENTS		DS REPRESENTATIVE							
						E Llagas / B Bilton							
QUALITY OF SERVICE		GOOD <input type="checkbox"/>		SATISFACTORY <input type="checkbox"/>		POOR <input type="checkbox"/>		CUSTOMER REPRESENTATIVE					
								Peter Dane / Steve Hodgetts					

DISTRICT	STATION	TYPE SERVICE		COMPANY		Schlumberger									
APG		9 5/8" Casing Job				Bass Strait Oil Co.									
RIG		TYPE OF WELL		FIELD		WELL No.		SERVICE REPORT							
Ocean Patriot		Exploration				Zane Grey 1									
TIME AND DATE JOB STARTED		TOTAL DEPTH		SIZE HOLE		DEVIATION		BHST		BHCT		INVOICE NUMBER			
17/02/2005 8:45:00 PM		2735		12 1/4" OH				99 C		67 C					
TIME & DATE JOB COMPLETED		DRILL FLUID				FORMATION		SIR NUMBER							
17/02/2005 11:30:00 PM		KCL/Polymer Mud Type		10.1 ppg Wt. Vis											
Casing		Previous Casing													
9 5/8"		2184 m		47		2158 m		13 3/8"		1090 m		68			
Size		Depth		Type		Collar at		TOP		Bottom		Size			
Completion		BRIDGE PLUG		TAIL PIPE											
Size		Depth		Type		top		Shoe Depth		Type		Depth			
Casing Equipment Used		CEMENT HEAD		MUD CIRCULATION PRIOR TO JOB											
SHOE 1		COLLAR 1		PLUG 1 1		CENT.		DSE		Time - Min.		Vol. BBLs Press - PSI			
Float Stab		Float Stab		Top Bottom Qty. Type											
WASH		SPACER		LEAD SLURRY		TAIL SLURRY									
8.34		60		8.34 ppg		60 bbl		12.5		128 bbls		101 bbls			
Wt.		Vol. BBLs		Fill		Vol. BBLs		Wt.		Vol.		Mix Water			
EQUIPMENT		LAS		X Pump		Batch		Compressor		4062913261		DURING JOB WAS PIPE			
LPJ		Unit		Mixer		RCM		Pump Unit S/No.		Rotated		Reciprocated			
Parameters Recorded:		ON:		PRISM		Recorder		MUD RETURNS		LOST DURING JOB		BBLS			
Class "G" + 0.01 gps D047 + 0.042 gps D075 + 0.25 gps D110 + 12.521 gps Seawater @ 12.5 ppg w/ 2.24 cf/sk yield		Class "G" + 0.01 gps D047 + 0.09 gps D145A + 0.80 gps D193 + 4.259 gps drill water @ 15.8 ppg w/ 1.16 cf/sk yield		MATERIALS USED		D047 = 7 gals		D193 = 200 gals		D075 = 161 gals		D110 = 96 gals			
						D145A = 23 gals		1 set DSE 9 5/8" top & bottom							
PRESSURE		VOLUME		LT		RECORD OF SERVICE									
Low High		BBL BPM		MIN											
20:45						Safety meeting on rig floor with all relevant personnel									
20:55		10		5		Flush lines with 10 bbl drill water ahead to break circulation									
21:00		3,000				Pressure test lines to 3000 psi for 5 minutes									
21:05		60		7		Pump 60 bbl of chemical wash									
21:15		45		7		Pump 45 bbl of drill water									
21:25						Drop bottom dart (Pressure indicated 2400 psi)									
21:28		5		5		Pump 5bbls of drill water behind dart									
21:35		128		6		Mix & pump 128 bbl Lead slurry @ 12.5ppg; (Mix fluid =101bbls)									
22:00		51.4		5		Mix & pump 51.4 bbl of Tail slurry @ 15.8 ppg; (Mix fluid=30.6bbls)									
22:20						Drop top dart									
22:23		3		5		Displace with 3 bbl drill water to shear top plug (Pressure indicated 2200 psi)									
22:25		7		5		Displace with 7 bbl drill water									
22:28		495				Switch over to rig pump for final displacement and attempt to bump the plug; No bump									
23:20						Bleed off and check return; 1 bbl return									
23:30						End of job									
No. of DS Personnel on Job		STEM1 DONE? YES X NO		TOTAL LOST TIME		H		TOTAL OPERATING TIME		2.75 H					
CUSTOMER COMMENTS												DS REPRESENTATIVE			
SUP		S.S.		x								Edgar Llagas / Pam Kosarek			
MECH		F.E.		x		HEL						CUSTOMER REPRESENTATIVE			
QUALITY OF SERVICE		GOOD		SATISFACTORY		POOR						Peter Dane / Steve Hodgetts			

DISTRICT APG	STATION	TYPE SERVICE 13 3/8" Casing Job		COMPANY Bass Strait Oil Co.		Schlumberger							
RIG Ocean Patriot	TYPE OF WELL Exploration		FIELD		WELL No. Zane Grey 1		SERVICE REPORT						
TIME AND DATE JOB STARTED 1/02/2005 9:08:00 PM		TOTAL DEPTH 1090m	SIZE HOLE 16" OH	DEVIATION	BHST 50 C	BHCT 27 C	INVOICE NUMBER						
TIME & DATE JOB COMPLETED 1/02/2005 11:32:00 PM		DRILL FLUID Seawater Type		8.6 ppg Wt.	Vis	FORMATION		SIR NUMBER					
		Liner						Previous Casing					
Size	Depth	Type	Wt.	Volume	Allowable Press.	Collar at	TOP		Bottom		Size		
Completion								BRIDGE PLUG		TAIL PIPE			
Size	Depth	Type	Wt.	Packer @	top	Shoe Depth	Type	Depth	Type	Depth			
CASING EQUIPMENT USED						CEMENT HEAD DSE		MUD CIRCULATION PRIOR TO JOB					
SHOE 1 Float Stab	COLLAR 1 Float Stab	PLUGS 1 Top	1 Bottom	CENT.	Qty.	Type	Time - Min.		Vol. BBLs		Press - PSI		
WASH		SPACER		LEAD SLURRY		TAIL SLURRY							
Wt.	Vol. BBLs	Fill	8.6 ppg Wt.	10 bbl Vol. BBLs	Fill	Wt.	Vol.	Mix Water	Fill	15.8 Wt.	67 bbls Vol.	40bbls Mix Water	Fill
EQUIPMENT		DURING JOB WAS PIPE		PARAMETERS RECORDED:		ON:		MUD RETURNS					
LAS LPJ	X Pump Unit	Batch Mixer	Compressor RCM	4062913261 Pump Unit S/No.	Rotated Reciprocated	X x x x	PRISM Recorder	LOST DURING JOB BBLs					
LEAD SLURRY				TAIL SLURRY				MATERIALS USED					
Class"G" + 0.01gps D047 + 0.042 gps D075 + 12.718 gps Seawater @ 12.5.ppg w/ 2.23cf/sk yield				Class"G"+ 0.01 gps D047 + 5.324 gps Seawater @ 15.8ppg w/ 1.18 cf/sk yield				D047 = 8gals D075 = 212 gals Class"G" = 31 MT					
PRESSURE		VOLUME		LT	RECORD OF SERVICE								
TIME	Low	High	BBL	BPM	MIN								
21:08						Safety meeting on rig floor with all relevant personnel							
21:12			3	3		Flush lines with 5 bbl seawater ahead to break circulation							
21:18		3,000				Pressure test lines to 3000 psi for 5 minutes							
21:23						Drop bottom dart							
21:21			5	2		Pump 5bbls of Seawater behind dart							
21:28			166	6		Mix & pump 166 bbl Lead slurry @ 12.5ppg; (Mix fluid =131bbls)							
22:03			67	5		Mix & pump 67 bbls of Tail slurry @ 15.8 ppg; (Mix fluid=40bbls)							
22:21						Drop top dart							
22:22			23	2		Displace with 23bbs seawater							
22:27						Switch over to rig pump for final displacement and bump the plug							
23:20		1500				Pressure to 1500psi to test casing							
23:30						Bleed off and check return							
23:32						End of job							
No. Of DS PERSONNEL ON JOB		STEM1 DONE? YES X NO		TOTAL LOST TIME H		TOTAL OPERATING TIME		2.5 H					
SUP		S.S.		CUSTOMER COMMENTS		DS REPRESENTATIVE							
MECH		F.E.				Ed Llagas / N.Macatangay							
QUALITY OF SERVICE		GOOD		SATISFACTORY		POOR		CUSTOMER REPRESENTATIVE					
								Chris Wilson / Stuart Douglas					

DISTRICT	STATION	TYPE SERVICE		COMPANY		Schlumberger					
APG		30" Conductor Casing				Bass Strait Oil Co.					
RIG		TYPE OF WELL		FIELD		WELL No.		SERVICE REPORT			
Ocean Patriot		Exploration				Zane Grey 1					
TIME AND DATE JOB STARTED		TOTAL DEPTH	SIZE HOLE	DEVIATION	BHST	BHCT	INVOICE NUMBER				
29/01/2005 20:00:00 PM		128.5m	36" OH			17 C 26 C					
TIME & DATE JOB COMPLETED		DRILL FLUID		FORMATION		SIR NUMBER					
29/01/2005 21:50:00 PM		Seawater Type	8.6 ppg Wt. Vis								
Liner							Previous Casing				
Size	Depth	Type	Wt.	Volume	Allowable Press.	Collar at	TOP	Bottom	Size		
Completion							BRIDGE PLUG		TAIL PIPE		
Size	Depth	Type	Wt.	Packer @	top	Shoe Depth	Type	Depth	Type Depth		
CASING EQUIPMENT USED							CEMENT HEAD		MUD CIRCULATION PRIOR TO JOB		
SHOE	COLLAR	PLUGS		CENT.			Time - Min.		Vol. BBLs Press - PSI		
Float Stab	Float Stab	Top	Bottom	Qty.	Type						
WASH		SPACER		LEAD SLURRY		TAIL SLURRY					
Wt.	Vol. BBLs	Fill	8.6 ppg Wt.	20 bbl Vol. BBLs	Fill	Wt.	Vol.	Mix Water	Fill		
EQUIPMENT		DURING JOB WAS PIPE		PARAMETERS RECORDED:		ON:		MUD RETURNS			
LAS LPJ	X Pump Unit	Batch Mixer	Compressor RCM	4062913261 Pump Unit S/No.	Rotated Reciprocated	X x x x Press Rate Vol Dty	PRISM Recorder	LOST DURING JOB BBLs			
SLURRY DESIGN				TAIL SLURRY		MATERIALS USED					
Class"G" + 0.01gps D047 + 1% BWOC CaCl + 5.313gps Seawater @ 15.8ppg w/ 1.19cf/sk yield				168 bbls slurry @ 15.8 ppg 100 bbl mix fluid		D047 = 8gals CaCl2 = 744 lbs 34 MT Class G Cement					
PRESSURE		VOLUME		LT	RECORD OF SERVICE						
TIME	Low	High	BBL	BPM	MIN						
20:00						Safety meeting on rig floor with all relevant personnel					
20:21			3	3		Flush lines with 3 bbl seawater ahead to break circulation					
20:23		2,000				Pressure test lines to 2000 psi for 5 minutes					
20:32			17	5		Pump 17 bbls seawater ahead w/ Fluorescence dye					
20:40			168	4		Mix & pump 168 bbl slurry @ 15.8 ppg; 0.01 gps D047+ 1% BWOC S001(CaCl2)					
21:31			51.8	6		Displace with 51.8 bbls seawater					
21:45						Bleed off and check returns					
21:46						End of job					
No. of DS PERSONNEL ON JOB											
STEM1 DONE? YES X NO		TOTAL LOST TIME		H	TOTAL OPERATING TIME		2 H				
CUSTOMER COMMENTS		DS REPRESENTATIVE									
SUP	S.S.	x	Ed Llagas / N.Macatangay								
MECH	F.E.		HEL	x	Chris Wilson / Stuart Douglas						
QUALITY OF SERVICE		GOOD	SATISFACTORY	POOR	CUSTOMER REPRESENTATIVE						

APPENDIX 17

FINAL RIG POSITIONING REPORT

(By Fugro)



REPORT FOR THE OCEAN PATRIOT RIG MOVE TO THE ZANE GREY-1 LOCATION

FUGRO SURVEY JOB NO. - P0201

Client : Bass Strait Oil Company Ltd
Level 25
500 Collins Street
Melbourne, 3000
Victoria

Date of Survey : 21 – 30 January 2005

0	Final			3 February 2005
Rev	Description	Checked	Approved	Date

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APPENDIX B : FINAL POSITIONING REPORT
APPENDIX C : DGPS AND GYRO CHECKS

ABSTRACT

Between 21 and 30 January 2004, Fugro Survey Pty Ltd (Fugro) provided equipment and personnel for the semi-submersible Mobile Offshore Drilling Unit Ocean Patriot, rig move from Grayling-1A to the Zane Grey-1 location in Permit Vic/P-42 in Bass Strait, offshore Victoria, Australia.

Surface positioning was achieved using Fugro's Starfix Differential GPS and Starfix Seis Navigation Software.

The final position for the drill stem derived from DGPS observations at the Zane Grey-1 location is:

Location Name:	Zane Grey-1
Easting (m):	586049.89
Northing (m):	5729856.42
Latitude:	38° 34' 31.64" S
Longitude:	147° 59' 16.27" E
Rig Heading:	43.20° (True)

This position is 1.7m on a bearing of 216.2° (Grid) from the proposed Zane Grey-1 location.

All coordinates in this report are referenced to the Australian Geodetic Datum (AGD84) and projected onto the Australian Map Grid 1984 (AMG84) Zone 55 (CM 147° E), unless otherwise stated.

All times in this report are quoted in Australian Eastern Daylight Saving Time (EDST), unless otherwise stated.

1.0 INTRODUCTION

Fugro Survey Pty Ltd (Fugro) was contracted by BSOC/Labrador Petro Management Pty Ltd (BSOC) to provide survey positioning services for the semi-submersible Mobile Offshore Drilling Unit (MODU), *Ocean Patriot*, during the rig move to Zane Grey-1 location Vic/P-42 in Bass Strait, offshore Victoria, Australia.

A general location diagram is shown as Figure 1-1.

This report details the equipment used, survey parameters adopted, procedures employed and the results achieved. A section on safety is included in Section 3.0 of this report.

1.1 Scope of Work

Personnel and equipment were provided on a 24 hour per day basis for:

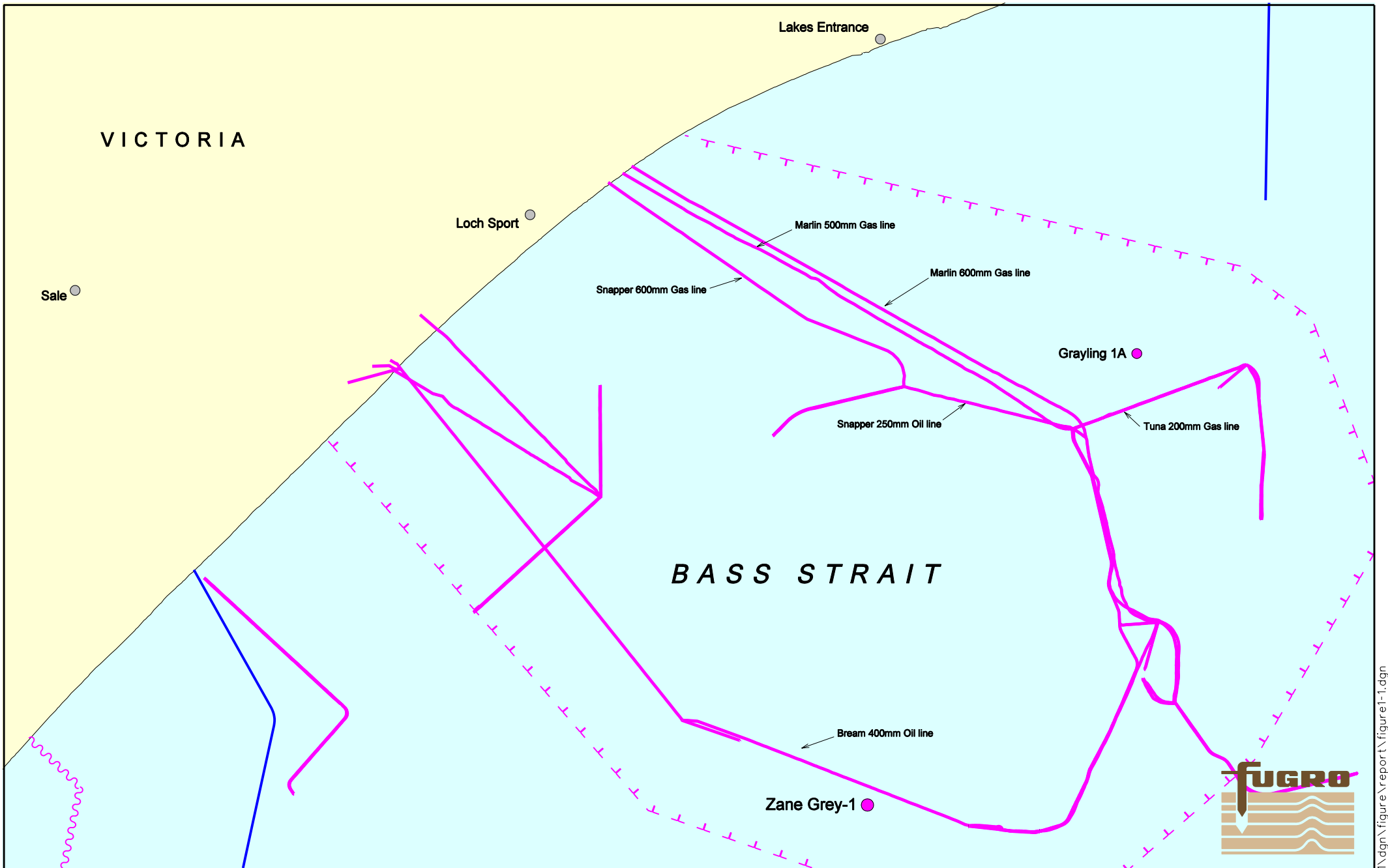
- Installation and maintenance of survey equipment on board the semi-submersible MODU *Ocean Patriot* and Anchor Handling Vessels (AHVs) *Far Grip* and *Pacific Wrangler*.
- Calibration of the SG Brown Gyrocompass and verification of the Starfix Differential GPS system on board the *Ocean Patriot*.
- Differential GPS check of the *Ocean Patriot* drillstem position at the Grayling-1A location.
- Navigation for the *Ocean Patriot*, *Far Grip* and *Pacific Wrangler* during anchor handling operations, using Fugro's Starfix Differential GPS and Starfix Seis Navigation Software.
- Final surface positioning of the *Ocean Patriot* drillstem at the Zane Grey-1 location using Fugro's Starfix Differential GPS.
- Reporting of the *Ocean Patriot* drillstem position at Zane Grey-1.

1.2 Summary of Events

Fugro personnel departed Perth on 21 January 2005 and arrived on board the *Ocean Patriot* on 22 January 2005. The rig move took place between 26 and 30 January 2005. The positioning of the drillstem at Zane Grey-1 location was finalised between 05:18 and 06:18 on 30 January 2005.

Fugro personnel departed the *Ocean Patriot* and returned to Perth on 30 January 2005.

For a detailed summary of events, refer to the Daily Operations Reports included in Appendix A.



GENERAL LOCATION DIAGRAM

FIGURE 1-1

2.0 RESULTS

2.1 Final Position

The final position of the *Ocean Patriot* drill stem was established by calculating the mean position from one hour of DGPS data logged between 05:18 and 06:18 on 30 January 2005. During this period, calculated drill stem coordinates from the primary and secondary positioning systems were logged at ten second intervals in Starfix Seis. Data from the primary positioning system were used for the final position calculation.

Differential GPS corrections were derived using a multi-reference solution with base station data from Melbourne, Bathurst and Cobar in Australia.

AGD84 geographical positions for the Zane Grey-1 location are shown in Table 2-1.

AGD84			
Position	Method	Latitude	Longitude
Drill Stem at Surface	MRDGPS	38° 34' 31.64" S	147° 59' 16.27" E
Proposed Location	-	38° 34' 31.60" S	147° 59' 16.31" E

TABLE 2-1 : GEOGRAPHICAL POSITIONS FOR ZANE GREY-1

AGD84 grid coordinates (CM 147° E) for Zane Grey-1 location are shown in Table 2-2.

AGD84, Zone 55, CM 147° E			
Position	Method	Easting (m)	Northing (m)
Drill Stem at Surface	MRDGPS	586049.89	5729856.42
Proposed Location	-	586050.9	5729857.8

TABLE 2-2 : GRID COORDINATES FOR ZANE GREY-1

This position is 1.7m on a bearing of 216.2° (Grid) from the design location.

A copy of the final positioning report is contained in Appendix B.

2.2 Rig Heading

The heading of the *Ocean Patriot* was established by calculating the average heading during one hour of corrected gyro compass readings logged between 05:18 and 06:18 on 30 January 2005. During this period gyro compass readings were recorded at ten-second intervals in Starfix Seis.

The *Ocean Patriot's* heading is shown in Table 2-3.

Description	Method	Heading (True)	Heading (Grid)
Rig Heading	Gyro compass	43.20°	43.81°
Proposed Heading	-	45.00°	45.62°

TABLE 2-3 : RIG HEADING

2.3 Anchor Positions

The approximate location of the *Ocean Patriot's* anchors is provided in Table 2-4.

AGD84, AMG, CM 147° E					
Anchor	Easting (m)	Northing (m)	Range (m)	Azimuth	Deployed By
1	586973	5730119	903.3	73.1°	<i>Pacific Wrangler</i>
2	587101	5729598	1032.3	104.3°	<i>Far Grip</i>
3	586326	5728806	1045.8	164.7°	<i>Far Grip</i>
4	585806	5728801	1045.6	193.4°	<i>Pacific Wrangler</i>
5	584965	5729580	1081.8	254.3°	<i>Pacific Wrangler</i>
6	585038	5730069	994.7	281.3°	<i>Pacific Wrangler</i>
7	585769	5730857	989.2	342.6°	<i>Pacific Wrangler</i>
8	586266	5730861	972.3	11.8°	<i>Pacific Wrangler</i>

TABLE 2-4 : ANCHOR POSITIONS

The approximate coordinates of the *Ocean Patriot's* anchors are calculated from the azimuth from the fairlead position to the AHVs stern position at the time of anchor deployment and the range from the fairlead position to the anchor, as obtained from the on board chain counter, corrected for catenary.

3.0 SAFETY

All work undertaken by Fugro personnel during the project was performed within the guidelines of Fugro's Safety Policy, as defined in Fugro's Safety Manual (SMS-P01) and Offshore Survey Safety Practices (SMS-SP26).

Fugro personnel worked within all project safety guidelines and plans adopted by BSOC.

No safety incidents involving Fugro personnel were reported during the project.

Fugro Surveyor R. Farrawell attended the Diamond Offshore Drilling general induction upon arrival on board the *Ocean Patriot* on 22 January 2005. The *Ocean Patriot* Safety Meeting which was held on 23 January 2005, at 19:00 was attended by both Fugro personnel.

The pre-rig move meeting on board the *Ocean Patriot* was attended by R. Farrawell on 25 January 2005.

A Project Specific Safety Plan was developed for positioning services on board the *Ocean Patriot* for the Zane Grey-1 rig move.

4.0 SURVEY PROCEDURES

4.1 Mobilisation

The survey team departed Perth on 21 January 2005, and arrived on board the *Ocean Patriot* whilst it was at Grayling-1A, on 22 January 2005. Following a rig induction, the survey equipment on board was powered up and systems and function tests completed.

Fugro personnel were advised by the Client Representative that the rig move would not commence until 25 January 2005, and that they were to remain on standby until then.

4.2 General Survey Procedures

Anchor recovery at Grayling-1A commenced on 26 January 2005, and the *Ocean Patriot* arrived in the vicinity of Zane Grey-1 on 27 January 2005. The *Ocean Patriot* tow from the Grayling-1A location to the Zane Grey-1 location was conducted with the *Far Grip* connected to the tow bridle.

The *Far Grip* manoeuvred the *Ocean Patriot* onto the proposed location run-line extending three nautical miles from the proposed location. The *Pacific Wrangler* was passed PCC #5 prior to the *Ocean Patriot* turning onto the run-in line, then continued toward the Anchor #5 drop location with the chain released from Fairlead 5 on the *Ocean Patriot*. The *Far Grip* remained on the tow bridle and continued along the run-line to the proposed Zane Grey-1 location. After Anchor #5 had been deployed by the *Pacific Wrangler*, the *Far Grip* approximately positioned the rig over the proposed Zane Grey-1 location.

The *Pacific Wrangler* proceeded to run Anchors #1, #4 and #8 prior to the *Far Grip* returning the tow bridle to the *Ocean Patriot*. Following deployment of Anchor #8 by the *Pacific Wrangler*, Anchors #1, #4, #5 and #8 were successfully cross tensioned. After cross tensioning of Anchors #1, #4, #5 and #8 the *Pacific Wrangler* deployed Anchors #7 and #6 while the *Far Grip* deployed Anchors #2 and #3.

The *Ocean Patriot* was positioned over the proposed Zane Grey-1 location with all anchoring and pre-tensioning completed at 04:15 on 28 January 2005. Final positioning of the *Ocean Patriot* drillstem was recorded between 05:18 and 06:18 on 30 January 2005. The final position of the *Ocean Patriot* drillstem at the Zane Grey-1 location was issued to the Labrador Drilling Supervisor (refer Appendix B).

4.3 Demobilisation

All navigation systems on board the *Ocean Patriot* and AHVs were switched off during demobilisation and left on board the vessels for subsequent anchor recovery.

Fugro personnel departed the *Ocean Patriot* and returned to Perth on 30 January 2005.

5.0 EQUIPMENT CALIBRATIONS

5.1 DGPS Navigation Integrity Check

In order to check the correct operation of the navigation systems installed on board the *Ocean Patriot*, DGPS data was logged for 15 minutes on 23 January 2005, while the rig was located at Grayling-1A.

A comparison of the primary and secondary DGPS was also conducted. The results from both of these tests are provided in Table 5-1.

AGD84, AMG, CM147°E				
	Latitude	Longitude	Easting (m)	Northing (m)
Established Well Coordinates	38° 09' 46.34" S	148° 17' 30.13" E	613159.11	5775325.56
Observed Coordinates	38° 09' 46.37" S	148° 17' 31.88" E	613189.39	5775324.27
Differences	00° 00' 00.00" S	000° 00' 01.75" E	-30.30	1.30
Primary Navigation	38° 09' 46.37" S	148° 17' 31.38" E	613189.39	5775324.27
Secondary Navigation	38° 09' 46.36" S	148° 17' 31.32" E	613188.04	5775324.54
Differences	00° 00' 00.00" S	000° 00' 00.06" E	1.34	-0.27

TABLE 5-1 : DGPS NAVIGATION INTEGRITY CHECK

The DGPS check described above demonstrated that the navigation systems on board the *Ocean Patriot* were set up and working correctly. The difference between the established and observed well coordinates is due to the rig skidding from Grayling-1 to Grayling-1A. The established well coordinates are referenced to Grayling-1. Details of the DGPS check are provided in Appendix C.

A positioning checklist was completed for the Zane Grey-1 location to confirm the proposed rig position and to ensure that the correct geodetic datum, transformation and projection parameters were being used. Geodetic calculations were performed using both Starfix Seis Software and Norcom Geodetic Software. This checklist (FSHY48-1) is shown in Appendix C.

5.2 Gyro Compass Calibration

The calibration of the survey gyro compass was carried out on 22 January 2005, whilst the rig was located at Grayling-1A.

A series of observations were made to the sun from which the rig heading was calculated. The calculated values were then compared to the observed gyro compass values logged in Starfix Seis and a mean C-O value of 0.74° was determined. This correction was applied in the navigation suite.

Details of the observations and gyro calibration reduction results are enclosed in Appendix C.

6.0 SURVEY PARAMETERS

6.1 Geodetic Parameters

All coordinates are referenced to the Australian Geodetic Datum 1984 (AGD84) unless otherwise noted. The Global Positioning System (GPS) operates on the World Geodetic System 1984 (WGS84) datum. Fugro's Differential GPS Reference Stations are currently defined in the International Terrestrial Reference Frame 2000 (ITRF2000 Epoch 2005.25) datum. Due to the continual refinement of the WGS84 reference frame, for all cases, the transformation parameters indicate that the WGS84 and ITRF2000 reference frames are essentially identical.

Datum : **World Geodetic System 1984 (WGS84)**
Reference Spheroid : World Geodetic System 1984
Semi-Major Axis : 6378137.000m
Inverse flattening : 298.257223563

Datum : **Australian Geodetic Datum 1984 (AGD84)**
Reference Spheroid : Australian National Spheroid (ANS)
Semi-Major Axis : 6378160.000m
Inverse flattening : 298.2500000

The following seven parameter datum transformation (Table 6-1) has been used in Fugro's software to transform WGS84 (ITRF2000 Epoch 2005.50) coordinates to AGD84 coordinates. These parameters are calculated from the 14 parameter transformation defined by Geoscience Australia. Fugro follows the Coordinate Frame Rotation convention (as defined by UKOOA) for datum transformations.

Transformation Parameters from WGS84 (ITRF2000 Epoch 2005.50) to AGD84			
dX	+117.747m	rX	+0.306452"
dY	+51.4751m	rY	+0.456052"
dZ	-139.1123m	rZ	+0.292040"
		dS	+0.195976ppm

TABLE 6-1 : TRANSFORMATION PARAMETERS

All grid projection coordinates are referenced to the Australian Map Grid 1984.

Projection : **Australian Map Grid (AMG84)**
Projection Type : Universal Transverse Mercator (UTM)
Latitude of Origin : 0° North
Central Meridian : 147° East (Zone 55)
Central Scale Factor : 0.9996
False Easting : 500000.000m
False Northing : 10000000.000m
Units : Metres

6.2 Differential GPS Reference Stations

Fugro's Differential GPS Reference Stations are currently defined in the ITRF2000 (Epoch 2005.25) datum and are shown in Table 6-2.

ITRF2000 (EPOCH 2005.25)				
Description	Site ID	Latitude	Longitude	Height (m)
Melbourne	385	37° 48' 29.0089" S	144° 57' 48.0282" E	82.061
Bathurst	336	33° 25' 46.8829" S	149° 34' 01.9679" E	756.657
Cobar	316	31° 29' 57.4351" S	145° 50' 20.3435" E	270.161

TABLE 6-2 : DGPS REFERENCE STATIONS

6.3 Project Coordinates and Tolerances

Project target coordinates and surface tolerance for Zane Grey-1 were supplied by the client and are shown in Table 6-3.

AGD84, AMG, CM 147°E			
Location	Easting (m)	Northing (m)	Tolerances
Zane Grey-1	586050.90	5729857.80	-

TABLE 6-3 : PROJECT DESIGN COORDINATES

7.0 EQUIPMENT AND PERSONNEL

7.1 Equipment Listing

Survey equipment used for the positioning of the *Ocean Patriot* was as follows:

Ocean Patriot

- 2 x Starfix Demodulators (1 Optus link, 1 APSat link)
- 2 x Trimble 4000 series GPS receivers
- 2 x Pentium IV computers, running Fugro's Starfix Seis navigation software suite (1 spare)
- 4 x 15" monitors (2 Seis, 1 Helm, 1 spare)
- 1 x SG Brown gyro compass
- 1 x Tokimex gyro compass (spare)
- 2 x Uninterruptible power supply units (UPS)
- 2 x Teledesign radio modem (1 spare)
- 1 x Theodolite, tripod and dark glass
- 1 x Printer

AHVs (complete system per vessel, plus one complete set of spares)

- 1 x Pentium III computers, running Starfix Seis (Remote)
- 1 x Monitor
- 1 x Starfix Spot DGPS receiver
- 1 x Fluxgate compass
- 1 x Teledesign radio modem
- 1 x Uninterruptible power supply unit (UPS)

All systems were provided complete with all necessary cabling, connectors, power supplies, antennae, accessories, manuals and consumables.

Refer to Figure 7-1 for an equipment flow diagram for the *Ocean Patriot* and Figure 7-2 for the equipment flow diagram for the AHVs.

7.2 Vessels

The vessels used for anchor handling and towing the *Ocean Patriot* were the *Pacific Wrangler* and the *Far Grip*. Refer to Figure 7-3, Figure 7-4 and Figure 7-5 for the vessel offset diagrams.

7.3 Personnel

Fugro personnel involved in the *Ocean Patriot* positioning operations were as follows:

R. Farrawell	Party Chief / Surveyor	21 – 30 January 2005
S. Bradley	Engineer	21 – 30 January 2005

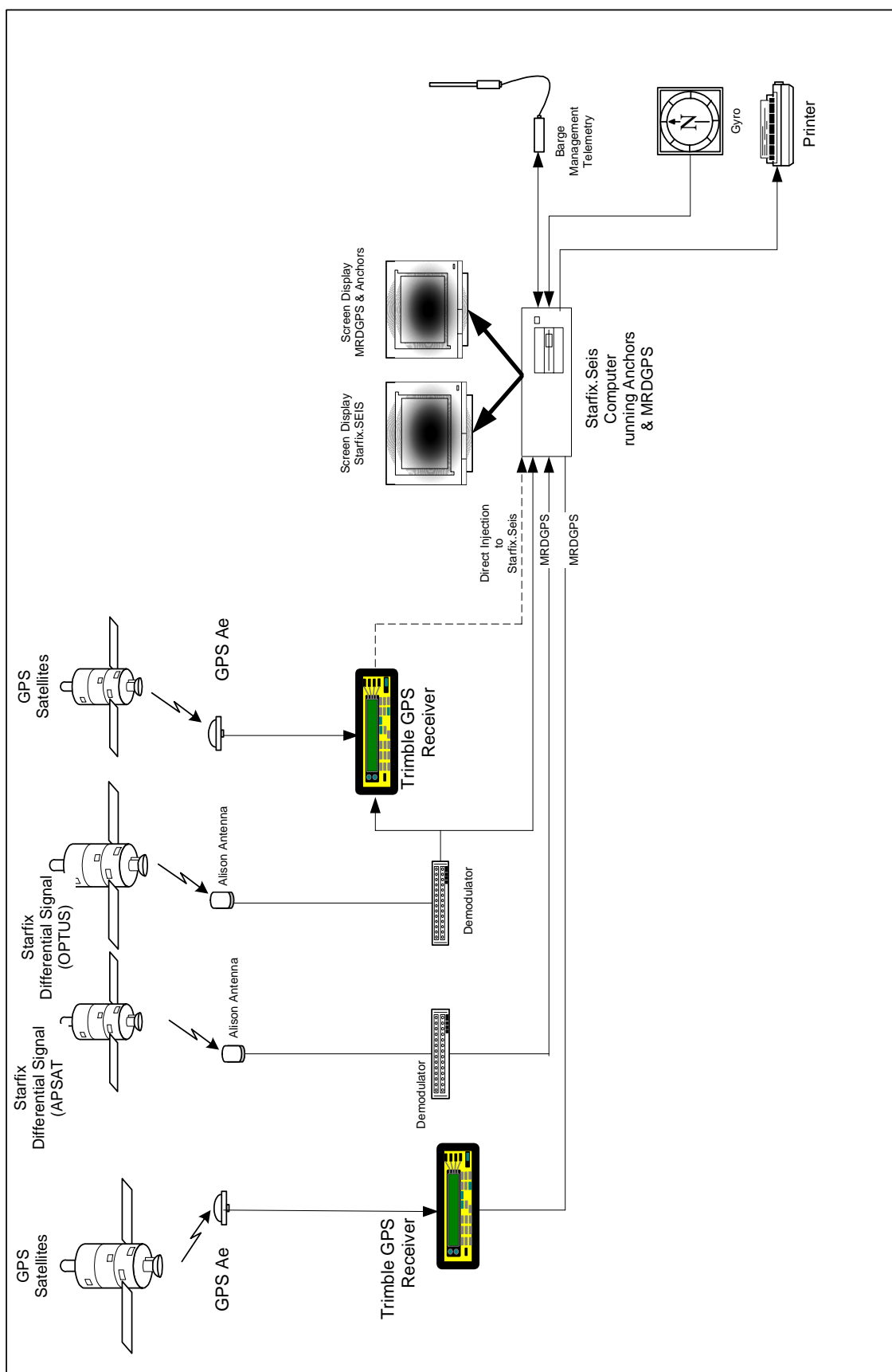


FIGURE 7-1 : EQUIPMENT FLOW DIAGRAM – MODU *OCEAN PATRIOT*

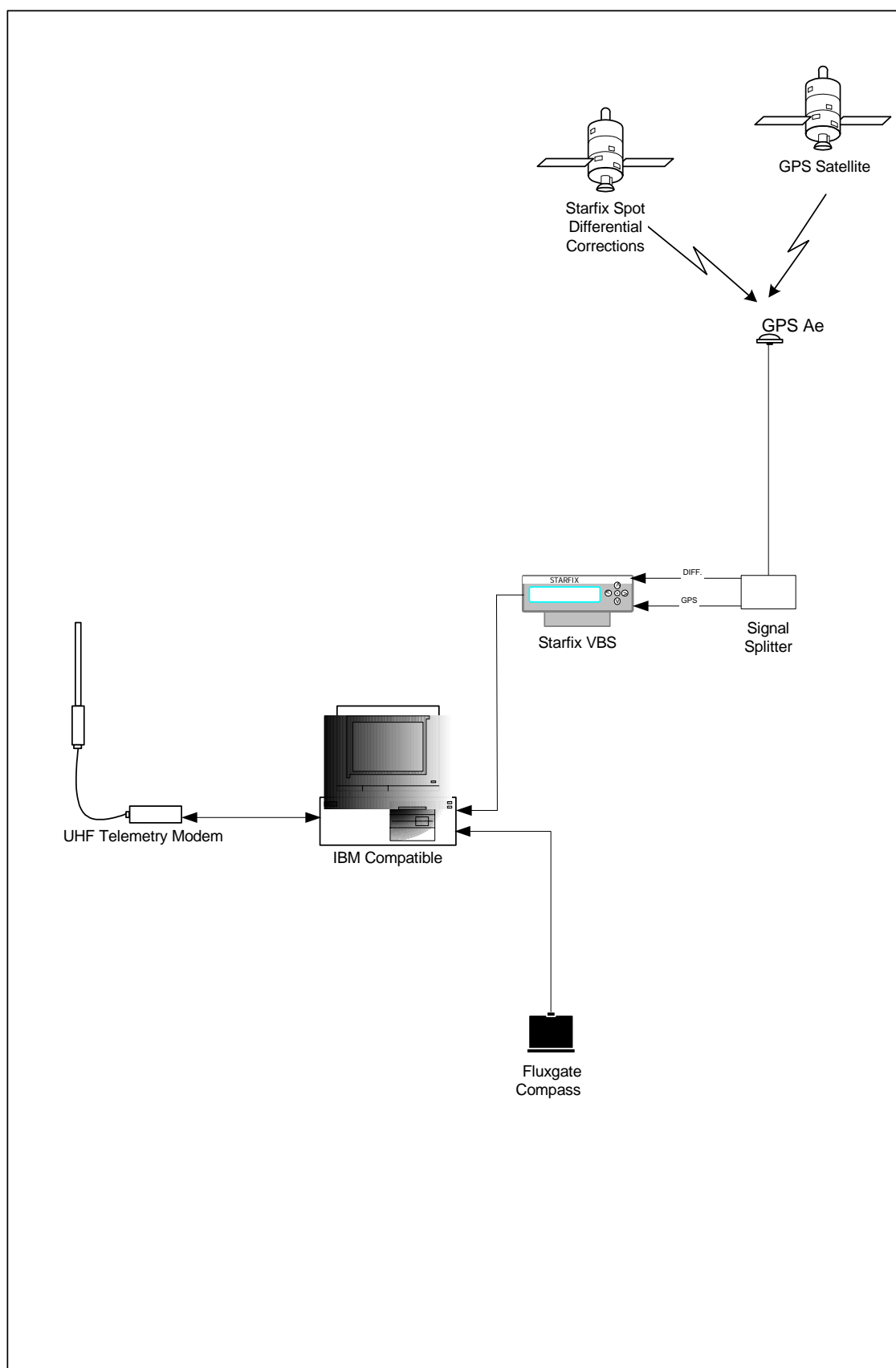
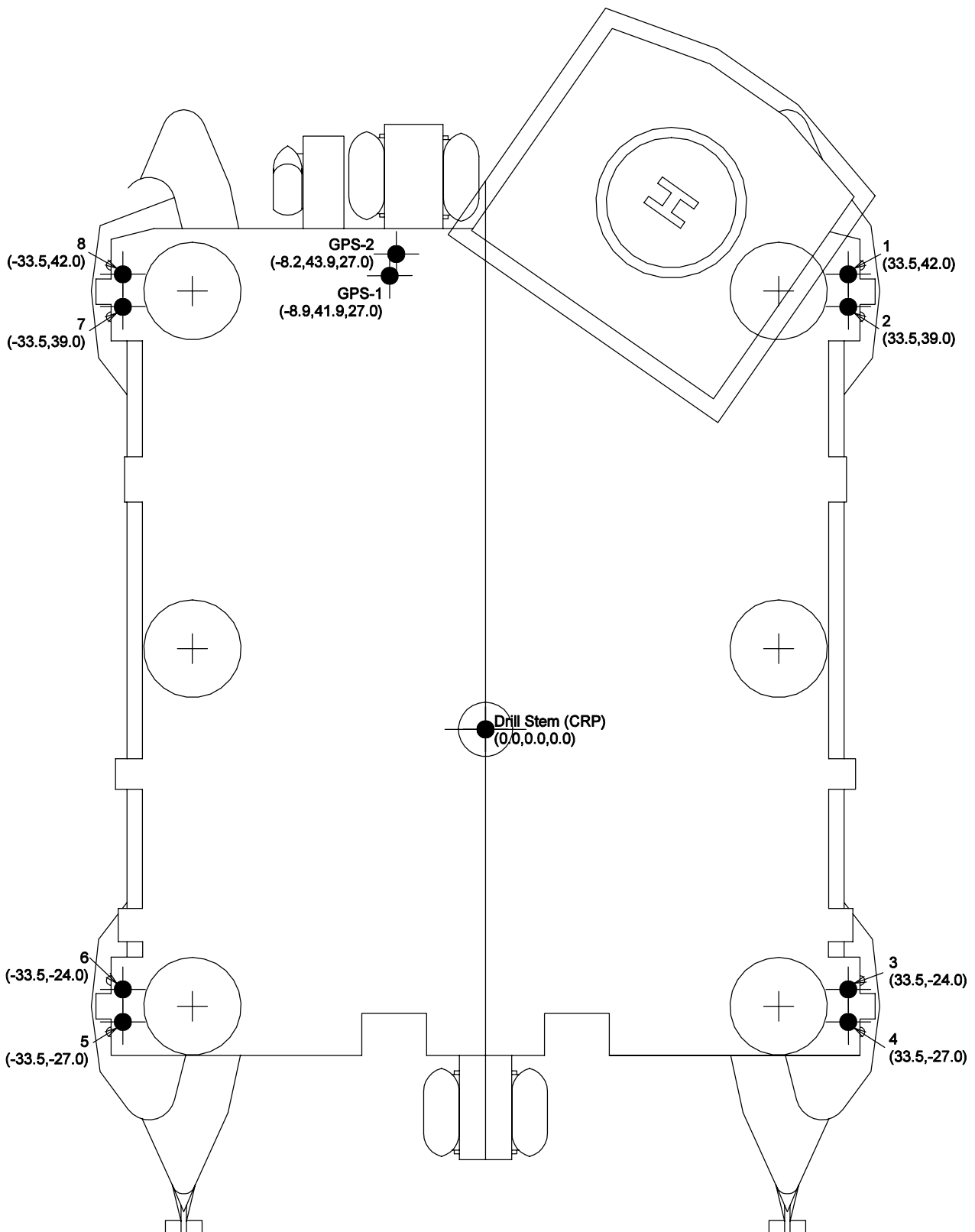


FIGURE 7-2 : EQUIPMENT FLOW DIAGRAM – AHVS



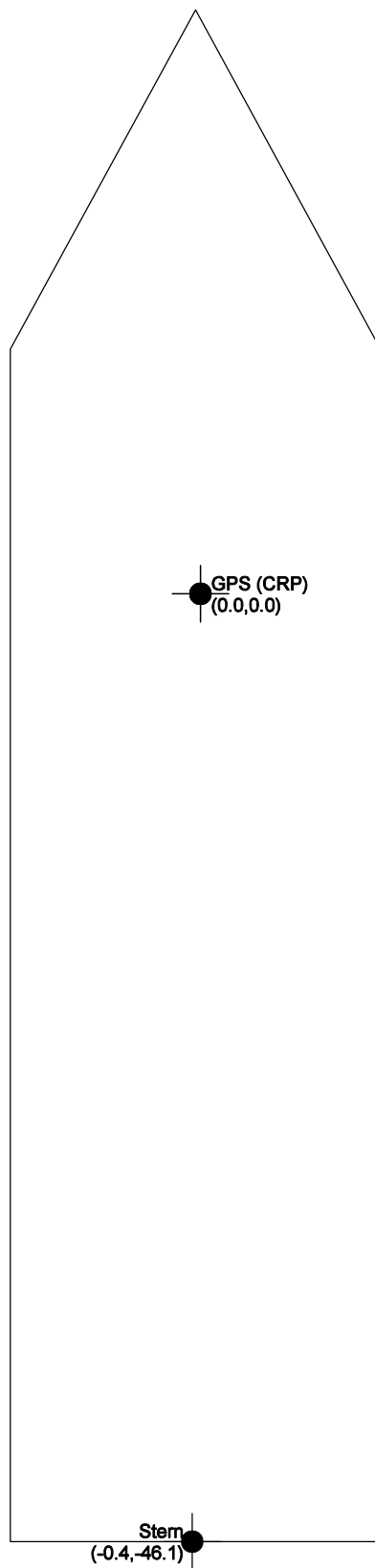
VESSEL OFFSET DIAGRAM – OCEAN PATRIOT

FIGURE 7-3



VESSEL OFFSET DIAGRAM – PACIFIC WRANGLER

FIGURE 7-4



VESSEL OFFSET DIAGRAM – FAR GRIP

FIGURE 7-5

8.0 CONCLUSION

The *Ocean Patriot* was successfully positioned at Zane Grey-1.

9.0 DISTRIBUTION

Copies of this report have been distributed as follows:

Bass Strait Oil Company Ltd	: 3 paper copies
	: 1 electronic copy

Fugro Survey Pty Ltd	: 1 paper copy
	: 1 electronic copy

APPENDIX A
DAILY OPERATIONS REPORTS

Approved by Dave Scott, Operations Manager – 08/05/01
Note – To ensure that this is the latest version check the Electronic Master File

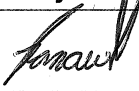

Approved by Dave Scott, Operations Manager – 08/05/01
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Note – To ensure that this is the latest version check the Electronic Master File

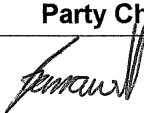

Approved by Dave Scott, Operations Manager – 08/05/01
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CLIENT: BSOC/LABRADOR		LOCATION: BASS STRAIT		DATE: 26JAN 05	
PROJECT: RIG MOVE – ZANE GREY-1		VESSEL: OCEAN PATRIOT		JOB NO: P0201	
FROM	TO	SUMMARY OF OPERATIONS			
0001		Personnel on Standby for Rig Move			
1130	1145	R. Farrawell attended morning meeting.			
1856		PCC Anchor 2 passed to Far Grip			
1907		PCC Anchor 6 passed to Pacific Wrangler			
1924		Anchor 6 off bottom			
2027		Anchor 6 PCC passed back.			
2037		PCC Anchor 7 passed to Pacific Wrangler			
2058		Anchor 2 PCC passed back			
2111		PCC 3 passed to Far Grip			
2135		Anchor 3 off bottom			
2205		PCC 7 passed back.			
2318		PCC 3 passed back			
2324		PCC 8 passed to Pacific Wrangler			
2355		Tow Bridle connected to Far Grip.			
RIG EQUIPMENT	NO.	AHT EQUIPMENT	NO.	PERSONNEL	TITLE
Starfix Seis	1	Starfix Seis	2	R. Farrawell	Surveyor / PC
Starfix Spot dGPS	2	Fluxgate Compass	2	S. Bradley	Engineer
Gyro Compass	1	Radio Modem	2		
Radio Modem	1	UPS	2		
UPS	1				
Theodolite	1				
Printer	1				
VEHICLES:					
CONSUMABLES:					
ACCOMMODATION:					
AUTHORISED CONTRACT CHANGES / COMMENTS:					
Party Chief Signature:		Client Representative Signature:		D O R Number	
				P0201-06	

Fugro Marine Division
FSHY01-1
DAILY OPERATIONS REPORT

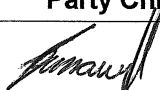
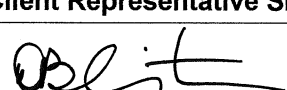


CLIENT: BSOC/LABRADOR		LOCATION: BASS STRAIT		DATE: 27 JAN 05	
PROJECT: RIG MOVE – ZANE GREY-1		VESSEL: OCEAN PATRIOT		JOB NO: P0201	
FROM	TO	SUMMARY OF OPERATIONS			
0055		#8 PCC returned to rig.			
0105		#4 PCC passed to Pacific Wrangler.			
0216		#4 PCC returned to rig.			
0235		#1 PCC passed to Pacific Wrangler			
0310		Rig commenced heaving in on #5			
0347		#1 PCC passed to rig.			
0406		#5 PCC passed to Pacific Wrangler.			
0454		#5 Bolstered			
0500		Start Of Tow			
1531		#5 PCC passed to Pacific Wrangler			
1655		#5 on bottom E584952.88, N5729589.30			
1737		#5 PCC passed back o rig.			
1800		#1 PCC passed to Pacific Wrangler			
1907		#1 anchor on bottom E586984.19, N5730112.81			
1928		#1 PCC passed back to rig			
1947		#4 PCC passed to Pacific Wrangler			
2015		#4 on bottom E585791.51, N5728794.61			
RIG EQUIPMENT	NO.	AHT EQUIPMENT	NO.	PERSONNEL	TITLE
Starfix Seis	1	Starfix Seis	2	R. Farrawell	Surveyor / PC
Starfix Spot dGPS	2	Fluxgate Compass	2	S. Bradley	Engineer
Gyro Compass	1	Radio Modem	2		
Radio Modem	1	UPS	2		
UPS	1				
Theodolite	1				
Printer	1				
VEHICLES:					
CONSUMABLES:					
ACCOMMODATION:					
AUTHORISED CONTRACT CHANGES / COMMENTS:					
Party Chief Signature:		Client Representative Signature:		D O R Number	
				P0201-07	

Approved by Dave Scott, Operations Manager – 08/05/01
Note – To ensure that this is the latest version check the Electronic Master File

Fugro Marine Division
FSHY01-1
DAILY OPERATIONS REPORT



CLIENT: BSOC/LABRADOR		LOCATION: BASS STRAIT		DATE: 28JAN 05	
PROJECT: RIG MOVE – ZANE GREY-1		VESSEL: OCEAN PATRIOT		JOB NO: P0201	
FROM	TO	SUMMARY OF OPERATIONS			
		#6 PCC passed to Pacific Wrangler			
0024		#3 PCC passed back to the rig			
0036		#2 PCC passed to Far Grip			
0039		#6 on bottom E585030.38, N5730080.59			
0103		#6 PCC passed back to the rig			
0135		#2 on bottom E587106.67, N5729584.32			
0211		#2 PCC passed back to rig.			
0415		All anchors pre tensioned to 200t Rig in position.			
0415		Waiting for rig to re-ballast and cement 30in casing before conducting final fix.			
1155		S. Bradley transferred to Pacific Wrangler			
1645		S. Bradley returned to Rig.			
1830		Testing Tokimec gyro from Pacific Wrangler.			
RIG EQUIPMENT	NO.	AHT EQUIPMENT	NO.	PERSONNEL	TITLE
Starfix Seis	1	Starfix Seis	2	R. Farrarwell	Surveyor / PC
Starfix Spot dGPS	2	Fluxgate Compass	2	S. Bradley	Engineer
Gyro Compass	1	Radio Modem	2		
Radio Modem	1	UPS	2		
UPS	1				
Theodolite	1				
Printer	1				
VEHICLES:					
CONSUMABLES:					
ACCOMMODATION:					
AUTHORISED CONTRACT CHANGES / COMMENTS:					
Party Chief Signature:		Client Representative Signature:		D O R Number	
				P0201-09	

Approved by Dave Scott, Operations Manager – 08/05/01
Note – To ensure that this is the latest version check the Electronic Master File

[illegible]

APPENDIX B
FINAL POSITIONING REPORT

RIG POSITION FIELD REPORT

Zane Grey-1



Client : BSOC/Labrador

Job Number : P0201

Rig : Ocean Patriot

Date: 30-Jan-05

Project : Zane Grey-1 Rig Positioning, Permit Vic/P-42, Victoria

Attention : C.Wilson

BSOC Company Man

The surface location of the drill stem on the Ocean Patriot was derived from 60 minutes of observations of the Primary Differential GPS data, between 0518 hrs and 0618 hrs on completion of all anchor pre-tensioning and ballasting down operations.

The results of the observations are as follows:

Geographical Coordinates			Grid Coordinates	
Latitude	38 ° 34 '	31.64 " South	Easting	586049.89
Longitude	147 ° 59 '	16.27 " East	Northing	5729856.42

The drill stem position is **1.7 m** at a bearing of **216.2 °** Grid from the design location.

The Client supplied design location for Zane Grey 1

Geographical Coordinates			Grid Coordinates	
Latitude	38 ° 34 '	31.60 " South	Easting	586050.90
Longitude	147 ° 59 '	16.31 " East	Northing	5729857.80

The Ocean Patriot's rig heading, derived from the mean of 60 minutes observation of the gyro heading is:

43.20 ° True 43.81 ° Grid

All coordinates in this field report are quoted in the following coordinate system:

Datum :	AGD 84	Projection :	MGA
Spheroid :	AMG	Zone (Central Meridian)	55 147 ° East

The approximate positions of the rig anchors corrected for catenary are as follows:

Anchor	Easting	Northing	Azimuth(°)
1	586973	5730119	73.1 °
2	587101	5729598	104.3 °
3	586326	5728806	164.7 °
4	585806	5728801	193.4 °
5	584965	5729580	254.3 °
6	585038	5730069	281.3 °
7	585769	5730857	342.6 °
8	586266	5730861	11.8 °

Party Chief/Surveyor:

R. Farrawell

Client Representative:

D. Errington

APPENDIX C
DGPS AND GYRO CHECKS

RIG POSITIONING

DGPS CHECK LIST (PRE RIG MOVE)



Client : BSOC/Labrador

Job Number :

P0201

Rig : Ocean Patriot

Date:

23-Jan-05

Project : Zane Gray-1 Rig Positioning, Permit Vic/P-42, Victoria

1) ESTABLISHED WELL COORDINATES

The surface location of the drill stem on the Ocean Patriot was observed for 15 minutes between 23:59 hrs and 00:15 hours on 23 January 2005 to verify the accuracy of the DGPS system against the established well coordinates.

	Easting	Northing
Established Well Coordinates	613159.11	5775325.56
Observed Coordinates	613189.39	5775324.27
Differences	-30.3	1.3

Ensure agreement OK(?) Y/N

If No, Check and ensure that rig has not moved off location.

2) PRIMARY/SECONDARY NAV SYSTEMS

From the data logged above, compare the observed coordinates for both Primary and Secondary navigation systems.

	Easting	Northing
Primary Navigation	613189.39	5775324.27
Secondary Navigation	613188.04	5775324.54
Differences	1.34	-0.27

Ensure agreement OK(?) Y/N

If No, Check antenna offsets and gyro calibration.

Party Chief/Surveyor:

R. Farrawell

Client Representative :

D. Errington

GYRO COMPASS CALIBRATION - CALCULATION SUMMARY



Client : BSOC/Labrador

Job Number : P0201

Rig : Ocean Patriot

Date: 23-Jan-05

Project : Zane Gray-1 Rig Positioning, Permit Vic/P-42, Victoria

Deg	Min	Sec
180	0	0

Correction Angle (RO to Lubberline)

Obs. No.	Date	UTC	Instrument Position						Calculated Sun Azimuth at UTC				Observed Direction to Sun				Calc'd Vessel Hdg	Obs'd Vessel Hdg	Sun Semi Diameter	(C-O) Degrees
			Latitude			Longitude			UTC											
			Deg	Min	Sec	Deg	Min	Sec	Deg	Min	Sec	Dec. Deg	Deg	Min	Sec	Dec. Deg				
1	22-Jan-05	8:35:00	-38	9	39	148	17	37	251	57	25	251.957	28	53	58	28.899	43.058	42.17	0.0000	0.89
2	22-Jan-05	8:37:00	-38	9	39	148	17	37	251	40	2	251.667	28	43	37	28.727	42.940	42.17	0.0000	0.77
3	22-Jan-05	8:37:45	-38	9	39	148	17	37	251	28	36	251.558	28	36	59	28.616	42.942	42.33	0.0000	0.61
4	22-Jan-05	8:38:05	-38	9	39	148	17	37	251	28	40	251.510	28	40	23	28.673	42.837	42.00	0.0000	0.84
5	22-Jan-05	8:38:35	-38	9	39	148	17	37	251	28	27	251.437	28	27	29	28.458	42.979	42.33	0.0000	0.65
6	22-Jan-05	8:38:55	-38	9	39	148	17	37	251	28	29	251.389	28	29	57	28.499	42.890	42.17	0.0000	0.72
7	22-Jan-05	8:39:20	-38	9	39	148	17	37	251	28	25	251.328	28	25	57	28.433	42.896	42.17	0.0000	0.73
8	22-Jan-05	8:39:40	-38	9	39	148	17	37	251	28	23	251.280	28	23	32	28.392	42.888	42.33	0.0000	0.56
9	22-Jan-05	8:40:00	-38	9	39	148	17	37	251	28	23	251.231	28	23	28	28.391	42.840	42.17	0.0000	0.67
10	22-Jan-05	8:40:20	-38	9	39	148	17	37	251	28	18	251.183	28	18	26	28.307	42.876	42.17	0.0000	0.71
11	22-Jan-05	8:40:40	-39	9	39	148	17	37	251	28	9	251.267	28	9	24	28.157	43.110	42.3	0.0000	0.78
12	22-Jan-05	8:41:10	-39	9	39	148	17	37	251	28	6	251.192	28	6	48	28.113	43.079	42.2	0.0000	0.91
13	22-Jan-05	8:41:30	-39	9	39	148	17	37	251	27	58	251.143	27	58	44	27.979	43.164	42.3	0.0000	0.83

Surveyor : R. Farrawell

Client Rep : D. Errington

Required Starfix.Seis Gyro Correction =

NOTE:Gyro correction of +0.00°
Entered During calibration

Hence new correction 0.74

Mean	0.74
Std. Deviation	0.11
Maximum	0.91
Minimum	0.56
Range	0.35

RIG POSITIONING

GEODESY AND COORDINATE CHECK LIST



Client : BSOC/Labrador
Rig : Ocean Patriot

Job Number : P0201
Date : 30/January/2005

Project : Zane Grey-1 Rig Positioning, Permit Vic/P-42, Victoria

1. CONFIRMATION OF PROPOSED RIG COORDINATES and HEADING.

Well Name Zane Grey-1 Ensure agreement with Client onsite prior to any positioning
Well Location - Latitude 38 34 31.60 S Operations. OK (?) Y / N.
Well Location - Longitude 147 59 16.31 E
Rig Heading (True) 45 ° T

2. GEODETIC PARAMETERS (WGS84 to LOCAL DATUM)

DATUM: Dx 117.7474 Ensure agreement with Client onsite prior to positioning Operations.
(WGS84 to Dy 51.4751 OK (?) Y / N.
Local Datum) Dz -139.1123
Rx 0.306452
Projection: Ry 0.456052
Rz 0.292040
Ds 0.19598 ppm
UTM Zone 55
Central Meridian 147 ° East

3. CHECK TRANSFORMATION OF SITE COORDINATES.

Well Location - Easting 586050.9 Ensure agreement with PCNav / Starfix.Seis. OK (?) Y / N
Well Location - Northing 5729857.8 If not, CHECK and RECALC.
Convergence at Location 0.62
Rig Heading (° Grid) 45.62

4. MEAS. ANT. OFFSETS from ANT. TO D/STEM (Rel. to Datum) NAV #1 SYSTEM NAV #2 SYSTEM

(Measure two (2) separate directions, verifying closure.)

	NAV #1 SYSTEM	NAV #2 SYSTEM
Delta X(m)	-8.9	-8.2
Delta Y(m)	41.9	43.9
Angle between Rig Centreline and Antenna(s) (Grid)	348.008	349.4
Distance between Drill Stem and Antenna(s)	42.83	44.66

5. MANUAL COORDINATE VERIFICATION FOR ANTENNAS NAV #1 SYSTEM NAV #2 SYSTEM

	NAV #1 SYSTEM	NAV #2 SYSTEM
Proposed Drill Stem Position Easting	586050.9	586050.9
Northing	5729857.8	5729857.8
Drill Stem to Antenna Proposed Hdg (G)	45.62	45.62
Brg (G) = Prop. Hdg. + Angle btwn centreline and antenna	33.62	35.04
Distance (m)	42.83	44.66
Calculated Antenna Easting	586074.62	586076.54
Coordinates (Local) Northing	5729893.47	5729894.37
Latitude	38 34 30.4301 S	38 34 30.4003 S
Longitude	147 59 17.2711 E	147 59 17.3500 E

	NAV #1 SYSTEM	NAV #2 SYSTEM
Calculated Proposed Antenna Coords (WGS 84) Latitude	38 34 24.8672 S	38 34 24.8374 S
Longitude	147 59 21.9304 E	147 59 22.0093 E

Surveyor :

R. Farrawell

R. Farrawell

Client Rep

D. Errington

D. Errington

Date : 26 Jan 2005

6. POST RIG MOVE - OBSERVED ANTENNA COORD

	NAV.SYS #1	NAV.SYS #2
Observed WGS84 Antenna Positions Latitude	38° 34' -38.5739	38° 34' -38.5739
Longitude	147° 59' 147.9891	147° 59' 147.9891

Ensure agreement between calculated and observed coordinates. If NO check calcs., antenna offsets. OK (?) Y / N

Surveyor :

R. Farrawell

R. Farrawell

Client Rep

D. Errington

D. Errington

Date : 30 Jan 2005

APPENDIX 18

RIG POSITIONING QA REPORT

(By RPS Hydrosearch)

SUPERVISION REPORT
FOR
OCEAN PATRIOT RIG MOVE
TO
ZANE GREY 1
BY
FUGRO SURVEY Pty Ltd
FOR
LABRADOR PETRO MANAGEMENT

22 TO 30 JANUARY 2005

Report No. : RPSH 05/011/50

Author : D.B. Errington

Approved :

Date : 31/01/2005

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TABLES

TABLE 1	DGPS Verification
TABLE 2	Comparison of DGPS Navigation Systems

1. SUMMARY INFORMATION

1.1. SPECIFICATIONS

Client:	Labrador Petro Management
Project Type:	Rig Move
Well Location:	Zane Grey 1
Permit:	Vic/P42
Location:	Bass Strait, Victoria
Type of Survey:	Rig Positioning Services
Survey Contractor:	Fugro Survey Pty Ltd
Rig:	Ocean Patriot (Semi-submersible)
Anchor Handlers	Pacific Wrangler, Far Grip
Period of services:	22 nd January 2004 to 30 th January 2004
Surface Positioning:	Starfix HP Differential GPS
Navigation System:	StarfixSeis Navigation system and Gyro
Tug Tracking:	Wombat
Safety:	Acceptable performance during survey operations
Time Zone:	Eastern Summer Standard Time (UTC+11hrs)

1.2. SUMMARY RESULTS

The Fugro survey team mobilised to the OCEAN PATRIOT on the 22nd January for the move from Grayling 1 well site to the Zane Grey 1 well. Rig survey equipment was set to work on arrival.

A significant amount of time, 3 days, was spent on standby, waiting for the Grayling well abandonment to be completed.

The Far Grip's navigation system was not configured correctly, requiring a visit by the Fugro Engineer to rectify.

Anchor recovery operations commenced at 1856 on 26th January.

The tow commenced at 0500 on 27th January, with the Far Grip towing on the forward bridle.

Total transit was 39nm; an average speed of 3.3 knots was achieved.

Anchoring operations continued until 0416 on 28th January. The final fix was completed at 0618 on 30th January, after the 30" conductor was set.

The rig was positioned 1.7m, 216° from planned.

All survey operations were carried out safely.

2. INTRODUCTION

2.1. RESULTS

The rig move was carried out in accordance with procedures and within specifications.

2.2. FINAL POSITION

The following final surface position was calculated from DGPS observations onboard the rig between 0518 and 0618 hrs on the 30th January 2005, after the 30" conductor had been set in place.

Antenna offsets and corrected rig heading were applied to the DGPS antenna position to obtain the drill stem (survey datum) coordinates, as follows:

Datum: AGD 84
Latitude: 38° 34' 31.64" South
Longitude: 147° 59' 16.27" East

Projection: MGA CM = 147° East
Easting: 586 049.89 mE
Northing: 5 729 856.42 mN
Rig Heading: 043.2° (True)

The final drill stem position was 1.7 m at 216 ° (True) from the planned location, and was within an acceptable positioning tolerance.

Assumed depth at location (from project procedures) was 73m LAT.

3. GEODETIC PARAMETERS

3.1. LOCAL SPHEROID

The local datum was used as the reference datum for all navigation and positioning on this project:

Datum:	Australian Geodetic Datum 1984 (AGD84)
Spheroid:	Australian National Spheroid
Inverse Flattening:	298.25
Semi-major Axis:	6,378,160.00

3.2. WGS84 SPHEROID (ITRF2000 EPOCH 2005.50)

The DGPS uses the WGS84 Datum the definition of which is as follows:

Datum:	World Geodetic System 1984
Spheroid:	WGS 84
Inverse Flattening (1/f):	298.257 223 563
Semi-major Axis:	6,378,137.0m

3.3. PROJECTION PARAMETERS

The following projection was used for grid coordinates:

Projection:	Australian Map Grid
Type:	Transverse Mercator
False Easting:	500,000m
False Northing:	10,000,000m
Origin of Latitude:	0°
Central Meridian:	147° East (Zone 55)
Scale factor at CM:	0.9996

3.4. DATUM TRANSFORMATION PARAMETERS

The following transformation was applied DGPS WGS84 (ITRF2000 Epoch 2005.50) position to compute AGD84 coordinates.

DX	=	+117.7474m
DY	=	+51.4751m

DZ = -139.1123m
rx = 0.306452"
ry = 0.456052"
rz = 0.292040"
Scale = 0.195976 ppm

3.5. VERTICAL DATUM AND TIDAL LEVELS

The tidal datum used for this location was LAT. No tide or current predictions were provided.

4. EQUIPMENT

4.1. RIG POSITIONING & NAVIGATION SYSTEM

4.1.1. System Description

The surface positioning system used throughout this project was Differential Global Positioning System (DGPS). Fugro operates two satellite based differential broadcast systems both of which were installed on the rig. The primary differential system was the Fugro Starfix MRDGPS satellite differential system.

Differential corrections and raw GPS signals were interfaced into the Fugro DGPS QC system - MRDGPS. Network-adjusted solutions were configured using corrections via either of the differential communications systems. The Network-adjusted solution used differential data from Melbourne, Bathurst and Cobar.

In addition to the Network MRDGPS position, a second Trimble was installed with corrections from Melbourne directly injected into the GPS unit.

The navigation software, Starfix Seis version 6.1, was installed and operated on the same PC as the MRDGPS PC. Starfix Seis is the hub of survey activities and provides on-line navigation of the rig, track guidance, anchor assignment and AHV navigation management. Fugro run a dual graphics card in the Starfix computer.

4.1.2. System Calibration

Fugro observed a check fix whilst the rig at the Grayling A well site, approximately 40m away from the Grayling 1 location; the check fix comprised a 30-minute observation of DGPS data.

The following table indicates the difference between the Grayling 1 published position and the check fix results:

	Difference (m)
Easting	0.0
Northing	-6.0

Table 1 - Summary of DGPS Verification Fix (GDA 94)

Check measurements of the antenna offsets from the centre of the moonpool were conducted (see Appendix 1) and the results confirmed the offsets previously adopted.

Navigation data was logged to compare Primary and Secondary Nav systems, the difference being:

	Difference (m)
Easting	-1.92
Northing	-0.9

Table 2 – Comparison of DGPS Navigation Systems

4.2. GYRO COMPASS

4.2.1. System Description

An SG Brown SGB 1000M compass situated in the wheelhouse was interfaced to the Starfix Seis navigation computer. A backup gyro was onboard.

4.2.2. Gyro Calibration

Two gyro calibrations were carried out before anchor recovery operations commenced, results were consistent, the resultant C-O was $+0.74^{\circ}$.

4.2.3. Gyro Performance

The gyro performed well for the duration of the rig move.

4.3. TUG TRACKING

4.3.1. System Description

The Fugro proprietary system Wombat was utilised for tracking of the AHV's. The system consists of a navigation (DGPS) and radio modem, with associated computer and Wombat software on the AHV.

4.3.2. System Performance

On system start up, the Far Grip was not utilising DGPS. This problem was traced to incorrect configuration of the Wombat software and rectified on 25th January.

The gyro on Pacific Wrangler appeared to fail during the anchoring phase of the operation. The unit was replaced with a KVH Fluxgate compass on 28th January.

4.4. SURVEY OPERATIONS

The Fugro Survey Team and BSOC QA/QC Surveyor were mobilised to the rig on the 22nd January via a Helicopter from Essendon Airport.

Safety Inductions, Equipment checks and review of the rig move procedures were completed soon after joining the Ocean Patriot.

Anchor recovery operations commenced at 18:56 on 26th January. All anchors were off the bottom by 0430 on 27th January, and the tow commenced at 0500. Anchor recovery was delayed because of problems with well abandonment at Grayling 1.

The Far Grip on the forward tow bridle undertook the tow at towing draft. Total tow distance was 39nm, and an average speed of 3.3 knots achieved.

The first anchor, #5, was deployed on the seabed at 1655 on 27th January. Far Grip remained on the tow bridle while the Pacific Wrangler deployed Anchors 1, 4, 5 and 8.

Far Grip was released from the tow at 2245, and laid Anchors # 2 and 3 while the Pacific Wrangler deployed #6 and #7 anchors.

The rig manoeuvred over Zane Grey 1 location and completed storm tension testing at 0416 on 28th January.

A final fix was observed for 60 minutes from 0518 on 30th January, following all the prerequisite QC checks.

The BSOC Survey QC Representatives and the Fugro Survey Team were demobilised to Essendon Airport on the 31st January.

Several independent quality control checks were conducted throughout the rig move. The checks ensured that all positioning of the rig was correct and as per the contractual procedures.

4.5. KEY PERSONNEL

The following survey personnel were involved with the project;

Name	On Hire	Title
Dave Errington	22 – 30 Jan 2005	RPS QC Surveyor
Rod Farrawell	22 – 30 Jan 2005	Fugro Surveyor
Steve Bradley	22 – 30 Jan 2005	Fugro Engineer

4.6. QC SUPERVISION

Survey QC of the project involved working with the Fugro surveyors and the Atwood personnel to ensure that all procedural, and safety specifications are met during the rig move. This included the following independent checks were carried out for this project:

- Intended Zane Grey location check
- Checks and issue of co-ordinates (including structures and existing wellheads if applicable)
- Rig Move Procedure checks and verification
- Intended route waypoints and approach lines
- Confirmation of correct geodesy
- DGPS system set-up
- Vessel and Rig Shape files
- Anchor fairlead offset check
- Antenna offset checks and confirmation
- Equipment configuration
- Intended anchor locations
- Catenary calculations and checks
- Gyro calibration computation check
- Final location verification and issue of co-ordinates to BSOC Company Man

5. PERFORMANCE APPRAISAL

5.1. SURVEY CONTRACTOR PERFORMANCE

The Fugro personnel performed adequately. The lack of StarfixSeis competence was a cause of concern, not inspiring a great deal of confidence. Both surveyor and engineer require further StarfixSeis training.

All operations were carried out safely and met the BSOC safety requirements.

5.2. GYRO COMPASS

Two gyro calibrations were carried out before anchor recovery operations commenced, results were consistent, the resultant C-O was $+0.74^{\circ}$.

5.3. POSITIONING

The DGPS system performed well throughout the rig move and no issues were raised with regard to the performance of the DGPS or the StarfixSeis navigation software system.

5.4. BARGE MANAGEMENT

The barge management system WOMBAT was used for tug tracking. The system performed well.

6. CONCLUSIONS AND RECOMMENDATIONS

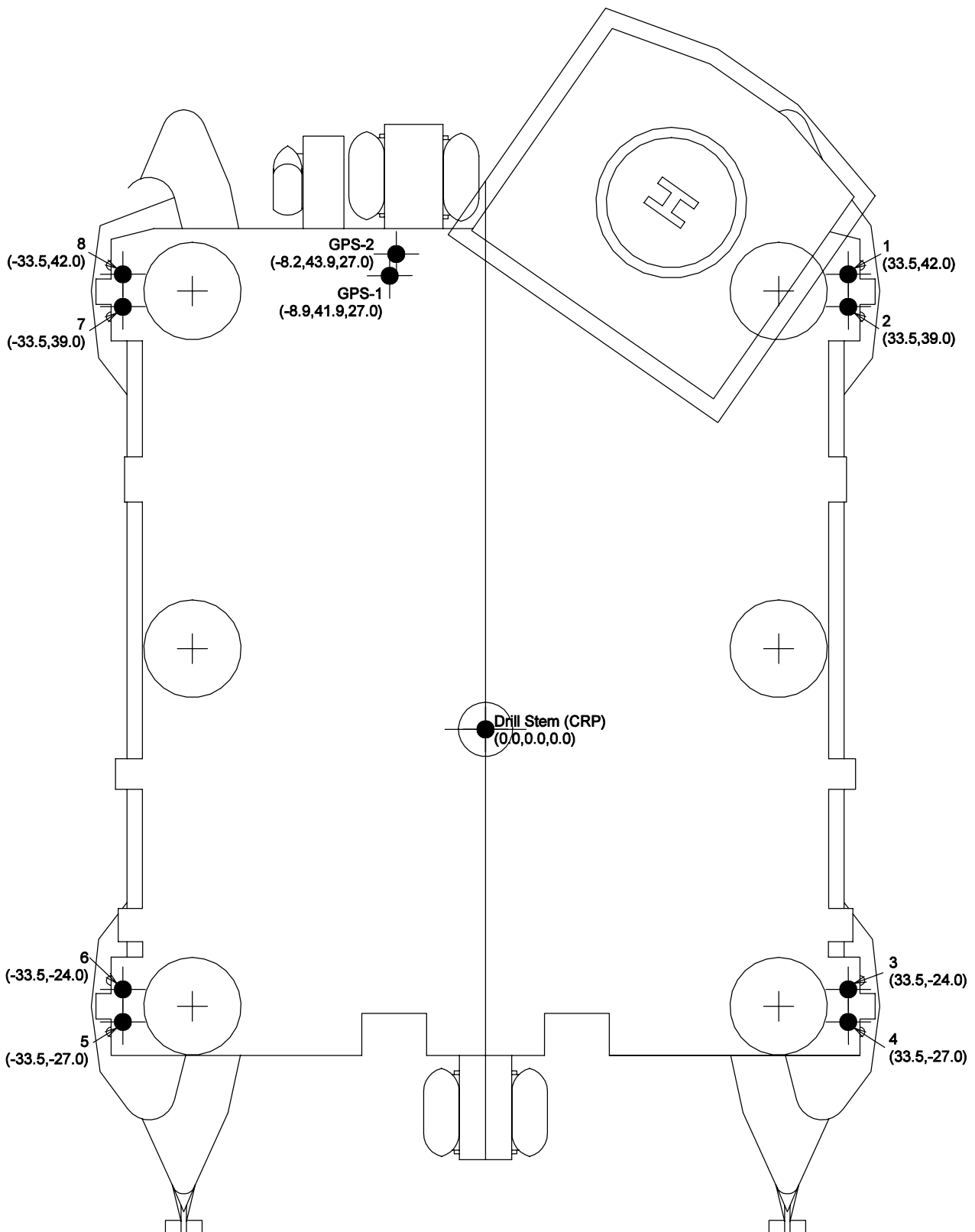
Some shortcomings in personnel performance were noted, Farrawell and Bradley were not fully competent Seis operators. The Pacific Wrangler gyro was replaced on completion of the move. A spare unit needs to be mobilised before the next move.

All necessary safety meetings and drills were attended.

APPENDICES

APPENDIX 1

Ocean Patriot Offset Diagram



VESSEL OFFSET DIAGRAM – OCEAN PATRIOT

FIGURE 7-3

APPENIDX 2

Diary Of Events

22 January 2005

16:10	Fugro Survey personnel join Ocean Patriot
16:30	Induction
16:45	Nav equipment started
18:30	All systems operational
19:30	Gyro calibration
20:30	On Standby – well abandonment

23 January 2005

00:00	On Standby – well abandonment
10:30	Fire drill
11:00	Abandon Barge Drill
13:00	General Safety Meeting

24 January 2005

00:00	On Standby – well abandonment
-------	-------------------------------

25 January 2005

00:00	On Standby – well abandonment
10:20	Fugro Engineer to Far Grip
10:27	Far Grip navigation operational
11:28	Pre rig Move Meeting
12:35	Fugro Engineer return onboard

26 January 2005

00:00	On Standby – well abandonment
18:56	Commenced anchor recovery

27 January 2005

05:00	All anchors recovered – under tow. Rig handed over to BSOC
15:31	#5 PCC to PW
16:10	Nav failure Ocean Patriot
16:12	Nav operational
16:55	#5 on bottom
17:06	Hold on #5 winch
17:37	#5 PCC to rig
18:00	#1 PCC to Pacific Wrangler
19:07	#1 on bottom
19:28	#1 PCC to rig
19:47	#4 PCC to Pacific Wrangler
20:15	#4 on bottom
20:37	#4 PCC to rig
20:55	#8 PCC to Pacific Wrangler
21:20	#8 on bottom
21:37	#8 PCC to rig
22:45	Far Grip off Tow Bridle
22:45	X Tensioning on #1- #5, #4 - #8 Completed
22:56	#7 PCC to Pacific Wrangler
23:07	#3 PCC to Far Grip
23:44	#3 on bottom

23:44 #7 on bottom

28 January 2005

00:10 #7 PCC to rig
00:15 #6 PCC to Pacific Wrangler
00:24 #3 PCC to rig
00:36 #2 PCC to Far Grip
00:39 #6 on bottom
01:03 #6 PCC to rig
01:35 #2 on bottom
01:50 Commence rig crawl
02:11 #2 PCC to rig
04:16 Complete rig crawl

29 January 2005

00:00 On standby

30 January 2005

05:18 Commence Final Fix
06:18 Complete Final Fix
10:10 QC Surveyor and Fugro staff depart Ocean Patriot

APPENDIX 3

Configuration

28/01/2005 12:03:01 LOC

*** FUGRO SURVEY STARFIX.SEIS ***

Header : Project Name : Zane Grey
Project Number : P0201
Project Description : Rig Move
Project Location : Bass Strait
Client : BSOC/Labrador
Client Representative : D. Errington
Client Reference Number :
Geophysical Contractor : Fugro
Positioning Contractor : Fugro
Positioning Processing Contractor: Fugro
Setup By : R. Farrawell & S. Bradley
On : 28/01/2005 10:00:48 LOC
Time Source : 9 GPS Raw Data Trimble
Time Offset : 11:00 (Using LOC)
Vessel : Ocean Patriot

Files Runline : C:\Fugro_Projects\P0201-Zane Grey-
1\SeisFiles\Runline\P0201.srn
Centrelines : (None)
Database : C:\Fugro_Projects\P0165_Grayling-
1_Apache_Ocean_Patriot\SeisFiles\Database\Structures\GDA94
CM147\gda94_cm147_struct.dgn
CAD : C:\Fugro_Projects\P0165_Grayling-
1_Apache_Ocean_Patriot\SeisFiles\Database\Structures\GDA94 CM147\gda94_cm147.dgn
Waypoint : C:\Fugro_Projects\P0201-Zane Grey-
1\SeisFiles\Waypoint\P0201.swy

Logging: Directory : C:\Fugro_Projects\P0201-Zane Grey-
1\Logging\NonSession\SEIS\

Fixing : Mode : Time
Start Mode : Manual
Stop Mode : Manual
Fix Devices :
Auto-Fix : SEIS
Manual : SEIS
External : (None)
Offset : (None)
MOB : (None)
Fix Interval : 5.000s
Reset at SOL : No
Next Fix No. : 56
Fix Increment : 1
Start FFID : 56
Start Man. Fix: 1
Early Start : 10s
Logging Start : 10s

Datum 1: Datum : AGD84_Australia_ICSM-ITRF2005.50Australian National
Spheroid : Australian National
SemiMajor Axis: 6378160.000
1/Flattening : 298.2500000000
Eccentricity^2: 0.006694541854588

Projection : Transverse Mercator (UTM)
Grid Name :
Lat. Origin : 0d00'00.0000"N
Lon. Origin : 147d00'00.0000"E
False East : 500000.000m
False North : 10000000.000m
Scale Factor : 0.9996
Convergence : Australia/New Zealand

Datum 2: Datum : WGS 84
Spheroid : WGS 84
SemiMajor Axis: 6378137.000
1/Flattening : 298.2572235630
Eccentricity^2: 0.006694379990141

Datum2>1:Parameters : From WGS84 to AGD84_Australia_ICSM-
ITRF2005.50Australian National
DX : 117.7470m RX : 0.3065"
DY : 51.4750m RY : 0.4561"
DZ : -139.1120m RZ : 0.2920"
D Scale : 0.1960ppm Rot Convention: +RZ=-RLongitude

Sundry : Vertical Datum:
Ell. Sep. : 0.0000m
Distances : Spheroidal
Bearings : True
Units : metres
Conversion : 1.0000000000

Main Vessel : Ocean Patriot
: C:\PROGRAM
FILES\FUGRO\6.1\SHARED\DATA\VESSEL_SHAPES\OCEAN PATRIOT.SVS

Nav. 1 : System : MRDGPS (In Use)
Type : Lat - Long
Priority : 1
Time-out : 5.0s
Offset Name : GPS_1
X Offset : -8.86m
Y Offset : 41.86m
Ant. Height : 27.00m

Nav. 2 : System : Direct Injection
Type : Lat - Long
Priority : 2
Time-out : 5.0s
Offset Name : GPS_2
X Offset : -8.24m
Y Offset : 43.86m
Ant. Height : 27.00m

Dead Reckoning: No Timeout: 30.0s

Gyro 1 : System : SGBrown (In Use)
Priority : 1
Time-out : 3.0s
Offset Name : CRP
X Offset : 0.00m
Y Offset : 0.00m

Z Offset : 0.00m
Correction : 0.74 Degrees

Offsets: Name	X	Y	Z
GPS_1	-8.86	41.86	27.00
GPS_2	-8.24	43.86	27.00
Drill Stem	0.00	0.00	0.00

Fairlead:Name	X	Y	Z
1	33.50	42.00	0.00
2	33.50	39.00	0.00
3	33.50	-24.00	0.00
4	33.50	-27.00	0.00
5	-33.50	-27.00	0.00
6	-33.50	-24.00	0.00
7	-33.50	39.00	0.00
8	-33.50	42.00	0.00

Secondary Vessel 1 : FAR GRIP
: C:\PROGRAM
FILES\FUGRO\6.1\SHARED\DATA\VESSEL_SHAPES\FAR GRIP.SVS

Nav. 1 : System : FAR GRIP (In Use)
Type : Lat - Long
Priority : 1
Time-out : 15.0s
Offset Name : CRP
X Offset : 0.00m
Y Offset : 0.00m
Ant. Height : 0.00m

Dead Reckoning: No Timeout: 30.0s

Gyro 1 : System : FAR GRIP (In Use)
Priority : 1
Time-out : 15.0s
Offset Name : CRP
X Offset : 0.00m
Y Offset : 0.00m
Z Offset : 0.00m
Correction : 0.00 Degrees

Offsets: Name	X	Y	Z
GPS	0.00	0.00	0.00
Stern	-0.40	-46.10	0.00

Secondary Vessel 2 : WRANGLER
: C:\PROGRAM
FILES\FUGRO\6.1\SHARED\DATA\VESSEL_SHAPES\WRANGLER.SVS

Nav. 1 : System : WRANGLER (In Use)
Type : Lat - Long
Priority : 1
Time-out : 15.0s
Offset Name : CRP
X Offset : 0.00m
Y Offset : 0.00m

Ant. Height : 0.00m
Dead Reckoning: No Timeout: 30.0s

Gyro 1 : System : WRANGLER (In Use)
Priority : 1
Time-out : 15.0s
Offset Name : CRP
X Offset : 0.00m
Y Offset : 0.00m
Z Offset : 0.00m
Correction : 0.00 Degrees

Offsets: Name	X	Y	Z
GPS	0.00	0.00	0.00
Stern	-2.00	-58.40	0.00

O/Ts : Steered Point: O/T 0
Shot : O/T 3

O/T 0	PR CRP	Flt:	Pos Sys: Datum In-Use
O/T 1	FAR GRIP	Flt:	Pos Sys: Datum In-Use
O/T 2	PR WRANGLER	Flt:	Pos Sys: Datum In-Use
O/T 3	PR Drill Stem	Flt:	Fxd Off: Drill Stem
O/T 4	PR GPS_1	Flt:	Fxd Off: GPS_1
O/T 5	PR GPS_2	Flt:	Fxd Off: GPS_2
O/T 6	PR Far Grip Stern	Flt:	Fxd Off: Stern
O/T 7	PR Wrangler Stern	Flt:	Fxd Off: Stern

O/T Legend: PR=Print LG=Log SN=Snap to line

Waypoint : Zane Grey
Position : 38d34'31.6207"S 147d59'16.3067"E 0.0m
586050.890mE 5729857.027mN 0.0m

Printing:

Fix mark rate	: 1
Weather Device	: (None)
Weather Interval:	60 minutes
Weather Enabled	: No
Config Changes	: No
System Timeouts	: No
Concise Header	: No

Software:Starfix Suite 6.1
HF: WOMBAT HF1
HF: GDA94 Files HF1
Seis Ver 2.08.0018
SeisEngine Ver 2.08.0011
Display Ver 2.14.0006
Anchors Ver 3.02.0028
Print Ver 2.03.0005

APPENIDX 4

Final Fix

RIG POSITION FIELD REPORT

Zane Grey-1



Client : BSOC/Labrador

Job Number : P0201

Rig : Ocean Patriot

Date: 30-Jan-05

Project : Zane Grey-1 Rig Positioning, Permit Vic/P-42, Victoria

Attention : C.Wilson BSOC Company Man

The surface location of the drill stem on the Ocean Patriot was derived from 60 minutes of observations of the Primary Differential GPS data, between 0518 hrs and 0618 hrs on completion of all anchor pre-tensioning and ballasting down operations. The results of the observations are as follows:

Geographical Coordinates			Grid Coordinates	
Latitude	38 ° 34 '	31.64 " South	Easting	586049.89
Longitude	147 ° 59 '	16.27 " East	Northing	5729856.42

The drill stem position is 1.7 m at a bearing of 216.2 ° Grid from the design location.

The Client supplied design location for Zane Grey 1

Geographical Coordinates			Grid Coordinates	
Latitude	38 ° 34 '	31.60 " South	Easting	586050.90
Longitude	147 ° 59 '	16.31 " East	Northing	5729857.80

The Ocean Patriot's rig heading, derived from the mean of 60 minutes observation of the gyro heading is:

43.20 ° True 43.81 ° Grid

All coordinates in this field report are quoted in the following coordinate system:

Datum : AGD 84 Projection : MGA
Spheroid : AMG Zone (Central Meridian) 55 147 ° East

The approximate positions of the rig anchors corrected for catenary are as follows:

Anchor	Easting	Northing	Azimuth(°)
1	586973	5730119	73.1 °
2	587101	5729598	104.3 °
3	586326	5728806	164.7 °
4	585806	5728801	193.4 °
5	584965	5729580	254.3 °
6	585038	5730069	281.3 °
7	585769	5730857	342.6 °
8	586266	5730861	11.8 °

Party Chief/Surveyor:

R. Farrawell

Client Representative:

D. Errington

APPENDIX 5

Geodesy and Coordinate Check

RIG POSITIONING

GEODESY AND COORDINATE CHECK LIST



Client : BSOC/Labrador
Rig : Ocean Patriot

Job Number : P0201
Date: 30/January/2005

Project : Zane Grey-1 Rig Positioning, Permit Vic/P-42, Victoria

1. CONFIRMATION OF PROPOSED RIG COORDINATES and HEADING.

Well Name Zane Grey-1 Ensure agreement with Client onsite prior to any positioning
Well Location - Latitude 38 34 31.60 S Operations. OK (?) Y / N.
Well Location - Longitude 147 59 16.31 E
Rig Heading (True) 45 ° T

2. GEODETIC PARAMETERS (WGS84 to LOCAL DATUM)

DATUM: Dx 117.7474 Ensure agreement with Client onsite prior to positioning Operations.
(WGS84 to Dy 51.4751 OK (?) Y / N.
Local Datum) Dz -139.1123
Rx 0.306452
Projection: Ry 0.456052
Rz 0.292040
Ds 0.19598 ppm
UTM Zone 55
Central Meridian 147 ° East

3. CHECK TRANSFORMATION OF SITE COORDINATES.

Well Location - Easting 586050.9 Ensure agreement with PCNav / Starfix.Seis. OK (?) Y / N
Well Location - Northing 5729857.8 If not, CHECK and RECALC.
Convergence at Location 0.62
Rig Heading (° Grid) 45.62

4. MEAS. ANT. OFFSETS from ANT. TO D/STEM (Rel. to Datum) NAV #1 SYSTEM NAV #2 SYSTEM

(Measure two (2) separate directions, verifying closure.)

Delta X(m)	-8.9	-8.2
Delta Y(m)	41.9	43.9
Angle between Rig Centreline and Antenna(s) (Grid)	348.008	349.4
Distance between Drill Stem and Antenna(s)	42.83	44.66

5. MANUAL COORDINATE VERIFICATION FOR ANTENNAS NAV #1 SYSTEM NAV #2 SYSTEM

Proposed Drill Stem Position	Easting	586050.9	586050.9
	Northing	5729857.8	5729857.8
Drill Stem to Antenna	Proposed Hdg (G)	45.62	45.62
Brg (G) = Prop. Hdg. + Angle btwn centreline and antenna		33.62	35.04
	Distance (m)	42.83	44.66
Calculated Antenna	Easting	586074.62	586076.54
Coordinates (Local)	Northing	5729893.47	5729894.37
	Latitude	38 34 30.4301 S	38 34 30.4003 S
	Longitude	147 59 17.2711 E	147 59 17.3500 E

Calculated Proposed Antenna Coords (WGS 84)	Latitude	38 34 24.8672 S	38 34 24.8374 S
	Longitude	147 59 21.9304 E	147 59 22.0093 E

Surveyor :

R. Farrawell
R. Farrawell

Client Rep

D. Errington
D. Errington

Date : 26 Jan 2005

6. POST RIG MOVE - OBSERVED ANTENNA COORD

Observed WGS84 Antenna Positions

	NAV.SYS #1	NAV.SYS #2
Latitude	38° 34' -38.5739	38° 34' -38.5739
Longitude	147° 59' 147.9891	147° 59' 147.9891

Ensure agreement between calculated and observed coordinates. If NO, check calcs., antenna offsets. OK (?) Y / N

Surveyor :

R. Farrawell
R. Farrawell

Client Rep

D. Errington
D. Errington

Date : 30 Jan 2005

APPENDIX 19

DRILLING FLUIDS REPORT

(By MI Swaco)

Fluids Recap

Bass Strait Oil Co.

Zane Grey 1
Gippsland
Exploration
Vic-P42



Prepared by: Nigel Warman



M-I L.L.C.
ONE-TRAX
DRILLING FLUID DATA MANAGEMENT SYSTEM

Operator: Bass Strait Oil Co.
Well Name: Zane Grey 1
Field/Area: Gippsland
Description: Exploration
Location: Vic-P42
Warehouse: Melbourne
Contractor: Diamond Offshore

Spud Date: 29/01/2005
TD Date: 10/03/2005
Location Code: 7001
Project Engineer: Nigel Warman
Sales Engineer: Jasdeep Singh
Sales Engineer: Peter Dwyer
M-I Well No. 17396

Comments:

Type	Size in	Depth m	TVD m	Hole in	Max MW sp.gr.	Fluid 1	Fluid2	Drilling Problem	Days	Cost \$
Casing	30	128	128	36	1.05	Spud Mud	Spud Mud	None	1	5287.30
Casing	13.375	1091	1030	16	1.05	Spud Mud	Spud Mud	None	3	25216.90
Casing	9.625	2184	1936	12.25	1.22	GLYDRIL		Wellbore Instability	15	210843.22
Open Hole	.	3675	3219	8.5	1.17	GLYDRIL		Sidetrack	27	121323.30

Total Depth: 3675 m

TVD: 2969 m

Water Depth: 73 m

Drilling Days: 46

Total Cost:

362,670.72

**DRILLING FLUIDS RECAP FOR BASS STRAIT OIL
ZANE GREY 1**

CONTENTS:

- **DISCUSSION BY INTERVAL**
- **DAILY DISCUSSION REPORT**
- **COST BY INTERVAL**
- **DAILY VOLUME SUMMARY SHEET**
- **TOTAL MATERIAL COST**
- **HYDRAULICS REPORT**
- **DRILLING FLUIDS SUMMARY**
- **PRODUCT CONSUMPTION**
- **DAILY MUD REPORTS**

**DRILLING FLUIDS RECAP FOR BASS STRAIT OIL
ZANE GREY 1**

**DISCUSSION
BY
INTERVAL**

DRILLING FLUIDS RECAP FOR BASS STRAIT OIL ZANE GREY 1

SUMMARY:

Bass Strait Oil Company was the operator of directional exploration well, Zane Grey-1, Vic/P42, Victoria, Australia using Ocean Patriot semi submersible rig owned by Diamond Offshore. Zane Grey-1 was located 230 nautical miles east of Melbourne. The well was programmed for 29 days to drill to 3177 m below sea level in 73m of water depth.

The rig Ocean Patriot was towed from Grayling 1A (Apache) and was on location on 27 Jan 2005.

Zane Grey 1 was spudded on the 29th January 2005 at 15:40 hrs. The 36 x 26" hole was drilled from 94 m to 128 m using seawater and Gel sweeps. The 30 x 20 inch conductor casing was run and cemented in place without incident.

The 16-inch hole was drilled to 1095 m and 13 $\frac{3}{8}$ casing was lowered without incident to 1091 m.

The casing shoe was drilled out with a 12 $\frac{1}{4}$ inch bit. The hole was drilled from 1091m to 2772 meters with a 6% KCl/PHPA/Glycol mud system.

The 8 $\frac{1}{2}$ " hole was drilled from 2184 to 3765 meters with a 6% KCl/PHPA/Glycol mud system.

DRILLING FLUIDS RECAP FOR BASS STRAIT OIL ZANE GREY 1

Interval I	94 - 128 meters	36 x 26 Hole	30 x 20 inch casing
------------	-----------------	--------------	---------------------

MUDTYPE : Seawater / PHG / Guar Gum sweeps

HOLE PROBLEMS : None

MUD PROPERTIES:

Mud Weight: 1.05 sg
YP: 46 lb/100ft²
API FL: 15 cc/30 min
Funnel Vis: 110 sec/qt
Hardness: 40 mg/l
MBT: 20 ppb

OPERATIONS:

Zane Grey – 1 was spudded on 29th January 2005 at 14:30 Hrs. The 26" hole with 36" hole opener was used to spud the well using 205 bbl of 4 ppb Guar Gum to initiate drilling. The section was drilled to 128 m using 50 bbl of 24 ppb PHG every single. The well was displaced with 200 bbl PHG prior to run casing. The 30" casing was lowered and cemented in place.

MUD

1365 bbl of 24 ppb Gel was prehydrated once the rig was ballasted down and bulk stocks taken on board. 220 bbl of 4 ppb Guar Gum was also mixed in seawater for initiating drilling. A total of 660 bbl of gel and 205 bbl of Guar Gum were used for drilling out this section and 705 bbl of PHG was carried over to next section.

SOLIDS CONTROL:

None used as returns were directed to seabed.

OBSERVATIONS AND RECOMMENDATIONS:

No changes are proposed.

DRILLING FLUIDS RECAP FOR BASS STRAIT OIL ZANE GREY 1

Interval II	128 – 1095	16" Hole section	13 ³ / ₈ " casing
-------------	------------	------------------	---

MUDTYPE : Seawater / PHG / Guar Gum sweeps

HOLE PROBLEMS : None

MUD PROPERTIES:

Mud Weight: 1.05 sg
YP: 32 lb/100ft²
API FL: 14 cc/30 min
Funnel Vis: > 100 se/qt
Hardness: 80 mg/l
MBT: 25-30 ppb

OPERATIONS:

The 16" hole assembly was made up using a down hole motor to build the hole angle to 35 degrees and drilled to 1095m. The TD was called earlier than the planned depth of 1174 m due to a poor drilling rate. Typically 50-70 bbl of PHG was pumped mid stand and on connections. Due to a shortage of drill water 420 bbl of 3.5 ppb Guar Gum was used for mid stand sweeps from 770 m to 1000 m.

The hole was displaced with 1000 bbl of PHG containing 0.8% MI Lube and followed by 200 bbl of inhibited 5% KCl PHG with 1% MI Lube weighted to 1.15 sg.

The BHA was pulled out of hole and casing run to bottom without any tight hole reported. The 13³/₈" casing was set at 1091 m and cemented in place.

MUD:

705 bbl of Gel mud from the previous section was carried over to this section and additional volume of 1021 bbl of 24 ppb Gel was mixed. Also 225 bbl of 24 ppb PHG containing 1% MI Lube & 5% KCl weighted to 1.15 sg was mixed in a separate pit for displacing hole at TD to stabilise any reactive formations and provide hole lubricity.

A total of 5427 bbl of sweeps including 420 bbl of Guar Gum sweeps were pumped as sweeps and for filling the casing.

**DRILLING FLUIDS RECAP FOR BASS STRAIT OIL
ZANE GREY 1****SOLIDS CONTROL:**

No solids control was used as returns were to seabed.

OBSERVATIONS AND RECOMMENDATIONS:

No changes are recommended, as the PHG sweep system is the most cost effective way to drill this interval.

DRILLING FLUIDS RECAP FOR BASS STRAIT OIL ZANE GREY 1

Interval I11	1091-2772 meters	12¼" Section	9⅝" casing set at 2184 m
--------------	------------------	--------------	-----------------------------

MUD TYPE : KCl/PHPA/Glycol

HOLE PROBLEMS : The mud weight increased throughout initially drilling the 12¼" section and then the decision was made at the operator's request to drop the mud weight back to 9.4ppg with dilution. As a result, severe sloughing of the wellbore occurred which caused problems with running 9⅝" casing. The casing hung up at 1772 and 1776m on the initial attempt to run the casing to 2772m (section TD). The decision was then made to pull the string and wiper trip to bottom. The casing was hung up again at 2184m on the next attempt to get to TD and was set high at this depth. No other problems existed throughout this section except minor loss of cuttings integrity during the transition from Idcap D to PHPA encapsulation.

MUD PROPERTIES:

Mud Weight: 10 ppg
YP: 20-35
PV 34-24
API FL: 5 cc
KCl: 6%
PHPA: 0.5-0.9 ppb
Funnel Vis: 80-55 sec/qt
Zinc Oxide: 1.5 ppb
Hardness: 240 mg/l
Drill Solids: 1-2.5%
PH: 9.5
6 RPM: 8-9

DRILLING FLUIDS RECAP FOR BASS STRAIT OIL ZANE GREY 1

OPERATIONS:

The 13 $\frac{3}{8}$ inch casing shoe track was drilled out with a 12 $\frac{1}{4}$ inch bit to 1060 m and the hole was displaced to 1.04 sg KCl/Polymer/Glycol mud while drilling through the shoe track, which was very slow due to excessive drag experienced. A total of 30m of cement column was drilled using this mud which showed signs of cement contamination. A FIT of 1.6 sg was obtained at 1098m. Drilling was resumed and at 2103m the string pulled out of hole to examine BHA due to accidentally slacking off the weight. The drilling rate was 50 m/hr on an average. The hole was drilled to 2772m with a significant tight spot at 1772m. The casing was run initially to 1776m and pulled for a wiper trip to bottom. The casing was run a second time and set high at 2184m. The 9 $\frac{5}{8}$ " casing was cemented in place.

MUD:

210 bbl of 25 ppb Gel was kept in one of the pits and rest of the tanks were dumped and cleaned for mixing new mud for this section after the casing was landed. The 40 bbl of PHG was blended into Polymer mud to get a total of 1730 bbl with 1 ppb Idcap D, 1 ppb Duotec, 1.6 ppb Hibtrol and 2.8% Glydril LC. Some foaming problems were experienced while mixing the Duotec in water and this was controlled by the addition of Defoam A.

The shoe track was drilled with seawater initially but while still inside the casing the hole was displaced with the KCl/Idcap D mud with a 30 bbl of Gel spacer. The mud was contaminated due to cement drilling and was treated out with Citric Acid and Sodium Bicarbonate.

The cuttings were well encapsulated on the shakers and the shakers handled the flow rate of 950 gpm without any problems. The header boxes were required to be cleaned of the cuttings accumulation. The fluid loss control was obtained less than 6 cc per 30 minutes with Hibtrol initially and Idcap provided good hole inhibition until stock was finished by 1800m. Glydril LC was used to 1600m with flow line temperatures of 100°F and then the cloud point inhibition mechanism was obtained using Glydril MC.

The mud weight was kept under control by higher dilution levels due to mud losses at the centrifuge due to improper settings up to 1600m. But due to excessive volume of mud being lost, the centrifuge was shut down.

DRILLING FLUIDS RECAP FOR BASS STRAIT OIL ZANE GREY 1

The mud weight increased to 9.6 ppg due to solids accumulation in the mud at 2050m. It was decided to dump and dilute by consultation with company rep. 900 bbl of unweighted premix was mixed in preparation to do this while tripping. The string was dropped in the hole at 2103m due to brake failure and one stand was bent. So the dilution planned with PHPA mud was postponed till after the trip. The string was pulled out of the hole to check the down hole tools. The pulling out was tight and back reaming was performed to pull out.

At the casing shoe while running in hole, the hole was circulated and the Polyplus concentration was enhanced to 1.25-1.5 ppb. The shakers were not able to handle the flow and the premix was added to system to keep volume and replace the Idcap system to a PHPA system.

Further running in the hole was very good to bottom and the mud was again conditioned to displace the old Idcap mud in hole to PHPA rich mud. After two cycles the mud was able to pass over 84 mesh screens at 800 gpm and drilling was resumed. The mud weight of this mud was 9.2 ppg which crept up to 9.7 ppg at 2500 m due to solids build up. The shaker screens could not be upgraded due to higher PHPA in the mud and unable to avoid losses on the shakers. Dry additions of PHPA were made at the rate of 2 bags for every stand drilled. The premixes were made of 1.5 ppb PHPA using slam dunking method because otherwise it was impossible to add PHPA through the hoppers.

At 2650m due to the mud weight rising to 9.7 ppg 300 bbl of the active mud was taken out of the system and diluted with 400 bbl of Premix to reduce the mud weight back to 9.5 ppg. But while drilling during the night-time, the centrifuge was turned off without knowledge of the mud engineer and the mud weight again increased to 9.7 ppg at 2707m.

On discussion with company rep, it was decided to reduce the mud weight by a regular massive dumping and dilution regime.

The string was pulled out of hole due to the directional tools unable to steer the bit in desired azimuth. The hole was reported to be in good condition.

A tri-cone bit with packed BHA assembly was run in hole. Extensive reaming was required to reach bottom due to three stabilizers in the string (stiff assembly) and under gauge hole. No fill was reported at bottom. The mud weight increased from 9.7 ppg to 9.9 ppg during reaming and consequently 430 bbl mud was dumped and volume diluted by premix to cut the weight back to 9.6-9.7 ppg. Also as the centrifuge was not performing well after repairs, the shaker screens were upgraded

DRILLING FLUIDS RECAP FOR BASS STRAIT OIL ZANE GREY 1

to 120 mesh to control solids build up. This upgrade was possible only because no dry PHPA additions were made to mud while drilling due to sand formation drilled.

During reaming to bottom the centrifuge was turned off unknowingly and the driller or mud engineer were not notified. This resulted in more LGS entering the mud. A 50 barrel high vis sweep was pumped at 2705m with no additional cuttings returning over the shakers. The active system was treated with 0.1ppb of Duotec slowly to the active system and the 6 rpm reading rose from 10 to 12. The mud weight stabilised at 9.7 ppg as a result of running the desilter and the centrifuge and the gradual upgrade of screens to 145's.

The 12¼" directional hole was drilled from 2724m to 2772m (TD) and the system was circulated bottoms up. A string was pulled back and a wiper trip was conducted. The bit was run to bottom and the hole was circulated. There were still significant cuttings coming over the shakers when the company man decided to pull out of hole to run 9⅝" casing. While circulating, the mud was conditioned. The pH was increased from 8.5 to 9 with additions of Potassium Hydroxide and the low end rheology was increased with additions of Duotec. Bactericide was also added prior to pulling out to run casing. The drill string was slugged and pulled out of hole.

The 9⅝" casing was rigged up and run in the hole with tight hole experienced on numerous occasions. The casing was hung up at 1772m and was run in very slowly to 1776m and the decision was to pump a slug and pull the casing to surface for a wiper trip.

The centrifuge was continuously run on the active mud to reduce the level of low gravity solids. Minor seepage losses continued throughout the 12¼" section. Significant losses were experienced over the shakers due to fines / clays blocking the shaker screens. A lack of communication between the data engineers and the mud engineer / driller caused these losses to be far more extreme than what they could have been if stopped early.

The bit was run in the hole and extensive washing and reaming took place to 2283m. During this the mud weight was reduced at the company mans request down to 9.4 ppg using the centrifuge and with additions of unweighted premixes. As a result the hole began to slough in and the mud weight was increased to 9.6 ppg then 9.8 ppg. Premixes contained concentrated Polyplus to maintain the excellent inhibition throughout this section. The shaker screens were continually monitored for holes and replaced accordingly. New shaker screens were taken from the store. A high viscosity Duovis sweep was pumped which returned excessive cuttings from the wellbore and subsequent losses over the shakers were experienced.

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Reaming continued. The hole had sloughed in completely and it was if the bit was drilling new hole. At 2735m the decision was made to circulate the hole clean, pump a heavy weight slug and pull out of hole to run 9⁵/₈" casing for the second time. As a result of the severe wellbore stability and an increase in gas the mud weight was increased to 10 ppg at the operator's request. Further increases in mud weight were stopped by running the solids control equipment and ensuring no holes in the shaker screens. Nine new shaker screens were taken from the warehouse.

The 9⁵/₈" casing was once again picked up and run in the hole. There were no problems experienced until 1962m, where the casing was circulated and washed down. The casing was run to 2184m with significant tight hole from 1962m onwards. Losses over the shakers continued and the screens were downgraded to 84's mesh size in order to keep mud in the active system.

At 2184m the decision was made to set casing high and rig up Schlumberger to cement the 9⁵/₈" casing. Schlumberger pumped 60 bbls of chemical wash and 60 bbls of spacers followed by 128 bbls of lead cement and 50 bbls of tail cement. The casing was displaced with +/- 625 bbls of mud from active system. No cement was observed at surface during the displacement. 376 bbls of mud was left behind the casing.

SOLIDS CONTROL:

The shakers were dressed with 84 mesh screens with 10/20 mesh scalping screens. These handled the 900 gpm flow quite well and kept solids build up under control after the mud was warmed up and sheared sufficiently. The screens were upgraded in stages to 105 & 145 mesh on the shakers. The desilter and centrifuge were run continuously.

The screens had to backed down from a combination of 105's and 145's to 84's mesh screens at times to keep mud in the active system due to the entrance of un-sheared polymers and fine clays blinding the screens. The screens were again increased to 145's mesh size to negate increasing mud weight and LGS content.

There were problems with delamination of shaker screens throughout the well and attempts were always made to repair broken screens. Silicon and liquid metal were used to patch screens, with liquid metal having the longer endurance. Silicon was used when screens required quick repair. As a result of the delamination problem, many new shaker screens were taken from the store.

The centrifuge didn't perform to optimum conditions for the early half of the section. The centrifuge was being repaired on several occasions and as a result the mud

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weight through these stages increased. At a critical point in the drilling of the middle stages of this section the centrifuge was unknowingly turned off for approximately 16 hrs. The mud engineer and driller were not informed of this.

The desilter is not normally run continuously when drilling with a PHPA mud, usually only on an "as required" basis. This is due to the dispersion effect of the cuttings by the centrifugal pumps. However, the desilter had to be run continuously when the centrifuge was run as the desilter pump was used to feed the centrifuge suction pit. Apparently there is one pump down at present but until this pump is fixed, the desilter will have to be run whenever the centrifuge is required to be operated.

DOWNHOLE LOSSES:

Some downhole losses could be attributed to the limestone formations below the casing shoe but no LCM was pumped due to whole mud losses occurring at shakers during drilling this interval and faster drilling rates. Losses through this section were largely due to the solids control equipment, in particular the shakers.

OBSERVATIONS AND RECOMMENDATIONS:

The planned mud system of initially using the Idcap system was not adequate to control the swelling clays and after changing over to the PHPA system the hole responded very well. The 6% KCl level and 1.25 ppb PHPA concentrations were sufficient to control shales drilled. Operationally the inability of hopper pumps to handle the thick PHPA premixes was limiting the concentration of PHPA in the premixes to 1.25 ppb.

The centrifuge didn't perform well initially and resulted in fines/solids build up in the mud system. The creeping mud weight required higher dilution levels than planned. The mud weight increased quickly from 9.4 ppg to 10 ppg and after the decision to bring back the mud weight was made the well sloughed severely. In retrospect the mud weight should have been allowed to stay at 10 ppg until the casing had been set.

Although PHPA when initially un-sheared can cause problems with losses over the shakers, it is recommended to still persist with high initial concentrations and deal with losses over the shakers. Once PHPA systems are at the required concentration they are much easier to maintain and shale instability becomes a minor problem.

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Slam dunking PHPA worked well on this occasion and provided a quick and efficient method of getting PHPA into the premixes. Dry additions of PHPA were added at the returns line at a rate of approximately 1-2 sacks per every stand drilled. However, the mud pumps were cleaned for maintenance and it was found that the dry additions caused severe problems with the pumps. Dry additions ceased and the depletion of PHPA was controlled with concentrated premixes of approximately 1.5-2 ppb of PHPA.

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Interval IV	2184 - 3765 meters	8½" Hole	9⅝" casing set at 2814 m
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MUD TYPE : KCl/PHPA/Glycol

HOLE PROBLEMS : None

MUD PROPERTIES:

Mud Weight	1.12 – 1.17 sg
YP:	6 - 38
PV	9 – 21
API FL:	4.3 – 7.6 cc
KCl:	6 – 6.5%
PHPA:	0.5 – 1 ppb
Funnel Vis:	38 – 68 sec/qt
Hardness:	380 – 1200 mg/l
Solids:	6.8 – 8.2 %
PH:	9-12
6 RPM:	6 - 11

OPERATIONS:

The 9⅝" casing was cemented in place at 2184m and the pipe displaced with 625bbls of mud. The BOP's were nipped up and tested and the 8½" BHA assembly was run in hole to drill the cement track and shoe and new formation.

A decision was made to set a cement plug and sidetrack the previously drilled hole. The 8½" assembly was pulled out of the hole and a tubing stinger was run in hole to 2250m. Bottoms up was circulated and a cement plug was set consisting of 38.4 bbls of cement. The tubing was pulled back to 2100m and the system circulated to check for cement. The 2⅞" tubing was pulled back to 1240m and the operation was suspended while waiting on cement for approximately 24hrs.

The tubing was run back to tag cement and the system was circulated bottoms up and the tubing pulled to surface. The 8½" assembly was picked up and the cement was controlled drilled while attempting to kick off the cement plug.

The 8½" hole was drilled to 3107m at an average ROP of between 20-60m/hr. At 3107m the bit stopped drilling. The assembly was pulled to surface and it was found

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that the bit and bottom half of the mud motor had been left in the hole. The decision was then made by the operator to set a second cement plug and sidetrack once more.

The cement stinger was run in hole to 3106m, the system was circulated bottoms up and 18 bbls of cement was placed at the bottom of the hole. The hole was displaced and the tubing pulled and laid out. The new 8½" BHA assembly with the new tri-cone bit was made up and run in the hole. Cement was tagged and the system circulated bottoms up. Unable to kick off cement plug as insufficient time was given for cement to harden and the formation was too hard. As a result the cement was drilled down until the fish was hit and the decision to pull out of hole was made. The hole was circulated clean, a slug pumped and the string pulled out of hole.

Another cement plug was set between 2946 – 3106m to sufficiently cover the fish. The new BHA and new PDC bit was made up and run in the hole. The decision was made to attempt to kick off in open hole above the cement plug to save time and to allow sufficient time for the cement to set. This was unsuccessful so the cement plug was used to kick the well off again. The cement proved to be inadequate again in providing enough resistance to be able to kick off. Cement was drilled for approximately 36 hours before the decision was made to pull the BHA and make up a new BHA.

After setting another cement plug, the pipe was run back and an attempt to kick off was made. Cement was drilled to 3022 meters while attempting to drop off the cement with no success. The hole was circulated clean, a slug was pumped and the pipe pulled. The BHA was changed, the pipe run back in the hole and further drilling of cement continued but again without success.

A trip was made to pick up a special "drop off" bit and this was used to drill to 3092m with 100% formation recorded. This bit was then pulled to pick up a regular bit. A Hycalog RSX1630 bit was then run in the hole and drilled to 3162.1m. The bit was pulled back to the shoe while extensive repairs were made to the top drive. After the top drive was repaired, drilling continued without problems apart from pump problems which were rectified by changing suction lines.

There were no further problems while drilling to the TD of 3675m. The hole was circulated clean, a wiper trip was made before POH and running wireline logs.

The following wireline logs were run:

MLL-DLL-MAC-ORITPZDL-CN-DSL-TTRM
RCL-GR-ORIT

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There were no problems with log #1. Log #2 stuck at 3185m. Stripped over cable, latched onto fish and resumed logging using LWF procedures.

After logging the 2 $\frac{7}{8}$ " tubing was run to 3390m and a high viscosity pill spotted. Plug #1 was spotted from 3350 to 3250m. Plug #2 was spotted from 2230 to 2130m. The hole was then displaced with inhibited mud before pulling out to cut and remove the casing.

MUD:

During weighting on cement, testing casing, nipping up BOP's and testing the BOP's the surface mud was centrifuged and de-siltered in order to reduce the LGS in the system. The 8 $\frac{1}{2}$ " assembly was picked up and run in the hole to drill out the cement track, float shoe and 50m of new formation to conduct the formation integrity test. The mud was pre-treated with citric acid and bicarbonate of soda to minimise the effects from the cement. OS-1 was added to reduce the risk of corrosion. The mud in the hole had a high level of drilled solids and was directed into reserve pits and dumped to make way for new premix. The required mud weight to drill the new formation was 1.13sg (9.4 ppg) as requested by the operator and after circulating the hole clean this mud weight was achieved.

Typical formulation for a premix was:

- Fresh water as required
- Caustic Potash at 0.2 ppb
- Poly Pac UL at 2.3 ppb
- KCL at 22 ppb
- Glydril MC at 4%
- PolyPlus at 1.2 ppb
- Duovis at 1.2 ppb
- Barite as required.

Extra Duo Tec was added to ensure the 6 RPM reading was in the range of 10 to 12 units. There were no problems in maintaining the fluid loss below the required fluid loss of 5cc with additions of PolyPac UL.

The 8 $\frac{1}{2}$ " assembly was pulled out of hole. The system was circulated bottoms up and while circulating, the system was again treated with citric acid and bicarbonate of soda. No cement was observed at the shakers, however the mud was slightly contaminated with cement shown by an increase in pH and hardness. The active

DRILLING FLUIDS RECAP FOR BASS STRAIT OIL ZANE GREY 1

system was treated with Duotec, KCl and Polypac UL to restore the system properties. While pulling out the possum belly and sandtrap were cleaned and dumped and the shaker screens were thoroughly checked for damage and replaced accordingly.

The mud had an unusually high level of aeration which made the mud weights out of hole seem lower than expected. This was common throughout the well and the mud weights going into the hole were taken as the mud weight of the active system.

The cement stinger was run in the hole to set a kick off cement plug (38.4 bbls). Schlumberger completed the cement job and the stinger was pulled back to 1240m and the cement was allowed to set. The stinger was then run in to tag cement and the system circulated bottoms up. There was no cement observed at surface but once again the mud was contaminated with cement. 130 bbls of cement contaminated mud was dumped at the shakers during bottoms up.

The 8½" BHA was again made up and run in the hole to control drill cement. The active system was treated with Bicarbonate of Soda and Citric Acid prior to drilling the cement to minimise the effects. The ROP through this section was very slow and it was thought that possible bit balling could be the reason. A 25 bbl KCl/Caustic pill was pumped as a result. There was no substantial gain in ROP. Finer mesh screens were dressed on the shakers to minimise the effects of LGS. The desilter and centrifuge were also run continuously while drilling to control LGS and mud weight. Extra Glycol MC was added to the active system to get the concentration of Glycol up to the program specifications of 4%. Duotec was added to the system to lift the low-end rheology and hole cleaning.

Due to the severe wellbore stability problems encountered while drilling the 12¼" hole one of the main aims through the 8½" section was to maintain the mud weight as stable as practically possible with use of weighted premixes and manipulating the solids control equipment. The mud weight was raised to 1.15SG as per operators request. Significant losses over the shakers occurred as a result of losing one shaker for a period of approximately 8 hrs.

The shaker screens continued to delaminate and many new screens were taken from the store as required. The slow ROP lead to the decision to pull the string for a routine bit change. On doing this it was found that the bit and half of the mud motor had been left in the hole. The decision was made to cement over the fish and sidetrack once again. A cement plug was set (18 bbls) and left to dry for approximately 15 hrs. The BHA with new tri-cone bit was run in and the cement tagged and the system circulated bottoms up. Again significant cement contamination was evident and approximately 80 bbls of mud was dumped.

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Coarse 84 mesh screens were placed on the shakers while drilling through the cement. And again the system was treated with Citric Acid and Bicarbonate of Soda prior to drilling cement and during drilling. The cement was not allowed sufficient time to harden and it was difficult to kick off. The cement was drilled until the fish was contacted and the string pulled to surface for another cement plug job.

When soft cement severely contaminated the mud, it was dumped. Lesser contamination was treated with sodium bicarbonate and citric acid. The last of the citric acid was used while drilling cement to 2623 meters. From this point the pH and Hardness levels increased to 12 and 1200 mg/l respectively. The viscosity started to drop while drilling the cement, presumably because the high pH was removing the PolyPlus and masking the DuoTec/DuoVis. Pilot tests of DuoTec and DuoVis to the high pH mud showed the yield point and 6 RPM reading did not increase in this environment. PolyPlus precipitates out immediately at these pH levels.

Bentonite was mixed in fresh water and then circulated as high viscosity sweeps to check on hole cleaning. Very little increase in cuttings was observed at the shakers when the high viscosity sweeps reached the surface. This was probably due to the very slow drilling rates while trying to wash off the cement. The gel sweeps were limited as PHG in a brine mud system can tend to foam and/or aerate if too much is added. The mud weight was maintained at 1.13 sg with barite.

SOLIDS CONTROL:

While testing BOP's, all the used screens were repaired with silicone and liquid metal and old screens were discarded. The surface active pit was centrifuged and 'de-silted' to decrease the level of LGS.

The average discharge of the desilter was approximately 10.2 ppg and the losses were around 1.5 bbls per hour. The average discharge from the centrifuge was approximately 8.5 ppg and the losses were around 1 bbl per hour.

Coarse screens were placed on the shakers while drilling cement plug and 198 bbls of old mud was replaced with fresh premix. This effectively reduced the level of LGS in the system. The sand-trap and possum belly was cleaned when sufficient time allowed. Again 130 bbls were dumped at the shakers while circulating bottoms up, due to cement contamination.

During drilling ahead the screens were upgraded to a combination of firstly 120's and 145's to a combination of 145's and 165's. The desilter and centrifuge were

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continuously run to control the mud weight within the requested range. Delamination continued to be a problem and many new screens were taken from the store as a result.

At approximately 2700m shaker 2 was out of action for 10hrs and as a result severe losses over the shakers were experienced at times. The screens were downsized to a combination of 120's and 145's to try and keep mud within the active system.

The desilter is not normally run continuously when drilling with a PHPA mud, usually only on an "as required" basis. This is due to the dispersion effect of the cuttings by the centrifugal pumps. However, the desilter had to be run continuously when the centrifuge was run as the desilter pump was used to feed the centrifuge suction pit. Apparently there is one pump down at present but until this pump is fixed, the desilter will have to be run whenever the centrifuge is required to be operated.

DOWNHOLE LOSSES:

There were some minor downhole mud losses while drilling the 8½" hole section but these were not considered to warrant adding LCM to the mud system. If the mud losses had been stopped entirely, mud would have had to have been dumped at the surface to make way for new dilution mud in order to minimise low gravity solids.

OBSERVATIONS:


The mud weight at the flow line was typically 0.2 to 0.3 ppg lower than the mud weight observed in the suction pit. However, the same mud weighed at the flow line just prior to the mud discharging into the pits was almost the same as the actual suction pit mud weight. This change in mud weight readings may have been due to the aeration system that was used in the possum belly to prevent the cuttings from building up.

POST TD OPERATIONS:


A wiper trip was made at TD which showed the hole to be in good condition. There were no hole problems while logging. After logging was complete, the hole was plugged and abandoned as per the program with no further problems.

**DRILLING FLUIDS RECAP FOR BASS STRAIT OIL
ZANE GREY 1**


**DAILY DISCUSSION
REPORT**

	Operator : Bass Strait Oil Co. Well Name : Zane Grey 1 Contractor : Diamond Offshore	Field/Area : Gippsland Description : Exploration Location : Vic-P42 Daily Discussion M-I Well : 17396
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27/01/2005	TD = 0 m	Day -1
Entered inventory values from the SOF end of Grayling 1A.		
28/01/2005	TD = 0 m	Day 0
Worked on Tow bridle. Meantime picked up drill pipe. Waiting for the rig to Ballast down to start mixing Gel mud.		
29/01/2005	TD = 128 m	Day 1
Spud at 14:30 hrs using 200 bbl of Guar Gum. Then drilled ahead with Gel sweeps to 128 m. Running 30 inch casing. Mixed 1365 bbl of 24 ppb Gel in Pit 3, 4, & 5. Also mixed 220 bbl of 4 ppb Guar Gum in Pit 1 to initiate spudding.		
30/01/2005	TD = 576 m	Day 2
Cemented casing. Made up BHA. Drilled to 576 m @ 21:00 Hrs using 50 + 50 bbl PHG sweeps every stand. Mixed 225 bbl of PHG containing 5% KCl & 1% MILube for displacement. Filled other tanks with 24 ppb PHG. Building PHG on the run.		
31/01/2005	TD = 1045 m	Day 3
Continued drilling ahead to 1045 m building angle to 32 deg. Used 400 bbl of 3.6 ppb Guar Gum sweeps from 770 m to 1000 m mid stand. Pumped 50-75 bbl of PHG sweeps on connections. Used MIGel NT at the same price as MIGel Bulk. Used broken sacks of Barite. Added 0.8% MILube in the 900 bbl Displacement mud as per program. Dressed shakers with new 16 x 84 mesh screens. Flushed Desilter with sea water.		
1/02/2005	TD = 1095 m	Day 4
Drilled to 1095 m. Called TD due to poor ROP. Displaced hole to PHG. POOH. Hole good. Run casing to bottom. Pumped PHG sweeps while drilling. Displaced hole with 1000 bbl of PHG containing MILube and 200 bbl of Inhibited PHG weighted to 1.15 sg prior to POOH. Mixed more PHG to fill casing.		
2/02/2005	TD = 1095 m	Day 5
Finsihed cementing. Run BOP Stack. Wait on Weather to latch BOP. Saved 170 bbl of PHG for sweeps for cement drilling. Mixed 1730 bbl of KCl-Idcap-Glycol mud for next section. Chemicals still on Wrangler are not in Inventory.		

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3/02/2005	TD = 1095 m	Day 6
WOW. Land BOP. Completed mixing KCl-Polymer-Glycol mud for next section.		
4/02/2005	TD = 1095 m	Day 7
Tested BOP. Made up BHA with MWD tools and RIH. Drilled cement from 1023 m to 1065 m. Slow cement drilling rate. Displaced well with KCl-Polymer-Glydrill mud. Further drilled cmt to 1080 m @ 21:00. Added Glydrill LC to surface volume. Pumped 2 PHG sweeps while cmr drilling. Dumped returns untill clear returns obtained. Intend to improve rheology as drilling progresses depending upon flow handling at shakers. None chemicals left on Wrangler.		
5/02/2005	TD = 1600 m	Day 8
Drilled to 1098 m. FIT 1.6 sg. Drilled to 1600 m @ 21:00. Treated out cement contamination due to early displacement with Citric & Bicarb. Added Duotec to system to improve rheology. Changed scalping screens to 30 mesh. Shakers handling 900 gpm OK. Started Centrifuge & Desilter at 1400 m to control rising MWt. Gradually upgrading shaker screens.		
6/02/2005	TD = 2103 m	Day 9
Drilled to 2103 m. P/O for MWD tools change. Added Idcap to active while drilling to overcome depletion. Mud weight risen due to solids. Made up 900 bbl of premix to dump/dilute once back on bottom. Centrifuge discarding mud.		
7/02/2005	TD = 2236 m	Day 10
Completed POOH backreaming. R/I to shoe. Circ. Further R/I to bottom washing last 5 stds to bottom. Conditioned mud. Drilled to xxxx m. Mixed premixes of 1.25 ppb PHPA. Treated surface volume with 1.2 ppb PHPA. Conditioned mud while circulating at csg shoe. Lost 70% of the returns over shakers. Replaced lost volume with premixes. Further treated system with PHPA rich premixes to make for lost volume while circulating at bottom. Adding KCl to system for depletion and Duotec for low end rheology.		
8/02/2005	TD = 2675 m	Day 11
Drilled to 2675 m. Pumped 60 bbl of HiVis sweep of 4 ppb Duotec; no extra cuttings observed on shakers. Added 100 bbl of 6% KCl mix to system to reduce viscosity. Adding OS-1 for remove dissolved oxygen. Upgraded screens to 105 & 120+ dump/dilute to control rising mud wt. Took out 300 bbl active mud and bled in premix to condition mud.		
9/02/2005	TD = 2707 m	Day 12
Drilled to 2707 m. POOH for BHA change. Hole good. RIH is in progress. Obtained Mwt of 9.5 ppg after dump/dilute and risen to 9.7 ppg after 5 hrs of drilling. Centrifuge turned off unknowingly. Changed screens to 120 mesh. Dump and cleaned header box.		

	Operator : Bass Strait Oil Co. Field/Area : Gippsland Well Name : Zane Grey 1 Description : Exploration Contractor : Diamond Offshore Location : Vic-P42	Daily Discussion M-I Well : 17396
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10/02/2005	TD = 2724 m	Day 13
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R/I hole with tricone bit and packed assembly. Reamed down to bottom. Drilled to 2724 m. Working on leaking wash pipe. Mud wt increased to 9.9 ppg while reaming. Centrifuge made available at 11:00 hrs. Dump/dilute 430 bbl to cut wt to 9.6+ ppgat 2710 m. Pump 50 bbl HiVis sweep at 2705 m with no extra cuttings observed on shakers. Treated system with Duotec for rheology control.

11/02/2005	TD = 2772 m	Day 14
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Drill 12 1/4" hole from 2724' to 2772' (TD). Circulate B/U and condition mud. Make wiper trip to \$\$\$\$ meters, run back to bottom, circulate hole clean, pump slug and POH to run casing.
All mud properties within program specifications. Mud weight stabilised at 1.16 with constant running of the centrifuge and desilter. The screens on the shakers are being upgraded as flow permits. Recommended dry additions of Polyplus direct to active system to maintain the integrity of the cuttings at the shakers. Added Duotec and KOH to active to maintain low end rheology and lift pH, respectively.

Drill to 2772 meters.

12/02/2005	TD = 2772 m	Day 15
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POOH. Rig up and run 9 5/8" casing. Casing stopped at 1772m.
Run centrifuge continuously on active mud to reduce low gravity solids. Mud weight into centrifuge 9.65ppg and discharging out at 9.15ppg. Midnight mud weight in active is 9.55ppg.

Running 9 5/8" Casing.

13/02/2005	TD = 2772 m	Day 16
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Casing hung up at 1776m. Make up slug and pull casing to surface for wiper trip to bottom.
Continue running centrifuge to treat surface volume mud. Lost 90 bbls mud at surface due to accidental overflow of sandtrap while centrifuging surface volume. Monitoring screen condition and screening up to 145's. All mud properties within program specifications and building concentrated phpa and glycol premixes to maintain properties and preparing for next section.

Pull casing.

14/02/2005	TD = 2772 m	Day 17
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RIH with bit, wash and ream to 2283 meters. Lost large quantities of mud at shakers when soft clays blinded the shaker screens. Pump high viscosity Duovis sweep, high cuttings concentration was removed at shakers with returning sweep.
Running desilter and centrifuge as required to reduce concentration of low gravity solids. Running degasser. Added barite to weight system up to 9.6 and then 9.8ppg. Controlled further increases in mud weight from LGS with additions of unweighted whole mud premixes. Adding extra PolyPlus to premixes to assist with encapsulation and fine grain solids removal. Took 4x145's and 2x120's new shaker screens from store. Monitoring screens for holes.

Ream to bottom for casing.

15/02/2005	TD = 2735 m	Day 18
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Continue reaming to 2735 meters, circulate hole clean, pump slug and pull out of hole to run casing.
Mud weight increased to 10ppg with barite as requested by company representative. Running centrifuge during extended periods of circulation to maintain LGS as low as possible.

Wiper trip and washing and reaming to TD in attempt to run 9 5/8" casing to TD.

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16/02/2005	TD = 2735 m	Day 19
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Continue POH, hold JSA, pick up and run 9 5/8" casing. No problems till 1962 meters, circulate casing and wash down. Circulating casing down from 1962 to 1973 meters. Losing mud at shakers due to sticky clays blinding shaker screens.

Dump possum belly (+/- 40 bbls) after circulating at 1962 meters to try and minimise future mud losses at shakers due to blinding of shaker screens. Add glute biocide to prevent bacterial degradation. Maintained active volume by adding premix whole mud additions weighted to 9.9ppg.

Run 9 5/8" casing.

17/02/2005	TD = 2735 m	Day 20
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Run 9 5/8" casing to 2184m. Schlumberger pump 60bbls of chemical wash and 60bbls of spacers followed by 128bbls of lead and 50bbls of tail cement. The casing was displaced with 625bbls of mud. No cement was observed back to surface during displacement. WOC.

All mud properties within specifications and building premixes to complete cement displacement and preparing for next interval. Had losses over the shakers again due to blinding of screens by fines/clays. The screens were downgraded to 84's mesh size in order to hold mud in the system.

The LGS will be conditioned using the centrifuge after cement job.

Volume left behind casing was 376bbls (other).

Run casing to 2184m.

18/02/2005	TD = 2184 m	Day 21
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Nipple up BOP and test.

Fixed used shaker screens for next interval. Centrifuged and de-siltered surface active pit to decrease level of drilled solids in mud.

Note: Removed 234 bbls from mud volume due to mud left in original 12.25" hole.

Nipple up BOP.

19/02/2005	TD = 2189 m	Day 22
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Complete testing BOP. make up 8.5" bit and BHA, RIH, drill out cement and shoe.

Pretreat mud with citric acid and bicarbonate to minimise cement contamination to mud. Add premix whole mud additions to reduce mud weight to 9.2 ppg. (1.1 s.g.). Add OS-1 oxygen scavenger for corrosion control. Continued centrifuging active system to reduce LGS. Dumped 198bbls of old heavy mud to reduce LGS and due to lack of pit space. Using coarse screens while drilling cement.

Drill out cement and shoe.

20/02/2005	TD = 2180 m	Day 23
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RIH with tubing stinger to 2250m. Circ bottom up. Spot 14 bbl HiVis pill at 2260m. Pull back to 2234m and set cement plug to 2180m. Pump 5 bbl water test lines, pump 15 bbl water, pump cement, (38.4 bbls) pump 1.7 bbls water, displace with 122.6 bbls mud. Pull back to 2100m, circ and check for cement, POH to 1240m. WOC.


Treat mud with citric acid and bicarb prior to cementing. Add further bicarb and citric while circulating. No cement returns observed at shakers while circulating although post cementing mud check showed cement had entered system as pH had increased to 10. Use DuoVis for hi vis pill prior to cementing. Adding extra Duotec, KCl and Pac UI to restore mud properties. Clean sandtrap and possum belly (50 bbls). Added defoamer to prevent aeration and allow accurate mud weights.

Spot cement plug.

21/02/2005	TD = 2192 m	Day 24
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WOC. RIH 2 7/8" tubing and tag cement. Circulate bottoms up and POH. Pick up 8 1/2" bit and BHA and RIH. Control drill cement while attempting to kick off cement plug. Drill to 2192m.

Dumped 130bbls of cement contaminated mud at shakers during bottoms up following tagging cement. Transferred over new premix. Added KCl salt to active. Treated mud with bicarb and citric acid prior to drilling cement to limit effects of cement contamination. Maintain mud weight at 1.13sg.

	Operator : Bass Strait Oil Co. Well Name : Zane Grey 1 Contractor : Diamond Offshore	Field/Area : Gippsland Description : Exploration Location : Vic-P42	Daily Discussion M-I Well : 17396
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22/02/2005	TD = 2244 m	Day 25
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Continue drilling 8.5" hole to 2244 meters. Adding premix as required to maintain volume. Mud properties stable. Concentrating heavily on maintaining consistent mud weight throughout this section.

Continue drilling 8.5" hole. Slow ROP, possible bit balling, pump 25 bbl KCl/caustic pill, no substantial gain in ROP. Install finer mesh screens to minimise low gravity solids. Delay installation of finer shaker screens until booster pump has been activated. Running desilter and centrifuge to control mud weight. Added extra Glycol to bring up concentration to 4% as per program. Added Duotec and KCl to lift low end rheology and salt concentration. Adding OS1 for corrosion control.

Continue drilling 8.5" hole.

23/02/2005	TD = 2532 m	Day 26
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Continue drilling 8.5" hole to 2532 meters.

Received 2x145's and 6x165's shaker screens. Checking screen condition regularly and upgrading as necessary. Keeping mud weight as stable as practically possible with solids control and additions of unweighted premix.

Drilling 8 1/2" hole very slowly. Kick off successful. Checked bit balling, no problem. ROP increased at around 2300m.

24/02/2005	TD = 2886.7 m	Day 27
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Continue drilling to 2886 meters. Drilling predominantly sandstone and claystone with coal. Stop and repair top drive, circulate and condition hole prior to making 5 stand wiper trip through coal stringer.

Transfer 150 bbls old heavy (1.16 sg) mud from active to pit 2, dilute with unweighted premix from pit 5 to control mud weight.

Continue adding premix whole mud additions to maintain volume and control mud weight/low gravity solids. Running desilter and centrifuge 24 hours to minimise solids. Adding OS-1 oxygen scavenger for corrosion control. Mud properties remaining constant. Maintain mud weight at 1.15 sg as requested. Seal on shaker two is broken. Currently running on three shakers and as a result lost significant volumes of mud over shakers.

Drill to 2886 meters. Experiencing coal stringers. Down 1 shaker and losing as a result. Small wiper trip through coal.

25/02/2005	TD = 3107 m	Day 28
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Continue drilling to 3107 meters. Survey at 3044 meters = 31. Bit stopped drilling, circulate hole clean, pump slug (2) and POH to check bit. Repairing shaker screens as required. Ten new shaker screens (6 x 145 and 4 x 120 mesh) taken from stores. Problems with delaminating and holes persisting. Running desander and centrifuge 24 hours to reduce LGS.

Drill to 3107 meters. Bit stopped drilling.

26/02/2005	TD = 3107 m	Day 29
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On tripping out of hole for bit change found that bit and half of mud motor was left in hole. RIH with cement stinger to 3106m. Circ bottoms up, pump 20 bbls water, 18 bbls cement and 7 bbls water. Displace cement, POH and lay out tubing. Make up new kick off assembly.

Dumped sand trap and possum belly (+/- 80bbls). Changed out screens and replaced with 2 new 120's and 2 new 145's. Building premixes with concentrated PHPA, Pac UL and Glycol to maintain system properties.


POH for bit change and found that bit and half of mud motor were left in hole. Cement fish and sidekick.

27/02/2005	TD = 3107 m	Day 30
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Make up bit and BHA, RIH, tag cement and attempt to kick off. Unable to kick off and drill new hole. Hit fish. Circulate hole clean, pump barite slug and POH.

Tag and drill cement. Dump 260 bbls of cement contaminated mud at shakers. Running desilter and centrifuge continuously to reduce low gravity solids. Using coarse 84 mesh screens to minimise concentrated PHPA premix mud losses and prevent cement blocking fine screens. Treat mud with citric acid and bicarb prior to drilling cement.

Drill cement. Mud gets contaminated again! Can't kick off because formation too hard - hit fish. POOH for cement plug.

	Operator : Bass Strait Oil Co. Well Name : Zane Grey 1 Contractor : Diamond Offshore	Field/Area : Gippsland Description : Exploration Location : Vic-P42 Daily Discussion M-I Well : 17396
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28/02/2005	TD = 3107 m	Day 31
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RIH with 18 joints cement stinger to 3106m. Circulate hole clean and cement as per program. (Plug from 2946 to 3106m). Pull back to 2820m, pump slug and POH with stinger. Make up new bit and BHA, RIH.

Lost 18 bbls while cleaning out pit # 4, primary premixing pit. Mix up 470bbls of new unweighted premix. Repairing old shaker screens and replaci ng as required.

WOC.

1/03/2005	TD = 2995 m	Day 32
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WOC. RIH with 8 1/2" BHA and attempt to kick off openhole. Allow adequate time for cement to set. Run in and tag cement and attempt to kick off cement. The 6MT of Barite charged off todays report is a stock adjustment to match the barge engineers figures.

Have drilled large amounts of cement over last few days and mud properties (yield point, 6 RPM readings) have reduced below program specifications. Active system treated with high concentration of Duovis and Duotec but these proved ineffective due to the high calcium from cement and high pH. Forward plan is to wait until finished drilling cement and then treat mud properties back to program specifications. Have presently used all stock of Citric and Bicarb. Cleaned possum belly and sandtrap.

2/03/2005	TD = 3022 m	Day 33
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Continue drilling cement to 3022 meters while attempting to drop off and make new hole - no success. Circulate hole clean, pump slug and POH.

Will bring properties back to program specs once finished drilling cement.

Mud weight and viscosity observed to be dropping off while drilling cement. Waiting for the arrival of new citic acid and bicarbonate stocks to treat cement contaminated mud. Added barite and KCl to increase mud weight. Prehydrated gel (28 ppb) in premix tank in for adding to mud when drilling resumes to raise YP and 6RPM reading. pH too high for polymers to work. Limited use of solids control equipment due to low mud weight.

Drill to 3022 meters.

3/03/2005	TD = 3056 m	Day 34
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Continue drilling cement while attempting to drop off to make new hole.

Waiting on boat with new stocks of citric acid and sodium bicarbonate to treat cement contaminated mud. Pumped weighted gel high viscosity Pac UL sweeps to check for adequate hole cleaning...no problems. High pH burning off polymers which is reducing mud rheology. Adding barite as required to maintain mud weight at 1.13 sg. Dump and clean out possum belly and sandtrap.

Drill to 3056 meters.

4/03/2005	TD = 3070 m	Day 35
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Continue drilling cement to 3070 meters while attempting to kick off into new formation. Circulate hole clean, pump slug and POH to pick up new bit. RIH.

Waiting on citric and bicarbonate to treat cement contaminated mud, chemicals presently being offloaded from workboat. Gel usage was a correction from yesterday as per barge engineers bulk dips.

Continue drilling to 3070m.


5/03/2005	TD = 3092 m	Day 36
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Continue drilling to 3092 meters. Now drilling in 100% formation. Circulate hole clean, pump slug, POH to change bit. RIH to continue drilling.

Dumped out cement contaminated sand traps and possum belly during trip.

Commence treating cement contaminated mud as soon as the bit started to drill new formation. Mud properties reacted positively with the addition of Sodium Bicarbonate and citric acid (large quantities required, 2.2 ppb of each so far). Increase in rheology noticed immediately although the drop in pH and calcium levels was only marginal. Working on surface volume while tripping.

Dril;l to 3092 meters.

	Operator : Bass Strait Oil Co. Well Name : Zane Grey 1 Contractor : Diamond Offshore	Field/Area : Gippsland Description : Exploration Location : Vic-P42 Daily Discussion M-I Well : 17396
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6/03/2005	TD = 3162.1 m	Day 37
<p>RIH with new bit, continue drilling to 3162.1 meters. Problems with top drive, circulate hole clean, pump slug and pull back to shoe to repair top drive.</p> <p>Circulate and condition mud while drilling. Adding Pac UL to reduce fluid loss. Mud tending to foam, postpone adding Duovis to raise 6 rpm reading till aeration of mud has been removed to prevent mud pumps from losing oressure.</p> <p>Drill to 3162.1 meters.</p>		


7/03/2005	TD = 3162.1 m	Day 38
<p>Repairing top drive (24 hours).</p> <p>None required.</p> <p>Mud loggers report 24 bbls lost to hole while monitoring trip tank. (No circulation today).</p> <p>Rig Repair</p>		

8/03/2005	TD = 3162.1 m	Day 39
<p>Continue repairs to top-drive.</p> <p>Add Pac UL to lower fluid loss in active pit.</p> <p>Downhole mud loss includes 24 bbls omitted from yesterdays volume accounting report.</p> <p>Rig repair</p>		

9/03/2005	TD = 3460 m	Day 40
<p>RIH, drill to 3460 meters. Inclination = 22.6 degrees. Initially problems maintaining pump pressure, changed suction pit and cleaned out sediment from suction lines, good pressure now. Driller reports hole appears to be in good condition. Cuttings appear firm, shiny and well consolidated on shaker screens. Max gas = 18%.</p> <p>Adding premix with extra Pac UL that was previously made to further lower the fluid loss. Adding KCl to increase mud weight to 1.17 sg as requested. Adding OS-1 oxygen scavenger for corrosion control. Lost mud at shakers while drilling sand sections, maintained fine screens despite losses to minimise low gravity solids.</p> <p>Drill to 3460 meters.</p>		

10/03/2005	TD = 3675 m	Day 41
<p>Continue drilling to 3675 meters (TD). Circulate hole clean, make wiper trip, RIH, condition mud, pump slug and POH for logs.</p> <p>Treat mud with biocide and oxygen scavenger to prevent bacterial degradation while logging. Adding KCl for weight. Reduce fluid loss with Pac UL prior to logging. Running centrifuge to reduce low gravity solids. Adding extra PolyPlus to replace PHPA lost with cuttings. Occasional mud losses at shakers, maintain fine screens to minimise solids build-up.</p> <p>Drill to 3675 meters.</p>		

11/03/2005	TD = 3675 m	Day 42
<p>Rig up and run wireline logs - 24 hours logging, no problems.</p> <p>Inventory corrections:</p> <p>Incorrectly entered 12 Glycol MC instead of LC. Citric Acid, 40 sacks on pallet, not 44 as entered on Rpt # 42.</p> <p>Re-stacked all chems in store room and did inventory check ready for back loading. Chems used today is inventory correction.</p> <p>Logging</p>		

	Operator : Bass Strait Oil Co. Well Name : Zane Grey 1 Contractor : Diamond Offshore	Field/Area : Gippsland Description : Exploration Location : Vic-P42 Daily Discussion M-I Well : 17396
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12/03/2005	TD = 3675 m	Day 43
Continue logging operations. Mud loggers report 48 bbls lost to formation while logging. Logging.		
13/03/2005	TD = 3675 m	Day 44
Continue logging operations. Lost 40 bbls to formation while logging. Wireline logging.		
14/03/2005	TD = 3675 m	Day 45
Complete logging, RIH with 2 7/8" cement stinger on drill pipe to 3390 meters. Circulate bottom up prior to cementing for P and A. None required. Circulate/P and A		
15/03/2005	TD = 3675 m	Day 46
Spot 10-bbl hi-vis pill at 3390m. Pull back to 3350m. Set Plug #1 from 3350m to 3250m. Pull back to 3150m and circ b/u. Lay down pipe. Spot 15 bbls hi vis pill at 2290 meters. Set plug #2 from 2230m to 2130m. Circ mud, no cement. RIH and tag cement, displace with inhibited mud. POH and lay out pipe. Inhibit mud with caustic soda, biocide and oxygen scavenger. Used Calcium Chloride for cement top job. Pump barite slugs as required. Gel used for high viscosity pills. Pand A		

**DRILLING FLUIDS RECAP FOR BASS STRAIT OIL
ZANE GREY 1**

**COST
BY
INTERVAL**



PRODUCT SUMMARY

Operator : Bass Strait Oil Co.
Well Name : Zane Grey 1
Contractor : Diamond Offshore

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42

SUMMARY OF PRODUCT USAGE FOR INTERVAL

29/01/2005 - 29/01/2005, 4- 128 m

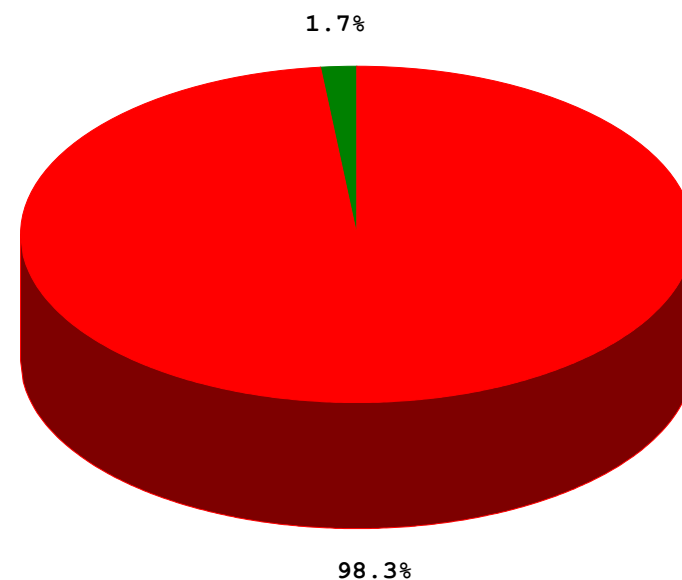
WATER-BASED MUD	SIZE	AMOUNT	UNIT COST	PROD COST
			(\$)	(\$)
1 - CAUSTIC SODA (DRY)	25 KG DM	3	19.50	58.50
2 - SODIUM BICARBONATE	25 KG BG	3	10.90	32.70
3 - M-I GEL BULK	1 MT BK	15	298.30	4474.50
4 - GUAR GUM	25 KG BG	16	45.10	721.60
SUB TOTAL:				5287.30
TAX:				0.00
WATER-BASED MUD TOTAL COST:				5287.3
TOTAL MUD COST FOR INTERVAL:				5287.3

BREAKDOWN OF COST BY PRODUCT GROUP 29/01/2005 - 29/01/2005, 94 - 128 m

Water-Based Mud Products	\$	%
1-Common Chemicals	91.20	1.7
2-Visc/Fluid Loss	5196.10	98.3

Water-Based Mud Total Cost: \$ 5287.30 100.0

Water-Based Mud





PRODUCT SUMMARY

Operator : Bass Strait Oil Co.
Well Name : Zane Grey 1
Contractor : Diamond Offshore

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42

SUMMARY OF PRODUCT USAGE FOR INTERVAL

30/01/2005 - 1/02/2005, 128 - 1095 m

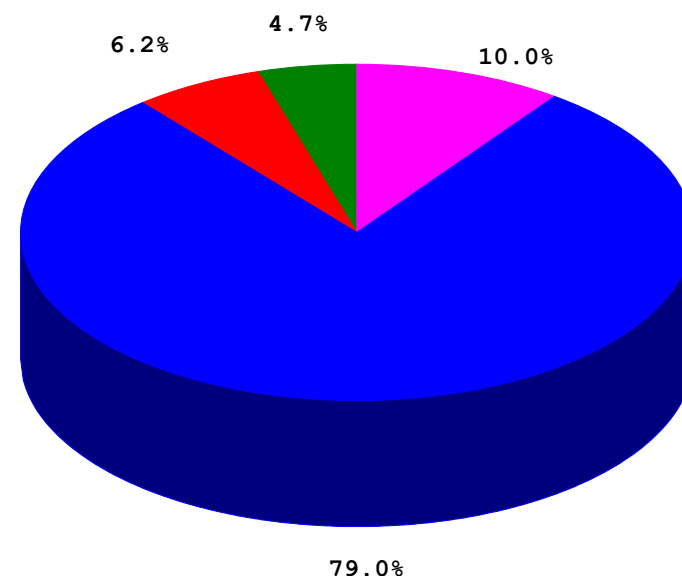
WATER-BASED MUD	SIZE	AMOUNT	UNIT COST	PROD COST
			(\$)	(\$)
1 - CALCIUM CHLORIDE	25 KG BG	8	10.50	84.00
2 - LIME	25 KG BG	1	7.95	7.95
3 - SODA ASH	25 KG BG	4	12.30	49.20
4 - CAUSTIC SODA (DRY)	25 KG DM	11	19.50	214.50
5 - SODIUM BICARBONATE	25 KG BG	7	10.90	76.30
6 - M-I BAR BULK	1 MT BK	9	283.50	2446.61
7 - M-I GEL BULK	1 MT BK	62	298.30	18476.70
8 - POTASSIUM CHLORIDE	1 MT BG	2	382.50	765.00
9 - GUAR GUM	25 KG BG	26	45.10	1172.60
10 - M-I BAR	25 KG BG	12	6.52	78.24
11 - M-I GEL NT	100 LB BG	20	13.54	270.80
12 - M-I LUBE	55 GA DM	7	225.00	1575.00
SUB TOTAL:				25216.90
TAX:				0.00
WATER-BASED MUD TOTAL COST:				25216.9
TOTAL MUD COST FOR INTERVAL:				25216.9

BREAKDOWN OF COST BY PRODUCT GROUP 30/01/2005 - 1/02/2005, 128 - 1095 m

Water-Based Mud Products	\$	%
1-Common Chemicals	1196.95	4.7
2-Lubricant	1575.00	6.2
3-Visc/Fluid Loss	19920.10	79.0
4-Weight Material	2524.85	10.0

Water-Based Mud Total Cost: \$ 25216.90 100.0

Water-Based Mud





PRODUCT SUMMARY

Operator : Bass Strait Oil Co.
Well Name : Zane Grey 1
Contractor : Diamond Offshore

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42

SUMMARY OF PRODUCT USAGE FOR INTERVAL

2/02/2005 - 16/02/2005, 1095 - 2735 m

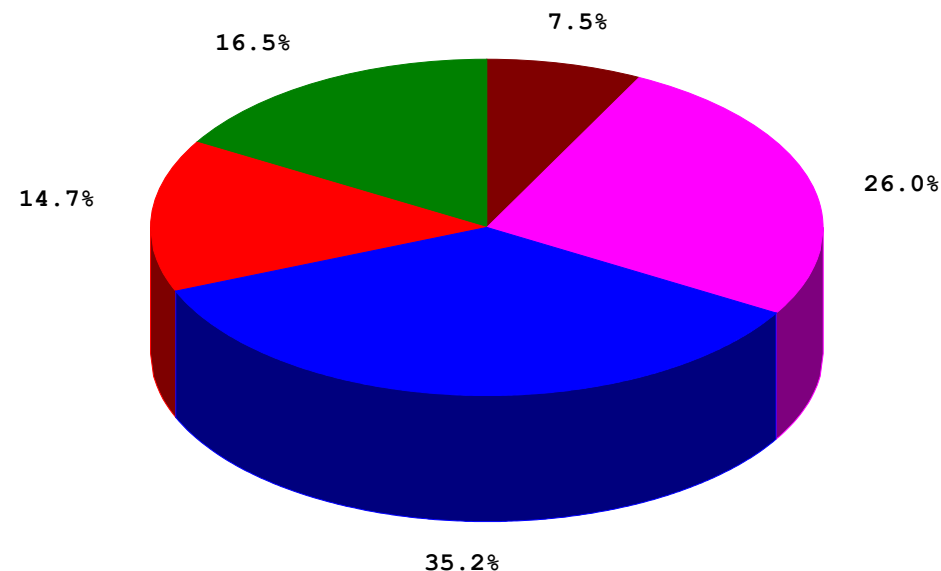
WATER-BASED MUD	SIZE	AMOUNT	UNIT COST	PROD COST
			(\$)	(\$)
1 - CITRIC ACID	25 KG BG	14	35.80	501.20
2 - DUOTEC	25 KG BG	175	193.11	33794.25
3 - OS-1	25 KG BG	32	35.40	1132.80
4 - SODA ASH	25 KG BG	14	12.30	172.20
5 - CAUSTIC SODA (DRY)	25 KG DM	2	19.50	39.00
6 - SODIUM BICARBONATE	25 KG BG	42	10.90	457.80
7 - M-I BAR BULK	1 MT BK	56	283.50	15830.64
8 - POTASSIUM CHLORIDE	1 MT BG	75	382.50	28687.50
9 - GLUTE 25	25 LT CN	4	68.25	273.00
10 - DEFOAM A	5 GA CN	28	66.30	1856.40
11 - IDCAP D	25 KG BG	88	197.36	17367.68
12 - POTASSIUM HYDROXIDE	25 KG CN	52	33.80	1757.60
13 - HIBTROL	25 KG BG	58	88.93	5157.94
14 - POLYPAC UL	25 KG BG	137	93.43	12799.91
15 - POLY PLUS DRY	25 KG BG	163	83.50	13610.50
16 - GLYDRIL LC	55 GA DM	44	626.94	27585.36
17 - GLYDRIL MC	55 GA DM	131	356.50	46701.50
18 - DUO-VIS	25 KG BG	14	222.71	3117.94
SUB TOTAL:				210843.22
TAX:				0.00
WATER-BASED MUD TOTAL COST:				210843.22
TOTAL MUD COST FOR INTERVAL:				210843.22

BREAKDOWN OF COST BY PRODUCT GROUP 2/02/2005 - 16/02/2005, 1095 - 2735 m

Water-Based Mud Products	\$	%
1-Common Chemicals	34877.50	16.5
2-Encapsulator	30978.18	14.7
3-Inhibitor	74286.86	35.2
4-Visc/Fluid Loss	54870.04	26.0
5-Weight Material	15830.64	7.5

Water-Based Mud Total Cost: \$ 210843.22 100.0

Water-Based Mud





PRODUCT SUMMARY

Operator : Bass Strait Oil Co.
Well Name : Zane Grey 1
Contractor : Diamond Offshore

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42

SUMMARY OF PRODUCT USAGE FOR INTERVAL

17/02/2005 - 15/03/2005, 2735 - 3675 m

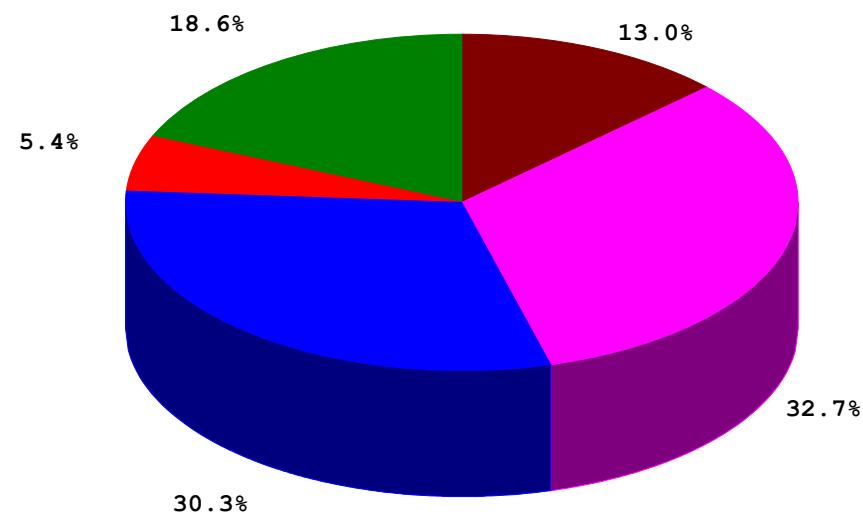
WATER-BASED MUD	SIZE	AMOUNT	UNIT COST	PROD COST
			(\$)	(\$)
1 - CALCIUM CHLORIDE	25 KG BG	28	10.50	294.00
2 - CITRIC ACID	25 KG BG	101	35.80	3615.80
3 - DUOTEC	25 KG BG	74	193.11	14290.14
4 - OS-1	25 KG BG	42	35.40	1486.80
5 - SODA ASH	25 KG BG	22	12.30	270.60
6 - CAUSTIC SODA (DRY)	25 KG DM	4	19.50	78.00
7 - SODIUM BICARBONATE	25 KG BG	82	10.90	893.80
8 - M-I BAR BULK	1 MT BK	56	283.50	15790.95
9 - M-I GEL BULK	1 MT BK	7	298.30	2207.42
10 - POTASSIUM CHLORIDE	1 MT BG	34	382.50	13005.00
11 - GLUTE 25	25 LT CN	12	68.25	819.00
12 - DEFOAM A	5 GA CN	24	66.30	1591.20
13 - POTASSIUM HYDROXIDE	25 KG CN	14	33.80	473.20
14 - POLYPAC UL	25 KG BG	160	93.43	14948.80
15 - POLY PLUS DRY	25 KG BG	78	83.50	6513.00
16 - GLYDRIL LC	55 GA DM	28	626.94	17554.32
17 - GLYDRIL MC	55 GA DM	54	356.50	19251.00
18 - DUO-VIS	25 KG BG	37	222.71	8240.27
SUB TOTAL:				121323.30
TAX:				0.00
WATER-BASED MUD TOTAL COST:				121323.3
TOTAL MUD COST FOR INTERVAL:				121323.3

BREAKDOWN OF COST BY PRODUCT GROUP 17/02/2005 - 15/03/2005, 2735 - 3675 m

Water-Based Mud Products	\$	%
1-Common Chemicals	22527.40	18.6
2-Encapsulator	6513.00	5.4
3-Inhibitor	36805.32	30.3
4-Visc/Fluid Loss	39686.63	32.7
5-Weight Material	15790.95	13.0

Water-Based Mud Total Cost: \$ 121323.30 100.0

Water-Based Mud



**DRILLING FLUIDS RECAP FOR BASS STRAIT OIL
ZANE GREY 1**

**DAILY VOLUME
SUMMARY SHEET**

Bass Strait Oil ZaneGrey-1

36" Top Hole. Pre-Hydrated Gel

Hole volume zero due to SW

Date	Mud Volume Status bbl					Mud Volume Built bbl					Mud Volume Lost bbl						
	Depth	Hole	Surf Active	Premix	Total Vol	Water	Mud Received	Bar Chems	Daily Total	Cum Built	Solids Equip	Surf	Dump	Hole	Sweeps Plugs	Daily Total	Cummul Lost
29-Jan-05	128	0	0	705	705	1538		47	1585	1585			15		865	880	880
30-Jan-05					0				0	1585						0	880

16" Pre-Hydrated Gel

Hole volume zero due to SW

Date	Mud Volume Status bbl					Mud Volume Built bbl					Mud Volume Lost bbl						
	Depth	Hole	Surf Active	Premix	Total Vol	Water	Mud Received	Bar Chems	Daily Total	Cum Built	Solids Equip	Surf	Dump	Hole	Sweeps Plugs	Daily Total	Cummul Lost
30-Jan-05	576			1910	1910	2946	705	101	3752	3752					1842	1842	1842
31-Jan-05	1045			1967	1967	1517		43	1560	5312					1503	1503	3345
1-Feb-05	1095			538	538	582		71	653	5965					2082	2082	5427
2-Feb-05	1095			210	210				0	5965			328			328	5755

12.25" KCl/Idcap D

	Mud Volume Status bbl					Mud Volume Built bbl								Mud Volume Lost bbl							
Date	Depth	Hole	Surf Active	Res	Total Vol	Water	Mud Received	Casing Cement	Mud Built	Chemical	Bar	Daily Total	Cum Built	Solids Equip	Centrifuge	Dump	Hole	Sweeps Plugs	Other	Daily Total	Cummul Lost
					0							0	0							0	0
2-Feb-05	1095			1730	1730	1582	40			108		1730	1730							0	0
3-Feb-05	1095			1733	1733					3		3	1733							0	0
4-Feb-05	1095	556	431	680	1667					7		7	1740			73				73	73
5-Feb-05	1600	786	431	414	1631	399				55		454	2194	80	360		50			490	563
6-Feb-05	2103	1031	354	887	2272	807				75		882	3076	139	102					241	804
7-Feb-05	2236	1077	395	772	2244	419				71	14	504	3580	484	48					532	1336
8-Feb-05	2675	1277	401	622	2300	426				42		468	4048	319	93					412	1748
9-Feb-05	2707	1311	329	1263	2903	577				66.62	9.38	653	4701			50				50	1798
10-Feb-05	2724	1300	460	1052	2812	356				24		380	5081		27	444				471	2269
11-Feb-05	2772	1322	425	1052	2799	320				29	3	352	5433			285	80			365	2634
12-Feb-05	2772	1008	423	1123	2554							0	5433			75	170			245	2879
13-Feb-05	2772	1008	474	933	2415						5	5	5438			100	44			144	3023
14-Feb-05	2772	1391	453	443	2287	360				29	13	402	5840			410	120			530	3553
15-Feb-05	2735	1362	481	619	2462	355				32	20	407	6247			112	120			232	3785
16-Feb-05	2735	1381	477	601	2459	276				13	18	307	6554			240	70			310	4095
17-Feb-05	2735	871	520	1209	2600	283		307		19	15	624	7178			453	30			483	4578
18-Feb-05	2184	607	510	1209	2326							0	7178			274				274	4852

8.5" KCL / PHPA / Glycol

Date	Mud Volume Status bbl					Mud Volume Built bbl								Mud Volume Lost bbl							
	Depth	Hole	Surf Active	Res	Total Vol	Water	Mud Received	Casing Cement	Mud Built	Chemical	Bar	Daily Total	Cum Built	Solids Equip	Centrifuge	Dump	Hole	Sweeps Plugs	Other		
18-Feb-05	2184	607	510	1209	2326		2326					2326	2326							0	0
19-Feb-05	2189	551	422	1070	2043							0	2326			283				283	283
20-Feb-05	2180	566	420	1070	2056	22				13		35	2361			22				22	305
21-Feb-05	2192	548	511	1059	2118					3		3	2364			130			-189	-59	246
22-Feb-05	2244	559	492	1059	2110	30				15		45	2409	35	10	8				53	299
23-Feb-05	2532	619	484	947	2050					6		6	2415	51	15					66	365
24-Feb-05	2887	694	525	949	2168	350				30		380	2795	158	22	35	47			262	627
25-Feb-05	3107	740	525	1041	2306	298				36	4	338	3133	111	36		53			200	827
26-Feb-05	3107	754	497	1101	2352	313				22	3	338	3471	11	4	80	8		189	292	1119
27-Feb-05	3107	795	445	743	1983					1	4	5	3476	75	24	260	15			374	1493
28-Feb-05	3107	763	400	1259	2422	445				26		471	3947	10	5	17				32	1525
1-Mar-05	2995	718	499	1042	2259					4	9	13	3960	70	15	91				176	1701
2-Mar-05	3022	724	534	1099	2357	180				17	7	204	4164	67	15	24				106	1807
3-Mar-05	3056	731	510	1098	2339	100				6	13	119	4283	60	15	62				137	1944
4-Mar-05	3070	736	500	1018	2254					9		9	4292	45	15	34				94	2038
5-Mar-05	3092	743	361	794	1898					7	12	19	4311	75	20	280				375	2413
6-Mar-05	3162	753	361	975	2089	370				29	3	402	4713	120	15	76				211	2624
7-Mar-05	3162	774.5	340.5	974	2089							0	4713							0	2624
8-Mar-05	3162	774	293	975	2042							0	4713				47			47	2671
9-Mar-05	3460	830	297	776	1903					7	4	11	4724	60	10	50	30			150	2821
10-Mar-05	3765	898	306	486	1690					6	3	9	4733	117	15	40	50			222	3043
11-Mar-05	3765	898	306	486	1690							0	4733							0	3043
12-Mar-05	3765	968	297	377	1642							0	4733				48			48	3091
13-Mar-05	3765	967	257	377	1601							0	4733				41			41	3132
14-Mar-05	3765	0	0		0							0	4733			1601				1601	4733

**DRILLING FLUIDS RECAP FOR BASS STRAIT OIL
ZANE GREY 1**

**TOTAL
MATERIAL
COST**



PRODUCT SUMMARY

Operator : Bass Strait Oil Co.
Well Name : Zane Grey 1
Contractor : Diamond Offshore

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42

SUMMARY OF PRODUCT USAGE FOR INTERVAL

27/01/2005 - 15/03/2005, 0 - 3675 m

WATER-BASED MUD	SIZE	AMOUNT	UNIT COST	PROD COST
			(\$)	(\$)
1 - CALCIUM CHLORIDE	25 KG BG	36	10.50	378.00
2 - CITRIC ACID	25 KG BG	115	35.80	4117.00
3 - DUOTEC	25 KG BG	249	193.11	48084.39
4 - LIME	25 KG BG	1	7.95	7.95
5 - OS-1	25 KG BG	74	35.40	2619.60
6 - SODA ASH	25 KG BG	40	12.30	492.00
7 - CAUSTIC SODA (DRY)	25 KG DM	20	19.50	390.00
8 - SODIUM BICARBONATE	25 KG BG	134	10.90	1460.60
9 - M-I BAR BULK	1 MT BK	120	283.50	34068.19
10 - M-I GEL BULK	1 MT BK	84	298.30	25158.62
11 - POTASSIUM CHLORIDE	1 MT BG	111	382.50	42457.50
12 - GUAR GUM	25 KG BG	42	45.10	1894.20
13 - M-I BAR	25 KG BG	12	6.52	78.24
14 - M-I GEL NT	100 LB BG	20	13.54	270.80
15 - GLUTE 25	25 LT CN	16	68.25	1092.00
16 - DEFOAM A	5 GA CN	52	66.30	3447.60
17 - IDCAP D	25 KG BG	88	197.36	17367.68
18 - POTASSIUM HYDROXIDE	25 KG CN	66	33.80	2230.80
19 - HIBTROL	25 KG BG	58	88.93	5157.94
20 - POLYPAC UL	25 KG BG	297	93.43	27748.71
21 - POLY PLUS DRY	25 KG BG	241	83.50	20123.50
22 - M-I LUBE	55 GA DM	7	225.00	1575.00
23 - GLYDRIL LC	55 GA DM	72	626.94	45139.68
24 - GLYDRIL MC	55 GA DM	185	356.50	65952.50
25 - DUO-VIS	25 KG BG	51	222.71	11358.21
SUB TOTAL:				362670.72



PRODUCT SUMMARY

Operator : Bass Strait Oil Co.
Well Name : Zane Grey 1
Contractor : Diamond Offshore

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42

SUMMARY OF PRODUCT USAGE FOR INTERVAL

27/01/2005 - 15/03/2005, 0 - 3675 m

TAX: 0.00

WATER-BASED MUD TOTAL COST: 362670.72

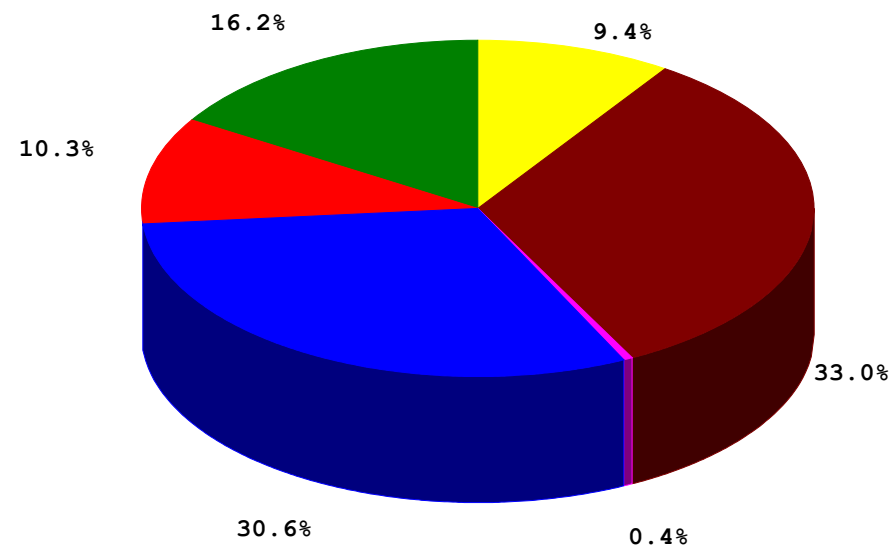
TOTAL MUD COST FOR INTERVAL: 362670.72

BREAKDOWN OF COST BY PRODUCT GROUP 27/01/2005 - 15/03/2005, 0 - 3675 m

Water-Based Mud Products	\$	%
1-Common Chemicals	58693.05	16.2
2-Encapsulator	37491.18	10.3
3-Inhibitor	111092.18	30.6
4-Lubricant	1575.00	0.4
5-Visc/Fluid Loss	119672.87	33.0
6-Weight Material	34146.43	9.4

Water-Based Mud Total Cost: \$ 362670.71 100.0

Water-Based Mud



**DRILLING FLUIDS RECAP FOR BASS STRAIT OIL
ZANE GREY 1**

**HYDRAULICS
REPORT**



HYDRAULICS SUMMARY

Operator : Bass Strait Oil Co.

Field/Area : Gippsland

Well Name : Zane Grey 1

Description : Exploration

Contractor : Diamond Offshore

Location : Vic-P42

Date	29/01/2005	30/01/2005	31/01/2005	1/02/2005	2/02/2005	3/02/2005	4/02/2005	5/02/2005
Depth m	128	450	1045	1095	1095	1095	1095	1550
Days Since Spud	1	2	3	4	5	6	7	8
*RHEOLOGICAL PROPERTIES								
Mud Wt sp.gr.	1.05	1.05	1.05	1.05	1.04	1.045	1.045	1.1
Plastic Visc cP	11	8	13	12	8	8	8	15
Yield Point lb/100ft ²	46	69	32	31	9	10	10	32
3-rpm Rdg Fann deg	24	60	29	24	3	3	3	10
np Value	.2546	.1426	.3661	.3551	.5564	.5305	.5305	.3996
Kp Value lb*s ⁿ /100ft ²	12.4322	33.7616	4.895	5.0106	.5645	.7024	.7024	4.1491
na Value	.2036	.048	.0536	.0908	.3433	.3705	.3705	.3227
Ka Value lb*s ⁿ /100ft ²	18.3728	59.198	28.3512	22.082	1.8283	1.749	1.749	6.3036
*FLOW DATA								
Flow Rate gal/min	855	1154	1154	0	0	0	803	936
Pump Pressure psi	1000	2500	2500	0	0	0	2000	2000
Pump hhp	*	1683	1683	*	*	*	937	1092
*PRESSURE LOSSES								
Drill String psi	*	429	1071	*	*	*	684	1202
Bit psi	*	3097	3097	*	*	*	773	1106
Annulus psi	*	43	40	*	*	*	17	81
Total System psi	*	3568	4208	*	*	*	1474	2388
*BIT HYDRAULICS								
Nozzles 1/32"		3x16	3x16			3x15	3x15	3x15
Nozzles 1/32"						2x14	2x14	2x14
Bit Pressure %	*	124	124	*	*	*	39	55
Bit hhp	*	2085	2085	*	*	*	362	604
Bit HSI (index)	*	10.37	10.37	*	*	*	3.07	5.12
Jet Velocity ft/s	*	192	192	*	*	*	96	112
Impact Force lbf	*	3289	3289	*	*	*	1141	1631
*DRILL COLLARS ANNULUS								
Velocity m/min	*	45	45	*	*	*	67	81
Critical Vel m/min	*	198	138	*	*	*	71	132
Reynolds Number	*	171	345	*	*	*	2251	1130
Crit Re (Lam - Tran)	*	3275	2968	*	*	*	2743	2923
*DRILL PIPE ANNULUS								
Velocity m/min	*	37	37	*	*	*	18	56
Critical Vel m/min	*	196	137	*	*	*	55	119
Reynolds Number	*	121	245	*	*	*	245	717
Crit Re (Lam - Tran)	*	3275	2968	*	*	*	2743	2923
*HOLE CLEANING								
Slip Velocity m/min	*	4	5	*	*	*	8	4
Rising Velocity m/min	*	33	32	*	*	*	10	51
Lifting Capacity %	*	90	86	*	*	*	55	92
Cutting Conc %	*	0.0	0.0	*	*	*	0.0	1.94
Penetration Rate m/h	0	0	0	0	0	0	0	50
CASING SHOE PRESSURES								
ECD sp.gr.	*	1.06	1.05	*	*	*	1.06	1.14
ECD+Cuttings sp.gr.	*	1.06	1.05	*	*	*	1.06	1.16
TOTAL DEPTH PRESSURES								
ECD sp.gr.	*	1.1	1.08	*	*	*	1.06	1.14
ECD+Cuttings sp.gr.	*	1.1	1.08	*	*	*	1.06	1.17

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DRILLING FLUIDS DATA MANAGEMENT SYSTEM



HYDRAULICS SUMMARY

Operator : Bass Strait Oil Co.

Field/Area : Gippsland

Well Name : Zane Grey 1

Description : Exploration

Contractor : Diamond Offshore

Location : Vic-P42

Date	6/02/2005	7/02/2005	8/02/2005	9/02/2005	10/02/2005	11/02/2005	12/02/2005	13/02/2005
Depth m	2100	2111	2625	2707	2724	2772	2772	2772
Days Since Spud	9	10	11	12	13	14	15	16
*RHEOLOGICAL PROPERTIES								
Mud Wt sp.gr.	1.14	1.13+	1.16	1.16	1.16	1.16	1.15	1.16
Plastic Visc cP	19	16	23	21	21	20	22	23
Yield Point lb/100ft ²	32	38	42	36	36	36	33	32
3-rpm Rdg Fann deg	10	8	9	7	7	8	8	8
np Value	.4569	.3744	.4371	.4525	.4525	.4406	.4854	.504
Kp Value lb*s^n/100ft ²	3.1504	5.5788	4.5428	3.6178	3.6178	3.8291	2.8431	2.5314
na Value	.349	.4041	.4254	.459	.4507	.4041	.4041	.3953
Ka Value lb*s^n/100ft ²	6.0385	4.4154	4.7979	3.5327	3.5807	4.4154	4.4154	4.479
*FLOW DATA								
Flow Rate gal/min	936	872	872	872	872	641	0	0
Pump Pressure psi	2600	2600	2800	2800	2800	2045	0	0
Pump hhp	1420	1323	1424	1424	1424	765	*	*
*PRESSURE LOSSES								
Drill String psi	1289	1370	1874	1045	1862	1150	*	*
Bit psi	1146	986	501	800	800	432	*	*
Annulus psi	75	106	148	50	124	115	*	*
Total System psi	2510	2461	2523	1895	2786	1698	*	*
*BIT HYDRAULICS								
Nozzles 1/32"	3x15	3x15	5x15	3x20	3x20	3x20		
Nozzles 1/32"	2x14	2x14	2x14					
Bit Pressure %	44	38	18	29	29	21	*	*
Bit hhp	626	502	255	407	407	162	*	*
Bit HSI (index)	5.31	4.26	2.16	3.45	3.45	1.37	*	*
Jet Velocity ft/s	112	104	73	93	93	68	*	*
Impact Force lbf	1691	1455	1050	1328	1328	717	*	*
*DRILL COLLARS ANNULUS								
Velocity m/min	81	76	76	72	76	56	*	*
Critical Vel m/min	136	134	148	134	133	131	*	*
Reynolds Number	1076	1002	858	947	1024	630	*	*
Crit Re (Lam - Tran)	2844	2957	2871	2850	2850	2866	*	*
*DRILL PIPE ANNULUS								
Velocity m/min	56	52	52	20	52	38	*	*
Critical Vel m/min	122	117	128	95	114	115	*	*
Reynolds Number	699	685	598	598	730	430	*	*
Crit Re (Lam - Tran)	2844	2957	2871	2850	2850	2866	*	*
*HOLE CLEANING								
Slip Velocity m/min	4	5	4	5	5	5	*	*
Rising Velocity m/min	52	47	48	15	47	34	*	*
Lifting Capacity %	92	91	92	76	91	88	*	*
Cutting Conc %	1.93	2.11	2.09	9.12	2.11	0.3	*	*
Penetration Rate m/h	50	50	50	50	50	5	0	0
CASING SHOE PRESSURES								
ECD sp.gr.	1.18	1.16	1.2	1.2	1.19	1.19	*	*
ECD+Cuttings sp.gr.	1.2	1.19	1.23	1.32	1.22	1.19	*	*
TOTAL DEPTH PRESSURES								
ECD sp.gr.	1.18	1.17	1.2	1.2	1.2	1.19	*	*
ECD+Cuttings sp.gr.	1.21	1.2	1.23	1.32	1.22	1.2	*	*

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DRILLING FLUIDS DATA MANAGEMENT SYSTEM



HYDRAULICS SUMMARY

Operator : Bass Strait Oil Co.

Field/Area : Gippsland

Well Name : Zane Grey 1

Description : Exploration

Contractor : Diamond Offshore

Location : Vic-P42

Date		14/02/2005	15/02/2005	16/02/2005	17/02/2005	18/02/2005	19/02/2005	20/02/2005	21/02/2005
Depth	m	2283	2735	2735	2735	2184	2184	1810	2192
Days Since Spud		17	18	19	20	21	22	23	24
*RHEOLOGICAL PROPERTIES									
Mud Wt	sp.gr.	1.188	1.21	1.21	1.22	1.19	1.12	1.13	1.13
Plastic Visc	cP	22	22	22	22	24	15	15	21
Yield Point	lb/100ft ²	35	32	34	42	40	26	25	38
3-rpm Rdg	Fann deg	8	7	7	9	9	6	6	9
np Value		.4709	.493	.478	.4263	.4594	.4498	.4594	.4393
Kp Value	lb*s^n/100ft ²	3.226	2.6619	3.0311	4.7845	3.8905	2.6466	2.4316	4.0668
na Value		.4209	.4422	.4507	.4393	.4182	.3832	.3705	.3953
Ka Value	lb*s^n/100ft ²	4.2962	3.6308	3.5807	4.6902	4.8547	3.4264	3.498	5.0389
*FLOW DATA									
Flow Rate	gal/min	949	829	547	684	0	641	526	526
Pump Pressure	psi	3295	3650	450	650	0	650	1085	1085
Pump	hhp	1824	1765	*	*	*	243	333	333
*PRESSURE LOSSES									
Drill String	psi	1876	1792	*	*	*	827	713	726
Bit	psi	971	754	*	*	*	418		224
Annulus	psi	107	110	*	*	*	238	174	356
Total System	psi	2954	2656	*	*	*	1482	886	1305
*BIT HYDRAULICS									
Nozzles	1/32"	3x20	3x20				3x20		6x15
Nozzles	1/32"								
Bit Pressure	%	29	21	*	*	*	64		21
Bit	hhp	537	365	*	*	*	156		69
Bit HSI	(index)	4.56	3.1	*	*	*	2.75		1.21
Jet Velocity	ft/s	101	88	*	*	*	68		50
Impact Force	lbf	1611	1252	*	*	*	693		418
*DRILL COLLARS ANNULUS									
Velocity	m/min	73	64	*	*	*	145	59	131
Critical Vel	m/min	131	124	*	*	*	126	97	170
Reynolds Number		994	883	*	*	*	3113	1094	1637
Crit Re (Lam - Tran)		2825	2795	*	*	*	2854	2841	2868
*DRILL PIPE ANNULUS									
Velocity	m/min	52	46	*	*	*	15	12	131
Critical Vel	m/min	114	107	*	*	*	82	80	170
Reynolds Number		717	648	*	*	*	648	648	1637
Crit Re (Lam - Tran)		2825	2795	*	*	*	2854	2841	2868
*HOLE CLEANING									
Slip Velocity	m/min	4	5	*	*	*	5	5	4
Rising Velocity	m/min	48	41	*	*	*	9	7	127
Lifting Capacity	%	92	90	*	*	*	63	55	97
Cutting Conc	%	0.0	0.0	*	*	*	0.0	0.0	0.0
Penetration Rate	m/h	0	0	0	0	0	0	0	0
CASING SHOE PRESSURES									
ECD	sp.gr.	1.22	1.24	*	*	*	1.21	1.21	1.26
ECD+Cuttings	sp.gr.	1.22	1.24	*	*	*	1.21	1.21	1.26
TOTAL DEPTH PRESSURES									
ECD	sp.gr.	1.23	1.24	*	*	*	1.21	1.19	1.26
ECD+Cuttings	sp.gr.	1.23	1.24	*	*	*	1.21	1.19	1.26

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DRILLING FLUIDS DATA MANAGEMENT SYSTEM



HYDRAULICS SUMMARY

Operator : Bass Strait Oil Co.

Field/Area : Gippsland

Well Name : Zane Grey 1

Description : Exploration

Contractor : Diamond Offshore

Location : Vic-P42

Date	22/02/2005	23/02/2005	24/02/2005	25/02/2005	26/02/2005	27/02/2005	28/02/2005	1/03/2005
Depth m	2244	2532	2887	3107	3107	3107	3107	2995
Days Since Spud	25	26	27	28	29	30	31	32
*RHEOLOGICAL PROPERTIES								
Mud Wt sp.gr.	1.14	1.13	1.14	1.15	1.15	1.15	1.15	1.14
Plastic Visc cP	19	18	19	17	17	16	18	20
Yield Point lb/100ft ²	33	34	34	32	33	32	34	21
3-rpm Rdg Fann deg	8	7	8	8	8	7	8	6
np Value	.4493	.4288	.442	.4297	.4222	.415	.4288	.5732
Kp Value lb*s ⁿ /100ft ²	3.3671	3.8254	3.5917	3.5859	3.8331	3.8487	3.8254	1.2261
na Value	.3863	.4334	.4041	.3769	.3863	.4244	.4209	.3832
Ka Value lb*s ⁿ /100ft ²	4.5457	3.6831	4.4154	4.6156	4.5457	3.7379	4.2962	3.4264
*FLOW DATA								
Flow Rate gal/min	650	611	594	581	581	462	0	444
Pump Pressure psi	3200	3850	2660	3690	400	1400	0	2050
Pump hhp	1214	1372	922	1251	136	377	*	531
*PRESSURE LOSSES								
Drill String psi	1002	958	1041	1027	952	325	*	705
Bit psi	345	302	288	278		186	*	212
Annulus psi	344	395	462	450	432	73	*	295
Total System psi	1691	1655	1791	1755	1384	584	*	1212
*BIT HYDRAULICS								
Nozzles 1/32"	6x15	6x15	6x15	6x15		2x12	6x14	6x14
Nozzles 1/32"						32		
Bit Pressure %	11	8	11	8		13	*	10
Bit hhp	131	108	100	94		50	*	55
Bit HSI (index)	2.31	1.9	1.76	1.66		.88	*	.97
Jet Velocity ft/s	61	58	56	55		45	*	48
Impact Force lbf	644	564	538	519		338	*	345
DRILL COLLARS ANNULUS								
Velocity m/min	162	152	148	145	72	104	*	111
Critical Vel m/min	153	161	161	149	123	151	*	127
Reynolds Number	2719	2260	2172	2386	1066	1369	*	1986
Crit Re (Lam - Tran)	2854	2882	2864	2881	2892	2901	*	2685
*DRILL PIPE ANNULUS								
Velocity m/min	162	97	94	92	92	25	*	70
Critical Vel m/min	153	138	140	131	134	92	*	112
Reynolds Number	2719	1414	1319	1410	1365	1365	*	1180
Crit Re (Lam - Tran)	2854	2882	2864	2881	2892	2901	*	2685
*HOLE CLEANING								
Slip Velocity m/min	5	5	5	5	5	5	*	5
Rising Velocity m/min	157	92	89	87	87	21	*	65
Lifting Capacity %	97	95	95	95	95	81	*	92
Cutting Conc %	0.06	0.17	0.46	0.36	0.0	0.0	*	0.0
Penetration Rate m/h	2.5	6	16	12.2	0	0	0	0.1
CASING SHOE PRESSURES								
ECD sp.gr.	1.26	1.24	1.26	1.26	1.26	1.22	*	1.21
ECD+Cuttings sp.gr.	1.26	1.24	1.26	1.26	1.26	1.22	*	1.21
TOTAL DEPTH PRESSURES								
ECD sp.gr.	1.26	1.25	1.27	1.27	1.26	1.27	*	1.22
ECD+Cuttings sp.gr.	1.26	1.26	1.28	1.27	1.26	1.27	*	1.22

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DRILLING FLUIDS DATA MANAGEMENT SYSTEM



HYDRAULICS SUMMARY

Operator : Bass Strait Oil Co.

Field/Area : Gippsland

Well Name : Zane Grey 1

Description : Exploration

Contractor : Diamond Offshore

Location : Vic-P42

Date		2/03/2005	3/03/2005	4/03/2005	5/03/2005	6/03/2005	7/03/2005	8/03/2005	9/03/2005
Depth	m	3022	3056	3070	3092	3162	3162	3162	3460
Days Since Spud		33	34	35	36	37	38	39	40
*RHEOLOGICAL PROPERTIES									
Mud Wt	sp.gr.	1.13	1.13	1.13	1.13	1.14	1.14	1.14	1.17
Plastic Visc	cP	17	9	9	18	19	18	18	15
Yield Point	lb/100ft ²	14	7	6	16	17	17	18	25
3-rpm Rdg	Fann deg	6	4	3	4	4	5	5	4
np Value		.6308	.6439	.6781	.613	.6114	.5986	.585	.4594
Kp Value	lb*s ⁿ /100ft ²	.6474	.3079	.2332	.7933	.8481	.893	1.0003	2.4316
na Value		.3573	.2885	.3433	.4289	.5338	.4702	.4702	.4729
Ka Value	lb*s ⁿ /100ft ²	3.5746	2.666	1.8283	2.1201	1.7868	2.4778	2.4778	1.9734
*FLOW DATA									
Flow Rate	gal/min	598	598	598	598	598	0	0	624
Pump Pressure	psi	3200	2754	2754	2700	2800	0	0	3300
Pump	hhp	1116	961	961	942	977	*	*	1201
*PRESSURE LOSSES									
Drill String	psi	1109	943	944	1084	1182	*	*	1197
Bit	psi	382	382	382	382	385	*	*	430
Annulus	psi	303	135	127	248	387	*	*	335
Total System	psi	1793	1459	1453	1714	1954	*	*	1963
*BIT HYDRAULICS									
Nozzles	1/32"	6x14	6x14	6x14	6x14	6x14	6x14	6x14	6x14
Nozzles	1/32"								
Bit Pressure	%	12	14	14	14	14	*	*	13
Bit	hhp	133	133	133	133	134	*	*	157
Bit HSI	(index)	2.35	2.35	2.35	2.35	2.37	*	*	2.76
Jet Velocity	ft/s	65	65	65	65	65	*	*	68
Impact Force	lbf	621	621	621	621	626	*	*	700
DRILL COLLARS ANNULUS									
Velocity	m/min	149	149	149	149	149	*	*	139
Critical Vel	m/min	120	81	77	111	145	*	*	117
Reynolds Number		3579	7361	7624	3901	2497	*	*	3134
Crit Re (Lam - Tran)		2606	2588	2541	2630	2632	*	*	2841
*DRILL PIPE ANNULUS									
Velocity	m/min	95	95	95	95	95	*	*	92
Critical Vel	m/min	106	74	68	95	118	*	*	100
Reynolds Number		2073	3976	4353	2429	1729	*	*	2127
Crit Re (Lam - Tran)		2606	2588	2541	2630	2632	*	*	2841
*HOLE CLEANING									
Slip Velocity	m/min	5	7	8	6	6	*	*	6
Rising Velocity	m/min	89	88	87	88	88	*	*	85
Lifting Capacity	%	94	93	92	93	93	*	*	93
Cutting Conc	%	0.06	0.06	0.06	0.06	0.22	*	*	0.55
Penetration Rate	m/h	2	2	2	2	7.7	0	0	19.8
CASING SHOE PRESSURES									
ECD	sp.gr.	1.2	1.16	1.16	1.19	1.23	*	*	1.24
ECD+Cuttings	sp.gr.	1.21	1.16	1.16	1.19	1.23	*	*	1.25
TOTAL DEPTH PRESSURES									
ECD	sp.gr.	1.21	1.17	1.16	1.2	1.24	*	*	1.25
ECD+Cuttings	sp.gr.	1.21	1.17	1.16	1.2	1.24	*	*	1.26

M-I L.L.C.

17396

DRILLING FLUIDS DATA MANAGEMENT SYSTEM



HYDRAULICS SUMMARY

Operator : Bass Strait Oil Co.

Field/Area : Gippsland

Well Name : Zane Grey 1

Description : Exploration

Contractor : Diamond Offshore

Location : Vic-P42

Date		10/03/2005	11/03/2005	12/03/2005	13/03/2005	14/03/2005	15/03/2005		
Depth	m	3675	3675	3675	3675	3675	3675		
Days Since Spud		41	42	43	44	45	46		
*RHEOLOGICAL PROPERTIES									
Mud Wt	sp.gr.	1.17	1.17	1.17	1.17	1.17	1.17		
Plastic Visc	cP	15	16	15	16	17	17		
Yield Point	lb/100ft ²	26	26	26	26	27	27		
3-rpm Rdg	Fann deg	5	5	5	6	6	6		
np Value		.4498	.4657	.4498	.4657	.4713	.4713		
Kp Value	lb*s^n/100ft ²	2.6466	2.4558	2.6466	2.4558	2.4838	2.4838		
na Value		.4225	.4352	.4225	.3705	.3953	.3953		
Ka Value	lb*s^n/100ft ²	2.678	2.6232	2.678	3.498	3.3593	3.3593		
*FLOW DATA									
Flow Rate	gal/min	628	0	0	0	607	607		
Pump Pressure	psi	3300	0	0	0	2100	2100		
Pump	hhp	1209	*	*	*	744	744		
*PRESSURE LOSSES									
Drill String	psi	1262	*	*	*	1368	1368		
Bit	psi	436	*	*	*				
Annulus	psi	377	*	*	*	353	353		
Total System	psi	2074	*	*	*	1721	1721		
*BIT HYDRAULICS									
Nozzles	1/32"	6x14							
Nozzles	1/32"								
Bit Pressure	%	13	*	*	*				
Bit	hhp	160	*	*	*				
Bit HSI	(index)	2.81	*	*	*				
Jet Velocity	ft/s	68	*	*	*				
Impact Force	lbf	709	*	*	*				
*DRILL COLLARS ANNULUS									
Velocity	m/min	140	*	*	*	67	67		
Critical Vel	m/min	120	*	*	*	99	99		
Reynolds Number		3130	*	*	*	1327	1327		
Crit Re (Lam - Tran)		2854	*	*	*	2824	2824		
*DRILL PIPE ANNULUS									
Velocity	m/min	92	*	*	*	89	89		
Critical Vel	m/min	104	*	*	*	111	111		
Reynolds Number		2027	*	*	*	1751	1751		
Crit Re (Lam - Tran)		2854	*	*	*	2824	2824		
*HOLE CLEANING									
Slip Velocity	m/min	6	*	*	*	5	5		
Rising Velocity	m/min	87	*	*	*	84	84		
Lifting Capacity	%	94	*	*	*	94	94		
Cutting Conc	%	0.33	*	*	*	0.34	0.34		
Penetration Rate	m/h	12	12	12	12	12	12		
CASING SHOE PRESSURES									
ECD	sp.gr.	1.25	*	*	*	1.26	1.26		
ECD+Cuttings	sp.gr.	1.25	*	*	*	1.26	1.26		
TOTAL DEPTH PRESSURES									
ECD	sp.gr.	1.25	*	*	*	1.25	1.25		
ECD+Cuttings	sp.gr.	1.26	*	*	*	1.26	1.26		

M-I L.L.C.

17396

DRILLING FLUIDS DATA MANAGEMENT SYSTEM

**DRILLING FLUIDS RECAP FOR BASS STRAIT OIL
ZANE GREY 1**

**DRILLING
FLUIDS
SUMMARY**



Field/Area : Gippsland

Description : Exploration

Location : Vic-P42

[illegible]

27/01/2005:
28/01/2005:
29/01/2005:

30/01/2005:
31/01/2005:



Field/Area : Gippsland

Description : Exploration

Location : Vic-P42

[illegible]

1/02/2005:
2/02/2005:
3/02/2005:
4/02/2005:
5/02/2005:



Field/Area : Gippsland

Description : Exploration

Location : Vic-P42

[illegible]

REMARKS

6/02/2005:

7/02/2005:

DRILLING FLUIDS SUMMARY

Operator : Bass Strait Oil Co.

Field/Area : Gippsland

Well Name : Zane Grey 1

Description : Exploration

Contractor : Diamond Offshore

Location : Vic-P42

[illegible]

REMARKS

8/02/2005:

9/02/2005:

10/02/2005:



Field/Area : Gippsland

Description : Exploration

Location : Vic-P42

Date		10/02/2005	10/02/2005	11/02/2005	11/02/2005	12/02/2005	12/02/2005
Depth/TVD	m	2600/	2707/2373	2772/ 2421	2772/2421	2772/2472	2772/2472
Activity		Drilling	Drilling	POH	POH	Running Casing	Running Casing
Mud Type		KCl-Polymer	KCl-Polymer	KCl-Polymer	KCl-Polymer	KCl-Polymer	KCl-Polymer
Hole Size	in	12.25	12.25	12.25	12.25	12.25	12.25
Circ Volume	bbbl	1760	1760	1747	1747	1430	1430
Flow Rate	gal/min	872	872	641	641	0	0
Circ Pressure	psi	2800	2800	2045	2045	0	0
Avg ROP	m/hr	50	50	5	5	0	0
Sample From		Pit 3	Pit 3	Pit	Pit	PIT	PIT
Flow Line Temp	°F	120	110	130	125	n/a	n/a
Mud Weight	sp.gr.	1.18+@110 °F	1.18@110 °F	1.16@120 °F	1.16@120 °F	1.15@90 °F	1.16@90 °F
Funnel Viscosity	s/qt	65	92	63	65	66	68
PV	cP	22	24	20	21	22	19
YP	lb/100ft²	46	42	36	36	33	37
R600/R300/R200		90/68/57	90/66/55	76/56/46	78/57/47	77/55/45	75/56/46
R100/R6/R3		42/12/9	40/12/9	33/11/8	34/12/8	33/11/8	32/11/7
10s/10m/30m Gel	lb/100ft²	10/17/20	10/16/20	9/16/17	9/17/19	7/14/18	8/15/18
API Fluid Loss	cc/30 min	4.6	4.4	4.1	4.3	4.3	4.3
HTHP Fluid Loss	cc/30 min						
Cake API/HT	1/32"	1/	1/	1/	1/	1/	1/
Solids	%Vol	11	11	9	9	8.5	9
Oil/Water	%Vol	/89	/89	0/91	0/91	/91.5	/91
Sand	%Vol	1	1	0.6	0.6	0.5	0.5
MBT	lb/bbl	14	13	15	15	15	15
pH		9	9	9.0	9	9.0	9
Alkal Mud (Pm)		0	0				
Pf/Mf		0.05/0.75	0.02/0.7	0.1/0.7	0.1/0.7	0.05/0.7	0.05/0.7
Chlorides	mg/l	37000	38000	38000	38000	38000	38000
Hardness Ca		400	400	420	440	300	300
Glycol	% V/V	4	4	3.5	3.5	3.5	3.5
PHPA	ppb	1	1	1.1	1.1	1.1	1.1
Sulhite Excess	mg/l	10	10	40	40	40	40
KCl	% Wt	7	7	6.5	6.5	6.5	6.5

[illegible]

REMARKS

11/02/2005: Drill to 2772 meters.

12/02/2005: Running 9 5/8" Casing.



Field/Area : Gippsland

Description : Exploration

Location : Vic-P42

[illegible]

REMARKS

13/02/2005: Pull casing.

14/02/2005: Ream to bottom for casing.

15/02/2005: Wiper trip and washing and reaming to TD in attempt to run 9 5/8" casing to TD.



Field/Area : Gippsland

Description : Exploration

Location : Vic-P42

Date		15/02/2005	16/02/2005	16/02/2005	17/02/2005	17/02/2005	18/02/2005
Depth/TVD	m	2772/ 2421	2735/2390	2735/2390	2735/2390	2735/2390	2184/1936
Activity		POH for CSG	Run Casing	Run Casing	WOC	WOC	Test BOP
Mud Type		KCl-Polymer	KCl-Polymer	KCl-Polymer	KCl-Polymer	KCl-Polymer	KCl-Polymer
Hole Size	in	12.25	12.25	12.25	12.25	12.25	0
Circ Volume	bbbl	1842	1857	1857	1083	1083	806
Flow Rate	gal/min	829	547	547	684	684	0
Circ Pressure	psi	3650	450	450	650	650	0
Avg ROP	m/hr	0	0	0	0	0	0
Sample From		PIT	PIT	PIT	PIT	PIT	PIT
Flow Line Temp	°F	105	95	n/a			n/a
Mud Weight	sp.gr.	1.2@113 °F	1.21@85 °F	1.21@ 87 °F	1.22@92 °F	1.22@88 °F	1.19@85 °F
Funnel Viscosity	s/qt	73	72	88	78	85	84
PV	cP	21	22	25	22	25	24
YP	lb/100ft²	36	34	44	42	43	40
R600/R300/R200		78/57/47	78/56/46	94/69/57	86/64/55	93/68/58	88/64/52
R100/R6/R3		34/11/7	34/11/7	42/14/10	42/12/9	43/12/9	39/13/9
10s/10m/30m Gel	lb/100ft²	8/13/15	8/14/16	12/23/24	9/18/24	10/20/26	9/18/23
API Fluid Loss	cc/30 min	3.8	3.9	3.8	3.4	3.4	3.6
HTHP Fluid Loss	cc/30 min						
Cake API/HT	1/32"	1/	1/	1/	1/	1/	1/
Solids	%Vol	11	11.5	11.5	12	12	10.5
Oil/Water	%Vol	/89	0/88.5	0/88.5	/88	/88	0/89.5
Sand	%Vol	0.5	0.5	0.5	0.6	0.6	0.5
MBT	lb/bbl	15	17.5	17.5	15	15	17.5
pH		8.5	9	9	9	9	8.5
Alkal Mud (Pm)							
Pf/Mf		0.03/0.5	0.05/0.55	0.03/0.5	0.02/0.4	0.02/0.45	0.02/0.5
Chlorides	mg/l	38000	36000	36000	39000	39000	36000
Hardness Ca		300	320	300	280	320	560
Glycol	% V/V	3.5	4.3	4.3	3.5	3.5	3.5
PHPA	ppb	1.1	1.0	1.1	1.1	1.1	1
Sulhite Excess	mg/l	40	40	40	40	40	0
KCl	% Wt	6.5	6	6	6.5	6.5	6

Daily Mud Cost	\$	7512.84		9903.52		0.00
Cuml Mud Cost	\$	241347.42		251250.94		251250.94
Sales Engineer	Peter D/Drew Bl	Peter D/Drew Bl	Peter D/Drew Bl	Peter D/Drew Bl	Peter D/Drew Bl	Peter D/Drew Bl
Products Used		Duotec / 4		Bicarb / 2		
		Bicarb / 1		BAR-bul / 10		
		BAR-bul / 12		KCl / 2		
		KCl / 2		Glut / 1		
		Glut / 1		DefoamA / 2		
		DefoamA / 1		KOH / 2		
		KOH / 1		PAC / 10		
		PAC / 5		PHPA / 8		
		PHPA / 6		Gly MC / 8		
		Gly MC / 4		DUOVIS / 7		

REMARKS

16/02/2005: Run 9 5/8" casing.

17/02/2005: Run casing to 2184m.

18/02/2005: Nipple up BOP.



Field/Area : Gippsland

Description : Exploration

Location : Vic-P42

Date		18/02/2005	19/02/2005	19/02/2005	19/02/2005	20/02/2005	20/02/2005
Depth/TVD	m	2184/1936	2184/1936	2184/1936	2184/1936	1810/1625	2184/1936
Activity		Test BOP	Drill casing shoe	Drill casing shoe	Drill casing shoe	WOC	WOC
Mud Type		KCl-Polymer	KCl-Polymer	KCl-Polymer	KCl-Polymer	KCl-Polymer	KCl-Polymer
Hole Size	in	0	8.5	8.5	8.5	8.5	8.5
Circ Volume	bbbl	806	973	973	973	986	986
Flow Rate	gal/min	0	641	641	641	526	526
Circ Pressure	psi	0	650	650	650	1085	1085
Avg ROP	m/hr	0	0	0	0	0	0
Sample From		PIT	F/L	PIT	PIT	F/L	PIT
Flow Line Temp	°F	n/a	95	n/a	n/a	90	n/a
Mud Weight	sp.gr.	1.22@92 °F	1.12@90 °F	1.19@90 °F	1.19@90 °F	1.13@90 °F	1.13@90 °F
Funnel Viscosity	s/qt	80	62	84	85	60	73
PV	cP	24	15	24	21	15	16
YP	lb/100ft²	39	26	39	31	25	31
R600/R300/R200		87/63/52	56/41/35	87/63/51	73/52/44	55/40/36	63/47/39
R100/R6/R3		38/12/9	23/10/6	37/12/8	32/10/7	22/10/6	28/10/7
10s/10m/30m Gel	lb/100ft²	10/17/22	5/11/17	7/15/21	7/12/19	4/11/17	6/9/14
API Fluid Loss	cc/30 min	3.5	4.3	3.8	3.5	4.5	4.4
HTHP Fluid Loss	cc/30 min						
Cake API/HT	1/32"	1/	1/	1/	1/	1/	1/
Solids	%Vol	12	6.8	10.3	10.3	7.2	7.6
Oil/Water	%Vol	0/88	0/93.2	0/89.7	0/89.7	0/92.8	0/92.4
Sand	%Vol	0.5	0.5	0.5	0.5	0.5	0.5
MBT	lb/bbl	17.5	15	17.5	17.5	12.5	12.5
pH		8.5	9	8.5	8.5	10	10
Alkal Mud (Pm)							
Pf/Mf		0.02/0.45	0.3/0.8	0.02/0.5	0.02/0.45	0.4/0.85	0.12/1
Chlorides	mg/l	36000	32000	36000	36000	29000	30000
Hardness Ca		580	440	580	580	380	480
Glycol	% V/V	3.5	3.5	3.5	3.5	3.5	3.5
PHPA	ppb	1.0	1	1	1.1	0.8	0.8
Sulhite Excess	mg/l	0	150	0	10	150	80
KCl	% Wt	6	5.5	6	6	5.2	5.4

[illegible]

REMARKS

19/02/2005: Drill out cement and shoe.

20/02/2005: Spot cement plug.



Field/Area : Gippsland

Description : Exploration

Location : Vic-P42

[illegible]

21/02/2005:

22/02/2005: Continue drilling 8.5" hole.

23/02/2005: Drilling 8 1/2" hole very slowly. Kick off sucessfull. Checked bit balling, no problem. ROP increased at around 2300m.



Field/Area : Gippsland

Description : Exploration

Location : Vic-P42

[illegible]

REMARKS

24/02/2005: Drill to 2886 meters. Experiencing coal stringers. Down 1 shaker and losing as a result. Small wiper trip through coal.

25/02/2005: Drill to 3107 meters. Bit stopped drilling.

26/02/2005: POH for bit change and found that bit and half of mud motor were left in hole. Cement fish and sidekick.



DRILLING FLUIDS SUMMARY

Operator : Bass Strait Oil Co.

Well Name : Zane Grey 1

Contractor : Diamond Offshore

Field/Area : Gippsland

Description : Exploration

Location : Vic-P42

[illegible]

REMARKS

27/02/2005: Drill cement. Mud gets contaminated again! Can't kick off because formation too hard - hit fish. POOH for cement plug.

28/02/2005: WOC.

1/03/2005:



Field/Area : Gippsland

Description : Exploration

Location : Vic-P42

[illegible]

REMARKS

2/03/2005: Drill to 3022 meters.

3/03/2005: Drill to 3056 meters.

4/03/2005: Continue drilling to 3070m.



Field/Area : Gippsland

Description : Exploration

Location : Vic-P42

[illegible]

REMARKS

5/03/2005: Drilled to 3092 meters.

6/03/2005: Drill to 3162.1 meters.

7/03/2005: Rig Repair



Field/Area : Gippsland

Description : Exploration

Location : Vic-P42

[illegible]

REMARKS

8/03/2005: Rig repair

9/03/2005: Drill to 3460 meters.

10/03/2005: Drill to 3675 meters.



Field/Area : Gippsland

Description : Exploration

Location : Vic-P42

[illegible]

11/03/2005: Logging
12/03/2005: Logging.
13/03/2005: Wireline logging.



Field/Area : Gippsland

Description : Exploration

Location : Vic-P42

[illegible]

REMARKS

14/03/2005: Circulate/P and A

15/03/2005: Pand A

**DRILLING FLUIDS RECAP FOR BASS STRAIT OIL
ZANE GREY 1**

**PRODUCT
CONSUMPTION**

Product Consumption

Operator : Bass Strait Oil Co.
Well Name : Zane Grey 1
Location : Vic-P42
Field/Area: Gippsland

Contractor: Diamond Offshore
M-I Engineer: Jasdeep Singh
Rig Name: Ocean Patriot
Stock Point: Melbourne

[illegible]

Product Consumption

Operator : Bass Strait Oil Co.
Well Name : Zane Grey 1
Location : Vic-P42
Field/Area: Gippsland

Contractor: Diamond Offshore
M-I Engineer: Jasdeep Singh
Rig Name: Ocean Patriot
Stock Point: Melbourne

[illegible]

Product Consumption

Operator : Bass Strait Oil Co.
Well Name : Zane Grey 1
Location : Vic-P42
Field/Area: Gippsland

Contractor: Diamond Offshore
M-I Engineer: Jasdeep Singh
Rig Name: Ocean Patriot
Stock Point: Melbourne

[illegible]

Product Consumption

Operator : Bass Strait Oil Co.
Well Name : Zane Grey 1
Location : Vic-P42
Field/Area: Gippsland

Contractor: Diamond Offshore
M-I Engineer: Jasdeep Singh
Rig Name: Ocean Patriot
Stock Point: Melbourne

[illegible]



Contractor: Diamond Offshore
M-I Engineer: Jasdeep Singh
Rig Name: Ocean Patriot
Stock Point: Melbourne

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Product Consumption

Operator : Bass Strait Oil Co.
Well Name : Zane Grey 1
Location : Vic-P42
Field/Area: Gippsland

Contractor: Diamond Offshore
M-I Engineer: Jasdeep Singh
Rig Name: Ocean Patriot
Stock Point: Melbourne

[illegible]

Product Consumption

Operator : Bass Strait Oil Co.
Well Name : Zane Grey 1
Location : Vic-P42
Field/Area: Gippsland

Contractor: Diamond Offshore
M-I Engineer: Jasdeep Singh
Rig Name: Ocean Patriot
Stock Point: Melbourne

[illegible]

Product Consumption

Operator : Bass Strait Oil Co.
Well Name : Zane Grey 1
Location : Vic-P42
Field/Area: Gippsland

Contractor: Diamond Offshore
M-I Engineer: Jasdeep Singh
Rig Name: Ocean Patriot
Stock Point: Melbourne

[illegible]

Product Consumption

Operator : Bass Strait Oil Co.
Well Name : Zane Grey 1
Location : Vic-P42
Field/Area: Gippsland

Contractor: Diamond Offshore
M-I Engineer: Jasdeep Singh
Rig Name: Ocean Patriot
Stock Point: Melbourne

[illegible]

Product Consumption

Operator : Bass Strait Oil Co.
Well Name : Zane Grey 1
Location : Vic-P42
Field/Area: Gippsland

Contractor: Diamond Offshore
M-I Engineer: Jasdeep Singh
Rig Name: Ocean Patriot
Stock Point: Melbourne

[illegible]

**DRILLING FLUIDS RECAP FOR BASS STRAIT OIL
ZANE GREY 1**

**DAILY
MUD
REPORTS**

WATER-BASED MUD REPORT No.

Date	27/01/2005	Depth/TVD	m / m
Spud Date	29/01/2005	Mud Type	
Water Depth	73	Activity	Run Anchors

Operator : Bass Strait Oil Co.
Report For : Chris Wilson/Stuart
Well Name : Zane Grey 1
Contractor : Diamond Offshore
Report For : Sean Defritas/Paul Baker

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

[illegible]

WATER-BASED MUD REPORT No. 2

Date	28/01/2005	Depth/TVD	0 m / 0 m
Spud Date	29/01/2005	Mud Type	
Water Depth	73	Activity	P/U DP

Operator : Bass Strait Oil Co.
Report For : Chris Wilson/Stuart
Well Name : Zane Grey 1
Contractor : Diamond Offshore
Report For : Sean Defritas/Paul Baker

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

[illegible]



WATER-BASED MUD REPORT No. 3

Date	29/01/2005	Depth/TVD	128 m / 128 m
Spud Date	29/01/2005	Mud Type	Gel Spud
Water Depth	73	Activity	Casing

Operator : Bass Strait Oil Co.
Report For : Chris Wilson/Stuart
Well Name : Zane Grey 1
Contractor : Diamond Offshore
Report For : Sean Defritas/Paul Baker

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size 36 in		Surface	Hole 140.4	Pump Make OILWELL 1700PT	NATIONAL 12P-160
Nozzles 1/32"				Pump Size 6 X 12.in	6 X 12.in
Drill Pipe Size in	Length m	Intermediate	Active Pits -4	Pump Cap 4.274 gal/stk	4.274 gal/stk
Drill Pipe Size in	Length m	Intermediate	Total Circulating Vol -4	Pump stk/min 100@97%	100@97%
Drill Collar Size in	Length m	Production or Liner	In Storage 720	Flow Rate	855 gal/min
				Bottoms Up	min 0 stk
				Total Circ Time	min -4 stk
				Circulating Pressure	1000 psi

MUD PROPERTIES

Sample From	Pit 4@16:00	Pit 1@14:00
Flow Line Temp °F		
Depth/TVD m	128/128	0/0
Mud Weight sp.gr.	1.05@70°F	1.03@70°F
Funnel Viscosity s/qt	110	> 200
Rheology Temp °F	120	120
R600/R300	68/57	132/110
R200/R100	55/49	100/82
R6/R3	24/24	34/26
PV cP	11	22
YP lb/100ft²	46	88
10s/10m/30m Gel lb/100ft²	35/37/38	
API Fluid Loss cc/30 min	15	
HTHP FL Temp cc/30 min		
Cake API/HTHP 1/32"	1/	
Solids %Vol	1	
Oil/Water %Vol	/99	
Sand %Vol		
MBT lb/bbl	20	
pH	9.5	
Alkal Mud (Pm)	0.5	
Pf/Mf	0.25/0.5	
Chlorides mg/l	1200	
Hardness Ca mg/l	40	
Glycol % V/V		
PHPA ppb		
Sulhite Excess mg/l		
KCl % Wt		

PRODUCTS USED LAST 24 HRS

Products	Size	Amt
CAUSTIC SODA (DRY)	25 KG DM	3
SODIUM BICARBONATE	25 KG BG	3
M-I GEL BULK	1 MT BK	15
GUAR GUM	25 KG BG	16

SOLIDS EQUIP	Size	Hr
VSM Shaker 1		0
VSM Shaker 2		0
VSM Shaker 3		0
VSM Shaker 4		0
D-Silter 12 x 4		0
Centrifuge-DFE		0

MUD PROPERTY SPECIFICATIONS

Weight	1.05
Viscosity	> 100
Filtrate	NC

REMARKS AND TREATMENT

Mixed 1365 bbl of 24 ppb Gel in Pit 3, 4, & 5. Also mixed 220 bbl of 4 ppb Guar Gum in Pit 1 to initiate spudding.

REMARKS

Spud at 14:30 hrs using 200 bbl of Guar Gum. Then drilled ahead with Gel sweeps to 128 m. Running 30 inch casing.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG (bbl)	SOLIDS ANALYSIS (%/lb/bbl)	MUD RHEOLOGY & HYDRAULICS
Rig Up/Service		Oil Added 0	NaCl .1/ .7	np/na Values
Drilling		Water Added 1538	KCl . / .	kp/ka (lb*s^n/100ft²)
Tripping		Mud Received 0	Low Gravity 3./ 27.6	Bit Loss (psi / %)
Non-Productive Tim		Dumped 0	Bentonite 2.2/ 20.	Bit HHP (hbp / HSI)
		Left in Hole 0	Drill Solids .8/ 7.6	Bit Jet Vel (m/s)
		Other 0	Weight Material NA/ NA	Ann. Vel DP (m/min)
		Sweeps 865	Chemical Conc - / .	Ann. Vel DC (m/min)
			Inert/React .382	Crit Vel DP (m/min)
			Average SG 2.6	Crit Vel DC (m/min)
			Carb/BiCarb (m mole/L) 5./ 7.9	

M-I ENGR / PHONE	RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Jasdeep Singh 08-9302 3790		08-9325 4822	\$ 5,287.30	\$ 5,287.30



WATER-BASED MUD REPORT No. 4

Date	30/01/2005	Depth/TVD	576 m / 576 m
Spud Date	29/01/2005	Mud Type	Gel Spud
Water Depth	73	Activity	Drilling

Operator : Bass Strait Oil Co.
Report For : Chris Wilson/Stuart
Well Name : Zane Grey 1
Contractor : Diamond Offshore
Report For : Sean Defritas/Paul Baker

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size	16 in Tricone Smith	Surface	Hole	Pump Make	OILWELL 1700PT NATIONAL 12P-16C
Nozzles	3x16 / 1/32"		425.7	Pump Size	6 X 12.in 6 X 12.in
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	4.274 gal/stk 4.274 gal/stk
5 in	376 m		-7	Pump stk/min	90@97% 90@97%
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	1154 gal/min
5 in	90 m		425	Bottoms Up	14.5 min 3915 stk
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time	15.5 min 4176 stk
8 in	110 m		1910	Circulating Pressure	2500 psi

MUD PROPERTIES		
Sample From	Pit 3@18:00	
Flow Line Temp	°F	
Depth/TVD	m	450/450
Mud Weight	sp.gr.	1.05@70°F
Funnel Viscosity	s/qt	120
Rheology Temp	°F	120
R600/R300		85/77
R200/R100		74/71
R6/R3		60/60
PV	cP	8
YP	lb/100ft²	69
10s/10m/30m Gel	lb/100ft²	45/57/65
API Fluid Loss	cc/30 min	14
HTHP FL Temp	cc/30 min	
Cake API/HTHP	1/32"	1/
Solids	%Vol	1
Oil/Water	%Vol	/99
Sand	%Vol	
MBT	lb/bbl	22.5
pH		9.5
Alkal Mud (Pm)		0.45
Pf/Mf		0.3/0.55
Chlorides	mg/l	1200
Hardness Ca	mg/l	120
Glycol	% V/V	
PHPA	ppb	
Sulhite Excess	mg/l	
KCl	% Wt	

PRODUCTS USED LAST 24 HRS		
Products	Size	Amt
CALCIUM CHLORIDE	25 KG BG	8
SODA ASH	25 KG BG	4
CAUSTIC SODA (DRY)	25 KG DM	7
SODIUM BICARBONATE	25 KG BG	7
M-I BAR BULK	1 MT BK	4
M-I GEL BULK	1 MT BK	28
POTASSIUM CHLORIDE	1 MT BG	2
M-I LUBE	55 GA DM	2

SOLIDS EQUIP	Size	Hr
VSM Shaker 1		0
VSM Shaker 2		0
VSM Shaker 3		0
VSM Shaker 4		0
D-Silter 12 x 4		0
Centrifuge-DFE		0

MUD PROPERTY SPECIFICATIONS	
Weight	1.05
Viscosity	> 100
Filtrate	NC

REMARKS AND TREATMENT	REMARKS
Mixed 225 bbl of PHG containing 5% KCl & 1% MILube for displacement. Filled other tanks with 24 ppb PHG. Building PHG on the run.	Cemented casing. Made up BHA. Drilled to 576 m @ 21:00 Hrs using 50 + 50 bbl PHG sweeps every stand.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG (bbl)	SOLIDS ANALYSIS (%/lb/bbl)	MUD RHEOLOGY & HYDRAULICS
Rig Up/Service		Oil Added 0	NaCl .1/ .7	np/na Values 0.143/0.048
Drilling		Water Added 2946	KCl . / .	kp/ka (lb*s^n/100ft²) 33.762/59.198
Tripping		Mud Received 0	Low Gravity 3./ 27.6	Bit Loss (psi / %) 3097 / 123.9
Non-Productive Tim		Dumped 15	Bentonite 2.5/ 22.5	Bit HHP (hbp / HSI) 2085 / 10.4
		Left in Hole 0	Drill Solids .6/ 5.1	Bit Jet Vel (m/s) 192
		Other 0	Weight Material NA/ NA	Ann. Vel DP (m/min) 37.32
		Sweeps 1842	Chemical Conc - / .	Ann. Vel DC (m/min) 44.9
			Inert/React .2285	Crit Vel DP (m/min) 196
			Average SG 2.6	Crit Vel DC (m/min) 198
			Carb/BiCarb (m mole/L) 6./ 9.5	ECD @ 576 (sp.gr.) 1.1

M-I ENGR / PHONE	RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Drew Blackburn Jasdeep Singh	08-9302 3790	08-9325 4822	\$ 11,136.89	\$ 16,424.19



WATER-BASED MUD REPORT No. 5

Date	31/01/2005	Depth/TVD	1045 m / 993 m
Spud Date	29/01/2005	Mud Type	Gel Spud
Water Depth	73	Activity	Drilling

Operator : Bass Strait Oil Co.
Report For : Chris/Stuart/James
Well Name : Zane Grey 1
Contractor : Diamond Offshore
Report For : Sean Defritas/Paul Baker

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size	16 in Tricone Smith	Surface	Hole	Pump Make	OILWELL 1700PT NATIONAL 12P-16C
Nozzles	3x16 / 1/32"		798.3	Pump Size	6 X 12.in 6 X 12.in
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	4.274 gal/stk 4.274 gal/stk
5 in	845 m		.7	Pump stk/min	90@97% 90@97%
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	1154 gal/min
5 in	90 m		799	Bottoms Up	27.1 min 7308 stk
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time	29.1 min 7852 stk
8 in	110 m		1967	Circulating Pressure	2500 psi

MUD PROPERTIES

Sample From	Pit 4@21:00
Flow Line Temp	°F
Depth/TVD	m 1045/993
Mud Weight	sp.gr. 1.05@70°F
Funnel Viscosity	s/qt > 100
Rheology Temp	°F 120
R600/R300	58/45
R200/R100	40/35
R6/R3	29/29
PV	cP 13
YP	lb/100ft² 32
10s/10m/30m Gel	lb/100ft² 42/66/100
API Fluid Loss	cc/30 min 13.2
HTHP FL Temp	cc/30 min
Cake API/HTHP	1/32" 1/
Solids	%Vol 2
Oil/Water	%Vol /98
Sand	%Vol
MBT	lb/bbl 25
pH	9.5
Alkal Mud (Pm)	0.5
Pf/Mf	0.2/0.45
Chlorides	mg/l 600
Hardness Ca	mg/l 40
Glycol	% V/V
PHPA	ppb
Sulhite Excess	mg/l
KCl	% Wt

PRODUCTS USED LAST 24 HRS

Products	Size	Amt
LIME	25 KG BG	1
CAUSTIC SODA (DRY)	25 KG DM	3
M-I BAR BULK	1 MT BK	5
M-I GEL BULK	1 MT BK	10
GUAR GUM	25 KG BG	26
M-I BAR	25 KG BG	12
M-I GEL NT	100 LB BG	20

SOLIDS EQUIP	Size	Hr
VSM Shaker 1	84/84/84/84	0
VSM Shaker 2	84/84/84/84	0
VSM Shaker 3	84/84/84/84	0
VSM Shaker 4	84/84/84/84	0
D-Silter 12 x 4		0
Centrifuge-DFE		0

MUD PROPERTY SPECIFICATIONS

Weight	1.05
Viscosity	> 100
Filtrate	NC

REMARKS AND TREATMENT

Used 400 bbl of 3.6 ppb Guar Gum sweeps from 770 m to 1000 m mid stand.
 Pumped 50-75 bbl of PHG sweeps on connections. Used MIGel NT at the same price as MIGel Bulk. Used broken sacks of Barite. Added 0.8% MILube in the 900 bbl Displacement mud as per program. Dressed shakers with new 16 x 84 mesh screens. Flushed Desilter with sea water.

REMARKS

Continued drilling ahead to 1045 m building angle to 32 deg.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG (bbl)	SOLIDS ANALYSIS (%/lb/bbl)	MUD RHEOLOGY & HYDRAULICS
Rig Up/Service		Oil Added 0	NaCl ./.3	np/na Values 0.366/0.054
Drilling		Water Added 1517	KCl ./.3	kp/ka (lb*s^n/100ft²) 4.895/28.351
Tripping		Mud Received 0	Low Gravity 3.1/ 28.	Bit Loss (psi / %) 3097 / 123.9
Non-Productive Tim		Dumped 0	Bentonite 2.7/ 25.	Bit HHP (hhp / HSI) 2085 / 10.4
		Left in Hole 0	Drill Solids .3/ 3.	Bit Jet Vel (m/s) 192
		Other 0	Weight Material NA/ NA	Ann. Vel DP (m/min) 37.32
		Sweeps 1503	Chemical Conc - / .	Ann. Vel DC (m/min) 44.9
			Inert/React .121	Crit Vel DP (m/min) 137
			Average SG 2.6	Crit Vel DC (m/min) 138
			Carb/BiCarb (m mole/L) 4/ 6.3	ECD @ 1045 (sp.gr.) 1.08

M-I ENGR / PHONE	RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Drew Blackburn Jasdeep Singh	08-9302 3790	08-9325 4822	\$ 5,883.70	\$ 22,307.89



WATER-BASED MUD REPORT No. 6

Date	1/02/2005	Depth/TVD	1095 m / 1033 m
Spud Date	29/01/2005	Mud Type	Gel Spud
Water Depth	73	Activity	Cementing

Operator : Bass Strait Oil Co.
Report For : Chris/Stuart/James
Well Name : Zane Grey 1
Contractor : Diamond Offshore
Report For : Sean Defritas/Paul Baker

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size 16 in		Surface	Hole	Pump Make	OILWELL 1700PT NATIONAL 12P-16C
Nozzles 1/32"			800.5(Tot)/799.7(Bit)	Pump Size	6 X 12.in 6 X 12.in
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	gal/stk gal/stk
5 in	94 m		.5	Pump stk/min	
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	gal/min
13.375 in	1000 m		800.2	Bottoms Up	
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time	
in	m		538	Circulating Pressure	

MUD PROPERTIES

Sample From	Pit 4@08:00
Flow Line Temp	°F
Depth/TVD	m 1095/1043
Mud Weight	sp.gr. 1.05@70°F
Funnel Viscosity	s/qt 120
Rheology Temp	°F 120
R600/R300	55/43
R200/R100	39/33
R6/R3	25/24
PV	cP 12
YP	lb/100ft² 31
10s/10m/30m Gel	lb/100ft² 35/57/78
API Fluid Loss	cc/30 min 14
HTHP FL Temp	cc/30 min
Cake API/HTHP	1/32" 1/
Solids	%Vol 1
Oil/Water	%Vol /99
Sand	%Vol
MBT	lb/bbl 24
pH	9.4
Alkal Mud (Pm)	0.45
Pf/Mf	0.2/0.45
Chlorides	mg/l 600
Hardness Ca	mg/l 80
Glycol	% V/V
PHPA	ppb
Sulhite Excess	mg/l
KCl	% Wt

PRODUCTS USED LAST 24 HRS

Products	Size	Amt
CAUSTIC SODA (DRY)	25 KG DM	1
M-I GEL BULK	1 MT BK	24
M-I LUBE	55 GA DM	5

SOLIDS EQUIP	Size	Hr
VSM Shaker 1	84/84/84/84	0
VSM Shaker 2	84/84/84/84	0
VSM Shaker 3	84/84/84/84	0
VSM Shaker 4	84/84/84/84	0
D-Silter 12 x 4		0
Centrifuge-DFE		0

MUD PROPERTY SPECIFICATIONS

Weight	1.05
Viscosity	> 100
Filtrate	NC

REMARKS AND TREATMENT

Pumped PHG sweeps while drilling. Displaced hole with 1000 bbl of PHG containing MILube and 200 bbl of Inhibited PHG weighted to 1.15 sg prior to POOH. Mixed more PHG to fill casing.

REMARKS

Drilled to 1095 m. Called TD due to poor ROP. Displaced hole to PHG. POOH. Hole good. Run casing to bottom.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG (bbl)	SOLIDS ANALYSIS (%/lb/bbl)	MUD RHEOLOGY & HYDRAULICS
Rig Up/Service		Oil Added 0	NaCl ./.3	np/na Values 0.355/0.091
Drilling		Water Added 582	KCl ./.3	kp/ka (lb*s^n/100ft²) 5.011/22.082
Tripping		Mud Received 0	Low Gravity 3.1/ 28.	Bit Loss (psi / %) / 1
Non-Productive Tim		Dumped 0	Bentonite 2.6/ 24.	Bit HHP (hhp / HSI) / 1
		Left in Hole 0	Drill Solids .4/ 4.	Bit Jet Vel (m/s)
		Other 0	Weight Material NA/ NA	Ann. Vel DP (m/min)
		Sweeps 2089	Chemical Conc - / .	Ann. Vel DC (m/min)
			Inert/React .1678	Crit Vel DP (m/min)
			Average SG 2.6	Crit Vel DC (m/min)
			Carb/BiCarb (m mole/L) 4./ 7.9	ECD @ 1094 (sp.gr.) 1.05

M-I ENGR / PHONE	RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Drew Blackburn Jasdeep Singh	08-9302 3790	08-6363 8872	\$ 8,196.31	\$ 30,504.20



WATER-BASED MUD REPORT No. 7

Date	2/02/2005	Depth/TVD	1095 m / 1033 m
Spud Date	29/01/2005	Mud Type	KCl-Idcap-Glycol
Water Depth	73	Activity	WOW

Operator : Bass Strait Oil Co.
Report For : Chris/Stuart/James
Well Name : Zane Grey 1
Contractor : Diamond Offshore
Report For : Sean Defritas/Paul Baker

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size 12.25 in		Surface	Hole 597	Pump Make OILWELL 1700PT	NATIONAL 12P-16C
Nozzles 1/32"				Pump Size 6 X 12.in	6 X 12.in
Drill Pipe Size in	Length m	Intermediate	Active Pits 204	Pump Cap gal/stk	gal/stk
Drill Pipe Size in	Length m	Intermediate	Total Circulating Vol 204	Pump stk/min	
Drill Collar Size in	Length m	Production or Liner	In Storage 1901	Flow Rate gal/min	
				Bottoms Up	
				Total Circ Time	
				Circulating Pressure	

MUD PROPERTIES		
Sample From	Pit 4@19:00	
Flow Line Temp °F		
Depth/TVD m	1095/1043	
Mud Weight sp.gr.	1.04@65°F	
Funnel Viscosity s/qt	46	
Rheology Temp °F	120	
R600/R300	25/17	
R200/R100	14/10	
R6/R3	4/3	
PV cP	8	
YP lb/100ft²	9	
10s/10m/30m Gel lb/100ft²	5/6/7	
API Fluid Loss cc/30 min	9.5	
HTHP FL Temp cc/30 min		
Cake API/HTHP 1/32"	1/	
Solids %Vol	0.5	
Oil/Water %Vol	/99.5	
Sand %Vol		
MBT lb/bbl	1	
pH	8.5	
Alkal Mud (Pm)	0	
Pf/Mf	0.05/1	
Chlorides mg/l	27000	
Hardness Ca mg/l	160	
Glycol % V/V	2.5	
PHPA ppb		
Sulhite Excess mg/l		
KCl % Wt	5	

PRODUCTS USED LAST 24 HRS		
Products	Size	Amt
DUOTEC	25 KG BG	32
SODA ASH	25 KG BG	4
POTASSIUM CHLORIDE	1 MT BG	14
DEFOAM A	5 GA CN	5
IDCAP D	25 KG BG	32
POTASSIUM HYDROXIDE	25 KG CN	8
HIBTROL	25 KG BG	50
GLYDRIL LC	55 GA DM	39

SOLIDS EQUIP	Size	Hr
VSM Shaker 1	84/84/84/84	0
VSM Shaker 2	84/84/84/84	0
VSM Shaker 3	84/84/84/84	0
VSM Shaker 4	84/84/84/84	0
D-Silter 12 x 4		0
Centrifuge-DFE		0

MUD PROPERTY SPECIFICATIONS		
Weight	1.05-1.10	
Viscosity	40-60	
Filtrate	< 6	

REMARKS AND TREATMENT	REMARKS
Saved 170 bbl of PHG for sweeps for cement drilling. Mixed 1730 bbl of KCl-Idcap-Glycol mud for next section. Chemicals still on Wrangler are not in Inventory.	Finsihed cementing. Run BOP Stack. Wait on Weather to latch BOP.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG (bbl)	SOLIDS ANALYSIS (%/lb/bbl)	MUD RHEOLOGY & HYDRAULICS
Rig Up/Service		Oil Added 0	NaCl .1/ 1.4	np/na Values
Drilling		Water Added 1582	KCl 1.9/ 17.9	kp/ka (lb*s^n/100ft²)
Tripping		Mud Received 0	Low Gravity .3/ 3.	Bit Loss (psi / %)
Non-Productive Tim		Other 0	Bentonite .1/ 1.	Bit HHP (hhp / HSI)
		Sweeps 0	Drill Solids .2/ 2.	Bit Jet Vel (m/s)
		Dumped 327	Weight Material NA/ NA	Ann. Vel DP (m/min)
		Left in Hole 0	Chemical Conc - / .	Ann. Vel DC (m/min)
			Inert/React 2.0168	Crit Vel DP (m/min)
			Average SG 2.6	Crit Vel DC (m/min)
			Carb/BiCarb (m mole/L) 1./ 15.8	

M-I ENGR / PHONE	RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Drew Blackburn Jasdeep Singh 08-9302 3790	08-6363 8872	08-9325 4822	\$ 47,398.30	\$ 77,902.50



WATER-BASED MUD REPORT No. 8

Date	3/02/2005	Depth/TVD	1095 m / 1033 m
Spud Date	29/01/2005	Mud Type	KCl-Idcap-Glycol
Water Depth	73	Activity	Run BOP

Operator : Bass Strait Oil Co.
Report For : C.Wilson/S.Douglas/J.Gilmour
Well Name : Zane Grey 1
Contractor : Diamond Offshore
Report For : Sean Defritas/Ray Breaud

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size	12.25 in Security FSX563	Surface	Hole	Pump Make	OILWELL 1700PT NATIONAL 12P-16C
Nozzles	3x15 / 2x14 / 1/32"		597	Pump Size	6 X 12.in 6 X 12.in
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	gal/stk gal/stk
	m			Pump stk/min	
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	gal/min
	m			Bottoms Up	
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time	
	m		1904	Circulating Pressure	

MUD PROPERTIES

Sample From	Pit 3@17:00	
Flow Line Temp	°F	
Depth/TVD	m	1095/1033
Mud Weight	sp.gr.	1.045@64°F
Funnel Viscosity	s/qt	47
Rheology Temp	°F	120
R600/R300		26/18
R200/R100		15/11
R6/R3		4/3
PV	cP	8
YP	lb/100ft²	10
10s/10m/30m Gel	lb/100ft²	4/5/5
API Fluid Loss	cc/30 min	7.8
HTHP FL Temp	cc/30 min	
Cake API/HTHP	1/32"	1/
Solids	%Vol	0.5
Oil/Water	%Vol	/99.5
Sand	%Vol	
MBT	lb/bbl	2
pH		8.8
Alkal Mud (Pm)		0
Pf/Mf		0.05/0.75
Chlorides	mg/l	25000
Hardness Ca	mg/l	160
Glycol	% V/V	2.5
PHPA	ppb	
Sulhite Excess	mg/l	
KCl	% Wt	5

PRODUCTS USED LAST 24 HRS

Products	Size	Amt
POTASSIUM CHLORIDE	1 MT BG	1

SOLIDS EQUIP

	Size	Hr
VSM Shaker 1	84/84/84/84	0
VSM Shaker 2	84/84/84/84	0
VSM Shaker 3	84/84/84/84	0
VSM Shaker 4	84/84/84/84	0
D-Silter 12 x 4		0
Centrifuge-DFE		0

MUD PROPERTY SPECIFICATIONS

Weight	1.05-1.10
Viscosity	40-60
Filtrate	< 6

REMARKS AND TREATMENT

Completed mixing KCl-Polymer-Glycol mud for next section.

REMARKS

WOW. Land BOP.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG	(bbl)	SOLIDS ANALYSIS (%/lb/bbl)	MUD RHEOLOGY & HYDRAULICS
Rig Up/Service		Oil Added	0	NaCl	np/na Values
Drilling		Water Added	0	KCl	kp/ka (lb•s^n/100ft²)
Tripping		Mud Received	0	Low Gravity	Bit Loss (psi / %)
Non-Productive Tim		Dumped	0	Bentonite	Bit HHP (hhp / HSI)
		Left in Hole	0	Drill Solids	Bit Jet Vel (m/s)
		Other	0	Weight Material	Ann. Vel DP (m/min)
		Sweeps	0	Chemical Conc	Ann. Vel DC (m/min)
				Inert/React	Crit Vel DP (m/min)
				Average SG	Crit Vel DC (m/min)
				Carb/BiCarb (m mole/L)	

M-I ENGR / PHONE

Drew Blackburn
Jasdeep Singh 08-9302 3790

RIG PHONE

08-6363 8872

WAREHOUSE PHONE

08-9325 4822

DAILY COST

\$ 382.50

CUMULATIVE COST

\$ 78,285.00



WATER-BASED MUD REPORT No. 9

Date	4/02/2005	Depth/TVD	1095 m / 1033 m
Spud Date	29/01/2005	Mud Type	KCl-Idcap-Glycol
Water Depth	73	Activity	Cmt Drilling

Operator : Bass Strait Oil Co.
Report For : C.Wilson/S.Douglas/J.Gilmour
Well Name : Zane Grey 1
Contractor : Diamond Offshore
Report For : Sean Defritas/Ray Breaud

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size	12.25 in Security FSX563	Surface	Hole	Pump Make	OILWELL 1700PT NATIONAL 12P-16C
Nozzles	3x15 / 2x14 / 1/32"		555.9(Tot)/548.5(Bit)	Pump Size	6 X 12.in 6 X 12.in
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	4.274 gal/stk 4.274 gal/stk
5 in	831 m		431.1	Pump stk/min	94@97% 94@97%
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	803 gal/min
5 in	166 m		979.7	Bottoms Up	25.8 min 4850 stk
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time	51.2 min 9633 stk
8 in	83 m		681	Circulating Pressure	2000 psi

MUD PROPERTIES

Sample From	Pit 3@17:00
Flow Line Temp	°F
Depth/TVD	m 1095/1033
Mud Weight	sp.gr. 1.045@65°F
Funnel Viscosity	s/qt 47
Rheology Temp	°F 120
R600/R300	26/18
R200/R100	15/11
R6/R3	4/3
PV	cP 8
YP	lb/100ft² 10
10s/10m/30m Gel	lb/100ft² 4/5/5
API Fluid Loss	cc/30 min 7.6
HTHP FL Temp	cc/30 min
Cake API/HTHP	1/32" 1/
Solids	%Vol 0.5
Oil/Water	%Vol /99.5
Sand	%Vol
MBT	lb/bbl 2
pH	8.8
Alkal Mud (Pm)	0
Pf/Mf	0.05/0.8
Chlorides	mg/l 25000
Hardness Ca	mg/l 160
Glycol	% V/V 3
PHPA	ppb
Sulhite Excess	mg/l
KCl	% Wt 5

PRODUCTS USED LAST 24 HRS

Products	Size	Amt
GLYDRIL LC	55 GA DM	5

SOLIDS EQUIP	Size	Hr
VSM Shaker 1	84/84/84/84	2
VSM Shaker 2	84/84/84/84	2
VSM Shaker 3	84/84/84/84	2
VSM Shaker 4	84/84/84/84	2
D-Silter 12 x 4		0
Centrifuge-DFE		0

MUD PROPERTY SPECIFICATIONS

Weight	1.05-1.10
Viscosity	40-60
Filtrate	< 6

REMARKS AND TREATMENT

Added Glydril LC to surface volume. Pumped 2 PHG sweeps while cmr drilling. Dumped returns untill clear returns obtained. Intend to improve rheology as drilling progresses depending upon flow handling at shakers. None chemicals left on Wrangler.

REMARKS

Tested BOP. Made up BHA with MWD tools and RIH. Drilled cement from 1023 m to 1065 m. Slow cement drilling rate. Displaced well with KCl-Polymer-Glydril mud. Further drilled cmt to 1080 m @ 21:00.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG (bbl)	SOLIDS ANALYSIS (%/lb/bbl)	MUD RHEOLOGY & HYDRAULICS
Rig Up/Service		Oil Added 0	NaCl .3	np/na Values 0.531/0.371
Drilling		Water Added 0	KCl 1.9/ 17.9	kp/ka (lb*s^n/100ft²) 0.702/1.749
Tripping		Mud Received 0	Low Gravity .8/ 7.2	Bit Loss (psi / %) 773 / 1
Non-Productive Tim		Dumped 133	Bentonite 2/ 2.	Bit HHP (hbp / HSI) 362 / 1
		Other 0	Drill Solids .6/ 5.2	Bit Jet Vel (m/s) 96
		Sweeps 80	Weight Material NA/ NA	Ann. Vel DP (m/min) 46.45
		Shakers 30	Chemical Conc - / .	Ann. Vel DC (m/min) 66.56
		Centrifuge 0	Inert/React 2.6111	Crit Vel DP (m/min) 63
		Formation 0	Average SG 2.6	Crit Vel DC (m/min) 71
			Carb/BiCarb (m mole/L) 1./ 7.9	ECD @ 1080 (sp.gr.) 1.06

M-I ENGR / PHONE

Drew Blackburn
Jasdeep Singh 08-9302 3790

RIG PHONE

08-6363 8872

WAREHOUSE PHONE

08-9325 4822

DAILY COST

\$ 3,134.70

CUMULATIVE COST

\$ 81,419.70



WATER-BASED MUD REPORT No. 10

Date	5/02/2005	Depth/TVD	1600 m / 1451 m
Spud Date	29/01/2005	Mud Type	KCl-Idcap-Glycol
Water Depth	73	Activity	Drilling

Operator : Bass Strait Oil Co.
Report For : C.Wilson/S.Douglas/J.Gilmour
Well Name : Zane Grey 1
Contractor : Diamond Offshore
Report For : Sean Defritas/Ray Breaud

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size	12.25 in Security FSX563	Surface	Hole	Pump Make	OILWELL 1700PT NATIONAL 12P-16C
Nozzles	3x15 / 2x14 / 1/32"		786.3	Pump Size	6 X 12.in 6 X 12.in
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	4.274 gal/stk 4.274 gal/stk
5 in	1351 m		430.7	Pump stk/min	73@97% 73@97%
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	936 gal/min
5 in	166 m		1217	Bottoms Up	31.4 min 6886 stk
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time	54.6 min 11959 stk
8 in	83 m		415	Circulating Pressure	2000 psi

MUD PROPERTIES

Sample From	lowline@18:0	Active@11:00
Flow Line Temp	°F	100
Depth/TVD	m	1550/1446
Mud Weight	sp.gr.	1.1@100°F 1.06+@100°F
Funnel Viscosity	s/qt	57
Rheology Temp	°F	120
R600/R300		62/47 47/35
R200/R100		40/31 30/23
R6/R3		13/10 9/7
PV	cP	15
YP	lb/100ft²	32
10s/10m/30m Gel	lb/100ft²	12/19/21 9/12/13
API Fluid Loss	cc/30 min	4.2
HTHP FL Temp	cc/30 min	
Cake API/HTHP	1/32"	1/
Solids	%Vol	9
Oil/Water	%Vol	/91 /95.5
Sand	%Vol	1
MBT	lb/bbl	3
pH		8.5
Alkal Mud (Pm)		0.3
Pf/Mf		0.05/1.6 0.1/1.8
Chlorides	mg/l	30000
Hardness Ca	mg/l	400
		640
Glycol	% V/V	3
PHPA	ppb	3
Sulhite Excess	mg/l	
KCl	% Wt	5.5

PRODUCTS USED LAST 24 HRS

Products	Size	Amt
CITRIC ACID	25 KG BG	14
DUOTEC	25 KG BG	42
SODA ASH	25 KG BG	10
SODIUM BICARBONATE	25 KG BG	16
POTASSIUM CHLORIDE	1 MT BG	8
DEFOAM A	5 GA CN	2
IDCAP D	25 KG BG	26
POTASSIUM HYDROXIDE	25 KG CN	5
HIBTROL	25 KG BG	8
POLYPAC UL	25 KG BG	4
GLYDRIL MC	55 GA DM	12

SOLIDS EQUIP

Size	Hr
VSM Shaker 1	105/105/105/105
VSM Shaker 2	105
VSM Shaker 3	84/84/84/84
VSM Shaker 4	145
D-Silter 12 x 4	
Centrifuge-DFE	

MUD PROPERTY SPECIFICATIONS

Weight	1.05-1.10
Viscosity	40-60
Filtrate	< 6

REMARKS AND TREATMENT

Treated out cement contamination due to early displacement with Citric & Bicarb. Added Duotec to system to improve rheology. Changed scalping screens to 30 mesh. Shakers handling 900 gpm OK. Started Centrifuge & Desilter at 1400 m to control rising MWt. Gradually upgrading shaker screens.

REMARKS

Drilled to 1098 m. FIT 1.6 sg. Drilled to 1600 m @ 21:00.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG (bbl)	SOLIDS ANALYSIS (%/lb/bbl)	MUD RHEOLOGY & HYDRAULICS
Rig Up/Service		Oil Added	0	np/na Values
Drilling		Water Added	399	kp/ka (lb*s^n/100ft²)
Tripping		Mud Received	0	Bit Loss (psi / %)
Non-Productive Tim		Dumped	0	Bit HHP (hhp / HSI)
		Other	0	Bit Jet Vel (m/s)
		Sweeps	0	Ann. Vel DP (m/min)
		Shakers	214	Ann. Vel DC (m/min)
		Centrifuge	80	Crit Vel DP (m/min)
		Formation	50	Crit Vel DC (m/min)
		Desilter	146	ECD @ 1600 (sp.gr.)

M-I ENGR / PHONE

Drew Blackburn
Jasdeep Singh

RIG PHONE

08-9302 3790
08-6363 8872

WAREHOUSE PHONE

08-9325 4822

DAILY COST

\$ 22,765.34

CUMULATIVE COST

\$ 104,185.04

**WATER-BASED MUD REPORT No. 11**

Date	6/02/2005	Depth/TVD	2103 m / 1868 m
Spud Date	29/01/2005	Mud Type	KCl-Idcap-Glycol
Water Depth	73	Activity	Tripping

Operator : Bass Strait Oil Co.
Report For : C.Wilson/S.Douglas/P.O'shea
Well Name : Zane Grey 1
Contractor : Diamond Offshore
Report For : Sean Defritas/Ray Breaud

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size	12.25 in Security FSX563	Surface	Hole	Pump Make	OILWELL 1700PT NATIONAL 12P-16C
Nozzles	3x15 / 2x14 / 1/32"		1031.1(Tot)/694.9(Bit)	Pump Size	6 X 12.in 6 X 12.in
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	4.274 gal/stk 4.274 gal/stk
5 in	1151 m		353.9	Pump stk/min	73@97% 73@97%
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	936 gal/min
5 in	166 m		1048.8	Bottoms Up	27.9 min 6102 stk
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time	47.1 min 10306 stk
8 in	83 m		888	Circulating Pressure	2600 psi

MUD PROPERTIES

Sample From	FL@13:00	Pit 3@06:15
Flow Line Temp	°F	110
Depth/TVD	m	2100/1865
Mud Weight	sp.gr.	1.14@110°F 1.12@100°F
Funnel Viscosity	s/qt	57 78
Rheology Temp	°F	120 120
R600/R300		70/51 57/49
R200/R100		44/34 42/31
R6/R3		13/10 13/10
PV	cP	19 8
YP	lb/100ft²	32 41
10s/10m/30m Gel	lb/100ft²	12/20/23 11/16/19
API Fluid Loss	cc/30 min	4.4 4.6
HTHP FL Temp	cc/30 min	
Cake API/HTHP	1/32"	1/
Solids	%Vol	10 8
Oil/Water	%Vol	/90 /92
Sand	%Vol	1 1
MBT	lb/bbl	12 10
pH		8.9 9
Alkal Mud (Pm)		0 0
Pf/Mf		0.02/2 0.1/1.7
Chlorides	mg/l	30000 30000
Hardness Ca	mg/l	600 400
Glycol	% V/V	2.5 2.5
PHPA	ppb	
Sulhite Excess	mg/l	
KCl	% Wt	5 6

PRODUCTS USED LAST 24 HRS

Products	Size	Amt
DUOTEC	25 KG BG	24
SODIUM BICARBONATE	25 KG BG	6
POTASSIUM CHLORIDE	1 MT BG	9
DEFOAM A	5 GA CN	3
IDCAP D	25 KG BG	30
POTASSIUM HYDROXIDE	25 KG CN	9
POLYPAC UL	25 KG BG	32
POLY PLUS DRY	25 KG BG	14
GLYDRIL MC	55 GA DM	26

SOLIDS EQUIP	Size	Hr
VSM Shaker 1	105/105/105/105	0
VSM Shaker 2	105	0
VSM Shaker 3	84/84/84/84	0
VSM Shaker 4	145	0
D-Silter 12 x 4		0
Centrifuge-DFE		0

MUD PROPERTY SPECIFICATIONS

Weight	1.05-1.10
Viscosity	40-60
Filtrate	< 6

REMARKS AND TREATMENT

Added Idcap to active while drilling to overcome depletion. Mud weight risen due to solids. Made up 900 bbl of premix to dump/dilute once back on bottom. Centrifuge discarding mud.

REMARKS

Drilled to 2103 m. P/O for MWD tools change.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG (bbl)	SOLIDS ANALYSIS (%/lb/bbl)	MUD RHEOLOGY & HYDRAULICS
Rig Up/Service		Oil Added	0	np/na Values
Drilling		Water Added	807	kp/ka (lb*s^n/100ft²)
Tripping		Mud Received	0	Bit Loss (psi / %)
Non-Productive Tim		Dumped	0	Bit HHP (hhp / HSI)
		Other	0	Bit Jet Vel (m/s)
		Sweeps	0	Ann. Vel DP (m/min)
		Shakers	139	Ann. Vel DC (m/min)
		Centrifuge	101	Crit Vel DP (m/min)
		Formation	0	Crit Vel DC (m/min)
		Desilter	0	ECD @ 1400 (sp.gr.)

M-I ENGR / PHONE	RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Drew Blackburn Jasdeep Singh	08-9302 3790	08-6363 8872	\$ 27,994.20	\$ 132,179.24



WATER-BASED MUD REPORT No. 12

Date	7/02/2005	Depth/TVD	2236 m / 1979 m
Spud Date	29/01/2005	Mud Type	KCl-Polymer-Glycol
Water Depth	73	Activity	Drilling

Operator : Bass Strait Oil Co.
Report For : C.Wilson/S.Douglas/P.O'shea
Well Name : Zane Grey 1
Contractor : Diamond Offshore
Report For : Sean Defritas/Ray Breaud

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size	12.25 in Security FSX563	Surface	Hole	Pump Make	OILWELL 1700PT NATIONAL 12P-16C
Nozzles	3x15 / 2x14 / 1/32"		1076.8	Pump Size	6 X 12.in 6 X 12.in
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	4.274 gal/stk 4.274 gal/stk
5 in	1987 m		395.2	Pump stk/min	68@97% 68@97%
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	872 gal/min
5 in	166 m		1472	Bottoms Up	46 min 9376 stk
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time	70.9 min 14463 stk
8 in	83 m		773	Circulating Pressure	2600 psi

MUD PROPERTIES

Sample From	FL@17:00	Pit 3@11:00
Flow Line Temp	°F 110	90
Depth/TVD	m 2111/1979	1091/
Mud Weight	sp.gr. 1.13+@110°F	1.13@90°F
Funnel Viscosity	s/qt 65	>120
Rheology Temp	°F 120	120
R600/R300	70/54	99/65
R200/R100	45/33	52/37
R6/R3	10/8	13/10
PV	cP 16	34
YP	lb/100ft² 38	31
10s/10m/30m Gel	lb/100ft² 9/14/16	11/17/18
API Fluid Loss	cc/30 min 4.8	5
HTHP FL Temp	cc/30 min	
Cake API/HTHP	1/32" 1/	1/
Solids	%Vol 9	8.5
Oil/Water	%Vol /91	/91.5
Sand	%Vol 1	
MBT	lb/bbl 13	5
pH	9	9
Alkal Mud (Pm)	0	0
Pf/Mf	0.08/2	0.05/2
Chlorides	mg/l 30000	30000
Hardness Ca	mg/l 480	540
Glycol	% V/V 3	2.5
PHPA	ppb 1.2	1.25
Sulhite Excess	mg/l	
KCl	% Wt 5	5

PRODUCTS USED LAST 24 HRS

Products	Size	Amt
DUOTEC	25 KG BG	11
OS-1	25 KG BG	6
SODIUM BICARBONATE	25 KG BG	2
M-I BAR BULK	1 MT BK	10
POTASSIUM CHLORIDE	1 MT BG	11
DEFOAM A	5 GA CN	6
POTASSIUM HYDROXIDE	25 KG CN	4
POLYPAC UL	25 KG BG	13
POLY PLUS DRY	25 KG BG	46
GLYDRIL MC	55 GA DM	12

SOLIDS EQUIP	Size	Hr
VSM Shaker 1	84/84/84/84	12
VSM Shaker 2	84/84/84/84	12
VSM Shaker 3	84/84/84/105	12
VSM Shaker 4	84/84/84/84	12
D-Silter 12 x 4		5
Centrifuge-DFE		5

MUD PROPERTY SPECIFICATIONS

Weight	1.05-1.10
Viscosity	40-60
Filtrate	< 6

REMARKS AND TREATMENT

Mixed premixes of 1.25 ppb PHPA. Treated surface volume with 1.2 ppb PHPA. Conditioned mud while circulating at csg shoe. Lost 70% of the returns over shakers. Replaced lost volume with premixes. Further treated system with PHPA rich premixes to make for lost volume while circulating at bottom. Adding KCl to system for depletion and Duotec for low end rheology.

REMARKS

Completed POOH backreaming. R/I to shoe. Circ. Further R/I to bottom washing last 5 stds to bottom. Conditioned mud. Drilled to xxxx m.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG (bbl)	SOLIDS ANALYSIS (%/lb/bbl)	MUD RHEOLOGY & HYDRAULICS
Rig Up/Service		Oil Added 0	NaCl .2/ 2.9	np/na Values 0.374/0.404
Drilling		Water Added 433	KCl 1.8/ 16.8	kp/ka (lb*s^n/100ft²) 5.579/4.415
Tripping		Mud Received 0	Low Gravity 6.5/ 59.3	Bit Loss (psi / %) 986 / 1
Non-Productive Tim		Dumped 0	Bentonite 1.4/ 13.	Bit HHP (hbp / HSI) 502 / 1
		Other 0	Drill Solids 5.1/ 46.3	Bit Jet Vel (m/s) 104
		Sweeps 0	Weight Material NA/ NA	Ann. Vel DP (m/min) 52.09
		Shakers 449	Chemical Conc - / -	Ann. Vel DC (m/min) 75.69
		Centrifuge 48	Inert/React 3.5637	Crit Vel DP (m/min) 117
		Formation 0	Average SG 2.6	Crit Vel DC (m/min) 134
		Desilter 35	Carb/BiCarb (m mole/L) 1.6/ 8.	ECD @ 2236 (sp.gr.) 1.17

M-I ENGR / PHONE		RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Drew Blackburn Jasdeep Singh		08-9302 3790 08-6363 8872	08-9325 4822	\$ 19,205.13	\$ 151,384.37



WATER-BASED MUD REPORT No. 13

Date	8/02/2005	Depth/TVD	2675 m / 2341 m
Spud Date	29/01/2005	Mud Type	KCl-Polymer-Glycol
Water Depth	73	Activity	Drilling

Operator : Bass Strait Oil Co.
Report For : P.Dane/S.Douglas/P.O'shea
Well Name : Zane Grey 1
Contractor : Diamond Offshore
Report For : Sean Defritas/Ray Breaud

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size	12.25 in Security FSX563	Surface	Hole	Pump Make	OILWELL 1700PT NATIONAL 12P-16C
Nozzles	5x15 / 2x14 / 1/32"		1277.4	Pump Size	6 X 12.in 6 X 12.in
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	4.274 gal/stk 4.274 gal/stk
5 in	2426 m		398.6	Pump stk/min	68@97% 68@97%
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	872 gal/min
5 in	166 m		1676	Bottoms Up	54.4 min 11095 stk
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time	80.7 min 16468 stk
8 in	83 m		623	Circulating Pressure	2800 psi

MUD PROPERTIES

Sample From		FL@17:00	FL@06:20
Flow Line Temp	°F	130	120
Depth/TVD	m	2625/2300	2460/2135
Mud Weight	sp.gr.	1.16@120°F	1.16@120°F
Funnel Viscosity	s/qt	65	65
Rheology Temp	°F	120	120
R600/R300		88/65	82/59
R200/R100		55/40	49/35
R6/R3		12/9	12/9
PV	cP	23	23
YP	lb/100ft²	42	36
10s/10m/30m Gel	lb/100ft²	11/22/25	11/20/23
API Fluid Loss	cc/30 min	4.2	4.4
HTHP FL Temp	cc/30 min		
Cake API/HTHP	1/32"	1/	1/
Solids	%Vol	10.5	11
Oil/Water	%Vol	/89.5	/89
Sand	%Vol	0.75	1
MBT	lb/bbl	15	15
pH		9	8.8
Alkal Mud (Pm)			0
Pf/Mf		0.02/1.2	0.02/1.2
Chlorides	mg/l	37000	38000
Hardness Ca	mg/l	440	560
Glycol	% V/V	3	3
PHPA	ppb	1.2	1.25
Sulhite Excess	mg/l	80	40
KCl	% Wt	6	6.5

PRODUCTS USED LAST 24 HRS

Products	Size	Amt
DUOTEC	25 KG BG	19
OS-1	25 KG BG	10
SODIUM BICARBONATE	25 KG BG	4
POTASSIUM CHLORIDE	1 MT BG	6
GLUTE 25	25 LT CN	1
DEFOAM A	5 GA CN	2
POTASSIUM HYDROXIDE	25 KG CN	8
POLYPAC UL	25 KG BG	12
POLY PLUS DRY	25 KG BG	25
GLYDRIL MC	55 GA DM	12

SOLIDS EQUIP	Size	Hr
VSM Shaker 1	120/120/120/120	0
VSM Shaker 2	105/105/105/105	0
VSM Shaker 3	105/105/84/84	0
VSM Shaker 4	105/120/84/84	0
D-Silter 12 x 4		0
Centrifuge-DFE		0

MUD PROPERTY SPECIFICATIONS

Weight	1.05-1.10
Viscosity	40-60
Filtrate	< 6

REMARKS AND TREATMENT

Pumped 60 bbl of HiVis sweep of 4 ppb Duotec; no extra cuttings observed on shakers. Added 100 bbl of 6% KCl mix to system to reduce viscosity. Adding OS-1 for remove dissolved oxygen. Upgraded screens to 105 & 120+ dump/dilute to control rising mud wt. Took out 300 bbl active mud and bled in premix to condition mud.

Drilled to 2675 m.

REMARKS

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG	(bbl)	SOLIDS ANALYSIS (%/lb/bbl)		MUD RHEOLOGY & HYDRAULICS	
Rig Up/Service		Oil Added	0	NaCl	.3/ 3.8	np/na Values	0.437/0.425
Drilling		Water Added	426	KCl	2.2/ 20.	kp/ka (lb·s ⁿ /100ft ²)	4.543/4.798
Tripping		Mud Received	0	Low Gravity	7.9/ 72.2	Bit Loss (psi / %)	501 / 1
Non-Productive Tim		Dumped	0	Bentonite	1.6/ 15.	Bit HHP (hbp / HSI)	255 / 1
		Other	0	Drill Solids	6.3/ 57.2	Bit Jet Vel (m/s)	73
		Sweeps	0	Weight Material	NA/ NA	Ann. Vel DP (m/min)	52.09
		Shakers	169	Chemical Conc	- / -	Ann. Vel DC (m/min)	75.69
		Centrifuge	93	Inert/React	3.8139	Crit Vel DP (m/min)	128
		Formation	0	Average SG	2.6	Crit Vel DC (m/min)	148
		Desilter	150	Carb/BiCarb (m mole/L)	.4/ 2.	ECD @ 2675 (sp.gr.)	1.2

M-I ENGR / PHONE	RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Drew Blackburn Jasdeep Singh	08-9302 3790	08-6363 8872	\$ 14,319.60	\$ 165,703.97

**WATER-BASED MUD REPORT No. 14**

Date	9/02/2005	Depth/TVD	2707 m / 2373 m
Spud Date	29/01/2005	Mud Type	KCl-Polymer-Glycol
Water Depth	73	Activity	Tripping

Operator : Bass Strait Oil Co.
Report For : P.Dane/S.Douglas/P.O'shea
Well Name : Zane Grey 1
Contractor : Diamond Offshore
Report For : Sean Defritas/Ray Breaud

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size	12.25 in Security XL12	Surface	Hole	Pump Make	OILWELL 1700PT NATIONAL 12P-16C
Nozzles	3x20 / 1/32"		1311.3(Tot)/553.7(Bit)	Pump Size	6 X 12.in 6 X 12.in
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	4.274 gal/stk 4.274 gal/stk
5 in	842 m		327.7	Pump stk/min	68@97% 68@97%
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	872 gal/min
5 in	166 m		881.4	Bottoms Up	24 min 4891 stk
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time	42.5 min 8661 stk
8 in	83 m		1263	Circulating Pressure	2800 psi

MUD PROPERTIES

Sample From	Pit 3@16:00
Flow Line Temp	°F
Depth/TVD	m 2707/2373
Mud Weight	sp.gr. 1.16@100°F
Funnel Viscosity	s/qt 70
Rheology Temp	°F 120
R600/R300	78/57
R200/R100	48/35
R6/R3	10/7
PV	cP 21
YP	lb/100ft² 36
10s/10m/30m Gel	lb/100ft² 9/17/20
API Fluid Loss	cc/30 min 4.6
HTHP FL Temp	cc/30 min
Cake API/HTHP	1/32" 1/
Solids	%Vol 11
Oil/Water	%Vol /89
Sand	%Vol 0.75
MBT	lb/bbl 14
pH	9
Alkal Mud (Pm)	
Pf/Mf	0.08/0.8
Chlorides	mg/l 37000
Hardness Ca	mg/l 300
Glycol	% V/V 4
PHPA	ppb 1.2
Sulhite Excess	mg/l 40
KCl	% Wt 7

PRODUCTS USED LAST 24 HRS

Products	Size	Amt
DUOTEC	25 KG BG	14
OS-1	25 KG BG	5
SODIUM BICARBONATE	25 KG BG	5
M-I BAR BULK	1 MT BK	6
POTASSIUM CHLORIDE	1 MT BG	11
DEFOAM A	5 GA CN	3
POTASSIUM HYDROXIDE	25 KG CN	4
POLYPAC UL	25 KG BG	25
POLY PLUS DRY	25 KG BG	29
GLYDRIL MC	55 GA DM	20

SOLIDS EQUIP	Size	Hr
VSM Shaker 1	120/120/120/120	0
VSM Shaker 2	120/120/120/120	0
VSM Shaker 3	120/120/120/120	0
VSM Shaker 4	120/120/120/120	0
D-Silter 12 x 4		0
Centrifuge-DFE		0

MUD PROPERTY SPECIFICATIONS

Weight	1.05-1.10
Viscosity	40-60
Filtrate	< 6

REMARKS AND TREATMENT

Obtained Mwt of 9.5 ppg after dump/dilute and risen to 9.7 ppg after 5 hrs of drilling. Centrifuge turned off unknowingly. Changed screens to 120 mesh. Dump and cleaned header box.

REMARKS

Drilled to 2707 m. POOH for BHA change. Hole good. RIH is in progress.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG	(bbl)	SOLIDS ANALYSIS (%/lb/bbl)		MUD RHEOLOGY & HYDRAULICS	
Rig Up/Service		Oil Added	0	NaCl	.1/ 1.1	np/na Values	0.453/0.459
Drilling		Water Added	577	KCl	2.6/ 23.7	kp/ka (lb•s^n/100ft²)	3.618/3.533
Tripping		Mud Received	0	Low Gravity	7.2/ 65.9	Bit Loss (psi / %)	800 / 1
Non-Productive Tim		Dumped	50	Bentonite	.8/ 7.5	Bit HHP (hhp / HSI)	407 / 1
		Other	0	Drill Solids	6.4/ 58.4	Bit Jet Vel (m/s)	93
		Sweeps	0	Weight Material	NA/ NA	Ann. Vel DP (m/min)	50.45
		Shakers	0	Chemical Conc	- / -	Ann. Vel DC (m/min)	72.27
		Centrifuge	0	Inert/React	3.7079	Crit Vel DP (m/min)	114
		Formation	0	Average SG	2.6	Crit Vel DC (m/min)	134
		Desilter	0	Carb/BiCarb (m mole/L)	1.6/ 8.	ECD @ 1091 (sp.gr.)	1.2

M-I ENGR / PHONE

Drew Blackburn
Jasdeep Singh 08-9302 3790

RIG PHONE

08-6363 8872

WAREHOUSE PHONE

08-9325 4822

DAILY COST

\$ 21,138.60

CUMULATIVE COST

\$ 186,842.57

**WATER-BASED MUD REPORT No. 15**

Date	10/02/2005	Depth/TVD	2724 m / 2390 m
Spud Date	29/01/2005	Mud Type	KCl-Polymer-Glycol
Water Depth	73	Activity	Drilling

Operator : Bass Strait Oil Co.
Report For : P.Dane/S.Douglas/P.O'shea
Well Name : Zane Grey 1
Contractor : Diamond Offshore
Report For : Sean Defritas/Ray Breaud

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size	12.25 in Security XL12	Surface	Hole	Pump Make	OILWELL 1700PT NATIONAL 12P-16C
Nozzles	3x20 / 1/32"		1300.3	Pump Size	6 X 12.in 6 X 12.in
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	4.274 gal/stk 4.274 gal/stk
5 in	2478 m		459.7	Pump stk/min	68@97% 68@97%
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	872 gal/min
5 in	166 m		1760	Bottoms Up	55.3 min 11291 stk
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time	84.8 min 17293 stk
8 in	80 m		1051	Circulating Pressure	2800 psi

MUD PROPERTIES

Sample From	Pit 3@18:00	Pit 3@07:00
Flow Line Temp	°F 130	120
Depth/TVD	m 2724/2390	2600/
Mud Weight	sp.gr. 1.16@120°F	1.18+@110°F
Funnel Viscosity	s/qt 63	65
Rheology Temp	°F 120	120
R600/R300	78/57	90/68
R200/R100	47/34	57/42
R6/R3	10/7	12/9
PV	cP 21	22
YP	lb/100ft² 36	46
10s/10m/30m Gel	lb/100ft² 8/14/17	10/17/20
API Fluid Loss	cc/30 min 4.4	4.6
HTHP FL Temp	cc/30 min	
Cake API/HTHP	1/32" 1/	1/
Solids	%Vol 9	11
Oil/Water	%Vol /91	/89
Sand	%Vol 0.65	1
MBT	lb/bbl 14	14
pH	9	9
Alkal Mud (Pm)	0	0
Pf/Mf	0.1/0.75	0.05/0.75
Chlorides	mg/l 37500	37000
Hardness Ca	mg/l 440	400
Glycol	% V/V 4	4
PHPA	ppb 1	1
Sulhite Excess	mg/l 10	10
KCl	% Wt 7	7

PRODUCTS USED LAST 24 HRS

Products	Size	Amt
DUOTEC	25 KG BG	12
OS-1	25 KG BG	4
SODIUM BICARBONATE	25 KG BG	2
POTASSIUM CHLORIDE	1 MT BG	3
DEFOAM A	5 GA CN	2
POTASSIUM HYDROXIDE	25 KG CN	2
POLYPAC UL	25 KG BG	9
POLY PLUS DRY	25 KG BG	8
GLYDRIL MC	55 GA DM	9

SOLIDS EQUIP	Size	Hr
VSM Shaker 1	120/120/120/120	0
VSM Shaker 2	120/120/120/120	0
VSM Shaker 3	120/120/120/120	0
VSM Shaker 4	120/120/120/120	0
D-Silter 12 x 4		0
Centrifuge-DFE		0

MUD PROPERTY SPECIFICATIONS

Weight	1.05-1.10
Viscosity	40-60
Filtrate	< 6

REMARKS AND TREATMENT

Mud wt increased to 9.9 ppg while reaming. Centrifuge made available at 11:00 hrs. Dump/dilute 430 bbl to cut wt to 9.6+ ppgat 2710 m. Pump 50 bbl HiVis sweep at 2705 m with no extra cuttings observed on shakers. Treated system with Duotec for rheology control.

REMARKS

R/I hole with tricone bit and packed assembly. Reamed down to bottom. Drilled to 2724 m. Working on leaking wash pipe.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG (bbl)	SOLIDS ANALYSIS (%/lb/bbl)	MUD RHEOLOGY & HYDRAULICS
Rig Up/Service		Oil Added 0	NaCl .1/ 1.4	np/na Values 0.453/0.451
Drilling		Water Added 356	KCl 2.6/ 24.	kp/ka (lb*s^n/100ft²) 3.618/3.581
Tripping		Mud Received 0	Low Gravity 5.3/ 48.5	Bit Loss (psi / %) 800 / 1
Non-Productive Tim		Dumped 444	Bentonite 1.1/ 10.3	Bit HHP (hbp / HSI) 407 / 1
		Other 0	Drill Solids 3.6/ 33.1	Bit Jet Vel (m/s) 93
		Sweeps 0	Weight Material .9/ 13.6	Ann. Vel DP (m/min) 52.09
		Shakers 0	Chemical Conc - / 5.	Ann. Vel DC (m/min) 75.69
		Centrifuge 27	Inert/React 2.1037	Crit Vel DP (m/min) 114
		Formation 0	Average SG 2.84	Crit Vel DC (m/min) 133
		Desilter 0	Carb/BiCarb (m mole/L) 2./ 10.	ECD @ 2724 (sp.gr.) 1.2

M-I ENGR / PHONE		RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Drew Blackburn					
Jasdeep Singh	08-9302 3790	08-6363 8872	08-9325 4822	\$ 8,545.79	\$ 195,388.36



WATER-BASED MUD REPORT No. 16

Date	11/02/2005	Depth/TVD	2772 m / 2421 m
Spud Date	29/01/2005	Mud Type	KCl-Polymer-Glycol
Water Depth	73	Activity	POH

Operator : Bass Strait Oil Co.
Report For : P.Dane/S.Douglas/P.O'shea
Well Name : Zane Grey 1
Contractor : Diamond Offshore
Report For : Sean Defreitas/Ray Breaud

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size	12.25 in Security XL12	Surface	Hole	Pump Make	OILWELL 1700PT NATIONAL 12P-16C
Nozzles	3x20 / 1/32"	30in @128m (128TVD)	1322.2	Pump Size	6 X 12.in 6 X 12.in
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	4.274 gal/stk 4.274 gal/stk
5 in	2526 m	13.375in @1091m (1030TVD)	424.8	Pump stk/min	75@97% 75@97%
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	641 gal/min
5 in	166 m	9.625in @2184m (1936TVD)	1747	Bottoms Up	76.5 min 11482 stk
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time	114.5 min 17170 stk
8 in	80 m		1051	Circulating Pressure	2045 psi

MUD PROPERTIES

Sample From		Pit@0400	Pit@18:00
Flow Line Temp	°F	130	125
Depth/TVD	m	2772/2421	2772/2421
Mud Weight	sp.gr.	1.16@120°F	1.16@120°F
Funnel Viscosity	s/qt	63	65
Rheology Temp	°F	120	120
R600/R300		76/56	78/57
R200/R100		46/33	47/34
R6/R3		11/8	12/8
PV	cP	20	21
YP	lb/100ft²	36	36
10s/10m/30m Gel	lb/100ft²	9/16/17	9/17/19
API Fluid Loss	cc/30 min	4.1	4.3
HTHP FL Temp	cc/30 min		
Cake API/HTHP	1/32"	1/	1/
Solids	%Vol	9	9
Oil/Water	%Vol	0/91	0/91
Sand	%Vol	0.6	0.6
MBT	lb/bbl	15	15
pH		9.0	9
Alkal Mud (Pm)			
Pf/Mf		0.1/0.7	0.1/0.7
Chlorides	mg/l	38000	38000
Hardness Ca	mg/l	420	440
Glycol	% V/V	3.5	3.5
PHPA	ppb	1.1	1.1
Sulhite Excess	mg/l	40	40
KCl	% Wt	6.5	6.5

PRODUCTS USED LAST 24 HRS

Products	Size	Amt
DUOTEC	25 KG BG	8
OS-1	25 KG BG	4
SODIUM BICARBONATE	25 KG BG	2
M-I BAR BULK	1 MT BK	2
POTASSIUM CHLORIDE	1 MT BG	3
GLUTE 25	25 LT CN	2
POTASSIUM HYDROXIDE	25 KG CN	6
POLYPAC UL	25 KG BG	9
POLY PLUS DRY	25 KG BG	12
GLYDRIL MC	55 GA DM	12

SOLIDS EQUIP	Size	Hr
VSM Shaker 1	145/145/145/120	15
VSM Shaker 2	145/145/120/120	15
VSM Shaker 3	120/120/120/120	15
VSM Shaker 4	120/120/120/120	15
D-Silter 12 x 4		14
Centrifuge-DFE		18

MUD PROPERTY SPECIFICATIONS

Weight	1.05-1.10
Viscosity	40-60
Filtrate	< 6

REMARKS AND TREATMENT

All mud properties within program specifications. Mud weight stabilised at 1.16 with constant running of the centrifuge and desilter. The screens on the shakers are being upgraded as flow permits. Recommended dry additions of Polyplus direct to active system to maintain the integrity of the cuttings at the shakers. Added Duotec and KOH to active to maintain low end rheology and lift pH, respectively.

REMARKS

Drill 12 1/4" hole from 2724' to 2772' (TD). Circulate B/U and condition mud. Make wiper trip to \$\$\$\$ meters, run back to bottom, circulate hole clean, pump slug and POH to run casing.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG	(bbl)	SOLIDS ANALYSIS (%/lb/bbl)		MUD RHEOLOGY & HYDRAULICS	
Rig Up/Service		Oil Added	0	NaCl	.1/ 1.7	np/na Values	0.441/0.404
Drilling	13	Water Added	320	KCl	2.6/ 24.	kp/ka (lb·s ⁿ /100ft ²)	3.829/4.415
Tripping	8	Mud Received	0	Low Gravity	5.3/ 48.3	Bit Loss (psi / %)	432 / 1
Non-Productive Tim		Dumped	140	Bentonite	1.3/ 11.5	Bit HHP (hbp / HSI)	162 / 1
Condition Hole	3	Other	0	Drill Solids	3.5/ 31.9	Bit Jet Vel (m/s)	68
		Sweeps	0	Weight Material	.9/ 13.5	Ann. Vel DP (m/min)	38.29
		Shakers	75	Chemical Conc	- / 5.	Ann. Vel DC (m/min)	55.64
		Centrifuge	25	Inert/React	1.8899	Crit Vel DP (m/min)	115
		Formation	80	Average SG	2.84	Crit Vel DC (m/min)	131
		Desilter	45	Carb/BiCarb (m mole/L)	2.7/ 10.	ECD @ 2772 (sp.gr.)	1.19

M-I ENGR / PHONE	RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Drew Blackburn Peter Dwyer	08-9302 3790	08-6363 8872	\$ 9,882.95	\$ 205,271.31

WATER-BASED MUD REPORT No. 17

Date	12/02/2005	Depth/TVD	2772 m / 2421 m
Spud Date	29/01/2005	Mud Type	KCI-Polymer-Glycol
Water Depth	73	Activity	Running Casing

Operator : Bass Strait Oil Co.
Report For : P.Dane/S.Douglas/P.O'shea
Well Name : Zane Grey 1
Contractor : Diamond Offshore
Report For : Sean Defreitas/Ray Breaud

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA		
Bit Size	12.25 in	Surface 30in @128m (128TVD)	Hole	Pump Make	OILWELL 1700PT	NATIONAL 12P-16C
Nozzles	1/32"		1007.1	Pump Size	6 X 12.in	6 X 12.in
Drill Pipe Size	Length	Intermediate 13.375in @1091m (1030TVD)	Active Pits 422.9	Pump Cap	gal/stk	gal/stk
5 in	m			Pump stk/min		
Drill Pipe Size	Length	Intermediate 9.625in @2184m (1936TVD)	Total Circulating Vol 422.9	Flow Rate	gal/min	
5 in	m			Bottoms Up		
Drill Collar Size	Length	Production or Liner	In Storage 1123	Total Circ Time		
8 in	m			Circulating Pressure		

MUD PROPERTIES			
Sample From		PIT@22:00	PIT@09:00
Flow Line Temp	°F	n/a	n/a
Depth/TVD	m	2772/2472	2772/2472
Mud Weight	sp.gr.	1.15@90°F	1.16@90°F
Funnel Viscosity	s/qt	66	68
Rheology Temp	°F	120	120
R600/R300		77/55	75/56
R200/R100		45/33	46/32
R6/R3		11/8	11/7
PV	cP	22	19
YP	lb/100ft²	33	37
10s/10m/30m Gel	lb/100ft²	7/14/18	8/15/18
API Fluid Loss	cc/30 min	4.3	4.3
HTHP FL Temp	cc/30 min		
Cake API/HTHP	1/32"	1/	1/
Solids	%Vol	8.5	9
Oil/Water	%Vol	/91.5	/91
Sand	%Vol	0.5	0.5
MBT	lb/bbl	15	15
pH		9.0	9
Alkal Mud (Pm)			
Pf/Mf		0.05/0.7	0.05/0.7
Chlorides	mg/l	38000	38000
Hardness Ca	mg/l	300	300
Glycol	% V/V	3.5	3.5
PHPA	ppb	1.1	1.1
Sulhite Excess	mg/l	40	40
KCl	% Wt	6.5	6.5

[illegible]

SOLIDS EQUIP	Size	Hr
VSM Shaker 1	145/145/145/120	0
VSM Shaker 2	145/145/120/120	0
VSM Shaker 3	120/120/120/120	0
VSM Shaker 4	120/120/120/120	0
D-Silter 12 x 4		0
Centrifuge-DFE		23

MUD PROPERTY SPECIFICATIONS	
Weight	1.05-1.10
Viscosity	40-60
Filtrate	< 6

REMARKS AND TREATMENT

Run centrifuge continuously on active mud to reduce low gravity solids. Mud weight into centrifuge 9.65ppg and discharging out at 9.15ppg. Midnight mud weight in active is 9.55ppg.

REMARKS

POOH. Rig up and run 9 5/8" casing. Casing stopped at 1772m.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG	(bbl)	SOLIDS ANALYSIS (%lb/bbl)		MUD RHEOLOGY & HYDRAULICS	
Rig Up/Service	6	Oil Added	0	NaCl	.3/ 3.9	np/na	Values
Drilling		Water Added	0	KCl	2.3/ 21.1	kp/ka	(lb·s ⁿ /100ft ²)
Tripping	6	Mud Received	0	Low Gravity	5.2/ 47.1	Bit Loss	(psi / %)
Non-Productive Tim		Dumped	50	Bentonite	1.3/ 11.6	Bit HHP	(hhp / HSI)
Running Casing	12	Other	0	Drill Solids	3.4/ 30.5	Bit Jet Vel	(m/s)
		Sweeps	0	Weight Material	.7/ 10.1	Ann. Vel DP	(m/min)
		Shakers	0	Chemical Conc	- / 5.	Ann. Vel DC	(m/min)
		Centrifuge	25	Inert/React	1.8085	Crit Vel DP	(m/min)
		Formation	170	Average SG		Crit Vel DC	(m/min)
		Desilter	0	Carb/BiCarb (m mole/L)	1/ 5.		

M-I ENGR / PHONE		RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Drew Blackburn					
Peter Dwver	08-9302 3790	08-6363 8872	08-9325 4822	\$ 0.00	\$ 205 271.31

WATER-BASED MUD REPORT No. 18

Date	13/02/2005	Depth/TVD	2772 m / 2421 m
Spud Date	29/01/2005	Mud Type	KCI-Polymer-Glycol
Water Depth	73	Activity	RIH

Operator : Bass Strait Oil Co.
Report For : P.Dane/S.Douglas/P.O'shea
Well Name : Zane Grey 1
Contractor : Diamond Offshore
Report For : Sean Defreitas/Ray Breaud

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA		
Bit Size	12.25 in	Surface 30in @128m (128TVD)	Hole 1007.1	Pump Make	OILWELL 1700PT	NATIONAL 12P-16C
Nozzles	1/32"			Pump Size	6 X 12.in	6 X 12.in
Drill Pipe Size	Length	Intermediate 13.375in @1091m (1030TVD)	Active Pits 473.9	Pump Cap	gal/stk	gal/stk
5 in	m			Pump stk/min		
Drill Pipe Size	Length	Intermediate 9.625in @2184m (1936TVD)	Total Circulating Vol 473.9	Flow Rate	gal/min	
5 in	m			Bottoms Up		
Drill Collar Size	Length	Production or Liner	In Storage 933	Total Circ Time		
8 in	m			Circulating Pressure		

MUD PROPERTIES		
Sample From	PIT@23:00	PIT@05:00
Flow Line Temp °F	n/a	n/a
Depth/TVD m	2772/2472	2772/2472
Mud Weight sp.gr.	1.16@90°F	1.16@90°F
Funnel Viscosity s/qt	67	73
Rheology Temp °F	120	120
R600/R300	78/55	71/51
R200/R100	44/32	42/31
R6/R3	11/8	11/8
PV cP	23	20
YP lb/100ft²	32	31
10s/10m/30m Gel lb/100ft²	8/12/16	8/11/13
API Fluid Loss cc/30 min	4.3	4
HTHP FL Temp cc/30 min		
Cake API/HTHP 1/32"	1/	1/
Solids %Vol	9	9
Oil/Water %Vol	0/91	/91
Sand %Vol	0.4	0.4
MBT lb/bbl	15	15
pH	9	9
Alkal Mud (Pm)		
Pf/Mf	0.05/0.6	0.05/0.75
Chlorides mg/l	38000	41000
Hardness Ca mg/l	300	300
Glycol % V/V	3	3
PHPA ppb	1.1	1.0
Sulhite Excess mg/l	40	40
KCl % Wt	6.5	7

[illegible]

SOLIDS EQUIP	Size	Hr
VSM Shaker 1	145/145/145/120	0
VSM Shaker 2	145/145/120/120	0
VSM Shaker 3	120/120/120/120	0
VSM Shaker 4	120/120/120/120	0
D-Silter 12 x 4		0
Centrifuge-DFE		12

MUD PROPERTY SPECIFICATIONS	
Weight	1.05-1.10
Viscosity	40-60
Filtrate	< 6

REMARKS AND TREATMENT

Continue running centrifuge to treat surface volume mud. Lost 90 bbls mud at surface due to accidental overflow of sandtrap while centrifuging surface volume. Monitoring screen condition and screening up to 145's. All mud properties within program specifications and building concentrated phpa and glycol premixes to maintain properties and preparing for next section.

REMARKS

Casing hung up at 1776m. Make up slug and pull casing to surface for wiper trip to bottom.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG	(bbl)	SOLIDS ANALYSIS (%/lb/bbl)		MUD RHEOLOGY & HYDRAULICS	
Rig Up/Service	1	Oil Added	0	NaCl	.3/ 3.9	np/na	Values
Drilling		Water Added	0	KCl	2.3/ 20.9	kp/ka	(lb·s ⁿ /100ft ²)
Tripping	22	Mud Received	0	Low Gravity	6.6/ 59.8	Bit Loss	(psi / %)
Non-Productive Tim		Dumped	0	Bentonite	1.1/ 10.	Bit HHP	(hhp / HSI)
Running Casing	1	Other	90	Drill Solids	4.9/ 44.8	Bit Jet Vel	(m/s)
		Sweeps	0	Weight Material	NA/ NA	Ann. Vel DP	(m/min)
		Shakers	0	Chemical Conc	- / 5.	Ann. Vel DC	(m/min)
		Centrifuge	10	Inert/React	2.6535	Crit Vel DP	(m/min)
		Formation	44	Average SG	2.6	Crit Vel DC	(m/min)
		Desilter	0	Carb/BiCarb (m mole/L)	1./ 5.		

M-I ENGR / PHONE		RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Drew Blackburn					
Peter Dwyer	08-9302 3790	08-6363 8872	08-9325 4822	\$ 935.55	\$ 206,206.86

**WATER-BASED MUD REPORT No. 19**

Date	14/02/2005	Depth/TVD	2772 m / 2421 m
Spud Date	29/01/2005	Mud Type	KCl-Polymer-Glycol
Water Depth	73	Activity	Condition hole

Operator : Bass Strait Oil Co.
Report For : P.Dane/S.Douglas/P.O'shea
Well Name : Zane Grey 1
Contractor : Diamond Offshore
Report For : Sean Defreitas/Ray Breaud

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size	12.25 in SECURITY X-S4	Surface	Hole	Pump Make	OILWELL 1700PT NATIONAL 12P-16C
Nozzles	3x20 / 1/32"	30in @128m (128TVD)	1390.8(Tot)/1140.6(Bit)	Pump Size	6 X 12.in 6 X 12.in
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	4.274 gal/stk 4.274 gal/stk
5 in	2071 m	13.375in @1091m (1030TVD)	452.2	Pump stk/min	74@97% 74@97%
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	949 gal/min
5 in	140 m	9.625in @2184m (1936TVD)	1592.8	Bottoms Up	44.9 min 9964 stk
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time	70.5 min 15650 stk
8 in	72 m		443	Circulating Pressure	3295 psi

MUD PROPERTIES

Sample From	F/L@22:15	PIT@0430
Flow Line Temp	°F 105	105
Depth/TVD	m 2283/2019	2772/
Mud Weight	sp.gr. 1.188@100°F	1.15@95°F
Funnel Viscosity	s/qt 57	75
Rheology Temp	°F 120	120
R600/R300	79/57	76/55
R200/R100	48/35	46/33
R6/R3	12/8	11/8
PV	cP 22	21
YP	lb/100ft² 35	34
10s/10m/30m Gel	lb/100ft² 8/13/17	8/12/15
API Fluid Loss	cc/30 min 4.2	4.2
HTHP FL Temp	cc/30 min	
Cake API/HTHP	1/32" 1/	1/
Solids	%Vol 10.1	8.6
Oil/Water	%Vol 0/89.9	/91.4
Sand	%Vol 0.5	0.5
MBT	lb/bbl 15	15
pH	9	9
Alkal Mud (Pm)		
Pf/Mf	0.05/0.5	0.05/0.6
Chlorides	mg/l 44000	42000
Hardness Ca	mg/l 320	300
Glycol	% V/V 3.5	3.5
PHPA	ppb 1.0	1
Sulhite Excess	mg/l 40	80
KCl	% Wt 7	7

PRODUCTS USED LAST 24 HRS

Products	Size	Amt
DUOTEC	25 KG BG	3
OS-1	25 KG BG	3
SODIUM BICARBONATE	25 KG BG	2
M-I BAR BULK	1 MT BK	9
POTASSIUM CHLORIDE	1 MT BG	4
DEFOAM A	5 GA CN	2
POTASSIUM HYDROXIDE	25 KG CN	3
POLYPAC UL	25 KG BG	15
POLY PLUS DRY	25 KG BG	11
GLYDRIL MC	55 GA DM	10
DUO-VIS	25 KG BG	11

SOLIDS EQUIP	Size	Hr
VSM Shaker 1	145/145/145/120	22
VSM Shaker 2	145/145/120/120	22
VSM Shaker 3	120/120/120/120	22
VSM Shaker 4	120/120/120/120	22
D-Silter 12 x 4		10
Centrifuge-DFE		19

MUD PROPERTY SPECIFICATIONS

Weight	1.05-1.10
Viscosity	40-60
Filtrate	< 6

REMARKS AND TREATMENT

Running desilter and centrifuge as required to reduce concentration of low gravity solids. Running degasser. Added barite to weight system up to 9.6 and then 9.8ppg. Controlled further increases in mud weight from LGS with additions of unweighted whole mud premixes. Adding extra PolyPlus to premixes to assist with encapsulation and fine grain solids removal. Took 4x145's and 2x120's new shaker screens from store. Monitoring screens for holes.

REMARKS

RIH with bit, wash and ream to 2283 meters. Lost large quantities of mud at shakers when soft clays blinded the shaker screens. Pump high viscosity Duovis sweep, high cuttings concentration was removed at shakers with returning sweep.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG (bbl)	SOLIDS ANALYSIS (%/lb/bbl)	MUD RHEOLOGY & HYDRAULICS
Rig Up/Service		Oil Added 0	NaCl .5/ 5.4	np/na Values 0.471/0.421
Drilling		Water Added 360	KCl 2.5/ 22.8	kp/ka (lb*s^n/100ft²) 3.226/4.296
Tripping	2	Mud Received 0	Low Gravity 5.7/ 52.1	Bit Loss (psi / %) 971 / 1
Non-Productive Tim		Dumped 0	Bentonite 1.2/ 11.	Bit HHP (hbp / HSI) 537 / 1
Running Casing		Other 0	Drill Solids 4./ 36.1	Bit Jet Vel (m/s) 101
Reaming	22	Sweeps 0	Weight Material 1.4/ 20.8	Ann. Vel DP (m/min) 52.31
		Shakers 335	Chemical Conc - / 5.	Ann. Vel DC (m/min) 73.44
		Centrifuge 25	Inert/React 2.1401	Crit Vel DP (m/min) 114
		Formation 120	Average SG 2.92	Crit Vel DC (m/min) 131
		Desilter 50	Carb/BiCarb (m mole/L) 1./ 5.	ECD @ 2283 (sp.gr.) 1.23

M-I ENGR / PHONE	RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Drew Blackburn Peter Dwyer	08-9302 3790	08-6363 8872	\$ 13,357.59	\$ 219,564.45



WATER-BASED MUD REPORT No. 20

Date	15/02/2005	Depth/TVD	2735 m / 2390 m
Spud Date	29/01/2005	Mud Type	KCl-Polymer-Glycol
Water Depth	73	Activity	POH for CSG

Operator : Bass Strait Oil Co.
Report For : P.Dane
Well Name : Zane Grey 1
Contractor : Diamond Offshore
Report For : Sean Defreitas/Ray Breaud

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size	12.25 in SECURITY X-S4	Surface	Hole	Pump Make	OILWELL 1700PT NATIONAL 12P-16C
Nozzles	3x20 / 1/32"	30in @128m (128TVD)	1362.2	Pump Size	6 X 12.in 6 X 12.in
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	4.274 gal/stk 4.274 gal/stk
5 in	2523 m	13.375in @1091m (1030TVD)	479.8	Pump stk/min	64@97% 64@97%
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	829 gal/min
5 in	140 m	9.625in @2184m (1936TVD)	1842	Bottoms Up	61.3 min 11886 stk
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time	93.3 min 18104 stk
8 in	72 m		619	Circulating Pressure	3650 psi

MUD PROPERTIES

Sample From	F/L@16:30	PIT@06:00
Flow Line Temp	°F 105	105
Depth/TVD	m 2735/2390	2772/2421
Mud Weight	sp.gr. 1.21@115°F	1.2@113°F
Funnel Viscosity	s/qt 68	73
Rheology Temp	°F 120	120
R600/R300	76/54	78/57
R200/R100	47/33	47/34
R6/R3	11/7	11/7
PV	cP 22	21
YP	lb/100ft² 32	36
10s/10m/30m Gel	lb/100ft² 7/12/16	8/13/15
API Fluid Loss	cc/30 min 4	3.8
HTHP FL Temp	cc/30 min	
Cake API/HTHP	1/32" 1/	1/
Solids	%Vol 11.5	11
Oil/Water	%Vol /88.5	/89
Sand	%Vol 0.5	0.5
MBT	lb/bbl 15	15
pH	9	8.5
Alkal Mud (Pm)		
Pf/Mf	0.05/0.55	0.03/0.5
Chlorides	mg/l 39500	38000
Hardness Ca	mg/l 340	300
Glycol	% V/V 3.5	3.5
PHPA	ppb 1.1	1.1
Sulhite Excess	mg/l 40	40
KCl	% Wt 6.5	6.5

PRODUCTS USED LAST 24 HRS

Products	Size	Amt
DUOTEC	25 KG BG	6
CAUSTIC SODA (DRY)	25 KG DM	2
SODIUM BICARBONATE	25 KG BG	2
M-I BAR BULK	1 MT BK	14
POTASSIUM CHLORIDE	1 MT BG	3
DEFOAM A	5 GA CN	2
POTASSIUM HYDROXIDE	25 KG CN	2
POLYPAC UL	25 KG BG	13
POLY PLUS DRY	25 KG BG	12
GLYDRIL MC	55 GA DM	14
DUO-VIS	25 KG BG	3

SOLIDS EQUIP	Size	Hr
VSM Shaker 1	145/145/145/120	22
VSM Shaker 2	145/145/120/120	22
VSM Shaker 3	120/120/120/120	22
VSM Shaker 4	120/120/120/120	22
D-Silter 12 x 4		16
Centrifuge-DFE		17

MUD PROPERTY SPECIFICATIONS

Weight	1.05-1.10
Viscosity	40-60
Filtrate	< 6

REMARKS AND TREATMENT

Mud weight increased to 10ppg with barite as requested by company representative. Running centrifuge during extended periods of circulation to maintain LGS as low as possible.

REMARKS

Continue reaming to 2735 meters, circulate hole clean, pump slug and pull out of hole to run casing.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG (bbl)	SOLIDS ANALYSIS (%/lb/bbl)	MUD RHEOLOGY & HYDRAULICS
Rig Up/Service		Oil Added 0	NaCl 3/3	np/na Values 0.493/0.442
Drilling		Water Added 355	KCl 2.5/ 22.5	kp/ka (lb*s^n/100ft²) 2.662/3.631
Tripping	5	Mud Received 0	Low Gravity 7.3/ 66.4	Bit Loss (psi / %) 754 / 1
Non-Productive Tim		Sweeps 0	Bentonite 1/ 9.2	Bit HHP (hbp / HSI) 365 / 1
Reaming	17	Shakers 76	Drill Solids 5.7/ 52.3	Bit Jet Vel (m/s) 88
Condition Hole	2	Centrifuge 22	Weight Material 1.5/ 21.8	Ann. Vel DP (m/min) 45.7
		Formation 120	Chemical Conc - / 5	Ann. Vel DC (m/min) 64.16
		Desilter 14	Inert/React 3.0965	Crit Vel DP (m/min) 107
		Dumped 0	Average SG 2.87	Crit Vel DC (m/min) 124
		Other 0	Carb/BiCarb (m mole/L) 1/ 5	ECD @ 2735 (sp.gr.) 1.24

M-I ENGR / PHONE	RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Drew Blackburn Peter Dwyer 08-9302 3790	08-6363 8872	08-9325 4822	\$ 14,270.13	\$ 233,834.58

**WATER-BASED MUD REPORT No. 21**

Date	16/02/2005	Depth/TVD	2735 m / 2390 m
Spud Date	29/01/2005	Mud Type	KCl-Polymer-Glycol
Water Depth	73	Activity	Run Casing

Operator : Bass Strait Oil Co.
Report For : P. Dane
Well Name : Zane Grey 1
Contractor : Diamond Offshore
Report For : Sean Defreitas/Ray Breaud

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size 12.25 in		Surface	Hole	Pump Make	OILWELL 1700PT NATIONAL 12P-16C
Nozzles 1/32"		30in @128m (128TVD)	1381.4	Pump Size	6 X 12.in 6 X 12.in
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	4.274 gal/stk 4.274 gal/stk
5 in	m	13.375in @1091m (1030TVD)	475.6	Pump stk/min	64@97% 64@97%
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	547 gal/min
5 in	m	9.625in @2184m (1936TVD)	475.6	Bottoms Up	min 0 stk
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time	36.5 min 4675 stk
8 in	m		601	Circulating Pressure	450 psi

MUD PROPERTIES

Sample From	PIT@19:20	PIT@06:00
Flow Line Temp °F	95	n/a
Depth/TVD m	2735/2390	2735/2390
Mud Weight sp.gr.	1.21@85°F	1.21@87°F
Funnel Viscosity s/qt	72	88
Rheology Temp °F	120	120
R600/R300	78/56	94/69
R200/R100	46/34	57/42
R6/R3	11/7	14/10
PV cP	22	25
YP lb/100ft²	34	44
10s/10m/30m Gel lb/100ft²	8/14/16	12/23/24
API Fluid Loss cc/30 min	3.9	3.8
HTHP FL Temp cc/30 min		
Cake API/HTHP 1/32"	1/	1/
Solids %Vol	11.5	11.5
Oil/Water %Vol	0/88.5	0/88.5
Sand %Vol	0.5	0.5
MBT lb/bbl	17.5	17.5
pH	9	9
Alkal Mud (Pm)		
Pf/Mf	0.05/0.55	0.03/0.5
Chlorides mg/l	36000	36000
Hardness Ca mg/l	320	300
Glycol % V/V	4.3	4.3
PHPA ppb	1.0	1.1
Sulhite Excess mg/l	40	40
KCl % Wt	6	6

PRODUCTS USED LAST 24 HRS

Products	Size	Amt
DUOTEC	25 KG BG	4
SODIUM BICARBONATE	25 KG BG	1
M-I BAR BULK	1 MT BK	12
POTASSIUM CHLORIDE	1 MT BG	2
GLUTE 25	25 LT CN	1
DEFOAM A	5 GA CN	1
POTASSIUM HYDROXIDE	25 KG CN	1
POLYPAC UL	25 KG BG	5
POLY PLUS DRY	25 KG BG	6
GLYDRIL MC	55 GA DM	4

SOLIDS EQUIP	Size	Hr
VSM Shaker 1	145/145/145/120	0
VSM Shaker 2	145/145/120/120	0
VSM Shaker 3	120/120/120/120	0
VSM Shaker 4	120/120/120/120	0
D-Silter 12 x 4		0
Centrifuge-DFE		0

MUD PROPERTY SPECIFICATIONS

Weight	1.05-1.10
Viscosity	40-60
Filtrate	< 6

REMARKS AND TREATMENT

Dump possum belly (+/- 40 bbls) after circulating at 1962 meters to try and minimise future mud losses at shakers due to blinding of shaker screens. Add glute biocide to prevent bacterial degradation. Maintained active volume by adding premix whole mud additions weighted to 9.9ppg.

REMARKS

Continue POH, hold JSA, pick up and run 9 5/8" casing. No problems till 1962 meters, circulate casing and wash down. Circulating casing down from 1962 to 1973 meters. Losing mud at shakers due to sticky clays blinding shaker screens.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG (bbl)	SOLIDS ANALYSIS (%/lb/bbl)	MUD RHEOLOGY & HYDRAULICS
Rig Up/Service		Oil Added 0	NaCl 1/ 1.3	np/na Values
Drilling		Water Added 276	KCl 2.5/ 22.5	kp/ka (lb·s ⁿ /100ft²)
Tripping	2	Mud Received 0	Low Gravity 7.4/ 67.2	Bit Loss (psi / %)
Non-Productive Tim		Sweeps 0	Bentonite 1.3/ 11.9	Bit HHP (hbp / HSI)
Reaming		Shakers 200	Drill Solids 5.5/ 50.2	Bit Jet Vel (m/s)
Condition Hole	2	Centrifuge 0	Weight Material 1.6/ 22.9	Ann. Vel DP (m/min)
Running Casing	20	Formation 70	Chemical Conc - / 5.	Ann. Vel DC (m/min)
		Desilter 0	Inert/React 2.5524	Crit Vel DP (m/min)
		Dumped 40	Average SG 2.88	Crit Vel DC (m/min)
		Other 0	Carb/BiCarb (m mole/L) 1/ 5.	

M-I ENGR / PHONE		RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Drew Blackburn Peter Dwyer		08-9302 3790	08-6363 8872	08-9325 4822	\$ 7,512.84
					\$ 241,347.42

**WATER-BASED MUD REPORT No. 22**

Date	17/02/2005	Depth/TVD	2735 m / 2390 m
Spud Date	29/01/2005	Mud Type	KCl-Polymer-Glycol
Water Depth	73	Activity	WOC

Operator : Bass Strait Oil Co.
Report For : P. Dane
Well Name : Zane Grey 1
Contractor : Diamond Offshore
Report For : Sean Defreitas/Ray Breaud

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA					
Bit Size 12.25 in		Surface	Hole	Pump Make	OILWELL 1700PT	NATIONAL 12P-16C			
Nozzles 1/32"		30in @128m (128TVD)	870.8	Pump Size	6 X 12.in	6 X 12.in			
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	4.274 gal/stk	4.274 gal/stk			
5 in	m	13.375in @1091m (1030TVD)	520.2	Pump stk/min	80@97%	80@97%			
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	684 gal/min				
5 in	m	9.625in @2184m (1936TVD)	520.2	Bottoms Up	min	0 stk			
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time	31.9 min	5110 stk			
8 in	m	in @3675m (3219TVD)	1209	Circulating Pressure	650 psi				
MUD PROPERTIES				PRODUCTS USED LAST 24 HRS					
Sample From		PIT@22:30		PIT@10:30	Products	Size	Amt		
Flow Line Temp	°F				SODIUM BICARBONATE	25 KG BG	2		
Depth/TVD	m	2735/2390		2735/2390	M-I BAR BULK	1 MT BK	10		
Mud Weight	sp.gr.	1.22@92°F		1.22@88°F	POTASSIUM CHLORIDE	1 MT BG	2		
Funnel Viscosity	s/qt	78		85	GLUTE 25	25 LT CN	1		
Rheology Temp	°F	120		120	DEFOAM A	5 GA CN	2		
R600/R300		86/64		93/68	POTASSIUM HYDROXIDE	25 KG CN	2		
R200/R100		55/42		58/43	POLYPAC UL	25 KG BG	10		
R6/R3		12/9		12/9	POLY PLUS DRY	25 KG BG	8		
PV	cP	22		25	GLYDRIL MC	55 GA DM	8		
YP	lb/100ft²	42		43	DUO-VIS	25 KG BG	7		
10s/10m/30m Gel	lb/100ft²	9/18/24		10/20/26					
API Fluid Loss	cc/30 min	3.4		3.4					
HTHP FL Temp	cc/30 min								
Cake API/HTHP	1/32"	1/		1/					
Solids	%Vol	12		12					
Oil/Water	%Vol	/88		/88					
Sand	%Vol	0.6		0.6					
MBT	lb/bbl	15		15					
pH		9		9					
Alkal Mud (Pm)									
Pf/Mf		0.02/0.4		0.02/0.45					
Chlorides	mg/l	39000		39000					
Hardness Ca	mg/l	280	320						
Glycol	% V/V	3.5	3.5						
PHPA	ppb	1.1	1.1						
Sulhite Excess	mg/l	40	40						
KCl	% Wt	6.5	6.5						
REMARKS AND TREATMENT			REMARKS						
All mud properties within specifications and building premixes to complete cement displacement and preparing for next interval. Had losses over the shakers again due to blinding of screens by fines/clays. The screens were downgraded to 84's mesh size in order to hold mud in the system. The LGS will be conditioned using the centrifuge after cement job. Volume left behind casing was 376bbls (other).			Run 9 5/8" casing to 2184m. Schlumberger pump 60bbls of chemical wash and 60bbls of spacers followed by 128bbls of lead and 50bbls of tail cement. The casing was displaced with 625bbls of mud. No cement was observed back to surface during displacement. WOC.						
TIME DISTR	Last 24 Hrs	MUD VOL ACCTG	(bbl)	SOLIDS ANALYSIS (%/lb/bbl)		MUD RHEOLOGY & HYDRAULICS			
Rig Up/Service		Oil Added	0	NaCl	.2/ 2.8	np/na	Values		
Drilling		Water Added	283	KCl	2.4/ 22.3	kp/ka	(lb•sⁿ/100ft²)		
Tripping		Mud Received	0	Low Gravity	7.7/ 70.1	Bit Loss	(psi / %)		
Non-Productive Tim		Sweeps	0	Bentonite	1./ 8.7	Bit HHP (hhp / HSI)			
Running Casing	21	Shakers	77	Drill Solids	6.2/ 56.4	Bit Jet Vel (m/s)			
Cementing	3	Centrifuge	0	Weight Material	1.6/ 23.8	Ann. Vel DP (m/min)			
		Formation	30	Chemical Conc	- / 5.	Ann. Vel DC (m/min)			
		Desilter	0	Inert/React	3.3398	Crit Vel DP (m/min)			
		Dumped	0	Average SG	2.88	Crit Vel DC (m/min)			
		Other	376	Carb/BiCarb (m mole/L)	.4/ 2.				
M-I ENGR / PHONE		RIG PHONE		WAREHOUSE PHONE		DAILY COST		CUMULATIVE COST	
Drew Blackburn									
Peter Dwyer									
08-9302 3790		08-6363 8872		08-9325 4822		\$ 9,903.52		\$ 251,250.94	

**WATER-BASED MUD REPORT No. 23**

Date	18/02/2005	Depth/TVD	2184 m / 1936 m
Spud Date	29/01/2005	Mud Type	KCl-Polymer-Glycol
Water Depth	73	Activity	Test BOP

Operator : Bass Strait Oil Co.
Report For : P. Dane
Well Name : Zane Grey 1
Contractor : Diamond Offshore
Report For : Barry Scott/Ray Breaud

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

DRILLING ASSEMBLY		CASING		MUD VOLUME (bbl)		CIRCULATION DATA		
Bit Size	in	Surface		Hole		Pump Make	OILWELL 1700PT	NATIONAL 12P-16C
Nozzles	1/32"	30in @128m (128TVD)		607.3		Pump Size	6 X 12.in	6 X 12.in
Drill Pipe Size	Length	Intermediate		Active Pits		Pump Cap	gal/stk	gal/stk
5 in	m	13.375in @1091m (1030TVD)		506.7		Pump stk/min		
Drill Pipe Size	Length	Intermediate		Total Circulating Vol		Flow Rate		gal/min
5 in	m	9.625in @2184m (1936TVD)		506.7		Bottoms Up		
Drill Collar Size	Length	Production or Liner		In Storage		Total Circ Time		
8 in	m	in @3675m (3219TVD)		1209		Circulating Pressure		
MUD PROPERTIES				PRODUCTS USED LAST 24 HRS				
Sample From		PIT@23:00	PIT@05:00			Products	Size	Amt
Flow Line Temp		°F	n/a					
Depth/TVD		m	2184/1936					
Mud Weight		sp.gr.	1.19@85°F					
Funnel Viscosity		s/qt	84					
Rheology Temp		°F	120					
R600/R300			88/64					
R200/R100			52/39					
R6/R3			13/9					
PV		cP	24					
YP		lb/100ft²	40					
10s/10m/30m Gel		lb/100ft²	9/18/23					
API Fluid Loss		cc/30 min	3.6					
HTHP FL Temp		cc/30 min						
Cake API/HTHP		1/32"	1/					
Solids		%Vol	10.5					
Oil/Water		%Vol	0/89.5					
Sand		%Vol	0.5					
MBT		lb/bbl	17.5					
pH			8.5					
Alkal Mud (Pm)								
Pf/Mf			0.02/0.5					
Chlorides		mg/l	36000					
Hardness Ca		mg/l	560					
Glycol		% V/V	3.5					
PHPA		ppb	1					
Sulhite Excess		mg/l	0					
KCl		% Wt	6					



WATER-BASED MUD REPORT No. 24

Date	19/02/2005	Depth/TVD	2189 m / 1936 m
Spud Date	29/01/2005	Mud Type	KCl-Polymer-Glycol
Water Depth	73	Activity	Drill casing shoe

Operator : Bass Strait Oil Co.
Report For : P. Dane
Well Name : Zane Grey 1
Contractor : Diamond Offshore
Report For : Ray Breaud

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size	8.5 in Security EBX	Surface	Hole	Pump Make	OILWELL 1700PT NATIONAL 12P-16C
Nozzles	3x20 / 1/32"	30in @128m (128TVD)	550.6(Tot)/550.4(Bit)	Pump Size	6 X 12.in 6 X 12.in
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	4.274 gal/stk 4.274 gal/stk
5 in	1982 m	13.375in @1091m (1030TVD)	422.4	Pump stk/min	75@97% 75@97%
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	641 gal/min
5 in	130 m	9.625in @2184m (1936TVD)	972.8	Bottoms Up	28.1 min 4220 stk
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time	63.7 min 9561 stk
6.5 in	72 m	in @3675m (3219TVD)	1098	Circulating Pressure	650 psi

MUD PROPERTIES

Sample From	F/L@22:00	PIT@11:00
Flow Line Temp	°F 95	n/a
Depth/TVD	m 2184/1936	2184/1936
Mud Weight	sp.gr. 1.12@90°F	1.19@90°F
Funnel Viscosity	s/qt 62	84
Rheology Temp	°F 120	120
R600/R300	56/41	87/63
R200/R100	35/23	51/37
R6/R3	10/6	12/8
PV	cP 15	24
YP	lb/100ft² 26	39
10s/10m/30m Gel	lb/100ft² 5/11/17	7/15/21
API Fluid Loss	cc/30 min 4.3	3.8
HTHP FL Temp	cc/30 min	
Cake API/HTHP	1/32" 1/	1/
Solids	%Vol 6.8	10.3
Oil/Water	%Vol 0/93.2	0/89.7
Sand	%Vol 0.5	0.5
MBT	lb/bbl 15	17.5
pH	9	8.5
Alkal Mud (Pm)		
Pf/Mf	0.3/0.8	0.02/0.5
Chlorides	mg/l 32000	36000
Hardness Ca	mg/l 440	580
Glycol	% V/V 3.5	3.5
PHPA	ppb 1	1
Sulhite Excess	mg/l 150	0
KCl	% Wt 5.5	6

PRODUCTS USED LAST 24 HRS

Products	Size	Amt
CITRIC ACID	25 KG BG	9
DUOTEC	25 KG BG	13
OS-1	25 KG BG	8
SODIUM BICARBONATE	25 KG BG	12
POTASSIUM CHLORIDE	1 MT BG	3
DEFOAM A	5 GA CN	2
POLYPAC UL	25 KG BG	14
POLY PLUS DRY	25 KG BG	7
GLYDRIL MC	55 GA DM	8

SOLIDS EQUIP	Size	Hr
VSM Shaker 1	84/84/84/84	12
VSM Shaker 2	84/84/84/84	12
VSM Shaker 3	84/84/84/84	12
VSM Shaker 4	84/84/84/84	12
D-Silter 12 x 4		20
Centrifuge-DFE		24

MUD PROPERTY SPECIFICATIONS

Weight	1.05-1.10
Viscosity	40-60
Filtrate	< 6

REMARKS AND TREATMENT

Pretreat mud with citric acid and bicarbonate to minimise cement contamination to mud. Add premix whole mud additions to reduce mud weight to 9.2 ppg. (1.1 s.g.). Add OS-1 oxygen scavenger for corrosion control. Continued centrifuging active system to reduce LGS. Dumped 198bbls of old heavy mud to reduce LGS and due to lack of pit space. Using coarse screens while drilling cement.

REMARKS

Complete testing BOP. make up 8.5" bit and BHA, RIH, drill out cement and shoe.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG (bbl)	SOLIDS ANALYSIS (%/lb/bbl)	MUD RHEOLOGY & HYDRAULICS
Rig Up/Service		Oil Added 0	NaCl .3/ 4.1	np/na Values 0.450/0.383
Drilling	12	Water Added 300	KCl 1.9/ 17.1	kp/ka (lb*s^n/100ft²) 2.647/3.426
Tripping	8	Mud Received 0	Low Gravity 4.1/ 37.4	Bit Loss (psi / %) 418 / 1
Non-Productive Tim		Sweeps 45	Bentonite 1.4/ 12.8	Bit HHP (hhp / HSI) 156 / 1
BOP Testing	4	Shakers 5	Drill Solids 2.2/ 19.6	Bit Jet Vel (m/s) 68
		Centrifuge 20	Weight Material .5/ 7.2	Ann. Vel DP (m/min) 95.09
		Formation 0	Chemical Conc - / 5	Ann. Vel DC (m/min) 144.63
		Desilter 0	Inert/React 1.1618	Crit Vel DP (m/min) 111
		Dumped 198	Average SG 2.77	Crit Vel DC (m/min) 126
		Other 0	Carb/BiCarb (m mole/L) 6/ 30.	ECD @ 2184 (sp.gr.) 1.21

M-I ENGR / PHONE	RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Drew Blackburn Peter Dwyer	08-9302 3790 08-6363 8872	08-9325 4822	\$ 9,271.25	\$ 260,522.19

**WATER-BASED MUD REPORT No. 25**

Date	20/02/2005	Depth/TVD	2180 m / 2180 m
Spud Date	29/01/2005	Mud Type	KCl-Polymer-Glycol
Water Depth	73	Activity	WOC

Operator : Bass Strait Oil Co.
Report For : P. Dane
Well Name : Zane Grey 1
Contractor : Diamond Offshore
Report For : Ray Breaud

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size 8.5 in		Surface	Hole	Pump Make	OILWELL 1700PT NATIONAL 12P-16C
Nozzles 1/32"		30in @128m (128TVD)	565.9(Tot)/506.3(Bit)	Pump Size	6 X 12.in 6 X 12.in
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	4.274 gal/stk 4.274 gal/stk
5 in	1844 m	13.375in @1091m (1030TVD)	420.1	Pump stk/min	61@97% 62@97%
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	526 gal/min
2.875 in	88 m	9.625in @2184m (1936TVD)	926.4	Bottoms Up	31.7 min 3904 stk
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time	74 min 9099 stk
in	m	in @3675m (3219TVD)	1070	Circulating Pressure	1085 psi

MUD PROPERTIES

Sample From	F/L@21:00	PIT@04:00
Flow Line Temp	°F 90	n/a
Depth/TVD	m 1810/1625	2184/1936
Mud Weight	sp.gr. 1.13@90°F	1.13@90°F
Funnel Viscosity	s/qt 60	73
Rheology Temp	°F 120	120
R600/R300	55/40	63/47
R200/R100	36/22	39/28
R6/R3	10/6	10/7
PV	cP 15	16
YP	lb/100ft² 25	31
10s/10m/30m Gel	lb/100ft² 4/11/17	6/9/14
API Fluid Loss	cc/30 min 4.5	4.4
HTHP FL Temp	cc/30 min	
Cake API/HTHP	1/32" 1/	1/
Solids	%Vol 7.2	7.6
Oil/Water	%Vol 0/92.8	0/92.4
Sand	%Vol 0.5	0.5
MBT	lb/bbl 12.5	12.5
pH	10	10
Alkal Mud (Pm)		
Pf/Mf	0.4/0.85	0.12/1
Chlorides	mg/l 29000	30000
Hardness Ca	mg/l 380	480
Glycol	% V/V 3.5	3.5
PHPA	ppb 0.8	0.8
Sulhite Excess	mg/l 150	80
KCl	% Wt 5.2	5.4

PRODUCTS USED LAST 24 HRS

Products	Size	Amt
CITRIC ACID	25 KG BG	8
DUOTEC	25 KG BG	2
SODIUM BICARBONATE	25 KG BG	8
POTASSIUM CHLORIDE	1 MT BG	2
GLUTE 25	25 LT CN	2
DEFOAM A	5 GA CN	7
POLYPAC UL	25 KG BG	5
GLYDRIL MC	55 GA DM	3
DUO-VIS	25 KG BG	3

SOLIDS EQUIP	Size	Hr
VSM Shaker 1	84/84/84/84	10
VSM Shaker 2	84/84/84/84	10
VSM Shaker 3	84/84/84/84	10
VSM Shaker 4	84/84/84/84	10
D-Silter 12 x 4		0
Centrifuge-DFE		8

MUD PROPERTY SPECIFICATIONS

Weight	1.05-1.10
Viscosity	40-60
Filtrate	< 6

REMARKS AND TREATMENT

Treat mud with citric acid and bicarb prior to cementing. Add further bicarb and citric while circulating. No cement returns observed at shakers while circulating although post cementing mud check showed cement had entered system as pH had increased to 10. Use DuoVis for hi vis pill prior to cementing. Adding extra Duotec, KCl and Pac Ul to restore mud properties. Clean sandtrap and possum belly (50 bbls). Added defoamer to prevent aeration and allow accurate mud weights.

REMARKS

RIH with tubing stinger to 2250m. Circ bottom up. Spot 14 bbl HiVis pill at 2260m. Pull back to 2234m and set cement plug to 2180m. Pump 5 bbl water test lines, pump 15 bbl water, pump cement, (38.4 bbls) pump 1.7 bbls water, displace with 122.6 bbls mud. Pull back to 2100m, circ and check for cement, POH to 1240m. WOC.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG (bbl)	SOLIDS ANALYSIS (%/lb/bbl)	MUD RHEOLOGY & HYDRAULICS
Rig Up/Service	12	Oil Added 0	NaCl .2/ 2.6	np/na Values 0.459/0.371
Drilling		Water Added 22	KCl 1.8/ 16.9	kp/ka (lb*s^n/100ft²) 2.432/3.498
Tripping	8	Mud Received 0	Low Gravity 4.4/ 39.9	Bit Loss (psi / %) / 1
Non-Productive Tim		Sweeps 0	Bentonite 1.1/ 9.7	Bit HHP (hhp / HSI) / 1
Cementing	4	Shakers 0	Drill Solids 2.8/ 25.2	Bit Jet Vel (m/s)
		Centrifuge 0	Weight Material 8/ 11.4	Ann. Vel DP (m/min) 78.03
		Formation 0	Chemical Conc - / 5.	Ann. Vel DC (m/min) 58.57
		Desilter 0	Inert/React 1.7927	Crit Vel DP (m/min) 108
		Dumped 50	Average SG 2.84	Crit Vel DC (m/min) 97
		Other 0	Carb/BiCarb (m mole/L) 7.9/ 4.	ECD @ 1932 (sp.gr.) 1.19

M-I ENGR / PHONE	RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Drew Blackburn Peter Dwyer	08-9302 3790	08-6363 8872	\$ 4,330.20	\$ 264,852.39



WATER-BASED MUD REPORT No. 26

Date	21/02/2005	Depth/TVD	2192 m / 1942 m
Spud Date	29/01/2005	Mud Type	KCl-Polymer-Glycol
Water Depth	73	Activity	Drilling

Operator : Bass Strait Oil Co.
Report For : P. Dane
Well Name : Zane Grey 1
Contractor : Diamond Offshore
Report For : Ray Breaud

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size	8.5 in HYC. RSX162	Surface	Hole	Pump Make	OILWELL 1700PT NATIONAL 12P-16C
Nozzles	6x15 / 1/32"	30in @128m (128TVD)	548.4	Pump Size	6 X 12.in 6 X 12.in
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	4.274 gal/stk 4.274 gal/stk
5 in	1943 m	13.375in @1091m (1030TVD)	510.6	Pump stk/min	61@97% 62@97%
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	526 gal/min
5 in	139 m	9.625in @2184m (1936TVD)	1059	Bottoms Up	34.2 min 4208 stk
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time	84.6 min 10401 stk
6.5 in	110 m	in @3675m (3219TVD)	870	Circulating Pressure	1085 psi

MUD PROPERTIES

Sample From	F/L@23:00	PIT@04:00
Flow Line Temp	°F 105	n/a
Depth/TVD	m 2192/1942	2184/1940
Mud Weight	sp.gr. 1.13@100°F	1.14@92°F
Funnel Viscosity	s/qt 68	64
Rheology Temp	°F 120	120
R600/R300	80/59	76/55
R200/R100	48/36	44/34
R6/R3	12/9	11/8
PV	cP 21	21
YP	lb/100ft² 38	34
10s/10m/30m Gel	lb/100ft² 5/14/19	5/12/16
API Fluid Loss	cc/30 min 4.8	4.8
HTHP FL Temp	cc/30 min	
Cake API/HTHP	1/32" 1/	1/
Solids	%Vol 7.2	8
Oil/Water	%Vol 0/92.8	0/92
Sand	%Vol 0.25	0.3
MBT	lb/bbl 12.5	12.5
pH	9.5	9.5
Alkal Mud (Pm)		
Pf/Mf	0.3/0.7	0.35/0.6
Chlorides	mg/l 32000	28000
Hardness Ca	mg/l 440	500
Glycol	% V/V 3.5	3.5
PHPA	ppb 0.75	0.8
Sulhite Excess	mg/l 80	80
KCl	% Wt 5.5	5.5

PRODUCTS USED LAST 24 HRS

Products	Size	Amt
CITRIC ACID	25 KG BG	4
SODIUM BICARBONATE	25 KG BG	4
GLYDRIL MC	55 GA DM	2
DUO-VIS	25 KG BG	2

SOLIDS EQUIP	Size	Hr
VSM Shaker 1	84/84/84/84	4
VSM Shaker 2	120/120/120/120	4
VSM Shaker 3	84/84/84/84	4
VSM Shaker 4	84/84/84/84	4
D-Silter 12 x 4		0
Centrifuge-DFE		0

MUD PROPERTY SPECIFICATIONS

Weight	1.05-1.15
Viscosity	40-60
Filtrate	<5

REMARKS AND TREATMENT

Dumped 130bbls of cement contaminated mud at shakers during bottoms up following tagging cement. Transferred over new premix. Added KCl salt to active. Treated mud with bicarb and citric acid prior to drilling cement to limit effects of cement contamination. Maintain mud weight at 1.13sg.

REMARKS

WOC. RIH 2 7/8" tubing and tag cement. Circulate bottoms up and POH. Pick up 8 1/2" bit and BHA and RIH. Control drill cement while attempting to kick off cement plug. Drill to 2192m.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG	(bbl)	SOLIDS ANALYSIS (%/lb/bbl)	MUD RHEOLOGY & HYDRAULICS
Rig Up/Service	2	Oil Added	0	NaCl	np/na Values
Drilling	3	Water Added	0	KCl	kp/ka (lb*s^n/100ft²)
Tripping	15	Mud Received	0	Low Gravity	4.3/ 39.1
Non-Productive Tim		Sweeps	0	Bentonite	1.1/ 9.8
Condition Mud	2	Shakers	0	Drill Solids	2.7/ 24.3
Wait on Cement	2	Centrifuge	0	Weight Material	.7/ 10.5
		Formation	0	Chemical Conc	- / 5.
		Desilter	0	Inert/React	1.7278
		Dumped	130	Average SG	2.83
		Other	0	Carb/BiCarb (m mole/L)	6/ 9.5

M-I ENGR / PHONE	RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Drew Blackburn Peter Dwyer	08-9302 3790	08-6363 8872	\$ 1,345.22	\$ 266,197.61



WATER-BASED MUD REPORT No. 27

Date	22/02/2005	Depth/TVD	2244 m / 1987 m
Spud Date	29/01/2005	Mud Type	KCl-Polymer-Glycol
Water Depth	73	Activity	Drilling

Operator : Bass Strait Oil Co.
Report For : Greg Harmes
Well Name : Zane Grey 1
Contractor : Diamond Offshore
Report For : Ray Breaud

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size	8.5 in HYC. RSX162	Surface	Hole	Pump Make	OILWELL 1700PT NATIONAL 12P-16C
Nozzles	6x15 / 1/32"	30in @128m (128TVD)	559.3	Pump Size	6 X 12.in 6 X 12.in
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	4.274 gal/stk 4.274 gal/stk
5 in	1995 m	13.375in @1091m (1030TVD)	491.7	Pump stk/min	76@97% 76@97%
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	650 gal/min
5 in	139 m	9.625in @2184m (1936TVD)	1051	Bottoms Up	28.2 min 4285 stk
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time	67.9 min 10322 stk
6.5 in	110 m	in @3675m (3219TVD)	870	Circulating Pressure	3200 psi

MUD PROPERTIES

Sample From	F/L@23:00	PIT@10:00
Flow Line Temp	°F 118	118
Depth/TVD	m 2244/1987	2220/1966
Mud Weight	sp.gr. 1.14@115°F	1.14@105°F
Funnel Viscosity	s/qt 59	62
Rheology Temp	°F 120	120
R600/R300	71/52	73/54
R200/R100	44/31	45/33
R6/R3	11/8	11/8
PV	cP 19	19
YP	lb/100ft² 33	35
10s/10m/30m Gel	lb/100ft² 5/12/18	9/14/17
API Fluid Loss	cc/30 min 4.6	
HTHP FL Temp	cc/30 min	
Cake API/HTHP	1/32" 1/	
Solids	%Vol 7.6	
Oil/Water	%Vol 0/92.4	
Sand	%Vol 0.25	
MBT	lb/bbl 7.5	
pH	9.5	
Alkal Mud (Pm)		
Pf/Mf	0.25/1.1	
Chlorides	mg/l 31500	
Hardness Ca	mg/l 460	
Glycol	% V/V 4	
PHPA	ppb 0.8	
Sulhite Excess	mg/l 100	
KCl	% Wt 5.5	

PRODUCTS USED LAST 24 HRS

Products	Size	Amt
CITRIC ACID	25 KG BG	8
DUOTEC	25 KG BG	3
OS-1	25 KG BG	3
POTASSIUM CHLORIDE	1 MT BG	1
POTASSIUM HYDROXIDE	25 KG CN	1
POLYPAC UL	25 KG BG	12
GLYDRIL MC	55 GA DM	8

SOLIDS EQUIP	Size	Hr
VSM Shaker 1	120/120/120/120	24
VSM Shaker 2	145/145/145/145	24
VSM Shaker 3	105/105/105/105	18
VSM Shaker 4	120/120/145/145	24
D-Silter 12 x 4		24
Centrifuge-DFE		24

MUD PROPERTY SPECIFICATIONS

Weight	1.05-1.15
Viscosity	40-60
Filtrate	<5

REMARKS AND TREATMENT

Continue drilling 8.5" hole. Slow ROP, possible bit balling, pump 25 bbl KCl/caustic pill, no substantial gain in ROP. Install finer mesh screens to minimise low gravity solids. Delay installation of finer shaker screens until booster pump has been activated. Running desilter and centrifuge to control mud weight. Added extra Glycol to bring up concentration to 4% as per program. Added Duotec and KCl to lift low end rheology and salt concentration. Adding OS1 for corrosion control.

REMARKS

Continue drilling 8.5" hole to 2244 meters. Adding premix as required to maintain volume. Mud properties stable. Concentrating heavily on maintaining consistent mud weight throughout this section.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG (bbl)	SOLIDS ANALYSIS (%/lb/bbl)	MUD RHEOLOGY & HYDRAULICS
Rig Up/Service		Oil Added 0	NaCl .3/ 3.8	np/na Values 0.449/0.386
Drilling	24	Water Added 30	KCl 1.8/ 17.	kp/ka (lb*s^n/100ft²) 3.367/4.546
Tripping		Mud Received 0	Low Gravity 4.5/ 40.9	Bit Loss (psi / %) 345 / 1
Non-Productive Tim		Sweeps 0	Bentonite .4/ 4.	Bit HHP (hbp / HSI) 131 / 1
Condition Mud		Shakers 5	Drill Solids 3.5/ 31.9	Bit Jet Vel (m/s) 61
Wait on Cement		Centrifuge 10	Weight Material 1./ 14.	Ann. Vel DP (m/min) 96.42
		Formation 0	- / 5.	Ann. Vel DC (m/min) 161.86
		Desilter 30	Inert/React 3.7841	Crit Vel DP (m/min) 133
		Dumped 8	Average SG 2.88	Crit Vel DC (m/min) 153
		Other 0	Carb/BiCarb (m mole/L) 5./ 7.9	ECD @ 2244 (sp.gr.) 1.26

M-I ENGR / PHONE	RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Drew Blackburn Peter Dwyer	08-9302 3790 08-6363 8872	08-9325 4822	\$ 5,361.39	\$ 271,559.00

WATER-BASED MUD REPORT No. 28

Date	23/02/2005	Depth/TVD	2532 m / 2231 m
Spud Date	29/01/2005	Mud Type	KCI-Polymer-Glycol
Water Depth	73	Activity	Drilling

Operator :	Bass Strait Oil Co.
Report For :	Greg Harmes
Well Name :	Zane Grey 1
Contractor :	Diamond Offshore
Report For :	Ray Breaud

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA		
Bit Size	8.5 in HYC. RSX162	Surface 30in @128m (128TVD)	Hole 619.4	Pump Make	OILWELL 1700PT NATIONAL 12P-16C	
Nozzles	6x15 / 1/32"			Pump Size	6 X 12.in	6 X 12.in
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	4.274 gal/stk	4.274 gal/stk
5 in	2283 m	13.375in @1091m (1030TVD)	483.6	Pump stk/min	72@97%	71@97%
Drill Pipe Size	Length	Intermediate	Total Circulating Vol 1103	Flow Rate	611 gal/min	
5 in	139 m	9.625in @2184m (1936TVD)		Bottoms Up	30.3 min	4334 stk
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time	60 min	8581 stk
6.5 in	110 m	in @3675m (3219TVD)	758	Circulating Pressure	3850 psi	

MUD PROPERTIES		
Sample From	F/L@23:00	PIT@04:30
Flow Line Temp °F	122	120
Depth/TVD m	2532/2231	2285/2022
Mud Weight sp.gr	1.13@100°F	1.13@94°F
Funnel Viscosity sq/qt	61	64
Rheology Temp °F	120	120
R600/R300	70/52	75/55
R200/R100	43/32	45/33
R6/R3	10/7	11/8
PV cP	18	20
YP lb/100ft²	34	35
10s/10m/30m Gel lb/100ft²	9/13/16	10/14/17
API Fluid Loss cc/30 min	4.5	4
HTHP FL Temp cc/30 min		
Cake API/HTHP 1/32"	1/	1/
Solids %Vol	7.5	7.5
Oil/Water %Vol	0/92.5	0/92.5
Sand %Vol	0.25	0.25
MBT lb/bbl	7.5	7.5
pH	9	9.5
Alkal Mud (Pm)		
Pf/Mf	0.1/0.8	0.15/1.2
Chlorides mg/l	31500	32000
Hardness Ca mg/l	580	600
Glycol % V/V	4	4
PHPA ppb	1	1.0
Sulhite Excess mg/l	100	100
KCl % Wt	5.5	5.5

[illegible]

SOLIDS EQUIP	Size	Hr
VSM Shaker 1	120/120/120/120	24
VSM Shaker 2	145/145/145/145	24
VSM Shaker 3	105/105/105/105	24
VSM Shaker 4	120/120/145/145	24
D-Silter 12 x 4		18
Centrifuge-DFE		24

MUD PROPERTY SPECIFICATIONS	
Weight	1.05-1.15
Viscosity	40-60
Filtrate	<5

REMARKS AND TREATMENT

Received 2x145's and 6x165's shaker screens. Checking screen condition regularly and upgrading as necessary. Keeping mud weight as stable as practically possible with solids control and additions of unweighted premix.

REMARKS

Continue drilling 8.5" hole to 2532 meters.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG	(bbl)	SOLIDS ANALYSIS (%lb/bbl)		MUD RHEOLOGY & HYDRAULICS	
Rig Up/Service		Oil Added	0	NaCl	.3/ 3.8	np/na Values	0.429/0.433
Drilling	24	Water Added	0	KCl	1.8/ 17.	kp/ka (lb•s^n/100ft²)	3.825/3.683
Tripping		Mud Received	0	Low Gravity	4.9/ 44.7	Bit Loss (psi / %)	302 / 1
Non-Productive Tim		Desilter	36	Bentonite	.4/ 3.5	Bit HHP (hhp / HSI)	108 / 1
		Dumped	0	Drill Solids	4./ 36.3	Bit Jet Vel (m/s)	58
		Other	0	Weight Material	.4/ 6.3	Ann. Vel DP (m/min)	96.6
		Sweeps	0	Chemical Conc	- / 5.	Ann. Vel DC (m/min)	152.15
		Shakers	15	Inert/React	4.2972	Crit Vel DP (m/min)	138
		Centrifuge	15	Average SG	2.73	Crit Vel DC (m/min)	161
		Formation	0	Carb/BiCarb (m mole/L)	2 / 10.	ECD @ 2532 (sp.gr.)	1.25

M-I ENGR / PHONE		RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Drew Blackburn					
Peter Dwyer	08-9302 3790	08-6363 8872	08-9325 4822	\$ 2,542.42	\$ 274,101.42



WATER-BASED MUD REPORT No. 29

Date	24/02/2005	Depth/TVD	2886.7 m / 2491 m
Spud Date	29/01/2005	Mud Type	KCl-Polymer-Glycol
Water Depth	73	Activity	Wiper Trip

Operator : Bass Strait Oil Co.
Report For : Greg Harmes
Well Name : Zane Grey 1
Contractor : Diamond Offshore
Report For : Ray Breaud

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size	8.5 in HYC. RSX162	Surface	Hole	Pump Make	OILWELL 1700PT NATIONAL 12P-16C
Nozzles	6x15 / 1/32"	30in @128m (128TVD)	693.5	Pump Size	6 X 12.in 6 X 12.in
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	4.274 gal/stk 4.274 gal/stk
5 in	2638 m	13.375in @1091m (1030TVD)	525.5	Pump stk/min	73@97% 66@97%
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	594 gal/min
5 in	139 m	9.625in @2184m (1936TVD)	1219	Bottoms Up	34.9 min 4852 stk
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time	68.5 min 9515 stk
6.5 in	110 m	in @3675m (3219TVD)	760	Circulating Pressure	2660 psi

MUD PROPERTIES

Sample From	F/L@23:00	PIT@05:00
Flow Line Temp	°F 124	123
Depth/TVD	m 2886.7/2491	2593/2281
Mud Weight	sp.gr. 1.14@100°F	1.13@106°F
Funnel Viscosity	s/qt 64	53
Rheology Temp	°F 120	120
R600/R300	72/53	69/50
R200/R100	44/33	41/31
R6/R3	11/8	10/7
PV	cP 19	19
YP	lb/100ft² 34	31
10s/10m/30m Gel	lb/100ft² 8/13/16	7/12/14
API Fluid Loss	cc/30 min 4.7	4.6
HTHP FL Temp	cc/30 min	
Cake API/HTHP	1/32" 1/	1/
Solids	%Vol 7.8	7.8
Oil/Water	%Vol 0/92.2	/92.2
Sand	%Vol 0.25	0.25
MBT	lb/bbl 7.5	7.5
pH	9.0	9
Alkal Mud (Pm)		
Pf/Mf	0.15/0.7	0.1/0.75
Chlorides	mg/l 30000	30000
Hardness Ca	mg/l 480	650
Glycol	% V/V 4	4
PHPA	ppb 1	1.1
Sulhite Excess	mg/l 50	120
KCl	% Wt 5.5	5.5

PRODUCTS USED LAST 24 HRS

Products	Size	Amt
DUOTEC	25 KG BG	11
OS-1	25 KG BG	2
SODA ASH	25 KG BG	5
SODIUM BICARBONATE	25 KG BG	4
POTASSIUM CHLORIDE	1 MT BG	4
GLUTE 25	25 LT CN	1
DEFOAM A	5 GA CN	2
POTASSIUM HYDROXIDE	25 KG CN	2
POLYPAC UL	25 KG BG	15
POLY PLUS DRY	25 KG BG	14
GLYDRIL LC	55 GA DM	10

SOLIDS EQUIP	Size	Hr
VSM Shaker 1	120/120/120/120	24
VSM Shaker 2	145/145/145/145	16
VSM Shaker 3	105/105/105/105	24
VSM Shaker 4	120/120/145/145	24
D-Silter 12 x 4		24
Centrifuge-DFE		24

MUD PROPERTY SPECIFICATIONS

Weight	1.15 sg
Viscosity	40-60
Filtrate	<5

REMARKS AND TREATMENT

Continue adding premix whole mud additions to maintain volume and control mud weight/low gravity solids. Running desilter and centrifuge 24 hours to minimise solids. Adding OS-1 oxygen scavenger for corrosion control. Mud properties remaining constant. Maintain mud weight at 1.15 sg as requested. Seal on shaker two is broken. Currently running on three shakers and as a result lost significant volumes of mud over shakers.

REMARKS

Continue drilling to 2886 meters. Drilling predominantly sandstone and claystone with coal. Stop and repair top drive, circulate and condition hole prior to making 5 stand wiper trip through coal stringer. Transfer 150 bbls old heavy (1.16 sg) mud from active to pit 2, dilute with unweighted premix from pit 5 to control mud weight.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG (bbl)	SOLIDS ANALYSIS (%/lb/bbl)	MUD RHEOLOGY & HYDRAULICS
Rig Up/Service	1.5	Oil Added 0	NaCl .2/ 2.9	np/na Values 0.442/0.404
Drilling	21.5	Water Added 350	KCl 1.8/ 16.9	kp/ka (lb*s^n/100ft²) 3.592/4.415
Tripping	1	Mud Received 0	Low Gravity 4.9/ 44.9	Bit Loss (psi / %) 288 / 1
Non-Productive Tim		Desilter 28	Bentonite .4/ 3.5	Bit HHP (hhp / HSI) 100 / 1
		Dumped 35	Drill Solids 4./ 36.4	Bit Jet Vel (m/s) 56
		Other 0	Weight Material 8./ 11.5	Ann. Vel DP (m/min) 93.91
		Sweeps 0	Chemical Conc - / 5.	Ann. Vel DC (m/min) 147.92
		Shakers 130	Inert/React 4.3191	Crit Vel DP (m/min) 140
		Centrifuge 22	Average SG 2.82	Crit Vel DC (m/min) 161
		Formation 47	Carb/BiCarb (m mole/L) 3./ 15.	ECD @ 2887 (sp.gr.) 1.27

M-I ENGR / PHONE	RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Drew Blackburn Peter Dwyer	08-9302 3790	08-6363 8872	\$ 12,938.41	\$ 287,039.83

**WATER-BASED MUD REPORT No. 30**

Date	25/02/2005	Depth/TVD	3107 m / 2706 m
Spud Date	29/01/2005	Mud Type	KCl-Polymer-Glycol
Water Depth	73	Activity	Tripping

Operator : Bass Strait Oil Co.
Report For : Greg Harmes
Well Name : Zane Grey 1
Contractor : Diamond Offshore
Report For : Ray Breaud

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size	8.5 in HYC. RSX162	Surface	Hole	Pump Make	OILWELL 1700PT NATIONAL 12P-16C
Nozzles	6x15 / 1/32"	30in @128m (128TVD)	739.5	Pump Size	6 X 12.in 6 X 12.in
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	4.274 gal/stk 4.274 gal/stk
5 in	2858 m	13.375in @1091m (1030TVD)	525.5	Pump stk/min	68@97% 68@97%
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	581 gal/min
5 in	139 m	9.625in @2184m (1936TVD)	1265	Bottoms Up	38 min 5175 stk
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time	73.1 min 9938 stk
6.5 in	110 m	in @3675m (3219TVD)	852	Circulating Pressure	3690 psi

MUD PROPERTIES			
Sample From	F/L@22:00	PIT@04:30	
Flow Line Temp	°F	127	126
Depth/TVD	m	3107/2787	2965/2697
Mud Weight	sp.gr.	1.15@110°F	1.14@104°F
Funnel Viscosity	s/qt	58	60
Rheology Temp	°F	120	120
R600/R300		66/49	72/53
R200/R100		41/30	44/32
R6/R3		11/8	11/8
PV	cP	17	19
YP	lb/100ft²	32	34
10s/10m/30m Gel	lb/100ft²	7/13/16	10/16/19
API Fluid Loss	cc/30 min	4.5	4.8
HTHP FL Temp	cc/30 min		
Cake API/HTHP	1/32"	1/	1/
Solids	%Vol	8.2	8.0
Oil/Water	%Vol	0/91.8	0/92
Sand	%Vol	0.3	0.3
MBT	lb/bbl	9	9
pH		9	9
Alkal Mud (Pm)			
Pf/Mf		0.1/0.6	0.1/0.7
Chlorides	mg/l	30500	31000
Hardness Ca	mg/l	480	450
Glycol	% V/V	4	4
PHPA	ppb	1.2	1.2
Sulhite Excess	mg/l	50	80
KCl	% Wt	5.5	5.5

PRODUCTS USED LAST 24 HRS		
Products	Size	Amt
DUOTEC	25 KG BG	8
OS-1	25 KG BG	3
SODA ASH	25 KG BG	2
M-I BAR BULK	1 MT BK	3
POTASSIUM CHLORIDE	1 MT BG	6
GLUTE 25	25 LT CN	1
DEFOAM A	5 GA CN	1
POTASSIUM HYDROXIDE	25 KG CN	4
POLYPAC UL	25 KG BG	17
POLY PLUS DRY	25 KG BG	13
GLYDRIL LC	55 GA DM	6
GLYDRIL MC	55 GA DM	4

SOLIDS EQUIP	Size	Hr
VSM Shaker 1	120/120/120/120	22
VSM Shaker 2	145/145/145/145	22
VSM Shaker 3	120/120/105/105	22
VSM Shaker 4	145/145/145/145	22
D-Silter 12 x 4		24
Centrifuge-DFE		24

MUD PROPERTY SPECIFICATIONS		
Weight	1.15 sg	
Viscosity	40-60	
Filtrate	<5	

REMARKS AND TREATMENT

Repairing shaker screens as required. Ten new shaker screens (6 x 145 and 4 x 120 mesh) taken from stores. Problems with delaminating and holes persisting. Running desander and centrifuge 24 hours to reduce LGS.

REMARKS

Continue drilling to 3107 meters. Survey at 3044 meters = 31. Bit stopped drilling, circulate hole clean, pump slug (2) and POH to check bit.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG	(bbl)	SOLIDS ANALYSIS (%/lb/bbl)	MUD RHEOLOGY & HYDRAULICS
Rig Up/Service		Oil Added	0	NaCl	np/na Values
Drilling	19	Water Added	298	KCl	kp/ka (lb*s^n/100ft²)
Tripping	3	Mud Received	0	Low Gravity	278 / 1
Non-Productive Tim		Desilter	41	Bentonite	Bit HHP (hbp / HSI)
Condition Hole	2	Dumped	0	Drill Solids	94 / 1
		Other	0	Weight Material	Bit Jet Vel (m/s)
		Sweeps	0	Chemical Conc	Ann. Vel DP (m/min)
		Shakers	70	Inert/React	Ann. Vel DC (m/min)
		Centrifuge	36	Average SG	Crit Vel DP (m/min)
		Formation	53	Carb/BiCarb (m mole/L)	Crit Vel DC (m/min)

M-I ENGR / PHONE	RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Drew Blackburn Peter Dwyer	08-9302 3790	08-6363 8872	\$ 12,867.33	\$ 299,907.16



WATER-BASED MUD REPORT No. 31

Date	26/02/2005	Depth/TVD	3107 m / 2706 m
Spud Date	29/01/2005	Mud Type	KCl-Polymer-Glycol
Water Depth	73	Activity	WOC

Operator : Bass Strait Oil Co.
Report For : Greg Harmes
Well Name : Zane Grey 1
Contractor : Diamond Offshore
Report For : Ray Breaud

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size 8.5 in		Surface	Hole	Pump Make	OILWELL 1700PT NATIONAL 12P-16C
Nozzles 1/32"		30in @128m (128TVD)	753.6(Tot)/753.3(Bit)	Pump Size	6 X 12.in 6 X 12.in
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	4.274 gal/stk 4.274 gal/stk
5 in	3021 m	13.375in @1091m (1030TVD)	497.4	Pump stk/min	68@97% 68@97%
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	581 gal/min
5 in	m	9.625in @2184m (1936TVD)	1250.8	Bottoms Up	38.7 min 5267 stk
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time	72.9 min 9910 stk
in	m	in @3675m (3219TVD)	1101	Circulating Pressure	400 psi

MUD PROPERTIES

Sample From	F/L@15:20	PIT@04:30
Flow Line Temp	°F 110	n/a
Depth/TVD	m 3107/2787	3107/2787
Mud Weight	sp.gr. 1.15@90°F	1.15@93°F
Funnel Viscosity	s/qt 61	66
Rheology Temp	°F 120	120
R600/R300	67/50	70/52
R200/R100	41/31	42/32
R6/R3	11/8	11/8
PV	cP 17	18
YP	lb/100ft² 33	34
10s/10m/30m Gel	lb/100ft² 6/13/17	8/14/17
API Fluid Loss	cc/30 min 4.7	4.8
HTHP FL Temp	cc/30 min	
Cake API/HTHP	1/32" 1/	1/
Solids	%Vol 8.2	8.4
Oil/Water	%Vol 0/91.8	0/91.6
Sand	%Vol 0.25	0.25
MBT	lb/bbl 10	10
pH	9	9
Alkal Mud (Pm)		
Pf/Mf	0.1/0.65	0.05/0.55
Chlorides	mg/l 30500	30500
Hardness Ca	mg/l 460	500
Glycol	% V/V 4	4
PHPA	ppb 1.1	1.1
Sulhite Excess	mg/l 50	50
KCl	% Wt 5.5	5.5

PRODUCTS USED LAST 24 HRS

Products	Size	Amt
DUOTEC	25 KG BG	3
SODA ASH	25 KG BG	2
M-I BAR BULK	1 MT BK	2
POTASSIUM CHLORIDE	1 MT BG	3
DEFOAM A	5 GA CN	1
POTASSIUM HYDROXIDE	25 KG CN	2
POLYPAC UL	25 KG BG	8
POLY PLUS DRY	25 KG BG	7
GLYDRIL MC	55 GA DM	8

SOLIDS EQUIP	Size	Hr
VSM Shaker 1	120/120/120/120	6
VSM Shaker 2	145/145/145/145	6
VSM Shaker 3	120/120/105/105	6
VSM Shaker 4	145/145/145/145	6
D-Silter 12 x 4		23
Centrifuge-DFE		23

MUD PROPERTY SPECIFICATIONS

Weight	1.15 sg
Viscosity	40-60
Filtrate	<5

REMARKS AND TREATMENT

Dumped sand trap and possum belly (+/- 80bbls). Changed out screens and replaced with 2 new 120's and 2 new 145's. Building premixes with concentrated PHPA, Pac UL and Glycol to maintain system properties.

REMARKS

On tripping out of hole for bit change found that bit and half of mud motor was left in hole. RIH with cement stinger to 3106m. Circ bottoms up, pump 20 bbls water, 18 bbls cement and 7 bbls water. Displace cement, POH and lay out tubing. Make up new kick off assembly.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG (bbl)	SOLIDS ANALYSIS (%/lb/bbl)	MUD RHEOLOGY & HYDRAULICS
Rig Up/Service	3	Oil Added 0	NaCl .3/ 3.2	np/na Values 0.422/0.386
Drilling		Water Added 313	KCl 1.8/ 16.9	kp/ka (lb*s^n/100ft²) 3.833/4.546
Tripping	15	Mud Received 0	Low Gravity 5.1/ 46.5	Bit Loss (psi / %) / 1
Non-Productive Tim		Desilter 11	Bentonite .7/ 6.1	Bit HHP (hbp / HSI) / 1
Condition Hole	1	Dumped 80	Drill Solids 3.9/ 35.4	Bit Jet Vel (m/s)
Cementing	5	Other 0	Weight Material 1./ 14.7	Ann. Vel DP (m/min) 91.86
		Sweeps 0	Chemical Conc - / 5.	Ann. Vel DC (m/min) 72.34
		Shakers 0	Inert/React 3.1451	Crit Vel DP (m/min) 134
		Centrifuge 4	Average SG 2.86	Crit Vel DC (m/min) 123
		Formation 8	Carb/BiCarb (m mole/L) 2./ 10.	ECD @ 3106 (sp.gr.) 1.26

M-I ENGR / PHONE	RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Drew Blackburn Peter Dwyer	08-9302 3790	08-6363 8872	\$ 6,579.57	\$ 306,486.73



WATER-BASED MUD REPORT No. 32

Date	27/02/2005	Depth/TVD	3107 m / 2706 m
Spud Date	29/01/2005	Mud Type	KCl-Polymer-Glycol
Water Depth	73	Activity	POH

Operator : Bass Strait Oil Co.
Report For : Greg Harmes
Well Name : Zane Grey 1
Contractor : Diamond Offshore
Report For : Ray Breaud

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size	8.5 in Reed HYC RC1	Surface	Hole	Pump Make	OILWELL 1700PT NATIONAL 12P-16C
Nozzles	2x12 / 32 / 1/32"	30in @128m (128TVD)	794.8(Tot)/177.8(Bit)	Pump Size	6 X 12.in 6 X 12.in
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	4.274 gal/stk 4.274 gal/stk
5 in	251 m	13.375in @1091m (1030TVD)	445.2	Pump stk/min	54@97% 54@97%
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	462 gal/min
5 in	139 m	9.625in @2184m (1936TVD)	623	Bottoms Up	9.1 min 979 stk
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time	27.7 min 2996 stk
6.5 in	110 m	in @3675m (3219TVD)	743	Circulating Pressure	1400 psi

MUD PROPERTIES			
Sample From	F/L@15:00	PIT@05:30	
Flow Line Temp	°F	115	127
Depth/TVD	m	3107/2706	3107/2706
Mud Weight	sp.gr.	1.15@100°F	1.16@112°F
Funnel Viscosity	s/qt	58	65
Rheology Temp	°F	120	120
R600/R300		64/48	74/55
R200/R100		40/31	46/34
R6/R3		11/7	12/8
PV	cP	16	19
YP	lb/100ft²	32	36
10s/10m/30m Gel	lb/100ft²	5/12/17	10/15/18
API Fluid Loss	cc/30 min	4.5	4.5
HTHP FL Temp	cc/30 min		
Cake API/HTHP	1/32"	1/	1/
Solids	%Vol	8.2	8.5
Oil/Water	%Vol	0/91.8	0/91.5
Sand	%Vol	0.25	0.25
MBT	lb/bbl	10	10
pH		9.5	8.5
Alkal Mud (Pm)			
Pf/Mf		0.3/1.3	0.01/0.8
Chlorides	mg/l	31000	31000
Hardness Ca	mg/l	600	480
Glycol	% V/V	4	4
PHPA	ppb	1.2	1.2
Sulhite Excess	mg/l	30	80
KCl	% Wt	5.5	5.5

PRODUCTS USED LAST 24 HRS		
Products	Size	Amt
CITRIC ACID	25 KG BG	8
OS-1	25 KG BG	2
SODIUM BICARBONATE	25 KG BG	4
M-I BAR BULK	1 MT BK	3
GLUTE 25	25 LT CN	1
DEFOAM A	5 GA CN	1
POLYPAC UL	25 KG BG	3

SOLIDS EQUIP	Size	Hr
VSM Shaker 1	120/120/120/120	12
VSM Shaker 2	84/84/84/84	12
VSM Shaker 3	120/120/105/105	12
VSM Shaker 4	84/84/84/84	12
D-Silter 12 x 4		21
Centrifuge-DFE		22

MUD PROPERTY SPECIFICATIONS	
Weight	1.15 sg
Viscosity	40-60
Filtrate	<5

REMARKS AND TREATMENT

Tag and drill cement. Dump 260 bbls of cement contaminated mud at shakers. Running desilter and centrifuge continuously to reduce low gravity solids. Using coarse 84 mesh screens to minimise concentrated PHPA premix mud losses and prevent cement blocking fine screens. Treat mud with citric acid and bicarb prior to drilling cement.

REMARKS

Make up bit and BHA, RIH, tag cement and attempt to kick off. Unable to kick off and drill new hole. Hit fish. Circulate hole clean, pump barite slug and POH.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG	(bbl)	SOLIDS ANALYSIS (%/lb/bbl)	MUD RHEOLOGY & HYDRAULICS
Rig Up/Service		Oil Added	0	NaCl	np/na Values
Drilling	7	Water Added	0	KCl	kp/ka (lb*s^n/100ft²)
Tripping	16	Mud Received	0	Low Gravity	1.8/ 16.9
Non-Productive Tim		Desilter	38	Bentonite	Bit Loss (psi / %)
Condition Hole	1	Dumped	260	Drill Solids	77 6.1
Cementing		Other	0	Weight Material	Bit Jet Vel (m/s)
		Sweeps	0	Chemical Conc	Ann. Vel DP (m/min)
		Shakers	37	Inert/React	Ann. Vel DC (m/min)
		Centrifuge	24	Average SG	Crit Vel DP (m/min)
		Formation	15	Carb/BiCarb (m mole/L)	Crit Vel DC (m/min)
					ECD @ 500 (sp.gr.)

M-I ENGR / PHONE	RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Drew Blackburn Peter Dwyer	08-9302 3790	08-6363 8872	\$ 1,581.09	\$ 308,067.82

**WATER-BASED MUD REPORT No. 33**

Date	28/02/2005	Depth/TVD	3107 m / 2706 m
Spud Date	29/01/2005	Mud Type	KCl-Polymer-Glycol
Water Depth	73	Activity	WOC

Operator : Bass Strait Oil Co.
Report For : Greg Harmes
Well Name : Zane Grey 1
Contractor : Diamond Offshore
Report For : Ray Breaud

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size	8.5 in HYC RSX168	Surface	Hole	Pump Make	OILWELL 1700PT NATIONAL 12P-16C
Nozzles	6x14 / 1/32"	30in @128m (128TVD)	763.3(Tot)/533.5(Bit)	Pump Size	6 X 12.in 6 X 12.in
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	gal/stk gal/stk
5 in	1891 m	13.375in @1091m (1030TVD)	399.7	Pump stk/min	
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	gal/min
5 in	139 m	9.625in @2184m (1936TVD)	933.2	Bottoms Up	
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time	
6.5 in	82 m	in @3675m (3219TVD)	1259	Circulating Pressure	

MUD PROPERTIES

Sample From	PIT@23:00	PIT@04:30
Flow Line Temp	°F	n/a
Depth/TVD	m	3107/3106 3107/2787
Mud Weight	sp.gr.	1.15@90°F 1.15@85°F
Funnel Viscosity	s/qt	62 65
Rheology Temp	°F	120 120
R600/R300		70/52 72/54
R200/R100		47/35 45/34
R6/R3		11/8 11/8
PV	cP	18 18
YP	lb/100ft ²	34 36
10s/10m/30m Gel	lb/100ft ²	7/14/17 8/14/17
API Fluid Loss	cc/30 min	4.6 4.6
HTHP FL Temp	cc/30 min	
Cake API/HTHP	1/32"	1/ 1/
Solids	%Vol	8.2 8.2
Oil/Water	%Vol	0/91.8 0/91.8
Sand	%Vol	0.25 0.25
MBT	lb/bbl	10 10
pH		10 10
Alkal Mud (Pm)		
Pf/Mf		0.35/1.3 0.35/1.35
Chlorides	mg/l	31000 31500
Hardness Ca	mg/l	580 600
Glycol	% V/V	4 4
PHPA	ppb	1.2 1.2
Sulhite Excess	mg/l	30 50
KCl	% Wt	5.5 5.5

PRODUCTS USED LAST 24 HRS

Products	Size	Amt
DUOTEC	25 KG BG	8
OS-1	25 KG BG	2
POTASSIUM CHLORIDE	1 MT BG	4
DEFOAM A	5 GA CN	1
POLYPAC UL	25 KG BG	8
POLY PLUS DRY	25 KG BG	9
GLYDRIL MC	55 GA DM	9

SOLIDS EQUIP	Size	Hr
VSM Shaker 1	120/120/120/120	10
VSM Shaker 2	84/84/84/84	10
VSM Shaker 3	120/120/105/105	10
VSM Shaker 4	84/84/84/84	10
D-Silter 12 x 4		5
Centrifuge-DFE		5

MUD PROPERTY SPECIFICATIONS

Weight	1.15 sg
Viscosity	40-60
Filtrate	<5

REMARKS AND TREATMENT

Lost 18 bbls while cleaning out pit # 4, primary premixing pit. Mix up 470bbls of new unweighted premix. Repairing old shaker screens and replacing as required.

REMARKS

RIH with 18 joints cement stinger to 3106m. Circulate hole clean and cement as per program. (Plug from 2946 to 3106m). Pull back to 2820m, pump slug and POH with stinger. Make up new bit and BHA, RIH.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG	(bbl)	SOLIDS ANALYSIS (%/lb/bbl)	MUD RHEOLOGY & HYDRAULICS
Rig Up/Service	5	Oil Added	0	NaCl	np/na Values
Drilling		Water Added	445	KCl	kp/ka (lb•s ⁿ /100ft ²)
Tripping	14	Mud Received	0	Low Gravity	1.8/ 16.9
Non-Productive Tim		Desilter	7	Bentonite	Bit Loss (psi / %)
Condition Hole		Dumped	17	Drill Solids	Bit HHP (hhp / HSI)
Cementing	5	Other	0	Weight Material	Bit Jet Vel (m/s)
		Sweeps	0	Chemical Conc	Ann. Vel DP (m/min)
		Shakers	3	Inert/React	Ann. Vel DC (m/min)
		Centrifuge	5	Average SG	Crit Vel DP (m/min)
		Formation	0	Carb/BiCarb (m mole/L)	Crit Vel DC (m/min)
					ECD @ 2112 (sp.gr.)

M-I ENGR / PHONE	RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Drew Blackburn Peter Dwyer	08-9302 3790	08-6363 8872	\$ 7,919.42	\$ 315,987.24



WATER-BASED MUD REPORT No. 34

Date	1/03/2005	Depth/TVD	2995 m / 2623 m
Spud Date	29/01/2005	Mud Type	KCl-Polymer-Glycol
Water Depth	73	Activity	Drill Cement

Operator : Bass Strait Oil Co.
Report For : G. Harmes / P. Dane
Well Name : Zane Grey 1
Contractor : Diamond Offshore
Report For : Ray Breaud

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size	8.5 in HYC RSX168	Surface	Hole	Pump Make	OILWELL 1700PT NATIONAL 12P-16C
Nozzles	6x14 / 1/32"	30in @128m (128TVD)	718.6	Pump Size	6 X 12.in 6 X 12.in
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	4.274 gal/stk 4.274 gal/stk
5 in	2774 m	13.375in @1091m (1030TVD)	499.4	Pump stk/min	52@97% 52@97%
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	444 gal/min
5 in	139 m	9.625in @2184m (1936TVD)	1218	Bottoms Up	47.7 min 4964 stk
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time	88.4 min 9198 stk
6.5 in	82 m	in @3675m (3219TVD)	1042	Circulating Pressure	2050 psi

MUD PROPERTIES			
Sample From	F/L@23:00	PIT@05:00	
Flow Line Temp	°F	125	123
Depth/TVD	m	2995/2623	2958/2592
Mud Weight	sp.gr.	1.14@111°F	1.14@104°F
Funnel Viscosity	s/qt	55	62
Rheology Temp	°F	120	120
R600/R300		61/41	64/44
R200/R100		32/23	35/25
R6/R3		8/6	8/6
PV	cP	20	20
YP	lb/100ft²	21	24
10s/10m/30m Gel	lb/100ft²	7/11/12	10/13/15
API Fluid Loss	cc/30 min	5.5	5
HTHP FL Temp	cc/30 min		
Cake API/HTHP	1/32"	1/	1/
Solids	%Vol	7.8	8.2
Oil/Water	%Vol	0/92.2	0/91.8
Sand	%Vol	0.25	0.25
MBT	lb/bbl	7.5	7.5
pH		10	10
Alkal Mud (Pm)			
Pf/Mf		0.4/1.6	0.5/2.2
Chlorides	mg/l	31000	32000
Hardness Ca	mg/l	1000	750
Glycol	% V/V	4	4
PHPA	ppb	0.75	0.8
Sulhite Excess	mg/l	50	180
KCl	% Wt	5.5	5.5

PRODUCTS USED LAST 24 HRS		
Products	Size	Amt
CITRIC ACID	25 KG BG	20
DUOTEC	25 KG BG	11
OS-I	25 KG BG	3
SODA ASH	25 KG BG	8
M-I BAR BULK	1 MT BK	6
GLUTE 25	25 LT CN	1
DEFOAM A	5 GA CN	1
DUO-VIS	25 KG BG	10

SOLIDS EQUIP	Size	Hr
VSM Shaker 1	84/84/84/84	12
VSM Shaker 2	120/120/120/120	20
VSM Shaker 3	120/120/120/120	20
VSM Shaker 4	145/145/120/120	12
D-Silter 12 x 4		15
Centrifuge-DFE		15

MUD PROPERTY SPECIFICATIONS		
Weight	1.15 sg	
Viscosity	40-60	
Filtrate	<5	

REMARKS AND TREATMENT

Have drilled large amounts of cement over last few days and mud properties (yield point, 6 RPM readings) have reduced below program specifications. Active system treated with high concentration of Duovis and Duotec but these proved ineffective due to the high calcium from cement and high pH. Forward plan is to wait until finished drilling cement and then treat mud properties back to program specifications. Have presently used all stock of Citric and Bicarb. Cleaned possum belly and sandtrap.

REMARKS

WOC. RIH with 8 1/2" BHA and attempt to kick off openhole. Allow adequate time for cement to set. Run in and tag cement and attempt to kick off cement. The 6MT of Barite charged off today's report is a stock adjustment to match the barge engineers figures.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG	(bbl)	SOLIDS ANALYSIS (%/lb/bbl)		MUD RHEOLOGY & HYDRAULICS	
Rig Up/Service		Oil Added	0	NaCl	.3/ 3.5	np/na Values	0.573/0.383
Drilling	17	Water Added	0	KCl	1.8/ 16.9	kp/ka (lb's'n/100ft²)	1.226/3.426
Tripping	5	Mud Received	0	Low Gravity	4.9/ 44.7	Bit Loss (psi / %)	212 / 1
Non-Productive Tim		Desilter	50	Bentonite	.4/ 3.5	Bit HHP (hhp / HSI)	55 / 1
Wait on Cement	2	Dumped	90	Drill Solids	4./ 36.2	Bit Jet Vel (m/s)	48
		Other	0	Weight Material	.8/ 11.2	Ann. Vel DP (m/min)	70.2
		Sweeps	0	Chemical Conc	- / 5.	Ann. Vel DC (m/min)	110.56
		Shakers	20	Inert/React	4.2896	Crit Vel DP (m/min)	112
		Centrifuge	15	Average SG	2.82	Crit Vel DC (m/min)	127
		Formation	0	Carb/BiCarb (m mole/L)	7.9/ 4.	ECD @ 2995 (sp.gr.)	1.22

M-I ENGR / PHONE	RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Drew Blackburn Peter Dwyer	08-9302 3790	08-6363 8872	\$ 7,107.46	\$ 323,094.70

**WATER-BASED MUD REPORT No. 35**

Date	2/03/2005	Depth/TVD	3022 m / 2647 m
Spud Date	29/01/2005	Mud Type	KCl-Polymer-Glycol
Water Depth	73	Activity	Circ for Trip / POH

Operator : Bass Strait Oil Co.
Report For : G. Harmes / P. Dane
Well Name : Zane Grey 1
Contractor : Diamond Offshore
Report For : Ray Breaud

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size	8.5 in HYC RSX168	Surface	Hole	Pump Make	OILWELL 1700PT NATIONAL 12P-16C
Nozzles	6x14 / 1/32"	30in @128m (128TVD)	724.3	Pump Size	6 X 12.in 6 X 12.in
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	4.274 gal/stk 4.274 gal/stk
5 in	2801 m	13.375in @1091m (1030TVD)	533.7	Pump stk/min	71@97% 69@97%
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	598 gal/min
5 in	139 m	9.625in @2184m (1936TVD)	1258	Bottoms Up	36.2 min 5071 stk
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time	70.6 min 9881 stk
6.5 in	82 m	in @3675m (3219TVD)	1099	Circulating Pressure	3200 psi

MUD PROPERTIES

Sample From	F/L@17:30	F/L@04:30
Flow Line Temp	°F	110 112
Depth/TVD	m	3022/2647 2999/2624
Mud Weight	sp.gr.	1.13@100°F 1.14@105°F
Funnel Viscosity	s/qt	43 57
Rheology Temp	°F	120 120
R600/R300		48/31 60/39
R200/R100		26/21 31/23
R6/R3		7/6 8/6
PV	cP	17 21
YP	lb/100ft²	14 18
10s/10m/30m Gel	lb/100ft²	6/11/14 8/12/16
API Fluid Loss	cc/30 min	7 6
HTHP FL Temp	cc/30 min	
Cake API/HTHP	1/32"	1/ 1/
Solids	%Vol	7 7.5
Oil/Water	%Vol	0/93 0/92.5
Sand	%Vol	0.25 0.25
MBT	lb/bbl	7.5 7.5
pH		11 11.5
Alkal Mud (Pm)		
Pf/Mf		0.5/2.8 0.45/2.6
Chlorides	mg/l	37500 37000
Hardness Ca	mg/l	1100 800
Glycol	% V/V	4 4
PHPA	ppb	0.75 0.75
Sulhite Excess	mg/l	50 50
KCl	% Wt	6.5 6.5

PRODUCTS USED LAST 24 HRS

Products	Size	Amt
OS-1	25 KG BG	2
M-I BAR BULK	1 MT BK	5
M-I GEL BULK	1 MT BK	2
POTASSIUM CHLORIDE	1 MT BG	3
GLUTE 25	25 LT CN	1

SOLIDS EQUIP	Size	Hr
VSM Shaker 1	84/84/84/84	18
VSM Shaker 2	120/120/120/120	18
VSM Shaker 3	120/120/120/120	18
VSM Shaker 4	145/145/120/120	4
D-Silter 12 x 4		8
Centrifuge-DFE		8

MUD PROPERTY SPECIFICATIONS

Weight	1.15 sg
Viscosity	40-60
Filtrate	<5

REMARKS AND TREATMENT

Mud weight and viscosity observed to be dropping off while drilling cement. Waiting for the arrival of new citric acid and bicarbonate stocks to treat cement contaminated mud. Added barite and KCl to increase mud weight. Prehydrated gel (28 ppb) in premix tank in for adding to mud when drilling resumes to raise YP and 6RPM reading. pH too high for polymers to work. Limited use of solids control equipment due to low mud weight.

REMARKS

Continue drilling cement to 3022 meters while attempting to drop off and make new hole - no success. Circulate hole clean, pump slug and POH.

Will bring properties back to program specs once finished drilling cement.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG	(bbl)	SOLIDS ANALYSIS (%/lb/bbl)		MUD RHEOLOGY & HYDRAULICS	
Rig Up/Service		Oil Added	0	NaCl	.3/ 3.7	np/na Values	0.631/0.357
Drilling	17	Water Added	180	KCl	2.3/ 21.4	kp/ka (lb•s ⁿ /100ft ²)	0.647/3.575
Tripping	7	Mud Received	0	Low Gravity	3.4/ 31.	Bit Loss (psi / %)	382 / 1
Non-Productive Tim		Desilter	50	Bentonite	.6/ 5.2	Bit HHP (hhp / HSI)	133 / 1
		Dumped	27	Drill Solids	2.3/ 20.8	Bit Jet Vel (m/s)	65
		Other	0	Weight Material	.9/ 13.9	Ann. Vel DP (m/min)	94.55
		Sweeps	0	Chemical Conc	- / 5.	Ann. Vel DC (m/min)	148.91
		Shakers	15	Inert/React	2.4602	Crit Vel DP (m/min)	106
		Centrifuge	15	Average SG	2.95	Crit Vel DC (m/min)	120
		Formation	0	Carb/BiCarb (m mole/L)	9/ .5	ECD @ 3022 (sp.gr.)	1.21

M-I ENGR / PHONE		RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Drew Blackburn					
Peter Dwyer	08-9302 3790	08-6363 8872	08-9325 4822	\$ 3 419.97	\$ 326 514.67

**WATER-BASED MUD REPORT No. 36**

Date	3/03/2005	Depth/TVD	3056 m / 2676 m
Spud Date	29/01/2005	Mud Type	KCl-Polymer-Glycol
Water Depth	73	Activity	Drill CMT

Operator : Bass Strait Oil Co.
Report For : G. Harmes / P. Dane
Well Name : Zane Grey 1
Contractor : Diamond Offshore
Report For : Bill Barker

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size	8.5 in HYC RSX168	Surface	Hole	Pump Make	OILWELL 1700PT NATIONAL 12P-16C
Nozzles	6x14 / 1/32"	30in @128m (128TVD)	731.4	Pump Size	6 X 12.in 6 X 12.in
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	4.274 gal/stk 4.274 gal/stk
5 in	2835 m	13.375in @1091m (1030TVD)	509.6	Pump stk/min	71@97% 69@97%
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	598 gal/min
5 in	139 m	9.625in @2184m (1936TVD)	1241	Bottoms Up	36.6 min 5122 stk
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time	70.1 min 9808 stk
6.5 in	82 m	in @3675m (3219TVD)	1098	Circulating Pressure	2754 psi

MUD PROPERTIES

Sample From	F/L@23:00	F/L@1600
Flow Line Temp	°F	110
Depth/TVD	m	3056/2676
Mud Weight	sp.gr.	1.13@100°F
Funnel Viscosity	s/qt	38
Rheology Temp	°F	120
R600/R300		25/16
R200/R100		13/11
R6/R3		5/4
PV	cP	9
YP	lb/100ft²	7
10s/10m/30m Gel	lb/100ft²	4/7/11
API Fluid Loss	cc/30 min	7
HTHP FL Temp	cc/30 min	
Cake API/HTHP	1/32"	1/
Solids	%Vol	7.3
Oil/Water	%Vol	0/92.7
Sand	%Vol	0.25
MBT	lb/bbl	7.5
pH		12
Alkal Mud (Pm)		
Pf/Mf		0.5/2.5
Chlorides	mg/l	34000
Hardness Ca	mg/l	1200
Glycol	% V/V	4
PHPA	ppb	
Sulhite Excess	mg/l	50
KCl	% Wt	6

PRODUCTS USED LAST 24 HRS

Products	Size	Amt
SODA ASH	25 KG BG	1
M-I BAR BULK	1 MT BK	9
M-I GEL BULK	1 MT BK	2
DEFOAM A	5 GA CN	1
POLYPAC UL	25 KG BG	7

SOLIDS EQUIP	Size	Hr
VSM Shaker 1	84/84/84/84	20
VSM Shaker 2	120/120/120/120	20
VSM Shaker 3	120/120/120/120	20
VSM Shaker 4	145/145/120/120	20
D-Silter 12 x 4		4
Centrifuge-DFE		4

MUD PROPERTY SPECIFICATIONS

Weight	1.15 sg
Viscosity	40-60
Filtrate	<5

REMARKS AND TREATMENT

Waiting on boat with new stocks of citric acid and sodium bicarbonate to treat cement contaminated mud. Pumped weighted gel high viscosity Pac UL sweeps to check for adequate hole cleaning...no problems. High pH burning off polymers which is reducing mud rheology. Adding barite as required to maintain mud weight at 1.13 sg. Dump and clean out possum belly and sandtrap.

REMARKS

Continue drilling cement while attempting to drop off to make new hole.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG (bbl)	SOLIDS ANALYSIS (%/lb/bbl)	MUD RHEOLOGY & HYDRAULICS
Rig Up/Service	1	Oil Added	0	np/na Values
Drilling	19	Water Added	100	kp/ka (lb*s^n/100ft²)
Tripping	4	Mud Received	0	Bit Loss (psi / %)
Non-Productive Tim		Formation	0	Bit HHP (hbp / HSI)
		Desilter	35	Bit Jet Vel (m/s)
		Dumped	62	Ann. Vel DP (m/min)
		Other	0	Ann. Vel DC (m/min)
		Sweeps	0	Crit Vel DP (m/min)
		Shakers	25	Crit Vel DC (m/min)
		Centrifuge	15	ECD @ 3056 (sp.gr.)

M-I ENGR / PHONE	RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Peter Dwyer 08-9302 3790	08-6363 8872	08-9325 4822	\$ 3,738.96	\$ 330,253.63

WATER-BASED MUD REPORT No. 37

Date	4/03/2005	Depth/TVD	3070 m / 2687 m
Spud Date	29/01/2005	Mud Type	KCI-Polymer-Glycol
Water Depth	73	Activity	Tripping

Operator : Bass Strait Oil Co.
Report For : G. Harmes / P. Dane
Well Name : Zane Grey 1
Contractor : Diamond Offshore
Report For : Bill Barker

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size	8.5 in HYC RSX168	Surface 30in @128m (128TVD)	Hole 735.8(Tot)/719.7(Bit)	Pump Make	OILWELL 1700PT NATIONAL 12P-16C
Nozzles	6x14 / 1/32"			Pump Size	6 X 12.in 6 X 12.in
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	4.274 gal/stk 4.274 gal/stk
5 in	2779 m	13.375in @1091m (1030TVD)	500.2	Pump stk/min	71@97% 69@97%
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	598 gal/min
5 in	139 m	9.625in @2184m (1936TVD)	1219.9	Bottoms Up	36 min 5039 stk
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time	68.8 min 9638 stk
6.5 in	82 m	in @3675m (3219TVD)	1018	Circulating Pressure	2754 psi

MUD PROPERTIES		
Sample From		PIT@24:00
Flow Line Temp	°F	n/a
Depth/TVD	m	3070/2687
Mud Weight	sp.gr.	1.13@90°F
Funnel Viscosity	s/qt	38
Rheology Temp	°F	120
R600/R300		24/15
R200/R100		12/10
R6/R3		5/3
PV	cP	9
YP	lb/100ft²	6
10s/10m/30m Gel	lb/100ft²	3/6/11
API Fluid Loss	cc/30 min	7.4
HTHP FL Temp	cc/30 min	
Cake API/HTHP	1/32"	1/
Solids	%Vol	7.3
Oil/Water	%Vol	0/92.7
Sand	%Vol	0.25
MBT	lb/bbl	7.5
pH		12
Alkal Mud (Pm)		
Pf/Mf		0.5/2.4
Chlorides	mg/l	34000
Hardness Ca	mg/l	1150
Glycol	% V/V	4
PHPA	ppb	
Sulhite Excess	mg/l	50
KCl	% Wt	6

[illegible]

SOLIDS EQUIP	Size	Hr
VSM Shaker 1	84/84/84/84	10
VSM Shaker 2	120/120/120/120	10
VSM Shaker 3	120/120/120/120	10
VSM Shaker 4	145/145/120/120	10
D-Silter 12 x 4		3
Centrifuge-DFE		3

MUD PROPERTY SPECIFICATIONS	
Weight	1.15 sg
Viscosity	40-60
Filtrate	<5

REMARKS AND TREATMENT

Waiting on citric and bicarbonate to treat cement contaminated mud, chemicals presently being offloaded from workboat. Gel usage was a correction from yesterday as per barge engineers bulk dips.

REMARKS

Continue drilling cement to 3070 meters while attempting to kick off into new formation. Circulate hole clean, pump slug and POH to pick up new bit. RIH.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG	(bbl)	SOLIDS ANALYSIS (%/lb/bbl)		MUD RHEOLOGY & HYDRAULICS	
Rig Up/Service	1	Oil Added	0	NaCl	.3/ 3.2	np/na Values	0.678/0.343
Drilling	9.5	Water Added	0	KCl	2.1/ 19.6	kp/ka (lb•s^n/100ft²)	0.233/1.828
Tripping	12.5	Mud Received	0	Low Gravity	4.2/ 38.6	Bit Loss (psi / %)	382 / 1
Non-Productive Tim		Formation	0	Bentonite	.5/ 4.2	Bit HHP (hhp / HSI)	133 / 1
Condition Hole	1.0	Desilter	30	Drill Solids	3.2/ 29.3	Bit Jet Vel (m/s)	65
		Dumped	34	Weight Material	.7/ 9.7	Ann. Vel DP (m/min)	94.55
		Other	0	Chemical Conc	- / 5.	Ann. Vel DC (m/min)	148.91
		Sweeps	0	Inert/React	3.4779	Crit Vel DP (m/min)	68
		Shakers	15	Average SG	2.82	Crit Vel DC (m/min)	77
		Centrifuge	15	Carb/BiCarb (m mole/L)	.7	ECD @ 3000 (sp.gr.)	1.16

M-I ENGR / PHONE		RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Peter Dwyer	08-9302 3790	08-6363 8872	08-9325 4822	\$ 894.90	\$ 331 148.53

WATER-BASED MUD REPORT No. 38

Date	5/03/2005	Depth/TVD	3092 m / 2693.7 m
Spud Date	29/01/2005	Mud Type	KCI-Polymer-Glycol
Water Depth	73	Activity	RIH

Operator : Bass Strait Oil Co.
Report For : G. Harmes / P. Dane
Well Name : Zane Grey 1
Contractor : Diamond Offshore
Report For : Bill Barker

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size	8.5 in HYC RSX168	Surface	Hole	Pump Make	OILWELL 1700PT NATIONAL 12P-16C
Nozzles	6x14 / 1/32"	30in @128m (128TVD)	743(Tot)/698.8(Bit)	Pump Size	6 X 12.in 6 X 12.in
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	4.274 gal/stk 4.274 gal/stk
5 in	2679 m	13.375in @1091m (1030TVD)	361	Pump stk/min	71@97% 69@97%
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	598 gal/min
5 in	139 m	9.625in @2184m (1936TVD)	1059.8	Bottoms Up	34.9 min 4891 stk
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time	61.5 min 8612 stk
6.5 in	82 m	in @3675m (3219TVD)	794	Circulating Pressure	2700 psi

MUD PROPERTIES		
Sample From	PIT@23:00	F/L@10:40
Flow Line Temp °F	n/a	110
Depth/TVD m	3092/2693.2	3092/2693.3
Mud Weight sp.gr.	1.13@110°F	1.13@110°F
Funnel Viscosity s/qt	45	43
Rheology Temp °F	120	120
R600/R300	52/34	48/31
R200/R100	26/18	24/16
R6/R3	7/4	5/2
PV cP	18	17
YP lb/100ft²	16	14
10s/10m/30m Gel lb/100ft²	4/8/12	3/7/10
API Fluid Loss cc/30 min	5.5	6
HTHP FL Temp cc/30 min		
Cake API/HTHP 1/32"	1/	1/
Solids %Vol	7.3	7.3
Oil/Water %Vol	0/92.7	0/92.7
Sand %Vol	0.25	0.25
MBT lb/bbl	7.5	7.5
pH	9.5	10
Alkal Mud (Pm)		
Pf/Mf	0.25/1.4	0.35/1.8
Chlorides mg/l	32000	32000
Hardness Ca mg/l	700	850
Glycol % V/V	4	4
PHPA ppb		
Sulhite Excess mg/l	20	20
KCl % Wt	6	6

[illegible]

SOLIDS EQUIP	Size	Hr
VSM Shaker 1	84/84/84/84	13
VSM Shaker 2	120/120/120/120	13
VSM Shaker 3	120/120/120/120	13
VSM Shaker 4	145/145/120/120	13
D-Silter 12 x 4		3
Centrifuge-DFE		3

MUD PROPERTY SPECIFICATIONS	
Weight	1.15 sg
Viscosity	40-60
Filtrate	<5

REMARKS AND TREATMENT

Commence treating cement contaminated mud as soon as the bit started to drill new formation. Mud properties reacted positively with the addition of Sodium Bicarbonate and citric acid (large quantities required, 2.2 ppb of each so far). Increase in rheology noticed immediately although the drop in pH and calcium levels was only marginal. Working on surface volume while tripping.

REMARKS

Continue drilling to 3092 meters. Now drilling in 100% formation. Circulate hole clean, pump slug, POH to change bit. RIH to continue drilling.

Dumped out cement contaminated sand traps and possum belly during trip.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG	(bbl)	SOLIDS ANALYSIS (%/lb/bbl)		MUD RHEOLOGY & HYDRAULICS	
Rig Up/Service		Oil Added	0	NaCl	.2/ 2.1	np/na Values	0.613/0.429
Drilling	11	Water Added	0	KCl	2.1/ 19.6	kp/ka (lb•s ⁿ /100ft ²)	0.793/2.120
Tripping	12	Mud Received	0	Low Gravity	4.3/ 39.	Bit Loss (psi / %)	382 / 1
Non-Productive Tim		Formation	0	Bentonite	.5/ 4.2	Bit HHP (hhp / HSI)	133 / 1
Condition Hole	1	Desilter	40	Drill Solids	3.3/ 29.8	Bit Jet Vel (m/s)	65
		Dumped	280	Weight Material	.7/ 10.3	Ann. Vel DP (m/min)	94.55
		Other	0	Chemical Conc	- / 5.	Ann. Vel DC (m/min)	148.91
		Sweeps	0	Inert/React	3.5361	Crit Vel DP (m/min)	95
		Shakers	35	Average SG	2.83	Crit Vel DC (m/min)	111
		Centrifuge	20	Carb/BiCarb (m mole/L)	5./ 7.9	ECD @ 2900 (sp.gr.)	1.2

M-I ENGR / PHONE		RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Peter Dwyer	08-9302 3790	08-6363 8872	08-9325 4822	\$ 6 484 96	\$ 337 633 49

**WATER-BASED MUD REPORT No. 39**

Date	6/03/2005	Depth/TVD	3162.1 m / 2753.6 m
Spud Date	29/01/2005	Mud Type	KCl-Polymer-Glycol
Water Depth	73	Activity	Rig Repairs

Operator : Bass Strait Oil Co.
Report For : G. Harmes / P. Dane
Well Name : Zane Grey 1
Contractor : Diamond Offshore
Report For : Bill Barker

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size	8.5 in HYC RSX1630	Surface	Hole	Pump Make	OILWELL 1700PT NATIONAL 12P-16C
Nozzles	6x14 / 1/32"	30in @128m (128TVD)	753.5	Pump Size	6 X 12.in 6 X 12.in
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	4.274 gal/stk 4.274 gal/stk
5 in	2941 m	13.375in @1091m (1030TVD)	361.5	Pump stk/min	71@97% 69@97%
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	598 gal/min
5 in	139 m	9.625in @2184m (1936TVD)	1115	Bottoms Up	37.7 min 5279 stk
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time	65.4 min 9153 stk
6.5 in	82 m	in @3675m (3219TVD)	975	Circulating Pressure	2800 psi

MUD PROPERTIES

Sample From	F/L@10.30	PIT@24:00
Flow Line Temp	°F 110	n/a
Depth/TVD	m 3162.1/2753.6	3162.1/2753.6
Mud Weight	sp.gr. 1.14@100°F	1.14@100°F
Funnel Viscosity	s/qt 50	53
Rheology Temp	°F 120	120
R600/R300	55/36	53/35
R200/R100	30/26	30/25
R6/R3	8/4	8/4
PV	cP 19	18
YP	lb/100ft² 17	17
10s/10m/30m Gel	lb/100ft² 4/9/13	4/10/14
API Fluid Loss	cc/30 min 5.5	5.5
HTHP FL Temp	cc/30 min	
Cake API/HTHP	1/32" 1/	1/
Solids	%Vol 7.6	7.6
Oil/Water	%Vol 0/92.4	0/92.4
Sand	%Vol 0.25	0.25
MBT	lb/bbl 7.5	7.5
pH	9.5	9.5
Alkal Mud (Pm)		
Pf/Mf	0.25/1.4	0.25/1.4
Chlorides	mg/l 32000	32000
Hardness Ca	mg/l 640	640
Glycol	% V/V 4	4
PHPA	ppb 1	1
Sulhite Excess	mg/l 50	50
KCl	% Wt 6	6

PRODUCTS USED LAST 24 HRS

Products	Size	Amt
DUOTEC	25 KG BG	4
M-I BAR BULK	1 MT BK	2
POTASSIUM CHLORIDE	1 MT BG	4
DEFOAM A	5 GA CN	2
POLYPAC UL	25 KG BG	12
POLY PLUS DRY	25 KG BG	12
GLYDRIL LC	55 GA DM	11
DUO-VIS	25 KG BG	4

SOLIDS EQUIP	Size	Hr
VSM Shaker 1	84/84/84/84	10
VSM Shaker 2	120/120/120/120	10
VSM Shaker 3	120/120/120/120	10
VSM Shaker 4	145/145/120/120	10
D-Silter 12 x 4		3
Centrifuge-DFE		3

MUD PROPERTY SPECIFICATIONS

Weight	1.15 sg
Viscosity	40-60
Filtrate	<5

REMARKS AND TREATMENT

Circulate and condition mud while drilling. Adding Pac UL to reduce fluid loss. Mud tending to foam, postpone adding Duovis to raise 6 rpm reading till aeration of mud has been removed to prevent mud pumps from losing pressure.

REMARKS

RIH with new bit, continue drilling to 3162.1 meters. Problems with top drive, circulate hole clean, pump slug and pull back to shoe to repair top drive.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG (bbl)	SOLIDS ANALYSIS (%/lb/bbl)	MUD RHEOLOGY & HYDRAULICS
Rig Up/Service		Oil Added 0	NaCl 2/ 2.1	np/na Values 0.611/0.534
Drilling	6	Water Added 370	KCl 2.1/ 19.6	kp/ka (lb*s^n/100ft²) 0.848/1.787
Tripping	6	Mud Received 0	Low Gravity 4.3/ 38.9	Bit Loss (psi / %) 385 / 1
Non-Productive Tim	12	Formation 0	Bentonite .5/ 4.2	Bit HHP (hhp / HSI) 134 / 1
Condition Hole		Desilter 60	Drill Solids 3.3/ 29.7	Bit Jet Vel (m/s) 65
		Dumped 75	Weight Material 1./ 15.1	Ann. Vel DP (m/min) 94.55
		Other 0	Chemical Conc - / 5.	Ann. Vel DC (m/min) 148.91
		Sweeps 0	Inert/React 3.5143	Crit Vel DP (m/min) 118
		Shakers 60	Average SG 2.91	Crit Vel DC (m/min) 145
		Centrifuge 15	Carb/BiCarb (m mole/L) 5/ 7.9	ECD @ 3162 (sp.gr.) 1.24

M-I ENGR / PHONE	RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Peter Dwyer 08-9302 3790	08-6363 8872	08-9325 4822	\$ 12,912.38	\$ 350,545.87

WATER-BASED MUD REPORT No. 40

Date	7/03/2005	Depth/TVD	3162.1 m / 2753.6 m
Spud Date	29/01/2005	Mud Type	KCI-Polymer-Glycol
Water Depth	73	Activity	Repair Top drive

Operator : Bass Strait Oil Co.
Report For : G. Harmes / P. Dane
Well Name : Zane Grey 1
Contractor : Diamond Offshore
Report For : Bill Barker

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA			
Bit Size	8.5 in HYC RSX1630	Surface 30in @128m (128TVD)	Hole 774.5(Tot)/549.2(Bit)	Pump Make	OILWELL 1700PT	NATIONAL 12P-16C	
Nozzles	6x14 / 1/32"			Pump Size	6 X 12.in	6 X 12.in	
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	gal/stk	gal/stk	
5 in	1963 m	13.375in @1091m (1030TVD)	340.5	Pump stk/min			
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	gal/min		
5 in	139 m	9.625in @2184m (1936TVD)	889.8	Bottoms Up			
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time			
6.5 in	82 m	in @3675m (3219TVD)	975	Circulating Pressure			
MUD PROPERTIES				PRODUCTS USED LAST 24 HRS			
Sample From		PIT@23:00		PIT@12:00	Products	Size	Amt
Flow Line Temp	°F	N/A		N/A			
Depth/TVD	m	3162/2753.6		3162/2753.6			
Mud Weight	sp.gr.	1.14@90°F		1.14@90°F			
Funnel Viscosity	s/qt	57		55			
Rheology Temp	°F	120		120			
R600/R300		53/35		55/36			
R200/R100		30/26		31/26			
R6/R3		8/5		9/5			
PV	cP	18		19			
YP	lb/100ft²	17		17			
10s/10m/30m Gel	lb/100ft²	4/8/12		5/8/13			
API Fluid Loss	cc/30 min	7.6		7.6			
HTHP FL Temp	cc/30 min						
Cake API/HTHP	1/32"	1/		1/			
Solids	%Vol	7.6		7.6			
Oil/Water	%Vol	0/92.4		0/92.4			
Sand	%Vol	0.25		0.25			
MBT	lb/bbl	7.5		7.5			
pH		9.5	9.5				
Alkal Mud (Pm)							
Pf/Mf		0.25/1.4	0.25/1.4				
Chlorides	mg/l	32000	32000				
Hardness Ca	mg/l	640	640				
Glycol	% V/V	4	4				
PHPA	ppb	1	1				
Sulhite Excess	mg/l	50	50				
KCl	% Wt	6	6				
REMARKS AND TREATMENT			REMARKS				
None required. Mud loggers report 24 bbls lost to hole while monitoring trip tank. (No circulation today).			Repairing top drive (24 hours).				
TIME DISTR	Last 24 Hrs	MUD VOL ACCTG	(bbl)	SOLIDS ANALYSIS (%/lb/bbl)		MUD RHEOLOGY & HYDRAULICS	
Rig Up/Service		Oil Added	0	NaCl	.2/ 2.1	np/na Values	0.599/0.470
Drilling		Water Added	0	KCl	2.1/ 19.6	kp/ka (lb*s^n/100ft²)	0.893/2.478
Tripping		Mud Received	0	Low Gravity	4.3/ 38.9	Bit Loss (psi / %)	/ 1
Non-Productive Tim	24	Formation	0	Bentonite	.5/ 4.2	Bit HHP (hhp / HSI)	/ 1
Condition Hole		Desilter	0	Drill Solids	3.3/ 29.7	Bit Jet Vel (m/s)	
		Dumped	0	Weight Material	1./ 15.1	Ann. Vel DP (m/min)	
		Other	0	Chemical Conc	- / 5.	Ann. Vel DC (m/min)	
		Sweeps	0	Inert/React	3.5143	Crit Vel DP (m/min)	117
		Shakers	0	Average SG	2.91	Crit Vel DC (m/min)	138
		Centrifuge	0	Carb/BiCarb (m mole/L)	5./ 7.9	ECD @ 2184 (sp.gr.)	1.14
M-I ENGR / PHONE		RIG PHONE		WAREHOUSE PHONE		DAILY COST	
Peter Dwver 08-9302 3790		08-6363 8872		08-9325 4822		\$ 0.00	
						\$ 350 545 87	

WATER-BASED MUD REPORT No. 41

Date	8/03/2005	Depth/TVD	3162.1 m / 2753.6 m
Spud Date	29/01/2005	Mud Type	KCI-Polymer-Glycol
Water Depth	73	Activity	Repair Top Drive

Operator : Bass Strait Oil Co.
Report For : G. Harmes / P. Dane
Well Name : Zane Grey 1
Contractor : Diamond Offshore
Report For : Bill Barker

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size	8.5 in HYC RSX1630	Surface	Hole	Pump Make	OILWELL 1700PT NATIONAL 12P-16C
Nozzles	6x14 / 1/32"	30in @128m (128TVD)	774.5(Tot)/549.2(Bit)	Pump Size	6 X 12.in 6 X 12.in
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	gal/stk gal/stk
5 in	1963 m	13.375in @1091m (1030TVD)	292.5	Pump stk/min	
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	gal/min
5 in	139 m	9.625in @2184m (1936TVD)	841.8	Bottoms Up	
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time	
6.5 in	82 m	in @3675m (3219TVD)	975	Circulating Pressure	

MUD PROPERTIES			
Sample From		PIT@23:00	PIT@12:00
Flow Line Temp	°F	n/a	n/a
Depth/TVD	m	3162/2753.6	3162/2753.6
Mud Weight	sp.gr.	1.14@90°F	1.14@90°F
Funnel Viscosity	s/qt	58	57
Rheology Temp	°F	120	120
R600/R300		54/36	53/35
R200/R100		30/26	30/26
R6/R3		8/5	8/5
PV	cP	18	18
YP	lb/100ft²	18	17
10s/10m/30m Gel	lb/100ft²	3/8/11	4/7/11
API Fluid Loss	cc/30 min	6	7.6
HTHP FL Temp	cc/30 min		
Cake API/HTHP	1/32"	1/	1/
Solids	%Vol	7.6	7.6
Oil/Water	%Vol	0/92.4	0/92.4
Sand	%Vol	0.25	0.25
MBT	lb/bbl	7.5	7.5
pH		9.5	9.5
Alkal Mud (Pm)			
Pf/Mf		0.25/1.4	0.25/1.4
Chlorides	mg/l	32000	32000
Hardness Ca	mg/l	640	640
Glycol	% V/V	4	4
PHPA	ppb	1	1
Sulhite Excess	mg/l	50	50
KCl	% Wt	6	6

[illegible]

SOLIDS EQUIP	Size	Hr
VSM Shaker 1	84/84/84/84	0
VSM Shaker 2	120/120/120/120	0
VSM Shaker 3	120/120/120/120	0
VSM Shaker 4	145/145/120/120	0
D-Silter 12 x 4		0
Centrifuge-DFE		0

MUD PROPERTY SPECIFICATIONS	
Weight	1.15 sg
Viscosity	40-60
Filtrate	<5

REMARKS AND TREATMENT

Add Pac UL to lower fluid loss in active pit.
Downhole mud loss includes 24 bbls omitted from yesterdays volume accounting report.

REMARKS

Continue repairs to top-drive.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG	(bbl)	SOLIDS ANALYSIS (%/lb/bbl)	MUD RHEOLOGY & HYDRAULICS		
Rig Up/Service		Oil Added	0	NaCl	2/ 2.1	np/na Values	0.585/0.470
Drilling		Water Added	0	KCl	2.1/ 19.6	kp/ka (lb•s ⁿ /100ft²)	1.000/2.478
Tripping		Mud Received	0	Low Gravity	4.3/ 38.9	Bit Loss (psi / %)	/ 1
Non-Productive Tim	24	Formation	48	Bentonite	.5/ 4.2	Bit HHP (hhp / HSI)	/ 1
Condition Hole		Desilter	0	Drill Solids	3.3/ 29.7	Bit Jet Vel (m/s)	
		Dumped	0	Weight Material	1./ 15.1	Ann. Vel DP (m/min)	
		Other	0	Chemical Conc	- / 5.	Ann. Vel DC (m/min)	
		Sweeps	0	Inert/React	3.5143	Crit Vel DP (m/min)	117
		Shakers	0	Average SG	2.91	Crit Vel DC (m/min)	138
		Centrifuge	0	Carb/BiCarb (m mole/L)	5./ 7.9	ECD @ 2184 (sp.gr.)	1.14

M-I ENGR / PHONE		RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Peter Dwyer	08-9302 3790	08-6363 8872	08-9325 4822	\$ 0.00	\$ 350,545.87



WATER-BASED MUD REPORT No. 42

Date	9/03/2005	Depth/TVD	3460 m / 3020 m
Spud Date	29/01/2005	Mud Type	KCl-Polymer-Glycol
Water Depth	73	Activity	Drilling

Operator : Bass Strait Oil Co.
Report For : G. Harmes / P. Dane
Well Name : Zane Grey 1
Contractor : Diamond Offshore
Report For : Bill Barker

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size	8.5 in HYC RSX1630	Surface	Hole	Pump Make	OILWELL 1700PT NATIONAL 12P-16C
Nozzles	6x14 / 1/32"	30in @128m (128TVD)	830.4	Pump Size	6 X 12.in 6 X 12.in
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	4.274 gal/stk 4.274 gal/stk
5 in	3239 m	13.375in @1091m (1030TVD)	296.6	Pump stk/min	74@97% 72@97%
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	624 gal/min
5 in	139 m	9.625in @2184m (1936TVD)	1127	Bottoms Up	40.1 min 5860 stk
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time	65.2 min 9516 stk
6.5 in	82 m	in @3675m (3219TVD)	776	Circulating Pressure	3300 psi

MUD PROPERTIES

Sample From		F/L@23:20	F/L@12:50
Flow Line Temp	°F	127	115
Depth/TVD	m	3460/3020	3245/2827
Mud Weight	sp.gr.	1.17@120°F	1.15@110°F
Funnel Viscosity	s/qt	59	55
Rheology Temp	°F	120	120
R600/R300		55/40	52/35
R200/R100		31/21	29/22
R6/R3		9/4	8/5
PV	cP	15	17
YP	lb/100ft²	25	18
10s/10m/30m Gel	lb/100ft²	3/7/12	3/8/13
API Fluid Loss	cc/30 min	4.8	5.5
HTHP FL Temp	cc/30 min		
Cake API/HTHP	1/32"	1/	1/
Solids	%Vol	8.3	7.5
Oil/Water	%Vol	0/91.7	0/92.5
Sand	%Vol	0.25	0.25
MBT	lb/bbl	7.5	7.5
pH		9.5	9.5
Alkal Mud (Pm)			
Pf/Mf		0.2/1.2	0.25/1.4
Chlorides	mg/l	34500	32000
Hardness Ca	mg/l	560	600
Glycol	% V/V	4	4
PHPA	ppb	1	1
Sulhite Excess	mg/l	150	150
KCl	% Wt	6.5	6

PRODUCTS USED LAST 24 HRS

Products	Size	Amt
OS-1	25 KG BG	4
SODIUM BICARBONATE	25 KG BG	4
M-I BAR BULK	1 MT BK	3
POTASSIUM CHLORIDE	1 MT BG	1
DEFOAM A	5 GA CN	2
POLYPAC UL	25 KG BG	20
POLY PLUS DRY	25 KG BG	4
GLYDRIL LC	55 GA DM	1
DUO-VIS	25 KG BG	1

SOLIDS EQUIP	Size	Hr
VSM Shaker 1	84/84/84/84	18
VSM Shaker 2	120/120/120/120	18
VSM Shaker 3	120/120/120/120	18
VSM Shaker 4	145/145/120/120	18
D-Silter 12 x 4		8
Centrifuge-DFE		15

MUD PROPERTY SPECIFICATIONS

Weight	1.16 sg
Viscosity	40-60
Filtrate	<5

REMARKS AND TREATMENT

Adding premix with extra Pac UL that was previously made to further lower the fluid loss. Adding KCl to increase mud weight to 1.17 sg as requested. Adding OS-1 oxygen scavenger for corrosion control. Lost mud at shakers while drilling sand sections, maintained fine screens despite losses to minimise low gravity solids.

REMARKS

RIH, drill to 3460 meters. Inclination = 22.6 degrees. Initially problems maintaining pump pressure, changed suction pit and cleaned out sediment from suction lines, good pressure now. Driller reports hole appears to be in good condition. Cuttings appear firm, shiny and well consolidated on shaker screens. Max gas = 18%.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG	(bbl)	SOLIDS ANALYSIS (%/lb/bbl)		MUD RHEOLOGY & HYDRAULICS	
Rig Up/Service	2	Oil Added	0	NaCl	.2/ 2.2	np/na Values	0.459/0.473
Drilling	14	Water Added	0	KCl	2.3/ 21.	kp/ka (lb·s ⁿ /100ft ²)	2.432/1.973
Tripping	5	Mud Received	0	Low Gravity	3.6/ 32.9	Bit Loss (psi / %)	430 / 1
Non-Productive Tim	3	Formation	30	Bentonite	.5/ 4.9	Bit HHP (hhp / HSI)	157 / 1
Condition Hole		Desilter	30	Drill Solids	2.5/ 23.	Bit Jet Vel (m/s)	68
		Dumped	50	Weight Material	2.2/ 32.4	Ann. Vel DP (m/min)	91.65
		Other	0	Chemical Conc	- / 5.	Ann. Vel DC (m/min)	138.68
		Sweeps	0	Inert/React	2.7238	Crit Vel DP (m/min)	100
		Shakers	30	Average SG	3.21	Crit Vel DC (m/min)	117
		Centrifuge	10	Carb/BiCarb (m mole/L)	4/ 6.3	ECD @ 3460 (sp.gr.)	1.25

M-I ENGR / PHONE	RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Peter Dwyer	08-9302 3790	08-6363 8872	\$ 4,603.05	\$ 355,148.92

WATER-BASED MUD REPORT No. 43

Date	10/03/2005	Depth/TVD	3675 m / 3219.8 m
Spud Date	29/01/2005	Mud Type	KCI-Polymer-Glycol
Water Depth	73	Activity	POH to Log

Operator : Bass Strait Oil Co.
Report For : G. Harmes / P. Dane
Well Name : Zane Grey 1
Contractor : Diamond Offshore
Report For : Bill Barker

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size	8.5 in HYC RSX1630	Surface 30in @128m (128TVD)	Hole	Pump Make	OILWELL 1700PT NATIONAL 12P-16C
Nozzles	6x14 / 1/32"		877.8	Pump Size	6 X 12.in 6 X 12.in
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	4.274 gal/stk 4.274 gal/stk
5 in	3454 m	13.375in @1091m (1030TVD)	326.2	Pump stk/min	74@97% 73@97%
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	628 gal/min
5 in	139 m	9.625in @2184m (1936TVD)	1204	Bottoms Up	42.2 min 6206 stk
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time	69.2 min 10166 stk
6.5 in	82 m	in @3675m (3219TVD)	486	Circulating Pressure	3300 psi

MUD PROPERTIES			
Sample From		F/L@22:30	F/L@12:00
Flow Line Temp	°F	130	127
Depth/TVD	m	3675/3219.8	3631/3178
Mud Weight	sp.gr.	1.17@125°F	1.17@120°F
Funnel Viscosity	s/qt	58	59
Rheology Temp	°F	120	120
R600/R300		56/41	57/42
R200/R100		33/22	34/24
R6/R3		9/5	10/6
PV	cP	15	15
YP	lb/100ft²	26	27
10s/10m/30m Gel	lb/100ft²	3/8/12	4/8/14
API Fluid Loss	cc/30 min	4.4	4.5
HTHP FL Temp	cc/30 min		
Cake API/HTHP	1/32"	1/	1/
Solids	%Vol	8.3	8.3
Oil/Water	%Vol	/91.7	/91.7
Sand	%Vol	0.25	0.25
MBT	lb/bbl	7.5	7.5
pH		9	9
Alkal Mud (Pm)			
Pf/Mf		0.15/0.7	0.15/0.8
Chlorides	mg/l	36500	36000
Hardness Ca	mg/l	400	500
Glycol	% V/V	4	4
PHPA	ppb	1	1
Sulhite Excess	mg/l	200	200
KCl	% Wt	6.5	6.5

[illegible]

SOLIDS EQUIP	Size	Hr
VSM Shaker 1	84/84/84/84	22
VSM Shaker 2	120/120/120/120	22
VSM Shaker 3	120/120/120/120	22
VSM Shaker 4	145/145/120/120	22
D-Silter 12 x 4		8
Centrifuge-DFE		18

MUD PROPERTY SPECIFICATIONS	
Weight	1.16 sg
Viscosity	40-60
Filtrate	<5

REMARKS AND TREATMENT

Treat mud with biocide and oxygen scavenger to prevent bacterial degradation while logging. Adding KCl for weight. Reduce fluid loss with Pac UL prior to logging. Running centrifuge to reduce low gravity solids. Adding extra PolyPlus to replace PHPA lost with cuttings. Occasional mud losses at shakers, maintain fine screens to minimise solids build-up.

REMARKS

Continue drilling to 3675 meters (TD). Circulate hole clean, make wiper trip, RIH, condition mud, pump slug and POH for logs.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG	(bbl)	SOLIDS ANALYSIS (%lb/bbl)		MUD RHEOLOGY & HYDRAULICS	
Rig Up/Service		Oil Added	0	NaCl	3/ 3.3	np/na Values	0.450/0.423
Drilling	16	Water Added	0	KCl	2.3/ 21.	kp/ka (lb.s^n/100ft²)	2.647/2.678
Tripping	5	Mud Received	0	Low Gravity	3.6/ 32.5	Bit Loss (psi / %)	436 / 1
Non-Productive Tim		Formation	50	Bentonite	5/ 5.	Bit HHP (hhp / HSI)	160 / 1
Condition Hole	3	Desilter	80	Drill Solids	2.5/ 22.5	Bit Jet Vel (m/s)	68
		Dumped	40	Weight Material	2.2/ 31.8	Ann. Vel DP (m/min)	92.24
		Other	0	Chemical Conc	- / 5.	Ann. Vel DC (m/min)	139.57
		Sweeps	0	Inert/React	2.666	Crit Vel DP (m/min)	104
		Shakers	37	Average SG	3.2	Crit Vel DC (m/min)	120
		Centrifuge	15	Carb/BiCarb (m mole/L)	3/ 15.	ECD @ 3675 (sp.gr.)	1.25

M-I ENGR / PHONE		RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Peter Dwver	08-9302 3790	08-6363 8872	08-9325 4822	\$ 4 800 36	\$ 359 949 28

WATER-BASED MUD REPORT No. 44

Date	11/03/2005	Depth/TVD	3675 m / 3219.8 m
Spud Date	29/01/2005	Mud Type	KCI-Polymer-Glycol
Water Depth	73	Activity	logging

Operator : Bass Strait Oil Co.
Report For : G. Harmes / P. Dane
Well Name : Zane Grey 1
Contractor : Diamond Offshore
Report For : Bill Barker

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA		
Bit Size	8.5 in HYC RSX1630	Surface 30in @128m (128TVD)	Hole 877.8	Pump Make	OILWELL 1700PT	NATIONAL 12P-16C
Nozzles	1/32"			Pump Size	6 X 12.in	6 X 12.in
Drill Pipe Size	Length	Intermediate 13.375in @1091m (1030TVD)	Active Pits 306.2	Pump Cap	gal/stk	gal/stk
5 in	3454 m			Pump stk/min		
Drill Pipe Size	Length	Intermediate 9.625in @2184m (1936TVD)	Total Circulating Vol 1184	Flow Rate	gal/min	
5 in	139 m			Bottoms Up		
Drill Collar Size	Length	Production or Liner in @3675m (3219TVD)	In Storage 486	Total Circ Time		
6.5 in	82 m			Circulating Pressure		

MUD PROPERTIES			
Sample From		Pit@23:00	Pit@13:00
Flow Line Temp	°F	n/a	n/a
Depth/TVD	m	3675/3219.8	3675/3219.8
Mud Weight	sp.gr.	1.17@90°F	1.17@90°F
Funnel Viscosity	s/qt	61	59
Rheology Temp	°F	120	120
R600/R300		58/42	56/41
R200/R100		33/23	33/22
R6/R3		9/5	9/5
PV	cP	16	15
YP	lb/100ft²	26	26
10s/10m/30m Gel	lb/100ft²	4/8/13	3/7/13
API Fluid Loss	cc/30 min	4.4	4.4
HTHP FL Temp	cc/30 min		
Cake API/HTHP	1/32"	1/	1/
Solids	%Vol	8.3	8.3
Oil/Water	%Vol	0/91.7	0/91.7
Sand	%Vol	0.25	0.25
MBT	lb/bbl	7.5	7.5
pH		9	9
Alkal Mud (Pm)			
Pf/Mf		0.15/0.7	0.15/0.7
Chlorides	mg/l	36500	36500
Hardness Ca	mg/l	400	400
Glycol	% V/V	4	4
PHPA	ppb	1	1
Sulhite Excess	mg/l	150	200
KCl	% Wt	6.5	6.5

PRODUCTS USED LAST 24 HRS		
Products	Size	Amt
CAUSTIC SODA (DRY)	25 KG DM	1
POLYPAC UL	25 KG BG	2
DUO-VIS	25 KG BG	3

SOLIDS EQUIP	Size	Hr
VSM Shaker 1	84/84/84/84	0
VSM Shaker 2	120/120/120/120	0
VSM Shaker 3	120/120/120/120	0
VSM Shaker 4	145/145/120/120	0
D-Silter 12 x 4		0
Centrifuge-DFE		0

MUD PROPERTY SPECIFICATIONS	
Weight	1.16 sg
Viscosity	40-60
Filtrate	<5

REMARKS AND TREATMENT

Inventory corrections:
Incorrectly entered 12 Glycol MC instead of LC. Citric Acid, 40 sacks on pallet, not 44 as entered on Rpt # 42.
Re-stacked all chems in store room and did inventory check ready for back loading. Chems used today is inventory correction.

REMARKS

Rig up and run wireline logs - 24 hours logging, no problems.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG	(bbl)	SOLIDS ANALYSIS (%lb/bbl)		MUD RHEOLOGY & HYDRAULICS	
Rig Up/Service		Oil Added	0	NaCl	.3/ 3.3	np/na Values	0.466/0.435
Drilling		Water Added	0	KCl	2.3/ 21.	kp/ka (lb/s^n/100ft²)	2.456/2.623
Tripping		Mud Received	0	Low Gravity	3.6/ 32.5	Bit Loss (psi / %)	/1
Non-Productive Tim		Formation	0	Bentonite	.5/ 5.	Bit HHP (hhp / HSI)	/1
Condition Hole		Desilter	20	Drill Solids	2.5/ 22.5	Bit Jet Vel (m/s)	
Wireline Logs	24	Dumped	0	Weight Material	2.2/ 31.8	Ann. Vel DP (m/min)	
		Other	0	Chemical Conc	- / 5.	Ann. Vel DC (m/min)	
		Sweeps	0	Inert/React	2.666	Crit Vel DP (m/min)	107
		Shakers	0	Average SG	3.2	Crit Vel DC (m/min)	124
		Centrifuge	0	Carb/BiCarb (m mole/L)	3/ 15.	ECD @ 3675 (sp.gr.)	1.17

M-I ENGR / PHONE		RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Peter Dwyer	08-9302 3790	08-6363 8872	08-9325 4822	\$ 874.49	\$ 360 823.77

WATER-BASED MUD REPORT No. 45

Date	12/03/2005	Depth/TVD	3675 m / 3219.8 m
Spud Date	29/01/2005	Mud Type	KCI-Polymer-Glycol
Water Depth	73	Activity	Logging

Operator : Bass Strait Oil Co.
Report For : G. Harmes / P. Dane
Well Name : Zane Grey 1
Contractor : Diamond Offshore
Report For : Bill Barker

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA		
Bit Size	8.5 in HYC RSX1630	Surface	Hole	Pump Make	OILWELL 1700PT	NATIONAL 12P-160
Nozzles	1/32"	30in @128m (128TVD)	967.8	Pump Size	6 X 12.in	6 X 12.in
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	gal/stk	gal/stk
5 in	m	13.375in @1091m (1030TVD)	277.2	Pump stk/min		
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	gal/min	
5 in	m	9.625in @2184m (1936TVD)	277.2	Bottoms Up		
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time		
6.5 in	m	in @3675m (3219TVD)	377	Circulating Pressure		

MUD PROPERTIES		
Sample From	PIT@11:00	PIT@23:00
Flow Line Temp °F	n/a	n/a
Depth/TVD m	3675/3219.8	3675/3219.8
Mud Weight sp.gr	1.17@90°F	1.17@90°F
Funnel Viscosity s/qt	63	62
Rheology Temp °F	120	120
R600/R300	56/41	58/42
R200/R100	33/22	34/22
R6/R3	9/5	9/6
PV cP	15	16
YP lb/100ft²	26	26
10s/10m/30m Gel lb/100ft²	4/8/12	3/8/14
API Fluid Loss cc/30 min	4.5	4.4
HTHP FL Temp cc/30 min		
Cake API/HTHP 1/32"	1/	1/
Solids %Vol	8.3	8.3
Oil/Water %Vol	0/91.7	0/91.7
Sand %Vol	0.25	0.25
MBT lb/bbl	7.5	7.5
pH	9.0	9
Alkal Mud (Pm)		
Pf/Mf	0.15/0.7	0.15/0.7
Chlorides mg/l	36500	36500
Hardness Ca mg/l	400	400
Glycol % V/V	4	4
PHPA ppb	1	1
Sulhite Excess mg/l	150	150
KCl % Wt	6.5	6.5

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SOLIDS EQUIP	Size	Hr
VSM Shaker 1	84/84/84/84	0
VSM Shaker 2	120/120/120/120	0
VSM Shaker 3	120/120/120/120	0
VSM Shaker 4	145/145/120/120	0
D-Silter 12 x 4		0
Centrifuge-DFE		0

MUD PROPERTY SPECIFICATIONS	
Weight	1.16 sg
Viscosity	40-60
Filtrate	<5

REMARKS AND TREATMENT		REMARKS	
Mud loggers report 48 bbls lost to formation while logging.		Continue logging operations.	

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG	(bbl)	SOLIDS ANALYSIS (%/lb/bbl)		MUD RHEOLOGY & HYDRAULICS	
Rig Up/Service		Oil Added	0	NaCl	.3/ 3.3	np/na	Values
Drilling		Water Added	0	KCl	2.3/ 21.	kp/ka	(lb·s ⁿ /100ft²)
Tripping		Mud Received	0	Low Gravity	3.6/ 32.5	Bit Loss	(psi / %)
Non-Productive Tim		Desilter	0	Bentonite	.5/ 5.	Bit HHP	(hhp / HSI)
Condition Hole		Dumped	0	Drill Solids	2.5/ 22.5	Bit Jet Vel	(m/s)
Wireline Logs	24	Other	0	Weight Material	2.2/ 31.8	Ann. Vel DP	(m/min)
		Sweeps	0	Chemical Conc	- / 5.	Ann. Vel DC	(m/min)
		Shakers	0	Inert/React	2.666	Crit Vel DP	(m/min)
		Centrifuge	0	Average SG	3.2	Crit Vel DC	(m/min)
		Formation	48	Carb/BiCarb (m mole/L)	3/ 15.		

M-I ENGR / PHONE		RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Peter Dwver	08-9302 3790	08-6363 8872	08-9325 4822	\$ 0.00	\$ 360,823.77

WATER-BASED MUD REPORT No. 46

Date	13/03/2005	Depth/TVD	3675 m / 3219.8 m
Spud Date	29/01/2005	Mud Type	KCI-Polymer-Glycol
Water Depth	73	Activity	Logging

Operator : Bass Strait Oil Co.
Report For : G. Harmes / P. Dane
Well Name : Zane Grey 1
Contractor : Diamond Offshore
Report For : Bill Barker

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size	8.5 in HYC RSX1630	Surface 30in @128m (128TVD)	Hole	Pump Make	OILWELL 1700PT NATIONAL 12P-16C
Nozzles	1/32"		967.8	Pump Size	6 X 12.in
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	gal/stk gal/stk
5 in	m	13.375in @1091m (1030TVD)	257.2	Pump stk/min	
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	gal/min
5 in	m	9.625in @2184m (1936TVD)	257.2	Bottoms Up	
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time	
6.5 in	m	in @3675m (3219TVD)	377	Circulating Pressure	

MUD PROPERTIES		
Sample From	Pit@22:40	PIT@13:00
Flow Line Temp °F	n/a	n/a
Depth/TVD m	3675/3219.8	3675/3219.8
Mud Weight sp.gr.	1.17@90°F	1.17@90°F
Funnel Viscosity s/qt	63	62
Rheology Temp °F	120	120
R600/R300	58/42	56/41
R200/R100	34/22	35/23
R6/R3	9/6	9/5
PV cP	16	15
YP lb/100ft²	26	26
10s/10m/30m Gel lb/100ft²	4/8/15	3/8/14
API Fluid Loss cc/30 min	4.4	4.4
HTHP FL Temp cc/30 min		
Cake API/HTHP 1/32"	1/	1/
Solids %Vol	8.3	8.3
Oil/Water %Vol	0/91.7	0/91.7
Sand %Vol	0.25	0.25
MBT lb/bbl	7.5	7.5
pH	9	9
Alkal Mud (Pm)		
Pf/Mf	0.15/0.7	0.15/0.7
Chlorides mg/l	36500	36500
Hardness Ca mg/l	400	400
Glycol % V/V	4	4
PHPA ppb	1	1
Sulhite Excess mg/l	100	100
KCl % Wt	6.5	6.5

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SOLIDS EQUIP	Size	Hr
VSM Shaker 1	84/84/84/84	0
VSM Shaker 2	120/120/120/120	0
VSM Shaker 3	120/120/120/120	0
VSM Shaker 4	145/145/120/120	0
D-Silter 12 x 4		0
Centrifuge-DFE		0

MUD PROPERTY SPECIFICATIONS	
Weight	1.16 sg
Viscosity	40-60
Filtrate	<5

<p>REMARKS AND TREATMENT</p> <p>Lost 40 bbls to formation while logging.</p>	<p>REMARKS</p> <p>Continue logging operations.</p>
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TIME DISTR	Last 24 Hrs	MUD VOL ACCTG (bbl)	SOLIDS ANALYSIS (%lb/bbl)		MUD RHEOLOGY & HYDRAULICS	
Rig Up/Service		Oil Added	0	NaCl	.3/ 3.3	np/na Values
Drilling		Water Added	0	KCl	2.3/ 21.	kp/ka (lb•s^n/100ft²)
Tripping		Mud Received	0	Low Gravity	3.6/ 32.5	Bit Loss (psi / %)
Non-Productive Tim		Desilter	0	Bentonite	.5/ 5.	Bit HHP (hhp / HSI)
Condition Hole		Dumped	20	Drill Solids	2.5/ 22.5	Bit Jet Vel (m/s)
Wireline Logs	24	Other	0	Weight Material	2.2/ 31.8	Ann. Vel DP (m/min)
		Sweeps	0	Chemical Conc	- / 5.	Ann. Vel DC (m/min)
		Shakers	0	Inert/React	2.666	Crit Vel DP (m/min)
		Centrifuge	0	Average SG	3.2	Crit Vel DC (m/min)
		Formation	0	Carb/BiCarb (m mole/L)	3/ 15.	

M-I ENGR / PHONE		RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Peter Dwver	08-9302 3790	08-6363 8872	08-9325 4822	\$ 0.00	\$ 360 823.77

WATER-BASED MUD REPORT No. 47

Date	14/03/2005	Depth/TVD	3675 m / 3219.8 m
Spud Date	29/01/2005	Mud Type	KCI-Polymer-Glycol
Water Depth	73	Activity	Circ for P & A

Operator : Bass Strait Oil Co.
Report For : G. Harmes / P. Dane
Well Name : Zane Grey 1
Contractor : Diamond Offshore
Report For : Bill Barker

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

DRILLING ASSEMBLY		CASING		MUD VOLUME (bbl)		CIRCULATION DATA					
Bit Size	8.5 in HYC RSX1630	Surface		Hole		Pump Make	OILWELL 1700PT	NATIONAL 12P-16C			
Nozzles	1/32"	30in @128m (128TVD)		897.9(Tot)/829(Bit)		Pump Size	6 X 12.in	6 X 12.in			
Drill Pipe Size	Length	Intermediate		Active Pits		Pump Cap	4.274 gal/stk	4.274 gal/stk			
5 in	3210 m	13.375in @1091m (1030TVD)		307.1		Pump stk/min	71@97%	71@97%			
Drill Pipe Size	Length	Intermediate		Total Circulating Vol		Flow Rate		607 gal/min			
2.875 in	180 m	9.625in @2184m (1936TVD)		1136.1		Bottoms Up		44.2 min 6272 stk			
Drill Collar Size	Length	Production or Liner		In Storage		Total Circ Time		78.6 min 11163 stk			
in	m	in @3675m (3219TVD)		377		Circulating Pressure		2100 psi			
MUD PROPERTIES				PRODUCTS USED LAST 24 HRS							
Sample From		F/L@23:00	PIT@11:30	Products					Size	Amt	
Flow Line Temp		°F	105								
Depth/TVD		m	3675/2969								
Mud Weight		sp.gr.	1.17@105°F								
Funnel Viscosity		s/qt	64								
Rheology Temp		°F	120								
R600/R300			61/44								
R200/R100			35/24								
R6/R3			10/6								
PV		cP	17								
YP		lb/100ft²	27								
10s/10m/30m Gel		lb/100ft²	5/9/15								
API Fluid Loss		cc/30 min	4.5								
HTHP FL Temp		cc/30 min									
Cake API/HTHP		1/32"	1/								
Solids		%Vol	8.3								
Oil/Water		%Vol	0/91.7								
Sand		%Vol	0.25								
MBT		lb/bbl	7.5								
pH			9								
Alkal Mud (Pm)											
Pf/Mf			0.15/0.7								
Chlorides		mg/l	36500								
Hardness Ca		mg/l	420								
Glycol		% V/V	4								
PHPA		ppb	1								
Sulhite Excess		mg/l	60								
KCl		% Wt	6.5								
REMARKS AND TREATMENT				REMARKS							
None required.				Complete logging, RIH with 2 7/8" cement stinger on drill pipe to 3390 meters. Circulate bottom up prior to cementing for P and A.							
TIME DISTR		Last 24 Hrs		MUD VOL ACCTG (bbl)		SOLIDS ANALYSIS (%/lb/bbl)		MUD RHEOLOGY & HYDRAULICS			
Rig Up/Service		1		Oil Added		0		np/na Values			
Drilling				Water Added		0		0.471/0.395			
Tripping		7		Mud Received		0		kp/ka (lb*s^n/100ft²)			
Non-Productive Tim				Desilter		0		2.484/3.359			
Condition Hole		2		Dumped		0		Bit Loss (psi / %)			
Wireline Logs		14		Other		0		/ 1			
				Sweeps		0		Bit HHP (hbp / HSI)			
				Shakers		0		/ 1			
				Centrifuge		0		Bit Jet Vel (m/s)			
				Formation		20		Ann. Vel DP (m/min)			
								Ann. Vel DC (m/min)			
								67.08			
								111			
								99			
								ECD @ 3390 (sp.gr.)			
								1.25			
M-I ENGR / PHONE				RIG PHONE		WAREHOUSE PHONE		DAILY COST		CUMULATIVE COST	
Peter Dwver 08-9302 3790				08-6363 8872		08-9325 4822		\$ 0.00		\$ 360.823 77	

**WATER-BASED MUD REPORT No. 48**

Date	15/03/2005	Depth/TVD	3675 m / 3219.8 m
Spud Date	29/01/2005	Mud Type	KCl-Polymer-Glycol
Water Depth	73	Activity	P and A

Operator : Bass Strait Oil Co.
Report For : G. Harmes / P. Dane
Well Name : Zane Grey 1
Contractor : Diamond Offshore
Report For : Bill Barker

Field/Area : Gippsland
Description : Exploration
Location : Vic-P42
M-I Well No. : 17396

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size	8.5 in HYC RSX1630	Surface	Hole	Pump Make	OILWELL 1700PT NATIONAL 12P-16C
Nozzles	1/32"	30in @128m (128TVD)	897.9(Tot)/829(Bit)	Pump Size	6 X 12.in 6 X 12.in
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	4.274 gal/stk 4.274 gal/stk
5 in	3210 m	13.375in @1091m (1030TVD)	316.1	Pump stk/min	71@97% 71@97%
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	607 gal/min
2.875 in	180 m	9.625in @2184m (1936TVD)	1145.1	Bottoms Up	44.2 min 6272 stk
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time	79.2 min 11251 stk
in	m	in @3675m (3219TVD)	377	Circulating Pressure	2100 psi

MUD PROPERTIES

Sample From		PIT@21:00	PIT@10:00
Flow Line Temp	°F	n/a	N/A
Depth/TVD	m	3675/3219.8	3675/3219.8
Mud Weight	sp.gr.	1.17@95°F	1.17@95°F
Funnel Viscosity	s/qt	65	64
Rheology Temp	°F	120	120
R600/R300		61/44	60/43
R200/R100		34/24	33/22
R6/R3		9/6	8/5
PV	cP	17	17
YP	lb/100ft²	27	26
10s/10m/30m Gel	lb/100ft²	5/10/15	4/9/15
API Fluid Loss	cc/30 min	4.6	4.6
HTHP FL Temp	cc/30 min		
Cake API/HTHP	1/32"	1/	1/
Solids	%Vol	8.3	8.3
Oil/Water	%Vol	0/91.7	0/91.7
Sand	%Vol	0.25	0.25
MBT	lb/bbl	7.5	7.5
pH		9.5	9.5
Alkal Mud (Pm)			
Pf/Mf		0.25/1.2	0.15/0.7
Chlorides	mg/l	36500	36500
Hardness Ca	mg/l	440	420
Glycol	% V/V	4	4
PHPA	ppb	1	1
Sulhite Excess	mg/l	150	150
KCl	% Wt	6.5	6.5

PRODUCTS USED LAST 24 HRS

Products	Size	Amt
CALCIUM CHLORIDE	25 KG BG	28
OS-1	25 KG BG	6
CAUSTIC SODA (DRY)	25 KG DM	3
M-I BAR BULK	1 MT BK	4
GLUTE 25	25 LT CN	3

SOLIDS EQUIP	Size	Hr
VSM Shaker 1	84/84/84/84	4
VSM Shaker 2	120/120/120/120	4
VSM Shaker 3	120/120/120/120	4
VSM Shaker 4	145/145/120/120	4
D-Silter 12 x 4		0
Centrifuge-DFE		0

MUD PROPERTY SPECIFICATIONS

Weight	1.16 sg
Viscosity	40-60
Filtrate	<5

REMARKS AND TREATMENT

Inhibit mud with caustic soda, biocide and oxygen scavenger. Used Calcium Chloride for cement top job. Pump barite slugs as required. Gel used for high viscosity pills.

REMARKS

Spot 10-bbl hi-vis pill at 3390m. Pull back to 3350m. Set Plug #1 from 3350m to 3250m. Pull back to 3150m and circ b/u. Lay down pipe. Spot 15 bbls hi vis pill at 2290 meters. Set plug #2 from 2230m to 2130m. Circ mud, no cement. RIH and tag cement, displace with inhibited mud. POH and lay out pipe.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG	(bbl)	SOLIDS ANALYSIS (%/lb/bbl)		MUD RHEOLOGY & HYDRAULICS	
Rig Up/Service		Oil Added	0	NaCl	3/ 3.3	np/na Values	0.471/0.395
Drilling		Water Added	0	KCl	2.3/ 21.	kp/ka (lb•s^n/100ft²)	2.484/3.359
Tripping		Mud Received	0	Low Gravity	3.6/ 32.5	Bit Loss (psi / %)	/ 1
Non-Productive Tim	24	Desilter	0	Bentonite	5/ 5.	Bit HHP (hhp / HSI)	/ 1
Condition Hole		Dumped	0	Drill Solids	2.5/ 22.5	Bit Jet Vel (m/s)	
Wireline Logs		Other	0	Weight Material	2.2/ 31.8	Ann. Vel DP (m/min)	89.15
		Sweeps	0	Chemical Conc	- / 5.	Ann. Vel DC (m/min)	67.08
		Shakers	0	Inert/React	2.666	Crit Vel DP (m/min)	111
		Centrifuge	0	Average SG	3.2	Crit Vel DC (m/min)	99
		Formation	0	Carb/BiCarb (m mole/L)	5/ 7.9	ECD @ 3390 (sp.gr.)	1.25

M-I ENGR / PHONE	RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Peter Dwyer 08-9302 3790	08-6363 8872	08-9325 4822	\$ 1,846.95	\$ 362,670.72

APPENDIX 20

DRILLING DATA ZANEGREY-1

(By Independent Data Services [IDS])



Bass Strait Oil Company Limited

Well : ZaneGrey-1

Rig : Ocean Patriot

Drilling Data Appendix

Part 1 : Well Summary

- Well Overview
- Summary Sheet
- Well History
- Phase Summary

Well Summary

Well Objective :

The primary objective of the well is to verify the depth (+/- 50m) of the Top of the Latrobe Group @ 2226mRT (TVD), if within prognosis then the primary targets are the Kingfish and Volador formations.

Country :	Australia
Permit :	Vic / P-42
Well :	ZaneGrey-1
Well Type :	EXPLORATION
Operating Company :	Bass Strait Oil Company Limited
Rig :	Ocean Patriot

Latitude :	38 Deg 34 Min 31.64 Sec
Longitude :	147 Deg 59 Min 16.27 Sec
UTM North :	5729856.42
UTM East :	586049.89
DFE above MSL :	21.5m
Water Depth :	72.5m
Planned TD :	3692.0m
Actual TD :	3675.0m

On Location Date / Time :	27 Jan 2005 / 1655
Spud Date / Time :	29 Jan 2005 / 1430
TD Reached Date / Time :	10 Mar 2005 / 17:00
Rig Released Date / Time :	18 Mar 2005 / 17:30
Total Days Spud / Total Depth :	48.12
Total Days on Operations :	50.50
Total Days Budgeted :	28.83

Party	Working Interest Stake	Comment
Bass Strait Oil Company Limited		50% Operator.
Inpex Corporation		50%
Bass Strait Oil Company Limited		50% Operator.
Inpex Corporation		50%
Bass Strait Oil Company Limited		50% Operator.
Inpex Corporation		50%

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 17:30

Well History

Well: ZaneGrey-1

#	Date	Depth	24 Hour Summary
1	27 Jan 2005	0	Pulled anchors on Grayling-1. Commenced tow at 05:00 hrs. Moved rig to ZaneGrey-1 location, commenced running anchors.
2	28 Jan 2005	0	Completed anchor handling operations, cross tensioned same, made up and racked back 36" BHA, picked up 5" drill pipe, commenced making up 30 x 20" conductor string.
3	29 Jan 2005	129.5	Made up conductor string and hung off in moonpool, continued to pick up 5" drill pipe, made up cement stand, made up 36" BHA and drilled to TD, ran PGB and conductor and cemented same.
4	30 Jan 2005	684.0	Waited on conductor cement, made up 16" BHA and ran in the hole, drilled out 20" shoe, drilled ahead in 16" hole.
5	31 Jan 2005	1080.0	Directionally drilled ahead in 16" hole.
6	01 Feb 2005	1095.0	Directionally drilled to TD in 16" hole. Circulated, displaced and pulled out of the hole. Rigged up and ran 13 3/8" casing and cemented same.
7	02 Feb 2005	1095.0	Laid down 18 3/4" wellhead running tool and Dowell Deepsea Express cement head, picked up riser double, made up same to BOP stack and commenced running BOP stack and riser. Waited on weather before landing out BOP stack.
8	03 Feb 2005	1095.0	Continued to wait on weather, landed out BOP stack, installed diverter, tested BOP stack, rigged down riser handling equipment.
9	04 Feb 2005	1098.0	Made up 12 1/4" BHA, troubleshot MWD, performed 4,500 psi connector test, laid out MWD, picked up new MWD, ran in the hole with 12 1/4" BHA, drilled out shoe track while displacing to KCI mud system.
10	05 Feb 2005	1691.0	Circulated hole clean, conducted FIT, drilled ahead in 12 1/4" hole, changed over to spare Kelly hose after washing standpipe number 1.
11	06 Feb 2005	2103.0	Changed over to second standpipe due to wash in the primary standpipe. Continued drilling 12 1/4" hole. Incident with top drive system causing a stand of drill pipe to bend. This stand was racked back and the motor alignment cylinder on the top drive system was replaced. Pulled out of hole inspecting all drill pipe on the way out.
12	07 Feb 2005	2315.0	Finished circulating at the shoe. Pulled out of the hole. Changed out the MWD pulser. Adjusted the bend in the motor. Surface tested MWD, motor and adjustable gauge stabiliser. Ran in the hole to the 13 3/8" casing shoe. Circulated and conditioned the mud. Continued to run in the hole having to wash and ream down from 1916 m to 2103 m due to tight hole. Drilled ahead 12 1/4" hole.
13	08 Feb 2005	2697.0	Drilled ahead 12 1/4" hole. Difficult drilling after the top of the Gurnard formation was drilled. High torque.
14	09 Feb 2005	2702.0	Continued to drill 12 1/4" directional hole with mud motor assembly in rotary mode from 2697 m to 2702 m. Difficulty drilling. High torque. On bottom torque 28 klbs. String and motor stalling. Pull out of the hole with 5" drill pipe to change the bit and bottom hole assembly. Change out bit and run in hole with a rotary assembly. Circulate at the shoe while slipping and cutting drill line and serviced the top drive. Continued running in the hole. Wash and ream from 1767 m to 2220 m due to tight hole.
15	10 Feb 2005	2741.0	Continued washing and reaming to back to bottom. Drilled ahead in 12 1/4" hole. Difficulty drilling. High torque. 25 klbs to 32 klbs torque. Swivel packing washed on top drive system. Circulate through circulation hose and subs while swivel packing repaired. Continued drilling ahead in 12 1/4" hole.
16	11 Feb 2005	2772.5	Drilled to section TD. Pulled out of hole. Difficulty pulling out of hole from 2772 m to 2540 m. Short wiper trip from 1968 m back down to 2772 m. Good hole. Pulled out of hole. Good hole.
17	12 Feb 2005	2772.5	Continued pulling out of the hole from 1480 m to 246 m. Continued pulling the bottom hole assembly out of the hole, laying out the bit and racking the same back in the derrick. Rigged up to run 9 5/8" casing. Continued running 9 5/8" casing.
18	13 Feb 2005	2772.5	Continued to pull 9 5/8" casing out of the hole. Racked back shoe track in the derrick. Rigged down casing handling gear. Rigged up drill pipe handling gear. Set the 13 3/8" wear bushing. Ran in hole with 12 1/4" hole wiper assembly.
19	14 Feb 2005	2772.5	Continued to run in the hole with 5" drill pipe. Wash through tight spot / obstruction at 1777m. Continue to wash and ream to 2284 m. Circulate hole clean. Pull out of the hole with 5" drill pipe.
20	15 Feb 2005	2772.5	Continued to backream the short wiper trip to 1740 m. Reaming in the hole to 2735 m. Circulate hole clean. Continued pulling out of the hole.
21	16 Feb 2005	2772.5	Continued pulling out of the hole. Racked back BHA in derrick. Rigged up to run 9 5/8" casing. Ran 9 5/8" casing having to wash/ream tight spots.
22	17 Feb 2005	2772.5	Continued running 9 5/8" casing, washed down through tight spots. Unable to work casing past 2194m. Layed out 8 joints of casing. Made up hanger joint and cement stinger. RIH with landing string. Washed casing to bottom. Circulated 2 x bottoms up. Pumped cement. Rigged down cement lines and running tool.

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 17:30

23	18 Feb 2005	2772.5	Cemented 9 5/8" casing, changed out wellhead seal assembly and tested same, made up 8 1/2" clean out BHA, ran wearbushing, made up weight-set test tool.
24	19 Feb 2005	2772.5	Tested BOP stack, ran in the hole with 8 1/2" cleanout BHA, tested 9 5/8" casing, drilled 9 5/8" cement/shoetrack.
25	20 Feb 2005	2170.0	Continued washing and reaming, conducted FIT, pulled out of the hole with 8 1/2" cleanout BHA, ran in the hole with 2 7/8" cement stinger, set cement plug, dressed plug to 2,170m.

Well: ZaneGrey-1 ST1

#	Date	Depth	24 Hour Summary
1	20 Feb 2005	2170.0	POOH from 2170m (dressed off plug). Pulled back to PU extra DP.
2	21 Feb 2005	2190.0	Picked up drill pipe while waiting on cement, tagged cement, pulled out of the hole, picked up 8 1/2" directional BHA, ran in the hole and tagged plug, commenced time drilling to kick off.
3	22 Feb 2005	2255.0	Drilled/slid in 8 1/2" hole.
4	23 Feb 2005	2541.0	Directionally drilled ahead in 8 1/2" hole.
5	24 Feb 2005	2886.0	Drilling ahead 8 1/2" hole.
6	25 Feb 2005	3107.0	Drilled ahead 8 1/2" hole, difficult sliding. Bit unable to penetrate 3107 m. Pull out of the hole to change the bit.
7	26 Feb 2005	3107.0	Continued to pull out of hole. On surface it was found that the motor bit box had parted from the lower bearing housing of the motor and was left downhole. Fish left in hole:- bit, motor bit box and motor drive shaft (~1m long). Ran in hole with cement stinger. Set cement plug.

Well: ZaneGrey-1 ST2

#	Date	Depth	24 Hour Summary
1	26 Feb 2005	2900.0	Set cement plug. Pulled cement stinger out of the hole. Layed out same. Pickup 8 1/2" bottom hole assembly.
2	27 Feb 2005	3107.0	Made up 8 1/2" directional bottom hole assembly. Run in hole with same on 5" drill pipe. Washed down from 2996 m. Unable to tag hard cement. Attempt an openhole side track by time drilling at 3075 m to 3082 m. Unsuccessful. Slid from 3082 m to 3107 m. Unable to kick off. Pull out of hole.
3	28 Feb 2005	2946.0	Continued to pull bottom hole assembly out of the hole. Ran in hole with cement stinger. Pumped 160 m cement plug. Pulled out of the hole with cement stinger. Ran in hole with 8 1/2" directional assembly.
4	01 Mar 2005	2995.0	Continued running in the hole. Washed and reamed from 2900 m to 2945 m. Unable to tag hard cement. Worked drill string repeatedly up and down attempting to create a ledge. Time drilled attempting to open hole sidetrack.
5	02 Mar 2005	3031.0	Continued sliding with 180 deg toolface. Unable to kickoff. Pull out of the hole.
6	03 Mar 2005	3060.0	Continued pulling the bottom hole assembly out of the hole. Changed out motor and bit. Continued running in hole. Time drilled from 3031 m to 3060 m with 180 deg toolface.
7	04 Mar 2005	3070.0	Continued time drilling with 180 deg toolface. Pulled out of the hole. Changed out bit. Ran in hole. Circulated and conditioned mud.
8	05 Mar 2005	3092.0	Slid ahead sidetracking from the original well bore at 3075 m. Pulled out of hole to change bit and BHA. Run in hole with new BHA.
9	06 Mar 2005	3162.0	Continued to run in the hole. Drill ahead. Top drive problems. Pulled back into the casing shoe to continue repairing top drive system.
10	07 Mar 2005	3162.0	Continued to trouble shoot electrical fault with the top drive system.
11	08 Mar 2005	3162.0	Continued to trouble shoot electrical fault with the top drive system.
12	09 Mar 2005	3480.0	Repaired top drive system. Directionally drilling ahead in rotary mode.
13	10 Mar 2005	3675.0	Drilled to well TD. Circulated hole clean. Short wiper trip to 3070 m. Pull out of the hole.
14	11 Mar 2005	3675.0	Continued pulling out of the hole with BHA. Layed out MWD, mud motor and bit. Rigged up for wireline logging. Wireline logging with Grand Slam tool.
15	12 Mar 2005	3675.0	Continued running wireline Grand Slam logging tool. Layed out same. Made up RCI logging tool. Ran in hole with same. RCI logging tool stuck in hole. Unable to pull TCI tool free. Ran in hole stripping over wireline to fish wireline RCI tool.
16	13 Mar 2005	3675.0	Continued stripping in the hole over the wireline cable. Retrieve fish. Reterminate wireline cable. Continued wireline RCI operations taking pressure samples. RCI tool failed. DODI continued trouble shooting top drive system from 3:30 am onwards.
17	14 Mar 2005	3675.0	Pulled out of the hole with wireline RCI tool. Layed out side entry sub. Parted wireline cable at the weak point.

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 17:30

18	15 Mar 2005	3675.0	Retrieve wireline cable. Continued pulling out of the hole. Layed out RCI tool. Picked up cement stinger. Ran in hole with the cement stinger. Circulated and spotted HI-VIS pill.
19	16 Mar 2005	3675.0	Pumped P&A cement plug #1. Pulled out of the hole laying out 5" drill pipe. Pumped P&A cement plug #2. Pulled out of the hole laying out 5" drill pipe. Displaced well to inhibited mud.
20	17 Mar 2005	3675.0	Layed out drill pipe. Retrieved wear bushing. Cut 9 5/8" casing. Layed out 9 5/8" casing. Set 13 3/8" bridge plug. Set cement plug #3. Pull BOP's.
21	18 Mar 2005	3675.0	Layed out marine riser. Nipped down BOP. Cut 20" and 30" casing. Retrieve 20" and 30" casing with PGB. Layed out same. Seabed survey with ROV.
			Finished pulling anchors. Handover rig to Woodside.

Part 2 : Drilling Data

- Bit Record
- BHA Record
- Mud Record
- Survey Data
- Casing Tally

Wellname : ZaneGrey-1					Drilling Co. : -					Rig : Ocean Patriot				
DFE above MSL : 21.5m					Lat : 38 Deg 34 Min 31.64 Sec					Spud Date : 29 Jan 2005				
Water Depth : 72.5m					Long : 147 Deg 59 Min 16.27 Sec					Spud Time: 1430				
										Release Date : 18 Mar 2005				
										Release Time: 17:30				

Bit Record

Well: ZaneGrey-1																										
Date In	IADC	Bit#	Size [in]	Ser #	Mfr	Type	Jets # x [32nd"]	D.In [m]	D.Out [m]	Prog [m]	Hrs o/b	SPP [psi]	Flow [gpm]	WOB [klb]	RPM	MW	TFA	ROP [m/hr]	I	O1	D	L	B	G	O2	R
29 Jan 2005	1-1-1	1	26.00	569645	Smith	GXIVV-6C	3 x 26	94.0	129.5	35.5	1.2	800	855	2	77	8.58	1.555	29.58	1	1	NO	A	E	I	NO	TD
30 Jan 2005	1-1-5	2	16.00	MM4714	Smith	GXIV-6C	2 x 22 2 x 18	129.5	1095.0	965.5	22.4	2717	1103	22	59	8.75	1.239	43.10	1	1	NO	A	E	I	NO	TD
04 Feb 2005	S223	3	12.25	10648437	Security	FSX563	2 x 14 5 x 15	1095.0	2103.0	1008	20.7	2911	949	11	73	8.70	1.164	48.70	1	2	BT	G	X	I	CT	RIG
07 Feb 2005	S223	3RR	12.25	10648437	Security	FSX563	3 x 20	2103.0	2702.0	599	19.52	2561	859	10	70	9.40	0.92	30.69	2	3	BT	G	X	4	WT	PR
09 Feb 2005	437X	4	12.25	10378981	Security	XL12	3 x 20	2702.0	2772.5	70.5	10.9	3546	890	29	123	9.70	0.92	6.47	3	3	BT	M1	E	I	WT	TD
13 Feb 2005	216S	5	12.25	718015	Security	XS-4	3 x 20	2772.5	2735.0	N/A	0						0.92	0.00	1	2	WT	A	E	I	NO	TD
19 Feb 2005	117	6	8.50	10676290	Security	EBXSC1S	3 x 20	2158.0	2260.0	102	11.3	1296	489	3	60	9.16	0.92	9.03	1	1	NO	A	E	1	NO	BHA

Well: ZaneGrey-1 ST1																										
Date In	IADC	Bit#	Size [in]	Ser #	Mfr	Type	Jets # x [32nd"]	D.In [m]	D.Out [m]	Prog [m]	Hrs o/b	SPP [psi]	Flow [gpm]	WOB [klb]	RPM	MW	TFA	ROP [m/hr]	I	O1	D	L	B	G	O2	R
21 Feb 2005	M322	7	8.50	208684	Reed	RSX162DGW	6 x 15	2170.0	3107.0	937	65.9	2387	541	21	49	9.40	1.035	14.22								

Well: ZaneGrey-1 ST2																										
Date In	IADC	Bit#	Size [in]	Ser #	Mfr	Type	Jets # x [32nd"]	D.In [m]	D.Out [m]	Prog [m]	Hrs o/b	SPP [psi]	Flow [gpm]	WOB [klb]	RPM	MW	TFA	ROP [m/hr]	I	O1	D	L	B	G	O2	R
26 Feb 2005	M322	8	8.50	D80771	Reed	TD43AKPRDH	1 x 32 2 x 14	2900.0	3107.0	207	5.9	1900	460	8		9.60	1.086	35.08	1	1	JD	M2	E	I	WT	BHA
28 Feb 2005	M332	9	8.50	207732	Reed	RSX163DGW	6 x 14	2950.0	3031.0	81	24	2288	493	13	35	9.60	0.902	3.38	0	0	NO	A	X	I	PN	BHA
02 Mar 2005	117W	6RR	8.50	10676290	Security	EBXSC1	3 x 20	3031.0	3070.0	39	21.6	2800	568	10		9.40	0.92	1.81	1	1	NO	A	E	1	NO	BHA
04 Mar 2005	S132	10	8.50	22520	Reed	DS43	3 x 20	3070.0	3092.0	22	6.8	2900	608	3		9.40	0.92	3.24	1	1	NO	N	X	I	ER	BHA
05 Mar 2005	M332	9RR	8.50	207732	Reed	RSX163	6 x 14	3092.0	3675.0	583	23.4	3108	612	15	81	9.40	0.902	24.91	2	3	WT	A	X	1	BU	TD

Wellname : ZaneGrey-1

Drilling Co. : -

Rig : Ocean Patriot

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time: 1430

Release Time: 17:30

BHA Record

Well: ZaneGrey-1

#	Date-in	Length [m]	Weight [klb]	Weight Blw/Jar Dry [klb]	Weight Blw/Jar Wet [klb]	String Weight [klb]	Pick-Up Weight [klb]	Slack-Off Weight [klb]	Torque Max [kft-lbs]	Torque on Bottom [kft-lbs]	Torque off Bottom [kft-lbs]	Description
1	29 Jan 2005	61.5	50.0	0	0	40.0	40.0	40.0	5	3	1	26" bit, 36" hole opener, 7 5/8" REG box x box bit sub with ported float and totco ring, 3 x 9 1/2" drill collars, 7 5/8" REG pin x 6 5/8" REG box X/O, 3 x 8" drill collars, 6 5/8" REG pin x 4 1/2" IF box X/O, 5" HWDP
2	30 Jan 2005	250.6	50.0	30.0	30.0	210.0	220.0	190.0	7	6	4	16" tri-cone bit, 9 5/8" motor, non-mag bottleneck X/O with ported float, non-mag 15 1/2" integral blade stabilizer, 8" MWD PM sub, 8" RLL with DGR and EWR, 8" MWD pulser/TM sub, 15" integral blade stabilizer, 3 x 8" drill collars, 8 1/4" jar, 2 x 8" drill collars, 6 5/8" REG pin x 4 1/2" IF box X/O, 18 x 5" HWDP
3	04 Feb 2005	251.8	55.0	26.0	26.0	220.0	240.0	190.0	15	12	6	12 1/4" PDC bit, 9 5/8" motor, non-mag bottleneck X/O with ported float, 11 1/4" - 12 1/4" adjustable gauge stabilizer, 8" MWD PM sub, 8" RLL with DGR and EWR, 8" MWD pulser/TM sub, 12" integral blade stabilizer, 3 x 8" drill collars, 8 1/4" jar, 2 x 8" drill collars, 6 5/8" REG pin x 4 1/2" IF box X/O, 18 x 5" HWDP
4	07 Feb 2005	251.8	55.0	26.0	26.0	300.0	350.0	250.0	22	16	12	12 1/4" PDC bit, 9 5/8" motor, non-mag bottleneck X/O with ported float, 11 1/4" - 12 1/4" adjustable gauge stabilizer, 8" MWD PM sub, 8" RLL with DGR and EWR, 8" MWD pulser/TM sub, 12" integral blade stabilizer, 3 x 8" drill collars, 8 1/4" jar, 2 x 8" drill collars, 6 5/8" REG pin x 4 1/2" IF box X/O, 18 x 5" HWDP
5	09 Feb 2005	246.7	55.0	26.0	26.0	240.0	350.0	300.0	29	23	15	12 1/4" PDC bit, 12 1/4" Near Bit Stabilizer with ported float, Non-Mag Pony DC, 12 1/4" String stabilizer, 8" MWD PM sub, 8" RLL with DGR and EWR, 8" MWD pulser/TM sub, 12" String stabilizer, 3 x 8" drill collars, 8 1/4" jar, 2 x 8" drill collars, 6 5/8" REG pin x 4 1/2" IF box X/O, 18 x 5" HWDP
6	13 Feb 2005	219.4	50.0	0	0	275.0	330.0	220.0	0	0	0	12 1/4" PDC bit, 12 1/4" Near Bit Stabilizer - c/w ported float, Non-Mag Pony DC, 12 1/4" String stabilizer, 8" MWD PM sub, 8" RLL with DGR and EWR, 8" MWD pulser/TM sub, 12" String stabilizer, 3 x 8" drill collars, 8 1/4" jar, 2 x 8" drill collars, 6 5/8" REG pin x 4 1/2" IF box X/O, 18 x 5" HWDP
7	19 Feb 2005	202.0	35.0	12.0	12.0	0	0	0	0	0	0	8 1/2" milled tooth tricone bit, bit sub with ported float, 2 x pony drill collars, 8 1/2" integral blade stabilizer, 3 x 6 1/2" DC's, 1 x 6 1/2" jar, 2 x 6 1/2" DC's, 18 x 5" HWDP.

Well: ZaneGrey-1 ST1

Wellname : ZaneGrey-1

Drilling Co. : -

Rig : Ocean Patriot

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time: 1430

Release Time: 17:30

#	Date-in	Length [m]	Weight [klb]	Weight Blw/Jar Dry [klb]	Weight Blw/Jar Wet [klb]	String Weight [klb]	Pick-Up Weight [klb]	Slack-Off Weight [klb]	Torque Max [kft-lbs]	Torque on Bottom [kft-lbs]	Torque off Bottom [kft-lbs]	Description
9	21 Feb 2005	249.3	50.0	20.0	20.0	275.0	325.0	235.0	18	14	10	8 1/2" PDC, motor, AGS, float sub with ported float installed, PM sub, FEWD, pulser/TM, integral blade stabiliser, 8 x 6 1/2" DC's, 1 x 6 1/2" jars, 15 x 5" HWDP.

Well: ZaneGrey-1 ST2

#	Date-in	Length [m]	Weight [klb]	Weight Blw/Jar Dry [klb]	Weight Blw/Jar Wet [klb]	String Weight [klb]	Pick-Up Weight [klb]	Slack-Off Weight [klb]	Torque Max [kft-lbs]	Torque on Bottom [kft-lbs]	Torque off Bottom [kft-lbs]	Description
10	26 Feb 2005	221.6	37.0	20.0	20.0	275.0	325.0	235.0	0	0	0	8 1/2" TCI, motor, AGS, float sub with ported float installed, PM sub, FEWD, pulser/TM, integral blade stabiliser, 5 x 6 1/2" DC's, 1 x 6 1/2" jars, 15 x 5" HWDP.
13	27 Feb 2005	221.6	40.0	0	0	285.0	345.0	245.0	22	5	3	8 1/2" PDC, motor, AGS, float sub with ported float installed, PM sub, FEWD, pulser/TM, integral blade stabiliser, 5 x 6 1/2" DC's, 1 x 6 1/2" jars, 15 x 5" HWDP.
14	03 Mar 2005	220.1	40.0	0	0	285.0	345.0	245.0	0	0	0	8 1/2" Milled Tooth, motor, stabiliser, float sub with ported float installed, PM sub, FEWD, pulser/TM, integral blade stabiliser, 5 x 6 1/2" DC's, 1 x 6 1/2" jars, 15 x 5" HWDP.
15	04 Mar 2005	220.0	40.0	0	0	285.0	345.0	245.0	0	0	0	8 1/2" Sidetracking Bit, motor, stabiliser, float sub with ported float installed, PM sub, FEWD, pulser/TM, integral blade stabiliser, 5 x 6 1/2" DC's, 1 x 6 1/2" jars, 15 x 5" HWDP.
16	05 Mar 2005	220.1	40.0	0	0	320.0	390.0	290.0	21	17	6	8 1/2" PDC, motor, stabiliser, float sub with ported float installed, PM sub, FEWD, pulser/TM, integral blade stabiliser, 5 x 6 1/2" DC's, 1 x 6 1/2" jars, 15 x 5" HWDP.

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time: 1430

Release Time: 17:30

Mud Recap

Well: ZaneGrey-1

WBM

R#	Date - Time	Type	Depth [m]	Tmp [C°]	MW [ppg]	VIS [sec/qt]	PV [cp]	YP [lb/100ft²]	Gel10s [lb/100ft²] / 10m [lb/100ft²]	F.L. API [cc]	F.L. hthp [cc]	Sols	Sand	MBT	PH	Cl [mg/l]	Hard [mg/l]	KCl [%]	Daily Cost [\$]
3	29 Jan 2005 - 1600	Hi Vis Gel Sweeps	128.0	28.0	8.75	110	11	46	35 / 37	15.0	0	1	0	20	9.5	1200.0	40.0	0	5287
3	29 Jan 2005 - 1400	Guar Sweeps	0	28.0	8.58	200	22	88	0 / 0	0	0	0		0	0	0	0	0	0
4	30 Jan 2005 - 1800	Hi Vis Gel Sweeps	450.0	28.0	8.75	120	8	69	45 / 57	14.0	0	1	0	22.5	9.5	1200.0	120.0	0	11137
5	31 Jan 2005 - 2100	Hi Vis Sweeps	1045.0	28.0	8.75	100	13	32	42 / 66	13.2	0	2	0	25	9.5	600.0	40.0	0	5884
6	01 Feb 2005 - 0800	Hi Vis Sweeps	1095.0	28.0	8.75	120	12	31	35 / 57	14.0	0	1	0	24	9.4	600.0	80.0	0	7071
7	02 Feb 2005 - 1900	KCl IDCAP Glycol	1095.0	28.0	8.66	46	8	9	5 / 6	9.5	0	0.5	0	1	8.5	27000.0	160.0	5	47398
8	03 Feb 2005 - 1700	KCl IDCAP Glycol	1095.0	28.0	8.70	47	8	10	4 / 5	7.8	0	0.5	0	2	8.8	25000.0	160.0	5	383
9	04 Feb 2005 - 1700	KCl IDCAP Glycol	1095.0	28.0	8.70	47	8	10	4 / 5	7.6	0	0.5	0	2	8.8	25000.0	160.0	5	3135
10	05 Feb 2005 - 0600	KCl IDCAP Glycol	1167.0	28.0	9.16	40	8	15	5 / 6	5.4	0	4	0	3	10	25000.0	800.0	5	22765
10	05 Feb 2005 - 1100	KCl IDCAP Glycol	1337.0	28.0	8.83	46	12	23	9 / 12	4.6	0	4.5	0	3	9	25000.0	640.0	5	0
10	05 Feb 2005 - 1800	KCl IDCAP Glycol	1550.0	28.0	9.16	57	15	32	12 / 19	4.2	0	9	0	3	8.5	30000.0	400.0	5.5	0
11	06 Feb 2005 - 1300	KCl IDCAP Glycol	2100.0	28.0	9.50	57	19	32	12 / 20	4.4	0	10	0	12	8.9	30000.0	600.0	5	27994
11	06 Feb 2005 - 06:15	KCl IDCAP Glycol	1850.0	28.0	9.33	78	8	41	11 / 16	4.6	0	8	0	10	9	30000.0	400.0	6	0
11	06 Feb 2005 - 03:30	KCl IDCAP Glycol	1726.0	28.0	9.16	80	16	30	11 / 15	4.6	0	8	0	7	9.2	32000.0	400.0	6	0
12	07 Feb 2005 - 1700	KCl-PHPA-Glycol	2111.0	43.0	9.40	65	16	38	9 / 14	0	0	9	1	13	9	30000.0	480.0	5	19205
12	07 Feb 2005 - 11:00	KCl-PHPA-Glycol	1091.0	32.0	9.40	120	34	31	11 / 17	5.0	0	8.5	0	0	9	30000.0	540.0	5	0
13	08 Feb 2005 - 17:00	KCl-PHPA-Glycol	2625.0	49.0	9.70	65	23	42	11 / 22	4.2	0	10.5	0.75	15	9	37000.0	440.0	6	14319
13	08 Feb 2005 - 06:20	KCl-PHPA-Glycol	2460.0	49.0	9.70	65	23	36	11 / 20	4.4	0	11	1	15	8.8	38000.0	560.0	6.5	0
13	08 Feb 2005 - 01:00	KCl-PHPA-Glycol	2344.0	49.0	9.70	85	27	44	12 / 23	4.6	0	11	1	0	9	40000.0	640.0	7	0
14	09 Feb 2005 - 16:00	KCl-PHPA-Glycol	2702.0	38.0	9.70	70	21	36	9 / 17	4.6	0	11	0.75	14	9	37000.0	300.0	7	21138
14	09 Feb 2005 - 23:00	KCl-PHPA-Glycol	2691.0	49.0	9.40	66	23	40	13 / 17	4.7	0	10	1	12	8.5	34000.0	300.0	6	0
15	10 Feb 2005 - 18:00	KCl-PHPA-Glycol	2724.0	49.0	9.70	63	21	36	8 / 14	4.4	0	9	0.65	14	9	37500.0	440.0	7	8545
15	10 Feb 2005 - 07:00	KCl-PHPA-Glycol	2600.0	43.0	9.80	65	22	46	10 / 17	4.6	0	11	1	14	9	37000.0	400.0	7	0
15	10 Feb 2005 - 03:00	KCl-PHPA-Glycol	2707.0	43.0	9.80	92	24	42	10 / 16	4.4	0	11	1	14	9	38000.0	400.0	7	0
16	11 Feb 2005 - 00:00	KCl-PHPA-Glycol	2772.0	49.0	9.70	63	20	36	9 / 16	4.1	0	9	0.6	15	9	38000.0	420.0	6.5	9882
16	11 Feb 2005 - 18:00	KCl-PHPA-Glycol	2772.0	49.0	9.70	65	21	36	9 / 17	4.3	0	9	0.6	15	9	38000.0	440.0	6.5	0
17	12 Feb 2005 - 22:00	KCl-PHPA-Glycol	2772.0	32.0	9.60	66	22	33	7 / 14	4.3	0	8.5	0.5	15	9	38000.0	300.0	6.5	0
17	12 Feb 2005 - 09:00	KCl-PHPA-Glycol	2772.0	32.0	9.70	68	19	37	8 / 15	4.3	0	9	0.5	15	9	38000.0	300.0	6.5	0

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time: 1430

Release Time: 17:30

17	12 Feb 2005 - 04:30	KCI-PHPA-Glycol	2772.0	31.0	9.70	80	23	37	10 / 15	4.4	0	9	0.5	15	9	38000.0	300.0	6.5	0
18	13 Feb 2005 - 23:00	KCI-PHPA-Glycol	2772.0	32.0	9.70	67	23	32	8 / 12	4.3	0	9	0.4	15	9	38000.0	300.0	6.5	936
18	13 Feb 2005 - 05:00	KCI-PHPA-Glycol	2772.0	32.0	9.70	73	20	31	8 / 11	4.0	0	9	0.4	15	9	38000.0	300.0	7	0
19	14 Feb 2005 - 22:15	KCI-PHPA-Glycol	2772.0	38.0	9.90	57	22	35	8 / 13	4.2	0	10	0.5	15	9	44000.0	320.0	7	13358
19	14 Feb 2005 - 00:00	KCI-PHPA-Glycol	2772.0	35.0	9.60	75	21	34	8 / 12	4.2	0	9	0.5	15	9	42000.0	300.0	7	0
20	15 Feb 2005 - 16:30	KCI-PHPA-Glycol	2735.0	46.0	10.10	68	22	32	7 / 12	4.0	0	11	0.5	15	9	39500.0	340.0	6.5	14270
20	15 Feb 2005 - 06:00	KCI-PHPA-Glycol	2772.0	45.0	9.90	73	21	36	8 / 13	3.8	0	11	0.5	15	8.5	38000.0	300.0	6.5	0
21	16 Feb 2005 - 19:20	KCI-PHPA-Glycol	2735.0	30.0	10.10	72	22	34	8 / 14	3.9	0	11	0.5	17.5	9	36000.0	320.0	6	7513
21	16 Feb 2005 - 06:00	KCI-PHPA-Glycol	2735.0	31.0	10.10	88	25	44	12 / 23	3.8	0	11	0.5	17.5	9	36000.0	300.0	6	0
22	17 Feb 2005 - 22:30	KCI-PHPA-Glycol	2735.0	33.0	10.20	78	22	42	9 / 18	3.4	0	12	0.6	15	9	39000.0	280.0	6.5	9904
22	17 Feb 2005 - 10:00	KCI-PHPA-Glycol	2735.0	31.0	10.20	85	25	43	10 / 20	3.4	0	12	0.6	15	9	39000.0	30020.0	6.5	0
23	18 Feb 2005 - 2300	KCI-PHPA-Glycol	2184.0	33.0	9.90	84	24	40	9 / 18	3.6	0	10.5	0.5	17.5	8.5	36000.0	560.0	6	0
23	18 Feb 2005 - 0500	KCI-PHPA-Glycol	2184.0	31.0	10.10	80	24	39	10 / 17	3.5	0	12	0.5	17.5	8.5	36000.0	580.0	6	0
24	19 Feb 2005 - 0600	KCI-PHPA-Glycol	2184.0	33.0	10.08	85	21	31	7 / 12	3.5	0	10.3	0.5	17.5	8.5	36000.0	580.0	6	9271
24	19 Feb 2005 - 1100	KCI-PHPA-Glycol	2184.0	31.0	10.08	84	24	39	7 / 15	3.8	0	10.3	0.5	17.5	8.5	36000.0	580.0	6	0
24	19 Feb 2005 - 2200	KCI-PHPA-Glycol	2184.0	31.0	9.16	62	15	26	5 / 11	4.3	0	6.8	0.5	15	9	32000.0	440.0	5.5	0
25	20 Feb 2005 - 0400	KCI-PHPA-Glycol	2184.0	33.0	9.40	73	16	31	6 / 9	4.4	0	7.6	0.5	12.5	10	30000.0	480.0	5.4	4330
25	20 Feb 2005 - 2100	KCI-PHPA-Glycol	2184.0	31.0	9.40	60	15	25	4 / 11	4.5	0	7.2	0.5	12.5	10	29000.0	380.0	5.2	0

Well: ZaneGrey-1 ST1

WBM

R#	Date - Time	Type	Depth [m]	Tmp [C°]	MW [ppg]	VIS [sec/qt]	PV [cp]	YP [lb/100ft²]	Gel10s [lb/100ft²] / 10m [lb/100ft²]	F.L. API [cc]	F.L. hthp [cc]	Sols	Sand	MBT	PH	Cl [mg/l]	Hard [mg/l]	KCl [%]	Daily Cost [\$]
1	20 Feb 2005 - 0400	KCI-PHPA-Glycol	2184.0	33.0	9.40	73	16	31	6 / 9	4.4	0	7.6	0.5	12.5	10	30000.0	480.0	5.4	4330
1	20 Feb 2005 - 2100	KCI-PHPA-Glycol	2184.0	31.0	9.40	60	15	25	4 / 11	4.5	0	7.2	0.5	12.5	10	29000.0	380.0	5.2	0
2	21 Feb 2005 - 0400	KCI-PHPA-Glycol	2184.0	33.0	9.50	64	21	34	5 / 12	4.8	0	8	0.3	12.5	9.5	28000.0	500.0	5.5	1345
2	21 Feb 2005 - 2300	KCI-PHPA-Glycol	2192.0	31.0	9.40	68	21	38	5 / 14	4.8	0	7.2	0.25	12.5	9.5	32000.0	440.0	5.5	0
3	22 Feb 2005 - 0300	KCI-PHPA-Glycol	2198.0	33.0	9.50	57	19	32	7 / 11	4.8	0	7.8	0.25	7.5	9	30500.0	600.0	5.2	5361
3	22 Feb 2005 - 2300	KCI-PHPA-Glycol	2244.0	31.0	9.50	59	19	33	5 / 12	4.6	0	7.6	0.25	7.5	9.5	31500.0	460.0	5.5	0
4	23 Feb 2005 - 0430	KCI-PHPA-Glycol	2285.0	33.0	9.40	64	20	35	10 / 14	4.0	0	7.5	0.25	7.5	9.5	32000.0	600.0	5.5	2542
4	23 Feb 2005 - 2300	KCI-PHPA-Glycol	2532.0	31.0	9.40	61	18	34	9 / 13	4.5	0	7.5	0.25	7.5	9	31500.0	580.0	5.5	0
5	24 Feb 2005 - 23:00	KCI-PHPA-Glycol	2887.0	38.0	9.50	64	19	34	8 / 13	4.7	0	7.8	0.25	7.5	9	30000.0	480.0	5.5	12938
6	25 Feb 2005 - 22:00	KCI-PHPA-Glycol	3107.0	43.0	9.60	58	17	32	7 / 13	4.5	0	8.2	0.3	9	9	30500.0	480.0	5.5	12867
7	26 Feb 2005 - 15:20	KCI-PHPA-Glycol	3107.0	32.0	9.60	61	17	33	6 / 13	4.7	0	8.2	0.25	10	9	30500.0	460.0	5.5	6580

Wellname : ZaneGrey-1

Drilling Co. : -

Rig : Ocean Patriot

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time: 1430

Release Time: 17:30

Well: ZaneGrey-1 ST2

WBM

R#	Date - Time	Type	Depth [m]	Tmp [C°]	MW [ppg]	VIS [sec/qt]	PV [cp]	YP [lb/100ft²]	Gel10s [lb/100ft²] / 10m [lb/100ft²]	F.L. API [cc]	F.L. hthp [cc]	Sols	Sand	MBT	PH	Cl [mg/l]	Hard [mg/l]	KCl [%]	Daily Cost [\$]
1	26 Feb 2005 - 15:20	KCl-PHPA-Glycol	3107.0	32.0	9.60	61	17	33	6 / 13	4.7	0	8.2	0.25	10	9	30500.0	460.0	5.5	6580
2	27 Feb 2005 - 15:00	KCl-PHPA-Glycol	3107.0	38.0	9.60	58	16	32	5 / 12	4.5	0	8.2	0.25	10	9	31000.0	600.0	5.5	1581
3	28 Feb 2005 - 23:00	KCl-PHPA-Glycol	3107.0	38.0	9.60	62	18	34	7 / 14	4.6	0	8.2	0.25	10	10	31000.0	580.0	5.5	7919
4	01 Mar 2005 - 23:00	KCl-PHPA-Glycol	2995.0	44.0	9.50	55	20	21	7 / 11	5.5	0	7.8	0.25	7.5	10	31000.0	1000.0	5.5	7107
5	02 Mar 2005 - 17:30	KCl-PHPA-Glycol	3022.0	38.0	9.40	43	17	14	6 / 11	7.0	0	7	0.25	7.5	11	37500.0	1100.0	6.5	3419
6	03 Mar 2005 - 23:00	KCl-PHPA-Glycol	3056.0	38.0	9.40	38	9	7	4 / 7	7.0	0	7.3	0.25	7.5	12	34000.0	1200.0	6	7107
7	04 Mar 2005 - 00:00	KCl-PHPA-Glycol	3070.0	32.0	9.40	38	9	6	3 / 6	7.4	0	7.3	0.25	7.5	12	34000.0	1150.0	6	894
8	05 Mar 2005 - 23:00	KCl-PHPA-Glycol	3092.0	43.0	9.40	45	18	16	4 / 8	5.5	0	7.3	0.25	7.5	9.5	32000.0	700.0	6	6484
9	06 Mar 2005 - 07:12	KCl-PHPA-Glycol	3162.0	38.0	9.40	50	19	17	4 / 9	5.5	0	7.6	0.25	7.5	9.5	32000.0	640.0	6	12912
10	07 Mar 2005 - 23:00	KCl-PHPA-Glycol	3162.0	33.0	9.50	57	18	17	4 / 8	7.6	0	7.5	0.25	7.5	9.5	32000.0	640.0	6	0
11	08 Mar 2005 - 23:00	KCl-PHPA-Glycol	3162.0	32.0	9.50	58	18	18	3 / 8	6.0	0	7.6	0.25	7.5	9.5	32000.0	640.0	6	0
12	09 Mar 2005 - 23:20	KCl-PHPA-Glycol	3460.0	49.0	9.70	59	15	25	3 / 7	4.8	0	8.3	0.25	7.5	9.5	34500.0	560.0	6.5	4603
13	10 Mar 2005 - 22:30	KCl-PHPA-Glycol	3765.0	52.0	9.70	58	15	26	3 / 8	4.4	0	8.3	0.25	7.5	9	36500.0	400.0	6.5	4800
14	11 Mar 2005 - 23:00	KCl-PHPA-Glycol	3765.0	32.0	9.70	61	16	26	4 / 8	4.4	0	8.3	0.25	7.5	9	36500.0	400.0	6.5	874
15	12 Mar 2005 - 11:00	KCl-PHPA-Glycol	3765.0	32.0	9.70	63	15	26	4 / 8	4.4	0	8.3	0.25	7.5	9	36500.0	400.0	6.5	0
16	13 Mar 2005 - 22:40	KCl-PHPA-Glycol	3765.0	32.0	9.70	63	16	26	4 / 8	4.4	0	8.3	0.25	7.5	9	36500.0	400.0	6.5	0
17	14 Mar 2005 - 22:40	KCl-PHPA-Glycol	3765.0	32.0	9.70	63	16	26	4 / 8	4.4	0	8.3	0.25	7.5	9	36500.0	400.0	6.5	0
18	15 Mar 2005 - 21:00	KCl-PHPA-Glycol	3765.0	35.0	9.70	65	17	27	5 / 10	4.6	0	8.3	0.25	7.5	9.5	36500.0	440.0	6.5	1846

Wellname : ZaneGrey-1

Drilling Co. : DOGC

Rig : Ocean Patriot

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 17:30

Survey

Well: ZaneGrey-1

Mag Dec: 0

Sidetrack # 0

Survey Plan graph not produced!

Survey VSection graph not produced!

Well: ZaneGrey-1 ST1

Mag Dec: 0

Sidetrack # 0

Survey Plan graph not produced!

Survey VSection graph not produced!

Well: ZaneGrey-1 ST2

Mag Dec: 0

Sidetrack # 0

Survey Plan graph not produced!

Survey VSection graph not produced!

Part 3 : Time Analysis Data

- Time Overview
- Trouble Time Analysis

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

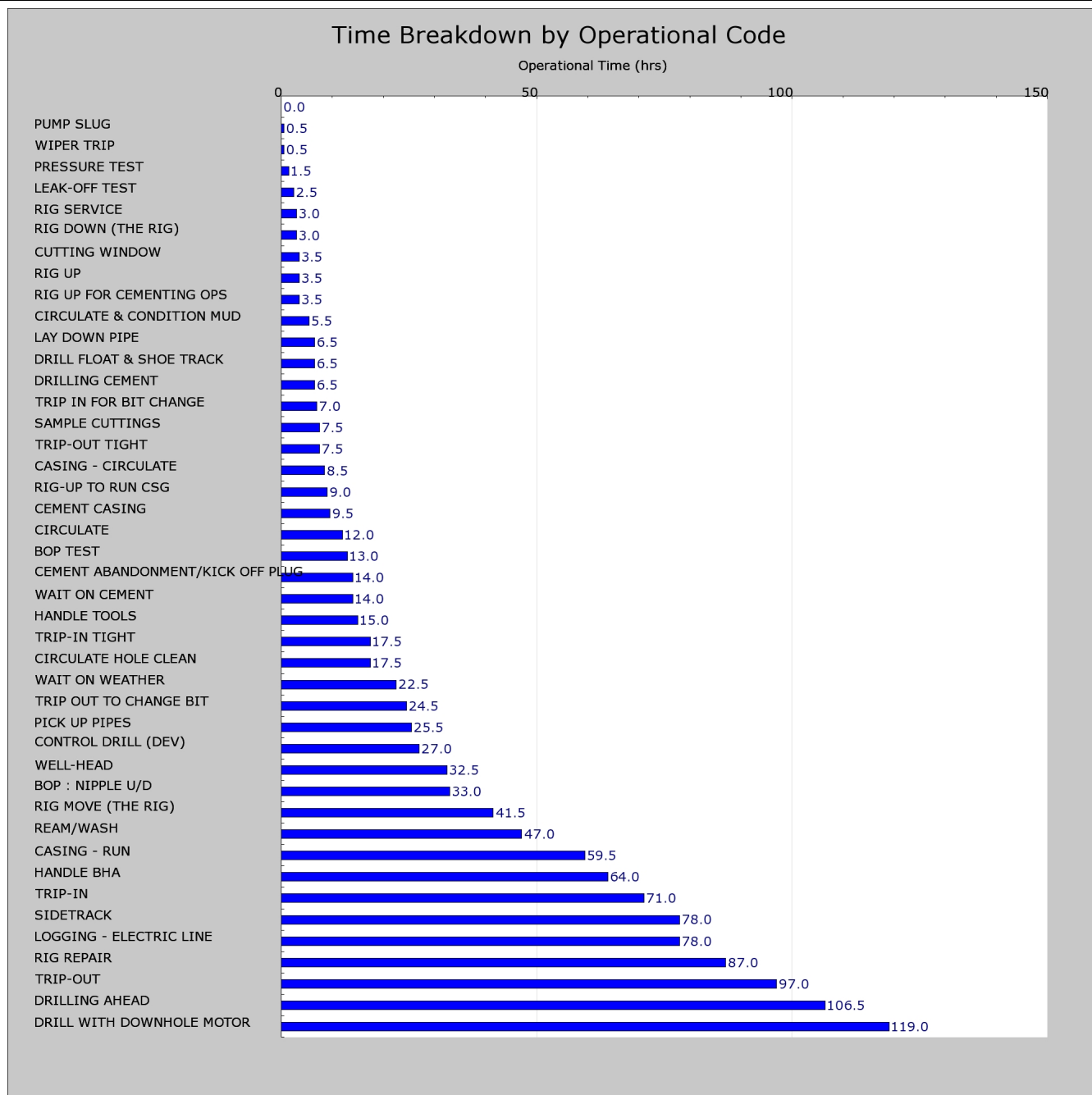
Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 17:30

Time Analysis Breakdown



DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

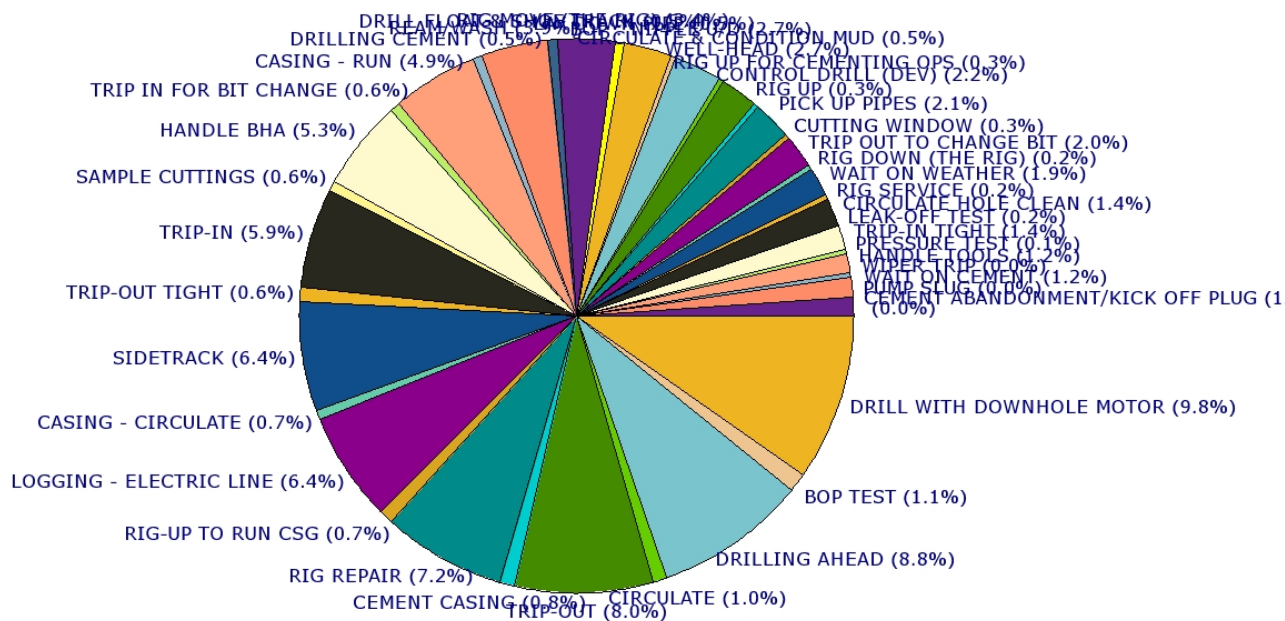
Water Depth : 72.5m

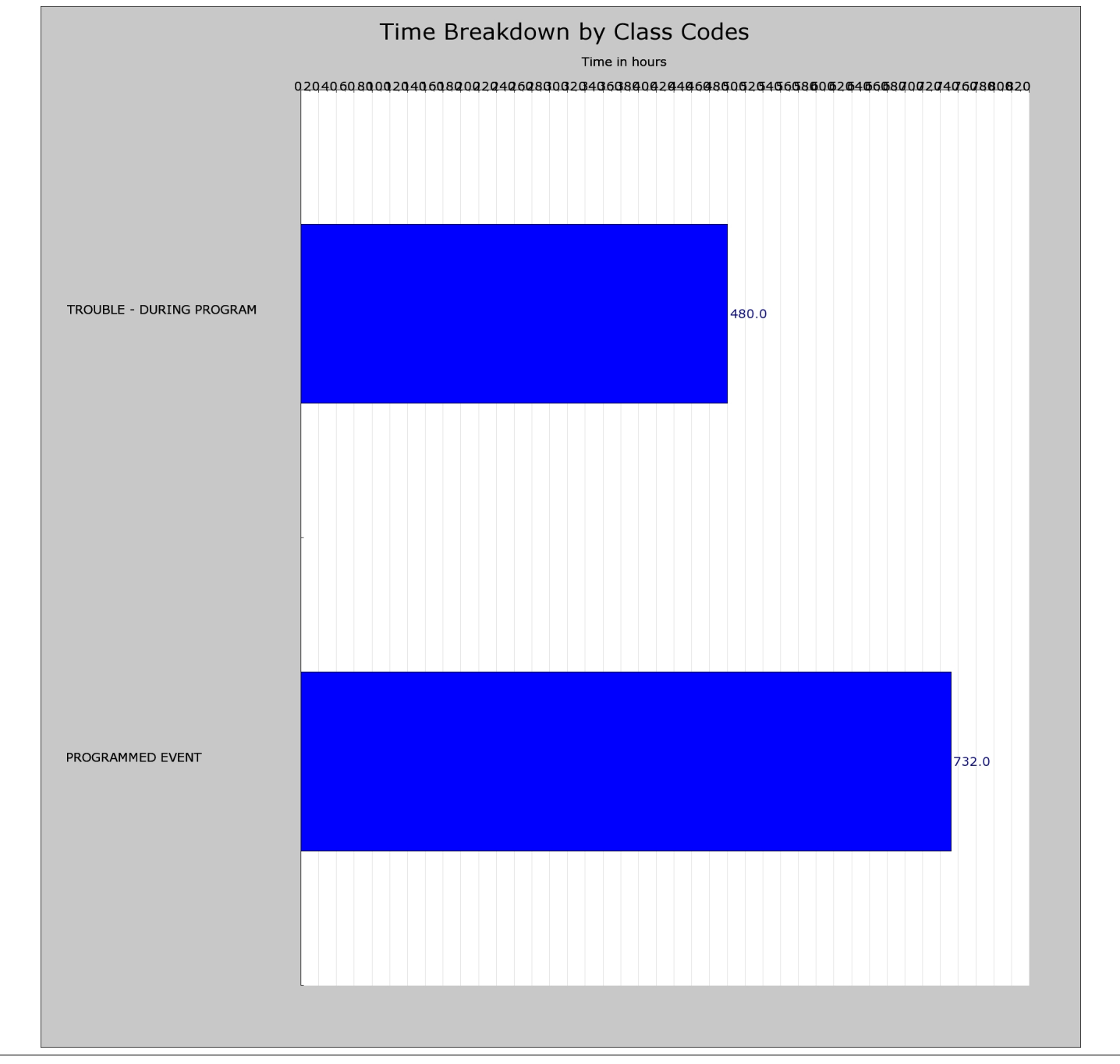
Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 17:30

Time Analysis by Operational Code (% of 1212 hrs)





DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

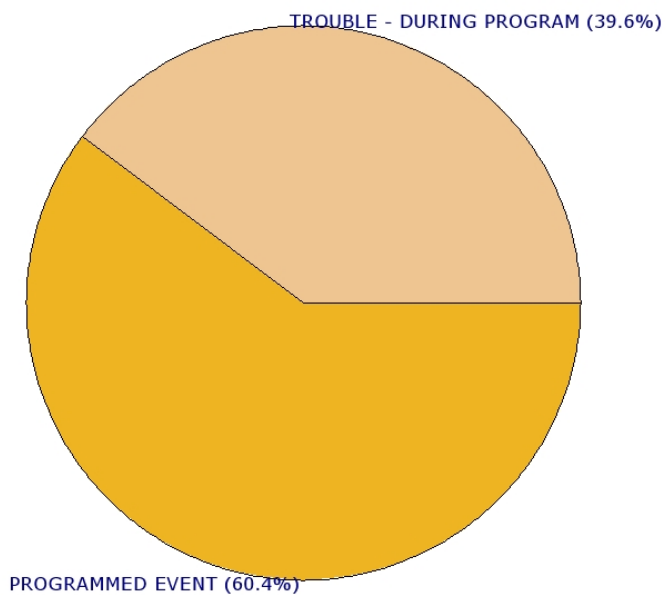
Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 17:30

Time Analysis by Class Codes (% of 1212 hrs)



DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

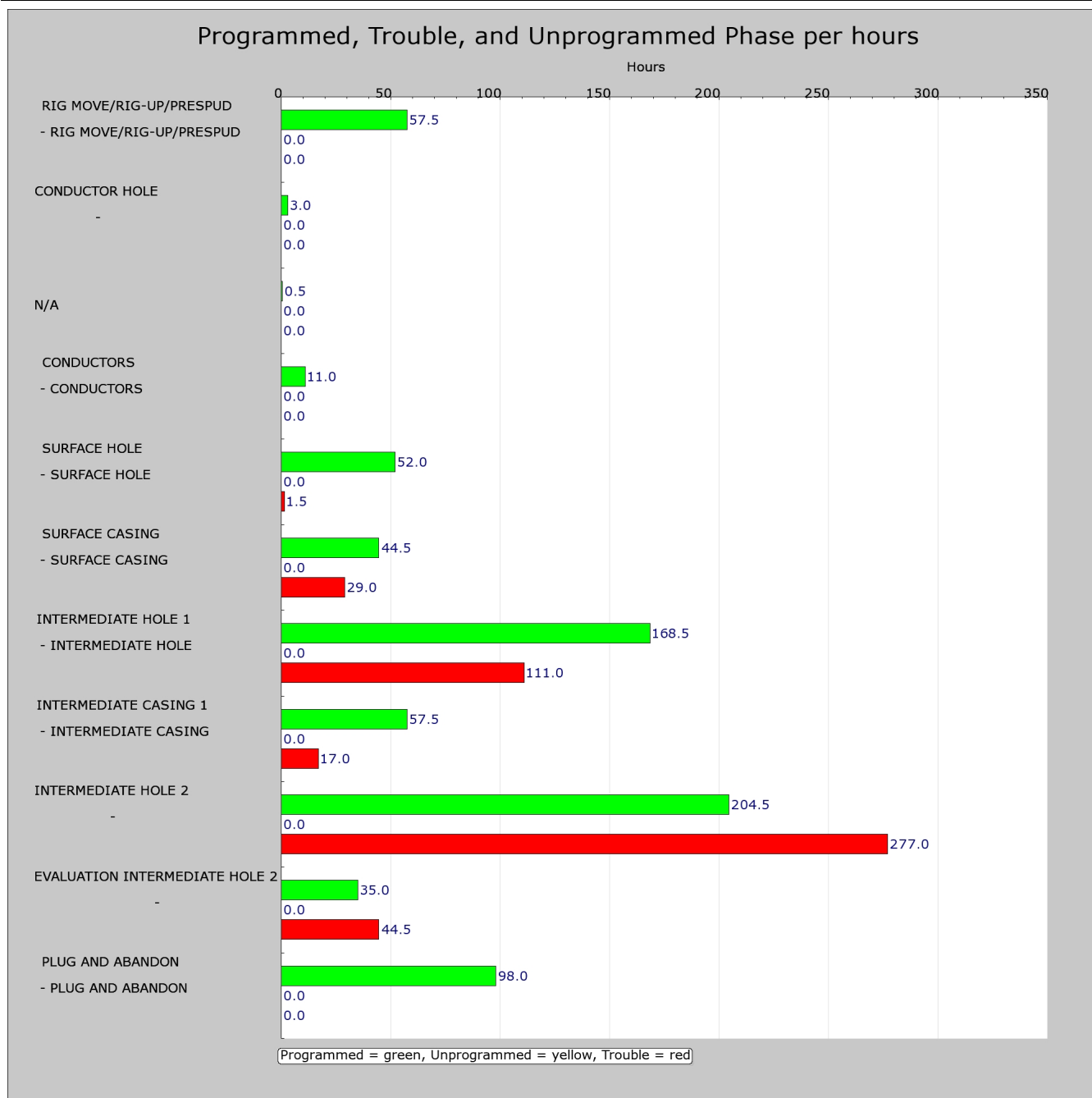
Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 17:30

Time Breakdown by Phase



Total Time on Operations : 1212 hrs

Total Productive Time : 732 hrs

Total Lost Time : 480 hrs

Total Unprogrammed Time : 0 hrs

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

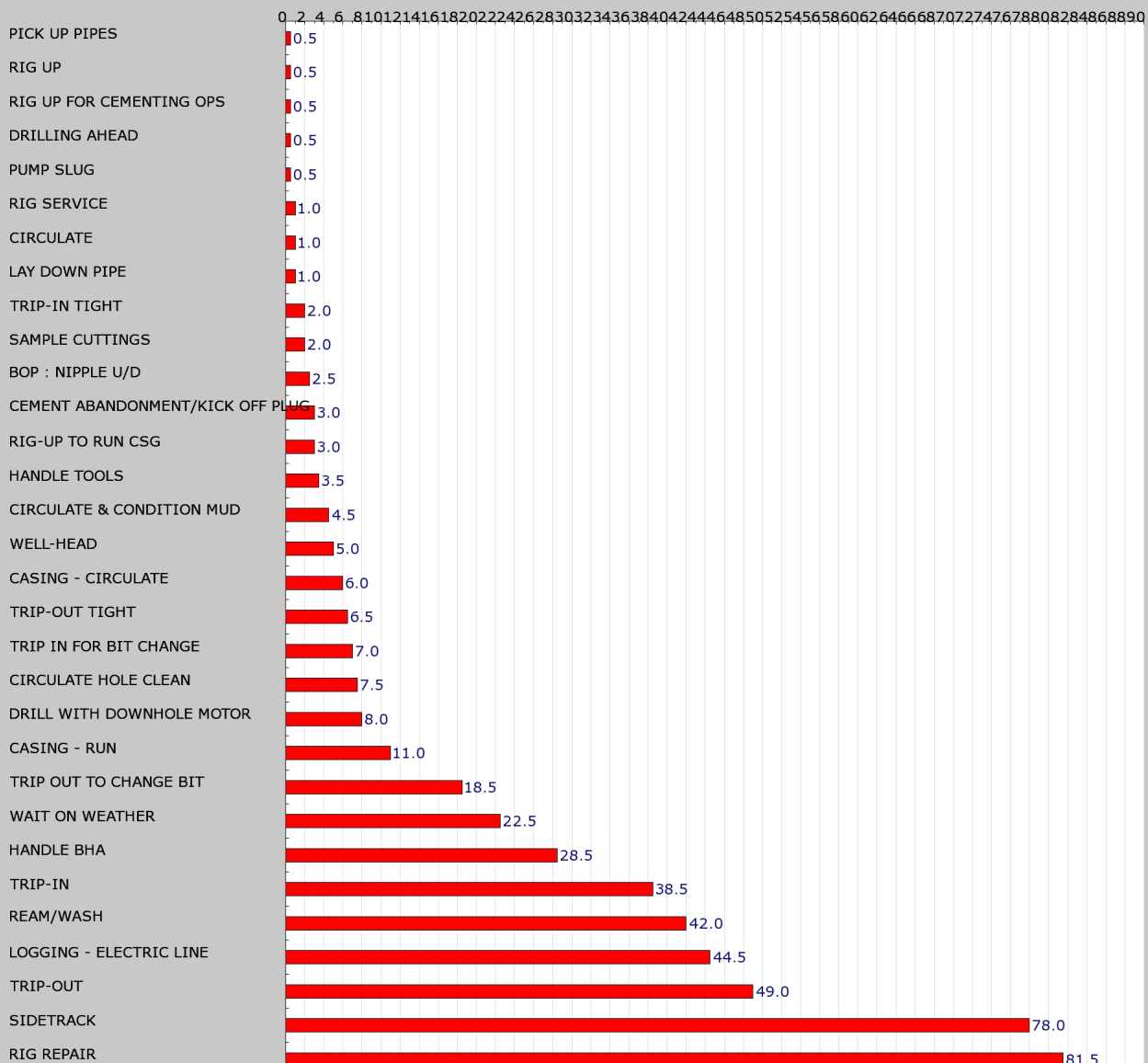
Spud Time : 1430

Release Time : 17:30

Trouble

Drilling : Lost Time Summary (hrs)

Hrs lost



DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

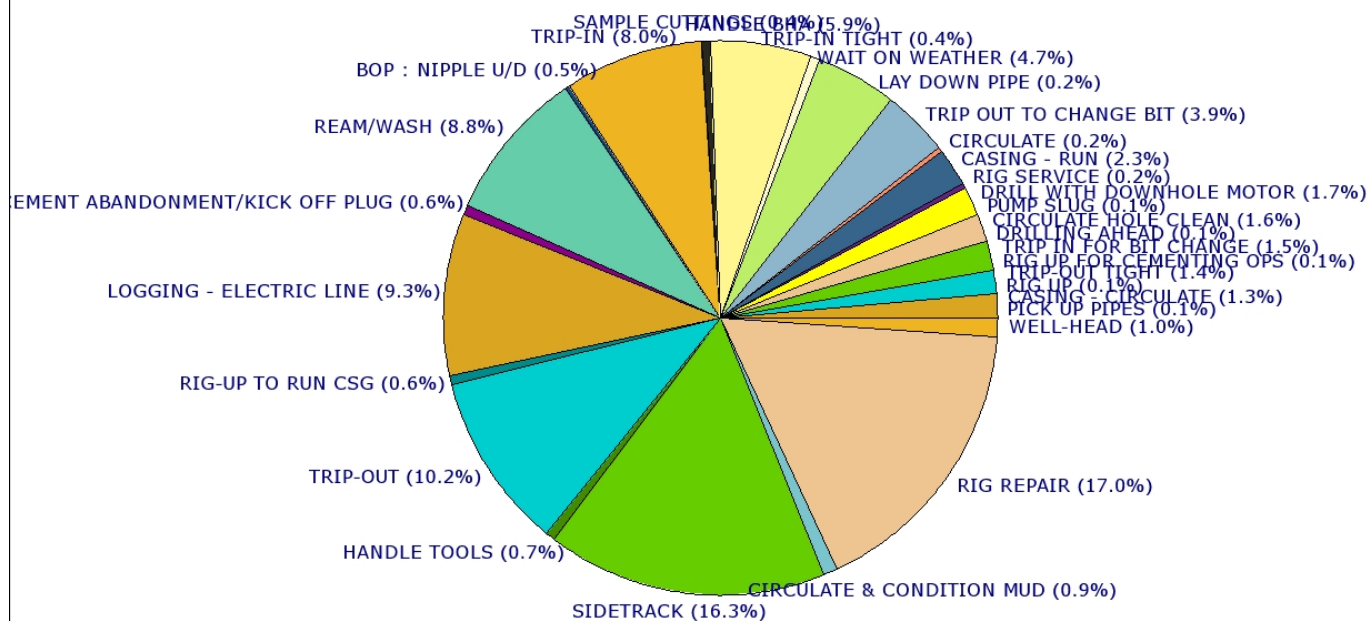
Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 17:30

Drilling : Lost Time Summary (% of 480 hrs)



DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

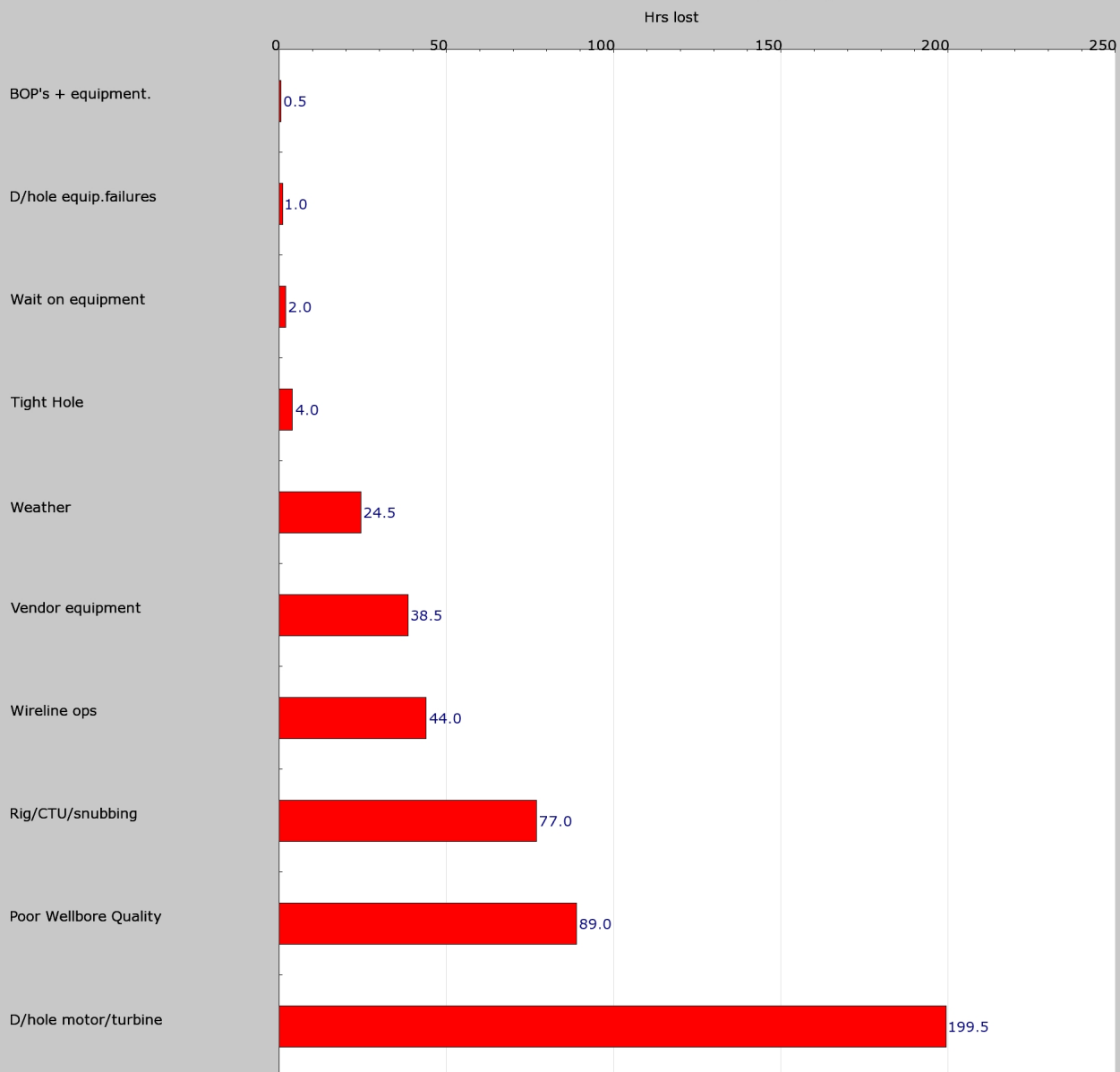
Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 17:30

Root Cause : Lost Time Summary (hrs)



DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

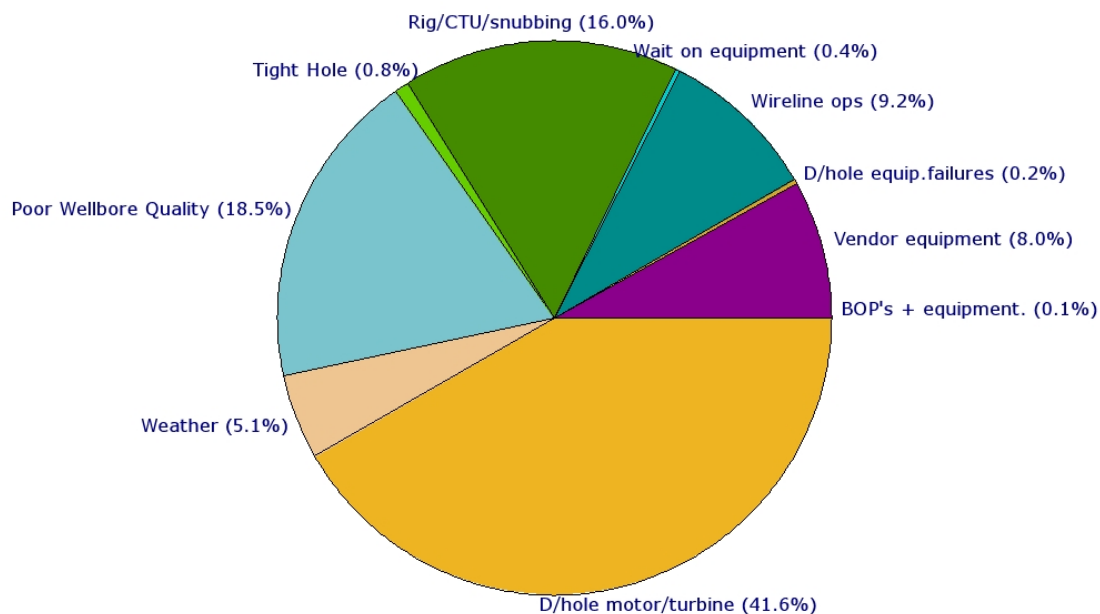
Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 17:30

Root Cause : Lost Time Summary (% of 480 hrs)



DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 17:30

Trouble During Programmed Time for ZaneGrey-1

Date	PHS	Operation	NPT	Depth	Description of Programmed Trouble Time
30 Jan 2005	SH	RIG REPAIR	0.5	129.5	Changed out blower hose and link tilt solenoid on top drive.
01 Feb 2005	SH	RIG REPAIR	1	1095.0	Attempted to repair derrick stabbing board camera - unsuccessful. Assistant driller assigned to transfer signals from stabbing board to driller.
					Changed out top drive link-tilt regulator.
02 Feb 2005	SC	WAIT ON WEATHER	6	1095.0	Waited on weather with rig 15 m off location.
					1800 hr: Wind - 40/50 kn, Direction - South, Swell - 3.5 m, Sea - 2 m, Heave - 0.6 m 2000 hr: Wind - 55/60 kn, Direction - South/South East, Swell/Sea - 8 m, Heave - 1 m 2200 hr: Wind - 55/60 kn, Direction - South/South East, Swell/Sea - 8 m, Heave - 2 m 2400 hr: Wind - 30/35 kn, Direction - South/South East, Swell/Sea - 8 m, Heave - 2 m
03 Feb 2005	SC	WAIT ON WEATHER	16.5	1095.0	Continued to wait on weather (supply vessel unable to offer close support for riser work in moonpool).
					0200 hr: Wind - 30 kn, Direction - SE, Swell/Sea - 7/8 m 0400 hr: Wind - 25 kn, Direction - N, Swell/Sea - 6.5 m 0600 hr: Wind - 25 kn, Direction - N, Swell/Sea - 5 m 0800 hr: Wind - 23 kn, Direction - NE, Swell/Sea - 5 m 1000 hr: Wind - 30/35 kn, Direction - NE, Swell/Sea - 5 m 1200 hr: Wind - 30/35 kn, Direction - NE, Swell/Sea - 4/5 m 1400 hr: Wind - 30 kn, Direction - NE, Swell/Sea - 4/5 m 1600 hr: Wind - 30 kn, Direction - NE, Swell/Sea - 4 m
03 Feb 2005	SC	BOP : NIPPLE U/D	2	1095.0	ROV inspected BOP stack and riser, observed BOP twisted at swivel joint. Installed storm saddles in moonpool and adjusted rig/turned the stack to line up with guide posts.
03 Feb 2005	SC	BOP : NIPPLE U/D	0.5	1095.0	Attempted to lay down landing joint but unable to pull free of inner barrel. Continued to work and free up same.
04 Feb 2005	SC	HANDLE BHA	1	1095.0	Ran in the hole with BHA to 251 m and attempted to re-test MWD with 870 gpm.
04 Feb 2005	SC	HANDLE BHA	0.5	1095.0	Attempted another MWD test with 870 gpm.
04 Feb 2005	SC	HANDLE BHA	0.5	1095.0	Attempted another MWD test with 900 gpm.
04 Feb 2005	SC	HANDLE BHA	1	1095.0	Pulled out of the hole from 251 m to 23 m.
04 Feb 2005	SC	HANDLE BHA	1	1095.0	Downloaded MWD - data incomplete. Laid out MWD and pulser sub.
04 Feb 2005	IH	HANDLE BHA	1	1095.0	Picked up new MWD and uploaded to same.
05 Feb 2005	IH	DRILLING AHEAD	0.5	1691.0	Number 1 stand pipe washed in derrick. Worked pipe to ensure it was free and rigged up to circulate through cement hose while rotating string using rotary table. Rigged up to change over to spare Kelly hose.
06 Feb 2005	IH	RIG REPAIR	3	1691.0	Continued to change over to spare Kelly hose while circulating through the cement hose and rotating using rotary table. Pressure tested hose to 5,000 psi for 10 minutes.
06 Feb 2005	IH	RIG REPAIR	2.5	2103.0	Due to an incident with the top drive a stand of drill pipe was bent (incident report to be completed). Rack back bent stand. A motor alignment cylinder was then replaced on the top drive system. Circulated 1.5 x bottoms up.
06 Feb 2005	IH	TRIP-OUT TIGHT	2	2103.0	Started pulling out of the hole from 2103 m to 1930 m, inspecting drill pipe on the way out. Hole tight. Attempted to work through tight hole. Overpull 50 to 60 klbs. Observed well not taking correct fluid volume for trip. Flow check. Well static.
06 Feb 2005	IH	REAM/WASH	5.5	2103.0	Backream out of hole from 1930 m to inside 13 3/8" casing shoe at 1092 m. Maintained minimum circulating pressures while worked through sections where hole packing off from 1825 m to 1820 m. Observed over-torqued connection at stand 56/55. Continued back-reaming. working through intermittent tight spots to 1310 m. Overpull 30 klbs to 40 klbs while backreaming 1310 m to almost inside casing shoe. Hole unloading significant volume of drill cuttings while backreaming.
06 Feb 2005	IH	CIRCULATE HOLE CLEAN	0.5	2103.0	Circulated at the shoe while boosting the riser. Significant volume of drill cuttings recovered. (At top and bottom screens)
07 Feb 2005	IH	CIRCULATE HOLE CLEAN	0.5	2103.0	Circulated hole clean at the 13 3/8" casing shoe. Boosted riser. Significant volume of cuttings recovered.

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 17:30

Trouble During Programmed Time for ZaneGrey-1

Date	PHS	Operation	NPT	Depth	Description of Programmed Trouble Time
07 Feb 2005	IH	TRIP-OUT	2.5	2103.0	Flow check. Well static. Pumped slug and continued pulling out of the hole with 5" drill pipe.
07 Feb 2005	IH	HANDLE BHA	2	2103.0	Continued pulling the BHA out of hole. MWD pulser was changed out and the bit was inspected. Conditioned surface active mud system with 1.25 ppbl PHPA.
07 Feb 2005	IH	HANDLE BHA	2	2103.0	Initialised MWD. Adjusted bend on motor from 1.15 deg to 0.78 deg. Surface tested MWD, motor and adjustable gauge stabiliser.
07 Feb 2005	IH	HANDLE BHA	1	2103.0	Ran BHA in the hole.
07 Feb 2005	IH	TRIP-IN	1	2103.0	Ran in the hole with 5" drill pipe to the 13 3/8" casing shoe.
07 Feb 2005	IH	CIRCULATE & CONDITION MUD	1.5	2103.0	Circulated and conditioned mud at the shoe.
07 Feb 2005	IH	TRIP-IN	2.5	2103.0	Continued running in the hole with 5" drill pipe to 1916 m. Conditioned surface active mud system with 1.25 ppbl PHPA.
07 Feb 2005	IH	TRIP-IN TIGHT	1	2103.0	Washed and reamed down from 1916 m to 2086 m. Hole tight.
07 Feb 2005	IH	CIRCULATE & CONDITION MUD	2	2103.0	Circulated and conditioned the mud while slowly working the pipe, raised mud system PHPA content to 1.25 ppbl prior to drilling ahead.
07 Feb 2005	IH	TRIP-IN TIGHT	0.5	2103.0	Washed and reamed down from 2086 m to 2103 m. Tight hole.
12 Feb 2005	IH	CASING - RUN	0.5	2772.0	Layed out casing joint 104. Rigged down casing handling gear.
12 Feb 2005	IH	CASING - CIRCULATE	3.5	2772.0	Rigged up 5" drill pipe handling gear. Picked up a stand of 5" drill pipe. Made up drill pipe to 9 5/8" casing using the circulating swedge. Circulated and reamed from 1776 m to 1777m. Torque limiter set to 15k ft.lbs. 10-40 rpm. 400 psi at 500 gpm.
13 Feb 2005	IH	CASING - CIRCULATE	2.5	2772.0	Continued to circulate and ream with difficulty from 1777 m to 1778 m. Work pipe at 10-40 rpm, 400 psi at 500 gpm with the torque limiter set to 15k ft.lbs.
13 Feb 2005	IH	RIG-UP TO RUN CSG	1	2772.0	Clear catwalk and rig floor. Prepare slug while rigging up to pull casing out of the hole. Held job safety analysis for pulling 9 5/8" casing out of the hole.
13 Feb 2005	IH	PUMP SLUG	0.5	2772.0	Flow check. Well static. Pump slug.
13 Feb 2005	IH	RIG-UP TO RUN CSG	0.5	2772.0	Break out circulating swedge. Racked back stand of 5" drill pipe. Rigged down 5" drill pipe handling gear. Rigged up 9 5/8" casing handling gear.
13 Feb 2005	IH	TRIP-OUT	15	2772.0	Continued to pull 9 5/8" 47 lb/ft, N80, NewVam casing out of the hole from 1776 m (joint 105) to 484 m (joint 207). Pulled out the cross over Pup joint (Pup joint B). Pulled 9 5/8" 47 lb/ft, N80, BTC out of the hole from 467 m (joint 208) to 36 m (joint 244). Pulled 139 joints at 9 jnts/hr. Casing was pulled out of the hole with no problems. Racked back 9 5/8" shoe track in the derrick.
13 Feb 2005	IH	TRIP-OUT	0.5	2772.0	Rigged down casing handling gear and 500 tonne bails.
13 Feb 2005	IH	TRIP-OUT	0.5	2772.0	Rigged up 5" drill pipe handling gear and 350 tonne bails.
13 Feb 2005	IH	TRIP-OUT	0.5	2772.0	Made up jetting sub and wear bushing recovery / setting tool to 5" drill pipe.
13 Feb 2005	IH	TRIP-OUT	0.5	2772.0	Ran in hole with 5" drill pipe. Washed through the BOP's and well head. Set the 13 3/8" wear bushing.
13 Feb 2005	IH	TRIP-OUT	0.5	2772.0	Pulled jetting tool and wear bushing recovery / setting tool out of hole with 5" drill pipe. Layout same.
13 Feb 2005	IH	TRIP-OUT	1.5	2772.0	Ran in hole with 12 1/4" rotary bottom hole assembly from derrick, with new mill tooth bit to 135 m. Shallow pulse tested MWD
14 Feb 2005	IH	TRIP-IN	0.5	2772.0	Continued running in the hole with BHA from 135 m to 219 m.
14 Feb 2005	IH	TRIP-IN	2	2772.0	Continued running in hole from 219 m to 1740 m with 5" drill pipe. Good Hole.
14 Feb 2005	IH	TRIP-IN TIGHT	0.5	2772.0	Continued running in the hole with care, with 5" drill pipe. Tag obstruction at 1777 m. Pull back to 1770 m and attempt wash down through obstruction. No go. Establish reaming parameters. (Up 270 klbs, down 220 klbs, rotating 240 klbs)
14 Feb 2005	IH	REAM/WASH	1.5	2772.0	Wash and ream (on compensator) 1777 m to 1780 m. 10 - 12 klbs weight on bit, 80 RPM, torque at 8 - 10 klbs, 825 gpm. Increase in weight gave flat torque. Oserved significant volume of cuttings / cavings at shakers.

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 17:30

Trouble During Programmed Time for ZaneGrey-1

Date	PHS	Operation	NPT	Depth	Description of Programmed Trouble Time
14 Feb 2005	IH	CIRCULATE HOLE CLEAN	1	2772.0	Broke through obstruction at 1780 m and continued wash and ream without difficulty to kelly down at 1795 m. Washed and reamed / backreamed pipe 1795 m to 1770 m while circulate bottoms up and until shakers clear. Increase RPM to 140 to assist hole cleaning. Significant volume of cuttings discarded - mostly larger cavings / cuttings, but large amount of fines blinding bottom shaker screens between 4000 stks and 6000 stks. Boosted riser after bottoms up. Large volume of large cavings / cuttings.
14 Feb 2005	IH	REAM/WASH	0.5	2772.0	Work pipe (dry) 1770 m to 1795 m. Observed 50 klbs up / 20 klbs down through 1780 m to 1777 m. Observed decrease in up down weights through tight spot. After decrease in weight up/down unable to pass 1791 m. Wash / ream 1785 m to 1795 m. String taking weight as work down, clear when pick-up above.
14 Feb 2005	IH	REAM/WASH	3.5	2772.0	Continued washing / reaming from 1795 m to 1910 m. 60-100 rpm, 10-12k ft.lbs, 520 gpm at 1650 psi. Increasing the flow rate to 900 gpm to assist hole cleaning. Excessive cuttings coming over the shakers. Commence raising the mud weight from 9.40 ppg to 9.80 ppg.
14 Feb 2005	IH	CIRCULATE HOLE CLEAN	0.5	2772.0	Circulate hole clean due to excessive cuttings return and to control surface losses over the shakers.
14 Feb 2005	IH	REAM/WASH	11	2772.0	Continued washing / reaming from 1910 m to 2284 m. 90-120 rpm, 5-10 klbs, 10-12k ft.lbs, 920 gpm at 3120 psi. Increasing WOB greater than 10 klbs caused the drill string to stall. Greater than 15 klbs the drill string started to pack off. Average reaming speed, 34 m/hr. Mud weight stabilised at 9.8 ppg. Gas peaks encountered during reaming, 1955 m 4.63%, 2108 m 4.92%.
14 Feb 2005	IH	CIRCULATE HOLE CLEAN	1.5	2772.0	Circulate hole clean with 13000 stks at 3900 psi.
14 Feb 2005	IH	REAM/WASH	1.5	2772.0	Flow check. Well static. Backream out of hole from 2284 m to 2232 m. Difficulty backreaming. Max over pull 80k. Backreaming with 140 rpm, 900 gpm at 3100 psi, 10k ft.lbs.
15 Feb 2005	IH	REAM/WASH	0.5	2772.0	Continued backreaming out of the hole from 2232 m to 2170 m. Difficulty backreaming. Backreamed at 31 m/hr.
15 Feb 2005	IH	REAM/WASH	2	2772.0	Continued backreaming out of the hole from 2170 m to 1740 m. Good hole. Backreaming with 620 gpm at 1800 psi, 120 - 140 rpm, 10 - 12k ft.lbs. Backreamed at 215 m/hr.
15 Feb 2005	IH	REAM/WASH	1.5	2772.0	Circulate 2 x bottoms up. 960 gpm at 3400 psi. Reduced amount of larger cuttings coming over the shakers, large volume of fine cuttings coming back.
15 Feb 2005	IH	REAM/WASH	4.5	2772.0	Continued reaming run in hole from 1740 m to 2283 m. 620 gpm at 1750 psi, 130 rpms, 12k ft.lbs. Average running speed 155 m/hr. Commence raising the mud weight to 10.0 ppg. 6.12% gas at 1842 m.
15 Feb 2005	IH	REAM/WASH	2	2772.0	Continued reaming in the hole from 2283 m to 2338 m. Difficulty reaming. 130 - 140 rpm, 12-16k ft.lbs, 870 gpm at 3400 psi. Reaming at 27.5 m/hr.
15 Feb 2005	IH	REAM/WASH	3.5	2772.0	Continued reaming in the hole from 2338 m to 2729 m. Good hole. Reamed with 130 rpm, 12k ft.lbs, 810 gpm at 3000 psi. Reaming at 112 m/hr.
15 Feb 2005	IH	REAM/WASH	1	2772.0	Continued reaming in the hole from 2729 m to 2735 m. Difficult reaming. Reamed with weight on bit up to 25 klbs, 110-130 rpm, 840 gpm at 3725 psi. Tagged at 2735 m with 40 klbs static weight, no movement.
15 Feb 2005	IH	CIRCULATE HOLE CLEAN	2	2772.0	Circulated hole clean with 15000 stks at 3800 psi.
15 Feb 2005	IH	TRIP-OUT	1	2772.0	Continued to pull out of the hole with 5" drill pipe from 2735 m to 2400 m. Good hole. Maximum overpull 80k.
15 Feb 2005	IH	TRIP-OUT TIGHT	4.5	2772.0	Continued to pull out of the hole with 5" drill pipe having to wash from 2400 m to 1735 m. 620 gpm at 2600 psi.
15 Feb 2005	IH	TRIP-OUT	1.5	2772.0	Flow check. Well static. Pumped slug. Continued pulling out of the hole from 1735 m to 1077 m. Flow check at 13 3/8" casing shoe. Well static.
16 Feb 2005	IH	TRIP-OUT	1	2772.0	Continued pulling out of the hole with 5" drill pipe from 1077 m to 219 m
16 Feb 2005	IH	HANDLE BHA	1.5	2772.0	Continued pulling the bottom hole assembly out of the hole from 219 m to surface racking back in the derrick
16 Feb 2005	IH	WELL-HEAD	1.5	2772.0	Retrieved wearbushing. Jetted wellhead on the way out.

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 17:30

Trouble During Programmed Time for ZaneGrey-1

Date	PHS	Operation	NPT	Depth	Description of Programmed Trouble Time
16 Feb 2005	IC	RIG-UP TO RUN CSG	1	2772.0	Held a job safety analysis on running 9 5/8" casing. Rigged up to run 9 5/8" casing.
16 Feb 2005	IC	RIG REPAIR	1.5	2772.0	Picked up 9 5/8" casing shoe track from the derrick. Racking arm stuck around 9 5/8" float shoe damaging the racking arm. Repaired same.
16 Feb 2005	IC	CASING - RUN	1	2772.0	Ran 9 5/8" casing shoe track assembly removing the 4 x spirolisers from the shoe track assembly. The blades of the reamer shoe were removed earlier.
16 Feb 2005	IC	RIG-UP TO RUN CSG	0.5	2772.0	Changed out the bails. Nipped up the TAM packer.
16 Feb 2005	IC	CASING - RUN	9.5	2772.0	Continued running 9 5/8" 47 lbs/ft, N80 BTC casing from surface to 467 m (joint 208). Ran cross over pup joint (pup joint B). Continued running 9 5/8" 47 lbs/ft, NewVam casing from 467 m (joint 207) to 1776 m (joint 104). Ran 127 joints at 14.5 jnts/hr. Inflated TAM packer at 1089 m, circulated before leaving the 13 3/8" casing shoe.
18 Feb 2005	IC	WELL-HEAD	1	2772.0	Broke circulation with cement unit and tested surface lines to 5,000 psi - OK. Attempted to test seal assembly against lower rams to 1,500 psi - no success.
18 Feb 2005	IC	WELL-HEAD	2.5	2772.0	Pulled out of the hole with seal assembly and inspected same - OK. Adjusted same and ran in the hole to attempt to energise again.

Trouble During Programmed Time for ZaneGrey-1 ST1

Date	PHS	Operation	NPT	Depth	Description of Programmed Trouble Time
24 Feb 2005	IH2	RIG REPAIR	1.5	2886.0	Repaired top drive. Smoke observed coming from the Top Drive system. Rectified same, repairing the Lube oil pump. Repaired blower ducting hose. Continued circulating, 610 gpm at 2600 psi.
25 Feb 2005	IH2	TRIP OUT TO CHANGE BIT	1	3107.0	Flow check. Well static. Pull out of the hole from 3107 m to 2829 m with 5" drill pipe.
25 Feb 2005	IH2	TRIP OUT TO CHANGE BIT	2	3107.0	Flow check. Well static. Pumped slug. Pull out of the hole from 2829 m to 2250 m with 5" drill pipe.
25 Feb 2005	IH2	TRIP OUT TO CHANGE BIT	0.5	3107.0	Made up Top Drive. (Set toolface at 140 Left deg, sidetrack orientation). Pump slug.
25 Feb 2005	IH2	TRIP OUT TO CHANGE BIT	1	3107.0	Continued to pull out of the hole from 2250 m to 1892 m with 5" drill pipe.
26 Feb 2005	IH2	TRIP OUT TO CHANGE BIT	3	3107.0	Continued to pull out of the hole from 1892 m to 249 m with 5" drill pipe.
26 Feb 2005	IH2	HANDLE BHA	2	3107.0	Continued to pull out of hole with the bottom hole assembly from 249 m to surface. On surface it was found that the motor bit box had parted from the lower bearing housing of the motor and was left down hole. Fish left in hole:- bit, motor bit box and motor drive shaft (~1m long).
26 Feb 2005	IH2	HANDLE BHA	1.5	3107.0	Lay out damaged motor. Change out MWD pulser to increase flow capacity. Racked back same.
26 Feb 2005	IH2	HANDLE BHA	0.5	3107.0	Made up cement stand (side Entry Sub on DP) & stood back same.
26 Feb 2005	IH2	PICK UP PIPES	0.5	3107.0	Rigged up 2.7/8" handling gear & prepared to RIH with 2.7/8" cement stinger.
26 Feb 2005	IH2	TRIP-IN	6.5	3107.0	Picked up mule shoe (1 jt modified with taper & circulation slots) & 8 jts 2.7/8" stinger. Tripped in hole on 5" DP to 3,106m. Washed down last stand. Tagged bottom & confirmed depth.
26 Feb 2005	IH2	CIRCULATE & CONDITION MUD	1	3107.0	Circulated bottoms up to confirm no trip gas.
26 Feb 2005	IH2	CEMENT ABANDONMENT/KICK OFF PLUG	1.5	3107.0	Rigged up cement line & pressure tested line to 1,000psi. Set 80m balanced cement plug from 3,106m - 3,026m to sidetrack around fish. Rigged down cement line.
26 Feb 2005	IH2	TRIP-OUT	0.5	2900.0	Pulled back above plug to 2,900m. (ended ZaneGrey-1ST1, commenced ZaneGrey-1ST2 at 17:00hrs).

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 17:30

Trouble During Programmed Time for ZaneGrey-1 ST2

Date	PHS	Operation	NPT	Depth	Description of Programmed Trouble Time
26 Feb 2005	IH2	CIRCULATE	0.5	2900.0	Displaced stinger string with 30bbls of mud to clear pipe of cement. Flowchecked well, well static. Pumped slug. (ended ZaneGrey-1ST1, commenced ZaneGrey-1ST2 at 17:00 hrs)
26 Feb 2005	IH2	TRIP-OUT	4	2900.0	POOH with cement stinger.
26 Feb 2005	IH2	LAY DOWN PIPE	1	2900.0	Rigged up 2.7/8" handling gear & laid out 2.7/8" cement stinger.
26 Feb 2005	IH2	HANDLE BHA	0.5	2900.0	Broke down cement side entry stand. LO side entry sub.
26 Feb 2005	IH2	HANDLE TOOLS	1	2900.0	Made up bit to new motor. Set & confirmed 1.22° bend on motor.
27 Feb 2005	IH2	HANDLE BHA	2.5	2996.0	Continued to pick up 8 1/2" directional bottom hole assembly. Shallow pulse tested LWD, motor and adjustable gauge stabiliser. Tested OK.
27 Feb 2005	IH2	TRIP-IN	5	2996.0	Continued to run in hole with 5" drill pipe.
27 Feb 2005	IH2	REAM/WASH	2	3075.0	Washed and reamed down from 2996 m to 3075 m.
27 Feb 2005	IH2	DRILL WITH DOWNHOLE MOTOR	2.5	3082.0	Time drilled from 3075 m to 3082 m with 140R to 170R toolface. Unable to hold over 2 MT on the bit.
27 Feb 2005	IH2	DRILL WITH DOWNHOLE MOTOR	5.5	3107.0	Slid with 70R to 90R toolfaces from 3082 m to 3107 m. Surveys and surface samples indicated still in the old hole. Increase in pump pressure and noise on MWD tool indicated tagging fish.
27 Feb 2005	IH2	TRIP-OUT	5	3107.0	Flow check. Well Static. Pulled out of the hole with 5" drill pipe.
27 Feb 2005	IH2	HANDLE BHA	0.5	3107.0	Pulled bottom hole assembly out of the hole.
27 Feb 2005	IH2	RIG REPAIR	0.5	3107.0	Repaired racking arm bumper pad.
27 Feb 2005	IH2	HANDLE BHA	0.5	3107.0	Continued to pull bottom hole assembly out of the hole.
28 Feb 2005	IH2	HANDLE BHA	1	3107.0	Continued to pull bottom hole assembly out of the hole. Racked back same. Broke off bit. Damaged to cones on bit indicated tagging fish.
28 Feb 2005	IH2	RIG UP	0.5	3107.0	Rigged up to run 2 7/8" tubing.
28 Feb 2005	IH2	TRIP-IN	1	3107.0	Picked up 18 joints 2 7/8" cement stinger. (17 joints of 2 7/8" drill pipe, 1 joint mule shoe)
28 Feb 2005	IH2	TRIP-IN	4.5	3107.0	Continued to run in hole with 5" drill pipe to 3107 m.
28 Feb 2005	IH2	CIRCULATE HOLE CLEAN	0.5	3107.0	Circulated hole clean.
28 Feb 2005	IH2	RIG UP FOR CEMENTING OPS	0.5	3107.0	Rigged up cement hose.
28 Feb 2005	IH2	CEMENT ABANDONMENT/KICK OFF PLUG	1.5	2946.0	Pumped 5 bbls of drill water and tested cement lines. Pumped remaining 15 bbls of water ahead as spacer. Pumped 36.5 bbls (195 xs) of 16.5 ppg cement slurry (160 m plug from 2946m to 3106m) Pumped 7.7 bbls of drill water behind slurry. Displaced cement with 161 bbls of mud. Cement in place at 9:15.
28 Feb 2005	IH2	TRIP-OUT	0.5	2946.0	Pulled out of hole with 5" drill pipe from 3107 m to 2820 m.
28 Feb 2005	IH2	CIRCULATE	0.5	2946.0	Circulated bottoms up.
28 Feb 2005	IH2	TRIP-OUT	4.5	2946.0	Flow check. Well Static. Pulled out of hole with 5" drill pipe from 2820 m to top of cement stinger (173.81 m).
28 Feb 2005	IH2	TRIP-OUT	1.5	2946.0	Pulled out and layed out 17 joints of 2 7/8" tubing and mule shoe. Layed out same.
28 Feb 2005	IH2	HANDLE TOOLS	1	2946.0	Make up bit and set motor bend to 1.5 deg.
28 Feb 2005	IH2	HANDLE BHA	0.5	2946.0	Made up and programmed LWD.
28 Feb 2005	IH2	HANDLE BHA	1	2946.0	Continued to run in hole with bottom hole assembly to 221 m. Tested LWD and adjustable gauge stabiliser. Tested OK.
28 Feb 2005	IH2	TRIP-IN	2.5	2946.0	Continued to run in hole with 5" drill pipe to casing shoe at 2183 m.
28 Feb 2005	IH2	SAMPLE CUTTINGS	2	2946.0	Held trip drill. 26 secs. Slip and cut drill line, (110 ft).
28 Feb 2005	IH2	RIG SERVICE	0.5	2946.0	Service top drive system.
01 Mar 2005	IH2	TRIP-IN	1.5	2946.0	Continued to run in hole with 5" drill pipe from 2183 m to 2885 m.
01 Mar 2005	IH2	REAM/WASH	1	2957.0	Washed and reamed down from 2885 m to 2957 m with minimal pumps. Tagged top of cement at 2945 m. Cement not hard enough to kick off.
01 Mar 2005	IH2	SIDETRACK	13	2979.0	Orientated tool face to 160 deg. Repeatedly reamed to create an initial ledge. Time drill at 2957 m to 2979 m attempting to open hole sidetrack.
01 Mar 2005	IH2	SIDETRACK	0.5	2987.0	Rotate ahead from 2979 m to 2987 m due to indications of the well kicking off (100 psi motor differential). Average rate of penetration 60 m/hr. Survey indicated bottom hole assembly still in original well bore.

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Trouble During Programmed Time for ZaneGrey-1 ST2

Date	PHS	Operation	NPT	Depth	Description of Programmed Trouble Time
01 Mar 2005	IH2	SIDETRACK	8	2995.0	Continued time drilling from 2987 m to 2995 m with toolface orientated to 180 deg.
02 Mar 2005	IH2	SIDETRACK	10.5	3013.0	Time drilled ahead with 180 deg toolface from 2995 m to 3013 m. Survey taken at 2987 m indicated bottom hole assembly is still in the original hole.
02 Mar 2005	IH2	SIDETRACK	1	3013.0	Work pipe up and down with 180 deg toolface and 650 gpm attempting to create a ledge to initiate time drilling.
02 Mar 2005	IH2	SIDETRACK	7.5	3031.0	Time drilled ahead with 180 deg toolface from 3013 m to 3031 m. Survey taken at 3018 m indicated bottom hole assembly is still in the original hole.
02 Mar 2005	IH2	TRIP-OUT	5	3031.0	Flow check. Well static. Pulled out of hole from 3031m to 221 m with 5" drill pipe.
03 Mar 2005	IH2	HANDLE BHA	1	3031.0	Continued pulling bottom hole assembly out of the hole. Layed out mud motor and bit.
03 Mar 2005	IH2	HANDLE BHA	1	3031.0	Picked up mud motor. Set bend to 1.5 deg.
03 Mar 2005	IH2	HANDLE BHA	0.5	3031.0	Continued running in hole with bottom hole assembly. Layed out adjustable gauge stabiliser. Picked up integral blade stabiliser.
03 Mar 2005	IH2	TRIP-IN	1	3031.0	Tested MWD. Tested OK.
03 Mar 2005	IH2	TRIP-IN	1	3031.0	Continued running in hole with bottom hole assembly. Test motor. Tested OK.
03 Mar 2005	IH2	TRIP-IN	4	3031.0	Continued running in hole with 5" drill pipe from 220 m to 3003 m.
03 Mar 2005	IH2	REAM/WASH	0.5	3031.0	Washed and reamed from 3003 m to 3031 m.
03 Mar 2005	IH2	SIDETRACK	15	3060.0	Time drilled from 3031 m to 3060 m with 180 deg toolface.
04 Mar 2005	IH2	SIDETRACK	10	3070.0	Continued time drilling from 3060 m to 3070 m with 180 deg toolface. Unable to kick off from original well bore.
04 Mar 2005	IH2	TRIP OUT TO CHANGE BIT	5	3070.0	Flow check. Well static. Pulled out of the hole with 5" drill pipe from 3070 m to 220 m.
04 Mar 2005	IH2	HANDLE BHA	2	3070.0	Continued pulling the bottom hole assembly out of the hole from 220 m to surface. Changed out the jars. Read and downloaded MWD. Changed bit.
04 Mar 2005	IH2	HANDLE BHA	1	3070.0	Ran in hole with bottom hole assembly from surface to 220 m. Tested MWD and motor. Tested OK
04 Mar 2005	IH2	RIG SERVICE	0.5	3070.0	Service top drive system
04 Mar 2005	IH2	TRIP-IN	4.5	3070.0	Continued running in the hole with 5" drill pipe from 220 m to 3070 m. Washed and reamed last stand to bottom.
04 Mar 2005	IH2	SIDETRACK	1	3070.0	Time drilled with 160 deg toolface.
05 Mar 2005	IH2	SIDETRACK	10.5	3092.0	Continued time drilling. At 3092 m 90% formation returns at surface. Survey at 3074.64 m Inc=30.11 deg, Az=15.22 deg confirmed departure from the original well bore. Well sidetracked at 3075 m.
05 Mar 2005	IH2	CIRCULATE HOLE CLEAN	1	3092.0	Circulated bottoms up.
05 Mar 2005	IH2	TRIP OUT TO CHANGE BIT	1.5	3092.0	Flow check. Well static. Pulled out of hole wet with 5" drill pipe from 3092 m to 2831 m.
05 Mar 2005	IH2	TRIP OUT TO CHANGE BIT	4.5	3092.0	Pumped slug. Continued to pull out of the hole with 5" drill pipe from 2831 m to 220 m.
05 Mar 2005	IH2	HANDLE BHA	1	3092.0	Pulled bottom hole assembly out of the hole from 220m to surface.
05 Mar 2005	IH2	HANDLE TOOLS	1.5	3092.0	Changed out MWD pulser and bit. Put motor sleeve on motor. Orientated mud motor and downloaded MWD tool.
05 Mar 2005	IH2	TRIP IN FOR BIT CHANGE	1	3092.0	Ran in hole with bottom hole assembly from surface to 220 m. Tested MWD and motor. Test OK.
05 Mar 2005	IH2	TRIP IN FOR BIT CHANGE	3	3092.0	Continued to run in hole with 5" drill pipe from 220 m to 1655 m.
06 Mar 2005	IH2	TRIP IN FOR BIT CHANGE	3	3092.0	Continued to run in the hole with 5" drill pipe from 1655 m to 3092 m. Washed and reamed last stand down.
06 Mar 2005	IH2	SIDETRACK	1	3107.0	Directionally drilled ahead in rotary mode from 3092 m to 3107 m. Rotary drilling parameters were 80 rpm, 12-17k ft.lbs, 590 gpm at 2700 psi. Rate of penetration 21 m/hr.
06 Mar 2005	IH2	RIG REPAIR	3.5	3162.0	Top drive brake locked up. Trouble shoot top drive problem.
06 Mar 2005	IH2	TRIP-OUT	3	3162.0	Pulled out of the hole to the casing shoe at 2140 m.
06 Mar 2005	IH2	RIG REPAIR	10	3162.0	Trouble shoot top drive problem.
07 Mar 2005	IH2	RIG REPAIR	24	3162.0	Continued trouble shooting electrical fault on top drive system.
08 Mar 2005	IH2	RIG REPAIR	24	3162.0	Continued to trouble shoot electrical fault with the top drive system.

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Trouble During Programmed Time for ZaneGrey-1 ST2

Date	PHS	Operation	NPT	Depth	Description of Programmed Trouble Time
09 Mar 2005	IH2	RIG REPAIR	3	3162.0	Continued to trouble shoot electrical fault with the top drive system. - Replace all brushes on top drive system motor - Trouble shoot and attempt to reprogram existing PLC - no success - Download new program and reload PLC - OK - Reload differential pressure switches and temperature sensors on lube oil pump
09 Mar 2005	IH2	RIG REPAIR	1	3162.0	Surface test top drive system. Tested OK.
09 Mar 2005	IH2	TRIP-IN	1	3162.0	Continued to run in the hole with 5" drill pipe from 2140 m to 2594 m.
09 Mar 2005	IH2	RIG REPAIR	1	3162.0	Cooling water pump tripped on Engine#1 causing engine to overheat. Engine#1 and #4 tripped causing rig power to shut down. Reset same.
09 Mar 2005	IH2	RIG REPAIR	1.5	3162.0	Continued to run in the hole with 5" drill pipe from 2594 m to 3162 m washing and reaming the last 1.5 stands to bottom.
09 Mar 2005	IH2	RIG REPAIR	2	3245.0	Plugged up suction line on rig pumps. Stopped drilling and cleaned out pump suction lines.
09 Mar 2005	IH2	RIG REPAIR	1	3345.0	Saver sub backed out on connection. Layed out single with saver sub. Pick up single and new saver sub. Torque same.
12 Mar 2005	EI2	LOGGING - ELECTRIC LINE	1	3675.0	Rigged down wireline equipment and compensator line.
12 Mar 2005	EI2	LOGGING - ELECTRIC LINE	1.5	3675.0	Rigged up to strip over wireline to retrieve fish.
12 Mar 2005	EI2	LOGGING - ELECTRIC LINE	0.5	3675.0	Tension wireline. Cut wireline cable.
12 Mar 2005	EI2	LOGGING - ELECTRIC LINE	2.5	3675.0	Continued rigging up to strip over wireline. Made up wireline surface latching equipment. Tested same. Tested OK
12 Mar 2005	EI2	LOGGING - ELECTRIC LINE	5.5	3675.0	Ran in the hole with 3.375" grapple stripping over wireline from surface to 1522 m with 5" drill pipe.
12 Mar 2005	EI2	LOGGING - ELECTRIC LINE	1	3675.0	Cut wireline and rehead same due to excessive tension.
12 Mar 2005	EI2	LOGGING - ELECTRIC LINE	3	3675.0	Continued running in the hole with 3.375" grapple stripping over wireline from 1522 to 2171 m with 5" drill pipe.
13 Mar 2005	EI2	LOGGING - ELECTRIC LINE	3.5	3675.0	Continued running in the hole with 3.375" grapple stripping over wireline from 2171 to 3146 m with 5" drill pipe.
13 Mar 2005	EI2	LOGGING - ELECTRIC LINE	0.5	3675.0	Troubleshoot top drive problem.
13 Mar 2005	EI2	LOGGING - ELECTRIC LINE	0.5	3675.0	Circulated at 30 spm above RCI logging tool.
13 Mar 2005	EI2	LOGGING - ELECTRIC LINE	0.5	3675.0	Attempted to latch RCI logging tool. Latched successfully.
13 Mar 2005	EI2	LOGGING - ELECTRIC LINE	5	3675.0	Pulled back 2 joints. Reterminate wireline cable. Continued trouble shooting top drive problem.
13 Mar 2005	EI2	LOGGING - ELECTRIC LINE	13.5	3675.0	Wireline logging on 5" drill pipe with RCI tool taking 27 pressure samples (26 good, 1 tight), 1 fluid sample over the interval 3190 m to 3622 m.
13 Mar 2005	EI2	LOGGING - ELECTRIC LINE	0.5	3675.0	Pulled out of the hole with wireline logging tools on 5" drill pipe due to RCI tool failure.
14 Mar 2005	EI2	LOGGING - ELECTRIC LINE	1.5	3675.0	Continued pulling out of the hole with wireline RCI tool to 3146 m.
14 Mar 2005	EI2	LOGGING - ELECTRIC LINE	3	3675.0	Layed out side entry sub. Pulled wireline cable breaking it at the weakpoint. Retrieved wireline cable.
14 Mar 2005	EI2	LOGGING - ELECTRIC LINE	0.5	3675.0	Rigged down wireline equipment.
14 Mar 2005	EI2	LOGGING - ELECTRIC LINE	0.5	3675.0	Pumped slug. Pulled out of the hole with fish on 5" drill pipe.

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Release Time : 17:30

Activity Report For ZaneGrey-1

Date : 27 Jan 2005						Daily Cost : \$ 3,771,186	Report Number : 1
Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity	
0	PS	P	RM		10.5	<p>Last anchor racked at Grayling-1 location at 05:00, 27th January 2005, rig handed over to BSOC.</p> <p>Towed to Zane Grey-1 location. Average speed 3.5 kn.</p> <p>0500: 38 deg 09.7'S 148 deg 17.6'E 2.3 kn 188 deg heading 0800: 38 deg 19.0'S 148 deg 16.0'E 3.5 kn 215 deg heading 1300: 38 deg 32.0'S 148 deg 04.4'E 3.25 kn 215 deg heading 1430: 38 deg 36.7'S 148 deg 59.9'E 2.8 kn (various headings while swinging around for run-in)</p> <p>Statement of facts at last anchor racked: Ocean Patriot - Barite: 96.72 MT Gel: 39.74 MT Cement (Class G): 7.2 MT Fuel Oil: 259.14 cu. mtr. Drill Water: 296.18 cu. mtr. Pot Water: 198.89 cu. mtr. Lube Oil: 4,600 l</p> <p>Far Grip - Barite: 36 MT Gel: 56 MT Cement (Class G): 170 MT Fuel Oil: 284.02 cu. mtr. Drill Water: 400.52 cu. mtr. Pot Water: 575.04 cu. mtr. Lube Oil: 8,556 l Hyd. Oil: 3,074 l</p> <p>Pacific Wrangler - Barite: 0 MT Gel: 42 MT Cement (Class G): 80 MT Fuel Oil: 482.35 cu. mtr. Drill Water: 485.04 cu. mtr. Pot Water: 251.02 cu. mtr. Lube Oil: 27,631 l Hyd. Oil: 0 l</p> <p>Note: 84 MT Class G cement and 56 MT Gel on Far Grip has been loaded out by and paid for by BSOC</p>	
0	PS	P	RM		8.5	<p>Anchor handling operations commenced.</p> <p>PCC #5 passed to Wrangler at 1530 Anchor #5 on bottom at 1655 PCC#5 back to rig at 1740</p> <p>First anchor down on Zane Grey-1 location at 1655.</p> <p>PCC #1 passed to Wrangler at 1800 Anchor #1 on bottom at 1910 PCC#1 back to rig at 1930</p> <p>PCC #4 passed to Wrangler at 1950 Anchor #4 on bottom at 2015 PCC#4 back to rig at 2040</p> <p>PCC #8 passed to Wrangler at 2100 Anchor #8 on bottom at 2120 PCC#8 back to rig at 2140</p> <p>Commenced pre-tension of 4 primary anchors at 2145 Disconnected Far Grip from tow bridle at 2245 Completed pre-tension of 4 primary anchors 2310, all OK.</p> <p>PCC #7 passed to Wrangler at 2300 Anchor #7 on bottom at 2350</p>	

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Date : 27 Jan 2005**Daily Cost : \$ 3,771,186****Report Number : 1**

PCC #3 passed to Grip at 2310
Anchor #3 on bottom at 2340

Date : 28 Jan 2005**Daily Cost : \$ 293,762****Report Number : 2**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
0	PS	P	RM		4.5	Continued anchor handling operations and cross tensioning while picking up 36" BHA. PCC#7 back to rig at 0010 PCC #6 passed to Wrangler at 0015 Anchor #6 on bottom at 0050 PCC#6 back to rig at 0105 PCC #3 back to rig at 0035 PCC #2 passed to Grip at 0040 Anchor #2 on bottom at 0140 PCC#2 back to rig at 0215 Commenced pre-tensioning all anchors at 0200. All anchors tension tested to 200t for 10 mins at 0420. Preliminary anchor positions (from fairlead): #1: 912 m @ 074 deg #2: 1037 m @ 105 deg #3: 1053 m @ 165 deg #4: 1051 m @ 194 deg #5: 1091 m @ 255 deg #6: 1001 m @ 282 deg #7: 992 m @ 343 deg #8: 976 m @ 012 deg
0	PS	P	HBHA		3	Continued to pick up 36" BHA while preparing to make repairs to tow bridle.
0	PS	P	PUP		10.5	Picked up 5" drill pipe while making repairs to tow bridle.
0	PS	P	PUP		3	Picked up 5" drill pipe while ballasting down rig from 10 m draft to transition zone.
0	PS	P	HBHA		2	Pressure tested TDS IBOP, swivel packing and mud hose to 250 psi for 5 mins and 5000 psi for 10 mins while ballasting down through transition zone.
0	PS	P	RU		0.5	Rigged up the handle 30" conductor.
0	PS	P	RC		0.5	Picked up 30" x 20" conductor shoe joint and ran same through PGB in moonpool.

Date : 29 Jan 2005**Daily Cost : \$ 333,905****Report Number : 3**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
0	PS	P	RC		4	Continued to make up and run 30" x 20" conductor string. Made up 30" running tool to 30" housing. Landed string in PGB and secured to dolly in moonpool.
0	PS	P	RD		0.5	Rigged down 30" conductor handling equipment from rig floor.
0	PS	P	HBHA		0.5	Made up double of 8" drill collars to 8 1/4" jars and racked back same.
0	PS	P	PUP		7.5	Picked up remaining 5" drill pipe. Note: ROV conducted seabed survey - seabed clear.
0	PS	P	HT		0.5	Made up cement stand with two TIW valves and one side entry sub.
0	PS	P	HBHA		1.5	Made up 36" BHA and ran in the hole, tagging seabed at 94 m (corrected to Mean Sea Level).
129.5	CONH	P	D		1	Spudded ZaneGrey-1. Drilled ahead in 36" hole from 94 m to 129.5 m (128 m hole opener depth). Spudded with 200 bbls of Guar Gum and pumped 50 bbl hi-vis on connection.
129.5		P	WT		0.5	Pumped 100 bbl hi-vis sweep and displaced hole with 200 bbl gel mud. Conducted wiper trip to 96 m. Hole good. Ran back to bottom.
129.5	CONH	P	TO		1	Pumped 200 bbl gel mud and dropped Totco survey. Pulled out of the hole from 129.5 m. Recovered Totco - 0.25 deg.
129.5	CONH	P	HT		1	Made up 30" housing running tool to 30" conductor and PGB in the moonpool.

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Date : 29 Jan 2005**Daily Cost : \$ 333,905****Report Number : 3**

129.5	CON	P	RC	1.5	Ran in the hole with 30" conductor string with ROV assistance, worked through hang-up depth of 115 m, washed down from 115 m to 129.5 m. Shoe placed at 127.75 m and top of 30" housing at 92.5 m.
129.5	CON	P	RUC	1	Circulated at 430 gpm while holding JSA for cement job. Nipped up cement line and pressure tested same to 2,000 psi, holding for 5 minutes.
129.5	CON	P	CMC	1	Pumped 168 bbl, 15.8 ppg cement slurry with cement unit. Fluoresciene dye in returns observed by ROV after 105 bbl.
129.5	CON	P	WOC	2.5	Waited on cement while observing surface samples.

Date : 30 Jan 2005**Daily Cost : \$ 325,218****Report Number : 4**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
129.5	CON	P	WOC		2.5	Continued to wait on cement.
129.5	CON	P	HT		1	Released running tool and pulled out of the hole. PGB bullseyes 0 degrees and heading 046 degrees. Laid down running tool and stinger.
129.5	CON	P	HBHA		1.5	Broke out and laid down cement stand and 36" BHA.
129.5	SH	P	HT		2	Picked up and made up 18 3/4" running tool and Dowell Deep Sea Expres Cement Head to HWDP and racked same in derrick.
129.5	SH	P	HBHA		5	Made up 16" BHA, orientated and scribed mud motor and uploaded to MWD tools.
129.5	SH	TP	RR	WOE	0.5	Changed out blower hose and link tilt solenoid on top drive.
129.5	SH	P	TI		0.5	Ran into the hole with 16" BHA stabbing into 30" housing with ROV assistance. Tagged top of cement at 124.7 m.
129.5	SH	P	DC		0.5	Cleaned out shoe track and rathole from 124.7 m to 129.5 m. Worked through the shoe at 127.75 m.
684.0	SH	P	D		10.5	Drilled 16" hole from 129.5 m to 486 m. Directionally drilled from 486 m to 684 m pumping 50 bbl hi-vis sweeps mid stand and spotting 50 bbl around BHA on connections. Backreamed last single prior to each connection.

Date : 31 Jan 2005**Daily Cost : \$ 349,011****Report Number : 5**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
1080.0	SH	P	D		24	Directionally drilled from 684 m to 1080 m pumping 50 bbl hi-vis sweeps mid stand and spotting 50 bbl around BHA on connections. Backreamed last single prior to each connection.

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Release Time : 17:30

Activity Report For ZaneGrey-1

Date : 01 Feb 2005						Daily Cost : \$ 535,143	Report Number : 6
Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity	
1095.0	SH	P	D		1.5	Continued directionally drilling ahead in 16" hole from 1080 m to 1095 m. TD for 16" section 1095 m (TD called early due to slow Rate of Penetration).	
1095.0	SH	P	CIR		2	Circulated with sea water and pumped 150 bbl hi-vis pill, circulated out same with sea water. Pumped 1,000 bbl hi-vis pill followed by 200 bbl of 9.6 ppg KCL mud chased with 50 bbl hi-vis.	
1095.0	SH	P	TO		2	Commenced pulling out of the hole with 16" BHA on 5" drill pipe. Hole conditions good.	
1095.0	SH	P	HBHA		3	Pulled out of the hole with 16" BHA and racked back same. Downloaded MWD tools.	
1095.0	SH	P	RRC		0.5	Held pre-job safety meeting and rigged up to run 13 3/8" casing.	
1095.0	SH	TP	RR	WOE	1	Attempted to repair derrick stabbing board camera - unsuccessful. Assistant driller assigned to transfer signals from stabbing board to driller.	
						Changed out top drive link-tilt regulator.	
1095.0	SH	P	RRC		0.5	Continued rigging up 13 3/8" casing handling equipment.	
1095.0	SC	P	RC		1	Made up shoe joint, intermediate joint and float collar joint and bakerlocked same. Attached guide ropes to guidelines.	
1095.0	SC	P	RRC		0.5	Filled shoe track with seawater and tested float assembly - test OK. Rigged up Tam packer.	
1095.0	SC	P	RC		5	Ran 13 3/8" casing from 37 m to 988 m.	
1095.0	SC	P	RD		0.5	Rigged down Tam packer.	
1095.0	SC	P	RC		0.5	Made up 18 3/4" wellhead housing joint and laid out Flush Mounted Spider.	
1095.0	SC	P	RUC		0.5	Made up Dowell Deepsea Expres Cement stinger and installed cement plug basket below stinger.	
1095.0	SC	P	RC		0.5	Made up 18 3/4" wellhead running tool to 18 3/4" wellhead housing.	
1095.0	SC	P	RC		1	Ran in the hole with 13 3/8" casing on 5" HWDP landing string from 999 m to 1090.61 m, landing out in 30" wellhead housing at 92 m. Tested latch with 50k overpull.	
1095.0	SC	P	CIC		1	Circulate string volume (550 bbl) with seawater at 515 gpm.	
1095.0	SC	P	CMC		1.5	Nippled up cement hose to Dowell Deepsea Expres Cement Head and pressure tested same to 3,000 psi for 10 minutes. Pumped 166 bbl 12.5 ppg lead slurry and 67 bbl 15.8 ppg tail slurry using cement unit. No surface indication of top plug shearing.	
1095.0	SC	P	CMC		1	Displaced cement using rig pump, bumped plug early at 3862 strokes and 2,300 psi. Calculated displacement 477 bbls, displaced by 61 bbls less than this at plug bump. Dowell pressure tested casing to 1,500 psi for 10 minutes.	
1095.0	SC	P	RD		0.5	Nippled down cement hose and released running tool. Commenced pulling out of the hole while flushing wellhead.	

Date : 02 Feb 2005						Daily Cost : \$ 394,613	Report Number : 7
Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity	
1095.0	SC	P	HT		1.5	Pulled out of the hole with 18 3/4" wellhead running tool from 91.52 m (18 3/4" wellhead datum). Broke out and laid down running tool, crossover, pup joint and cement stinger. Made up stand of HWDP and racked back same in derrick.	
1095.0	SC	P	HT		2	Laid down Dowell Deepsea Expres cement head and HWDP double. Laid down second 18 3/4" running tool, pup joint and 13 3/8" x 4 1/2" IF water bushing.	
1095.0	SC	P	RU		1.5	Rigged up to run marine riser and BOP stack.	
1095.0	SC	P	BOP		1	Made up riser double. Moved rig 15 m off location to protect wellhead.	
1095.0	SC	P	BOP		2.5	Moved BOP stack to well centre in moonpool and made up riser double to same. Installed guidelines and beacons.	
1095.0	SC	P	BOP		1	Picked up BOP stack from carrier and ran in with same.	
1095.0	SC	P	BOP		1	Filled choke and kill lines with drill water. Made up riser test cap and tested choke and kill lines to 250 psi for 5 mins and 5,000 psi for 10 mins.	
1095.0	SC	P	BOP		2.5	Continued to run BOP stack and riser, tested choke and kill lines to 250 psi for 5 mins and 5,000 psi for 10 mins.	
1095.0	SC	P	BOP		1	Picked up and ran slip joint.	

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 17:30

Date : 02 Feb 2005**Daily Cost : \$ 394,613****Report Number : 7**

1095.0	SC	P	BOP	0.5	Picked up riser landing joint.
1095.0	SC	P	BOP	2	Nippled up choke, kill and booster lines.
1095.0	SC	P	BOP	1	Engaged SDL ring.
1095.0	SC	P	BOP	0.5	Pressure tested choke and kill lines to 250 psi for 5 mins and 5,000 psi for 10 minutes.
1095.0	SC	TP	WOW WEA 6		Waited on weather with rig 15 m off location.
1800 hr: Wind - 40/50 kn, Direction - South, Swell - 3.5 m, Sea - 2 m, Heave - 0.6 m					
2000 hr: Wind - 55/60 kn, Direction - South/South East, Swell/Sea - 8 m, Heave - 1 m					
2200 hr: Wind - 55/60 kn, Direction - South/South East, Swell/Sea - 8 m, Heave - 2 m					
2400 hr: Wind - 30/35 kn, Direction - South/South East, Swell/Sea - 8 m, Heave - 2 m					

Date : 03 Feb 2005**Daily Cost : \$ 404,725****Report Number : 8**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
1095.0	SC	TP	WOW WEA	16.5		Continued to wait on weather (supply vessel unable to offer close support for riser work in moonpool).
						0200 hr: Wind - 30 kn, Direction - SE, Swell/Sea - 7/8 m
						0400 hr: Wind - 25 kn, Direction - N, Swell/Sea - 6.5 m
						0600 hr: Wind - 25 kn, Direction - N, Swell/Sea - 5 m
						0800 hr: Wind - 23 kn, Direction - NE, Swell/Sea - 5 m
						1000 hr: Wind - 30/35 kn, Direction - NE, Swell/Sea - 5 m
						1200 hr: Wind - 30/35 kn, Direction - NE, Swell/Sea - 4/5 m
						1400 hr: Wind - 30 kn, Direction - NE, Swell/Sea - 4/5 m
						1600 hr: Wind - 30 kn, Direction - NE, Swell/Sea - 4 m
1095.0	SC	P	BOP	1		Re-positioned the rig over wellhead. ROV observed BOP twisted and out of alignment with guide posts.
1095.0	SC	TP	BOP WEA	2		ROV inspected BOP stack and riser, observed BOP twisted at swivel joint. Installed storm saddles in moonpool and adjusted rig/turned the stack to line up with guide posts.
1095.0	SC	P	BOP	0.5		Landed out BOP stack on wellhead. Engaged stack connector. ROV confirmed indicator on stack in latched position. Pulled 50k over to confirm latch - OK.
						Before landing: PGB 0.75 deg (dir: port forward) on aft bullseye.
						After landing: PGB 0.75 deg (dir: port forward) on aft bullseye and 0 deg on port bullseye.
1095.0	SC	P	BOP	1		Backed out dogs on slip joint and stroked out same.
1095.0	SC	TP	BOP BOP	0.5		Attempted to lay down landing joint but unable to pull free of inner barrel. Continued to work and free up same.
1095.0	SC	P	BOP	1		Laid down landing joint. Picked up diverter and installed same.
1095.0	SC	P	BT	0.5		Broke circulation with Dowell cement unit. Tested surface lines to 3,500 psi - Ok. Closed shear rams and tested casing and connector to 3,000 psi for 15 minutes - Ok. Commenced rigging down riser handling equipment.
1095.0	SC	P	RD	1		Continued rigging down riser handling equipment and rigging up 350t bails and elevators.

Date : 04 Feb 2005**Daily Cost : \$ 428,138****Report Number : 9**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
1095.0	SC	P	HBHA	4.5		Made up 12 1/4" BHA, downloaded MWD. Shallow tested motor, adjustable gauge stabiliser and attempted to test MWD with 800 gpm.
1095.0	SC	TP	HBHA VEQ	1		Ran in the hole with BHA to 251 m and attempted to re-test MWD with 870 gpm.
1095.0	SC	P	HT	1		Made up Cameron weight-set test tool and ran in the hole with same on 5" drill pipe to 342 m, landing out tool in wellhead at 92 m.
1095.0	SC	P	BT	0.5		Pressure tested BOP stack connector to 4,500 psi for 10 minutes.
1095.0	SC	P	BT	1		Function test BOP stack with blue pod from drill floor remote panel and yellow pod from toolpusher's office remote panel - test good.
1095.0	SC	TP	HBHA VEQ	0.5		Attempted another MWD test with 870 gpm.
1095.0	SC	P	RM	0.5		Centred the rig over the well centre.

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 17:30

Date : 04 Feb 2005					Daily Cost : \$ 428,138	Report Number : 9
1095.0	SC	P	HT	0.5	Pulled out of the hole from 342 m to 251 m and laid out weight-set test tool.	
1095.0	SC	TP	HBHA	VEQ 0.5	Attempted another MWD test with 900 gpm.	
1095.0	SC	TP	HBHA	VEQ 1	Pulled out of the hole from 251 m to 23 m.	
1095.0	SC	TP	HBHA	VEQ 1	Downloaded MWD - data incomplete. Laid out MWD and pulser sub.	
1095.0	IH	TP	HBHA	VEQ 1	Picked up new MWD and uploaded to same.	
1095.0	IH	P	TI	4	Ran in the hole with 12 1/4" BHA, tagged cement at 1058.77 m.	
1095.0	IH	P	BT	0.5	Function tested diverter and pumped through both overboard lines - test good.	
1095.0	IH	P	DC	6	Drilled cement and float equipment from 1058.77 m to 1095 m. Hole packing off with plug junk.	
1098.0	IH	P	D	0.5	Directionally drilled ahead in 12 1/4" hole from 1095 m to 1098 m.	

Date : 05 Feb 2005					Daily Cost : \$ 357,430	Report Number : 10
Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
1098.0	IH	P	CIR		0.5	Circulated bottoms up at 1098 m at 950 gpm.
1098.0	IH	P	LOT		1.5	Conducted FIT with 8.6 ppg mud against lower pipe rams to 815 psi (1.6 SG equivalent) using Dowell cement unit. Took SCR's at 1090 m with 8.6 ppg mud: Rate - 30 spm, #2 - 150 psi, #3 - 125 psi, CLF - 25 psi Rate - 40 spm, #2 - 175 psi, #3 - 175 psi, CLF - 10 psi Rate - 50 spm, #2 - 225 psi, #3 - 225 psi, CLF - 10 psi
1691.0	IH	P	D		21.5	Directionally drilled ahead in 12 1/4" hole from 1098 m to 1691 m. Backreamed a single before each connection. Average ROP 27.6 m/hr. Attempted to slide from 1539 m to 1545 m, high torque and unable to maintain toolface. Slid from 1568 m to 1577 m to correct walk to left. Took SCR's at 1500 m with 9.0 ppg mud: Rate - 30 spm, #1 - 220 psi, #3 - 220 psi Rate - 40 spm, #1 - 255 psi, #3 - 260 psi Rate - 50 spm, #1 - 325 psi, #3 - 335 psi
1691.0	IH	TP	D	WOE	0.5	Number 1 stand pipe washed in derrick. Worked pipe to ensure it was free and rigged up to circulate through cement hose while rotating string using rotary table. Rigged up to change over to spare Kelly hose.

Date : 06 Feb 2005					Daily Cost : \$ 412,864	Report Number : 11
Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
1691.0	IH	TP	RR	VEQ	3	Continued to change over to spare Kelly hose while circulating through the cement hose and rotating using rotary table. Pressure tested hose to 5,000 psi for 10 minutes.
2103.0	IH	P	D		10.5	Directionally drilled ahead in 12 1/4" hole from 1691 m to 2103 m. Backreamed prior to each connection. Average ROP 57.2 m/hr.
2103.0	IH	TP	RR	VEQ	2.5	Due to an incident with the top drive a stand of drill pipe was bent (incident report to be completed). Rack back bent stand. A motor alignment cylinder was then replaced on the top drive system. Circulated 1.5 x bottoms up.
2103.0	IH	TP	TOT	VEQ	2	Started pulling out of the hole from 2103 m to 1930 m, inspecting drill pipe on the way out. Hole tight. Attempted to work through tight hole. Overpull 50 to 60 klbs. Observed well not taking correct fluid volume for trip. Flow check. Well static.
2103.0	IH	TP	RW	VEQ	5.5	Backream out of hole from 1930 m to inside 13 3/8" casing shoe at 1092 m. Maintained minimum circulating pressures while worked through sections where hole packing off from 1825 m to 1820 m. Observed over-torqued connection at stand 56/55. Continued back-reaming. working through intermittent tight spots to 1310 m. Overpull 30 klbs to 40 klbs while backreaming 1310 m to almost inside casing shoe. Hole unloading significant volume of drill cuttings while backreaming.
2103.0	IH	TP	CHC	VEQ	0.5	Circulated at the shoe while boosting the riser. Significant volume of drill cuttings recovered. (At top and bottom screens)

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 17:30

Date : 07 Feb 2005						Daily Cost : \$ 396472	Report Number : 12
Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity	
2103.0	IH	TP	CHC	VEQ	0.5	Circulated hole clean at the 13 3/8" casing shoe. Boosted riser. Significant volume of cuttings recovered.	
2103.0	IH	TP	TO	VEQ	2.5	Flow check. Well static. Pumped slug and continued pulling out of the hole with 5" drill pipe.	
2103.0	IH	TP	HBHA	VEQ	2	Continued pulling the BHA out of hole. MWD pulser was changed out and the bit was inspected. Conditioned surface active mud system with 1.25 ppbl PHPA.	
2103.0	IH	TP	HBHA	VEQ	2	Initialised MWD. Adjusted bend on motor from 1.15 deg to 0.78 deg. Surface tested MWD, motor and adjustable gauge stabiliser.	
2103.0	IH	TP	HBHA	VEQ	1	Ran BHA in the hole.	
2103.0	IH	TP	TI	VEQ	1	Ran in the hole with 5" drill pipe to the 13 3/8" casing shoe.	
2103.0	IH	TP	CMD	VEQ	1.5	Circulated and conditioned mud at the shoe.	
2103.0	IH	TP	TI	VEQ	2.5	Continued running in the hole with 5" drill pipe to 1916 m. Conditioned surface active mud system with 1.25 ppbl PHPA.	
2103.0	IH	TP	TIT	VEQ	1	Washed and reamed down from 1916 m to 2086 m. Hole tight.	
2103.0	IH	TP	CMD	VEQ	2	Circulated and conditioned the mud while slowly working the pipe, raised mud system PHPA content to 1.25 ppbl prior to drilling ahead.	
2103.0	IH	TP	TIT	VEQ	0.5	Washed and reamed down from 2086 m to 2103 m. Tight hole.	
2315.0	IH	P	DM		7.5	Drilled ahead 12 1/4" hole. Slid with difficulty from 2236 m to 2240 m while attempting to turn left and nudge up. Swepted the hole with 50 bbls HiVis pill at 2240 m. No noticeable increase in cuttings when the pill came to surface. Average rate of penetration, 69.7 m/hr.	

Date : 08 Feb 2005						Daily Cost : \$ 387562	Report Number : 13
Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity	
2546.0	IH	P	DM		11	Continued to drill 12 1/4" directional hole with mud motor assembly in rotary mode from 2315 m to 2546 m. Average rate of penetration, 57.7 m/hr.	
2546.0	IH	P	CIR	VEQ	0.5	Circulated while all three pump suction screen's were cleaned. Cleaned out polymer from screens.	
2697.0	IH	P	DM		12.5	Continued to drill 12 1/4" directional hole with mud motor assembly in rotary mode from 2546 m to 2697 m. Difficulty drilling. High torque. Off bottom torque at 12-13 klbs. On bottom torque 18klbs. String stalling regularly. Mud motor stalling with associated pressure spikes, (reduced flow rate to avoid tripping the pop-offs). Drilling difficulties were encountered around 2570 m. Average rate of penetration, 57.7 m/hr.	

Date : 09 Feb 2005						Daily Cost : \$ 389542	Report Number : 14
Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity	
2702.0	IH	P	DM		0.5	Continued to drill 12 1/4" directional hole with mud motor assembly in rotary mode from 2697 m to 2702m.	
2702.0	IH	P	CHC		2	Circulated 2 times bottoms up. Shakers clean. Pulled out of the hole with 5" drill pipe 5 stands (wet) from 2702 m to 2575 m. Hole good.	
2702.0	IH	P	TOB		6	Flow check. Well static. Pumped a slug. Continued pulling out of hole with 5" drill pipe from 2575 m to inside 13 3/8" casing shoe at 1090 m. Hole good. Flow check. Well static. Pulled out of hole with 5" drill pipe from 1090 m to 251 m.	
2702.0	IH	P	HBHA		2.5	Continued to pull bottom hole assembly out of hole. Lay out MWD, Adjustable gauge stabilizer, Mud motor and bit.	
2702.0	IH	P	HBHA		1.5	Pick up rotary bottom hole assembly, with Insert Tricone bit and the same MWD system.	
2702.0	IH	P	TI		2.5	Run in the hole from surface to 1074 m. Shallow tested the MWD at the second stand of HWDP.	
2702.0	IH	P	RU		0.5	Rig up circulating hose to circulate while slipping and cutting drill line.	
2702.0	IH	P	SC		1.5	Circulated at 300 gpm while slipping and cutting drill line.	
2702.0	IH	P	RS		0.5	Service the block, top drive system and pipe handler.	
2702.0	IH	P	RD		0.5	Rig down circulating hose and subs.	
2702.0	IH	P	TI		2	Continued to run in the hole with 5" drill pipe from 1074 m to 1767 m.	

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 17:30

Date : 09 Feb 2005**Daily Cost : \$ 389,542****Report Number : 14**

2702.0	IH	P	TIT	4	Wash and ream while running in with 5" drill pipe from 1767 m to 2220 m due to tight hole. 1900 m to 1910 m hole tight washed string through obstruction.
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Date : 10 Feb 2005**Daily Cost : \$ 376,549****Report Number : 15**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
2702.0	IH	P	TIT		11.5	Continued washing and reaming while running in hole with 5" drill pipe from 2222 m to 2702 m, due to tight hole.
2725.0	IH	P	D		6	Took slow circulation rates. Continued drilling 12 1/4" hole from 2702 m to 2725 m. Difficulty drilling. High torque associated with string stalling, maximum 28 kft.lbs. Average rate of penetration, 6.4 m/hr.
2725.0	IH	P	RR	VEQ	3	Swivel packing on top drive system washed. Pulled out of hole dry back reaming to 2725 m. Tight hole. 70k overpull, unable to pull back through without pumping. Rigged up circulating hose and subs to circulate through drill string while repairing the swivel packing.
2741.0	IH	P	D		3	Continued drilling 12 1/4" hole from 2725 m to 2741 m. Difficult drilling. High torque associated with string stalling, maximum 28 kft.lbs. Average rate of penetration, 9.7 m/hr.
2741.0	IH	P	RR	VEQ	0.5	Circulated using pump #2 while pump #1 and pump #3 were repaired. Pump #3 washed out on LH suction module. Pump #1 had LH swab/liner washed.

Date : 11 Feb 2005**Daily Cost : \$ 346,289****Report Number : 16**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
2741.0	IH	P	RR		2	Circulated and worked pipe at 2741 m while repairing pumps.
2772.0	IH	P	D		7	Drilled ahead 12 1/4" hole from 2741 m to section TD at 2772 m. Intermittent high torque while drilling coal beds. Drilling coal at 20-30 m/hr. High torque between coal beds. High torque associated with string stalling, maximum 16 kft.lbs. Average rate of penetration, 11.0 m/hr.
2772.0	IH	P	CHC		2	Circulated 2 x bottoms up. Shakers clean. ROV observed traces of fluid seeping from between the 30" wellhead housing joint and 18 3/4" wellhead.
2772.0	IH	P	TO		0.5	Flow check. Well Static. Wiper trip from 2772 m to 2700 m.
2772.0	IH	P	CIR		1.5	Circulated hole clean.
2772.0	IH	P	TOT		1	Flow check. Well Static. Pulled out of from 2772 m to 2628 m. Difficulty pulling out. 70k overpull at 2628 m.
2772.0	IH	P	RW		1	Wash and ream out the hole from 2628 m to 2398 m, 500 gpm and 70 rpm. Max overpull 15k.
2772.0	IH	P	TO		2	Continued to pull out of the hole from 2398 m to 1968 m. Good hole.
2772.0	IH	P	TI		2	Run in the hole from 1968 m to 2772 m. Good hole. Tight spot at 2359 m, reamed through, no drag.
2772.0	IH	P	CIR		1.5	Circulated bottoms up. Shakers clean.
2772.0	IH	P	TO		3.5	Continued to pull out of the hole from 2772 m to 1480 m. Good hole.

Date : 12 Feb 2005**Daily Cost : \$ 346,289****Report Number : 17**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
2772.0	IH	P	TO		1.5	Continued pulling out of the hole from 1480m to 246 m.
2772.0	IH	P	HBHA		1.5	Continued pulling out of the hole laying out the bit and racking the bottom hole assembly in the derrick.
2772.0	IH	P	WH		2	Made up jetting tool and wear bushing recovery tool. washed through the BOP's and well head. Recovered the 13 3/8" wear bushing. Minor scoring on the wear bushing port aft.
2772.0	IH	P	RRC		2.5	Make up 9 5/8" CHSART in a stand of 5" HWDP. During torquing up the joints the lower Mandrel on the Chsart parted. Layout same and picked up the backup 9 5/8" CHSART.
2772.0	IH	P	RUC		0.5	Made up deep sea express cement head. Racked back same.
2772.0	IH	P	RRC		1.5	Conducted job safety analysis on rigging up and running 9 5/8" casing. Rigged up to run 9 5/8" casing.
2772.0	IH	P	RC		0.5	Made up 9 5/8" shoe track assembly consisting of the shoe joint complete with Pen-o-trator reamer shoe, intermediate joint and float shoe all Baker locked. Tested shoe and float.

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 17:30

Date : 12 Feb 2005**Daily Cost : \$ 346,289****Report Number : 17**

2772.0	IH	P	RRC	0.5	Nipple up the TAM packer.
2772.0	IH	P	RC	1.5	Continued running 9 5/8" 47 lb/ft, N80, BTC casing from surface to 188 m (joint 232). Ran 12 joints at 12 jnts/hr.
2772.0	IH	P	RC	8	Continued running 9 5/8" 47 lb/ft, N80, BTC casing from 188 m (joint 231) to 467 m (joint 208). Ran a cross over pup joint (pup joint B) . Continued running 9 5/8" 47 lb/ft, N80, NewVam casing from 467 m (joint 207) to 1776 m (joint 104). Ran 127 joints at 15.8 jnts/hr. Difficluty running casing at 1776 m. Hole taking 70k down. Inflate TAM packer. Unable to wash through.
2772.0	IH	TP	RC	TTE 0.5	Layed out casing joint 104. Rigged down casing handling gear.
2772.0	IH	TP	CIC	TTE 3.5	Rigged up 5" drill pipe handling gear. Picked up a stand of 5" drill pipe. Made up drill pipe to 9 5/8" casing using the circulating swedge. Circulated and reamed from 1776 m to 1777m. Torque limiter set to 15k ft.lbs. 10-40 rpm. 400 psi at 500 gpm.

Date : 13 Feb 2005**Daily Cost : \$ 365,421****Report Number : 18**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
2772.0	IH	TP	CIC	PWQ	2.5	Continued to circulate and ream with difficulty from 1777 m to 1778 m. Work pipe at 10-40 rpm, 400 psi at 500 gpm with the torque limiter set to 15k ft.lbs.
2772.0	IH	TP	RRC	PWQ	1	Clear catwalk and rig floor. Prepare slug while rigging up to pull casing out of the hole. Held job safety analysis for pulling 9 5/8" casing out of the hole.
2772.0	IH	TP	PS	PWQ	0.5	Flow check. Well static. Pump slug.
2772.0	IH	TP	RRC	PWQ	0.5	Break out circulating swedge. Racked back stand of 5" drill pipe. Rigged down 5" drill pipe handling gear. Rigged up 9 5/8" casing handling gear.
2772.0	IH	TP	TO	PWQ	15	Continued to pull 9 5/8" 47 lb/ft, N80, NewVam casing out of the hole from 1776 m (joint 105) to 484 m (joint 207). Pulled out the cross over Pup joint (Pup joint B). Pulled 9 5/8" 47 lb/ft, N80, BTC out of the hole from 467 m (joint 208) to 36 m (joint 244). Pulled 139 joints at 9 jnts/hr. Casing was pulled out of the hole with no problems. Racked back 9 5/8" shoe track in the derrick.
2772.0	IH	TP	TO	PWQ	0.5	Rigged down casing handling gear and 500 tonne bails.
2772.0	IH	TP	TO	PWQ	0.5	Rigged up 5" drill pipe handling gear and 350 tonne bails.
2772.0	IH	TP	TO	PWQ	0.5	Made up jetting sub and wear bushing recovery / setting tool to 5" drill pipe.
2772.0	IH	TP	TO	PWQ	0.5	Ran in hole with 5" drill pipe. Washed through the BOP's and well head. Set the 13 3/8" wear bushing.
2772.0	IH	TP	TO	PWQ	0.5	Pulled jetting tool and wear bushing recovery / setting tool out of hole with 5" drill pipe. Layout same.
2772.0	IH	TP	TO	PWQ	1.5	Ran in hole with 12 1/4" rotary bottom hole assembly from derrick, with new mill tooth bit to 135 m. Shallow pulse tested MWD

Date : 14 Feb 2005**Daily Cost : \$ 368,421****Report Number : 19**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
2772.0	IH	TP	TI	PWQ	0.5	Continued running in the hole with BHA from 135 m to 219 m.
2772.0	IH	TP	TI	PWQ	2	Continued running in hole from 219 m to 1740 m with 5" drill pipe. Good Hole.
2772.0	IH	TP	TIT	PWQ	0.5	Continued running in the hole with care, with 5" drill pipe. Tag obstruction at 1777 m. Pull back to 1770 m and attempt wash down through obstruction. No go. Establish reaming parameters. (Up 270 klbs, down 220 klbs, rotating 240 klbs)
2772.0	IH	TP	RW	PWQ	1.5	Wash and ream (on compensator) 1777 m to 1780 m. 10 - 12 klbs weight on bit, 80 RPM, torque at 8 - 10 klbs, 825 gpm. Increase in weight gave flat torque. Oserved significant volume of cuttings / cavings at shakers.
2772.0	IH	TP	CHC	PWQ	1	Broke through obstruction at 1780 m and continued wash and ream without difficulty to kelly down at 1795 m. Washed and reamed / backreamed pipe 1795 m to 1770 m while circulate bottoms up and until shakers clear. Increase RPM to 140 to assist hole cleaning. Significant volume of cuttings discarded - mostly larger cavings / cuttings, but large amount of fines blinding bottom shaker screens between 4000 stks and 6000 stks. Boosted riser after bottoms up. Large volume of large cavings / cuttings.
2772.0	IH	TP	RW	PWQ	0.5	Work pipe (dry) 1770 m to 1795 m. Observed 50 klbs up / 20 klbs down through 1780 m to 1777 m. Observed decrease in up down weights through tight spot. After decrease in weight up/down unable to pass 1791 m. Wash / ream 1785 m to 1795 m. String taking weight as work down, clear when pick-up above.
2772.0	IH	TP	RW	PWQ	3.5	Continued washing / reaming from 1795 m to 1910 m. 60-100 rpm, 10-12k ft.lbs, 520 gpm at 1650

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 17:30

Date : 14 Feb 2005**Daily Cost : \$ 368,421****Report Number : 19**

					psi. Increasing the flow rate to 900 gpm to assist hole cleaning. Excessive cuttings coming over the shakers. Commence raising the mud weight from 9.40 ppg to 9.80 ppg.
2772.0	IH	TP	CHC	PWQ 0.5	Circulate hole clean due to excessive cuttings return and to control surface losses over the shakers.
2772.0	IH	TP	RW	PWQ 11	Continued washing / reaming from 1910 m to 2284 m. 90-120 rpm, 5-10 klbs, 10-12k ft.lbs, 920 gpm at 3120 psi. Increasing WOB greater than 10 klbs caused the drill string to stall. Greater than 15 klbs the drill string started to pack off. Average reaming speed, 34 m/hr. Mud weight stabilised at 9.8 ppg. Gas peaks encountered during reaming, 1955 m 4.63%, 2108 m 4.92%.
2772.0	IH	TP	CHC	PWQ 1.5	Circulate hole clean with 13000 stks at 3900 psi.
2772.0	IH	TP	RW	PWQ 1.5	Flow check. Well static. Backream out of hole from 2284 m to 2232 m. Difficulty backreaming. Max over pull 80k. Backreaming with 140 rpm, 900 gpm at 3100 psi, 10k ft.lbs.

Date : 15 Feb 2005**Daily Cost : \$ 357,652****Report Number : 20**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
2772.0	IH	TP	RW	PWQ 0.5		Continued backreaming out of the hole from 2232 m to 2170 m. Difficulty backreaming. Backreamed at 31 m/hr.
2772.0	IH	TP	RW	PWQ 2		Continued backreaming out of the hole from 2170 m to 1740 m. Good hole. Backreaming with 620 gpm at 1800 psi, 120 - 140 rpm, 10 - 12k ft.lbs. Backreamed at 215 m/hr.
2772.0	IH	TP	RW	PWQ 1.5		Circulate 2 x bottoms up. 960 gpm at 3400 psi. Reduced amount of larger cuttings coming over the shakers, large volume of fine cuttings coming back.
2772.0	IH	TP	RW	PWQ 4.5		Continued reaming run in hole from 1740 m to 2283 m. 620 gpm at 1750 psi, 130 rpms, 12k ft.lbs. Average running speed 155 m/hr. Commence raising the mud weight to 10.0 ppg. 6.12% gas at 1842 m.
2772.0	IH	TP	RW	PWQ 2		Continued reaming in the hole from 2283 m to 2338 m. Difficulty reaming. 130 - 140 rpm, 12-16k ft.lbs, 870 gpm at 3400 psi. Reaming at 27.5 m/hr.
2772.0	IH	TP	RW	PWQ 3.5		Continued reaming in the hole from 2338 m to 2729 m. Good hole. Reamed with 130 rpm, 12k ft.lbs, 810 gpm at 3000 psi. Reaming at 112 m/hr.
2772.0	IH	TP	RW	PWQ 1		Continued reaming in the hole from 2729 m to 2735 m. Difficult reaming. Reamed with weight on bit up to 25 klbs, 110-130 rpm, 840 gpm at 3725 psi. Tagged at 2735 m with 40 klbs static weight, no movement.
2772.0	IH	TP	CHC	PWQ 2		Circulated hole clean with 15000 stks at 3800 psi.
2772.0	IH	TP	TO	PWQ 1		Continued to pull out of the hole with 5" drill pipe from 2735 m to 2400 m. Good hole. Maximum overpull 80k.
2772.0	IH	TP	TOT	PWQ 4.5		Continued to pull out of the hole with 5" drill pipe having to wash from 2400 m to 1735 m. 620 gpm at 2600 psi.
2772.0	IH	TP	TO	PWQ 1.5		Flow check. Well static. Pumped slug. Continued pulling out of the hole from 1735 m to 1077 m. Flow check at 13 3/8" casing shoe. Well static.

Date : 16 Feb 2005**Daily Cost : \$ 733,377****Report Number : 21**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
2772.0	IH	TP	TO	PWQ 1		Continued pulling out of the hole with 5" drill pipe from 1077 m to 219 m
2772.0	IH	TP	HBHA	PWQ 1.5		Continued pulling the bottom hole assembly out of the hole from 219 m to surface racking back in the derrick
2772.0	IH	TP	WH	PWQ 1.5		Retrieved wearbushing. Jetted wellhead on the way out.
2772.0	IC	TP	RRC	PWQ 1		Held a job safety analysis on running 9 5/8" casing. Rigged up to run 9 5/8" casing.
2772.0	IC	TP	RR	PWQ 1.5		Picked up 9 5/8" casing shoe track from the derrick. Racking arm stuck around 9 5/8" float shoe damaging the racking arm. Repaired same.
2772.0	IC	TP	RC	PWQ 1		Ran 9 5/8" casing shoe track assembly removing the 4 x spoolisers from the shoe track assembly. The blades of the reamer shoe were removed earlier.
2772.0	IC	TP	RRC	PWQ 0.5		Changed out the bails. Nipped up the TAM packer.
2772.0	IC	TP	RC	PWQ 9.5		Continued running 9 5/8" 47 lbs/ft, N80 BTC casing from surface to 467 m (joint 208). Ran cross over pup joint (pup joint B). Continued running 9 5/8" 47 lbs/ft, NewVam casing from 467 m (joint 207) to 1776 m (joint 104). Ran 127 joints at 14.5 jnts/hr. Inflated TAM packer at 1089 m, circulated before leaving the 13 3/8" casing shoe.

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 17:30

Date : 16 Feb 2005**Daily Cost : \$ 733,377****Report Number : 21**

2772.0	IC	P	RC	2	Continued running 9 5/8" 47 lbs/ft, NewVam casing from 1776 m (joint 104) to 1964 m (joint 86). Took 50 klbs at 1895 m. Washed down at 560 gpm at 800 psi. Took 70 klbs at 1964 m. Washed down at 860 gpm at 190 psi. Unable to get past tight spot. Excessive cuttings coming over the shakers.
2772.0	IC	P	RW	1	Pulled back to 1962 m. Lay out joint 85 and TAM packer.
2772.0	IC	P	RC	0.5	Changed elevators. Made up stand of 5" drill pipe to casing string.
2772.0	IC	P	RC	1.5	Reamed from 1962 m to 1989 m. Pumped at 560 gpm at 500 psi. Torque limiter set to 15k ft.lbs. Unable to rotate.
2772.0	IC	P	RC	0.5	Racked back stand of 5" drill pipe. Changed out elevators.
2772.0	IC	P	RC	0.5	Continued running 9 5/8" casing from 1962 m. Damaged threads on joints 88 & 87.
2772.0	IC	P	RC	0.5	Layout joints 87 & 88 due to damaged threads.

Date : 17 Feb 2005**Daily Cost : \$ 345,867****Report Number : 22**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
2772.0	IC	P	RC		0.5	Continued laying out damaged joints 88 & 87.
2772.0	IC	P	RC		1.5	Continued running 9 5/8" casing from 1950m to 2038 m (joint 80). Washed down joint 80.
2772.0	IC	P	RC		0.5	Changed out elevators. Made up 5" drill pipe to casing using circulating swedge.
2772.0	IC	P	RC		1	Washed casing down with stand of 5" drill pipe 520 gpm at 560 psi.
2772.0	IC	P	RC		0.5	Racked back 5" drill pipe in the derrick. Changed out elevators.
2772.0	IC	P	RC		3	Continued running 9 5/8" casing from 2038m to 2113m (joint 74) . Washed through tights spots.
2772.0	IC	P	RC		0.5	Changed out elevators. Made up 5" drill pipe to casing using circulating swedge.
2772.0	IC	P	RC		1	Washed casing down from 2113 m to 2138 m with stand of 5" drill pipe 520 gpm at 560 psi.
2772.0	IC	P	RC		0.5	Racked back 5" drill pipe in the derrick. Changed out elevators.
2772.0	IC	P	RC		1.5	Continued running 9 5/8" casing from 2138m to 2194m (joint 67). Unable to work past 2194m.
2772.0	IC	P	RC		0.5	Changed out elevators. Made up 5" drill pipe to casing using circulating swedge.
2772.0	IC	P	RC		2	Washed casing down from 2188m to 2194m with stand of 5" drill pipe 520gpm at 560psi. Unable to wash past 2194 m.
2772.0	IC	P	RC		1.5	Layed out 8 joints of 9 5/8" casing.
2772.0	IC	P	RC		3.5	Made up hanger joint & cement stinger. Tested running tool. Ran the landing string in the hole on 5" HWDP.
2772.0	IC	P	RC		1	Washed and worked casing to 2184 m.
2772.0	IC	P	CIC		1.5	Circulated 2 x bottoms up with 430 gpm at 900 psi.
2772.0	IC	P	CMC		0.5	Held job safety meeting. Rigged up cement lines.
2772.0	IC	P	CMC		1.5	Tested lines to 3000psi. Pumped 60 bbl chemical wash & 45 bbl spacer. Mixed and pumped 321sx 'G' cement, 128 bbl lead slurry at 12.5 ppg. Followed by 249sx, 51.4 bbls tail slurry at 15.8 ppg.
2772.0	IC	P	CMC		1	Displaced cement by 10 bbls with Dowell cement unit & 495 bbls using rig pumps. Plug did not bump after the required strokes.
2772.0	IC	P	CMC		0.5	Rigged down cement line. Backed out running tool.

Date : 18 Feb 2005**Daily Cost : \$ 345,621****Report Number : 23**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
2772.0	IC	P	CMC		1	Release running tool. Pull out of the hole with same.
2772.0	IC	P	CMC		0.5	Layed out Deep Sea Express tool.
2772.0	IC	P	CMC		0.5	Layed out 9 5/8" circulating swedge.
2772.0	IC	P	CMC		0.5	Changed out the bails from 500 tonne to 350 tonne.
2772.0	IC	P	WH		1	Made up & RIH with Cameron mill and flush tool.
2772.0	IC	P	WH		0.5	Flushed and cleaned wellhead. POOH & laid out tool.
2772.0	IC	P	WH		2	Made up seal assembly & running tool. RIH. Attempted to energise with 35K down.

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 17:30

Date : 18 Feb 2005						Daily Cost : \$ 345,621	Report Number : 23
2772.0	IC	TP	WH	VEQ	1	Broke circulation with cement unit and tested surface lines to 5,000 psi - OK. Attempted to test seal assembly against lower rams to 1,500 psi - no success.	
2772.0	IC	TP	WH	VEQ	2.5	Pulled out of the hole with seal assembly and inspected same - OK. Adjusted same and ran in the hole to attempt to energise again.	
2772.0	IC	P	WH		1	Broke circulation with cement unit and tested seal assembly against lower rams to 1,500 psi for 5 minutes - OK. Took 30K overpull to ensure seal assembly energised - OK. Tested seal assembly to 5,000 psi for 10 minutes - OK.	
2772.0	IC	P	LDP		3.5	Pulled out of the hole laying down 12 1/4" BHA used to energise seal assembly. RIH with 8" DC & Jars. LO same.	
2772.0	IC	P	HBHA		2	Commenced picking up 8.5" BHA & racking same.	
2772.0	IC	P	WH		1	MU wearbushing to running tool & RIH. Set wearbushing, POOH & LO RT.	
2772.0	IC	P	HBHA		2	Continued PU & RIH with 8.5" BHA. MU BOP test tool & RIH on landing string.	
2772.0	IC	P	BT		5	Set test tool in wellhead & commenced testing BOP's.	

Date : 19 Feb 2005						Daily Cost : \$ 367,542	Report Number : 24
Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity	
2772.0	IC	P	BT		2.5	Continued to test BOP stack and choke and kill manifold on blue pod from drillers panel at 200 psi for 5 minutes and 5,000 psi for 10 minutes as per test program. Function tested BOP stack with yellow pod from remote panel in Koomey room - OK.	
2772.0	IC	P	HT		1	Unseated test plug, pulled out of the hole and laid down same.	
2772.0	IC	P	BT		2.5	Rigged up and tested TDS valves, TIW's and #1 standpipe valve at 200 psi for 5 minutes and 5,000 psi for 10 minutes.	
2772.0	IC	P	BT		0.5	Rigged down pup joint, TIW's and test hose.	
2772.0	IH2	P	TI		5	Ran in the hole with 8 1/2" cleanout BHA, tagged float at 2158 m.	
2772.0	IH2	P	CMD		1	Circulated and conditioned mud prior to casing test, dumped 100 bbls contaminated mud.	
2772.0	IH2	P	PT		1.5	Conducted line test to 5,000 psi for 5 minutes, tested 9 5/8" casing to 4,000 psi for 10 minutes.	
2772.0	IH2	P	CCW		3.5	Continued to drill cement, plugs and float at 500 gpm.	
2772.0	IH2	P	DFS		0.5	Drilled cement from 2158 m to 2184 m.	
2772.0	IH2	P	DFS		6	Drilled 9 5/8" shoe at 2184 m and drilled to 2192 m.	

Date : 20 Feb 2005						Daily Cost : \$ 345,892	Report Number : 25
Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity	
2772.0	IH2	P	RW		2.5	Washed and reamed from 2192 m to 2260 m.	
2772.0	IH2	P	CHC		1	Circulated hole clean w/ 6,000 stks @ 1,250 psi.	
2772.0	IH2	P	TO		0.5	Pulled back from 2,260m to 2,180m in shoe. Circulated string capacity @ 500gpm.	
2772.0	IH2	P	LOT		1	Circulated cement lines & pressure tested to 2,000psi. Conducted FIT, EMW =1.65sg.	
2772.0	IH2	P	TO		1	Flowchecked well, OK. Pumped slug & POOH from 2,180m to 1,170m.	
2772.0	IH2	P	TO		3.5	Continued POOH & racked BHA	
2772.0	IH2	P	RS		0.5	Serviced TDS, block & dolly's.	
2772.0	IH2	P	PUP		0.5	Rigged up to run 2.7/8" tubing.	
2772.0	IH2	P	TI		5	Held JSA & picked up open ended / slotted mule shoe with 3 stands of 2.7/8" tubing. Tripped in hole with stinger on 5" DP to 2260m.	
2772.0	IH2	P	CIR		1	Circ bottoms up.	
2772.0	IH2	P	CIR		0.5	Spotted havis pill from 2,260m to 2,234m.	
2772.0	IH2	P	TO		0.5	Pulled back to from 2,260m to 2,234m.	
2772.0	IH2	P	CMP		1	Tested cement lines. Mixed & pumped 203 sx 54m balanced cement plug from 2,234m.	
2772.0	IH2	P	TO		0.5	Pulled back above plug to 2,100m. Broke circulation.	

Wellname : ZaneGrey-1

Drilling Co. : -

Rig : Ocean Patriot

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 17:30

Date : 20 Feb 2005

Daily Cost : \$ 345,892

Report Number : 25

2170.0	IH2	P	CHC	2	Circulated bottoms up & monitored for cement in returns. Washed from 2,100m to 2,170m. Cement contamination observed. (Released to ZanGrey-1ST1)
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DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 17:30

Activity Report For ZaneGrey-1 ST1

Date : 20 Feb 2005						Daily Cost : \$ 11,972,981	Report Number : 1
Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity	
2170.0	IH2	P	TO		0.5	Commenced ZaneGrey -1ST1 (dressed off plug to 2,170m). Pulled back from 2,170m to 2,100m.	
2170.0	IH2	P	RS		0.5	Functioned & flushed BOPs after cement job.	
2170.0	IH2	P	TO		2	POOH to 1240m,	

Date : 21 Feb 2005						Daily Cost : \$ 237,413	Report Number : 2
Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity	
2170.0	IH2	P	PUP		3.5	Picked up drill pipe while running in the hole.	
2170.0	IH2	P	SC		2	Slipped and cut drill line.	
2170.0	IH2	P	TI		1	Ran in the hole from 2,070m to 2,199m. No weight taken until 2,199m, tagged with 8klb.	
2170.0	IH2	P	CHC		1	Pulled back inside shoe at 2,183m. Circulated bottoms up dumping cement contaminated mud.	
2170.0	IH2	P	TO		3.5	Flow checked well, static. Pumped slug & POOH.	
2170.0	IH2	P	LDP		2	RU & LD 2.7/8" tubing. Cleared floor & LO pony collar & stab off DC.	
2170.0	IH2	P	HBHA		5	Held JSA & PU 8.5" BHA #9. PU & tested adjustable gauge stabiliser & FEWD tools.	
2170.0	IH2	P	TI		2.5	RIH to 2,171m.	
2184.0	IH2	P	RW		0.5	Washed from 2,171m to 2,184m. Tagged firm cement.	
2190.0	IH2	P	CDD		3	Set up to kick off well. Established low side angle. Time drilled to 2,190m.	

Date : 22 Feb 2005						Daily Cost : \$ 286,639	Report Number : 3
Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity	
2208.0	IH2	P	CDD		12	Time control drilled from 2190 m to 2208 m. Mud loggers reported 50% cuttings in samples at 2207m.	
2255.0	IH2	P	CDD		12	Rotary drilled and slid from 2208 m to 2255 m.	

Date : 23 Feb 2005						Daily Cost : \$ 330,775	Report Number : 4
Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity	
2257.0	IH2	P	DM		0.5	Continued directionally drilling 8 1/2" hole from 2,255 m to 2,257 m. Took MWD surveys every stand.	
2265.0	IH2	P	DM		2	Slid from 2,257 m to 2,265 m.	
2287.0	IH2	P	DM		2.5	Directionally drilling 8 1/2" hole from 2,265 m to 2,287 m. Took MWD surveys every stand.	
2292.0	IH2	P	DM		1	Slid from 2,287 m to 2,292 m.	
2353.0	IH2	P	DM		4	Directionally drilling 8 1/2" hole from 2,292 m to 2,353 m. Took MWD surveys every stand.	
2360.0	IH2	P	DM		1	Slid from 2,353 m to 2,360 m.	
2383.0	IH2	P	DM		2	Directionally drilling 8 1/2" hole from 2,360 m to 2,383 m. Took MWD surveys every stand.	
2393.0	IH2	P	DM		1	Slid from 2,383 m to 2,393 m.	
2412.0	IH2	P	DM		1	Directionally drilling 8 1/2" hole from 2,393 m to 2,412 m. Took MWD surveys every stand.	
2419.0	IH2	P	DM		1	Slid from 2,412 m to 2,419 m.	
2464.0	IH2	P	DM		2.5	Directionally drilling 8 1/2" hole from 2,419 m to 2,464 m. Took MWD surveys every stand.	
2480.0	IH2	P	DM		0.5	Slid from 2,464 m to 2,480 m.	
2526.0	IH2	P	DM		3	Directionally drilling 8 1/2" hole from 2,480 m to 2,526 m. Took MWD surveys every stand.	
2530.0	IH2	P	DM		0.5	Slid from 2,526 m to 2,530 m.	
2541.0	IH2	P	DM		1.5	Directionally drilling 8 1/2" hole from 2,530 m to 2,541 m. Took MWD surveys every stand.	

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 17:30

Date : 24 Feb 2005**Daily Cost : \$ 313,658****Report Number : 5**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
2726.0	IH2	P	DM		10.5	Directionally drilled ahead in rotary mode in 8 1/2" hole from 2541 m to 2726 m. WOB = 16k lbs, RPM = 75, trq = 12-15k ft.lbs, 610 gpm at 2900 psi. Average rate of penetration 55 m/hr.
2736.0	IH2	P	DM		1	Directionally drilled ahead in sliding mode in 8 1/2" hole from 2726 m to 2736 m. Difficulty sliding, motor kept stalling at regular intervals, difficult toolface control. WOB = 24k lbs, 580 gpm at 2400 psi. Average rate of penetration 19 m/hr.
2761.0	IH2	P	DM		1.5	Directionally drilled ahead in rotary mode in 8 1/2" hole from 2736 m to 2761 m. WOB = 25k lbs, RPM = 87, trq = 12-15k ft.lbs, 640 gpm at 2700 psi. Average rate of penetration 36 m/hr.
2768.0	IH2	P	DM		2	Directionally drilled ahead in sliding mode in 8 1/2" hole from 2761 m to 2768 m. Difficulty sliding, motor kept stalling at regular intervals, difficult toolface control. WOB = 22k lbs, 595 gpm at 2600 psi. Average rate of penetration 14 m/hr.
2886.0	IH2	P	DM		6.5	Directionally drilled ahead in rotary mode in 8 1/2" hole from 2768 m to 2886 m. WOB = 10k lbs, RPM = 83, trq = 14-18k ft.lbs, 610 gpm at 2800 psi. Average rate of penetration 35 m/hr.
2886.0	IH2	TP	RR	RCS	1.5	Repaired top drive. Smoke observed coming from the Top Drive system. Rectified same, repairing the Lube oil pump. Repaired blower ducting hose. Continued circulating, 610 gpm at 2600 psi.
2886.0	IH2	P	D		0.5	Short wiper trip. Pulled out of hole with 5" drill pipe from 2886 m to 2741 m.
2886.0	IH2	P	D		0.5	Ran back in hole with 5" drill pipe from 2741 m to 2886 m. Hole good. No overpull.

Date : 25 Feb 2005**Daily Cost : \$ 330,537****Report Number : 6**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
2956.0	IH2	P	D		3	Directionally drilled ahead in rotary mode in 8 1/2" hole from 2886 m to 2956 m. WOB = 8-12k lbs, 64 rpm, 13-17k ft.lbs, 610 gpm at 2900 psi. Average rate of penetration 42 m/hr.
2963.0	IH2	P	D		1	Directionally drilled ahead in sliding mode in 8 1/2" hole from 2956 m to 2963 m. Difficulty sliding. Poor toolface control. WOB = 8-12k lbs, 610 gpm at 2900 psi. Average rate of penetration 20 m/hr.
2986.0	IH2	P	D		1.5	Directionally drilled ahead in rotary mode in 8 1/2" hole from 2963 m to 2986 m. WOB = 6-12k lbs, 52 rpm, 12-17k ft.lbs 610 gpm at 2900 psi. Average rate of penetration 36 m/hr.
3001.0	IH2	P	D		2.5	Directionally drilled ahead in sliding mode in 8 1/2" hole from 2986 m to 3001 m. Difficulty sliding. Poor toolface control. WOB = 6-10k lbs, 580 gpm at 2700 psi. Average rate of penetration 14 m/hr.
3015.0	IH2	P	D		0.5	Directionally drilled ahead in rotary mode in 8 1/2" hole from 3001 m to 3015 m. 50 rpm, 15-17k ft.lbs 590 gpm at 3000 psi. Average rate of penetration 52 m/hr.
3024.0	IH2	P	D		1.5	Directionally drilled ahead in sliding mode in 8 1/2" hole from 3015 m to 3024 m. Difficulty sliding. Poor toolface control. 580 gpm at 2800 psi. Average rate of penetration 14 m/hr.
3060.0	IH2	P	D		2.5	Directionally drilled ahead in rotary mode in 8 1/2" hole from 3024 m to 3060 m. 40 rpm, 13-18k ft.lbs 580 gpm at 3000 psi. Average rate of penetration 44 m/hr.
3068.0	IH2	P	D		1.5	Directionally drilled ahead in sliding mode in 8 1/2" hole from 3060 m to 3068 m. Difficulty sliding. Poor toolface control. 590 gpm at 3000 psi. Average rate of penetration 37 m/hr.
3105.0	IH2	P	D		1.5	Directionally drilled ahead in rotary mode in 8 1/2" hole from 3068 m to 3105 m. 60 rpm, 16-18k ft.lbs 610 gpm at 3100 psi. Average rate of penetration 40 m/hr.
3107.0	IH2	P	D		4	Directionally drilled ahead in rotary mode in 8 1/2" hole from 3105 m to 3107 m. Unable to penetrate 3107 m. (Varied drilling parameters, still no progress.) WOB = 5-38k lbs, 50-80 rpm, 12-17k ft.lbs 610 gpm at 3000 psi.
3107.0	IH2	TP	TOB	DHM	1	Flow check. Well static. Pull out of the hole from 3107 m to 2829 m with 5" drill pipe.
3107.0	IH2	TP	TOB	DHM	2	Flow check. Well static. Pumped slug. Pull out of the hole from 2829 m to 2250 m with 5" drill pipe.
3107.0	IH2	TP	TOB	DHM	0.5	Made up Top Drive. (Set toolface at 140 Left deg, sidetrack orientation). Pump slug.
3107.0	IH2	TP	TOB	DHM	1	Continued to pull out of the hole from 2250 m to 1892 m with 5" drill pipe.

Date : 26 Feb 2005**Daily Cost : \$ 187,686****Report Number : 7**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
3107.0	IH2	TP	TOB	DHM	3	Continued to pull out of the hole from 1892 m to 249 m with 5" drill pipe.
3107.0	IH2	TP	HBHA	DHM	2	Continued to pull out of hole with the bottom hole assembly from 249 m to surface. On surface it was found that the motor bit box had parted from the lower bearing housing of the motor and was left down hole.

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 17:30

Date : 26 Feb 2005**Daily Cost : \$ 187,686****Report Number : 7**

					Fish left in hole:- bit, motor bit box and motor drive shaft (~1m long).
3107.0	IH2	TP	HBHA	DHM 1.5	Lay out damaged motor. Change out MWD pulser to increase flow capacity. Racked back same.
3107.0	IH2	TP	HBHA	DHM 0.5	Made up cement stand (side Entry Sub on DP) & stood back same.
3107.0	IH2	TP	PUP	DHM 0.5	Rigged up 2.7/8" handling gear & prepared to RIH with 2.7/8" cement stinger.
3107.0	IH2	TP	TI	DHM 6.5	Picked up mule shoe (1 jt modified with taper & circulation slots) & 8 jts 2.7/8" stinger. Tripped in hole on 5" DP to 3,106m. Washed down last stand. Tagged bottom & confirmed depth.
3107.0	IH2	TP	CMD	DHM 1	Circulated bottoms up to confirm no trip gas.
3107.0	IH2	TP	CMP	DHM 1.5	Rigged up cement line & pressure tested line to 1,000psi. Set 80m balanced cement plug from 3,106m - 3,026m to sidetrack around fish. Rigged down cement line.
2900.0	IH2	TP	TO	DHM 0.5	Pulled back above plug to 2,900m. (ended ZaneGrey-1ST1, commenced ZaneGrey-1ST2 at 17:00hrs).

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 17:30

Activity Report For ZaneGrey-1 ST2

Date : 26 Feb 2005						Daily Cost : \$ 13,799,108	Report Number : 1
Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity	
2900.0	IH2	TP	CIR	DHM	0.5	Displaced stinger string with 30bbls of mud to clear pipe of cement. Flowchecked well, well static. Pumped slug. (ended ZaneGrey-1ST1, commenced ZaneGrey-1ST2 at 17:00 hrs)	
2900.0	IH2	TP	TO	DHM	4	POOH with cement stinger.	
2900.0	IH2	TP	LDP	DHM	1	Rigged up 2.7/8" handling gear & laid out 2.7/8" cement stinger.	
2900.0	IH2	TP	HBHA	DHM	0.5	Broke down cement side entry stand. LO side enty sub.	
2900.0	IH2	TP	HT	DHM	1	Made up bit to new motor. Set & confirmed 1.22° bend on motor.	
Date : 27 Feb 2005						Daily Cost : \$ 314,989	Report Number : 2
Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity	
2996.0	IH2	TP	HBHA	DHM	2.5	Continued to pick up 8 1/2" directional bottom hole assembly. Shallow pulse tested LWD, motor and adjustable gauge stabiliser. Tested OK.	
2996.0	IH2	TP	TI	DHM	5	Continued to run in hole with 5" drill pipe.	
3075.0	IH2	TP	RW	DHM	2	Washed and reamed down from 2996 m to 3075 m.	
3082.0	IH2	TP	DM	DHM	2.5	Time drilled from 3075 m to 3082 m with 140R to 170R toolface. Unable to hold over 2 MT on the bit.	
3107.0	IH2	TP	DM	DHM	5.5	Slid with 70R to 90R toolfaces from 3082 m to 3107 m. Surveys and surface samples indicated still in the old hole. Increase in pump pressure and noise on MWD tool indicated tagging fish.	
3107.0	IH2	TP	TO	DHM	5	Flow check. Well Static. Pulled out of the hole with 5" drill pipe.	
3107.0	IH2	TP	HBHA	DHM	0.5	Pulled bottom hole assembly out of the hole.	
3107.0	IH2	TP	RR	DHM	0.5	Repaired racking arm bumper pad.	
3107.0	IH2	TP	HBHA	DHM	0.5	Continued to pull bottom hole assembly out of the hole.	
Date : 28 Feb 2005						Daily Cost : \$ 341,476	Report Number : 3
Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity	
3107.0	IH2	TP	HBHA	DHM	1	Continued to pull bottom hole assembly out of the hole. Racked back same. Broke off bit. Damaged to cones on bit indicated tagging fish.	
3107.0	IH2	TP	RU	DHM	0.5	Rigged up to run 2 7/8" tubing.	
3107.0	IH2	TP	TI	DHM	1	Picked up 18 joints 2 7/8" cement stinger. (17 joints of 2 7/8" drill pipe, 1 joint mule shoe)	
3107.0	IH2	TP	TI	DHM	4.5	Continued to run in hole with 5" drill pipe to 3107 m.	
3107.0	IH2	TP	CHC	DHM	0.5	Circulated hole clean.	
3107.0	IH2	TP	RUC	DHM	0.5	Rigged up cement hose.	
2946.0	IH2	TP	CMP	DHM	1.5	Pumped 5 bbls of drill water and tested cement lines. Pumped remaining 15 bbls of water ahead as spacer. Pumped 36.5 bbls (195 xs) of 16.5 ppg cement slurry (160 m plug from 2946m to 3106m) Pumped 7.7 bbls of drill water behind slurry. Displaced cement with 161 bbls of mud. Cement in place at 9:15.	
2946.0	IH2	TP	TO	DHM	0.5	Pulled out of hole with 5" drill pipe from 3107 m to 2820 m.	
2946.0	IH2	TP	CIR	DHM	0.5	Circulated bottoms up.	
2946.0	IH2	TP	TO	DHM	4.5	Flow check. Well Static. Pulled out of hole with 5" drill pipe from 2820 m to top of cement stinger (173.81 m).	
2946.0	IH2	TP	TO	DHM	1.5	Pulled out and layed out 17 joints of 2 7/8" tubing and mule shoe. Layed out same.	
2946.0	IH2	TP	HT	DHM	1	Make up bit and set motor bend to 1.5 deg.	
2946.0	IH2	TP	HBHA	DHM	0.5	Made up and programmed LWD.	
2946.0	IH2	TP	HBHA	DHM	1	Continued to run in hole with bottom hole assembly to 221 m. Tested LWD and adjustable gauge stabiliser. Tested OK.	
2946.0	IH2	TP	TI	DHM	2.5	Continued to run in hole with 5" drill pipe to casing shoe at 2183 m.	
2946.0	IH2	TP	SC	DHM	2	Held trip drill. 26 secs. Slip and cut drill line, (110 ft).	

Wellname : ZaneGrey-1 ST2

Drilling Co. : -

Rig : Ocean Patriot

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 17:30

Date : 28 Feb 2005

Daily Cost : \$ 341,476

Report Number : 3

2946.0 IH2 TP RS DHM 0.5 Service top drive system.

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 17:30

Activity Report For ZaneGrey-1 ST2

Date : 01 Mar 2005						Daily Cost : \$ 324,474	Report Number : 4
Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity	
2946.0	IH2	TP	TI	DHM	1.5	Continued to run in hole with 5" drill pipe from 2183 m to 2885 m.	
2957.0	IH2	TP	RW	DHM	1	Washed and reamed down from 2885 m to 2957 m with minimal pumps. Tagged top of cement at 2945 m. Cement not hard enough to kick off.	
2979.0	IH2	TP	ST	DHM	13	Orientated tool face to 160 deg. Repeatedly reamed to create an initial ledge. Time drill at 2957 m to 2979 m attempting to open hole sidetrack.	
2987.0	IH2	TP	ST	DHM	0.5	Rotate ahead from 2979 m to 2987 m due to indications of the well kicking off (100 psi motor differential). Average rate of penetration 60 m/hr. Survey indicated bottom hole assembly still in original well bore.	
2995.0	IH2	TP	ST	DHM	8	Continued time drilling from 2987 m to 2995 m with toolface orientated to 180 deg.	
Date : 02 Mar 2005						Daily Cost : \$ 327,351	Report Number : 5
Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity	
3013.0	IH2	TP	ST	DHM	10.5	Time drilled ahead with 180 deg toolface from 2995 m to 3013 m. Survey taken at 2987 m indicated bottom hole assembly is still in the original hole.	
3013.0	IH2	TP	ST	DHM	1	Work pipe up and down with 180 deg toolface and 650 gpm attempting to create a ledge to iniate time drilling.	
3031.0	IH2	TP	ST	DHM	7.5	Time drilled ahead with 180 deg toolface from 3013 m to 3031 m. Survey taken at 3018 m indicated bottom hole assembly is still in the original hole.	
3031.0	IH2	TP	TO	DHM	5	Flow check. Well static. Pulled out of hole from 3031m to 221 m with 5" drill pipe.	
Date : 03 Mar 2005						Daily Cost : \$ 358,873	Report Number : 6
Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity	
3031.0	IH2	TP	HBHA	DHM	1	Continued pulling bottom hole assembly out of the hole. Layed out mud motor and bit.	
3031.0	IH2	TP	HBHA	DHM	1	Picked up mud motor. Set bend to 1.5 deg.	
3031.0	IH2	TP	HBHA	DHM	0.5	Continued running in hole with bottom hole assembly. Layed out adjustable gauge stabiliser. Picked up integral blade stabiliser.	
3031.0	IH2	TP	TI	DHM	1	Tested MWD. Tested OK.	
3031.0	IH2	TP	TI	DHM	1	Continued running in hole with bottom hole assembly. Test motor. Tested OK.	
3031.0	IH2	TP	TI	DHM	4	Continued running in hole with 5" drill pipe from 220 m to 3003 m.	
3031.0	IH2	TP	RW	DHM	0.5	Washed and reamed from 3003 m to 3031 m.	
3060.0	IH2	TP	ST	DHM	15	Time drilled from 3031 m to 3060 m with 180 deg toolface.	
Date : 04 Mar 2005						Daily Cost : \$ 327,637	Report Number : 7
Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity	
3070.0	IH2	TP	ST	DHM	10	Continued time drilling from 3060 m to 3070 m with 180 deg toolface. Unable to kick off from original well bore.	
3070.0	IH2	TP	TOB	DHM	5	Flow check. Well static. Pulled out of the hole with 5" drill pipe from 3070 m to 220 m.	
3070.0	IH2	TP	HBHA	DHM	2	Continued pulling the bottom hole assembly out of the hole from 220 m to surface. Changed out the jars. Read and downloaded MWD. Changed bit.	
3070.0	IH2	TP	HBHA	DHM	1	Ran in hole with bottom hole assembly from surface to 220 m. Tested MWD and motor. Tested OK	
3070.0	IH2	TP	RS	DHM	0.5	Service top drive system	
3070.0	IH2	TP	TI	DHM	4.5	Continued running in the hole with 5" drill pipe from 220 m to 3070 m. Washed and reamed last stand to bottom.	
3070.0	IH2	TP	ST	DHM	1	Time drilled with 160 deg toolface.	

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 17:30

Date : 05 Mar 2005						Daily Cost : \$ 367,334	Report Number : 8
Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity	
3092.0	IH2	TP	ST	DHM	10.5	Continued time drilling. At 3092 m 90% formation returns at surface. Survey at 3074.64 m Inc=30.11 deg, Az=15.22 deg confirmed departure from the original well bore. Well sidetracked at 3075 m.	
3092.0	IH2	TP	CHC	DHM	1	Circulated bottoms up.	
3092.0	IH2	TP	TOB	DHM	1.5	Flow check. Well static. Pulled out of hole wet with 5" drill pipe from 3092 m to 2831 m.	
3092.0	IH2	TP	TOB	DHM	4.5	Pumped slug. Continued to pull out of the hole with 5" drill pipe from 2831 m to 220 m.	
3092.0	IH2	TP	HBHA	DHM	1	Pulled bottom hole assembly out of the hole from 220m to surface.	
3092.0	IH2	TP	HT	DHM	1.5	Changed out MWD pulser and bit. Put motor sleeve on motor. Orientated mud motor and downloaded MWD tool.	
3092.0	IH2	TP	TIB	DHM	1	Ran in hole with bottom hole assembly from surface to 220 m. Tested MWD and motor. Test OK.	
3092.0	IH2	TP	TIB	DHM	3	Continued to run in hole with 5" drill pipe from 220 m to 1655 m.	

Date : 06 Mar 2005						Daily Cost : \$ 356,390	Report Number : 9
Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity	
3092.0	IH2	TP	TIB	DHM	3	Continued to run in the hole with 5" drill pipe from 1655 m to 3092 m. Washed and reamed last stand down.	
3107.0	IH2	TP	ST	DHT	1	Directionally drilled ahead in rotary mode from 3092 m to 3107 m. Rotary drilling parameters were 80 rpm, 12-17k ft.lbs, 590 gpm at 2700 psi. Rate of penetration 21 m/hr.	
3162.0	IH2	P	DM		3.5	Directionally drilled ahead in rotary mode from 3107 m to 3162 m. Difficultly sliding. Poor toolface control. Rotary drilling parameters were 80 rpm, 12-17k ft.lbs, 605 gpm at 2900 psi. Rate of penetration 40 m/hr.	
3162.0	IH2	TP	RR	RCS	3.5	Top drive brake locked up. Trouble shoot top drive problem.	
3162.0	IH2	TP	TO	RCS	3	Pulled out of the hole to the casing shoe at 2140 m.	
3162.0	IH2	TP	RR	RCS	10	Trouble shoot top drive problem.	

Date : 07 Mar 2005						Daily Cost : \$ 238,512	Report Number : 10
Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity	
3162.0	IH2	TP	RR	RCS	24	Continued trouble shooting electrical fault on top drive system.	

Date : 08 Mar 2005						Daily Cost : \$ 217,952	Report Number : 11
Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity	
3162.0	IH2	TP	RR	RCS	24	Continued to trouble shoot electrical fault with the top drive system.	

Date : 09 Mar 2005						Daily Cost : \$ 347,047	Report Number : 12
Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity	
3162.0	IH2	TP	RR	RCS	3	Continued to trouble shoot electrical fault with the top drive system. - Replace all brushes on top drive system motor - Trouble shoot and attempt to reprogram existing PLC - no success - Download new program and reload PLC - OK - Reload differential pressure switches and temperature sensors on lube oil pump	
3162.0	IH2	TP	RR	RCS	1	Surface test top drive system. Tested OK.	
3162.0	IH2	TP	TI	RCS	1	Continued to run in the hole with 5" drill pipe from 2140 m to 2594 m.	
3162.0	IH2	TP	RR	RCS	1	Cooling water pump tripped on Engine#1 causing engine to overheat. Engine#1 and #4 tripped causing rig power to shut down. Reset same.	
3162.0	IH2	TP	RR	RCS	1.5	Continued to run in the hole with 5" drill pipe from 2594 m to 3162 m washing and reaming the last 1.5 stands to bottom.	
3245.0	IH2	P	DM		3	Directionally drilled ahead in rotary mode from 3162 m to 3245 m. WOB 0-8 klbs, 83 rpm, 12-17k	

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 17:30

Date : 09 Mar 2005**Daily Cost : \$ 347,047****Report Number : 12**

						ft.lbs, 610 gpm at 3100 psi. Rate of penetration, 57 m/hr.
3245.0	IH2	TP	RR	RCS	2	Plugged up suction line on rig pumps. Stopped drilling and cleaned out pump suction lines.
3249.0	IH2	P	DM		1	Slid from 3245 m to 3249 m. Difficulty sliding. Poor toolface control. Rate of penetration, 25 m/hr.
3345.0	IH2	P	DM		4	Continued directionally drilling ahead in rotary mode from 3249 m to 3345 m. WOB 5-15 klbs, 80 rpm, 13-18k ft.lbs, 610 gpm at 3100 psi. Rate of penetration 47 m/hr.
3345.0	IH2	TP	RR	RCS	1	Saver sub backed out on connection. Layed out single with saver sub. Pick up single and new saver sub. Torque same.
3480.0	IH2	P	DM		5.5	Continued directionally drilling ahead in rotary mode from 3345 m to 3480 m. WOB 5-15 klbs, 80 rpm, 16-18k ft.lbs, 610 gpm at 3100 psi. Rate of penetration 54 m/hr.

Date : 10 Mar 2005**Daily Cost : \$ 338,534****Report Number : 13**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
3675.0	IH2	P	DM		17	Continued directionally drilling ahead in rotary mode from 3480 m to 3675 m. WOB 8-27 klbs, 82 rpm, 15-21k ft.lbs, 615 gpm at 3200 psi. Rate of penetration 14 m/hr.
3675.0	IH2	P	CHC		1	Circulated bottoms up.
3675.0	IH2	P	TO		3	Pulled out of the hole for a short wiper trip from 3675 m to 3070 m. Tight spots encountered at 3145 m to 3160 m, 3260 m to 3265 m, 3340 m to 3360 m.
3675.0	IH2	P	TI		1	Ran back in the hole from 3070 m to 3675 m. Good hole.
3675.0	IH2	P	CHC		1	Circulated bottoms up.
3675.0	IH2	P	TO		1	Flow check. Well static. Pumped slug. Pulled out of the hole from 3675 m to 3520 m. Good hole.

Date : 11 Mar 2005**Daily Cost : \$ 339,505****Report Number : 14**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
3675.0	IH2	P	TO		6	Continued pulling out of the hole from 3520 m to 81 m.
3675.0	IH2	P	HT		1	Continued pulling out of the hole. Layed out MWD, Mud motor and bit
3675.0	IH2	P	LOG		1	Rigged up to run wireline.
3675.0	EI2	P	LOG		2.5	Made up Grand Slam logging tools.
3675.0	EI2	P	LOG		13.5	Continued wireline logging with Grand Slam logging tools.

Date : 12 Mar 2005**Daily Cost : \$ 308,334****Report Number : 15**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
3675.0	EI2	P	LOG		2	Continued wireline logging with Grand Slam logging tool. Layed out same.
3675.0	EI2	P	LOG		3	Made up wireline RCI logging tool.
3675.0	EI2	P	LOG		3	Continued wireline logging with RCI tool.
3675.0	EI2	P	LOG		1	Wireline RCI tool stuck in hole. Unable to free RCI tool.
3675.0	EI2	TP	LOG	WIR	1	Rigged down wireline equipment and compensator line.
3675.0	EI2	TP	LOG	WIR	1.5	Rigged up to strip over wireline to retrieve fish.
3675.0	EI2	TP	LOG	WIR	0.5	Tension wireline. Cut wireline cable.
3675.0	EI2	TP	LOG	WIR	2.5	Continued rigging up to strip over wireline. Made up wireline surface latching equipment. Tested same. Tested OK
3675.0	EI2	TP	LOG	WIR	5.5	Ran in the hole with 3.375" grapple stripping over wireline from surface to 1522 m with 5" drill pipe.
3675.0	EI2	TP	LOG	WIR	1	Cut wireline and rehead same due to excessive tension.
3675.0	EI2	TP	LOG	WIR	3	Continued running in the hole with 3.375" grapple stripping over wireline from 1522 to 2171 m with 5" drill pipe.

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 17:30

Date : 13 Mar 2005**Daily Cost : \$ 276,582****Report Number : 16**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
3675.0	EI2	TP	LOG	WIR	3.5	Continued running in the hole with 3.375" grapple stripping over wireline from 2171 to 3146 m with 5" drill pipe.
3675.0	EI2	TP	LOG	RCS	0.5	Troubleshoot top drive problem.
3675.0	EI2	TP	LOG	WIR	0.5	Circulated at 30 spm above RCI logging tool.
3675.0	EI2	TP	LOG	WIR	0.5	Attempted to latch RCI logging tool. Latched successfully.
3675.0	EI2	TP	LOG	WIR	5	Pulled back 2 joints. Reterminate wireline cable. Continued trouble shooting top drive problem.
3675.0	EI2	TP	LOG	WIR	13.5	Wireline logging on 5" drill pipe with RCI tool taking 27 pressure samples (26 good, 1 tight), 1 fluid sample over the interval 3190 m to 3622 m.
3675.0	EI2	TP	LOG	WIR	0.5	Pulled out of the hole with wireline logging tools on 5" drill pipe due to RCI tool failure.

Date : 14 Mar 2005**Daily Cost : \$ 309,139****Report Number : 17**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
3675.0	EI2	TP	LOG	WIR	1.5	Continued pulling out of the hole with wireline RCI tool to 3146 m.
3675.0	EI2	TP	LOG	WIR	3	Layed out side entry sub. Pulled wireline cable breaking it at the weakpoint. Retrieved wireline cable.
3675.0	EI2	TP	LOG	WIR	0.5	Rigged down wireline equipment.
3675.0	EI2	TP	LOG	WIR	0.5	Pumped slug. Pulled out of the hole with fish on 5" drill pipe.
3675.0	EI2	P	LOG		6	Continued pulling out of the hole with wireline RCI tool
3675.0	EI2	P	LOG		1.5	Layed out wireline RCI tool.
3675.0	EI2	P	SC		2	Slipped and cut 140' of drill line.
3675.0	EI2	P	RS		0.5	Service dolly rollers.
3675.0	PA	P	TI		7	Made up cement stinger, (14 joints of 2.875" drill pipe and mule shoe). Ran in hole with same to 144.88 m. Continued running in hole with 5" drill pipe to 3390 m.
3675.0	PA	P	CIR		1	Circulated bottoms up. Spotted 10 bbls HI-VIS pill at 3390 m.
3675.0	PA	P	TO		0.5	Pulled out of the hole from 3390 m to 3350 m.

Date : 15 Mar 2005**Daily Cost : \$ 397,891****Report Number : 18**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
3675.0	PA	P	RUC		0.5	Rigged up for cement job.
3675.0	PA	P	CMP		1	Set balanced cement plug#1 from 3350 m to 3250 m across hydrocarbon bearing zone 3300 m to 3310 m. Plug #1; 40 bbl chemical wash spacer, 195 sxs of class G cement followed by 15.5 bbl water spacer. Rigged down after cement plug.
3675.0	PA	P	TO		0.5	Pulled out of the hole to 3128 m with 5" drill pipe.
3675.0	PA	P	CIR		1	Circulated bottoms up.
3675.0	PA	P	WOC		5	Layed out excess drill pipe and drill collars while waiting on cement.
3675.0	PA	P	CMP		1	Ran in hole to tag cement. Cement tagged with 2 klbs at 3203 m.
3675.0	PA	P	TO		2	Pulled out of the hole from 3203 m to 2290 m.
3675.0	PA	P	TO		0.5	Spot HI-VIS pill at 2290 m. Continued pulling out of the hole to 2230 m.
3675.0	PA	P	RUC		0.5	Rigged up for cement job.
3675.0	PA	P	CMP		0.5	Set balanced cement plug#2 from 2230 m to 2130 m across 9 5/8" casing shoe at 2184 m. Plug #2; 40 bbl chemical wash spacer, 195 sxs of class G cement followed by 13 bbl water spacer. Rigged down after cement plug.
3675.0	PA	P	TO		0.5	Pulled out of the hole from 2230 m to 2000 m.
3675.0	PA	P	CIR		1	Circulated bottoms up.
3675.0	PA	P	WOC		4	Pumped slug. Continued pulling out of the hole to 947 m laying out 5" drill pipe while waiting on cement.
3675.0	PA	P	CMP		3	Ran in hole to tag cement. Cement tagged with 2 klbs at 2153 m.

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 17:30

Date : 15 Mar 2005**Daily Cost : \$ 397,891****Report Number : 18**

3675.0	PA	P	CIR	0.5	Displace well with inhibited mud.
3675.0	PA	P	TO	2.5	Pumped slug. Pulled out of the hole from 2120 m to 1616 m laying out 5" drill pipe.

Date : 16 Mar 2005**Daily Cost : \$ 349,306****Report Number : 19**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
3675.0	PA	P	TO		5	Continued pulling out of the hole from 2120 m to 144 m laying out 5" drill pipe.
3675.0	PA	P	TO		1.5	Continued pulling out of the hole from 144 m to surface laying out cement stinger.
3675.0	PA	P	RU		0.5	Rigged down tubing handling equipment. Rigged up 5" drill pipe handling equipment.
3675.0	PA	P	WH		1.5	Made up wash sub below wear bushing retrieval tool. Retrieved wear bushing. Pulled out of hole with same. Layed out wear bushing.
3675.0	PA	P	WH		1.5	Made up 9 5/8" casing cutter assembly. Ran in hole with same.
3675.0	PA	P	WH		0.5	Cut 9 5/8" casing at 177 m with 35 spm at 450 psi, 8 klbs down. 2 minutes to cut casing.
3675.0	PA	P	WH		1	Pulled out of the hole from 177 m to surface laying out 9 5/8" casing cutter.
3675.0	PA	P	WH		0.5	Made up 9 5/8" casing retrieval assembly. Ran in hole with same. Landed and latched at 94 m with 5 klbs down. Released with 25 klbs overpull.
3675.0	PA	P	TO		1	Pulled out of hole with 9 5/8" casing. Racked back retrieval assembly in derrick.
3675.0	PA	P	WH		1.5	Layed out 9 5/8" casing.
3675.0	PA	P	CMP		1.5	Made up Dowell bridge plug with 6.5" drill collars. Ran in hole with same.
3675.0	PA	P	CMP		1	Set 13 3/8" bridge plug at 176 m. Pulled out of the hole.
3675.0	PA	P	CMP		1.5	Ran in hole and tagged bridge plug at 176 m. Displaced hole to 9.6 ppg inhibited mud. Flushed surface equipment.
3675.0	PA	P	CMP		0.5	Rigged up cement lines. Set balanced cement plug #3 from top of the bridge plug to 125 m.
3675.0	PA	P	TO		1.5	Pulled out of the hole with cement string. Run in hole and wash stack. Pulled out of hole laying out drill pipe.
3675.0	PA	P	BOP		1	Rigged up Riser/BOP handling equipment.
3675.0	PA	P	BOP		1	Layed out diverter.
3675.0	PA	P	BOP		1.5	Made up landing joint and scope in slip joint. Torqued up bolts.

Date : 17 Mar 2005**Daily Cost : \$ 346,712****Report Number : 20**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
3675.0	PA	P	BOP		0.5	Continued installing slip joint lock down bolts.
3675.0	PA	P	BOP		1	Unlatch BOP and pull off PGB. Remove pod hose saddles.
3675.0	PA	P	BOP		0.5	Locked in SLD ring under rotary.
3675.0	PA	P	BOP		1.5	Removed choke, kill and booster line goosenecks.
3675.0	PA	P	BOP		1.5	Layed out Slip joint.
3675.0	PA	P	BOP		1.5	Continued laying out marine riser.
3675.0	PA	P	BOP		1	Pulled marine riser double and BOP. Land same on BOP carrier.
3675.0	PA	P	BOP		0.5	Remove guide lines and nipple down BOP.
3675.0	PA	P	BOP		2	Move BOP to starboard side. Layed out marine riser double.
3675.0	PA	P	BOP		0.5	Rigged down marine riser handling equipment.
3675.0	PA	P	WH		2	Made up 20" and 30" casing cutting assembly. Attached ropes to guide lines. Tripped in hole with same.
3675.0	PA	P	WH		1	Cut 20" casing at 96.42 m. Casing cut in 32 mins.
3675.0	PA	P	WH		1	Pulled out of hole with 20" casing. Layed out same.
3675.0	PA	P	WH		1	Made up 30" grapple assembly.
3675.0	PA	P	WH		0.5	Ran in hole with 30" cutting assembly. Engage 30" housing. Confirmed with 50k overpull.

DFE above MSL : 21.5m	Lat : 38 Deg 34 Min 31.64 Sec	Spud Date : 29 Jan 2005	Release Date : 18 Mar 2005
Water Depth : 72.5m	Long : 147 Deg 59 Min 16.27 Sec	Spud Time : 1430	Release Time : 17:30

Date : 17 Mar 2005					Daily Cost : \$ 346,712	Report Number : 20
3675.0	PA	P	WH	6	Cut 30" casing at 95.94 m. Visual indications showed cutter being offset during cutting.	
3675.0	PA	P	WH	0.5	Pulled out of the hole with 30" casing and PGB. Secured PBG in moonpool. Commenced de-ballasting the rig from 23.5 m drill draft to 10 m transit draft.	
3675.0	PA	P	WH	0.5	Release 30" casing from the PGB. Layed out same.	
3675.0	PA	P	WH	1	Service 20" x 30" casing cutter assembly.	

Date : 18 Mar 2005					Daily Cost : \$ 179,303	Report Number : 21
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Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
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3675.0	PA	P	RM		17.5	Conducted seabed survey with ROV. Lay down excess BHA from derrick. Redress Smith abandonment tools, lay down same. Continue to de-ballast rig.
--------	----	---	----	--	------	--

Note: Commence pulling anchors @03:40 hrs

Anchor #7 - M/V Far Grip - PCC Out @01:30 hrs - Off Btm @02:10 hrs - PCC Back @05:10 hrs
 Anchor #3 - M/V Pacific Wrangler - PCC Out @04:15 hrs - Off Btm @04:35 hrs - PCC Back @05:40 hrs
 Anchor #6 - M/V Far Grip - PCC Out @ 05:20 hrs - Off Btm @05:40 hrs - PCC Back @07:35 hrs
 Anchor #2 - M/V Pacific Wrangler - PCC Out @05:50 hrs - Off Btm @06:10 hrs - PCC Back @07:40 hrs

Tow bridle passed and secure to Pacific Wrangler at 08:45hrs

Anchor #5 - M/V Far Grip - PCC Out @08:20 hrs - Off Btm @09:15 hrs - PCC Back @12:50 hrs
 Anchor #1 - M/V Far Grip - PCC Out @13:20 hrs - Off Btm @14:00 hrs - PCC Back @15:05 hrs
 Anchor #8 - M/V Far Grip - PCC Out @15:25 hrs - Off Btm @15:55 hrs - PCC Back @17:00 hrs
 Anchor #4 - M/V Far Grip - PCC Out @17:50hrs - Off Btm @18:15 hrs - PCC Back @19:20 hrs

NOTE = Two (2) hour adjustment made due to inspection on #5 anchor from Woodside Energy Ltd (See Statement Of Facts)

Rig under tow to Halladale 1 Location

3675.0	PS	P			0	Statement Of Facts at last anchor racked
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Ocean Patriot

Barite - 55.4 MT
 Gel - 9.4 MT
 Cement (class G) - 26.4 MT
 Fuel Oil - 394,161 Litres
 Drill Water - 328,812 Litres
 Pot Water - 251,697 Litres

Far Grip

Barite - 86 MT
 Gel - 48 MT
 Cement (class G) - 86 MT
 Fuel Oil - 530,000 Litres
 Drill Water - 605,000 Litres
 Pot Water - 637,000 Litres
 Lube Oil - 13,920 Litres

Pacific Wrangler

Barite - 43 MT
 Gel - 42 MT
 Cement (class G) - 123MT
 Fuel Oil - 652,900 MT
 Drill Water - 540,000 Litres
 Pot Water - 181,000 Litres
 Lub Oil - 28,458 Litres

APPENDIX 21

DRILLING DATA ZANEGREY-1/ST1

(By Independent Data Services [IDS])



Bass Strait Oil Company Limited

Well : ZaneGrey-1 ST1

Rig : Ocean Patriot

Drilling Data Appendix

Part 1 : Well Summary

- Well Overview
- Summary Sheet
- Well History
- Phase Summary

Well Summary

Well Objective :

The primary objective of the well is to verify the depth (+/- 50m) of the Top of the Latrobe Group @ 2226mRT (TVD), if within prognosis then the primary targets are the Kingfish and Volador formations.

Country :	Australia
Permit :	Vic / P-42
Well :	ZaneGrey-1 ZaneGrey-1 ST1
Well Type :	EXPLORATION
Operating Company :	Bass Strait Oil Company Limited
Rig :	Ocean Patriot

Latitude :	38 Deg 34 Min 31.64 Sec
Longitude :	147 Deg 59 Min 16.27 Sec
UTM North :	5729856.42
UTM East :	586049.89
DFE above MSL :	21.5m
Water Depth :	72.5m
Planned TD :	3692.0m
Actual TD :	3107.0m

On Location Date / Time :	27 Jan 2005 / 1655
Spud Date / Time :	29 Jan 2005 / 1430
TD Reached Date / Time :	/
Rig Released Date / Time :	/
Total Days Spud / Total Depth :	180.40
Total Days on Operations :	5.83
Total Days Budgeted :	0.00

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date :

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time :

Well History

Well: ZaneGrey-1 ST1

#	Date	Depth	24 Hour Summary
1	20 Feb 2005	2170.0	POOH from 2170m (dressed off plug). Pulled back to PU extra DP.
2	21 Feb 2005	2190.0	Picked up drill pipe while waiting on cement, tagged cement, pulled out of the hole, picked up 8 1/2" directional BHA, ran in the hole and tagged plug, commenced time drilling to kick off.
3	22 Feb 2005	2255.0	Drilled/slid in 8 1/2" hole.
4	23 Feb 2005	2541.0	Directionally drilled ahead in 8 1/2" hole.
5	24 Feb 2005	2886.0	Drilling ahead 8 1/2" hole.
6	25 Feb 2005	3107.0	Drilled ahead 8 1/2" hole, difficult sliding. Bit unable to penetrate 3107 m. Pull out of the hole to change the bit.
7	26 Feb 2005	3107.0	Continued to pull out of hole. On surface it was found that the motor bit box had parted from the lower bearing housing of the motor and was left downhole. Fish left in hole:- bit, motor bit box and motor drive shaft (~1m long). Ran in hole with cement stinger. Set cement plug.

Part 2 : Drilling Data

- Bit Record
- BHA Record
- Mud Record
- Survey Data

Wellname : ZaneGrey-1 ST1					Drilling Co. : -					Rig : Ocean Patriot				
DFE above MSL : 21.5m			Lat : 38 Deg 34 Min 31.64 Sec			Spud Date : 29 Jan 2005			Release Date :					
Water Depth : 72.5m			Long : 147 Deg 59 Min 16.27 Sec			Spud Time: 1430			Release Time:					

Bit Record

Well: ZaneGrey-1 ST1																										
Date In	IADC	Bit#	Size [in]	Ser #	Mfr	Type	Jets # x [32nd"]	D.In [m]	D.Out [m]	Prog [m]	Hrs o/b	SPP [psi]	Flow [gpm]	WOB [klb]	RPM	MW	TFA	ROP [m/hr]	I	O1	D	L	B	G	O2	R
21 Feb 2005	M322	7	8.50	208684	Reed	RSX162DGW	6 x 15	2170.0	3107.0	937	65.9	2387	541	21	49	9.40	1.035	14.22								

Wellname : ZaneGrey-1 ST1		Drilling Co. : -		Rig : Ocean Patriot	
DFE above MSL : 21.5m	Lat : 38 Deg 34 Min 31.64 Sec	Spud Date : 29 Jan 2005	Release Date :		
Water Depth : 72.5m	Long : 147 Deg 59 Min 16.27 Sec	Spud Time: 1430	Release Time:		

BHA Record

Well: ZaneGrey-1 ST1

#	Date-in	Length [m]	Weight [klb]	Weight Blw/Jar Dry [klb]	Weight Blw/Jar Wet [klb]	String Weight [klb]	Pick-Up Weight [klb]	Slack-Off Weight [klb]	Torque Max [kft-lbs]	Torque on Bottom [kft-lbs]	Torque off Bottom [kft-lbs]	Description
9	21 Feb 2005	249.3	50.0	20.0	20.0	275.0	325.0	235.0	18	14	10	8 1/2" PDC, motor, AGS, float sub with ported float installed, PM sub, FEWD, pulser/TM, integral blade stabiliser, 8 x 6 1/2" DC's, 1 x 6 1/2" jars, 15 x 5" HWDP.

Wellname : ZaneGrey-1 ST1

Drilling Co. : -

Rig : Ocean Patriot

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date :

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time: 1430

Release Time:

Mud Recap

Well: ZaneGrey-1 ST1

WBM

R#	Date - Time	Type	Depth [m]	Tmp [C°]	MW [ppg]	VIS [sec/qt]	PV [cp]	YP [lb/100ft²]	Gel10s [lb/100ft²] / 10m [lb/100ft²]	F.L. API [cc]	F.L. hthp [cc]	Sols	Sand	MBT	PH	Cl [mg/l]	Hard [mg/l]	KCl [%]	Daily Cost [\$]
1	20 Feb 2005 - 0400	KCl-PHPA-Glycol	2184.0	33.0	9.40	73	16	31	6 / 9	4.4	0	7.6	0.5	12.5	10	30000.0	480.0	5.4	4330
1	20 Feb 2005 - 2100	KCl-PHPA-Glycol	2184.0	31.0	9.40	60	15	25	4 / 11	4.5	0	7.2	0.5	12.5	10	29000.0	380.0	5.2	0
2	21 Feb 2005 - 0400	KCl-PHPA-Glycol	2184.0	33.0	9.50	64	21	34	5 / 12	4.8	0	8	0.3	12.5	9.5	28000.0	500.0	5.5	1345
2	21 Feb 2005 - 2300	KCl-PHPA-Glycol	2192.0	31.0	9.40	68	21	38	5 / 14	4.8	0	7.2	0.25	12.5	9.5	32000.0	440.0	5.5	0
3	22 Feb 2005 - 0300	KCl-PHPA-Glycol	2198.0	33.0	9.50	57	19	32	7 / 11	4.8	0	7.8	0.25	7.5	9	30500.0	600.0	5.2	5361
3	22 Feb 2005 - 2300	KCl-PHPA-Glycol	2244.0	31.0	9.50	59	19	33	5 / 12	4.6	0	7.6	0.25	7.5	9.5	31500.0	460.0	5.5	0
4	23 Feb 2005 - 0430	KCl-PHPA-Glycol	2285.0	33.0	9.40	64	20	35	10 / 14	4.0	0	7.5	0.25	7.5	9.5	32000.0	600.0	5.5	2542
4	23 Feb 2005 - 2300	KCl-PHPA-Glycol	2532.0	31.0	9.40	61	18	34	9 / 13	4.5	0	7.5	0.25	7.5	9	31500.0	580.0	5.5	0
5	24 Feb 2005 - 23:00	KCl-PHPA-Glycol	2887.0	38.0	9.50	64	19	34	8 / 13	4.7	0	7.8	0.25	7.5	9	30000.0	480.0	5.5	12938
6	25 Feb 2005 - 22:00	KCl-PHPA-Glycol	3107.0	43.0	9.60	58	17	32	7 / 13	4.5	0	8.2	0.3	9	9	30500.0	480.0	5.5	12867
7	26 Feb 2005 - 15:20	KCl-PHPA-Glycol	3107.0	32.0	9.60	61	17	33	6 / 13	4.7	0	8.2	0.25	10	9	30500.0	460.0	5.5	6580

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date :

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time :

Survey

Well: ZaneGrey-1 ST1

						Mag Dec: 0	Sidetrack # 1	
MD [m]	TVD [m]	INCL [deg]	CORR. AZ [deg]	DOGLEG [deg/30m]	'V' SECT [m]	N/S [m]	E/W [m]	TOOLTYPE
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
2193.14	2083.2	31.67	15.75	1.44	568.66	568.66	160.38	mwd
2214.58	2101.5	30.94	12.84	7.83	579.46	579.46	163.13	mwd
2241.00	2124.2	30.80	12.66	0.63	592.68	592.68	166.13	mwd
2270.43	2149.4	30.81	7.95	8.19	607.50	607.50	168.82	mwd
2298.37	2173.5	30.44	10.70	5.18	621.54	621.54	171.12	mwd
2326.97	2198.2	29.94	10.85	1.77	635.67	635.67	173.81	mwd
2355.80	2223.0	31.00	11.14	3.71	650.02	650.02	176.60	mwd
2381.72	2245.2	31.82	13.78	6.18	663.20	663.20	179.52	mwd
2414.16	2272.5	33.68	15.58	6.47	680.18	680.18	183.97	mwd
2442.70	2296.2	33.48	14.49	2.23	695.42	695.42	188.07	mwd
2470.32	2319.3	33.42	14.73	0.53	710.15	710.15	191.91	mwd
2499.52	2343.5	34.48	14.63	3.63	725.93	725.93	196.04	mwd
2528.50	2367.4	34.47	13.92	1.39	741.83	741.83	200.08	mwd
2557.49	2391.2	35.28	14.28	2.88	757.90	757.90	204.12	mwd
2585.36	2413.8	36.32	14.03	3.77	773.71	773.71	208.11	mwd
2614.39	2437.1	36.94	14.82	2.68	790.48	790.48	212.42	mwd
2643.01	2459.9	37.00	14.81	0.21	807.12	807.12	216.82	mwd
2671.57	2482.7	37.27	15.01	1.04	823.78	823.78	221.26	mwd
2700.11	2505.4	37.52	15.54	1.43	840.50	840.50	225.83	mwd
2729.08	2528.4	37.31	15.09	1.19	857.48	857.48	230.48	mwd
2758.57	2552.1	35.90	14.65	4.86	874.48	874.48	234.99	mwd
2786.53	2574.8	35.55	13.38	2.93	890.31	890.31	238.94	mwd
2815.67	2598.6	34.36	13.52	4.09	906.55	906.55	242.83	mwd
2844.06	2622.2	33.47	13.48	3.14	921.95	921.95	246.53	mwd
2872.61	2646.1	33.20	13.34	0.98	937.22	937.22	250.16	mwd
2901.47	2670.2	33.09	12.82	1.06	952.59	952.59	253.74	mwd
2930.23	2694.5	32.02	12.69	3.73	967.68	967.68	257.15	mwd
2959.08	2719.0	31.79	13.21	1.24	982.54	982.54	260.57	mwd
2987.28	2743.1	30.50	13.51	4.61	996.73	996.73	263.94	mwd
3015.71	2767.5	31.54	13.03	3.76	1010.99	1010.99	267.30	mwd
3044.57	2792.1	31.02	13.23	1.84	1025.58	1025.58	270.70	mwd
3073.76	2817.1	31.11	12.81	0.80	1040.26	1040.26	274.10	mwd
3092.90	2833.5	31.08	12.66	0.43	1049.90	1049.90	276.28	mwd

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

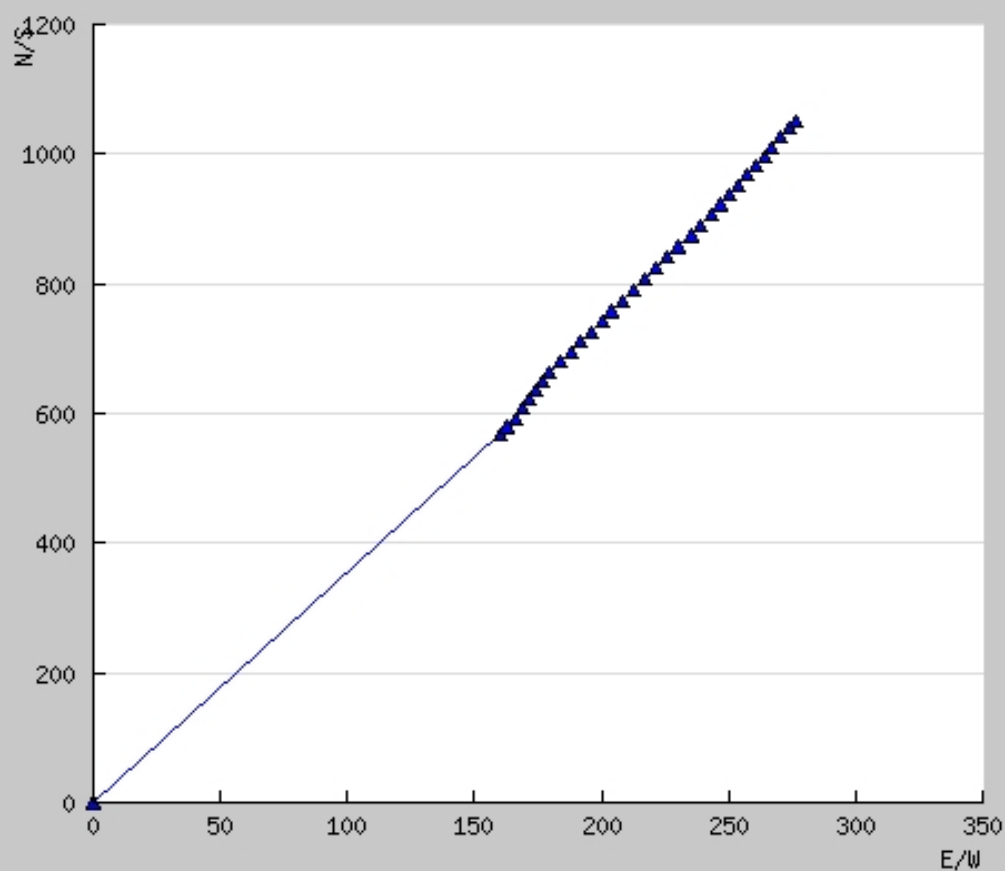
Release Date :

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time :

Plan View (ZaneGrey-1 ST1)

IDSDatNet - Created On 29 Jul 2005 05:58am

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

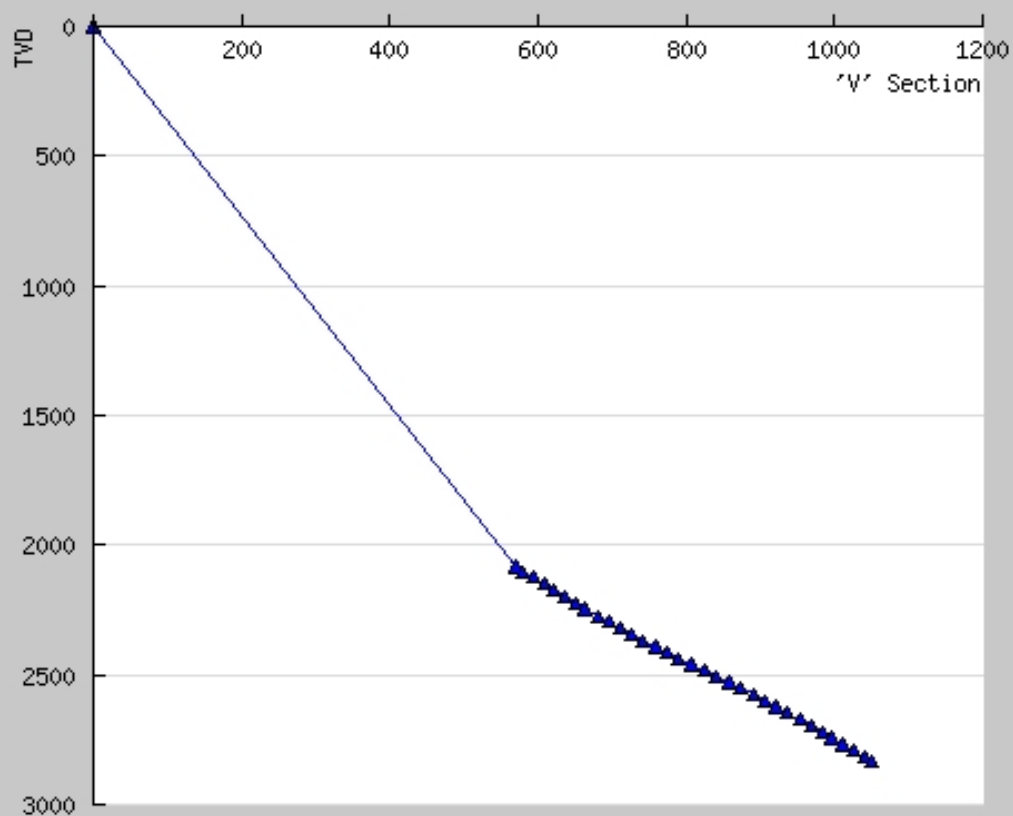
Release Date :

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time :

V Section (ZaneGrey-1 ST1)

IDSDatNet - Created On 29 Jul 2005 05:58am

Part 3 : Time Analysis Data

- Time Overview
- Trouble Time Analysis

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date :

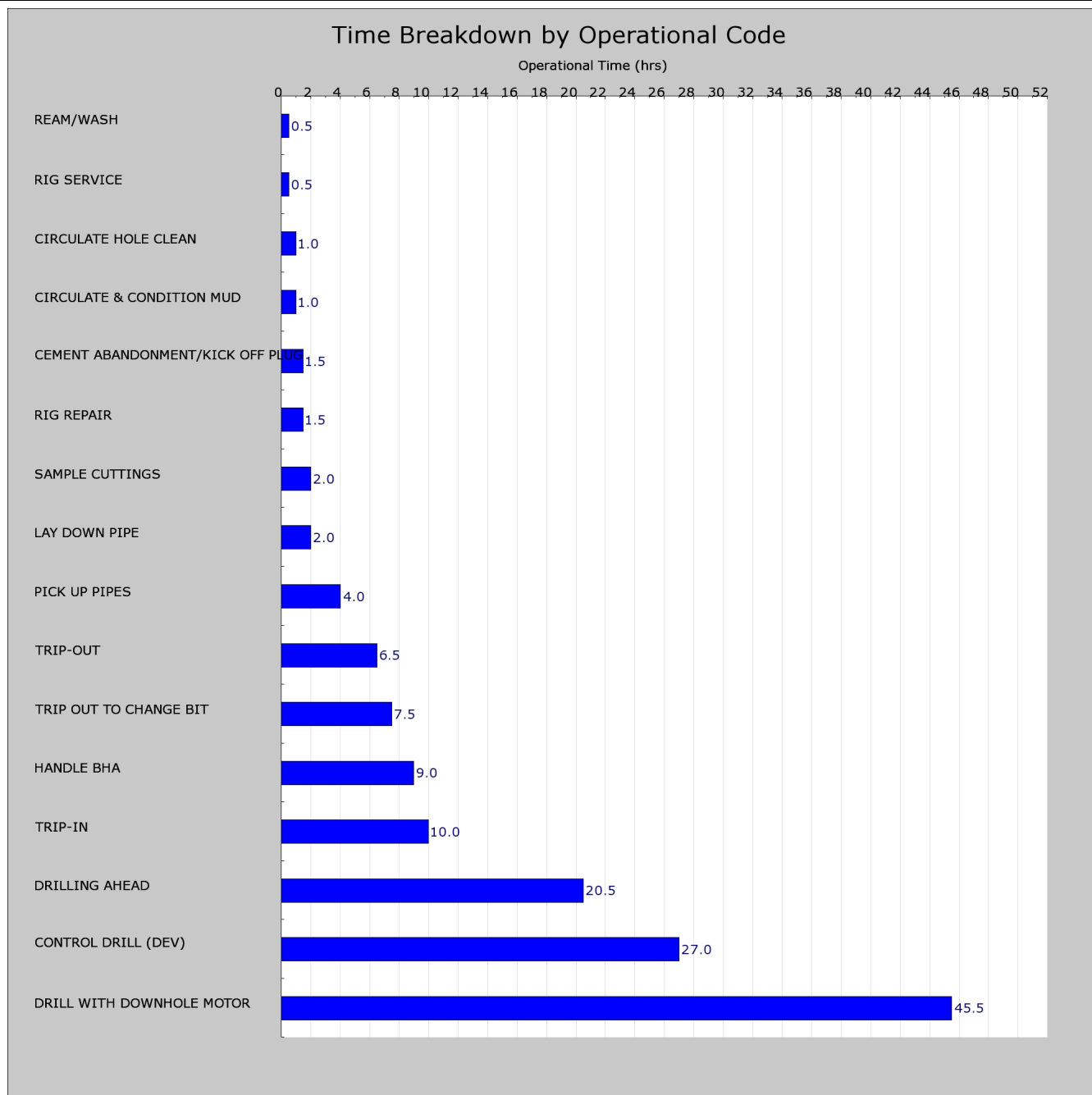
Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time :

Time Analysis Breakdown



DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date :

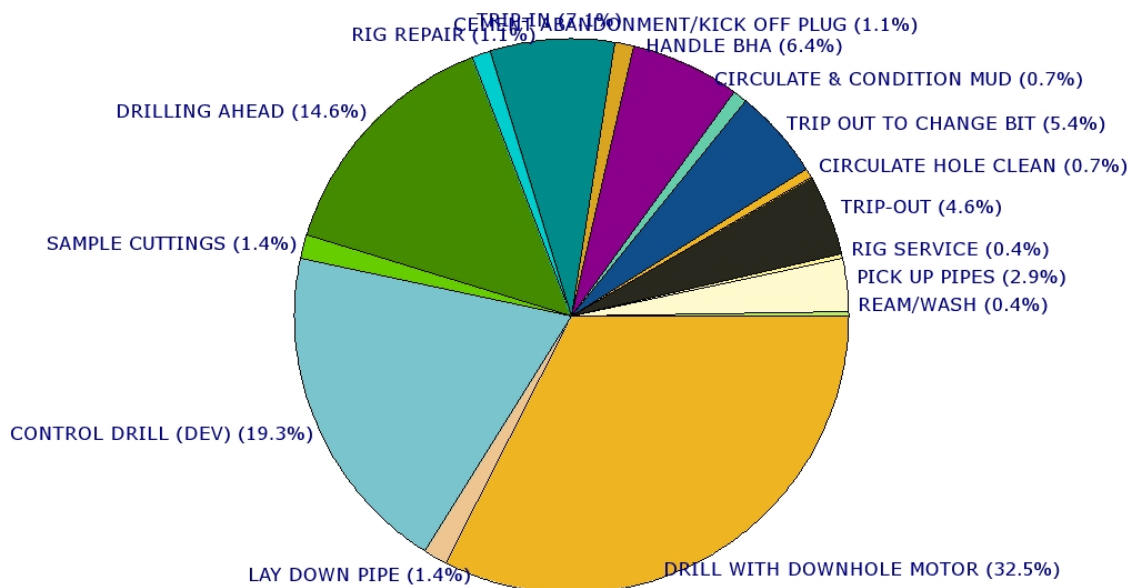
Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time :

Time Analysis by Operational Code (% of 140 hrs)



DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date :

Water Depth : 72.5m

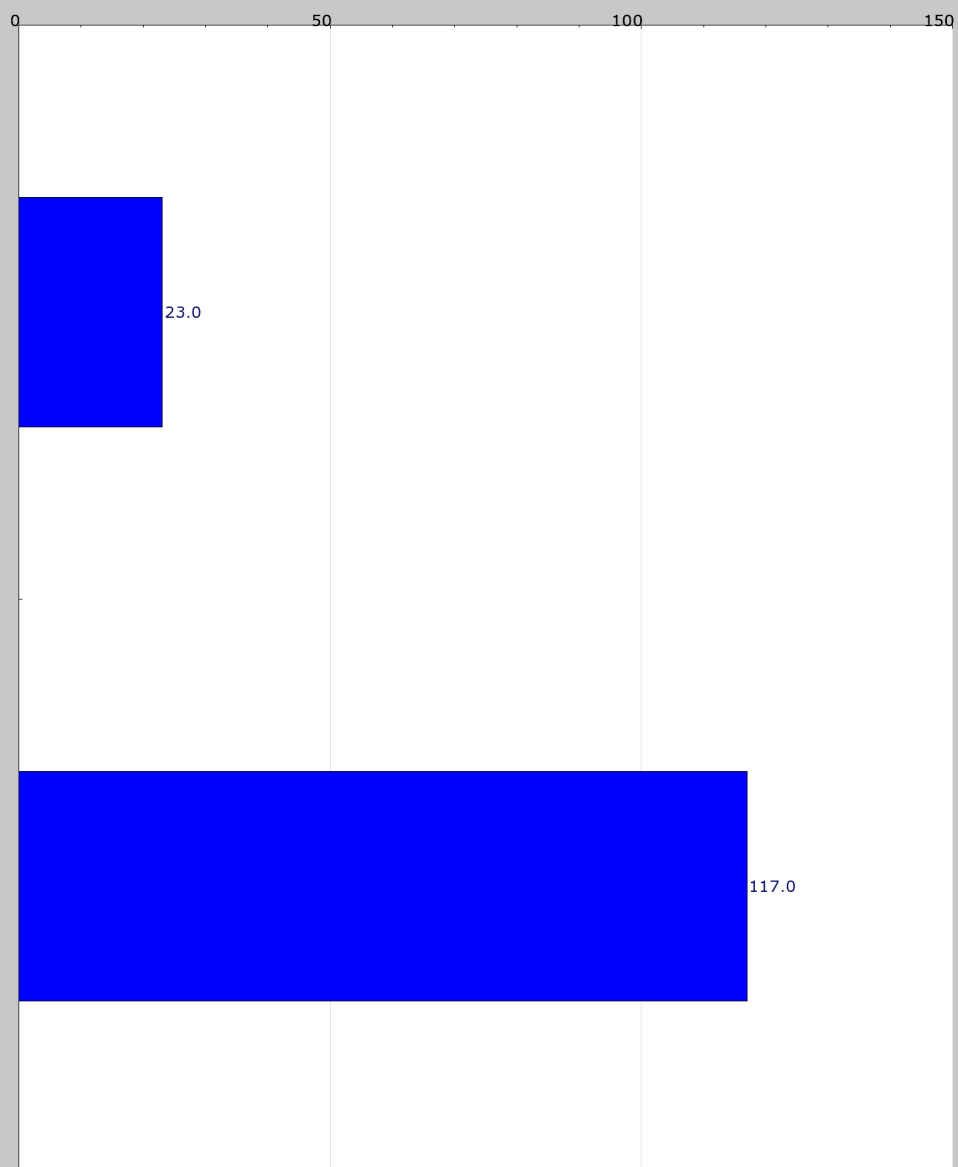
Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time :

Time Breakdown by Class Codes

Time in hours



DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date :

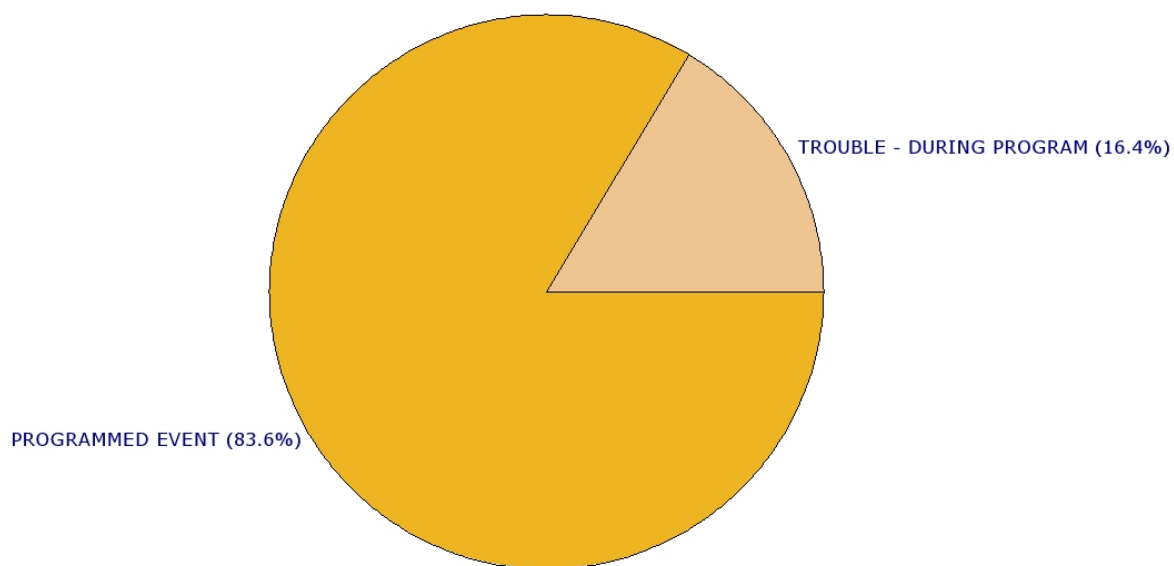
Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time :

Time Analysis by Class Codes (% of 140 hrs)



DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date :

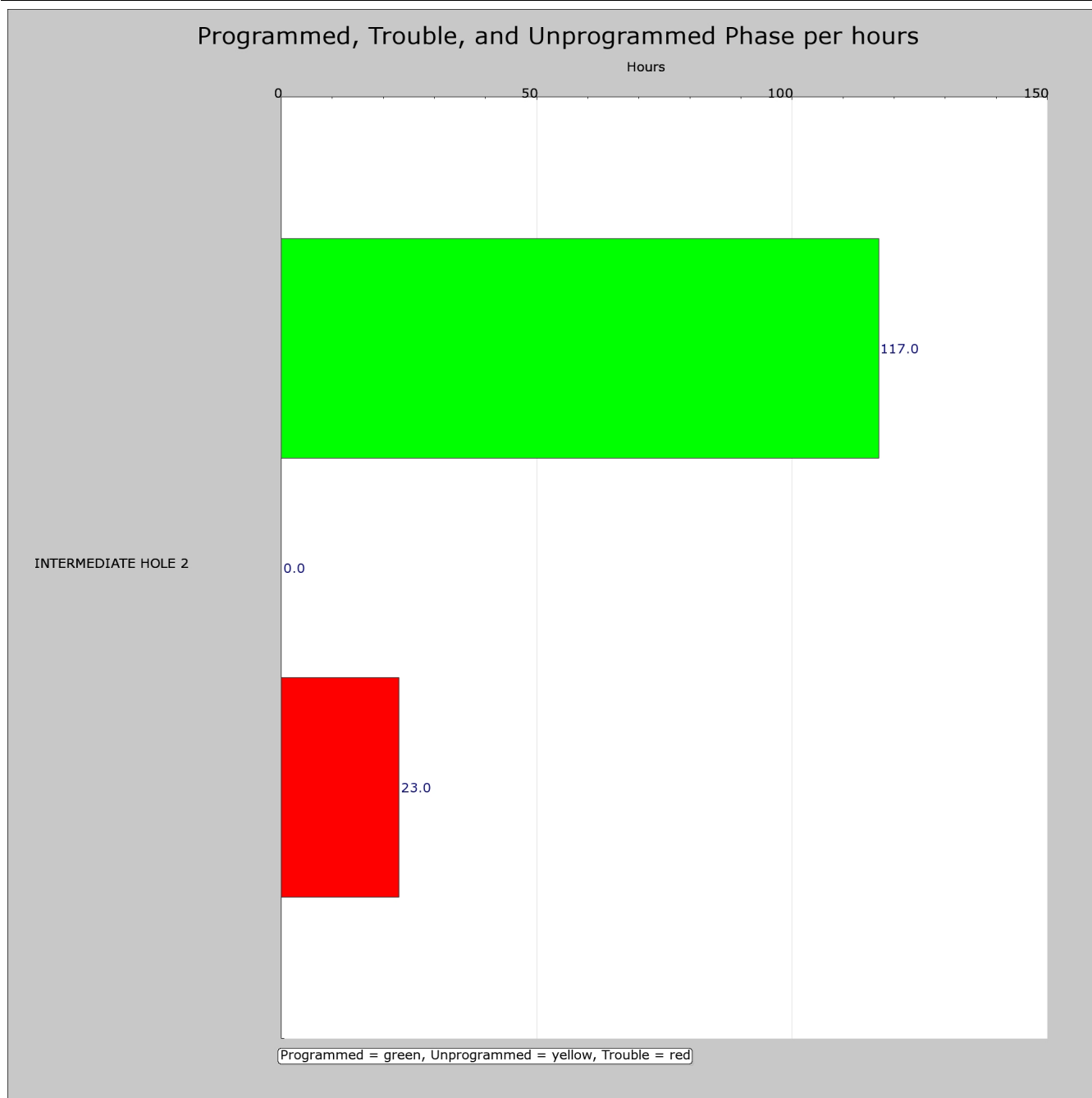
Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time :

Time Breakdown by Phase



Total Time on Operations : 140 hrs

Total Productive Time : 117 hrs

Total Lost Time : 23 hrs

Total Unprogrammed Time : 0 hrs

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date :

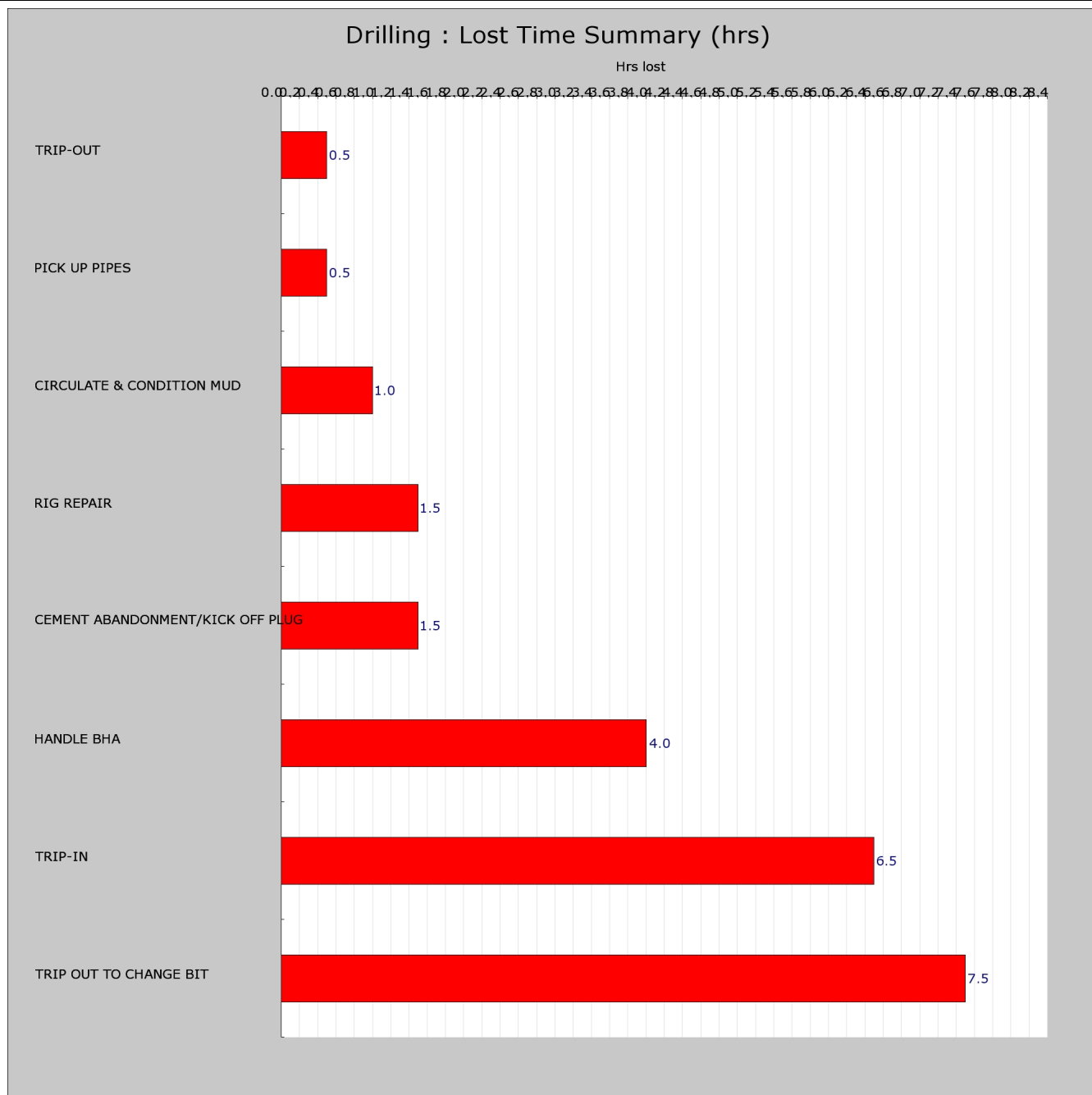
Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time :

Trouble



DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date :

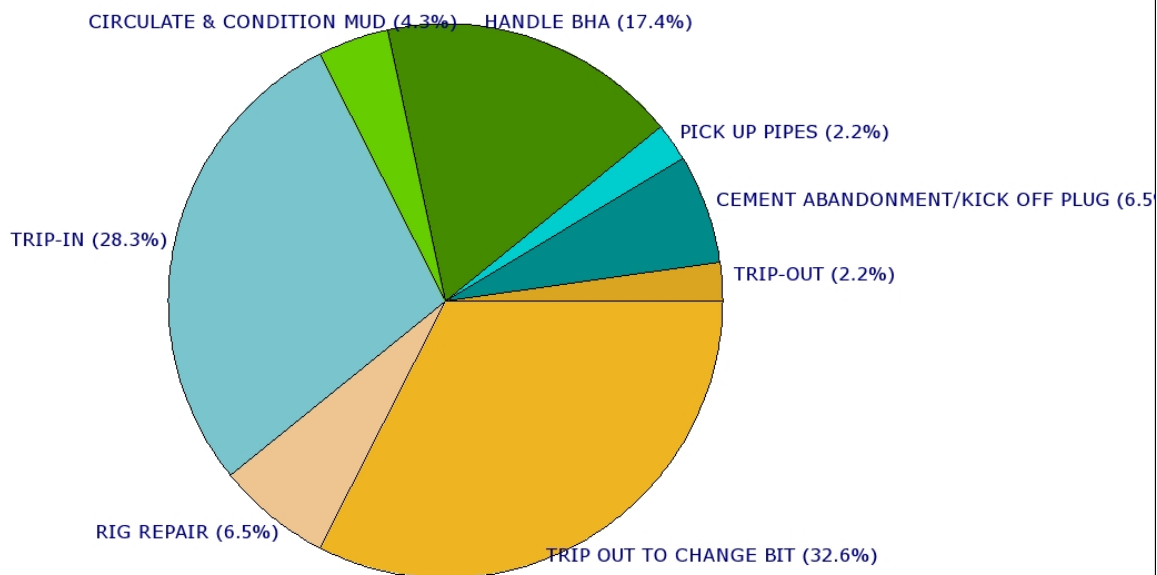
Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time :

Drilling : Lost Time Summary (% of 23 hrs)



DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date :

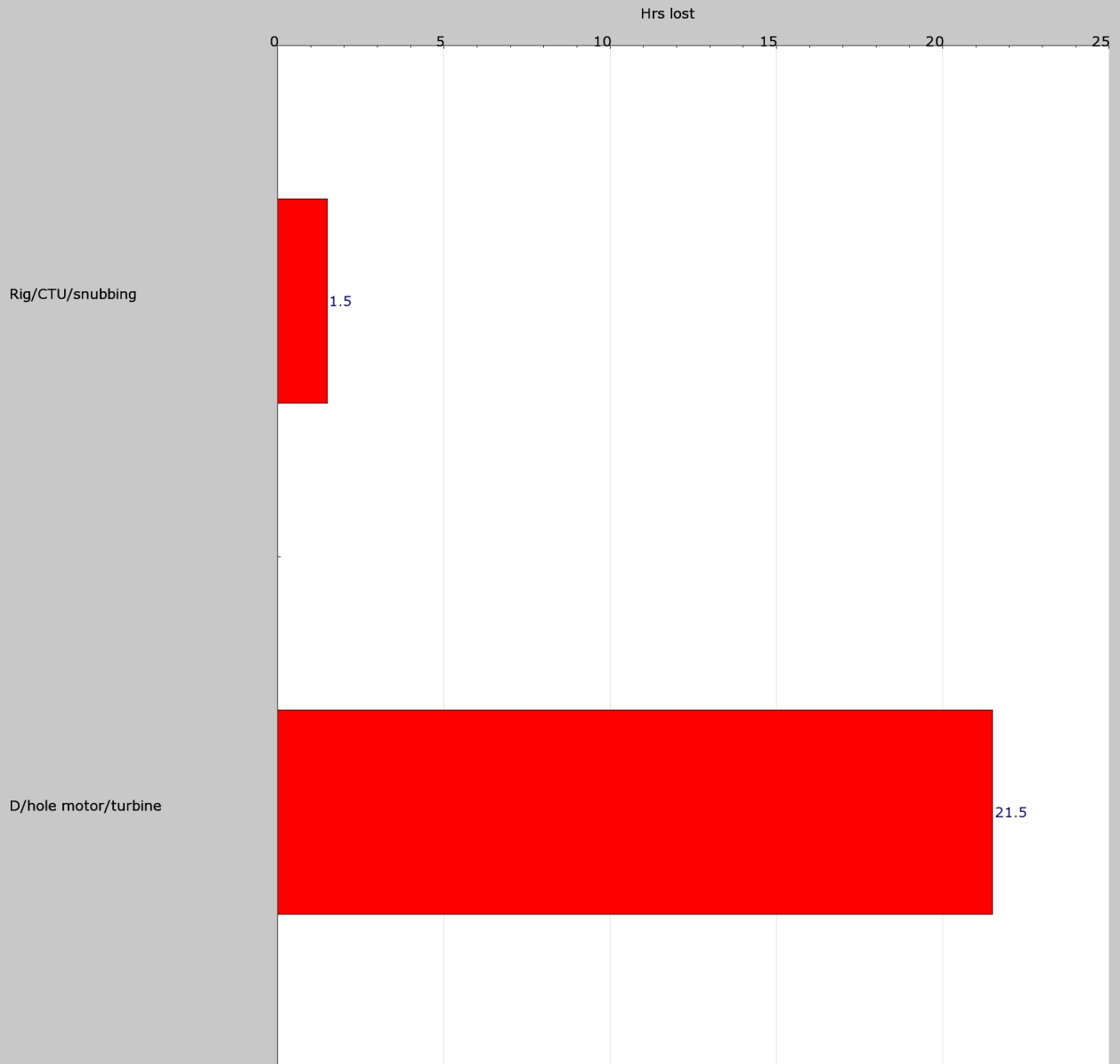
Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time :

Root Cause : Lost Time Summary (hrs)



DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date :

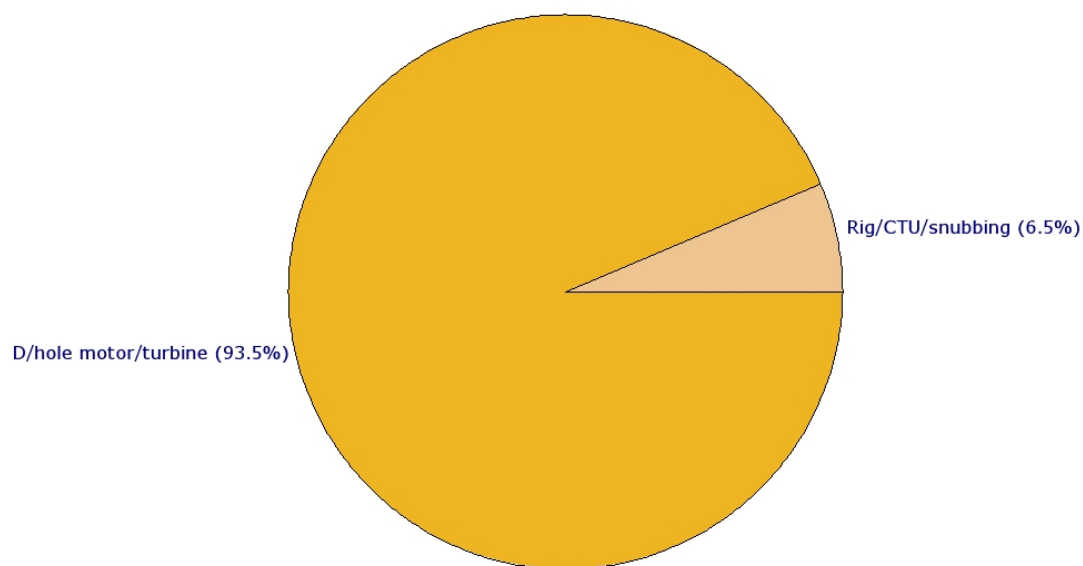
Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time :

Root Cause : Lost Time Summary (% of 23 hrs)



DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date :

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time :

Activity Report For ZaneGrey-1 ST1

Date : 20 Feb 2005						Daily Cost : \$ 11,972,981	Report Number : 1
Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity	
2170.0	IH2	P	TO		0.5	Commenced ZaneGrey -1ST1 (dressed off plug to 2,170m). Pulled back from 2,170m to 2,100m.	
2170.0	IH2	P	RS		0.5	Functioned & flushed BOPs after cement job.	
2170.0	IH2	P	TO		2	POOH to 1240m,	

Date : 21 Feb 2005						Daily Cost : \$ 237,413	Report Number : 2
Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity	
2170.0	IH2	P	PUP		3.5	Picked up drill pipe while running in the hole.	
2170.0	IH2	P	SC		2	Slipped and cut drill line.	
2170.0	IH2	P	TI		1	Ran in the hole from 2,070m to 2,199m. No weight taken until 2,199m, tagged with 8klb.	
2170.0	IH2	P	CHC		1	Pulled back inside shoe at 2,183m. Circulated bottoms up dumping cement contaminated mud.	
2170.0	IH2	P	TO		3.5	Flow checked well, static. Pumped slug & POOH.	
2170.0	IH2	P	LDP		2	RU & LD 2.7/8" tubing. Cleared floor & LO pony collar & stab off DC.	
2170.0	IH2	P	HBHA		5	Held JSA & PU 8.5" BHA #9. PU & tested adjustable gauge stabiliser & FEWD tools.	
2170.0	IH2	P	TI		2.5	RIH to 2,171m.	
2184.0	IH2	P	RW		0.5	Washed from 2,171m to 2,184m. Tagged firm cement.	
2190.0	IH2	P	CDD		3	Set up to kick off well. Established low side angle. Time drilled to 2,190m.	

Date : 22 Feb 2005						Daily Cost : \$ 286,639	Report Number : 3
Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity	
2208.0	IH2	P	CDD		12	Time control drilled from 2190 m to 2208 m. Mud loggers reported 50% cuttings in samples at 2207m.	
2255.0	IH2	P	CDD		12	Rotary drilled and slid from 2208 m to 2255 m.	

Date : 23 Feb 2005						Daily Cost : \$ 330,775	Report Number : 4
Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity	
2257.0	IH2	P	DM		0.5	Continued directionally drilling 8 1/2" hole from 2,255 m to 2,257 m. Took MWD surveys every stand.	
2265.0	IH2	P	DM		2	Slid from 2,257 m to 2,265 m.	
2287.0	IH2	P	DM		2.5	Directionally drilling 8 1/2" hole from 2,265 m to 2,287 m. Took MWD surveys every stand.	
2292.0	IH2	P	DM		1	Slid from 2,287 m to 2,292 m.	
2353.0	IH2	P	DM		4	Directionally drilling 8 1/2" hole from 2,292 m to 2,353 m. Took MWD surveys every stand.	
2360.0	IH2	P	DM		1	Slid from 2,353 m to 2,360 m.	
2383.0	IH2	P	DM		2	Directionally drilling 8 1/2" hole from 2,360 m to 2,383 m. Took MWD surveys every stand.	
2393.0	IH2	P	DM		1	Slid from 2,383 m to 2,393 m.	
2412.0	IH2	P	DM		1	Directionally drilling 8 1/2" hole from 2,393 m to 2,412 m. Took MWD surveys every stand.	
2419.0	IH2	P	DM		1	Slid from 2,412 m to 2,419 m.	
2464.0	IH2	P	DM		2.5	Directionally drilling 8 1/2" hole from 2,419 m to 2,464 m. Took MWD surveys every stand.	
2480.0	IH2	P	DM		0.5	Slid from 2,464 m to 2,480 m.	
2526.0	IH2	P	DM		3	Directionally drilling 8 1/2" hole from 2,480 m to 2,526 m. Took MWD surveys every stand.	
2530.0	IH2	P	DM		0.5	Slid from 2,526 m to 2,530 m.	
2541.0	IH2	P	DM		1.5	Directionally drilling 8 1/2" hole from 2,530 m to 2,541 m. Took MWD surveys every stand.	

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date :

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time :

Date : 24 Feb 2005**Daily Cost : \$ 313,658****Report Number : 5**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
2726.0	IH2	P	DM		10.5	Directionally drilled ahead in rotary mode in 8 1/2" hole from 2541 m to 2726 m. WOB = 16k lbs, RPM = 75, trq = 12-15k ft.lbs, 610 gpm at 2900 psi. Average rate of penetration 55 m/hr.
2736.0	IH2	P	DM		1	Directionally drilled ahead in sliding mode in 8 1/2" hole from 2726 m to 2736 m. Difficulty sliding, motor kept stalling at regular intervals, difficult toolface control. WOB = 24k lbs, 580 gpm at 2400 psi. Average rate of penetration 19 m/hr.
2761.0	IH2	P	DM		1.5	Directionally drilled ahead in rotary mode in 8 1/2" hole from 2736 m to 2761 m. WOB = 25k lbs, RPM = 87, trq = 12-15k ft.lbs, 640 gpm at 2700 psi. Average rate of penetration 36 m/hr.
2768.0	IH2	P	DM		2	Directionally drilled ahead in sliding mode in 8 1/2" hole from 2761 m to 2768 m. Difficulty sliding, motor kept stalling at regular intervals, difficult toolface control. WOB = 22k lbs, 595 gpm at 2600 psi. Average rate of penetration 14 m/hr.
2886.0	IH2	P	DM		6.5	Directionally drilled ahead in rotary mode in 8 1/2" hole from 2768 m to 2886 m. WOB = 10k lbs, RPM = 83, trq = 14-18k ft.lbs, 610 gpm at 2800 psi. Average rate of penetration 35 m/hr.
2886.0	IH2	TP	RR	RCS	1.5	Repaired top drive. Smoke observed coming from the Top Drive system. Rectified same, repairing the Lube oil pump. Repaired blower ducting hose. Continued circulating, 610 gpm at 2600 psi.
2886.0	IH2	P	D		0.5	Short wiper trip. Pulled out of hole with 5" drill pipe from 2886 m to 2741 m.
2886.0	IH2	P	D		0.5	Ran back in hole with 5" drill pipe from 2741 m to 2886 m. Hole good. No overpull.

Date : 25 Feb 2005**Daily Cost : \$ 330,537****Report Number : 6**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
2956.0	IH2	P	D		3	Directionally drilled ahead in rotary mode in 8 1/2" hole from 2886 m to 2956 m. WOB = 8-12k lbs, 64 rpm, 13-17k ft.lbs, 610 gpm at 2900 psi. Average rate of penetration 42 m/hr.
2963.0	IH2	P	D		1	Directionally drilled ahead in sliding mode in 8 1/2" hole from 2956 m to 2963 m. Difficulty sliding. Poor toolface control. WOB = 8-12k lbs, 610 gpm at 2900 psi. Average rate of penetration 20 m/hr.
2986.0	IH2	P	D		1.5	Directionally drilled ahead in rotary mode in 8 1/2" hole from 2963 m to 2986 m. WOB = 6-12k lbs, 52 rpm, 12-17k ft.lbs 610 gpm at 2900 psi. Average rate of penetration 36 m/hr.
3001.0	IH2	P	D		2.5	Directionally drilled ahead in sliding mode in 8 1/2" hole from 2986 m to 3001 m. Difficulty sliding. Poor toolface control. WOB = 6-10k lbs, 580 gpm at 2700 psi. Average rate of penetration 14 m/hr.
3015.0	IH2	P	D		0.5	Directionally drilled ahead in rotary mode in 8 1/2" hole from 3001 m to 3015 m. 50 rpm, 15-17k ft.lbs 590 gpm at 3000 psi. Average rate of penetration 52 m/hr.
3024.0	IH2	P	D		1.5	Directionally drilled ahead in sliding mode in 8 1/2" hole from 3015 m to 3024 m. Difficulty sliding. Poor toolface control. 580 gpm at 2800 psi. Average rate of penetration 14 m/hr.
3060.0	IH2	P	D		2.5	Directionally drilled ahead in rotary mode in 8 1/2" hole from 3024 m to 3060 m. 40 rpm, 13-18k ft.lbs 580 gpm at 3000 psi. Average rate of penetration 44 m/hr.
3068.0	IH2	P	D		1.5	Directionally drilled ahead in sliding mode in 8 1/2" hole from 3060 m to 3068 m. Difficulty sliding. Poor toolface control. 590 gpm at 3000 psi. Average rate of penetration 37 m/hr.
3105.0	IH2	P	D		1.5	Directionally drilled ahead in rotary mode in 8 1/2" hole from 3068 m to 3105 m. 60 rpm, 16-18k ft.lbs 610 gpm at 3100 psi. Average rate of penetration 40 m/hr.
3107.0	IH2	P	D		4	Directionally drilled ahead in rotary mode in 8 1/2" hole from 3105 m to 3107 m. Unable to penetrate 3107 m. (Varied drilling parameters, still no progress.) WOB = 5-38k lbs, 50-80 rpm, 12-17k ft.lbs 610 gpm at 3000 psi.
3107.0	IH2	TP	TOB	DHM	1	Flow check. Well static. Pull out of the hole from 3107 m to 2829 m with 5" drill pipe.
3107.0	IH2	TP	TOB	DHM	2	Flow check. Well static. Pumped slug. Pull out of the hole from 2829 m to 2250 m with 5" drill pipe.
3107.0	IH2	TP	TOB	DHM	0.5	Made up Top Drive. (Set toolface at 140 Left deg, sidetrack orientation). Pump slug.
3107.0	IH2	TP	TOB	DHM	1	Continued to pull out of the hole from 2250 m to 1892 m with 5" drill pipe.

Date : 26 Feb 2005**Daily Cost : \$ 187,686****Report Number : 7**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
3107.0	IH2	TP	TOB	DHM	3	Continued to pull out of the hole from 1892 m to 249 m with 5" drill pipe.
3107.0	IH2	TP	HBHA	DHM	2	Continued to pull out of hole with the bottom hole assembly from 249 m to surface. On surface it was found that the motor bit box had parted from the lower bearing housing of the motor and was left down hole.

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date :

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time :

Date : 26 Feb 2005**Daily Cost : \$ 187,686****Report Number : 7**

Fish left in hole:- bit, motor bit box and motor drive shaft (~1m long).

3107.0 IH2 TP HBHA DHM 1.5 Lay out damaged motor. Change out MWD pulser to increase flow capacity. Racked back same.

3107.0 IH2 TP HBHA DHM 0.5 Made up cement stand (side Entry Sub on DP) & stood back same.

3107.0 IH2 TP PUP DHM 0.5 Rigged up 2.7/8" handling gear & prepared to RIH with 2.7/8" cement stinger.

3107.0 IH2 TP TI DHM 6.5 Picked up mule shoe (1 jt modified with taper & circulation slots) & 8 jts 2.7/8" stinger. Tripped in hole on 5" DP to 3,106m. Washed down last stand. Tagged bottom & confirmed depth.

3107.0 IH2 TP CMD DHM 1 Circulated bottoms up to confirm no trip gas.

3107.0 IH2 TP CMP DHM 1.5 Rigged up cement line & pressure tested line to 1,000psi. Set 80m balanced cement plug from 3,106m - 3,026m to sidetrack around fish. Rigged down cement line.

2900.0 IH2 TP TO DHM 0.5 Pulled back above plug to 2,900m. (ended ZaneGrey-1ST1, commenced ZaneGrey-1ST2 at 17:00hrs).

APPENDIX 22

DRILLING DATA ZANEGREY-1/ST2

(By Independent Data Services [IDS])



Bass Strait Oil Company Limited

Well : ZaneGrey-1 ST2

Rig : Ocean Patriot

Drilling Data Appendix

Part 1 : Well Summary

- Well Overview
- Summary Sheet
- Well History
- Phase Summary

Well Summary

Well Objective :

The primary objective of the well is to verify the depth (+/- 50m) of the Top of the Latrobe Group @ 2226mRT (TVD), if within prognosis then the primary targets are the Kingfish and Volador formations.

Country :	Australia
Permit :	Vic / P-42
Well :	ZaneGrey-1 ST1 ZaneGrey-1 ST2
Well Type :	EXPLORATION
Operating Company :	Bass Strait Oil Company Limited
Rig :	Ocean Patriot

Latitude :	38 Deg 34 Min 31.64 Sec
Longitude :	147 Deg 59 Min 16.27 Sec
UTM North :	5729856.42
UTM East :	586049.89
DFE above MSL :	21.5m
Water Depth :	72.5m
Planned TD :	3692.0m
Actual TD :	3675.0m

On Location Date / Time :	27 Jan 2005 / 1655
Spud Date / Time :	29 Jan 2005 / 1430
TD Reached Date / Time :	10 Mar 2005 / 1700
Rig Released Date / Time :	18 Mar 2005 / 1730
Total Days Spud / Total Depth :	48.12
Total Days on Operations :	20.02
Total Days Budgeted :	0.00

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 1730

Well History

Well: ZaneGrey-1 ST2

#	Date	Depth	24 Hour Summary
1	26 Feb 2005	2900.0	Set cement plug. Pulled cement stinger out of the hole. Layed out same. Pickup 8 1/2" bottom hole assembly.
2	27 Feb 2005	3107.0	Made up 8 1/2" directional bottom hole assembly. Run in hole with same on 5" drill pipe. Washed down from 2996 m. Unable to tag hard cement. Attempt an openhole side track by time drilling at 3075 m to 3082 m. Unsuccessful. Slid from 3082 m to 3107 m. Unable to kick off. Pull out of hole.
3	28 Feb 2005	2946.0	Continued to pull bottom hole assembly out of the hole. Ran in hole with cement stinger. Pumped 160 m cement plug. Pulled out of the hole with cement stinger. Ran in hole with 8 1/2" directional assembly.
4	01 Mar 2005	2995.0	Continued running in the hole. Washed and reamed from 2900 m to 2945 m. Unable to tag hard cement. Worked drill string repeatedly up and down attempting to create a ledge. Time drilled attempting to open hole sidetrack.
5	02 Mar 2005	3031.0	Continued sliding with 180 deg toolface. Unable to kickoff. Pull out of the hole.
6	03 Mar 2005	3060.0	Continued pulling the bottom hole assembly out of the hole. Changed out motor and bit. Continued running in hole. Time drilled from 3031 m to 3060 m with 180 deg toolface.
7	04 Mar 2005	3070.0	Continued time drilling with 180 deg toolface. Pulled out of the hole. Changed out bit. Ran in hole. Circulated and conditioned mud.
8	05 Mar 2005	3092.0	Slid ahead sidetracking from the original well bore at 3075 m. Pulled out of hole to change bit and BHA. Run in hole with new BHA.
9	06 Mar 2005	3162.0	Continued to run in the hole. Drill ahead. Top drive problems. Pulled back into the casing shoe to continue repairing top drive system.
10	07 Mar 2005	3162.0	Continued to trouble shoot electrical fault with the top drive system.
11	08 Mar 2005	3162.0	Continued to trouble shoot electrical fault with the top drive system.
12	09 Mar 2005	3480.0	Repaired top drive system. Directionally drilling ahead in rotary mode.
13	10 Mar 2005	3675.0	Drilled to well TD. Circulated hole clean. Short wiper trip to 3070 m. Pull out of the hole.
14	11 Mar 2005	3675.0	Continued pulling out of the hole with BHA. Layed out MWD, mud motor and bit. Rigged up for wireline logging. Wireline logging with Grand Slam tool.
15	12 Mar 2005	3675.0	Continued running wireline Grand Slam logging tool. Layed out same. Made up RCI logging tool. Ran in hole with same. RCI logging tool stuck in hole. Unable to pull TCI tool free. Ran in hole stripping over wireline to fish wireline RCI tool.
16	13 Mar 2005	3675.0	Continued stripping in the hole over the wireline cable. Retrieve fish. Reterminate wireline cable. Continued wireline RCI operations taking pressure samples. RCI tool failed. DODI continued trouble shooting top drive system from 3:30 am onwards.
17	14 Mar 2005	3675.0	Pulled out of the hole with wireline RCI tool. Layed out side entry sub. Parted wireline cable at the weak point. Retrieve wireline cable. Continued pulling out of the hole. Layed out RCI tool. Picked up cement stinger. Ran in hole with the cement stinger. Circulated and spotted HI-VIS pill.
18	15 Mar 2005	3675.0	Pumped P&A cement plug #1. Pulled out of the hole laying out 5" drill pipe. Pumped P&A cement plug #2. Pulled out of the hole laying out 5" drill pipe. Displaced well to inhibited mud.
19	16 Mar 2005	3675.0	Layed out drill pipe. Retrieved wear bushing. Cut 9 5/8" casing. Layed out 9 5/8" casing. Set 13 3/8" bridge plug. Set cement plug #3. Pull BOP's.
20	17 Mar 2005	3675.0	Layed out marine riser. Nipped down BOP. Cut 20" and 30" casing. Retrieve 20" and 30" casing with PGB. Layed out same. Seabed survey with ROV.
21	18 Mar 2005	3675.0	Finished pulling anchors. Handover rig to Woodside.

Part 2 : Drilling Data

- Bit Record
- BHA Record
- Mud Record
- Survey Data

Wellname : ZaneGrey-1 ST2				Drilling Co. : -				Rig : Ocean Patriot			
DFE above MSL : 21.5m		Lat : 38 Deg 34 Min 31.64 Sec		Spud Date : 29 Jan 2005		Release Date : 18 Mar 2005					
Water Depth : 72.5m		Long : 147 Deg 59 Min 16.27 Sec		Spud Time: 1430		Release Time: 1730					

Bit Record

Well: ZaneGrey-1 ST2																										
Date In	IADC	Bit#	Size [in]	Ser #	Mfr	Type	Jets # x [3/32nd"]	D.In [m]	D.Out [m]	Prog [m]	Hrs o/b	SPP [psi]	Flow [gpm]	WOB [klb]	RPM	MW	TFA	ROP [m/hr]	I	O1	D	L	B	G	O2	R
26 Feb 2005	M322	8	8.50	D80771	Reed	TD43AKPRDH	1 x 32 2 x 14	2900.0	3107.0	207	5.9	1900	460	8		9.60	1.086	35.08	1	1	JD	M2	E	I	WT	BHA
28 Feb 2005	M332	9	8.50	207732	Reed	RSX163DGW	6 x 14	2950.0	3031.0	81	24	2288	493	13	35	9.60	0.902	3.38	0	0	NO	A	X	I	PN	BHA
02 Mar 2005	117W	6RR	8.50	10676290	Security	EBXSC1	3 x 20	3031.0	3070.0	39	21.6	2800	568	10		9.40	0.92	1.81	1	1	NO	A	E	1	NO	BHA
04 Mar 2005	S132	10	8.50	22520	Reed	DS43	3 x 20	3070.0	3092.0	22	6.8	2900	608	3		9.40	0.92	3.24	1	1	NO	N	X	I	ER	BHA
05 Mar 2005	M332	9RR	8.50	207732	Reed	RSX163	6 x 14	3092.0	3675.0	583	23.4	3108	612	15	81	9.40	0.902	24.91	2	3	WT	A	X	1	BU	TD

Wellname : ZaneGrey-1 ST2

Drilling Co. : -

Rig : Ocean Patriot

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time: 1430

Release Time: 1730

BHA Record

Well: ZaneGrey-1 ST2

#	Date-in	Length [m]	Weight [klb]	Weight Blw/Jar Dry [klb]	Weight Blw/Jar Wet [klb]	String Weight [klb]	Pick-Up Weight [klb]	Slack-Off Weight [klb]	Torque Max [kft-lbs]	Torque on Bottom [kft-lbs]	Torque off Bottom [kft-lbs]	Description
10	26 Feb 2005	221.6	37.0	20.0	20.0	275.0	325.0	235.0	0	0	0	8 1/2" TCI, motor, AGS, float sub with ported float installed, PM sub, FEWD, pulser/TM, integral blade stabiliser, 5 x 6 1/2" DC's, 1 x 6 1/2" jars, 15 x 5" HWDP.
13	27 Feb 2005	221.6	40.0	0	0	285.0	345.0	245.0	22	5	3	8 1/2" PDC, motor, AGS, float sub with ported float installed, PM sub, FEWD, pulser/TM, integral blade stabiliser, 5 x 6 1/2" DC's, 1 x 6 1/2" jars, 15 x 5" HWDP.
14	03 Mar 2005	220.1	40.0	0	0	285.0	345.0	245.0	0	0	0	8 1/2" Milled Tooth, motor, stabiliser, float sub with ported float installed, PM sub, FEWD, pulser/TM, integral blade stabiliser, 5 x 6 1/2" DC's, 1 x 6 1/2" jars, 15 x 5" HWDP.
15	04 Mar 2005	220.0	40.0	0	0	285.0	345.0	245.0	0	0	0	8 1/2" Sidetracking Bit, motor, stabiliser, float sub with ported float installed, PM sub, FEWD, pulser/TM, integral blade stabiliser, 5 x 6 1/2" DC's, 1 x 6 1/2" jars, 15 x 5" HWDP.
16	05 Mar 2005	220.1	40.0	0	0	320.0	390.0	290.0	21	17	6	8 1/2" PDC, motor, stabiliser, float sub with ported float installed, PM sub, FEWD, pulser/TM, integral blade stabiliser, 5 x 6 1/2" DC's, 1 x 6 1/2" jars, 15 x 5" HWDP.

Wellname : ZaneGrey-1 ST2

Drilling Co. : -

Rig : Ocean Patriot

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time: 1430

Release Time: 1730

Mud Recap

Well: ZaneGrey-1 ST2

WBM

R#	Date - Time	Type	Depth [m]	Tmp [C°]	MW [ppg]	VIS [sec/qt]	PV [cp]	YP [lb/100ft²]	Gel10s [lb/100ft²] / 10m [lb/100ft²]	F.L. API [cc]	F.L. hthp [cc]	Sols	Sand	MBT	PH	Cl [mg/l]	Hard [mg/l]	KCl [%]	Daily Cost [\$]
1	26 Feb 2005 - 15:20	KCl-PHPA-Glycol	3107.0	32.0	9.60	61	17	33	6 / 13	4.7	0	8.2	0.25	10	9	30500.0	460.0	5.5	6580
2	27 Feb 2005 - 15:00	KCl-PHPA-Glycol	3107.0	38.0	9.60	58	16	32	5 / 12	4.5	0	8.2	0.25	10	9	31000.0	600.0	5.5	1581
3	28 Feb 2005 - 23:00	KCl-PHPA-Glycol	3107.0	38.0	9.60	62	18	34	7 / 14	4.6	0	8.2	0.25	10	10	31000.0	580.0	5.5	7919
4	01 Mar 2005 - 23:00	KCl-PHPA-Glycol	2995.0	44.0	9.50	55	20	21	7 / 11	5.5	0	7.8	0.25	7.5	10	31000.0	1000.0	5.5	7107
5	02 Mar 2005 - 17:30	KCl-PHPA-Glycol	3022.0	38.0	9.40	43	17	14	6 / 11	7.0	0	7	0.25	7.5	11	37500.0	1100.0	6.5	3419
6	03 Mar 2005 - 23:00	KCl-PHPA-Glycol	3056.0	38.0	9.40	38	9	7	4 / 7	7.0	0	7.3	0.25	7.5	12	34000.0	1200.0	6	7107
7	04 Mar 2005 - 00:00	KCl-PHPA-Glycol	3070.0	32.0	9.40	38	9	6	3 / 6	7.4	0	7.3	0.25	7.5	12	34000.0	1150.0	6	894
8	05 Mar 2005 - 23:00	KCl-PHPA-Glycol	3092.0	43.0	9.40	45	18	16	4 / 8	5.5	0	7.3	0.25	7.5	9.5	32000.0	700.0	6	6484
9	06 Mar 2005 - 07:12	KCl-PHPA-Glycol	3162.0	38.0	9.40	50	19	17	4 / 9	5.5	0	7.6	0.25	7.5	9.5	32000.0	640.0	6	12912
10	07 Mar 2005 - 23:00	KCl-PHPA-Glycol	3162.0	33.0	9.50	57	18	17	4 / 8	7.6	0	7.5	0.25	7.5	9.5	32000.0	640.0	6	0
11	08 Mar 2005 - 23:00	KCl-PHPA-Glycol	3162.0	32.0	9.50	58	18	18	3 / 8	6.0	0	7.6	0.25	7.5	9.5	32000.0	640.0	6	0
12	09 Mar 2005 - 23:20	KCl-PHPA-Glycol	3460.0	49.0	9.70	59	15	25	3 / 7	4.8	0	8.3	0.25	7.5	9.5	34500.0	560.0	6.5	4603
13	10 Mar 2005 - 22:30	KCl-PHPA-Glycol	3765.0	52.0	9.70	58	15	26	3 / 8	4.4	0	8.3	0.25	7.5	9	36500.0	400.0	6.5	4800
14	11 Mar 2005 - 23:00	KCl-PHPA-Glycol	3765.0	32.0	9.70	61	16	26	4 / 8	4.4	0	8.3	0.25	7.5	9	36500.0	400.0	6.5	874
15	12 Mar 2005 - 11:00	KCl-PHPA-Glycol	3765.0	32.0	9.70	63	15	26	4 / 8	4.4	0	8.3	0.25	7.5	9	36500.0	400.0	6.5	0
16	13 Mar 2005 - 22:40	KCl-PHPA-Glycol	3765.0	32.0	9.70	63	16	26	4 / 8	4.4	0	8.3	0.25	7.5	9	36500.0	400.0	6.5	0
17	14 Mar 2005 - 22:40	KCl-PHPA-Glycol	3765.0	32.0	9.70	63	16	26	4 / 8	4.4	0	8.3	0.25	7.5	9	36500.0	400.0	6.5	0
18	15 Mar 2005 - 21:00	KCl-PHPA-Glycol	3765.0	35.0	9.70	65	17	27	5 / 10	4.6	0	8.3	0.25	7.5	9.5	36500.0	440.0	6.5	1846

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 1730

Survey

Well: ZaneGrey-1 ST2

Mag Dec: 0						Sidetrack # 2		
MD [m]	TVD [m]	INCL [deg]	CORR. AZ [deg]	DOGLEG [deg/30m]	'V' SECT [m]	N/S [m]	E/W [m]	TOOLTYPE
3044.57	2652.8	31.02	13.23	0	1323.91	1280.09	337.80	mwd
3074.64	2678.7	30.11	15.22	4.53	1294.91	1294.91	341.55	mwd
3114.34	2712.8	31.53	18.99	6.04	1314.34	1314.34	347.55	mwd
3131.12	2727.1	31.15	19.18	2.34	1322.59	1322.59	350.40	mwd
3159.25	2751.3	30.31	18.05	3.62	1336.21	1336.21	354.99	mwd
3188.52	2776.7	29.22	18.57	3.83	1350.00	1350.00	359.55	mwd
3217.29	2801.9	28.31	18.36	3.18	1363.13	1363.13	363.94	mwd
3276.11	2854.0	27.28	18.20	1.76	1389.18	1389.18	372.54	mwd
3333.29	2905.0	26.11	18.07	2.05	1413.59	1413.59	380.54	mwd
3389.79	2955.9	25.74	18.35	0.69	1437.05	1437.05	388.26	mwd
3417.10	2980.6	24.21	17.99	5.63	1448.01	1448.01	391.85	mwd
3445.51	3006.7	22.63	17.53	5.60	1458.76	1458.76	395.30	mwd
3475.40	3034.3	22.06	18.72	2.44	1469.56	1469.56	398.83	mwd
3504.57	3061.3	22.33	18.72	0.93	1480.00	1480.00	402.37	mwd
3533.24	3087.9	22.23	18.84	0.38	1490.29	1490.29	405.87	mwd
3562.17	3114.6	22.34	19.85	1.38	1500.64	1500.64	409.50	mwd
3590.58	3140.9	22.01	21.18	2.11	1510.68	1510.68	413.26	mwd
3619.85	3168.1	21.30	20.71	2.50	1520.77	1520.77	417.12	mwd
3649.53	3195.9	20.38	21.41	3.21	1530.62	1530.62	420.92	mwd
3662.14	3207.7	19.70	21.54	5.40	1534.64	1534.64	422.50	mwd
3675.00	3219.8	19.70	21.54	0	1538.68	1538.68	424.09	mwd

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

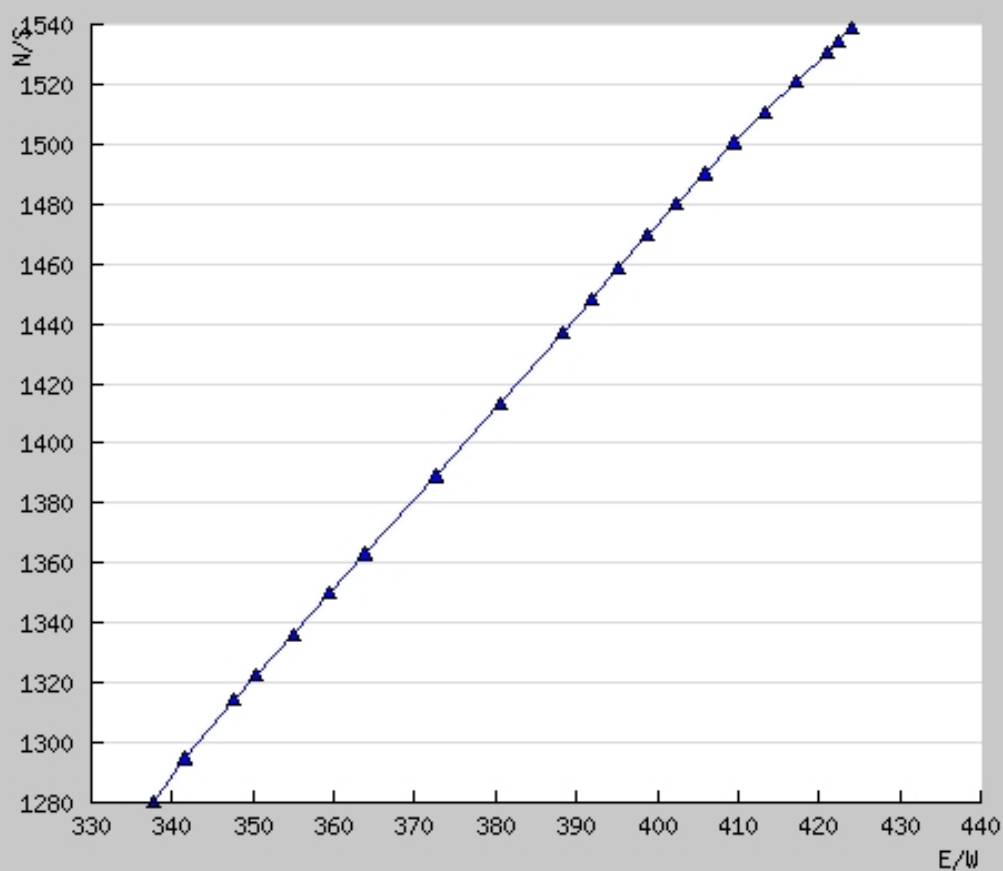
Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 1730

Plan View (ZaneGrey-1 ST2)

IDSDatNet - Created On 29 Jul 2005 06:01am

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

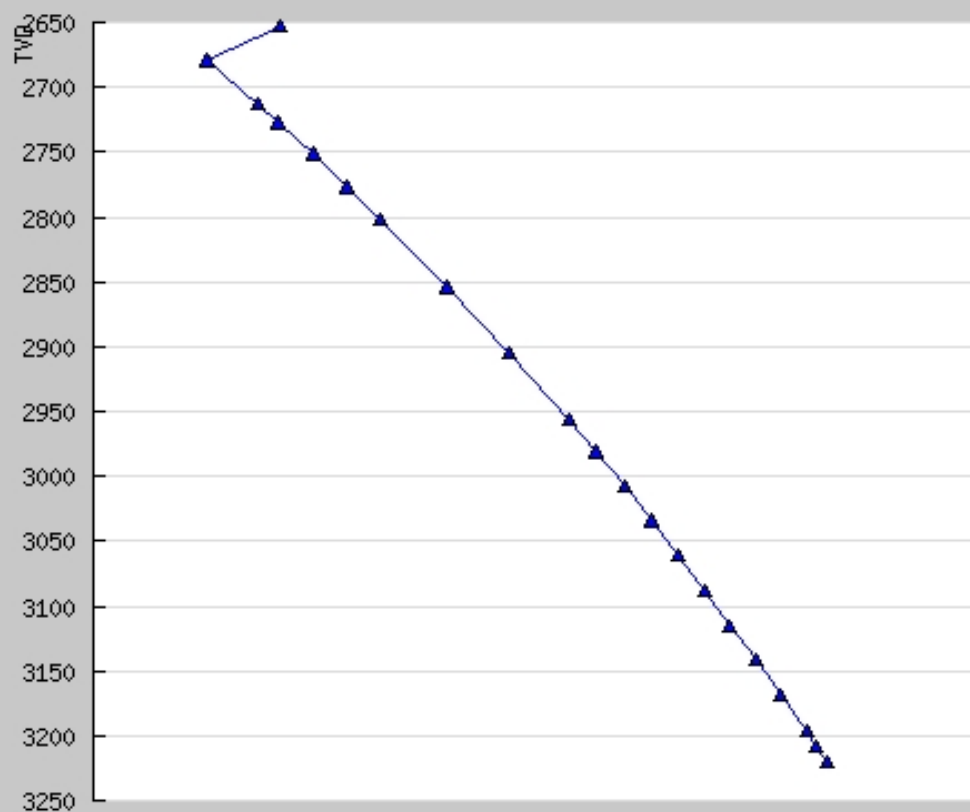
Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 1730

V Section (ZaneGrey-1 ST2)

IDSDatNet - Created On 29 Jul 2005 06:01am

Part 3 : Time Analysis Data

- Time Overview
- Trouble Time Analysis

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

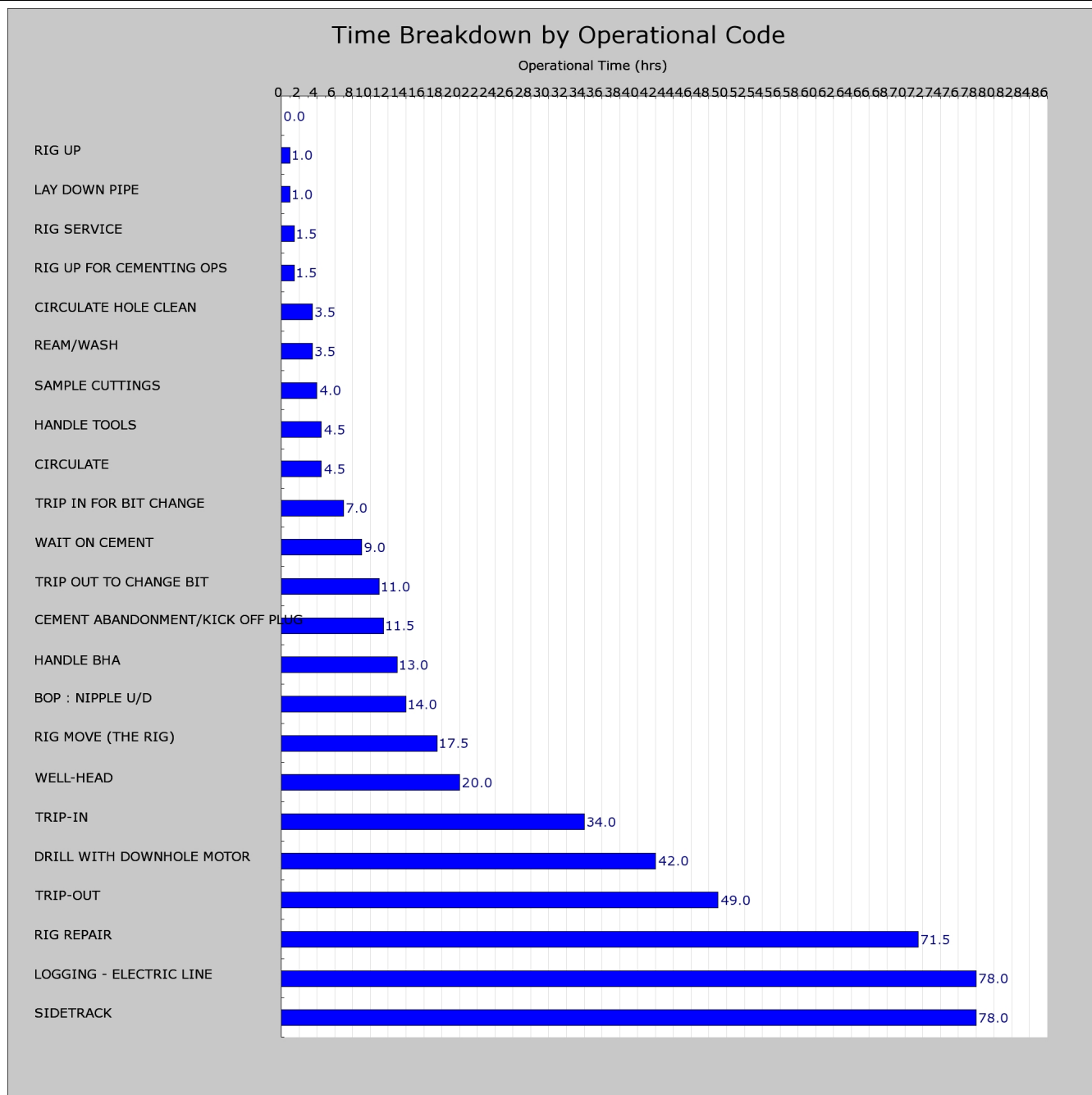
Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 1730

Time Analysis Breakdown



DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

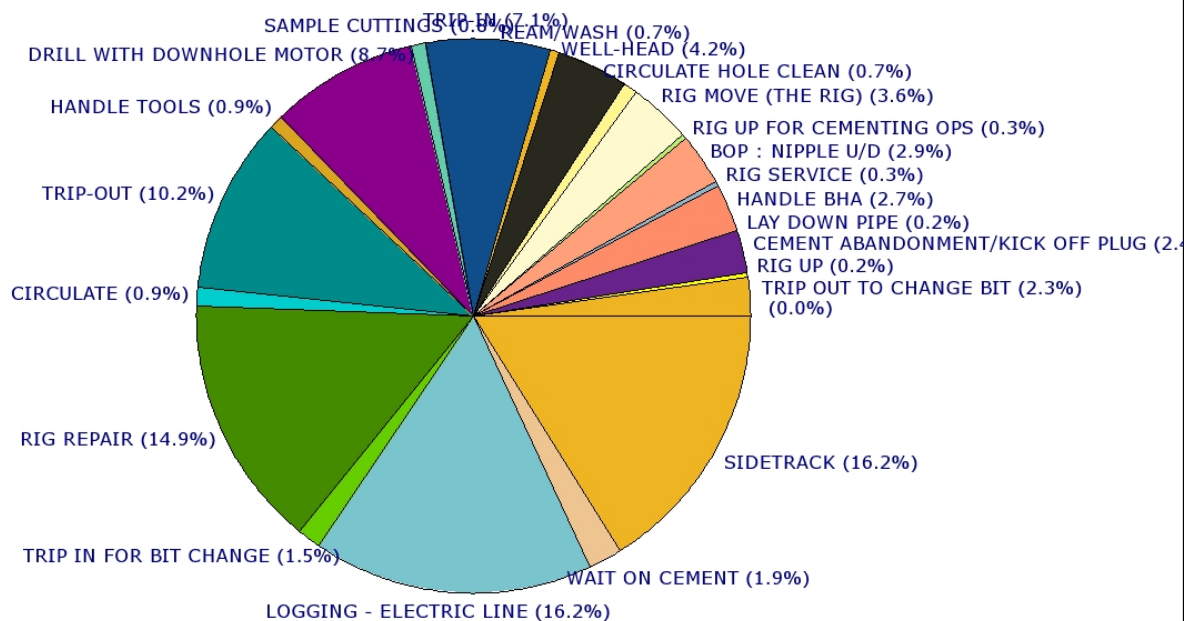
Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 1730

Time Analysis by Operational Code (% of 480.5 hrs)



DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 1730

Time Breakdown by Class Codes

Time in hours

0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340

PROGRAMMED EVENT

182.0

TROUBLE - DURING PROGRAM

298.5

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

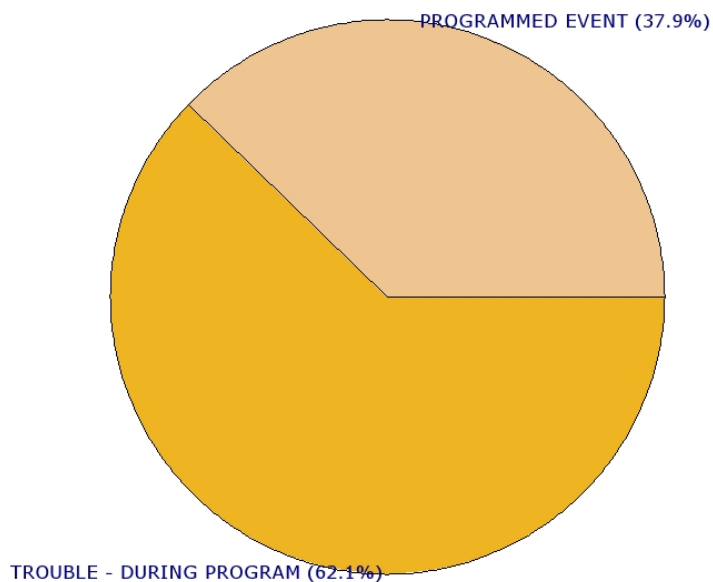
Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 1730

Time Analysis by Class Codes (% of 480.5 hrs)



DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

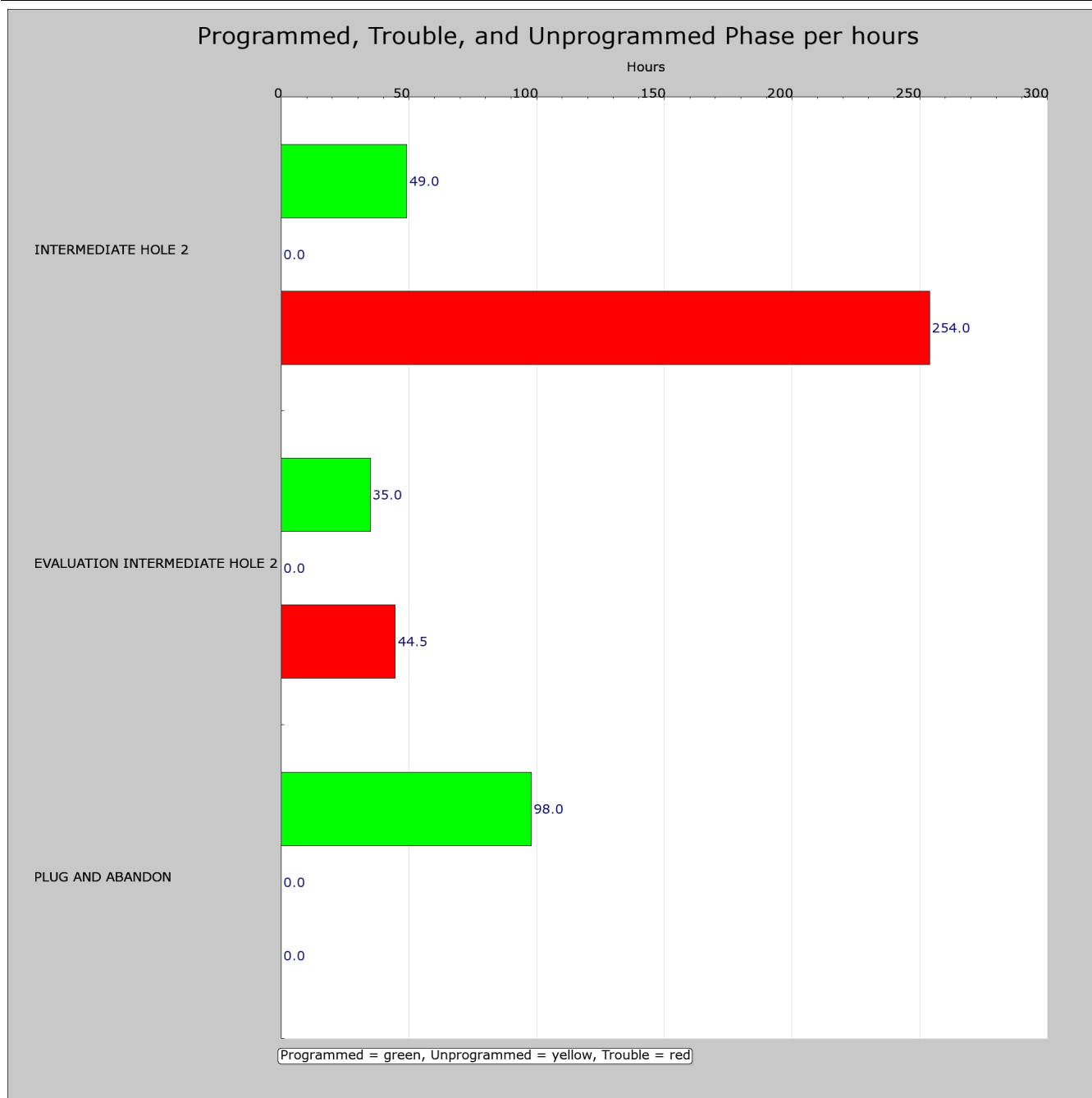
Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 1730

Time Breakdown by Phase



Total Time on Operations : 480.5 hrs

Total Productive Time : 182 hrs

Total Lost Time : 298.5 hrs

Total Unprogrammed Time : 0 hrs

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

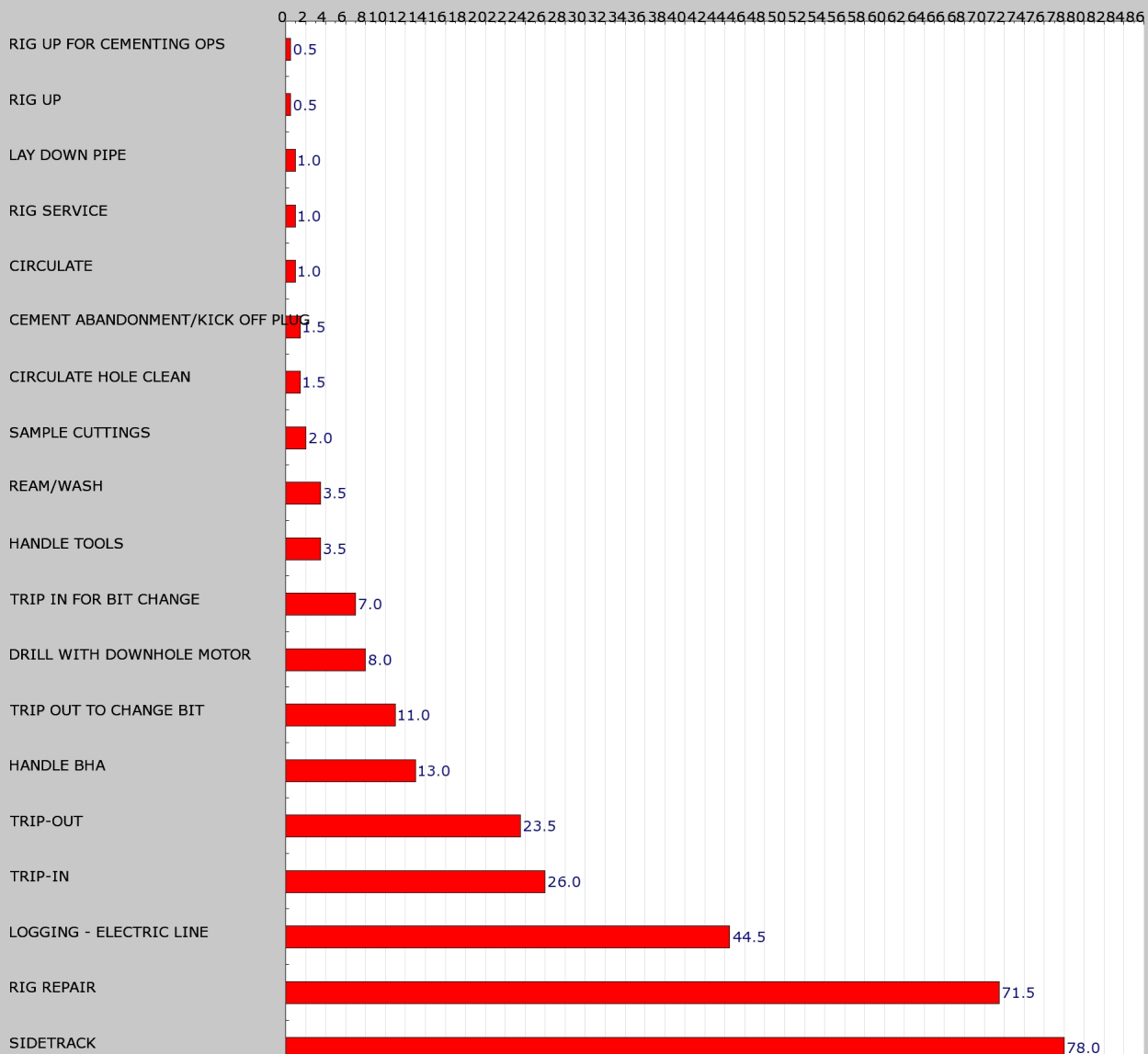
Spud Time : 1430

Release Time : 1730

Trouble

Drilling : Lost Time Summary (hrs)

Hrs lost



DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

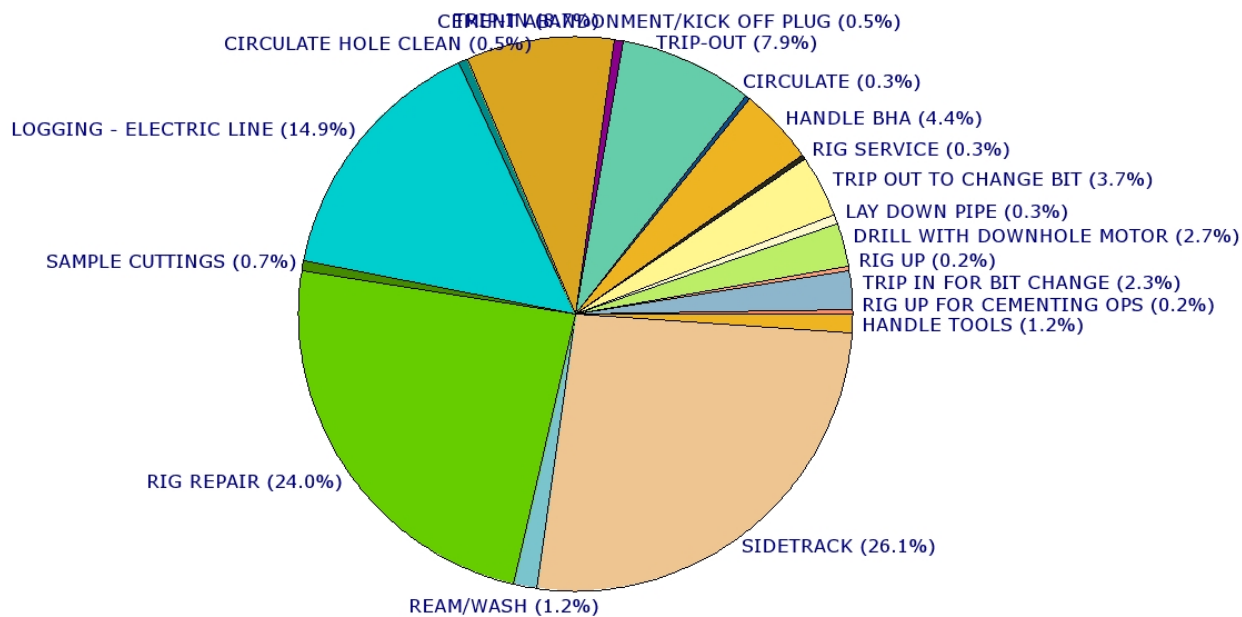
Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 1730

Drilling : Lost Time Summary (% of 298.5 hrs)



DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

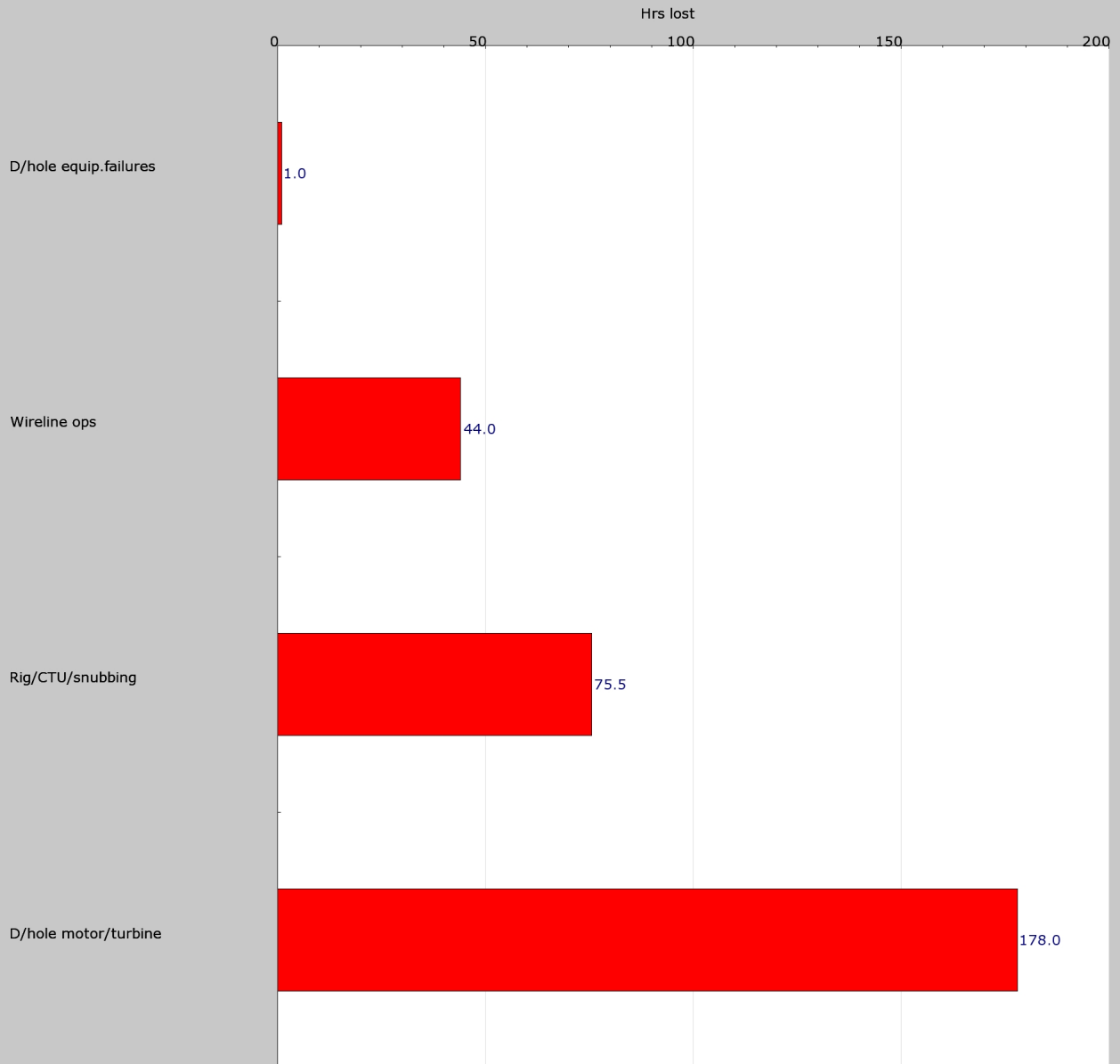
Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 1730

Root Cause : Lost Time Summary (hrs)



DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

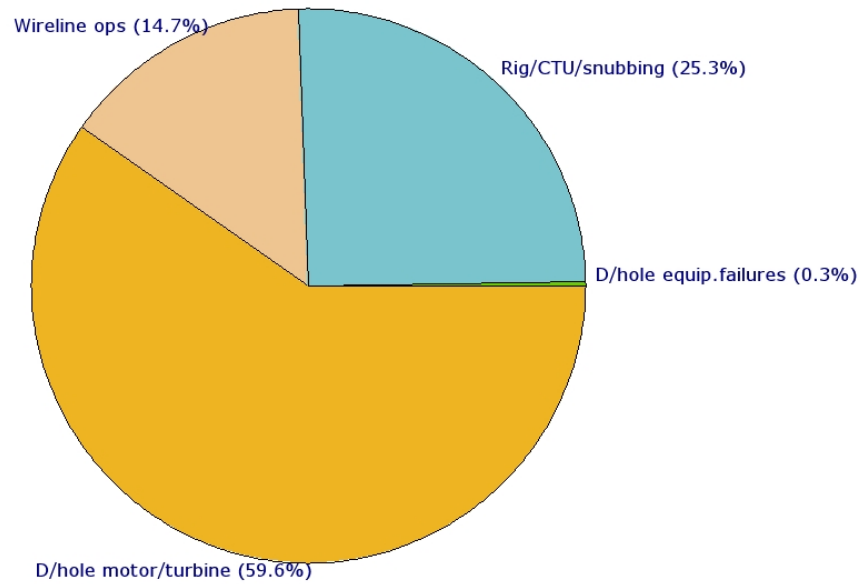
Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 1730

Root Cause : Lost Time Summary (% of 298.5 hrs)



DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 1730

Activity Report For ZaneGrey-1 ST2

Date : 26 Feb 2005						Daily Cost : \$ 13,799,108	Report Number : 1
Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity	
2900.0	IH2	TP	CIR	DHM	0.5	Displaced stinger string with 30bbls of mud to clear pipe of cement. Flowchecked well, well static. Pumped slug. (ended ZaneGrey-1ST1, commenced ZaneGrey-1ST2 at 17:00 hrs)	
2900.0	IH2	TP	TO	DHM	4	POOH with cement stinger.	
2900.0	IH2	TP	LDP	DHM	1	Rigged up 2.7/8" handling gear & laid out 2.7/8" cement stinger.	
2900.0	IH2	TP	HBHA	DHM	0.5	Broke down cement side entry stand. LO side enty sub.	
2900.0	IH2	TP	HT	DHM	1	Made up bit to new motor. Set & confirmed 1.22° bend on motor.	
Date : 27 Feb 2005						Daily Cost : \$ 314,989	Report Number : 2
Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity	
2996.0	IH2	TP	HBHA	DHM	2.5	Continued to pick up 8 1/2" directional bottom hole assembly. Shallow pulse tested LWD, motor and adjustable gauge stabiliser. Tested OK.	
2996.0	IH2	TP	TI	DHM	5	Continued to run in hole with 5" drill pipe.	
3075.0	IH2	TP	RW	DHM	2	Washed and reamed down from 2996 m to 3075 m.	
3082.0	IH2	TP	DM	DHM	2.5	Time drilled from 3075 m to 3082 m with 140R to 170R toolface. Unable to hold over 2 MT on the bit.	
3107.0	IH2	TP	DM	DHM	5.5	Slid with 70R to 90R toolfaces from 3082 m to 3107 m. Surveys and surface samples indicated still in the old hole. Increase in pump pressure and noise on MWD tool indicated tagging fish.	
3107.0	IH2	TP	TO	DHM	5	Flow check. Well Static. Pulled out of the hole with 5" drill pipe.	
3107.0	IH2	TP	HBHA	DHM	0.5	Pulled bottom hole assembly out of the hole.	
3107.0	IH2	TP	RR	DHM	0.5	Repaired racking arm bumper pad.	
3107.0	IH2	TP	HBHA	DHM	0.5	Continued to pull bottom hole assembly out of the hole.	
Date : 28 Feb 2005						Daily Cost : \$ 341,476	Report Number : 3
Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity	
3107.0	IH2	TP	HBHA	DHM	1	Continued to pull bottom hole assembly out of the hole. Racked back same. Broke off bit. Damaged to cones on bit indicated tagging fish.	
3107.0	IH2	TP	RU	DHM	0.5	Rigged up to run 2 7/8" tubing.	
3107.0	IH2	TP	TI	DHM	1	Picked up 18 joints 2 7/8" cement stinger. (17 joints of 2 7/8" drill pipe, 1 joint mule shoe)	
3107.0	IH2	TP	TI	DHM	4.5	Continued to run in hole with 5" drill pipe to 3107 m.	
3107.0	IH2	TP	CHC	DHM	0.5	Circulated hole clean.	
3107.0	IH2	TP	RUC	DHM	0.5	Rigged up cement hose.	
2946.0	IH2	TP	CMP	DHM	1.5	Pumped 5 bbls of drill water and tested cement lines. Pumped remaining 15 bbls of water ahead as spacer. Pumped 36.5 bbls (195 xs) of 16.5 ppg cement slurry (160 m plug from 2946m to 3106m) Pumped 7.7 bbls of drill water behind slurry. Displaced cement with 161 bbls of mud. Cement in place at 9:15.	
2946.0	IH2	TP	TO	DHM	0.5	Pulled out of hole with 5" drill pipe from 3107 m to 2820 m.	
2946.0	IH2	TP	CIR	DHM	0.5	Circulated bottoms up.	
2946.0	IH2	TP	TO	DHM	4.5	Flow check. Well Static. Pulled out of hole with 5" drill pipe from 2820 m to top of cement stinger (173.81 m).	
2946.0	IH2	TP	TO	DHM	1.5	Pulled out and layed out 17 joints of 2 7/8" tubing and mule shoe. Layed out same.	
2946.0	IH2	TP	HT	DHM	1	Make up bit and set motor bend to 1.5 deg.	
2946.0	IH2	TP	HBHA	DHM	0.5	Made up and programmed LWD.	
2946.0	IH2	TP	HBHA	DHM	1	Continued to run in hole with bottom hole assembly to 221 m. Tested LWD and adjustable gauge stabiliser. Tested OK.	
2946.0	IH2	TP	TI	DHM	2.5	Continued to run in hole with 5" drill pipe to casing shoe at 2183 m.	
2946.0	IH2	TP	SC	DHM	2	Held trip drill. 26 secs. Slip and cut drill line, (110 ft).	

Wellname : ZaneGrey-1 ST2

Drilling Co. : -

Rig : Ocean Patriot

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 1730

Date : 28 Feb 2005

Daily Cost : \$ 341,476

Report Number : 3

2946.0 IH2 TP RS DHM 0.5 Service top drive system.

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 1730

Activity Report For ZaneGrey-1 ST2

Date : 01 Mar 2005						Daily Cost : \$ 324,474	Report Number : 4
Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity	
2946.0	IH2	TP	TI	DHM	1.5	Continued to run in hole with 5" drill pipe from 2183 m to 2885 m.	
2957.0	IH2	TP	RW	DHM	1	Washed and reamed down from 2885 m to 2957 m with minimal pumps. Tagged top of cement at 2945 m. Cement not hard enough to kick off.	
2979.0	IH2	TP	ST	DHM	13	Orientated tool face to 160 deg. Repeatedly reamed to create an initial ledge. Time drill at 2957 m to 2979 m attempting to open hole sidetrack.	
2987.0	IH2	TP	ST	DHM	0.5	Rotate ahead from 2979 m to 2987 m due to indications of the well kicking off (100 psi motor differential). Average rate of penetration 60 m/hr. Survey indicated bottom hole assembly still in original well bore.	
2995.0	IH2	TP	ST	DHM	8	Continued time drilling from 2987 m to 2995 m with toolface orientated to 180 deg.	
Date : 02 Mar 2005						Daily Cost : \$ 327,351	Report Number : 5
Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity	
3013.0	IH2	TP	ST	DHM	10.5	Time drilled ahead with 180 deg toolface from 2995 m to 3013 m. Survey taken at 2987 m indicated bottom hole assembly is still in the original hole.	
3013.0	IH2	TP	ST	DHM	1	Work pipe up and down with 180 deg toolface and 650 gpm attempting to create a ledge to iniate time drilling.	
3031.0	IH2	TP	ST	DHM	7.5	Time drilled ahead with 180 deg toolface from 3013 m to 3031 m. Survey taken at 3018 m indicated bottom hole assembly is still in the original hole.	
3031.0	IH2	TP	TO	DHM	5	Flow check. Well static. Pulled out of hole from 3031m to 221 m with 5" drill pipe.	
Date : 03 Mar 2005						Daily Cost : \$ 358,873	Report Number : 6
Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity	
3031.0	IH2	TP	HBHA	DHM	1	Continued pulling bottom hole assembly out of the hole. Layed out mud motor and bit.	
3031.0	IH2	TP	HBHA	DHM	1	Picked up mud motor. Set bend to 1.5 deg.	
3031.0	IH2	TP	HBHA	DHM	0.5	Continued running in hole with bottom hole assembly. Layed out adjustable gauge stabiliser. Picked up integral blade stabiliser.	
3031.0	IH2	TP	TI	DHM	1	Tested MWD. Tested OK.	
3031.0	IH2	TP	TI	DHM	1	Continued running in hole with bottom hole assembly. Test motor. Tested OK.	
3031.0	IH2	TP	TI	DHM	4	Continued running in hole with 5" drill pipe from 220 m to 3003 m.	
3031.0	IH2	TP	RW	DHM	0.5	Washed and reamed from 3003 m to 3031 m.	
3060.0	IH2	TP	ST	DHM	15	Time drilled from 3031 m to 3060 m with 180 deg toolface.	
Date : 04 Mar 2005						Daily Cost : \$ 327,637	Report Number : 7
Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity	
3070.0	IH2	TP	ST	DHM	10	Continued time drilling from 3060 m to 3070 m with 180 deg toolface. Unable to kick off from original well bore.	
3070.0	IH2	TP	TOB	DHM	5	Flow check. Well static. Pulled out of the hole with 5" drill pipe from 3070 m to 220 m.	
3070.0	IH2	TP	HBHA	DHM	2	Continued pulling the bottom hole assembly out of the hole from 220 m to surface. Changed out the jars. Read and downloaded MWD. Changed bit.	
3070.0	IH2	TP	HBHA	DHM	1	Ran in hole with bottom hole assembly from surface to 220 m. Tested MWD and motor. Tested OK	
3070.0	IH2	TP	RS	DHM	0.5	Service top drive system	
3070.0	IH2	TP	TI	DHM	4.5	Continued running in the hole with 5" drill pipe from 220 m to 3070 m. Washed and reamed last stand to bottom.	
3070.0	IH2	TP	ST	DHM	1	Time drilled with 160 deg toolface.	

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 1730

Date : 05 Mar 2005						Daily Cost : \$ 367,334	Report Number : 8
Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity	
3092.0	IH2	TP	ST	DHM	10.5	Continued time drilling. At 3092 m 90% formation returns at surface. Survey at 3074.64 m Inc=30.11 deg, Az=15.22 deg confirmed departure from the original well bore. Well sidetracked at 3075 m.	
3092.0	IH2	TP	CHC	DHM	1	Circulated bottoms up.	
3092.0	IH2	TP	TOB	DHM	1.5	Flow check. Well static. Pulled out of hole wet with 5" drill pipe from 3092 m to 2831 m.	
3092.0	IH2	TP	TOB	DHM	4.5	Pumped slug. Continued to pull out of the hole with 5" drill pipe from 2831 m to 220 m.	
3092.0	IH2	TP	HBHA	DHM	1	Pulled bottom hole assembly out of the hole from 220m to surface.	
3092.0	IH2	TP	HT	DHM	1.5	Changed out MWD pulser and bit. Put motor sleeve on motor. Orientated mud motor and downloaded MWD tool.	
3092.0	IH2	TP	TIB	DHM	1	Ran in hole with bottom hole assembly from surface to 220 m. Tested MWD and motor. Test OK.	
3092.0	IH2	TP	TIB	DHM	3	Continued to run in hole with 5" drill pipe from 220 m to 1655 m.	

Date : 06 Mar 2005						Daily Cost : \$ 356,390	Report Number : 9
Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity	
3092.0	IH2	TP	TIB	DHM	3	Continued to run in the hole with 5" drill pipe from 1655 m to 3092 m. Washed and reamed last stand down.	
3107.0	IH2	TP	ST	DHT	1	Directionally drilled ahead in rotary mode from 3092 m to 3107 m. Rotary drilling parameters were 80 rpm, 12-17k ft.lbs, 590 gpm at 2700 psi. Rate of penetration 21 m/hr.	
3162.0	IH2	P	DM		3.5	Directionally drilled ahead in rotary mode from 3107 m to 3162 m. Difficultly sliding. Poor toolface control. Rotary drilling parameters were 80 rpm, 12-17k ft.lbs, 605 gpm at 2900 psi. Rate of penetration 40 m/hr.	
3162.0	IH2	TP	RR	RCS	3.5	Top drive brake locked up. Trouble shoot top drive problem.	
3162.0	IH2	TP	TO	RCS	3	Pulled out of the hole to the casing shoe at 2140 m.	
3162.0	IH2	TP	RR	RCS	10	Trouble shoot top drive problem.	

Date : 07 Mar 2005						Daily Cost : \$ 238,512	Report Number : 10
Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity	
3162.0	IH2	TP	RR	RCS	24	Continued trouble shooting electrical fault on top drive system.	

Date : 08 Mar 2005						Daily Cost : \$ 217,952	Report Number : 11
Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity	
3162.0	IH2	TP	RR	RCS	24	Continued to trouble shoot electrical fault with the top drive system.	

Date : 09 Mar 2005						Daily Cost : \$ 347,047	Report Number : 12
Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity	
3162.0	IH2	TP	RR	RCS	3	Continued to trouble shoot electrical fault with the top drive system. - Replace all brushes on top drive system motor - Trouble shoot and attempt to reprogram existing PLC - no success - Download new program and reload PLC - OK - Reload differential pressure switches and temperature sensors on lube oil pump	
3162.0	IH2	TP	RR	RCS	1	Surface test top drive system. Tested OK.	
3162.0	IH2	TP	TI	RCS	1	Continued to run in the hole with 5" drill pipe from 2140 m to 2594 m.	
3162.0	IH2	TP	RR	RCS	1	Cooling water pump tripped on Engine#1 causing engine to overheat. Engine#1 and #4 tripped causing rig power to shut down. Reset same.	
3162.0	IH2	TP	RR	RCS	1.5	Continued to run in the hole with 5" drill pipe from 2594 m to 3162 m washing and reaming the last 1.5 stands to bottom.	
3245.0	IH2	P	DM		3	Directionally drilled ahead in rotary mode from 3162 m to 3245 m. WOB 0-8 klbs, 83 rpm, 12-17k	

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 1730

Date : 09 Mar 2005**Daily Cost : \$ 347,047****Report Number : 12**

						ft.lbs, 610 gpm at 3100 psi. Rate of penetration, 57 m/hr.
3245.0	IH2	TP	RR	RCS	2	Plugged up suction line on rig pumps. Stopped drilling and cleaned out pump suction lines.
3249.0	IH2	P	DM		1	Slid from 3245 m to 3249 m. Difficulty sliding. Poor toolface control. Rate of penetration, 25 m/hr.
3345.0	IH2	P	DM		4	Continued directionally drilling ahead in rotary mode from 3249 m to 3345 m. WOB 5-15 klbs, 80 rpm, 13-18k ft.lbs, 610 gpm at 3100 psi. Rate of penetration 47 m/hr.
3345.0	IH2	TP	RR	RCS	1	Saver sub backed out on connection. Layed out single with saver sub. Pick up single and new saver sub. Torque same.
3480.0	IH2	P	DM		5.5	Continued directionally drilling ahead in rotary mode from 3345 m to 3480 m. WOB 5-15 klbs, 80 rpm, 16-18k ft.lbs, 610 gpm at 3100 psi. Rate of penetration 54 m/hr.

Date : 10 Mar 2005**Daily Cost : \$ 338,534****Report Number : 13**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
3675.0	IH2	P	DM		17	Continued directionally drilling ahead in rotary mode from 3480 m to 3675 m. WOB 8-27 klbs, 82 rpm, 15-21k ft.lbs, 615 gpm at 3200 psi. Rate of penetration 14 m/hr.
3675.0	IH2	P	CHC		1	Circulated bottoms up.
3675.0	IH2	P	TO		3	Pulled out of the hole for a short wiper trip from 3675 m to 3070 m. Tight spots encountered at 3145 m to 3160 m, 3260 m to 3265 m, 3340 m to 3360 m.
3675.0	IH2	P	TI		1	Ran back in the hole from 3070 m to 3675 m. Good hole.
3675.0	IH2	P	CHC		1	Circulated bottoms up.
3675.0	IH2	P	TO		1	Flow check. Well static. Pumped slug. Pulled out of the hole from 3675 m to 3520 m. Good hole.

Date : 11 Mar 2005**Daily Cost : \$ 339,505****Report Number : 14**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
3675.0	IH2	P	TO		6	Continued pulling out of the hole from 3520 m to 81 m.
3675.0	IH2	P	HT		1	Continued pulling out of the hole. Layed out MWD, Mud motor and bit
3675.0	IH2	P	LOG		1	Rigged up to run wireline.
3675.0	EI2	P	LOG		2.5	Made up Grand Slam logging tools.
3675.0	EI2	P	LOG		13.5	Continued wireline logging with Grand Slam logging tools.

Date : 12 Mar 2005**Daily Cost : \$ 308,334****Report Number : 15**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
3675.0	EI2	P	LOG		2	Continued wireline logging with Grand Slam logging tool. Layed out same.
3675.0	EI2	P	LOG		3	Made up wireline RCI logging tool.
3675.0	EI2	P	LOG		3	Continued wireline logging with RCI tool.
3675.0	EI2	P	LOG		1	Wireline RCI tool stuck in hole. Unable to free RCI tool.
3675.0	EI2	TP	LOG	WIR	1	Rigged down wireline equipment and compensator line.
3675.0	EI2	TP	LOG	WIR	1.5	Rigged up to strip over wireline to retrieve fish.
3675.0	EI2	TP	LOG	WIR	0.5	Tension wireline. Cut wireline cable.
3675.0	EI2	TP	LOG	WIR	2.5	Continued rigging up to strip over wireline. Made up wireline surface latching equipment. Tested same. Tested OK
3675.0	EI2	TP	LOG	WIR	5.5	Ran in the hole with 3.375" grapple stripping over wireline from surface to 1522 m with 5" drill pipe.
3675.0	EI2	TP	LOG	WIR	1	Cut wireline and rehead same due to excessive tension.
3675.0	EI2	TP	LOG	WIR	3	Continued running in the hole with 3.375" grapple stripping over wireline from 1522 to 2171 m with 5" drill pipe.

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 1730

Date : 13 Mar 2005**Daily Cost : \$ 276,582****Report Number : 16**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
3675.0	EI2	TP	LOG	WIR	3.5	Continued running in the hole with 3.375" grapple stripping over wireline from 2171 to 3146 m with 5" drill pipe.
3675.0	EI2	TP	LOG	RCS	0.5	Troubleshoot top drive problem.
3675.0	EI2	TP	LOG	WIR	0.5	Circulated at 30 spm above RCI logging tool.
3675.0	EI2	TP	LOG	WIR	0.5	Attempted to latch RCI logging tool. Latched successfully.
3675.0	EI2	TP	LOG	WIR	5	Pulled back 2 joints. Reterminate wireline cable. Continued trouble shooting top drive problem.
3675.0	EI2	TP	LOG	WIR	13.5	Wireline logging on 5" drill pipe with RCI tool taking 27 pressure samples (26 good, 1 tight), 1 fluid sample over the interval 3190 m to 3622 m.
3675.0	EI2	TP	LOG	WIR	0.5	Pulled out of the hole with wireline logging tools on 5" drill pipe due to RCI tool failure.

Date : 14 Mar 2005**Daily Cost : \$ 309,139****Report Number : 17**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
3675.0	EI2	TP	LOG	WIR	1.5	Continued pulling out of the hole with wireline RCI tool to 3146 m.
3675.0	EI2	TP	LOG	WIR	3	Layed out side entry sub. Pulled wireline cable breaking it at the weakpoint. Retrieved wireline cable.
3675.0	EI2	TP	LOG	WIR	0.5	Rigged down wireline equipment.
3675.0	EI2	TP	LOG	WIR	0.5	Pumped slug. Pulled out of the hole with fish on 5" drill pipe.
3675.0	EI2	P	LOG		6	Continued pulling out of the hole with wireline RCI tool
3675.0	EI2	P	LOG		1.5	Layed out wireline RCI tool.
3675.0	EI2	P	SC		2	Slipped and cut 140' of drill line.
3675.0	EI2	P	RS		0.5	Service dolly rollers.
3675.0	PA	P	TI		7	Made up cement stinger, (14 joints of 2.875" drill pipe and mule shoe). Ran in hole with same to 144.88 m. Continued running in hole with 5" drill pipe to 3390 m.
3675.0	PA	P	CIR		1	Circulated bottoms up. Spotted 10 bbls HI-VIS pill at 3390 m.
3675.0	PA	P	TO		0.5	Pulled out of the hole from 3390 m to 3350 m.

Date : 15 Mar 2005**Daily Cost : \$ 397,891****Report Number : 18**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
3675.0	PA	P	RUC		0.5	Rigged up for cement job.
3675.0	PA	P	CMP		1	Set balanced cement plug#1 from 3350 m to 3250 m across hydrocarbon bearing zone 3300 m to 3310 m. Plug #1; 40 bbl chemical wash spacer, 195 sxs of class G cement followed by 15.5 bbl water spacer. Rigged down after cement plug.
3675.0	PA	P	TO		0.5	Pulled out of the hole to 3128 m with 5" drill pipe.
3675.0	PA	P	CIR		1	Circulated bottoms up.
3675.0	PA	P	WOC		5	Layed out excess drill pipe and drill collars while waiting on cement.
3675.0	PA	P	CMP		1	Ran in hole to tag cement. Cement tagged with 2 klbs at 3203 m.
3675.0	PA	P	TO		2	Pulled out of the hole from 3203 m to 2290 m.
3675.0	PA	P	TO		0.5	Spot HI-VIS pill at 2290 m. Continued pulling out of the hole to 2230 m.
3675.0	PA	P	RUC		0.5	Rigged up for cement job.
3675.0	PA	P	CMP		0.5	Set balanced cement plug#2 from 2230 m to 2130 m across 9 5/8" casing shoe at 2184 m. Plug #2; 40 bbl chemical wash spacer, 195 sxs of class G cement followed by 13 bbl water spacer. Rigged down after cement plug.
3675.0	PA	P	TO		0.5	Pulled out of the hole from 2230 m to 2000 m.
3675.0	PA	P	CIR		1	Circulated bottoms up.
3675.0	PA	P	WOC		4	Pumped slug. Continued pulling out of the hole to 947 m laying out 5" drill pipe while waiting on cement.
3675.0	PA	P	CMP		3	Ran in hole to tag cement. Cement tagged with 2 klbs at 2153 m.

DFE above MSL : 21.5m

Lat : 38 Deg 34 Min 31.64 Sec

Spud Date : 29 Jan 2005

Release Date : 18 Mar 2005

Water Depth : 72.5m

Long : 147 Deg 59 Min 16.27 Sec

Spud Time : 1430

Release Time : 1730

Date : 15 Mar 2005**Daily Cost : \$ 397,891****Report Number : 18**

3675.0	PA	P	CIR	0.5	Displace well with inhibited mud.
3675.0	PA	P	TO	2.5	Pumped slug. Pulled out of the hole from 2120 m to 1616 m laying out 5" drill pipe.

Date : 16 Mar 2005**Daily Cost : \$ 349,306****Report Number : 19**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
3675.0	PA	P	TO		5	Continued pulling out of the hole from 2120 m to 144 m laying out 5" drill pipe.
3675.0	PA	P	TO		1.5	Continued pulling out of the hole from 144 m to surface laying out cement stinger.
3675.0	PA	P	RU		0.5	Rigged down tubing handling equipment. Rigged up 5" drill pipe handling equipment.
3675.0	PA	P	WH		1.5	Made up wash sub below wear bushing retrieval tool. Retrieved wear bushing. Pulled out of hole with same. Layed out wear bushing.
3675.0	PA	P	WH		1.5	Made up 9 5/8" casing cutter assembly. Ran in hole with same.
3675.0	PA	P	WH		0.5	Cut 9 5/8" casing at 177 m with 35 spm at 450 psi, 8 klbs down. 2 minutes to cut casing.
3675.0	PA	P	WH		1	Pulled out of the hole from 177 m to surface laying out 9 5/8" casing cutter.
3675.0	PA	P	WH		0.5	Made up 9 5/8" casing retrieval assembly. Ran in hole with same. Landed and latched at 94 m with 5 klbs down. Released with 25 klbs overpull.
3675.0	PA	P	TO		1	Pulled out of hole with 9 5/8" casing. Racked back retrieval assembly in derrick.
3675.0	PA	P	WH		1.5	Layed out 9 5/8" casing.
3675.0	PA	P	CMP		1.5	Made up Dowell bridge plug with 6.5" drill collars. Ran in hole with same.
3675.0	PA	P	CMP		1	Set 13 3/8" bridge plug at 176 m. Pulled out of the hole.
3675.0	PA	P	CMP		1.5	Ran in hole and tagged bridge plug at 176 m. Displaced hole to 9.6 ppg inhibited mud. Flushed surface equipment.
3675.0	PA	P	CMP		0.5	Rigged up cement lines. Set balanced cement plug #3 from top of the bridge plug to 125 m.
3675.0	PA	P	TO		1.5	Pulled out of the hole with cement string. Run in hole and wash stack. Pulled out of hole laying out drill pipe.
3675.0	PA	P	BOP		1	Rigged up Riser/BOP handling equipment.
3675.0	PA	P	BOP		1	Layed out diverter.
3675.0	PA	P	BOP		1.5	Made up landing joint and scope in slip joint. Torqued up bolts.

Date : 17 Mar 2005**Daily Cost : \$ 346,712****Report Number : 20**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
3675.0	PA	P	BOP		0.5	Continued installing slip joint lock down bolts.
3675.0	PA	P	BOP		1	Unlatch BOP and pull off PGB. Remove pod hose saddles.
3675.0	PA	P	BOP		0.5	Locked in SLD ring under rotary.
3675.0	PA	P	BOP		1.5	Removed choke, kill and booster line goosenecks.
3675.0	PA	P	BOP		1.5	Layed out Slip joint.
3675.0	PA	P	BOP		1.5	Continued laying out marine riser.
3675.0	PA	P	BOP		1	Pulled marine riser double and BOP. Land same on BOP carrier.
3675.0	PA	P	BOP		0.5	Remove guide lines and nipple down BOP.
3675.0	PA	P	BOP		2	Move BOP to starboard side. Layed out marine riser double.
3675.0	PA	P	BOP		0.5	Rigged down marine riser handling equipment.
3675.0	PA	P	WH		2	Made up 20" and 30" casing cutting assembly. Attached ropes to guide lines. Tripped in hole with same.
3675.0	PA	P	WH		1	Cut 20" casing at 96.42 m. Casing cut in 32 mins.
3675.0	PA	P	WH		1	Pulled out of hole with 20" casing. Layed out same.
3675.0	PA	P	WH		1	Made up 30" grapple assembly.
3675.0	PA	P	WH		0.5	Ran in hole with 30" cutting assembly. Engage 30" housing. Confirmed with 50k overpull.

DFE above MSL : 21.5m	Lat : 38 Deg 34 Min 31.64 Sec	Spud Date : 29 Jan 2005	Release Date : 18 Mar 2005
Water Depth : 72.5m	Long : 147 Deg 59 Min 16.27 Sec	Spud Time : 1430	Release Time : 1730

Date : 17 Mar 2005					Daily Cost : \$ 346,712	Report Number : 20
3675.0	PA	P	WH	6	Cut 30" casing at 95.94 m. Visual indications showed cutter being offset during cutting.	
3675.0	PA	P	WH	0.5	Pulled out of the hole with 30" casing and PGB. Secured PBG in moonpool. Commenced de-ballasting the rig from 23.5 m drill draft to 10 m transit draft.	
3675.0	PA	P	WH	0.5	Release 30" casing from the PGB. Layed out same.	
3675.0	PA	P	WH	1	Service 20" x 30" casing cutter assembly.	

Date : 18 Mar 2005					Daily Cost : \$ 179,303	Report Number : 21
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Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
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3675.0	PA	P	RM		17.5	Conducted seabed survey with ROV. Lay down excess BHA from derrick. Redress Smith abandonment tools, lay down same. Continue to de-ballast rig.
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Note: Commence pulling anchors @03:40 hrs

Anchor #7 - M/V Far Grip - PCC Out @01:30 hrs - Off Btm @02:10 hrs - PCC Back @05:10 hrs
 Anchor #3 - M/V Pacific Wrangler - PCC Out @04:15 hrs - Off Btm @04:35 hrs - PCC Back @05:40 hrs
 Anchor #6 - M/V Far Grip - PCC Out @ 05:20 hrs - Off Btm @05:40 hrs - PCC Back @07:35 hrs
 Anchor #2 - M/V Pacific Wrangler - PCC Out @05:50 hrs - Off Btm @06:10 hrs - PCC Back @07:40 hrs

Tow bridle passed and secure to Pacific Wrangler at 08:45hrs

Anchor #5 - M/V Far Grip - PCC Out @08:20 hrs - Off Btm @09:15 hrs - PCC Back @12:50 hrs
 Anchor #1 - M/V Far Grip - PCC Out @13:20 hrs - Off Btm @14:00 hrs - PCC Back @15:05 hrs
 Anchor #8 - M/V Far Grip - PCC Out @15:25 hrs - Off Btm @15:55 hrs - PCC Back @17:00 hrs
 Anchor #4 - M/V Far Grip - PCC Out @17:50hrs - Off Btm @18:15 hrs - PCC Back @19:20 hrs

NOTE = Two (2) hour adjustment made due to inspection on #5 anchor from Woodside Energy Ltd (See Statement Of Facts)

Rig under tow to Halladale 1 Location

3675.0	PS	P			0	Statement Of Facts at last anchor racked
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Ocean Patriot

Barite - 55.4 MT
 Gel - 9.4 MT
 Cement (class G) - 26.4 MT
 Fuel Oil - 394,161 Litres
 Drill Water - 328,812 Litres
 Pot Water - 251,697 Litres

Far Grip

Barite - 86 MT
 Gel - 48 MT
 Cement (class G) - 86 MT
 Fuel Oil - 530,000 Litres
 Drill Water - 605,000 Litres
 Pot Water - 637,000 Litres
 Lube Oil - 13,920 Litres

Pacific Wrangler

Barite - 43 MT
 Gel - 42 MT
 Cement (class G) - 123MT
 Fuel Oil - 652,900 MT
 Drill Water - 540,000 Litres
 Pot Water - 181,000 Litres
 Lub Oil - 28,458 Litres

APPENDIX 23

ZANEGREY-1 DAILY DRILLING REPORTS

(By Independent Data Services [IDS])

27 Jan 2005 (GMT +10)

From: Chris Wilson, Stuart Douglass
 To: Colin Allport

DRILLING MORNING REPORT # 1
ZaneGrey-1 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	0.0m	Cur. Hole Size	0.000in	AFE Cost	\$ 0.00
Field		TVD	0.0m	Casing OD	0.000in	AFE No.	
Drill Co.	DOGC	Progress	0.0m	Shoe TVD	0.00m	Daily COST	\$ 3771186.00
Rig	Ocean Patriot	Days from spud	0.00	FIT	0.00ppg	Cum Cost	\$ 3771186.00
Wtr Dpth(MSL)	72.5m	Days on well	0.79	LOT	0.00ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600 Cross tensioning anchors while picking up BHA.					
RT-ML	94.0m	Planned Op Complete anchor handling operations, prepare for spud.					

Summary of Period 0000 to 2400 Hrs

Pulled anchors on Grayling-1. Commenced tow at 05:00 hrs.
 Moved rig to ZaneGrey-1 location, commenced running anchors.

Operations For Period 0000 Hrs to 2400 Hrs on 27 Jan 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0500	1530	10.50	PS	P	RM	0.0m	<p>Last anchor racked at Grayling-1 location at 05:00, 27th January 2005, rig handed over to BSOC.</p> <p>Towed to Zane Grey-1 location. Average speed 3.5 kn.</p> <p>0500: 38 deg 09.7'S 148 deg 17.6'E 2.3 kn 188 deg heading 0800: 38 deg 19.0'S 148 deg 16.0'E 3.5 kn 215 deg heading 1300: 38 deg 32.0'S 148 deg 04.4'E 3.25 kn 215 deg heading 1430: 38 deg 36.7'S 148 deg 59.9'E 2.8 kn (various headings while swinging around for run-in)</p> <p>Statement of facts at last anchor racked: Ocean Patriot - Barite: 96.72 MT Gel: 39.74 MT Cement (Class G): 7.2 MT Fuel Oil: 259.14 cu. mtr. Drill Water: 296.18 cu. mtr. Pot Water: 198.89 cu. mtr. Lube Oil: 4,600 l</p> <p>Far Grip - Barite: 36 MT Gel: 56 MT Cement (Class G): 170 MT Fuel Oil: 284.02 cu. mtr. Drill Water: 400.52 cu. mtr. Pot Water: 575.04 cu. mtr. Lube Oil: 8,556 l Hyd. Oil: 3,074 l</p> <p>Pacific Wrangler - Barite: 0 MT Gel: 42 MT Cement (Class G): 80 MT Fuel Oil: 482.35 cu. mtr. Drill Water: 485.04 cu. mtr. Pot Water: 251.02 cu. mtr. Lube Oil: 27,631 l Hyd. Oil: 0 l</p> <p>Note: 84 MT Class G cement and 56 MT Gel on Far Grip has been loaded out by and paid for by BSOC</p>
1530	2400	8.50	PS	P	RM	0.0m	<p>Anchor handling operations commenced.</p> <p>PCC #5 passed to Wrangler at 1530 Anchor #5 on bottom at 1655 PCC#5 back to rig at 1740</p>

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
							<p>First anchor down on Zane Grey-1 location at 1655.</p> <p>PCC #1 passed to Wrangler at 1800 Anchor #1 on bottom at 1910 PCC#1 back to rig at 1930</p> <p>PCC #4 passed to Wrangler at 1950 Anchor #4 on bottom at 2015 PCC#4 back to rig at 2040</p> <p>PCC #8 passed to Wrangler at 2100 Anchor #8 on bottom at 2120 PCC#8 back to rig at 2140</p> <p>Commenced pre-tension of 4 primary anchors at 2145 Disconnected Far Grip from tow bridle at 2245 Completed pre-tension of 4 primary anchors 2310, all OK.</p> <p>PCC #7 passed to Wrangler at 2300 Anchor #7 on bottom at 2350</p> <p>PCC #3 passed to Grip at 2310 Anchor #3 on bottom at 2340</p>

Operations For Period 0000 Hrs to 0600 Hrs on 28 Jan 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0430	4.50	PS	P	RM	0.0m	<p>Continued anchor handling operations and cross tensioning while picking up 36" BHA.</p> <p>PCC#7 back to rig at 0010</p> <p>PCC #6 passed to Wrangler at 0015 Anchor #6 on bottom at 0050 PCC#6 back to rig at 0105</p> <p>PCC #3 back to rig at 0035</p> <p>PCC #2 passed to Grip at 0040 Anchor #2 on bottom at 0140 PCC#2 back to rig at 0215</p> <p>Commenced pre-tensioning all anchors at 0200. All anchors tension tested to 200t for 10 mins at 0420.</p> <p>Preliminary anchor positions (from fairlead): #1: 912 m @ 074 deg #2: 1037 m @ 105 deg #3: 1053 m @ 165 deg #4: 1051 m @ 194 deg #5: 1091 m @ 255 deg #6: 1001 m @ 282 deg #7: 992 m @ 343 deg #8: 976 m @ 012 deg</p>
0430	0600	1.50	PS	P	HBHA	0.0m	(IN PROGRESS) Continued to pick up 36" BHA while preparing to make repairs to tow bridle.

Bulk Stocks

Name	Unit	In	Used	Adjust	Balance
Barite	MT	0.00	0.00	0.00	96.7
Gel	MT	0.00	0.00	0.00	39.7
Cement	MT	0.00	0.00	0.00	7.2
Drill Water	m ³	0.00	15.70	0.00	280.5
Fuel Oil	m ³	0.00	9.34	0.00	249.8
Potable Water	m ³	28.90	27.50	0.00	200.3

Pumps

Pump Data - Last 24 Hrs								Slow Pump Data									
No.	Type	Liner (in)	MW (ppg)	Eff (%)	SPM	SPP (psi)	Flow (gpm)	Depth (m)	SPM1	SPP1 (psi)	Flow1(gpm)	SPM2	SPP2 (psi)	Flow2 (gpm)	SPM3	SPP3 (psi)	Flow3 (gpm)

Pumps																
Pump Data - Last 24 Hrs								Slow Pump Data								
1	A1700	6.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00					
2	12-P160	6.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00					
3	12-P160	6.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00					

Personnel On Board			
Job Title	Personnel	Company	Pax
OIM	Sean De Fretias	DOGC	48
Camp boss	Steve Worth	Total Marine Catering	8
ROV Pilot	Robert Griffiths	Fugro	4
Rig positioner	Rod Farrawell	Fugro	2
Rig positioner QC	Dave Errington	RPS Hyrdrosearch	1
Cementer	Edgar Lliagas	Dowell Schlumberger	2
Mud Engineer	Geoff Pike	MI Swaco	1
Wireline Engineer	Scott Einam	Baker Atlas	2
Data Engineer	Gary Bloom	Sperry Sun	2
Master	Peter Petrof	Offshore Marine Services	3
Wellhead Engineer	Bruce Hassett	Cameron	1
Comms Tech	Ron Stebbings	Marcom	1
Rope Access Tech	Michael Rogan	Vertigo	3
Senior Drilling Supervisor	Chris Wilson	BSOC	3
Total			81

HSE Summary				
Events	Date of last	Days Since	Descr.	Remarks
Stop Card-Prevention	27 Jan 2005	0 Days	14 STOP cards submitted	2 cards by 3rd Party 12 cards by DODI

Marine

Weather on 27 Jan 2005

Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period	
10.00mi	5.0kn	68.0deg	1009.00mbar	19.0C°	0.2m	68.0deg	0.0ft/min	
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments		
0.5deg	0.5deg	0.30m	1.0m	68.0deg	0.0ft/min			
Rig Dir.	Ris. Tension	VDL			Comments			
43.0deg	0.0klb	4085.0klb						

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Pacific Wrangler			Handling anchors	Item	Unit	Quantity
				Barite	MT	0.00
				Gel	MT	42.00
				Cement	MT	80.00
				Drill Water	M^3	485.00
				Fuel Oil	M^3	476.50
				Potable Water	M^3	249.00
Far Grip			Handling anchors	Item	Unit	Quantity
				Barite	MT	36.00
				Gel	MT	56.00
				Cement	MT	170.00
				Drill Water	M^3	400.00
				Fuel Oil	M^3	269.00
				Potable Water	M^3	575.00

Helicopter Movement				
Flight #	Company	Arr/Dep. Time	Pax In/Out	Comment
1	Bristow	0841 / 0853	2 / 4	Call sign: BZU

28 Jan 2005 (GMT +10)

From: Chris Wilson, Stuart Douglass
To: Colin Allport

DRILLING MORNING REPORT # 2
ZaneGrey-1 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	0.0m	Cur. Hole Size	0.000in	AFE Cost	\$ 0.00
Field		TVD	0.0m	Casing OD	0.000in	AFE No.	
Drill Co.	DOGC	Progress	0.0m	Shoe TVD	0.00m	Daily COST	\$ 293762.00
Rig	Ocean Patriot	Days from spud	0.00	FIT	0.00ppg	Cum Cost	\$ 4064948.00
Wtr Dpth(MSL)	72.5m	Days on well	1.79	LOT	0.00ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600	Picking up 5" drill pipe.				
RT-ML	94.0m	Planned Op	Pick up remainder of 5" drill pipe and spud well.				

Summary of Period 0000 to 2400 Hrs

Completed anchor handling operations, cross tensioned same, made up and racked back 36" BHA, picked up 5" drill pipe, commenced making up 30 x 20" conductor string.

Operations For Period 0000 Hrs to 2400 Hrs on 28 Jan 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0430	4.50	PS	P	RM	0.0m	Continued anchor handling operations and cross tensioning while picking up 36" BHA. PCC#7 back to rig at 0010 PCC #6 passed to Wrangler at 0015 Anchor #6 on bottom at 0050 PCC#6 back to rig at 0105 PCC #3 back to rig at 0035 PCC #2 passed to Grip at 0040 Anchor #2 on bottom at 0140 PCC#2 back to rig at 0215 Commenced pre-tensioning all anchors at 0200. All anchors tension tested to 200t for 10 mins at 0420. Preliminary anchor positions (from fairlead): #1: 912 m @ 074 deg #2: 1037 m @ 105 deg #3: 1053 m @ 165 deg #4: 1051 m @ 194 deg #5: 1091 m @ 255 deg #6: 1001 m @ 282 deg #7: 992 m @ 343 deg #8: 976 m @ 012 deg
0430	0730	3.00	PS	P	HBHA	0.0m	Continued to pick up 36" BHA while preparing to make repairs to tow bridle.
0730	1800	10.50	PS	P	PUP	0.0m	Picked up 5" drill pipe while making repairs to tow bridle.
1800	2100	3.00	PS	P	PUP	0.0m	Picked up 5" drill pipe while ballasting down rig from 10 m draft to transition zone.
2100	2300	2.00	PS	P	HBHA	0.0m	Pressure tested TDS IBOP, swivel packing and mud hose to 250 psi for 5 mins and 5000 psi for 10 mins while ballasting down through transition zone.
2300	2330	0.50	PS	P	RU	0.0m	Rigged up the handle 30" conductor.
2330	2400	0.50	PS	P	RC	0.0m	Picked up 30" x 20" conductor shoe joint and ran same through PGB in moonpool.

Operations For Period 0000 Hrs to 0600 Hrs on 29 Jan 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0400	4.00	PS	P	RC	0.0m	Continued to make up and run 30" x 20" conductor string. Made up 30" running tool to 30" housing. Landed string in PGB and secured to dolly in moonpool.
0400	0430	0.50	PS	P	RD	0.0m	Rigged down 30" conductor handling equipment from rig floor.
0430	0500	0.50	PS	P	HBHA	0.0m	Made up double of 8" drill collars to 8 1/4" jars and racked back same.
0500	0600	1.00	PS	P	PUP	0.0m	(IN PROGRESS) Picked up remaining 5" drill pipe.
Note: ROV conducted seabed survey - seabed clear.							

Bulk Stocks						
Name	Unit	In	Used	Adjust	Balance	
Barite	MT	0.00	0.00	0.00	96.7	
Gel	MT	0.00	0.00	0.00	39.7	
Cement	MT	0.00	0.00	0.00	7.2	
Drill Water	m ³	0.00	19.20	0.00	261.3	
Fuel Oil	m ³	0.00	11.60	0.00	238.2	
Potable Water	m ³	28.00	26.10	0.00	202.2	

Pumps																	
Pump Data - Last 24 Hrs								Slow Pump Data									
No.	Type	Liner (in)	MW (ppg)	Eff (%)	SPM	SPP (psi)	Flow (gpm)	Depth (m)	SPM1	SPP1 (psi)	Flow1(gpm)	SPM2	SPP2 (psi)	Flow2 (gpm)	SPM3	SPP3 (psi)	Flow3(gpm)
1	A1700	6.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	12-P160	6.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	12-P160	6.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Personnel On Board			
Job Title	Personnel	Company	Pax
OIM	Sean De Fretias	DOGC	48
Camp boss	Steve Worth	Total Marine Catering	8
ROV Pilot	Robert Griffiths	Fugro	4
Rig positioner	Rod Farrawell	Fugro	2
Rig positioner QC	Dave Errington	RPS Hydresearch	1
Cementer	Edgar Lliagas	Dowell Schlumberger	2
Mud Engineer	Jasdeep Singh	MI Swaco	1
Wireline Engineer	Scott Einam	Baker Atlas	2
Data Engineer	Gary Bloom	Sperry Sun	2
Wellhead Engineer	Bruce Hassett	Cameron	1
Comms Tech	Ron Stebbings	Marcom	1
Rope Access Tech	Michael Rogan	Vertigo	3
Senior Drilling Supervisor	Chris Wilson	BSOC	4
MWD Engineer	Stuart Allan	Halliburton	2
Directional Driller	John Smith	Halliburton	2
Engineer	Bob Kostecki	AME	1
Total			84

HSE Summary				
Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	23 Jan 2005	5 Days	Routine Abandon Rig Drill	Weekly abandon Rig Drill
Fire Drill	23 Jan 2005	5 Days	Routine Fire Drill	Weekly fire simulation drill
Pre-Tour Meetings	28 Jan 2005	0 Days	Routine Pre-Tour Meetings	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30
Stop Card-Prevention	28 Jan 2005	0 Days	7 STOP cards submitted	1 card by 3rd party 6 cards by DODI

Marine								
Weather on 28 Jan 2005								
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period	
10.00mi	16.0kn	68.0deg	1014.00mbar	20.0C°	0.5m	90.0deg	0.0ft/min	
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments		
0.5deg	0.5deg	0.30m	1.2m	0.0deg	0.0ft/min			
Rig Dir.	Ris. Tension	VDL		Comments				
43.0deg	0.0klb	3867.0klb						
Boats	Arrived (date/time)		Departed (date/time)		Status		Bulks	
Pacific Wrangler					Alongside rig receiving backload	Item	Unit	Quantity
						Barite	MT	0.00

				Item	Unit	Quantity
				Gel	MT	42.00
				Cement	MT	80.00
				Drill Water	M^3	485.00
				Fuel Oil	M^3	461.00
				Potable Water	M^3	246.00
Far Grip			At anchor	Item	Unit	Quantity
				Barite	MT	36.00
				Gel	MT	56.00
				Cement	MT	170.00
				Drill Water	M^3	400.00
				Fuel Oil	M^3	250.00
				Potable Water	M^3	572.00

Helicopter Movement

Flight #	Company	Arr/Dep. Time	Pax In/Out	Comment
1	Bristow	0904 / 0916	16 / 13	Call sign: BZU

29 Jan 2005 (GMT +10)

From: Chris Wilson, Stuart Douglass
To: Colin Allport

DRILLING MORNING REPORT # 3
ZaneGrey-1 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	129.5m	Cur. Hole Size	36.000in	AFE Cost	\$ 0.00
Field		TVD	129.5m	Casing OD	30.000in	AFE No.	
Drill Co.	DOGC	Progress	34.0m	Shoe TVD	127.80m	Daily COST	\$ 333905.00
Rig	Ocean Patriot	Days from spud	0.40	FIT	0.00ppg	Cum Cost	\$ 4398853.00
Wtr Dpth(MSL)	72.5m	Days on well	2.79	LOT	0.00ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600 Making up Dowell cement head.					
RT-ML	94.0m	Planned Op Run in the hole with 16" directional BHA, drill out shoe and drill ahead in 16" hole to kick off point.					

Summary of Period 0000 to 2400 Hrs

Made up conductor string and hung off in moonpool, continued to pick up 5" drill pipe, made up cement stand, made up 36" BHA and drilled to TD, ran PGB and conductor and cemented same.

Operations For Period 0000 Hrs to 2400 Hrs on 29 Jan 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0400	4.00	PS	P	RC	0.0m	Continued to make up and run 30" x 20" conductor string. Made up 30" running tool to 30" housing. Landed string in PGB and secured to dolly in moonpool.
0400	0430	0.50	PS	P	RD	0.0m	Rigged down 30" conductor handling equipment from rig floor.
0430	0500	0.50	PS	P	HBHA	0.0m	Made up double of 8" drill collars to 8 1/4" jars and racked back same.
0500	1230	7.50	PS	P	PUP	0.0m	Picked up remaining 5" drill pipe.
							Note: ROV conducted seabed survey - seabed clear.
1230	1300	0.50	PS	P	HT	0.0m	Made up cement stand with two TIW valves and one side entry sub.
1300	1430	1.50	PS	P	HBHA	0.0m	Made up 36" BHA and ran in the hole, tagging seabed at 94 m (corrected to Mean Sea Level).
1430	1530	1.00	CONH	P	D	129.5m	Spudded ZaneGrey-1. Drilled ahead in 36" hole from 94 m to 129.5 m (128 m hole opener depth). Spudded with 200 bbls of Guar Gum and pumped 50 bbl hi-vis on connection.
1530	1600	0.50		P	WT	129.5m	Pumped 100 bbl hi-vis sweep and displaced hole with 200 bbl gel mud. Conducted wiper trip to 96 m. Hole good. Ran back to bottom.
1600	1700	1.00	CONH	P	TO	129.5m	Pumped 200 bbl gel mud and dropped Totco survey. Pulled out of the hole from 129.5 m. Recovered Totco - 0.25 deg.
1700	1800	1.00	CONH	P	HT	129.5m	Made up 30" housing running tool to 30" conductor and PGB in the moonpool.
1800	1930	1.50	CON	P	RC	129.5m	Ran in the hole with 30" conductor string with ROV assistance, worked through hang-up depth of 115 m, washed down from 115 m to 129.5 m. Shoe placed at 127.75 m and top of 30" housing at 92.5 m.
1930	2030	1.00	CON	P	RUC	129.5m	Circulated at 430 gpm while holding JSA for cement job. Nippled up cement line and pressure tested same to 2,000 psi, holding for 5 minutes.
2030	2130	1.00	CON	P	CMC	129.5m	Pumped 168 bbl, 15.8 ppg cement slurry with cement unit. Fluoresciene dye in returns observed by ROV after 105 bbl.
2130	2400	2.50	CON	P	WOC	129.5m	Waited on cement while observing surface samples.

Operations For Period 0000 Hrs to 0600 Hrs on 30 Jan 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0230	2.50	CON	P	WOC	129.5m	Continued to wait on cement.
0230	0330	1.00	CON	P	HT	129.5m	Released running tool and pulled out of the hole. PGB bullseyes 0 degrees and heading 046 degrees. Laid down running tool and stinger.
0330	0500	1.50	CON	P	HBHA	129.5m	Broke out and laid down cement stand and 36" BHA.
0500	0600	1.00	SH	P	HT	129.5m	(IN PROGRESS) Picked up and made up 18 3/4" running tool and Dowell Deep Sea Expres Cement Head to HWDP and racked same in derrick.

Operations For Period Hrs to Hrs on

Operations For Period Hrs to Hrs on

General Comments

00:00 TO 24:00 Hrs ON 29 Jan 2005

Comments	Rig Requirements	Lessons Learnt
Rig Positioning Data: Drill stem is 1.7 m from design location at a bearing of 216.2 deg. latitude = 38 deg 34 min 31.64 sec S longitude = 147 deg 59 min 16.27 sec E. E = 586049.89 m N = 5729856.42 m Anchor Data: #1 E 586973, N 5730119, Az 73.1 deg #2 E 587101, N 5729598, Az 104.3 deg #3 E 586326, N 5728806, Az 164.7 deg #4 E 585806, N 5728801, Az 193.4 deg #5 E 584965, N 5729580, Az 254.3 deg #6 E 585038, N 5730069, Az 281.3 deg #7 E 585769, N 5730857, Az 342.6 deg #8 E 586266, N 5730861, Az 11.8 deg		

WBM Data

Cost Today \$ 5287.00

Mud Type:	Hi Vis Gel Sweeps	API FL:	15.0cc	Cl:	1200.0mg/l	Solids:	1.00	Viscosity	110.00sec/qt
Sample-From:	Pit 4	Filter-Cake:	1.00/32nd"	Hard/Ca:	40.0mg/l	H2O:	0.00%	PV	11.00cp
Time:	1600	HTHP-FL:	0.0cc	MBT:	20.00	Oil:	0.00%	YP	46.00lb/100ft²
Weight:	8.75ppg	HTHP-cake:	0.00/32nd"	PM:	0.00	Sand:	0	Gels 10s	35.00
Temp:	28.0C°			PF:	0.25	Glycol:	0.0%vol	Gels 10m	37.00
				pH:	9.50	KCl:	0.00%	Fann 003	24.00
						PHPA:	0.00ppb	Fann 006	24.00
								Fann 100	49.00
								Fann 200	55.00
								Fann 300	57.00
								Fann 600	68.00
Comment									

WBM Data

Cost Today \$ 0.00

Mud Type:	Guar Sweeps	API FL:	0.0cc	Cl:	0.0mg/l	Solids:	0.00	Viscosity	200.00sec/qt
Sample-From:	Pit 1	Filter-Cake:	0.00/32nd"	Hard/Ca:	0.0mg/l	H2O:	0.00%	PV	22.00cp
Time:	1400	HTHP-FL:	0.0cc	MBT:	0.00	Oil:	0.00%	YP	88.00lb/100ft²
Weight:	8.58ppg	HTHP-cake:	0.00/32nd"	PM:	0.00	Sand:		Gels 10s	0.00
Temp:	28.0C°			PF:	0.00	Glycol:	0.0%vol	Gels 10m	0.00
				pH:	0.00	KCl:	0.00%	Fann 003	26.00
						PHPA:	0.00ppb	Fann 006	34.00
								Fann 100	82.00
								Fann 200	100.00
								Fann 300	110.00
								Fann 600	132.00
Comment									

Shakers, Volumes and Losses Data

Engineer : Jasdeep Singh

Equip.	Descr.	Mesh Size	Available	720.00bbl	Losses	865.00bbl	Comments
			Active	0.00bbl	Downhole	0.00bbl	
			Mixing	0.00bbl	Surf+ Equip	0.00bbl	
			Hole	0.00bbl	Dumped	0.00bbl	
			Slug	0.00bbl	De-Gasser	0.00bbl	
			Reserve	15.00bbl	De-Sander	0.00bbl	
			Kill	0.00bbl	De-Silter	0.00bbl	
			Premix	705.00bbl	Centrifuge	0.00bbl	
			Sweeps	865.00bbl			

Bit # 1			Wear	I	O1	D	L	B	G	O2	R
				1	1	NO	A	E	I	NO	TD
Size ("):	26.00in	IADC#	1-1-1	Nozzles		Drilled over last 24 hrs			Calculated over Bit Run		

Mfr:	Smith	WOB(avg)	2.0klb	No.	Size	Progress	34.0m	Cum. Progress	34.0m
Type:	Milled Tooth	RPM(avg)	77.00	3	26.00/32nd"	On Bottom Hrs	1.20h	Cum. On Btm Hrs	1.20h
Serial No.:	569645	F.Rate	855.00gpm			IADC Drill Hrs	1.00h	Cum IADC Drill Hrs	1.00h
Bit Model	GXiVV-6C	SPP	800.00psi			Total Revs	8200.00	Cum Total Revs	8200.00
Depth In	94.0m	HSI				ROP(avg)	28.33 m/hr	ROP(avg)	28.33 m/hr
Depth Out	129.5m	TFA	1.55						

BHA # 1

Weight(Wet)	40.0klb	Length	61.5m	Torque(max)	5.00kft-lbs	D.C. (1) Ann Velocity	10.4mpm
Wt Below Jar(Wet)	0.0klb	String	40.0klb	Torque(Off.Btm)	1.00kft-lbs	D.C. (2) Ann Velocity	10.9mpm
		Pick-Up	40.0klb	Torque(On.Btm)	3.00kft-lbs	H.W.D.P. Ann Velocity	9.8mpm
		Slack-Off	40.0klb			D.P. Ann Velocity	9.8mpm

BHA Run Description 26" bit, 36" hole opener, 7 5/8" REG box x box bit sub with ported float and totco ring, 3 x 9 1/2" drill collars, 7 5/8" REG pin x 6 5/8" REG box X/O, 3 x 8" drill collars, 6 5/8" REG pin x 4 1/2" IF box X/O, 5" HWDP

BHA Run Comment

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.61m	26.00in	0.00in	569645	9 5/8" REG box x box with ported float and Totco ring installed
Hole Opener	2.65m	36.00in	0.00in	203A7	
Bit Sub	0.92m	9.50in	3.00in	507A403	
Drill Collar	9.19m	9.50in	3.00in	006-9	
Drill Collar	9.35m	9.50in	3.00in	005-9	7 5/8" REG pin x 6 5/8" REG box
Drill Collar	9.13m	9.50in	3.00in	004-9	
X/O	1.09m	9.38in	3.00in	508A480	
Drill Collar	9.19m	8.00in	3.00in	00-011	
Drill Collar	8.92m	8.00in	3.00in	00-020	6 5/8" REG pin x 4 1/2" IF box
Drill Collar	9.33m	8.00in	3.00in	00-010	
X/O	1.09m	8.00in	2.75in	508A610	

Bulk Stocks

Name	Unit	In	Used	Adjust	Balance
Barite	MT	0.00	0.00	0.00	96.7
Gel	MT	49.86	18.80	0.00	70.8
Cement	MT	78.38	0.00	0.00	85.6
Drill Water	m³	885.10	302.40	0.00	844.0
Fuel Oil	m³	0.00	13.40	0.00	224.8
Potable Water	m³	38.00	32.00	0.00	208.2

Pumps

Pump Data - Last 24 Hrs								Slow Pump Data									
No.	Type	Liner (in)	MW (ppg)	Eff (%)	SPM	SPP (psi)	Flow (gpm)	Depth (m)	SPM1	SPP1 (psi)	Flow1(gpm)	SPM2	SPP2 (psi)	Flow2 (gpm)	SPM3	SPP3 (psi)	Flow3 (gpm)
1	A1700	6.00	8.70	0.00	100.00	1000.00	425.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	12-P160	6.00	8.70	0.00	100.00	1000.00	425.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	12-P160	6.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Personnel On Board

Job Title	Personnel	Company	Pax
OIM	Sean De Fretias	DOGC	47
Camp boss	Steve Worth	Total Marine Catering	8
ROV Pilot	Robert Griffiths	Fugro	4
Rig positioner	Rod Farrawell	Fugro	2
Rig positioner QC	Dave Errington	RPS Hydresearch	1
Cementer	Edgar Lliagas	Dowell Schlumberger	2
Mud Engineer	Jasdeep Singh	MI Swaco	1

Personnel On Board

Wireline Engineer	Scott Einam	Baker Atlas	2
Data Engineer	Gary Bloom	Sperry Sun	2
Wellhead Engineer	Bruce Hassett	Cameron	1
Rope Access Tech	Michael Rogan	Vertigo	3
Senior Drilling Supervisor	Chris Wilson	BSOC	4
MWD Engineer	Stuart Allan	Halliburton	2
Directional Driller	John Smith	Halliburton	2
Engineer	Bob Kostecki	AME	1
Chef	Malcolm Soding	Farstad	1
Total			83

HSE Summary

Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	23 Jan 2005	6 Days	Routine Abandon Rig Drill	Weekly abandon Rig Drill
Fire Drill	23 Jan 2005	6 Days	Routine Fire Drill	Weekly fire simulation drill
First Aid	29 Jan 2005	0 Days	Minor pain and swelling in left forearm	Rope access tech complained of minor pain and swelling in left forearm after performing rope access repairs to tow bridle. Could not site any incident during repair which may have caused it. Medic applied ice pack.
Illness	29 Jan 2005	0 Days	Inflamed Bowel Disease	Chef on board Far Grip complaining of abdominal pain. Brought to rig for examination by medic and town doctor. Doctor advised that patient should have medical assistance onshore. Chef returned to Far Grip and then was brought back on the rig to spend the night before next helicopter flight out on Sunday.
Illness	29 Jan 2005	0 Days	Septic Arthritis of the knee	Roustabout complained of tenderness and redness of his knee and mentioned prior knee surgery. Did not site any incident onboard relating to this. Town doctor advised he should be sent onshore. Was sent off on today's helicopter.
Pre-Tour Meetings	29 Jan 2005	0 Days	Routine Pre-Tour Meetings	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30
Stop Card-Prevention	29 Jan 2005	0 Days	12 STOP cards submitted	4 cards by 3rd party 8 cards by DODI

Marine

Weather on 29 Jan 2005

Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period
10.00mi	12.0kn	180.0deg	1010.00mbar	21.0C°	0.5m	180.0deg	0.0ft/min
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments	
0.3deg	0.3deg	0.30m	1.0m	90.0deg	0.0ft/min		
Rig Dir.	Ris. Tension	VDL	Comments				
43.0deg	0.0klb	4568.0klb					

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Pacific Wrangler		0345	At Melbourne pilot station	<div>ItemUnitQuantity</div>		
				Barite	MT	0.00
				Gel	MT	42.00
				Cement	MT	0.00
				Drill Water	M^3	0.00
				Fuel Oil	M^3	456.60
				Potable Water	M^3	245.00
Far Grip			At anchor	<div>ItemUnitQuantity</div>		
				Barite	MT	36.00
				Gel	MT	0.00
				Cement	MT	170.00
				Drill Water	M^3	0.00
				Fuel Oil	M^3	237.00
				Potable Water	M^3	563.00

Helicopter Movement

Flight #	Company	Arr/Dep. Time	Pax In/Out	Comment
1	Bristow	1044 / 1055	0 / 2	Call sign: BZU

30 Jan 2005 (GMT +10)

From: Chris Wilson, Stuart Douglass
To: Colin Allport

DRILLING MORNING REPORT # 4
ZaneGrey-1 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	684.0m	Cur. Hole Size	16.000in	AFE Cost	\$ 0.00
Field		TVD	684.0m	Casing OD	30.000in	AFE No.	
Drill Co.	DOGC	Progress	554.5m	Shoe TVD	127.75m	Daily COST	\$ 325218.00
Rig	Ocean Patriot	Days from spud	1.40	FIT	0.00ppg	Cum Cost	\$ 4724071.00
Wtr Dpth(MSL)	72.5m	Days on well	3.79	LOT	0.00ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600	Drilling ahead in 16" hole.				
RT-ML	94.0m	Planned Op	TD 16" section and prepare to run 13 3/8" casing.				

Summary of Period 0000 to 2400 Hrs

Waited on conductor cement, made up 16" BHA and ran in the hole, drilled out 20" shoe, drilled ahead in 16" hole.

Operations For Period 0000 Hrs to 2400 Hrs on 30 Jan 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0230	2.50	CON	P	WOC	129.5m	Continued to wait on cement.
0230	0330	1.00	CON	P	HT	129.5m	Released running tool and pulled out of the hole. PGB bullseyes 0 degrees and heading 046 degrees. Laid down running tool and stinger.
0330	0500	1.50	CON	P	HBHA	129.5m	Broke out and laid down cement stand and 36" BHA.
0500	0700	2.00	SH	P	HT	129.5m	Picked up and made up 18 3/4" running tool and Dowell Deep Sea Express Cement Head to HWDP and racked same in derrick.
0700	1200	5.00	SH	P	HBHA	129.5m	Made up 16" BHA, orientated and scribed mud motor and uploaded to MWD tools.
1200	1230	0.50	SH	TP (WOE)	RR	129.5m	Changed out blower hose and link tilt solenoid on top drive.
1230	1300	0.50	SH	P	TI	129.5m	Ran into the hole with 16" BHA stabbing into 30" housing with ROV assistance. Tagged top of cement at 124.7 m.
1300	1330	0.50	SH	P	DC	129.5m	Cleaned out shoe track and rathole from 124.7 m to 129.5 m. Worked through the shoe at 127.75 m.
1330	2400	10.50	SH	P	D	684.0m	Drilled 16" hole from 129.5 m to 486 m. Directionally drilled from 486 m to 684 m pumping 50 bbl hi-vis sweeps mid stand and spotting 50 bbl around BHA on connections. Backreamed last single prior to each connection.

Operations For Period 0000 Hrs to 0600 Hrs on 31 Jan 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0600	6.00	SH	P	D	1080.0m	(IN PROGRESS) Directionally drilled from 684 m to 1080 m pumping 50 bbl hi-vis sweeps mid stand and spotting 50 bbl around BHA on connections. Backreamed last single prior to each connection.

Operations For Period Hrs to Hrs on

WBM Data				Cost Today \$ 11137.00			
Mud Type:	Hi Vis Gel Sweeps	API FL:	14.0cc	Cl:	1200.0mg/l	Solids:	1.00
Sample-From:	Pit 3	Filter-Cake:	1.00/32nd"	Hard/Ca:	120.0mg/l	H2O:	0.00%
Time:	1800	HTHP-FL:	0.0cc	MBT:	22.50	Oil:	0.00%
Weight:	8.75ppg	HTHP-cake:	0.00/32nd"	PM:	0.00	Sand:	0
Temp:	28.0C°			PF:	0.30	Glycol:	0.0%vol
				pH:	9.50	KCl:	0.00%
						PHPA:	0.00ppb
Comment						Fann 003	60.00
						Fann 006	60.00
						Fann 100	71.00
						Fann 200	74.00
						Fann 300	77.00
						Fann 600	85.00

Shakers, Volumes and Losses Data

Engineer : Jasdeep Singh

Equip.	Descr.	Mesh Size	Available	1910.00bbl	Losses	1857.00bbl	Comments
			Active	0.00bbl	Downhole	0.00bbl	
			Mixing	0.00bbl	Surf+ Equip	0.00bbl	
			Hole	0.00bbl	Dumped	15.00bbl	
			Slug	0.00bbl	De-Gasser	0.00bbl	
			Reserve	0.00bbl	De-Sander	0.00bbl	
			Kill	0.00bbl	De-Silter	0.00bbl	
			Premix	1910.00bbl	Centrifuge	0.00bbl	
			Sweeps	1842.00bbl			

Bit # 2			Wear	I	O1	D	L	B	G	O2	R
Size ("):	16.00in	IADC#	1-1-5	Nozzles		Drilled over last 24 hrs		Calculated over Bit Run			
Mfr:	Smith	WOB(avg)	12.3klb	No.	Size	Progress	554.5m	Cum. Progress	554.5m		
Type:	Milled Tooth	RPM(avg)	57.00	2	22.00/32nd"	On Bottom Hrs	6.90h	Cum. On Btm Hrs	6.90h		
Serial No.:	MM4714	F.Rate	1100.00gpm	2	18.00/32nd"	IADC Drill Hrs	6.90h	Cum IADC Drill Hrs	6.90h		
Bit Model	GXiV-6C	SPP	2388.00psi			Total Revs	74200.00	Cum Total Revs	74200.00		
Depth In	129.5m	HSI				ROP(avg)	80.36 m/hr	ROP(avg)	80.36 m/hr		
Depth Out		TFA	1.24								

BHA # 2

Weight(Wet)	40.0klb	Length	250.6m	Torque(max)	6.00kft-lbs	D.C. (1) Ann Velocity	42.8mpm
Wt Below Jar(Wet)	30.0klb	String	195.0klb	Torque(Off.Btm)	3.00kft-lbs	D.C. (2) Ann Velocity	0.0mpm
		Pick-Up	195.0klb	Torque(On.Btm)	5.00kft-lbs	H.W.D.P. Ann Velocity	35.6mpm
		Slack-Off	195.0klb			D.P. Ann Velocity	35.6mpm

BHA Run Description 16" tri-cone bit, 9 5/8" motor, non-mag bottleneck X/O with ported float, non-mag 15 1/2" integral blade stabilizer, 8" MWD PM sub, 8" RLL with DGR and EWR, 8" MWD pulser/TM sub, 15" integral blade stabilizer, 3 x 8" drill collars, 8 1/4" jar, 2 x 8" drill collars, 6 5/8" REG pin x 4 1/2" IF box X/O, 18 x 5" HWDP

BHA Run Comment Sensor distances from the bit: DGR - 19.78 m, EWR - 16.76 m, DM - 13.34 m

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.42m	16.00in	3.00in	MM4714	Milled tooth
Mud Motor	9.05m	9.63in	6.13in	963367	
Float Sub	0.54m	8.00in	3.00in	A 545	Bottleneck X/O with ported float installed
String Stabiliser	1.86m	15.50in	3.00in	2362	
MWD Tool	2.80m	8.00in	2.50in	DM67106	PM Sub
MWD Tool	7.20m	11.25in	2.50in	DM343GR8	RLL w/DGR + EWR
MWD Tool	3.10m	8.00in	2.50in	10532336	Pulser / TM sub
String Stabiliser	2.04m	15.00in	2.50in	47615	
Drill Collar	27.44m	8.00in	3.00in		3 x 8" DC's
Drilling Jars	9.68m	8.25in	2.40in	DAH02767	
Drill Collar	18.15m	8.00in	3.00in		2 x 8" DC's
X/O	1.09m	8.00in	2.75in	508A610	6 5/8" REG pin x 4 1/2" IF box
HWDP	167.26m	6.50in	3.00in		18 x 5" HWDP

Bulk Stocks

Name	Unit	In	Used	Adjust	Balance
Barite	MT	0.00	9.08	0.00	87.6
Gel	MT	0.00	16.80	0.00	54.0
Cement	MT	80.00	33.79	0.00	131.8
Drill Water	m ³	132.80	380.10	0.00	596.7
Fuel Oil	m ³	0.00	12.20	0.00	212.6

Bulk Stocks						
Name	Unit	In	Used	Adjust	Balance	
Potable Water	m ³	35.00	25.40	0.00	217.8	

Pumps																		
Pump Data - Last 24 Hrs								Slow Pump Data										
No.		Type	Liner (in)	MW (ppg)	Eff (%)	SPM	SPP (psi)	Flow (gpm)	Depth (m)	SPM1	SPP1 (psi)	Flow1(gpm)	SPM2	SPP2 (psi)	Flow2 (gpm)	SPM3	SPP3 (psi)	Flow3 (gpm)
1		A1700	6.00	8.75	0.00	90.00	2500.00	385.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2		12-P160	6.00	8.75	0.00	90.00	2500.00	385.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3		12-P160	6.00	8.75	0.00	90.00	2500.00	385.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Personnel On Board			
Job Title	Personnel	Company	Pax
OIM	Sean De Fretias	DOGC	47
Camp boss	Steve Worth	Total Marine Catering	9
ROV Pilot	Robert Griffiths	Fugro	4
Cementer	Edgar Lliagas	Dowell Schlumberger	2
Mud Engineer	Jasdeep Singh	MI Swaco	2
Wireline Engineer	Scott Einam	Baker Atlas	4
Data Engineer	Gary Bloom	Sperry Sun	2
Wellhead Engineer	Bruce Hassett	Cameron	1
Senior Drilling Supervisor	Chris Wilson	BSOC	4
MWD Engineer	Stuart Allan	Halliburton	2
Directional Driller	John Smith	Halliburton	3
Engineer	Bob Kostecki	AME	1
Engineer	Colin Fidock	Weatherford	3
Total			84

HSE Summary				
Events	Date of last	Days Since	Descr.	Remarks
First Aid	28 Jan 2005	2 Days	Thumb struck on header tank	Motorman was attempting to fill engine with oil and struck is left thumb on header tank while removing cap. Minor swelling to the thumb resulted but still had full motion of thumb. No other first aid required beyond examination.
Pre-Tour Meetings	29 Jan 2005	1 Day	Routine Pre-Tour Meetings	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30
Safety Meeting	30 Jan 2005	0 Days	Three weekly safety meetings held	Three weekly safety meetings held at 1300, 1900 and 0100, all personnel attended.
Stop Card-Prevention	30 Jan 2005	0 Days	12 STOP cards submitted	7 cards by DODI 5 cards by Client

Marine										
Weather on 30 Jan 2005										
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period			
12.00mi	10.0kn	225.0deg	1017.00mbar	21.0C°	1.0m	225.0deg	0.0ft/min			
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments				
0.3deg	0.3deg	0.30m	2.0m	225.0deg	0.0ft/min					
Rig Dir.	Ris. Tension	VDL		Comments						
43.0deg	0.0klb	4976.0klb								
Boats		Arrived (date/time)		Departed (date/time)		Status		Bulks		
Pacific Wrangler					Steaming back to rig after loading 13 3/8" casing and mud chemicals in Melbourne		Item		Unit	Quantity
							Barite		MT	84.00
							Gel		MT	42.00
							Cement		MT	0.00
							Drill Water		M^3	530.00
							Fuel Oil		M^3	440.00
							Potable Water		M^3	277.00

Far Grip			At anchor	Item	Unit	Quantity
				Barite	MT	36.00
				Gel	MT	0.00
				Cement	MT	90.00
				Drill Water	M^3	0.00
				Fuel Oil	M^3	231.00
				Potable Water	M^3	425.00

Helicopter Movement

Flight #	Company	Arr/Dep. Time	Pax In/Out	Comment
1	Bristow	1001 / 1013	10 / 9	Call sign: BZU

31 Jan 2005 (GMT +10)

From: Chris Wilson, Stuart Douglass
 To: Colin Allport

DRILLING MORNING REPORT # 5
ZaneGrey-1 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	1080.0m	Cur. Hole Size	16.000in	AFE Cost	\$ 0.00
Field		TVD	1021.2m	Casing OD	30.000in	AFE No.	
Drill Co.	DOGC	Progress	396.0m	Shoe TVD	127.75m	Daily COST	\$ 349011.00
Rig	Ocean Patriot	Days from spud	2.40	FIT	0.00ppg	Cum Cost	\$ 5073082.00
Wtr Dpth(MSL)	72.5m	Days on well	4.79	LOT	0.00ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600 Pulling out of the hole.					
RT-ML	94.0m	Planned Op Pull out of the hole, rig up and run 13 3/8" casing, cement same.					

Summary of Period 0000 to 2400 Hrs

Directionally drilled ahead in 16" hole.

Operations For Period 0000 Hrs to 2400 Hrs on 31 Jan 2005

From	To	Hrs	Phse	Clis (RC)	Op	Depth	Activity Description
0000	2400	24.00	SH	P	D	1080.0m	Directionally drilled from 684 m to 1080 m pumping 50 bbl hi-vis sweeps mid stand and spotting 50 bbl around BHA on connections. Backreamed last single prior to each connection.

Operations For Period 0000 Hrs to 0600 Hrs on 01 Feb 2005

From	To	Hrs	Phse	Clis (RC)	Op	Depth	Activity Description
0000	0130	1.50	SH	P	D	1095.0m	Continued directionally drilling ahead in 16" hole from 1080 m to 1095 m. TD for 16" section 1095 m (TD called early due to slow Rate of Penetration).
0130	0330	2.00	SH	P	CIR	1095.0m	Circulated with sea water and pumped 150 bbl hi-vis pill, circulated out same with sea water. Pumped 1,000 bbl hi-vis pill followed by 200 bbl of 9.6 ppg KCL mud chased with 50 bbl hi-vis.
0330	0530	2.00	SH	P	TO	1095.0m	Commenced pulling out of the hole with 16" BHA on 5" drill pipe. Hole conditions good.
0530	0600	0.50	SH	P	HBHA	1095.0m	(IN PROGRESS) Pulled out of the hole with 16" BHA and racked back same. Downloaded MWD tools.

Operations For Period Hrs to Hrs on

WBM Data				Cost Today \$ 5884.00			
Mud Type:	Hi Vis Sweeps	API FL:	13.2cc	Cl:	600.0mg/l	Solids:	2.00
Sample-From:	Pit 4	Filter-Cake:	1.00/32nd"	Hard/Ca:	40.0mg/l	H2O:	0.00%
Time:	2100	HTHP-FL:	0.0cc	MBT:	25.00	Oil:	0.00%
Weight:	8.75ppg	HTHP-cake:	0.00/32nd"	PM:	0.00	Sand:	0
Temp:	28.0C°			PF:	0.20	Glycol:	0.0%vol
				pH:	9.50	KCl:	0.00%
						PHPA:	0.00ppb
Comment						Fann 003	29.00
						Fann 006	29.00
						Fann 100	35.00
						Fann 200	40.00
						Fann 300	45.00
						Fann 600	58.00

Shakers, Volumes and Losses Data

Engineer : Jasdeep Singh

Equip.	Descr.	Mesh Size	Available	1967.00bbl	Losses	1518.00bbl	Comments
			Active	0.00bbl	Downhole	0.00bbl	
			Mixing	0.00bbl	Surf+ Equip	0.00bbl	
			Hole	0.00bbl	Dumped	15.00bbl	
			Slug	0.00bbl	De-Gasser	0.00bbl	
			Reserve	0.00bbl	De-Sander	0.00bbl	
			Kill	0.00bbl	De-Silter	0.00bbl	
			Premix	1967.00bbl	Centrifuge	0.00bbl	
			Sweeps	1503.00bbl			

Bit # 2				Wear	I	O1	D	L	B	G	O2	R
Size ("):	16.00in	IADC#	1-1-5	Nozzles		Drilled over last 24 hrs			Calculated over Bit Run			
Mfr:	Smith	WOB(avg)	25.8klb	No. Size		Progress 396.0m		Cum. Progress		950.5m		
Type:	Milled Tooth	RPM(avg)	60.00	2	22.00/32nd"	On Bottom Hrs 14.60h		Cum. On Btm Hrs		21.50h		
Serial No.:	MM4714	F.Rate	1105.00gpm	2	18.00/32nd"	IADC Drill Hrs 14.60h		Cum IADC Drill Hrs		21.50h		
Bit Model	GXiV-6C	SPP	2864.00psi			Total Revs 252500.00		Cum Total Revs		326700.00		
Depth In	129.5m	HSI				ROP(avg) 27.12 m/hr		ROP(avg)		44.21 m/hr		
Depth Out		TFA	1.24									

BHA # 2							
Weight(Wet)	40.0klb	Length	250.6m	Torque(max)	7.00kft-lbs	D.C. (1) Ann Velocity	42.8mpm
Wt Below Jar(Wet)	30.0klb	String	210.0klb	Torque(Off.Btm)	4.00kft-lbs	D.C. (2) Ann Velocity	0.0mpm
		Pick-Up	220.0klb	Torque(On.Btm)	6.00kft-lbs	H.W.D.P. Ann Velocity	35.6mpm
		Slack-Off	190.0klb			D.P. Ann Velocity	35.6mpm
BHA Run Description		16" tri-cone bit, 9 5/8" motor, non-mag bottleneck X/O with ported float, non-mag 15 1/2" integral blade stabilizer, 8" MWD PM sub, 8" RLL with DGR and EWR, 8" MWD pulser/TM sub, 15" integral blade stabilizer, 3 x 8" drill collars, 8 1/4" jar, 2 x 8" drill collars, 6 5/8" REG pin x 4 1/2" IF box X/O, 18 x 5" HWDP					
BHA Run Comment		Sensor distances from the bit: DGR - 19.78 m, EWR - 16.76 m, DM - 13.34 m					

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.42m	16.00in	3.00in	MM4714	Milled tooth
Mud Motor	9.05m	9.63in	6.13in	963367	
Float Sub	0.54m	8.00in	3.00in	A 545	Bottleneck X/O with ported float installed
String Stabiliser	1.86m	15.50in	3.00in	2362	
MWD Tool	2.80m	8.00in	2.50in	DM67106	PM Sub
MWD Tool	7.20m	11.25in	2.50in	DM343GR8	RLL w/DGR + EWR
MWD Tool	3.10m	8.00in	2.50in	10532336	Pulser / TM sub
String Stabiliser	2.04m	15.00in	2.50in	47615	
Drill Collar	27.44m	8.00in	3.00in		3 x 8" DC's
Drilling Jars	9.68m	8.25in	2.40in	DAH02767	
Drill Collar	18.15m	8.00in	3.00in		2 x 8" DC's
X/O	1.09m	8.00in	2.75in	508A610	6 5/8" REG pin x 4 1/2" IF box
HWDP	167.26m	6.50in	3.00in		18 x 5" HWDP

Bulk Stocks						
Name	Unit	In	Used	Adjust	Balance	
Barite	MT	0.00	0.00	0.00	87.6	
Gel	MT	0.00	27.27	0.00	26.7	
Cement	MT	0.00	0.00	0.00	131.8	
Drill Water	m ³	300.00	257.70	0.00	639.0	
Fuel Oil	m ³	0.00	18.90	0.00	193.7	
Potable Water	m ³	42.90	27.00	0.00	233.7	

Pumps																	
Pump Data - Last 24 Hrs								Slow Pump Data									
No.	Type	Liner (in)	MW (ppg)	Eff (%)	SPM	SPP (psi)	Flow (gpm)	Depth (m)	SPM1	SPP1 (psi)	Flow1 (gpm)	SPM2	SPP2 (psi)	Flow2 (gpm)	SPM3	SPP3 (psi)	Flow3 (gpm)
1	A1700	6.00	8.75	0.00	90.00	2864.00	368.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	12-P160	6.00	8.75	0.00	90.00	2864.00	368.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	12-P160	6.00	8.75	0.00	90.00	2864.00	368.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Personnel On Board			
Job Title	Personnel	Company	Pax
OIM	Sean De Fretias	DOGC	47
Camp boss	Steve Worth	Total Marine Catering	9

Personnel On Board

ROV Pilot	Robert Griffiths	Fugro	4
Cementer	Edgar Lliagas	Dowell Schlumberger	2
Mud Engineer	Jasdeep Singh	MI Swaco	2
Wireline Engineer	Scott Einam	Baker Atlas	4
Data Engineer	Gary Bloom	Sperry Sun	2
Wellhead Engineer	Bruce Hassett	Cameron	1
Senior Drilling Supervisor	Chris Wilson	BSOC	4
MWD Engineer	Stuart Allan	Halliburton	2
Directional Driller	John Smith	Halliburton	3
Engineer	Bob Kostecki	AME	1
Engineer	Colin Fidock	Weatherford	3
Total			84

HSE Summary

Events	Date of last	Days Since	Descr.	Remarks
Pre-Tour Meetings	31 Jan 2005	0 Days	Routine Pre-Tour Meetings	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30
Stop Card-Prevention	31 Jan 2005	0 Days	12 STOP cards submitted	6 cards by DODI 6 cards by client

Marine

Weather on 31 Jan 2005

Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period
12.00mi	5.0kn	45.0deg	1003.00mbar	23.0C°	1.5m	45.0deg	0.0ft/min
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments	
0.3deg	0.3deg	0.30m	1.5m	90.0deg	0.0ft/min		
Rig Dir.	Ris. Tension	VDL		Comments			
43.0deg	0.0klb	4982.0klb					

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks			
Pacific Wrangler	1200		Alongside offloading drill water.	Item		Unit	Quantity
				Barite		MT	84.00
				Gel		MT	42.00
				Cement		MT	0.00
				Drill Water		M^3	530.00
				Fuel Oil		M^3	415.60
				Potable Water		M^3	274.00
Far Grip			At anchor.	Item		Unit	Quantity
				Barite		MT	36.00
				Gel		MT	0.00
				Cement		MT	90.00
				Drill Water		M^3	0.00
				Fuel Oil		M^3	227.00
				Potable Water		M^3	125.00

01 Feb 2005 (GMT +10)

From: Chris Wilson, Stuart Douglass
To: Colin Allport

DRILLING MORNING REPORT # 6
ZaneGrey-1 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	1095.0m	Cur. Hole Size	16.000in	AFE Cost	\$ 0.00
Field		TVD	1033.5m	Casing OD	13.375in	AFE No.	
Drill Co.	DOGC	Progress	15.0m	Shoe TVD	1029.10m	Daily COST	\$ 535143.00
Rig	Ocean Patriot	Days from spud	3.40	FIT	0.00ppg	Cum Cost	\$ 5608225.00
Wtr Dpth(MSL)	72.5m	Days on well	5.79	LOT	0.00ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600	Rigging up to run BOP stack.				
RT-ML	94.0m	Planned Op	Run BOP stack.				

Summary of Period 0000 to 2400 Hrs

Directionally drilled to TD in 16" hole. Circulated, displaced and pulled out of the hole. Rigged up and ran 13 3/8" casing and cemented same.

Operations For Period 0000 Hrs to 2400 Hrs on 01 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0130	1.50	SH	P	D	1095.0m	Continued directionally drilling ahead in 16" hole from 1080 m to 1095 m. TD for 16" section 1095 m (TD called early due to slow Rate of Penetration).
0130	0330	2.00	SH	P	CIR	1095.0m	Circulated with sea water and pumped 150 bbl hi-vis pill, circulated out same with sea water. Pumped 1,000 bbl hi-vis pill followed by 200 bbl of 9.6 ppg KCL mud chased with 50 bbl hi-vis.
0330	0530	2.00	SH	P	TO	1095.0m	Commenced pulling out of the hole with 16" BHA on 5" drill pipe. Hole conditions good.
0530	0830	3.00	SH	P	HBHA	1095.0m	Pulled out of the hole with 16" BHA and racked back same. Downloaded MWD tools.
0830	0900	0.50	SH	P	RRC	1095.0m	Held pre-job safety meeting and rigged up to run 13 3/8" casing.
0900	1000	1.00	SH	TP (WOE)	RR	1095.0m	Attempted to repair derrick stabbing board camera - unsuccessful. Assistant driller assigned to transfer signals from stabbing board to driller.
							Changed out top drive link-tilt regulator.
1000	1030	0.50	SH	P	RRC	1095.0m	Continued rigging up 13 3/8" casing handling equipment.
1030	1130	1.00	SC	P	RC	1095.0m	Made up shoe joint, intermediate joint and float collar joint and bakerlocked same. Attached guide ropes to guidelines.
1130	1200	0.50	SC	P	RRC	1095.0m	Filled shoe track with seawater and tested float assembly - test OK. Rigged up Tam packer.
1200	1700	5.00	SC	P	RC	1095.0m	Ran 13 3/8" casing from 37 m to 988 m.
1700	1730	0.50	SC	P	RD	1095.0m	Rigged down Tam packer.
1730	1800	0.50	SC	P	RC	1095.0m	Made up 18 3/4" wellhead housing joint and laid out Flush Mounted Spider.
1800	1830	0.50	SC	P	RUC	1095.0m	Made up Dowell Deepsea Expres Cement stinger and installed cement plug basket below stinger.
1830	1900	0.50	SC	P	RC	1095.0m	Made up 18 3/4" wellhead running tool to 18 3/4" wellhead housing.
1900	2000	1.00	SC	P	RC	1095.0m	Ran in the hole with 13 3/8" casing on 5" HWDP landing string from 999 m to 1090.61 m, landing out in 30" wellhead housing at 92 m. Tested latch with 50k overpull.
2000	2100	1.00	SC	P	CIC	1095.0m	Circulate string volume (550 bbl) with seawater at 515 gpm.
2100	2230	1.50	SC	P	CMC	1095.0m	Nipped up cement hose to Dowell Deepsea Expres Cement Head and pressure tested same to 3,000 psi for 10 minutes. Pumped 166 bbl 12.5 ppg lead slurry and 67 bbl 15.8 ppg tail slurry using cement unit. No surface indication of top plug shearing.
2230	2330	1.00	SC	P	CMC	1095.0m	Displaced cement using rig pump, bumped plug early at 3862 strokes and 2,300 psi. Calculated displacement 477 bbls, displaced by 61 bbls less than this at plug bump. Dowell pressure tested casing to 1,500 psi for 10 minutes.
2330	2400	0.50	SC	P	RD	1095.0m	Nipped down cement hose and released running tool. Commenced pulling out of the hole while flushing wellhead.

Operations For Period 0000 Hrs to 0600 Hrs on 02 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0130	1.50	SC	P	HT	1095.0m	Pulled out of the hole with 18 3/4" wellhead running tool from 91.52 m (18 3/4" wellhead datum). Broke out and laid down running tool, crossover, pup joint and cement stinger. Made up stand of HWDP and racked back same in derrick.

Equipment	Length	OD	ID	Serial #	Comment
MWD Tool	2.80m	8.00in	2.50in	DM67106	PM Sub
MWD Tool	7.20m	11.25in	2.50in	DM343GR8	RLL w/DGR + EWR
MWD Tool	3.10m	8.00in	2.50in	10532336	Pulser / TM sub
String Stabiliser	2.04m	15.00in	2.50in	47615	
Drill Collar	27.44m	8.00in	3.00in		3 x 8" DC's
Drilling Jars	9.68m	8.25in	2.40in	DAH02767	
Drill Collar	18.15m	8.00in	3.00in		2 x 8" DC's
X/O	1.09m	8.00in	2.75in	508A610	6 5/8" REG pin x 4 1/2" IF box
HWDP	167.26m	6.50in	3.00in		18 x 5" HWDP

Bulk Stocks

Name	Unit	In	Used	Adjust	Balance
Barite	MT	0.00	0.00	0.00	87.6
Gel	MT	0.00	13.89	-0.41	12.4
Cement	MT	0.00	0.00	0.00	131.8
Drill Water	m ³	400.00	94.70	0.00	944.3
Fuel Oil	m ³	150.10	16.20	0.00	327.6
Potable Water	m ³	35.00	25.90	0.00	242.8

Pumps

Pump Data - Last 24 Hrs								Slow Pump Data									
No.	Type	Liner (in)	MW (ppg)	Eff (%)	SPM	SPP (psi)	Flow (gpm)	Depth (m)	SPM1	SPP1 (psi)	Flow1 (gpm)	SPM2	SPP2 (psi)	Flow2 (gpm)	SPM3	SPP3 (psi)	Flow3 (gpm)
1	A1700	6.00	8.75	0.00	90.00	3150.00	375.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	12-P160	6.00	8.75	0.00	90.00	3150.00	375.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	12-P160	6.00	8.75	0.00	90.00	3150.00	375.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Personnel On Board

Job Title	Personnel	Company	Pax
OIM	Sean De Fretias	DOGC	49
Camp boss	Steve Worth	Total Marine Catering	8
ROV Pilot	Robert Griffiths	Fugro	4
Cementer	Edgar Lliagas	Dowell Schlumberger	2
Mud Engineer	Jasdeep Singh	MI Swaco	2
Wireline Engineer	Scott Einam	Baker Atlas	3
Data Engineer	Gary Bloom	Sperry Sun	2
Wellhead Engineer	Bruce Hassett	Cameron	1
Senior Drilling Supervisor	Chris Wilson	BSOC	4
MWD Engineer	Stuart Allan	Halliburton	2
Directional Driller	John Smith	Halliburton	3
Engineer	Colin Fidock	Weatherford	3
Total			83

HSE Summary

Events	Date of last	Days Since	Descr.	Remarks
First Aid	30 Jan 2005	2 Days	Foreign body in welder's eye.	Welder reported feeling foreign body enter his eye when he flipped down the front lens of his welding helmet. Eye was flushed and still possible foreign body present. Re-examined after 12 hours and foreign body gone.
Pre-Tour Meetings	01 Feb 2005	0 Days	Routine Pre-Tour Meetings	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30
Stop Card-Prevention	01 Feb 2005	0 Days	15 STOP cards submitted	12 cards by DODI 3 cards by client

Marine

Weather on 01 Feb 2005								
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period	
12.00mi	25.0kn	225.0deg	995.00mbar	21.0C°	1.0m	225.0deg	0.0ft/min	
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments		
0.3deg	0.3deg	0.30m	1.5m	90.0deg	0.0ft/min			
Rig Dir.	Ris. Tension	VDL		Comments				
43.0deg	0.0klb	4544.0klb						
Boats		Arrived (date/time)	Departed (date/time)	Status		Bulks		
Pacific Wrangler				At anchor.	Item		Unit	Quantity
					Barite		MT	84.00
					Gel		MT	42.00
					Cement		MT	0.00
					Drill Water		M^3	70.00
					Fuel Oil		M^3	257.60
					Potable Water		M^3	270.00
Far Grip		0700	Steaming to Melbourne pilot station.	Item		Unit	Quantity	
				Barite		MT	36.00	
				Gel		MT	0.00	
				Cement		MT	90.00	
				Drill Water		M^3	0.00	
				Fuel Oil		M^3	225.00	
				Potable Water		M^3	125.00	

Helicopter Movement				
Flight #	Company	Arr/Dep. Time	Pax In/Out	Comment
1	Bristow	0902 / 0914	7 / 8	Call sign: BZU. Flight departure from Essendon delayed due to heavy fog at wellsite.

02 Feb 2005 (GMT +10)

From: Chris Wilson, Stuart Douglass
To: Colin Allport

DRILLING MORNING REPORT # 7
ZaneGrey-1 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	1095.0m	Cur. Hole Size	16.000in	AFE Cost	\$ 0.00
Field		TVD	1033.5m	Casing OD	13.375in	AFE No.	
Drill Co.	DOGC	Progress	0.0m	Shoe TVD	1029.10m	Daily COST	\$ 394613.00
Rig	Ocean Patriot	Days from spud	4.40	FIT	0.00ppg	Cum Cost	\$ 6002838.00
Wtr Dpth(MSL)	72.5m	Days on well	6.79	LOT	0.00ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600	Waiting on weather.				
RT-ML	94.0m	Planned Op	Wait on weather, land out BOP stack and pick up 12 1/4" BHA.				

Summary of Period 0000 to 2400 Hrs

Laid down 18 3/4" wellhead running tool and Dowell Deepsea Express cement head, picked up riser double, made up same to BOP stack and commenced running BOP stack and riser. Waited on weather before landing out BOP stack.

Operations For Period 0000 Hrs to 2400 Hrs on 02 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0130	1.50	SC	P	HT	1095.0m	Pulled out of the hole with 18 3/4" wellhead running tool from 91.52 m (18 3/4" wellhead datum). Broke out and laid down running tool, crossover, pup joint and cement stinger. Made up stand of HWDP and racked back same in derrick.
0130	0330	2.00	SC	P	HT	1095.0m	Laid down Dowell Deepsea Express cement head and HWDP double. Laid down second 18 3/4" running tool, pup joint and 13 3/8" x 4 1/2" IF water bushing.
0330	0500	1.50	SC	P	RU	1095.0m	Rigged up to run marine riser and BOP stack.
0500	0600	1.00	SC	P	BOP	1095.0m	Made up riser double. Moved rig 15 m off location to protect wellhead.
0600	0830	2.50	SC	P	BOP	1095.0m	Moved BOP stack to well centre in moonpool and made up riser double to same. Installed guidelines and beacons.
0830	0930	1.00	SC	P	BOP	1095.0m	Picked up BOP stack from carrier and ran in with same.
0930	1030	1.00	SC	P	BOP	1095.0m	Filled choke and kill lines with drill water. Made up riser test cap and tested choke and kill lines to 250 psi for 5 mins and 5,000 psi for 10 mins.
1030	1300	2.50	SC	P	BOP	1095.0m	Continued to run BOP stack and riser, tested choke and kill lines to 250 psi for 5 mins and 5,000 psi for 10 mins.
1300	1400	1.00	SC	P	BOP	1095.0m	Picked up and ran slip joint.
1400	1430	0.50	SC	P	BOP	1095.0m	Picked up riser landing joint.
1430	1630	2.00	SC	P	BOP	1095.0m	Nippled up choke, kill and booster lines.
1630	1730	1.00	SC	P	BOP	1095.0m	Engaged SDL ring.
1730	1800	0.50	SC	P	BOP	1095.0m	Pressure tested choke and kill lines to 250 psi for 5 mins and 5,000 psi for 10 minutes.
1800	2400	6.00	SC	TP (WEA)	WOW	1095.0m	Waited on weather with rig 15 m off location. 1800 hr: Wind - 40/50 kn, Direction - South, Swell - 3.5 m, Sea - 2 m, Heave - 0.6 m 2000 hr: Wind - 55/60 kn, Direction - South/South East, Swell/Sea - 8 m, Heave - 1 m 2200 hr: Wind - 55/60 kn, Direction - South/South East, Swell/Sea - 8 m, Heave - 2 m 2400 hr: Wind - 30/35 kn, Direction - South/South East, Swell/Sea - 8 m, Heave - 2 m

Operations For Period 0000 Hrs to 0600 Hrs on 03 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0600	6.00	SC	TP (WEA)	WOW	1095.0m	(IN PROGRESS) Continued to wait on weather (supply vessel unable to offer close support for riser work in moonpool). 0200 hr: Wind - 30 kn, Direction - SE, Swell/Sea - 7/8 m 0400 hr: Wind - 25 kn, Direction - N, Swell/Sea - 6.5 m 0600 hr: Wind - 25 kn, Direction - N, Swell/Sea - 5 m 0800 hr: Wind - 23 kn, Direction - NE, Swell/Sea - 5 m 1000 hr: Wind - 30/35 kn, Direction - NE, Swell/Sea - 5 m 1200 hr: Wind - 30/35 kn, Direction - NE, Swell/Sea - 4/5 m 1400 hr: Wind - 30 kn, Direction - NE, Swell/Sea - 4/5 m 1600 hr: Wind - 30 kn, Direction - NE, Swell/Sea - 4 m

Operations For Period Hrs to Hrs on

WBM Data				Cost Today \$ 47398.00					
Mud Type:	KCI IDCAP Glycol	API FL:	9.5cc	Cl:	27000.0mg/l	Solids:	0.50	Viscosity	46.00sec/qt
Sample-From:	Pit 4	Filter-Cake:	1.00/32nd"	Hard/Ca:	160.0mg/l	H2O:	0.00%	PV	8.00cp
Time:	1900	HTHP-FL:	0.0cc	MBT:	1.00	Oil:	0.00%	YP	9.00lb/100ft²
Weight:	8.66ppg	HTHP-cake:	0.00/32nd"	PM:	0.00	Sand:	0	Gels 10s	5.00
Temp:	28.0C°			PF:	0.05	Glycol:	2.5%vol	Gels 10m	6.00
				pH:	8.50	KCl:	0.00%	Fann 003	3.00
						PHPA:	0.00ppb	Fann 006	4.00
								Fann 100	10.00
								Fann 200	14.00
								Fann 300	27.00
								Fann 600	25.00
Comment									

Shakers, Volumes and Losses Data							Engineer : Jasdeep Singh		
Equip.	Descr.	Mesh Size	Available	1901.00bbl	Losses	327.00bbl	Comments		
			Active	0.00bbl	Downhole	0.00bbl			
			Mixing	0.00bbl	Surf+ Equip	0.00bbl			
			Hole	0.00bbl	Dumped	327.00bbl			
			Slug	0.00bbl	De-Gasser	0.00bbl			
			Reserve	0.00bbl	De-Sander	0.00bbl			
			Kill	0.00bbl	De-Silter	0.00bbl			
			Premix	1901.00bbl	Centrifuge	0.00bbl			

Bulk Stocks						
Name	Unit	In	Used	Adjust	Balance	
Barite	MT	0.00	0.00	0.00	87.6	
Gel	MT	0.00	0.00	0.00	12.4	
Cement	MT	0.00	36.38	0.00	95.4	
Drill Water	m³	0.00	287.10	0.00	657.2	
Fuel Oil	m³	0.00	21.00	0.00	306.6	
Potable Water	m³	27.00	16.70	0.00	253.1	

Pumps																
Pump Data - Last 24 Hrs								Slow Pump Data								
No.	Type	Liner (in)	MW (ppg)	Eff (%)	SPM	SPP (psi)	Flow (gpm)	Depth (m)	SPM1	SPP1 Flow1 (gpm)	SPM2	SPP2 Flow2 (gpm)	SPM3	SPP3 Flow3 (gpm)		
1	A1700	6.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	12-P160	6.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	12-P160	6.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Personnel On Board			
Job Title	Personnel	Company	Pax
OIM	Sean De Fretias	DOGC	49
Camp boss	Steve Worth	Total Marine Catering	8
ROV Pilot	Robert Griffiths	Fugro	4
Cementer	Edgar Lliagas	Dowell Schlumberger	2
Mud Engineer	Jasdeep Singh	MI Swaco	2
Wireline Engineer	Scott Einam	Baker Atlas	3
Data Engineer	Gary Bloom	Sperry Sun	2
Wellhead Engineer	Bruce Hassett	Cameron	1
Senior Drilling Supervisor	Chris Wilson	BSOC	4
MWD Engineer	Stuart Allan	Halliburton	2
Directional Driller	John Smith	Halliburton	3
Engineer	Colin Fidock	Weatherford	3
Total			83

HSE Summary				
Events	Date of last	Days Since	Descr.	Remarks
Pre-Tour Meetings	02 Feb 2005	0 Days	Routine Pre-Tour Meetings	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30. Stepback 5x5 methodology rolled out to crews at each meeting. 4 cards by DODI 5 cards by client
Stop Card-Prevention	02 Feb 2005	0 Days	9 STOP cards submitted	

Marine							
Weather on 02 Feb 2005							
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period
6.00mi	60.0kn	180.0deg	993.00mbar	15.0C°	3.5m	180.0deg	0.0ft/min
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments	
3.5deg	1.5deg	3.00m	3.5m	180.0deg	0.0ft/min		
Rig Dir.	Ris. Tension	VDL		Comments			
43.0deg	0.0klb	4643.0klb					

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Pacific Wrangler			At standby monitoring weather.	Item	Unit	Quantity
				Barite	MT	84.00
				Gel	MT	42.00
				Cement	MT	0.00
				Drill Water	M^3	70.00
				Fuel Oil	M^3	246.40
				Potable Water	M^3	268.00
Far Grip			Dockside at Wharf 27.	Item	Unit	Quantity
				Barite	MT	36.00
				Gel	MT	0.00
				Cement	MT	90.00
				Drill Water	M^3	0.00
				Fuel Oil	M^3	225.00
				Potable Water	M^3	125.00

03 Feb 2005 (GMT +10)

From: Chris Wilson, Stuart Douglass
To: Colin Allport

DRILLING MORNING REPORT # 8
ZaneGrey-1 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	1095.0m	Cur. Hole Size	16.000in	AFE Cost	\$ 0.00
Field		TVD	1033.5m	Casing OD	13.375in	AFE No.	
Drill Co.	DOGC	Progress	0.0m	Shoe TVD	1029.10m	Daily COST	\$ 404725.00
Rig	Ocean Patriot	Days from spud	5.40	FIT	0.00ppg	Cum Cost	\$ 6407563.00
Wtr Dpth(MSL)	72.5m	Days on well	7.79	LOT	0.00ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600	Making up Cameron weight-set test tool.				
RT-ML	94.0m	Planned Op	Perform 4,500 psi connector test. Pull out of the hole with 12 1/4" BHA and Cameron weight-set test tool, lay down weight-set test tool and run in the hole with 12 1/4" BHA, drill out shoe and rathole while displacing to KCI mud system, perform FIT, directionally drill ahead in 12 1/4" hole.				

Summary of Period 0000 to 2400 Hrs

Continued to wait on weather, landed out BOP stack, installed diverter, tested BOP stack, rigged down riser handling equipment.

Operations For Period 0000 Hrs to 2400 Hrs on 03 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	1630	16.50	SC	TP (WEA)	WOW	1095.0m	Continued to wait on weather (supply vessel unable to offer close support for riser work in moonpool). 0200 hr: Wind - 30 kn, Direction - SE, Swell/Sea - 7/8 m 0400 hr: Wind - 25 kn, Direction - N, Swell/Sea - 6.5 m 0600 hr: Wind - 25 kn, Direction - N, Swell/Sea - 5 m 0800 hr: Wind - 23 kn, Direction - NE, Swell/Sea - 5 m 1000 hr: Wind - 30/35 kn, Direction - NE, Swell/Sea - 5 m 1200 hr: Wind - 30/35 kn, Direction - NE, Swell/Sea - 4/5 m 1400 hr: Wind - 30 kn, Direction - NE, Swell/Sea - 4/5 m 1600 hr: Wind - 30 kn, Direction - NE, Swell/Sea - 4 m
1630	1730	1.00	SC	P	BOP	1095.0m	Re-positioned the rig over wellhead. ROV observed BOP twisted and out of alignment with guide posts.
1730	1930	2.00	SC	TP (WEA)	BOP	1095.0m	ROV inspected BOP stack and riser, observed BOP twisted at swivel joint. Installed storm saddles in moonpool and adjusted rig/turned the stack to line up with guide posts.
1930	2000	0.50	SC	P	BOP	1095.0m	Landed out BOP stack on wellhead. Engaged stack connector. ROV confirmed indicator on stack in latched position. Pulled 50k over to confirm latch - OK. Before landing: PGB 0.75 deg (dir: port forward) on aft bullseye. After landing: PGB 0.75 deg (dir: port forward) on aft bullseye and 0 deg on port bullseye.
2000	2100	1.00	SC	P	BOP	1095.0m	Backed out dogs on slip joint and stroked out same.
2100	2130	0.50	SC	TP (BOP)	BOP	1095.0m	Attempted to lay down landing joint but unable to pull free of inner barrel. Continued to work and free up same.
2130	2230	1.00	SC	P	BOP	1095.0m	Laid down landing joint. Picked up diverter and installed same.
2230	2300	0.50	SC	P	BT	1095.0m	Broke circulation with Dowell cement unit. Tested surface lines to 3,500 psi - Ok. Closed shear rams and tested casing and connector to 3,000 psi for 15 minutes - Ok. Commenced rigging down riser handling equipment.
2300	2400	1.00	SC	P	RD	1095.0m	Continued rigging down riser handling equipment and rigging up 350t bails and elevators.

Operations For Period 0000 Hrs to 0600 Hrs on 04 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0430	4.50	SC	P	HBHA	1095.0m	Made up 12 1/4" BHA, downloaded MWD. Shallow tested motor, adjustable gauge stabiliser and attempted to test MWD with 800 gpm.
0430	0530	1.00	SC	TP (VEQ)	HBHA	1095.0m	Ran in the hole with BHA to 251 m and attempted to re-test MWD with 870 gpm.
0530	0600	0.50	SC	P	HT	1095.0m	(IN PROGRESS) Made up Cameron weight-set test tool and ran in the hole with same on 5" drill pipe to 342 m, landing out tool in wellhead at 92 m.

Operations For Period Hrs to Hrs on

WBM Data				Cost Today \$ 383.00					
Mud Type:	KCI IDCAP Glycol	API FL:	7.8cc	Cl:	25000.0mg/l	Solids:	0.50	Viscosity	47.00sec/qt
Sample-From:	Pit 3	Filter-Cake:	1.00/32nd"	Hard/Ca:	160.0mg/l	H2O:	0.00%	PV	8.00cp
Time:	1700	HTHP-FL:	0.0cc	MBT:	2.00	Oil:	0.00%	YP	10.00lb/100ft²
Weight:	8.70ppg	HTHP-cake:	0.00/32nd"	PM:	0.00	Sand:	0	Gels 10s	4.00
Temp:	28.0C°			PF:	0.05	Glycol:	2.5%vol	Gels 10m	5.00
				pH:	8.80	KCl:	0.00%	Fann 003	3.00
						PHPA:	0.00ppb	Fann 006	4.00
								Fann 100	11.00
								Fann 200	15.00
								Fann 300	18.00
								Fann 600	26.00
Comment									

Shakers, Volumes and Losses Data						Engineer : Jasdeep Singh			
Equip.	Descr.	Mesh Size	Available	1904.00bbl	Losses	0.00bbl	Comments		
			Active	0.00bbl	Downhole	0.00bbl			
			Mixing	0.00bbl	Surf+ Equip	0.00bbl			
			Hole	0.00bbl	Dumped	0.00bbl			
			Slug	0.00bbl	De-Gasser	0.00bbl			
			Reserve	0.00bbl	De-Sander	0.00bbl			
			Kill	0.00bbl	De-Silter	0.00bbl			
			Premix	1904.00bbl	Centrifuge	0.00bbl			

Bulk Stocks						
Name	Unit	In	Used	Adjust	Balance	
Barite	MT	0.00	0.00	0.00	87.6	
Gel	MT	0.00	0.00	0.00	12.4	
Cement	MT	0.00	0.00	0.00	95.4	
Drill Water	m³	0.00	25.60	0.00	631.6	
Fuel Oil	m³	0.00	4.50	0.00	302.1	
Potable Water	m³	65.00	62.80	0.00	255.3	

Pumps																
Pump Data - Last 24 Hrs								Slow Pump Data								
No.	Type	Liner (in)	MW (ppg)	Eff (%)	SPM	SPP (psi)	Flow (gpm)	Depth (m)	SPM1	SPP1 Flow1 (gpm)	SPM2	SPP2 Flow2 (gpm)	SPM3	SPP3 Flow3 (gpm)	SPM4	SPP4 Flow4 (gpm)
1	A1700	6.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	12-P160	6.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	12-P160	6.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Personnel On Board			
Job Title	Personnel	Company	Pax
OIM	Sean De Fretias	DOGC	49
Camp boss	Steve Worth	Total Marine Catering	8
ROV Pilot	Robert Griffiths	Fugro	2
Cementer	Edgar Lliagas	Dowell Schlumberger	2
Mud Engineer	Jasdeep Singh	MI Swaco	2
Data Engineer	Gary Bloom	Sperry Sun	6
Wellhead Engineer	Bruce Hassett	Cameron	1
Senior Drilling Supervisor	Chris Wilson	BSOC	6
MWD Engineer	Stuart Allan	Halliburton	2
Directional Driller	John Smith	Halliburton	2
Total			80

HSE Summary				
Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	31 Jan 2005	3 Days	Abandon Rig Drill	

HSE Summary				
Events	Date of last	Days Since	Descr.	Remarks
BOP Test	02 Feb 2005	1 Day	BOP Test	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30 5 cards by DODI 1 card by client
Fire Drill	31 Jan 2005	3 Days	Fire Drill	
Lost Time Injury	20 May 2003	625 Days	LTI	
Pre-Tour Meetings	03 Feb 2005	0 Days	Routine Pre-Tour Meetings	
Stop Card-Prevention	03 Feb 2005	0 Days	6 STOP cards submitted	

Marine									
Weather on 03 Feb 2005									
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period		
9.00mi	20.0kn	22.0deg	1000.00mbar	18.0C°	1.5m	22.0deg	0.0ft/min		
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments			
0.5deg	0.5deg	0.30m	1.5m	45.0deg	0.0ft/min				
Rig Dir.	Ris. Tension	VDL		Comments					
43.0deg	0.0klb	4380.0klb							
Boats	Arrived (date/time)		Departed (date/time)		Status		Bulks		
Pacific Wrangler					At close standby while running BOP stack.	Item		Unit	Quantity
						Barite		MT	84.00
						Gel		MT	42.00
						Cement		MT	0.00
						Drill Water		M^3	70.00
						Fuel Oil		M^3	235.30
						Potable Water		M^3	264.00
Far Grip					Dockside at Wharf 27, departure delayed due to weather delays at wellsite.	Item		Unit	Quantity
						Barite		MT	36.00
						Gel		MT	0.00
						Cement		MT	90.00
						Drill Water		M^3	0.00
						Fuel Oil		M^3	225.00
						Potable Water		M^3	125.00

Helicopter Movement				
Flight #	Company	Arr/Dep. Time	Pax In/Out	Comment
1	Bristow	0927 / 0941	12 / 9	Call Sign: BZU. Chopper ex-Essendon then returned to Sale.
2	Bristow	1127 / 1141	6 / 12	Call Sign: BZU. Personnel travelled fixed wing to Sale then chopper to the rig.

04 Feb 2005 (GMT +10)

From: Chris Wilson, Stuart Douglass
To: Colin Allport

DRILLING MORNING REPORT # 9
ZaneGrey-1 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	1098.0m	Cur. Hole Size	12.250in	AFE Cost	\$ 0.00
Field		TVD	1036.0m	Casing OD	13.375in	AFE No.	
Drill Co.	DOGC	Progress	3.0m	Shoe TVD	1029.10m	Daily COST	\$ 428138.00
Rig	Ocean Patriot	Days from spud	6.40	FIT	0.00ppg	Cum Cost	\$ 6835701.00
Wtr Dpth(MSL)	72.5m	Days on well	8.79	LOT	0.00ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600 Drilling ahead in 12 1/4" hole.					
RT-ML	94.0m	Planned Op Drill ahead in 12 1/4" hole.					

Summary of Period 0000 to 2400 Hrs

Made up 12 1/4" BHA, troubleshot MWD, performed 4,500 psi connector test, laid out MWD, picked up new MWD, ran in the hole with 12 1/4" BHA, drilled out shoe track while displacing to KCI mud system.

Operations For Period 0000 Hrs to 2400 Hrs on 04 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0430	4.50	SC	P	HBHA	1095.0m	Made up 12 1/4" BHA, downloaded MWD. Shallow tested motor, adjustable gauge stabiliser and attempted to test MWD with 800 gpm.
0430	0530	1.00	SC	TP (VEQ)	HBHA	1095.0m	Ran in the hole with BHA to 251 m and attempted to re-test MWD with 870 gpm.
0530	0630	1.00	SC	P	HT	1095.0m	Made up Cameron weight-set test tool and ran in the hole with same on 5" drill pipe to 342 m, landing out tool in wellhead at 92 m.
0630	0700	0.50	SC	P	BT	1095.0m	Pressure tested BOP stack connector to 4,500 psi for 10 minutes.
0700	0800	1.00	SC	P	BT	1095.0m	Function test BOP stack with blue pod from drill floor remote panel and yellow pod from toolpusher's office remote panel - test good.
0800	0830	0.50	SC	TP (VEQ)	HBHA	1095.0m	Attempted another MWD test with 870 gpm.
0830	0900	0.50	SC	P	RM	1095.0m	Centred the rig over the well centre.
0900	0930	0.50	SC	P	HT	1095.0m	Pulled out of the hole from 342 m to 251 m and laid out weight-set test tool.
0930	1000	0.50	SC	TP (VEQ)	HBHA	1095.0m	Attempted another MWD test with 900 gpm.
1000	1100	1.00	SC	TP (VEQ)	HBHA	1095.0m	Pulled out of the hole from 251 m to 23 m.
1100	1200	1.00	SC	TP (VEQ)	HBHA	1095.0m	Downloaded MWD - data incomplete. Laid out MWD and pulser sub.
1200	1300	1.00	IH	TP (VEQ)	HBHA	1095.0m	Picked up new MWD and uploaded to same.
1300	1700	4.00	IH	P	TI	1095.0m	Ran in the hole with 12 1/4" BHA, tagged cement at 1058.77 m.
1700	1730	0.50	IH	P	BT	1095.0m	Function tested diverter and pumped through both overboard lines - test good.
1730	2330	6.00	IH	P	DC	1095.0m	Drilled cement and float equipment from 1058.77 m to 1095 m. Hole packing off with plug junk.
2330	2400	0.50	IH	P	D	1098.0m	Directionally drilled ahead in 12 1/4" hole from 1095 m to 1098 m.

Operations For Period 0000 Hrs to 0600 Hrs on 05 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0030	0.50	IH	P	CIR	1098.0m	Circulated bottoms up at 1098 m at 950 gpm.
0030	0200	1.50	IH	P	LOT	1098.0m	Conducted FIT with 8.6 ppg mud against lower pipe rams to 815 psi (1.6 SG equivalent) using Dowell cement unit.
0200	0600	4.00	IH	P	D	1691.0m	<p>Took SCR's at 1090 m with 8.6 ppg mud: Rate - 30 spm, #2 - 150 psi, #3 - 125 psi, CLF - 25 psi Rate - 40 spm, #2 - 175 psi, #3 - 175 psi, CLF - 10 psi Rate - 50 spm, #2 - 225 psi, #3 - 225 psi, CLF - 10 psi (IN PROGRESS) Directionally drilled ahead in 12 1/4" hole from 1098 m to 1691 m. Backreamed a single before each connection. Average ROP 27.6 m/hr.</p> <p>Attempted to slide from 1539 m to 1545 m, high torque and unable to maintain toolface.</p> <p>Slid from 1568 m to 1577 m to correct walk to left.</p>

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
							Took SCR's at 1500 m with 9.0 ppg mud: Rate - 30 spm, #1 - 220 psi, #3 - 220 psi Rate - 40 spm, #1 - 255 psi, #3 - 260 psi Rate - 50 spm, #1 - 325 psi, #3 - 335 psi

Operations For Period Hrs to Hrs on

WBM Data				Cost Today \$ 3135.00					
Mud Type:	KCI IDCAP Glycol	API FL:	7.6cc	Cl:	25000.0mg/l	Solids:	0.50	Viscosity	47.00sec/qt
Sample-From:	Pit 3	Filter-Cake:	1.00/32nd"	Hard/Ca:	160.0mg/l	H2O:	0.00%	PV	8.00cp
Time:	1700	HTHP-FL:	0.0cc	MBT:	2.00	Oil:	0.00%	YP	10.00lb/100ft²
Weight:	8.70ppg	HTHP-cake:	0.00/32nd"	PM:	0.00	Sand:	0	Gels 10s	4.00
Temp:	28.0C°			PF:	0.05	Glycol:	3.0%vol	Gels 10m	5.00
				pH:	8.80	KCl:	0.00%	Fann 003	3.00
						PHPA:	0.00ppb	Fann 006	4.00
								Fann 100	11.00
								Fann 200	15.00
								Fann 300	18.00
								Fann 600	26.00
Comment									

Shakers, Volumes and Losses Data				Engineer : Jasdeep Singh			
Equip.	Descr.	Mesh Size	Available	1668.00bbl	Losses	243.00bbl	Comments
			Active	987.00bbl	Downhole	0.00bbl	
			Mixing	0.00bbl	Surf+ Equip	30.00bbl	
			Hole	0.00bbl	Dumped	133.00bbl	
			Slug	0.00bbl	De-Gasser	0.00bbl	
			Reserve	0.00bbl	De-Sander	0.00bbl	
			Kill	0.00bbl	De-Silter	0.00bbl	
			Premix	681.00bbl	Centrifuge	0.00bbl	
			Sweeps	80.00bbl			

Bit # 3												
				Wear	I	O1	D	L	B	G	O2	R
Size ("):	12.25in	IADC#	S223	Nozzles		Drilled over last 24 hrs			Calculated over Bit Run			
Mfr:	Security	WOB(avg)	25.8klb	No. Size		Progress 3.0m		Cum. Progress 3.0m				
Type:	PDC	RPM(avg)	67.00	2	14.00/32nd"	On Bottom Hrs 0.20h		Cum. On Btm Hrs 0.20h				
Serial No.:	10648437	F.Rate	945.00gpm	5	15.00/32nd"	IADC Drill Hrs 0.20h		Cum IADC Drill Hrs 0.20h				
Bit Model	FSX563	SPP	2287.00psi			Total Revs 2100.00		Cum Total Revs 2100.00				
Depth In	1095.0m	HSI				ROP(avg) 15.00 m/hr		ROP(avg) 15.00 m/hr				
Depth Out		TFA	1.16									

BHA # 3							
Weight(Wet)	40.0klb	Length	251.8m	Torque(max)	0.00kft-lbs	D.C. (1) Ann Velocity	82.0mpm
Wt Below Jar(Wet)	26.0klb	String	0.0klb	Torque(Off.Btm)	0.00kft-lbs	D.C. (2) Ann Velocity	0.0mpm
		Pick-Up	0.0klb	Torque(On.Btm)	0.00kft-lbs	H.W.D.P. Ann Velocity	56.4mpm
		Slack-Off	0.0klb			D.P. Ann Velocity	56.4mpm
BHA Run Description		12 1/4" PDC bit, 9 5/8" motor, non-mag bottleneck X/O with ported float, 11 1/4" - 12 1/4" adjustable gauge stabilizer, 8" MWD PM sub, 8" RLL with DGR and EWR, 8" MWD pulser/TM sub, 12" integral blade stabilizer, 3 x 8" drill collars, 8 1/4" jar, 2 x 8" drill collars, 6 5/8" REG pin x 4 1/2" IF box X/O, 18 x 5" HWDP					
BHA Run Comment		Sensor distances from the bit: DGR - 21.64 m, EWR - 19.31 m, DM - 15.23 m					
Equipment		Length	OD	ID	Serial #	Comment	
Bit		0.35m	12.25in	0.00in	10648437	PDC	
Mud Motor		9.05m	9.63in	6.13in	963367		
Float Sub		1.03m	9.38in	3.00in	A 545	Bottleneck X/O with ported float installed	
Adjustable Gauge Stabilizer		3.33m	12.25in	3.00in	513-085	11 1/4" - 12 1/4" AGS	

Equipment	Length	OD	ID	Serial #	Comment
MWD Tool	2.80m	8.00in	2.50in	DM67106	PM Sub
MWD Tool	7.14m	11.25in	2.50in	DM90056915H1GR	ROLL w/DGR + EWR
MWD Tool	3.11m	8.00in	2.50in	10532336	Pulser / TM sub
String Stabiliser	1.82m	12.00in	2.50in	91322	
Drill Collar	27.44m	8.00in	3.00in		3 x 8" DC's
Drilling Jars	9.68m	8.25in	2.40in	DAH02767	
Drill Collar	18.15m	8.00in	3.00in		2 x 8" DC's
X/O	1.09m	8.00in	2.75in	508A610	6 5/8" REG pin x 4 1/2" IF box
HWDP	166.78m	6.50in	3.00in		18 x 5" HWDP

Bulk Stocks

Name	Unit	In	Used	Adjust	Balance
Barite	MT	0.00	0.00	0.00	87.6
Gel	MT	0.00	0.00	0.00	12.4
Cement	MT	0.00	0.00	0.00	95.4
Drill Water	m ³	0.00	72.30	0.00	559.3
Fuel Oil	m ³	0.00	4.10	0.00	298.0
Potable Water	m ³	38.00	28.30	0.00	265.0

Pumps

Pump Data - Last 24 Hrs								Slow Pump Data									
No.	Type	Liner (in)	MW (ppg)	Eff (%)	SPM	SPP (psi)	Flow (gpm)	Depth (m)	SPM1	SPP1 (psi)	Flow1 (gpm)	SPM2	SPP2 (psi)	Flow2 (gpm)	SPM3	SPP3 (psi)	Flow3 (gpm)
1	A1700	6.00	8.70	0.00	75.00	2287.00	315.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	12-P160	6.00	8.70	0.00	75.00	2287.00	315.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	12-P160	6.00	8.70	0.00	75.00	2287.00	315.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Personnel On Board

Job Title	Personnel	Company	Pax
OIM	Sean De Fretias	DOGC	50
Camp boss	Mark Stanley	Total Marine Catering	8
ROV Pilot	Robert Griffiths	Fugro	2
Cementer	Edgar Lliagas	Dowell Schlumberger	2
Mud Engineer	Jasdeep Singh	MI Swaco	2
Data Engineer	Gary Bloom	Sperry Sun	6
Wellhead Engineer	Bruce Hassett	Cameron	1
Senior Drilling Supervisor	Chris Wilson	BSOC	6
MWD Engineer	Stuart Allan	Halliburton	2
Directional Driller	John Smith	Halliburton	2
Centrifuge Hand	Ross Spranger	DFE	1
Inspector	Bruce Armour	NOPSA	2
Technician	Mark Anderson	Petrotech	1
Total			85

HSE Summary

Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	31 Jan 2005	4 Days	Abandon Rig Drill	
BOP Test	02 Feb 2005	2 Days	BOP Test	
Fire Drill	31 Jan 2005	4 Days	Fire Drill	
Lost Time Injury	20 May 2003	626 Days	LTI	
Pre-Tour Meetings	04 Feb 2005	0 Days	Routine Pre-Tour Meetings	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30
Rig Inspection	04 Feb 2005	0 Days	NOPSA Audit	
Stop Card-Prevention	04 Feb 2005	0 Days	10 STOP cards submitted	9 cards by DODI 1 card by client

Marine

Weather on 04 Feb 2005									
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period		
10.00mi	15.0kn	22.0deg	1000.00mbar	18.0C°	0.5m	22.0deg	0.0ft/min		
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments			
0.5deg	0.5deg	0.30m	1.5m	90.0deg	0.0ft/min				
Rig Dir.	Ris. Tension	VDL		Comments					
43.0deg	240.0klb	4137.0klb							
Boats		Arrived (date/time)		Departed (date/time)		Status			
Pacific Wrangler					At anchor.		Item	Unit	Quantity
							Barite	MT	84.00
							Gel	MT	42.00
							Cement	MT	0.00
							Drill Water	M^3	70.00
							Fuel Oil	M^3	227.60
							Potable Water	M^3	260.00
Far Grip					Steaming to rig from Wharf 27. ETA 1300, 5th Feb.		Item	Unit	Quantity
							Barite	MT	36.00
							Gel	MT	0.00
							Cement	MT	86.00
							Drill Water	M^3	336.00
							Fuel Oil	M^3	702.00
							Potable Water	M^3	572.00
Helicopter Movement									
Flight #		Company		Arr/Dep. Time		Pax In/Out		Comment	
1		Bristow		0835 / 0845		8 / 3		Call Sign: BZU	

05 Feb 2005 (GMT +10)

From: Chris Wilson, Stuart Douglass
To: Colin Allport

DRILLING MORNING REPORT # 10
ZaneGrey-1 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	1691.0m	Cur. Hole Size	12.250in	AFE Cost	\$ 0.00
Field		TVD	1526.2m	Casing OD	13.375in	AFE No.	
Drill Co.	DOGC	Progress	593.0m	Shoe TVD	1029.10m	Daily COST	\$ 357430.00
Rig	Ocean Patriot	Days from spud	7.40	FIT	13.30ppg	Cum Cost	\$ 7193131.00
Wtr Dpth(MSL)	72.5m	Days on well	9.79	LOT	0.00ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600 Drilling ahead in 12 1/4" hole.					
RT-ML	94.0m	Planned Op Drill ahead in 12 1/4" hole.					

Summary of Period 0000 to 2400 Hrs

Circulated hole clean, conducted FIT, drilled ahead in 12 1/4" hole, changed over to spare Kelly hose after washing standpipe number 1.

Operations For Period 0000 Hrs to 2400 Hrs on 05 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0030	0.50	IH	P	CIR	1098.0m	Circulated bottoms up at 1098 m at 950 gpm.
0030	0200	1.50	IH	P	LOT	1098.0m	Conducted FIT with 8.6 ppg mud against lower pipe rams to 815 psi (1.6 SG equivalent) using Dowell cement unit.
							Took SCR's at 1090 m with 8.6 ppg mud: Rate - 30 spm, #2 - 150 psi, #3 - 125 psi, CLF - 25 psi Rate - 40 spm, #2 - 175 psi, #3 - 175 psi, CLF - 10 psi Rate - 50 spm, #2 - 225 psi, #3 - 225 psi, CLF - 10 psi
0200	2330	21.50	IH	P	D	1691.0m	Directionally drilled ahead in 12 1/4" hole from 1098 m to 1691 m. Backreamed a single before each connection. Average ROP 27.6 m/hr.
							Attempted to slide from 1539 m to 1545 m, high torque and unable to maintain toolface.
							Slid from 1568 m to 1577 m to correct walk to left.
							Took SCR's at 1500 m with 9.0 ppg mud: Rate - 30 spm, #1 - 220 psi, #3 - 220 psi Rate - 40 spm, #1 - 255 psi, #3 - 260 psi Rate - 50 spm, #1 - 325 psi, #3 - 335 psi
2330	2400	0.50	IH	TP (WOE)	D	1691.0m	Number 1 stand pipe washed in derrick. Worked pipe to ensure it was free and rigged up to circulate through cement hose while rotating string using rotary table. Rigged up to change over to spare Kelly hose.

Operations For Period 0000 Hrs to 0600 Hrs on 06 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0300	3.00	IH	TP (VEQ)	RR	1691.0m	Continued to change over to spare Kelly hose while circulating through the cement hose and rotating using rotary table. Pressure tested hose to 5,000 psi for 10 minutes.
0300	0600	3.00	IH	P	D	2103.0m	(IN PROGRESS) Directionally drilled ahead in 12 1/4" hole from 1691 m to 2103 m. Backreamed prior to each connection. Average ROP 57.2 m/hr.

Operations For Period Hrs to Hrs on

Operations For Period Hrs to Hrs on

Operations For Period Hrs to Hrs on

WBM Data		Cost Today \$ 22765.00							
Mud Type:	KCI IDCAP Glycol	API FL:	5.4cc	Cl:	25000.0mg/l	Solids:	4.00	Viscosity	40.00sec/qt
Sample-From:	Active	Filter-Cake:	1.00/32nd"	Hard/Ca:	800.0mg/l	H2O:	0.00%	PV	8.00cp
Time:	0600	HTHP-FL:	0.0cc	MBT:	3.00	Oil:	0.00%	YP	15.00lb/100ft²
Weight:	9.16ppg	HTHP-cake:	0.00/32nd"	PM:	0.00	Sand:	0	Gels 10s	5.00
Temp:	28.0C°			PF:	0.15	Glycol:	3.0%vol	Gels 10m	6.00
				pH:	10.00	KCl:	0.00%	Fann 003	4.00
						PHPA:	0.00ppb	Fann 006	6.00
								Fann 100	15.00
								Fann 200	19.00
								Fann 300	23.00
								Fann 600	31.00
Comment									

WBM Data				Cost Today \$ 0.00					
Mud Type:	KCI IDCAP Glycol	API FL:	4.6cc	Cl:	25000.0mg/l	Solids:	4.50	Viscosity	46.00sec/qt
Sample-From:	Active	Filter-Cake:	1.00/32nd"	Hard/Ca:	640.0mg/l	H2O:	0.00%	PV	12.00cp
		HTHP-FL:	0.0cc	MBT:	3.00	Oil:	0.00%	YP	23.00lb/100ft²
Time:	1100	HTHP-cake:	0.00/32nd"	PM:	0.00	Sand:	0	Gels 10s	9.00
Weight:	8.83ppg			PF:	0.10	Glycol:	3.0%vol	Gels 10m	12.00
Temp:	28.0C°			pH:	9.00	KCl:	0.00%	Fann 003	7.00
						PHPA:	0.00ppb	Fann 006	9.00
								Fann 100	23.00
								Fann 200	30.00
								Fann 300	35.00
								Fann 600	47.00
Comment									

WBM Data				Cost Today \$ 0.00					
Mud Type:	KCI IDCAP Glycol	API FL:	4.2cc	Cl:	30000.0mg/l	Solids:	9.00	Viscosity	57.00sec/qt
Sample-From:	Flowline	Filter-Cake:	1.00/32nd"	Hard/Ca:	400.0mg/l	H2O:	0.00%	PV	15.00cp
Time:	1800	HTHP-FL:	0.0cc	MBT:	3.00	Oil:	0.00%	YP	32.00lb/100ft²
Weight:	9.16ppg	HTHP-cake:	0.00/32nd"	PM:	0.00	Sand:	0	Gels 10s	12.00
Temp:	28.0C°			PF:	0.05	Glycol:	3.0%vol	Gels 10m	19.00
				pH:	8.50	KCl:	0.00%	Fann 003	10.00
						PHPA:	0.00ppb	Fann 006	13.00
								Fann 100	31.00
								Fann 200	40.00
								Fann 300	47.00
								Fann 600	62.00
Comment									

Shakers, Volumes and Losses Data						Engineer : Jasdeep Singh			
Equip.	Descr.	Mesh Size	Available	1632.00bbl	Losses	490.00bbl	Comments		
			Active	1217.00bbl	Downhole	50.00bbl			
			Mixing	0.00bbl	Surf+ Equip	0.00bbl			
			Hole	0.00bbl	Dumped	0.00bbl			
			Slug	0.00bbl	De-Gasser	0.00bbl			
			Reserve	0.00bbl	De-Sander	0.00bbl			
			Kill	0.00bbl	De-Silter	146.00bbl			
			Premix	415.00bbl	Centrifuge	80.00bbl			
			Shakers	214.00bbl					

Bit # 3				Wear	I	O1	D	L	B	G	O2	R
Size ("):	12.25in	IADC#	S223	Nozzles		Drilled over last 24 hrs			Calculated over Bit Run			
Mfr:	Security	WOB(avg)	11.2klb	No.		Size		Progress	593.0m	Cum. Progress		596.0m
Type:	PDC	RPM(avg)	72.00	2	14.00/32nd"		On Bottom Hrs	13.30h	Cum. On Btm Hrs		13.50h	
Serial No.:	10648437	F.Rate	949.00gpm	5	15.00/32nd"		IADC Drill Hrs	13.30h	Cum IADC Drill Hrs		13.50h	
Bit Model	FSX563	SPP	2917.00psi					Total Revs	147300.00	Cum Total Revs		149400.00
Depth In	1095.0m	HSI						ROP(avg)	44.59 m/hr	ROP(avg)		44.15 m/hr
Depth Out		TFA	1.16									

BHA # 3							
Weight(Wet)	40.0klb	Length	251.8m	Torque(max)	15.00kft-lbs	D.C. (1) Ann Velocity	82.0mpm
Wt Below Jar(Wet)	26.0klb	String	220.0klb	Torque(Off.Btm)	6.00kft-lbs	D.C. (2) Ann Velocity	0.0mpm
		Pick-Up	240.0klb	Torque(On.Btm)	12.00kft-lbs	H.W.D.P. Ann Velocity	56.4mpm
		Slack-Off	190.0klb			D.P. Ann Velocity	56.4mpm
BHA Run Description		12 1/4" PDC bit, 9 5/8" motor, non-mag bottleneck X/O with ported float, 11 1/4" - 12 1/4" adjustable gauge stabilizer, 8" MWD PM sub, 8" RLL with DGR and EWR, 8" MWD pulser/TM sub, 12" integral blade stabilizer, 3 x 8" drill collars, 8 1/4" jar, 2 x 8" drill collars, 6 5/8" REG pin x 4 1/2" IF box X/O, 18 x 5" HWDP					

BHA Run Comment	Sensor distances from the bit: DGR - 21.64 m, EWR - 19.31 m, DM - 15.23 m
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Equipment	Length	OD	ID	Serial #	Comment
Bit	0.35m	12.25in	0.00in	10648437	PDC
Mud Motor	9.05m	9.63in	6.13in	963367	
Float Sub	1.03m	9.38in	3.00in	A 545	Bottleneck X/O with ported float installed
Adjustable Gauge Stabilizer	3.33m	12.25in	3.00in	513-085	11 1/4" - 12 1/4" AGS
MWD Tool	2.80m	8.00in	2.50in	DM67106	PM Sub
MWD Tool	7.14m	11.25in	2.50in	DM90056915H1GR	RLL w/DGR + EWR
MWD Tool	3.11m	8.00in	2.50in	10532336	Pulser / TM sub
String Stabiliser	1.82m	12.00in	2.50in	91322	
Drill Collar	27.44m	8.00in	3.00in		3 x 8" DC's
Drilling Jars	9.68m	8.25in	2.40in	DAH02767	
Drill Collar	18.15m	8.00in	3.00in		2 x 8" DC's
X/O	1.09m	8.00in	2.75in	508A610	6 5/8" REG pin x 4 1/2" IF box
HWDP	166.78m	6.50in	3.00in		18 x 5" HWDP

Bulk Stocks						
Name	Unit	In	Used	Adjust	Balance	
Barite	MT	0.00	0.00	0.00	87.6	
Gel	MT	0.00	0.00	0.00	12.4	
Cement	MT	0.00	0.00	0.00	95.4	
Drill Water	m³	0.00	60.20	0.00	499.1	
Fuel Oil	m³	0.00	19.20	0.00	278.8	
Potable Water	m³	29.00	20.70	0.00	273.3	

Pumps							
Pump Data - Last 24 Hrs							
No.	Type	Liner (in)	MW (ppg)	Eff (%)	SPM	SPP (psi)	Flow (gpm)
1	A1700	6.00	9.00	0.00	75.00	2917.00	317.00
2	12-P160	6.00	9.00	0.00	75.00	2917.00	317.00
3	12-P160	6.00	9.00	0.00	75.00	2917.00	317.00

Slow Pump Data									
Depth (m)	SPM1	SPP1 (psi)	Flow1(gpm)	SPM2	SPP2 (psi)	Flow2 (gpm)	SPM3	SPP3 (psi)	Flow3 (gpm)
1500.0	40.00	255.00	176.00	0.00	0.00	0.00	0.00	0.00	0.00
0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1500.0	40.00	260.00	176.00	0.00	0.00	0.00	0.00	0.00	0.00

Personnel On Board			
Job Title	Personnel	Company	Pax
OIM	Sean De Fretias	DOGC	50
Camp boss	Mark Stanley	Total Marine Catering	8
ROV Pilot	Robert Griffiths	Fugro	2
Cementer	Edgar Lliagas	Dowell Schlumberger	2
Mud Engineer	Jasdeep Singh	MI Swaco	2
Data Engineer	Gary Bloom	Sperry Sun	6
Wellhead Engineer	Bruce Hassett	Cameron	1
Senior Drilling Supervisor	Chris Wilson	BSOC	6
MWD Engineer	Stuart Allan	Halliburton	2
Directional Driller	John Smith	Halliburton	2
Centrifuge Hand	Ross Spranger	DFE	1
Inspector	Bruce Armour	NOPSA	2
Technician	Mark Anderson	Petrotech	1

Personnel On Board

Total 85

HSE Summary

Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	31 Jan 2005	5 Days	Abandon Rig Drill	Floorman was using chain tong on 9" collars, noticed sharp pain between his sholder blades. Consulted medic who administered first aid for pulled muscle.
BOP Test	02 Feb 2005	3 Days	BOP Test	
Fire Drill	31 Jan 2005	5 Days	Fire Drill	
First Aid	03 Feb 2005	2 Days	Floorman pulled back muscle.	
Lost Time Injury	20 May 2003	627 Days	LTI	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30
Pre-Tour Meetings	05 Feb 2005	0 Days	Routine Pre-Tour Meetings	
Rig Inspection	04 Feb 2005	1 Day	NOPSA Audit	
Stop Card-Prevention	05 Feb 2005	0 Days	6 STOP cards submitted	
				6 cards by DODI

Marine

Weather on 05 Feb 2005

Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period
10.00mi	25.0kn	270.0deg	1003.00mbar	19.0C°	1.0m	270.0deg	0.0ft/min
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments	
0.5deg	0.5deg	0.30m	2.0m	270.0deg	0.0ft/min		
Rig Dir.	Ris. Tension	VDL		Comments			
43.0deg	228.0klb	4194.0klb					

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks			
Pacific Wrangler			At anchor.	Item		Unit	Quantity
				Barite		MT	84.00
				Gel		MT	42.00
				Cement		MT	0.00
				Drill Water		M^3	70.00
				Fuel Oil		M^3	226.70
				Potable Water		M^3	256.00
Far Grip	1050		Starboard side, unloading 9 5/8" casing.	Item		Unit	Quantity
				Barite		MT	36.00
				Gel		MT	0.00
				Cement		MT	86.00
				Drill Water		M^3	336.00
				Fuel Oil		M^3	667.00
				Potable Water		M^3	548.00

06 Feb 2005 (GMT +10)

From: Chris Wilson, Stuart Douglass
To: Colin Allport

DRILLING MORNING REPORT # 11
ZaneGrey-1 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	2103.0m	Cur. Hole Size	12.250in	AFE Cost	\$ 0.00
Field		TVD	1867.9m	Casing OD	13.375in	AFE No.	
Drill Co.	DOGC	Progress	412.0m	Shoe TVD	1029.10m	Daily COST	\$ 412864.00
Rig	Ocean Patriot	Days from spud	8.40	FIT	13.30ppg	Cum Cost	\$ 7605995.00
Wtr Dpth(MSL)	72.5m	Days on well	10.79	LOT	0.00ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600 Testing MWD, motor and adjustable gauge stabiliser.					
RT-ML	94.0m	Planned Op Pull out of hole checking drill pipe and BHA. Run back in hole and continue to drill 12 1/4" hole.					

Summary of Period 0000 to 2400 Hrs

Changed over to second standpipe due to wash in the primary standpipe. Continued drilling 12 1/4" hole. Incident with top drive system causing a stand of drill pipe to bend. This stand was racked back and the motor alignment cylinder on the top drive system was replaced. Pulled out of hole inspecting all drill pipe on the way out.

Operations For Period 0000 Hrs to 2400 Hrs on 06 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0300	3.00	IH	TP (VEQ)	RR	1691.0m	Continued to change over to spare Kelly hose while circulating through the cement hose and rotating using rotary table. Pressure tested hose to 5,000 psi for 10 minutes.
0300	1330	10.50	IH	P	D	2103.0m	Directionally drilled ahead in 12 1/4" hole from 1691 m to 2103 m. Backreamed prior to each connection. Average ROP 57.2 m/hr.
1330	1600	2.50	IH	TP (VEQ)	RR	2103.0m	Due to an incident with the top drive a stand of drill pipe was bent (incident report to be completed). Rack back bent stand. A motor alignment cylinder was then replaced on the top drive system. Circulated 1.5 x bottoms up.
1600	1800	2.00	IH	TP (VEQ)	TOT	2103.0m	Started pulling out of the hole from 2103 m to 1930 m, inspecting drill pipe on the way out. Hole tight. Attempted to work through tight hole. Overpull 50 to 60 klbs. Observed well not taking correct fluid volume for trip. Flow check. Well static.
1800	2330	5.50	IH	TP (VEQ)	RW	2103.0m	Backream out of hole from 1930 m to inside 13 3/8" casing shoe at 1092 m. Maintained minimum circulating pressures while worked through sections where hole packing off from 1825 m to 1820 m. Observed over-torqued connection at stand 56/55. Continued back-reaming. working through intermittent tight spots to 1310 m. Overpull 30 klbs to 40 klbs while backreaming 1310 m to almost inside casing shoe. Hole unloading significant volume of drill cuttings while backreaming.
2330	2400	0.50	IH	TP (VEQ)	CHC	2103.0m	Circulated at the shoe while boosting the riser. Significant volume of drill cuttings recovered. (At top and bottom screens)

Operations For Period 0000 Hrs to 0600 Hrs on 07 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0030	0.50	IH	TP (VEQ)	CHC	2103.0m	Circulated hole clean at the 13 3/8" casing shoe. Boosted riser. Significant volume of cuttings recovered.
0030	0300	2.50	IH	TP (VEQ)	TO	2103.0m	Flow check. Well static. Pumped slug and continued pulling out of the hole with 5" drill pipe.
0300	0500	2.00	IH	TP (VEQ)	HBHA	2103.0m	Continued pulling the BHA out of hole. MWD pulser was changed out and the bit was inspected. Conditioned surface active mud system with 1.25 ppbl PHPA.
0500	0600	1.00	IH	TP (VEQ)	HBHA	2103.0m	(IN PROGRESS) Initialised MWD. Adjusted bend on motor from 1.15 deg to 0.78 deg. Surface tested MWD, motor and adjustable gauge stabiliser.

Operations For Period Hrs to Hrs on

Operations For Period Hrs to Hrs on

Operations For Period Hrs to Hrs on

WBM Data				Cost Today \$ 27994.00					
Mud Type:	KCl IDCAP Glycol	API FL:	4.4cc	Cl:	30000.0mg/l	Solids:	10.00	Viscosity	57.00sec/qt
Sample-From:	Flowline	Filter-Cake:	1.00/32nd"	Hard/Ca:	600.0mg/l	H2O:	0.00%	PV	19.00cp
		HTHP-FL:	0.0cc	MBT:	12.00	Oil:	0.00%	YP	32.00lb/100ft²
Time:	1300	HTHP-cake:	0.00/32nd"	PM:	0.00	Sand:	0	Gels 10s	12.00
Weight:	9.50ppg			PF:	0.02	Glycol:	2.5%vol	Gels 10m	20.00
Temp:	28.0C°			pH:	8.90	KCl:	0.00%	Fann 003	10.00
						PHPA:	0.00ppb	Fann 006	13.00
								Fann 100	34.00
								Fann 200	44.00
								Fann 300	51.00
								Fann 600	70.00
Comment									

WBM Data				Cost Today \$ 0.00					
Mud Type:	KCI IDCAP Glycol	API FL:	4.6cc	Cl:	30000.0mg/l	Solids:	8.00	Viscosity	78.00sec/qt
Sample-From:	Active	Filter-Cake:	0.00/32nd"	Hard/Ca:	400.0mg/l	H2O:	0.00%	PV	8.00cp
Time:	06:15	HTHP-FL:	0.0cc	MBT:	10.00	Oil:	0.00%	YP	41.00lb/100ft²
Weight:	9.33ppg	HTHP-cake:	0.00/32nd"	PM:	0.00	Sand:	0	Gels 10s	11.00
Temp:	28.0C°			PF:	0.10	Glycol:	2.5%vol	Gels 10m	16.00
				pH:	9.00	KCl:	0.00%	Fann 003	10.00
						PHPA:	0.00ppb	Fann 006	13.00
								Fann 100	31.00
								Fann 200	42.00
								Fann 300	49.00
								Fann 600	57.00
Comment									

WBM Data				Cost Today \$ 0.00					
Mud Type:	KCl IDCAP Glycol	API FL:	4.6cc	Cl:	32000.0mg/l	Solids:	8.00	Viscosity	80.00sec/qt
Sample-From:	Active	Filter-Cake:	1.00/32nd"	Hard/Ca:	400.0mg/l	H2O:	0.00%	PV	16.00cp
Time:	03:30	HTHP-FL:	0.0cc	MBT:	7.00	Oil:	0.00%	YP	30.00lb/100ft²
Weight:	9.16ppg	HTHP-cake:	0.00/32nd"	PM:	0.00	Sand:	0	Gels 10s	11.00
Temp:	28.0C°			PF:	0.15	Glycol:	3.0%vol	Gels 10m	15.00
				pH:	9.20	KCl:	0.00%	Fann 003	9.00
						PHPA:	0.00ppb	Fann 006	12.00
								Fann 100	29.00
								Fann 200	39.00
								Fann 300	46.00
								Fann 600	62.00
Comment									

Shakers, Volumes and Losses Data						Engineer : Jasdeep Singh			
Equip.	Descr.	Mesh Size	Available	2272.00bbl	Losses	290.00bbl	Comments		
			Active	354.00bbl	Downhole	50.00bbl			
			Mixing	0.00bbl	Surf+ Equip	0.00bbl			
			Hole	1031.00bbl	Dumped	0.00bbl			
			Slug	0.00bbl	De-Gasser	0.00bbl			
			Reserve	0.00bbl	De-Sander	0.00bbl			
			Kill	0.00bbl	De-Silter	0.00bbl			
			Premix	887.00bbl	Centrifuge	101.00bbl			
			Shakers	139.00bbl					

Bit # 3				Wear	I	O1	D	L	B	G	O2	R
Size ("):	12.25in	IADC#	S223	Nozzles		Drilled over last 24 hrs			Calculated over Bit Run			
Mfr:	Security	WOB(avg)	11.2klb	No. Size		Progress 412.0m		Cum. Progress		1008.0m		
Type:	PDC	RPM(avg)	76.00	2	14.00/32nd"	On Bottom Hrs 7.20h		Cum. On Btm Hrs		20.70h		
Serial No.:	10648437	F.Rate	949.00gpm	5	15.00/32nd"	IADC Drill Hrs 7.20h		Cum IADC Drill Hrs		20.70h		
Bit Model	FSX563	SPP	2917.00psi			Total Revs 147300.00		Cum Total Revs		296700.00		
Depth In	1095.0m	HSI				ROP(avg) 57.22 m/hr		ROP(avg)		48.70 m/hr		
Depth Out		TFA	1.16									

BHA # 3						
Weight(Wet)	40.0klb	Length	251.8m	Torque(max)	15.00kft-lbs	D.C. (1) Ann Velocity 82.0mpm
Wt Below Jar(Wet)	26.0klb	String	220.0klb	Torque(Off.Btm)	6.00kft-lbs	D.C. (2) Ann Velocity 0.0mpm
		Pick-Up	240.0klb	Torque(On.Btm)	12.00kft-lbs	H.W.D.P. Ann Velocity 56.4mpm
		Slack-Off	190.0klb			D.P. Ann Velocity 56.4mpm
BHA Run Description		12 1/4" PDC bit, 9 5/8" motor, non-mag bottleneck X/O with ported float, 11 1/4" - 12 1/4" adjustable gauge stabilizer, 8" MWD PM sub, 8" RLL with DGR and EWR, 8" MWD pulser/TM sub, 12" integral blade stabilizer, 3 x 8" drill collars, 8 1/4" jar, 2 x 8" drill collars, 6 5/8" REG pin x 4 1/2" IF box X/O, 18 x 5" HWDP				

BHA Run Comment	Sensor distances from the bit: DGR - 21.64 m, EWR - 19.31 m, DM - 15.23 m
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Equipment	Length	OD	ID	Serial #	Comment
Bit	0.35m	12.25in	0.00in	10648437	PDC
Mud Motor	9.05m	9.63in	6.13in	963367	
Float Sub	1.03m	9.38in	3.00in	A 545	Bottleneck X/O with ported float installed
Adjustable Gauge Stabilizer	3.33m	12.25in	3.00in	513-085	11 1/4" - 12 1/4" AGS
MWD Tool	2.80m	8.00in	2.50in	DM67106	PM Sub
MWD Tool	7.14m	11.25in	2.50in	DM90056915H1GR	RLL w/DGR + EWR
MWD Tool	3.11m	8.00in	2.50in	10532336	Pulser / TM sub
String Stabiliser	1.82m	12.00in	2.50in	91322	
Drill Collar	27.44m	8.00in	3.00in		3 x 8" DC's
Drilling Jars	9.68m	8.25in	2.40in	DAH02767	
Drill Collar	18.15m	8.00in	3.00in		2 x 8" DC's
X/O	1.09m	8.00in	2.75in	508A610	6 5/8" REG pin x 4 1/2" IF box
HWDP	166.78m	6.50in	3.00in		18 x 5" HWDP

Bulk Stocks						
Name	Unit	In	Used	Adjust	Balance	
Barite	MT	0.00	4.00	0.00	83.6	
Gel	MT	0.00	0.00	0.00	12.4	
Cement	MT	0.00	0.00	0.00	95.4	
Drill Water	m³	0.00	120.40	0.00	378.7	
Fuel Oil	m³	0.00	13.80	0.00	265.0	
Potable Water	m³	31.00	22.70	0.00	281.6	

Pumps							
Pump Data - Last 24 Hrs							
No.	Type	Liner (in)	MW (ppg)	Eff (%)	SPM	SPP (psi)	Flow (gpm)
1	A1700	6.00	9.00	0.00	75.00	2917.00	317.00
2	12-P160	6.00	9.00	0.00	75.00	2917.00	317.00
3	12-P160	6.00	9.00	0.00	75.00	2917.00	317.00

Slow Pump Data							
Depth (m)	SPM1	SPP1 (psi)	Flow1(gpm)	SPM2	SPP2 (psi)	Flow2 (gpm)	SPM3
1500.0	40.00	255.00	176.00	0.00	0.00	0.00	0.00
0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1500.0	40.00	260.00	176.00	0.00	0.00	0.00	0.00

Personnel On Board			
Job Title	Personnel	Company	Pax
OIM	Sean De Fretias	DOGC	48
Camp boss	Mark Stanley	Total Marine Catering	8
ROV Pilot	Robert Griffiths	Fugro	2
Cementer	Edgar Lliagas	Dowell Schlumberger	2
Mud Engineer	Jasdeep Singh	MI Swaco	2
Data Engineer	Gary Bloom	Sperry Sun	6
Wellhead Engineer	Bruce Hassett	Cameron	1
Senior Drilling Supervisor	Chris Wilson	BSOC	5
MWD Engineer	Stuart Allan	Halliburton	2
Directional Driller	John Smith	Halliburton	2
Centrifuge Hand	Ross Spranger	DFE	1
Casing Hand	Colin Fidock	Weatherford	2
Technician	Mark Anderson	Petrotech	1

Personnel On Board			
Wireline Engineer	Wayn Nurcahya	Baker Atlas	3
Total			85

HSE Summary				
Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	06 Feb 2005	0 Days	Abandon Rig Drill	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30 3 cards by DODI 5 cards by Third Party
BOP Test	02 Feb 2005	4 Days	BOP Test	
Fire Drill	06 Feb 2005	0 Days	Fire Drill	
Lost Time Injury	20 May 2003	628 Days	LTI	
Pre-Tour Meetings	06 Feb 2005	0 Days	Routine Pre-Tour Meetings	
Rig Inspection	04 Feb 2005	2 Days	NOPSA Audit	
Stop Card-Prevention	06 Feb 2005	0 Days	8 STOP cards submitted	

Marine

Weather on 06 Feb 2005

Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period
10.00mi	25.0kn	270.0deg	1003.00mbar	19.0C°	1.0m	270.0deg	0.0ft/min
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments	
0.5deg	0.5deg	0.30m	2.0m	270.0deg	0.0ft/min		
Rig Dir.	Ris. Tension	VDL	Comments				
43.0deg	228.0klb	4194.0klb					

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks			
Pacific Wrangler		1700	On route to Melbourne with backload cargo.	Item		Unit	Quantity
				Barite		MT	84.00
				Gel		MT	42.00
				Cement		MT	0.00
				Drill Water		M^3	70.00
				Fuel Oil		M^3	218.60
				Potable Water		M^3	254.00
Far Grip			Standby	Item		Unit	Quantity
				Barite		MT	36.00
				Gel		MT	0.00
				Cement		MT	86.00
				Drill Water		M^3	336.00
				Fuel Oil		M^3	650.00
				Potable Water		M^3	540.00

Helicopter Movement				
Flight #	Company	Arr/Dep. Time	Pax In/Out	Comment
1	Bristow	08:06 / 08:19	6 / 6	

07 Feb 2005 (GMT +10)

From: Chris Wilson, Stuart Douglass
 To: Colin Allport

DRILLING MORNING REPORT # 12
ZaneGrey-1 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	2315.0m	Cur. Hole Size	12.250in	AFE Cost	\$ 0.00
Field		TVD	2046.3m	Casing OD	13.375in	AFE No.	
Drill Co.	DOGC	Progress	212.0m	Shoe TVD	1029.10m	Daily COST	\$ 396472.00
Rig	Ocean Patriot	Days from spud	9.40	FIT	13.30ppg	Cum Cost	\$ 8002467.00
Wtr Dpth(MSL)	72.5m	Days on well	11.79	LOT	0.00ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600 Drilled ahead 12 1/4" hole.					
RT-ML	94.0m	Planned Op Drill ahead 12 1/4" hole. Evaluate the top of the Latrobe Group and decide on whether to drill ahead to prognosed TD.					

Summary of Period 0000 to 2400 Hrs

Finished circulating at the shoe. Pulled out of the hole. Changed out the MWD pulser. Adjusted the bend in the motor. Surface tested MWD, motor and adjustable gauge stabiliser. Ran in the hole to the 13 3/8" casing shoe. Circulated and conditioned the mud. Continued to run in the hole having to wash and ream down from 1916 m to 2103 m due to tight hole. Drilled ahead 12 1/4" hole.

Operations For Period 0000 Hrs to 2400 Hrs on 07 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0030	0.50	IH	TP (VEQ)	CHC	2103.0m	Circulated hole clean at the 13 3/8" casing shoe. Boosted riser. Significant volume of cuttings recovered.
0030	0300	2.50	IH	TP (VEQ)	TO	2103.0m	Flow check. Well static. Pumped slug and continued pulling out of the hole with 5" drill pipe.
0300	0500	2.00	IH	TP (VEQ)	HBHA	2103.0m	Continued pulling the BHA out of hole. MWD pulser was changed out and the bit was inspected. Conditioned surface active mud system with 1.25 ppbl PHPA.
0500	0700	2.00	IH	TP (VEQ)	HBHA	2103.0m	Initialised MWD. Adjusted bend on motor from 1.15 deg to 0.78 deg. Surface tested MWD, motor and adjustable gauge stabiliser.
0700	0800	1.00	IH	TP (VEQ)	HBHA	2103.0m	Ran BHA in the hole.
0800	0900	1.00	IH	TP (VEQ)	TI	2103.0m	Ran in the hole with 5" drill pipe to the 13 3/8" casing shoe.
0900	1030	1.50	IH	TP (VEQ)	CMD	2103.0m	Circulated and conditioned mud at the shoe.
1030	1300	2.50	IH	TP (VEQ)	TI	2103.0m	Continued running in the hole with 5" drill pipe to 1916 m. Conditioned surface active mud system with 1.25 ppbl PHPA.
1300	1400	1.00	IH	TP (VEQ)	TIT	2103.0m	Washed and reamed down from 1916 m to 2086 m. Hole tight.
1400	1600	2.00	IH	TP (VEQ)	CMD	2103.0m	Circulated and conditioned the mud while slowly working the pipe, raised mud system PHPA content to 1.25 ppbl prior to drilling ahead.
1600	1630	0.50	IH	TP (VEQ)	TIT	2103.0m	Washed and reamed down from 2086 m to 2103 m. Tight hole.
1630	2400	7.50	IH	P	DM	2315.0m	Drilled ahead 12 1/4" hole. Slid with difficulty from 2236 m to 2240 m while attempting to turn left and nudge up. Swept the hole with 50 bbls HiVis pill at 2240 m. No noticeable increase in cuttings when the pill came to surface. Average rate of penetration, 69.7 m/hr.

Operations For Period 0000 Hrs to 0600 Hrs on 08 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0600	6.00	IH	P	DM	2546.0m	(IN PROGRESS) Continued to drill 12 1/4" directional hole with mud motor assembly in rotary mode from 2315 m to 2546 m. Average rate of penetration, 57.7 m/hr.

Operations For Period Hrs to Hrs on

Operations For Period Hrs to Hrs on

BHA # 3						
Weight(Wet)	40.0klb	Length	251.8m	Torque(max)	15.00kft-lbs	D.C. (1) Ann Velocity 82.4mpm
Wt Below Jar(Wet)	26.0klb	String	220.0klb	Torque(Off.Btm)	6.00kft-lbs	D.C. (2) Ann Velocity 0.0mpm
		Pick-Up	240.0klb	Torque(On.Btm)	12.00kft-lbs	H.W.D.P. Ann Velocity 56.7mpm
		Slack-Off	190.0klb			D.P. Ann Velocity 56.7mpm
BHA Run Description		12 1/4" PDC bit, 9 5/8" motor, non-mag bottleneck X/O with ported float, 11 1/4" - 12 1/4" adjustable gauge stabilizer, 8" MWD PM sub, 8" RLL with DGR and EWR, 8" MWD pulser/TM sub, 12" integral blade stabilizer, 3 x 8" drill collars, 8 1/4" jar, 2 x 8" drill collars, 6 5/8" REG pin x 4 1/2" IF box X/O, 18 x 5" HWDP				
BHA Run Comment		Sensor distances from the bit: DGR - 21.64 m, EWR - 19.31 m, DM - 15.23 m				
Equipment		Length	OD	ID	Serial #	Comment
Bit		0.35m	12.25in	0.00in	10648437	PDC
Mud Motor		9.05m	9.63in	6.13in	963367	
Float Sub		1.03m	9.38in	3.00in	A 545	Bottleneck X/O with ported float installed
Adjustable Gauge Stabilizer		3.33m	12.25in	3.00in	513-085	11 1/4" - 12 1/4" AGS
MWD Tool		2.80m	8.00in	2.50in	DM67106	PM Sub
MWD Tool		7.14m	11.25in	2.50in	DM90056915H1GR	RLL w/DGR + EWR
MWD Tool		3.11m	8.00in	2.50in	10532336	Pulser / TM sub
String Stabiliser		1.82m	12.00in	2.50in	91322	
Drill Collar		27.44m	8.00in	3.00in		3 x 8" DC's
Drilling Jars		9.68m	8.25in	2.40in	DAH02767	
Drill Collar		18.15m	8.00in	3.00in		2 x 8" DC's
X/O		1.09m	8.00in	2.75in	508A610	6 5/8" REG pin x 4 1/2" IF box
HWDP		166.78m	6.50in	3.00in		18 x 5" HWDP
BHA # 4						
Weight(Wet)	40.0klb	Length	251.8m	Torque(max)	15.00kft-lbs	D.C. (1) Ann Velocity 76.4mpm
Wt Below Jar(Wet)	26.0klb	String	220.0klb	Torque(Off.Btm)	6.00kft-lbs	D.C. (2) Ann Velocity 0.0mpm
		Pick-Up	240.0klb	Torque(On.Btm)	12.00kft-lbs	H.W.D.P. Ann Velocity 52.6mpm
		Slack-Off	190.0klb			D.P. Ann Velocity 52.6mpm
BHA Run Description		12 1/4" PDC bit, 9 5/8" motor, non-mag bottleneck X/O with ported float, 11 1/4" - 12 1/4" adjustable gauge stabilizer, 8" MWD PM sub, 8" RLL with DGR and EWR, 8" MWD pulser/TM sub, 12" integral blade stabilizer, 3 x 8" drill collars, 8 1/4" jar, 2 x 8" drill collars, 6 5/8" REG pin x 4 1/2" IF box X/O, 18 x 5" HWDP				
BHA Run Comment		Sensor distances from the bit: DGR - 21.64 m, EWR - 19.31 m, DM - 15.23 m				
Equipment		Length	OD	ID	Serial #	Comment
Bit		0.35m	12.25in	0.00in	10648437	PDC
Mud Motor		9.05m	9.63in	6.13in	963367	
Float Sub		1.03m	9.38in	3.00in	A 545	Bottleneck X/O with ported float installed
Adjustable Gauge Stabilizer		3.33m	12.25in	3.00in	513-085	11 1/4" - 12 1/4" AGS
MWD Tool		2.80m	8.00in	2.50in	DM67106	PM Sub
MWD Tool		7.14m	11.25in	2.50in	DM90056915H1GR	RLL w/DGR + EWR
MWD Tool		3.11m	8.00in	2.50in	10532336	Pulser / TM sub
String Stabiliser		1.82m	12.00in	2.50in	91322	
Drill Collar		27.44m	8.00in	3.00in		3 x 8" DC's
Drilling Jars		9.68m	8.25in	2.40in	DAH02767	
Drill Collar		18.15m	8.00in	3.00in		2 x 8" DC's
X/O		1.09m	8.00in	2.75in	508A610	6 5/8" REG pin x 4 1/2" IF box
HWDP		166.78m	6.50in	3.00in		18 x 5" HWDP
Bulk Stocks						
Name			Unit	In	Used	Adjust Balance
Barite			MT	0.00	5.78	0.00 77.9
Gel			MT	0.00	0.00	0.00 12.4
Cement			MT	0.00	0.00	0.00 95.4
Drill Water			m³	0.00	102.30	0.00 276.4
Fuel Oil			m³	0.00	14.40	0.00 250.6

Bulk Stocks						
Name	Unit	In	Used	Adjust	Balance	
Potable Water	m ³	31.00	19.90	0.00	292.7	

Pumps																	
Pump Data - Last 24 Hrs								Slow Pump Data									
No.	Type	Liner (in)	MW (ppg)	Eff (%)	SPM	SPP (psi)	Flow (gpm)	Depth (m)	SPM1	SPP1 (psi)	Flow1(gpm)	SPM2	SPP2 (psi)	Flow2 (gpm)	SPM3	SPP3 (psi)	Flow3 (gpm)
1	A1700	6.00	9.70	0.00	75.00	3168.00	317.00	2373.0	40.00	425.00	176.00	0.00	0.00	0.00	0.00	0.00	0.00
2	12-P160	6.00	9.70	0.00	75.00	3168.00	317.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	12-P160	6.00	9.70	0.00	75.00	3168.00	317.00	2373.0	40.00	425.00	176.00	0.00	0.00	0.00	0.00	0.00	0.00

Personnel On Board			
Job Title	Personnel	Company	Pax
OIM	Sean De Fretias	DOGC	48
Camp boss	Mark Stanley	Total Marine Catering	8
ROV Pilot	Robert Griffiths	Fugro	2
Cementer	Edgar Lliagas	Dowell Schlumberger	2
Mud Engineer	Jasdeep Singh	MI Swaco	2
Data Engineer	Gary Bloom	Sperry Sun	6
Wellhead Engineer	Bruce Hassett	Cameron	1
Senior Drilling Supervisor	Chris Wilson	BSOC	5
MWD Engineer	Stuart Allan	Halliburton	2
Directional Driller	John Smith	Halliburton	2
Centrifuge Hand	Ross Spranger	DFE	1
Casing Hand	Colin Fidock	Weatherford	2
Technician	Mark Anderson	Petrotech	1
Wireline Engineer	Wayn Nurcahya	Baker Atlas	3
Total			85

HSE Summary				
Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	06 Feb 2005	1 Day	Abandon Rig Drill	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30 6 cards by DODI 4 cards by T/P 2 cards by BSOC 2 cards by Catering
BOP Test	02 Feb 2005	5 Days	BOP Test	
Fire Drill	06 Feb 2005	1 Day	Fire Drill	
Lost Time Injury	20 May 2003	629 Days	LTI	
Pre-Tour Meetings	07 Feb 2005	0 Days	Routine Pre-Tour Meetings	
Rig Inspection	04 Feb 2005	3 Days	NOPSA Audit	
Stop Card-Prevention	07 Feb 2005	0 Days	14 STOP cards submitted	

Marine								
Weather on 07 Feb 2005								
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period	
10.00mi	15.0kn	230.0deg	1012.00mbar	20.0C°	0.5m	230.0deg	0.0ft/min	
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments		
0.5deg	0.5deg	0.20m	1.5m	230.0deg	0.0ft/min			
Rig Dir.	Ris. Tension	VDL	Comments					
43.0deg	228.0klb	4453.0klb						
Boats	Arrived (date/time)		Departed (date/time)		Status		Bulks	
Pacific Wrangler					On route to Melbourne with backload cargo.	Item	Unit	Quantity
						Barite	MT	84.00
						Gel	MT	42.00
						Cement	MT	0.00
						Drill Water	M^3	70.00

				Item	Unit	Quantity
				Fuel Oil	M^3	218.60
				Potable Water	M^3	254.00
				Item	Unit	Quantity
Far Grip			Standby	Barite	MT	36.00
				Gel	MT	0.00
				Cement	MT	86.00
				Drill Water	M^3	336.00
				Fuel Oil	M^3	638.00
				Potable Water	M^3	532.00

08 Feb 2005 (GMT +10)

From: Peter Dane, Stuart Douglass
 To: Colin Allport

DRILLING MORNING REPORT # 13
ZaneGrey-1 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	2697.0m	Cur. Hole Size	12.250in	AFE Cost	\$0
Field		TVD	2359.1m	Casing OD	13.375in	AFE No.	
Drill Co.	DOGC	Progress	382.0m	Shoe TVD	1029.10m	Daily COST	\$387,562
Rig	Ocean Patriot	Days from spud	10.40	FIT	13.30ppg	Cum Cost	\$8,390,029
Wtr Dpth(MSL)	72.5m	Days on well	12.79	LOT	0.00ppg	Planned TD	3692.0m
RT-MSL	21.5m					Days Since Last LTI	
RT-ML	94.0m						

Current Op @ 0600: Pulled out of the hole.

Planned Op: Continued pulling out of the hole. Changed the bit. Run back in the hole and drill to section TD.

Summary of Period 0000 to 2400 Hrs

Drilled ahead 12 1/4" hole. Difficult drilling after the top of the Gurnard formation was drilled. High torque.

Operations For Period 0000 Hrs to 2400 Hrs on 08 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	1100	11.00	IH	P	DM	2546.0m	Continued to drill 12 1/4" directional hole with mud motor assembly in rotary mode from 2315 m to 2546 m. Average rate of penetration, 57.7 m/hr.
1100	1130	0.50	IH	P (VEQ)	CIR	2546.0m	Circulated while all three pump suction screen's were cleaned. Cleaned out polymer from screens.
1130	2400	12.50	IH	P	DM	2697.0m	Continued to drill 12 1/4" directional hole with mud motor assembly in rotary mode from 2546 m to 2697 m. Difficulty drilling. High torque. Off bottom torque at 12-13 klbs. On bottom torque 18klbs. String stalling regularly. Mud motor stalling with associated pressure spikes, (reduced flow rate to avoid tripping the pop-offs). Drilling difficulties were encountered around 2570 m. Average rate of penetration, 57.7 m/hr.

Operations For Period 0000 Hrs to 0600 Hrs on 09 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0030	0.50	IH	P	DM	2702.0m	Continued to drill 12 1/4" directional hole with mud motor assembly in rotary mode from 2697 m to 2702m.
0030	0230	2.00	IH	P	CHC	2702.0m	Circulated 2 times bottoms up. Shakers clean. Pulled out of the hole with 5" drill pipe 5 stands (wet) from 2702 m to 2575 m. Hole good.
0230	0600	3.50	IH	P	TOB	2702.0m	(IN PROGRESS) Flow check. Well static. Pumped a slug. Continued pulling out of hole with 5" drill pipe from 2575 m to inside 13 3/8" casing shoe at 1090 m. Hole good. Flow check. Well static. Pulled out of hole with 5" drill pipe from 1090 m to 251 m.

Operations For Period Hrs to Hrs on

Operations For Period Hrs to Hrs on

Operations For Period Hrs to Hrs on

WBM Data				Cost Today \$ 14319			
Mud Type:	KCl-PHPA-Glycol	API FL:	4.2cc	Cl:	37000.0mg/l	Solids:	10.5
Sample-From:	Flowline	Filter-Cake:	1/32nd"	Hard/Ca:	440.0mg/l	H2O:	90%
Time:	17:00	HTHP-FL:	0.0cc	MBT:	15	Oil:	0%
Weight:	9.70ppg	HTHP-cake:	0/32nd"	PM:	0	Sand:	0.75
Temp:	49.0C°			PF:	0.02	Glycol:	3.0%vol
				pH:	9	KCl:	6%
						PHPA:	1ppb
Comment				Viscosity			
				PV			
				YP			
				Gels 10s			
				Gels 10m			
				Fann 003			
				Fann 006			
				Fann 100			
				Fann 200			
				Fann 300			
				Fann 600			

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.35m	12.25in	0.00in	10648437	PDC
Mud Motor	9.05m	9.63in	6.13in	963367	
Float Sub	1.03m	9.38in	3.00in	A 545	Bottleneck X/O with ported float installed
Adjustable Gauge Stabilizer	3.33m	12.25in	3.00in	513-085	11 1/4" - 12 1/4" AGS
MWD Tool	2.80m	8.00in	2.50in	DM67106	PM Sub
MWD Tool	7.14m	11.25in	2.50in	DM90056915H1GR	ROLL w/DGR + EWR
MWD Tool	3.11m	8.00in	2.50in	10532336	Pulser / TM sub
String Stabiliser	1.82m	12.00in	2.50in	91322	
Drill Collar	27.44m	8.00in	3.00in		3 x 8" DC's
Drilling Jars	9.68m	8.25in	2.40in	DAH02767	
Drill Collar	18.15m	8.00in	3.00in		2 x 8" DC's
X/O	1.09m	8.00in	2.75in	508A610	6 5/8" REG pin x 4 1/2" IF box
HWDP	166.78m	6.50in	3.00in		18 x 5" HWDP

Bulk Stocks

Name	Unit	In	Used	Adjust	Balance
Barite	MT	0.00	2.49	0.00	75.4
Gel	MT	0.00	0.00	0.00	12.4
Cement	MT	0.00	0.00	0.00	95.4
Drill Water	m ³	336.00	218.30	0.00	394.1
Fuel Oil	m ³	0.00	19.00	0.00	231.6
Potable Water	m ³	37.00	28.70	0.00	301.0

Pumps

Pump Data - Last 24 Hrs								Slow Pump Data									
No.	Type	Liner (in)	MW (ppg)	Eff (%)	SPM	SPP (psi)	Flow (gpm)	Depth (m)	SPM1	SPP1 (psi)	Flow1 (gpm)	SPM2	SPP2 (psi)	Flow2 (gpm)	SPM3	SPP3 (psi)	Flow3 (gpm)
1	A1700	6.00	9.60	0.00	65.00	3412.00	278.00	2604.0	40.00	410.00	176.00	0.00	0.00	0.00	0.00	0.00	0.00
2	12-P160	6.00	9.70	0.00	65.00	3412.00	278.00	0.0	40.00	425.00	176.00	0.00	0.00	0.00	0.00	0.00	0.00
3	12-P160	6.00	9.60	0.00	65.00	3412.00	278.00	2604.0	40.00	415.00	176.00	0.00	0.00	0.00	0.00	0.00	0.00

Personnel On Board

Job Title	Personnel	Company	Pax
OIM	Sean De Fretias	DOGC	46
Camp boss	Mark Stanley	Total Marine Catering	8
ROV Pilot	Robert Griffiths	Fugro	2
Cementer	Edgar Liagas	Dowell Schlumberger	2
Mud Engineer	Jasdeep Singh	MI Swaco	2
Data Engineer	Gary Bloom	Sperry Sun	6
Wellhead Engineer	Bruce Hassett	Cameron	1
Senior Drilling Supervisor	Peter Dane	BSOC	5
MWD Engineer	Stuart Allan	Halliburton	2
Directional Driller	John Smith	Halliburton	2
Centrifuge Hand	Ross Spranger	DFE	1
Casing Hand	Colin Fidock	Weatherford	2
Technician	Mark Anderson	Petrotech	1
Wireline Engineer	Wayn Nurcahya	Baker Atlas	3
Woodside	Stuart Job	Other Contractor	3
Total			86

HSE Summary

Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	06 Feb 2005	2 Days	Abandon Rig Drill	
BOP Test	02 Feb 2005	6 Days	BOP Test	
Fire Drill	06 Feb 2005	2 Days	Fire Drill	
Lost Time Injury	20 May 2003	630 Days	LTI	

HSE Summary

Events	Date of last	Days Since	Descr.	Remarks
Pre-Tour Meetings	08 Feb 2005	0 Days	Routine Pre-Tour Meetings	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30
Rig Inspection	04 Feb 2005	4 Days	NOPSA Audit	
Stop Card-Prevention	08 Feb 2005	0 Days	5 STOP cards submitted	2 cards by DODI 3 cards by T/P

Marine

Weather on 08 Feb 2005

Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period
8.00mi	15.0kn	270.0deg	1006.00mbar	18.0C°	0.5m	270.0deg	0.0ft/min
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments	
0.5deg	0.5deg	0.20m	2.0m	247.0deg	0.0ft/min		
Rig Dir.	Ris. Tension	VDL		Comments			
43.0deg	228.0klb	4609.2klb					

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Pacific Wrangler			Standby in Melbourne	Item	Unit	Quantity
				Barite	MT	84.00
				Gel	MT	42.00
				Cement	MT	0.00
				Drill Water	M^3	70.00
				Fuel Oil	M^3	218.60
				Potable Water	M^3	254.00
Far Grip			Standby	Item	Unit	Quantity
				Barite	MT	36.00
				Gel	MT	0.00
				Cement	MT	86.00
				Drill Water	M^3	0.00
				Fuel Oil	M^3	624.00
				Potable Water	M^3	524.00

Helicopter Movement

Flight #	Company	Arr/Dep. Time	Pax In/Out	Comment
1	Bristow	08:18 / 08:27	11 / 10	

09 Feb 2005 (GMT +10)

From: Peter Dane, Stuart Douglass
 To: Colin Allport

DRILLING MORNING REPORT # 14
ZaneGrey-1 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	2702.0m	Cur. Hole Size	12.250in	AFE Cost	\$ 0.00
Field		TVD	2363.2m	Casing OD	13.375in	AFE No.	
Drill Co.	DOGC	Progress	5.0m	Shoe TVD	1029.10m	Daily COST	\$ 389542.00
Rig	Ocean Patriot	Days from spud	11.40	FIT	13.30ppg	Cum Cost	\$ 8779571.00
Wtr Dpth(MSL)	72.5m	Days on well	13.79	LOT	0.00ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600 Continued to drill 12 1/4" with rotary assembly.					
RT-ML	94.0m	Planned Op Continued to drill 12 1/4" to section TD. Pull out of hole with 5" drill pipe. Rig up to run 9 5/8" casing.					

Summary of Period 0000 to 2400 Hrs

Continued to drill 12 1/4" directional hole with mud motor assembly in rotary mode from 2697 m to 2702 m. Difficulty drilling. High torque. On bottom torque 28 klbs. String and motor stalling. Pull out of the hole with 5" drill pipe to change the bit and bottom hole assembly. Change out bit and run in hole with a rotary assembly. Circulate at the shoe while slipping and cutting drill line and serviced the top drive. Continued running in the hole. Wash and ream from 1767 m to 2220 m due to tight hole.

Operations For Period 0000 Hrs to 2400 Hrs on 09 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0030	0.50	IH	P	DM	2702.0m	Continued to drill 12 1/4" directional hole with mud motor assembly in rotary mode from 2697 m to 2702m.
0030	0230	2.00	IH	P	CHC	2702.0m	Circulated 2 times bottoms up. Shakers clean. Pulled out of the hole with 5" drill pipe 5 stands (wet) from 2702 m to 2575 m. Hole good.
0230	0830	6.00	IH	P	TOB	2702.0m	Flow check. Well static. Pumped a slug. Continued pulling out of hole with 5" drill pipe from 2575 m to inside 13 3/8" casing shoe at 1090 m. Hole good. Flow check. Well static. Pulled out of hole with 5" drill pipe from 1090 m to 251 m.
0830	1100	2.50	IH	P	HBHA	2702.0m	Continued to pull bottom hole assembly out of hole. Lay out MWD, Adjustable gauge stabilizer, Mud motor and bit.
1100	1230	1.50	IH	P	HBHA	2702.0m	Pick up rotary bottom hole assembly, with Insert Tricone bit and the same MWD system.
1230	1500	2.50	IH	P	TI	2702.0m	Run in the hole from surface to 1074 m. Shallow tested the MWD at the second stand of HWDP.
1500	1530	0.50	IH	P	RU	2702.0m	Rig up circulating hose to circulate while slipping and cutting drill line.
1530	1700	1.50	IH	P	SC	2702.0m	Circulated at 300 gpm while slipping and cutting drill line.
1700	1730	0.50	IH	P	RS	2702.0m	Service the block, top drive system and pipe handler.
1730	1800	0.50	IH	P	RD	2702.0m	Rig down circulating hose and subs.
1800	2000	2.00	IH	P	TI	2702.0m	Continued to run in the hole with 5" drill pipe from 1074 m to 1767 m.
2000	2400	4.00	IH	P	TIT	2702.0m	Wash and ream while running in with 5" drill pipe from 1767 m to 2220 m due to tight hole. 1900 m to 1910 m hole tight washed string through obstruction.

Operations For Period 0000 Hrs to 0600 Hrs on 10 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0600	6.00	IH	P	TIT	2702.0m	(IN PROGRESS) Continued washing and reaming while running in hole with 5" drill pipe from 2222 m to 2702 m, due to tight hole.

Operations For Period Hrs to Hrs on

Operations For Period Hrs to Hrs on

WBM Data				Cost Today \$ 21138.00			
Mud Type:	KCI-PHPA-Glycol	API FL:	4.6cc	Cl:	37000.0mg/l	Solids:	11.00
Sample-From:	Active	Filter-Cake:	1.00/32nd"	Hard/Ca:	300.0mg/l	H2O:	0.00%
Time:	16:00	HTHP-FL:	0.0cc	MBT:	14.00	Oil:	0.00%
Weight:	9.70ppg	HTHP-cake:	0.00/32nd"	PM:	0.00	Sand:	0.75
Temp:	38.0C°			PF:	0.08	Glycol:	4.0%vol
				pH:	9.00	KCl:	0.00%
						PHPA:	1.00ppb
Comment				Viscosity			
				PV			
				YP			
				Gels 10s			
				Gels 10m			
				Fann 003			
				Fann 006			
				Fann 100			
				Fann 200			
				Fann 300			
				Fann 600			

WBM Data				Cost Today \$ 0.00					
Mud Type:	KCI-PHPA-Glycol	API FL:	4.7cc	Cl:	34000.0mg/l	Solids:	10.00	Viscosity	66.00sec/qt
Sample-From:	Active	Filter-Cake:	1.00/32nd"	Hard/Ca:	300.0mg/l	H2O:	0.00%	PV	23.00cp
Time:	23:00	HTHP-FL:	0.0cc	MBT:	12.00	Oil:	0.00%	YP	40.00lb/100ft²
Weight:	9.40ppg	HTHP-cake:	0.00/32nd"	PM:	0.00	Sand:	1	Gels 10s	13.00
Temp:	49.0C°			PF:	0.08	Glycol:	3.0%vol	Gels 10m	17.00
				pH:	8.50	KCl:	0.00%	Fann 003	9.00
						PHPA:	1.00ppb	Fann 006	12.00
								Fann 100	39.00
								Fann 200	53.00
								Fann 300	63.00
								Fann 600	86.00
Comment									

Shakers, Volumes and Losses Data						Engineer : Jasdeep Singh			
Equip.	Descr.	Mesh Size	Available	2902.00bbl	Losses	50.00bbl	Comments		
			Active	328.00bbl	Downhole	0.00bbl			
			Mixing	0.00bbl	Surf+ Equip	0.00bbl			
			Hole	1312.00bbl	Dumped	0.00bbl			
			Slug	0.00bbl	De-Gasser	0.00bbl			
			Reserve	0.00bbl	De-Sander	0.00bbl			
			Kill	0.00bbl	De-Silter	0.00bbl			
			Premix	1262.00bbl	Centrifuge	0.00bbl			
			Dumped	50.00bbl					

Bit # 3RR				Wear	I	O1	D	L	B	G	O2	R
					2	3	BT	G	X	4	WT	PR
Size ("):	12.25in	IADC#	S223	Nozzles		Drilled over last 24 hrs			Calculated over Bit Run			
Mfr:	Security	WOB(avg)	10.0klb	No.	Size	Progress			Cum. Progress			
Type:	PDC	RPM(avg)	88.00	3	20.00/32nd"	On Bottom Hrs			Cum. On Btm Hrs			
Serial No.:	10648437	F.Rate	856.00gpm			IADC Drill Hrs			Cum IADC Drill Hrs			
Bit Model	FSX563	SPP	3471.00psi			Total Revs			Cum Total Revs			
Depth In	2103.0m	HSI				ROP(avg)			ROP(avg)			
Depth Out	2702.0m	TFA	0.92									

Bit # 4				Wear	I	O1	D	L	B	G	O2	R
Size ("):	12.25in	IADC#	437X	Nozzles		Drilled over last 24 hrs			Calculated over Bit Run			
Mfr:	Security	WOB(avg)	0.0klb	No.	Size	Progress			Cum. Progress			
Type:	TCI	RPM(avg)	0.00	3	20.00/32nd"	On Bottom Hrs			Cum. On Btm Hrs			
Serial No.:	10378981	F.Rate	0.00gpm			IADC Drill Hrs			Cum IADC Drill Hrs			
Bit Model	XL12	SPP	0.00psi			Total Revs			Cum Total Revs			
Depth In	2702.0m	HSI				ROP(avg)			ROP(avg)			
Depth Out		TFA	0.92									

BHA # 5							
Weight(Wet)	40.0klb	Length	246.7m	Torque(max)	0.00kft-lbs	D.C. (1) Ann Velocity	0.0mpm
Wt Below Jar(Wet)	26.0klb	String	295.0klb	Torque(Off.Btm)	0.00kft-lbs	D.C. (2) Ann Velocity	0.0mpm
		Pick-Up	350.0klb	Torque(On.Btm)	0.00kft-lbs	H.W.D.P. Ann Velocity	0.0mpm
		Slack-Off	240.0klb			D.P. Ann Velocity	0.0mpm
BHA Run Description		12 1/4" PDC bit, 12 1/4" Near Bit Stabilizer with ported float, Non-Mag Pony DC, 12 1/4" String stabilizer, 8" MWD PM sub, 8" RLL with DGR and EWR, 8" MWD pulser/TM sub, 12" String stabilizer, 3 x 8" drill collars, 8 1/4" jar, 2 x 8" drill collars, 6 5/8" REG pin x 4 1/2" IF box X/O, 18 x 5" HWDP					
BHA Run Comment		Sensor distances from the bit: DGR - 21.64 m, EWR - 19.31 m, DM - 15.23 m					

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.34m	12.25in	0.00in	10378981	Tricone Insert
Near Bit Stab	1.78m	8.00in	3.00in	270A144	Full gauge NB Stabilizer, c/w ported float
Pony DC	4.59m	8.13in	2.75in	A502	Short Non-mag Pony collar
String Stabiliser	1.95m	8.50in	2.75in	513-085	Full gauge String Stabilizer
MWD Tool	2.80m	8.00in	2.50in	DM67106	PM Sub
MWD Tool	7.14m	11.25in	2.50in	DM90056915H1GR	RLL w/DGR + EWR
MWD Tool	3.11m	8.00in	2.50in	10532336	Pulser / TM sub
String Stabiliser	1.82m	12.00in	2.50in	91322	
Drill Collar	27.44m	8.00in	3.00in		3 x 8" DC's
Drilling Jars	9.68m	8.25in	2.40in	DAH02767	
Drill Collar	18.15m	8.00in	3.00in		2 x 8" DC's
X/O	1.09m	8.00in	2.75in	508A610	6 5/8" REG pin x 4 1/2" IF box
HWDP	166.78m	6.50in	3.00in		18 x 5" HWDP

BHA # 4

Weight(Wet)	40.0klb	Length	251.8m	Torque(max)	22.00kft-lbs	D.C. (1) Ann Velocity	74.3mpm
Wt Below Jar(Wet)	26.0klb	String	300.0klb	Torque(Off.Btm)	12.00kft-lbs	D.C. (2) Ann Velocity	0.0mpm
		Pick-Up	350.0klb	Torque(On.Btm)	16.00kft-lbs	H.W.D.P. Ann Velocity	51.1mpm
		Slack-Off	250.0klb			D.P. Ann Velocity	51.1mpm

BHA Run Description

12 1/4" PDC bit, 9 5/8" motor, non-mag bottleneck X/O with ported float, 11 1/4" - 12 1/4" adjustable gauge stabilizer, 8" MWD PM sub, 8" RLL with DGR and EWR, 8" MWD pulser/TM sub, 12" integral blade stabilizer, 3 x 8" drill collars, 8 1/4" jar, 2 x 8" drill collars, 6 5/8" REG pin x 4 1/2" IF box X/O, 18 x 5" HWDP

BHA Run Comment

Sensor distances from the bit: DGR - 21.64 m, EWR - 19.31 m, DM - 15.23 m

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.35m	12.25in	0.00in	10648437	PDC
Mud Motor	9.05m	9.63in	6.13in	963367	
Float Sub	1.03m	9.38in	3.00in	A 545	Bottleneck X/O with ported float installed
Adjustable Gauge Stabilizer	3.33m	12.25in	3.00in	513-085	11 1/4" - 12 1/4" AGS
MWD Tool	2.80m	8.00in	2.50in	DM67106	PM Sub
MWD Tool	7.14m	11.25in	2.50in	DM90056915H1GR	RLL w/DGR + EWR
MWD Tool	3.11m	8.00in	2.50in	10532336	Pulser / TM sub
String Stabiliser	1.82m	12.00in	2.50in	91322	
Drill Collar	27.44m	8.00in	3.00in		3 x 8" DC's
Drilling Jars	9.68m	8.25in	2.40in	DAH02767	
Drill Collar	18.15m	8.00in	3.00in		2 x 8" DC's
X/O	1.09m	8.00in	2.75in	508A610	6 5/8" REG pin x 4 1/2" IF box
HWDP	166.78m	6.50in	3.00in		18 x 5" HWDP

Bulk Stocks

Name	Unit	In	Used	Adjust	Balance
Barite	MT	0.00	3.71	0.00	71.7
Gel	MT	0.00	0.00	0.00	12.4
Cement	MT	0.00	0.00	0.00	95.4
Drill Water	m ³	0.00	39.00	0.00	355.1
Fuel Oil	m ³	0.00	11.80	0.00	219.8
Potable Water	m ³	29.00	24.00	0.00	306.0

Pumps

Pump Data - Last 24 Hrs								Slow Pump Data									
No.	Type	Liner (in)	MW (ppg)	Eff (%)	SPM	SPP (psi)	Flow (gpm)	Depth (m)	SPM1	SPP1 (psi)	Flow1 (gpm)	SPM2	SPP2 (psi)	Flow2 (gpm)	SPM3	SPP3 (psi)	Flow3 (gpm)
1	A1700	6.00	9.60	0.00	65.00	3412.00	278.00	2604.0	40.00	410.00	176.00	0.00	0.00	0.00	0.00	0.00	0.00
2	12-P160	6.00	9.70	0.00	65.00	3412.00	278.00	0.0	40.00	425.00	176.00	0.00	0.00	0.00	0.00	0.00	0.00
3	12-P160	6.00	9.60	0.00	65.00	3412.00	278.00	2604.0	40.00	415.00	176.00	0.00	0.00	0.00	0.00	0.00	0.00

Personnel On Board

Job Title	Personnel	Company	Pax
OIM	Sean De Fretias	DOGC	46
Camp boss	Mark Stanley	Total Marine Catering	8
ROV Pilot	Robert Griffiths	Fugro	2
Cementer	Edgar Lliagas	Dowell Schlumberger	2
Mud Engineer	Jasdeep Singh	MI Swaco	2
Data Engineer	Gary Bloom	Sperry Sun	6
Wellhead Engineer	Bruce Hassett	Cameron	1
Senior Drilling Supervisor	Peter Dane	BSOC	5
MWD Engineer	Stuart Allan	Halliburton	2
Directional Driller	John Smith	Halliburton	2
Centrifuge Hand	Ross Spranger	DFE	1
Casing Hand	Colin Fidock	Weatherford	2
Technician	Mark Anderson	Petrotech	1
Wireline Engineer	Wayn Nurcahya	Baker Atlas	3
Woodside	Stuart Job	Other Contractor	3
Total			86

HSE Summary

Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	06 Feb 2005	3 Days	Abandon Rig Drill	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30 6 cards by DODI 1 cards by T/P
BOP Test	02 Feb 2005	7 Days	BOP Test	
Fire Drill	06 Feb 2005	3 Days	Fire Drill	
Lost Time Injury	20 May 2003	631 Days	LTI	
Pre-Tour Meetings	09 Feb 2005	0 Days	Routine Pre-Tour Meetings	
Rig Inspection	04 Feb 2005	5 Days	NOPSA Audit	
Stop Card-Prevention	09 Feb 2005	0 Days	7 STOP cards submitted	

Marine

Weather on 09 Feb 2005

Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period
10.00mi	15.0kn	230.0deg	1007.00mbar	18.0C°	0.5m	230.0deg	0.0ft/min
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments	
0.5deg	0.5deg	0.20m	0.5m	240.0deg	0.0ft/min		
Rig Dir.	Ris. Tension	VDL		Comments			
43.0deg	228.0klb	4618.9klb					

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Pacific Wrangler			Standby in Melbourne	Item	Unit	Quantity
				Barite	MT	84.00
				Gel	MT	42.00
				Cement	MT	0.00
				Drill Water	M^3	70.00
				Fuel Oil	M^3	218.60
				Potable Water	M^3	254.00
Far Grip			Standby at rig	Item	Unit	Quantity
				Barite	MT	36.00
				Gel	MT	0.00
				Cement	MT	86.00
				Drill Water	M^3	0.00
				Fuel Oil	M^3	608.00
				Potable Water	M^3	516.00

10 Feb 2005 (GMT +10)

From: Peter Dane, Stuart Douglass
 To: Colin Allport

DRILLING MORNING REPORT # 15
ZaneGrey-1 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	2741.0m	Cur. Hole Size	12.250in	AFE Cost	\$ 0.00
Field		TVD	2395.1m	Casing OD	13.375in	AFE No.	
Drill Co.	DOGC	Progress	39.0m	Shoe TVD	1029.10m	Daily COST	\$ 376549.00
Rig	Ocean Patriot	Days from spud	12.40	FIT	13.30ppg	Cum Cost	\$ 9156120.00
Wtr Dpth(MSL)	72.5m	Days on well	14.79	LOT	0.00ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600 Continued rotary drilling in 12 1/4" hole.					
RT-ML	94.0m	Planned Op Continued rotary drilling in 12 1/4" hole. TD hole section. Pull out of the hole.					

Summary of Period 0000 to 2400 Hrs

Continued washing and reaming to back to bottom. Drilled ahead in 12 1/4" hole. Difficulty drilling. High torque. 25 klbs to 32 klbs torque. Swivel packing washed on top drive system. Circulate through circulation hose and subs while swivel packing repaired. Continued drilling ahead in 12 1/4" hole.

Operations For Period 0000 Hrs to 2400 Hrs on 10 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	1130	11.50	IH	P	TIT	2702.0m	Continued washing and reaming while running in hole with 5" drill pipe from 2222 m to 2702 m, due to tight hole.
1130	1730	6.00	IH	P	D	2725.0m	Took slow circulation rates. Continued drilling 12 1/4" hole from 2702 m to 2725 m. Difficulty drilling. High torque associated with string stalling, maximum 28 kft.lbs. Average rate of penetration, 6.4 m/hr.
1730	2030	3.00	IH	P (VEQ)	RR	2725.0m	Swivel packing on top drive system washed. Pulled out of hole dry back reaming to 2725 m. Tight hole. 70k overpull, unable to pull back through without pumping. Rigged up circulating hose and subs to circulate through drill string while repairing the swivel packing.
2030	2330	3.00	IH	P	D	2741.0m	Continued drilling 12 1/4" hole from 2725 m to 2741 m. Difficult drilling. High torque associated with string stalling, maximum 28 kft.lbs. Average rate of penetration, 9.7 m/hr.
2330	2400	0.50	IH	P (VEQ)	RR	2741.0m	Circulated using pump #2 while pump #1 and pump #3 were repaired. Pump #3 washed out on LH suction module. Pump #1 had LH swab/liner washed.

Operations For Period 0000 Hrs to 0600 Hrs on 11 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0200	2.00	IH	P	RR	2741.0m	Circulated and worked pipe at 2741 m while repairing pumps.
0200	0600	4.00	IH	P	D	2772.0m	(IN PROGRESS) Drilled ahead 12 1/4" hole from 2741 m to section TD at 2772 m. Intermittent high torque while drilling coal beds. Drilling coal at 20-30 m/hr. High torque between coal beds. High torque associated with string stalling, maximum 16 kft.lbs. Average rate of penetration, 11.0 m/hr.

Operations For Period Hrs to Hrs on

Operations For Period Hrs to Hrs on

Operations For Period Hrs to Hrs on

WBM Data				Cost Today \$ 8545.00			
Mud Type:	KCl-PHPA-Glycol	API FL:	4.4cc	Cl:	37500.0mg/l	Solids:	9.00
Sample-From:	Active	Filter-Cake:	1.00/32nd"	Hard/Ca:	440.0mg/l	H2O:	0.00%
Time:	18:00	HTHP-FL:	0.0cc	MBT:	14.00	Oil:	0.00%
Weight:	9.70ppg	HTHP-cake:	0.00/32nd"	PM:	0.00	Sand:	0.65
Temp:	49.0C°			PF:	0.10	Glycol:	4.0%vol
				pH:	9.00	KCl:	0.00%
						PHPA:	1.00ppb
Comment				Fann 003			
				Fann 006			
				Fann 100			
				Fann 200			
				Fann 300			
				Fann 600			

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.34m	12.25in	0.00in	10378981	Tricone Insert
Near Bit Stab	1.78m	8.00in	3.00in	270A144	Full gauge NB Stabilizer, c/w ported float
Pony DC	4.59m	8.13in	2.75in	A502	Short Non-mag Pony collar
String Stabiliser	1.95m	8.50in	2.75in	513-085	Full gauge String Stabilizer
MWD Tool	2.80m	8.00in	2.50in	DM67106	PM Sub
MWD Tool	7.14m	11.25in	2.50in	DM90056915H1GR	ROLL w/DGR + EWR
MWD Tool	3.11m	8.00in	2.50in	10532336	Pulser / TM sub
String Stabiliser	1.82m	12.00in	2.50in	91322	
Drill Collar	27.44m	8.00in	3.00in		3 x 8" DC's
Drilling Jars	9.68m	8.25in	2.40in	DAH02767	
Drill Collar	18.15m	8.00in	3.00in		2 x 8" DC's
X/O	1.09m	8.00in	2.75in	508A610	6 5/8" REG pin x 4 1/2" IF box
HWDP	166.78m	6.50in	3.00in		18 x 5" HWDP

Bulk Stocks

Name	Unit	In	Used	Adjust	Balance
Barite	MT	0.00	0.00	0.00	71.7
Gel	MT	0.00	0.00	0.00	12.4
Cement	MT	0.00	0.00	0.00	95.4
Drill Water	m ³	400.00	106.00	0.00	649.1
Fuel Oil	m ³	0.00	16.80	0.00	203.0
Potable Water	m ³	32.00	42.50	0.00	295.5

Pumps

Pump Data - Last 24 Hrs								Slow Pump Data									
No.	Type	Liner (in)	MW (ppg)	Eff (%)	SPM	SPP (psi)	Flow (gpm)	Depth (m)	SPM1	SPP1 (psi)	Flow1 (gpm)	SPM2	SPP2 (psi)	Flow2 (gpm)	SPM3	SPP3 (psi)	Flow3 (gpm)
1	A1700	6.00	9.80	0.00	65.00	3545.00	278.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	12-P160	6.00	9.80	0.00	105.00	3545.00	450.00	2702.0	40.00	425.00	176.00	0.00	0.00	0.00	0.00	0.00	0.00
3	12-P160	6.00	9.80	0.00	105.00	3545.00	450.00	2702.0	40.00	440.00	176.00	0.00	0.00	0.00	0.00	0.00	0.00

Personnel On Board

Job Title	Personnel	Company	Pax
OIM	Sean De Fretias	DOGC	46
Camp boss	Mark Stanley	Total Marine Catering	8
ROV Pilot	Robert Griffiths	Fugro	2
Cementer	Edgar Liagas	Dowell Schlumberger	2
Mud Engineer	Jasdeep Singh	MI Swaco	2
Data Engineer	Gary Bloom	Sperry Sun	4
Wellhead Engineer	Bruce Hassett	Cameron	1
Senior Drilling Supervisor	Peter Dane	BSOC	5
MWD Engineer	Stuart Allan	Halliburton	2
Directional Driller	John Smith	Halliburton	2
Centrifuge Hand	Ross Spranger	DFE	1
Casing Hand	Colin Fidock	Weatherford	4
Technician	Mark Anderson	Petrotech	1
Wireline Engineer	Wayn Nurcahya	Baker Atlas	7
Total			87

HSE Summary

Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	06 Feb 2005	4 Days	Abandon Rig Drill	
BOP Test	02 Feb 2005	8 Days	BOP Test	
Fire Drill	06 Feb 2005	4 Days	Fire Drill	
Lost Time Injury	20 May 2003	632 Days	LTI	
Pre-Tour Meetings	10 Feb 2005	0 Days	Routine Pre-Tour Meetings	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30

HSE Summary				
Events	Date of last	Days Since	Descr.	Remarks
Rig Inspection	04 Feb 2005	6 Days	NOPSA Audit	
Stop Card-Prevention	10 Feb 2005	0 Days	11 STOP cards submitted	7 cards by DODI 4 cards by T/P

Marine								
Weather on 10 Feb 2005								
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period	
10.00mi	12.0kn	240.0deg	1012.00mbar	18.0C°	0.5m	240.0deg	0.0ft/min	
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments		
0.5deg	0.5deg	0.20m	0.5m	240.0deg	0.0ft/min			
Rig Dir.	Ris. Tension	VDL	Comments					
43.0deg	228.0klb	4571.6klb						
Boats	Arrived (date/time)		Departed (date/time)		Status		Bulks	
Pacific Wrangler					Enroute to Ocean Patriot with 8 1/2" hole requirements and Woodside's spud loadout	Item	Unit	Quantity
						Barite	MT	84.00
						Gel	MT	42.00
						Cement	MT	0.00
						Drill Water	M^3	70.00
						Fuel Oil	M^3	218.60
						Potable Water	M^3	254.00
Far Grip					Standby at rig	Item	Unit	Quantity
						Barite	MT	36.00
						Gel	MT	6.00
						Cement	MT	86.00
						Drill Water	M^3	0.00
						Fuel Oil	M^3	598.00
						Potable Water	M^3	108.00

Helicopter Movement				
Flight #	Company	Arr/Dep. Time	Pax In/Out	Comment
1	Bristow	08:55 / 09:12	9 / 8	

11 Feb 2005 (GMT +10)

From: Peter Dane, Stuart Douglass
To: Colin Allport

DRILLING MORNING REPORT # 16
ZaneGrey-1 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	2772.5m	Cur. Hole Size	12.250in	AFE Cost	\$ 0.00
Field		TVD	2420.7m	Casing OD	13.375in	AFE No.	
Drill Co.	DOGC	Progress	70.0m	Shoe TVD	1029.10m	Daily COST	\$ 346289.00
Rig	Ocean Patriot	Days from spud	13.40	FIT	13.30ppg	Cum Cost	\$ 9502409.00
Wtr Dpth(MSL)	72.5m	Days on well	15.79	LOT	0.00ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600	Make up Dowell cement head and rack back same.				
RT-ML	94.0m	Planned Op	Run 9 5/8" casing.				

Summary of Period 0000 to 2400 Hrs

Drilled to section TD. Pulled out of hole. Difficulty pulling out of hole from 2772 m to 2540 m. Short wiper trip from 1968 m back down to 2772 m. Good hole. Pulled out of hole. Good hole.

Operations For Period 0000 Hrs to 2400 Hrs on 11 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0200	2.00	IH	P	RR	2741.0m	Circulated and worked pipe at 2741 m while repairing pumps.
0200	0900	7.00	IH	P	D	2772.0m	Drilled ahead 12 1/4" hole from 2741 m to section TD at 2772 m. Intermittent high torque while drilling coal beds. Drilling coal at 20-30 m/hr. High torque between coal beds. High torque associated with string stalling, maximum 16 kft.lbs. Average rate of penetration, 11.0 m/hr.
0900	1100	2.00	IH	P	CHC	2772.0m	Circulated 2 x bottoms up. Shakers clean. ROV observed traces of fluid seeping from between the 30" wellhead housing joint and 18 3/4" wellhead.
1100	1130	0.50	IH	P	TO	2772.0m	Flow check. Well Static. Wiper trip from 2772 m to 2700 m.
1130	1300	1.50	IH	P	CIR	2772.0m	Circulated hole clean.
1300	1400	1.00	IH	P	TOT	2772.0m	Flow check. Well Static. Pulled out of from 2772 m to 2628 m. Difficulty pulling out. 70k overpull at 2628 m.
1400	1500	1.00	IH	P	RW	2772.0m	Wash and ream out the hole from 2628 m to 2398 m, 500 gpm and 70 rpm. Max overpull 15k.
1500	1700	2.00	IH	P	TO	2772.0m	Continued to pull out of the hole from 2398 m to 1968 m. Good hole.
1700	1900	2.00	IH	P	TI	2772.0m	Run in the hole from 1968 m to 2772 m. Good hole. Tight spot at 2359 m, reamed through, no drag.
1900	2030	1.50	IH	P	CIR	2772.0m	Circulated bottoms up. Shakers clean.
2030	2400	3.50	IH	P	TO	2772.0m	Continued to pull out of the hole from 2772 m to 1480 m. Good hole.

Operations For Period 0000 Hrs to 0600 Hrs on 12 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0130	1.50	IH	P	TO	2772.0m	Continued pulling out of the hole from 1480m to 246 m.
0130	0300	1.50	IH	P	HBHA	2772.0m	Continued pulling out of the hole laying out the bit and racking the bottom hole assembly in the derrick.
0300	0500	2.00	IH	P	WH	2772.0m	Made up jetting tool and wear bushing recovery tool. washed through the BOP's and well head. Recovered the 13 3/8" wear bushing. Minor scoring on the wear bushing port aft.
0500	0600	1.00	IH	P	RRC	2772.0m	(IN PROGRESS) Make up 9 5/8" CHSART in a stand of 5" HWDP. During torquing up the joints the lower Mandrel on the Chsart parted. Layout same and picked up the backup 9 5/8" CHSART.

Operations For Period Hrs to Hrs on

Operations For Period Hrs to Hrs on

WBM Data						Cost Today \$ 9882.00	
Mud Type:	KCI-PHPA-Glycol	API FL:	4.1cc	Cl:	38000.0mg/l	Solids:	9.00
Sample-From:	Active	Filter-Cake:	1.00/32nd"	Hard/Ca:	420.0mg/l	H2O:	0.00%
Time:	00:00	HTHP-FL:	0.0cc	MBT:	15.00	Oil:	0.00%
Weight:	9.70ppg	HTHP-cake:	0.00/32nd"	PM:	0.00	Sand:	0.6
Temp:	49.0C°			PF:	0.10	Glycol:	3.5%vol
				pH:	9.00	KCl:	0.00%
						PHPA:	1.00ppb
Comment						Viscosity	63.00sec/qt
						PV	20.00cp
						YP	36.00lb/100ft²
						Gels 10s	9.00
						Gels 10m	16.00
						Fann 003	8.00
						Fann 006	11.00
						Fann 100	33.00
						Fann 200	46.00
						Fann 300	56.00
						Fann 600	78.00

WBM Data						Cost Today \$ 0.00	
Mud Type:	KCI-PHPA-Glycol	API FL:	4.3cc	Cl:	38000.0mg/l	Solids:	9.00
Sample-From:	Active	Filter-Cake:	1.00/32nd"	Hard/Ca:	440.0mg/l	H2O:	0.00%
Time:	18:00	HTHP-FL:	0.0cc	MBT:	15.00	Oil:	0.00%
Weight:	9.70ppg	HTHP-cake:	0.00/32nd"	PM:	0.00	Sand:	0.6
Temp:	49.0C°			PF:	0.10	Glycol:	3.5%vol
				pH:	9.00	KCl:	0.00%
						PHPA:	1.00ppb
Comment						Viscosity	65.00sec/qt
						PV	21.00cp
						YP	36.00lb/100ft²
						Gels 10s	9.00
						Gels 10m	17.00
						Fann 003	8.00
						Fann 006	12.00
						Fann 100	34.00
						Fann 200	47.00
						Fann 300	57.00
						Fann 600	78.00

Shakers, Volumes and Losses Data						Engineer : Peter Dwyer	
Equip.	Descr.	Mesh Size	Available	2422.00bbl	Losses	471.00bbl	Comments
			Active	72.00bbl	Downhole	0.00bbl	
			Mixing	0.00bbl	Surf+ Equip	0.00bbl	
			Hole	1300.00bbl	Dumped	0.00bbl	
			Slug	0.00bbl	De-Gasser	0.00bbl	
			Reserve	475.00bbl	De-Sander	0.00bbl	
			Kill	0.00bbl	De-Silter	0.00bbl	
			Premix	575.00bbl	Centrifuge	27.00bbl	
			Dumped	444.00bbl			

Bit # 4											
				Wear	I	O1	D	L	B	G	O2
Size ("):	12.25in	IADC#	437X	Nozzles		Drilled over last 24 hrs		Calculated over Bit Run			
Mfr:	Security	WOB(avg)	36.0klb	No. Size		Progress	70.0m	Cum. Progress		109.0m	
Type:	TCI	RPM(avg)	131.00	3	20.00/32nd"	On Bottom Hrs	4.80h	Cum. On Btm Hrs		10.90h	
Serial No.:	10378981	F.Rate	897.00gpm			IADC Drill Hrs	4.80h	Cum IADC Drill Hrs		10.90h	
Bit Model	XL12	SPP	3547.00psi			Total Revs	0.00	Cum Total Revs		0.00	
Depth In	2702.0m	HSI				ROP(avg)	14.58 m/hr	ROP(avg)		10.00 m/hr	
Depth Out		TFA	0.92								

BHA # 5							
Weight(Wet)	40.0klb	Length	246.7m	Torque(max)	29.00kft-lbs	D.C. (1) Ann Velocity	77.9mpm
Wt Below Jar(Wet)	26.0klb	String	240.0klb	Torque(Off.Btm)	15.00kft-lbs	D.C. (2) Ann Velocity	0.0mpm
		Pick-Up	350.0klb	Torque(On.Btm)	23.00kft-lbs	H.W.D.P. Ann Velocity	53.6mpm
		Slack-Off	300.0klb			D.P. Ann Velocity	53.6mpm
BHA Run Description		12 1/4" PDC bit, 12 1/4" Near Bit Stabilizer with ported float, Non-Mag Pony DC,12 1/4" String stabilizer, 8" MWD PM sub, 8" RLL with DGR and EWR, 8" MWD pulser/TM sub, 12" String stabilizer, 3 x 8" drill collars, 8 1/4" jar, 2 x 8" drill collars, 6 5/8" REG pin x 4 1/2" IF box X/O, 18 x 5" HWDP					
BHA Run Comment		Sensor distances from the bit: DGR - 21.64 m, EWR - 19.31 m, DM - 15.23 m					

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.34m	12.25in	0.00in	10378981	Tricone Insert
Near Bit Stab	1.78m	8.00in	3.00in	270A144	Full gauge NB Stabilizer, c/w ported float
Pony DC	4.59m	8.13in	2.75in	A502	Short Non-mag Pony collar
String Stabiliser	1.95m	8.50in	2.75in	513-085	Full gauge String Stabilizer
MWD Tool	2.80m	8.00in	2.50in	DM67106	PM Sub
MWD Tool	7.14m	11.25in	2.50in	DM90056915H1GR	ROLL w/DGR + EWR
MWD Tool	3.11m	8.00in	2.50in	10532336	Pulser / TM sub
String Stabiliser	1.82m	12.00in	2.50in	91322	
Drill Collar	27.44m	8.00in	3.00in		3 x 8" DC's
Drilling Jars	9.68m	8.25in	2.40in	DAH02767	
Drill Collar	18.15m	8.00in	3.00in		2 x 8" DC's
X/O	1.09m	8.00in	2.75in	508A610	6 5/8" REG pin x 4 1/2" IF box
HWDP	166.78m	6.50in	3.00in		18 x 5" HWDP

Bulk Stocks

Name	Unit	In	Used	Adjust	Balance
Barite	MT	0.00	2.00	0.00	69.7
Gel	MT	0.00	0.00	0.00	12.4
Cement	MT	0.00	0.00	0.00	95.4
Drill Water	m ³	0.00	117.60	0.00	531.5
Fuel Oil	m ³	200.00	15.30	0.00	387.7
Potable Water	m ³	32.00	49.50	0.00	278.0

Pumps

Pump Data - Last 24 Hrs								Slow Pump Data									
No.	Type	Liner (in)	MW (ppg)	Eff (%)	SPM	SPP (psi)	Flow (gpm)	Depth (m)	SPM1	SPP1 (psi)	Flow1 (gpm)	SPM2	SPP2 (psi)	Flow2 (gpm)	SPM3	SPP3 (psi)	Flow3 (gpm)
1	A1700	6.00	9.70	0.00	65.00	3545.00	278.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	12-P160	6.00	9.70	0.00	105.00	3545.00	450.00	2750.0	40.00	410.00	176.00	0.00	0.00	0.00	0.00	0.00	0.00
3	12-P160	6.00	9.70	0.00	105.00	3545.00	450.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Personnel On Board

Job Title	Personnel	Company	Pax
OIM	Sean De Fretias	DOGC	46
Camp boss	Mark Stanley	Total Marine Catering	8
ROV Pilot	Robert Griffiths	Fugro	2
Cementer	Edgar Liagas	Dowell Schlumberger	2
Mud Engineer	Peter Dwyer	MI Swaco	2
Data Engineer	Gary Bloom	Sperry Sun	4
Wellhead Engineer	Bruce Hassett	Cameron	1
Senior Drilling Supervisor	Peter Dane	BSOC	5
MWD Engineer	Timothy Osborne	Halliburton	2
Directional Driller	John Smith	Halliburton	2
Centrifuge Hand	Ross Spranger	DFE	1
Casing Hand	Colin Fidock	Weatherford	4
Technician	Mark Anderson	Petrotech	1
Wireline Engineer	Wayn Nurcahya	Baker Atlas	7
Total			87

HSE Summary

Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	06 Feb 2005	5 Days	Abandon Rig Drill	
BOP Test	02 Feb 2005	9 Days	BOP Test	
Fire Drill	06 Feb 2005	5 Days	Fire Drill	
Lost Time Injury	20 May 2003	633 Days	LTI	
Pre-Tour Meetings	11 Feb 2005	0 Days	Routine Pre-Tour Meetings	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30

HSE Summary				
Events	Date of last	Days Since	Descr.	Remarks
Rig Inspection	04 Feb 2005	7 Days	NOPSA Audit	
Stop Card-Prevention	11 Feb 2005	0 Days	6 STOP cards submitted	3 cards by DODI 3 cards by T/P

Marine								
Weather on 11 Feb 2005								
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period	
10.00mi	18.0kn	240.0deg	1012.00mbar	17.0C°	1.0m	240.0deg	0.0ft/min	
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments		
0.5deg	0.5deg	0.20m	2.0m	240.0deg	0.0ft/min			
Rig Dir.	Ris. Tension	VDL	Comments					
43.0deg	228.0klb	4769.4klb						
Boats	Arrived (date/time)		Departed (date/time)		Status	Bulks		
Pacific Wrangler					Standby at rig	Item	Unit	Quantity
						Barite	MT	84.00
						Gel	MT	42.00
						Cement	MT	123.00
						Drill Water	M^3	522.00
						Fuel Oil	M^3	478.00
						Potable Water	M^3	228.00
Far Grip					Standby at rig.	Item	Unit	Quantity
						Barite	MT	36.00
						Gel	MT	6.00
						Cement	MT	86.00
						Drill Water	M^3	0.00
						Fuel Oil	M^3	392.00
						Potable Water	M^3	100.00

Helicopter Movement				
Flight #	Company	Arr/Dep. Time	Pax In/Out	Comment
1	Bristow	08:39 / 08:55	7 / 7	

12 Feb 2005 (GMT +10)

From: Peter Dane, Stuart Douglass
To: Colin Allport

DRILLING MORNING REPORT # 17
ZaneGrey-1 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	2772.5m	Cur. Hole Size	12.250in	AFE Cost	\$ 0.00
Field		TVD	2420.5m	Casing OD	13.375in	AFE No.	
Drill Co.	DOGC	Progress	0.0m	Shoe TVD	1029.10m	Daily COST	\$ 346289.00
Rig	Ocean Patriot	Days from spud	14.40	FIT	13.30ppg	Cum Cost	\$ 9848698.00
Wtr Dpth(MSL)	72.5m	Days on well	16.79	LOT	0.00ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600	Continued pulling 9 5/8" casing out of the hole.				
RT-ML	94.0m	Planned Op	Continued pulling 9 5/8" casing out of the hole. Wiper trip in 12 1/4" hole.				

Summary of Period 0000 to 2400 Hrs

Continued pulling out of the hole from 1480 m to 246 m. Continued pulling the bottom hole assembly out of the hole, laying out the bit and racking the same back in the derrick. Rigged up to run 9 5/8" casing. Continued running 9 5/8" casing.

Operations For Period 0000 Hrs to 2400 Hrs on 12 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0130	1.50	IH	P	TO	2772.0m	Continued pulling out of the hole from 1480m to 246 m.
0130	0300	1.50	IH	P	HBHA	2772.0m	Continued pulling out of the hole laying out the bit and racking the bottom hole assembly in the derrick.
0300	0500	2.00	IH	P	WH	2772.0m	Made up jetting tool and wear bushing recovery tool. washed through the BOP's and well head. Recovered the 13 3/8" wear bushing. Minor scoring on the wear bushing port aft.
0500	0730	2.50	IH	P	RRC	2772.0m	Make up 9 5/8" CHSART in a stand of 5" HWDP. During torquing up the joints the lower Mandrel on the Chsart parted. Layout same and picked up the backup 9 5/8" CHSART.
0730	0800	0.50	IH	P	RUC	2772.0m	Made up deep sea express cement head. Racked back same.
0800	0930	1.50	IH	P	RRC	2772.0m	Conducted job safety analysis on rigging up and running 9 5/8" casing. Rigged up to run 9 5/8" casing.
0930	1000	0.50	IH	P	RC	2772.0m	Made up 9 5/8" shoe track assembly consisting of the shoe joint complete with Pen-o-trator reamer shoe, intermediate joint and float shoe all Baker locked. Tested shoe and float.
1000	1030	0.50	IH	P	RRC	2772.0m	Nipple up the TAM packer.
1030	1200	1.50	IH	P	RC	2772.0m	Continued running 9 5/8" 47 lb/ft, N80, BTC casing from surface to 188 m (joint 232). Ran 12 joints at 12 jnts/hr.
1200	2000	8.00	IH	P	RC	2772.0m	Continued running 9 5/8" 47 lb/ft, N80, BTC casing from 188 m (joint 231) to 467 m (joint 208). Ran a cross over pup joint (pup joint B) . Continued running 9 5/8" 47 lb/ft, N80, NewVam casing from 467 m (joint 207) to 1776 m (joint 104). Ran 127 joints at 15.8 jnts/hr. Difficuluty running casing at 1776 m. Hole taking 70k down. Inflate TAM packer. Unable to wash through.
2000	2030	0.50	IH	TP (TTE)	RC	2772.0m	Layed out casing joint 104. Rigged down casing handling gear.
2030	2400	3.50	IH	TP (TTE)	CIC	2772.0m	Rigged up 5" drill pipe handling gear. Picked up a stand of 5" drill pipe. Made up drill pipe to 9 5/8" casing using the circulating swedge. Circulated and reamed from 1776 m to 1777m. Torque limiter set to 15k ft.lbs. 10-40 rpm. 400 psi at 500 gpm.

Operations For Period 0000 Hrs to 0600 Hrs on 13 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0230	2.50	IH	TP (PWQ)	CIC	2772.0m	Continued to circulate and ream with difficulty from 1777 m to 1778 m. Work pipe at 10-40 rpm, 400 psi at 500 gpm with the torque limiter set to 15k ft.lbs.
0230	0330	1.00	IH	TP (PWQ)	RRC	2772.0m	Clear catwalk and rig floor. Prepare slug while rigging up to pull casing out of the hole. Held job safety analysis for pulling 9 5/8" casing out of the hole.
0330	0400	0.50	IH	TP (PWQ)	PS	2772.0m	Flow check. Well static. Pump slug.
0400	0430	0.50	IH	TP (PWQ)	RRC	2772.0m	Break out circulating swedge. Racked back stand of 5" drill pipe. Rigged down 5" drill pipe handling gear. Rigged up 9 5/8" casing handling gear.
0430	0600	1.50	IH	TP (PWQ)	TO	2772.0m	(IN PROGRESS) Continued to to pull 9 5/8" 47 lb/ft, N80, NewVam casing out of the hole from 1776 m (joint 105) to 484 m (joint 207). Pulled out the cross over Pup joint (Pup joint B). Pulled 9 5/8" 47 lb/ft, N80, BTC out of the hole from 467 m (joint 208) to 36 m (joint 244). Pulled 139 joints at 9 jnts/hr. Casing was pulled out of the hole with no problems. Racked back 9 5/8" shoe track in the derrick.

Operations For Period Hrs to Hrs on
Operations For Period Hrs to Hrs on
Operations For Period Hrs to Hrs on

WBM Data				Cost Today \$ 0.00					
Mud Type:	KCl-PHPA-Glycol	API FL:	4.3cc	Cl:	38000.0mg/l	Solids:	8.50	Viscosity	66.00sec/qt
Sample-From:	Active	Filter-Cake:	1.00/32nd"	Hard/Ca:	300.0mg/l	H2O:	0.00%	PV	22.00cp
Time:	22:00	HTHP-FL:	0.0cc	MBT:	15.00	Oil:	0.00%	YP	33.00lb/100ft²
Weight:	9.60ppg	HTHP-cake:	0.00/32nd"	PM:	0.00	Sand:	0.5	Gels 10s	7.00
Temp:	32.0C°			PF:	0.05	Glycol:	3.5%vol	Gels 10m	14.00
				pH:	9.00	KCl:	0.00%	Fann 003	8.00
						PHPA:	1.00ppb	Fann 006	11.00
								Fann 100	33.00
								Fann 200	45.00
								Fann 300	55.00
								Fann 600	77.00
Comment									

WBM Data				Cost Today \$ 0.00					
Mud Type:	KCl-PHPA-Glycol	API FL:	4.3cc	Cl:	38000.0mg/l	Solids:	9.00	Viscosity	68.00sec/qt
Sample-From:	Active	Filter-Cake:	1.00/32nd"	Hard/Ca:	300.0mg/l	H2O:	0.00%	PV	19.00cp
Time:	09:00	HTHP-FL:	0.0cc	MBT:	15.00	Oil:	0.00%	YP	37.00lb/100ft²
Weight:	9.70ppg	HTHP-cake:	0.00/32nd"	PM:	0.00	Sand:	0.5	Gels 10s	8.00
Temp:	32.0C°			PF:	0.05	Glycol:	3.5%vol	Gels 10m	15.00
				pH:	9.00	KCl:	0.00%	Fann 003	7.00
						PHPA:	1.00ppb	Fann 006	11.00
								Fann 100	32.00
								Fann 200	46.00
								Fann 300	56.00
								Fann 600	75.00
Comment									

WBM Data				Cost Today \$ 0.00					
Mud Type:	KCl-PHPA-Glycol	API FL:	4.4cc	Cl:	38000.0mg/l	Solids:	9.00	Viscosity	80.00sec/qt
Sample-From:	Active	Filter-Cake:	1.00/32nd"	Hard/Ca:	300.0mg/l	H2O:	0.00%	PV	23.00cp
Time:	04:30	HTHP-FL:	0.0cc	MBT:	15.00	Oil:	0.00%	YP	37.00lb/100ft²
Weight:	9.70ppg	HTHP-cake:	0.00/32nd"	PM:	0.00	Sand:	0.5	Gels 10s	10.00
Temp:	31.0C°			PF:	0.05	Glycol:	3.5%vol	Gels 10m	15.00
				pH:	9.00	KCl:	0.00%	Fann 003	9.00
						PHPA:	1.00ppb	Fann 006	12.00
								Fann 100	37.00
								Fann 200	51.00
								Fann 300	60.00
								Fann 600	83.00
Comment									

Shakers, Volumes and Losses Data				Engineer : Peter Dwyer			
Equip.	Descr.	Mesh Size	Available	2552.00bbl	Losses	245.00bbl	Comments
			Active	423.00bbl	Downhole	170.00bbl	
			Mixing	0.00bbl	Surf+ Equip	0.00bbl	
			Hole	1007.00bbl	Dumped	0.00bbl	
			Slug	0.00bbl	De-Gasser	0.00bbl	
			Reserve	412.00bbl	De-Sander	0.00bbl	
			Kill	0.00bbl	De-Silter	0.00bbl	
			Premix	710.00bbl	Centrifuge	25.00bbl	
			Dumped	50.00bbl			

Bit # 4			Wear	I	O1	D	L	B	G	O2	R
				3	3	BT	M1	E	I	WT	TD
Size ("):	12.25in	IADC#	437X	Nozzles		Drilled over last 24 hrs			Calculated over Bit Run		

Mfr:	Security	WOB(avg)	0.0klb	No.	Size	Progress	0.0m	Cum. Progress	109.0m
Type:	TCI	RPM(avg)	0.00	3	20.00/32nd"	On Bottom Hrs	0.00h	Cum. On Btm Hrs	10.90h
Serial No.:	10378981	F.Rate	0.00gpm			IADC Drill Hrs	0.00h	Cum IADC Drill Hrs	10.90h
Bit Model	XL12	SPP	0.00psi			Total Revs	0.00	Cum Total Revs	0.00
Depth In	2702.0m	HSI				ROP(avg)	N/A	ROP(avg)	10.00 m/hr
Depth Out	2772.5m	TFA	0.92						

BHA # 5

Weight(Wet)	40.0klb	Length	246.7m	Torque(max)	29.00kft-lbs	D.C. (1) Ann Velocity	77.9mpm
Wt Below Jar(Wet)	26.0klb	String	240.0klb	Torque(Off.Btm)	15.00kft-lbs	D.C. (2) Ann Velocity	0.0mpm
		Pick-Up	350.0klb	Torque(On.Btm)	23.00kft-lbs	H.W.D.P. Ann Velocity	53.6mpm
		Slack-Off	300.0klb			D.P. Ann Velocity	53.6mpm

BHA Run Description 12 1/4" PDC bit, 12 1/4" Near Bit Stabilizer with ported float, Non-Mag Pony DC, 12 1/4" String stabilizer, 8" MWD PM sub, 8" RLL with DGR and EWR, 8" MWD pulser/TM sub, 12" String stabilizer, 3 x 8" drill collars, 8 1/4" jar, 2 x 8" drill collars, 6 5/8" REG pin x 4 1/2" IF box X/O, 18 x 5" HWDP

BHA Run Comment Sensor distances from the bit: DGR - 21.64 m, EWR - 19.31 m, DM - 15.23 m

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.34m	12.25in	0.00in	10378981	Tricone Insert
Near Bit Stab	1.78m	8.00in	3.00in	270A144	Full gauge NB Stabilizer, c/w ported float
Pony DC	4.59m	8.13in	2.75in	A502	Short Non-mag Pony collar
String Stabiliser	1.95m	8.50in	2.75in	513-085	Full gauge String Stabilizer
MWD Tool	2.80m	8.00in	2.50in	DM67106	PM Sub
MWD Tool	7.14m	11.25in	2.50in	DM90056915H1GR	RLL w/DGR + EWR
MWD Tool	3.11m	8.00in	2.50in	10532336	Pulser / TM sub
String Stabiliser	1.82m	12.00in	2.50in	91322	
Drill Collar	27.44m	8.00in	3.00in		3 x 8" DC's
Drilling Jars	9.68m	8.25in	2.40in	DAH02767	
Drill Collar	18.15m	8.00in	3.00in		2 x 8" DC's
X/O	1.09m	8.00in	2.75in	508A610	6 5/8" REG pin x 4 1/2" IF box
HWDP	166.78m	6.50in	3.00in		18 x 5" HWDP

Bulk Stocks

Name	Unit	In	Used	Adjust	Balance
Barite	MT	0.00	2.38	0.00	67.3
Gel	MT	0.00	0.00	0.00	12.4
Cement	MT	0.00	0.00	0.00	95.4
Drill Water	m³	0.00	1.40	0.00	530.1
Fuel Oil	m³	0.00	12.40	0.00	375.3
Potable Water	m³	28.00	53.50	0.00	252.5

Pumps

Pump Data - Last 24 Hrs								Slow Pump Data									
No.	Type	Liner (in)	MW (ppg)	Eff (%)	SPM	SPP (psi)	Flow (gpm)	Depth (m)	SPM1	SPP1 (psi)	Flow1(gpm)	SPM2	SPP2 (psi)	Flow2 (gpm)	SPM3	SPP3 (psi)	Flow3 (gpm)
1	A1700	6.00	9.70	0.00	65.00	3545.00	278.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	12-P160	6.00	9.70	0.00	105.00	3545.00	450.00	2750.0	40.00	410.00	176.00	0.00	0.00	0.00	0.00	0.00	0.00
3	12-P160	6.00	9.70	0.00	105.00	3545.00	450.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Personnel On Board

Job Title	Personnel	Company	Pax
OIM	Sean De Fretias	DOGC	46
Camp boss	Mark Stanley	Total Marine Catering	8
ROV Pilot	Robert Griffiths	Fugro	2
Cementer	Edgar Lliagas	Dowell Schlumberger	2
Mud Engineer	Peter Dwyer	MI Swaco	2

Personnel On Board

Data Engineer	Gary Bloom	Sperry Sun	4
Wellhead Engineer	Bruce Hassett	Cameron	1
Senior Drilling Supervisor	Peter Dane	BSOC	5
MWD Engineer	Timothy Osborne	Halliburton	2
Directional Driller	John Smith	Halliburton	2
Centrifuge Hand	Ross Spranger	DFE	1
Casing Hand	Colin Fidock	Weatherford	4
Technician	Mark Anderson	Petrotech	1
Wireline Engineer	Wayn Nurcahya	Baker Atlas	7
Total			87

HSE Summary

Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	06 Feb 2005	6 Days	Abandon Rig Drill	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30 3 cards by DODI 2 cards by T/P
BOP Test	02 Feb 2005	10 Days	BOP Test	
Fire Drill	06 Feb 2005	6 Days	Fire Drill	
Lost Time Injury	20 May 2003	634 Days	LTI	
Pre-Tour Meetings	12 Feb 2005	0 Days	Routine Pre-Tour Meetings	
Rig Inspection	04 Feb 2005	8 Days	NOPSA Audit	
Stop Card-Prevention	12 Feb 2005	0 Days	5 STOP cards submitted	

Marine

Weather on 12 Feb 2005

Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period
10.00mi	26.0kn	240.0deg	1017.00mbar	17.0C°	1.0m	240.0deg	0.0ft/min
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments	
0.5deg	0.5deg	0.30m	1.5m	240.0deg	0.0ft/min		
Rig Dir.	Ris. Tension	VDL		Comments			
43.0deg	228.0klb	44382.6klb					

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Pacific Wrangler			Standby at rig	Item	Unit	Quantity
				Barite	MT	84.00
				Gel	MT	42.00
				Cement	MT	123.00
				Drill Water	M^3	522.00
				Fuel Oil	M^3	474.00
				Potable Water	M^3	223.00
Far Grip			Standby at rig.	Item	Unit	Quantity
				Barite	MT	36.00
				Gel	MT	6.00
				Cement	MT	86.00
				Drill Water	M^3	0.00
				Fuel Oil	M^3	385.00
				Potable Water	M^3	90.00

13 Feb 2005 (GMT +10)

From: Peter Dane, Stuart Douglass
To: Colin Allport

DRILLING MORNING REPORT # 18
ZaneGrey-1 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	2772.5m	Cur. Hole Size	12.250in	AFE Cost	\$ 0.00
Field		TVD	2420.5m	Casing OD	13.375in	AFE No.	
Drill Co.	DOGC	Progress	0.0m	Shoe TVD	1029.10m	Daily COST	\$ 365421.00
Rig	Ocean Patriot	Days from spud	15.38	FIT	13.30ppg	Cum Cost	\$ 10214119.00
Wtr Dpth(MSL)	72.5m	Days on well	17.77	LOT	0.00ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600	Continued wiper trip.				
RT-ML	94.0m	Planned Op	Continued 12 1/4" wiper trip to TD. Circulate bottoms up. Pull out of the hole. Rig up to run 9 5/8" casing. Run 9 5/8" casing.				

Summary of Period 0000 to 2400 Hrs

Continued to pull 9 5/8" casing out of the hole. Racked back shoe track in the derrick. Rigged down casing handling gear. Rigged up drill pipe handling gear. Set the 13 3/8" wear bushing. Ran in hole with 12 1/4" hole wiper assembly.

Operations For Period 0000 Hrs to 2400 Hrs on 13 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0230	2.50	IH	TP (PWQ)	CIC	2772.0m	Continued to circulate and ream with difficulty from 1777 m to 1778 m. Work pipe at 10-40 rpm, 400 psi at 500 gpm with the torque limiter set to 15k ft.lbs.
0230	0330	1.00	IH	TP (PWQ)	RRC	2772.0m	Clear catwalk and rig floor. Prepare slug while rigging up to pull casing out of the hole. Held job safety analysis for pulling 9 5/8" casing out of the hole.
0330	0400	0.50	IH	TP (PWQ)	PS	2772.0m	Flow check. Well static. Pump slug.
0400	0430	0.50	IH	TP (PWQ)	RRC	2772.0m	Break out circulating swedge. Racked back stand of 5" drill pipe. Rigged down 5" drill pipe handling gear. Rigged up 9 5/8" casing handling gear.
0430	1930	15.00	IH	TP (PWQ)	TO	2772.0m	Continued to pull 9 5/8" 47 lb/ft, N80, NewVam casing out of the hole from 1776 m (joint 105) to 484 m (joint 207). Pulled out the cross over Pup joint (Pup joint B). Pulled 9 5/8" 47 lb/ft, N80, BTC out of the hole from 467 m (joint 208) to 36 m (joint 244). Pulled 139 joints at 9 jnts/hr. Casing was pulled out of the hole with no problems. Racked back 9 5/8" shoe track in the derrick.
1930	2000	0.50	IH	TP (PWQ)	TO	2772.0m	Rigged down casing handling gear and 500 tonne bails.
2000	2030	0.50	IH	TP (PWQ)	TO	2772.0m	Rigged up 5" drill pipe handling gear and 350 tonne bails.
2030	2100	0.50	IH	TP (PWQ)	TO	2772.0m	Made up jetting sub and wear bushing recovery / setting tool to 5" drill pipe.
2100	2130	0.50	IH	TP (PWQ)	TO	2772.0m	Ran in hole with 5" drill pipe. Washed through the BOP's and well head. Set the 13 3/8" wear bushing.
2130	2200	0.50	IH	TP (PWQ)	TO	2772.0m	Pulled jetting tool and wear bushing recovery / setting tool out of hole with 5" drill pipe. Layout same.
2200	2330	1.50	IH	TP (PWQ)	TO	2772.0m	Ran in hole with 12 1/4" rotary bottom hole assembly from derrick, with new mill tooth bit to 135 m. Shallow pulse tested MWD

Operations For Period 0000 Hrs to 0600 Hrs on 14 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0030	0.50	IH	TP (PWQ)	TI	2772.0m	Continued running in the hole with BHA from 135 m to 219 m.
0030	0230	2.00	IH	TP (PWQ)	TI	2772.0m	Continued running in hole from 219 m to 1740 m with 5" drill pipe. Good Hole.
0230	0300	0.50	IH	TP (PWQ)	TIT	2772.0m	Continued running in the hole with care, with 5" drill pipe. Tag obstruction at 1777 m. Pull back to 1770 m and attempt wash down through obstruction. No go. Establish reaming parameters. (Up 270 klbs, down 220 klbs, rotating 240 klbs)
0300	0430	1.50	IH	TP (PWQ)	RW	2772.0m	Wash and ream (on compensator) 1777 m to 1780 m. 10 - 12 klbs weight on bit, 80 RPM, torque at 8 - 10 klbs, 825 gpm. Increase in weight gave flat torque. Oserved significant volume of cuttings / cavings at shakers.
0430	0530	1.00	IH	TP (PWQ)	CHC	2772.0m	Broke through obstruction at 1780 m and continued wash and ream without difficulty to kelly down at 1795 m. Washed and reamed / backreamed pipe 1795 m to 1770 m while circulate bottoms up and until shakers clear. Increase RPM to 140 to assist hole cleaning. Significant volume of cuttings discarded - mostly larger cavings / cuttings, but large amount of fines blinding bottom shaker screens between 4000

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0530	0600	0.50	IH	TP (PWQ)	RW	2772.0m	stks and 6000 stks. Boosted riser after bottoms up. Large volume of large cavings / cuttings. Work pipe (dry) 1770 m to 1795 m. Observed 50 klbs up / 20 klbs down through 1780 m to 1777 m. Observed decrease in up down weights through tight spot. After decrease in weight up/down unable to pass 1791 m. Wash / ream 1785 m to 1795 m. String taking weight as work down, clear when pick-up above.

Operations For Period Hrs to Hrs on
Operations For Period Hrs to Hrs on

WBM Data				Cost Today \$ 936.00			
Mud Type:	KCl-PHPA-Glycol	API FL:	4.3cc	Cl:	38000.0mg/l	Solids:	9.00
Sample-From:	Active	Filter-Cake:	1.00/32nd"	Hard/Ca:	300.0mg/l	H2O:	0.00%
Time:	23:00	HTHP-FL:	0.0cc	MBT:	15.00	Oil:	0.00%
Weight:	9.70ppg	HTHP-cake:	0.00/32nd"	PM:	0.00	Sand:	0.4
Temp:	32.0C°			PF:	0.05	Glycol:	3.0%vol
				pH:	9.00	KCl:	0.00%
						PHPA:	1.00ppb
Comment							Viscosity 67.00sec/qt PV 23.00cp YP 32.00lb/100ft² Gels 10s 8.00 Gels 10m 12.00 Fann 003 8.00 Fann 006 11.00 Fann 100 32.00 Fann 200 44.00 Fann 300 55.00 Fann 600 78.00

WBM Data				Cost Today \$ 0.00			
Mud Type:	KCl-PHPA-Glycol	API FL:	4.0cc	Cl:	38000.0mg/l	Solids:	9.00
Sample-From:	Active	Filter-Cake:	1.00/32nd"	Hard/Ca:	300.0mg/l	H2O:	0.00%
Time:	05:00	HTHP-FL:	0.0cc	MBT:	15.00	Oil:	0.00%
Weight:	9.70ppg	HTHP-cake:	0.00/32nd"	PM:	0.00	Sand:	0.4
Temp:	32.0C°			PF:	0.05	Glycol:	3.0%vol
				pH:	9.00	KCl:	0.00%
						PHPA:	1.00ppb
Comment							Viscosity 73.00sec/qt PV 20.00cp YP 31.00lb/100ft² Gels 10s 8.00 Gels 10m 11.00 Fann 003 8.00 Fann 006 11.00 Fann 100 31.00 Fann 200 42.00 Fann 300 51.00 Fann 600 71.00

Shakers, Volumes and Losses Data				Engineer : Peter Dwyer			
Equip.	Descr.	Mesh Size	Available	2413.00bbl	Losses	144.00bbl	Comments
			Active	474.00bbl	Downhole	44.00bbl	
			Mixing	0.00bbl	Surf+ Equip	0.00bbl	
			Hole	1007.00bbl	Dumped	0.00bbl	
			Slug	0.00bbl	De-Gasser	0.00bbl	
			Reserve	412.00bbl	De-Sander	0.00bbl	
			Kill	0.00bbl	De-Silter	0.00bbl	
			Premix	520.00bbl	Centrifuge	10.00bbl	
			Other	90.00bbl			

Bit # 5				Wear	I	O1	D	L	B	G	O2	R
Size ("):	12.25in	IADC#	216S	Nozzles		Drilled over last 24 hrs			Calculated over Bit Run			
Mfr:	Security	WOB(avg)	0.0klb	No.	Size	Progress		0.0m	Cum. Progress		0.0m	
Type:	Milled Tooth	RPM(avg)	0.00	3	20.00/32nd"	On Bottom Hrs		0.00h	Cum. On Btm Hrs		0.00h	
Serial No.:	718015	F.Rate	0.00gpm			IADC Drill Hrs		0.00h	Cum IADC Drill Hrs		0.00h	
Bit Model	XS-4	SPP	0.00psi			Total Revs		0.00	Cum Total Revs		0.00	
Depth In	2772.5m	HSI				ROP(avg)		N/A	ROP(avg)		0.00 m/hr	
Depth Out		TFA	0.92									

BHA # 6							
Weight(Wet)	0.0klb	Length	219.4m	Torque(max)	0.00kft-lbs	D.C. (1) Ann Velocity	0.0mpm

Wt Below Jar(Wet)	0.0klb	String	0.0klb	Torque(Off.Btm)	0.00kft-lbs	D.C. (2) Ann Velocity	0.0mpm
		Pick-Up	0.0klb	Torque(On.Btm)	0.00kft-lbs	H.W.D.P. Ann Velocity	0.0mpm
		Slack-Off	0.0klb			D.P. Ann Velocity	0.0mpm

BHA Run Description 12 1/4" PDC bit, 12 1/4" Near Bit Stabilizer - c/w ported float,Non-Mag Pony DC,12 1/4" String stabilizer, 8" MWD PM sub, 8" RLL with DGR and EWR, 8" MWD pulser/TM sub, 12" String stabilizer, 3 x 8" drill collars, 8 1/4" jar, 2 x 8" drill collars, 6 5/8" REG pin x 4 1/2" IF box X/O, 18 x 5" HWDP

BHA Run Comment Sensor distances from the bit: DGR - 21.64 m, EWR - 19.31 m, DM - 15.23 m

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.34m	12.25in	0.00in	10378981	Tricone Insert
Near Bit Stab	1.78m	8.00in	3.00in	270A144	Full gauge NB Stabilizer, c/w ported float
Pony DC	4.59m	8.13in	2.75in	A502	Short Non-mag Pony collar
String Stabiliser	1.95m	8.50in	2.75in	513-085	Full gauge String Stabilizer
MWD Tool	2.80m	8.00in	2.50in	DM67106	PM Sub
MWD Tool	7.14m	11.25in	2.50in	DM90056915H1GR	RLL w/DGR + EWR
MWD Tool	3.11m	8.00in	2.50in	10532336	Pulser / TM sub
String Stabiliser	1.82m	12.00in	2.50in	91322	
Drill Collar	27.44m	8.00in	3.00in		3 x 8" DC's
Drilling Jars	9.68m	8.25in	2.40in	DAH02767	
Drill Collar	18.15m	8.00in	3.00in		2 x 8" DC's
X/O	1.09m	8.00in	2.75in	508A610	6 5/8" REG pin x 4 1/2" IF box
HWDP	139.53m	6.50in	3.00in		15 x 5" HWDP

Bulk Stocks

Name	Unit	In	Used	Adjust	Balance
Barite	MT	0.00	8.62	0.00	58.7
Gel	MT	0.00	0.00	0.00	12.4
Cement	MT	0.00	0.00	0.00	95.4
Drill Water	m ³	0.00	140.00	0.00	390.1
Fuel Oil	m ³	0.00	7.90	0.00	367.4
Potable Water	m ³	28.00	26.90	0.00	253.6

Pumps

Pump Data - Last 24 Hrs

No.	Type	Liner (in)	MW (ppg)	Eff (%)	SPM	SPP (psi)	Flow (gpm)	Depth (m)	SPM1	SPP1 (psi)	Flow1(gpm)	SPM2	SPP2 (psi)	Flow2 (gpm)	SPM3	SPP3 (psi)	Flow3 (gpm)
1	A1700	6.00	9.70	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	12-P160	6.00	9.70	0.00	59.00	400.00	250.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	12-P160	6.00	9.70	0.00	59.00	400.00	250.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Personnel On Board

Job Title	Personnel	Company	Pax
OIM	Sean De Fretias	DOGC	46
Camp boss	Mark Stanley	Total Marine Catering	8
ROV Pilot	Robert Griffiths	Fugro	2
Cementer	Edgar Lliagas	Dowell Schlumberger	2
Mud Engineer	Peter Dwyer	MI Swaco	2
Data Engineer	Gary Bloom	Sperry Sun	6
Wellhead Engineer	Bruce Hassett	Cameron	1
Senior Drilling Supervisor	Peter Dane	BSOC	5
MWD Engineer	Timothy Osborne	Halliburton	2
Directional Driller	John Smith	Halliburton	2
Centrifuge Hand	Brendon McPhail	DFE	1
Casing Hand	Colin Fidock	Weatherford	4
Technician	Mark Anderson	Petrotech	1
Wireline Engineer	Wayn Nurcahya	Baker Atlas	3
Total			85

HSE Summary

Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	13 Feb 2005	0 Days	Abandon Rig Drill	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30 8 cards by DODI 4 cards by T/P 2 cards by catering
BOP Test	02 Feb 2005	11 Days	BOP Test	
Fire Drill	13 Feb 2005	0 Days	Fire Drill	
Lost Time Injury	20 May 2003	635 Days	LTI	
Pre-Tour Meetings	13 Feb 2005	0 Days	Routine Pre-Tour Meetings	
Rig Inspection	04 Feb 2005	9 Days	NOPSA Audit	
Stop Card-Prevention	13 Feb 2005	0 Days	14 STOP cards submitted	

Marine

Weather on 13 Feb 2005

Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period
10.00mi	15.0kn	45.0deg	1020.00mbar	20.0C°	0.3m	45.0deg	0.0ft/min
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments	
0.4deg	0.4deg	0.30m	1.0m	240.0deg	0.0ft/min		
Rig Dir.	Ris. Tension	VDL		Comments			
43.0deg	228.0klb	4465.6klb					

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Pacific Wrangler			Standby at rig	Item	Unit	Quantity
				Barite	MT	84.00
				Gel	MT	42.00
				Cement	MT	123.00
				Drill Water	M^3	522.00
				Fuel Oil	M^3	470.70
				Potable Water	M^3	218.00
Far Grip			Standby at rig.	Item	Unit	Quantity
				Barite	MT	36.00
				Gel	MT	6.00
				Cement	MT	86.00
				Drill Water	M^3	0.00
				Fuel Oil	M^3	377.00
				Potable Water	M^3	84.00

Helicopter Movement

Flight #	Company	Arr/Dep. Time	Pax In/Out	Comment
1	Bristow	11:46 / 11:55	2 / 4	

14 Feb 2005 (GMT +10)

From: Peter Dane, Stuart Douglass
To: Colin Allport

DRILLING MORNING REPORT # 19
ZaneGrey-1 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	2772.5m	Cur. Hole Size	12.250in	AFE Cost	\$ 0.00
Field		TVD	2420.5m	Casing OD	13.375in	AFE No.	
Drill Co.	DOGC	Progress	0.0m	Shoe TVD	1029.10m	Daily COST	\$ 368421.00
Rig	Ocean Patriot	Days from spud	16.40	FIT	13.30ppg	Cum Cost	\$ 10582540.00
Wtr Dpth(MSL)	72.5m	Days on well	18.77	LOT	0.00ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600	Continued waching / reaming in the hole.				
RT-ML	94.0m	Planned Op	Continue washing / reaming in the hole. Pull out of the hole.				

Summary of Period 0000 to 2400 Hrs

Continued to run in the hole with 5" drill pipe. Wash through tight spot / obstruction at 1777m. Continue to wash and ream to 2284 m. Circulate hole clean. Pull out of the hole with 5" drill pipe.

Operations For Period 0000 Hrs to 2400 Hrs on 14 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0030	0.50	IH	TP (PWQ)	TI	2772.0m	Continued running in the hole with BHA from 135 m to 219 m.
0030	0230	2.00	IH	TP (PWQ)	TI	2772.0m	Continued running in hole from 219 m to 1740 m with 5" drill pipe. Good Hole.
0230	0300	0.50	IH	TP (PWQ)	TIT	2772.0m	Continued running in the hole with care, with 5" drill pipe. Tag obstruction at 1777 m. Pull back to 1770 m and attempt wash down through obstruction. No go. Establish reaming parameters. (Up 270 klbs, down 220 klbs, rotating 240 klbs)
0300	0430	1.50	IH	TP (PWQ)	RW	2772.0m	Wash and ream (on compensator) 1777 m to 1780 m. 10 - 12 klbs weight on bit, 80 RPM, torque at 8 - 10 klbs, 825 gpm. Increase in weight gave flat torque. Oserved significant volume of cuttings / cavings at shakers.
0430	0530	1.00	IH	TP (PWQ)	CHC	2772.0m	Broke through obstruction at 1780 m and continued wash and ream without difficulty to kelly down at 1795 m. Washed and reamed / backreamed pipe 1795 m to 1770 m while circulate bottoms up and until shakers clear. Increase RPM to 140 to assist hole cleaning. Significant volume of cuttings discarded - mostly larger cavings / cuttings, but large amount of fines blinding bottom shaker screens between 4000 stks and 6000 stks. Boosted riser after bottoms up. Large volume of large cavings / cuttings.
0530	0600	0.50	IH	TP (PWQ)	RW	2772.0m	Work pipe (dry) 1770 m to 1795 m. Observed 50 klbs up / 20 klbs down through 1780 m to 1777 m. Observed decrease in up down weights through tight spot. After decrease in weight up/down unable to pass 1791 m. Wash / ream 1785 m to 1795 m. String taking weight as work down, clear when pick-up above.
0600	0930	3.50	IH	TP (PWQ)	RW	2772.0m	Continued washing / reaming from 1795 m to 1910 m. 60-100 rpm, 10-12k ft.lbs, 520 gpm at 1650 psi. Increasing the flow rate to 900 gpm to assist hole cleaning. Excessive cuttings coming over the shakers. Commence raising the mud weight from 9.40 ppg to 9.80 ppg.
0930	1000	0.50	IH	TP (PWQ)	CHC	2772.0m	Circulate hole clean due to excessive cuttings return and to control surface losses over the shakers.
1000	2100	11.00	IH	TP (PWQ)	RW	2772.0m	Continued washing / reaming from 1910 m to 2284 m. 90-120 rpm, 5-10 klbs, 10-12k ft.lbs, 920 gpm at 3120 psi. Increasing WOB greater than 10 klbs caused the drill string to stall. Greater than 15 klbs the drill string started to pack off. Average reaming speed, 34 m/hr. Mud weight stabilised at 9.8 ppg. Gas peaks encountered during reaming, 1955 m 4.63%, 2108 m 4.92%.
2100	2230	1.50	IH	TP (PWQ)	CHC	2772.0m	Circulate hole clean with 13000 stks at 3900 psi.
2230	2400	1.50	IH	TP (PWQ)	RW	2772.0m	Flow check. Well static. Backream out of hole from 2284 m to 2232 m. Difficulty backreaming. Max over pull 80k. Backreaming with 140 rpm, 900 gpm at 3100 psi, 10k ft.lbs.

Operations For Period 0000 Hrs to 0600 Hrs on 15 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0030	0.50	IH	TP (PWQ)	RW	2772.0m	Continued backreaming out of the hole from 2232 m to 2170 m. Difficulty backreaming. Backreamed at 31 m/hr.
0030	0230	2.00	IH	TP (PWQ)	RW	2772.0m	Continued backreaming out of the hole from 2170 m to 1740 m. Good hole. Backreaming with 620 gpm at 1800 psi, 120 - 140 rpm, 10 - 12k ft.lbs. Backreamed

Wt Below Jar(Wet)	0.0klb	String	0.0klb	Torque(Off.Btm)	0.00kft-lbs	D.C. (2) Ann Velocity	0.0mpm
		Pick-Up	0.0klb	Torque(On.Btm)	0.00kft-lbs	H.W.D.P. Ann Velocity	0.0mpm
		Slack-Off	0.0klb			D.P. Ann Velocity	0.0mpm

BHA Run Description	12 1/4" PDC bit, 12 1/4" Near Bit Stabilizer - c/w ported float,Non-Mag Pony DC,12 1/4" String stabilizer, 8" MWD PM sub, 8" RLL with DGR and EWR, 8" MWD pulser/TM sub, 12" String stabilizer, 3 x 8" drill collars, 8 1/4" jar, 2 x 8" drill collars, 6 5/8" REG pin x 4 1/2" IF box X/O, 18 x 5" HWDP						
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BHA Run Comment	Sensor distances from the bit: DGR - 21.64 m, EWR - 19.31 m, DM - 15.23 m						
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Equipment	Length	OD	ID	Serial #	Comment
Bit	0.34m	12.25in	0.00in	10378981	Tricone Insert
Near Bit Stab	1.78m	8.00in	3.00in	270A144	Full gauge NB Stabilizer, c/w ported float
Pony DC	4.59m	8.13in	2.75in	A502	Short Non-mag Pony collar
String Stabiliser	1.95m	8.50in	2.75in	513-085	Full gauge String Stabilizer
MWD Tool	2.80m	8.00in	2.50in	DM67106	PM Sub
MWD Tool	7.14m	11.25in	2.50in	DM90056915H1GR	RLL w/DGR + EWR
MWD Tool	3.11m	8.00in	2.50in	10532336	Pulser / TM sub
String Stabiliser	1.82m	12.00in	2.50in	91322	
Drill Collar	27.44m	8.00in	3.00in		3 x 8" DC's
Drilling Jars	9.68m	8.25in	2.40in	DAH02767	
Drill Collar	18.15m	8.00in	3.00in		2 x 8" DC's
X/O	1.09m	8.00in	2.75in	508A610	6 5/8" REG pin x 4 1/2" IF box
HWDP	139.53m	6.50in	3.00in		15 x 5" HWDP

Bulk Stocks

Name	Unit	In	Used	Adjust	Balance
Barite	MT	0.00	13.41	0.00	45.2
Gel	MT	0.00	0.00	0.00	12.4
Cement	MT	0.00	0.00	0.00	95.4
Drill Water	m ³	0.00	89.70	0.00	300.4
Fuel Oil	m ³	0.00	17.70	0.00	349.7
Potable Water	m ³	31.00	23.80	0.00	260.8

Pumps

Pump Data - Last 24 Hrs								Slow Pump Data									
No.	Type	Liner (in)	MW (ppg)	Eff (%)	SPM	SPP (psi)	Flow (gpm)	Depth (m)	SPM1	SPP1 (psi)	Flow1(gpm)	SPM2	SPP2 (psi)	Flow2 (gpm)	SPM3	SPP3 (psi)	Flow3 (gpm)
1	A1700	6.00	9.90	0.00	70.00	3100.00	300.00	2284.0	40.00	350.00	171.00	0.00	0.00	0.00	0.00	0.00	0.00
2	12-P160	6.00	9.90	0.00	70.00	3100.00	300.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	12-P160	6.00	9.90	0.00	70.00	3100.00	300.00	2284.0	40.00	360.00	171.00	0.00	0.00	0.00	0.00	0.00	0.00

Personnel On Board

Job Title	Personnel	Company	Pax
OIM	Sean De Fretias	DOGC	46
Camp boss	Mark Stanley	Total Marine Catering	8
ROV Pilot	Robert Griffiths	Fugro	2
Cementer	Edgar Lliagas	Dowell Schlumberger	2
Mud Engineer	Peter Dwyer	MI Swaco	2
Data Engineer	Gary Bloom	Sperry Sun	6
Wellhead Engineer	Bruce Hassett	Cameron	1
Senior Drilling Supervisor	Peter Dane	BSOC	5
MWD Engineer	Timothy Osborne	Halliburton	2
Directional Driller	John Smith	Halliburton	2
Centrifuge Hand	Brendon McPhail	DFE	1
Casing Hand	Colin Fidock	Weatherford	4
Technician	Mark Anderson	Petrotech	1
Wireline Engineer	Wayn Nurcahya	Baker Atlas	3
Fargrip	Lee Aylemore	Farstad	1
Total			86

HSE Summary

Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	13 Feb 2005	1 Day	Abandon Rig Drill	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30 8 cards by DODI 2 cards by T/P
BOP Test	02 Feb 2005	12 Days	BOP Test	
Fire Drill	13 Feb 2005	1 Day	Fire Drill	
Lost Time Injury	20 May 2003	636 Days	LTI	
Pre-Tour Meetings	14 Feb 2005	0 Days	Routine Pre-Tour Meetings	
Rig Inspection	04 Feb 2005	10 Days	NOPSA Audit	
Stop Card-Prevention	14 Feb 2005	0 Days	10 STOP cards submitted	

Marine

Weather on 14 Feb 2005

Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period
10.00mi	15.0kn	45.0deg	1015.00mbar	22.0C°	0.5m	45.0deg	0.0ft/min
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments	
0.4deg	0.4deg	0.30m	1.0m	240.0deg	0.0ft/min		
Rig Dir.	Ris. Tension	VDL		Comments			
43.0deg	228.0klb	4279.7klb					

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Pacific Wrangler			Standby at rig	Item	Unit	Quantity
				Barite	MT	84.00
				Gel	MT	42.00
				Cement	MT	123.00
				Drill Water	M^3	522.00
				Fuel Oil	M^3	459.30
				Potable Water	M^3	213.00
Far Grip			Standby at rig	Item	Unit	Quantity
				Barite	MT	36.00
				Gel	MT	6.00
				Cement	MT	86.00
				Drill Water	M^3	0.00
				Fuel Oil	M^3	373.00
				Potable Water	M^3	76.00

15 Feb 2005 (GMT +10)

From: Peter Dane, Steve Hodgetts
To: Colin Allport

DRILLING MORNING REPORT # 20
ZaneGrey-1 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	2772.5m	Cur. Hole Size	12.250in	AFE Cost	\$ 0.00
Field		TVD	2420.5m	Casing OD	13.375in	AFE No.	
Drill Co.	DOGC	Progress	0.0m	Shoe TVD	1029.10m	Daily COST	\$ 357652.00
Rig	Ocean Patriot	Days from spud	17.40	FIT	13.30ppg	Cum Cost	\$ 10940192.00
Wtr Dpth(MSL)	72.5m	Days on well	19.77	LOT	0.00ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600 Continued running 9 5/8" casing.					
RT-ML	94.0m	Planned Op Continued to run 9 5/8" casing.					

Summary of Period 0000 to 2400 Hrs

Continued to backream the short wiper trip to 1740 m. Reaming in the hole to 2735 m. Circulate hole clean. Continued pulling out of the hole.

Operations For Period 0000 Hrs to 2400 Hrs on 15 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0030	0.50	IH	TP (PWQ)	RW	2772.0m	Continued backreaming out of the hole from 2232 m to 2170 m. Difficulty backreaming. Backreamed at 31 m/hr.
0030	0230	2.00	IH	TP (PWQ)	RW	2772.0m	Continued backreaming out of the hole from 2170 m to 1740 m. Good hole. Backreaming with 620 gpm at 1800 psi, 120 - 140 rpm, 10 - 12k ft.lbs. Backreamed at 215 m/hr.
0230	0400	1.50	IH	TP (PWQ)	RW	2772.0m	Circulate 2 x bottoms up. 960 gpm at 3400 psi. Reduced amount of larger cuttings coming over the shakers, large volume of fine cuttings coming back.
0400	0830	4.50	IH	TP (PWQ)	RW	2772.0m	Continued reaming run in hole from 1740 m to 2283 m. 620 gpm at 1750 psi, 130 rpms, 12k ft.lbs. Average running speed 155 m/hr. Commence raising the mud weight to 10.0 ppg. 6.12% gas at 1842 m.
0830	1030	2.00	IH	TP (PWQ)	RW	2772.0m	Continued reaming in the hole from 2283 m to 2338 m. Difficulty reaming. 130 - 140 rpm, 12-16k ft.lbs, 870 gpm at 3400 psi. Reaming at 27.5 m/hr.
1030	1400	3.50	IH	TP (PWQ)	RW	2772.0m	Continued reaming in the hole from 2338 m to 2729 m. Good hole. Reamed with 130 rpm, 12k ft.lbs, 810 gpm at 3000 psi. Reaming at 112 m/hr.
1400	1500	1.00	IH	TP (PWQ)	RW	2772.0m	Continued reaming in the hole from 2729 m to 2735 m. Difficult reaming. Reamed with weight on bit up to 25 klbs, 110-130 rpm, 840 gpm at 3725 psi. Tagged at 2735 m with 40 klbs static weight, no movement.
1500	1700	2.00	IH	TP (PWQ)	CHC	2772.0m	Circulated hole clean with 15000 stks at 3800 psi.
1700	1800	1.00	IH	TP (PWQ)	TO	2772.0m	Continued to pull out of the hole with 5" drill pipe from 2735 m to 2400 m. Good hole. Maximum overpull 80k.
1800	2230	4.50	IH	TP (PWQ)	TOT	2772.0m	Continued to pull out of the hole with 5" drill pipe having to wash from 2400 m to 1735 m. 620 gpm at 2600 psi.
2230	2400	1.50	IH	TP (PWQ)	TO	2772.0m	Flow check. Well static. Pumped slug. Continued pulling out of the hole from 1735 m to 1077 m. Flow check at 13 3/8" casing shoe. Well static.

Operations For Period 0000 Hrs to 0600 Hrs on 16 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0100	1.00	IH	TP (PWQ)	TO	2772.0m	Continued pulling out of the hole with 5" drill pipe from 1077 m to 219 m
0100	0230	1.50	IH	TP (PWQ)	HBHA	2772.0m	Continued pulling the bottom hole assembly out of the hole from 219 m to surface racking back in the derrick
0230	0400	1.50	IH	TP (PWQ)	WH	2772.0m	Retrieved wearbushing. Jetted wellhead on the way out.
0400	0500	1.00	IC	TP (PWQ)	RRC	2772.0m	Held a job safety analysis on running 9 5/8" casing. Rigged up to run 9 5/8" casing.
0500	0600	1.00	IC	TP (PWQ)	RR	2772.0m	(IN PROGRESS) Picked up 9 5/8" casing shoe track from the derrick. Racking arm stuck around 9 5/8" float shoe damaging the racking arm. Repaired same.

Operations For Period Hrs to Hrs on

Operations For Period Hrs to Hrs on

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.34m	12.25in	0.00in	10378981	Tricone Insert
Near Bit Stab	1.78m	8.00in	3.00in	270A144	Full gauge NB Stabilizer, c/w ported float
Pony DC	4.59m	8.13in	2.75in	A502	Short Non-mag Pony collar
String Stabiliser	1.95m	8.50in	2.75in	513-085	Full gauge String Stabilizer
MWD Tool	2.80m	8.00in	2.50in	DM67106	PM Sub
MWD Tool	7.14m	11.25in	2.50in	DM90056915H1GR	ROLL w/DGR + EWR
MWD Tool	3.11m	8.00in	2.50in	10532336	Pulser / TM sub
String Stabiliser	1.82m	12.00in	2.50in	91322	
Drill Collar	27.44m	8.00in	3.00in		3 x 8" DC's
Drilling Jars	9.68m	8.25in	2.40in	DAH02767	
Drill Collar	18.15m	8.00in	3.00in		2 x 8" DC's
X/O	1.09m	8.00in	2.75in	508A610	6 5/8" REG pin x 4 1/2" IF box
HWDP	139.53m	6.50in	3.00in		15 x 5" HWDP

Bulk Stocks

Name	Unit	In	Used	Adjust	Balance
Barite	MT	0.00	19.29	0.00	26.0
Gel	MT	0.00	0.00	0.00	12.4
Cement	MT	0.00	0.00	0.00	95.4
Drill Water	m ³	0.00	151.00	0.00	149.4
Fuel Oil	m ³	0.00	19.10	0.00	330.6
Potable Water	m ³	31.00	24.00	0.00	267.8

Pumps

Pump Data - Last 24 Hrs								Slow Pump Data									
No.	Type	Liner (in)	MW (ppg)	Eff (%)	SPM	SPP (psi)	Flow (gpm)	Depth (m)	SPM1	SPP1 (psi)	Flow1 (gpm)	SPM2	SPP2 (psi)	Flow2 (gpm)	SPM3	SPP3 (psi)	Flow3 (gpm)
1	A1700	6.00	10.00	0.00	70.00	3100.00	300.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	12-P160	6.00	10.00	0.00	70.00	3100.00	300.00	2735.0	40.00	440.00	171.00	0.00	0.00	0.00	0.00	0.00	0.00
3	12-P160	6.00	10.00	0.00	70.00	3100.00	300.00	2735.0	40.00	440.00	171.00	0.00	0.00	0.00	0.00	0.00	0.00

Personnel On Board

Job Title	Personnel	Company	Pax
OIM	Sean De Fretias	DOGC	47
Camp boss	Mark Stanley	Total Marine Catering	8
ROV Pilot	Robert Griffiths	Fugro	2
Cementer	Edgar Liagas	Dowell Schlumberger	2
Mud Engineer	Peter Dwyer	MI Swaco	2
Data Engineer	Gary Bloom	Sperry Sun	6
Wellhead Engineer	Bruce Hassett	Cameron	1
Senior Drilling Supervisor	Peter Dane	BSOC	5
MWD Engineer	Timothy Osborne	Halliburton	2
Directional Driller	John Smith	Halliburton	2
Centrifuge Hand	Brendon McPhail	DFE	1
Casing Hand	Colin Fidock	Weatherford	4
Technician	Mark Anderson	Petrotech	1
Wireline Engineer	Wayn Nurcahya	Baker Atlas	3
Total			86

HSE Summary

Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	13 Feb 2005	2 Days	Abandon Rig Drill	
BOP Test	02 Feb 2005	13 Days	BOP Test	
Fire Drill	13 Feb 2005	2 Days	Fire Drill	
Lost Time Injury	20 May 2003	637 Days	LTI	
Pre-Tour Meetings	15 Feb 2005	0 Days	Routine Pre-Tour Meetings	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30

HSE Summary

Events	Date of last	Days Since	Descr.	Remarks
Rig Inspection	04 Feb 2005	11 Days	NOPSA Audit	
Stop Card-Prevention	15 Feb 2005	0 Days	10 STOP cards submitted	7 cards by DODI 3 cards by T/P

Marine

Weather on 15 Feb 2005

Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period
10.00mi	28.0kn	240.0deg	1016.00mbar	20.0C°	1.0m	240.0deg	0.0ft/min
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments	
0.4deg	0.4deg	0.30m	2.5m	240.0deg	0.0ft/min		
Rig Dir.	Ris. Tension	VDL		Comments			
43.0deg	228.0klb	4231.3klb					

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Pacific Wrangler			Standby at rig	Item	Unit	Quantity
				Barite	MT	84.00
				Gel	MT	42.00
				Cement	MT	123.00
				Drill Water	M^3	522.00
				Fuel Oil	M^3	462.40
Far Grip			Standby at rig	Potable Water	M^3	208.00
				Item	Unit	Quantity
				Barite	MT	36.00
				Gel	MT	6.00
				Cement	MT	86.00
				Drill Water	M^3	0.00
				Fuel Oil	M^3	366.00
				Potable Water	M^3	68.00

Helicopter Movement

Flight #	Company	Arr/Dep. Time	Pax In/Out	Comment
1	Bristow	8:23 / 8:55	9 / 9	

16 Feb 2005 (GMT +10)

From: Peter Dane, Steve Hodgetts
To: Colin Allport

DRILLING MORNING REPORT # 21
ZaneGrey-1 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	2772.5m	Cur. Hole Size	12.250in	AFE Cost	\$ 0.00
Field		TVD	2420.5m	Casing OD	13.375in	AFE No.	
Drill Co.	DOGC	Progress	0.0m	Shoe TVD	1029.10m	Daily COST	\$ 733377.00
Rig	Ocean Patriot	Days from spud	18.40	FIT	13.30ppg	Cum Cost	\$ 11673569.00
Wtr Dpth(MSL)	72.5m	Days on well	20.77	LOT	0.00ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600		Continued running 9 5/8" casing.			
RT-ML	94.0m	Planned Op		Continued running 9 5/8" casing.			

Summary of Period 0000 to 2400 Hrs

Continued pulling out of the hole. Racked back BHA in derrick. Rigged up to run 9 5/8" casing. Ran 9 5/8" casing having to wash/ream tight spots.

Operations For Period 0000 Hrs to 2400 Hrs on 16 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0100	1.00	IH	TP (PWQ)	TO	2772.0m	Continued pulling out of the hole with 5" drill pipe from 1077 m to 219 m
0100	0230	1.50	IH	TP (PWQ)	HBHA	2772.0m	Continued pulling the bottom hole assembly out of the hole from 219 m to surface racking back in the derrick
0230	0400	1.50	IH	TP (PWQ)	WH	2772.0m	Retrieved wearbushing. Jetted wellhead on the way out.
0400	0500	1.00	IC	TP (PWQ)	RRC	2772.0m	Held a job safety analysis on running 9 5/8" casing. Rigged up to run 9 5/8" casing.
0500	0630	1.50	IC	TP (PWQ)	RR	2772.0m	Picked up 9 5/8" casing shoe track from the derrick. Racking arm stuck around 9 5/8" float shoe damaging the racking arm. Repaired same.
0630	0730	1.00	IC	TP (PWQ)	RC	2772.0m	Ran 9 5/8" casing shoe track assembly removing the 4 x spoolisers from the shoe track assembly. The blades of the reamer shoe were removed earlier.
0730	0800	0.50	IC	TP (PWQ)	RRC	2772.0m	Changed out the bails. Nipped up the TAM packer.
0800	1730	9.50	IC	TP (PWQ)	RC	2772.0m	Continued running 9 5/8" 47 lbs/ft, N80 BTC casing from surface to 467 m (joint 208). Ran cross over pup joint (pup joint B). Continued running 9 5/8" 47 lbs/ft, NewVam casing from 467 m (joint 207) to 1776 m (joint 104). Ran 127 joints at 14.5 jnts/hr. Inflated TAM packer at 1089 m, circulated before leaving the 13 3/8" casing shoe.
1730	1930	2.00	IC	P	RC	2772.0m	Continued running 9 5/8" 47 lbs/ft, NewVam casing from 1776 m (joint 104) to 1964 m (joint 86). Took 50 klbs at 1895 m. Washed down at 560 gpm at 800 psi. Took 70 klbs at 1964 m. Washed down at 860 gpm at 190 psi. Unable to get past tight spot. Excessive cuttings coming over the shakers.
1930	2030	1.00	IC	P	RW	2772.0m	Pulled back to 1962 m. Lay out joint 85 and TAM packer.
2030	2100	0.50	IC	P	RC	2772.0m	Changed elevators. Made up stand of 5" drill pipe to casing string.
2100	2230	1.50	IC	P	RC	2772.0m	Reamed from 1962 m to 1989 m. Pumped at 560 gpm at 500 psi. Torque limiter set to 15k ft.lbs. Unable to rotate.
2230	2300	0.50	IC	P	RC	2772.0m	Racked back stand of 5" drill pipe. Changed out elevators.
2300	2330	0.50	IC	P	RC	2772.0m	Continued running 9 5/8" casing from 1962 m. Damaged threads on joints 88 & 87.
2330	2400	0.50	IC	P	RC	2772.0m	Layout joints 87 & 88 due to damaged threads.

Operations For Period 0000 Hrs to 0600 Hrs on 17 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0030	0.50	IC	P	RC	2772.0m	Continued laying out damaged joints 88 & 87.
0030	0200	1.50	IC	P	RC	2772.0m	Continued running 9 5/8" casing from 1950m to 2038 m (joint 80). Washed down joint 80.
0200	0230	0.50	IC	P	RC	2772.0m	Changed out elevators. Made up 5" drill pipe to casing using circulating swedge.
0230	0330	1.00	IC	P	RC	2772.0m	Washed casing down with stand of 5" drill pipe 520 gpm at 560 psi.
0330	0400	0.50	IC	P	RC	2772.0m	Racked back 5" drill pipe in the derrick. Changed out elevators.
0400	0600	2.00	IC	P	RC	2772.0m	(IN PROGRESS) Continued running 9 5/8" casing from 2038m to 2113m (joint 74) . Washed through tight spots.

Operations For Period Hrs to Hrs on

Operations For Period Hrs to Hrs on

WBM Data				Cost Today \$ 7513.00			
Mud Type: KCl-PHPA-Glycol	API FL: 3.9cc	Cl: 36000.0mg/l	Solids: 11.00	Viscosity	72.00sec/qt		
Sample-From: Active	Filter-Cake: 1.00/32nd"	Hard/Ca: 320.0mg/l	H2O: 0.00%	PV	22.00cp		
Time: 19:20	HTHP-FL: 0.0cc	MBT: 17.50	Oil: 0.00%	YP	34.00lb/100ft²		
Weight: 10.10ppg	HTHP-cake: 0.00/32nd"	PM: 0.00	Sand: 0.5	Gels 10s	8.00		
Temp: 30.0C°		PF: 0.05	Glycol: 4.3%vol	Gels 10m	14.00		
		pH: 9.00	KCl: 0.00%	Fann 003	7.00		
			PHPA: 1.00ppb	Fann 006	11.00		
				Fann 100	34.00		
				Fann 200	46.00		
				Fann 300	56.00		
Comment				Fann 600	78.00		

WBM Data				Cost Today \$ 0.00			
Mud Type: KCl-PHPA-Glycol	API FL: 3.8cc	Cl: 36000.0mg/l	Solids: 11.00	Viscosity	88.00sec/qt		
Sample-From: Active	Filter-Cake: 1.00/32nd"	Hard/Ca: 300.0mg/l	H2O: 0.00%	PV	25.00cp		
Time: 06:00	HTHP-FL: 0.0cc	MBT: 17.50	Oil: 0.00%	YP	44.00lb/100ft²		
Weight: 10.10ppg	HTHP-cake: 0.00/32nd"	PM: 0.00	Sand: 0.5	Gels 10s	12.00		
Temp: 31.0C°		PF: 0.03	Glycol: 4.3%vol	Gels 10m	23.00		
		pH: 9.00	KCl: 0.00%	Fann 003	10.00		
			PHPA: 1.00ppb	Fann 006	14.00		
				Fann 100	42.00		
				Fann 200	57.00		
				Fann 300	69.00		
Comment				Fann 600	94.00		

Shakers, Volumes and Losses Data				Engineer : Peter Dwyer			
Equip.	Descr.	Mesh Size	Available	2458.00bbl	Losses	310.00bbl	Comments
			Active	476.00bbl	Downhole	70.00bbl	
			Mixing	0.00bbl	Surf+ Equip	200.00bbl	
			Hole	1381.00bbl	Dumped	40.00bbl	
			Slug	0.00bbl	De-Gasser	0.00bbl	
			Reserve	13.00bbl	De-Sander	0.00bbl	
			Kill	0.00bbl	De-Silter	0.00bbl	
			Premix	588.00bbl	Centrifuge	0.00bbl	

BHA # 6							
Weight(Wet)	0.0klb	Length	219.4m	Torque(max)	0.00kft-lbs	D.C. (1) Ann Velocity	0.0mpm
Wt Below Jar(Wet)	0.0klb	String	275.0klb	Torque(Off.Btm)	0.00kft-lbs	D.C. (2) Ann Velocity	0.0mpm
		Pick-Up	330.0klb	Torque(On.Btm)	0.00kft-lbs	H.W.D.P. Ann Velocity	0.0mpm
		Slack-Off	220.0klb			D.P. Ann Velocity	0.0mpm
BHA Run Description		12 1/4" PDC bit, 12 1/4" Near Bit Stabilizer - c/w ported float,Non-Mag Pony DC,12 1/4" String stabilizer, 8" MWD PM sub, 8" RLL with DGR and EWR, 8" MWD pulser/TM sub, 12" String stabilizer, 3 x 8" drill collars, 8 1/4" jar, 2 x 8" drill collars, 6 5/8" REG pin x 4 1/2" IF box X/O, 18 x 5" HWDP					
BHA Run Comment		Sensor distances from the bit: DGR - 21.64 m, EWR - 19.31 m, DM - 15.23 m					
Equipment		Length	OD	ID	Serial #	Comment	
Bit		0.34m	12.25in	0.00in	10378981	Tricone Insert	
Near Bit Stab		1.78m	8.00in	3.00in	270A144	Full gauge NB Stabilizer, c/w ported float	
Pony DC		4.59m	8.13in	2.75in	A502	Short Non-mag Pony collar	
String Stabiliser		1.95m	8.50in	2.75in	513-085	Full gauge String Stabilizer	
MWD Tool		2.80m	8.00in	2.50in	DM67106	PM Sub	
MWD Tool		7.14m	11.25in	2.50in	DM90056915H1GR	RLL w/DGR + EWR	
MWD Tool		3.11m	8.00in	2.50in	10532336	Pulser / TM sub	
String Stabiliser		1.82m	12.00in	2.50in	91322		
Drill Collar		27.44m	8.00in	3.00in		3 x 8" DC's	
Drilling Jars		9.68m	8.25in	2.40in	DAH02767		
Drill Collar		18.15m	8.00in	3.00in		2 x 8" DC's	

Equipment	Length	OD	ID	Serial #	Comment
X/O	1.09m	8.00in	2.75in	508A610	6 5/8" REG pin x 4 1/2" IF box
HWDP	139.53m	6.50in	3.00in		15 x 5" HWDP

Bulk Stocks

Name	Unit	In	Used	Adjust	Balance
Barite	MT	32.21	0.00	0.00	58.2
Gel	MT	0.00	0.00	0.00	12.4
Cement	MT	0.00	0.00	0.00	95.4
Drill Water	m ³	0.00	33.90	0.00	115.5
Fuel Oil	m ³	0.00	8.20	0.00	322.4
Potable Water	m ³	25.00	13.90	0.00	278.9

Pumps

Pump Data - Last 24 Hrs								Slow Pump Data									
No.	Type	Liner (in)	MW (ppg)	Eff (%)	SPM	SPP (psi)	Flow (gpm)	Depth (m)	SPM1	SPP1 (psi)	Flow1(gpm)	SPM2	SPP2 (psi)	Flow2 (gpm)	SPM3	SPP3 (psi)	Flow3 (gpm)
1	A1700	6.00	10.00	0.00	70.00	3100.00	300.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	12-P160	6.00	10.00	0.00	70.00	3100.00	300.00	2735.0	40.00	440.00	171.00	0.00	0.00	0.00	0.00	0.00	0.00
3	12-P160	6.00	10.00	0.00	70.00	3100.00	300.00	2735.0	40.00	440.00	171.00	0.00	0.00	0.00	0.00	0.00	0.00

Personnel On Board

Job Title	Personnel	Company	Pax
OIM	Sean De Fretias	DOGC	47
Camp boss	Mark Stanley	Total Marine Catering	8
ROV Pilot	Robert Griffiths	Fugro	2
Cementer	Edgar Lliagas	Dowell Schlumberger	2
Mud Engineer	Peter Dwyer	MI Swaco	2
Data Engineer	Gary Bloom	Sperry Sun	6
Wellhead Engineer	Bruce Hassett	Cameron	1
Senior Drilling Supervisor	Peter Dane	BSOC	5
MWD Engineer	Timothy Osborne	Halliburton	2
Directional Driller	John Smith	Halliburton	2
Centrifuge Hand	Brendon McPhail	DFE	1
Casing Hand	Colin Fidock	Weatherford	4
Technician	Mark Anderson	Petrotech	1
Wireline Engineer	Wayn Nurcahya	Baker Atlas	3
Total			86

HSE Summary

Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	13 Feb 2005	3 Days	Abandon Rig Drill	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30 3 cards by DODI
BOP Test	02 Feb 2005	14 Days	BOP Test	
Fire Drill	13 Feb 2005	3 Days	Fire Drill	
Lost Time Injury	20 May 2003	638 Days	LTI	
Pre-Tour Meetings	16 Feb 2005	0 Days	Routine Pre-Tour Meetings	
Rig Inspection	04 Feb 2005	12 Days	NOPSA Audit	
Stop Card-Prevention	16 Feb 2005	0 Days	3 STOP cards submitted	

Marine

Weather on 16 Feb 2005								
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period	
10.00mi	40.0kn	240.0deg	1013.00mbar	23.0C°	0.5m	240.0deg	0.0ft/min	
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments		
0.4deg	0.4deg	0.30m	1.5m	240.0deg	0.0ft/min			
Rig Dir.	Ris. Tension	VDL	Comments					
43.0deg	228.0klb	3963.5klb						
Boats	Arrived (date/time)		Departed (date/time)		Status	Bulks		
Pacific Wrangler					Standby at rig	Item	Unit	Quantity
						Barite	MT	84.00
						Gel	MT	42.00
						Cement	MT	123.00
						Drill Water	M^3	522.00
						Fuel Oil	M^3	450.60
						Potable Water	M^3	203.00
Far Grip					Standby at rig	Item	Unit	Quantity
						Barite	MT	0.00
						Gel	MT	6.00
						Cement	MT	86.00
						Drill Water	M^3	0.00
						Fuel Oil	M^3	353.00
						Potable Water	M^3	60.00

17 Feb 2005 (GMT +10)

From: Peter Dane, Steve Hodgetts
To: Colin Allport

DRILLING MORNING REPORT # 22
ZaneGrey-1 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	2772.5m	Cur. Hole Size	8.500in	AFE Cost	\$ 0.00
Field		TVD	2420.5m	Casing OD	9.625in	AFE No.	
Drill Co.	DOGC	Progress	0.0m	Shoe TVD	1936.20m	Daily COST	\$ 345867.00
Rig	Ocean Patriot	Days from spud	19.40	FIT	0.00ppg	Cum Cost	\$ 12019436.00
Wtr Dpth(MSL)	72.5m	Days on well	21.77	LOT	0.00ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600	Attempting to land seal assembly.				
RT-ML	94.0m	Planned Op	Run, set & test seal assembly. Lay out 12 1/4" bottom hole assembly. Test BOP. Drill out shoe track.				

Summary of Period 0000 to 2400 Hrs

Continued running 9 5/8" casing, washed down through tight spots. Unable to work casing past 2194m. Layed out 8 joints of casing. Made up hanger joint and cement stinger. RIH with landing string. Washed casing to bottom. Circulated 2 x bottoms up. Pumped cement. Rigged down cement lines and running tool.

Operations For Period 0000 Hrs to 2400 Hrs on 17 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0030	0.50	IC	P	RC	2772.0m	Continued laying out damaged joints 88 & 87.
0030	0200	1.50	IC	P	RC	2772.0m	Continued running 9 5/8" casing from 1950m to 2038 m (joint 80). Washed down joint 80.
0200	0230	0.50	IC	P	RC	2772.0m	Changed out elevators. Made up 5" drill pipe to casing using circulating swedge.
0230	0330	1.00	IC	P	RC	2772.0m	Washed casing down with stand of 5" drill pipe 520 gpm at 560 psi.
0330	0400	0.50	IC	P	RC	2772.0m	Racked back 5" drill pipe in the derrick. Changed out elevators.
0400	0700	3.00	IC	P	RC	2772.0m	Continued running 9 5/8" casing from 2038m to 2113m (joint 74) . Washed through tight spots.
0700	0730	0.50	IC	P	RC	2772.0m	Changed out elevators. Made up 5" drill pipe to casing using circulating swedge.
0730	0830	1.00	IC	P	RC	2772.0m	Washed casing down from 2113 m to 2138 m with stand of 5" drill pipe 520 gpm at 560 psi.
0830	0900	0.50	IC	P	RC	2772.0m	Racked back 5" drill pipe in the derrick. Changed out elevators.
0900	1030	1.50	IC	P	RC	2772.0m	Continued running 9 5/8" casing from 2138m to 2194m (joint 67). Unable to work past 2194m.
1030	1100	0.50	IC	P	RC	2772.0m	Changed out elevators. Made up 5" drill pipe to casing using circulating swedge.
1100	1300	2.00	IC	P	RC	2772.0m	Washed casing down from 2188m to 2194m with stand of 5" drill pipe 520gpm at 560psi. Unable to wash past 2194 m.
1300	1430	1.50	IC	P	RC	2772.0m	Layed out 8 joints of 9 5/8" casing.
1430	1800	3.50	IC	P	RC	2772.0m	Made up hanger joint & cement stinger. Tested running tool. Ran the landing string in the hole on 5" HWDP.
1800	1900	1.00	IC	P	RC	2772.0m	Washed and worked casing to 2184 m.
1900	2030	1.50	IC	P	CIC	2772.0m	Circulated 2 x bottoms up with 430 gpm at 900 psi.
2030	2100	0.50	IC	P	CMC	2772.0m	Held job safety meeting. Rigged up cement lines.
2100	2230	1.50	IC	P	CMC	2772.0m	Tested lines to 3000psi. Pumped 60 bbl chemical wash & 45 bbl spacer. Mixed and pumped 321sx 'G' cement, 128 bbl lead slurry at 12.5 ppg. Followed by 249sx, 51.4 bbls tail slurry at 15.8 ppg.
2230	2330	1.00	IC	P	CMC	2772.0m	Displaced cement by 10 bbls with Dowell cement unit & 495 bbls using rig pumps. Plug did not bump after the required strokes.
2330	2400	0.50	IC	P	CMC	2772.0m	Rigged down cement line. Backed out running tool.

Operations For Period 0000 Hrs to 0600 Hrs on 18 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0100	1.00	IC	P	CMC	2772.0m	Release running tool. Pull out of the hole with same.
0100	0130	0.50	IC	P	CMC	2772.0m	Layed out Deep Sea Express tool.
0130	0200	0.50	IC	P	CMC	2772.0m	Layed out 9 5/8" circulating swedge.
0200	0230	0.50	IC	P	CMC	2772.0m	Changed out the bails from 500 tonne to 350 tonne.
0230	0330	1.00	IC	P	WH	2772.0m	Made up & RIH with Cameron mill and flush tool.
0330	0400	0.50	IC	P	WH	2772.0m	Flushed and cleaned wellhead. POOH & laid out tool.

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0400	0600	2.00	IC	P	WH	2772.0m	Made up seal assembly & running tool. RIH. Attempted to energise with 35K down.

Operations For Period Hrs to Hrs on

Operations For Period Hrs to Hrs on

WBM Data				Cost Today \$ 9904.00					
Mud Type:	KCl-PHPA-Glycol	API FL:	3.4cc	Cl:	39000.0mg/l	Solids:	12.00	Viscosity	78.00sec/qt
Sample-From:	Active	Filter-Cake:	1.00/32nd"	Hard/Ca:	280.0mg/l	H2O:	0.00%	PV	22.00cp
Time:	22:30	HTHP-FL:	0.0cc	MBT:	15.00	Oil:	0.00%	YP	42.00lb/100ft²
Weight:	10.20ppg	HTHP-cake:	0.00/32nd"	PM:	0.00	Sand:	0.6	Gels 10s	9.00
Temp:	33.0C°			PF:	0.02	Glycol:	3.5%vol	Gels 10m	18.00
				pH:	9.00	KCl:	0.00%	Fann 003	9.00
						PHPA:	1.00ppb	Fann 006	12.00
								Fann 100	42.00
								Fann 200	55.00
								Fann 300	64.00
								Fann 600	86.00
Comment									

WBM Data				Cost Today \$ 0.00					
Mud Type:	KCl-PHPA-Glycol	API FL:	3.4cc	Cl:	39000.0mg/l	Solids:	12.00	Viscosity	85.00sec/qt
Sample-From:	Active	Filter-Cake:	1.00/32nd"	Hard/Ca:	30020.0mg/l	H2O:	0.00%	PV	25.00cp
Time:	10:00	HTHP-FL:	0.0cc	MBT:	15.00	Oil:	0.00%	YP	43.00lb/100ft²
Weight:	10.20ppg	HTHP-cake:	0.00/32nd"	PM:	0.00	Sand:	0.6	Gels 10s	10.00
Temp:	31.0C°			PF:	0.02	Glycol:	3.5%vol	Gels 10m	20.00
				pH:	9.00	KCl:	0.00%	Fann 003	9.00
						PHPA:	1.00ppb	Fann 006	12.00
								Fann 100	43.00
								Fann 200	58.00
								Fann 300	68.00
								Fann 600	93.00
Comment									

Shakers, Volumes and Losses Data					Engineer : Peter Dwyer		
Equip.	Descr.	Mesh Size	Available	2600.00bbl	Losses	483.00bbl	Comments
			Active	520.00bbl	Downhole	30.00bbl	
			Mixing	0.00bbl	Surf+ Equip	77.00bbl	
			Hole	871.00bbl	Dumped	0.00bbl	
			Slug	0.00bbl	De-Gasser	0.00bbl	
			Reserve	304.00bbl	De-Sander	0.00bbl	
			Kill	0.00bbl	De-Silter	0.00bbl	
			Premix	905.00bbl	Centrifuge	0.00bbl	
			Other	376.00bbl			

Bulk Stocks						
Name	Unit	In	Used	Adjust	Balance	
Barite	MT	24.94	11.91	0.00	71.2	
Gel	MT	0.00	0.00	0.00	12.4	
Cement	MT	0.00	0.00	0.00	95.4	
Drill Water	m³	522.00	150.30	0.00	487.2	
Fuel Oil	m³	0.00	16.40	0.00	306.0	
Potable Water	m³	12.50	18.00	0.00	273.4	

Pumps																	
Pump Data - Last 24 Hrs								Slow Pump Data									
No.	Type	Liner (in)	MW (ppg)	Eff (%)	SPM	SPP (psi)	Flow (gpm)	Depth (m)	SPM1	SPP1 (psi)	Flow1 (gpm)	SPM2	SPP2 (psi)	Flow2 (gpm)	SPM3	SPP3 (psi)	Flow3 (gpm)
1	A1700	6.00	10.20	0.00	75.00	400.00	320.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	12-P160	6.00	10.20	0.00	75.00	400.00	320.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	12-P160	6.00	10.20	0.00	75.00	400.00	320.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Personnel On Board

Job Title	Personnel	Company	Pax
OIM	Barry Scott	DOGC	47
Camp boss	Mark Stanley	Total Marine Catering	8
ROV Pilot	Robert Griffiths	Fugro	2
Cementer	Edgar Lliagas	Dowell Schlumberger	2
Mud Engineer	Peter Dwyer	MI Swaco	2
Data Engineer	Dorian Kuhn	Sperry Sun	6
Wellhead Engineer	Bruce Hassett	Cameron	1
Senior Drilling Supervisor	Peter Dane	BSOC	5
MWD Engineer	Daniel Luoni	Halliburton	2
Directional Driller	John Smith	Halliburton	2
Centrifuge Hand	Brendon McPhail	DFE	1
Casing Hand	Colin Fidock	Weatherford	4
Technician	Mark Anderson	Petrotech	1
Wireline Engineer	Wayn Nurcahya	Baker Atlas	3
Total			86

HSE Summary

Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	13 Feb 2005	4 Days	Abandon Rig Drill	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30 5 cards by DODI 1 card by T/P
BOP Test	02 Feb 2005	15 Days	BOP Test	
Fire Drill	13 Feb 2005	4 Days	Fire Drill	
Lost Time Injury	20 May 2003	639 Days	LTI	
Pre-Tour Meetings	17 Feb 2005	0 Days	Routine Pre-Tour Meetings	
Rig Inspection	04 Feb 2005	13 Days	NOPSA Audit	
Stop Card-Prevention	17 Feb 2005	0 Days	6 STOP cards submitted	

Marine

Weather on 17 Feb 2005

Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period
10.00mi	25.0kn	45.0deg	1019.00mbar	15.0C°	0.2m	45.0deg	0.0ft/min
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments	
0.3deg	0.3deg	0.30m	1.0m	225.0deg	0.0ft/min		
Rig Dir.	Ris. Tension	VDL		Comments			
43.0deg	228.0klb	4098.4klb					

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks			
Pacific Wrangler			Standby at rig	Item		Unit	Quantity
				Barite		MT	59.00
				Gel		MT	42.00
				Cement		MT	123.00
				Drill Water		M^3	0.00
				Fuel Oil		M^3	442.80
				Potable Water		M^3	198.00
Far Grip			Standby at rig	Item		Unit	Quantity
				Barite		MT	0.00
				Gel		MT	6.00
				Cement		MT	86.00
				Drill Water		M^3	0.00
				Fuel Oil		M^3	342.00
				Potable Water		M^3	52.00

Helicopter Movement

Flight #	Company	Arr/Dep. Time	Pax In/Out	Comment
1	Bristow	08:50 / 09:05	11 / 11	

18 Feb 2005 (GMT +10)

From: Peter Dane, Steve Hodgetts
To: Colin Allport

DRILLING MORNING REPORT # 23
ZaneGrey-1 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	2772.5m	Cur. Hole Size	12.250in	AFE Cost	\$ 0.00
Field		TVD	2420.5m	Casing OD	9.625in	AFE No.	
Drill Co.	DOGC	Progress	0.0m	Shoe TVD	1936.08m	Daily COST	\$ 345621.00
Rig	Ocean Patriot	Days from spud	20.40	FIT	0.00ppg	Cum Cost	\$ 12365057.00
Wtr Dpth(MSL)	72.5m	Days on well	22.77	LOT	0.00ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600	Testing BOP stack.				
RT-ML	94.0m	Planned Op	Lay out weight-set test tool and run in the hole with 8 1/2" BHA, drill cement and shoe and commence cleanout.				

Summary of Period 0000 to 2400 Hrs

Cemented 9 5/8" casing, changed out wellhead seal assembly and tested same, made up 8 1/2" clean out BHA, ran wearbushing, made up weight-set test tool.

Operations For Period 0000 Hrs to 2400 Hrs on 18 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0100	1.00	IC	P	CMC	2772.0m	Release running tool. Pull out of the hole with same.
0100	0130	0.50	IC	P	CMC	2772.0m	Layed out Deep Sea Express tool.
0130	0200	0.50	IC	P	CMC	2772.0m	Layed out 9 5/8" circulating swedge.
0200	0230	0.50	IC	P	CMC	2772.0m	Changed out the bails from 500 tonne to 350 tonne.
0230	0330	1.00	IC	P	WH	2772.0m	Made up & RIH with Cameron mill and flush tool.
0330	0400	0.50	IC	P	WH	2772.0m	Flushed and cleaned wellhead. POOH & laid out tool.
0400	0600	2.00	IC	P	WH	2772.0m	Made up seal assembly & running tool. RIH. Attempted to energise with 35K down.
0600	0700	1.00	IC	TP (VEQ)	WH	2772.0m	Broke circulation with cement unit and tested surface lines to 5,000 psi - OK. Attempted to test seal assembly against lower rams to 1,500 psi - no success.
0700	0930	2.50	IC	TP (VEQ)	WH	2772.0m	Pulled out of the hole with seal assembly and inspected same - OK. Adjusted same and ran in the hole to attempt to energise again.
0930	1030	1.00	IC	P	WH	2772.0m	Broke circulation with cement unit and tested seal assembly against lower rams to 1,500 psi for 5 minutes - OK. Took 30K overpull to ensure seal assembly energised - OK. Tested seal assembly to 5,000 psi for 10 minutes - OK.
1030	1400	3.50	IC	P	LDP	2772.0m	Pulled out of the hole laying down 12 1/4" BHA used to energise seal assembly. RIH with 8" DC & Jars. LO same.
1400	1600	2.00	IC	P	HBHA	2772.0m	Commenced picking up 8.5" BHA & racking same.
1600	1700	1.00	IC	P	WH	2772.0m	MU wearbushing to running tool & RIH. Set wearbushing, POOH & LO RT.
1700	1900	2.00	IC	P	HBHA	2772.0m	Continued PU & RIH with 8.5" BHA. MU BOP test tool & RIH on landing string.
1900	2400	5.00	IC	P	BT	2772.0m	Set test tool in wellhead & commenced testing BOP's.

Operations For Period 0000 Hrs to 0600 Hrs on 19 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0230	2.50	IC	P	BT	2772.0m	Continued to test BOP stack and choke and kill manifold on blue pod from drillers panel at 200 psi for 5 minutes and 5,000 psi for 10 minutes as per test program. Function tested BOP stack with yellow pod from remote panel in Koomey room - OK.
0230	0330	1.00	IC	P	HT	2772.0m	Unseated test plug, pulled out of the hole and laid down same.
0330	0600	2.50	IC	P	BT	2772.0m	Rigged up and tested TDS valves, TIW's and #1 standpipe valve at 200 psi for 5 minutes and 5,000 psi for 10 minutes.

Operations For Period Hrs to Hrs on

Operations For Period Hrs to Hrs on

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.24m	8.50in	0.00in	10676290	Milled tooth
Bit Sub	0.85m	6.50in	2.88in	186-0044	With ported float installed
Pony DC	4.11m	6.50in	2.81in	A366, 47645	
String Stabiliser	1.47m	8.50in	2.88in	207A147	
Drill Collar	46.65m	6.50in	2.88in		
Drilling Jars	9.87m	6.50in	0.00in	40909	
HWDP	138.80m	5.00in	3.00in		

Bulk Stocks

Name	Unit	In	Used	Adjust	Balance
Barite	MT	0.00	0.00	0.00	71.2
Gel	MT	0.00	0.00	0.00	12.4
Cement	MT	0.00	23.77	4.06	75.7
Drill Water	m ³	0.00	86.70	0.00	400.5
Fuel Oil	m ³	0.00	11.90	4.00	298.1
Potable Water	m ³	26.00	22.40	0.00	277.0

Pumps

Pump Data - Last 24 Hrs								Slow Pump Data									
No.	Type	Liner (in)	MW (ppg)	Eff (%)	SPM	SPP (psi)	Flow (gpm)	Depth (m)	SPM1	SPP1 (psi)	Flow1 (gpm)	SPM2	SPP2 (psi)	Flow2 (gpm)	SPM3	SPP3 (psi)	Flow3 (gpm)
1	A1700	6.00	10.20	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	12-P160	6.00	10.20	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	12-P160	6.00	10.20	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Personnel On Board

Job Title	Personnel	Company	Pax
OIM	Barry Scott	DOGC	47
Camp boss	Mark Stanley	Total Marine Catering	9
ROV Pilot	Robert Griffiths	Fugro	2
Cementer	Edgar Lliagas	Dowell Schlumberger	2
Mud Engineer	Peter Dwyer	MI Swaco	2
Data Engineer	Dorian Kuhn	Sperry Sun	6
Wellhead Engineer	Bruce Hassett	Cameron	1
Senior Drilling Supervisor	Peter Dane	BSOC	5
MWD Engineer	Daniel Luoni	Halliburton	2
Directional Driller	Tim Walton	Halliburton	2
Centrifuge Hand	Brendon McPhail	DFE	1
Technician	Mark Anderson	Petrotech	1
Wireline Engineer	Wayn Nurcahya	Baker Atlas	3
Total			83

HSE Summary

Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	13 Feb 2005	5 Days	Abandon Rig Drill	
BOP Test	02 Feb 2005	16 Days	BOP Test	
Fire Drill	13 Feb 2005	5 Days	Fire Drill	
Lost Time Injury	20 May 2003	640 Days	LTI	
Pre-Tour Meetings	17 Feb 2005	1 Day	Routine Pre-Tour Meetings	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30
Rig Inspection	04 Feb 2005	14 Days	NOPSA Audit	
Stop Card-Prevention	18 Feb 2005	0 Days	7 STOP cards submitted	7 cards by DODI 0 cards by Third Party

Marine

Weather on 18 Feb 2005									
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period		
10.00mi	12.0kn	45.0deg	1008.00mbar	20.0C°	0.2m	45.0deg	0.0ft/min		
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments			
0.3deg	0.3deg	0.30m	0.5m	225.0deg	0.0ft/min				
Rig Dir.	Ris. Tension	VDL		Comments					
45.0deg	228.0klb	3987.5klb							
Boats		Arrived (date/time)		Departed (date/time)		Status			
Pacific Wrangler					At anchor.		Item	Unit	Quantity
							Barite	MT	59.00
							Gel	MT	42.00
							Cement	MT	123.00
							Drill Water	M^3	0.00
							Fuel Oil	M^3	441.50
							Potable Water	M^3	193.00
Far Grip			1600		Steaming to Melbourne.		Item	Unit	Quantity
							Barite	MT	1.00
							Gel	MT	6.00
							Cement	MT	86.00
							Drill Water	M^3	0.00
							Fuel Oil	M^3	335.00
							Potable Water	M^3	48.00
Helicopter Movement									
Flight #		Company		Arr/Dep. Time		Pax In/Out		Comment	
1		Bristow		0826 / 0840		11 / 14		Call Sign: BZU	

19 Feb 2005 (GMT +10)

From: Peter Dane, Steve Hodgetts
To: Colin Allport

DRILLING MORNING REPORT # 24
ZaneGrey-1 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	2772.5m	Cur. Hole Size	8.500in	AFE Cost	\$ 0.00
Field		TVD	2420.5m	Casing OD	9.625in	AFE No.	
Drill Co.	DOGC	Progress	34.0m	Shoe TVD	1936.08m	Daily COST	\$ 367542.00
Rig	Ocean Patriot	Days from spud	21.40	FIT	0.00ppg	Cum Cost	\$ 12732599.00
Wtr Dpth(MSL)	72.5m	Days on well	23.77	LOT	0.00ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600	Pulling out of the hole.				
RT-ML	94.0m	Planned Op	POOH & RIH w / tbg cement stinger. Set balanced cement plug for sidetrack.				

Summary of Period 0000 to 2400 Hrs

Tested BOP stack, ran in the hole with 8 1/2" cleanout BHA, tested 9 5/8" casing, drilled 9 5/8" cement/shoetrack.

Operations For Period 0000 Hrs to 2400 Hrs on 19 Feb 2005

From	To	Hrs	Phse	Clis (RC)	Op	Depth	Activity Description
0000	0230	2.50	IC	P	BT	2772.0m	Continued to test BOP stack and choke and kill manifold on blue pod from drillers panel at 200 psi for 5 minutes and 5,000 psi for 10 minutes as per test program. Function tested BOP stack with yellow pod from remote panel in Koomey room - OK.
0230	0330	1.00	IC	P	HT	2772.0m	Unseated test plug, pulled out of the hole and laid down same.
0330	0600	2.50	IC	P	BT	2772.0m	Rigged up and tested TDS valves, TIW's and #1 standpipe valve at 200 psi for 5 minutes and 5,000 psi for 10 minutes.
0600	0630	0.50	IC	P	BT	2772.0m	Rigged down pup joint, TIW's and test hose.
0630	1130	5.00	IH2	P	TI	2772.0m	Ran in the hole with 8 1/2" cleanout BHA, tagged float at 2158 m.
1130	1230	1.00	IH2	P	CMD	2772.0m	Circulated and conditioned mud prior to casing test, dumped 100 bbls contaminated mud.
1230	1400	1.50	IH2	P	PT	2772.0m	Conducted line test to 5,000 psi for 5 minutes, tested 9 5/8" casing to 4,000 psi for 10 minutes.
1400	1730	3.50	IH2	P	CCW	2772.0m	Continued to drill cement, plugs and float at 500 gpm.
1730	1800	0.50	IH2	P	DFS	2772.0m	Drilled cement from 2158 m to 2184 m.
1800	2400	6.00	IH2	P	DFS	2772.0m	Drilled 9 5/8" shoe at 2184 m and drilled to 2192 m.

Operations For Period 0000 Hrs to 0600 Hrs on 20 Feb 2005

From	To	Hrs	Phse	Clis (RC)	Op	Depth	Activity Description
0000	0230	2.50	IH2	P	RW	2772.0m	Washed and reamed from 2192 m to 2260 m.
0230	0330	1.00	IH2	P	CHC	2772.0m	Circulated hole clean w/ 6,000 stks @ 1,250 psi.
0330	0400	0.50	IH2	P	TO	2772.0m	Pulled back from 2,260m to 2,180m in shoe. Circulated string capacity @ 500gpm.
0400	0500	1.00	IH2	P	LOT	2772.0m	Circulated cement lines & pressure tested to 2,000psi. Conducted FIT, EMW =1.65sg.
0500	0600	1.00	IH2	P	TO	2772.0m	Flowchecked well, OK. Pumped slug & POOH from 2,180m to 1,170m.

Operations For Period Hrs to Hrs on

Operations For Period Hrs to Hrs on

Operations For Period Hrs to Hrs on

WBM Data				Cost Today \$ 9271.00			
Mud Type:	KCI-PHPA-Glycol	API FL:	3.5cc	Cl:	36000.0mg/l	Solids:	10.30
Sample-From:	Active	Filter-Cake:	1.00/32nd"	Hard/Ca:	580.0mg/l	H2O:	0.00%
Time:	0600	HTHP-FL:	0.0cc	MBT:	17.50	Oil:	0.00%
Weight:	10.08ppg	HTHP-cake:	0.00/32nd"	PM:	0.00	Sand:	0.5
Temp:	33.0C°			PF:	0.02	Glycol:	3.5%vol
				pH:	8.50	KCI:	0.00%
						PHPA:	1.00ppb
Comment				Viscosity			
				PV			
				YP			
				Gels 10s			
				Gels 10m			
				Fann 003			
				Fann 006			
				Fann 100			
				Fann 200			
				Fann 300			
				Fann 600			

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.24m	8.50in	0.00in	10676290	Milled tooth
Bit Sub	0.85m	6.50in	2.88in	186-0044	With ported float installed
Pony DC	4.11m	6.50in	2.81in	A366, 47645	
String Stabiliser	1.47m	8.50in	2.88in	207A147	
Drill Collar	46.65m	6.50in	2.88in		
Drilling Jars	9.87m	6.50in	0.00in	40909	
HWDP	138.80m	5.00in	3.00in		

Bulk Stocks

Name	Unit	In	Used	Adjust	Balance
Barite	MT	0.00	0.00	0.00	71.2
Gel	MT	0.00	0.00	0.00	12.4
Cement	MT	0.00	0.00	0.00	75.7
Drill Water	m ³	0.00	148.10	0.00	252.4
Fuel Oil	m ³	0.00	11.90	0.00	286.2
Potable Water	m ³	12.20	9.70	0.00	279.5

Pumps

Pump Data - Last 24 Hrs								Slow Pump Data									
No.	Type	Liner (in)	MW (ppg)	Eff (%)	SPM	SPP (psi)	Flow (gpm)	Depth (m)	SPM1	SPP1 (psi)	Flow1 (gpm)	SPM2	SPP2 (psi)	Flow2 (gpm)	SPM3	SPP3 (psi)	Flow3 (gpm)
1	A1700	6.00	10.20	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	12-P160	6.00	10.20	0.00	75.00	650.00	320.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	12-P160	6.00	10.20	0.00	75.00	650.00	320.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Personnel On Board

Job Title	Personnel	Company	Pax
OIM	Barry Scott	DOGC	47
Camp boss	Mark Stanley	Total Marine Catering	9
ROV Pilot	Robert Griffiths	Fugro	2
Cementer	Edgar Lliagas	Dowell Schlumberger	2
Mud Engineer	Peter Dwyer	MI Swaco	2
Data Engineer	Dorian Kuhn	Sperry Sun	6
Senior Drilling Supervisor	Peter Dane	BSOC	5
MWD Engineer	Daniel Luoni	Halliburton	2
Directional Driller	Tim Walton	Halliburton	2
Centrifuge Hand	Brendon McPhail	DFE	1
Technician	Mark Anderson	Petrotech	1
Wireline Engineer	Wayn Nurcahya	Baker Atlas	3
Total			82

HSE Summary

Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	13 Feb 2005	6 Days	Abandon Rig Drill	
BOP Test	02 Feb 2005	17 Days	BOP Test	
Fire Drill	13 Feb 2005	6 Days	Fire Drill	
Lost Time Injury	20 May 2003	641 Days	LTI	
Pre-Tour Meetings	17 Feb 2005	2 Days	Routine Pre-Tour Meetings	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30
Rig Inspection	04 Feb 2005	15 Days	NOPSA Audit	
Stop Card-Prevention	19 Feb 2005	0 Days	4 STOP cards submitted	3 cards by DODI 1 card by Third Party

Marine

Weather on 19 Feb 2005							
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period
10.00mi	14.0kn	225.0deg	1002.00mbar	18.0C°	0.5m	225.0deg	0.0ft/min
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments	
0.3deg	0.3deg	0.20m	1.0m	225.0deg	0.0ft/min		
Rig Dir.	Ris. Tension	VDL	Comments				
45.0deg	228.0klb	4306.0klb					

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Pacific Wrangler			At anchor.	Item	Unit	Quantity
				Barite	MT	59.00
				Gel	MT	42.00
				Cement	MT	123.00
				Drill Water	M^3	0.00
				Fuel Oil	M^3	436.40
				Potable Water	M^3	190.00
Far Grip			Dockside at wharf 27.	Item	Unit	Quantity
				Barite	MT	1.00
				Gel	MT	6.00
				Cement	MT	86.00
				Drill Water	M^3	0.00
				Fuel Oil	M^3	335.00
				Potable Water	M^3	48.00

Helicopter Movement				
Flight #	Company	Arr/Dep. Time	Pax In/Out	Comment
1	Bristow	1234 / 1245	0 / 1	Call Sign: BZU, freight chopper - 1 x 8 1/2" Reed PDC out to rig.

20 Feb 2005 (GMT +10)

From: Peter Dane, Steve Hodgetts
To: Colin Allport

DRILLING MORNING REPORT # 25
ZaneGrey-1 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	2170.0m	Cur. Hole Size	8.500in	AFE Cost	\$ 0.00
Field		TVD	1924.3m	Casing OD	9.625in	AFE No.	
Drill Co.	DOGC	Progress	68.0m	Shoe TVD	1936.08m	Daily COST	\$ 345892.00
Rig	Ocean Patriot	Days from spud	22.27	FIT	13.70ppg	Cum Cost	\$ 13078491.00
Wtr Dpth(MSL)	72.5m	Days on well	24.65	LOT	0.00ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600 On ZaneGrey-1ST1.					
RT-ML	94.0m	Planned Op					

Summary of Period 0000 to 2400 Hrs

Continued washing and reaming, conducted FIT, pulled out of the hole with 8 1/2" cleanout BHA, ran in the hole with 2 7/8" cement stinger, set cement plug, dressed plug to 2,170m.

Operations For Period 0000 Hrs to 2400 Hrs on 20 Feb 2005

From	To	Hrs	Phse	Clis (RC)	Op	Depth	Activity Description
0000	0230	2.50	IH2	P	RW	2772.0m	Washed and reamed from 2192 m to 2260 m.
0230	0330	1.00	IH2	P	CHC	2772.0m	Circulated hole clean w/ 6,000 stks @ 1,250 psi.
0330	0400	0.50	IH2	P	TO	2772.0m	Pulled back from 2,260m to 2,180m in shoe. Circulated string capacity @ 500gpm.
0400	0500	1.00	IH2	P	LOT	2772.0m	Circulated cement lines & pressure tested to 2,000psi. Conducted FIT, EMW =1.65sg.
0500	0600	1.00	IH2	P	TO	2772.0m	Flowchecked well, OK. Pumped slug & POOH from 2,180m to 1,170m.
0600	0930	3.50	IH2	P	TO	2772.0m	Continued POOH & racked BHA
0930	1000	0.50	IH2	P	RS	2772.0m	Serviced TDS, block & dolly's.
1000	1030	0.50	IH2	P	PUP	2772.0m	Rigged up to run 2.7/8" tubing.
1030	1530	5.00	IH2	P	TI	2772.0m	Held JSA & picked up open ended / slotted mule shoe with 3 stands of 2.7/8" tubing. Tripped in hole with stinger on 5" DP to 2260m.
1530	1630	1.00	IH2	P	CIR	2772.0m	Circ bottoms up.
1630	1700	0.50	IH2	P	CIR	2772.0m	Spotted havis pill from 2,260m to 2,234m.
1700	1730	0.50	IH2	P	TO	2772.0m	Pulled back to from 2,260m to 2,234m.
1730	1830	1.00	IH2	P	CMP	2772.0m	Tested cement lines. Mixed & pumped 203 sx 54m balanced cement plug from 2,234m.
1830	1900	0.50	IH2	P	TO	2772.0m	Pulled back above plug to 2,100m. Broke circulation.
1900	2100	2.00	IH2	P	CHC	2170.0m	Circulated bottoms up & monitored for cement in returns. Washed from 2,100m to 2,170m. Cement contamination observed. (Released to ZanGrey-1ST1)

Operations For Period Hrs to Hrs on

Operations For Period Hrs to Hrs on

WBM Data				Cost Today \$ 4330.00			
Mud Type:	KCl-PHPA-Glycol	API FL:	4.4cc	Cl:	30000.0mg/l	Solids:	7.60
Sample-From:	Active	Filter-Cake:	1.00/32nd"	Hard/Ca:	480.0mg/l	H2O:	0.00%
Time:	0400	HTHP-FL:	0.0cc	MBT:	12.50	Oil:	0.00%
Weight:	9.40ppg	HTHP-cake:	0.00/32nd"	PM:	0.00	Sand:	0.5
Temp:	33.0C°			PF:	0.12	Glycol:	3.5%vol
				pH:	10.00	KCl:	0.00%
						PHPA:	1.00ppb
Comment						Fann 003	7.00
						Fann 006	10.00
						Fann 100	28.00
						Fann 200	39.00
						Fann 300	47.00
						Fann 600	63.00

WBM Data				Cost Today \$ 0.00			
Mud Type:	KCI-PHPA-Glycol	API FL:	4.5cc	Cl:	29000.0mg/l	Solids:	7.20
Sample-From:	Flowline	Filter-Cake:	1.00/32nd"	Hard/Ca:	380.0mg/l	H2O:	0.00%
Time:	2100	HTHP-FL:	0.0cc	MBT:	12.50	Oil:	0.00%
Weight:	9.40ppg	HTHP-cake:	0.00/32nd"	PM:	0.00	Sand:	0.5
Temp:	31.0C°			PF:	0.40	Glycol:	3.5%vol
				pH:	10.00	KCI:	0.00%
						PHPA:	1.00ppb
Comment							Viscosity 60.00sec/qt PV 15.00cp YP 25.00lb/100ft² Gels 10s 4.00 Gels 10m 11.00 Fann 003 6.00 Fann 006 10.00 Fann 100 22.00 Fann 200 36.00 Fann 300 40.00 Fann 600 55.00

Shakers, Volumes and Losses Data				Engineer : Peter Dwyer			
Equip.	Descr.	Mesh Size	Available	2623.00bbl	Losses	50.00bbl	Comments
Shaker 1	VSM-100	84	Active	986.00bbl	Downhole	0.00bbl	
Shaker 2	VSM-100	84	Mixing	0.00bbl	Surf+ Equip	0.00bbl	
Shaker 3	VSM-100	84	Hole	567.00bbl	Dumped	50.00bbl	
Shaker 4	VSM-100	84	Slug	0.00bbl	De-Gasser	0.00bbl	
			Reserve	403.00bbl	De-Sander	0.00bbl	
			Kill	0.00bbl	De-Silter	0.00bbl	
			Premix	667.00bbl	Centrifuge	0.00bbl	

Bit # 6												
				Wear	I	O1	D	L	B	G	O2	R
					1	1	NO	A	E	1	NO	BHA
Size ("):	8.50in	IADC#	117	Nozzles		Drilled over last 24 hrs			Calculated over Bit Run			
Mfr:	Security	WOB(avg)	2.8klb	No. Size		Progress 68.0m		Cum. Progress		102.0m		
Type:	Milled Tooth	RPM(avg)	60.00	3	20.00/32nd"	On Bottom Hrs 1.20h		Cum. On Btm Hrs		11.30h		
Serial No.:	10676290	F.Rate	489.00gpm			IADC Drill Hrs 1.20h		Cum IADC Drill Hrs		11.30h		
Bit Model	EBXSC1S	SPP	1296.00psi			Total Revs 5400.00		Cum Total Revs		84900.00		
Depth In	2158.0m	HSI				ROP(avg) 56.67 m/hr		ROP(avg)		9.03 m/hr		
Depth Out	2260.0m	TFA	0.92									

BHA # 7							
Weight(Wet)	30.0klb	Length	202.0m	Torque(max)	0.00kft-lbs	D.C. (1) Ann Velocity	121.8mpm
Wt Below Jar(Wet)	12.0klb	String	0.0klb	Torque(Off.Btm)	0.00kft-lbs	D.C. (2) Ann Velocity	0.0mpm
		Pick-Up	0.0klb	Torque(On.Btm)	0.00kft-lbs	H.W.D.P. Ann Velocity	77.3mpm
		Slack-Off	0.0klb			D.P. Ann Velocity	77.3mpm

BHA Run Description 8 1/2" milled tooth tricone bit, bit sub with ported float, 2 x pony drill collars, 8 1/2" integral blade stabilizer, 3 x 6 1/2" DC's, 1 x 6 1/2" jar, 2 x 6 1/2" DC's, 18 x 5" HWDP.

BHA Run Comment

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.24m	8.50in	0.00in	10676290	Milled tooth
Bit Sub	0.85m	6.50in	2.88in	186-0044	With ported float installed
Pony DC	4.11m	6.50in	2.81in	A366, 47645	
String Stabiliser	1.47m	8.50in	2.88in	207A147	
Drill Collar	46.65m	6.50in	2.88in		
Drilling Jars	9.87m	6.50in	0.00in	40909	
HWDP	138.80m	5.00in	3.00in		

Bulk Stocks						
Name	Unit	In	Used	Adjust	Balance	
Barite	MT	0.00	0.00	0.00	71.2	
Gel	MT	0.00	0.00	0.00	12.4	

Bulk Stocks					
Name	Unit	In	Used	Adjust	Balance
Cement	MT	0.00	5.00	0.00	70.7
Drill Water	m ³	0.00	54.10	0.00	198.3
Fuel Oil	m ³	0.00	9.70	0.00	276.5
Potable Water	m ³	34.90	26.30	0.00	288.1

Pumps																	
Pump Data - Last 24 Hrs								Slow Pump Data									
No.	Type	Liner (in)	MW (ppg)	Eff (%)	SPM	SPP (psi)	Flow (gpm)	Depth (m)	SPM1	SPP1 (psi)	Flow1 (gpm)	SPM2	SPP2 (psi)	Flow2 (gpm)	SPM3	SPP3 (psi)	Flow3 (gpm)
1	A1700	6.00	9.40	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	12-P160	6.00	9.40	0.00	61.00	1085.00	300.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	12-P160	6.00	9.40	0.00	62.00	1085.00	300.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Personnel On Board			
Job Title	Personnel	Company	Pax
OIM	Barry Scott	DOGC	47
Camp boss	Mark Stanley	Total Marine Catering	9
ROV Pilot	Robert Griffiths	Fugro	2
Cementer	Edgar Lliagas	Dowell Schlumberger	2
Mud Engineer	Peter Dwyer	MI Swaco	2
Data Engineer	Dorian Kuhn	Sperry Sun	6
Senior Drilling Supervisor	Peter Dane	BSOC	5
MWD Engineer	Daniel Luoni	Halliburton	2
Directional Driller	Tim Walton	Halliburton	2
Centrifuge Hand	Brendon McPhail	DFE	1
Technician	Mark Anderson	Petrotech	1
Wireline Engineer	Wayn Nurcahya	Baker Atlas	3
Total			82

HSE Summary				
Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	20 Feb 2005	0 Days	Abandon Rig Drill	Based on simulated fire at paint locker.
BOP Test	02 Feb 2005	18 Days	BOP Test	
Fire Drill	20 Feb 2005	0 Days	Fire Drill	
Lost Time Injury	20 May 2003	642 Days	LTI	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30
Pre-Tour Meetings	20 Feb 2005	0 Days	Routine Pre-Tour Meetings	
Rig Inspection	04 Feb 2005	16 Days	NOPSA Audit	
Safety Meeting	20 Feb 2005	0 Days	Safety meetings held	3 Safety meetings held at 1300, 1900 and 0100, attended by all crews.
Stop Card-Prevention	20 Feb 2005	0 Days	9 STOP cards submitted	8 cards by DODI 1 card by Third Party

Marine									
Weather on 20 Feb 2005									
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period		
10.00mi	19.0kn	135.0deg	1016.00mbar	15.0C°	0.5m	135.0deg	0.0ft/min		
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments			
0.2deg	0.2deg	0.10m	1.5m	135.0deg	0.0ft/min				
Rig Dir.	Ris. Tension	VDL Comments							
45.0deg	228.0klb	4300.0klb							
Boats		Arrived (date/time)		Departed (date/time)		Status			
Pacific Wrangler					At anchor.		Bulks		
							Item	Unit	Quantity
							Barite	MT	59.00
							Gel	MT	42.00

				Item	Unit	Quantity
				Drill Water	M^3	0.00
				Fuel Oil	M^3	435.20
				Potable Water	M^3	187.00
Far Grip			Steaming to the rig from Wharf 27.	Item	Unit	Quantity
				Barite	MT	1.00
				Gel	MT	6.00
				Cement	MT	86.00
				Drill Water	M^3	0.00
				Fuel Oil	M^3	335.00
				Potable Water	M^3	48.00

APPENDIX 24

ZANEGREY-1/ST1 DAILY DRILLING REPORTS

(By Independent Data Services [IDS])

20 Feb 2005 (GMT +10)

From: Peter Dane, Steve Hodgetts
To: Colin Allport

DRILLING MORNING REPORT # 1
ZaneGrey-1 ST1 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	2170.0m	Cur. Hole Size	8.500in	AFE Cost	\$ 0.00
Field		TVD	1924.3m	Casing OD	9.625in	AFE No.	
Drill Co.	DOGC	Progress	0.0m	Shoe TVD	1936.08m	Daily COST	\$ 11972981.00
Rig	Ocean Patriot	Days from spud	22.40	FIT	13.70ppg	Cum Cost	\$ 11972981.00
Wtr Dpth(MSL)	72.5m	Days on well	0.13	LOT	0.00ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600 Running in the hole to tag cement.					
RT-ML	94.0m	Planned Op Run in the hole and tag cement, pull out of the hole and pick up 8 1/2" directional BHA, sidetrack. RIH & kick off sidetrack.					

Summary of Period 0000 to 2400 Hrs

POOH from 2170m (dressed off plug). Pulled back to PU extra DP.

Operations For Period 0000 Hrs to 2400 Hrs on 20 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
2100	2130	0.50	IH2	P	TO	2170.0m	Commenced ZaneGrey -1ST1 (dressed off plug to 2,170m). Pulled back from 2,170m to 2,100m.
2130	2200	0.50	IH2	P	RS	2170.0m	Functioned & flushed BOPs after cement job.
2200	2400	2.00	IH2	P	TO	2170.0m	POOH to 1240m,

Operations For Period 0000 Hrs to 0600 Hrs on 21 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0330	3.50	IH2	P	PUP	2170.0m	Picked up drill pipe while running in the hole.
0330	0530	2.00	IH2	P	SC	2170.0m	Slipped and cut drill line.
0530	0600	0.50	IH2	P	TI	2170.0m	(IN PROGRESS) Ran in the hole from 2,070m to 2,199m. No weight taken until 2,199m, tagged with 8klb.

Operations For Period Hrs to Hrs on

Operations For Period Hrs to Hrs on

WBM Data				Cost Today \$ 4330.00			
Mud Type:	KCl-PHPA-Glycol	API FL:	4.4cc	Cl:	30000.0mg/l	Solids:	7.60
Sample-From:	Active	Filter-Cake:	1.00/32nd"	Hard/Ca:	480.0mg/l	H2O:	0.00%
Time:	0400	HTHP-FL:	0.0cc	MBT:	12.50	Oil:	0.00%
Weight:	9.40ppg	HTHP-cake:	0.00/32nd"	PM:	0.00	Sand:	0.5
Temp:	33.0C°			PF:	0.12	Glycol:	3.5%vol
				pH:	10.00	KCl:	0.00%
						PHPA:	1.00ppb
Comment						Fann 003	7.00
						Fann 006	10.00
						Fann 100	28.00
						Fann 200	39.00
						Fann 300	47.00
						Fann 600	63.00

WBM Data				Cost Today \$ 0.00			
Mud Type:	KCl-PHPA-Glycol	API FL:	4.5cc	Cl:	29000.0mg/l	Solids:	7.20
Sample-From:	Flowline	Filter-Cake:	1.00/32nd"	Hard/Ca:	380.0mg/l	H2O:	0.00%
Time:	2100	HTHP-FL:	0.0cc	MBT:	12.50	Oil:	0.00%
Weight:	9.40ppg	HTHP-cake:	0.00/32nd"	PM:	0.00	Sand:	0.5
Temp:	31.0C°			PF:	0.40	Glycol:	3.5%vol
				pH:	10.00	KCl:	0.00%
						PHPA:	1.00ppb
Comment						Fann 003	6.00
						Fann 006	10.00
						Fann 100	22.00
						Fann 200	36.00
						Fann 300	40.00
						Fann 600	55.00

Shakers, Volumes and Losses Data

Engineer : Peter Dwyer

Equip.	Descr.	Mesh Size	Available	2623.00bbl	Losses	50.00bbl	Comments
Shaker 1	VSM-100	84	Active	986.00bbl	Downhole	0.00bbl	
Shaker 2	VSM-100	84	Mixing	0.00bbl	Surf+ Equip	0.00bbl	
Shaker 3	VSM-100	84	Hole	567.00bbl	Dumped	50.00bbl	
Shaker 4	VSM-100	84	Slug	0.00bbl	De-Gasser	0.00bbl	
			Reserve	403.00bbl	De-Sander	0.00bbl	
			Kill	0.00bbl	De-Silter	0.00bbl	
			Premix	667.00bbl	Centrifuge	0.00bbl	

Survey

MD	Incl Deg	Corr. Az (deg)	TVD	'V' Sect	Dogleg (deg/100ft)	N/S	E/W	Tool Type
0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	

Bulk Stocks

Name	Unit	In	Used	Adjust	Balance
Barite	MT	0.00	0.00	0.00	71.2
Gel	MT	0.00	0.00	0.00	12.4
Cement	MT	0.00	0.00	0.00	70.7
Drill Water	m³	0.00	0.00	0.00	198.3
Fuel Oil	m³	0.00	0.00	0.00	276.5
Potable Water	m³	0.00	0.00	0.00	288.1

Pumps

Pump Data - Last 24 Hrs								Slow Pump Data									
No.	Type	Liner (in)	MW (ppg)	Eff (%)	SPM	SPP (psi)	Flow (gpm)	Depth (m)	SPM1	SPP1 (psi)	Flow1 (gpm)	SPM2	SPP2 (psi)	Flow2 (gpm)	SPM3	SPP3 (psi)	Flow3 (gpm)
1	A1700	6.00	9.40	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	12-P160	6.00	9.40	0.00	61.00	1085.00	300.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	12-P160	6.00	9.40	0.00	62.00	1085.00	300.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Personnel On Board

Job Title	Personnel	Company	Pax
OIM	Barry Scott	DOGC	47
Camp boss	Mark Stanley	Total Marine Catering	9
ROV Pilot	Robert Griffiths	Fugro	2
Cementer	Edgar Lliagas	Dowell Schlumberger	2
Mud Engineer	Peter Dwyer	MI Swaco	2
Data Engineer	Dorian Kuhn	Sperry Sun	6
Senior Drilling Supervisor	Peter Dane	BSOC	5
MWD Engineer	Daniel Luoni	Halliburton	2
Directional Driller	Tim Walton	Halliburton	2
Centrifuge Hand	Brendon McPhail	DFE	1
Technician	Mark Anderson	Petrotech	1
Wireline Engineer	Wayn Nurcahya	Baker Atlas	3
Total			82

HSE Summary

Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	20 Feb 2005	0 Days	Abandon Rig Drill	
BOP Test	02 Feb 2005	18 Days	BOP Test	
Fire Drill	20 Feb 2005	0 Days	Fire Drill	Based on simulated fire at paint locker.
Lost Time Injury	20 May 2003	642 Days	LTI	

HSE Summary

Events	Date of last	Days Since	Descr.	Remarks
Pre-Tour Meetings	20 Feb 2005	0 Days	Routine Pre-Tour Meetings	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30
Rig Inspection	04 Feb 2005	16 Days	NOPSA Audit	
Safety Meeting	20 Feb 2005	0 Days	Safety meetings held	3 Safety meetings held at 1300, 1900 and 0100, attended by all crews.
Stop Card-Prevention	20 Feb 2005	0 Days	9 STOP cards submitted	8 cards by DODI 1 card by Third Party

Marine

Weather on 20 Feb 2005

Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period
10.00mi	19.0kn	135.0deg	1016.00mbar	15.0C°	0.5m	135.0deg	0.0ft/min
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments	
0.2deg	0.2deg	0.10m	1.5m	135.0deg	0.0ft/min		
Rig Dir.	Ris. Tension	VDL		Comments			
45.0deg	228.0klb	4300.0klb					

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Pacific Wrangler			At anchor.	Item	Unit	Quantity
				Barite	MT	59.00
				Gel	MT	42.00
				Cement	MT	123.00
				Drill Water	M^3	0.00
				Fuel Oil	M^3	435.20
Far Grip			Steaming to the rig from Wharf 27.	Potable Water	M^3	187.00
				Item	Unit	Quantity
				Barite	MT	1.00
				Gel	MT	6.00
				Cement	MT	86.00
				Drill Water	M^3	0.00
				Fuel Oil	M^3	335.00
				Potable Water	M^3	48.00

21 Feb 2005 (GMT +10)

From: Peter Dane, Steve Hodgetts
To: Colin Allport

DRILLING MORNING REPORT # 2
ZaneGrey-1 ST1 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	2190.0m	Cur. Hole Size	8.500in	AFE Cost	\$ 0.00
Field		TVD	1941.5m	Casing OD	9.625in	AFE No.	
Drill Co.	DOGC	Progress	20.0m	Shoe TVD	1936.08m	Daily COST	\$ 237413.00
Rig	Ocean Patriot	Days from spud	23.40	FIT	13.70ppg	Cum Cost	\$ 12210394.00
Wtr Dpth(MSL)	72.5m	Days on well	1.13	LOT	0.00ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600 Kicking off well.					
RT-ML	94.0m	Planned Op Continue to kick off, drill ahead in 8 1/2" hole.					

Summary of Period 0000 to 2400 Hrs

Picked up drill pipe while waiting on cement, tagged cement, pulled out of the hole, picked up 8 1/2" directional BHA, ran in the hole and tagged plug, commenced time drilling to kick off.

Operations For Period 0000 Hrs to 2400 Hrs on 21 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0330	3.50	IH2	P	PUP	2170.0m	Picked up drill pipe while running in the hole.
0330	0530	2.00	IH2	P	SC	2170.0m	Slipped and cut drill line.
0530	0630	1.00	IH2	P	TI	2170.0m	Ran in the hole from 2,070m to 2,199m. No weight taken until 2,199m, tagged with 8klb.
0630	0730	1.00	IH2	P	CHC	2170.0m	Pulled back inside shoe at 2,183m. Circulated bottoms up dumping cement contaminated mud.
0730	1100	3.50	IH2	P	TO	2170.0m	Flow checked well, static. Pumped slug & POOH.
1100	1300	2.00	IH2	P	LDP	2170.0m	RU & LD 2.7/8" tubing. Cleared floor & LO pony collar & stab off DC.
1300	1800	5.00	IH2	P	HBHA	2170.0m	Held JSA & PU 8.5" BHA #9. PU & tested adjustable gauge stabiliser & FEWD tools.
1800	2030	2.50	IH2	P	TI	2170.0m	RIH to 2,171m.
2030	2100	0.50	IH2	P	RW	2184.0m	Washed from 2,171m to 2,184m. Tagged firm cement.
2100	2400	3.00	IH2	P	CDD	2190.0m	Set up to kick off well. Established low side angle. Time drilled to 2,190m.

Operations For Period 0000 Hrs to 0600 Hrs on 22 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0600	6.00	IH2	P	CDD	2208.0m	(IN PROGRESS) Time control drilled from 2190 m to 2208 m. Mud loggers reported 50% cuttings in samples at 2207m.

Operations For Period Hrs to Hrs on

Operations For Period Hrs to Hrs on

WBM Data				Cost Today \$ 1345.00			
Mud Type:	KCI-PHPA-Glycol	API FL:	4.8cc	Cl:	28000.0mg/l	Solids:	8.00
Sample-From:	Active	Filter-Cake:	1.00/32nd"	Hard/Ca:	500.0mg/l	H2O:	0.00%
Time:	0400	HTHP-FL:	0.0cc	MBT:	12.50	Oil:	0.00%
Weight:	9.50ppg	HTHP-cake:	0.00/32nd"	PM:	0.00	Sand:	0.3
Temp:	33.0C°			PF:	0.35	Glycol:	3.5%vol
				pH:	9.50	KCl:	0.00%
						PHPA:	1.00ppb
Comment						Fann 003	8.00
						Fann 006	11.00
						Fann 100	34.00
						Fann 200	44.00
						Fann 300	55.00
						Fann 600	76.00

WBM Data				Cost Today \$ 0.00			
Mud Type:	KCl-PHPA-Glycol	API FL:	4.8cc	Cl:	32000.0mg/l	Solids:	7.20
Sample-From:	Flowline	Filter-Cake:	1.00/32nd"	Hard/Ca:	440.0mg/l	H2O:	0.00%
Time:	2300	HTHP-FL:	0.0cc	MBT:	12.50	Oil:	0.00%
Weight:	9.40ppg	HTHP-cake:	0.00/32nd"	PM:	0.00	Sand:	0.25
Temp:	31.0C°			PF:	0.35	Glycol:	3.5%vol
				pH:	9.50	KCl:	0.00%
						PHPA:	1.00ppb
Comment							Viscosity 68.00sec/qt PV 21.00cp YP 38.00lb/100ft² Gels 10s 5.00 Gels 10m 14.00 Fann 003 9.00 Fann 006 12.00 Fann 100 36.00 Fann 200 48.00 Fann 300 59.00 Fann 600 80.00

Shakers, Volumes and Losses Data				Engineer : Peter Dwyer			
Equip.	Descr.	Mesh Size	Available	2477.00bbl	Losses	130.00bbl	Comments
Shaker 1	VSM-100	84	Active	1059.00bbl	Downhole	0.00bbl	
Shaker 2	VSM-100	120	Mixing	0.00bbl	Surf+ Equip	0.00bbl	
Shaker 3	VSM-100	84	Hole	548.00bbl	Dumped	130.00bbl	
Shaker 4	VSM-100	84	Slug	0.00bbl	De-Gasser	0.00bbl	
			Reserve	374.00bbl	De-Sander	0.00bbl	
			Kill	0.00bbl	De-Silter	0.00bbl	
			Premix	496.00bbl	Centrifuge	0.00bbl	

Bit # 7				Wear	I	O1	D	L	B	G	O2	R
Size ("):	8.50in	IADC#	M322	Nozzles		Drilled over last 24 hrs			Calculated over Bit Run			
Mfr:	Reed	WOB(avg)	48.9klb	No.	Size	Progress 20.0m			Cum. Progress 20.0m			
Type:	PDC	RPM(avg)	34.00	6	15.00/32nd"	On Bottom Hrs 1.30h			Cum. On Btm Hrs 1.30h			
Serial No.:	208684	F.Rate	565.00gpm			IADC Drill Hrs 1.30h			Cum IADC Drill Hrs 1.30h			
Bit Model	RSX162DGW	SPP	914.00psi			Total Revs 10100.00			Cum Total Revs 10100.00			
Depth In	2170.0m	HSI				ROP(avg) 15.38 m/hr			ROP(avg) 15.38 m/hr			
Depth Out	3107.0m	TFA	1.03									

BHA # 9						
Weight(Wet)	40.0klb	Length	249.3m	Torque(max)	0.00kft-lbs	D.C. (1) Ann Velocity
Wt Below Jar(Wet)	20.0klb	String	0.0klb	Torque(Off.Btm)	0.00kft-lbs	D.C. (2) Ann Velocity
		Pick-Up	0.0klb	Torque(On.Btm)	0.00kft-lbs	H.W.D.P. Ann Velocity
		Slack-Off	0.0klb			D.P. Ann Velocity
BHA Run Description	8 1/2" PDC, motor, AGS, float sub with ported float installed, PM sub, FEWD, pulser/TM, integral blade stabiliser, 8 x 6 1/2" DC's, 1 x 6 1/2" jars, 15 x 5" HWDP.					
BHA Run Comment	Bit box of motor parted from lower part of the motor, leaving the bit, the motor bit box and the motor drive shaft downhole.					

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.22m	8.50in	2.50in	208684	Reed RSX162DGW PDC PM Sub FEWD Pulser/TM
Mud Motor	7.67m	6.81in	4.50in	700-041	
Adjustable Gauge Stabilizer	3.23m	6.63in	2.81in	450-066	
Float Sub	0.64m	6.81in	3.00in	DA6015	
MWD Tool	2.81m	6.50in	0.00in	90052756M6	
MWD Tool	7.05m	6.69in	0.00in	90057455H1GR6	
MWD Tool	3.06m	6.50in	3.25in	192198	
String Stabiliser	1.56m	6.50in	3.00in	47697	
Drill Collar	55.81m	6.50in	2.75in		
Drilling Jars	9.87m	6.50in	2.75in	40909	
Drill Collar	18.59m	6.50in	2.75in		

Equipment	Length	OD	ID	Serial #	Comment
HWDP	138.80m	6.50in	3.00in		

Survey

MD	Incl Deg	Corr. Az (deg)	TVD	'V' Sect	Dogleg (deg/100ft)	N/S	E/W	Tool Type
0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	

Bulk Stocks

Name	Unit	In	Used	Adjust	Balance
Barite	MT	0.00	0.00	0.00	71.2
Gel	MT	0.00	0.00	0.00	12.4
Cement	MT	0.00	0.00	0.00	70.7
Drill Water	m ³	0.00	23.90	0.00	174.4
Fuel Oil	m ³	250.00	14.10	0.00	512.4
Potable Water	m ³	33.30	27.70	0.00	293.7

Pumps

Pump Data - Last 24 Hrs								Slow Pump Data										
No.		Type	Liner (in)	MW (ppg)	Eff (%)	SPM	SPP (psi)	Flow (gpm)	Depth (m)	SPM1	SPP1 (psi)	Flow1(gpm)	SPM2	SPP2 (psi)	Flow2 (gpm)	SPM3	SPP3 (psi)	Flow3 (gpm)
1	A1700		6.00	9.50	0.00	36.00	913.00	154.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	12-P160		6.00	9.50	0.00	36.00	913.00	154.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	12-P160		6.00	9.50	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Personnel On Board

Job Title	Personnel	Company	Pax
OIM	Barry Scott	DOGC	47
Camp boss	Mark Stanley	Total Marine Catering	9
ROV Pilot	Robert Griffiths	Fugro	2
Cementer	Edgar Lliagas	Dowell Schlumberger	2
Mud Engineer	Peter Dwyer	MI Swaco	2
Data Engineer	Dorian Kuhn	Sperry Sun	6
Senior Drilling Supervisor	Peter Dane	BSOC	5
MWD Engineer	Daniel Luoni	Halliburton	2
Directional Driller	Tim Walton	Halliburton	2
Centrifuge Hand	Brendon McPhail	DFE	1
Technician	Mark Anderson	Petrotech	1
Wireline Engineer	Wayn Nurcahya	Baker Atlas	3
Total			82

HSE Summary

Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	20 Feb 2005	1 Day	Abandon Rig Drill	Based on simulated fire at paint locker.
BOP Test	02 Feb 2005	19 Days	BOP Test	
Fire Drill	20 Feb 2005	1 Day	Fire Drill	
Lost Time Injury	20 May 2003	643 Days	LTi	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30
Pre-Tour Meetings	20 Feb 2005	1 Day	Routine Pre-Tour Meetings	
Rig Inspection	04 Feb 2005	17 Days	NOPSA Audit	
Safety Meeting	20 Feb 2005	1 Day	Safety meetings held	3 Safety meetings held at 1300, 1900 and 0100, attended by all crews.
Stop Card-Prevention	21 Feb 2005	0 Days	7 STOP cards submitted	6 cards by DODI 1 card by Third Party

Marine

Weather on 21 Feb 2005							
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period
10.00mi	12.0kn	135.0deg	1018.00mbar	16.0C°	0.5m	157.0deg	0.0ft/min
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments	
0.3deg	0.3deg	0.20m	1.0m	157.0deg	0.0ft/min		
Rig Dir.	Ris. Tension	VDL	Comments				
45.0deg	228.0klb	4188.0klb					

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Pacific Wrangler		1830	Steaming to Wharf 27	Item	Unit	Quantity
				Barite	MT	59.00
				Gel	MT	42.00
				Cement	MT	123.00
				Drill Water	M^3	0.00
				Fuel Oil	M^3	181.00
				Potable Water	M^3	185.00
Far Grip	1535		At anchor	Item	Unit	Quantity
				Barite	MT	85.00
				Gel	MT	6.00
				Cement	MT	86.00
				Drill Water	M^3	286.00
				Fuel Oil	M^3	788.00
				Potable Water	M^3	660.00

22 Feb 2005 (GMT +10)

From: Peter Dane, Steve Hodgetts
To: Colin Allport

DRILLING MORNING REPORT # 3
ZaneGrey-1 ST1 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	2255.0m	Cur. Hole Size	8.500in	AFE Cost	\$ 0.00
Field		TVD	1996.0m	Casing OD	9.625in	AFE No.	
Drill Co.	DOGC	Progress	65.0m	Shoe TVD	1936.08m	Daily COST	\$ 286639.00
Rig	Ocean Patriot	Days from spud	24.40	FIT	13.70ppg	Cum Cost	\$ 12497033.00
Wtr Dpth(MSL)	72.5m	Days on well	2.13	LOT	0.00ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600 Drilling/sliding in 8 1/2" hole.					
RT-ML	94.0m	Planned Op Drill/slide in 8 1/2" hole.					

Summary of Period 0000 to 2400 Hrs							
Drilled/slid in 8 1/2" hole.							

Operations For Period 0000 Hrs to 2400 Hrs on 22 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	1200	12.00	IH2	P	CDD	2208.0m	Time control drilled from 2190 m to 2208 m. Mud loggers reported 50% cuttings in samples at 2207m.
1200	2400	12.00	IH2	P	CDD	2255.0m	Rotary drilled and slid from 2208 m to 2255 m.

Operations For Period 0000 Hrs to 0600 Hrs on 23 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0030	0.50	IH2	P	DM	2257.0m	Continued directionally drilling 8 1/2" hole from 2,255 m to 2,257 m. Took MWD surveys every stand.
0030	0230	2.00	IH2	P	DM	2265.0m	Slid from 2,257 m to 2,265 m.
0230	0500	2.50	IH2	P	DM	2287.0m	Directionally drilling 8 1/2" hole from 2,265 m to 2,287 m. Took MWD surveys every stand.
0500	0600	1.00	IH2	P	DM	2292.0m	Slid from 2,287 m to 2,292 m.

Operations For Period Hrs to Hrs on

Operations For Period Hrs to Hrs on

WBM Data				Cost Today \$ 5361.00			
Mud Type:	KCI-PHPA-Glycol	API FL:	4.8cc	Cl:	30500.0mg/l	Solids:	7.80
Sample-From:	Active	Filter-Cake:	1.00/32nd"	Hard/Ca:	600.0mg/l	H2O:	0.00%
Time:	0300	HTHP-FL:	0.0cc	MBT:	7.50	Oil:	0.00%
Weight:	9.50ppg	HTHP-cake:	0.00/32nd"	PM:	0.00	Sand:	0.25
Temp:	33.0C°			PF:	0.20	Glycol:	3.5%vol
				pH:	9.00	KCl:	0.00%
						PHPA:	1.00ppb
Comment							Viscosity 57.00sec/qt PV 19.00cp YP 32.00lb/100ft² Gels 10s 7.00 Gels 10m 11.00 Fann 003 7.00 Fann 006 10.00 Fann 100 31.00 Fann 200 43.00 Fann 300 51.00 Fann 600 70.00

WBM Data				Cost Today \$ 0.00			
Mud Type:	KCI-PHPA-Glycol	API FL:	4.6cc	Cl:	31500.0mg/l	Solids:	7.60
Sample-From:	Flowline	Filter-Cake:	1.00/32nd"	Hard/Ca:	460.0mg/l	H2O:	0.00%
Time:	2300	HTHP-FL:	0.0cc	MBT:	7.50	Oil:	0.00%
Weight:	9.50ppg	HTHP-cake:	0.00/32nd"	PM:	0.00	Sand:	0.25
Temp:	31.0C°			PF:	0.25	Glycol:	4.0%vol
				pH:	9.50	KCl:	0.00%
						PHPA:	1.00ppb
Comment							Viscosity 59.00sec/qt PV 19.00cp YP 33.00lb/100ft² Gels 10s 5.00 Gels 10m 12.00 Fann 003 8.00 Fann 006 11.00 Fann 100 31.00 Fann 200 44.00 Fann 300 52.00 Fann 600 71.00

Shakers, Volumes and Losses Data

Engineer : Peter Dwyer

Equip.	Descr.	Mesh Size	Available	2480.00bbl	Losses	53.00bbl	Comments
Centrifuge 6	DFE		Active	1051.00bbl	Downhole	0.00bbl	
De-Silter 5	DODI	12 x 4"	Mixing	0.00bbl	Surf+ Equip	5.00bbl	
Shaker 1	VSM-100	4 x 120	Hole	559.00bbl	Dumped	8.00bbl	
Shaker 2	VSM-100	4 x 145	Slug	0.00bbl	De-Gasser	0.00bbl	
Shaker 3	VSM-100	4 x 105	Reserve	374.00bbl	De-Sander	0.00bbl	
Shaker 4	VSM-100	2 x 120, 2 x 145	Kill	0.00bbl	De-Silter	30.00bbl	
			Premix	496.00bbl	Centrifuge	10.00bbl	

Bit # 7				Wear	I	O1	D	L	B	G	O2	R
Size ("):	8.50in	IADC#	M322	Nozzles		Drilled over last 24 hrs			Calculated over Bit Run			
Mfr:	Reed	WOB(avg)	6.0klb	No.	Size	Progress		65.0m	Cum. Progress		85.0m	
Type:	PDC	RPM(avg)	0.00	6	15.00/32nd"	On Bottom Hrs		14.90h	Cum. On Btm Hrs		16.20h	
Serial No.:	208684	F.Rate	309.00gpm			IADC Drill Hrs		14.90h	Cum IADC Drill Hrs		16.20h	
Bit Model	RSX162DGW	SPP	914.00psi			Total Revs		158700.00	Cum Total Revs		168800.00	
Depth In	2170.0m	HSI				ROP(avg)		4.36 m/hr	ROP(avg)		5.25 m/hr	
Depth Out	3107.0m	TFA	1.03									

BHA # 9

Weight(Wet)	40.0klb	Length	249.3m	Torque(max)	12.00kft-lbs	D.C. (1) Ann Velocity	76.9mpm
Wt Below Jar(Wet)	20.0klb	String	250.0klb	Torque(Off.Btm)	8.00kft-lbs	D.C. (2) Ann Velocity	0.0mpm
		Pick-Up	305.0klb	Torque(On.Btm)	10.00kft-lbs	H.W.D.P. Ann Velocity	48.9mpm
		Slack-Off	215.0klb			D.P. Ann Velocity	48.9mpm

BHA Run Description 8 1/2" PDC, motor, AGS, float sub with ported float installed, PM sub, FEWD, pulser/TM, integral blade stabiliser, 8 x 6 1/2" DC's, 1 x 6 1/2" jars, 15 x 5" HWDP.

BHA Run Comment Bit box of motor parted from lower part of the motor, leaving the bit, the motor bit box and the motor drive shaft downhole.

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.22m	8.50in	2.50in	208684	Reed RSX162DGW PDC
Mud Motor	7.67m	6.81in	4.50in	700-041	
Adjustable Gauge Stabilizer	3.23m	6.63in	2.81in	450-066	
Float Sub	0.64m	6.81in	3.00in	DA6015	
MWD Tool	2.81m	6.50in	0.00in	90052756M6	PM Sub
MWD Tool	7.05m	6.69in	0.00in	90057455H1GR6	FEWD
MWD Tool	3.06m	6.50in	3.25in	192198	Pulser/TM
String Stabiliser	1.56m	6.50in	3.00in	47697	
Drill Collar	55.81m	6.50in	2.75in		
Drilling Jars	9.87m	6.50in	2.75in	40909	
Drill Collar	18.59m	6.50in	2.75in		
HWDP	138.80m	6.50in	3.00in		

Survey

MD	Incl Deg	Corr. Az (deg)	TVD	'V' Sect	Dogleg (deg/100ft)	N/S	E/W	Tool Type
0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	
2193.14	31.67	15.75	2083.2	568.66	1.44	568.66	160.38	mwd
2214.58	30.94	12.84	2101.5	579.46	7.83	579.46	163.13	mwd
2241.00	30.80	12.66	2124.2	592.68	0.64	592.68	166.12	mwd

Bulk Stocks					
Name	Unit	In	Used	Adjust	Balance
Barite	MT	0.00	0.00	0.00	71.2
Gel	MT	0.00	0.00	0.00	12.4
Cement	MT	0.00	0.00	0.00	70.7
Drill Water	m ³	528.30	53.20	0.00	649.5
Fuel Oil	m ³	0.00	8.60	0.00	503.8
Potable Water	m ³	33.30	26.90	0.00	300.1

Pumps																	
Pump Data - Last 24 Hrs								Slow Pump Data									
No.	Type	Liner (in)	MW (ppg)	Eff (%)	SPM	SPP (psi)	Flow (gpm)	Depth (m)	SPM1	SPP1 (psi)	Flow1 (gpm)	SPM2	SPP2 (psi)	Flow2 (gpm)	SPM3	SPP3 (psi)	Flow3 (gpm)
1	A1700	6.00	9.50	0.00	76.00	3200.00	325.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	12-P160	6.00	9.50	0.00	76.00	3200.00	325.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	12-P160	6.00	9.50	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Personnel On Board			
Job Title	Personnel	Company	Pax
OIM	Barry Scott	DOGC	50
Camp boss	Mark Stanley	Total Marine Catering	9
ROV Pilot	Bob George	Fugro	2
Cementer	Edgar Lliagas	Dowell Schlumberger	2
Mud Engineer	Peter Dwyer	MI Swaco	2
Data Engineer	Dorian Kuhn	Sperry Sun	6
Senior Drilling Supervisor	Greg Harms	BSOC	5
MWD Engineer	Daniel Luoni	Halliburton	2
Directional Driller	Tim Walton	Halliburton	2
Centrifuge Hand	Brendon McPhail	DFE	1
Technician	Mark Anderson	Petrotech	1
Wireline Engineer	Wayn Nurcahya	Baker Atlas	3
Total			85

HSE Summary				
Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	20 Feb 2005	2 Days	Abandon Rig Drill	Based on simulated fire at paint locker.
BOP Test	02 Feb 2005	20 Days	BOP Test	
Fire Drill	20 Feb 2005	2 Days	Fire Drill	
Lost Time Injury	20 May 2003	644 Days	LTI	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30
Pre-Tour Meetings	20 Feb 2005	2 Days	Routine Pre-Tour Meetings	
Rig Inspection	04 Feb 2005	18 Days	NOPSA Audit	
Safety Meeting	20 Feb 2005	2 Days	Safety meetings held	3 Safety meetings held at 1300, 1900 and 0100, attended by all crews.
Stop Card-Prevention	22 Feb 2005	0 Days	6 STOP cards submitted	5 cards by DODI 1 card by Third Party

Marine							
Weather on 22 Feb 2005							
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period
10.00mi	15.0kn	135.0deg	1020.00mbar	17.0C°	0.5m	135.0deg	0.0ft/min
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments	
0.3deg	0.3deg	0.20m	1.0m	135.0deg	0.0ft/min		
Rig Dir.	Ris. Tension	VDL	Comments				
45.0deg	228.0klb	4304.0klb					
Boats	Arrived (date/time)		Departed (date/time)		Status		Bulks

Pacific Wrangler			At Wharf 27	Item	Unit	Quantity
				Barite	MT	59.00
				Gel	MT	42.00
				Cement	MT	123.00
				Drill Water	M^3	0.00
				Fuel Oil	M^3	181.00
Far Grip			At anchor	Potable Water	M^3	185.00
				Item	Unit	Quantity
				Barite	MT	85.00
				Gel	MT	6.00
				Cement	MT	86.00
				Drill Water	M^3	0.00
				Fuel Oil	M^3	780.00
				Potable Water	M^3	352.00

Helicopter Movement				
Flight #	Company	Arr/Dep. Time	Pax In/Out	Comment
1	Bristow	0911 / 0926	11 / 8	Call sign: BZU

23 Feb 2005 (GMT +10)

From: Greg Harms, Steve Hodgetts
To: Colin Allport

DRILLING MORNING REPORT # 4
ZaneGrey-1 ST1 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	2541.0m	Cur. Hole Size	8.500in	AFE Cost	\$ 0.00
Field		TVD	2238.0m	Casing OD	9.625in	AFE No.	
Drill Co.	DOGC	Progress	286.0m	Shoe TVD	1936.08m	Daily COST	\$ 330775.00
Rig	Ocean Patriot	Days from spud	25.40	FIT	13.70ppg	Cum Cost	\$ 12827808.00
Wtr Dpth(MSL)	72.5m	Days on well	3.13	LOT	0.00ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600 Directionally drilling ahead in 8 1/2" hole.					
RT-ML	94.0m	Planned Op Directionally drill ahead in 8 1/2" hole.					

Summary of Period 0000 to 2400 Hrs
Directionally drilled ahead in 8 1/2" hole.

Operations For Period 0000 Hrs to 2400 Hrs on 23 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0030	0.50	IH2	P	DM	2257.0m	Continued directionally drilling 8 1/2" hole from 2,255 m to 2,257 m. Took MWD surveys every stand.
0030	0230	2.00	IH2	P	DM	2265.0m	Slid from 2,257 m to 2,265 m.
0230	0500	2.50	IH2	P	DM	2287.0m	Directionally drilling 8 1/2" hole from 2,265 m to 2,287 m. Took MWD surveys every stand.
0500	0600	1.00	IH2	P	DM	2292.0m	Slid from 2,287 m to 2,292 m.
0600	1000	4.00	IH2	P	DM	2353.0m	Directionally drilling 8 1/2" hole from 2,292 m to 2,353 m. Took MWD surveys every stand.
1000	1100	1.00	IH2	P	DM	2360.0m	Slid from 2,353 m to 2,360 m.
1100	1300	2.00	IH2	P	DM	2383.0m	Directionally drilling 8 1/2" hole from 2,360 m to 2,383 m. Took MWD surveys every stand.
1300	1400	1.00	IH2	P	DM	2393.0m	Slid from 2,383 m to 2,393 m.
1400	1500	1.00	IH2	P	DM	2412.0m	Directionally drilling 8 1/2" hole from 2,393 m to 2,412 m. Took MWD surveys every stand.
1500	1600	1.00	IH2	P	DM	2419.0m	Slid from 2,412 m to 2,419 m.
1600	1830	2.50	IH2	P	DM	2464.0m	Directionally drilling 8 1/2" hole from 2,419 m to 2,464 m. Took MWD surveys every stand.
1830	1900	0.50	IH2	P	DM	2480.0m	Slid from 2,464 m to 2,480 m.
1900	2200	3.00	IH2	P	DM	2526.0m	Directionally drilling 8 1/2" hole from 2,480 m to 2,526 m. Took MWD surveys every stand.
2200	2230	0.50	IH2	P	DM	2530.0m	Slid from 2,526 m to 2,530 m.
2230	2400	1.50	IH2	P	DM	2541.0m	Directionally drilling 8 1/2" hole from 2,530 m to 2,541 m. Took MWD surveys every stand.

Operations For Period 0000 Hrs to 0600 Hrs on 24 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0600	6.00	IH2	P	DM	2726.0m	(IN PROGRESS) Directionally drilled ahead in rotary mode in 8 1/2" hole from 2541 m to 2726 m. WOB = 16k lbs, RPM = 75, trq = 12-15k ft.lbs, 610 gpm at 2900 psi. Average rate of penetration 55 m/hr.

Operations For Period Hrs to Hrs on

Operations For Period Hrs to Hrs on

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.22m	8.50in	2.50in	208684	Reed RSX162DGW PDC
Mud Motor	7.67m	6.81in	4.50in	700-041	
Adjustable Gauge Stabilizer	3.23m	6.63in	2.81in	450-066	
Float Sub	0.64m	6.81in	3.00in	DA6015	
MWD Tool	2.81m	6.50in	0.00in	90052756M6	PM Sub
MWD Tool	7.05m	6.69in	0.00in	90057455H1GR6	FEWD
MWD Tool	3.06m	6.50in	3.25in	192198	Pulser/TM
String Stabiliser	1.56m	6.50in	3.00in	47697	
Drill Collar	55.81m	6.50in	2.75in		
Drilling Jars	9.87m	6.50in	2.75in	40909	
Drill Collar	18.59m	6.50in	2.75in		
HWDP	138.80m	6.50in	3.00in		

Survey

MD	Incl Deg	Corr. Az (deg)	TVD	'V' Sect	Dogleg (deg/100ft)	N/S	E/W	Tool Type
2414.16	33.68	15.58	2272.5	680.18	6.47	680.18	183.97	mwd
2442.70	33.48	14.49	2296.2	695.42	2.23	695.42	188.07	mwd
2470.32	33.42	14.73	2319.3	710.15	0.53	710.15	191.91	mwd
2499.52	34.48	14.63	2343.5	725.93	3.63	725.93	196.04	mwd
2528.50	34.47	13.92	2367.4	741.83	1.39	741.83	200.08	mwd

Bulk Stocks

Name	Unit	In	Used	Adjust	Balance
Barite	MT	0.00	4.99	0.00	66.2
Gel	MT	0.00	0.00	0.00	12.4
Cement	MT	0.00	0.00	0.00	70.7
Drill Water	m³	0.00	104.70	0.00	544.8
Fuel Oil	m³	0.00	14.10	0.00	489.7
Potable Water	m³	23.60	18.30	0.00	305.4

Pumps

Pump Data - Last 24 Hrs								Slow Pump Data										
No.		Type	Liner (in)	MW (ppg)	Eff (%)	SPM	SPP (psi)	Flow (gpm)	Depth (m)	SPM1	SPP1 (psi)	Flow1(gpm)	SPM2	SPP2 (psi)	Flow2 (gpm)	SPM3	SPP3 (psi)	Flow3 (gpm)
1	A1700		6.00	9.50	0.00	73.00	2800.00	305.00	2255.0	40.00	440.00	168.00	0.00	0.00	0.00	0.00	0.00	0.00
2	12-P160		6.00	9.50	0.00	73.00	2800.00	305.00	2255.0	40.00	440.00	168.00	0.00	0.00	0.00	0.00	0.00	0.00
3	12-P160		6.00	9.50	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Personnel On Board

Job Title	Personnel	Company	Pax
OIM	Barry Scott	DOGC	50
Camp boss	Mark Stanley	Total Marine Catering	9
ROV Pilot	Bob George	Fugro	2
Cementer	Edgar Lliagas	Dowell Schlumberger	2
Mud Engineer	Peter Dwyer	MI Swaco	2
Data Engineer	Dorian Kuhn	Sperry Sun	6
Senior Drilling Supervisor	Greg Harms	BSOC	5
MWD Engineer	Daniel Luoni	Halliburton	2
Directional Driller	Tim Walton	Halliburton	2
Centrifuge Hand	Brendon McPhail	DFE	1
Technician	Mark Anderson	Petrotech	1
Wireline Engineer	Wayn Nurcahya	Baker Atlas	3
Total			85

HSE Summary				
Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	20 Feb 2005	3 Days	Abandon Rig Drill	Based on simulated fire at paint locker.
BOP Test	02 Feb 2005	21 Days	BOP Test	
Fire Drill	20 Feb 2005	3 Days	Fire Drill	
Lost Time Injury	20 May 2003	645 Days	LTI	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30
Pre-Tour Meetings	20 Feb 2005	3 Days	Routine Pre-Tour Meetings	
Rig Inspection	04 Feb 2005	19 Days	NOPSA Audit	
Safety Meeting	20 Feb 2005	3 Days	Safety meetings held	3 Safety meetings held at 1300, 1900 and 0100, attended by all crews.
Stop Card-Prevention	23 Feb 2005	0 Days	8 STOP cards submitted	8 cards by DODI 0 cards by Third Party

Marine							
Weather on 23 Feb 2005							
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period
10.00mi	10.0kn	90.0deg	1016.00mbar	21.0C°	0.5m	90.0deg	0.0ft/min
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments	
0.3deg	0.3deg	0.20m	1.0m	112.0deg	0.0ft/min		
Rig Dir.	Ris. Tension	VDL		Comments			
45.0deg	228.0klb	4136.0klb					

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Pacific Wrangler			Steaming to rig.	Item	Unit	Quantity
				Barite	MT	59.00
				Gel	MT	42.00
				Cement	MT	123.00
				Drill Water	M^3	303.00
				Fuel Oil	M^3	935.00
				Potable Water	M^3	256.00
Far Grip			At anchor	Item	Unit	Quantity
				Barite	MT	85.00
				Gel	MT	6.00
				Cement	MT	86.00
				Drill Water	M^3	0.00
				Fuel Oil	M^3	777.00
				Potable Water	M^3	344.00

24 Feb 2005 (GMT +10)

From: Greg Harms, Steve Hodgetts
To: Colin Allport

DRILLING MORNING REPORT # 5
ZaneGrey-1 ST1 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	2886.0m	Cur. Hole Size	8.500in	AFE Cost	\$ 0.00
Field		TVD	2518.2m	Casing OD	9.625in	AFE No.	
Drill Co.	DOGC	Progress	345.0m	Shoe TVD	1936.08m	Daily COST	\$ 313658.00
Rig	Ocean Patriot	Days from spud	26.40	FIT	13.70ppg	Cum Cost	\$ 13141466.00
Wtr Dpth(MSL)	72.5m	Days on well	4.13	LOT	0.00ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600	Drilling ahead 8 1/2" hole.				
RT-ML	94.0m	Planned Op	Drilling ahead 8 1/2" hole.				

Summary of Period 0000 to 2400 Hrs
Drilling ahead 8 1/2" hole.

Operations For Period 0000 Hrs to 2400 Hrs on 24 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	1030	10.50	IH2	P	DM	2726.0m	Directionally drilled ahead in rotary mode in 8 1/2" hole from 2541 m to 2726 m. WOB = 16k lbs, RPM = 75, trq = 12-15k ft.lbs, 610 gpm at 2900 psi. Average rate of penetration 55 m/hr.
1030	1130	1.00	IH2	P	DM	2736.0m	Directionally drilled ahead in sliding mode in 8 1/2" hole from 2726 m to 2736 m. Difficulty sliding, motor kept stalling at regular intervals, difficult toolface control. WOB = 24k lbs, 580 gpm at 2400 psi. Average rate of penetration 19 m/hr.
1130	1300	1.50	IH2	P	DM	2761.0m	Directionally drilled ahead in rotary mode in 8 1/2" hole from 2736 m to 2761 m. WOB = 25k lbs, RPM = 87, trq = 12-15k ft.lbs, 640 gpm at 2700 psi. Average rate of penetration 36 m/hr.
1300	1500	2.00	IH2	P	DM	2768.0m	Directionally drilled ahead in sliding mode in 8 1/2" hole from 2761 m to 2768 m. Difficulty sliding, motor kept stalling at regular intervals, difficult toolface control. WOB = 22k lbs, 595 gpm at 2600 psi. Average rate of penetration 14 m/hr.
1500	2130	6.50	IH2	P	DM	2886.0m	Directionally drilled ahead in rotary mode in 8 1/2" hole from 2768 m to 2886 m. WOB = 10k lbs, RPM = 83, trq = 14-18k ft.lbs, 610 gpm at 2800 psi. Average rate of penetration 35 m/hr.
2130	2300	1.50	IH2	TP (RCS)	RR	2886.0m	Repaired top drive. Smoke observed coming from the Top Drive system. Rectified same, repairing the Lube oil pump. Repaired blower ducting hose. Continued circulating, 610 gpm at 2600 psi.
2300	2330	0.50	IH2	P	D	2886.0m	Short wiper trip. Pulled out of hole with 5" drill pipe from 2886 m to 2741 m.
2330	2400	0.50	IH2	P	D	2886.0m	Ran back in hole with 5" drill pipe from 2741 m to 2886 m. Hole good. No overpull.

Operations For Period 0000 Hrs to 0600 Hrs on 25 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0300	3.00	IH2	P	D	2956.0m	Directionally drilled ahead in rotary mode in 8 1/2" hole from 2886 m to 2956 m. WOB = 8-12k lbs, 64 rpm, 13-17k ft.lbs, 610 gpm at 2900 psi. Average rate of penetration 42 m/hr.
0300	0400	1.00	IH2	P	D	2963.0m	Directionally drilled ahead in sliding mode in 8 1/2" hole from 2956 m to 2963 m. Difficulty sliding. Poor toolface control. WOB = 8-12k lbs, 610 gpm at 2900 psi. Average rate of penetration 20 m/hr.
0400	0530	1.50	IH2	P	D	2986.0m	Directionally drilled ahead in rotary mode in 8 1/2" hole from 2963 m to 2986 m. WOB = 6-12k lbs, 52 rpm, 12-17k ft.lbs 610 gpm at 2900 psi. Average rate of penetration 36 m/hr.
0530	0600	0.50	IH2	P	D	3001.0m	(IN PROGRESS) Directionally drilled ahead in sliding mode in 8 1/2" hole from 2986 m to 3001 m. Difficulty sliding. Poor toolface control. WOB = 6-10k lbs, 580 gpm at 2700 psi. Average rate of penetration 14 m/hr.

Operations For Period Hrs to Hrs on

WBM Data				Cost Today \$ 12938.00			
Mud Type:	KCI-PHPA-Glycol	API FL:	4.7cc	Cl:	30000.0mg/l	Solids:	7.80
Sample-From:	Active	Filter-Cake:	1.00/32nd"	Hard/Ca:	480.0mg/l	H2O:	0.00%
Time:	23:00	HTHP-FL:	0.0cc	MBT:	7.50	Oil:	0.00%
Weight:	9.50ppg	HTHP-cake:	0.00/32nd"	PM:	0.00	Sand:	0.25
Temp:	38.0C°			PF:	0.15	Glycol:	4.0%vol
				pH:	9.00	KCI:	0.00%
						PHPA:	1.00ppb
Comment							Viscosity 64.00sec/qt PV 19.00cp YP 34.00lb/100ft² Gels 10s 8.00 Gels 10m 13.00 Fann 003 8.00 Fann 006 11.00 Fann 100 33.00 Fann 200 44.00 Fann 300 53.00 Fann 600 72.00

Shakers, Volumes and Losses Data				Engineer : Peter Dwyer			
Equip.	Descr.	Mesh Size	Available	1978.00bbl	Losses	262.00bbl	Comments
Centrifuge 6	DFE		Active	525.00bbl	Downhole	47.00bbl	
De-Silter 5	DODI	12 x 4"	Mixing	0.00bbl	Surf+ Equip	130.00bbl	
Shaker 1	VSM-100	1 x 165, 3 x 120	Hole	693.00bbl	Dumped	35.00bbl	
Shaker 2	VSM-100	4 x 145	Slug	0.00bbl	De-Gasser	0.00bbl	
Shaker 3	VSM-100	1 x 120, 3 x 105	Reserve	267.00bbl	De-Sander	0.00bbl	
Shaker 4	VSM-100	1 x 120, 3 x 145	Kill	0.00bbl	De-Silter	28.00bbl	
			Premix	493.00bbl	Centrifuge	22.00bbl	

Bit # 7				Wear	I	O1	D	L	B	G	O2	R
Size ("):	8.50in	IADC#	M322	Nozzles		Drilled over last 24 hrs			Calculated over Bit Run			
Mfr:	Reed	WOB(avg)	15.2klb	No.	Size	Progress			Cum. Progress			
Type:	PDC	RPM(avg)	76.00	6	15.00/32nd"	On Bottom Hrs			Cum. On Btm Hrs			
Serial No.:	208684	F.Rate	606.00gpm			IADC Drill Hrs			Cum IADC Drill Hrs			
Bit Model	RSX162DGW	SPP	2830.00psi			Total Revs			Cum Total Revs			
Depth In	2170.0m	HSI				ROP(avg)			ROP(avg)			
Depth Out	3107.0m	TFA	1.03									

BHA # 9							
Weight(Wet)	40.0klb	Length	249.3m	Torque(max)	20.00kft-lbs	D.C. (1) Ann Velocity	150.9mpm
Wt Below Jar(Wet)	20.0klb	String	290.0klb	Torque(Off.Btm)	10.00kft-lbs	D.C. (2) Ann Velocity	0.0mpm
		Pick-Up	345.0klb	Torque(On.Btm)	15.00kft-lbs	H.W.D.P. Ann Velocity	95.8mpm
		Slack-Off	250.0klb			D.P. Ann Velocity	95.8mpm

BHA Run Description	8 1/2" PDC, motor, AGS, float sub with ported float installed, PM sub, FEWD, pulser/TM, integral blade stabiliser, 8 x 6 1/2" DC's, 1 x 6 1/2" jars, 15 x 5" HWDP.
BHA Run Comment	Bit box of motor parted from lower part of the motor, leaving the bit, the motor bit box and the motor drive shaft downhole.

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.22m	8.50in	2.50in	208684	Reed RSX162DGW PDC PM Sub FEWD Pulser/TM
Mud Motor	7.67m	6.81in	4.50in	700-041	
Adjustable Gauge Stabilizer	3.23m	6.63in	2.81in	450-066	
Float Sub	0.64m	6.81in	3.00in	DA6015	
MWD Tool	2.81m	6.50in	0.00in	90052756M6	
MWD Tool	7.05m	6.69in	0.00in	90057455H1GR6	
MWD Tool	3.06m	6.50in	3.25in	192198	
String Stabiliser	1.56m	6.50in	3.00in	47697	
Drill Collar	55.81m	6.50in	2.75in		
Drilling Jars	9.87m	6.50in	2.75in	40909	
Drill Collar	18.59m	6.50in	2.75in		

Equipment	Length	OD	ID	Serial #	Comment
HWDP	138.80m	6.50in	3.00in		

Survey

MD	Incl Deg	Corr. Az (deg)	TVD	'V' Sect	Dogleg (deg/100ft)	N/S	E/W	Tool Type
2758.57	35.90	14.65	2552.1	874.48	4.86	874.48	234.99	mwd
2786.53	35.55	13.38	2574.8	890.31	2.93	890.31	238.94	mwd
2815.67	34.36	13.52	2598.6	906.55	4.09	906.55	242.83	mwd
2844.06	33.47	13.48	2622.2	921.95	3.14	921.95	246.53	mwd
2872.61	33.20	13.34	2646.1	937.22	0.98	937.22	250.16	mwd

Bulk Stocks

Name	Unit	In	Used	Adjust	Balance
Barite	MT	0.00	0.00	0.00	66.2
Gel	MT	0.00	0.00	0.00	12.4
Cement	MT	0.00	0.00	0.00	70.7
Drill Water	m³	0.00	154.10	0.00	390.7
Fuel Oil	m³	0.00	16.20	0.00	473.5
Potable Water	m³	34.10	25.80	0.00	313.7

Pumps

Pump Data - Last 24 Hrs								Slow Pump Data										
No.		Type	Liner (in)	MW (ppg)	Eff (%)	SPM	SPP (psi)	Flow (gpm)	Depth (m)	SPM1	SPP1 (psi)	Flow1(gpm)	SPM2	SPP2 (psi)	Flow2 (gpm)	SPM3	SPP3 (psi)	Flow3 (gpm)
1	A1700		6.00	9.50	0.00	73.00	2800.00	305.00	2255.0	40.00	440.00	168.00	0.00	0.00	0.00	0.00	0.00	0.00
2	12-P160		6.00	9.50	0.00	73.00	2800.00	305.00	2255.0	40.00	440.00	168.00	0.00	0.00	0.00	0.00	0.00	0.00
3	12-P160		6.00	9.50	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Personnel On Board

Job Title	Personnel	Company	Pax
OIM	Barry Scott	DOGC	46
Camp boss	Mark Stanley	Total Marine Catering	9
ROV Pilot	Bob George	Fugro	2
Cementer	Shane Bilton	Dowell Schlumberger	1
Mud Engineer	Peter Dwyer	MI Swaco	2
Data Engineer	Dorian Kuhn	Sperry Sun	6
Senior Drilling Supervisor	Greg Harms	BSOC	5
MWD Engineer	Daniel Luoni	Halliburton	2
Directional Driller	Tim Walton	Halliburton	2
Centrifuge Hand	Brendon McPhail	DPE	1
Technician	Mark Anderson	Petrotech	1
Wireline Engineer	Sergio Arellano	Baker Atlas	3
Other Operator	Ron King	Other Operator	2
Total			82

HSE Summary

Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	20 Feb 2005	4 Days	Abandon Rig Drill	Based on simulated fire at paint locker.
BOP Test	02 Feb 2005	22 Days	BOP Test	
Fire Drill	20 Feb 2005	4 Days	Fire Drill	
Lost Time Injury	20 May 2003	646 Days	LTI	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30
Pre-Tour Meetings	24 Feb 2005	0 Days	Routine Pre-Tour Meetings	
Rig Inspection	04 Feb 2005	20 Days	NOPSA Audit	
Safety Meeting	20 Feb 2005	4 Days	Safety meetings held	3 Safety meetings held at 1300, 1900 and 0100, attended by all crews.
Stop Card-Prevention	24 Feb 2005	0 Days	9 STOP cards submitted	7 cards by DODI 2 cards by Third Party

HSE Summary

Events	Date of last	Days Since	Descr.	Remarks
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Marine

Weather on 24 Feb 2005

Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period
10.00mi	20.0kn	225.0deg	1013.00mbar	24.0C°	0.5m	225.0deg	0.0ft/min
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments	
0.2deg	0.2deg	0.20m	1.5m	225.0deg	0.0ft/min		
Rig Dir.	Ris. Tension	VDL		Comments			
45.0deg	228.0klb	4121.3klb					

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Pacific Wrangler			At rig	Item	Unit	Quantity
				Barite	MT	59.00
				Gel	MT	42.00
				Cement	MT	123.00
				Drill Water	M^3	617.00
				Fuel Oil	M^3	640.00
				Potable Water	M^3	255.00
Far Grip			On route to Melbourne	Item	Unit	Quantity
				Barite	MT	0.00
				Gel	MT	0.00
				Cement	MT	0.00
				Drill Water	M^3	0.00
				Fuel Oil	M^3	0.00
				Potable Water	M^3	0.00

Helicopter Movement

Flight #	Company	Arr/Dep. Time	Pax In/Out	Comment
1	Bristow	08:31 / 08:42	6 / 9	

25 Feb 2005 (GMT +10)

From: Greg Harms, Steve Hodgetts
To: Colin Allport

DRILLING MORNING REPORT # 6
ZaneGrey-1 ST1 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	3107.0m	Cur. Hole Size	8.500in	AFE Cost	\$ 0.00
Field		TVD	2706.3m	Casing OD	9.625in	AFE No.	
Drill Co.	DOGC	Progress	221.0m	Shoe TVD	1936.08m	Daily COST	\$ 330537.00
Rig	Ocean Patriot	Days from spud	27.40	FIT	13.70ppg	Cum Cost	\$ 13472003.00
Wtr Dpth(MSL)	72.5m	Days on well	5.13	LOT	0.00ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600	Picking up cement stinger.				
RT-ML	94.0m	Planned Op	Continue running in the hole with cement stinger.				

Summary of Period 0000 to 2400 Hrs

Drilled ahead 8 1/2" hole, difficult sliding. Bit unable to penetrate 3107 m. Pull out of the hole to change the bit.

Operations For Period 0000 Hrs to 2400 Hrs on 25 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0300	3.00	IH2	P	D	2956.0m	Directionally drilled ahead in rotary mode in 8 1/2" hole from 2886 m to 2956 m. WOB = 8-12k lbs, 64 rpm, 13-17k ft.lbs, 610 gpm at 2900 psi. Average rate of penetration 42 m/hr.
0300	0400	1.00	IH2	P	D	2963.0m	Directionally drilled ahead in sliding mode in 8 1/2" hole from 2956 m to 2963 m. Difficulty sliding. Poor toolface control. WOB = 8-12k lbs, 610 gpm at 2900 psi. Average rate of penetration 20 m/hr.
0400	0530	1.50	IH2	P	D	2986.0m	Directionally drilled ahead in rotary mode in 8 1/2" hole from 2963 m to 2986 m. WOB = 6-12k lbs, 52 rpm, 12-17k ft.lbs 610 gpm at 2900 psi. Average rate of penetration 36 m/hr.
0530	0800	2.50	IH2	P	D	3001.0m	Directionally drilled ahead in sliding mode in 8 1/2" hole from 2986 m to 3001 m. Difficulty sliding. Poor toolface control. WOB = 6-10k lbs, 580 gpm at 2700 psi. Average rate of penetration 14 m/hr.
0800	0830	0.50	IH2	P	D	3015.0m	Directionally drilled ahead in rotary mode in 8 1/2" hole from 3001 m to 3015 m. 50 rpm, 15-17k ft.lbs 590 gpm at 3000 psi. Average rate of penetration 52 m/hr.
0830	1000	1.50	IH2	P	D	3024.0m	Directionally drilled ahead in sliding mode in 8 1/2" hole from 3015 m to 3024 m. Difficulty sliding. Poor toolface control. 580 gpm at 2800 psi. Average rate of penetration 14 m/hr.
1000	1230	2.50	IH2	P	D	3060.0m	Directionally drilled ahead in rotary mode in 8 1/2" hole from 3024 m to 3060 m. 40 rpm, 13-18k ft.lbs 580 gpm at 3000 psi. Average rate of penetration 44 m/hr.
1230	1400	1.50	IH2	P	D	3068.0m	Directionally drilled ahead in sliding mode in 8 1/2" hole from 3060 m to 3068 m. Difficulty sliding. Poor toolface control. 590 gpm at 3000 psi. Average rate of penetration 37 m/hr.
1400	1530	1.50	IH2	P	D	3105.0m	Directionally drilled ahead in rotary mode in 8 1/2" hole from 3068 m to 3105 m. 60 rpm, 16-18k ft.lbs 610 gpm at 3100 psi. Average rate of penetration 40 m/hr.
1530	1930	4.00	IH2	P	D	3107.0m	Directionally drilled ahead in rotary mode in 8 1/2" hole from 3105 m to 3107 m. Unable to penetrate 3107 m. (Varied drilling parameters, still no progress.) WOB = 5-38k lbs, 50-80 rpm, 12-17k ft.lbs 610 gpm at 3000 psi.
1930	2030	1.00	IH2	TP (DHM)	TOB	3107.0m	Flow check. Well static. Pull out of the hole from 3107 m to 2829 m with 5" drill pipe.
2030	2230	2.00	IH2	TP (DHM)	TOB	3107.0m	Flow check. Well static. Pumped slug. Pull out of the hole from 2829 m to 2250 m with 5" drill pipe.
2230	2300	0.50	IH2	TP (DHM)	TOB	3107.0m	Made up Top Drive. (Set toolface at 140 Left deg, sidetrack orientation). Pump slug.
2300	2400	1.00	IH2	TP (DHM)	TOB	3107.0m	Continued to pull out of the hole from 2250 m to 1892 m with 5" drill pipe.

Operations For Period 0000 Hrs to 0600 Hrs on 26 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0300	3.00	IH2	TP (DHM)	TOB	3107.0m	Continued to pull out of the hole from 1892 m to 249 m with 5" drill pipe.
0300	0500	2.00	IH2	TP (DHM)	HBHA	3107.0m	Continued to pull out of hole with the bottom hole assembly from 249 m to surface. On surface it was found that the motor bit box had parted from the lower bearing housing of the motor and was left down hole. Fish left in hole:- bit, motor bit box and motor drive shaft (~1m long).

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0500	0600	1.00	IH2	TP (DHM)	HBHA	3107.0m	(IN PROGRESS) Lay out damaged motor. Change out MWD pulser to inceased flow capacity. Racked back same.

Operations For Period Hrs to Hrs on

WBM Data				Cost Today \$ 12867.00			
Mud Type:	KCI-PHPA-Glycol	API FL:	4.5cc	Cl:	30500.0mg/l	Solids:	8.20
Sample-From:	Active	Filter-Cake:	1.00/32nd"	Hard/Ca:	480.0mg/l	H2O:	0.00%
Time:	22:00	HTHP-FL:	0.0cc	MBT:	9.00	Oil:	0.00%
Weight:	9.60ppg	HTHP-cake:	0.00/32nd"	PM:	0.00	Sand:	0.3
Temp:	43.0C°			PF:	0.10	Glycol:	4.0%vol
				pH:	9.00	KCl:	0.00%
						PHPA:	1.00ppb
Comment						Fann 003	8.00
						Fann 006	11.00
						Fann 100	30.00
						Fann 200	41.00
						Fann 300	49.00
						Fann 600	66.00

Shakers, Volumes and Losses Data				Engineer : Peter Dwyer			
Equip.	Descr.	Mesh Size	Available	2116.00bbl	Losses	200.00bbl	Comments
Centrifuge 6	DFE		Active	525.00bbl	Downhole	53.00bbl	
De-Silter 5	DODI	12 x 4"	Mixing	0.00bbl	Surf+ Equip	70.00bbl	
Shaker 1	VSM-100	4 x 120	Hole	739.00bbl	Dumped	0.00bbl	
Shaker 2	VSM-100	4 x 145	Slug	0.00bbl	De-Gasser	0.00bbl	
Shaker 3	VSM-100	2 x 120, 2 x 105	Reserve	267.00bbl	De-Sander	0.00bbl	
Shaker 4	VSM-100	4 x 145	Kill	0.00bbl	De-Silter	41.00bbl	
			Premix	585.00bbl	Centrifuge	36.00bbl	

Bit # 7				Wear	I	O1	D	L	B	G	O2	R
Size ("):	8.50in	IADC#	M322	Nozzles		Drilled over last 24 hrs			Calculated over Bit Run			
Mfr:	Reed	WOB(avg)	14.0klb	No.	Size	Progress			Cum. Progress			
Type:	PDC	RPM(avg)	48.00	6	15.00/32nd"	On Bottom Hrs			Cum. On Btm Hrs			
Serial No.:	208684	F.Rate	600.00gpm			IADC Drill Hrs			Cum IADC Drill Hrs			
Bit Model	RSX162DGW	SPP	2970.00psi			Total Revs			Cum Total Revs			
Depth In	2170.0m	HSI				ROP(avg)			ROP(avg)			
Depth Out	3107.0m	TFA	1.03									

BHA # 9							
Weight(Wet)	40.0klb	Length	249.3m	Torque(max)	18.00kft-lbs	D.C. (1) Ann Velocity	149.4mpm
Wt Below Jar(Wet)	20.0klb	String	275.0klb	Torque(Off.Btm)	10.00kft-lbs	D.C. (2) Ann Velocity	0.0mpm
		Pick-Up	325.0klb	Torque(On.Btm)	14.00kft-lbs	H.W.D.P. Ann Velocity	94.9mpm
		Slack-Off	235.0klb			D.P. Ann Velocity	94.9mpm
BHA Run Description		8 1/2" PDC, motor, AGS, float sub with ported float installed, PM sub, FEWD, pulser/TM, integral blade stabiliser, 8 x 6 1/2" DC's, 1 x 6 1/2" jars, 15 x 5" HWDP.					
BHA Run Comment		Bit box of motor parted from lower part of the motor, leaving the bit, the motor bit box and the motor drive shaft downhole.					
Equipment		Length	OD	ID	Serial #	Comment	
Bit		0.22m	8.50in	2.50in	208684	Reed RSX162DGW PDC	
Mud Motor		7.67m	6.81in	4.50in	700-041		
Adjustable Gauge Stabilizer		3.23m	6.63in	2.81in	450-066		
Float Sub		0.64m	6.81in	3.00in	DA6015		
MWD Tool		2.81m	6.50in	0.00in	90052756M6	PM Sub	
MWD Tool		7.05m	6.69in	0.00in	90057455H1GR6	FEWD	
MWD Tool		3.06m	6.50in	3.25in	192198	Pulser/TM	

Equipment	Length	OD	ID	Serial #	Comment
String Stabiliser	1.56m	6.50in	3.00in	47697	
Drill Collar	55.81m	6.50in	2.75in		
Drilling Jars	9.87m	6.50in	2.75in	40909	
Drill Collar	18.59m	6.50in	2.75in		
HWDP	138.80m	6.50in	3.00in		

Survey

MD	Incl Deg	Corr. Az (deg)	TVD	'V' Sect	Dogleg (deg/100ft)	N/S	E/W	Tool Type
2987.28	30.50	13.51	2743.1	996.73	4.61	996.73	263.94	mwd
3015.71	31.54	13.03	2767.5	1010.99	3.76	1010.99	267.30	mwd
3044.57	31.02	13.23	2792.1	1025.58	1.84	1025.58	270.70	mwd
3073.76	31.11	12.81	2817.1	1040.26	0.80	1040.26	274.10	mwd
3092.90	31.08	12.66	2833.5	1049.90	0.43	1049.90	276.28	mwd

Bulk Stocks

Name	Unit	In	Used	Adjust	Balance
Barite	MT	0.00	0.00	0.00	66.2
Gel	MT	0.00	0.00	0.00	12.4
Cement	MT	0.00	0.00	0.00	70.7
Drill Water	m³	0.00	156.50	0.00	234.2
Fuel Oil	m³	0.00	21.60	0.00	451.9
Potable Water	m³	31.90	27.70	0.00	317.9

Pumps

Pump Data - Last 24 Hrs								Slow Pump Data										
No.		Type	Liner (in)	MW (ppg)	Eff (%)	SPM	SPP (psi)	Flow (gpm)	Depth (m)	SPM1	SPP1 (psi)	Flow1(gpm)	SPM2	SPP2 (psi)	Flow2 (gpm)	SPM3	SPP3 (psi)	Flow3 (gpm)
1		A1700	6.00	9.50	0.00	68.00	3000.00	280.00	2255.0	40.00	440.00	168.00	0.00	0.00	0.00	0.00	0.00	0.00
2		12-P160	6.00	9.50	0.00	0.00	0.00	0.00	2255.0	40.00	440.00	168.00	0.00	0.00	0.00	0.00	0.00	0.00
3		12-P160	6.00	9.50	0.00	68.00	3000.00	280.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Personnel On Board

Job Title	Personnel	Company	Pax
OIM	Barry Scott	DOGC	46
Camp boss	Kevin Tolland	Total Marine Catering	9
ROV Pilot	Bob George	Fugro	2
Cementer	Dave Green	Dowell Schlumberger	2
Mud Engineer	Peter Dwyer	MI Swaco	2
Data Engineer	Dorian Kuhn	Sperry Sun	6
Senior Drilling Supervisor	Greg Harms	BSOC	5
MWD Engineer	Daniel Luoni	Halliburton	2
Directional Driller	Tim Walton	Halliburton	2
Centrifuge Hand	Brendon McPhail	DFE	1
Technician	Mark Anderson	Petrotech	1
Wireline Engineer	Sergio Arellano	Baker Atlas	3
Liner Hanger	Andi Russell	Weatherford	1
Total			82

HSE Summary

Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	20 Feb 2005	5 Days	Abandon Rig Drill	
BOP Test	02 Feb 2005	23 Days	BOP Test	
Fire Drill	20 Feb 2005	5 Days	Fire Drill	Based on simulated fire at paint locker.
Lost Time Injury	20 May 2003	647 Days	LTI	
Pre-Tour Meetings	25 Feb 2005	0 Days	Routine Pre-Tour Meetings	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30
Rig Inspection	04 Feb 2005	21 Days	NOPSA Audit	

HSE Summary				
Events	Date of last	Days Since	Descr.	Remarks
Safety Meeting	20 Feb 2005	5 Days	Safety meetings held	3 Safety meetings held at 1300, 1900 and 0100, attended by all crews. 8 cards by DODI 1 cards by Third Party
Stop Card-Prevention	25 Feb 2005	0 Days	9 STOP cards submitted	

Marine									
Weather on 25 Feb 2005									
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period		
10.00mi	19.0kn	225.0deg	1017.00mbar	22.0C°	0.5m	225.0deg	0.0ft/min		
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments			
0.2deg	0.2deg	0.20m	1.0m	225.0deg	0.0ft/min				
Rig Dir.	Ris. Tension	VDL		Comments					
45.0deg	228.0klb	4121.3klb							
Boats	Arrived (date/time)		Departed (date/time)		Status		Bulks		
Pacific Wrangler					Standby at rig	Item		Unit	Quantity
						Barite		MT	59.00
						Gel		MT	42.00
						Cement		MT	123.00
						Drill Water		M^3	617.00
						Fuel Oil		M^3	636.70
						Potable Water		M^3	252.00
Far Grip					Standby in Melbourne	Item		Unit	Quantity
						Barite		MT	0.00
						Gel		MT	0.00
						Cement		MT	0.00
						Drill Water		M^3	0.00
						Fuel Oil		M^3	0.00
						Potable Water		M^3	0.00

Helicopter Movement				
Flight #	Company	Arr/Dep. Time	Pax In/Out	Comment
1	Bristow	08:40 / 08:52	10 / 10	

26 Feb 2005 (GMT +10)

From: Greg Harms, Steve Hodgetts
To: Colin Allport

DRILLING MORNING REPORT # 7
ZaneGrey-1 ST1 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	3107.0m	Cur. Hole Size	8.500in	AFE Cost	\$ 0.00
Field		TVD	2706.3m	Casing OD	9.625in	AFE No.	
Drill Co.	DOGC	Progress	0.0m	Shoe TVD	1936.08m	Daily COST	\$ 187686.00
Rig	Ocean Patriot	Days from spud	28.10	FIT	13.70ppg	Cum Cost	\$ 13659689.00
Wtr Dpth(MSL)	72.5m	Days on well	5.83	LOT	0.00ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600	RIH to tag plug.				
RT-ML	94.0m	Planned Op	PU new bit & BHA. RIH. Tag cement & dress off plug. Sidetrack around fish. Directionally drill to TD.				

Summary of Period 0000 to 2400 Hrs

Continued to pull out of hole. On surface it was found that the motor bit box had parted from the lower bearing housing of the motor and was left downhole. Fish left in hole:- bit, motor bit box and motor drive shaft (~1m long). Ran in hole with cement stinger. Set cement plug.

Operations For Period 0000 Hrs to 2400 Hrs on 26 Feb 2005

From	To	Hrs	Phse	Clis (RC)	Op	Depth	Activity Description
0000	0300	3.00	IH2	TP (DHM)	TOB	3107.0m	Continued to pull out of the hole from 1892 m to 249 m with 5" drill pipe.
0300	0500	2.00	IH2	TP (DHM)	HBHA	3107.0m	Continued to pull out of hole with the bottom hole assembly from 249 m to surface. On surface it was found that the motor bit box had parted from the lower bearing housing of the motor and was left down hole. Fish left in hole:- bit, motor bit box and motor drive shaft (~1m long).
0500	0630	1.50	IH2	TP (DHM)	HBHA	3107.0m	Lay out damaged motor. Change out MWD pulser to increase flow capacity. Racked back same.
0630	0700	0.50	IH2	TP (DHM)	HBHA	3107.0m	Made up cement stand (side Entry Sub on DP) & stood back same.
0700	0730	0.50	IH2	TP (DHM)	PUP	3107.0m	Rigged up 2.7/8" handling gear & prepared to RIH with 2.7/8" cement stinger.
0730	1400	6.50	IH2	TP (DHM)	TI	3107.0m	Picked up mule shoe (1 jt modified with taper & circulation slots) & 8 jts 2.7/8" stinger. Tripped in hole on 5" DP to 3,106m. Washed down last stand. Tagged bottom & confirmed depth.
1400	1500	1.00	IH2	TP (DHM)	CMD	3107.0m	Circulated bottoms up to confirm no trip gas.
1500	1630	1.50	IH2	TP (DHM)	CMP	3107.0m	Rigged up cement line & pressure tested line to 1,000psi. Set 80m balanced cement plug from 3,106m - 3,026m to sidetrack around fish. Rigged down cement line.
1630	1700	0.50	IH2	TP (DHM)	TO	2900.0m	Pulled back above plug to 2,900m. (ended ZaneGrey-1ST1, commenced ZaneGrey-1ST2 at 17:00hrs).

Operations For Period Hrs to Hrs on

WBM Data				Cost Today \$ 6580.00			
Mud Type:	KCI-PHPA-Glycol	API FL:	4.7cc	Cl:	30500.0mg/l	Solids:	8.20
Sample-From:	Flowline	Filter-Cake:	1.00/32nd"	Hard/Ca:	460.0mg/l	H2O:	0.00%
Time:	15:20	HTHP-FL:	0.0cc	MBT:	10.00	Oil:	0.00%
Weight:	9.60ppg	HTHP-cake:	0.00/32nd"	PM:	0.00	Sand:	0.25
Temp:	32.0C°			PF:	0.10	Glycol:	4.0%vol
				pH:	9.00	KCI:	0.00%
						PHPA:	1.00ppb
Comment						Fann 003	8.00
						Fann 006	11.00
						Fann 100	31.00
						Fann 200	41.00
						Fann 300	50.00
						Fann 600	67.00

Shakers, Volumes and Losses Data

Engineer : Peter Dwyer

Equip.	Descr.	Mesh Size	Available	2352.00bbl	Losses	103.00bbl	Comments
Centrifuge 6	DFE		Active	497.00bbl	Downhole	8.00bbl	
De-Silter 5	DODI	12 x 4"	Mixing	0.00bbl	Surf+ Equip	0.00bbl	
Shaker 1	VSM-100	4 x 120	Hole	754.00bbl	Dumped	80.00bbl	
Shaker 2	VSM-100	4 x 145	Slug	0.00bbl	De-Gasser	0.00bbl	
Shaker 3	VSM-100	2 x 120, 2 x 105	Reserve	181.00bbl	De-Sander	0.00bbl	
Shaker 4	VSM-100	4 x 145	Kill	0.00bbl	De-Silter	11.00bbl	
			Premix	920.00bbl	Centrifuge	4.00bbl	

Bit # 7				Wear	I	O1	D	L	B	G	O2	R
Size ("):	8.50in	IADC#	M322	Nozzles		Drilled over last 24 hrs			Calculated over Bit Run			
Mfr:	Reed	WOB(avg)	0.0klb	No. Size		Progress 0.0m		Cum. Progress		937.0m		
Type:	PDC	RPM(avg)	0.00	6 15.00/32nd"		On Bottom Hrs 0.00h		Cum. On Btm Hrs		65.90h		
Serial No.:	208684	F.Rate	0.00gpm			IADC Drill Hrs 0.00h		Cum IADC Drill Hrs		65.90h		
Bit Model	RSX162DGW	SPP	0.00psi			Total Revs 699400.00		Cum Total Revs		2367900.00		
Depth In	2170.0m	HSI				ROP(avg) N/A		ROP(avg)		14.22 m/hr		
Depth Out	3107.0m	TFA	1.03									

BHA # 9							
Weight(Wet)	40.0klb	Length	249.3m	Torque(max)	18.00kft-lbs	D.C. (1) Ann Velocity	149.4mpm
Wt Below Jar(Wet)	20.0klb	String	275.0klb	Torque(Off.Btm)	10.00kft-lbs	D.C. (2) Ann Velocity	0.0mpm
		Pick-Up	325.0klb	Torque(On.Btm)	14.00kft-lbs	H.W.D.P. Ann Velocity	94.9mpm
		Slack-Off	235.0klb			D.P. Ann Velocity	94.9mpm
BHA Run Description		8 1/2" PDC, motor, AGS, float sub with ported float installed, PM sub, FEWD, pulser/TM, integral blade stabiliser, 8 x 6 1/2" DC's, 1 x 6 1/2" jars, 15 x 5" HWDP.					
BHA Run Comment		Bit box of motor parted from lower part of the motor, leaving the bit, the motor bit box and the motor drive shaft downhole.					

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.22m	8.50in	2.50in	208684	Reed RSX162DGW PDC
Mud Motor	7.67m	6.81in	4.50in	700-041	
Adjustable Gauge Stabilizer	3.23m	6.63in	2.81in	450-066	
Float Sub	0.64m	6.81in	3.00in	DA6015	
MWD Tool	2.81m	6.50in	0.00in	90052756M6	PM Sub
MWD Tool	7.05m	6.69in	0.00in	90057455H1GR6	FEWD
MWD Tool	3.06m	6.50in	3.25in	192198	Pulser/TM
String Stabiliser	1.56m	6.50in	3.00in	47697	
Drill Collar	55.81m	6.50in	2.75in		
Drilling Jars	9.87m	6.50in	2.75in	40909	
Drill Collar	18.59m	6.50in	2.75in		
HWDP	138.80m	6.50in	3.00in		

Survey								
MD	Incl Deg	Corr. Az (deg)	TVD	'V' Sect	Dogleg (deg/100ft)	N/S	E/W	Tool Type
2987.28	30.50	13.51	2743.1	996.73	4.61	996.73	263.94	mwd
3015.71	31.54	13.03	2767.5	1010.99	3.76	1010.99	267.30	mwd
3044.57	31.02	13.23	2792.1	1025.58	1.84	1025.58	270.70	mwd
3073.76	31.11	12.81	2817.1	1040.26	0.80	1040.26	274.10	mwd
3092.90	31.08	12.66	2833.5	1049.90	0.43	1049.90	276.28	mwd

Bulk Stocks					
Name	Unit	In	Used	Adjust	Balance
Barite	MT	0.00	4.07	0.00	62.1
Gel	MT	0.00	0.00	0.00	12.4
Cement	MT	0.00	11.71	0.00	59.0
Drill Water	m ³	585.30	154.40	0.00	665.1
Fuel Oil	m ³	0.00	16.20	0.00	435.7
Potable Water	m ³	34.70	29.90	0.00	322.7

Pumps																	
Pump Data - Last 24 Hrs								Slow Pump Data									
No.	Type	Liner (in)	MW (ppg)	Eff (%)	SPM	SPP (psi)	Flow (gpm)	Depth (m)	SPM1	SPP1 (psi)	Flow1 (gpm)	SPM2	SPP2 (psi)	Flow2 (gpm)	SPM3	SPP3 (psi)	Flow3 (gpm)
1	A1700	6.00	9.50	0.00	68.00	3000.00	280.00	2255.0	40.00	440.00	168.00	0.00	0.00	0.00	0.00	0.00	0.00
2	12-P160	6.00	9.50	0.00	0.00	0.00	0.00	2255.0	40.00	440.00	168.00	0.00	0.00	0.00	0.00	0.00	0.00
3	12-P160	6.00	9.50	0.00	68.00	3000.00	280.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Personnel On Board			
Job Title	Personnel	Company	Pax
OIM	Barry Scott	DOGC	46
Camp boss	Kevin Tolland	Total Marine Catering	9
ROV Pilot	Bob George	Fugro	2
Cementer	Dave Green	Dowell Schlumberger	2
Mud Engineer	Peter Dwyer	MI Swaco	2
Data Engineer	Dorian Kuhn	Sperry Sun	6
Senior Drilling Supervisor	Greg Harms	BSOC	5
MWD Engineer	Daniel Luoni	Halliburton	2
Directional Driller	Tim Walton	Halliburton	2
Centrifuge Hand	Brendon McPhail	DFE	1
Technician	Mark Anderson	Petrotech	1
Wireline Engineer	Sergio Arellano	Baker Atlas	3
Liner Hanger	Andi Russell	Weatherford	1
Total			82

HSE Summary				
Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	20 Feb 2005	6 Days	Abandon Rig Drill	Based on simulated fire at paint locker.
BOP Test	02 Feb 2005	24 Days	BOP Test	
Fire Drill	20 Feb 2005	6 Days	Fire Drill	
Lost Time Injury	20 May 2003	648 Days	LTI	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30
Pre-Tour Meetings	26 Feb 2005	0 Days	Routine Pre-Tour Meetings	
Rig Inspection	04 Feb 2005	22 Days	NOPSAs Audit	
Safety Meeting	20 Feb 2005	6 Days	Safety meetings held	3 Safety meetings held at 1300, 1900 and 0100, attended by all crews.
Stop Card-Prevention	26 Feb 2005	0 Days	11 STOP cards submitted	9 cards by DODI 2 cards by Third Party

Marine							
Weather on 26 Feb 2005							
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period
10.00mi	23.0kn	225.0deg	1022.00mbar	20.0C°	0.5m	225.0deg	0.0ft/min
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments	
0.3deg	0.3deg	0.20m	1.5m	225.0deg	0.0ft/min		
Rig Dir.	Ris. Tension	VDL		Comments			
45.0deg	228.0klb	4227.3klb					
Boats	Arrived (date/time)		Departed (date/time)		Status		Bulks

Pacific Wrangler			Standby at rig	Item	Unit	Quantity
				Barite	MT	59.00
				Gel	MT	42.00
				Cement	MT	123.00
				Drill Water	M^3	0.00
				Fuel Oil	M^3	630.50
Far Grip			Standby in Melbourne	Potable Water	M^3	249.00
				Item	Unit	Quantity
				Barite	MT	0.00
				Gel	MT	0.00
				Cement	MT	0.00
				Drill Water	M^3	0.00
				Fuel Oil	M^3	0.00
				Potable Water	M^3	0.00

APPENDIX 25

ZANEGREY-1/ST2 DAILY DRILLING REPORTS

(By Independent Data Services [IDS])

26 Feb 2005 (GMT +10)

From: Greg Harms, Steve Hodgetts
To: Colin Allport

DRILLING MORNING REPORT # 1
ZaneGrey-1ST2 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	2900.0m	Cur. Hole Size	8.500in	AFE Cost	\$ 0
Field		TVD	2529.7m	Casing OD	9.625in	AFE No.	
Drill Co.	DOGC	Progress	0m	Shoe TVD	1936.08m	Daily COST	\$ 13,799,108
Rig	Ocean Patriot	Days from spud	28.40	FIT	13.70ppg	Cum Cost	\$ 13,799,108
Wtr Dpth(MSL)	72.5m	Days on well	0.29	LOT	0ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600 Continued running in hole with 5" drill pipe.					
RT-ML	94m	Planned Op Run in hole. Tag cement. Kick off. Drill ahead 8 1/2" hole.					

Summary of Period 0000 to 2400 Hrs

Continued to pull out of hole. On surface it was found that the motor bit box had parted from the lower bearing housing of the motor and was left downhole. Fish left in hole:- bit, motor bit box and motor drive shaft (~1m long). Ran in hole with cement stinger. Set cement plug. Pulled cement stinger out of the hole. Layed out same. Pickup 8 1/2" bottom hole assembly.

Operations For Period 0000 Hrs to 2400 Hrs on 26 Feb 2005

From	To	Hrs	Phse	Clis (RC)	Op	Depth	Activity Description
1700	1730	0.50	IH3	P	CIR	2900.0m	Displaced stinger string with 30bbls of mud to clear pipe of cement. Flowchecked well, well static. Pumped slug. (ended ZaneGrey-1ST1, commenced ZaneGrey-1ST2 at 17:00 hrs)
1730	2130	4.00	IH3	P	TO	2900.0m	POOH with cement stinger.
2130	2230	1.00	IH3	P	LDP	2900.0m	Rigged up 2.7/8" handling gear & laid out 2.7/8" cement stinger.
2230	2300	0.50	IH3	P	HBHA	2900.0m	Broke down cement side entry stand. LO side entry sub.
2300	2400	1.00	IH3	P	HT	2900.0m	Made up bit to new motor. Set & confirmed 1.22° bend on motor.

Operations For Period 0000 Hrs to 0600 Hrs on 27 Feb 2005

From	To	Hrs	Phse	Clis (RC)	Op	Depth	Activity Description
0000	0230	2.50	IH3	P	HBHA	2900.0m	Continued to pick up 8 1/2" bottom hole assembly.
0230	0600	3.50	IH3	P	HBHA	2900.0m	Continued to run in hole with 5" drill pipe.

WBM Data

Cost Today \$ 6,580

Mud Type:	KCI-PHPA-Glycol	API FL:	4.7cc	Cl:	30500.0mg/l	Solids:	8.2	Viscosity	61sec/qt
Sample-From:	Flowline	Filter-Cake:	1/32nd"	Hard/Ca:	460.0mg/l	H2O:	92%	PV	17cp
Time:	15:20	HTHP-FL:	0cc	MBT:	10	Oil:	0%	YP	33lb/100ft²
Weight:	9.60ppg	HTHP-cake:	0/32nd"	PM:	0	Sand:	0.25	Gels 10s	6
Temp:	32.0C°			PF:	0.1	Glycol:	4.0%vol	Gels 10m	13
				pH:	9	KCI:	5.5%	Fann 003	8
						PHPA:	1ppb	Fann 006	11
								Fann 100	31
								Fann 200	41
								Fann 300	50
								Fann 600	67
Comment									

Shakers, Volumes and Losses Data

Engineer : Peter Dwyer

Equip.	Descr.	Mesh Size	Available	2352bbl	Losses	103bbl	Comments
Centrifuge 6	DFE		Active	497bbl	Downhole	8bbl	
De-Silter 5	DODI	12 x 4"	Mixing	0bbl	Surf+ Equip	0bbl	
Shaker 1	VSM-100	4 x 120	Hole	754bbl	Dumped	80bbl	
Shaker 2	VSM-100	4 x 145	Slug	0bbl	De-Gasser	0bbl	
Shaker 3	VSM-100	2 x 120, 2 x 105	Reserve	181bbl	De-Sander	0bbl	
Shaker 4	VSM-100	4 x 145	Kill	0bbl	De-Silter	11bbl	
			Premix	920bbl	Centrifuge	4bbl	

Bit # 8				Wear	I	O1	D	L	B	G	O2	R
Size ("):	8.50in	IADC#		Nozzles		Drilled over last 24 hrs				Calculated over Bit Run		
Mfr:	Reed	WOB(avg)	0klb	No.	Size	Progress		0m	Cum. Progress		0m	
Type:	TCI	RPM(avg)	0	1	32/32nd"	On Bottom Hrs		0h	Cum. On Btm Hrs		0h	
Serial No.:	D80771	F.Rate	0gpm	2	14/32nd"	IADC Drill Hrs		0h	Cum IADC Drill Hrs		0h	
Bit Model	TD43AKPRDH	SPP	0psi			Total Revs		0	Cum Total Revs		0	
Depth In	2900.0m	HSI				ROP(avg)		N/A	ROP(avg)		0.00 m/hr	
Depth Out	0m	TFA	1.086									

BHA # 10							
Weight(Wet)	40.0klb	Length	221.6m	Torque(max)	0kft-lbs	D.C. (1) Ann Velocity	0mpm
Wt Below Jar(Wet)	20.0klb	String	275.0klb	Torque(Off.Btm)	0kft-lbs	D.C. (2) Ann Velocity	0mpm
		Pick-Up	325.0klb	Torque(On.Btm)	0kft-lbs	H.W.D.P. Ann Velocity	0mpm
		Slack-Off	235.0klb			D.P. Ann Velocity	0mpm

BHA Run Description 8 1/2" PDC, motor, AGS, float sub with ported float installed, PM sub, FEWD, pulser/TM, integral blade stabiliser, 5 x 6 1/2" DC's, 1 x 6 1/2" jars, 15 x 5" HWDP.

BHA Run Comment

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.26m	8.50in	2.50in	D80771	Reed Hycalog TD43AKPRDH PM Sub FEWD Pulser/TM
Mud Motor	7.67m	6.81in	4.50in	700-018	
Adjustable Gauge Stabilizer	3.23m	6.63in	2.81in	450-066	
Float Sub	0.64m	6.81in	3.00in	DA6015	
MWD Tool	2.81m	6.50in	0in	90052756M6	
MWD Tool	7.05m	6.69in	0in	90057455H1GR6	
MWD Tool	3.06m	6.50in	3.25in	192198	
String Stabiliser	1.56m	6.50in	3.00in	47697	
Drill Collar	28.06m	6.50in	2.75in		
Drilling Jars	9.87m	6.50in	2.75in	40909	
Drill Collar	18.59m	6.50in	2.75in		
HWDP	138.80m	6.50in	3.00in		

Bulk Stocks						
Name	Unit	In	Used	Adjust	Balance	
Barite	MT	0	0	0	0.0	
Gel	MT	0	0	0	0.0	
Cement	MT	0	0	0	0.0	
Drill Water	m³	0	0	0	0.0	
Fuel Oil	m³	0	0	0	0.0	
Potable Water	m³	0	0	0	0.0	

Pumps																	
Pump Data - Last 24 Hrs								Slow Pump Data									
No.	Type	Liner (in)	MW (ppg)	Eff (%)	SPM	SPP (psi)	Flow (gpm)	Depth (m)	SPM1	SPP1 (psi)	Flow1 (gpm)	SPM2	SPP2 (psi)	Flow2 (gpm)	SPM3	SPP3 (psi)	Flow3 (gpm)
1	A1700	6.00	9.50	97	68	3000	280	2255.0	40	440	168	0	0	0	0	0	0
2	12-P160	6.00	9.50	97	0	0	0	2255.0	40	440	168	0	0	0	0	0	0
3	12-P160	6.00	9.50	97	68	3000	280	0	0	0	0	0	0	0	0	0	0

Personnel On Board			
Job Title	Personnel	Company	Pax
OIM	Barry Scott	DOGC	46
Camp boss	Kevin Tolland	Total Marine Catering	9
ROV Pilot	Bob George	Fugro	2

Personnel On Board

Cementer	Dave Green	Dowell Schlumberger	2
Mud Engineer	Peter Dwyer	MI Swaco	2
Data Engineer	Dorian Kuhn	Sperry Sun	6
Senior Drilling Supervisor	Greg Harms	BSOC	5
MWD Engineer	Daniel Luoni	Halliburton	2
Directional Driller	Tim Walton	Halliburton	2
Centrifuge Hand	Brendon McPhail	DFE	1
Technician	Mark Anderson	Petrotech	1
Wireline Engineer	Sergio Arellano	Baker Atlas	3
Liner Hanger	Andi Russell	Weatherford	1
Total			82

HSE Summary

Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	20 Feb 2005	6 Days	Abandon Rig Drill	Based on simulated fire at paint locker.
BOP Test	02 Feb 2005	24 Days	BOP Test	
Fire Drill	20 Feb 2005	6 Days	Fire Drill	
Lost Time Injury	20 May 2003	648 Days	LTI	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30
Pre-Tour Meetings	26 Feb 2005	0 Days	Routine Pre-Tour Meetings	
Rig Inspection	04 Feb 2005	22 Days	NOPSA Audit	
Safety Meeting	20 Feb 2005	6 Days	Safety meetings held	3 Safety meetings held at 1300, 1900 and 0100, attended by all crews.
Stop Card-Prevention	26 Feb 2005	0 Days	11 STOP cards submitted	9 cards by DODI 2 cards by Third Party

Marine

Weather on 26 Feb 2005

Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period
10.00mi	23.0kn	225deg	1022mbar	20.0C°	0.5m	225deg	0ft/min
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments	
0.3deg	0.3deg	0.20m	1.5m	225deg	0ft/min		
Rig Dir.	Ris. Tension	VDL		Comments			
45.0deg	228.0klb	4227.3klb					

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Pacific Wrangler			Standby at rig	Item	Unit	Quantity
				Barite	MT	59
				Gel	MT	42
				Cement	MT	123
				Drill Water	M^3	0
				Fuel Oil	M^3	630.5
				Potable Water	M^3	249
Far Grip			Standby in Melbourne	Item	Unit	Quantity
				Barite	MT	0
				Gel	MT	0
				Cement	MT	0
				Drill Water	M^3	0
				Fuel Oil	M^3	0
				Potable Water	M^3	0

27 Feb 2005 (GMT +10)

From: Greg Harms, Steve Hodgetts
To: Colin Allport

DRILLING MORNING REPORT # 2
ZaneGrey-1ST2 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	3107.0m	Cur. Hole Size	8.500in	AFE Cost	\$ 0
Field		TVD	2706.3m	Casing OD	9.625in	AFE No.	
Drill Co.	DOGC	Progress	0m	Shoe TVD	1936.08m	Daily COST	\$ 314,989
Rig	Ocean Patriot	Days from spud	29.40	FIT	13.70ppg	Cum Cost	\$ 14,114,097
Wtr Dpth(MSL)	72.5m	Days on well	1.29	LOT	0ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600 Running in hole with the cement stinger on 5" drill pipe.					
RT-ML	94m	Planned Op Continue to run in hole with cement stinger on 5 " drill pipe. Set 180 m cement plug. Pull out of the hole with cement stinger.					

Summary of Period 0000 to 2400 Hrs

Made up 8 1/2" directional bottom hole assembly. Run in hole with same on 5" drill pipe. Washed down from 2996 m. Unable to tag hard cement. Attempt to side track by time drilling at 3075 m to 3082 m. Unsuccessful. Slid from 3082 m to 3107 m. Unable to kick off. Pull out of hole.

Operations For Period 0000 Hrs to 2400 Hrs on 27 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0230	2.50	IH3	TP (DHM)	HBHA	2996.0m	Continued to pick up 8 1/2" directional bottom hole assembly. Shallow pulse tested LWD, motor and adjustable gauge stabiliser. Tested OK.
0230	0730	5.00	IH3	TP (DHM)	TI	2996.0m	Continued to run in hole with 5" drill pipe.
0730	0930	2.00	IH3	TP (DHM)	RW	3075.0m	Washed and reamed down from 2996 m to 3075 m.
0930	1200	2.50	IH3	TP (DHM)	DM	3082.0m	Time drilled from 3075 m to 3082 m with 140R to 170R toolface. Unable to hold over 2 MT on the bit.
1200	1730	5.50	IH3	TP (DHM)	DM	3107.0m	Slid with 70R to 90R toolfaces from 3082 m to 3107 m. Surveys and surface samples indicated still in the old hole. Increase in pump pressure and noise on MWD tool indicated tagging fish.
1730	2230	5.00	IH3	TP (DHM)	TO	3107.0m	Flow check. Well Static. Pulled out of the hole with 5" drill pipe.
2230	2300	0.50	IH3	TP (DHM)	HBHA	3107.0m	Pulled bottom hole assembly out of the hole.
2300	2330	0.50	IH3	TP (DHM)	RR	3107.0m	Repaired racking arm bumper pad.
2330	2400	0.50	IH3	TP (DHM)	HBHA	3107.0m	Continued to pull bottom hole assembly out of the hole.

Operations For Period 0000 Hrs to 0600 Hrs on 28 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0100	1.00	IH3	TP (DHM)	HBHA	3107.0m	Continued to pull bottom hole assembly out of the hole. Racked back same. Broke off bit. Damaged to cones on bit indicated tagging fish.
0100	0130	0.50	IH3	TP (DHM)	RU	3107.0m	Rigged up to run 2 7/8" tubing.
0130	0230	1.00	IH3	TP (DHM)	TI	3107.0m	Picked up 18 joints 2 7/8" cement stinger. (17 joints of 2 7/8" drill pipe, 1 joint mule shoe)
0230	0600	3.50	IH3	TP (DHM)	TI	3107.0m	Continued to run in hole with 5" drill pipe.

WBM Data

Cost Today \$ 1,581

Mud Type:	KCI-PHPA-Glycol	API FL:	4.5cc	Cl:	31000.0mg/l	Solids:	8.2	Viscosity	58sec/qt
Sample-From:	Flowline	Filter-Cake:	1/32nd"	Hard/Ca:	600.0mg/l	H2O:	92%	PV	16cp
Time:	15:00	HTHP-FL:	0cc	MBT:	10	Oil:	0%	YP	32lb/100ft²
Weight:	9.60ppg	HTHP-cake:	0/32nd"	PM:	0	Sand:	0.25	Gels 10s	5
Temp:	38.0C°			PF:	0.3	Glycol:	4.0%vol	Gels 10m	12
				pH:	9	KCl:	5.5%	Fann 003	7
						PHPA:	1ppb	Fann 006	11
								Fann 100	31
								Fann 200	40
								Fann 300	48
								Fann 600	64
Comment									

Shakers, Volumes and Losses Data

Engineer : Peter Dwyer

Equip.	Descr.	Mesh Size	Available	1983bbl	Losses	374bbl	Comments
Centrifuge 6	DFE		Active	445bbl	Downhole	15bbl	
De-Silter 5	DODI	12 x 4"	Mixing	0bbl	Surf+ Equip	37bbl	
Shaker 1	VSM-100	4 x 120	Hole	795bbl	Dumped	260bbl	
Shaker 2	VSM-100	4 x 84	Slug	0bbl	De-Gasser	0bbl	
Shaker 3	VSM-100	2 x 120, 2 x 105	Reserve	127bbl	De-Sander	0bbl	
Shaker 4	VSM-100	4 x 84	Kill	0bbl	De-Silter	38bbl	
			Premix	616bbl	Centrifuge	24bbl	

Bit # 8				Wear	I	O1	D	L	B	G	O2	R
					1	1	JD	M2	E	I	WT	BHA
Size ("):	8.50in	IADC#	Nozzles			Drilled over last 24 hrs			Calculated over Bit Run			
Mfr:	Reed	WOB(avg)	8.0klb	No.	Size	Progress	0m	Cum. Progress			0m	
Type:	TCI	RPM(avg)	0	1	32/32nd"	On Bottom Hrs	0h	Cum. On Btm Hrs			0h	
Serial No.:	D80771	F.Rate	460gpm	2	14/32nd"	IADC Drill Hrs	0h	Cum IADC Drill Hrs			0h	
Bit Model	TD43AKPRDH	SPP	1900psi				Total Revs	0	Cum Total Revs			0
Depth In	2900.0m	HSI					ROP(avg)	N/A	ROP(avg)			0.00 m/hr
Depth Out	3107.0m	TFA	1.086									

BHA # 10

Weight(Wet)	40.0klb	Length	221.6m	Torque(max)	0kft-lbs	D.C. (1) Ann Velocity	114.5mpm
Wt Below Jar(Wet)	20.0klb	String	275.0klb	Torque(Off.Btm)	0kft-lbs	D.C. (2) Ann Velocity	0mpm
		Pick-Up	325.0klb	Torque(On.Btm)	0kft-lbs	H.W.D.P. Ann Velocity	72.7mpm
		Slack-Off	235.0klb			D.P. Ann Velocity	72.7mpm

BHA Run Description 8 1/2" PDC, motor, AGS, float sub with ported float installed, PM sub, FEWD, pulser/TM, integral blade stabiliser, 5 x 6 1/2" DC's, 1 x 6 1/2" jars, 15 x 5" HWDP.

BHA Run Comment Unable to kick off old well bore. POOH to set another cement plug.

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.26m	8.50in	2.50in	D80771	Reed Hycalog TD43AKPRDH
Mud Motor	7.67m	6.81in	4.50in	700-018	
Adjustable Gauge Stabilizer	3.23m	6.63in	2.81in	450-066	
Float Sub	0.64m	6.81in	3.00in	DA6015	
MWD Tool	2.81m	6.50in	0in	90052756M6	PM Sub
MWD Tool	7.05m	6.69in	0in	90057455H1GR6	FEWD
MWD Tool	3.06m	6.50in	3.25in	192198	Pulser/TM
String Stabiliser	1.56m	6.50in	3.00in	47697	
Drill Collar	28.06m	6.50in	2.75in		
Drilling Jars	9.87m	6.50in	2.75in	40909	
Drill Collar	18.59m	6.50in	2.75in		
HWDP	138.80m	6.50in	3.00in		

Bulk Stocks

Name	Unit	In	Used	Adjust	Balance
Barite	MT	0	4.1	0	58.1
Gel	MT	0	0	0	12.4
Cement	MT	0	0	0	59.0
Drill Water	m ³	0	81.9	0	583.2
Fuel Oil	m ³	0	10.8	0	424.8
Potable Water	m ³	9.7	6.1	0	326.0

Pumps																		
Pump Data - Last 24 Hrs								Slow Pump Data										
No.	Type	Liner (in)	MW (ppg)	Eff (%)	SPM	SPP (psi)	Flow (gpm)	Depth (m)	SPM1	SPP1 (psi)	Flow1 (gpm)	SPM2	SPP2 (psi)	Flow2 (gpm)	SPM3	SPP3 (psi)	Flow3 (gpm)	
1	A1700	6.00	9.50	97	68	3000	280	2255.0	40	440	168	0	0	0	0	0	0	
2	12-P160	6.00	9.50	97	0	0	0	2255.0	40	440	168	0	0	0	0	0	0	
3	12-P160	6.00	9.50	97	68	3000	280	0	0	0	0	0	0	0	0	0	0	
Personnel On Board																		
Job Title				Personnel						Company						Pax		
OIM					Barry Scott						DOGC						46	
Camp boss					Kevin Tolland						Total Marine Catering						9	
ROV Pilot					Bob George						Fugro						2	
Cementer					Dave Green						Dowell Schlumberger						2	
Mud Engineer					Peter Dwyer						MI Swaco						2	
Data Engineer					Dorian Kuhn						Sperry Sun						6	
Senior Drilling Supervisor					Greg Harms						BSOC						5	
MWD Engineer					Daniel Luoni						Halliburton						2	
Directional Driller					Tim Walton						Halliburton						2	
Centrifuge Hand					Brendon McPhail						DFE						1	
Technician					Mark Anderson						Petrotech						1	
Wireline Engineer					Sergio Arellano						Baker Atlas						3	
Liner Hanger					Andi Russell						Weatherford						1	
															Total	82		
HSE Summary																		
Events		Date of last		Days Since		Descr.				Remarks								
Abandon Drill		27 Feb 2005		0 Days		Abandon Rig Drill				Based on simulated fire in laundry.								
BOP Test		02 Feb 2005		25 Days		BOP Test												
Fire Drill		27 Feb 2005		0 Days		Fire Drill												
Lost Time Injury		20 May 2003		649 Days		LTI												
Pre-Tour Meetings		27 Feb 2005		0 Days		Routine Pre-Tour Meetings				Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30								
Rig Inspection		04 Feb 2005		23 Days		NOPSA Audit				3 Safety meetings held at 1300, 1900 and 0100, attended by all crews.								
Safety Meeting		27 Feb 2005		0 Days		Safety meetings held												
Stop Card-Prevention		27 Feb 2005		0 Days		5 STOP cards submitted				5 cards by DODI								
Marine																		
Weather on 27 Feb 2005																		
Visibility		Wind Speed		Wind Dir.		Pressure		Air Temp.		Wave Height		Wave Dir.		Wave Period				
10.00mi		25.0kn		090deg		1020mbar		23.0C°		0.5m		090deg		0ft/min				
Roll		Pitch		Heave		Swell Height		Swell Dir.		Swell Period								
0.3deg		0.3deg		0.20m		1.5m		090deg		0ft/min								
Rig Dir.		Ris. Tension		VDL		Comments												
45.0deg		228.0klb		4072.0klb														
Boats		Arrived (date/time)				Departed (date/time)				Status				Bulks				
Pacific Wrangler										Standby at rig				Item		Unit		Quantity
														Barite		MT		59
														Gel		MT		42
														Cement		MT		123
														Drill Water		M^3		0
														Fuel Oil		M^3		629.9
														Potable Water		M^3		249
Far Grip										Standby in Melbourne				Item		Unit		Quantity
														Barite		MT		0
														Gel		MT		0
														Cement		MT		0

				Item Unit Quantity		
				Drill Water	M^3	0
				Fuel Oil	M^3	0
				Potable Water	M^3	0

28 Feb 2005 (GMT +10)

From: Greg Harms, Steve Hodgetts
To: Colin Allport

DRILLING MORNING REPORT # 3
ZaneGrey-1ST2 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	2946.0m	Cur. Hole Size	8.500in	AFE Cost	\$ 0
Field		TVD	2568.4m	Casing OD	9.625in	AFE No.	
Drill Co.	DOGC	Progress	0m	Shoe TVD	1936.08m	Daily COST	\$ 341,476
Rig	Ocean Patriot	Days from spud	30.40	FIT	13.70ppg	Cum Cost	\$ 14,455,573
Wtr Dpth(MSL)	72.5m	Days on well	2.29	LOT	0ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600					
RT-ML	94m	Planned Op Kick off original well bore. Drill ahead.					

Summary of Period 0000 to 2400 Hrs

Continued to pull bottom hole assembly out of the hole. Ran in hole with cement stinger. Pumped 160 m cement plug. Pulled out of the hole with cement stinger. Ran in hole with directional assembly.

Operations For Period 0000 Hrs to 2400 Hrs on 28 Feb 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0100	1.00	IH3	TP (DHM)	HBHA	3107.0m	Continued to pull bottom hole assembly out of the hole. Racked back same. Broke off bit. Damaged to cones on bit indicated tagging fish.
0100	0130	0.50	IH3	TP (DHM)	RU	3107.0m	Rigged up to run 2 7/8" tubing.
0130	0230	1.00	IH3	TP (DHM)	TI	3107.0m	Picked up 18 joints 2 7/8" cement stinger. (17 joints of 2 7/8" drill pipe, 1 joint mule shoe)
0230	0700	4.50	IH3	TP (DHM)	TI	3107.0m	Continued to run in hole with 5" drill pipe to 3107 m.
0700	0730	0.50	IH3	TP (DHM)	CHC	3107.0m	Circulated hole clean.
0730	0800	0.50	IH3	TP (DHM)	RUC	3107.0m	Rigged up cement hose.
0800	0930	1.50	IH3	TP (DHM)	CMP	2946.0m	Pumped 5 bbls of drill water and tested cement lines. Pumped remaining 15 bbls of water ahead as spacer. Pumped 36.5 bbls (195 sxs) of 16.5 ppg cement slurry (160 m plug from 2946m to 3106m) Pumped 7.7 bbls of drill water behind slurry. Displaced cement with 161 bbls of mud. Cement in place at 9:15.
0930	1000	0.50	IH3	TP (DHM)	TO	2946.0m	Pulled out of hole with 5" drill pipe from 3107 m to 2820 m.
1000	1030	0.50	IH3	TP (DHM)	CIR	2946.0m	Circulated bottoms up.
1030	1500	4.50	IH3	TP (DHM)	TO	2946.0m	Flow check. Well Static. Pulled out of hole with 5" drill pipe from 2820 m to top of cement stinger (173.81 m).
1500	1630	1.50	IH3	TP (DHM)	TO	2946.0m	Pulled out and layed out 17 joints of 2 7/8" tubing and mule shoe. Layed out same.
1630	1730	1.00	IH3	TP (DHM)	HT	2946.0m	Make up bit and set motor bend to 1.5 deg.
1730	1800	0.50	IH3	TP (DHM)	HBHA	2946.0m	Made up and programmed LWD.
1800	1900	1.00	IH3	TP (DHM)	HBHA	2946.0m	Continued to run in hole with bottom hole assembly to 221 m. Tested LWD and adjustable gauge stabiliser. Tested OK.
1900	2130	2.50	IH3	TP (DHM)	TI	2946.0m	Continued to run in hole with 5" drill pipe to casing shoe at 2183 m.
2130	2330	2.00	IH3	TP (DHM)	SC	2946.0m	Held trip drill. 26 secs. Slip and cut drill line, (110 ft).
2330	2400	0.50	IH3	TP (DHM)	RS	2946.0m	Service top drive system.

Operations For Period 0000 Hrs to 0600 Hrs on 01 Mar 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0130	1.50	IH3	TP (DHM)	TI	2946.0m	Continued to run in hole with 5" drill pipe from 2183 m to 2885 m.
0130	0230	1.00	IH3	TP (DHM)	RW	2957.0m	Washed and reamed down from 2885 m to 2957 m with minimal pumps. Tagged top of cement at 2945 m. Cement not hard enough to kick off.

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0230	0600	3.50	IH3	TP (DHM)	ST	2957.0m	Orientated tool face to 160 deg. Repeatedly reamed to create an initial ledge. Time drill at 2957 m attempting to open hole sidetrack.

WBM Data
Cost Today \$ 7,919

Mud Type:	KCI-PHPA-Glycol	API FL:	4.6cc	Cl:	31000.0mg/l	Solids:	8.2	Viscosity	62sec/qt
Sample-From:	Flowline	Filter-Cake:	1/32nd"	Hard/Ca:	580.0mg/l	H2O:	92%	PV	18cp
Time:	23:00	HTHP-FL:	0cc	MBT:	10	Oil:	0%	YP	34lb/100ft²
Weight:	9.60ppg	HTHP-cake:	0/32nd"	PM:	0	Sand:	0.25	Gels 10s	7
Temp:	38.0C°			PF:	0.35	Glycol:	4.0%vol	Gels 10m	14
				pH:	10	KCl:	5.5%	Fann 003	8
						PHPA:	1ppb	Fann 006	11
								Fann 100	35
								Fann 200	47
								Fann 300	52
								Fann 600	70
Comment									

Shakers, Volumes and Losses Data

Engineer : Peter Dwyer

Equip.	Descr.	Mesh Size	Available	2422bbl	Losses	32bbl	Comments
Centrifuge 6	DFE		Active	400bbl	Downhole	0bbl	
De-Silter 5	DODI	12 x 4"	Mixing	0bbl	Surf+ Equip	3bbl	
Shaker 1	VSM-100	4 x 120	Hole	763bbl	Dumped	17bbl	
Shaker 2	VSM-100	4 x 84	Slug	0bbl	De-Gasser	0bbl	
Shaker 3	VSM-100	2 x 120, 2 x 105	Reserve	328bbl	De-Sander	0bbl	
Shaker 4	VSM-100	4 x 84	Kill	0bbl	De-Silter	7bbl	
			Premix	931bbl	Centrifuge	5bbl	

Bit # 9

			Wear	I	O1	D	L	B	G	O2	R
Size ("):	8.50in	IADC#	Nozzles		Drilled over last 24 hrs		Calculated over Bit Run				
Mfr:	Reed	WOB(avg) 0klb	No.	Size	Progress 0m		Cum. Progress 0m				
Type:	PDC	RPM(avg) 0	6	14/32nd"	On Bottom Hrs 0h		Cum. On Btm Hrs 0h				
Serial No.:	207732	F.Rate 0gpm			IADC Drill Hrs 0h		Cum IADC Drill Hrs 0h				
Bit Model	RSX168DGW	SPP 0psi			Total Revs 0		Cum Total Revs 0				
Depth In	2950.0m	HSI			ROP(avg) N/A		ROP(avg) 0.00 m/hr				
Depth Out	0m	TFA 0.902									

Bit # 8

			Wear	I	O1	D	L	B	G	O2	R
Size ("):	8.50in	IADC#	Nozzles		Drilled over last 24 hrs		Calculated over Bit Run				
Mfr:	Reed	WOB(avg) 8.0klb	No.	Size	Progress 0m		Cum. Progress 0m				
Type:	TCI	RPM(avg) 0	1	32/32nd"	On Bottom Hrs 0h		Cum. On Btm Hrs 0h				
Serial No.:	D80771	F.Rate 460gpm	2	14/32nd"	IADC Drill Hrs 0h		Cum IADC Drill Hrs 0h				
Bit Model	TD43AKPRDH	SPP 1900psi			Total Revs 0		Cum Total Revs 0				
Depth In	2900.0m	HSI			ROP(avg) N/A		ROP(avg) 0.00 m/hr				
Depth Out	3107.0m	TFA 1.086									

BHA # 13

Weight(Wet)	0klb	Length	221.6m	Torque(max)	0kft-lbs	D.C. (1) Ann Velocity	0mpm
Wt Below Jar(Wet)	0klb	String	0klb	Torque(Off.Btm)	0kft-lbs	D.C. (2) Ann Velocity	0mpm
		Pick-Up	0klb	Torque(On.Btm)	0kft-lbs	H.W.D.P. Ann Velocity	0mpm
		Slack-Off	0klb			D.P. Ann Velocity	0mpm
BHA Run Description		8 1/2" PDC, motor, AGS, float sub with ported float installed, PM sub, FEWD, pulser/TM, integral blade stabiliser, 5 x 6 1/2" DC's, 1 x 6 1/2" jars, 15 x 5" HWDP.					

BHA Run Comment						Unable to kick off old well bore. POOH to set another cement plug.					
Equipment		Length	OD	ID	Serial #	Comment					
Bit		0.22m	8.50in	2.50in	207732	Reed Hycalog RSX168DGW					
Mud Motor		7.67m	6.81in	4.50in	700-018						
Adjustable Gauge Stabilizer		3.23m	6.63in	2.81in	450-066						
Float Sub		0.64m	6.81in	3.00in	DA6015						
MWD Tool		2.81m	6.50in	0in	90052756M6	PM Sub					
MWD Tool		7.05m	6.69in	0in	90057455H1GR6	FEWD					
MWD Tool		3.06m	6.50in	3.25in	192198	Pulser/TM					
String Stabiliser		1.56m	6.50in	3.00in	47697						
Drill Collar		28.06m	6.50in	2.75in	40909						
Drilling Jars		9.87m	6.50in	2.75in							
Drill Collar		18.59m	6.50in	2.75in							
HWDP		138.80m	6.50in	3.00in							

BHA # 10							
Weight(Wet)	40.0klb	Length	221.6m	Torque(max)	0kft-lbs	D.C. (1) Ann Velocity	114.5mpm
Wt Below Jar(Wet)	20.0klb	String	275.0klb	Torque(Off.Btm)	0kft-lbs	D.C. (2) Ann Velocity	0mpm
		Pick-Up	325.0klb	Torque(On.Btm)	0kft-lbs	H.W.D.P. Ann Velocity	72.7mpm
		Slack-Off	235.0klb			D.P. Ann Velocity	72.7mpm

BHA Run Description 8 1/2" PDC, motor, AGS, float sub with ported float installed, PM sub, FEWD, pulser/TM, integral blade stabiliser, 5 x 6 1/2" DC's, 1 x 6 1/2" jars, 15 x 5" HWDP.

BHA Run Comment						Unable to kick off old well bore. POOH to set another cement plug.					
Equipment		Length	OD	ID	Serial #	Comment					
Bit		0.26m	8.50in	2.50in	D80771	Reed Hycalog TD43AKPRDH					
Mud Motor		7.67m	6.81in	4.50in	700-018						
Adjustable Gauge Stabilizer		3.23m	6.63in	2.81in	450-066						
Float Sub		0.64m	6.81in	3.00in	DA6015						
MWD Tool		2.81m	6.50in	0in	90052756M6	PM Sub					
MWD Tool		7.05m	6.69in	0in	90057455H1GR6	FEWD					
MWD Tool		3.06m	6.50in	3.25in	192198	Pulser/TM					
String Stabiliser		1.56m	6.50in	3.00in	47697						
Drill Collar		28.06m	6.50in	2.75in	40909						
Drilling Jars		9.87m	6.50in	2.75in							
Drill Collar		18.59m	6.50in	2.75in							
HWDP		138.80m	6.50in	3.00in							

Bulk Stocks						
Name	Unit	In	Used	Adjust	Balance	
Barite	MT	0	4.34	0	53.7	
Gel	MT	0	0	0	12.4	
Cement	MT	0	10.79	0	48.2	
Drill Water	m ³	0	48.1	0	535.1	
Fuel Oil	m ³	0	10.8	0	414.0	
Potable Water	m ³	31.9	28.3	0	329.6	

Pumps																	
Pump Data - Last 24 Hrs									Slow Pump Data								
No.	Type	Liner (in)	MW (ppg)	Eff (%)	SPM	SPP (psi)	Flow (gpm)	Depth (m)	SPM1	SPP1 (psi)	Flow1 (gpm)	SPM2	SPP2 (psi)	Flow2 (gpm)	SPM3	SPP3 (psi)	Flow3 (gpm)
1	A1700	6.00	9.60	97	68	3000	280	2950.0	40	515	168	0	0	0	0	0	0
2	12-P160	6.00	9.50	97	0	0	0	0	0	0	0	0	0	0	0	0	0
3	12-P160	6.00	9.60	97	68	3000	280	2950.0	40	515	168	0	0	0	0	0	0

Personnel On Board			
Job Title	Personnel	Company	Pax

Personnel On Board

OIM	Barry Scott	DOGC	46
Camp boss	Kevin Tolland	ESS	9
ROV Pilot	Bob George	Fugro	2
Cementer	Dave Green	Dowell Schlumberger	2
Mud Engineer	Peter Dwyer	MI Swaco	2
Data Engineer	Dorian Kuhn	Sperry Sun	6
Senior Drilling Supervisor	Greg Harms	BSOC	5
MWD Engineer	Daniel Luoni	Halliburton	2
Directional Driller	Tim Walton	Halliburton	2
Centrifuge Hand	Brendon McPhail	DFE	1
Technician	Mark Anderson	Petrotech	1
Wireline Engineer	Sergio Arellano	Baker Atlas	3
Liner Hanger	Andi Russell	Weatherford	1
Total			82

HSE Summary

Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	27 Feb 2005	1 Day	Abandon Rig Drill	Based on simulated fire in laundry.
BOP Test	02 Feb 2005	26 Days	BOP Test	
Fire Drill	27 Feb 2005	1 Day	Fire Drill	
Lost Time Injury	20 May 2003	650 Days	LTI	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30
Pre-Tour Meetings	28 Feb 2005	0 Days	Routine Pre-Tour Meetings	
Rig Inspection	04 Feb 2005	24 Days	NOPSA Audit	
Safety Meeting	27 Feb 2005	1 Day	Safety meetings held	3 Safety meetings held at 1300, 1900 and 0100, attended by all crews.
Stop Card-Prevention	28 Feb 2005	0 Days	8 STOP cards submitted	6 cards by DODI 2 cards by Third Party

Marine

Weather on 28 Feb 2005

Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period
10.00mi	29.0kn	000deg	1016mbar	22.0C°	0.5m	090deg	0ft/min
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments	
0.3deg	0.3deg	0.20m	1.5m	090deg	0ft/min		
Rig Dir.	Ris. Tension	VDL		Comments			
45.0deg	228.0klb	3958.6klb					

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Pacific Wrangler			Standby at rig	Item	Unit	Quantity
				Barite	MT	59
				Gel	MT	42
				Cement	MT	123
				Drill Water	M^3	0
				Fuel Oil	M^3	626.3
				Potable Water	M^3	243
Far Grip			Standby in Melbourne	Item	Unit	Quantity
				Barite	MT	0
				Gel	MT	0
				Cement	MT	0
				Drill Water	M^3	0
				Fuel Oil	M^3	0
				Potable Water	M^3	0

01 Mar 2005 (GMT +10)

From: Peter Dane, Greg Harms
 To: Colin Allport

DRILLING MORNING REPORT # 4
ZaneGrey-1ST2 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	2995.0m	Cur. Hole Size	8.500in	AFE Cost	\$ 0
Field		TVD	2624.0m	Casing OD	9.625in	AFE No.	
Drill Co.	DOGC	Progress	55.0m	Shoe TVD	1936.08m	Daily COST	\$ 324,474
Rig	Ocean Patriot	Days from spud	31.40	FIT	13.70ppg	Cum Cost	\$ 14,780,047
Wtr Dpth(MSL)	72.5m	Days on well	3.29	LOT	0ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600 Time drilling.					
RT-ML	94m	Planned Op Time drill. Kick off original wellbore. Drill ahead.					

Summary of Period 0000 to 2400 Hrs

Continued running in the hole. Washed and reamed from 2900 m to 2945 m. Unable to tag hard cement. Worked drill string repeatedly up and down attempting to create a ledge. Time drilled attempting to open hole sidetrack.

Operations For Period 0000 Hrs to 2400 Hrs on 01 Mar 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0130	1.50	IH3	TP (DHM)	TI	2946.0m	Continued to run in hole with 5" drill pipe from 2183 m to 2885 m.
0130	0230	1.00	IH3	TP (DHM)	RW	2957.0m	Washed and reamed down from 2885 m to 2957 m with minimal pumps. Tagged top of cement at 2945 m. Cement not hard enough to kick off.
0230	1530	13.00	IH3	TP (DHM)	ST	2979.0m	Orientated tool face to 160 deg. Repeatedly reamed to create an initial ledge. Time drill at 2957 m to 2979 m attempting to open hole sidetrack.
1530	1600	0.50	IH3	TP (DHM)	ST	2987.0m	Rotate ahead from 2979 m to 2987 m due to indications of the well kicking off (100 psi motor differential). Average rate of penetration 60 m/hr. Survey indicated bottom hole assembly still in original well bore.
1600	2400	8.00	IH3	TP (DHM)	ST	2995.0m	Continued time drilling from 2987 m to 2995 m with toolface orientated to 180 deg.

Operations For Period 0000 Hrs to 0600 Hrs on 02 Mar 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0600	6.00	IH3	TP (DHM)	ST	3013.0m	(IN PROGRESS) Time drilled ahead with 180 deg toolface from 2995 m to 3013 m. Survey taken at 2987 m indicated bottom hole assembly is still in the original hole.

WBM Data				Cost Today \$ 7,107			
Mud Type:	KCl-PHPA-Glycol	API FL:	5.5cc	Cl:	31000.0mg/l	Solids:	7.8
Sample-From:	Flowline	Filter-Cake:	1/32nd"	Hard/Ca:	1000.0mg/l	H2O:	92%
Time:	23:00	HTHP-FL:	0cc	MBT:	7.5	Oil:	0%
Weight:	9.50ppg	HTHP-cake:	0/32nd"	PM:	0	Sand:	0.25
Temp:	44.0C°			PF:	0.4	Glycol:	4.0%vol
				pH:	10	KCl:	5.5%
						PHPA:	1ppb
Comment							
						Viscosity	55sec/qt
						PV	20cp
						YP	21lb/100ft²
						Gels 10s	7
						Gels 10m	11
						Fann 003	6
						Fann 006	8
						Fann 100	23
						Fann 200	32
						Fann 300	41
						Fann 600	61

Shakers, Volumes and Losses Data				Engineer : Peter Dwyer			
Equip.	Descr.	Mesh Size	Available	2260bbl	Losses	175bbl	Comments
Centrifuge 6	DFE		Active	499bbl	Downhole	0bbl	
De-Silter 5	DODI	12 x 4"	Mixing	0bbl	Surf+ Equip	20bbl	
Shaker 1	VSM-100	4 x 84	Hole	719bbl	Dumped	90bbl	
Shaker 2	VSM-100	4 x 120	Slug	0bbl	De-Gasser	0bbl	
Shaker 3	VSM-100	2 x 120, 2 x 105	Reserve	268bbl	De-Sander	0bbl	
Shaker 4	VSM-100	2 x 145, 2 x 120	Kill	0bbl	De-Silter	50bbl	
			Premix	774bbl	Centrifuge	15bbl	

Bit # 9				Wear	I	O1	D	L	B	G	O2	R
Size ("):	8.50in	IADC#	M332	Nozzles		Drilled over last 24 hrs				Calculated over Bit Run		
Mfr:	Reed	WOB(avg)	17.0klb	No.	Size	Progress		55.0m		Cum. Progress		55.0m
Type:	PDC	RPM(avg)	30	6	14/32nd"	On Bottom Hrs		12.50h		Cum. On Btm Hrs		12.50h
Serial No.:	207732	F.Rate	450gpm			IADC Drill Hrs		12.50h		Cum IADC Drill Hrs		12.50h
Bit Model	RSX163DGW	SPP	2000psi			Total Revs		46		Cum Total Revs		46
Depth In	2950.0m	HSI				ROP(avg)		4.40 m/hr		ROP(avg)		4.40 m/hr
Depth Out		TFA	0.902									

BHA # 13							
Weight(Wet)	0klb	Length	221.6m	Torque(max)	22kft-lbs	D.C. (1) Ann Velocity	0mpm
Wt Below Jar(Wet)	0klb	String	285.0klb	Torque(Off.Btm)	3kft-lbs	D.C. (2) Ann Velocity	0mpm
		Pick-Up	345.0klb	Torque(On.Btm)	5kft-lbs	H.W.D.P. Ann Velocity	0mpm
		Slack-Off	245.0klb			D.P. Ann Velocity	0mpm

BHA Run Description 8 1/2" PDC, motor, AGS, float sub with ported float installed, PM sub, FEWD, pulser/TM, integral blade stabiliser, 5 x 6 1/2" DC's, 1 x 6 1/2" jars, 15 x 5" HWDP.

BHA Run Comment

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.22m	8.50in	2.50in	207732	Reed Hycalog RSX168DGW PM Sub FEWD Pulser/TM
Mud Motor	7.67m	6.81in	4.50in	700-018	
Adjustable Gauge Stabilizer	3.23m	6.63in	2.81in	450-066	
Float Sub	0.64m	6.81in	3.00in	DA6015	
MWD Tool	2.81m	6.50in	0in	90052756M6	
MWD Tool	7.05m	6.69in	0in	90057455H1GR6	
MWD Tool	3.06m	6.50in	3.25in	192198	
String Stabiliser	1.56m	6.50in	3.00in	47697	
Drill Collar	28.06m	6.50in	2.75in		
Drilling Jars	9.87m	6.50in	2.75in	40909	
Drill Collar	18.59m	6.50in	2.75in		
HWDP	138.80m	6.50in	3.00in		

Bulk Stocks						
Name	Unit	In	Used	Adjust	Balance	
Barite	MT	34.92	1.32	0	87.3	
Gel	MT	0	0	0	12.4	
Cement	MT	0	0	0	48.2	
Drill Water	m³	0	110.7	0	424.4	
Fuel Oil	m³	0	10.8	0	403.2	
Potable Water	m³	31.9	25.8	0	335.7	

Pumps																		
Pump Data - Last 24 Hrs								Slow Pump Data										
No.		Type	Liner (in)	MW (ppg)	Eff (%)	SPM	SPP (psi)	Flow (gpm)	Depth (m)	SPM1	SPP1 (psi)	Flow1 (gpm)	SPM2	SPP2 (psi)	Flow2 (gpm)	SPM3	SPP3 (psi)	Flow3 (gpm)
1		A1700	6.00	9.50	97	53	1800	222	2255.0	40	440	168	0	0	0	0	0	0
2		12-P160	6.00	9.50	97	53	1800	222	2255.0	40	440	168	0	0	0	0	0	0
3		12-P160	6.00	9.50	97	0	0	0	0	0	0	0	0	0	0	0	0	0

Personnel On Board			
Job Title	Personnel	Company	Pax
OIM	Barry Scott	DOGC	46
Camp boss	Kevin Tolland	ESS	8
ROV Pilot	Bob George	Fugro	2

Personnel On Board

Cementer	Dave Green	Dowell Schlumberger	2
Mud Engineer	Peter Dwyer	MI Swaco	2
Data Engineer	Dorian Kuhn	Sperry Sun	5
Senior Drilling Supervisor	Peter Dane	BSOC	5
MWD Engineer	Daniel Luoni	Halliburton	2
Directional Driller	Tim Walton	Halliburton	2
Centrifuge Hand	Brendon McPhail	DFE	1
Technician	Mark Anderson	Petrotech	1
Wireline Engineer	Sergio Arellano	Baker Atlas	3
Liner Hanger	Andi Russell	Weatherford	1
Fire Safety	Bill Westhead	Chubb	2
Forklift Trainer	Bernard Stone	Forklift	1
Total			83

HSE Summary

Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	27 Feb 2005	2 Days	Abandon Rig Drill	Based on simulated fire in laundry.
BOP Test	19 Feb 2005	10 Days	BOP Test	
Fire Drill	27 Feb 2005	2 Days	Fire Drill	
Lost Time Injury	20 May 2003	651 Days	LTI	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30
Pre-Tour Meetings	28 Feb 2005	1 Day	Routine Pre-Tour Meetings	
Rig Inspection	04 Feb 2005	25 Days	NOPSA Audit	
Safety Meeting	27 Feb 2005	2 Days	Safety meetings held	3 Safety meetings held at 1300, 1900 and 0100, attended by all crews.
Stop Card-Prevention	28 Feb 2005	1 Day	4 STOP cards submitted	3 cards by DODI 1 acrd by Third Party

Marine

Weather on 01 Mar 2005

Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period
10.00mi	12.0kn	000deg	1010mbar	23.0C°	0.2m	000deg	0ft/min
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments	
0.2deg	0.2deg	0.10m	0.5m	045deg	0ft/min		
Rig Dir.	Ris. Tension	VDL		Comments			
45.0deg	228.0klb	3441.8klb					

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks			
Pacific Wrangler			Standby at rig	Item		Unit	Quantity
				Barite		MT	0
				Gel		MT	42
				Cement		MT	123
				Drill Water		M^3	0
				Fuel Oil		M^3	622.4
				Potable Water		M^3	243
Far Grip			On route to Ocean Patriot	Item		Unit	Quantity
				Barite		MT	0
				Gel		MT	0
				Cement		MT	0
				Drill Water		M^3	0
				Fuel Oil		M^3	0
				Potable Water		M^3	0

Helicopter Movement

Flight #	Company	Arr/Dep. Time	Pax In/Out	Comment
1	Bristow	08:46 / 08:59	12 / 11	

02 Mar 2005 (GMT +10)

From: Peter Dane,Greg Harms
To: Colin Allport

DRILLING MORNING REPORT # 5
ZaneGrey-1ST2 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	3031.0m	Cur. Hole Size	8.500in	AFE Cost	\$ 0
Field		TVD	2655.8m	Casing OD	9.625in	AFE No.	
Drill Co.	DOGC	Progress	36.0m	Shoe TVD	1936.08m	Daily COST	\$ 327,351
Rig	Ocean Patriot	Days from spud	32.40	FIT	13.70ppg	Cum Cost	\$ 15,107,398
Wtr Dpth(MSL)	72.5m	Days on well	4.29	LOT	0ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600 Running in hole.					
RT-ML	94m	Planned Op Continued running in the hole. Kick off well. Drill ahead.					

Summary of Period 0000 to 2400 Hrs

Continued sliding with 180 deg toolface. Unable to kickoff. Pull out of the hole.

Operations For Period 0000 Hrs to 2400 Hrs on 02 Mar 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	1030	10.50	IH3	TP (DHM)	ST	3013.0m	Time drilled ahead with 180 deg toolface from 2995 m to 3013 m. Survey taken at 2987 m indicated bottom hole assembly is still in the original hole.
1030	1130	1.00	IH3	TP (DHM)	ST	3013.0m	Work pipe up and down with 180 deg toolface and 650 gpm attempting to create a ledge to initiate time drilling.
1130	1900	7.50	IH3	TP (DHM)	ST	3031.0m	Time drilled ahead with 180 deg toolface from 3013 m to 3031 m. Survey taken at 3018 m indicated bottom hole assembly is still in the original hole.
1900	2400	5.00	IH3	TP (DHM)	TO	3031.0m	Flow check. Well static. Pulled out of hole from 3031m to 221 m with 5" drill pipe.

Operations For Period 0000 Hrs to 0600 Hrs on 03 Mar 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0300	3.00	IH3	TP (DHM)	HBHA	3031.0m	Continued pulling bottom hole assembly out of the hole. Changed out mud motor and bit.
0300	0600	3.00	IH3	TP (DHM)	TI	3031.0m	Continued running in hole from 221 m to 1340 m with 5" drill pipe.

WBM Data

Cost Today \$ 3,419

Mud Type:	KCI-PHPA-Glycol	API FL:	7.0cc	Cl:	37500.0mg/l	Solids:	7	Viscosity	43sec/qt
Sample-From:	Flowline	Filter-Cake:	1/32nd"	Hard/Ca:	1100.0mg/l	H2O:	93%	PV	17cp
Time:	17:30	HTHP-FL:	0cc	MBT:	7.5	Oil:	0%	YP	14lb/100ft²
Weight:	9.40ppg	HTHP-cake:	0/32nd"	PM:	0	Sand:	0.25	Gels 10s	6
Temp:	38.0C°			PF:	0.5	Glycol:	4.0%vol	Gels 10m	11
				pH:	11	KCl:	6.5%	Fann 003	6
						PHPA:	1ppb	Fann 006	7
								Fann 100	21
								Fann 200	26
								Fann 300	31
								Fann 600	48
Comment									

Shakers, Volumes and Losses Data

Engineer : Peter Dwyer

Equip.	Descr.	Mesh Size	Available	2357bbl	Losses	107bbl	Comments
Centrifuge 6	DFE		Active	534bbl	Downhole	0bbl	
De-Silter 5	DODI	12 x 4"	Mixing	0bbl	Surf+ Equip	15bbl	
Shaker 1	VSM-100	4 x 84	Hole	724bbl	Dumped	27bbl	
Shaker 2	VSM-100	4 x 120	Slug	0bbl	De-Gasser	0bbl	
Shaker 3	VSM-100	4 x 120	Reserve	455bbl	De-Sander	0bbl	
Shaker 4	VSM-100	2 x 145, 2 x 120	Kill	0bbl	De-Silter	50bbl	
			Premix	644bbl	Centrifuge	15bbl	

Bit # 9				Wear	I	O1	D	L	B	G	O2	R
					0	0	NO	A	X	I	PN	BHA
Size ("):	8.50in	IADC#	M332	Nozzles		Drilled over last 24 hrs				Calculated over Bit Run		
Mfr:	Reed	WOB(avg)	8.0klb	No.	Size	Progress		36.0m		Cum. Progress		91.0m
Type:	PDC	RPM(avg)	40	6	14/32nd"	On Bottom Hrs		11.50h		Cum. On Btm Hrs		24.00h
Serial No.:	207732	F.Rate	540gpm			IADC Drill Hrs		12.50h		Cum IADC Drill Hrs		25.00h
Bit Model	RSX163DGW	SPP	2600psi			Total Revs		211100		Cum Total Revs		211146
Depth In	2950.0m	HSI				ROP(avg)		3.13 m/hr		ROP(avg)		3.79 m/hr
Depth Out	3031.0m	TFA	0.902									

BHA # 13							
Weight(Wet)	0klb	Length	221.6m	Torque(max)	22kft-lbs	D.C. (1) Ann Velocity	134.5mpm
Wt Below Jar(Wet)	0klb	String	285.0klb	Torque(Off.Btm)	3kft-lbs	D.C. (2) Ann Velocity	0mpm
		Pick-Up	345.0klb	Torque(On.Btm)	5kft-lbs	H.W.D.P. Ann Velocity	85.4mpm
		Slack-Off	245.0klb			D.P. Ann Velocity	85.4mpm

BHA Run Description 8 1/2" PDC, motor, AGS, float sub with ported float installed, PM sub, FEWD, pulser/TM, integral blade stabiliser, 5 x 6 1/2" DC's, 1 x 6 1/2" jars, 15 x 5" HWDP.

BHA Run Comment

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.22m	8.50in	2.50in	207732	Reed Hycalog RSX163DGW PM Sub FEWD Pulser/TM
Mud Motor	7.67m	6.81in	4.50in	700-018	
Adjustable Gauge Stabilizer	3.23m	6.63in	2.81in	450-066	
Float Sub	0.64m	6.81in	3.00in	DA6015	
MWD Tool	2.81m	6.50in	0in	90052756M6	
MWD Tool	7.05m	6.69in	0in	90057455H1GR6	
MWD Tool	3.06m	6.50in	3.25in	192198	
String Stabiliser	1.56m	6.50in	3.00in	47697	
Drill Collar	28.06m	6.50in	2.75in		
Drilling Jars	9.87m	6.50in	2.75in	40909	
Drill Collar	18.59m	6.50in	2.75in		
HWDP	138.80m	6.50in	3.00in		

Bulk Stocks						
Name	Unit	In	Used	Adjust	Balance	
Barite	MT	0	7.95	0	79.4	
Gel	MT	0	0	0	12.4	
Cement	MT	0	0	0	48.2	
Drill Water	m³	284	148	0	560.4	
Fuel Oil	m³	0	17.4	0	385.8	
Potable Water	m³	40	34.5	0	341.2	

Pumps																		
Pump Data - Last 24 Hrs								Slow Pump Data										
No.		Type	Liner (in)	MW (ppg)	Eff (%)	SPM	SPP (psi)	Flow (gpm)	Depth (m)	SPM1	SPP1 (psi)	Flow1 (gpm)	SPM2	SPP2 (psi)	Flow2 (gpm)	SPM3	SPP3 (psi)	Flow3 (gpm)
1	A1700		6.00	9.50	97	53	1800	222	2255.0	40	440	168	0	0	0	0	0	0
2	12-P160		6.00	9.50	97	53	1800	222	2255.0	40	440	168	0	0	0	0	0	0
3	12-P160		6.00	9.50	97	0	0	0	0	0	0	0	0	0	0	0	0	0

Personnel On Board			
Job Title	Personnel	Company	Pax
OIM	Barry Scott	DOGC	46
Camp boss	Kevin Tolland	ESS	8
ROV Pilot	Bob George	Fugro	2

Personnel On Board

Cementer	Dave Green	Dowell Schlumberger	2
Mud Engineer	Peter Dwyer	MI Swaco	2
Data Engineer	Dorian Kuhn	Sperry Sun	5
Senior Drilling Supervisor	Peter Dane	BSOC	5
MWD Engineer	Daniel Luoni	Halliburton	2
Directional Driller	Tim Walton	Halliburton	3
Centrifuge Hand	Brendon McPhail	DFE	1
Technician	Mark Anderson	Petrotech	1
Wireline Engineer	Sergio Arellano	Baker Atlas	3
Liner Hanger	Andi Russell	Weatherford	1
Fire Safety	Bill Westhead	Chubb	2
Forklift Trainer	Bernard Stone	Forklift	1
Total			84

HSE Summary

Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	27 Feb 2005	3 Days	Abandon Rig Drill	Based on simulated fire in laundry.
BOP Test	19 Feb 2005	11 Days	BOP Test	
Fire Drill	27 Feb 2005	3 Days	Fire Drill	
Lost Time Injury	20 May 2003	652 Days	LTI	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30
Pre-Tour Meetings	01 Mar 2005	1 Day	Routine Pre-Tour Meetings	
Rig Inspection	04 Feb 2005	26 Days	NOPSA Audit	
Safety Meeting	27 Feb 2005	3 Days	Safety meetings held	3 Safety meetings held at 1300, 1900 and 0100, attended by all crews.
Stop Card-Prevention	01 Mar 2005	1 Day	7 STOP cards submitted	3 cards by DODI 4 cards by Third Party

Marine

Weather on 02 Mar 2005

Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period
10.00mi	40.0kn	240deg	1028mbar	22.0C°	0.4m	240deg	0ft/min
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments	
0.4deg	0.4deg	0.20m	1.5m	202deg	0ft/min		
Rig Dir.	Ris. Tension	VDL		Comments			
45.0deg	228.0klb	4245.6klb					

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Pacific Wrangler			Standby at rig	Item	Unit	Quantity
				Barite	MT	0
				Gel	MT	42
				Cement	MT	123
				Drill Water	M^3	0
				Fuel Oil	M^3	615.3
				Potable Water	M^3	240
Far Grip	13:00	20:00	Arrived at Ocean Patriot at 13:00. Unloaded. Backloaded. Sent back to Melbourne at full steam. Departed 20:00.	Item	Unit	Quantity
				Barite	MT	0
				Gel	MT	0
				Cement	MT	0
				Drill Water	M^3	0
				Fuel Oil	M^3	0
				Potable Water	M^3	0

Helicopter Movement

Flight #	Company	Arr/Dep. Time	Pax In/Out	Comment
1	Bristow	15:27 / 15:36	1 / 0	

03 Mar 2005 (GMT +10)

From: Peter Dane, Greg Harms
To: Colin Allport

DRILLING MORNING REPORT # 6
ZaneGrey-1ST2 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	3060.0m	Cur. Hole Size	8.500in	AFE Cost	\$ 0
Field		TVD	2679.5m	Casing OD	9.625in	AFE No.	
Drill Co.	DOGC	Progress	36.0m	Shoe TVD	1936.08m	Daily COST	\$ 358,873
Rig	Ocean Patriot	Days from spud	33.40	FIT	13.70ppg	Cum Cost	\$ 15,466,271
Wtr Dpth(MSL)	72.5m	Days on well	5.29	LOT	0ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600 Time drill ahead with 180 deg toolface.					
RT-ML	94m	Planned Op Time drill ahead with 180 deg toolface. Pull out of hole for a bottom hole assembly change.					

Summary of Period 0000 to 2400 Hrs

Continued pulling the bottom hole assembly out of the hole. Changed out motor and bit. Continued running in hole. Time drilled from 3031 m to 3060 m with 180 deg toolface.

Operations For Period 0000 Hrs to 2400 Hrs on 03 Mar 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0100	1.00	IH3	TP (DHM)	HBHA	3031.0m	Continued pulling bottom hole assembly out of the hole. Layed out mud motor and bit.
0100	0200	1.00	IH3	TP (DHM)	HBHA	3031.0m	Picked up mud motor. Set bend to 1.5 deg.
0200	0230	0.50	IH3	TP (DHM)	HBHA	3031.0m	Continued running in hole with bottom hole assembly. Layed out adjustable gauge stabiliser. Picked up integral blade stabiliser.
0230	0330	1.00	IH3	TP (DHM)	TI	3031.0m	Tested MWD. Tested OK.
0330	0430	1.00	IH3	TP (DHM)	TI	3031.0m	Continued running in hole with bottom hole assembly. Test motor. Tested OK.
0430	0830	4.00	IH3	TP (DHM)	TI	3031.0m	Continued running in hole with 5" drill pipe from 220 m to 3003 m.
0830	0900	0.50	IH3	TP (DHM)	RW	3031.0m	Washed and reamed from 3003 m to 3031 m.
0900	2400	15.00	IH3	TP (DHM)	ST	3060.0m	Time drilled from 3031 m to 3060 m with 180 deg toolface.

Operations For Period 0000 Hrs to 0600 Hrs on 04 Mar 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0600	6.00	IH3	TP (DHM)	ST	3107.0m	Continued time drilling from 3060 m to 3066 m with 180 deg toolface.

WBM Data

Cost Today \$ 7,107

Mud Type:	KCI-PHPA-Glycol	API FL:	7.0cc	Cl:	34000.0mg/l	Solids:	7.3	Viscosity	38sec/qt
Sample-From:	Flowline	Filter-Cake:	1/32nd"	Hard/Ca:	1200.0mg/l	H2O:	93%	PV	9cp
Time:	23:00	HTHP-FL:	0cc	MBT:	7.5	Oil:	0%	YP	7lb/100ft²
Weight:	9.40ppg	HTHP-cake:	0/32nd"	PM:	0	Sand:	0.25	Gels 10s	4
Temp:	38.0C°			PF:	0.5	Glycol:	4.0%vol	Gels 10m	7
				pH:	12	KCI:	6%	Fann 003	4
						PHPA:	0ppb	Fann 006	5
								Fann 100	11
								Fann 200	13
								Fann 300	16
								Fann 600	25
Comment									

Shakers, Volumes and Losses Data

Engineer : Peter Dwyer

Equip.	Descr.	Mesh Size	Available	2339bbl	Losses	137bbl	Comments
Centrifuge 6	DFE		Active	731bbl	Downhole	0bbl	
De-Silter 5	DODI	12 x 4"	Mixing	0bbl	Surf+ Equip	25bbl	
Shaker 1	VSM-100	4 x 84	Hole	510bbl	Dumped	62bbl	
Shaker 2	VSM-100	4 x 120	Slug	0bbl	De-Gasser	0bbl	
Shaker 3	VSM-100	2 x 120, 2 x 105	Reserve	454bbl	De-Sander	0bbl	
Shaker 4	VSM-100	2 x 145, 2 x 120	Kill	0bbl	De-Silter	35bbl	
			Premix	644bbl	Centrifuge	15bbl	

Bit # 6RR				Wear	I	O1	D	L	B	G	O2	R	
Size ("):	8.50in	IADC#		Nozzles		Drilled over last 24 hrs			Calculated over Bit Run				
Mfr:	Security	WOB(avg)	0klb	No. Size		Progress		0m	Cum. Progress				0m
Type:	Milled Tooth	RPM(avg)	0	3	20/32nd"	On Bottom Hrs		0h	Cum. On Btm Hrs				0h
Serial No.:	10676290	F.Rate	0gpm			IADC Drill Hrs		0h	Cum IADC Drill Hrs				0h
Bit Model	EBXSC1	SPP	0psi			Total Revs		0	Cum Total Revs				0
Depth In	3031.0m	HSI				ROP(avg)		N/A	ROP(avg)				0.00 m/hr
Depth Out	0m	TFA	0.920										

Bit # 9				Wear	I	O1	D	L	B	G	O2	R
Size ("):	8.50in	IADC#	M332		0	0	NO	A	X	I	PN	BHA
Mfr:	Reed	WOB(avg)	8.0klb	No.		Drilled over last 24 hrs		Calculated over Bit Run				
Type:	PDC	RPM(avg)	40	No.	Size	Progress	36.0m	Cum. Progress		127.0m		
Serial No.:	207732	F.Rate	540gpm	6	14/32nd"	On Bottom Hrs	11.50h	Cum. On Btm Hrs		35.50h		
Bit Model	RSX163DGW	SPP	2600psi			IADC Drill Hrs	12.50h	Cum IADC Drill Hrs		37.50h		
Depth In	2950.0m	HSI				Total Revs	211100	Cum Total Revs		422246		
Depth Out	3031.0m	TFA	0.902			ROP(avg)	3.13 m/hr	ROP(avg)		3.58 m/hr		

BHA # 14							
Weight(Wet)	0klb	Length	220.1m	Torque(max)	0kft-lbs	D.C. (1) Ann Velocity	0mpm
Wt Below Jar(Wet)	0klb	String	285.0klb	Torque(Off.Btm)	0kft-lbs	D.C. (2) Ann Velocity	0mpm
		Pick-Up	345.0klb	Torque(On.Btm)	0kft-lbs	H.W.D.P. Ann Velocity	0mpm
		Slack-Off	245.0klb			D.P. Ann Velocity	0mpm
BHA Run Description		8 1/2" PDC, motor, stabiliser, float sub with ported float installed, PM sub, FEWD, pulser/TM, integral blade stabiliser, 5 x 6 1/2" DC's, 1 x 6 1/2" jars, 15 x 5" HWDP.					

BHA Run Comment

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.24m	8.50in	2.50in	10676290	Security EBXSC1S
Mud Motor	7.67m	6.75in	4.50in	675-495	1.5 deg bend
String Stabiliser	1.75m	6.63in	2.81in	450-066	
Float Sub	0.64m	6.81in	3.00in	DA6015	
MWD Tool	2.81m	6.50in	0in	90052756M6	PM Sub
MWD Tool	7.05m	6.69in	0in	90057455H1GR6	FEWD
MWD Tool	3.06m	6.50in	3.25in	192198	Pulser/TM
String Stabiliser	1.56m	6.50in	3.00in	47697	
Drill Collar	28.06m	6.50in	2.75in		
Drilling Jars	9.87m	6.50in	2.75in	40909	
Drill Collar	18.59m	6.50in	2.75in		

Equipment	Length	OD	ID	Serial #	Comment
HWDP	138.80m	6.50in	3.00in		

BHA # 13

Weight(Wet)	0klb	Length	221.6m	Torque(max)	22kft-lbs	D.C. (1) Ann Velocity	134.5mpm
Wt Below Jar(Wet)	0klb	String	285.0klb	Torque(Off.Btm)	3kft-lbs	D.C. (2) Ann Velocity	0mpm
		Pick-Up	345.0klb	Torque(On.Btm)	5kft-lbs	H.W.D.P. Ann Velocity	85.4mpm
		Slack-Off	245.0klb			D.P. Ann Velocity	85.4mpm

BHA Run Description 8 1/2" PDC, motor, AGS, float sub with ported float installed, PM sub, FEWD, pulser/TM, integral blade stabiliser, 5 x 6 1/2" DC's, 1 x 6 1/2" jars, 15 x 5" HWDP.

BHA Run Comment

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.22m	8.50in	2.50in	207732	Reed Hycalog RSX163DGW
Mud Motor	7.67m	6.81in	4.50in	700-018	
Adjustable Gauge Stabilizer	3.23m	6.63in	2.81in	450-066	
Float Sub	0.64m	6.81in	3.00in	DA6015	
MWD Tool	2.81m	6.50in	0in	90052756M6	PM Sub
MWD Tool	7.05m	6.69in	0in	90057455H1GR6	FEWD
MWD Tool	3.06m	6.50in	3.25in	192198	Pulser/TM
String Stabiliser	1.56m	6.50in	3.00in	47697	
Drill Collar	28.06m	6.50in	2.75in		
Drilling Jars	9.87m	6.50in	2.75in	40909	
Drill Collar	18.59m	6.50in	2.75in		
HWDP	138.80m	6.50in	3.00in		

Bulk Stocks

Name	Unit	In	Used	Adjust	Balance
Barite	MT	0	8.05	0	71.3
Gel	MT	0	0	0	12.4
Cement	MT	0	0	0	48.2
Drill Water	m ³	0	30.2	0	530.2
Fuel Oil	m ³	0	11.9	0	373.9
Potable Water	m ³	41	29.1	0	353.1

Pumps

Pump Data - Last 24 Hrs								Slow Pump Data									
No.	Type	Liner (in)	MW (ppg)	Eff (%)	SPM	SPP (psi)	Flow (gpm)	Depth (m)	SPM1	SPP1 (psi)	Flow1 (gpm)	SPM2	SPP2 (psi)	Flow2 (gpm)	SPM3	SPP3 (psi)	Flow3 (gpm)
1	A1700	6.00	9.50	97	53	1800	222	2255.0	40	440	168	0	0	0	0	0	0
2	12-P160	6.00	9.50	97	53	1800	222	2255.0	40	440	168	0	0	0	0	0	0
3	12-P160	6.00	9.50	97	0	0	0	0	0	0	0	0	0	0	0	0	0

Personnel On Board

Job Title	Personnel	Company	Pax
OIM	Barry Scott	DOGC	47
Camp boss	Kevin Tolland	ESS	8
ROV Pilot	Bob George	Fugro	2
Cementer	Dave Green	Dowell Schlumberger	2
Mud Engineer	Peter Dwyer	MI Swaco	1
Data Engineer	Dorian Kuhn	Sperry Sun	5
Senior Drilling Supervisor	Peter Dane	BSOC	5
MWD Engineer	Daniel Luoni	Halliburton	2
Directional Driller	Tim Walton	Halliburton	3
Centrifuge Hand	Brendon McPhail	DFE	1
Technician	Mark Anderson	Petrotech	1
Wireline Engineer	Sergio Arellano	Baker Atlas	3

Personnel On Board

Liner Hanger	Andi Russell	Weatherford	1
Fire Safety	Bill Westhead	Chubb	2
Forklift Trainer	Bernard Stone	Forklift	1
Inspector	Tim Gillahan	Nobles	1
Total			85

HSE Summary

Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	27 Feb 2005	4 Days	Abandon Rig Drill	Based on simulated fire in laundry.
BOP Test	19 Feb 2005	12 Days	BOP Test	
Fire Drill	27 Feb 2005	4 Days	Fire Drill	
Lost Time Injury	20 May 2003	653 Days	LTI	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30
Pre-Tour Meetings	01 Mar 2005	2 Days	Routine Pre-Tour Meetings	
Rig Inspection	04 Feb 2005	27 Days	NOPSA Audit	
Safety Meeting	27 Feb 2005	4 Days	Safety meetings held	3 Safety meetings held at 1300, 1900 and 0100, attended by all crews.
Stop Card-Prevention	01 Mar 2005	2 Days	4 STOP cards submitted	2 cards by DODI 2 cards by Third Party

Marine

Weather on 03 Mar 2005

Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period
10.00mi	5.0kn	225deg	1010mbar	21.0C°	0m	000deg	0ft/min
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments	
0.2deg	0.2deg	0.30m	0.5m	225deg	0ft/min		
Rig Dir.	Ris. Tension	VDL		Comments			
45.0deg	228.0klb	4144.7klb					

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Pacific Wrangler			Standby at rig	Item	Unit	Quantity
				Barite	MT	0
				Gel	MT	42
				Cement	MT	123
				Drill Water	M^3	0
				Fuel Oil	M^3	613.1
				Potable Water	M^3	237
Far Grip	13:00	20:00	Melbourne	Item	Unit	Quantity
				Barite	MT	0
				Gel	MT	0
				Cement	MT	0
				Drill Water	M^3	0
				Fuel Oil	M^3	0
				Potable Water	M^3	0

Helicopter Movement

Flight #	Company	Arr/Dep. Time	Pax In/Out	Comment
1	Bristow	08:40 / 08:59	14 / 13	

04 Mar 2005 (GMT +10)

From: Peter Dane, Greg Harms
To: Colin Allport

DRILLING MORNING REPORT # 7
ZaneGrey-1ST2 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	3070.0m	Cur. Hole Size	8.500in	AFE Cost	\$ 0
Field		TVD	2688.0m	Casing OD	9.625in	AFE No.	
Drill Co.	DOGC	Progress	29.0m	Shoe TVD	1936.08m	Daily COST	\$ 327,637
Rig	Ocean Patriot	Days from spud	34.40	FIT	13.70ppg	Cum Cost	\$ 15,793,908
Wtr Dpth(MSL)	72.5m	Days on well	6.29	LOT	0ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600	Time drilling.				
RT-ML	94m	Planned Op	Kick off original well bore. Pull out of hole to change bottom hole assembly.				

Summary of Period 0000 to 2400 Hrs

Continued time drilling with 180 deg toolface. Pulled out of the hole. Changed out bit. Ran in hole. Circulated and conditioned mud.

Operations For Period 0000 Hrs to 2400 Hrs on 04 Mar 2005

From	To	Hrs	Phse	Clis (RC)	Op	Depth	Activity Description
0000	1000	10.00	IH3	TP (DHM)	ST	3070.0m	Continued time drilling from 3060 m to 3070 m with 180 deg toolface. Unable to kick off from original well bore.
1000	1500	5.00	IH3	TP (DHM)	TOB	3070.0m	Flow check. Well static. Pulled out of the hole with 5" drill pipe from 3070 m to 220 m.
1500	1700	2.00	IH3	TP (DHM)	HBHA	3070.0m	Continued pulling the bottom hole assembly out of the hole from 220 m to surface. Changed out the jars. Read and downloaded MWD. Changed bit.
1700	1800	1.00	IH3	TP (DHM)	HBHA	3070.0m	Ran in hole with bottom hole assembly from surface to 220 m. Tested MWD and motor. Tested OK
1800	1830	0.50	IH3	TP (DHM)	RS	3070.0m	Service top drive system
1830	2300	4.50	IH3	TP (DHM)	TI	3070.0m	Continued running in the hole with 5" drill pipe from 220 m to 3070 m. Washed and reamed last stand to bottom.
2300	2400	1.00	IH3	TP (DHM)	ST	3070.0m	Time drilled with 160 deg toolface.

Operations For Period 0000 Hrs to 0600 Hrs on 05 Mar 2005

From	To	Hrs	Phse	Clis (RC)	Op	Depth	Activity Description
0000	0600	6.00	IH3	TP (DHM)	ST	3073.0m	Continued time drilling with 180 deg toolface.

WBM Data				Cost Today \$ 894					
Mud Type:	KCl-PHPA-Glycol	API FL:	7.4cc	Cl:	34000.0mg/l	Solids:	7.3	Viscosity	38sec/qt
Sample-From:	Active	Filter-Cake:	1/32nd"	Hard/Ca:	1150.0mg/l	H2O:	93%	PV	9cp
Time:	00:00	HTHP-FL:	0cc	MBT:	7.5	Oil:	0%	YP	6lb/100ft²
Weight:	9.40ppg	HTHP-cake:	0/32nd"	PM:	0	Sand:	0.25	Gels 10s	3
Temp:	32.0C°			PF:	0.5	Glycol:	4.0%vol	Gels 10m	6
				pH:	12	KCl:	6%	Fann 003	3
						PHPA:	0ppb	Fann 006	5
								Fann 100	10
								Fann 200	12
								Fann 300	15
								Fann 600	24
Comment									

Shakers, Volumes and Losses Data

Engineer : Peter Dwyer

Equip.	Descr.	Mesh Size	Available	2254bbl	Losses	94bbl	Comments
Centrifuge 6	DFE		Active	500bbl	Downhole	0bbl	
De-Silter 5	DODI	12 x 4"	Mixing	0bbl	Surf+ Equip	15bbl	
Shaker 1	VSM-100	4 x 84	Hole	736bbl	Dumped	34bbl	
Shaker 2	VSM-100	4 x 120	Slug	0bbl	De-Gasser	0bbl	
Shaker 3	VSM-100	4 x 120	Reserve	374bbl	De-Sander	0bbl	
Shaker 4	VSM-100	2 x 145, 2 x 120	Kill	0bbl	De-Silter	30bbl	
			Premix	644bbl	Centrifuge	15bbl	

Bit # 10												
				Wear	I	O1	D	L	B	G	O2	R
Size ("):	8.50in	IADC#	S132	Nozzles		Drilled over last 24 hrs			Calculated over Bit Run			
Mfr:	Reed	WOB(avg)	0klb	No.	Size	Progress		0m	Cum. Progress			0m
Type:	PDC	RPM(avg)	0			On Bottom Hrs		0h	Cum. On Btm Hrs			0h
Serial No.:	22520	F.Rate	0gpm			IADC Drill Hrs		0h	Cum IADC Drill Hrs			0h
Bit Model	DS43	SPP	0psi			Total Revs		0	Cum Total Revs			0
Depth In	3070.0m	HSI				ROP(avg)		N/A	ROP(avg)			0.00 m/hr
Depth Out	0m	TFA	0.000									

Bit # 6RR				Wear		I	O1	D	L	B	G	O2	R
Size ("):	8.50in	IADC#		Nozzles			Drilled over last 24 hrs			Calculated over Bit Run			
Mfr:	Security	WOB(avg)	8.0klb	No.		Size	Progress		29.0m	Cum. Progress			29.0m
Type:	Milled Tooth	RPM(avg)	0	3	20/32nd"		On Bottom Hrs		8.80h	Cum. On Btm Hrs			8.80h
Serial No.:	10676290	F.Rate	608gpm				IADC Drill Hrs		8.80h	Cum IADC Drill Hrs			8.80h
Bit Model	EBXSC1	SPP	2800psi				Total Revs		187500	Cum Total Revs			187500
Depth In	3031.0m	HSI					ROP(avg)		3.30 m/hr	ROP(avg)			3.30 m/hr
Depth Out	3070.0m	TFA	0.920										

BHA # 15							
Weight(Wet)	0klb	Length	220.0m	Torque(max)	0kft-lbs	D.C. (1) Ann Velocity	0mpm
Wt Below Jar(Wet)	0klb	String	285.0klb	Torque(Off.Btm)	0kft-lbs	D.C. (2) Ann Velocity	0mpm
		Pick-Up	345.0klb	Torque(On.Btm)	0kft-lbs	H.W.D.P. Ann Velocity	0mpm
		Slack-Off	245.0klb			D.P. Ann Velocity	0mpm
BHA Run Description		8 1/2" PDC, motor, stabiliser, float sub with ported float installed, PM sub, FEWD, pulser/TM, integral blade stabiliser, 5 x 6 1/2" DC's, 1 x 6 1/2" jars, 15 x 5" HWDP.					
BHA Run Comment		No stabiliser sleeve on motor					

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.13m	8.50in	2.50in	10676290	Reed DS43
Mud Motor	7.67m	6.75in	4.50in	675-495	1.5 deg bend
String Stabiliser	1.75m	6.63in	2.81in	450-066	
Float Sub	0.64m	6.81in	3.00in	DA6015	
MWD Tool	2.81m	6.50in	0in	90052756M6	PM Sub
MWD Tool	7.05m	6.69in	0in	90057455H1GR6	FEWD
MWD Tool	3.06m	6.50in	3.25in	192198	Pulser/TM
String Stabiliser	1.56m	6.50in	3.00in	47697	
Drill Collar	28.06m	6.50in	2.75in		
Drilling Jars	9.87m	6.50in	2.75in	03409D	
Drill Collar	18.59m	6.50in	2.75in		

Equipment	Length	OD	ID	Serial #	Comment
HWDP	138.80m	6.50in	3.00in		

BHA # 14

Weight(Wet)	0klb	Length	220.1m	Torque(max)	0kft-lbs	D.C. (1) Ann Velocity	151.4mpm
Wt Below Jar(Wet)	0klb	String	285.0klb	Torque(Off.Btm)	0kft-lbs	D.C. (2) Ann Velocity	0mpm
		Pick-Up	345.0klb	Torque(On.Btm)	0kft-lbs	H.W.D.P. Ann Velocity	96.1mpm
		Slack-Off	245.0klb			D.P. Ann Velocity	96.1mpm
BHA Run Description		8 1/2" PDC, motor, stabiliser, float sub with ported float installed, PM sub, FEWD, pulser/TM, integral blade stabiliser, 5 x 6 1/2" DC's, 1 x 6 1/2" jars, 15 x 5" HWDP.					
BHA Run Comment		No stabiliser sleeve on motor					

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.24m	8.50in	2.50in	10676290	Security EBXSC1S
Mud Motor	7.67m	6.75in	4.50in	675-495	1.5 deg bend
String Stabiliser	1.75m	6.63in	2.81in	450-066	
Float Sub	0.64m	6.81in	3.00in	DA6015	
MWD Tool	2.81m	6.50in	0in	90052756M6	PM Sub
MWD Tool	7.05m	6.69in	0in	90057455H1GR6	FEWD
MWD Tool	3.06m	6.50in	3.25in	192198	Pulser/TM
String Stabiliser	1.56m	6.50in	3.00in	47697	
Drill Collar	28.06m	6.50in	2.75in		
Drilling Jars	9.87m	6.50in	2.75in	40909	
Drill Collar	18.59m	6.50in	2.75in		
HWDP	138.80m	6.50in	3.00in		

Bulk Stocks

Name	Unit	In	Used	Adjust	Balance
Barite	MT	0	8.05	0	63.3
Gel	MT	0	3	0	9.4
Cement	MT	0	0	0	48.2
Drill Water	m ³	349.7	6	0	873.9
Fuel Oil	m ³	0	14.9	0	359.0
Potable Water	m ³	37	32.9	0	357.2

Pumps

Pump Data - Last 24 Hrs								Slow Pump Data									
No.	Type	Liner (in)	MW (ppg)	Eff (%)	SPM	SPP (psi)	Flow (gpm)	Depth (m)	SPM1	SPP1 (psi)	Flow1 (gpm)	SPM2	SPP2 (psi)	Flow2 (gpm)	SPM3	SPP3 (psi)	Flow3 (gpm)
1	A1700	6.00	9.40	97	70	2800	302	0	0	0	0	0	0	0	0	0	0
2	12-P160	6.00	9.40	97	70	2800	302	0	0	0	0	0	0	0	0	0	0
3	12-P160	6.00	9.40	97	0	0	0	0	0	0	0	0	0	0	0	0	0

Personnel On Board

Job Title	Personnel	Company	Pax
OIM	Barry Scott	DOGC	45
Camp boss	Kevin Tolland	ESS	8
ROV Pilot	Bob George	Fugro	2
Cementer	Dave Green	Dowell Schlumberger	2
Mud Engineer	Peter Dwyer	MI Swaco	1
Data Engineer	Dorian Kuhn	Sperry Sun	5
Senior Drilling Supervisor	Peter Dane	BSOC	5
MWD Engineer	Daniel Luoni	Halliburton	2
Directional Driller	Tim Walton	Halliburton	3
Centrifuge Hand	Brendon McPhail	DFE	1
Technician	Mark Anderson	Petrotech	1
Wireline Engineer	Sergio Arellano	Baker Atlas	3

Personnel On Board

Liner Hanger	Andi Russell	Weatherford	1
CCTV	Darren Edwards	CCTV	2
Crane Repair	Mark Watson	Liebher Cranes	2
Total			83

HSE Summary

Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	27 Feb 2005	5 Days	Abandon Rig Drill	Based on simulated fire in laundry.
BOP Test	19 Feb 2005	13 Days	BOP Test	
Fire Drill	27 Feb 2005	5 Days	Fire Drill	
Lost Time Injury	20 May 2003	654 Days	LTi	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30
Pre-Tour Meetings	04 Mar 2005	0 Days	Routine Pre-Tour Meetings	
Rig Inspection	04 Feb 2005	28 Days	NOPSA Audit	
Safety Meeting	27 Feb 2005	5 Days	Safety meetings held	3 Safety meetings held at 1300, 1900 and 0100, attended by all crews.
Stop Card-Prevention	04 Mar 2005	0 Days	6 STOP cards submitted	6 cards by DODI

Marine

Weather on 04 Mar 2005

Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period
10.00mi	17.0kn	225deg	1011mbar	24.0C°	0.5m	225deg	0ft/min
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments	
0.3deg	0.3deg	0.30m	1.0m	225deg	0ft/min		
Rig Dir.	Ris. Tension	VDL		Comments			
45.0deg	228.0klb	4246.1klb					

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Pacific Wrangler			Standby at rig	Item	Unit	Quantity
				Barite	MT	0
				Gel	MT	42
				Cement	MT	123
				Drill Water	M^3	0
				Fuel Oil	M^3	609
				Potable Water	M^3	234
Far Grip	18:00		Arrived at the Ocean Patriot. Unloaded. Backloaded.	Item	Unit	Quantity
				Barite	MT	0
				Gel	MT	0
				Cement	MT	0
				Drill Water	M^3	0
				Fuel Oil	M^3	0
				Potable Water	M^3	0

Helicopter Movement

Flight #	Company	Arr/Dep. Time	Pax In/Out	Comment
2	Bristow	12:48 / 12:57	0 / 0	Drill bits flown out
1	Bristow	08:45 / 09:02	10 / 12	

05 Mar 2005 (GMT +10)

From: Peter Dane, Greg Harms
To: Colin Allport

DRILLING MORNING REPORT # 8
ZaneGrey-1ST2 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	3092.0m	Cur. Hole Size	8.500in	AFE Cost	\$ 0
Field		TVD	2693.7m	Casing OD	9.625in	AFE No.	
Drill Co.	DOGC	Progress	22.0m	Shoe TVD	1936.08m	Daily COST	\$ 367,334
Rig	Ocean Patriot	Days from spud	35.40	FIT	13.70ppg	Cum Cost	\$ 16,161,242
Wtr Dpth(MSL)	72.5m	Days on well	7.29	LOT	0ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600	Drilling ahead.				
RT-ML	94m	Planned Op	Drill ahead.				

Summary of Period 0000 to 2400 Hrs

Slid ahead sidetracking from the original well bore at 3075 m. Pulled out of hole to change bit and BHA. Run in hole with new BHA.

Operations For Period 0000 Hrs to 2400 Hrs on 05 Mar 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	1030	10.50	IH3	TP (DHM)	ST	3092.0m	Continued time drilling. At 3092 m 90% formation returns at surface. Survey at 3074.64 m Inc=30.11 deg, Az=15.22 deg confirmed departure from the original well bore. Well sidetracked at 3075 m.
1030	1130	1.00	IH3	TP (DHM)	CHC	3092.0m	Circulated bottoms up.
1130	1300	1.50	IH3	TP (DHM)	TOB	3092.0m	Flow check. Well static. Pulled out of hole wet with 5" drill pipe from 3092 m to 2831 m.
1300	1730	4.50	IH3	TP (DHM)	TOB	3092.0m	Pumped slug. Continued to pull out of the hole with 5" drill pipe from 2831 m to 220 m.
1730	1830	1.00	IH3	TP (DHM)	HBHA	3092.0m	Pulled bottom hole assembly out of the hole from 220m to surface.
1830	2000	1.50	IH3	TP (DHM)	HT	3092.0m	Changed out MWD pulser and bit. Put motor sleeve on motor. Orientated mud motor and downloaded MWD tool.
2000	2100	1.00	IH3	TP (DHM)	TIB	3092.0m	Ran in hole with bottom hole assembly from surface to 220 m. Tested MWD and motor. Test OK.
2100	2400	3.00	IH3	TP (DHM)	TIB	3092.0m	Continued to run in hole with 5" drill pipe from 220 m to 1655 m.

Operations For Period 0000 Hrs to 0600 Hrs on 06 Mar 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0300	3.00	IH3	TP (DHM)	TIB	3092.0m	Continued to run in the hole with 5" drill pipe from 1655 m to 3092 m.
0300	0400	1.00	IH3	TP (DHT)	ST	3107.0m	Drilled ahead in rotary mode.
0400	0600	2.00	IH3	P	DM	3134.0m	Drilled ahead in rotary mode.

WBM Data

Cost Today \$ 6,484

Mud Type:	KCl-PHPA-Glycol	API FL:	5.5cc	Cl:	32000.0mg/l	Solids:	7.3	Viscosity	45sec/qt
Sample-From:	Active	Filter-Cake:	1/32nd"	Hard/Ca:	700.0mg/l	H2O:	93%	PV	18cp
Time:	23:00	HTHP-FL:	0cc	MBT:	7.5	Oil:	0%	YP	16lb/100ft²
Weight:	9.40ppg	HTHP-cake:	0/32nd"	PM:	0	Sand:	0.25	Gels 10s	4
Temp:	43.0C°			PF:	0.25	Glycol:	4.0%vol	Gels 10m	8
				pH:	9.5	KCl:	6%	Fann 003	4
						PHPA:	0ppb	Fann 006	7
								Fann 100	18
								Fann 200	26
								Fann 300	34
								Fann 600	52
Comment									

Shakers, Volumes and Losses Data

Engineer : Peter Dwyer

Equip.	Descr.	Mesh Size	Available	1898bbl	Losses	375bbl	Comments
Centrifuge 6	DFE		Active	361bbl	Downhole	0bbl	
De-Silter 5	DODI	12 x 4"	Mixing	0bbl	Surf+ Equip	35bbl	
Shaker 1	VSM-100	4 x 84	Hole	743bbl	Dumped	280bbl	
Shaker 2	VSM-100	4 x 120	Slug	0bbl	De-Gasser	0bbl	
Shaker 3	VSM-100	4 x 120	Reserve	334bbl	De-Sander	0bbl	
Shaker 4	VSM-100	2 x 145, 2 x 120	Kill	0bbl	De-Silter	40bbl	
			Premix	460bbl	Centrifuge	20bbl	

Bit # 9RR				Wear	I	O1	D	L	B	G	O2	R	
Size ("):	8.50in	IADC#	M332	Nozzles		Drilled over last 24 hrs			Calculated over Bit Run				
Mfr:	Reed	WOB(avg)	0klb	No.	Size	Progress		0m	Cum. Progress				0m
Type:	PDC	RPM(avg)	0			On Bottom Hrs		0h	Cum. On Btm Hrs				0h
Serial No.:	207732	F.Rate	0gpm			IADC Drill Hrs		0h	Cum IADC Drill Hrs				0h
Bit Model	RSX163	SPP	0psi			Total Revs		0	Cum Total Revs				0
Depth In	3092.0m	HSI				ROP(avg)		N/A	ROP(avg)				0.00 m/hr
Depth Out	0m	TFA	0.000										

Bit # 10				Wear		I	O1	D	L	B	G	O2	R	
						1	1	JD		X	I		BHA	
Size ("):	8.50in	IADC#	S132	Nozzles			Drilled over last 24 hrs			Calculated over Bit Run				
Mfr:	Reed	WOB(avg)	3.0klb	No.		Size	Progress		22.0m	Cum. Progress		44.0m		
Type:	PDC	RPM(avg)	0	3	20/32nd"		On Bottom Hrs		6.80h	Cum. On Btm Hrs		6.80h		
Serial No.:	22520	F.Rate	608gpm				IADC Drill Hrs		6.80h	Cum IADC Drill Hrs		6.80h		
Bit Model	DS43	SPP	2900psi				Total Revs		73900	Cum Total Revs		73900		
Depth In	3070.0m	HSI					ROP(avg)		3.24 m/hr	ROP(avg)		6.47 m/hr		
Depth Out	3092.0m	TFA	0.920											

BHA # 15							
Weight(Wet)	0klb	Length	220.0m	Torque(max)	0kft-lbs	D.C. (1) Ann Velocity	151.4mpm
Wt Below Jar(Wet)	0klb	String	285.0klb	Torque(Off.Btm)	0kft-lbs	D.C. (2) Ann Velocity	0mpm
		Pick-Up	345.0klb	Torque(On.Btm)	0kft-lbs	H.W.D.P. Ann Velocity	96.1mpm
		Slack-Off	245.0klb			D.P. Ann Velocity	96.1mpm
BHA Run Description		8 1/2" PDC, motor, stabiliser, float sub with ported float installed, PM sub, FEWD, pulser/TM, integral blade stabiliser, 5 x 6 1/2" DC's, 1 x 6 1/2" jars, 15 x 5" HWDP.					

BHA Run Comment

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.22m	8.50in	2.50in	10676290	Reed RSX163
Mud Motor	7.67m	6.75in	4.50in	675-495	1.15 deg bend
String Stabiliser	1.75m	6.63in	2.81in	450-066	
Float Sub	0.64m	6.81in	3.00in	DA6015	
MWD Tool	2.81m	6.50in	0in	90052756M6	PM Sub
MWD Tool	7.05m	6.69in	0in	90057455H1GR6	FEWD
MWD Tool	3.06m	6.50in	3.25in	192198	Pulser/TM
String Stabiliser	1.56m	6.50in	3.00in	47697	
Drill Collar	28.06m	6.50in	2.75in		
Drilling Jars	9.27m	6.50in	2.75in	03409D	
Drill Collar	18.59m	6.50in	2.75in		

Equipment	Length	OD	ID	Serial #	Comment
HWDP	138.80m	6.50in	3.00in		

BHA # 16

Weight(Wet)	0klb	Length	220.1m	Torque(max)	0kft-lbs	D.C. (1) Ann Velocity	0mpm
Wt Below Jar(Wet)	0klb	String	285.0klb	Torque(Off.Btm)	0kft-lbs	D.C. (2) Ann Velocity	0mpm
		Pick-Up	345.0klb	Torque(On.Btm)	0kft-lbs	H.W.D.P. Ann Velocity	0mpm
		Slack-Off	245.0klb			D.P. Ann Velocity	0mpm

BHA Run Description 8 1/2" PDC, motor, stabiliser, float sub with ported float installed, PM sub, FEWD, pulser/TM, integral blade stabiliser, 5 x 6 1/2" DC's, 1 x 6 1/2" jars, 15 x 5" HWDP.

BHA Run Comment

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.22m	8.50in	2.50in	10676290	Reed RSX163
Mud Motor	7.67m	6.75in	4.50in	675-495	1.15 deg bend
String Stabiliser	1.75m	6.63in	2.81in	450-066	
Float Sub	0.64m	6.81in	3.00in	DA6015	
MWD Tool	2.81m	6.50in	0in	90052756M6	PM Sub
MWD Tool	7.05m	6.69in	0in	90057455H1GR6	FEWD
MWD Tool	3.06m	6.50in	3.25in	192198	Pulser/TM
String Stabiliser	1.56m	6.50in	3.00in	47697	
Drill Collar	28.06m	6.50in	2.75in		
Drilling Jars	9.27m	6.50in	2.75in	03409D	
Drill Collar	18.59m	6.50in	2.75in		
HWDP	138.80m	6.50in	3.00in		

Survey

MD	Incl Deg	Corr. Az (deg)	TVD	'V' Sect	Dogleg (deg/100ft)	N/S	E/W	Tool Type
0	0	0	0	0	0	0	0	

Bulk Stocks

Name	Unit	In	Used	Adjust	Balance
Barite	MT	0	5.06	8.03	66.2
Gel	MT	0	0	0	9.4
Cement	MT	0	0	0	48.2
Drill Water	m ³	0	86.1	13.7	801.5
Fuel Oil	m ³	0	12.1	0	346.9
Potable Water	m ³	35	32.3	0	359.9

Pumps

Pump Data - Last 24 Hrs								Slow Pump Data									
No.	Type	Liner (in)	MW (ppg)	Eff (%)	SPM	SPP (psi)	Flow (gpm)	Depth (m)	SPM1	SPP1 (psi)	Flow1 (gpm)	SPM2	SPP2 (psi)	Flow2 (gpm)	SPM3	SPP3 (psi)	Flow3 (gpm)
1	A1700	6.00	9.40	97	70	2800	302	0	0	0	0	0	0	0	0	0	0
2	12-P160	6.00	9.40	97	70	2800	302	0	0	0	0	0	0	0	0	0	0
3	12-P160	6.00	9.40	97	0	0	0	0	0	0	0	0	0	0	0	0	0

Personnel On Board

Job Title	Personnel	Company	Pax
OIM	Barry Scott	DOGC	45
Camp boss	Kevin Tolland	ESS	8
ROV Pilot	Bob George	Fugro	2
Cementer	Dave Green	Dowell Schlumberger	2
Mud Engineer	Peter Dwyer	MI Swaco	1
Data Engineer	Dorian Kuhn	Sperry Sun	5
Senior Drilling Supervisor	Peter Dane	BSOC	5
MWD Engineer	Daniel Luoni	Halliburton	2

Personnel On Board

Directional Driller	Tim Walton	Halliburton	3
Centrifuge Hand	Brendon McPhail	DFE	1
Technician	Mark Anderson	Petrotech	1
Wireline Engineer	Sergio Arellano	Baker Atlas	3
Liner Hanger	Andi Russell	Weatherford	1
CCTV	Darren Edwards	CCTV	2
Crane Repair	Mark Watson	Liebher Cranes	2
Total			83

HSE Summary

Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	27 Feb 2005	6 Days	Abandon Rig Drill	Based on simulated fire in laundry.
BOP Test	19 Feb 2005	14 Days	BOP Test	
Fire Drill	27 Feb 2005	6 Days	Fire Drill	
Lost Time Injury	20 May 2003	655 Days	LTI	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30
Pre-Tour Meetings	05 Mar 2005	0 Days	Routine Pre-Tour Meetings	
Rig Inspection	04 Feb 2005	29 Days	NOPSA Audit	
Safety Meeting	27 Feb 2005	6 Days	Safety meetings held	3 Safety meetings held at 1300, 1900 and 0100, attended by all crews.
Stop Card-Prevention	05 Mar 2005	0 Days	5 STOP cards submitted	5 cards by DODI

Marine

Weather on 05 Mar 2005

Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period
10.00mi	40.0kn	225deg	1009mbar	17.0C°	1.0m	225deg	0ft/min
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments	
1.0deg	0.8deg	1.00m	4.0m	225deg	0ft/min		
Rig Dir.	Ris. Tension	VDL		Comments			
45.0deg	228.0klb	4138.1klb					

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Pacific Wrangler			Standby at rig	Item	Unit	Quantity
				Barite	MT	0
				Gel	MT	42
				Cement	MT	123
				Drill Water	M³	0
				Fuel Oil	M³	602
				Potable Water	M³	231
Far Grip			Melbourne	Item	Unit	Quantity
				Barite	MT	0
				Gel	MT	0
				Cement	MT	0
				Drill Water	M³	0
				Fuel Oil	M³	0
				Potable Water	M³	0

06 Mar 2005 (GMT +10)

From: Peter Dane, Greg Harms
To: Colin Allport

DRILLING MORNING REPORT # 9
ZaneGrey-1ST2 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	3162.0m	Cur. Hole Size	8.500in	AFE Cost	\$ 0
Field		TVD	2753.6m	Casing OD	9.625in	AFE No.	
Drill Co.	DOGC	Progress	70.0m	Shoe TVD	1936.08m	Daily COST	\$ 356,390
Rig	Ocean Patriot	Days from spud	36.40	FIT	13.70ppg	Cum Cost	\$ 16,517,632
Wtr Dpth(MSL)	72.5m	Days on well	8.29	LOT	0ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600 Repairing top drive system.					
RT-ML	94m	Planned Op Repairing top drive system.					

Summary of Period 0000 to 2400 Hrs							
Continued to run in the hole. Drill ahead. Top drive problems. Pulled back into the casing shoe to continue repairing top drive system.							

Operations For Period 0000 Hrs to 2400 Hrs on 06 Mar 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0300	3.00	IH3	TP (DHM)	TIB	3092.0m	Continued to run in the hole with 5" drill pipe from 1655 m to 3092 m. Washed and reamed last stand down.
0300	0400	1.00	IH3	TP (DHT)	ST	3107.0m	Directionally drilled ahead in rotary mode from 3092 m to 3107 m. Rotary drilling parameters were 80 rpm, 12-17k ft.lbs, 590 gpm at 2700 psi. Rate of penetration 21 m/hr.
0400	0730	3.50	IH3	P	DM	3162.0m	Directionally drilled ahead in rotary mode from 3107 m to 3162 m. Difficulty sliding. Poor toolface control. Rotary drilling parameters were 80 rpm, 12-17k ft.lbs, 605 gpm at 2900 psi. Rate of penetration 40 m/hr.
0730	1100	3.50	IH3	TP (RCS)	RR	3162.0m	Top drive brake locked up. Trouble shoot top drive problem.
1100	1400	3.00	IH3	TP (RCS)	TO	3162.0m	Pulled out of the hole to the casing shoe at 2140 m.
1400	2400	10.00	IH3	P (RCS)	RR	3162.0m	Trouble shoot top drive problem.

Operations For Period 0000 Hrs to 0600 Hrs on 07 Mar 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0600	6.00	IH3	TP (RCS)	RR	3162.0m	Continued trouble shooting top drive system.

WBM Data		Cost Today \$ 12,912							
Mud Type:	KCl-PHPA-Glycol	API FL:	5.5cc	Cl:	32000.0mg/l	Solids:	7.6	Viscosity	50sec/qt
Sample-From:	Flowline	Filter-Cake:	1/32nd"	Hard/Ca:	640.0mg/l	H2O:	93%	PV	19cp
Time:	07:12	HTHP-FL:	0cc	MBT:	7.5	Oil:	0%	YP	17lb/100ft²
Weight:	9.40ppg	HTHP-cake:	0/32nd"	PM:	0	Sand:	0.25	Gels 10s	4
Temp:	38.0C°			PF:	0.25	Glycol:	4.0%vol	Gels 10m	9
				pH:	9.5	KCl:	6%	Fann 003	4
						PHPA:	0ppb	Fann 006	8
								Fann 100	26
								Fann 200	30
								Fann 300	36
								Fann 600	55
Comment									

Shakers, Volumes and Losses Data

Engineer : Peter Dwyer

Equip.	Descr.	Mesh Size	Available	2089bbl	Losses	210bbl	Comments
Centrifuge 6	DFE		Active	361bbl	Downhole	0bbl	
De-Silter 5	DODI	12 x 4"	Mixing	0bbl	Surf+ Equip	60bbl	
Shaker 1	VSM-100	4 x 84	Hole	753bbl	Dumped	75bbl	
Shaker 2	VSM-100	4 x 120	Slug	0bbl	De-Gasser	0bbl	
Shaker 3	VSM-100	4 x 120	Reserve	318bbl	De-Sander	0bbl	
Shaker 4	VSM-100	2 x 145, 2 x 120	Kill	0bbl	De-Silter	60bbl	
			Premix	657bbl	Centrifuge	15bbl	

Bit # 9RR				Wear	I	O1	D	L	B	G	O2	R
Size ("):	8.50in	IADC#	M332	Nozzles		Drilled over last 24 hrs			Calculated over Bit Run			
Mfr:	Reed	WOB(avg)	5.0klb	No.	Size	Progress		70.0m	Cum. Progress		70.0m	
Type:	PDC	RPM(avg)	80	6	14/32nd"	On Bottom Hrs		2.40h	Cum. On Btm Hrs		2.40h	
Serial No.:	207732	F.Rate	600gpm			IADC Drill Hrs		2.40h	Cum IADC Drill Hrs		2.40h	
Bit Model	RSX163	SPP	2800psi			Total Revs		37300	Cum Total Revs		37300	
Depth In	3092.0m	HSI				ROP(avg)		29.17 m/hr	ROP(avg)		29.17 m/hr	
Depth Out	0m	TFA	0.902									

BHA # 16

Weight(Wet)	0klb	Length	220.1m	Torque(max)	25kft-lbs	D.C. (1) Ann Velocity	149.4mpm
Wt Below Jar(Wet)	0klb	String	285.0klb	Torque(Off.Btm)	12kft-lbs	D.C. (2) Ann Velocity	0mpm
		Pick-Up	345.0klb	Torque(On.Btm)	23kft-lbs	H.W.D.P. Ann Velocity	94.9mpm
		Slack-Off	245.0klb			D.P. Ann Velocity	94.9mpm

BHA Run Description 8 1/2" PDC, motor, stabiliser, float sub with ported float installed, PM sub, FEWD, pulser/TM, integral blade stabiliser, 5 x 6 1/2" DC's, 1 x 6 1/2" jars, 15 x 5" HWDP.

BHA Run Comment

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.22m	8.50in	2.50in	10676290	Reed RSX163
Mud Motor	7.67m	6.75in	4.50in	675-495	1.15 deg bend
String Stabiliser	1.75m	6.63in	2.81in	450-066	
Float Sub	0.64m	6.81in	3.00in	DA6015	
MWD Tool	2.81m	6.50in	0in	90052756M6	PM Sub
MWD Tool	7.05m	6.69in	0in	90057455H1GR6	FEWD
MWD Tool	3.06m	6.50in	3.25in	192198	Pulser/TM
String Stabiliser	1.56m	6.50in	3.00in	47697	
Drill Collar	28.06m	6.50in	2.75in		
Drilling Jars	9.27m	6.50in	2.75in	03409D	
Drill Collar	18.59m	6.50in	2.75in		
HWDP	138.80m	6.50in	3.00in		

Survey

MD	Incl Deg	Corr. Az (deg)	TVD	'V' Sect	Dogleg (deg/100ft)	N/S	E/W	Tool Type
0	0	0	0	0	0	0	0	

Bulk Stocks

Name	Unit	In	Used	Adjust	Balance
Barite	MT	0	0	0	66.2
Gel	MT	0	0	0	9.4
Cement	MT	0	0	0	48.2

Bulk Stocks					
Name	Unit	In	Used	Adjust	Balance
Drill Water	m ³	0	72.3	0	729.2
Fuel Oil	m ³	0	13	0	333.9
Potable Water	m ³	32	26.4	0	365.5

Pumps																	
Pump Data - Last 24 Hrs								Slow Pump Data									
No.	Type	Liner (in)	MW (ppg)	Eff (%)	SPM	SPP (psi)	Flow (gpm)	Depth (m)	SPM1	SPP1 (psi)	Flow1 (gpm)	SPM2	SPP2 (psi)	Flow2 (gpm)	SPM3	SPP3 (psi)	Flow3 (gpm)
1	A1700	6.00	9.40	97	70	2800	302	0	0	0	0	0	0	0	0	0	0
2	12-P160	6.00	9.40	97	70	2800	302	0	0	0	0	0	0	0	0	0	0
3	12-P160	6.00	9.40	97	0	0	0	0	0	0	0	0	0	0	0	0	0

Personnel On Board			
Job Title	Personnel	Company	Pax
OIM	Barry Scott	DOGC	45
Camp boss	Kevin Tolland	ESS	8
ROV Pilot	Bob George	Fugro	2
Cementer	Dave Green	Dowell Schlumberger	2
Mud Engineer	Peter Dwyer	MI Swaco	1
Data Engineer	Dorian Kuhn	Sperry Sun	5
Senior Drilling Supervisor	Peter Dane	BSOC	5
MWD Engineer	Daniel Luoni	Halliburton	2
Directional Driller	Tim Walton	Halliburton	3
Centrifuge Hand	Brendon McPhail	DFE	1
Technician	Mark Anderson	Petrotech	1
Wireline Engineer	Sergio Arellano	Baker Atlas	3
Liner Hanger	Andi Russell	Weatherford	1
CCTV	Darren Edwards	CCTV	2
Crane Repair	Mark Watson	Liebher Cranes	2
Total			83

HSE Summary				
Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	06 Mar 2005	0 Days	Abandon Rig Drill	Based on simulated fire in laundry.
BOP Test	19 Feb 2005	15 Days	BOP Test	
Fire Drill	06 Mar 2005	0 Days	Fire Drill	
Lost Time Injury	20 May 2003	656 Days	LTI	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30
Pre-Tour Meetings	06 Mar 2005	0 Days	Routine Pre-Tour Meetings	
Rig Inspection	04 Feb 2005	30 Days	NOPSA Audit	
Safety Meeting	06 Feb 2005	28 Days	Safety meetings held	3 Safety meetings held at 1300, 1900 and 0100, attended by all crews.
Stop Card-Prevention	06 Mar 2005	0 Days	10 STOP cards submitted	8 cards by DODI 2 cards by T/Party

Marine							
Weather on 06 Mar 2005							
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period
10.00mi	35.0kn	225deg	1016mbar	19.0C°	1.0m	225deg	0ft/min
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments	
1.0deg	0.8deg	1.00m	4.0m	225deg	0ft/min		
Rig Dir.	Ris. Tension	VDL		Comments			
45.0deg	228.0klb	4254.9klb					
Boats	Arrived (date/time)		Departed (date/time)		Status		Bulks

Pacific Wrangler			Standby at rig	Item	Unit	Quantity
				Barite	MT	0
				Gel	MT	42
				Cement	MT	123
				Drill Water	M^3	0
				Fuel Oil	M^3	590
				Potable Water	M^3	228
Far Grip			Melbourne	Item	Unit	Quantity
				Barite	MT	0
				Gel	MT	0
				Cement	MT	0
				Drill Water	M^3	0
				Fuel Oil	M^3	0
				Potable Water	M^3	0

07 Mar 2005 (GMT +10)

From: Peter Dane, Greg Harms
 To: Colin Allport

DRILLING MORNING REPORT # 10
ZaneGrey-1ST2 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	3162.0m	Cur. Hole Size	8.500in	AFE Cost	\$ 0
Field		TVD	2753.6m	Casing OD	9.625in	AFE No.	
Drill Co.	DOGC	Progress	0m	Shoe TVD	1936.08m	Daily COST	\$ 238,512
Rig	Ocean Patriot	Days from spud	37.40	FIT	13.70ppg	Cum Cost	\$ 16,756,144
Wtr Dpth(MSL)	72.5m	Days on well	9.29	LOT	0ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600	Continued to trouble shoot electrical fault with the top drive system.				
RT-ML	94m	Planned Op	Continued to trouble shoot electrical fault with the top drive system.				

Summary of Period 0000 to 2400 Hrs

Continued to trouble shoot electrical fault with the top drive system.

Operations For Period 0000 Hrs to 2400 Hrs on 07 Mar 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	2400	24.00	IH3	TP (RCS)	RR	3162.0m	Continued trouble shooting electrical fault on top drive system.

Operations For Period 0000 Hrs to 0600 Hrs on 08 Mar 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0600	6.00	IH3	TP (RCS)	RR	3162.0m	(IN PROGRESS) Continued to trouble shoot electrical fault with the top drive system.

WBM Data		Cost Today \$ 0									
Mud Type:	KCl-PHPA-Glycol	API FL:	7.6cc	Cl:	32000.0mg/l	Solids:	7.5	Viscosity	57sec/qt		
Sample-From:	Flowline	Filter-Cake:	1/32nd"	Hard/Ca:	640.0mg/l	H2O:	92%	PV	18cp		
Time:	23:00	HTHP-FL:	0cc	MBT:	7.5	Oil:	0%	YP	17lb/100ft²		
Weight:	9.50ppg	HTHP-cake:	0/32nd"	PM:	0	Sand:	0.25	Gels 10s	4		
Temp:	33.0C°			PF:	0.25	Glycol:	4.0%vol	Gels 10m	8		
				pH:	9.5	KCl:	6%	Fann 003	5		
						PHPA:	0ppb	Fann 006	8		
								Fann 100	26		
								Fann 200	30		
								Fann 300	35		
								Fann 600	53		
Comment											

Shakers, Volumes and Losses Data							Engineer : Peter Dwyer				
Equip.	Descr.	Mesh Size	Available	2090bbl	Losses	0bbl	Comments				
Centrifuge 6	DFE		Active	341bbl	Downhole	0bbl					
De-Silter 5	DODI	12 x 4"	Mixing	0bbl	Surf+ Equip	0bbl					
Shaker 1	VSM-100	4 x 84	Hole	774bbl	Dumped	0bbl					
Shaker 2	VSM-100	4 x 120	Slug	0bbl	De-Gasser	0bbl					
Shaker 3	VSM-100	4 x 120	Reserve	318bbl	De-Sander	0bbl					
Shaker 4	VSM-100	2 x 145, 2 x 120	Kill	0bbl	De-Silter	0bbl					
			Premix	657bbl	Centrifuge	0bbl					

Bit # 9RR			Wear	I	O1	D	L	B	G	O2	R
Size ("):	8.50in	IADC#	M332	Nozzles		Drilled over last 24 hrs			Calculated over Bit Run		

Mfr:	Reed	WOB(avg)	0klb	No.	Size	Progress	0m	Cum. Progress	70.0m
Type:	PDC	RPM(avg)	0	6	14/32nd"	On Bottom Hrs	0h	Cum. On Btm Hrs	2.40h
Serial No.:	207732	F.Rate	0gpm			IADC Drill Hrs	0h	Cum IADC Drill Hrs	2.40h
Bit Model	RSX163	SPP	0psi			Total Revs	0	Cum Total Revs	37300
Depth In	3092.0m	HSI				ROP(avg)	N/A	ROP(avg)	29.17 m/hr
Depth Out	0m	TFA	0.902						

BHA # 16

Weight(Wet)	0klb	Length	220.1m	Torque(max)	0kft-lbs	D.C. (1) Ann Velocity	0mpm
Wt Below Jar(Wet)	0klb	String	285.0klb	Torque(Off.Btm)	0kft-lbs	D.C. (2) Ann Velocity	0mpm
		Pick-Up	345.0klb	Torque(On.Btm)	0kft-lbs	H.W.D.P. Ann Velocity	0mpm
		Slack-Off	245.0klb			D.P. Ann Velocity	0mpm

BHA Run Description 8 1/2" PDC, motor, stabiliser, float sub with ported float installed, PM sub, FEWD, pulser/TM, integral blade stabiliser, 5 x 6 1/2" DC's, 1 x 6 1/2" jars, 15 x 5" HWDP.

BHA Run Comment

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.22m	8.50in	2.50in	10676290	Reed RSX163
Mud Motor	7.67m	6.75in	4.50in	675-495	1.15 deg bend
String Stabiliser	1.75m	6.63in	2.81in	450-066	
Float Sub	0.64m	6.81in	3.00in	DA6015	
MWD Tool	2.81m	6.50in	0in	90052756M6	PM Sub
MWD Tool	7.05m	6.69in	0in	90057455H1GR6	FEWD
MWD Tool	3.06m	6.50in	3.25in	192198	Pulser/TM
String Stabiliser	1.56m	6.50in	3.00in	47697	
Drill Collar	28.06m	6.50in	2.75in		
Drilling Jars	9.27m	6.50in	2.75in	03409D	
Drill Collar	18.59m	6.50in	2.75in		
HWDP	138.80m	6.50in	3.00in		

Survey

MD	Incl Deg	Corr. Az (deg)	TVD	'V' Sect	Dogleg (deg/100ft)	N/S	E/W	Tool Type
0	0	0	0	0	0	0	0	

Survey

MD	Incl Deg	Corr. Az (deg)	TVD	'V' Sect	Dogleg (deg/100ft)	N/S	E/W	Tool Type
3044.57	31.02	13.23	2652.8	1323.91	0	1280.09	337.80	mwd
3074.64	30.11	15.22	2678.7	1294.91	4.53	1294.91	341.55	mwd
3114.34	31.53	18.99	2712.8	1314.34	6.04	1314.34	347.55	mwd

Bulk Stocks

Name	Unit	In	Used	Adjust	Balance
Barite	MT	0	0	0	66.2
Gel	MT	0	0	0	9.4
Cement	MT	0	0	0	48.2
Drill Water	m³	0	23.8	0	705.4
Fuel Oil	m³	0	10.5	0	323.4
Potable Water	m³	31	42.1	0	354.4

Pumps

Pump Data - Last 24 Hrs								Slow Pump Data									
No.	Type	Liner (in)	MW (ppg)	Eff (%)	SPM	SPP (psi)	Flow (gpm)	Depth (m)	SPM1	SPP1 (psi)	Flow1 (gpm)	SPM2	SPP2 (psi)	Flow2 (gpm)	SPM3	SPP3 (psi)	Flow3 (gpm)
1	A1700	6.00	9.40	97	0	0	0	0	0	0	0	0	0	0	0	0	0
2	12-P160	6.00	9.40	97	0	0	0	0	0	0	0	0	0	0	0	0	0

Pumps																	
Pump Data - Last 24 Hrs								Slow Pump Data									
3	12-P160	6.00	9.40	97	0	0	0	0	0	0	0	0	0	0	0	0	
Personnel On Board																	
Job Title				Personnel				Company				Pax					
OIM				Barry Scott				DOGC				45					
Camp boss				Kevin Tolland				ESS				8					
ROV Pilot				Bob George				Fugro				2					
Cementer				Dave Green				Dowell Schlumberger				2					
Mud Engineer				Peter Dwyer				MI Swaco				1					
Data Engineer				Dorian Kuhn				Sperry Sun				5					
Senior Drilling Supervisor				Peter Dane				BSOC				5					
MWD Engineer				Daniel Luoni				Halliburton				2					
Directional Driller				Tim Walton				Halliburton				3					
Centrifuge Hand				Brendon McPhail				DFE				1					
Technician				Mark Anderson				Petrotech				1					
Wireline Engineer				Sergio Arellano				Baker Atlas				3					
Liner Hanger				Andi Russell				Weatherford				1					
CCTV				Darren Edwards				CCTV				2					
Crane Repair				Mark Watson				Liebher Cranes				2					
														Total	83		

HSE Summary					
Events	Date of last	Days Since	Descr.	Remarks	
Abandon Drill	06 Mar 2005	1 Day	Abandon Rig Drill	Based on simulated fire in laundry.	
BOP Test	19 Feb 2005	16 Days	BOP Test		
Fire Drill	06 Mar 2005	1 Day	Fire Drill		
Lost Time Injury	20 May 2003	657 Days	LTi	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30	
Pre-Tour Meetings	07 Mar 2005	0 Days	Routine Pre-Tour Meetings		
Rig Inspection	04 Feb 2005	31 Days	NOPSA Audit		
Safety Meeting	06 Feb 2005	29 Days	Safety meetings held	3 Safety meetings held at 1300, 1900 and 0100, attended by all crews.	
Stop Card-Prevention	07 Mar 2005	0 Days	4 STOP cards submitted	4 cards by DODI	

Marine									
Weather on 07 Mar 2005									
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period		
10.00mi	40.0kn	225deg	1017mbar	18.0C°	1.0m	225deg	0ft/min		
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments			
0.8deg	0.8deg	0.50m	4.0m	225deg	0ft/min				
Rig Dir.	Ris. Tension	VDL		Comments					
45.0deg	228.0klb	4246.1klb							
Boats	Arrived (date/time)		Departed (date/time)		Status		Bulks		
Pacific Wrangler					Standby at rig	Item		Unit	Quantity
						Barite		MT	0
						Gel		MT	42
						Cement		MT	123
						Drill Water		M^3	0
						Fuel Oil		M^3	583
						Potable Water		M^3	225
Far Grip					Melbourne	Item		Unit	Quantity
						Barite		MT	0
						Gel		MT	0
						Cement		MT	0
						Drill Water		M^3	0
						Fuel Oil		M^3	0
						Potable Water		M^3	0

08 Mar 2005 (GMT +10)

From: Peter Dane, Greg Harms
 To: Colin Allport

DRILLING MORNING REPORT # 11
ZaneGrey-1ST2 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	3162.0m	Cur. Hole Size	8.500in	AFE Cost	\$ 0
Field		TVD	2753.6m	Casing OD	9.625in	AFE No.	
Drill Co.	DOGC	Progress	0m	Shoe TVD	1936.08m	Daily COST	\$ 217,952
Rig	Ocean Patriot	Days from spud	38.40	FIT	13.70ppg	Cum Cost	\$ 16,974,096
Wtr Dpth(MSL)	72.5m	Days on well	10.29	LOT	0ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600 Running in hole.					
RT-ML	94m	Planned Op Drill ahead					

Summary of Period 0000 to 2400 Hrs

Continued to trouble shoot electrical fault with the top drive system.

Operations For Period 0000 Hrs to 2400 Hrs on 08 Mar 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	2400	24.00	IH3	TP (RCS)	RR	3162.0m	Continued to trouble shoot electrical fault with the top drive system.

Operations For Period 0000 Hrs to 0600 Hrs on 09 Mar 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0300	3.00	IH3	TP (RCS)	RR	3162.0m	Continued to trouble shoot electrical fault with the top drive system. - Replace all brushes on top drive system motor - Troble shoot and attempt to reprogram existing PLC - no success - Download new program and reload PLC - OK - Reload differential pressure switches and temperature sensors on lube oil pump
0300	0400	1.00	IH3	TP (RCS)	RR	3162.0m	Surface test top drive system. Tested OK.
0400	0500	1.00	IH3	TP (RCS)	TI	3162.0m	Continued to run in the hole with 5" drill pipe from 2140 m to 2594 m.
0500	0600	1.00	IH3	TP (RCS)	RR	3162.0m	Cooling water pump tripped on Engine#1 causing engine to overheat. Engine#1 and #4 tripped causing rig power to shut down. Reset same.

WBM Data				Cost Today \$ 0								
Mud Type:	KCI-PHPA-Glycol	API FL:	6.0cc	Cl:	32000.0mg/l	Solids:	7.6	Viscosity	58sec/qt			
Sample-From:	Active	Filter-Cake:	1/32nd"	Hard/Ca:	640.0mg/l	H2O:	92%	PV	18cp			
Time:	23:00	HTHP-FL:	0cc	MBT:	7.5	Oil:	0%	YP	18lb/100ft²			
Weight:	9.50ppg	HTHP-cake:	0/32nd"	PM:	0	Sand:	0.25	Gels 10s	3			
Temp:	32.0C°			PF:	0.25	Glycol:	4.0%vol	Gels 10m	8			
								Fann 003	5			
								Fann 006	8			
								Fann 100	26			
								Fann 200	30			
								Fann 300	36			
								Fann 600	54			
Comment												

Shakers, Volumes and Losses Data						Engineer : Peter Dwyer					
Equip.	Descr.	Mesh Size	Available	2042bbl	Losses	48bbl	Comments				
Centrifuge 6	DFE		Active	293bbl	Downhole	48bbl					
De-Silter 5	DODI	12 x 4"	Mixing	0bbl	Surf+ Equip	0bbl					
Shaker 1	VSM-100	4 x 84	Hole	774bbl	Dumped	0bbl					
Shaker 2	VSM-100	4 x 120	Slug	0bbl	De-Gasser	0bbl					
Shaker 3	VSM-100	4 x 120	Reserve	318bbl	De-Sander	0bbl					
Shaker 4	VSM-100	2 x 145, 2 x 120	Kill	0bbl	De-Silter	0bbl					
			Premix	657bbl	Centrifuge	0bbl					

Bit # 9RR				Wear	I	O1	D	L	B	G	O2	R
Size ("):	8.50in	IADC#	M332	Nozzles		Drilled over last 24 hrs			Calculated over Bit Run			
Mfr:	Reed	WOB(avg)	0klb	No.	Size	Progress		0m	Cum. Progress		70.0m	
Type:	PDC	RPM(avg)	0	6	14/32nd"	On Bottom Hrs		0h	Cum. On Btm Hrs		2.40h	
Serial No.:	207732	F.Rate	0gpm			IADC Drill Hrs		0h	Cum IADC Drill Hrs		2.40h	
Bit Model	RSX163	SPP	0psi			Total Revs		0	Cum Total Revs		37300	
Depth In	3092.0m	HSI				ROP(avg)		N/A	ROP(avg)		29.17 m/hr	
Depth Out	0m	TFA	0.902									

BHA # 16							
Weight(Wet)	0klb	Length	220.1m	Torque(max)	0kft-lbs	D.C. (1) Ann Velocity	0mpm
Wt Below Jar(Wet)	0klb	String	285.0klb	Torque(Off.Btm)	0kft-lbs	D.C. (2) Ann Velocity	0mpm
		Pick-Up	345.0klb	Torque(On.Btm)	0kft-lbs	H.W.D.P. Ann Velocity	0mpm
		Slack-Off	245.0klb			D.P. Ann Velocity	0mpm

BHA Run Description 8 1/2" PDC, motor, stabiliser, float sub with ported float installed, PM sub, FEWD, pulser/TM, integral blade stabiliser, 5 x 6 1/2" DC's, 1 x 6 1/2" jars, 15 x 5" HWDP.

BHA Run Comment

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.22m	8.50in	2.50in	10676290	Reed RSX163
Mud Motor	7.67m	6.75in	4.50in	675-495	1.15 deg bend
String Stabiliser	1.75m	6.63in	2.81in	450-066	
Float Sub	0.64m	6.81in	3.00in	DA6015	
MWD Tool	2.81m	6.50in	0in	90052756M6	PM Sub
MWD Tool	7.05m	6.69in	0in	90057455H1GR6	FEWD
MWD Tool	3.06m	6.50in	3.25in	192198	Pulser/TM
String Stabiliser	1.56m	6.50in	3.00in	47697	
Drill Collar	28.06m	6.50in	2.75in		
Drilling Jars	9.27m	6.50in	2.75in	03409D	
Drill Collar	18.59m	6.50in	2.75in		
HWDP	138.80m	6.50in	3.00in		

Survey								
MD	Incl Deg	Corr. Az (deg)	TVD	'V' Sect	Dogleg (deg/100ft)	N/S	E/W	Tool Type
0	0	0	0	0	0	0	0	

Survey								
MD	Incl Deg	Corr. Az (deg)	TVD	'V' Sect	Dogleg (deg/100ft)	N/S	E/W	Tool Type
3044.57	31.02	13.23	2652.8	1323.91	0	1280.09	337.80	mwd
3074.64	30.11	15.22	2678.7	1294.91	4.53	1294.91	341.55	mwd
3114.34	31.53	18.99	2712.8	1314.34	6.04	1314.34	347.55	mwd

Bulk Stocks					
Name	Unit	In	Used	Adjust	Balance
Barite	MT	0	0	0	66.2
Gel	MT	0	0	0	9.4
Cement	MT	0	0	0	48.2
Drill Water	m³	0	0	0	705.4
Fuel Oil	m³	200	14	0	509.4
Potable Water	m³	25	27.7	0	351.7

Pumps																	
Pump Data - Last 24 Hrs								Slow Pump Data									
No.	Type	Liner (in)	MW (ppg)	Eff (%)	SPM	SPP (psi)	Flow (gpm)	Depth (m)	SPM1	SPP1 (psi)	Flow1 (gpm)	SPM2	SPP2 (psi)	Flow2 (gpm)	SPM3	SPP3 (psi)	Flow3 (gpm)
1	A1700	6.00	9.50	97	0	0	0	0	0	0	0	0	0	0	0	0	0
2	12-P160	6.00	9.50	97	0	0	0	0	0	0	0	0	0	0	0	0	0
3	12-P160	6.00	9.50	97	0	0	0	0	0	0	0	0	0	0	0	0	0

Personnel On Board			
Job Title	Personnel	Company	Pax
OIM	Barry Scott	DOGC	46
Camp boss	Kevin Tolland	ESS	8
ROV Pilot	Bob George	Fugro	2
Cementer	Dave Green	Dowell Schlumberger	2
Mud Engineer	Peter Dwyer	MI Swaco	1
Data Engineer	Dorian Kuhn	Sperry Sun	5
Senior Drilling Supervisor	Peter Dane	BSOC	4
MWD Engineer	Daniel Luoni	Halliburton	2
Directional Driller	Tim Walton	Halliburton	1
Centrifuge Hand	Brendon McPhail	DFE	1
Technician	Mark Anderson	Petrotech	1
Wireline Engineer	Sergio Arellano	Baker Atlas	3
Liner Hanger	Andi Russell	Weatherford	1
CCTV	Darren Edwards	CCTV	2
Crane Repair	Mark Watson	Liebher Cranes	2
Total			81

HSE Summary				
Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	06 Mar 2005	2 Days	Abandon Rig Drill	Based on simulated fire in laundry.
BOP Test	19 Feb 2005	17 Days	BOP Test	
Fire Drill	06 Mar 2005	2 Days	Fire Drill	
Lost Time Injury	20 May 2003	658 Days	LTI	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30
Pre-Tour Meetings	08 Mar 2005	0 Days	Routine Pre-Tour Meetings	
Rig Inspection	04 Feb 2005	32 Days	NOPSA Audit	
Safety Meeting	06 Feb 2005	30 Days	Safety meetings held	3 Safety meetings held at 1300, 1900 and 0100, attended by all crews.
Stop Card-Prevention	08 Mar 2005	0 Days	9 STOP cards submitted	6 cards by DODI 3 cards by T/party

Marine								
Weather on 08 Mar 2005								
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period	
10.00mi	30.0kn	225deg	1020mbar	18.0C°	0.5m	225deg	0ft/min	
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments		
0.3deg	0.3deg	0.30m	2.0m	225deg	0ft/min			
Rig Dir.	Ris. Tension	VDL		Comments				
45.0deg	228.0klb	4385.0klb						
Boats	Arrived (date/time)		Departed (date/time)		Status		Bulks	
Pacific Wrangler					Standby at rig		Item Unit Quantity	
							Barite MT 0	
							Gel MT 42	
							Cement MT 123	
							Drill Water M^3 0	
							Fuel Oil M^3 372	
							Potable Water M^3 222	
Far Grip					Melbourne		Item Unit Quantity	
						Barite MT		

				Item	Unit	Quantity
				Gel	MT	0
				Cement	MT	0
				Drill Water	M^3	0
				Fuel Oil	M^3	0
				Potable Water	M^3	0

Helicopter Movement				
Flight #	Company	Arr/Dep. Time	Pax In/Out	Comment
1	Bristow	08:35 / 08:50	8 / 10	
2	Bristow	12:44 / 12:53	1 / 1	

09 Mar 2005 (GMT +10)

From: Peter Dane, Greg Harms
 To: Colin Allport

DRILLING MORNING REPORT # 12
ZaneGrey-1ST2 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	3480.0m	Cur. Hole Size	8.500in	AFE Cost	\$ 0
Field		TVD	3038.7m	Casing OD	9.625in	AFE No.	
Drill Co.	DOGC	Progress	318.0m	Shoe TVD	1936.08m	Daily COST	\$ 347,047
Rig	Ocean Patriot	Days from spud	39.40	FIT	13.70ppg	Cum Cost	\$ 17,321,143
Wtr Dpth(MSL)	72.5m	Days on well	11.29	LOT	0ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600 Directionally drilling ahead in rotary mode.					
RT-ML	94m	Planned Op Directionally drilling ahead in rotary mode to well TD. Circulate hole clean. Pull out of hole for logging.					

Summary of Period 0000 to 2400 Hrs

Repaired top drive system. Directionally drilling ahead in rotary mode.

Operations For Period 0000 Hrs to 2400 Hrs on 09 Mar 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0300	3.00	IH3	TP (RCS)	RR	3162.0m	Continued to trouble shoot electrical fault with the top drive system. - Replace all brushes on top drive system motor - Trouble shoot and attempt to reprogram existing PLC - no success - Download new program and reload PLC - OK - Reload differential pressure switches and temperature sensors on lube oil pump
0300	0400	1.00	IH3	TP (RCS)	RR	3162.0m	Surface test top drive system. Tested OK.
0400	0500	1.00	IH3	TP (RCS)	TI	3162.0m	Continued to run in the hole with 5" drill pipe from 2140 m to 2594 m.
0500	0600	1.00	IH3	TP (RCS)	RR	3162.0m	Cooling water pump tripped on Engine#1 causing engine to overheat. Engine#1 and #4 tripped causing rig power to shut down. Reset same.
0600	0730	1.50	IH3	TP (RCS)	RR	3162.0m	Continued to run in the hole with 5" drill pipe from 2594 m to 3162 m washing and reaming the last 1.5 stands to bottom.
0730	1030	3.00	IH3	P	DM	3245.0m	Directionally drilled ahead in rotary mode from 3162 m to 3245 m. WOB 0-8 klbs, 83 rpm, 12-17k ft.lbs, 610 gpm at 3100 psi. Rate of penetration, 57 m/hr.
1030	1230	2.00	IH3	TP (RCS)	RR	3245.0m	Plugged up suction line on rig pumps. Stopped drilling and cleaned out pump suction lines.
1230	1330	1.00	IH3	P	DM	3249.0m	Slid from 3245 m to 3249 m. Difficulty sliding. Poor toolface control. Rate of penetration, 25 m/hr.
1330	1730	4.00	IH3	TP (RCS)	RR	3345.0m	Continued directionally drilling ahead in rotary mode from 3249 m to 3345 m. WOB 5-15 klbs, 80 rpm, 13-18k ft.lbs, 610 gpm at 3100 psi. Rate of penetration 47 m/hr.
1730	1830	1.00	IH3	TP (RCS)	RR	3345.0m	Saver sub backed out on connection. Layed out single with saver sub. Pick up single and new saver sub. Torque same.
1830	2400	5.50	IH3	P	DM	3480.0m	Continued directionally drilling ahead in rotary mode from 3345 m to 3480 m. WOB 5-15 klbs, 80 rpm, 16-18k ft.lbs, 610 gpm at 3100 psi. Rate of penetration 54 m/hr.

Operations For Period 0000 Hrs to 0600 Hrs on 10 Mar 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0600	6.00	IH3	P	DM	3560.0m	Continued directionally drilling ahead in rotary mode from 3480 m to 3560 m. WOB 10-22 klbs, 82 rpm, 18k ft.lbs, 620 gpm at 3200 psi. Rate of penetration 20 m/hr.

WBM Data

Cost Today \$ 4,603

Mud Type:	KCI-PHPA-Glycol	API FL:	4.8cc	Cl:	34500.0mg/l	Solids:	8.3	Viscosity	59sec/qt
Sample-From:	Flowline	Filter-Cake:	1/32nd"	Hard/Ca:	560.0mg/l	H2O:	92%	PV	15cp
Time:	23:20	HTHP-FL:	0cc	MBT:	7.5	Oil:	0%	YP	25lb/100ft²
Weight:	9.70ppg	HTHP-cake:	0/32nd"	PM:	0	Sand:	0.25	Gels 10s	3
Temp:	49.0C°			PF:	0.2	Glycol:	4.0%vol	Gels 10m	7
				pH:	9.5	KCl:	6.5%	Fann 003	4
						PHPA:	1ppb	Fann 006	9
								Fann 100	21
								Fann 200	31
								Fann 300	40
								Fann 600	55
Comment									

Shakers, Volumes and Losses Data

Engineer : Peter Dwyer

Equip.	Descr.	Mesh Size	Available	1904bbl	Losses	150bbl	Comments
Centrifuge 6	DFE		Active	297bbl	Downhole	30bbl	
De-Silter 5	DODI	12 x 4"	Mixing	0bbl	Surf+ Equip	30bbl	
Shaker 1	VSM-100	4 x 84	Hole	831bbl	Dumped	50bbl	
Shaker 2	VSM-100	4 x 120	Slug	0bbl	De-Gasser	0bbl	
Shaker 3	VSM-100	4 x 120	Reserve	112bbl	De-Sander	0bbl	
Shaker 4	VSM-100	2 x 145, 2 x 120	Kill	0bbl	De-Silter	30bbl	
			Premix	664bbl	Centrifuge	10bbl	

Bit # 9RR				Wear	I	O1	D	L	B	G	O2	R
Size ("):	8.50in	IADC#	M332	Nozzles		Drilled over last 24 hrs			Calculated over Bit Run			
Mfr:	Reed	WOB(avg)	14.0klb	No.	Size	Progress		318.0m	Cum. Progress		388.0m	
Type:	PDC	RPM(avg)	80	6	14/32nd"	On Bottom Hrs		7.90h	Cum. On Btm Hrs		10.30h	
Serial No.:	207732	F.Rate	610gpm			IADC Drill Hrs		7.90h	Cum IADC Drill Hrs		10.30h	
Bit Model	RSX163	SPP	3050psi			Total Revs		160600	Cum Total Revs		197900	
Depth In	3092.0m	HSI				ROP(avg)		40.25 m/hr	ROP(avg)		37.67 m/hr	
Depth Out	0m	TFA	0.902									

BHA # 16

Weight(Wet)	0klb	Length	220.1m	Torque(max)	18kft-lbs	D.C. (1) Ann Velocity	151.9mpm
Wt Below Jar(Wet)	0klb	String	310.0klb	Torque(Off.Btm)	6kft-lbs	D.C. (2) Ann Velocity	0mpm
		Pick-Up	370.0klb	Torque(On.Btm)	16kft-lbs	H.W.D.P. Ann Velocity	96.4mpm
		Slack-Off	270.0klb			D.P. Ann Velocity	96.4mpm

BHA Run Description 8 1/2" PDC, motor, stabiliser, float sub with ported float installed, PM sub, FEWD, pulser/TM, integral blade stabiliser, 5 x 6 1/2" DC's, 1 x 6 1/2" jars, 15 x 5" HWDP.

BHA Run Comment

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.22m	8.50in	2.50in	10676290	Reed RSX163
Mud Motor	7.67m	6.75in	4.50in	675-495	1.15 deg bend
String Stabiliser	1.75m	6.63in	2.81in	450-066	
Float Sub	0.64m	6.81in	3.00in	DA6015	
MWD Tool	2.81m	6.50in	0in	90052756M6	PM Sub
MWD Tool	7.05m	6.69in	0in	90057455H1GR6	FEWD
MWD Tool	3.06m	6.50in	3.25in	192198	Pulser/TM
String Stabiliser	1.56m	6.50in	3.00in	47697	
Drill Collar	28.06m	6.50in	2.75in		
Drilling Jars	9.27m	6.50in	2.75in	03409D	
Drill Collar	18.59m	6.50in	2.75in		
HWDP	138.80m	6.50in	3.00in		

Survey

MD	Incl Deg	Corr. Az (deg)	TVD	'V' Sect	Dogleg (deg/100ft)	N/S	E/W	Tool Type
0	0	0	0	0	0	0	0	

Survey

MD	Incl Deg	Corr. Az (deg)	TVD	'V' Sect	Dogleg (deg/100ft)	N/S	E/W	Tool Type
3389.79	25.74	18.35	2955.9	1437.05	0.69	1437.05	388.26	mwd
3417.10	24.21	17.99	2980.6	1448.01	5.63	1448.01	391.85	mwd

Survey								
MD	Incl Deg	Corr. Az (deg)	TVD	'V' Sect	Dogleg (deg/100ft)	N/S	E/W	Tool Type
3445.51	22.63	17.53	3006.7	1458.76	5.60	1458.76	395.30	mwd
3475.40	22.06	18.72	3034.3	1469.56	2.44	1469.56	398.83	mwd
3504.57	22.33	18.72	3061.3	1480.00	0.93	1480.00	402.37	mwd

Bulk Stocks						
Name	Unit	In	Used	Adjust	Balance	
Barite	MT	0	0	0	66.2	
Gel	MT	0	0	0	9.4	
Cement	MT	0	0	0	48.2	
Drill Water	m ³	0	48.3	-0.4	656.7	
Fuel Oil	m ³	0	13.5	0.7	496.6	
Potable Water	m ³	32	23.7	0	360.0	

Pumps																	
Pump Data - Last 24 Hrs								Slow Pump Data									
No.	Type	Liner (in)	MW (ppg)	Eff (%)	SPM	SPP (psi)	Flow (gpm)	Depth (m)	SPM1	SPP1 (psi)	Flow1 (gpm)	SPM2	SPP2 (psi)	Flow2 (gpm)	SPM3	SPP3 (psi)	Flow3 (gpm)
1	A1700	6.00	9.50	97	73	3400	305	3288.0	40	425	178	0	0	0	0	0	0
2	12-P160	6.00	9.50	97	0	0	0	0	0	0	0	0	0	0	0	0	0
3	12-P160	6.00	9.50	97	73	3400	305	0	0	0	0	0	0	0	0	0	0

Personnel On Board			
Job Title	Personnel	Company	Pax
OIM	Barry Scott	DOGC	46
Camp boss	Kevin Tolland	ESS	8
ROV Pilot	Bob George	Fugro	2
Cementer	Dave Green	Dowell Schlumberger	2
Mud Engineer	Peter Dwyer	MI Swaco	1
Data Engineer	Dorian Kuhn	Sperry Sun	5
Senior Drilling Supervisor	Peter Dane	BSOC	5
MWD Engineer	Daniel Luoni	Halliburton	2
Directional Driller	Tim Walton	Halliburton	1
Centrifuge Hand	Brendon McPhail	DFE	1
Technician	Mark Anderson	Petrotech	1
Wireline Engineer	Sergio Arellano	Baker Atlas	3
Liner Hanger	Andi Russell	Weatherford	1
CCTV	Darren Edwards	CCTV	2
Crane Repair	Mark Watson	Liebher Cranes	2
Total			82

HSE Summary				
Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	06 Mar 2005	3 Days	Abandon Rig Drill	Based on simulated fire in laundry. Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30 3 Safety meetings held at 1300, 1900 and 0100, attended by all crews. 6 cards by DODI
BOP Test	19 Feb 2005	18 Days	BOP Test	
Fire Drill	06 Mar 2005	3 Days	Fire Drill	
Lost Time Injury	20 May 2003	659 Days	LTI	
Pre-Tour Meetings	09 Mar 2005	0 Days	Routine Pre-Tour Meetings	
Rig Inspection	04 Feb 2005	33 Days	NOPSA Audit	
Safety Meeting	06 Feb 2005	31 Days	Safety meetings held	
Stop Card-Prevention	09 Mar 2005	0 Days	6 STOP cards submitted	

Marine

Weather on 09 Mar 2005							
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period
10.00mi	26.0kn	225deg	1020mbar	20.0C°	0.5m	225deg	0ft/min
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments	
0.3deg	0.3deg	0.30m	3.0m	225deg	0ft/min		
Rig Dir.	Ris. Tension	VDL		Comments			
45.0deg	228.0klb	4283.6klb					

Boats		Arrived (date/time)	Departed (date/time)	Status	Bulks		
Pacific Wrangler			12:20	On route to Melbourne	Item	Unit	Quantity
					Barite	MT	0
					Gel	MT	42
					Cement	MT	123
					Drill Water	M^3	0
					Fuel Oil	M^3	369
					Potable Water	M^3	222
Far Grip		12:30		Standby at rig	Item	Unit	Quantity
					Barite	MT	86
					Gel	MT	48
					Cement	MT	86
					Drill Water	M^3	605
					Fuel Oil	M^3	615
					Potable Water	M^3	620

Helicopter Movement				
Flight #	Company	Arr/Dep. Time	Pax In/Out	Comment
1	Bristow	08:20 / 08:29	2 / 1	

10 Mar 2005 (GMT +10)

From: Peter Dane, Greg Harms
 To: Colin Allport

DRILLING MORNING REPORT # 13
ZaneGrey-1ST2 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	3675.0m	Cur. Hole Size	8.500in	AFE Cost	\$ 0
Field		TVD	3219.8m	Casing OD	9.625in	AFE No.	
Drill Co.	DOGC	Progress	195.0m	Shoe TVD	1936.08m	Daily COST	\$ 338,534
Rig	Ocean Patriot	Days from spud	40.40	FIT	13.70ppg	Cum Cost	\$ 17,659,677
Wtr Dpth(MSL)	72.5m	Days on well	12.29	LOT	0ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600 Pulling out of the hole.					
RT-ML	94m	Planned Op Continue pulling out of the hole. Lay out MWD and motor. Rig up for wireline logging. Run wireline logging.					

Summary of Period 0000 to 2400 Hrs

Drilled to well TD. Circulated hole clean. Short wiper trip to 3070 m. Pull out of the hole.

Operations For Period 0000 Hrs to 2400 Hrs on 10 Mar 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	1700	17.00	IH3	P	DM	3675.0m	Continued directionally drilling ahead in rotary mode from 3480 m to 3675 m. WOB 8-27 klbs, 82 rpm, 15-21k ft.lbs, 615 gpm at 3200 psi. Rate of penetration 14 m/hr.
1700	1800	1.00	IH3	P	CHC	3675.0m	Circulated bottoms up.
1800	2100	3.00	IH3	P	TO	3675.0m	Pulled out of the hole for a short wiper trip from 3675 m to 3070 m. Tight spots encountered at 3145 m to 3160 m, 3260 m to 3265 m, 3340 m to 3360 m.
2100	2200	1.00	IH3	P	TI	3675.0m	Ran back in the hole from 3070 m to 3675 m. Good hole.
2200	2300	1.00	IH3	P	CHC	3675.0m	Circulated bottoms up.
2300	2400	1.00	IH3	P	TO	3675.0m	Flow check. Well static. Pumped slug. Pulled out of the hole from 3675 m to 3520 m. Good hole.

Operations For Period 0000 Hrs to 0600 Hrs on 11 Mar 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0600	6.00	IH3	P	TO	3675.0m	Continued pulling out of the hole from 3520 m to 81 m.

WBM Data				Cost Today \$ 4,800			
Mud Type:	KCl-PHPA-Glycol	API FL:	4.4cc	Cl:	36500.0mg/l	Solids:	8.3
Sample-From:	Flowline	Filter-Cake:	1/32nd"	Hard/Ca:	400.0mg/l	H2O:	92%
Time:	22:30	HTHP-FL:	0cc	MBT:	7.5	Oil:	0%
Weight:	9.70ppg	HTHP-cake:	0/32nd"	PM:	0	Sand:	0.25
Temp:	52.0C°			PF:	0.15	Glycol:	4.0%vol
				pH:	9	KCl:	6.5%
						PHPA:	1ppb
Comment							Viscosity 58sec/qt PV 15cp YP 26lb/100ft² Gels 10s 3 Gels 10m 8 Fann 003 5 Fann 006 9 Fann 100 22 Fann 200 33 Fann 300 41 Fann 600 56

Shakers, Volumes and Losses Data				Engineer : Peter Dwyer			
Equip.	Descr.	Mesh Size	Available	1690bbl	Losses	222bbl	Comments
Centrifuge 6	DFE		Active	306bbl	Downhole	50bbl	
De-Silter 5	DODI	12 x 4"	Mixing	0bbl	Surf+ Equip	37bbl	
Shaker 1	VSM-100	4 x 84	Hole	898bbl	Dumped	40bbl	
Shaker 2	VSM-100	4 x 120	Slug	0bbl	De-Gasser	0bbl	
Shaker 3	VSM-100	4 x 120	Reserve	112bbl	De-Sander	0bbl	
Shaker 4	VSM-100	2 x 145, 2 x 120	Kill	0bbl	De-Silter	80bbl	
			Premix	374bbl	Centrifuge	15bbl	

Bit # 9RR				Wear	I	O1	D	L	B	G	O2	R
Size ("):	8.50in	IADC#	M332	Nozzles		Drilled over last 24 hrs			Calculated over Bit Run			
Mfr:	Reed	WOB(avg)	18.0klb	No. Size		Progress		195.0m	Cum. Progress		583.0m	
Type:	PDC	RPM(avg)	82	6	14/32nd"	On Bottom Hrs		13.10h	Cum. On Btm Hrs		23.40h	
Serial No.:	207732	F.Rate	615gpm			IADC Drill Hrs		13.10h	Cum IADC Drill Hrs		23.40h	
Bit Model	RSX163	SPP	3200psi			Total Revs		370800	Cum Total Revs		568700	
Depth In	3092.0m	HSI				ROP(avg)		14.89 m/hr	ROP(avg)		24.91 m/hr	
Depth Out	3675.0m	TFA	0.902									

BHA # 16							
Weight(Wet)	0klb	Length	220.1m	Torque(max)	21kft-lbs	D.C. (1) Ann Velocity	153.1mpm
Wt Below Jar(Wet)	0klb	String	320.0klb	Torque(Off.Btm)	6kft-lbs	D.C. (2) Ann Velocity	0mpm
		Pick-Up	390.0klb	Torque(On.Btm)	17kft-lbs	H.W.D.P. Ann Velocity	97.2mpm
		Slack-Off	290.0klb			D.P. Ann Velocity	97.2mpm

BHA Run Description 8 1/2" PDC, motor, stabiliser, float sub with ported float installed, PM sub, FEWD, pulser/TM, integral blade stabiliser, 5 x 6 1/2" DC's, 1 x 6 1/2" jars, 15 x 5" HWDP.

BHA Run Comment

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.22m	8.50in	2.50in	10676290	Reed RSX163
Mud Motor	7.67m	6.75in	4.50in	675-495	1.15 deg bend
String Stabiliser	1.75m	6.63in	2.81in	450-066	
Float Sub	0.64m	6.81in	3.00in	DA6015	
MWD Tool	2.81m	6.50in	0in	90052756M6	PM Sub
MWD Tool	7.05m	6.69in	0in	90057455H1GR6	FEWD
MWD Tool	3.06m	6.50in	3.25in	192198	Pulser/TM
String Stabiliser	1.56m	6.50in	3.00in	47697	
Drill Collar	28.06m	6.50in	2.75in		
Drilling Jars	9.27m	6.50in	2.75in	03409D	
Drill Collar	18.59m	6.50in	2.75in		
HWDP	138.80m	6.50in	3.00in		

Survey								
MD	Incl Deg	Corr. Az (deg)	TVD	'V' Sect	Dogleg (deg/100ft)	N/S	E/W	Tool Type
0	0	0	0	0	0	0	0	

Survey								
MD	Incl Deg	Corr. Az (deg)	TVD	'V' Sect	Dogleg (deg/100ft)	N/S	E/W	Tool Type
3590.58	22.01	21.18	3140.9	1510.68	2.11	1510.68	413.26	mwd
3619.85	21.30	20.71	3168.1	1520.77	2.50	1520.77	417.12	mwd
3649.53	20.38	21.41	3195.9	1530.62	3.21	1530.62	420.92	mwd
3662.14	19.70	21.54	3207.7	1534.64	5.40	1534.64	422.50	mwd
3675.00	19.70	21.54	3219.8	1538.68	0	1538.68	424.09	mwd

Bulk Stocks					
Name	Unit	In	Used	Adjust	Balance
Barite	MT	0	8.96	0	57.3
Gel	MT	0	0	0	9.4
Cement	MT	0	0	0	48.2
Drill Water	m³	0	70.7	0	586.0
Fuel Oil	m³	0	16.5	0	480.1
Potable Water	m³	34	29.9	0	364.1

Pumps

[illegible]

Personnel On Board

Job Title	Personnel	Company	Pax
OIM	Barry Scott	DOGC	47
Camp boss	Kevin Tolland	ESS	9
ROV Pilot	Bob George	Fugro	2
Cementer	Dave Green	Dowell Schlumberger	2
Mud Engineer	Peter Dwyer	MI Swaco	1
Data Engineer	Dorian Kuhn	Sperry Sun	5
Senior Drilling Supervisor	Peter Dane	BSOC	5
MWD Engineer	Daniel Luoni	Halliburton	2
Directional Driller	Tim Walton	Halliburton	1
Centrifuge Hand	Brendon McPhail	DFE	1
Technician	Mark Anderson	Petrotech	1
Wireline Engineer	Peter Ristau	Baker Atlas	7
Liner Hanger	Andi Russell	Weatherford	1
CCTV	Darren Edwards	CCTV	2
Total			86

HSE Summary

Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	06 Mar 2005	4 Days	Abandon Rig Drill	
BOP Test	19 Feb 2005	19 Days	BOP Test	
Fire Drill	06 Mar 2005	4 Days	Fire Drill	Based on simulated fire in laundry.
Lost Time Injury	20 May 2003	660 Days	LTI	
Pre-Tour Meetings	10 Mar 2005	0 Days	Routine Pre-Tour Meetings	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30
Rig Inspection	04 Feb 2005	34 Days	NOPSA Audit	
Safety Meeting	06 Feb 2005	32 Days	Safety meetings held	3 Safety meetings held at 1300, 1900 and 0100, attended by all crews.
Stop Card-Prevention	10 Mar 2005	0 Days	4 STOP cards submitted	4 cards by DODI

Marine

Weather on 10 Mar 2005

Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period
10.00mi	10.0kn	225deg	1020mbar	20.0C°	0m	225deg	0ft/min
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments	
0.3deg	0.3deg	0.30m	2.0m	225deg	0ft/min		
Rig Dir.	Ris. Tension	VDL		Comments			
45.0deg	228.0klb	4164.5klb					

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Pacific Wrangler			Melbourne	Item	Unit	Quantity
				Barite	MT	0
				Gel	MT	0
				Cement	MT	0
				Drill Water	M^3	0
				Fuel Oil	M^3	0
				Potable Water	M^3	0
Far Grip			Standby at rig	Item	Unit	Quantity
				Barite	MT	86
				Gel	MT	46
				Cement	MT	86

				Item	Unit	Quantity
				Drill Water	M^3	605
				Fuel Oil	M^3	609
				Potable Water	M^3	605

Helicopter Movement				
Flight #	Company	Arr/Dep. Time	Pax In/Out	Comment
1	Bristow	09:05 / 09:18	7 / 3	

11 Mar 2005 (GMT +10)

From: Peter Dane, Greg Harms
To: Colin Allport

DRILLING MORNING REPORT # 14
ZaneGrey-1ST2 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	3675.0m	Cur. Hole Size	8.500in	AFE Cost	\$ 0
Field		TVD	3219.8m	Casing OD	9.625in	AFE No.	
Drill Co.	DOGC	Progress	195.0m	Shoe TVD	1936.08m	Daily COST	\$ 339,505
Rig	Ocean Patriot	Days from spud	41.40	FIT	13.70ppg	Cum Cost	\$ 17,999,182
Wtr Dpth(MSL)	72.5m	Days on well	13.29	LOT	0ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600 Wireline logging with RCI tool.					
RT-ML	94m	Planned Op Wireline logging with RCI tool.					

Summary of Period 0000 to 2400 Hrs

Continued pulling out of the hole with BHA. Layed out MWD, mud motor and bit. Rigged up for wireline logging. Wireline logging with Grand Slam tool.

Operations For Period 0000 Hrs to 2400 Hrs on 11 Mar 2005

From	To	Hrs	Phse	Clis (RC)	Op	Depth	Activity Description
0000	0600	6.00	IH3	P	TO	3675.0m	Continued pulling out of the hole from 3520 m to 81 m.
0600	0700	1.00	IH3	P	HT	3675.0m	Continued pulling out of the hole. Layed out MWD, Mud motor and bit
0700	0800	1.00	IH3	P	LOG	3675.0m	Rigged up to run wireline.
0800	1030	2.50	EI3	P	LOG	3675.0m	Made up Grand Slam logging tools.
1030	2400	13.50	EI3	P	LOG	3675.0m	Continued wireline logging with Grand Slam logging tools.

Operations For Period 0000 Hrs to 0600 Hrs on 12 Mar 2005

From	To	Hrs	Phse	Clis (RC)	Op	Depth	Activity Description
0000	0600	6.00	EI3	P	LOG	3675.0m	Wireline logging with RCI tool.

WBM Data

Cost Today \$ 874

Mud Type:	KCI-PHPA-Glycol	API FL:	4.4cc	Cl:	36500.0mg/l	Solids:	8.3	Viscosity	61sec/qt
Sample-From:	Active	Filter-Cake:	1/32nd"	Hard/Ca:	400.0mg/l	H2O:	92%	PV	16cp
Time:	23:00	HTHP-FL:	0cc	MBT:	7.5	Oil:	0%	YP	26lb/100ft²
Weight:	9.70ppg	HTHP-cake:	0/32nd"	PM:	0	Sand:	0.25	Gels 10s	4
Temp:	32.0C°			PF:	0.15	Glycol:	4.0%vol	Gels 10m	8
				pH:	9	KCl:	6.5%	Fann 003	5
						PHPA:	1ppb	Fann 006	9
								Fann 100	23
								Fann 200	33
								Fann 300	42
								Fann 600	58
Comment									

Shakers, Volumes and Losses Data

Engineer : Peter Dwyer

Equip.	Descr.	Mesh Size	Available	1690bbl	Losses	0bbl	Comments
Centrifuge 6	DFE		Active	306bbl	Downhole	0bbl	
De-Silter 5	DODI	12 x 4"	Mixing	0bbl	Surf+ Equip	0bbl	
Shaker 1	VSM-100	4 x 84	Hole	898bbl	Dumped	0bbl	
Shaker 2	VSM-100	4 x 120	Slug	0bbl	De-Gasser	0bbl	
Shaker 3	VSM-100	4 x 120	Reserve	112bbl	De-Sander	0bbl	
Shaker 4	VSM-100	2 x 145, 2 x 120	Kill	0bbl	De-Silter	0bbl	
			Premix	374bbl	Centrifuge	0bbl	

Bit # 9RR

Wear	I	O1	D	L	B	G	O2	R
	2	3	WT	A	X	1	BU	TD
Size ("):	8.50in	IADC#	M332	Nozzles		Drilled over last 24 hrs		Calculated over Bit Run

Mfr:	Reed	WOB(avg)	0klb	No.	Size	Progress	195.0m	Cum. Progress	778.0m
Type:	PDC	RPM(avg)	0	6	14/32nd"	On Bottom Hrs	13.10h	Cum. On Btm Hrs	36.50h
Serial No.:	207732	F.Rate	0gpm			IADC Drill Hrs	13.10h	Cum IADC Drill Hrs	36.50h
Bit Model	RSX163	SPP	0psi			Total Revs	370800	Cum Total Revs	939500
Depth In	3092.0m	HSI				ROP(avg)	14.89 m/hr	ROP(avg)	21.32 m/hr
Depth Out	3675.0m	TFA	0.902						

BHA # 16

Weight(Wet)	0klb	Length	220.1m	Torque(max)	0kft-lbs	D.C. (1) Ann Velocity	0mpm
Wt Below Jar(Wet)	0klb	String	0klb	Torque(Off.Btm)	0kft-lbs	D.C. (2) Ann Velocity	0mpm
		Pick-Up	0klb	Torque(On.Btm)	0kft-lbs	H.W.D.P. Ann Velocity	0mpm
		Slack-Off	0klb			D.P. Ann Velocity	0mpm

BHA Run Description 8 1/2" PDC, motor, stabiliser, float sub with ported float installed, PM sub, FEWD, pulser/TM, integral blade stabiliser, 5 x 6 1/2" DC's, 1 x 6 1/2" jars, 15 x 5" HWDP.

BHA Run Comment

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.22m	8.50in	2.50in	10676290	Reed RSX163
Mud Motor	7.67m	6.75in	4.50in	675-495	1.15 deg bend
String Stabiliser	1.75m	6.63in	2.81in	450-066	
Float Sub	0.64m	6.81in	3.00in	DA6015	
MWD Tool	2.81m	6.50in	0in	90052756M6	PM Sub
MWD Tool	7.05m	6.69in	0in	90057455H1GR6	FEWD
MWD Tool	3.06m	6.50in	3.25in	192198	Pulser/TM
String Stabiliser	1.56m	6.50in	3.00in	47697	
Drill Collar	28.06m	6.50in	2.75in		
Drilling Jars	9.27m	6.50in	2.75in	03409D	
Drill Collar	18.59m	6.50in	2.75in		
HWDP	138.80m	6.50in	3.00in		

Survey

MD	Incl Deg	Corr. Az (deg)	TVD	'V' Sect	Dogleg (deg/100ft)	N/S	E/W	Tool Type
0	0	0	0	0	0	0	0	

Survey

MD	Incl Deg	Corr. Az (deg)	TVD	'V' Sect	Dogleg (deg/100ft)	N/S	E/W	Tool Type
3590.58	22.01	21.18	3140.9	1510.68	2.11	1510.68	413.26	mwd
3619.85	21.30	20.71	3168.1	1520.77	2.50	1520.77	417.12	mwd
3649.53	20.38	21.41	3195.9	1530.62	3.21	1530.62	420.92	mwd
3662.14	19.70	21.54	3207.7	1534.64	5.40	1534.64	422.50	mwd
3675.00	19.70	21.54	3219.8	1538.68	0	1538.68	424.09	mwd

Bulk Stocks

Name	Unit	In	Used	Adjust	Balance
Barite	MT	0	0	0	57.3
Gel	MT	0	0	0	9.4
Cement	MT	0	0	0	48.2
Drill Water	m³	0	24.2	0	561.8
Fuel Oil	m³	0	16.7	0	463.4
Potable Water	m³	30	39.7	0	354.4

Pumps

Pump Data - Last 24 Hrs								Slow Pump Data									
No.	Type	Liner (in)	MW (ppg)	Eff (%)	SPM	SPP (psi)	Flow (gpm)	Depth (m)	SPM1	SPP1 (psi)	Flow1 (gpm)	SPM2	SPP2 (psi)	Flow2 (gpm)	SPM3	SPP3 (psi)	Flow3 (gpm)

Pumps																	
Pump Data - Last 24 Hrs									Slow Pump Data								
1	A1700	6.00	9.70	97	0	0	0	0	0	0	0	0	0	0	0	0	0
2	12-P160	6.00	9.70	97	0	0	0	0	0	0	0	0	0	0	0	0	0
3	12-P160	6.00	9.70	97	0	0	0	0	0	0	0	0	0	0	0	0	0

Personnel On Board			
Job Title	Personnel	Company	Pax
OIM	Barry Scott	DOGC	49
Camp boss	Kevin Tolland	ESS	8
ROV Pilot	Bob George	Fugro	2
Cementer	Dave Green	Dowell Schlumberger	2
Mud Engineer	Peter Dwyer	MI Swaco	1
Data Engineer	Dorian Kuhn	Sperry Sun	3
Senior Drilling Supervisor	Peter Dane	BSOC	5
MWD Engineer	Angus Owaekwuotu	Halliburton	1
Technician	Mark Anderson	Petrotech	2
Wireline Engineer	Peter Ristau	Baker Atlas	7
Liner Hanger	Andi Russell	Weatherford	1
CCTV	Darren Edwards	CCTV	2
Total			83

HSE Summary				
Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	06 Mar 2005	5 Days	Abandon Rig Drill	Based on simulated fire in laundry.
BOP Test	19 Feb 2005	20 Days	BOP Test	
Fire Drill	06 Mar 2005	5 Days	Fire Drill	
Lost Time Injury	20 May 2003	661 Days	LTI	
Pre-Tour Meetings	11 Mar 2005	0 Days	Routine Pre-Tour Meetings	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30
Rig Inspection	04 Feb 2005	35 Days	NOPSA Audit	3 Safety meetings held at 1300, 1900 and 0100, attended by all crews.
Safety Meeting	06 Feb 2005	33 Days	Safety meetings held	
Stop Card-Prevention	11 Mar 2005	0 Days	5 STOP cards submitted	5 cards by DODI

Marine							
Weather on 11 Mar 2005							
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period
10.00mi	10.0kn	000deg	1020mbar	18.0C°	0m	065deg	0ft/min
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments	
0.3deg	0.3deg	0.30m	0.5m	065deg	0ft/min		
Rig Dir.	Ris. Tension	VDL		Comments			
45.0deg	228.0klb	3988.2klb					

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Pacific Wrangler	17:45		Standby at rig	Item	Unit	Quantity
				Barite	MT	43
				Gel	MT	42
				Cement	MT	123
				Drill Water	M^3	540
				Fuel Oil	M^3	682
				Potable Water	M^3	208
Far Grip			Standby at rig	Item	Unit	Quantity
				Barite	MT	86
				Gel	MT	48
				Cement	MT	86
				Drill Water	M^3	605
				Fuel Oil	M^3	604
				Potable Water	M^3	610

Helicopter Movement				
Flight #	Company	Arr/Dep. Time	Pax In/Out	Comment
1	Bristow	09:30 / 09:44	9 / 12	

12 Mar 2005 (GMT +10)

From: Peter Dane, Greg Harms
To: Colin Allport

DRILLING MORNING REPORT # 15
ZaneGrey-1ST2 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	3675.0m	Cur. Hole Size	8.500in	AFE Cost	\$ 0
Field		TVD	3219.8m	Casing OD	9.625in	AFE No.	
Drill Co.	DOGC	Progress	0m	Shoe TVD	1936.08m	Daily COST	\$ 308,334
Rig	Ocean Patriot	Days from spud	42.40	FIT	13.70ppg	Cum Cost	\$ 18,307,516
Wtr Dpth(MSL)	72.5m	Days on well	14.29	LOT	0ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600 Reterminating wireline cable.					
RT-ML	94m	Planned Op Retrieve RCI logging tool. Reconnect wireline cable. Continue wireline logging with RCI tool.					

Summary of Period 0000 to 2400 Hrs

Continued running wireline Grand Slam logging tool. Layed out same. Made up RCI logging tool. Ran in hole with same. RCI logging tool stuck in hole. Unable to pull TCI tool free. Ran in hole stripping over wireline to fish wireline RCI tool.

Operations For Period 0000 Hrs to 2400 Hrs on 12 Mar 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0200	2.00	EI3	P	LOG	3675.0m	Continued wireline logging with Grand Slam logging tool. Layed out same.
0200	0500	3.00	EI3	P	LOG	3675.0m	Made up wireline RCI logging tool.
0500	0800	3.00	EI3	P	LOG	3675.0m	Continued wireline logging with RCI tool.
0800	0900	1.00	EI3	P	LOG	3675.0m	Wireline RCI tool stuck in hole. Unable to free RCI tool.
0900	1000	1.00	EI3	TP (WIR)	LOG	3675.0m	Rigged down wireline equipment and compensator line.
1000	1130	1.50	EI3	TP (WIR)	LOG	3675.0m	Rigged up to strip over wireline to retrieve fish.
1130	1200	0.50	EI3	TP (WIR)	LOG	3675.0m	Tension wireline. Cut wireline cable.
1200	1430	2.50	EI3	TP (WIR)	LOG	3675.0m	Continued rigging up to strip over wireline. Made up wireline surface latching equipment. Tested same. Tested OK
1430	2000	5.50	EI3	TP (WIR)	LOG	3675.0m	Ran in the hole with 3.375" grapple stripping over wireline from surface to 1522 m with 5" drill pipe.
2000	2100	1.00	EI3	TP (WIR)	LOG	3675.0m	Cut wireline and rehead same due to excessive tension.
2100	2400	3.00	EI3	TP (WIR)	LOG	3675.0m	Continued running in the hole with 3.375" grapple stripping over wireline from 1522 to 2171 m with 5" drill pipe.

Operations For Period 0000 Hrs to 0600 Hrs on 13 Mar 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0330	3.50	EI3	TP (WIR)	LOG	3675.0m	Continued running in the hole with 3.375" grapple stripping over wireline from 2171 to 3145 m with 5" drill pipe.
0330	0400	0.50	EI3	TP (RCS)	LOG	3675.0m	Troubleshoot top drive problem.
0400	0500	1.00	EI3	TP (WIR)	LOG	3675.0m	Circulated slowly above RCI logging tool.
0500	0530	0.50	EI3	TP (WIR)	LOG	3675.0m	Attempted to latch RCI logging tool. Latched successfully.
0530	0600	0.50	EI3	TP (WIR)	LOG	3675.0m	Pulled back 2 joints. Reterminate wireline cable. Continued trouble shooting top drive problem.

Personnel On Board

Wireline Engineer	Peter Ristau	Baker Atlas	7
Liner Hanger	Andi Russell	Weatherford	1
CCTV	Darren Edwards	CCTV	2
Total			83

HSE Summary

Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	06 Mar 2005	6 Days	Abandon Rig Drill	Based on simulated fire in laundry.
BOP Test	19 Feb 2005	21 Days	BOP Test	
Fire Drill	06 Mar 2005	6 Days	Fire Drill	
Lost Time Injury	20 May 2003	662 Days	LTI	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30
Pre-Tour Meetings	11 Mar 2005	1 Day	Routine Pre-Tour Meetings	
Rig Inspection	04 Feb 2005	36 Days	NOPSA Audit	
Safety Meeting	06 Feb 2005	34 Days	Safety meetings held	3 Safety meetings held at 1300, 1900 and 0100, attended by all crews.
Stop Card-Prevention	11 Mar 2005	1 Day	5 STOP cards submitted	5 cards by DODI

Marine

Weather on 12 Mar 2005

Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period
10.00mi	10.0kn	110deg	1017mbar	21.0C°	0m	110deg	0ft/min
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments	
0.3deg	0.3deg	0.30m	1.0m	225deg	0ft/min		
Rig Dir.	Ris. Tension	VDL		Comments			
45.0deg	228.0klb	3970.5klb					

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Pacific Wrangler			Standby at rig	Item	Unit	Quantity
				Barite	MT	43
				Gel	MT	42
				Cement	MT	123
				Drill Water	M³	540
				Fuel Oil	M³	679
				Potable Water	M³	206
Far Grip			Standby at rig	Item	Unit	Quantity
				Barite	MT	86
				Gel	MT	48
				Cement	MT	86
				Drill Water	M³	605
				Fuel Oil	M³	600
				Potable Water	M³	605

13 Mar 2005 (GMT +10)

From: Peter Dane, Greg Harms
 To: Colin Allport

DRILLING MORNING REPORT # 16
ZaneGrey-1ST2 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	3675.0m	Cur. Hole Size	8.500in	AFE Cost	\$ 0
Field		TVD	3219.8m	Casing OD	9.625in	AFE No.	
Drill Co.	DOGC	Progress	0m	Shoe TVD	1936.08m	Daily COST	\$ 276,582
Rig	Ocean Patriot	Days from spud	43.40	FIT	13.70ppg	Cum Cost	\$ 18,584,098
Wtr Dpth(MSL)	72.5m	Days on well	15.29	LOT	0ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600 Continued pulling out of the hole.					
RT-ML	94m	Planned Op Continued pulling out of the hole. Lay out RCI tool. Slip and cut drill line. Commence plug and abandonment.					

Summary of Period 0000 to 2400 Hrs

Continued stripping in the hole over the wireline cable. Retrieve fish. Reterminate wireline cable. Continued wireline RCI operations taking pressure samples. RCI tool failed. DODI continued trouble shooting top drive system from 3:30 am onwards.

Operations For Period 0000 Hrs to 2400 Hrs on 13 Mar 2005

From	To	Hrs	Phse	Clis (RC)	Op	Depth	Activity Description
0000	0330	3.50	EI3	TP (WIR)	LOG	3675.0m	Continued running in the hole with 3.375" grapple stripping over wireline from 2171 to 3146 m with 5" drill pipe.
0330	0400	0.50	EI3	TP (RCS)	LOG	3675.0m	Troubleshoot top drive problem.
0330	0400	0.50	EI3	TP (WIR)	LOG	3675.0m	Circulated at 30 spm above RCI logging tool.
0430	0500	0.50	EI3	TP (WIR)	LOG	3675.0m	Attempted to latch RCI logging tool. Latched successfully.
0500	1000	5.00	EI3	TP (WIR)	LOG	3675.0m	Pulled back 2 joints. Reterminate wireline cable. Continued trouble shooting top drive problem.
1000	2330	13.50	EI3	TP (WIR)	LOG	3675.0m	Wireline logging on 5" drill pipe with RCI tool taking 27 pressure samples (26 good, 1 tight), 1 fluid sample over the interval 3190 m to 3622 m.
2330	2400	0.50	EI3	TP (WIR)	LOG	3675.0m	Pulled out of the hole with wireline logging tools on 5" drill pipe due to RCI tool failure.

Operations For Period 0000 Hrs to 0600 Hrs on 14 Mar 2005

From	To	Hrs	Phse	Clis (RC)	Op	Depth	Activity Description
0000	0530	5.50	EI3	TP (WIR)	LOG	3675.0m	Continued pulling out of the hole with wireline RCI tool to 3165 m. Layed out side entry sub. Pulled wireline cable breaking at weakpoint. Retrieved wireline cable.
0530	0600	0.50	EI3	TP (WIR)	LOG	3675.0m	Continued pulling out of the hole with wireline RCI tool

WBM Data

Cost Today \$ 0

Mud Type:	KCI-PHPA-Glycol	API FL:	4.4cc	Cl:	36500.0mg/l	Solids:	8.3	Viscosity	63sec/qt
Sample-From:	Active	Filter-Cake:	1/32nd"	Hard/Ca:	400.0mg/l	H2O:	92%	PV	16cp
Time:	22:40	HTHP-FL:	0cc	MBT:	7.5	Oil:	0%	YP	26lb/100ft²
Weight:	9.70ppg	HTHP-cake:	0/32nd"	PM:	0	Sand:	0.25	Gels 10s	4
Temp:	32.0C°			PF:	0.15	Glycol:	4.0%vol	Gels 10m	8
				pH:	9	KCI:	6.5%	Fann 003	6
						PHPA:	1ppb	Fann 006	9
								Fann 100	22
								Fann 200	34
								Fann 300	42
								Fann 600	58
Comment									

Shakers, Volumes and Losses Data

Engineer : Peter Dwyer

Equip.	Descr.	Mesh Size	Available	1602bbl	Losses	40bbl	Comments
Centrifuge 6	DFE		Active	257bbl	Downhole	40bbl	
De-Silter 5	DODI	12 x 4"	Mixing	0bbl	Surf+ Equip	0bbl	
Shaker 1	VSM-100	4 x 84	Hole	968bbl	Dumped	0bbl	
Shaker 2	VSM-100	4 x 120	Slug	0bbl	De-Gasser	0bbl	
Shaker 3	VSM-100	4 x 120	Reserve	112bbl	De-Sander	0bbl	
Shaker 4	VSM-100	2 x 145, 2 x 120	Kill	0bbl	De-Silter	0bbl	
			Premix	265bbl	Centrifuge	0bbl	

Survey

MD	Incl Deg	Corr. Az (deg)	TVD	'V' Sect	Dogleg (deg/100ft)	N/S	E/W	Tool Type
0	0	0	0	0	0	0	0	

Survey

MD	Incl Deg	Corr. Az (deg)	TVD	'V' Sect	Dogleg (deg/100ft)	N/S	E/W	Tool Type
3590.58	22.01	21.18	3140.9	1510.68	2.11	1510.68	413.26	mwd
3619.85	21.30	20.71	3168.1	1520.77	2.50	1520.77	417.12	mwd
3649.53	20.38	21.41	3195.9	1530.62	3.21	1530.62	420.92	mwd
3662.14	19.70	21.54	3207.7	1534.64	5.40	1534.64	422.50	mwd
3675.00	19.70	21.54	3219.8	1538.68	0	1538.68	424.09	mwd

Bulk Stocks

Name	Unit	In	Used	Adjust	Balance
Barite	MT	0	0	0	57.3
Gel	MT	0	0	0	9.4
Cement	MT	0	0	0	48.2
Drill Water	m³	0	6	0	537.7
Fuel Oil	m³	0	11.1	0	437.7
Potable Water	m³	29	41.2	0	331.1

Personnel On Board

Job Title	Personnel	Company	Pax
OIM	Barry Scott	DOGC	49
Camp boss	Kevin Tolland	ESS	8
ROV Pilot	Bob George	Fugro	4
Cementer	Dave Green	Dowell Schlumberger	2
Mud Engineer	Peter Dwyer	MI Swaco	1
Data Engineer	Dorian Kuhn	Sperry Sun	2
Senior Drilling Supervisor	Peter Dane	BSOC	5
Technician	Mark Anderson	Petrotech	2
Wireline Engineer	Peter Ristau	Baker Atlas	7
CCTV	Darren Edwards	CCTV	2
Casing Cutting	Tom Armstrong	Smith	1
Total			83

HSE Summary

Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	13 Mar 2005	0 Days	Abandon Rig Drill	
BOP Test	19 Feb 2005	22 Days	BOP Test	
Fire Drill	13 Mar 2005	0 Days	Fire Drill	Based on simulated fire in Store room.
Lost Time Injury	20 May 2003	663 Days	LTI	
Pre-Tour Meetings	13 Mar 2005	0 Days	Routine Pre-Tour Meetings	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30

HSE Summary

Events	Date of last	Days Since	Descr.	Remarks
Rig Inspection	04 Feb 2005	37 Days	NOPSA Audit	3 Safety meetings held at 1300, 1900 and 0100, attended by all crews. 6 cards by DODI 1 card by T/party
Safety Meeting	13 Feb 2005	28 Days	Safety meetings held	
Stop Card-Prevention	13 Mar 2005	0 Days	7 STOP cards submitted	

Marine

Weather on 13 Mar 2005

Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period
10.00mi	10.0kn	110deg	1017mbar	21.0C°	0m	110deg	0ft/min
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments	
0.3deg	0.3deg	0.30m	1.0m	225deg	0ft/min		
Rig Dir.	Ris. Tension	VDL		Comments			
45.0deg	228.0klb	3970.5klb					

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Pacific Wrangler			Standby at rig	Item	Unit	Quantity
				Barite	MT	43
				Gel	MT	42
				Cement	MT	123
				Drill Water	M^3	540
				Fuel Oil	M^3	677
				Potable Water	M^3	202
Far Grip		13:45	Departed to Melbourne	Item	Unit	Quantity
				Barite	MT	86
				Gel	MT	48
				Cement	MT	86
				Drill Water	M^3	605
				Fuel Oil	M^3	597
				Potable Water	M^3	602

Helicopter Movement

Flight #	Company	Arr/Dep. Time	Pax In/Out	Comment
1	Bristow	09:37 / 09:47	3 / 3	

14 Mar 2005 (GMT +10)

From: Peter Dane, Greg Harms
To: Colin Allport

DRILLING MORNING REPORT # 17
ZaneGrey-1ST2 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	3675.0m	Cur. Hole Size	8.500in	AFE Cost	\$ 0
Field		TVD	3219.8m	Casing OD	9.625in	AFE No.	
Drill Co.	DOGC	Progress	0m	Shoe TVD	1936.08m	Daily COST	\$ 309,139
Rig	Ocean Patriot	Days from spud	44.40	FIT	13.70ppg	Cum Cost	\$ 18,893,237
Wtr Dpth(MSL)	72.5m	Days on well	16.29	LOT	0ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600		Laying out drill pipe and drill collars while waiting on cement.			
RT-ML	94m	Planned Op		Tag cement plug. Set second cement plug. Lay out drill pipe while waiting on cement. Tag cement. Continued laying out drill pipe.			

Summary of Period 0000 to 2400 Hrs

Pulled out of the hole with wireline RCI tool. Layed out side entry sub. Parted wireline cable at the weak point. Retrieve wireline cable. Continued pulling out of the hole. Layed out RCI tool. Picked up cement stinger. Ran in hole with the cement stinger. Circulated and spotted HI-VIS pill.

Operations For Period 0000 Hrs to 2400 Hrs on 14 Mar 2005

From	To	Hrs	Phse	Clis (RC)	Op	Depth	Activity Description
0000	0130	1.50	EI3	TP (WIR)	LOG	3675.0m	Continued pulling out of the hole with wireline RCI tool to 3146 m.
0130	0430	3.00	EI3	TP (WIR)	LOG	3675.0m	Layed out side entry sub. Pulled wireline cable breaking it at the weakpoint. Retrieved wireline cable.
0430	0500	0.50	EI3	TP (WIR)	LOG	3675.0m	Rigged down wireline equipment.
0500	0530	0.50	EI3	TP (WIR)	LOG	3675.0m	Pumped slug. Pulled out of the hole with fish on 5" drill pipe.
0530	1130	6.00	EI3	P	LOG	3675.0m	Continued pulling out of the hole with wireline RCI tool
1130	1300	1.50	EI3	P	LOG	3675.0m	Layed out wireline RCI tool.
1300	1500	2.00	EI3	P	SC	3675.0m	Slipped and cut 140' of drill line.
1500	1530	0.50	EI3	P	RS	3675.0m	Service dolly rollers.
1530	2230	7.00	PA	P	TI	3675.0m	Made up cement stinger, (14 joints of 2.875" drill pipe and mule shoe). Ran in hole with same to 144.88 m. Continued running in hole with 5" drill pipe to 3390 m.
2230	2330	1.00	PA	P	CIR	3675.0m	Circulated bottoms up. Spotted 10 bbls HI-VIS pill at 3390 m.
2330	2400	0.50	EI3	P	TO	3675.0m	Pulled out of the hole from 3390 m to 3350 m.

Operations For Period 0000 Hrs to 0600 Hrs on 15 Mar 2005

From	To	Hrs	Phse	Clis (RC)	Op	Depth	Activity Description
0000	0030	0.50	EI3	P	RUC	3675.0m	Rigged up for cement job.
0030	0130	1.00	EI3	P	CMP	3675.0m	Set balanced cement plug#1 from 3350 m to 3250 m across hydrocarbon bearing zone 3300 m to 3310 m.
0130	0200	0.50	EI3	P	CMP	3675.0m	Rigged down after cement plug.
0200	0600	4.00	EI3	P	WOC	3675.0m	Layed out drill pipe while waiting on cement.

General Comments

00:00 TO 24:00 Hrs ON 14 Mar 2005

Comments	Rig Requirements	Lessons Learnt
Top drive system was repaired. SCR Bay 6: -Faulty contactor inhibiting SCR 6 enable signal. -replacing contactor -tested OK SCR Bay 2: -replace faulty logic control circuit card -top drive system tested OK on CSR Bay 2	Top Drive System	

WBM Data				Cost Today \$ 0			
Mud Type:	KCI-PHPA-Glycol	API FL:	4.4cc	Cl:	36500.0mg/l	Solids:	8.3
Sample-From:	Active	Filter-Cake:	1/32nd"	Hard/Ca:	400.0mg/l	H2O:	92%
Time:	22:40	HTHP-FL:	0cc	MBT:	7.5	Oil:	0%
Weight:	9.70ppg	HTHP-cake:	0/32nd"	PM:	0	Sand:	0.25
Temp:	32.0C°			PF:	0.15	Glycol:	4.0%vol
				pH:	9	KCI:	6.5%
						PHPA:	1ppb
Comment						Fann 003	6
						Fann 006	9
						Fann 100	22
						Fann 200	34
						Fann 300	42
						Fann 600	58

Shakers, Volumes and Losses Data				Engineer : Peter Dwyer			
Equip.	Descr.	Mesh Size	Available	1602bbl	Losses	40bbl	Comments
Centrifuge 6	DFE		Active	257bbl	Downhole	40bbl	
De-Silter 5	DODI	12 x 4"	Mixing	0bbl	Surf+ Equip	0bbl	
Shaker 1	VSM-100	4 x 84	Hole	968bbl	Dumped	0bbl	
Shaker 2	VSM-100	4 x 120	Slug	0bbl	De-Gasser	0bbl	
Shaker 3	VSM-100	4 x 120	Reserve	112bbl	De-Sander	0bbl	
Shaker 4	VSM-100	2 x 145, 2 x 120	Kill	0bbl	De-Silter	0bbl	
			Premix	265bbl	Centrifuge	0bbl	

Survey								
MD	Incl Deg	Corr. Az (deg)	TVD	'V' Sect	Dogleg (deg/100ft)	N/S	E/W	Tool Type
0	0	0	0	0	0	0	0	

Survey								
MD	Incl Deg	Corr. Az (deg)	TVD	'V' Sect	Dogleg (deg/100ft)	N/S	E/W	Tool Type
3590.58	22.01	21.18	3140.9	1510.68	2.11	1510.68	413.26	mwd
3619.85	21.30	20.71	3168.1	1520.77	2.50	1520.77	417.12	mwd
3649.53	20.38	21.41	3195.9	1530.62	3.21	1530.62	420.92	mwd
3662.14	19.70	21.54	3207.7	1534.64	5.40	1534.64	422.50	mwd
3675.00	19.70	21.54	3219.8	1538.68	0	1538.68	424.09	mwd

Bulk Stocks						
Name	Unit	In	Used	Adjust	Balance	
Barite	MT	0	0	0.47	57.8	
Gel	MT	0	0	0	9.4	
Cement	MT	0	0	0	48.2	
Drill Water	m³	0	31.9	0	505.8	
Fuel Oil	m³	0	9.5	0	428.2	
Potable Water	m³	29	16.9	0	343.2	

Personnel On Board			
Job Title	Personnel	Company	Pax
OIM	Barry Scott	DOGC	47
Camp boss	Kevin Tolland	ESS	8
ROV Pilot	Bob George	Fugro	4
Cementer	Dave Green	Dowell Schlumberger	2
Mud Engineer	Peter Dwyer	MI Swaco	1
Data Engineer	Dorian Kuhn	Sperry Sun	2
Senior Drilling Supervisor	Peter Dane	BSOC	5
Technician	Mark Anderson	Petrotech	2
Wireline Engineer	Peter Ristau	Baker Atlas	7

Personnel On Board

CCTV	Darren Edwards	CCTV	2
Casing Cutting	Tom Armstrong	Smith	1
Total			81

HSE Summary

Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	13 Mar 2005	1 Day	Abandon Rig Drill	Based on simulated fire in Store room.
BOP Test	19 Feb 2005	23 Days	BOP Test	
Fire Drill	13 Mar 2005	1 Day	Fire Drill	
Lost Time Injury	20 May 2003	664 Days	LTi	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30
Pre-Tour Meetings	13 Mar 2005	1 Day	Routine Pre-Tour Meetings	
Rig Inspection	04 Feb 2005	38 Days	NOPSA Audit	
Safety Meeting	13 Feb 2005	29 Days	Safety meetings held	3 Safety meetings held at 1300, 1900 and 0100, attended by all crews.
Stop Card-Prevention	13 Mar 2005	1 Day	7 STOP cards submitted	6 cards by DODI 1 card by T/party

Marine

Weather on 14 Mar 2005

Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period
10.00mi	13.0kn	180deg	1012mbar	18.0C°	0m	180deg	0ft/min
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments	
0.3deg	0.3deg	0.30m	1.0m	135deg	0ft/min		
Rig Dir.	Ris. Tension	VDL		Comments			
45.0deg	228.0klb	3924.2klb					

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Pacific Wrangler			Standby at rig	Item	Unit	Quantity
				Barite	MT	43
				Gel	MT	42
				Cement	MT	123
				Drill Water	M^3	540
				Fuel Oil	M^3	675
				Potable Water	M^3	196
Far Grip			Melbourne	Item	Unit	Quantity
				Barite	MT	0
				Gel	MT	0
				Cement	MT	0
				Drill Water	M^3	0
				Fuel Oil	M^3	0
				Potable Water	M^3	0

Helicopter Movement

Flight #	Company	Arr/Dep. Time	Pax In/Out	Comment
1	Bristow	09:30 / 09:40	1 / 3	

15 Mar 2005 (GMT +10)

From: Peter Dane, Greg Harms
To: Colin Allport

DRILLING MORNING REPORT # 18
ZaneGrey-1ST2 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	3675.0m	Cur. Hole Size	8.500in	AFE Cost	\$ 0
Field		TVD	3219.8m	Casing OD	9.625in	AFE No.	
Drill Co.	DOGC	Progress	0m	Shoe TVD	1936.08m	Daily COST	\$ 397,891
Rig	Ocean Patriot	Days from spud	45.40	FIT	13.70ppg	Cum Cost	\$ 19,291,128
Wtr Dpth(MSL)	72.5m	Days on well	17.29	LOT	0ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600	Pulling out of the hole. Laying out 5" drill pipe.				
RT-ML	94m	Planned Op	Continue laying out 5" drill pipe. Retrieve wear bushing. Cut 9 5/8" casing. Pull and lay out 9 5/8" casing. Set bridge plug above 9 5/8" stub. Set P&A cement plug #3. Unlatch and pull BOP.				

Summary of Period 0000 to 2400 Hrs

Pumped P&A cement plug #1. Pulled out of the hole laying out 5" drill pipe. Pumped P&A cement plug #2. Pulled out of the hole laying out 5" drill pipe. Displaced well to inhibited mud.

Operations For Period 0000 Hrs to 2400 Hrs on 15 Mar 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0030	0.50	PA	P	RUC	3675.0m	Rigged up for cement job.
0030	0130	1.00	PA	P	CMP	3675.0m	Set balanced cement plug#1 from 3350 m to 3250 m across hydrocarbon bearing zone 3300 m to 3310 m. Plug #1; 40 bbl chemical wash spacer, 195 sxs of class G cement followed by 15.5 bbl water spacer. Rigged down after cement plug.
0130	0200	0.50	PA	P	TO	3675.0m	Pulled out of the hole to 3128 m with 5" drill pipe.
0200	0300	1.00	PA	P	CIR	3675.0m	Circulated bottoms up.
0300	0800	5.00	PA	P	WOC	3675.0m	Layed out excess drill pipe and drill collars while waiting on cement.
0800	0900	1.00	PA	P	CMP	3675.0m	Ran in hole to tag cement. Cement tagged with 2 klbs at 3203 m.
0900	1100	2.00	PA	P	TO	3675.0m	Pulled out of the hole from 3203 m to 2290 m.
1100	1130	0.50	PA	P	TO	3675.0m	Spot HI-VIS pill at 2290 m. Continued pulling out of the hole to 2230 m.
1130	1200	0.50	PA	P	RUC	3675.0m	Rigged up for cement job.
1200	1230	0.50	PA	P	CMP	3675.0m	Set balanced cement plug#2 from 2230 m to 2130 m across 9 5/8" casing shoe at 2184 m. Plug #2; 40 bbl chemical wash spacer, 195 sxs of class G cement followed by 13 bbl water spacer. Rigged down after cement plug.
1230	1300	0.50	PA	P	TO	3675.0m	Pulled out of the hole from 2230 m to 2000 m.
1300	1400	1.00	PA	P	CIR	3675.0m	Circulated bottoms up.
1400	1800	4.00	PA	P	WOC	3675.0m	Pumped slug. Continued pulling out of the hole to 947 m laying out 5" drill pipe while waiting on cement.
1800	2100	3.00	PA	P	CMP	3675.0m	Ran in hole to tag cement. Cement tagged with 2 klbs at 2153 m.
2100	2130	0.50	PA	P	CIR	3675.0m	Displace well with inhibited mud.
2130	2400	2.50	PA	P	TO	3675.0m	Pumped slug. Pulled out of the hole from 2120 m to 1616 m laying out 5" drill pipe.

Operations For Period 0000 Hrs to 0600 Hrs on 16 Mar 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0600	6.00	PA	P	TO	3675.0m	Continued pulling out of the hole from 2120m laying out 5" drill pipe

WBM Data		Cost Today \$ 1,846							
Mud Type:	KCI-PHPA-Glycol	API FL:	4.6cc	Cl:	36500.0mg/l	Solids:	8.3	Viscosity	65sec/qt
Sample-From:	Active	Filter-Cake:	1/32nd"	Hard/Ca:	440.0mg/l	H2O:	92%	PV	17cp
Time:	21:00	HTHP-FL:	0cc	MBT:	7.5	Oil:	0%	YP	27lb/100ft²
Weight:	9.70ppg	HTHP-cake:	0/32nd"	PM:	0	Sand:	0.25	Gels 10s	5
Temp:	35.0C°			PF:	0.25	Glycol:	4.0%vol	Gels 10m	10
				pH:	9.5	KCl:	6.5%	Fann 003	6
						PHPA:	1ppb	Fann 006	9
								Fann 100	24
								Fann 200	34
								Fann 300	44
								Fann 600	61
Comment									

Shakers, Volumes and Losses Data

Engineer : Peter Dwyer

Equip.	Descr.	Mesh Size	Available	1591bbl	Losses	0bbl	Comments
Centrifuge 6	DFE		Active	316bbl	Downhole	0bbl	
De-Silter 5	DODI	12 x 4"	Mixing	0bbl	Surf+ Equip	0bbl	
Shaker 1	VSM-100	4 x 84	Hole	898bbl	Dumped	0bbl	
Shaker 2	VSM-100	4 x 120	Slug	0bbl	De-Gasser	0bbl	
Shaker 3	VSM-100	4 x 120	Reserve	112bbl	De-Sander	0bbl	
Shaker 4	VSM-100	2 x 145, 2 x 120	Kill	0bbl	De-Silter	0bbl	
			Premix	265bbl	Centrifuge	0bbl	

Survey

MD	Incl Deg	Corr. Az (deg)	TVD	'V' Sect	Dogleg (deg/100ft)	N/S	E/W	Tool Type
0	0	0	0	0	0	0	0	

Survey

MD	Incl Deg	Corr. Az (deg)	TVD	'V' Sect	Dogleg (deg/100ft)	N/S	E/W	Tool Type
3590.58	22.01	21.18	3140.9	1510.68	2.11	1510.68	413.26	mwd
3619.85	21.30	20.71	3168.1	1520.77	2.50	1520.77	417.12	mwd
3649.53	20.38	21.41	3195.9	1530.62	3.21	1530.62	420.92	mwd
3662.14	19.70	21.54	3207.7	1534.64	5.40	1534.64	422.50	mwd
3675.00	19.70	21.54	3219.8	1538.68	0	1538.68	424.09	mwd

Bulk Stocks

Name	Unit	In	Used	Adjust	Balance
Barite	MT	0	2.4	0	55.4
Gel	MT	0	0	0	9.4
Cement	MT	0	16.99	0	31.2
Drill Water	m³	0	69.9	0	435.9
Fuel Oil	m³	0	9.9	0	418.3
Potable Water	m³	29	38.6	0	333.6

Personnel On Board

Job Title	Personnel	Company	Pax
OIM	Barry Scott	DOGC	46
Camp boss	Kevin Tolland	ESS	8
ROV Pilot	Bob George	Fugro	4
Cementer	Dave Green	Dowell Schlumberger	2
Mud Engineer	Peter Dwyer	MI Swaco	1
Data Engineer	Dorian Kuhn	Sperry Sun	2
Senior Drilling Supervisor	Peter Dane	BSOC	3
Wireline Engineer	Alasdair Douglas	Baker Atlas	2
CCTV	Darren Edwards	CCTV	2
Casing Cutting	Tom Armstrong	Smith	1
Well Head Engineer	Bruce Hasset	Cameron	1
Surveyor	Jon Richards	Fugro	2
Communications	Ron Stebbings	Marcom	1
Total			75

HSE Summary

Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	13 Mar 2005	2 Days	Abandon Rig Drill	
BOP Test	19 Feb 2005	24 Days	BOP Test	
Fire Drill	13 Mar 2005	2 Days	Fire Drill	Based on simulated fire in Store room.

HSE Summary

Events	Date of last	Days Since	Descr.	Remarks
Lost Time Injury	20 May 2003	665 Days	LTI	
Pre-Tour Meetings	15 Mar 2005	0 Days	Routine Pre-Tour Meetings	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30
Rig Inspection	04 Feb 2005	39 Days	NOPSA Audit	
Safety Meeting	13 Feb 2005	30 Days	Safety meetings held	3 Safety meetings held at 1300, 1900 and 0100, attended by all crews.
Stop Card-Prevention	15 Mar 2005	0 Days	3 STOP cards submitted	2 cards by DODI 1 card by T/party

Marine

Weather on 15 Mar 2005

Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period
10.00mi	20.0kn	225deg	1017mbar	19.0C°	1.0m	225deg	0ft/min
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments	
0.3deg	0.3deg	0.30m	1.0m	135deg	0ft/min		
Rig Dir.	Ris. Tension	VDL		Comments			
45.0deg	228.0klb	3752.2klb					

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks			
Pacific Wrangler			Standby at rig	Item		Unit	Quantity
				Barite		MT	43
				Gel		MT	42
				Cement		MT	123
				Drill Water		M^3	540
				Fuel Oil		M^3	673
				Potable Water		M^3	192
Far Grip			On route to Ocean Patriot	Item		Unit	Quantity
				Barite		MT	0
				Gel		MT	0
				Cement		MT	0
				Drill Water		M^3	0
				Fuel Oil		M^3	0
				Potable Water		M^3	0

Helicopter Movement

Flight #	Company	Arr/Dep. Time	Pax In/Out	Comment
1	Bristow	09:41 / 09:55	6 / 12	

16 Mar 2005 (GMT +10)

From: Peter Dane, Greg Harms
To: Colin Allport

DRILLING MORNING REPORT # 19
ZaneGrey-1ST2 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	3675.0m	Cur. Hole Size	8.500in	AFE Cost	\$ 0
Field		TVD	3219.8m	Casing OD	9.625in	AFE No.	
Drill Co.	DOGC	Progress	0m	Shoe TVD	1936.08m	Daily COST	\$ 349,306
Rig	Ocean Patriot	Days from spud	46.40	FIT	13.70ppg	Cum Cost	\$ 19,640,434
Wtr Dpth(MSL)	72.5m	Days on well	18.29	LOT	0ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600 Laying out riser.					
RT-ML	94m	Planned Op Pull BOP's. Cut 20" x 30" casing. Recover PGB well heads and casing stubs. Pull anchors.					

Summary of Period 0000 to 2400 Hrs

Layed out drill pipe. Retrieved wear bushing. Cut 9 5/8" casing. Layed out 9 5/8" casing. Set 13 3/8" bridge plug. Set cement plug #3. Pull BOP's.

Operations For Period 0000 Hrs to 2400 Hrs on 16 Mar 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0500	5.00	PA	P	TO	3675.0m	Continued pulling out of the hole from 2120 m to 144 m laying out 5" drill pipe.
0500	0630	1.50	PA	P	TO	3675.0m	Continued pulling out of the hole from 144 m to surface laying out cement stinger.
0630	0700	0.50	PA	P	RU	3675.0m	Rigged down tubing handling equipment. Rigged up 5" drill pipe handling equipment.
0700	0830	1.50	PA	P	WH	3675.0m	Made up wash sub below wear bushing retrieval tool. Retrieved wear bushing. Pulled out of hole with same. Layed out wear bushing.
0830	1000	1.50	PA	P	WH	3675.0m	Made up 9 5/8" casing cutter assembly. Ran in hole with same.
1000	1030	0.50	PA	P	WH	3675.0m	Cut 9 5/8" casing at 177 m with 35 spm at 450 psi, 8 klbs down. 2 minutes to cut casing.
1030	1130	1.00	PA	P	WH	3675.0m	Pulled out of the hole from 177 m to surface laying out 9 5/8" casing cutter.
1130	1200	0.50	PA	P	WH	3675.0m	Made up 9 5/8" casing retrieval assembly. Ran in hole with same. Landed and latched at 94 m with 5 klbs down. Released with 25 klbs overpull.
1200	1300	1.00	PA	P	TO	3675.0m	Pulled out of hole with 9 5/8" casing. Racked back retrieval assembly in derrick.
1300	1430	1.50	PA	P	WH	3675.0m	Layed out 9 5/8" casing.
1430	1600	1.50	PA	P	CMP	3675.0m	Made up Dowell bridge plug with 6.5" drill collars. Ran in hole with same.
1600	1700	1.00	PA	P	CMP	3675.0m	Set 13 3/8" bridge plug at 176 m. Pulled out of the hole.
1700	1830	1.50	PA	P	CMP	3675.0m	Ran in hole and tagged bridge plug at 176 m. Displaced hole to 9.6 ppg inhibited mud. Flushed surface equipment.
1830	1900	0.50	PA	P	CMP	3675.0m	Rigged up cement lines. Set balanced cement plug #3 from top of the bridge plug to 125 m.
1900	2030	1.50	PA	P	TO	3675.0m	Pulled out of the hole with cement string. Run in hole and wash stack. Pulled out of hole laying out drill pipe.
2030	2130	1.00	PA	P	BOP	3675.0m	Rigged up Riser/BOP handling equipment.
2130	2230	1.00	PA	P	BOP	3675.0m	Layed out diverter.
2230	2400	1.50	PA	P	BOP	3675.0m	Made up landing joint and scope in slip joint. Torqued up bolts.

Operations For Period 0000 Hrs to 0600 Hrs on 17 Mar 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0030	0.50	PA	P	BOP	3675.0m	Continued installing slip joint lock down bolts.
0030	0130	1.00	PA	P	BOP	3675.0m	Unlatch BOP and pull off PGB. Remove pod hose saddles.
0130	0200	0.50	PA	P	BOP	3675.0m	Locked in SLD ring under rotary.
0200	0330	1.50	PA	P	BOP	3675.0m	Removed choke, kill and booster line goosenecks.
0330	0500	1.50	PA	P	BOP	3675.0m	Layed out Slip joint.
0500	0600	1.00	PA	P	BOP	3675.0m	Continued to lay out marine riser.

General Comments

00:00 TO 24:00 Hrs ON 16 Mar 2005

Comments	Rig Requirements	Lessons Learnt
Inspected #3 anchor.	Anchor inspection	

Shakers, Volumes and Losses Data

Engineer : Peter Dwyer

Equip.	Descr.	Mesh Size	Available	Obbl	Losses	693bbl	Comments
Centrifuge 6	DFE		Active	Obbl	Downhole	Obbl	Hole displaced to inhibited mud. Surface mud sytem dumped. Mud tanks cleaned.
De-Silter 5	DODI	12 x 4"	Mixing	Obbl	Surf+ Equip	Obbl	
Shaker 1	VSM-100	4 x 84	Hole	Obbl	Dumped	693bbl	
Shaker 2	VSM-100	4 x 120	Slug	Obbl	De-Gasser	Obbl	
Shaker 3	VSM-100	4 x 120	Reserve	Obbl	De-Sander	Obbl	
Shaker 4	VSM-100	2 x 145, 2 x 120	Kill	Obbl	De-Silter	Obbl	
			Premix		Centrifuge	Obbl	

Survey

MD	Incl Deg	Corr. Az (deg)	TVD	'V' Sect	Dogleg (deg/100ft)	N/S	E/W	Tool Type
0	0	0	0	0	0	0	0	

Survey

MD	Incl Deg	Corr. Az (deg)	TVD	'V' Sect	Dogleg (deg/100ft)	N/S	E/W	Tool Type
3590.58	22.01	21.18	3140.9	1510.68	2.11	1510.68	413.26	mwd
3619.85	21.30	20.71	3168.1	1520.77	2.50	1520.77	417.12	mwd
3649.53	20.38	21.41	3195.9	1530.62	3.21	1530.62	420.92	mwd
3662.14	19.70	21.54	3207.7	1534.64	5.40	1534.64	422.50	mwd
3675.00	19.70	21.54	3219.8	1538.68	0	1538.68	424.09	mwd

Bulk Stocks

Name	Unit	In	Used	Adjust	Balance
Barite	MT	0	0	0	55.4
Gel	MT	0	0	0	9.4
Cement	MT	0	4.77	0	26.4
Drill Water	m³	0	38.6	0	397.3
Fuel Oil	m³	0	5.1	0	413.2
Potable Water	m³	0	23.8	0	309.8

Personnel On Board

Job Title	Personnel	Company	Pax
OIM	Barry Scott	DOGC	46
Camp boss	Kevin Tolland	ESS	8
ROV Pilot	Bob George	Fugro	4
Cementer	Dave Green	Dowell Schlumberger	2
Mud Engineer	Peter Dwyer	MI Swaco	1
Data Engineer	Dorian Kuhn	Sperry Sun	2
Senior Drilling Supervisor	Peter Dane	BSOC	3
Wireline Engineer	Alasdair Douglas	Baker Atlas	2
CCTV	Darren Edwards	CCTV	2
Casing Cutting	Tom Armstrong	Smith	1
Well Head Engineer	Bruce Hasset	Cameron	1
Surveyor	Jon Richards	Fugro	2
Communications	Ron Stebbings	Marcom	1
Total			75

HSE Summary

Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	13 Mar 2005	3 Days	Abandon Rig Drill	Based on simulated fire in Store room.
BOP Test	19 Feb 2005	25 Days	BOP Test	
Fire Drill	13 Mar 2005	3 Days	Fire Drill	

HSE Summary

Events	Date of last	Days Since	Descr.	Remarks
Lost Time Injury	20 May 2003	666 Days	LTI	
Pre-Tour Meetings	16 Mar 2005	0 Days	Routine Pre-Tour Meetings	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30
Rig Inspection	04 Feb 2005	40 Days	NOPSA Audit	
Safety Meeting	13 Feb 2005	31 Days	Safety meetings held	3 Safety meetings held at 1300, 1900 and 0100, attended by all crews.
Stop Card-Prevention	16 Mar 2005	0 Days	3 STOP cards submitted	2 cards by DODI 1 card by T/party

Marine

Weather on 16 Mar 2005

Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period
10.00mi	25.0kn	225deg	1017mbar	16.0C°	2.0m	225deg	0ft/min
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments	
0.3deg	0.3deg	0.30m	1.5m	225deg	0ft/min		
Rig Dir.	Ris. Tension	VDL		Comments			
45.0deg	228.0klb	3611.8klb					

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Pacific Wrangler			Standby at rig	Item	Unit	Quantity
				Barite	MT	43
				Gel	MT	42
				Cement	MT	123
				Drill Water	M^3	540
				Fuel Oil	M^3	669
				Potable Water	M^3	188
Far Grip	10:40		Standby at rig	Item	Unit	Quantity
				Barite	MT	86
				Gel	MT	48
				Cement	MT	86
				Drill Water	M^3	605
				Fuel Oil	M^3	564
				Potable Water	M^3	652

17 Mar 2005 (GMT +10)

From: Peter Dane, Greg Harms
To: Colin Allport

DRILLING MORNING REPORT # 20
ZaneGrey-1ST2 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	3675.0m	Cur. Hole Size	8.500in	AFE Cost	\$ 0
Field		TVD	3219.8m	Casing OD	9.625in	AFE No.	
Drill Co.	DOGC	Progress	0m	Shoe TVD	1936.08m	Daily COST	\$ 346,712
Rig	Ocean Patriot	Days from spud	47.40	FIT	13.70ppg	Cum Cost	\$ 19,987,146
Wtr Dpth(MSL)	72.5m	Days on well	19.31	LOT	0ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600 Retrieving anchors.					
RT-ML	94m	Planned Op Retrieving anchors. Handover rig to Woodside.					

Summary of Period 0000 to 2400 Hrs

Layed out marine riser. Nippled down BOP. Cut 20" and 30" casing. Retrieve 20" and 30" casing with PGB. Layed out same. Seabed survey with ROV.

Operations For Period 0000 Hrs to 2400 Hrs on 17 Mar 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0030	0.50	PA	P	BOP	3675.0m	Continued installing slip joint lock down bolts.
0030	0130	1.00	PA	P	BOP	3675.0m	Unlatch BOP and pull off PGB. Remove pod hose saddles.
0130	0200	0.50	PA	P	BOP	3675.0m	Locked in SLD ring under rotary.
0200	0330	1.50	PA	P	BOP	3675.0m	Removed choke, kill and booster line goosenecks.
0330	0500	1.50	PA	P	BOP	3675.0m	Layed out Slip joint.
0500	0630	1.50	PA	P	BOP	3675.0m	Continued laying out marine riser.
0600	0730	1.50	PA	P	BOP	3675.0m	Pulled marine riser double and BOP. Land same on BOP carrier.
0730	0800	0.50	PA	P	BOP	3675.0m	Remove guide lines and nipple down BOP.
0800	1000	2.00	PA	P	BOP	3675.0m	Move BOP to starboard side. Layed out marine riser double.
1000	1030	0.50	PA	P	BOP	3675.0m	Rigged down marine riser handling equipment.
1030	1230	2.00	PA	P	WH	3675.0m	Made up 20" and 30" casing cutting assembly. Attached ropes to guide lines. Tripped in hole with same.
1230	1330	1.00	PA	P	WH	3675.0m	Cut 20" casing at 96.42 m. Casing cut in 32 mins.
1330	1430	1.00	PA	P	WH	3675.0m	Pulled out of hole with 20" casing. Layed out same.
1430	1530	1.00	PA	P	WH	3675.0m	Made up 30" grapple assembly.
1530	1600	0.50	PA	P	WH	3675.0m	Ran in hole with 30" cutting assembly. Engage 30" housing. Confirmed with 50k overpull.
1600	2200	6.00	PA	P	WH	3675.0m	Cut 30" casing at 95.94 m. Visual indications showed cutter being offset during cutting.
2200	2230	0.50	PA	P	WH	3675.0m	Pulled out of the hole with 30" casing and PGB. Secured PBG in moonpool. Commenced de-ballasting the rig from 23.5 m drill draft to 10 m transit draft.
2230	2300	0.50	PA	P	WH	3675.0m	Release 30" casing from the PGB. Layed out same.
2300	2400	1.00	PA	P	WH	3675.0m	Service 20" x 30" casing cutter assembly.

Operations For Period 0000 Hrs to 0600 Hrs on 18 Mar 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	0230	2.50	PA	P	WH	3675.0m	Conducted seabed survey with ROV. Continued de-ballasting rig.
0230	0600	3.50	PS	P		3675.0m	Pulled anchor #7 with Far Grip. Anchor off bottom at 02:00. Pulled anchor #3 with Pacific Wrangler. Anchor off bottom at 04:35. Continued de-ballasting rig.

General Comments

00:00 TO 24:00 Hrs ON 17 Mar 2005

Comments	Rig Requirements	Lessons Learnt
Inspect anchor #4.	Anchor Inspection	

Survey

MD	Incl Deg	Corr. Az (deg)	TVD	'V' Sect	Dogleg (deg/100ft)	N/S	E/W	Tool Type
0	0	0	0	0	0	0	0	

Survey								
MD	Incl Deg	Corr. Az (deg)	TVD	'V' Sect	Dogleg (deg/100ft)	N/S	E/W	Tool Type
3590.58	22.01	21.18	3140.9	1510.68	2.11	1510.68	413.26	mwd
3619.85	21.30	20.71	3168.1	1520.77	2.50	1520.77	417.12	mwd
3649.53	20.38	21.41	3195.9	1530.62	3.21	1530.62	420.92	mwd
3662.14	19.70	21.54	3207.7	1534.64	5.40	1534.64	422.50	mwd
3675.00	19.70	21.54	3219.8	1538.68	0	1538.68	424.09	mwd

Bulk Stocks						
Name	Unit	In	Used	Adjust	Balance	
Barite	MT	0	0	0	55.4	
Gel	MT	0	0	0	9.4	
Cement	MT	0	0	0	26.4	
Drill Water	m³	0	6	0	391.3	
Fuel Oil	m³	0	7.8	0	405.4	
Potable Water	m³	0	23.2	0	286.6	

Personnel On Board			
Job Title	Personnel	Company	Pax
OIM	Sean De Freitas	DOGC	47
Camp boss	Kevin Tolland	ESS	8
ROV Pilot	Bob George	Fugro	4
Cementer	Dave Green	Dowell Schlumberger	2
Senior Drilling Supervisor	Peter Dane	BSOC	3
Wireline Engineer	Alasdair Douglas	Baker Atlas	2
CCTV	Darren Edwards	CCTV	2
Casing Cutting	Tom Armstrong	Smith	1
Well Head Engineer	Bruce Hasset	Cameron	1
Surveyor	Jon Richards	Fugro	2
Communications	Ron Stebbings	Marcom	1
Marine Crew	George Ainsley	MO47	8
Other Operator	Stuart Job	Woodside	3
Total			84

HSE Summary				
Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	13 Mar 2005	4 Days	Abandon Rig Drill	Based on simulated fire in Store room.
BOP Test	19 Feb 2005	26 Days	BOP Test	
Fire Drill	13 Mar 2005	4 Days	Fire Drill	
Lost Time Injury	20 May 2003	667 Days	LTI	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30
Pre-Tour Meetings	17 Mar 2005	0 Days	Routine Pre-Tour Meetings	
Rig Inspection	04 Feb 2005	41 Days	NOPSA Audit	
Safety Meeting	13 Feb 2005	32 Days	Safety meetings held	3 Safety meetings held at 1300, 1900 and 0100, attended by all crews.
Stop Card-Prevention	17 Mar 2005	0 Days	3 STOP cards submitted	2 cards by DODI 1 card by T/party

Marine

Weather on 17 Mar 2005

Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period
10.00mi	20.0kn	135deg	1019mbar	17.0C°	1.5m	135deg	0ft/min
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments	
0.3deg	0.3deg	0.30m	1.5m	135deg	0ft/min		
Rig Dir.	Ris. Tension	VDL		Comments			
45.0deg	228.0klb	3470.1klb					

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Pacific Wrangler			Standby at rig. Problem with a thruster. Repaired OK.	Item	Unit	Quantity
				Barite	MT	43
				Gel	MT	42
				Cement	MT	123
				Drill Water	M^3	540
				Fuel Oil	M^3	663.9
Far Grip			Standby at rig	Potable Water	M^3	185
				Item	Unit	Quantity
				Barite	MT	86
				Gel	MT	48
				Cement	MT	86
				Drill Water	M^3	605
				Fuel Oil	M^3	540
				Potable Water	M^3	645

Helicopter Movement				
Flight #	Company	Arr/Dep. Time	Pax In/Out	Comment
1	Bristow	08:56 / 09:07	12 / 15	
2	Bristow	14:31 / 14:41	11 / 0	MO47 and Woodside personnel.

18 Mar 2005 (GMT +10)

From: Peter Dane, Greg Harms
To: Colin Allport

DRILLING MORNING REPORT # 21
ZaneGrey-1ST2 (Vic / P-42)

Well Data							
Country	Australia	M. Depth	3675.0m	Cur. Hole Size	8.500in	AFE Cost	\$ 0
Field		TVD	3219.8m	Casing OD	9.625in	AFE No.	
Drill Co.	DOGC	Progress	0m	Shoe TVD	1936.08m	Daily COST	\$ 179,303
Rig	Ocean Patriot	Days from spud	48.12	FIT	13.70ppg	Cum Cost	\$ 20,166,449
Wtr Dpth(MSL)	72.5m	Days on well	20.04	LOT	0ppg	Planned TD	3692.0m
RT-MSL	21.5m	Current Op @ 0600 Pulling anchors.					
RT-ML	94m	Planned Op Finish pulling anchors. Handover rig to Woodside.					

Summary of Period 0000 to 2400 Hrs

Finished pulling anchors. Handover rig to Woodside.

Operations For Period 0000 Hrs to 2400 Hrs on 18 Mar 2005

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
0000	1730	17.50	PA	P	RM	3675.0m	<p>Conducted seabed survey with ROV. Lay down excess BHA from derrick. Redress Smith abandonment tools, lay down same. Continue to de-ballast rig.</p> <p>Note: Commence pulling anchors @03:40 hrs</p> <p>Anchor #7 - M/V Far Grip - PCC Out @01:30 hrs - Off Btm @02:10 hrs - PCC Back @05:10 hrs</p> <p>Anchor #3 - M/V Pacific Wrangler - PCC Out @04:15 hrs - Off Btm @04:35 hrs - PCC Back @05:40 hrs</p> <p>Anchor #6 - M/V Far Grip - PCC Out @ 05:20 hrs - Off Btm @05:40 hrs - PCC Back @07:35 hrs</p> <p>Anchor #2 - M/V Pacific Wrangler - PCC Out @05:50 hrs - Off Btm @06:10 hrs - PCC Back @07:40 hrs</p> <p>Tow bridle passed and secure to Pacific Wrangler at 08:45hrs</p> <p>Anchor #5 - M/V Far Grip - PCC Out @08:20 hrs - Off Btm @09:15 hrs - PCC Back @12:50 hrs</p> <p>Anchor #1 - M/V Far Grip - PCC Out @13:20 hrs - Off Btm @14:00 hrs - PCC Back @15:05 hrs</p> <p>Anchor #8 - M/V Far Grip - PCC Out @15:25 hrs - Off Btm @15:55 hrs - PCC Back @17:00 hrs</p> <p>Anchor #4 - M/V Far Grip - PCC Out @17:50hrs - Off Btm @18:15 hrs - PCC Back @19:20 hrs</p> <p>NOTE = Two (2) hour adjustment made due to inspection on #5 anchor from Woodside Energy Ltd (See Statement Of Facts)</p>
1730	1730	0.00	PS	P		3675.0m	<p>Rig under tow to Halladale 1 Location</p> <p>Statement Of Facts at last anchor racked</p> <p>Ocean Patriot</p> <p>Barite - 55.4 MT</p> <p>Gel - 9.4 MT</p> <p>Cement (class G) - 26.4 MT</p> <p>Fuel Oil - 394,161 Litres</p> <p>Drill Water - 328,812 Litres</p> <p>Pot Water - 251,697 Litres</p> <p>Far Grip</p> <p>Barite - 86 MT</p> <p>Gel - 48 MT</p> <p>Cement (class G) - 86 MT</p> <p>Fuel Oil - 530,000 Litres</p> <p>Drill Water - 605,000 Litres</p> <p>Pot Water - 637,000 Litres</p> <p>Lube Oil - 13,920 Litres</p>

From	To	Hrs	Phse	Cls (RC)	Op	Depth	Activity Description
							Pacific Wrangler Barite - 43 MT Gel - 42 MT Cement (class G) - 123MT Fuel Oil - 652,900 MT Drill Water - 540,000 Litres Pot Water - 181,000 Litres Lub Oil - 28,458 Litres

Survey

MD	Incl Deg	Corr. Az (deg)	TVD	'V' Sect	Dogleg (deg/100ft)	N/S	E/W	Tool Type
0	0	0	0	0	0	0	0	

Survey

MD	Incl Deg	Corr. Az (deg)	TVD	'V' Sect	Dogleg (deg/100ft)	N/S	E/W	Tool Type
3590.58	22.01	21.18	3140.9	1510.68	2.11	1510.68	413.26	mwd
3619.85	21.30	20.71	3168.1	1520.77	2.50	1520.77	417.12	mwd
3649.53	20.38	21.41	3195.9	1530.62	3.21	1530.62	420.92	mwd
3662.14	19.70	21.54	3207.7	1534.64	5.40	1534.64	422.50	mwd
3675.00	19.70	21.54	3219.8	1538.68	0	1538.68	424.09	mwd

Bulk Stocks

Name	Unit	In	Used	Adjust	Balance
Barite	MT	0	0	0	55.4
Gel	MT	0	0	0	9.4
Cement	MT	0	0	0	26.4
Drill Water	m³	0	62.5	0	328.8
Fuel Oil	m³	0	11.3	0	394.1
Potable Water	m³	0	34.9	0	251.7

Personnel On Board

Job Title	Personnel	Company	Pax
OIM	Sean De Freitas	DOGC	48
Camp boss	Kevin Tolland	ESS	8
ROV Pilot	Bob George	Fugro	4
Cementer	Dave Green	Dowell Schlumberger	2
Senior Drilling Supervisor	Peter Dane	BSOC	3
Wireline Engineer	Alasdair Douglas	Baker Atlas	2
CCTV	Darren Edwards	CCTV	2
Casing Cutting	Tom Armstrong	Smith	1
Well Head Engineer	Bruce Hasset	Cameron	1
Surveyor	Jon Richards	Fugro	2
Communications	Ron Stebbings	Marcom	1
Marine Crew	George Ainsley	MO47	8
Other Operator	Stuart Job	Woodside	3
Total			85

HSE Summary

Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	13 Mar 2005	5 Days	Abandon Rig Drill	Based on simulated fire in Store room.
BOP Test	19 Feb 2005	27 Days	BOP Test	
Fire Drill	13 Mar 2005	5 Days	Fire Drill	
Lost Time Injury	20 May 2003	668 Days	LTI	Pre-Tour meetings at 05:45, 07:00, 11:30, 23:30
Pre-Tour Meetings	17 Mar 2005	1 Day	Routine Pre-Tour Meetings	

HSE Summary

Events	Date of last	Days Since	Descr.	Remarks
Rig Inspection	04 Feb 2005	42 Days	NOPSA Audit	3 Safety meetings held at 1300, 1900 and 0100, attended by all crews. 2 cards by DODI 1 card by T/party
Safety Meeting	13 Feb 2005	33 Days	Safety meetings held	
Stop Card-Prevention	17 Mar 2005	1 Day	3 STOP cards submitted	

Marine

Weather on 18 Mar 2005

Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period
10.00mi	25.0kn	225deg	1017mbar	16.0C°	2.0m	225deg	0ft/min
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments	
0.3deg	0.3deg	0.30m	1.5m	225deg	0ft/min		
Rig Dir.	Ris. Tension	VDL		Comments			
45.0deg	228.0klb	3611.8klb					

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Pacific Wrangler			Standby at rig	Item	Unit	Quantity
				Barite	MT	43
				Gel	MT	42
				Cement	MT	123
				Drill Water	M³	540
				Fuel Oil	M³	652.9
				Potable Water	M³	181
Far Grip			Standby at rig	Item	Unit	Quantity
				Barite	MT	86
				Gel	MT	48
				Cement	MT	86
				Drill Water	M³	605
				Fuel Oil	M³	530
				Potable Water	M³	637

Helicopter Movement

Flight #	Company	Arr/Dep. Time	Pax In/Out	Comment
1	Bristow	/	0 / 0	

ENCLOSURES

Company	:	Bass Strait Oil Company Ltd
Rig	:	Ocean Patriot
Well	:	ZaneGrey-1
Field	:	ZaneGrey / Gippsland Basin
Country	:	Australia
DOE Number	:	

Latitude : 38° 34' 31.64" South
Longitude : 147° 59' 16.27" East

















UTM Easting = 586,049.89 m
UTM Northing = 5,729,856.42 m

Other Services





















Permanent Datum	Mean Sea Level	Elevation :	0.00 m	KB	0.00 m
Log Measured From	Drill Floor	21.50 m	Above Permanent Datum	DF	21.50 m
Drilling Measured From	Drill Floor	MD LOG		GL	0.00 m
				WD	72.50 m
Depth Logged	94.00 m	To	2,772.50 m	Unit No.	197
Date Logged	27-Jan-05	To	11-Feb-05	Job No.	AUIN0003415248
Total Depth MD	2,772.50 m	TVD :	2,420.70 m	Plot Type	Final
Spud Date	27-Jan-05	Plot Date	23-Jun-05		
Run No.	Borehole Record (MD)		Run No.	Borehole Record (MD)	
1	Size	From	To	Size	From
2	914.000 mm	94.00 m	129.50 m		To
3	406.000 mm	129.50 m	1,095.00 m		
4	311.150 mm	1,095.00 m	2,103.00 m		
5	311.150 mm	2,103.00 m	2,702.00 m		
	2,702.00 m	2,772.50 m			
				Size	Weight
				762.000 mm	461.34 kgpm
				339.999 mm	101.20 kgpm
				244.475 mm	69.94 kgpm
					SURFACE
					SURFACE
					127.75 m
					1,090.61 m
					2,184.00 m

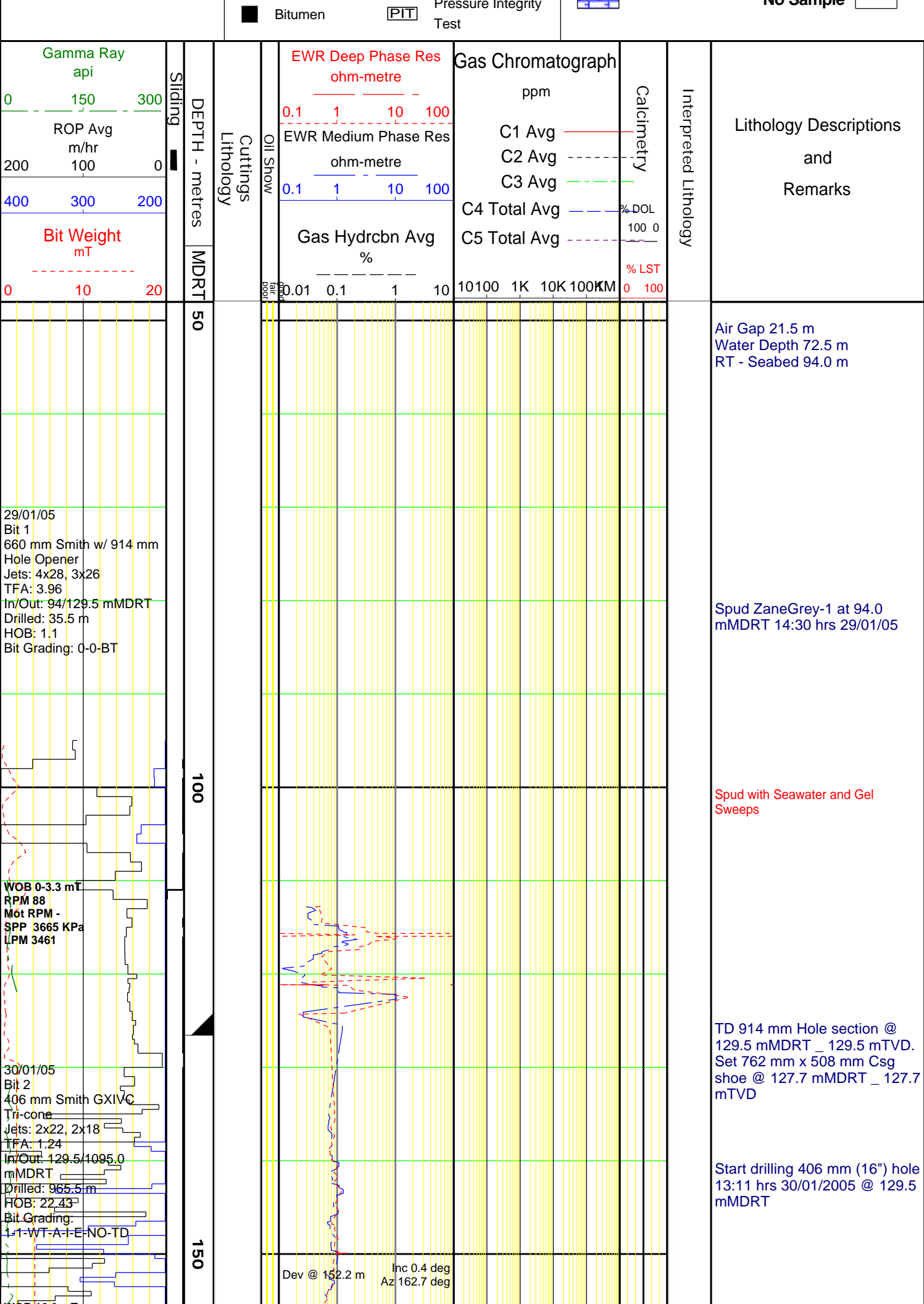
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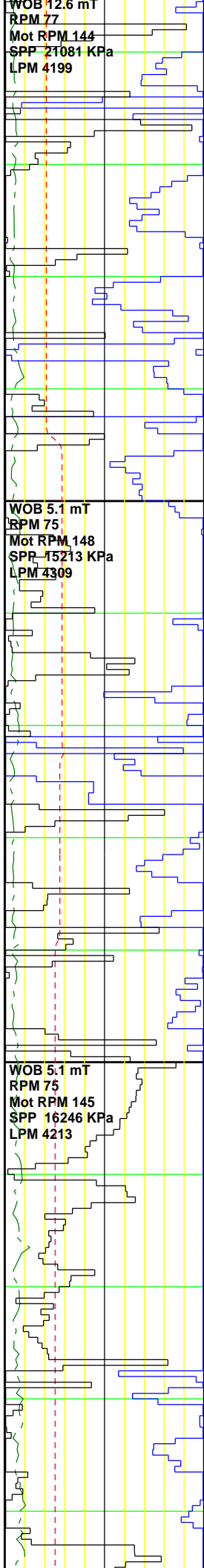
Abbreviations and Symbols

Drilling Data		Mud Data			
BG	Background Gas	Cl-	Chloride Ion Conc	Rm	Mud Resistivity
BHT	Bottomhole Temp	FC	Filter Cake	Rmf	Filtrate Resistivity
C	Carbide Test	FL	Filtrate Loss	S	Solids Content
CB	Core Bit	G	Gels	Vis	Funnel Viscosity
CG	Connection Gas	pH	Hydrogen Ion Content	MW	Mud Weight
CKF	Check For Flow	PV	Plastic Viscosity	YP	Yield Point
CO	Circulate Out	<div>Engineering Data</div> <div><div>Core No.</div><div>DST No.</div><div>Casing Seat</div><div>Side Wall Core</div><div>Gas Traces</div><div>Gas</div><div>Oil Traces</div><div>Oil</div><div>Water</div><div>Salt Water</div><div>Fresh Water</div><div>Hydrocarbons Smell</div><div>H2S Smell</div><div>Interval Tester</div><div>Wireline Log Run</div><div>Leakoff Test</div></div>			
DB	Diamond Bit				
DC	Depth Correction				
DS	Direction Survey				
DST	Drillstem Test				
FLT	Flowline Temp.				
LAT	Logged After Trip				
NB	New Bit				
NR	No Returns				
PDC	Polycrystalline Diamond				
	Compound Bit				
PR	Partial Returns				
RPM	Revs Per Minute				
RRB	Rerun Bit				
STG	Short Trip Gas				
TB	Turbo Drill				
TG	Trip Gas				
U	Gas Units				
WOB	Weight On Bit				

Lithology Symbols

	Sandstone	Calcsiltite	
	Silty Sandstone	Calcarenite	
	Silt	Mudstone	
	Siltstone	Marl	
	Clay	Glauconitic Sandstone	
	Claystone	Chert	
	Calcareous Claystone	Conglomerate	
	Limestone	Igneous	
	Dolomite	Coal	
	Calcilutite	No Sample	





200

250

Dev @ 180.1 m Inc 0.4 deg
Az 187.8 deg

Dev @ 208.3 m Inc 0.5 deg
Az 134.9 deg

Dev @ 236.3 m Inc 0.5 deg
Az 145.4 deg

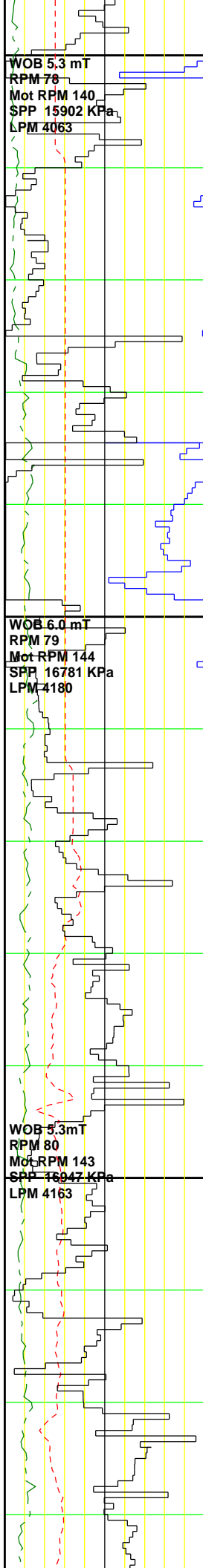
Dev @ 265.1 m Inc 0.5 deg
Az 133.5 deg

Dev @ 291.2 m Inc 0.5 deg
Az 112.3 deg

Geograph wire failure @
138.0 mMDRT

Use draw works encoder to
track depth

Drill with Seawater and Gel Sweeps
Returns to sea floor



300

350

400

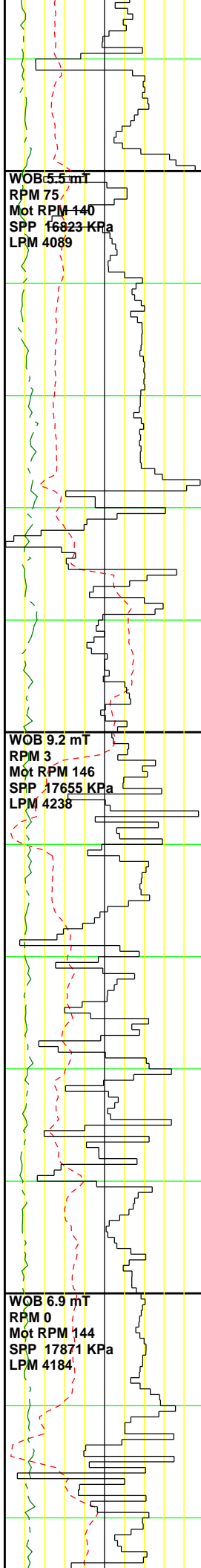
Dev @ 322.8 m Inc 0.3 deg
Az 122.9 deg

Dev @ 351.1 m Inc 0.6 deg
Az 108.0 deg

Dev @ 379.5 m Inc 0.6 deg
Az 107.0 deg

Dev @ 408.3 m Inc 0.6 deg
Az 109.2 deg

Drill with Seawater and Gel Sweeps
Returns to sea floor



WOB 5.5 mT
RPM 75
Mot RPM 140
SPP 16823 KPa
LPM 4089

WOB 9.2 mT
RPM 3
Mot RPM 146
SPP 17655 KPa
LPM 4238

WOB 6.9 mT
RPM 0
Mot RPM 144
SPP 17871 KPa
LPM 4184

450

500

550

Dev @ 436.4 m Inc 0.5 deg
Az 108.4 deg

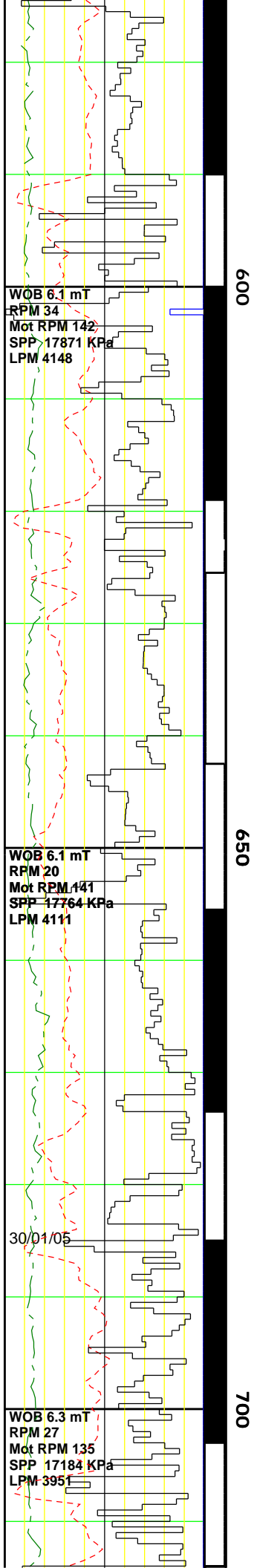
Dev @ 463.0 m Inc 0.6 deg
Az 101.3 deg

Dev @ 493.8 m Inc 1.5 deg
Az 39.2 deg

Dev @ 521.5 m Inc 3.7 deg
Az 26.6 deg

Dev @ 550.7 m Inc 6.4 deg
Az 18.1 deg

Kick off point @ 486.0 mMDRT



600

650

700

Dev @ 578.9 m Inc 9.5 deg
Az 11.8 deg

Dev @ 605.4 m Inc 12.3 deg
Az 11.5 deg

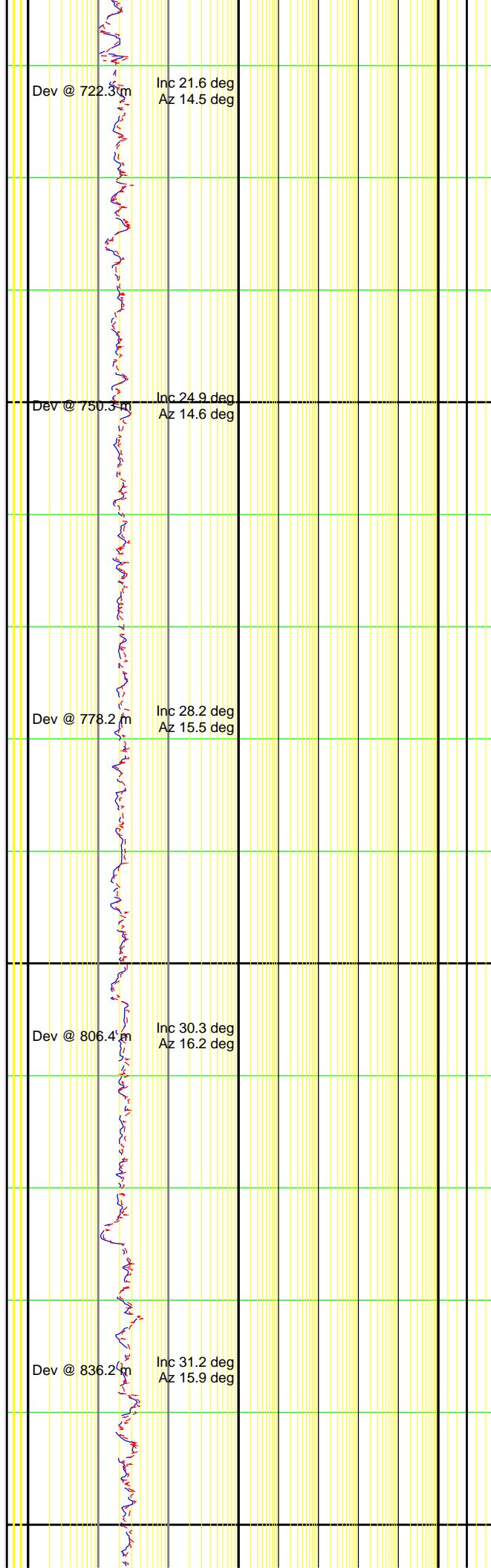
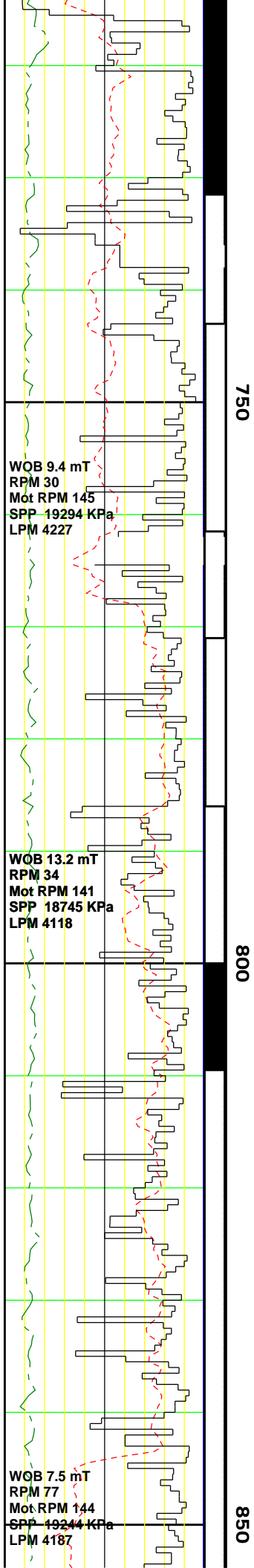
Dev @ 637.3 m Inc 15.1 deg
Az 10.9 deg

Dev @ 663.4 m Inc 17.3 deg
Az 12.1 deg

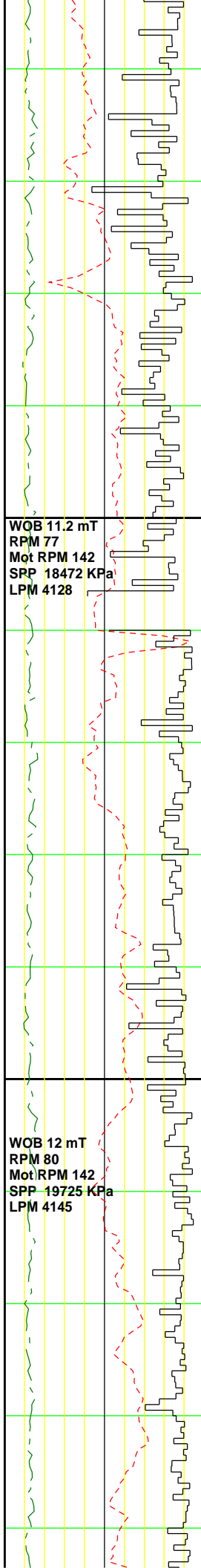
Dev @ 693.7 m Inc 19.0 deg
Az 14.0 deg

Drill with Seawater and Gel Sweeps
Returns to sea floor

Drill with Seawater and Gel Sweeps
Returns to sea floor



Drill with Seawater and Gel Sweeps
Returns to sea floor



006

950

Dev @ 864.5 m Inc 31.5 deg
Az 15.9 deg

Dev @ 892.9 m Inc 32.2 deg
Az 16.1 deg

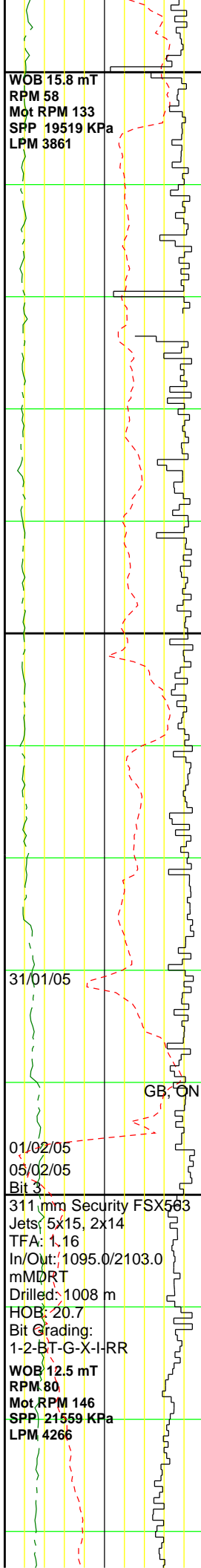
Dev @ 921.5 m Inc 32.7 deg
Az 14.7 deg

Dev @ 950.0 m Inc 32.9 deg
Az 14.7 deg

FUNCTION TESTED GAS
SYSTEM - 31/01/05 -
TESTED OK.

Dev @ 979.0 m Inc 33.4 deg
Az 14.2 deg

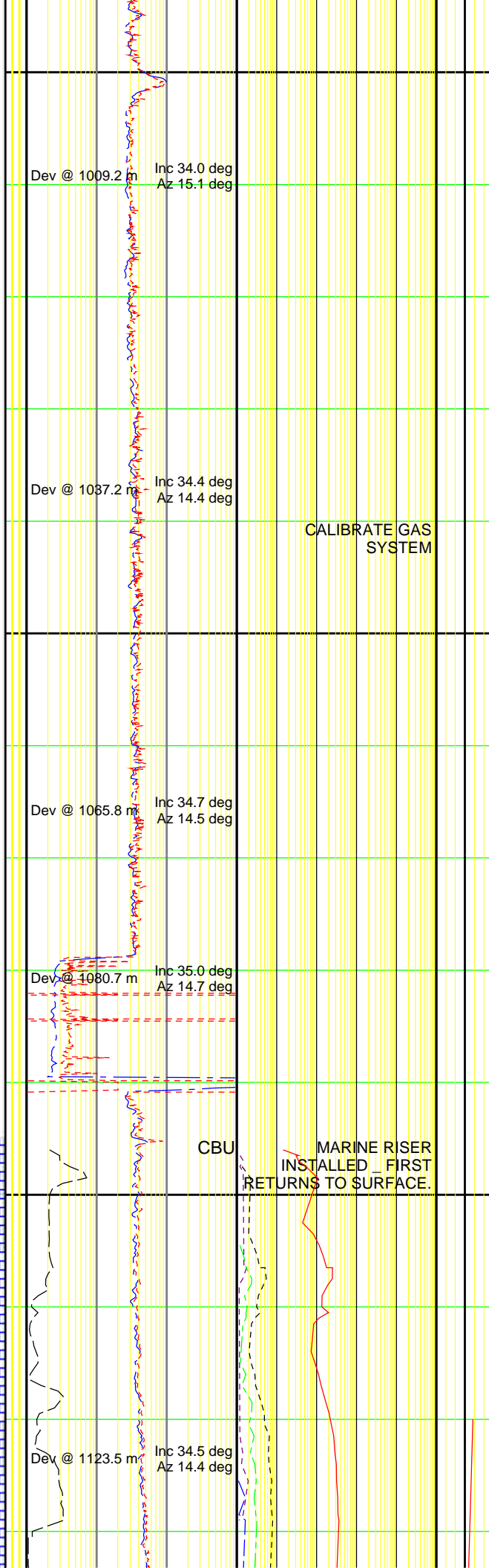
Drill with Seawater and Gel Sweeps
Returns to sea floor



1000

1050

1100



Drill with Seawater and Gel Sweeps
Returns to sea floor

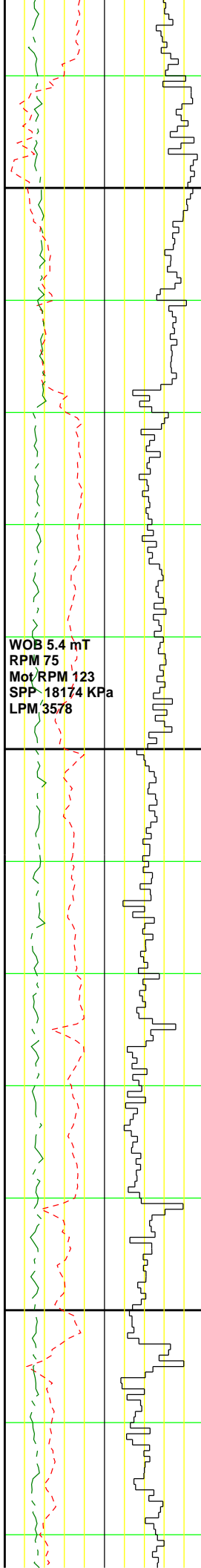
Drill with Seawater and Gel Sweeps
Returns to sea floor

TD 406 mm section at 1095.0
mMDRT _ 1033.4 mTVD.
Set 340 mm casing at 1090.6
mMDRT _ 1029.9 mTVD,

Start drilling 311 mm (12 1/4")
hole 23:30 hrs 04/02/2005 @
1095.0 mMDRT
FIT @ 1090.6 mMDRT = 1.58
sg (13.2 ppg)

1095.0 - 1200.0 mMDRT
Interbedded Argillaceous Calcilutite and
Calcsiltite.

CALCILUTITE: argill, wh-lt gy, lt brn gy, v
sft-sft, amor, micr, (65-75%) & arg
(25-35%) mtx, tr foss, tr-20% calcsilt, tr
vf dk gn glauc grns.
CALCSILTITE: lt-m gy, lt brn gy, sft-frn,
calc silt w/ tr-10% vf calc sand, micr mtx,
grd to CALCILUTITE.
CALCARENITE: lt gy, pl yelsh brn to pl
grsh yel, frm-hd, pred f-vf, part recryst,
tr-20% clay mtx, tr foss frags (shl), tr vf
dk gn glauc grns.



WOB 5.4 mT
RPM 75
Mot/RPM 123
SPP 18174 KPa
LPM 3578

1150

1200

1250

Dev @ 1150.7 m Inc 34.2 deg
Az 14.3 deg

Dev @ 1178.2 m Inc 33.7 deg
Az 14.5 deg

Gas System on Blow Back
to clear moisture from
lines

FUNCTION TESTED GAS
SYSTEM - 04/02/05 -
TESTED OK.

Dev @ 1208.0 m Inc 33.5 deg
Az 14.7 deg

Dev @ 1237.0 m Inc 33.6 deg
Az 14.4 deg

Dev @ 1265.6 m Inc 34.2 deg
Az 14.6 deg

Displace hole to new mud system -
KCI-Ildcap-Glycol
MW: 1.20 sg
FV: 55
PV/YP 24/34
Gels: 6/13
O/W/S: 0/91/9
Cl: 36000 mg/l

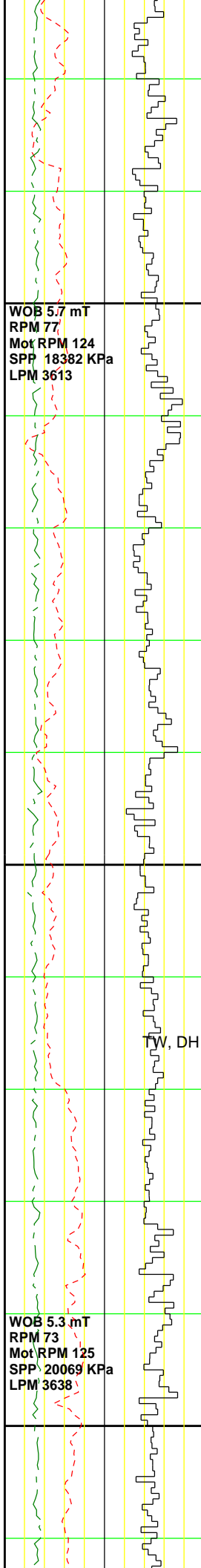
CALCISILTITE: lt-m gy, m dk gy, frm-hd,
blky, calc silt, micr (10-20%) & arg mtx
(5-10%), grd to CALCILUTITE, tr vf dk
gn glauc grns.
ARGILLACEOUS CALCILUTITE: lt-m
gy,lt brnsh gy, sft-frm, hd i/p, blky, micr
(65-80%) & arg (20-35%) mtx, tr-30%
CALCILUTITE grd to CALCISILTITE i/p,
tr vf dk gn glauc grns i/p.

1200.0 - 1250.0 mMDRT
Interbedded Argillaceous Calcilutite and
Calcisiltite with minor Calcarenite.

ARGILLACEOUS CALCILUTITE: lt-m
gy,lt brnsh gy, sft-frm, hd i/p, blky, micr
(65-80%) & arg (20-35%) mtx, tr-30%
CALCILUTITE grd to CALCISILTITE i/p,
tr vf dk gn glauc grns i/p.
CALCISILTITE: lt-m gy, lt gy brn,
frm-hd, blky, calc silt, micr (10-20%) &
arg mtx (5-10%), grd to CALCILUTITE
i/p, tr vf dk gn glauc grns.
CALCARENITE: lt gy, pl yel brn i/p, frm -
hd, vfU - fL, 10-15% calc cmt, tr-5% cly
mtx, tr-15% f glauc grns, tr shl frags &
lge Forams.

1250.0 - 1320.0 mMDRT
Interbedded Argillaceous Calcilutite and
Calcisiltite.

CALCISILTITE: lt-m gy, m dk gy, frm-hd,
blky, calc silt, micr (10-20%) & arg mtx
(5-10%), grd to CALCILUTITE, tr vf dk
gn glauc grns.
ARGILLACEOUS CALCILUTITE: wh, lt -
m gy, lt brnsh gy, sft-frm, blky, micr
(65-70%) & arg (20-35%) mtx, tr-30%
CALCILUTITE grd to CALCISILTITE i/p,
tr vf dk gn glauc grns i/p.



WOB 5.7 mT
RPM 77
Mot RPM 124
SPP 18382 KPa
LPM 3613

WOB 5.3 mT
RPM 73
Mot RPM 125
SPP 20069 KPa
LPM 3638

W, DH

1300

1350

1400

Dev @ 1294.5 m Inc 34.7 deg
Az 13.9 deg

Dev @ 1323.5 m Inc 34.5 deg
Az 14.4 deg

Dev @ 1353.0 m Inc 34.4 deg
Az 13.9 deg

Dev @ 1380.9 m Inc 34.3 deg
Az 13.8 deg

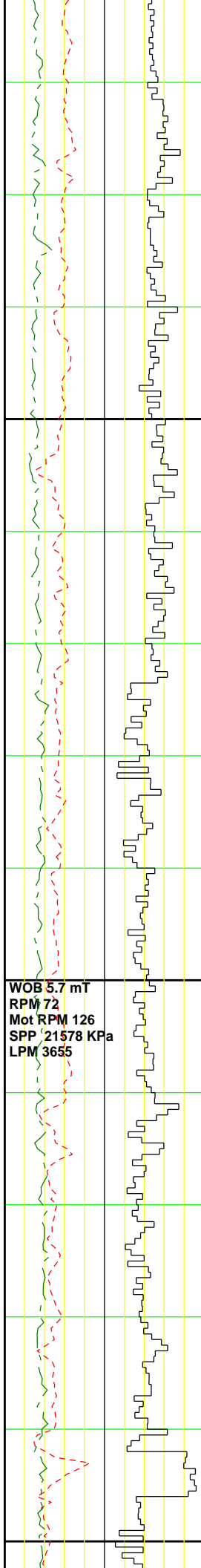
Dev @ 1409.7 m Inc 34.2 deg
Az 13.3 deg

CALCISILTITE: lt - m gy, frm, blk, calc silt, micr (10-20%) & arg mtx (5-20%), grd to & f interbed w/ CALCILUTITE, tr vf dk gn glauc grns.
ARGILLACEOUS CALCILUTITE: wh, lt-m gy, sft, disp - frm, blk, micr (60-80%) & arg (20-40%) mtx, tr-20% CALCILUTITE grd to CALCISILTITE i/p, tr vf dk gn glauc grns i/p.

1320.0 - 1560.0 mMDRT
Interbedded Argillaceous Calcilutite and Calcisiltite with minor Calcarenite.

CALCISILTITE: lt-m gy, frm-hd, loc sft, blk-sbbk, calc silt, micr (10-20%) & arg mtx (20-35%), grd to CALCILUTITE i/p, tr vf dk gn glauc grns.
CALCILUTITE: wh, v lt gy, grd to m lt gy i/p, sft, pred cmbly, micr (50-60%) & arg (5-10%) mtx, com grd to CALCISILTITE i/p, loc tr vf dk gn glauc grns i/p, iso amber xls.

CALCISILTITE: lt gy-lt m gy, i/p lt olv gy, sft-frm, loc mod hd, cmbly, micr (5-10%) & arg mtx (30-40%), grd CALCILUTITE i/p, tr vf dk gn glauc grns, tr f carb flks.
CALCILUTITE: wh, v lt gy, sft, pred cmbly, micr (60-70%) & sli arg (5-10%) mtx, loc tr vf blk carb flks.



1450

1500

1550

WOB 5.7 mT
RPM 72
Mot RPM 126
SPP 21578 KPa
LPM 3655

Dev @ 1438.1 m Inc 34.5 deg
Az 13.6 deg

Dev @ 1466.4 m Inc 34.4 deg
Az 12.8 deg

Dev @ 1494.7 m Inc 34.4 deg
Az 12.3 deg

Dev @ 1523.4 m Inc 34.2 deg
Az 12.0 deg

Dev @ 1551.9 m Inc 34.0 deg
Az 12.1 deg

CALCISILTITE: lt gy-lt m gy, lt olv gy-olv gy, sft frm, loc mod hd, cmbly, micr (5-10%) & arg mtx (35-45%), grd to CALCARENITE i/p, tr vf dk gn glauc grns, tr f carb flks, tr - rr foss frags & Forams, tr calc xls.
CALCILUTITE: wh, v lt gy, sft, pred cmbly, micr (40-50%) & sli arg (15-25%) mtx, loc tr vf blk carb flks, rr-com glauc stng.

CALCISILTITE: v lt gy-lt m gy, lt olv gy-olv gy, sft frm, loc mod hd, cmbly, micr (5-10%) & arg mtx (30-40%), less glauc, tr vf dk gn glauc grns, tr f carb flks, tr-rr foss frags & forams, iso lt pnk stn mU qtz grns.
CALCILUTITE: off wh, v lt gy, sft, pred cmbly, micr (20-30%) & sli arg (15-25%) mtx, loc tr vf blk carb flks, tr glauc stng.

CALCISILTITE: lt olv gy-olv gy, sft frm, blk-ang frags, mnr arg mtx (5-10%), grd to CALCARENITE, tr vf dk gn glauc, tr f carb flks, tr - rr foss frags & Forams.
CALCILUTITE: off wh, lt gy, sft, inc homogenous, cmbly, micr (75-85%) & sli arg (5 - 10%) mtx, calcisilt (tr-5%) grns i/p, occ tr vf blk carb flks, tr glauc stng.
CALCARENITE: pl yelsh brn, lt gy, lt olv gy, frm-hd, partly recryst, tr shell frags & Forams
SANDSTONE (TR): isolated lt pnk stnd qtz grns, lse, m-crs, ang-sbrnd.

MW: 1.10 sg
EV: 57

WOB 1-3.4 mT
RPM 66
Mot RPM 139
SPP 13041 KPa
LPM 4038

WOB 4.3 mT
RPM 67
Mot RPM 125
SPP 21106 KPa
LPM 3643

1600

1650

Dev @ 1580.9 m Inc 34.3 deg
Az 12.1 deg
Az 13.3 deg

Dev @ 1609.6 m Inc 34.7 deg
Az 16.1 deg

Dev @ 1638.6 m Inc 34.3 deg
Az 16.7 deg

Dev @ 1667.5 m Inc 34.0 deg
Az 16.1 deg

Blockage to
Chromatograph

RV: 37
PV/YP 15/32
Gels: 12/19
O/W/S: 0/91/9
Cl: 30000 mg/l

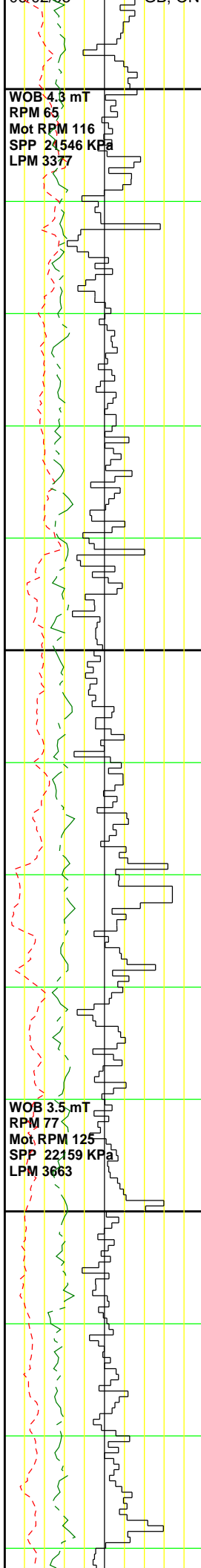
1560.0 - 1691.0 mMDRT
Interbedded Calcareous Claystone and
Marl with minor Calcilutite and
Calcisiltite.

MARL: v lt-lt m gy, v sft-sft, disp i/p,
amor, cly mtx (35-45%), grd to ARG
CALCILUTITE i/p, tr-5% calcisilt, tr vf blk
carb flks stng, tr vf dk gn dissem glauc,
tr foss frags & Forams.
CALCISILTITE: lt bnsh gy-brn gy, lt olv
gy-olv gy, sft-frn, blk-ang frags, mnr
arg mtx (5-10%), grd to CALCARENITE,
tr vf dk gn glauc, tr f carb flks, tr-rr foss
frags & Forams, tr crs pyr nod.

CALCILUTITE: off wh, lt gy, sft, blk,
pty i/p, homogenous, micr (40-85%) &
inc arg (15-40%) mtx, grd to ARG
CALCILUTITE & MARL, calcisilt
(tr-10%) grns i/p, tr vf blk carb flks.
CALCARENITE: pl yelsh bn, lt gy, lt olv
gy, frm-hd, partly recryst, tr shell frags &
Forams.
SANDSTONE (TR): isolated lt pnk stnd
qtz grns, lse, m-crs, ang-sbrnd.

CALCAREOUS CLAYSTONE: lt-m lt gy,
sft-mod frm, sbbkly-blky, 20-35% calc
mtx, tr calcisilt, tr carb spks, tr dissem
pyr, nil-tr vf glauc grns.
MARL: lt-m dk gy, v sft-sft, disp i/p,
amor, cly mtx (35-45%), grd to ARG
CALCILUTITE i/p, tr calcisilt i/p, nil-tr vf
dk gn dissem glauc, tr foss frags &
Forams.

Run Carbide @ 1655.0
mMDRT
Theor Ann Vol = 713 bbls
Act Ann Vol = 726 bbls
Ave hole dia = 12.54"



WOB 4.3 mT
RPM 65
Mot RPM 116
SPP 21546 KPa
LPM 3377

WOB 3.5 mT
RPM 77
Mot RPM 125
SPP 22159 KPa
LPM 3663

1700

1750

1800

Dev @ 1696.0 m Inc 34.2 deg
Az 16.4 deg

Dev @ 1724.7 m Inc 33.8 deg
Az 16.0 deg

Dev @ 1753.0 m Inc 34.2 deg
Az 16.9 deg

Dev @ 1782.8 m Inc 34.1 deg
Az 16.5 deg

Dev @ 1811.3 m Inc 34.4 deg
Az 17.5 deg

determine moisture
contamination in
Chromatograph

Work on Chromatograph -
flushing with air to rid
moisture.
Total Gas readings still
maintained.

Attempt to change out
faulty Chromatograph
with spare
Chromatograph.

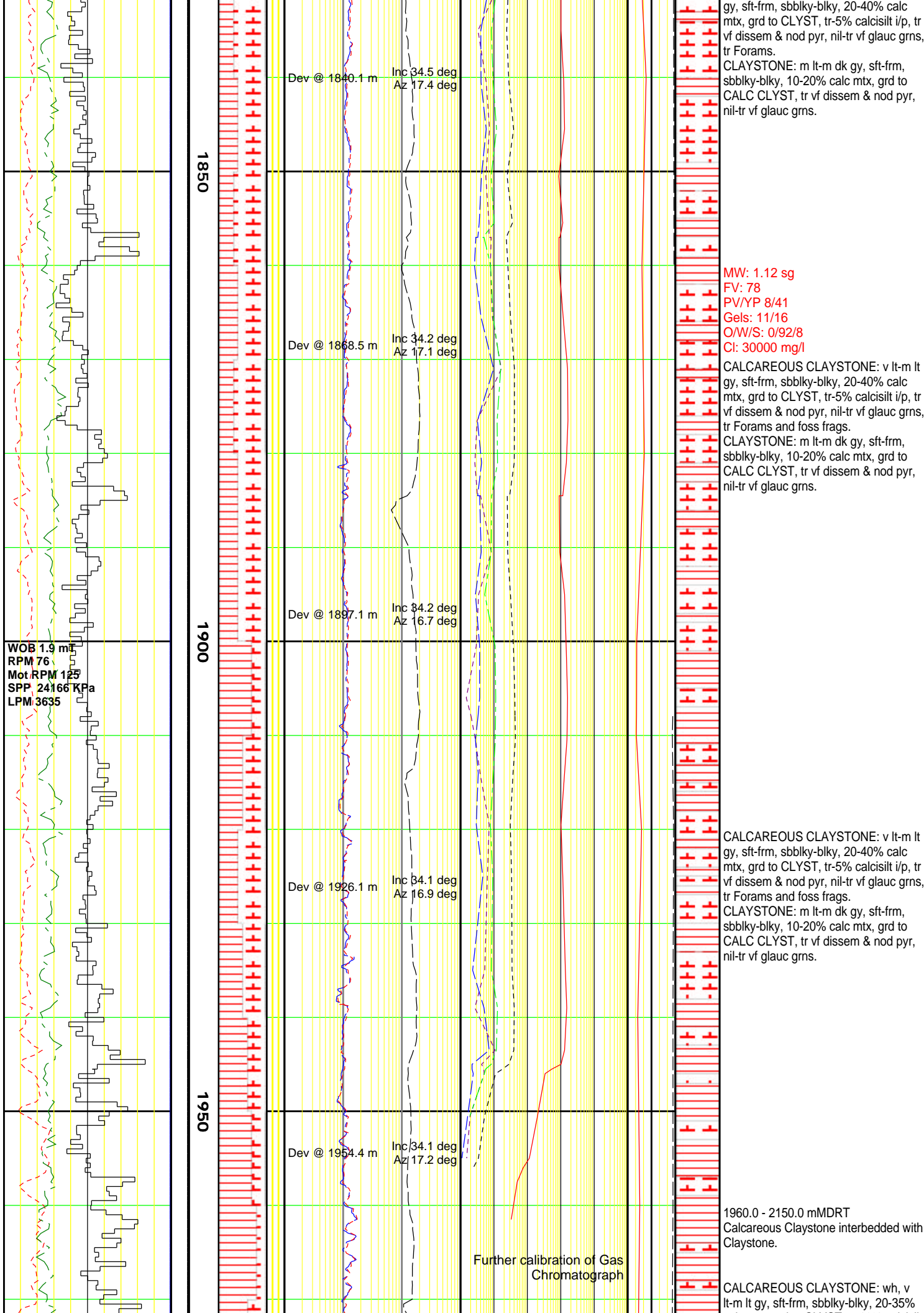
Spare Chromatograph
powered up, cycling to
correct temperature before
completing full calibration.

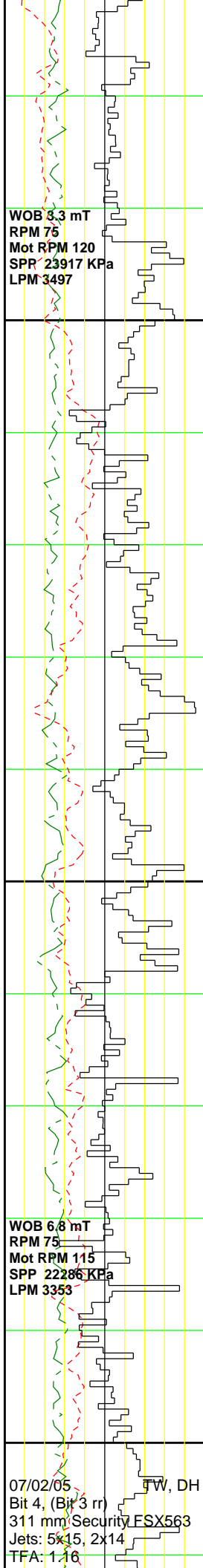
1691.0 - 1770.0 mMDRT
Calcareous Claystone.
CALCAREOUS CLAYSTONE: lt-m lt gy,
sft-mod frm, sbblky-blky, 20-35% calc
mtx, tr calcisilt, tr carb spks, tr dissem
pyr, nil-tr vf glauc grns.
MARL: lt-m dk gy, v sft-sft, disp i/p,
amor, cly mtx (35-45%), grd to ARG
CALCILUTITE i/p, tr calcisilt i/p, nil-tr vf
dk gn dissem glauc, tr foss frags &
Forams.

1770.0 - 1960.0 mMDRT
Calcareous Claystone interbedded with
Claystone.

CALCAREOUS CLAYSTONE: lt-m lt gy,
sft-frm, sbblky-blky, 20-40% calc mtx,
grd to CLYST, tr-5% calcisilt i/p, tr vf
dissem & nod pyr, nil-tr vf glauc grns.
CLAYSTONE: lt-m dk gy, sft-frm,
sbblky-blky, 10-20% calc mtx, grd to
CALC CLYST, tr vf dissem & nod pyr,
nil-tr vf glauc grns.

CALCAREOUS CLAYSTONE: v lt-m lt





2000

2050

2100

Dev @ 1983.4 m Inc 33.9 deg Az 17.5 deg

Dev @ 2012.2 m Inc 33.5 deg Az 17.0 deg

Dev @ 2041.6 m Inc 33.4 deg Az 17.6 deg

Dev @ 2070.4 m Inc 33.4 deg Az 17.4 deg

Continued calibration of Gas Chromatograph

calc mtx, grd to CLYST, tr-10% calcisilt
i/p, tr vf dissep pyr & crs nod pyr, nil-tr
vf glauc grns, nil-tr bnsh yel foss frags
incl. Forams and Bryz spics.
CLAYSTONE: m lt-m dk gy, sft-frm, disp
i/p, sbblky-blky, 5-20% calc mtx, grd to
CALC CLYST, tr vf dissep & nod pyr,
nil-tr vf glauc grns.

CALCAREOUS CLAYSTONE: off wh, v
lt-m gy, inc gy, v sft-sft, sbblky, 20-35%
calc mtx, grd to CLYST, tr-20% calcisilt
i/p, tr vf dissep pyr & crs nod pyr, nil-tr
vf glauc grns, nil-tr foss frags.
CLAYSTONE: m lt-m dk gy, sft-frm, disp
i/p, pred sbblky, 5-20% calc mtx, grd to
CALC CLYST, tr vf dissep & nod pyr,
nil-tr vf glauc grns, tr lse md rnd qtz
grns.

CALCAREOUS CLAYSTONE: pred m
gy, com m lt gy, sft-frm, sbblky-blky,
20-35% calc mtx, grd to CLYST, tr vf
dissep pyr & crs nod pyr, nil-tr vf glauc
grns, nil-tr foss frags.
CLAYSTONE: m lt-m dk gy, m gy-olv
gy, sft-frm, disp i/p, sbblky-blky, occ
subsplintery, 5-20% calc mtx, grd to
CALC CLYST, tr vf dissep & nod pyr,
nil-tr vf glauc grns, tr micmic, tr carb flks.

07/02/05 TW, DH
Bit 4, (Bit 3 rr)
311 mm Security FSX563
Jets: 5x15, 2x14
TFA: 1.16

In/Out: 2103.0/2702.0
mMDRT
Drilled: 1831 m
HOB: 19.5
Bit Grading:
2-3-BT-G-X-4-VHT-PR

MW: 1.12 sg
FV: 65
PV/YP 8/41
Gels: 16/38
OW/S: 0/91/9
Cl: 30000 mg/l

2150

2200

2250

Dev @ 2126.4 m Inc 32.9 deg
Az 16.8 deg

Dev @ 2154.8 m Inc 32.5 deg
Az 16.8 deg

Dev @ 2183.2 m Inc 32.4 deg
Az 16.5 deg

Dev @ 2211.8 m Inc 32.5 deg
Az 17.6 deg

Dev @ 2240.3 m Inc 32.6 deg
Az 16.8 deg

2150.0 - 2250.0 mMDRT
Interbedded Calcareous Claystone and
Claystone with minor traces of
Sandstone and Siltstone.

CALCAREOUS CLAYSTONE: v lt gy -
yelsh gy, lt olv gy, v sft-sft, rr frm, sbiky,
com amor & plas, incr homog, 20-35%
calc mtx grd to CLYST, tr foss frags,
nil-tr carb flks, f dissem pyr & crs nod
pyr.

CLAYSTONE: m gy-m dk gy, olv gy,
frm, loc mod hd, blkly, loc subsplintery,
5-15% calc mtx, grd to CALC CLYST,
tr-rr foss frags & forams, tr vf dissem &
nod pyr, tr micmic.

TD 311 mm (12 1/4") hole
section @ 2772.0 mMDRT @
08:46 hrs on 11/02/05. After 2
attempts, the 244 mm casing
could not be set pass 2184.0
mMDRT.
244 mm (9 5/8") casing shoe
set @ 2184.0 mMDRT.

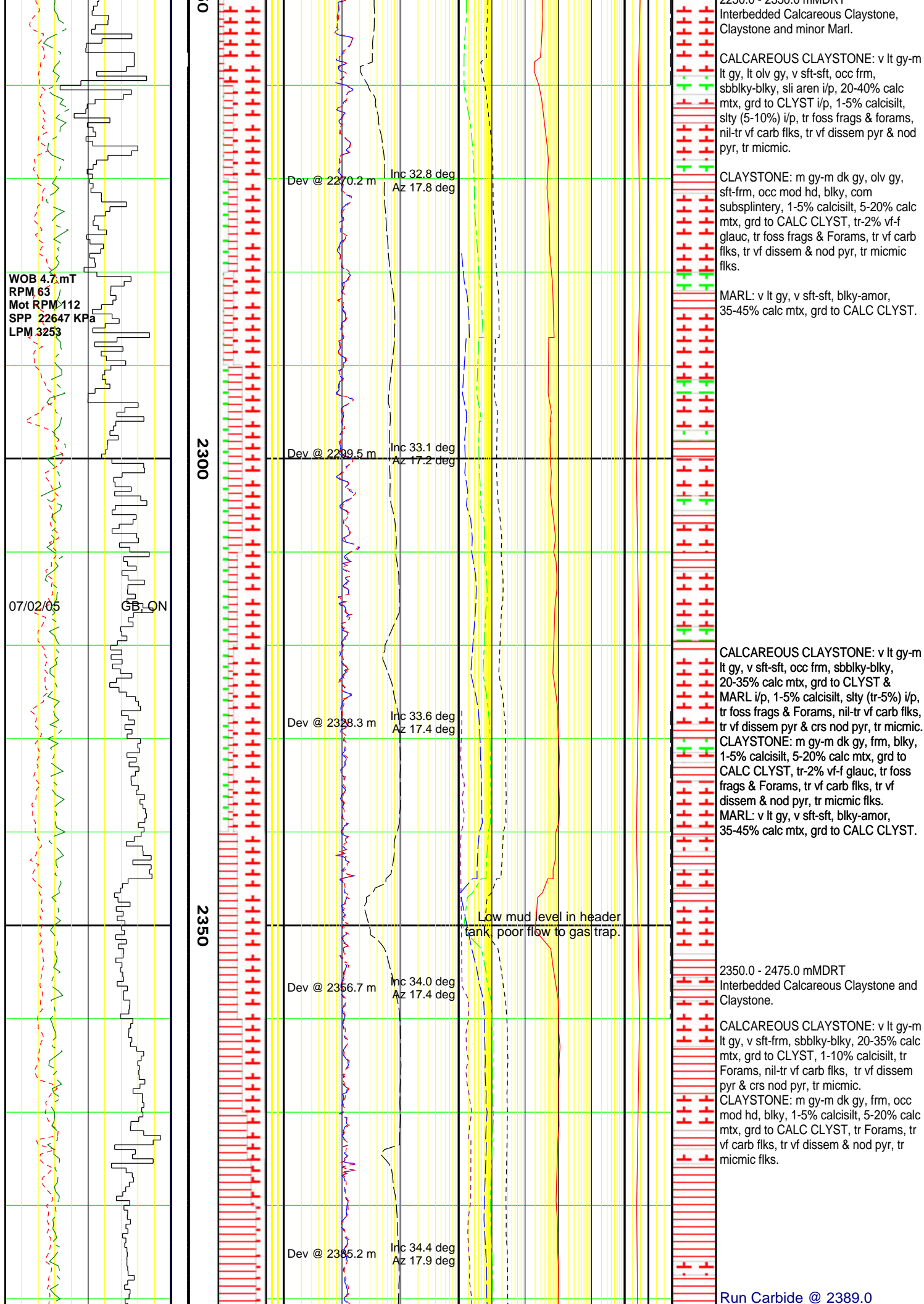
CALCAREOUS CLAYSTONE: v lt gy-m
lt gy, lt olv gy, v sft-sft, rr frm,
sbbiky-blky, loc amor & plas, incr slty &
aren i/p, 15-30% calc mtx, grd to
CLYST, tr foss frags & forams, nil-tr v
carb flks, f dissem pyr & crs nod pyr.

CLAYSTONE: m gy-m dk gy, olv gy,
sft-frm, rr mod hd, blkly, tr subsplintery,
5-15% calc mtx, grd to CALC CLYST,
tr-rr foss frags & Forams, tr carb flks, tr
vf dissem & nod pyr, tr micmic flks.

2250.0 - 2350.0 mMDRT

Norman Naidoo - Data
Engr.
Gary Bloom - Data Engr.
Tony Wyeth - Data Engr.
Dorian Kuhn - Data Engr.
Oliver Nindgen - Mud
Logger
Dave Hartney - Mud
Logger
Brent Glassbarrow - Mud
Logger

WOB 5.9 mT
RPM 71
Mot RPM 114
SPP 21297 KPa
LPM 3312



WOB 4.7mT
RPM 63
Mot RPM 112
SPP 22647 KPa
LPM 3253

07/02/05 GB-QN

Low mud level in header
tank, poor flow to gas trap.

2250.0 - 2350.0 mMDRT
Interbedded Calcareous Claystone,
Claystone and minor Marl.

CALCAREOUS CLAYSTONE: v lt gy-m
lt gy, lt olv gy, v sft-sft, occ frm,
sbbiky-blky, sli aren i/p, 20-40% calc
mtx, grd to CLYST i/p, 1-5% calcisilt,
slty (5-10%) i/p, tr foss frags & forams,
nil-tr vf carb flks, tr vf dissem pyr & nod
pyr, tr micmic.

CLAYSTONE: m gy-m dk gy, olv gy,
sft-frm, occ mod hd, blky, com
subsplintery, 1-5% calcisilt, 5-20% calc
mtx, grd to CALC CLYST, tr-2% vf-f
glauc, tr foss frags & Forams, tr vf carb
flks, tr vf dissem & nod pyr, tr micmic
flks.

MARL: v lt gy, v sft-sft, blky-amor,
35-45% calc mtx, grd to CALC CLYST.

CALCAREOUS CLAYSTONE: v lt gy-m
lt gy, v sft-sft, occ frm, sbbiky-blky,
20-35% calc mtx, grd to CLYST &
MARL i/p, 1-5% calcisilt, slty (tr-5%) i/p,
tr foss frags & Forams, nil-tr vf carb flks,
tr vf dissem pyr & crs nod pyr, tr micmic.

CLAYSTONE: m gy-m dk gy, frm, blky,
1-5% calcisilt, 5-20% calc mtx, grd to
CALC CLYST, tr-2% vf-f glauc, tr foss
frags & Forams, tr vf carb flks, tr vf
dissem & nod pyr, tr micmic flks.

MARL: v lt gy, v sft-sft, blky-amor,
35-45% calc mtx, grd to CALC CLYST.

2350.0 - 2475.0 mMDRT
Interbedded Calcareous Claystone and
Claystone.

CALCAREOUS CLAYSTONE: v lt gy-m
lt gy, v sft-frm, sbbiky-blky, 20-35% calc
mtx, grd to CLYST, 1-10% calcisilt, tr
Forams, nil-tr vf carb flks, tr vf dissem
pyr & crs nod pyr, tr micmic.

CLAYSTONE: m gy-m dk gy, frm, occ
mod hd, blky, 1-5% calcisilt, 5-20% calc
mtx, grd to CALC CLYST, tr Forams, tr
vf carb flks, tr vf dissem & nod pyr, tr
micmic flks.

WOB 4.8 mT
RPM 68
Mot RPM 115
SPP 22298 KPa
LPM 3334

2400

2450

2500

WOB 4.2 mT
RPM 69
Mot RPM 112
SPP 24029 KPa
LPM 3272

Dev @ 2413.8 m Inc 35.0 deg
Az 17.7 deg

Dev @ 2441.9 m Inc 35.3 deg
Az 17.9 deg

Dev @ 2470.3 m Inc 35.2 deg
Az 17.6 deg

Dev @ 2499.6 m Inc 35.1 deg
Az 18.3 deg

Dev @ 2528.7 m Inc 34.9 deg
Az 17.7 deg

Carbide Check

Rig on 1 pump only
Insufficient flow to Gas
Trap

mMDRT
Theor Ann Vol = 1123 bbls
Act Ann Vol = 1147 bbls
Ave hole dia = 12.54"

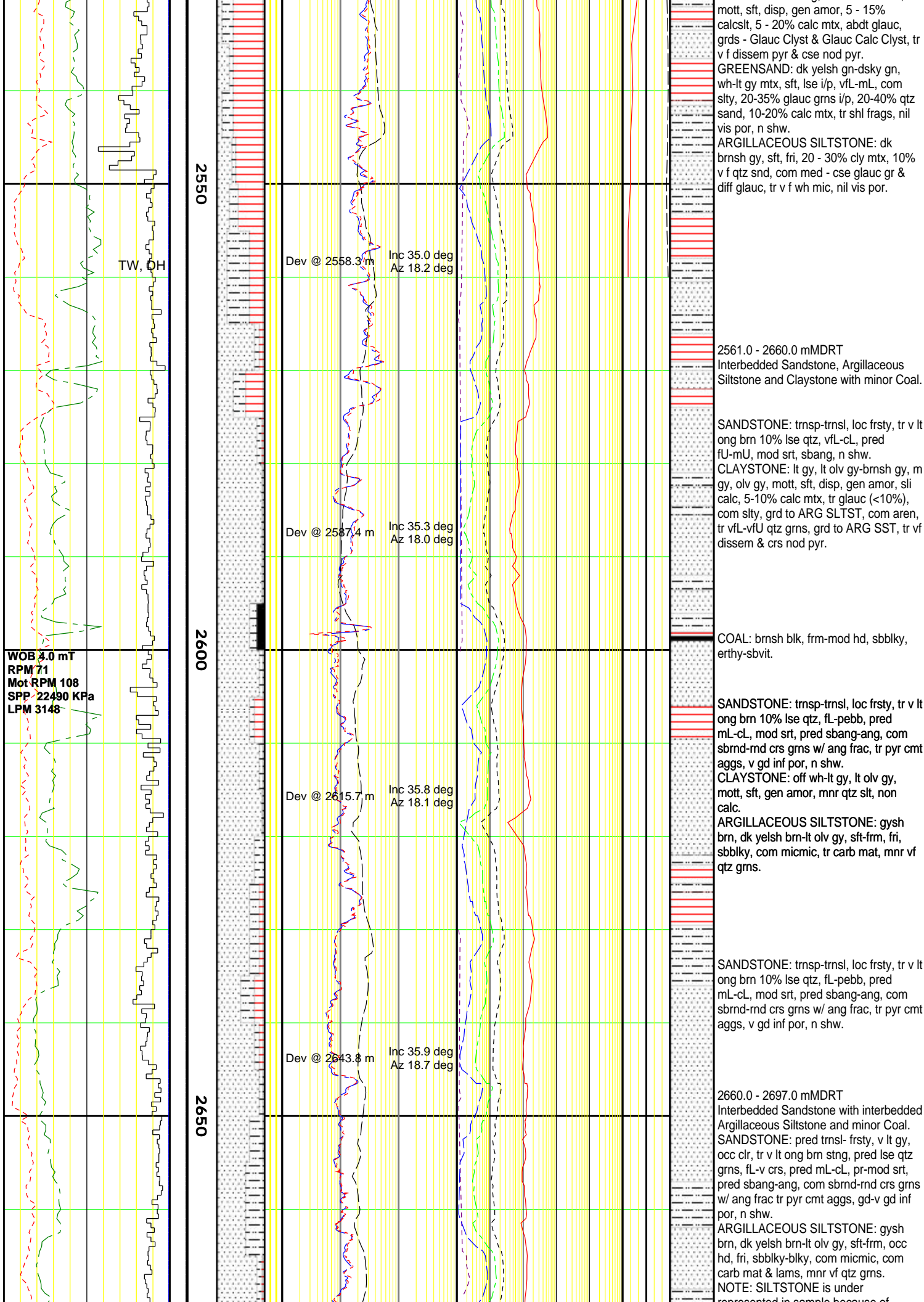
CALCAREOUS CLAYSTONE: v lt gy-m
lt gy, v sft frm, sbbly-bly, 20-35% calc
mtx, grd to CLYST, 1-10% calcisilt, tr
Forams, nil-tr vf carb flks, tr vf dissem
pyr & crs nod pyr, tr micmic.
CLAYSTONE: m gy-m dk gy, yelsh
gy-dsky yel mott i/p, frm, occ mod hd,
bly, 1-10% calcisilt, 5-20% calc mtx,
grd to CALC CLYST, tr Forams, tr vf
carb flks, tr vf dissem & nod pyr, tr
micmic flks, tr vf glauc grns.

CALCAREOUS CLAYSTONE: v lt gy-m
lt gy, v sft frm, amor i/p, sbbly-bly,
20-35% calc mtx, grd to CLYST, 5-20%
calcisilt, nil-tr vf carb flks, tr vf dissem
pyr & crs nod pyr, tr micmic.
CLAYSTONE: lt gy-m dk gy, lt olv gy,
yelsh gy-dsky yel, mott i/p, frm, occ mod
hd, bly, 1-10% calcisilt, 5-20% calc
mtx, grd to CALC CLYST, tr vf carb flks,
tr vf dissem & crs nod pyr, tr micmic flks,
tr vf glauc grns.

2475.0 - 2521.0 mMDRT
Interbedded Calcareous Claystone,
Claystone and minor Marl.

CALCAREOUS CLAYSTONE: v lt gy-m
lt gy, v sft frm, amor i/p, sbbly-bly,
20-35% calc mtx, 5-20% calcisilt, grd to
CLYST & MARL, nil-tr vf carb flks, tr vf
dissem pyr & f dk lams, tr crs nod pyr, tr
f glauc i/p, nil-tr lt bnsh yel foss frags.
CLAYSTONE: lt gy-m dk gy, bnsh gy,
frm-mod hd, splintery, bly, 5-15%
calcisilt, 5-20% calc mtx, grd to CALC
CLYST, nil-5% qtz slt w/ rr md-crs snd,
tr vf carb flks, tr vf dissem & crs nod pyr,
tr vf glauc grns.

2521.0 - 2561.0 mMDRT
Interbedded Claystone and Greensand
with minor Argillaceous Siltstone and
Claystone.
CLAYSTONE: lt gy - med dk gy, pa rdsh
brn - mod rdsh orng, lt brn - mod brn.



WOB 3.0 mT
RPM 75
Mot RPM 110
SPP 24415 KPa
LPM 3211

GB, QZ

08/02/05

2700

10/02/05
Bit 5
311 mm Security DBS
XL12
Jets: 3 x 20
TFA: 0.92
In/Out: 2702.0/2772.5
mMDRT
Drilled: 70.5 m
HOB: 10.9
Bit Grading:
3-3-BT-2-E-I-WT-TD

2750

11/02/05

2800

Dev @ 2676.2 m

Az 18.9 deg

Dev @ 2703.1 m Inc 35.4 deg
Az 18.3 deg

Dev @ 2730.3 m Inc 35.6 deg
Az 18.4 deg

Dev @ 2758.6 m Inc 34.9 deg
Az 18.8 deg

CBU

MW: 1.16 sg
FV: 70
PV/YP 21/36
Gels: 9/17
O/W/S: 0/89/11
Cl: 37000 mg/l

MW: 1.16 sg
FV: 63
PV/YP 21/21
Gels: 8/14
O/W/S: 0/91/9
Cl: 37500 mg/l

MW: 1.16 sg
FV: 63
PV/YP 20/361
Gels: 9/16
O/W/S: 0/91/9
Cl: 38000 mg/l

2697.0 - 2733.0 mMDRT
Sandstone with minor interbedded
Argillaceous Siltstone, Claystone and
Coal.
SANDSTONE: clr-trnsl, frsty i/p, tr v lt
ong brn, pred lse qtz grns, fl-pebb, pred
mL-cL, pr srt, pred sbang-ang, tr mica
flks, com sbrnd-rnd crs grns w/ ang frac
tr pyr cmt aggs, gd inf por, n shw.
ARGILLACEOUS SILTSTONE: gysh
brn, dk yelsh brn-lt olv gy, sft-frm, fri,
sbbkly, com micnic, tr carb mat, mnr vf
qtz grns.
CLAYSTONE: wh, lt gy, med brn-brn
blk, brnsh gy-md brn, sft-frm, blkly, disp
i/p, washing out, slty w/tr-10% qtz slt, tr-
30% carb mat, tr pyr, tr-rv vf qtz grns,
non calc.

2733.0 - 2772.5 mMDRT
Sandstone with minor interbedded
Argillaceous Siltstone, Claystone and
Coal.
SANDSTONE: trnsp-trnsl, tr opq, occ v lt
gy, frsty, vfU-cU, pred mL-cL, mod wl
srt, ang-sbang, com sbrnd-rnd c grns w/
ang frac, tr c mic flks, tr foss & forams, n
shw.
SILTSTONE: gy brn-dk gy brn, mod-dk
yelsh brn, dk yel org, sft, fri, sbbkly,
washing out, 20-30% arg mtx, mic,
abdnt carb mat & lams, aren i/p, tr crs
pyr nod, non calc.

SANDSTONE: clr-trnsl, opq i/p, occ lt gy,
fl-vclU, pred mU-cL, pr-mod srt,
sbang-ang, occ sbrnd grns w/ang fracs,
lse, occ fri aggs, tr crs nod pyr, tr crs
mica flks, tr foss frags & forams, tr Fe
stng, mod-gd inf por, pr-mod vis por, n
shw.
CLAYSTONE: off wh-lt gy, lt olv gy,
mott, sft, gen amor, mnr qtz slt, non
calc.
COAL: dk yelsh brn, dk brn-blk, sft -
mod frm, sbbkly-sbfiss, slty i.p., erthy -
sbvit.

TD 311 mm Hole section at
2772.5 mMDRT _ 2420.7
mTVD. After 2 attempts, the
244 mm casing could not be
set pass 2184.0 mMDRT. Set
244 mm Casing shoe @
2184.0 mMDRT _ 1903.0
mTVD.

ZaneGrey-1 was plugged back
to 2184.0 mMDRT, and
ZaneGrey-1ST1 was kicked off
at 2190.0 mMDRT.

<div> <div>Gamma Ray api</div> <div>0 150 300</div> </div> <div> <div>ROP Avg m/hr</div> <div>200 100 0</div> </div> <div> <div>Bit Weight mT</div> <div>0 10 20</div> </div>	Sliding	DEPTH - metres	MDRT	<div>Oil Show</div> <div> <div> <div>EWR Deep Phase Res ohm-metre</div> <div>0.1 1 10 100</div> </div> <div> <div>EWR Medium Phase Res ohm-metre</div> <div>0.1 1 10 100</div> </div> <div> <div>Gas Hydrclbn Avg %</div> <div>0.01 0.1 1 10</div> </div> </div>	<div>Gas Chromatograph</div> <div>ppm</div> <div> <div>C1 Avg</div> <div>C2 Avg</div> <div>C3 Avg</div> <div>C4 Total Avg</div> <div>C5 Total Avg</div> </div> <div> <div>% DOL</div> <div>100 0</div> </div> <div> <div>% LST</div> <div>0 100</div> </div>	Calcmtry	Interpreted Lithology	Lithology Descriptions and Remarks
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RIG MONITORING
FORMATION EVALUATION LOG

Country : Australia
Field : ZaneGrey / Gippsland Basin
Location : Lat: 38° 34' 31.64" South
Long: 147° 59' 16.27" East
Well : ZaneGrey-1 ST1
Company : Bass Strait Oil Company Ltd
Rig : Ocean Patriot

LOCATION

Latitude : 38° 34' 31.64" South
Longitude : 147° 59' 16.27" East
UTM Easting = 586,049.89 m
UTM Northing = 5,729,856.42 m

Other Services

Permanent Datum : Mean Sea Level

Elev. : 0.00 m

Log Measured From : Drill Floor

21.50 m Above Permanent Datum

Drilling Measured From : Drill Floor

MD LOG

KB 0.00 m
DF 21.50 m
GL 0.00 m
WD 72.50 m

Depth Logged : 2,184.00 m To 3,107.00 m

Unit No. : 197

Job No. : AUFEE0003564401

Date Logged : 27-Jan-05 To 25-Feb-05

Total Depth MD : 3,107.00 m TVD : 2,706.20 m

Plot Type : Final

Plot Date : 22-Jun-05

Run No. : 27-Jan-05

Run No.

Size : 216,000 mm From 2,184.00 m To 3,107.00 m

Borehole Record (MD)

Size : 244.475 mm From 69.94 kgpm SURFACE To 2,184.00 m

Casing Record (MD)

LEGEND

Abbreviations and Symbols

Drilling Data

BG Background Gas
BHT Bottomhole Temp
C Carbide Test
CB Core Bit
CG Connection Gas
CKF Check For Flow
CO Circulate Out
DB Diamond Bit
DC Depth Correction
DS Direction Survey
DST Drillstem Test
FLT Flowline Temp.
LAT Logged After Trip
NB New Bit
NR No Returns
PDC Polycrystalline Diamond
Compound Bit
PR Partial Returns
RPM Revs Per Minute
RRB Rerun Bit
STG Short Trip Gas
TB Turbo Drill
TG Trip Gas
U Gas Units
WOB Weight On Bit

Mud Data

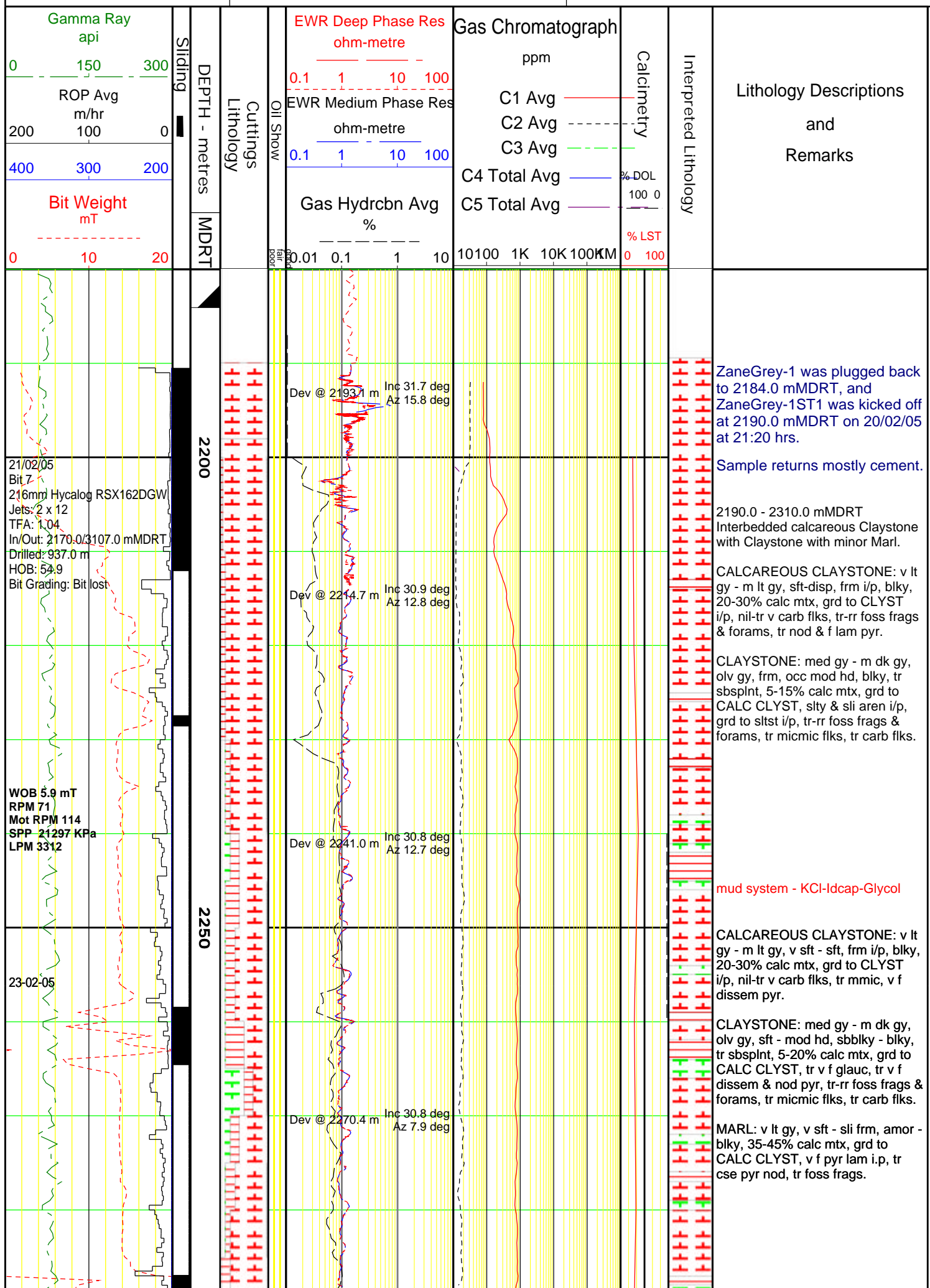
Cl- Chloride Ion Conc Rm Mud Resistivity
FC Filter Cake Rmf Filtrate Resistivity
FL Filtrate Loss S Solids Content
G Gels Vis Funnel Viscosity
pH Hydrogen Ion Content MW Mud Weight
PV Plastic Viscosity YP Yield Point

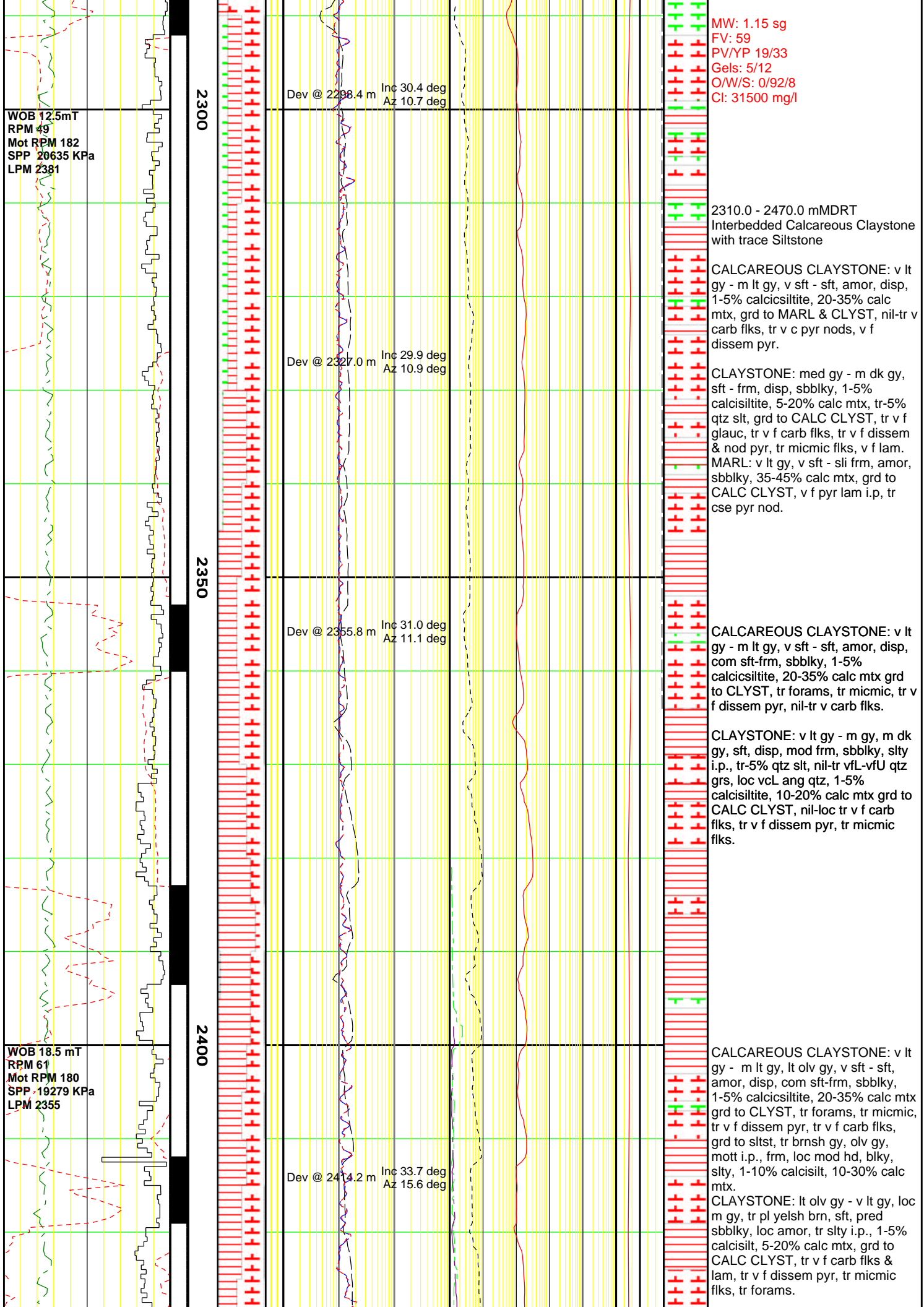
Engineering Data

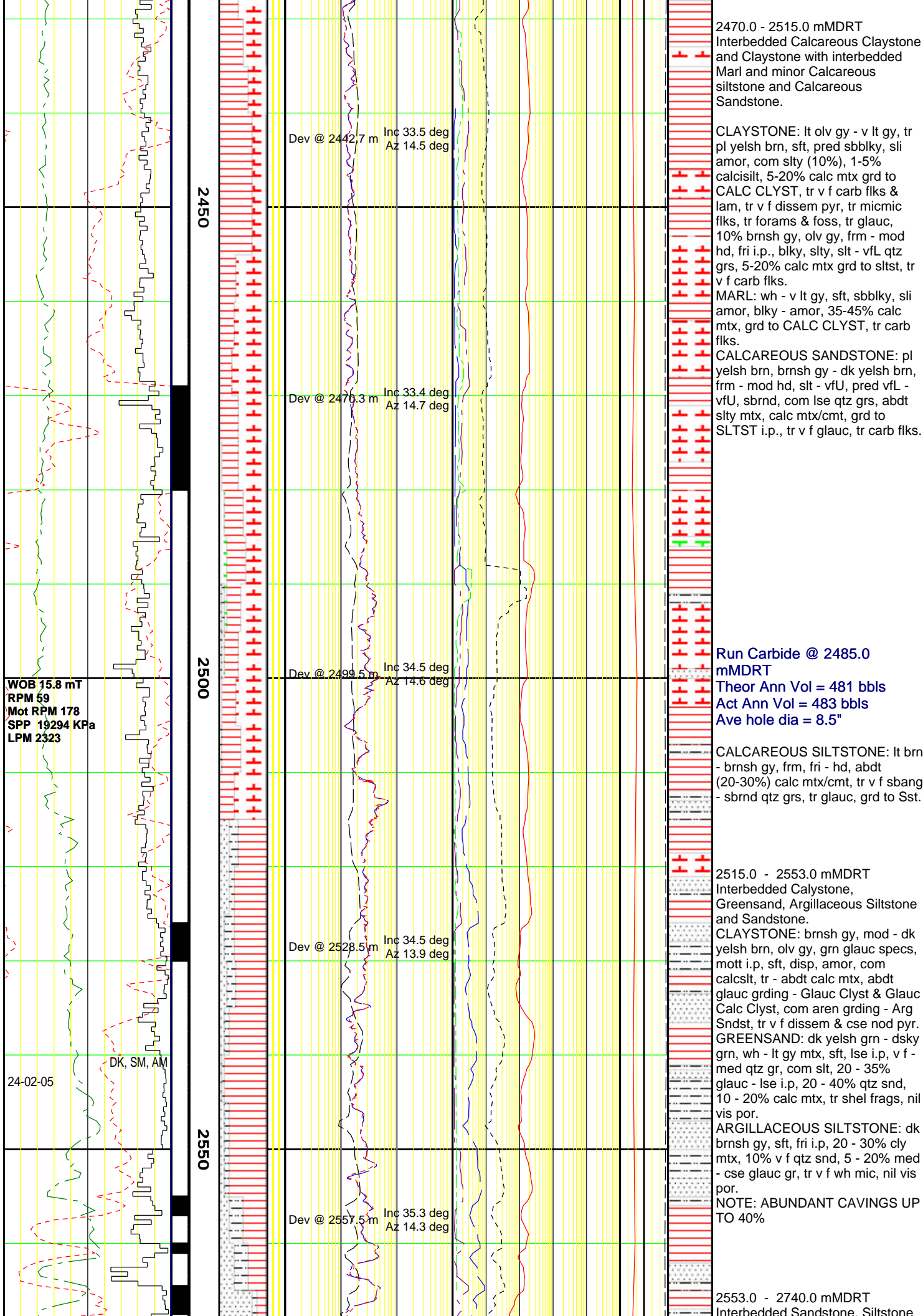
Core No. Water
DST No. Salt Water
Casing Seat Fresh Water
Side Wall Core Hydrocarbons Smell
Gas Traces H2S Smell
Gas
Oil Traces
Oil
Interval Tester
Wireline Log Run
Leakoff Test
Pressure Integrity

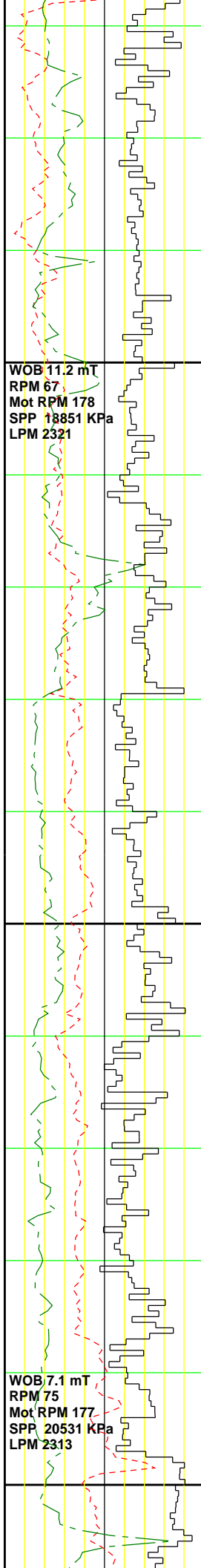
Lithology Symbols

Sandstone
Silty Sandstone
Silt
Siltstone
Clay
Claystone
Calcareous Claystone
Limestone
Dolomite
Calcilutite
Calcisiltite
Calcarenite
Mudstone
Marl
Glauconitic Sandstone
Chert
Conglomerate
Igneous
Coal
No Sample









2600

2650

2700

Dev @ 2588.4 m Inc 36.3 deg
Az 14.0 deg

Dev @ 2671.6 m Inc 37.3 deg
Az 15.0 deg

Dev @ 2700.1 m Inc 37.5 deg
Az 15.5 deg

SANDSTONE: dk yelsh orng, mod - dk yelsh brn, sft, amor i.p, trnsp - trnsl, occ frst, yelsh orng, lse qtz gr i.p, pr std, rnd - ang, 20 - 30% cly mtz i.p, slty grds - Arg Sndst & Arg Sltst, pr inf por, n shw.

MW: 1.13 sg
FV: 61
PV/YP 18/34
Gels: 9/13
O/W/S: 0/93/7
Cl: 31500 mg/l

SANDSTONE: pred trnsl - frst, v lt gy, loc clr, tr v pl orng (stn), lse qtz gr, vfU - vcL, pred mU-cl, mod srt, pred sbang - sbrnd, com sbrnd - rnd crs grs, v gd inf por, n shw.

SILTSTONE: gysh brn, dk yelsh brn, dk yelsh orng, sft, fri, cmbly, wsh out, 5 - 20% arg mtz grd to SLTY CLYST, mic, tr carb mat & lam, mnr v f qtz grs.

CLAYSTONE: pred wh - lt gy, lt brnsh gy - dk yelsh brn, sft, amor, wsh out, tr - 20% qtz slt & snd grs, grd to SLTST i.p., non calc. Note: claystone and siltstone washing out in mud.

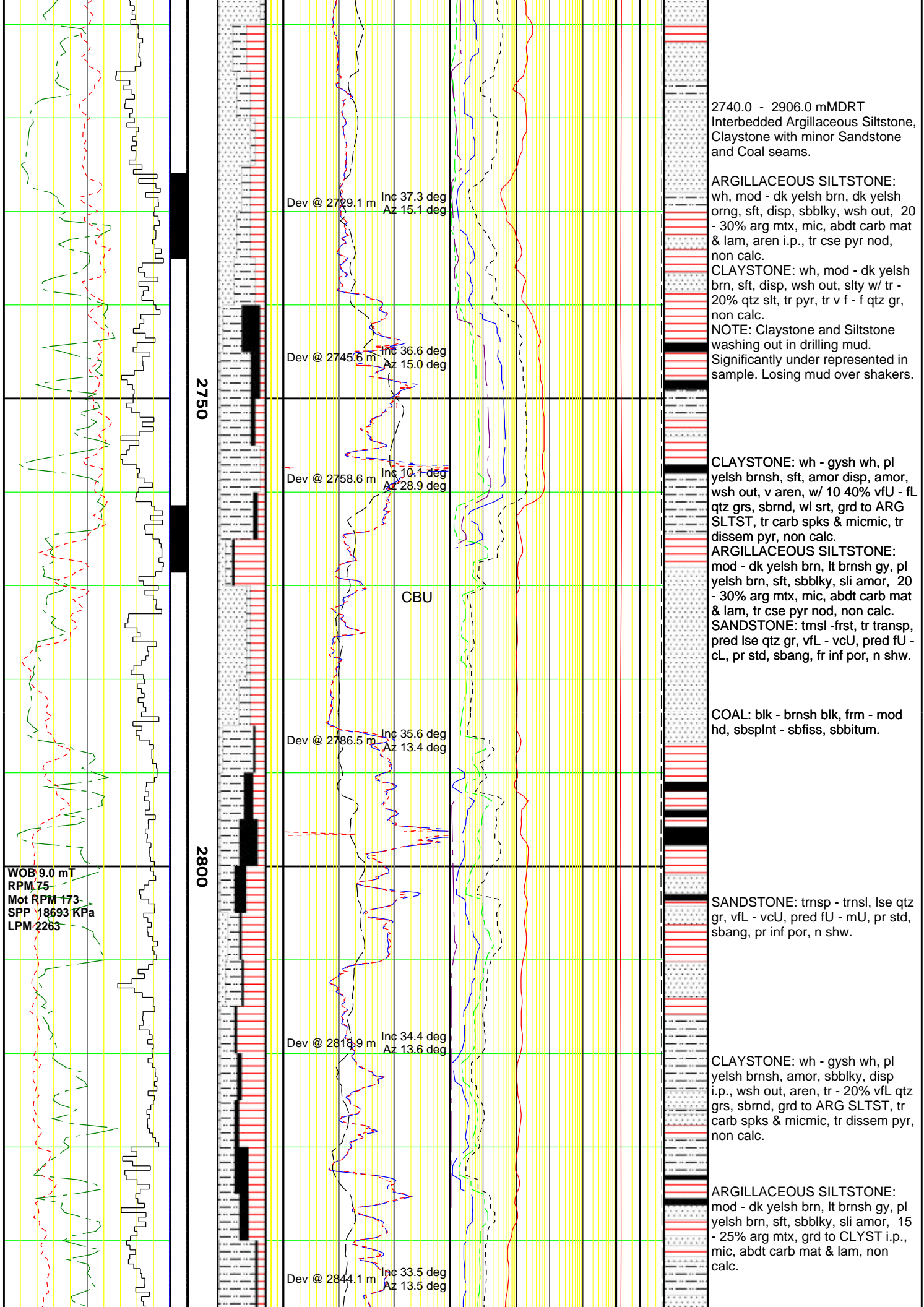
SANDSTONE: v lt gy, trnsl, occ clr, tr v pa orng - dk yelsh orng, lse qtz gr, pr std, f - v cse gr, sbang - ang, tr pyr cmt aggr, tr cse mic flks, v gd inf por, n shw.

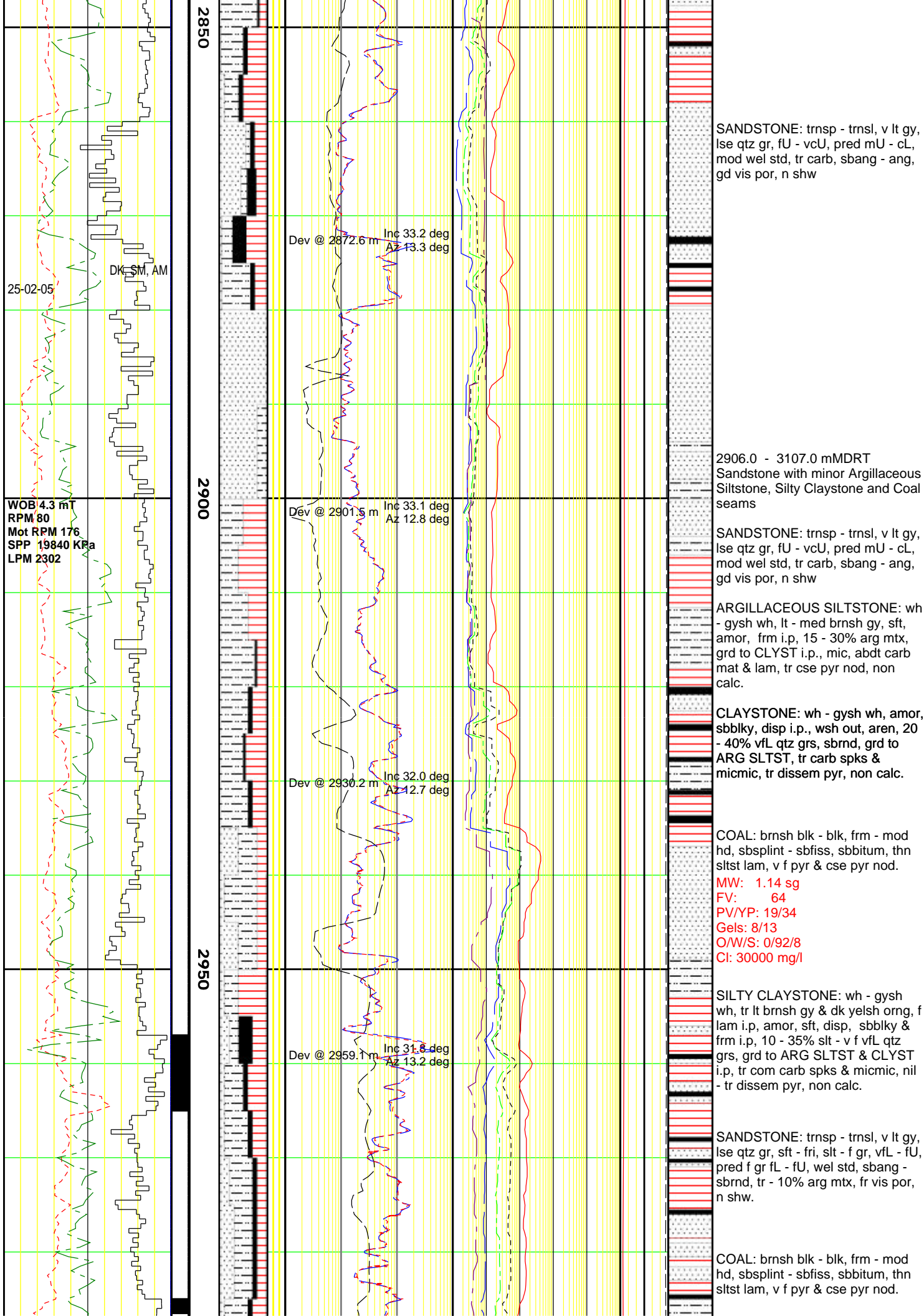
ARGILLACEOUS SILTSTONE: mod - dk yelsh brn, sft, fri, sbblky, 20 - 30% arg mtz, mic, abdt carb mat & lam, aren w/ 5 - 10% v f - med qtz gr, tr cse pyr nod, non calc.

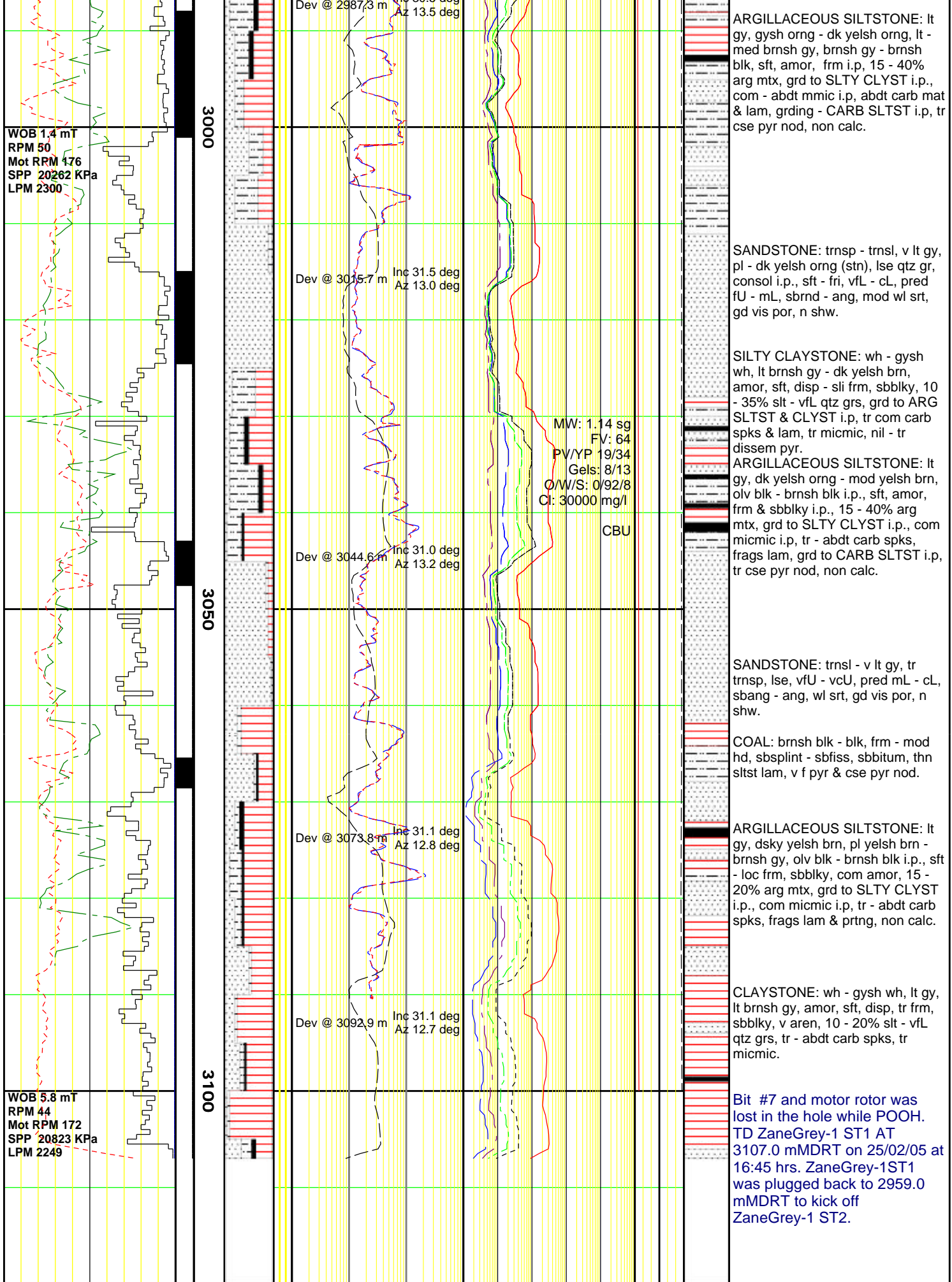
CLAYSTONE: wh - lt gy, lt brnsh gy - mod brn, dk yelsh orng, com lam, sft, disp, amor, sbblky i.p, sft, tr - 20% qtz slt, grds - Arg Sltst i.p, tr carb mat, carb lam, tr pyr, tr - rr v f - cse qtz gr, non calc.

NOTE: Claystone and Siltstone washing out in mud.

SANDSTONE: trnsl - frst, v lt gy, loc clr, lse qtz gr, tr opq, tr v pl orng stn i.p., fU-vcL, brkn grs, pred fU - cU, (pbbly), pr std, pred sbang - ang, com sbrnd - rnd crs grs w/ ang frac, tr pyr cmt aggr & nods, tr mic flks, v gd inf por, n shw.







Gamma Ray api	Slid	EWR Deep Phase Res ohm-metre	Gas Chromatograph ppm	Ce	In
0 150 300					

ROP Avg m/hr			Cuttings Lithology	Oil Show	EWR Medium Phase Res ohm-metre	C1 Avg	C2 Avg	C3 Avg	C4 Total Avg	C5 Total Avg	Interpreted Lithology	Lithology Descriptions and Remarks
200	100	0										
400	300	200	DEPTH - metres	MDRT	Gas Hydrclbn Avg %	10100 1K 10K 100KM	% DOL	% LST				
Bit Weight mT												
0	10	20			0.01 0.1 1 10							

RIG MONITORING
FORMATION EVALUATION LOG

Country : Australia
Field : ZaneGrey / Gippsland Basin
Location : Lat: 38° 34' 31.64" South
Long: 147° 59' 16.27" East
Well : ZaneGrey-1 ST2
Company : Bass Strait Oil Company Ltd
Rig : Ocean Patriot

LOCATION

Latitude : 38° 34' 31.64" South
Longitude : 147° 59' 16.27" East
UTM Easting = 586,049.89 m
UTM Northing = 5,729,856.42 m

Other Services

Permanent Datum : Mean Sea Level
Log Measured From : Drill Floor
Drilling Measured From : Drill Floor
Elevation : 0.00 m
21.50 m Above Permanent Datum

MD LOG

Elev. KB 0.00 m
DF 21.50 m
GL 0.00 m
WD 72.50 m

Depth Logged : 3,075.00 m To 3,675.00 m
Date Logged : 27-Jan-05 To 10-Mar-05
Total Depth MD : 3,675.00 m TVD : 3,219.80 m

Spud Date : 27-Jan-05
Plot Type : Final
Plot Date : 23-Jun-05

















Run No. : 11
Size : 216,000 mm
Borehole Record (MD)
From : 3,075.00 m To : 3,675.00 m

Run No. :
Size :
Borehole Record (MD)
From : To :
Casing Record (MD)
From : To :
Size :
Weight :
From : To :





















LEGEND

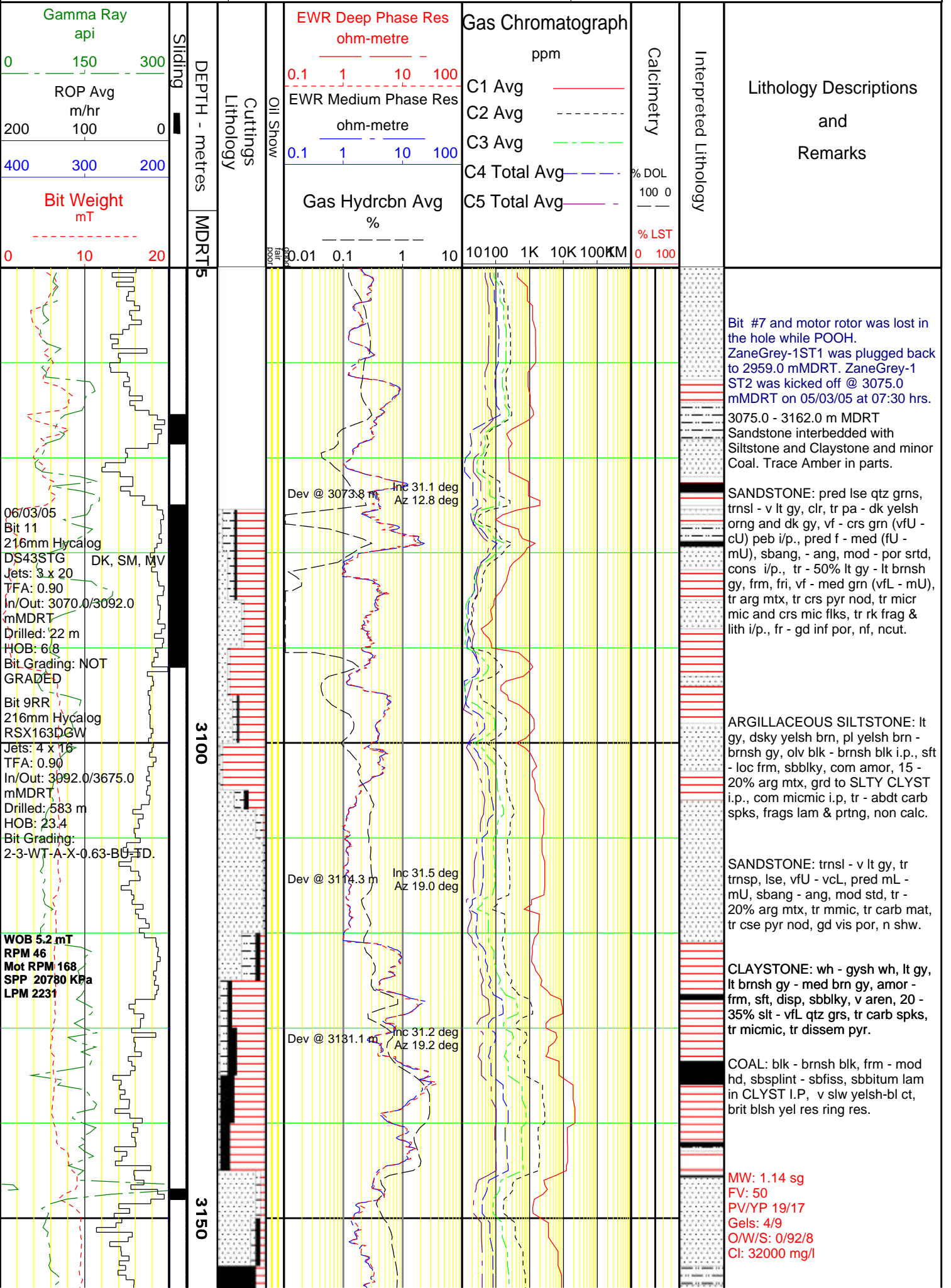
Abbreviations and Symbols

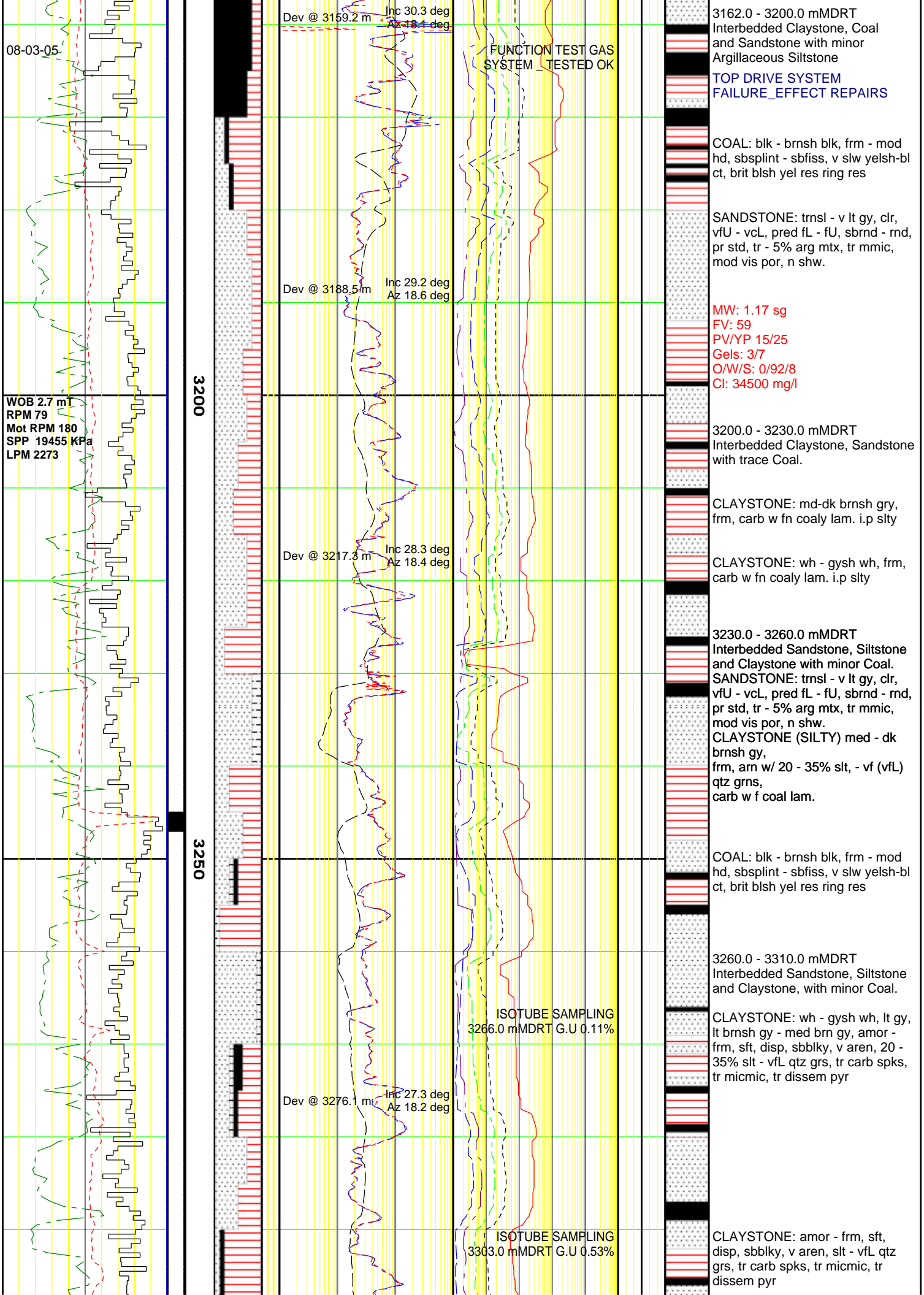
Drilling Data		Mud Data			
BG	Background Gas	Cl-	Chloride Ion Conc	Rm	Mud Resistivity
BHT	Bottomhole Temp	FC	Filter Cake	Rmf	Filtrate Resistivity
C	Carbide Test	FL	Filtrate Loss	S	Solids Content
CB	Core Bit	G	Gels	Vis	Funnel Viscosity
CG	Connection Gas	pH	Hydrogen Ion Content	MW	Mud Weight
CKF	Check For Flow	PV	Plastic Viscosity	YP	Yield Point
CO	Circulate Out	Engineering Data			
DB	Diamond Bit				
DC	Depth Correction				
DS	Direction Survey				
DST	Drillstem Test				
FLT	Flowline Temp.				
LAT	Logged After Trip				
NB	New Bit				
NR	No Returns				
PDC	Polycrystalline Diamond				
PR	Partial Returns				
RPM	Revs Per Minute				
RRB	Rerun Bit				
STG	Short Trip Gas				
TB	Turbo Drill				
TG	Trip Gas				
U	Gas Units				
WOB	Weight On Bit				

	Core No.		Water
	DST No.		Salt Water
	Casing Seat		Fresh Water
	Side Wall Core		Hydrocarbons Smell
	Gas Traces		H2S Smell
	Gas		Interval Tester
	Oil Traces		Wireline Log Run
	Oil		Leakoff Test

Lithology Symbols

	Sandstone		Calcisiltite
	Silty Sandstone		Calcareenite
	Silt		Mudstone
	Siltstone		Marl
	Clay		Glauconitic Sandstone
	Claystone		Chert
	Calcareous Claystone		Conglomerate
	Limestone		Igneous
	Dolomite		Coal
	Calclutite		No Sample





WOB 10.5 mT
RPM 78
Mot RPM 183
SPP 21027 KPa
LPM 2313

WOB 8.0 mT
RPM 79
Mot RPM 182
SPP 20854 KPa
LPM 2302

3300

3350

3400

ISOTUBE SAMPLING
3314.0 mMDRT G.U. 15%

Dev @ 3333.3 m Inc 26.1 deg
Az 18.1 deg

CHROMATOGRAPH
SYSTEM OVER
SATURATED WITH
HYDROCARBONS DUE TO
SHORT RUN TIME. RESET
RUN TIME TO
ACCOMMODATED
HEAVIER
HYDROCARBONS

REMOVE SAVER SUB

Dev @ 3389.8 m Inc 25.7 deg
Az 18.4 deg

Dev @ 3417.1 m Inc 24.2 deg
Az 18.0 deg

SANDSTONE: trnsl - v lt gy, pred lse, vfU - vcL, pred fL - fU, sbrnd - rnd, pr std, tr - 5% arg mtx, tr mmic, mod vis por, v slw blsh ct, pchy blsh yel ring res.

COAL: brnsh blk - blk, frm - mod hd, sbsplint - sbfiss, sbbitum, thn sltst lam, v slw yelsh-bl ct, pa blsh yel res ring res

3310.0 - 3350.0 mMDRT
Sandstone with interbedded Siltstone and Claystone with minor Coal.

3350.0 - 3370.0 mMDRT
Quartz Sandstone.

SANDSTONE: lse qtz grns, clr - trnsl, v lt gy orng, pa - dk yelsh orng, med - vcrs grn (mL - vcU), abund, frac, peb, pred med - crs (mU-cl), crs w/ dep, pr srtd, tr micr mic, nil - tr carb flks & lam, gd vis por, nfl, ncut.

3370.0 - 3410.0 mMDRT
Sandstone with interbedded Siltstone and Silty Claystone, with minor Coal.

COAL: brnsh blk - blk, frm - mod hd, sbsplint - sbfiss, sbbitum, thn sltst lam, v slw yelsh-bl ct, pa blsh yel res ring res

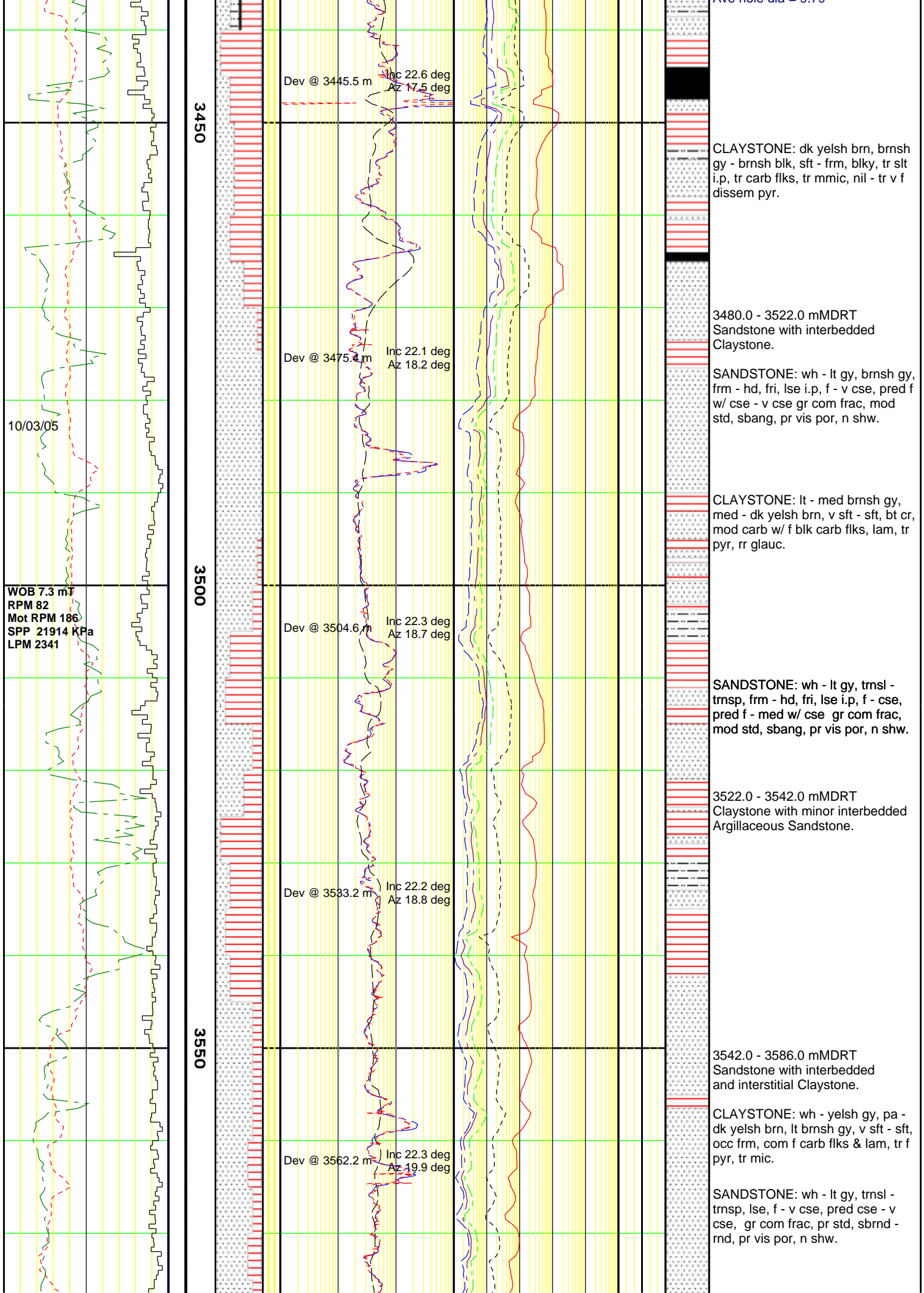
CLAYSTONE: wh - gysh wh, mod - dk yelsh brn & med - dk brnsh gy, disp - frm, sft, sbblky, v aren, 20 - 30% slt - vL qtz grs, tr carb w/ f coal lam.

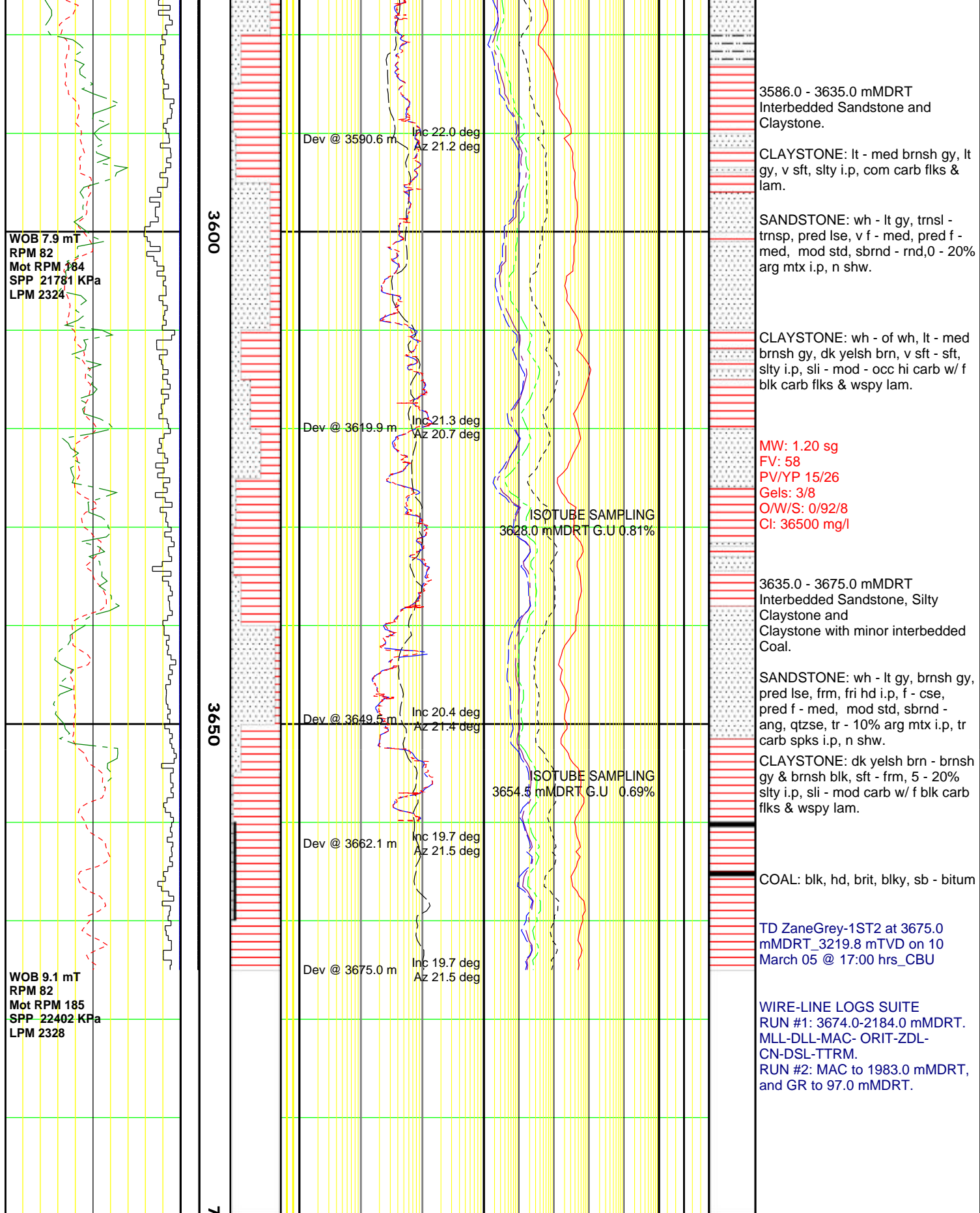
3410.0 - 3480.0 mMDRT
Interbedded Sandstone, Silty Carbonaceous Claystone, with Coal seams.

COAL: brnsh blk - blk, frm - mod hd, sbsplint - sbfiss, sbbitum, thn sltst lam, slw yelsh-bl ct, strng blsh yel res ring res

Run Carbide @ 3431.0 mMDRT
Theor Ann Vol = 597 bbls
Act Ann Vol = 688 bbls
Ave hole dia = 9.79"

WOB Hole dia = 5.75





Gamma Ray api		Sliding DEPTH - m	Cutting Litholog	Oil Show	EWR Deep Phase Res ohm-metre		Gas Chromatograph		Calcmetry	Interpreted Li	Lithology Descriptions and Remarks			
0	150				300	0.1	1	10				100	ppm	
ROP Avg m/hr					EWR Medium Phase Res ohm-metre		C1 Avg					C2 Avg		C3 Avg
200	100				0	0.1	1	10				100		

Geology						Lithology						Remarks					
<p>Bit Weight mT</p>						<p>Gas Hydrocn Avg %</p>						<p>C4 Total Avg ——— % DOL C5 Total Avg ——— % LST</p>					
0 10 20						0.01 0.1 1 10						10 100 1K 10K 100K 1M					
												0 100					

RIG MONITORING
DRILLING LOG

Country : Australia
Field : ZaneGrey / Gippsland Basin
Location : Lat: 38° 34' 31.64" South
Long: 147° 59' 16.27" East
Well : ZaneGrey-1
Company : Bass Strait Oil Company Ltd
Rig : Ocean Patriot

LOCATION

Latitude : 38° 34' 31.64" South
Longitude : 147° 59' 16.27" East
UTM Easting = 586,049.89 m
UTM Northing = 5,729,856.42 m

Other Services

Permanent Datum : Mean Sea Level Elevation : 0.00 m

Log Measured From : Drill Floor 21.50 m Above Permanent Datum

Drilling Measured From : Drill Floor

MD LOG

Depth Logged : 94.00 m To 2,772.50 m

Date Logged : 27-Jan-05 To 11-Feb-05

Total Depth MD : 2,772.50 m TVD: 2,420.70 m

Spud Date : 27-Jan-05

Unit No. : 197
Plot Type : Final
Plot Date : 21-Jun-05

Job No. : AUIN0003415248

Run No. Borehole Record (MD)

Run No.	Size	From	To
1	914,000 mm	94.00 m	129.50 m
2	406,000 mm	129.50 m	1,095.00 m
3	311,150 mm	1,095.00 m	2,103.00 m
4	311,150 mm	2,103.00 m	2,702.00 m
5	311,150 mm	2,702.00 m	2,772.50 m

Run No.

Size Borehole Record (MD)

To

Size	Casing Weight	From	To
762,000 mm	461.34 kgpm	SURFACE	127.75 m
339,999 mm	101.20 kgpm	SURFACE	1,090.61 m
244,475 mm	69.94 kgpm	SURFACE	2,184.00 m

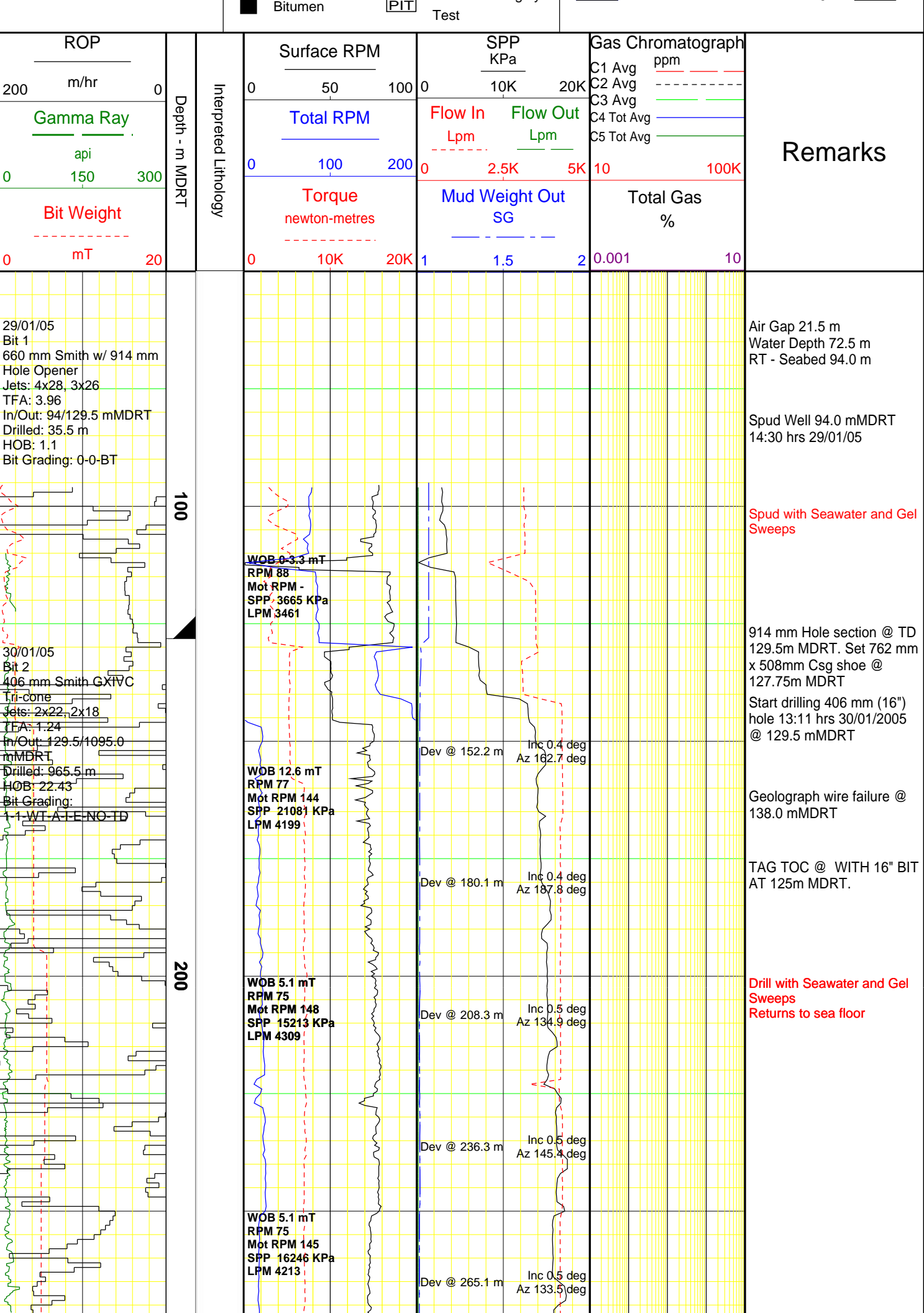
LEGEND

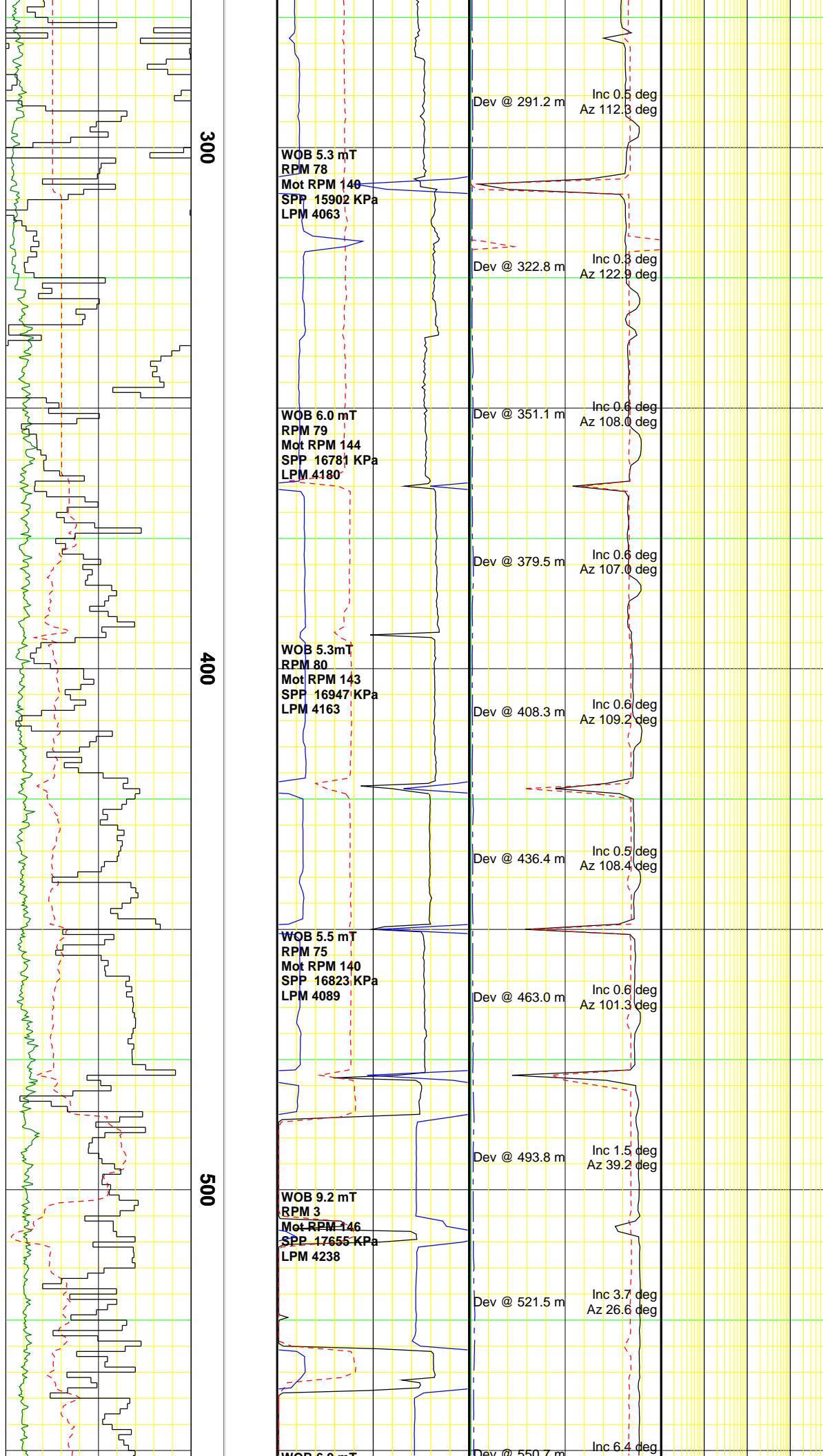
Abbreviations and Symbols

Drilling Data		Mud Data			
BG	Background Gas	Cl-	Chloride Ion Conc	Rm	Mud Resistivity
BHT	Bottomhole Temp	FC	Filter Cake	Rmf	Filtrate Resistivity
C	Carbide Test	FL	Filtrate Loss	S	Solids Content
CB	Core Bit	G	Gels	Vis	Funnel Viscosity
CG	Connection Gas	pH	Hydrogen Ion Content	MW	Mud Weight
CKF	Check For Flow	PV	Plastic Viscosity	YP	Yield Point
CO	Circulate Out	Engineering Data			
DB	Diamond Bit	Core No.	Water		
DC	Depth Correction	DST No.	Salt Water		
DS	Direction Survey	Casing Seat	Fresh Water		
DST	Drillstem Test	Side Wall Core	Hydrocarbons Smell		
FLT	Flowline Temp.	Gas Traces	H2S Smell		
LAT	Logged After Trip	Gas	Interval Tester		
NB	New Bit	Oil Traces	Wireline Log Run		
NR	No Returns	Oil	Leakoff Test		
PDC	Polycrystalline Diamond		Pressure Integrity		
	Compound Bit				
PR	Partial Returns				
RPM	Revs Per Minute				
RRB	Rerun Bit				
STG	Short Trip Gas				
TB	Turbo Drill				
TG	Trip Gas				
U	Gas Units				
WOB	Weight On Bit				

Lithology Symbols

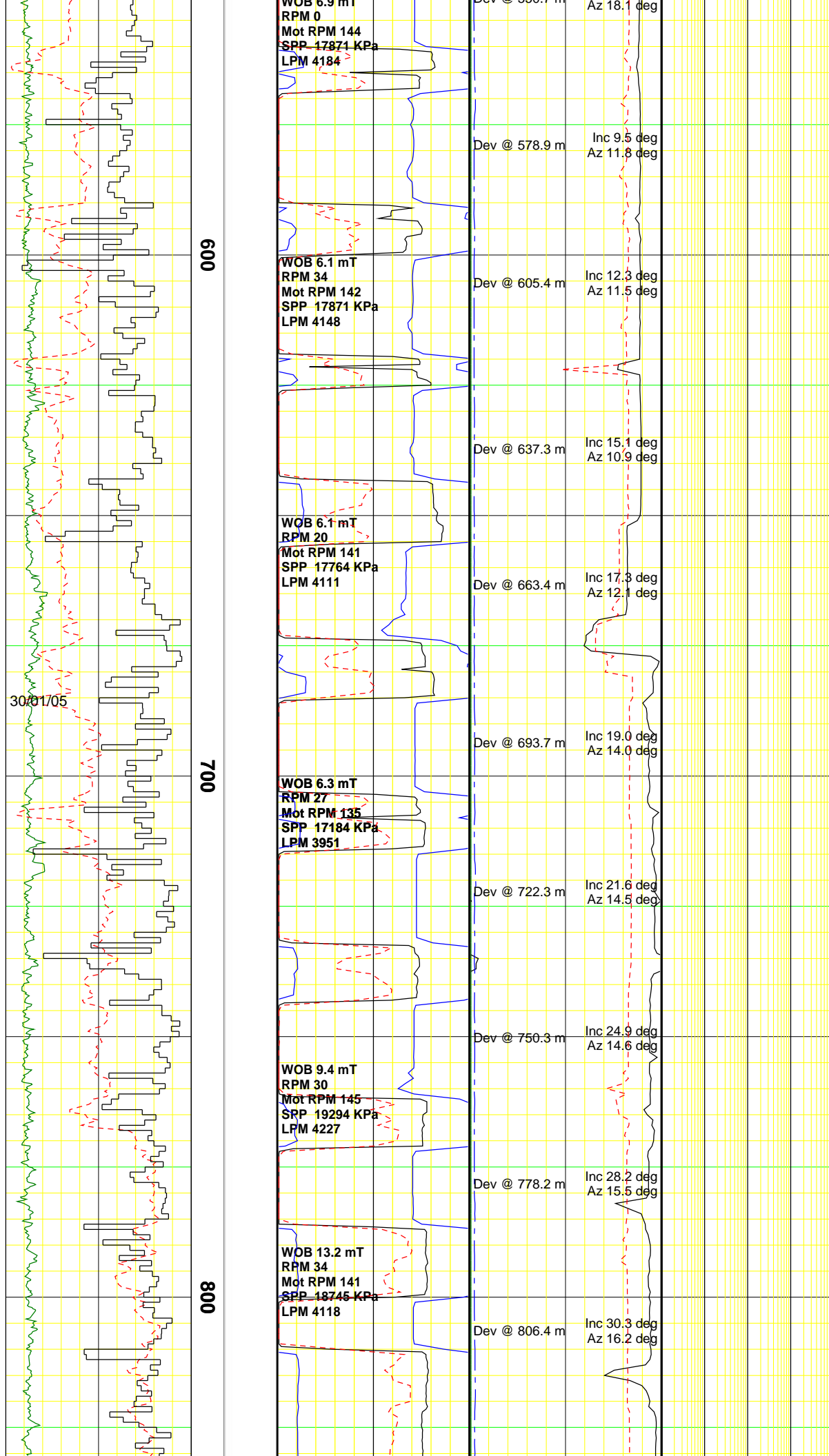
	Sandstone		Calcisiltite
	Silty Sandstone		Calcarene
	Silt		Mudstone
	Siltstone		Marl
	Clay		Glauconitic Sandstone
	Claystone		Chert
	Calcareous Claystone		Conglomerate
	Limestone		Igneous
	Dolomite		Coal
	Calcilutite		No Sample





Drill with Seawater and Gel
Sweeps
Returns to sea floor

Kick off point @ 486.0
mMDRT



009

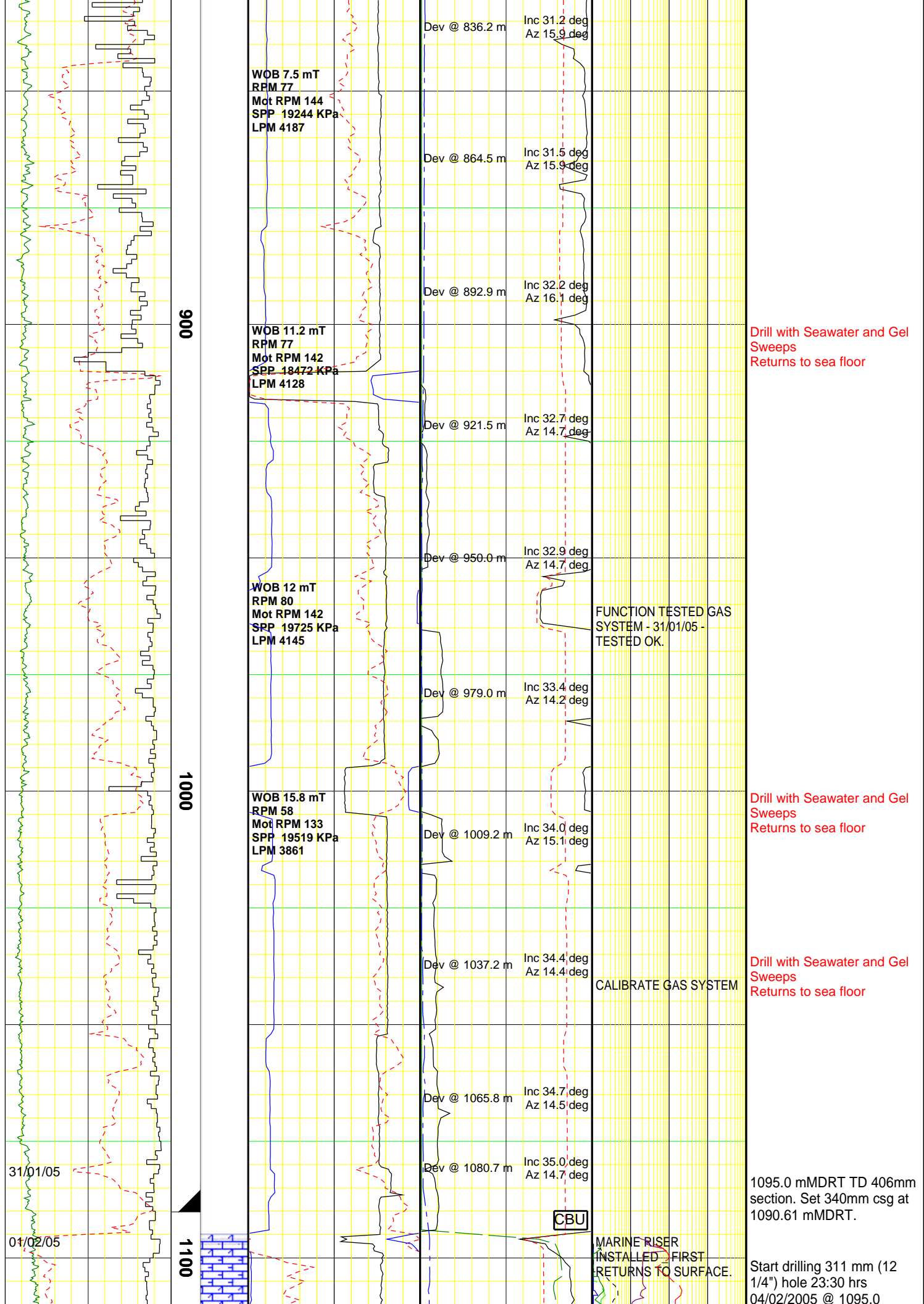
700

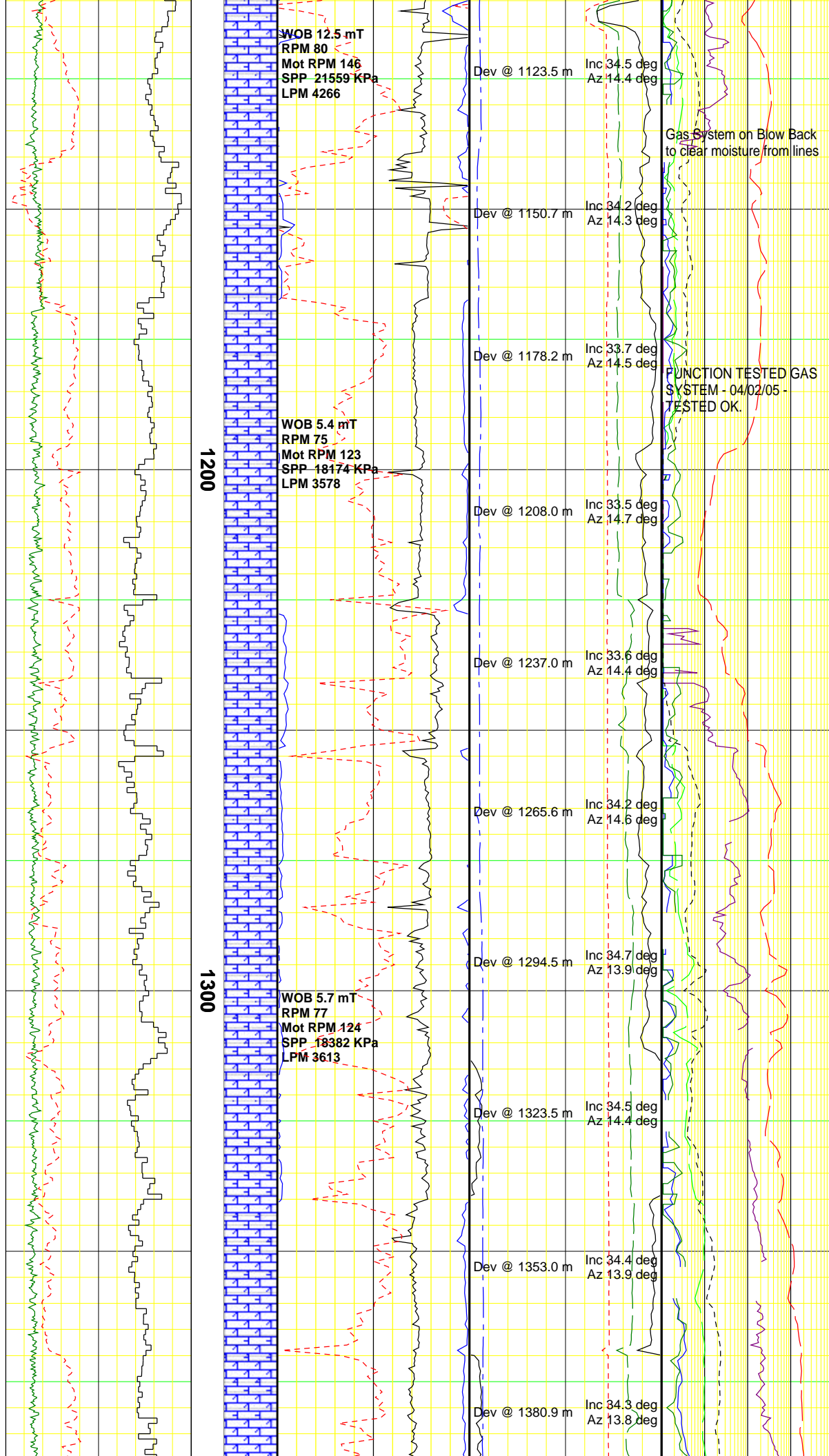
800

Drill with Seawater and Gel
Sweeps
Returns to sea floor

Drill with Seawater and Gel
Sweeps
Returns to sea floor

Drill with Seawater and Gel
Sweeps
Returns to sea floor





mMDRT
F.I.T 1090m MDRT with 8.6
ppg (1.03 sg) mud = 14.37
ppg or 1.726 sg or 815 psi
EMW.

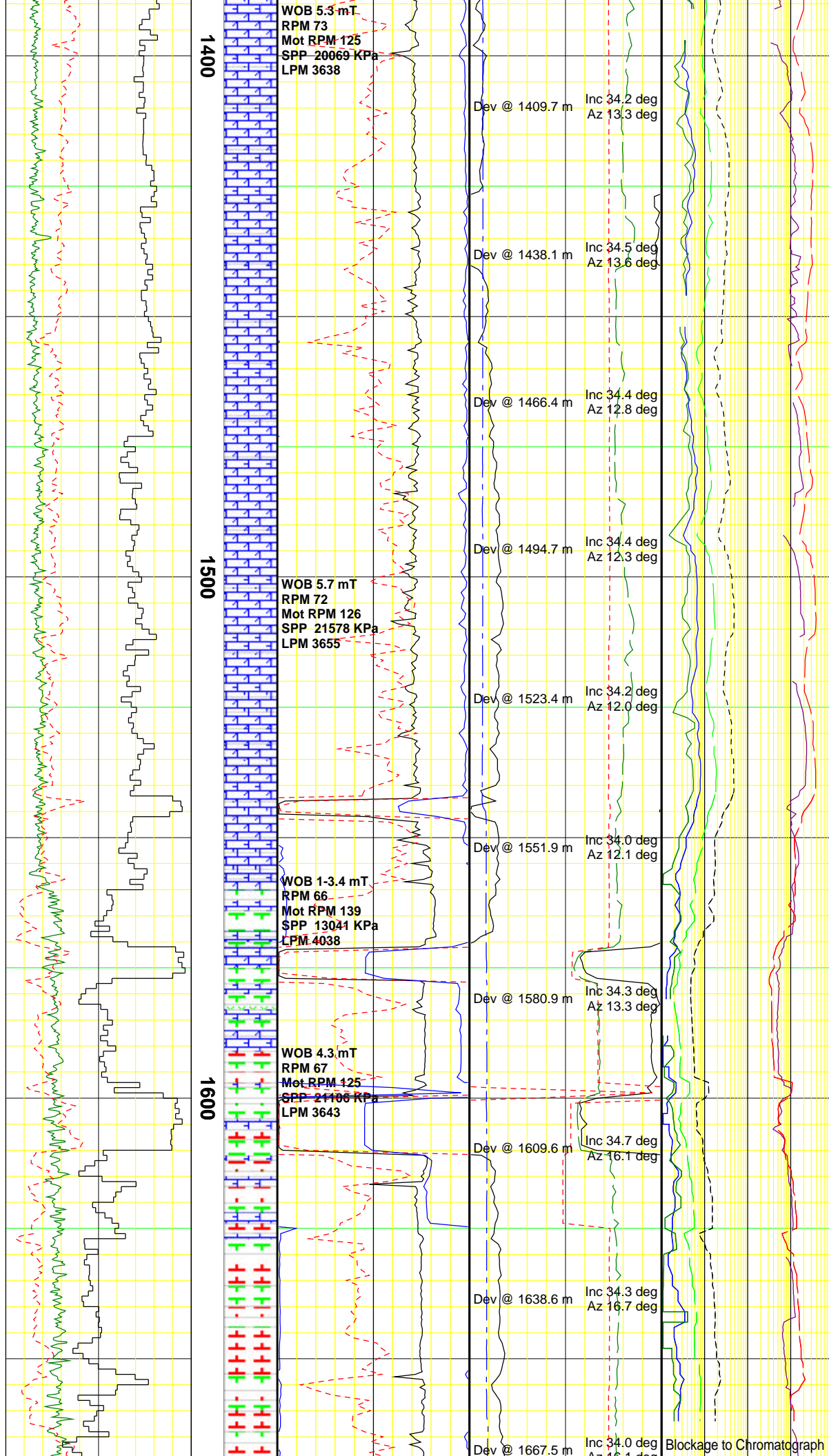
Displace hole to new mud
system - KCl-Idcap-Glycol

MW: 1.20 sg
FV: 55
PV/YP 24/34
Gels: 6/13
O/W/S: 0/91/9
Cl: 36000 mg/l

TAKE MWD surveys every
stand down

Take SCR's

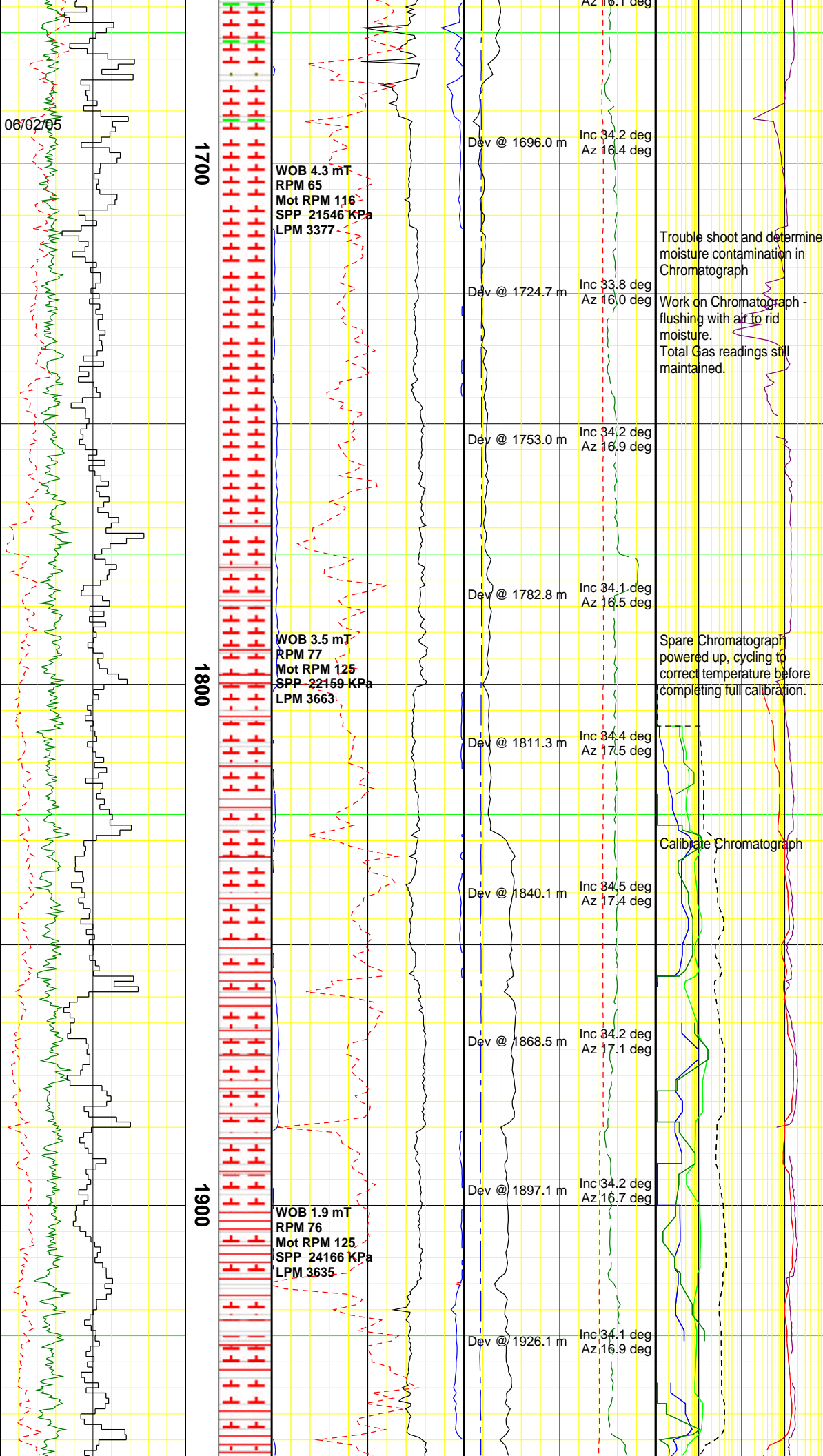
Take SCR's with pump1
and pump 3



MW: 1.10 sg
FV: 57
PV/YP 15/32
Gels: 12/19
O/W/S: 0/91/9
Cl: 30000 mg/l

Run Carbide @ 1655.0 m
Theor Ann Vol = 713 bbls
Act Ann Vol = 726 bbls

Act Ann Vol = 726 bbls
Ave hole dia = 12.54"



Standpipe washout_
circulate and replace the
same

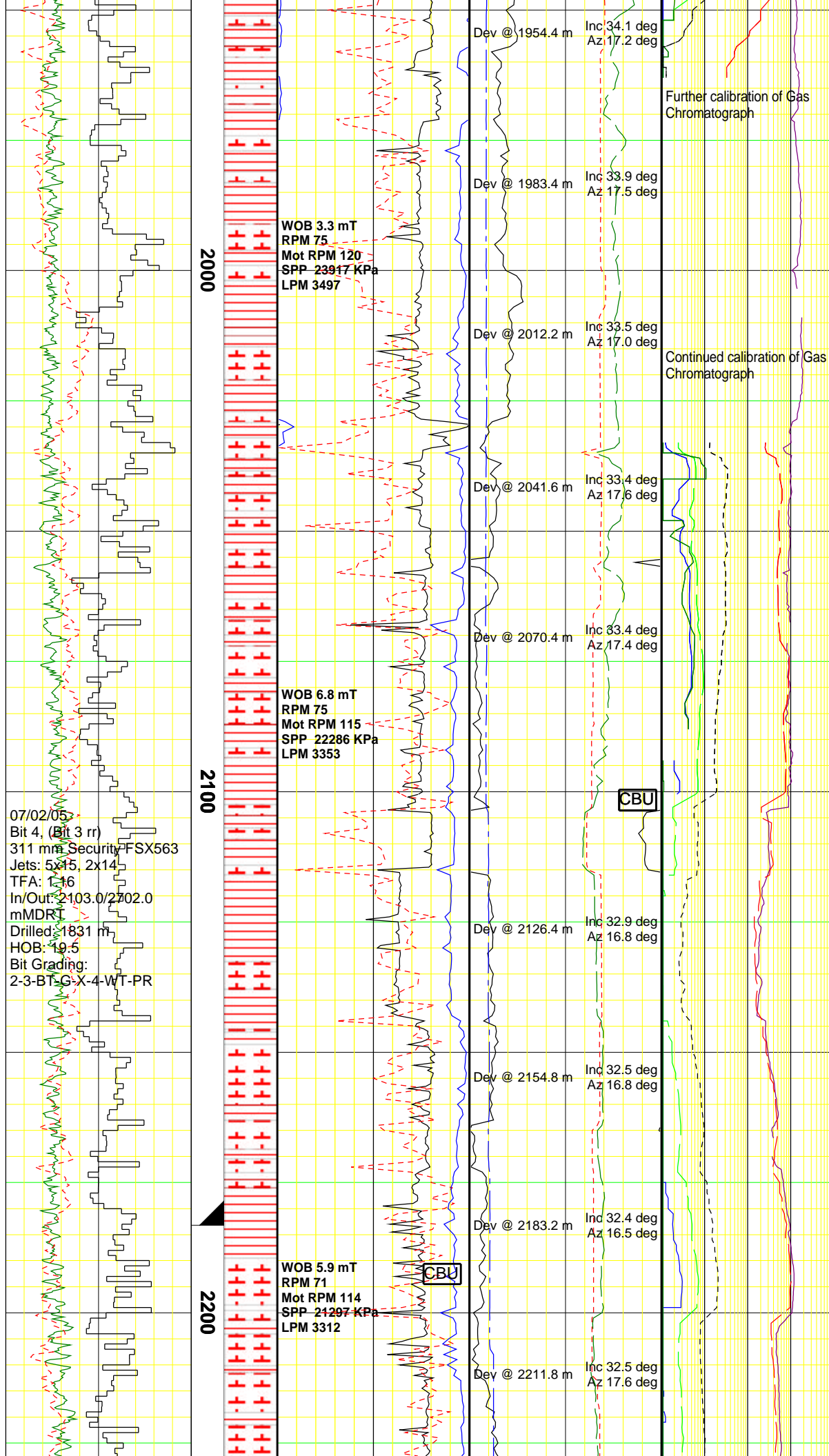
Trouble shoot and determine
moisture contamination in
Chromatograph

Work on Chromatograph -
flushing with air to rid
moisture.
Total Gas readings still
maintained.

Spare Chromatograph
powered up, cycling to
correct temperature before
completing full calibration.

Calibrate Chromatograph

MW: 1.12 sg
FV: 78
PV/YP 8/41
Gels: 11/16
O/W/S: 0/92/8
Cl: 30000 mg/l

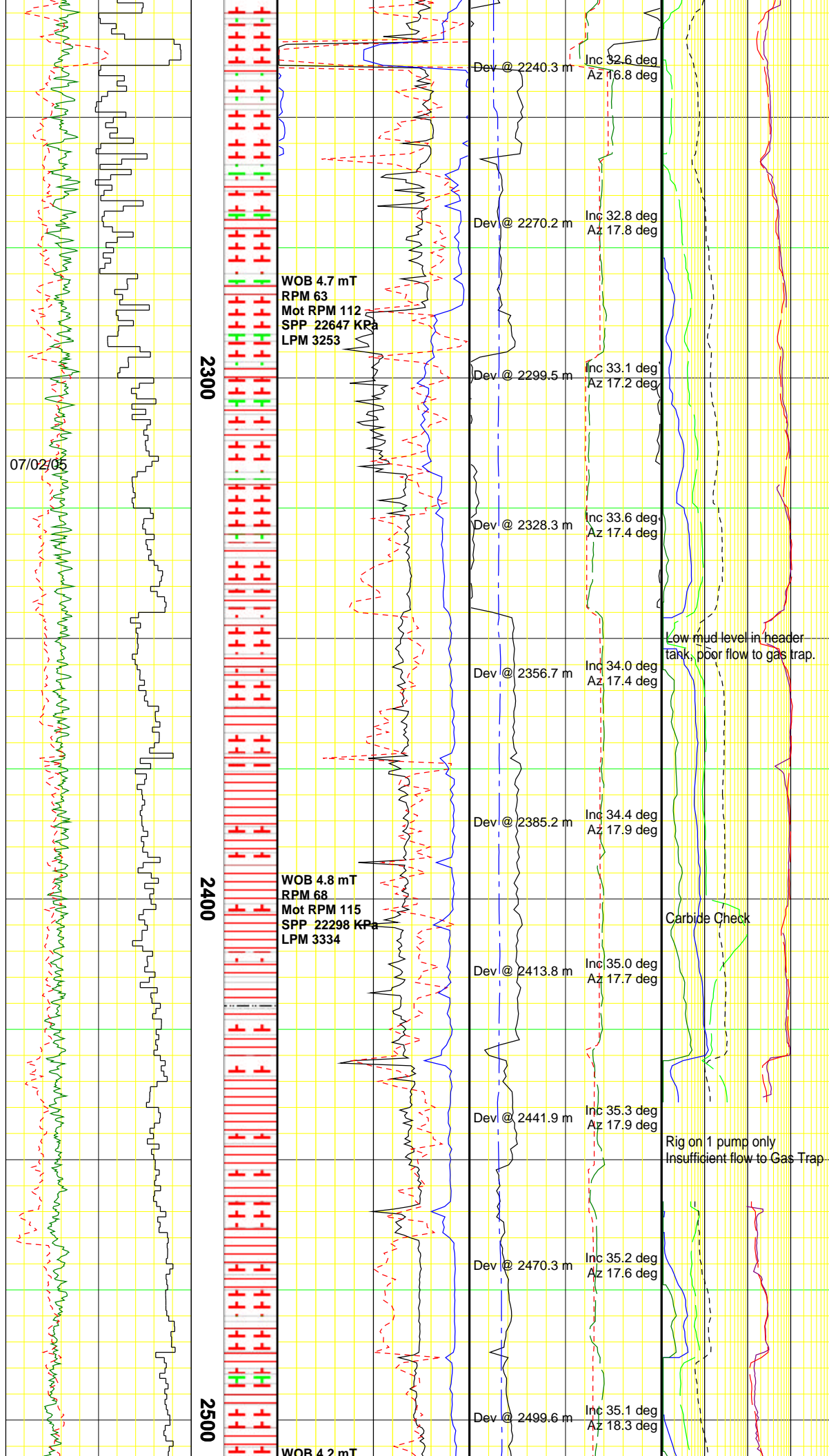


POOH @ 2103m MDRT
and rest motor AKO. Wipe
from 2103m to 1930m while
POOH. Back ream/ wash
tight spot 1930m to 1092m.

Wash and ream from
1916m to 2103m while RIH.

MW: 1.12 sg
FV: 65
PV/YP 8/41
Gels: 16/38
O/W/S: 0/91/9
Cl: 30000 mg/l

Drilled 311mm Hole
2772.0m MDRT. Could not
land casing at the planned
depth. Set 244 mm Csg
shoe @ 2184.0m MDRT



07/02/05

WOB 4.7 mT
RPM 63
Mot RPM 112
SPP 22647 KPa
LPM 3253

WOB 4.8 mT
RPM 68
Mot RPM 115
SPP 22298 KPa
LPM 3334

WOB 4.2 mT

Dev @ 2240.3 m Inc 32.6 deg
Az 16.8 deg

Dev @ 2270.2 m Inc 32.8 deg
Az 17.8 deg

Dev @ 2299.5 m Inc 33.1 deg
Az 17.2 deg

Dev @ 2328.3 m Inc 33.6 deg
Az 17.4 deg

Dev @ 2356.7 m Inc 34.0 deg
Az 17.4 deg

Dev @ 2385.2 m Inc 34.4 deg
Az 17.9 deg

Dev @ 2413.8 m Inc 35.0 deg
Az 17.7 deg

Dev @ 2441.9 m Inc 35.3 deg
Az 17.9 deg

Dev @ 2470.3 m Inc 35.2 deg
Az 17.6 deg

Dev @ 2499.6 m Inc 35.1 deg
Az 18.3 deg

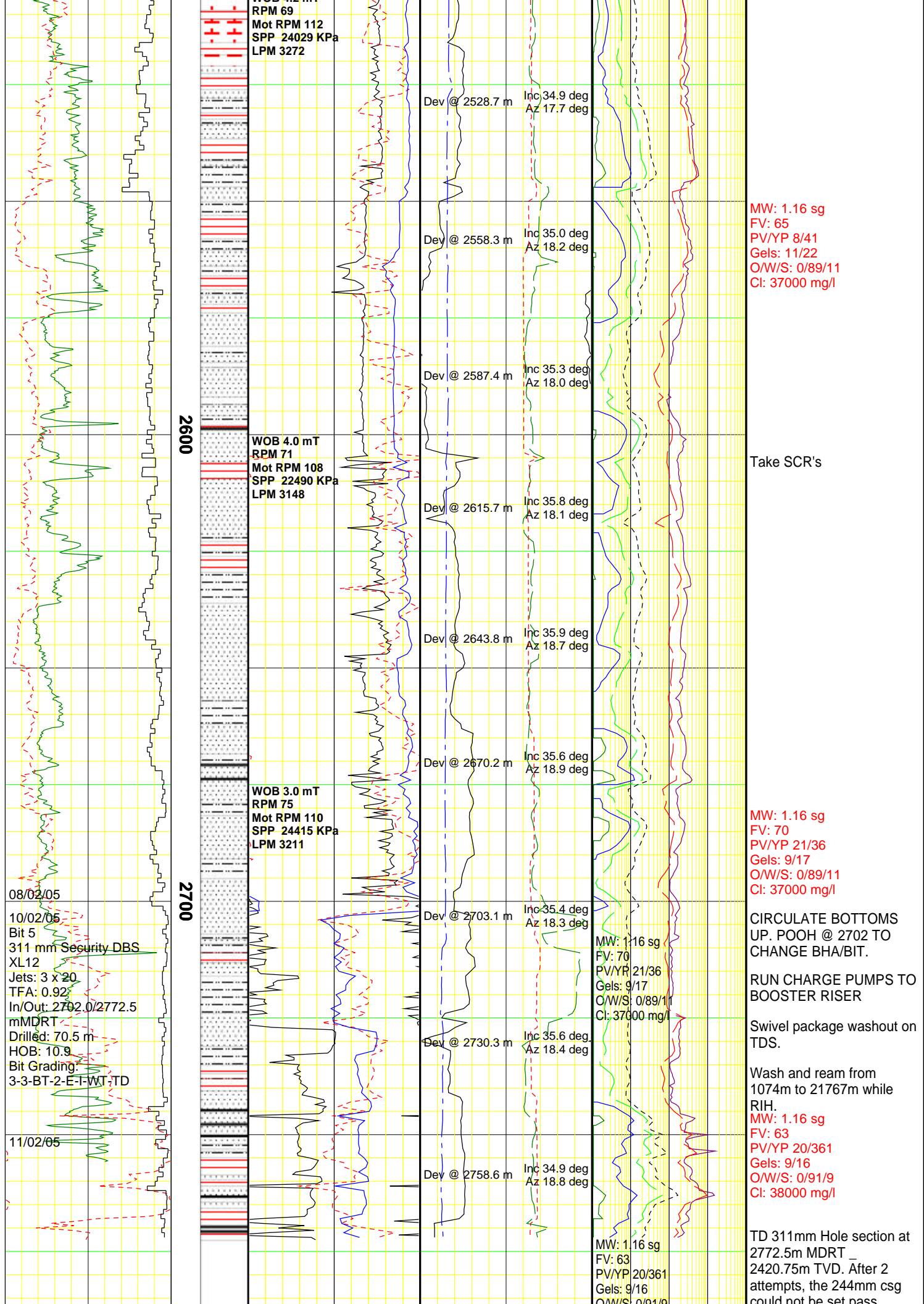
Low mud level in header
tank, poor flow to gas trap.

Take SCR's

Run Carbide @ 2389.0 m
Theor Ann Vol = 1123 bbls
Act Ann Vol = 1147 bbls
Ave hole dia = 12.54"

Carbide Check

Rig on 1 pump only
Insufficient flow to Gas Trap



		2800				O/W/SI 0.91/9 Cl: 38000 mg/l		could not be cut pass 2184m MDRT. Set 244 mm Csg shoe @ 2184.0m MDRT _ 1903m TVD.		
ROP m/hr 200 0		Depth - m MDRT 0 150 300	Interpreted Lithology	Surface RPM 0 50 100		SPP KPa 0 10K 20K		Gas Chromatograph ppm C1 Avg C2 Avg C3 Avg C4 Tot Avg C5 Tot Avg		Remarks
Gamma Ray api 0 150 300				Total RPM 0 100 200		Flow In Flow Out Lpm Lpm 0 2.5K 5K		10 100K		
Bit Weight mT 0 20				Torque newton-metres 0 10K 20K		Mud Weight Out SG 1 1.5 2		Total Gas % 0.001 10		

RIG MONITORING

DRILLING LOG

Country : Australia

Field : ZaneGrey / Gippsland Basin

Location : Lat: 38° 34' 31.64" South
Long: 147° 59' 16.27" East

Well : ZaneGrey-1 ST1

Company : Bass Strait Oil Company Ltd

Rig : Ocean Patriot

LOCATION

Latitude : 38° 34' 31.64" South

Longitude : 147° 59' 16.27" East

UTM Easting = 586,049.89 m

UTM Northing = 5,729,856.42 m

Other Services

Permanent Datum : Mean Sea Level

Elev. : 0.00 m

Log Measured From : Drill Floor

21.50 m Above Permanent Datum

Drilling Measured From : Drill Floor

MD LOG

KB 0.00 m

Depth Logged : 2,184.00 m To 3,107.00 m

Unit No. : 197

Job No. : AUFEE0003564401

Date Logged : 27-Jan-05 To 25-Feb-05

Total Depth MD : 3,107.00 m TVD: 2,706.20 m

Plot Type : Final

Plot Date : 22-Jun-05

Run No. 7

Borehole Record (MD)

Size From 216.000 mm To 2,184.00 m

Size To 3,107.00 m

Run No.

Borehole Record (MD)

To

Size 244.475 mm


















Casing Record (MD)

Weight From 69.94 kgpm





















Size To SURFACE 2,184.00 m

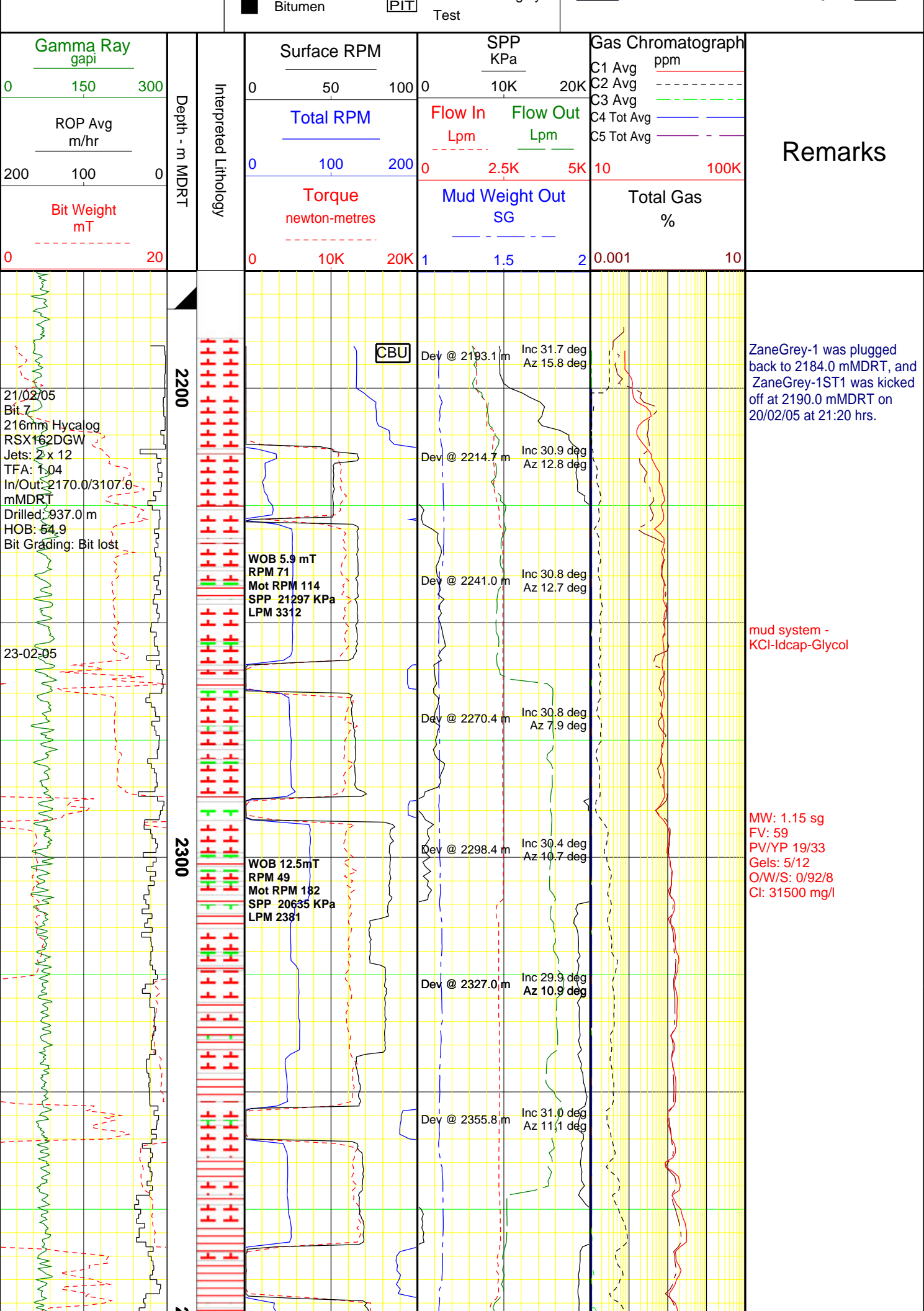
LEGEND

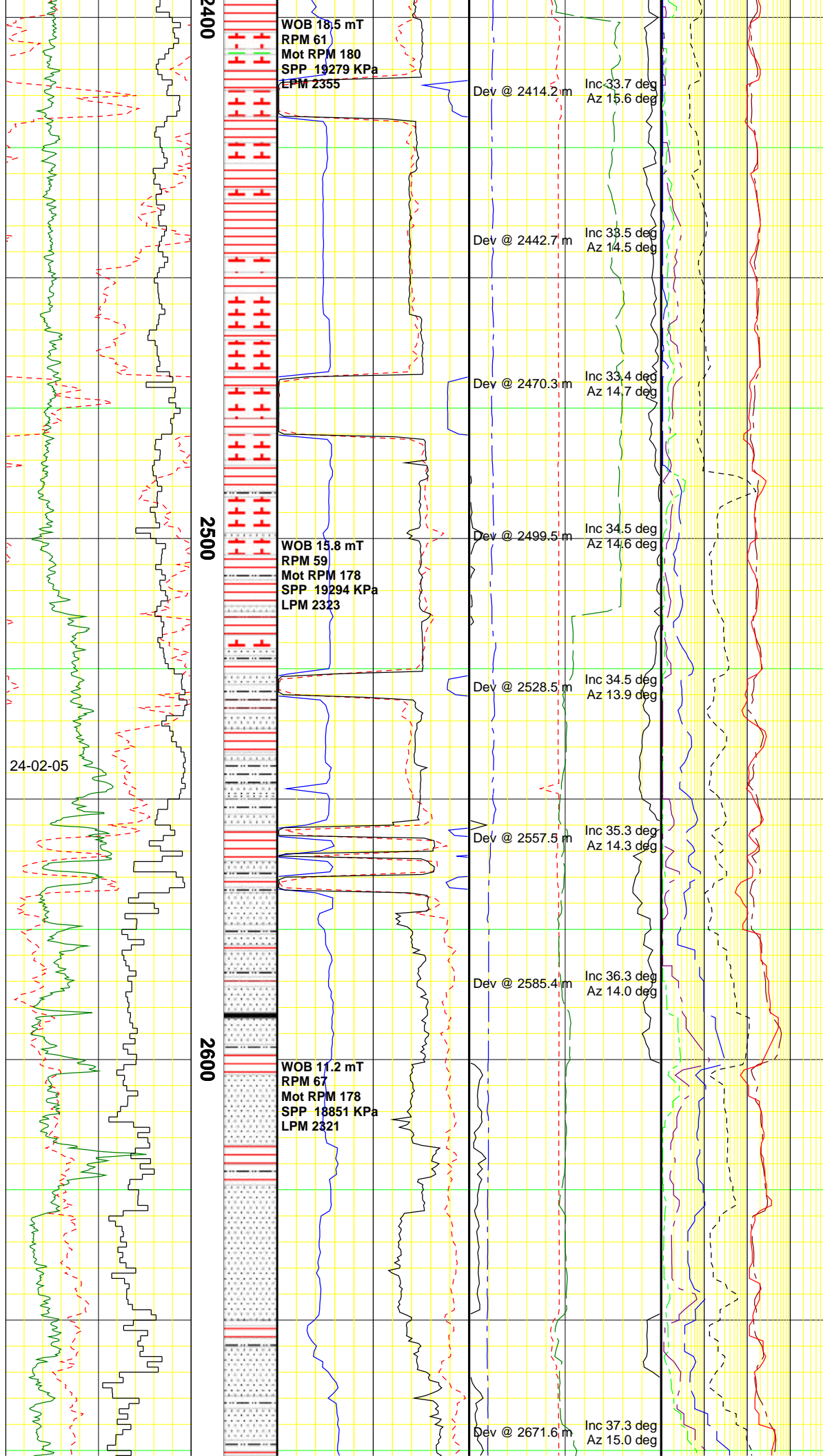
Abbreviations and Symbols

Drilling Data		Mud Data			
BG	Background Gas	Cl-	Chloride Ion Conc	Rm	Mud Resistivity
BHT	Bottomhole Temp	FC	Filter Cake	Rmf	Filtrate Resistivity
C	Carbide Test	FL	Filtrate Loss	S	Solids Content
CB	Core Bit	G	Gels	Vis	Funnel Viscosity
CG	Connection Gas	pH	Hydrogen Ion Content	MW	Mud Weight
CKF	Check For Flow	PV	Plastic Viscosity	YP	Yield Point
CO	Circulate Out	Engineering Data			
DB	Diamond Bit				
DC	Depth Correction		Core No.		Water
DS	Direction Survey		DST No.		Salt Water
DST	Drillstem Test		Casing Seat		Fresh Water
FLT	Flowline Temp.		Side Wall Core		Hydrocarbons Smell
LAT	Logged After Trip		Gas Traces		H2S Smell
NB	New Bit		Gas		Interval Tester
NR	No Returns		Oil Traces		Wireline Log Run
PDC	Polycrystalline Diamond		Oil		Leakoff Test
PR	Partial Returns		Pressure Integrity		
RPM	Revs Per Minute				
RRB	Rerun Bit				
STG	Short Trip Gas				
TB	Turbo Drill				
TG	Trip Gas				
U	Gas Units				
WOB	Weight On Bit				

Lithology Symbols

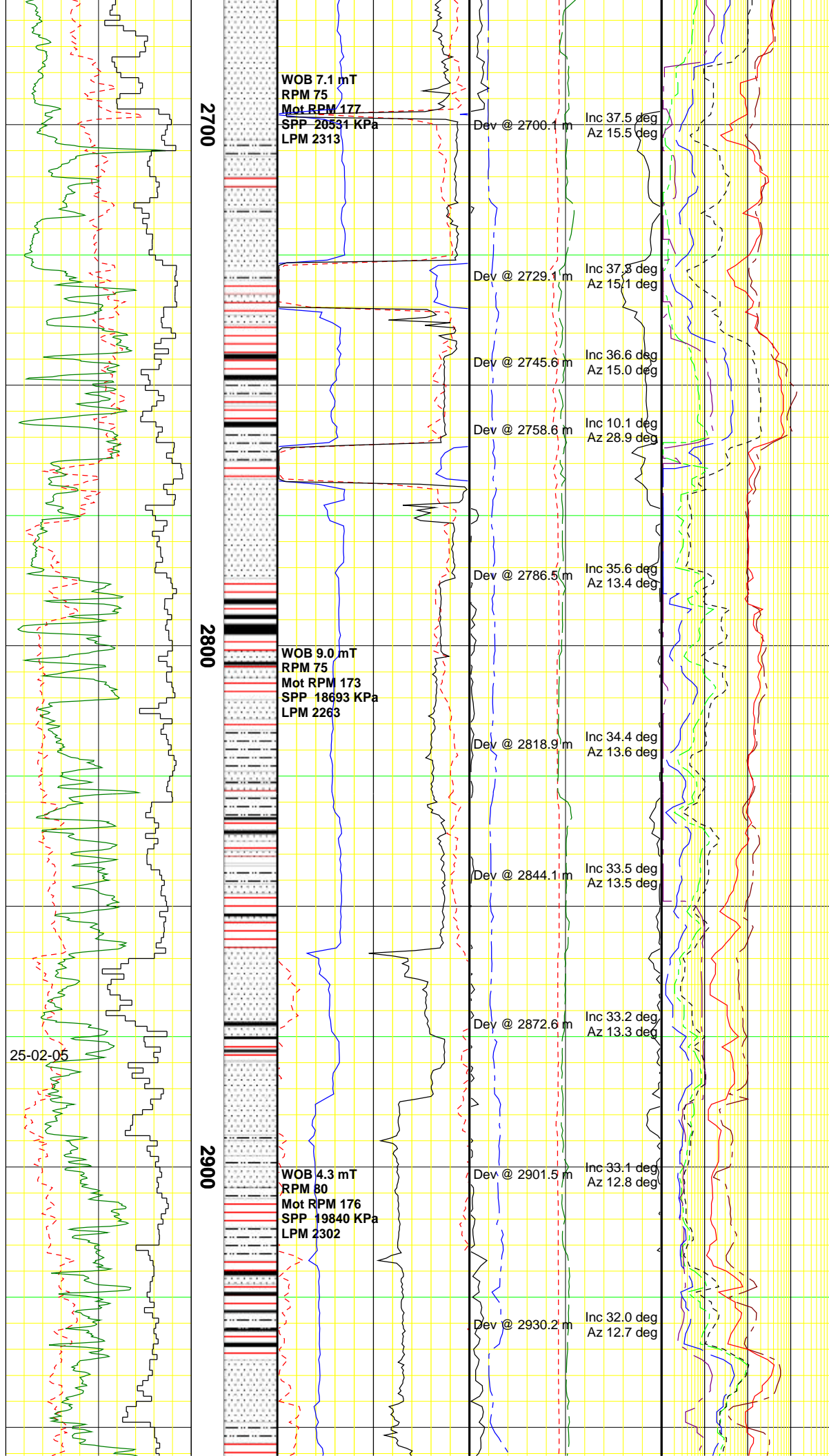
	Sandstone		Calcisiltite
	Silty Sandstone		Calcarene
	Silt		Mudstone
	Siltstone		Marl
	Clay		Glauconitic Sandstone
	Claystone		Chert
	Calcareous Claystone		Conglomerate
	Limestone		Igneous
	Dolomite		Coal
	Calcilutite		No Sample



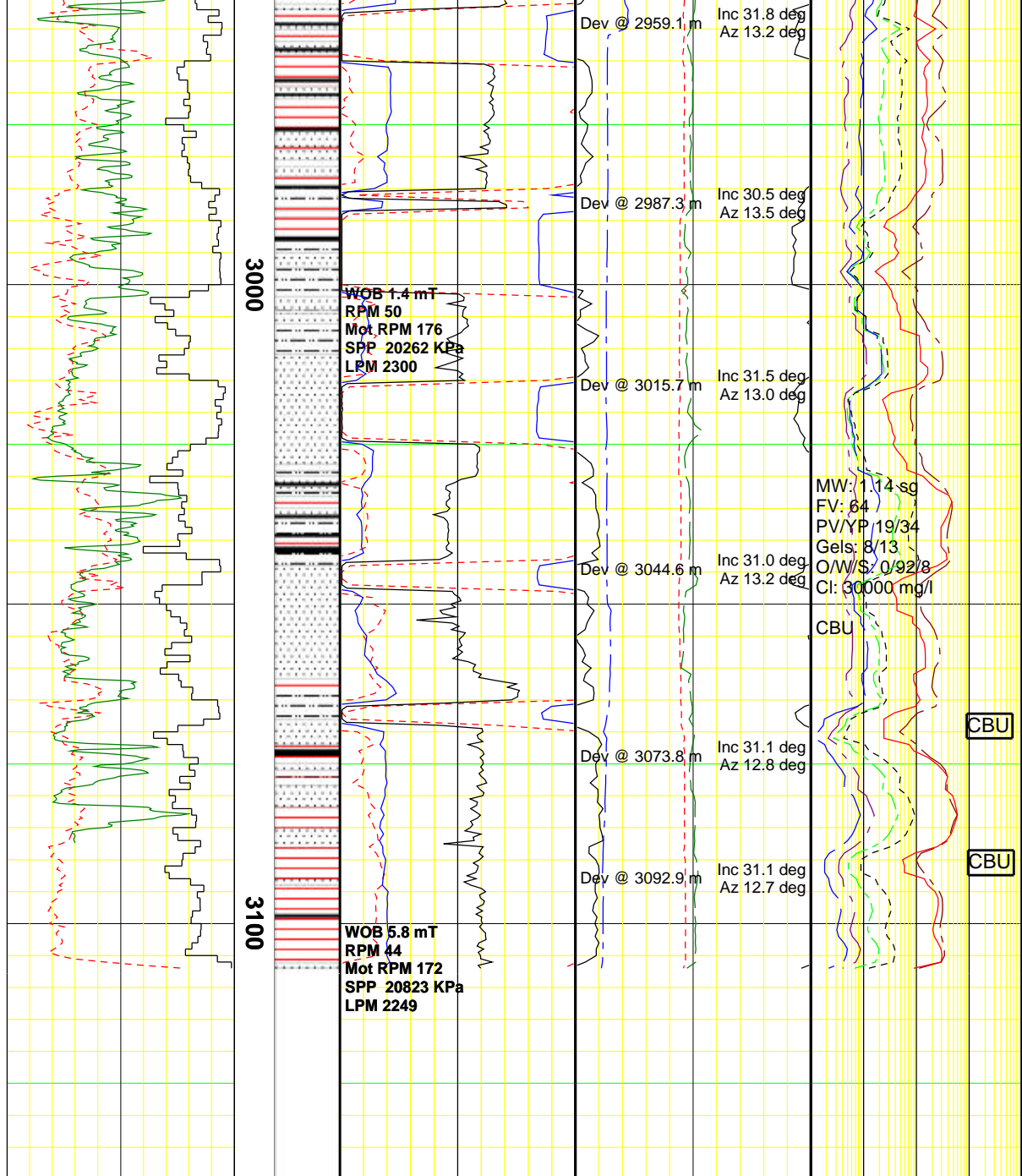


Run Carbide @ 2485.0
mMDRT
Theor Ann Vol = 481 bbls
Act Ann Vol = 483 bbls
Ave hole dia = 8.5"

MW: 1.13 sg
FV: 61
PV/YP 18/34
Gels: 9/13
O/W/S: 0/93/7
Cl: 31500 mg/l



MW: 1.14 sg
FV: 64
PV/YP: 19/34
Gels: 8/13
O/W/S: 0/92/8
Cl: 30000 mg/l



Bit #7 and motor rotor was lost in the hole while POOH. TD ZaneGrey-1 ST1 AT 3107.0 mMDRT on 25/02/05 at 16:45 hrs. ZaneGrey-1ST1 was plugged back to 2959.0 mMDRT to kick off ZaneGrey-1 ST2.

Gamma Ray gapi			Depth - m MDRT	Interpreted Lithology	Surface RPM			SPP KPa			Gas Chromatograph		
0	150	300			0	50	100	0	10K	20K	C1 Avg	ppm	
ROP Avg m/hr					Total RPM			Flow In		Flow Out	C2 Avg	-----	
200	100	0			0	100	200	Lpm		Lpm	C3 Avg	-----	
Bit Weight mT			Torque newton-metres			Mud Weight Out SG			Total Gas %				
-----			-----			-----			-----				
0		20	0	10K	20K	1	1.5	2	0.001		10		

Remarks

RIG MONITORING
DRILLING LOG

Country : Australia
Field : ZaneGrey / Gippsland Basin
Location : Lat: 38° 34' 31.64" South
Long: 147° 59' 16.27" East
Well : ZaneGrey-1 ST2
Company : Bass Strait Oil Company Ltd
Rig : Ocean Patriot

LOCATION

Latitude : 38° 34' 31.64" South
Longitude : 147° 59' 16.27" East
UTM Easting = 586,049.89 m
UTM Northing = 5,729,856.42 m

Other Services

Permanent Datum : Mean Sea Level Elevation : 0.00 m

Elev. KB 0.00 m

Log Measured From : Drill Floor 21.50 m Above Permanent Datum

DF 21.50 m
GL 0.00 m
WD 72.50 m

Drilling Measured From : Drill Floor

MD LOG

WD 72.50 m

Depth Logged : 3,075.00 m To 3,675.00 m

Unit No. : 197

Job No. : AUFEE0003576081

Date Logged : 27-Jan-05 To 10-Mar-05

Total Depth MD : 3,675.00 m TVD: 3,219.80 m

Plot Type : Final

Plot Date : 23-Jun-05

Run No. Borehole Record (MD)

Run No.


















Borehole Record (MD)

11 216,000 mm 3,075.00 m 3,675.00 m





















Size Casing Record (MD)
Weight From To

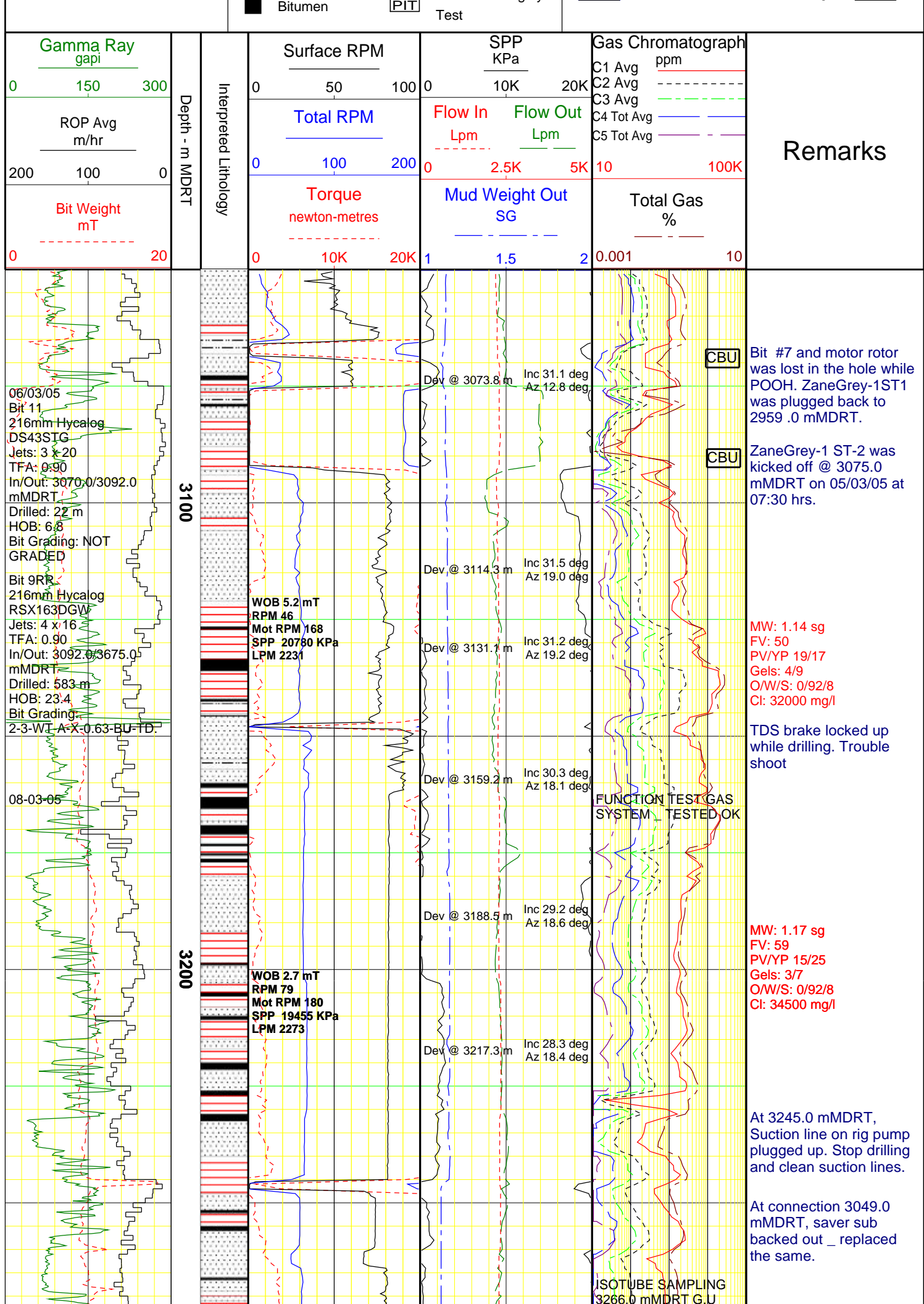
LEGEND

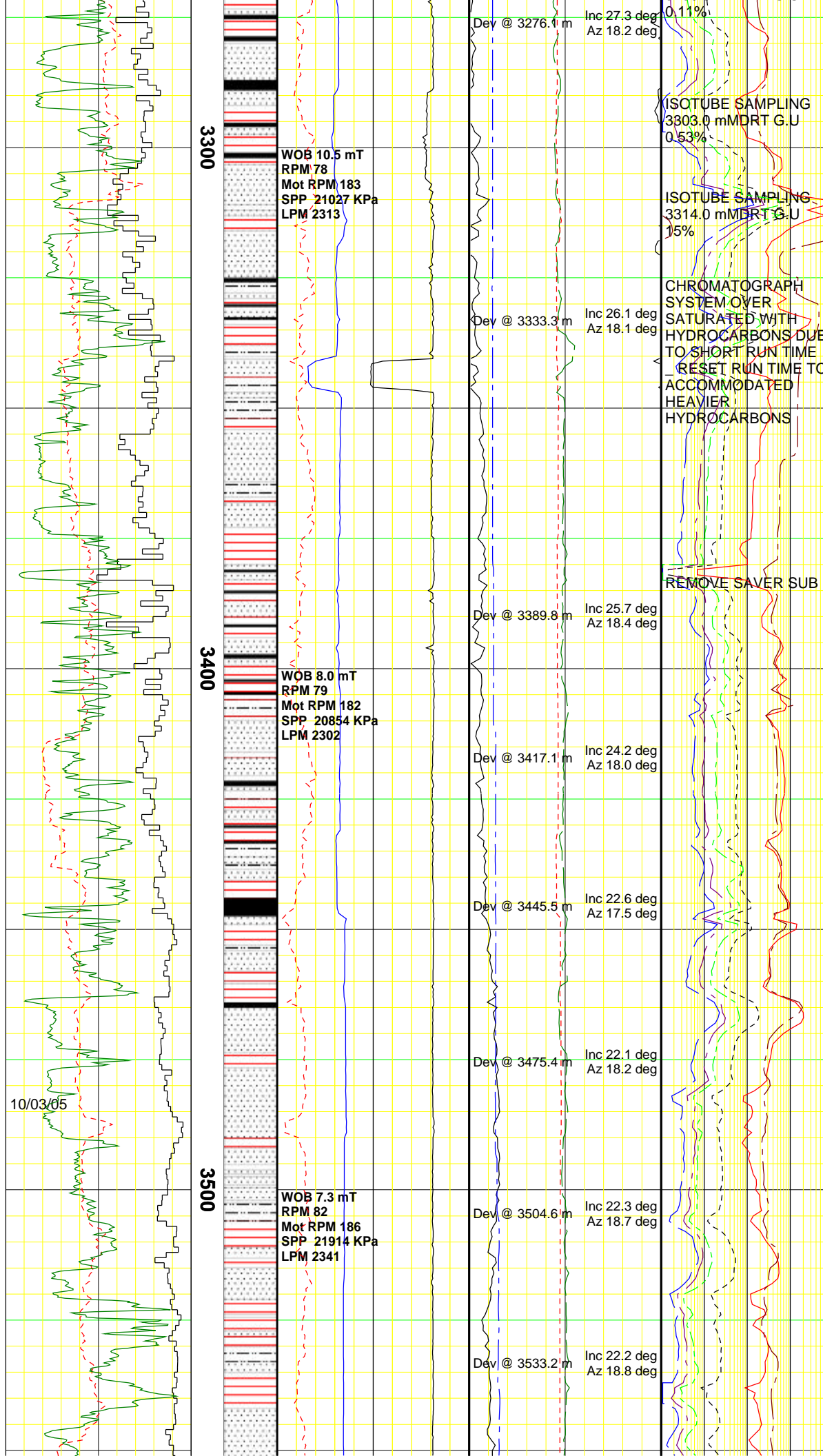
Abbreviations and Symbols

Drilling Data		Mud Data			
BG	Background Gas	Cl-	Chloride Ion Conc	Rm	Mud Resistivity
BHT	Bottomhole Temp	FC	Filter Cake	Rmf	Filtrate Resistivity
C	Carbide Test	FL	Filtrate Loss	S	Solids Content
CB	Core Bit	G	Gels	Vis	Funnel Viscosity
CG	Connection Gas	pH	Hydrogen Ion Content	MW	Mud Weight
CKF	Check For Flow	PV	Plastic Viscosity	YP	Yield Point
CO	Circulate Out	Engineering Data			
DB	Diamond Bit				
DC	Depth Correction		Core No.		Water
DS	Direction Survey		DST No.		Salt Water
DST	Drillstem Test		Casing Seat		Fresh Water
FLT	Flowline Temp.		Side Wall Core		Hydrocarbons Smell
LAT	Logged After Trip		Gas Traces		H2S Smell
NB	New Bit		Gas		Interval Tester
NR	No Returns		Oil Traces		Wireline Log Run
PDC	Polycrystalline Diamond		Oil		Leakoff Test
PR	Partial Returns		Pressure Integrity		
RPM	Revs Per Minute				
RRB	Rerun Bit				
STG	Short Trip Gas				
TB	Turbo Drill				
TG	Trip Gas				
U	Gas Units				
WOB	Weight On Bit				

Lithology Symbols

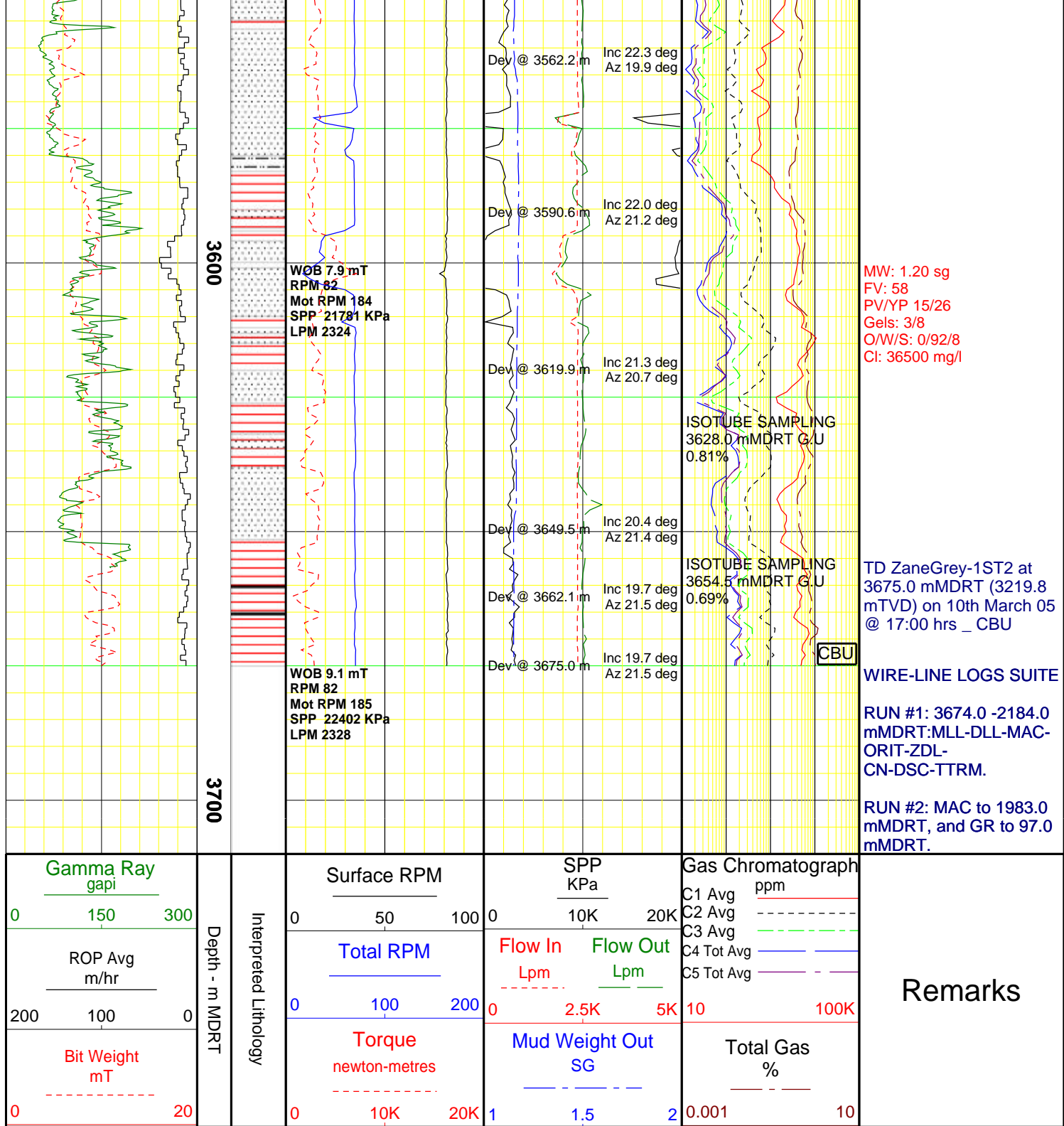
	Sandstone		Calcisiltite
	Silty Sandstone		Calcareenite
	Silt		Mudstone
	Siltstone		Marl
	Clay		Glauconitic Sandstone
	Claystone		Chert
	Calcareous Claystone		Conglomerate
	Limestone		Igneous
	Dolomite		Coal
	Calcilutite		No Sample





Take MWD survey every stand down.

Run Carbide @ 3431.0 mMDRT
Theor Ann Vol = 597 bbls
Act Ann Vol = 688 bbls
Ave hole dia = 9.79"



RIG MONITORING PRESSURE LOG

Company	:	Bass Strait Oil Company Ltd
Rig	:	Ocean Patriot
Well	:	Combined ZaneGrey-1 ST1 & ST2
Field	:	ZaneGrey / Gippsland Basin
Country	:	Australia
DOE Number	:	
Latitude	:	38° 34' 31.64" South
Longitude	:	147° 59' 16.27" East
UTM Easting	=	586,049.89 m
UTM Northing	=	5,729,856.42 m

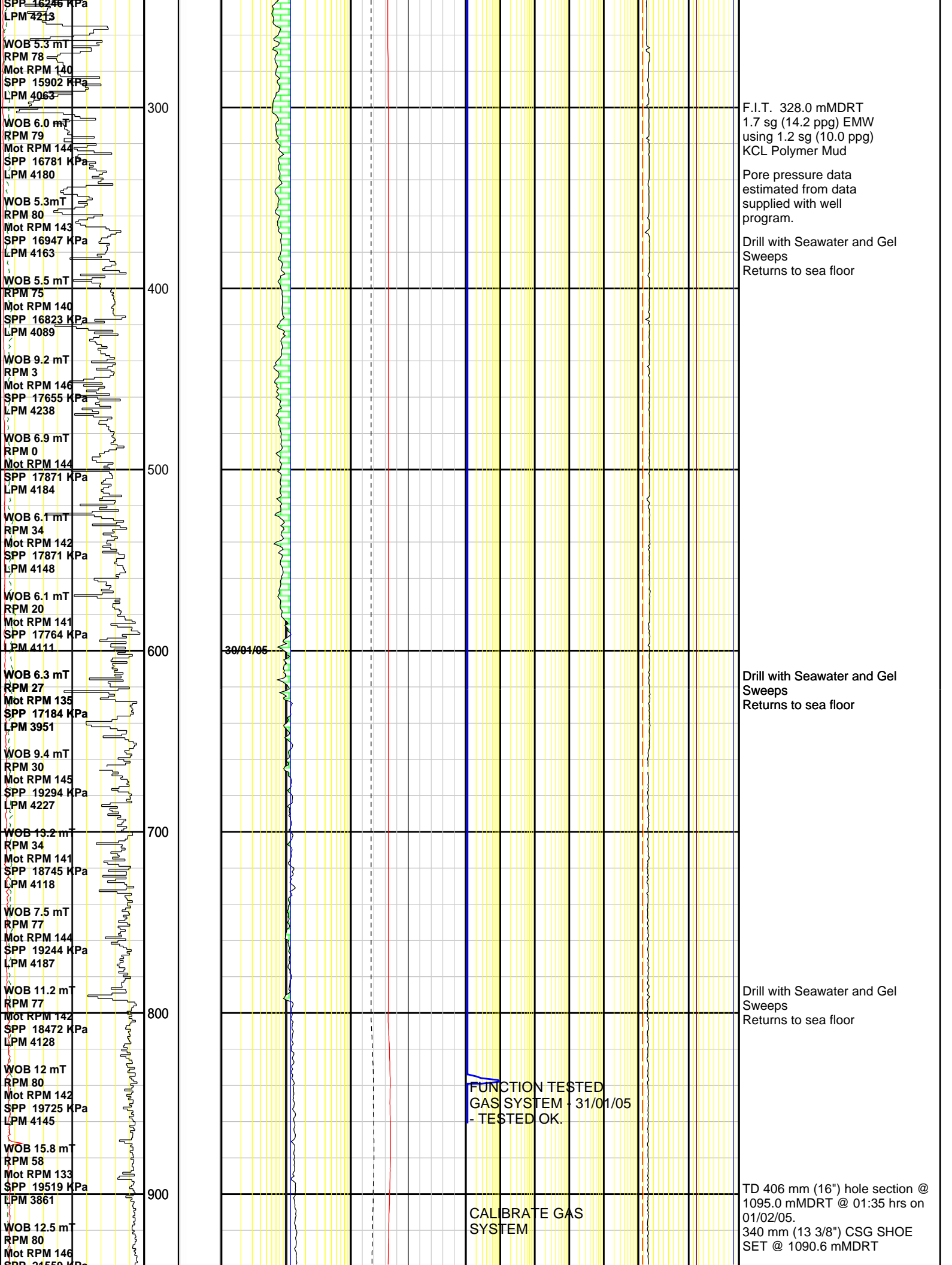
Other Services

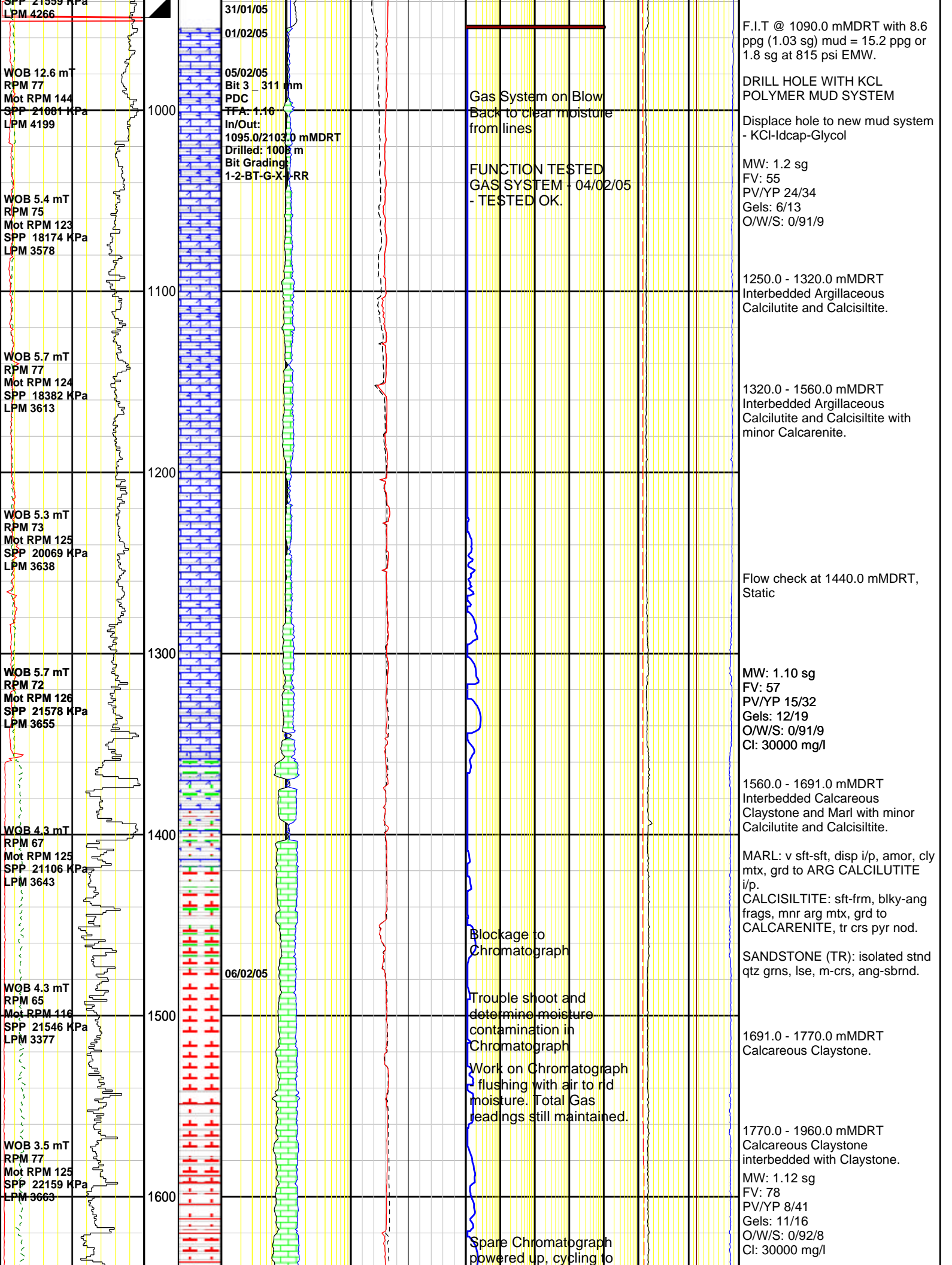
TV-D LOG

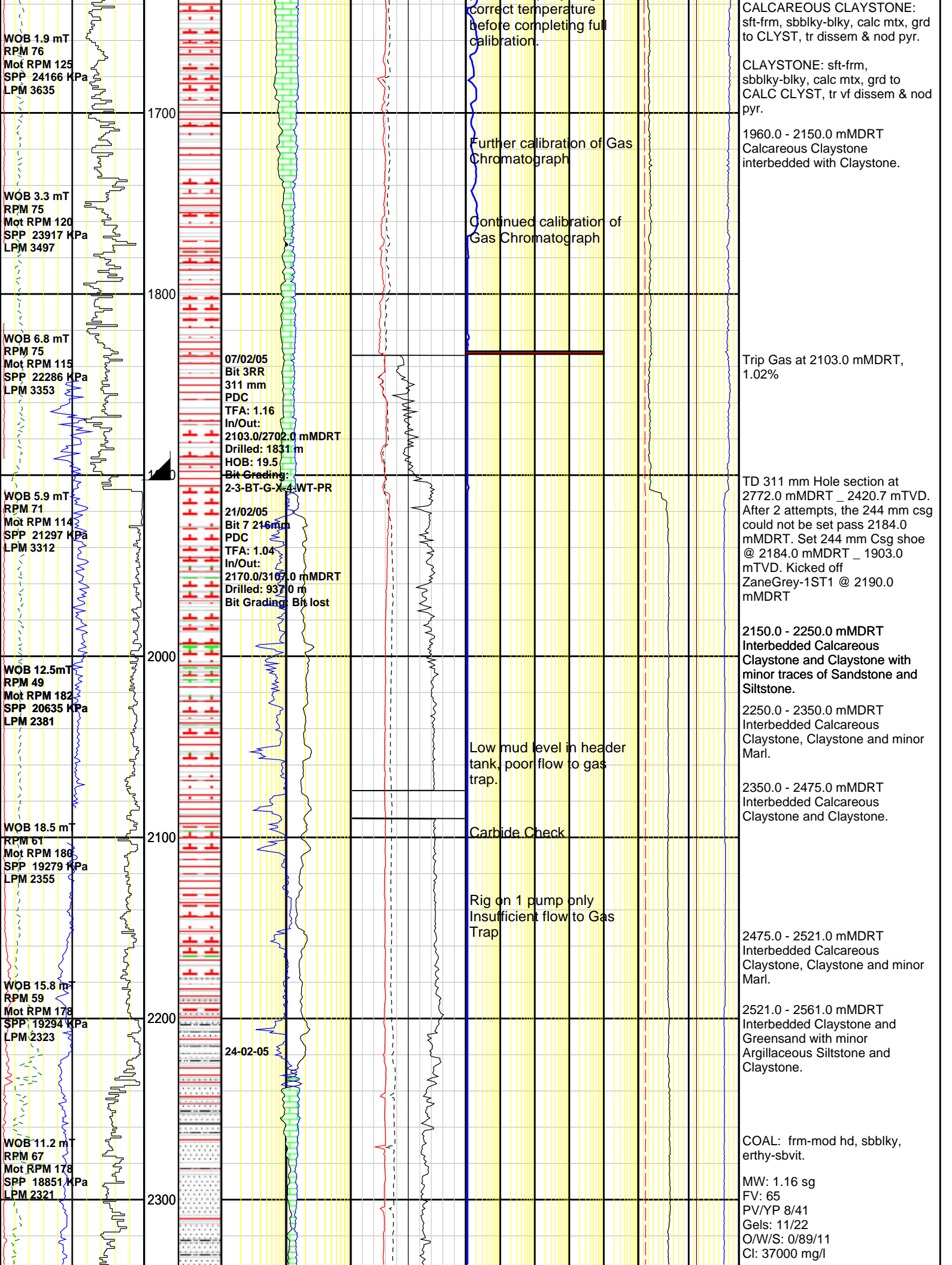
Depth Logged	: 94.00 m	To 3,675.00 m	Unit No.	: 197	Job No.	: AUFE0003576081
Date Logged	: 27-Jan-04	To 10-Mar-05				
Total Depth MD	: 3,675.00 m	TVD: 3,219.83 m	Plot Type	: Final		
Spud Date	: 27-Jan-05		Plot Date	: 23-Jun-05		

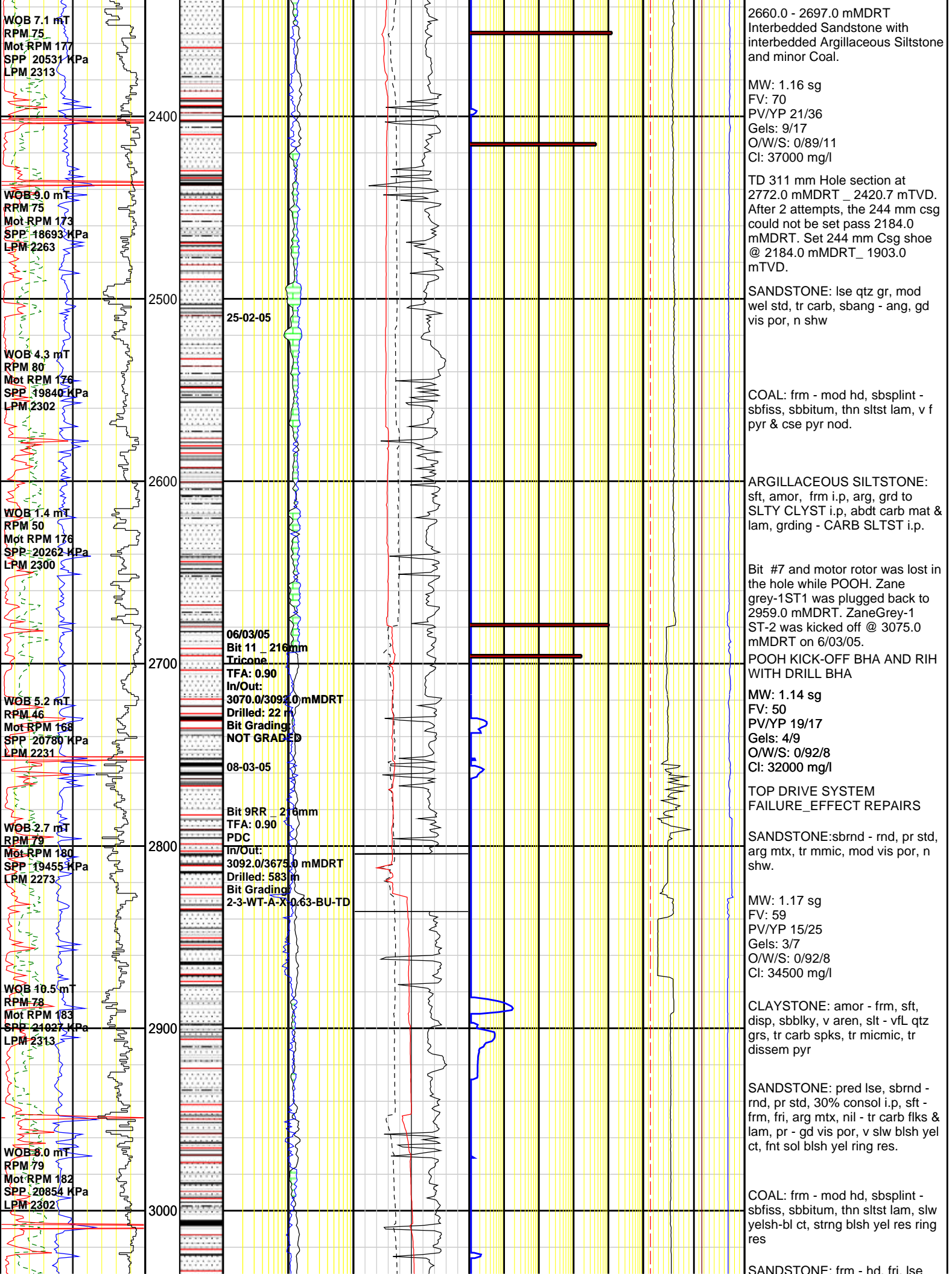
Run No.	Borehole Record (TVD)			Run No.	Borehole Record (TVD)		
	Size	From	To		Size	From	To
1	914,000 mm	81.90 m	112.84 m				
2	406,000 mm	112.84 m	954.09 m				
3	311,150 mm	954.09 m	1,832.38 m				
4	311,150 mm	1,832.38 m	2,354.30 m				
5	311,150 mm	2,354.30 m	2,415.73 m				
7	216,000 mm	1,902.96 m	2,706.21 m				
11	216,000 mm	2,678.85 m	3,219.52 m				

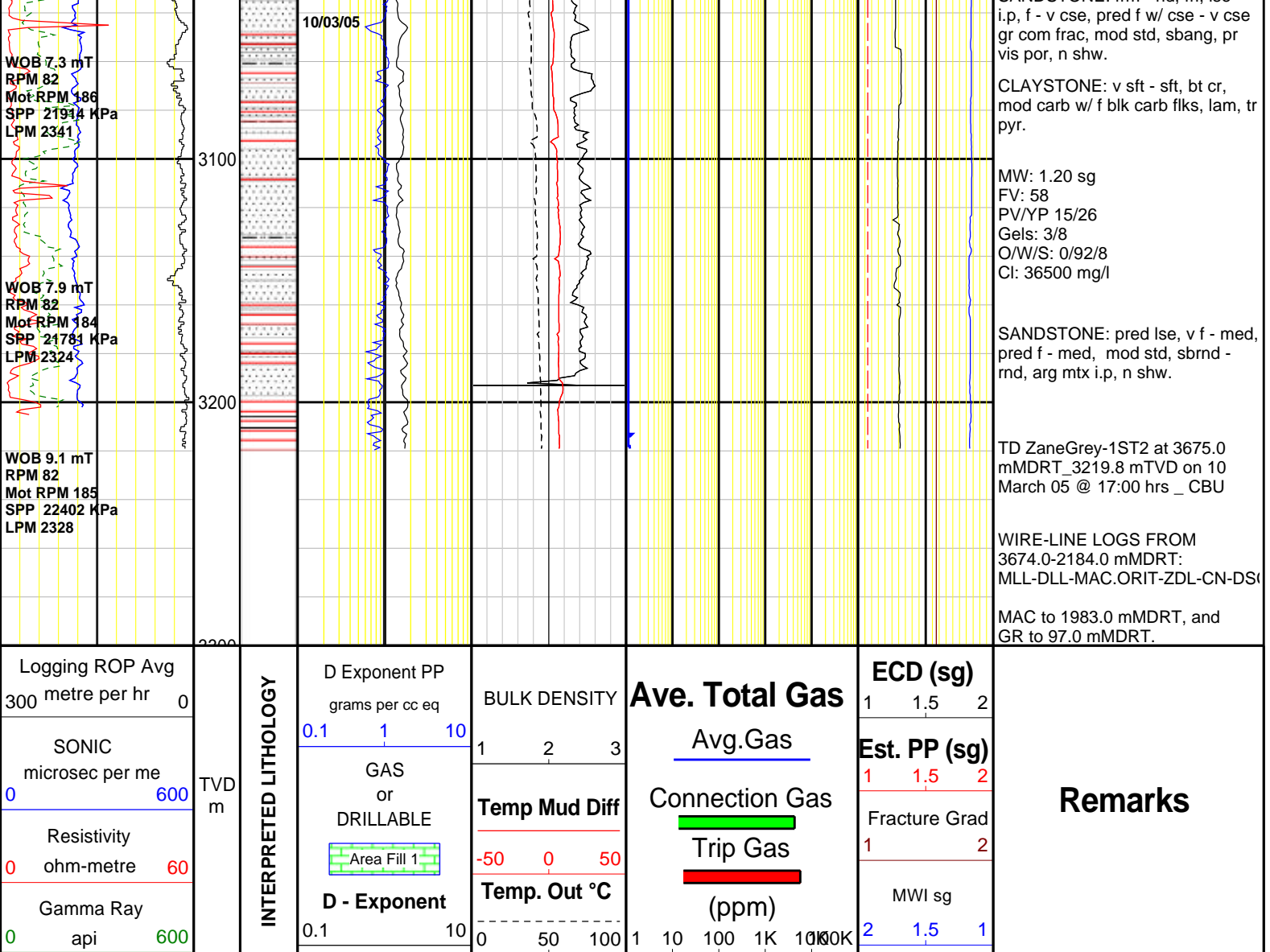
Logging ROP Avg 300 metre per hr 0		INTERPRETED LITHOLOGY	D Exponent PP grams per cc eq 0.1 1 10	BULK DENSITY 1 2 3	Ave. Total Gas						ECD (sg) 1 1.5 2			Remarks
SONIC microsec per me 0 600			GAS or DRILLABLE <div>Area Fill 1</div>	Temp Mud Diff -50 0 50	Avg. Gas						Est. PP (sg) 1 1.5 2			
Resistivity ohm-metre 0 60					Connection Gas						Fracture Grad 1 2			
Gamma Ray api 0 600					Trip Gas (ppm)						MWI sg 2 1.5 1			
			29/01/05 Bit 1 660 mm Smith w/ 914 mm Hole Opener TFA: 3.96 In/Out: 94/129.5 mMDRT Drilled: 35.5 m Bit Grading: 0-0-BT										Air Gap 21.5 m Water Depth 72.5 m RT - Seabed 94.0 m Spud with Seawater and Gel Sweeps	
			30/01/05 Bit 2 406 mm Tri-cone TFA: 1.24 In/Out: 129.5/1095.0 mMDRT Drilled: 965.5 m Bit Grading: 1-1-WT A-1-E NO TD										Drill 914 mm (36") hole section to 129.5 mMDRT @ 15:20 hrs on 29/01/05. 762 mm (30") csg set @ 127.7 mMDRT. Overburden Data from Patricia-1 well	











RIG MONITORING FORMATION EVALUATION LOG

Company	:	Bass Strait Oil Company Ltd
Rig	:	Ocean Patriot
Well	:	Combined ZaneGrey-1 ST1 & ST2
Field	:	ZaneGrey / Gippsland Basin
Country	:	Australia
DOE Number	:	
Latitude : 38° 34' 31.64" South		
Longitude : 147° 59' 16.27" East		
UTM Easting =	586,049.89	m
UTM Northing =	5,729,856.42	m
Other Services		

Depth Logged	: 94.00 m	To 3,675.00 m	Unit No.	: 197	Job No.	: AUFEE000357608
Date Logged	: 27-Jan-05	To 10-Mar-05				
Total Depth MD	: 3,675.00 m	TVD: 3,219.80 m	Plot Type	: Final		
Spud Date	: 27-Jan-05		Plot Date	: 23-Jun-05		

[illegible]

LEGEND

Abbreviations and Symbols

















Drilling Data

BG	Background Gas
BHT	Bottomhole Temp
C	Carbide Test
CB	Core Bit
CG	Connection Gas
CKF	Check For Flow
CO	Circulate Out
DB	Diamond Bit
DC	Depth Correction
DS	Direction Survey
DST	Drillstem Test
FLT	Flowline Temp.
LAT	Logged After Trip
NB	New Bit
NR	No Returns
PDC	Polycrystalline Diamond Compound Bit
PR	Partial Returns
RPM	Revs Per Minute
RRB	Rerun Bit
STG	Short Trip Gas
TB	Turbo Drill
TG	Trip Gas
U	Gas Units





















Mud Data

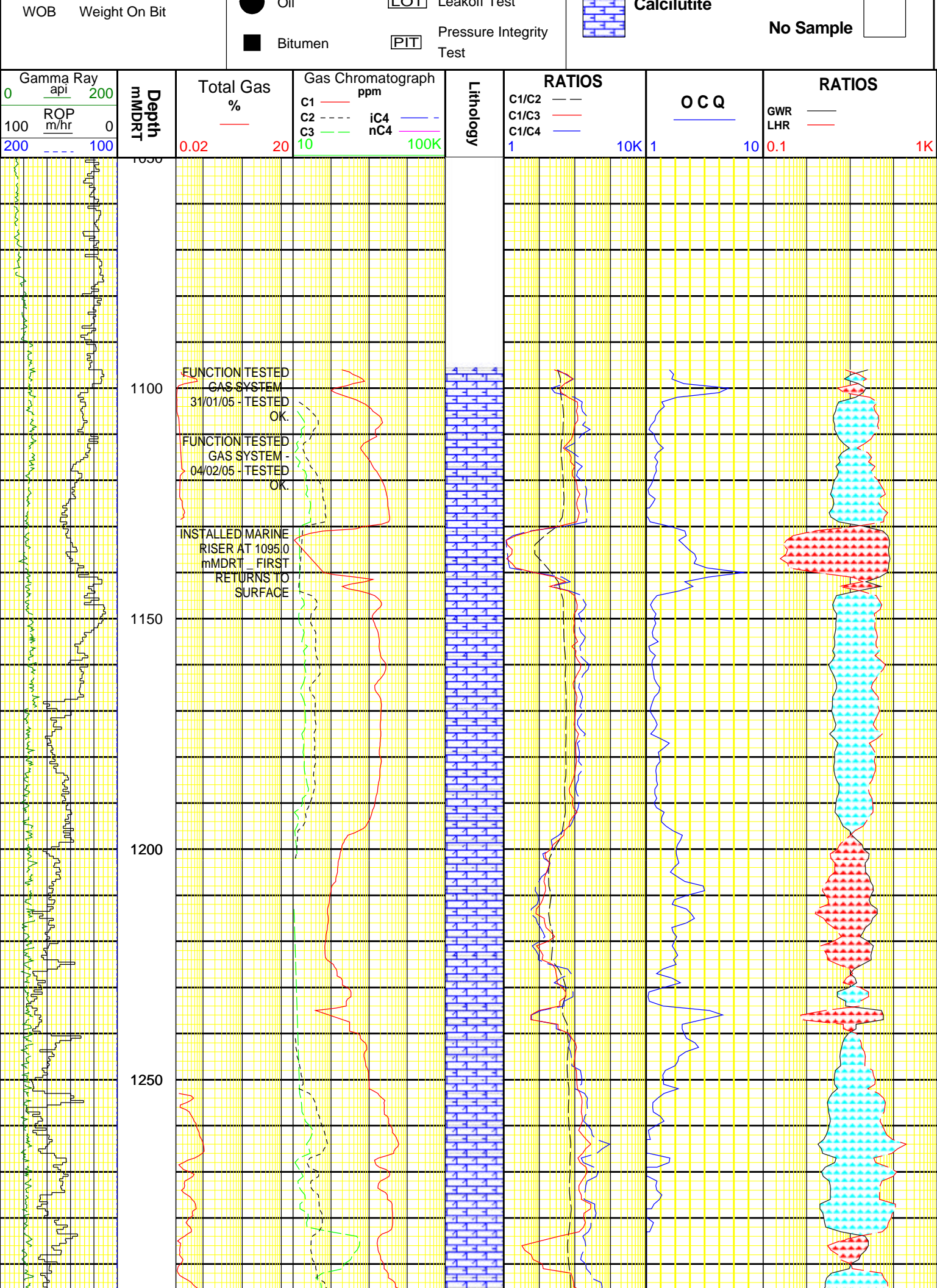
Cl-	Chloride Ion Conc	Rm	Mud Resistivity
FC	Filter Cake	Rmf	Filtrate Resistivity
FL	Filtrate Loss	S	Solids Content
G	Gels	Vis	Funnel Viscosity
pH	Hydrogen Ion Content	MW	Mud Weight
PV	Plastic Viscosity	YP	Yield Point

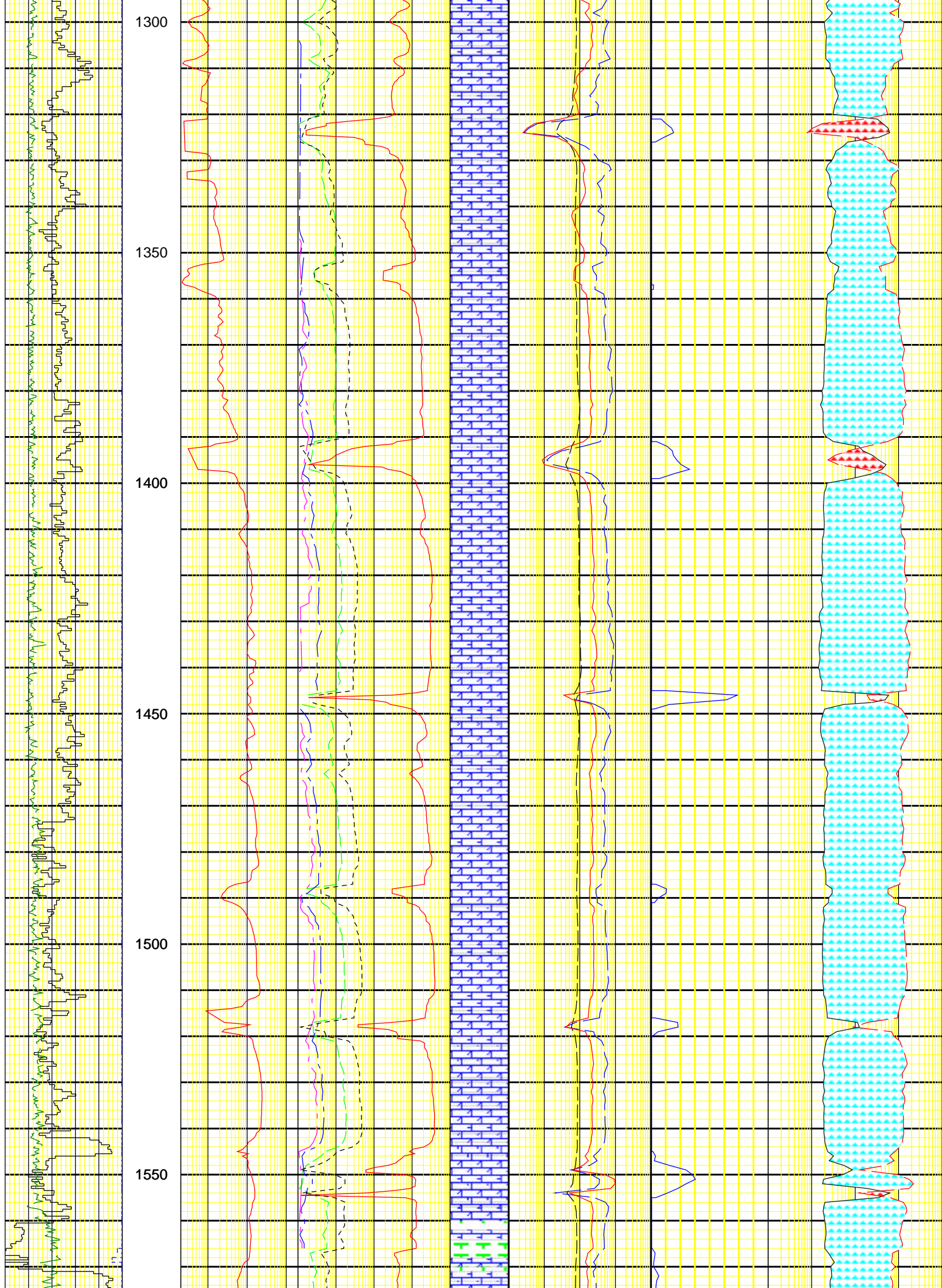
Engineering Data

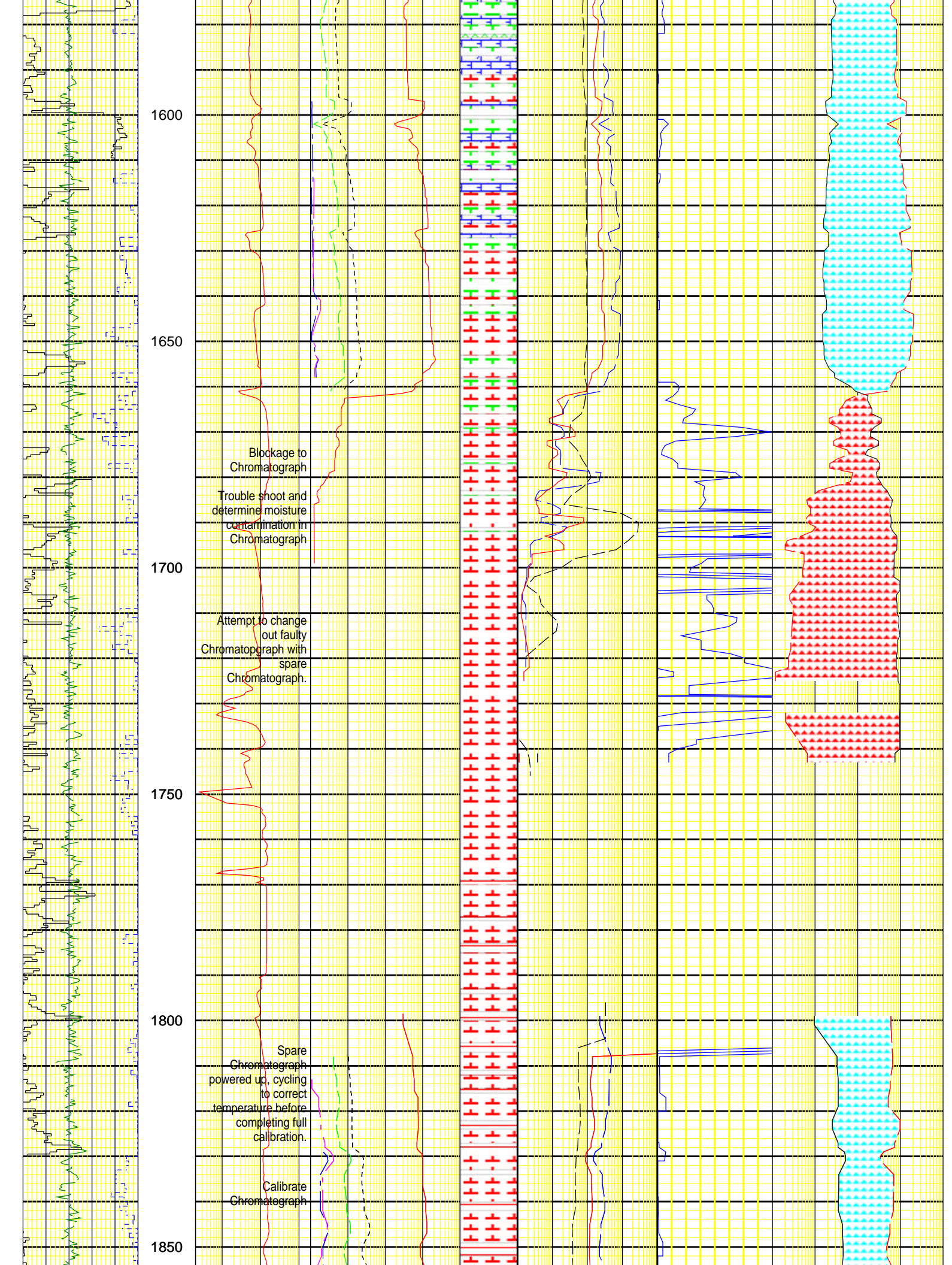
	Core No.		Water
	DST No.		Salt Water
	Casing Seat		Fresh Water
	Side Wall Core		Hydrocarbons Smell
	Gas Traces		H2S Smell
	Gas		Interval Tester
	Oil Traces		Wireline Log Run
	Oil		Leakoff Test

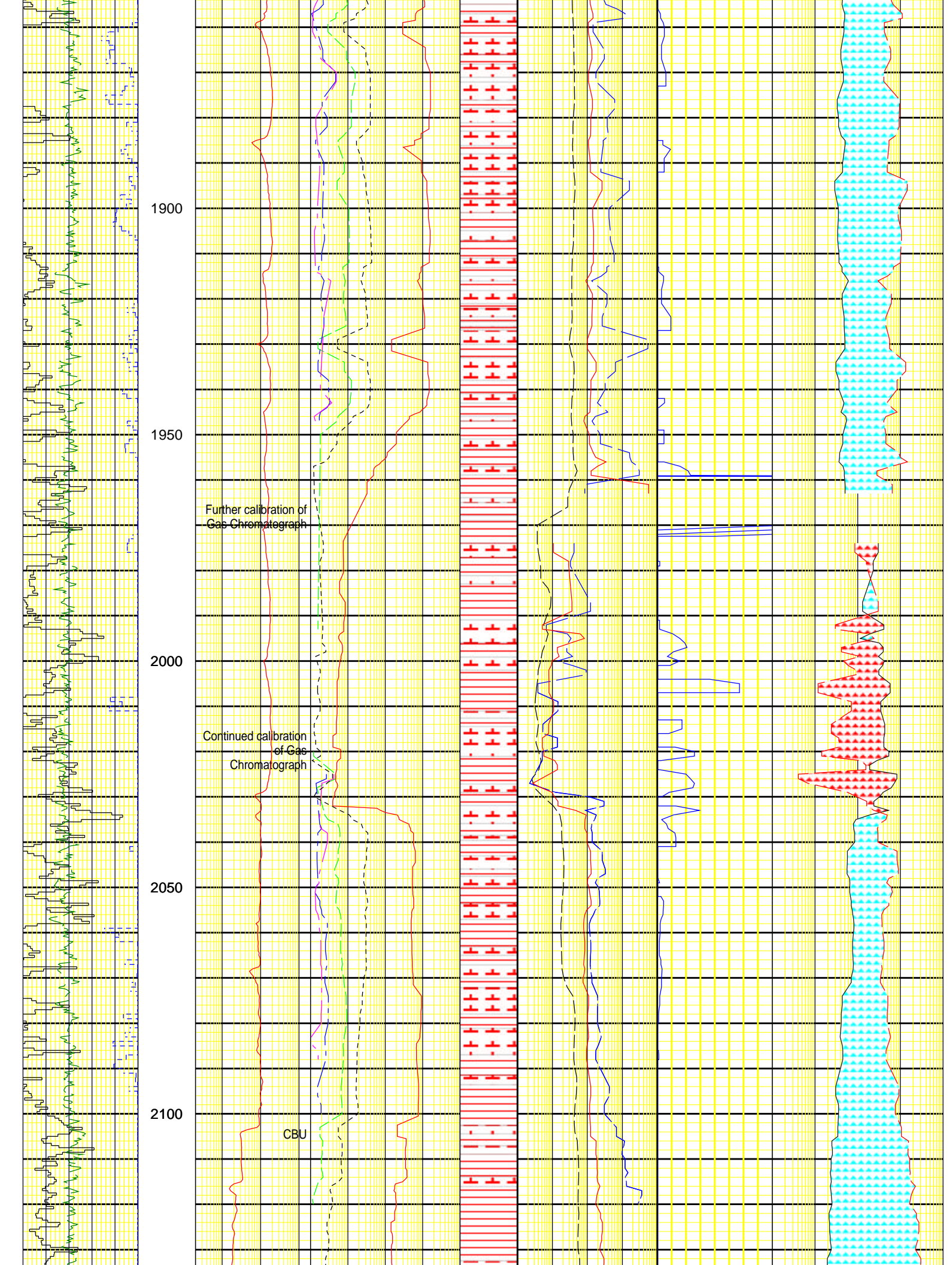
Lithology Symbols

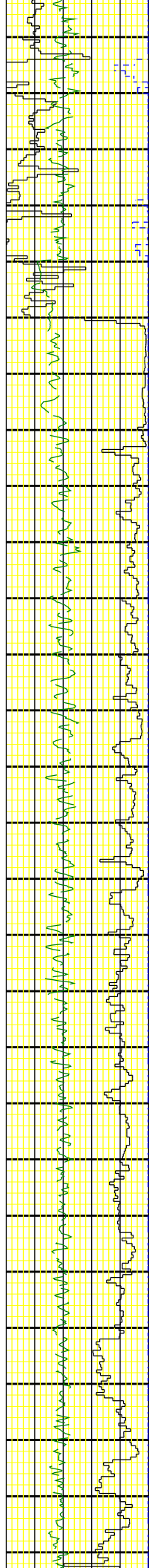
	Sandstone	Calcsiltite	
	Silty Sandstone	Calcarenite	
	Silt	Mudstone	
	Siltstone	Marl	
	Clay	Glauconitic Sandstone	
	Claystone	Chert	
	Calcareous Claystone	Conglomerate	
	Limestone	Igneous	
	Dolomite	Coal	
	Calcsiltite		











2150

2200

2250

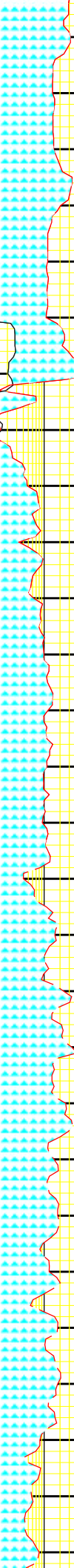
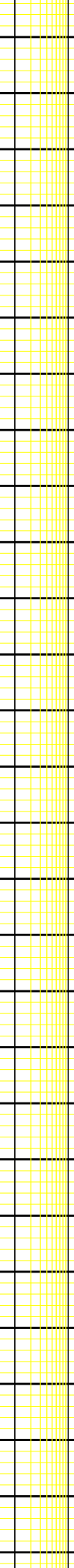
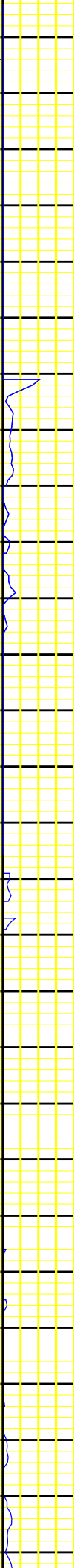
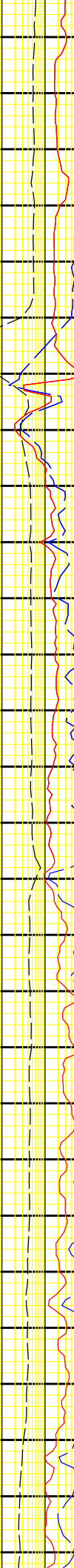
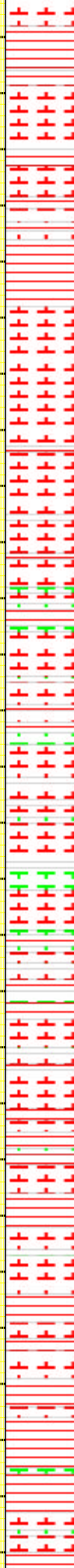
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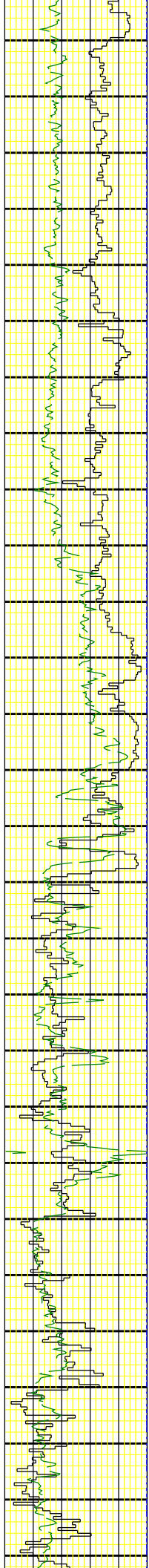
2350

2400

Low mud level in
header tank, poor
flow to gas trap.

Carbide Check





2450

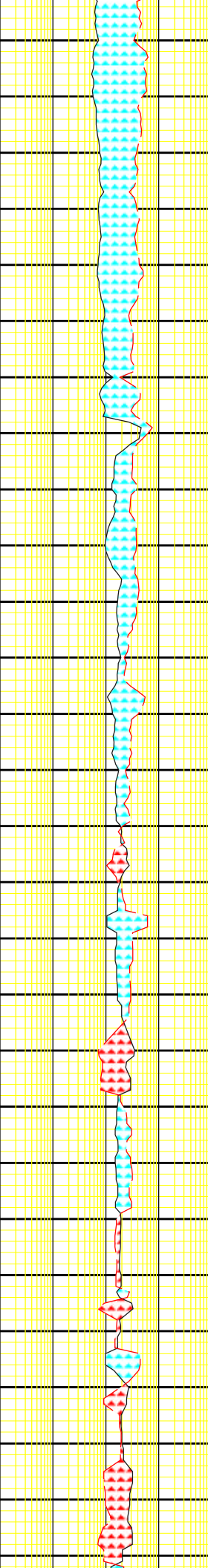
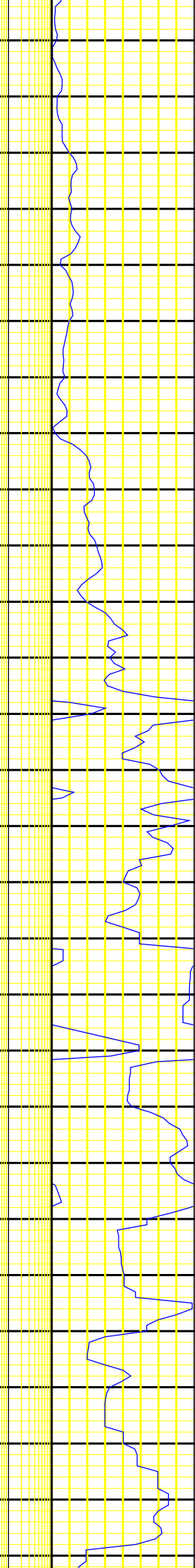
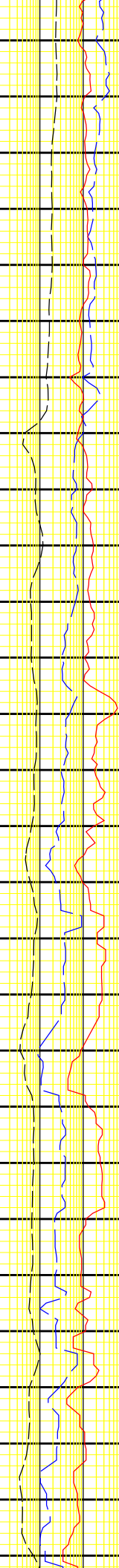
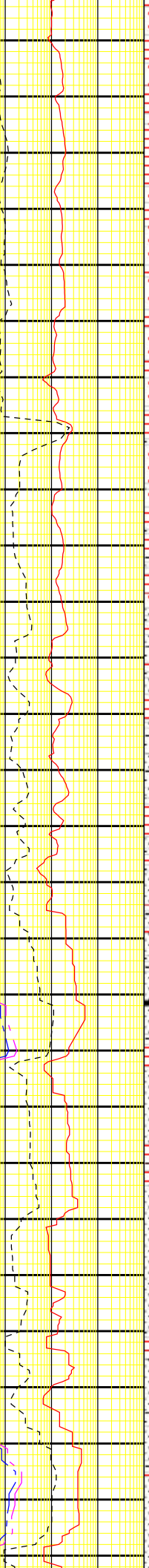
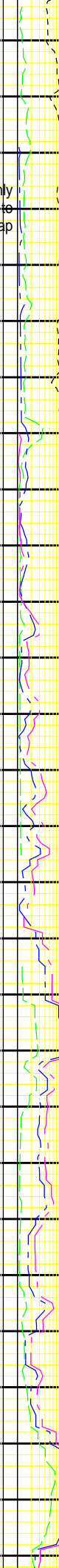
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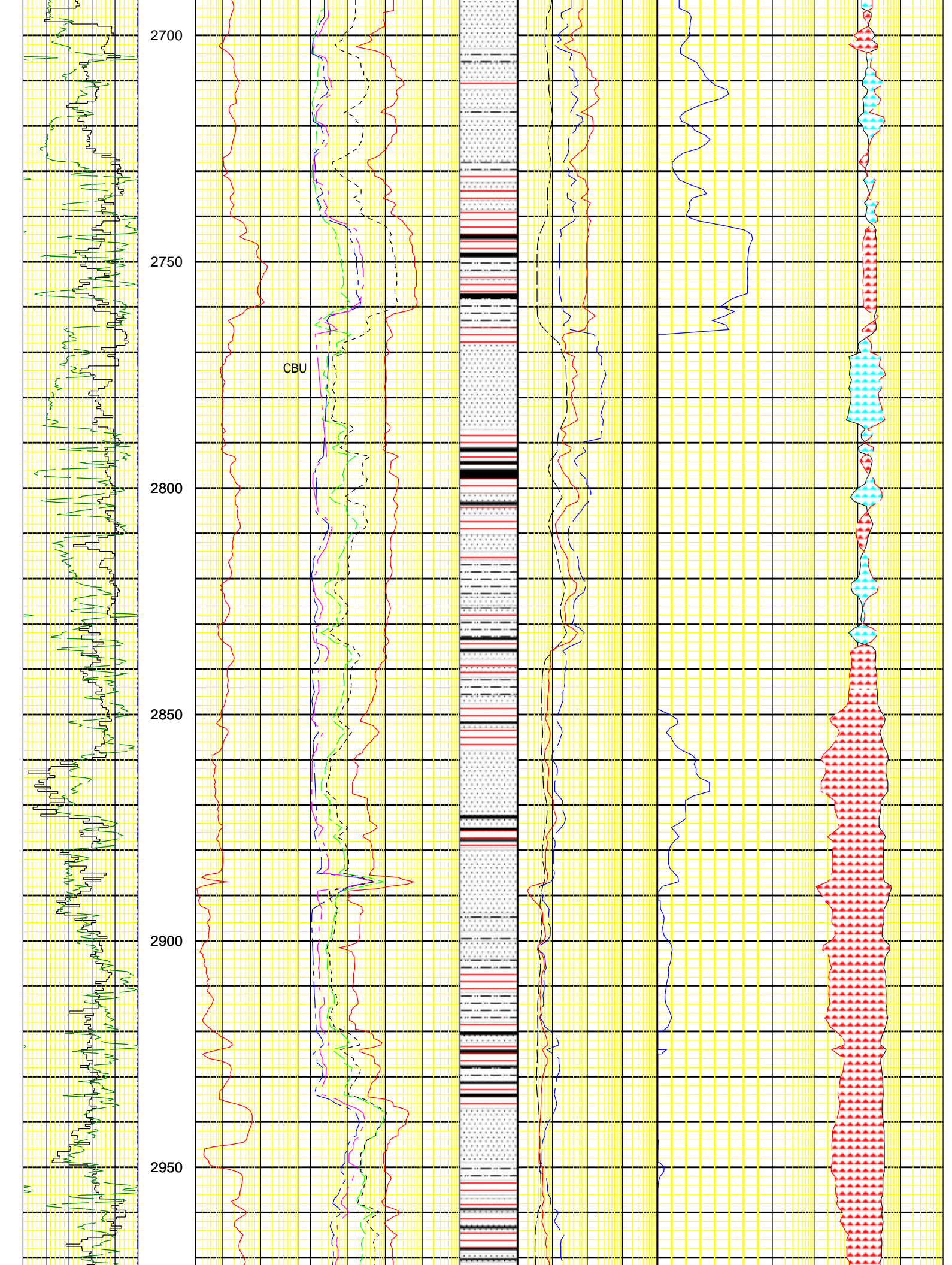
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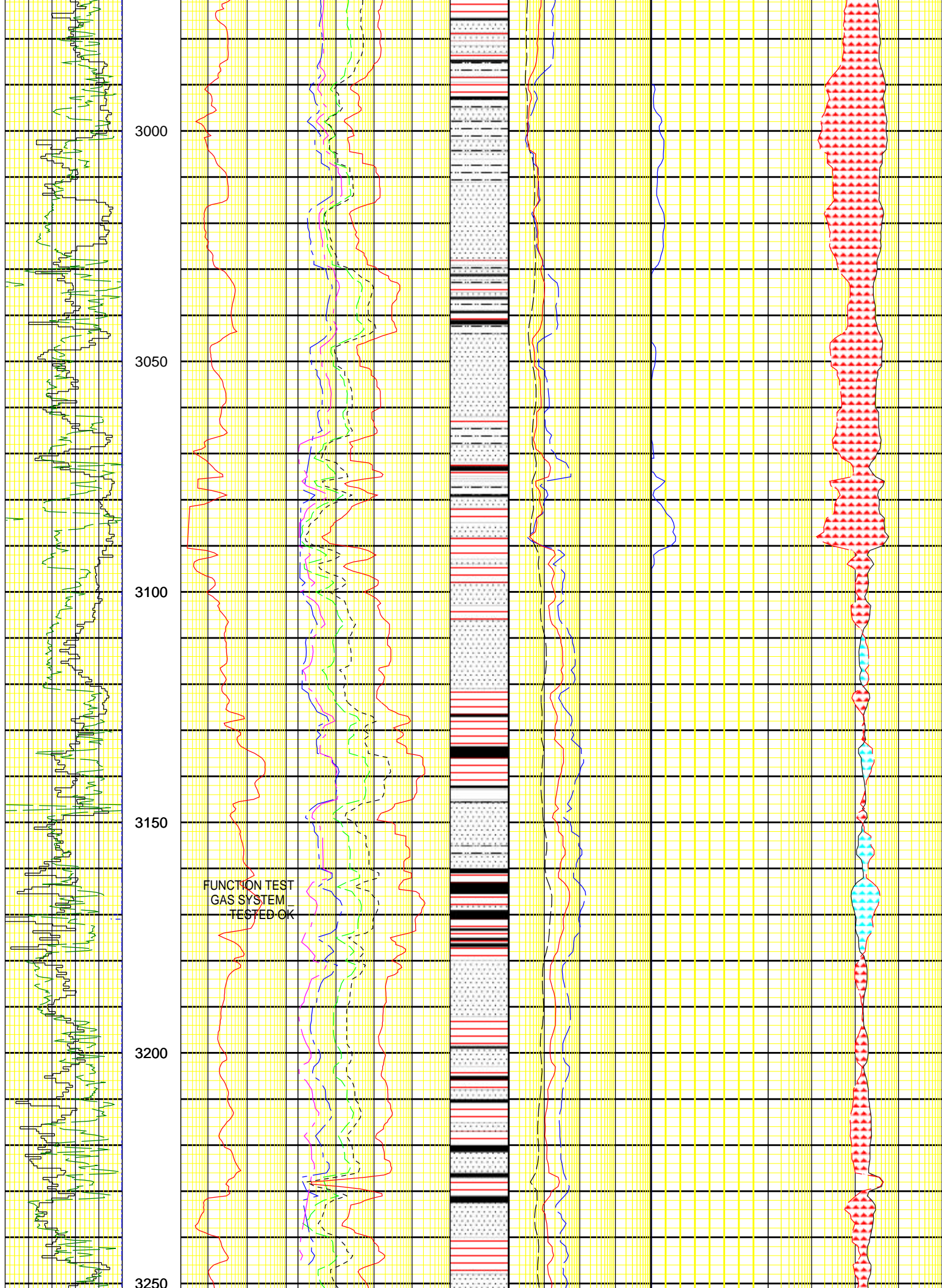
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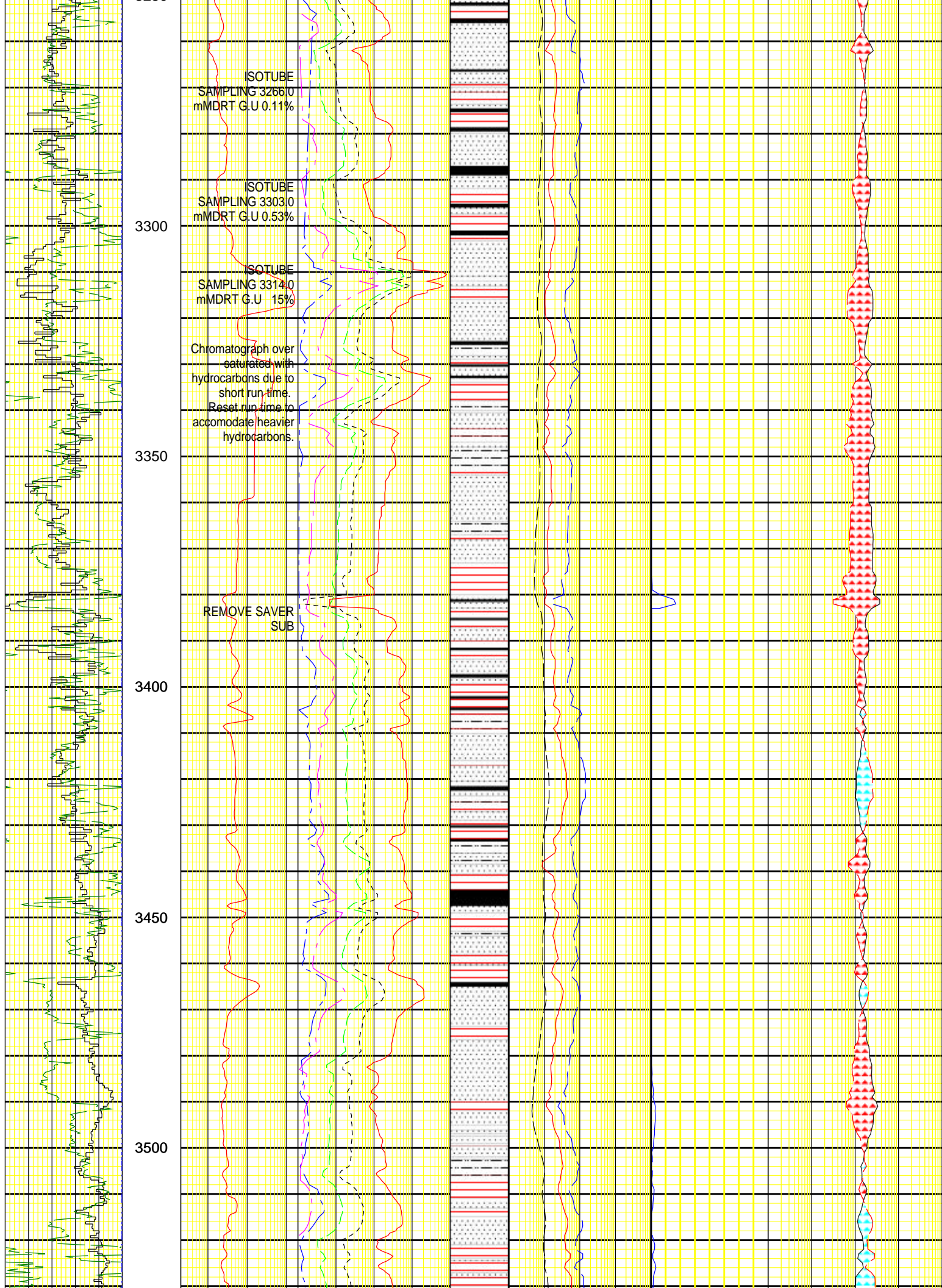
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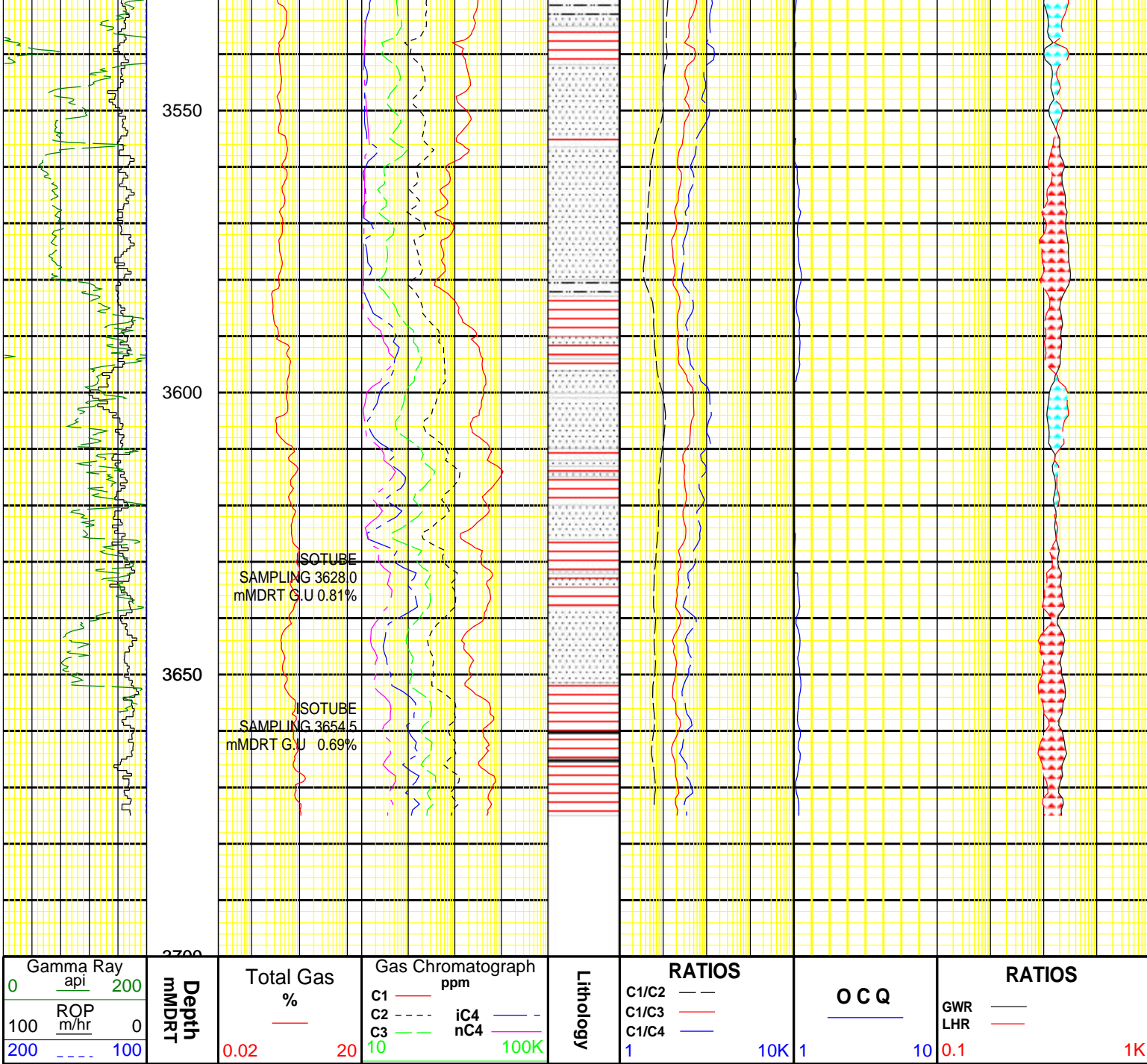
Rig on 1 pump only
insufficient flow to
Gas Trap











End of Well Report Binder Spine Template



ZaneGrey-1/ST1/ST2 VIC/P42

WELL COMPLETION REPORT (Basic Data)

Volume 1 of 1



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