HALLIBURTON | Sperry Drilling

Powered by INSITE

1 : 500

DGR Dual Gamma Ray
EWR-Phase 4
PWD

Country	: Japan
Field	: Nankai Trough
Location	: Lat: 33° 18' 3.04" North Long: 136° 38' 12.17" East
Well	: C0002N
Company	: JAMSTEC
Rig	: CHIKYU

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DOE Number :

LOCATION
Latitude : 33° 18' 3.04" North
Longitude : 136° 38' 12.17" East
UTM Easting = 652382.4 m
UTM Northing = 3685834.6 m

Other Services
Directional Drilling
DDSr Drillstring Dynamics

Permanent Datum : Mean Sea Level Elevation : 0.00 m
Log Measured From : Drill Floor 28.50 m Above Permanent Datum
Drilling Measured From : Drill Floor

Elev. KB 0.00 m
DF 28.50 m
GL 0.00 m
WD 1939.00 m

TVDss LOG

Depth Logged : 2,798.50 m To 4,267.40 m
Date Logged : 04-Nov-13 To 15-Nov-13
Total Depth MD : 4,297.00 m TVD : 4,295.90 m
Spud Date : 11-Oct-13

Unit No. : 0003501 Job No. : JP-XX-0900526576
Plot Type : Final
Plot Date : 08-Jan-14

Borehole Record (TVDss)			
Run No.	Size	From	To
1	17.000 in	2,798.50 m	3,946.40 m
2	17.000 in	3,946.40 m	4,267.40 m

Casing Record (TVDss)			
Size	Weight	From	To
36.000 in	822.36 kg/m	1,934.32 m	1,992.50 m
20.000 in	192.39 kg/m	1,934.32 m	2,793.30 m

WELL INFORMATION

MWD Run Number	100	200
Date run completed	10-Nov-13	15-Nov-13
Rig Bit Number	1	2
Bit Size (in)	17.000	17.000
Tool Nominal OD (in)	8.000	8.000
Log Start Depth (TVD, m)	2,827.000	3,974.900
Log End Depth (TVD, m)	3,974.900	4,295.897
Drill or Wipe	Drill	Drill
Drill/Wipe Start Date and Time	04-Nov-13 20:30	11-Nov-13 22:15
Drill/Wipe End Date and Time	09-Nov-13 19:30	13-Nov-13 01:15
Min Inc (deg) @ Depth (TVD, m)	.12 @ 3,351.949	.06 @ 3,957.113
Max Inc (deg) @ Depth (TVD, m)	5.36 @ 3,083.428	.40 @ 4,276.657
Bit TFA(cm2) / Bit Type	5.8 / PDC	5.8 / PDC
Flow Rate (m3pm)	3.41	3.60
Max AV (mps) / CV (mps) @ MWD	N/A / N/A	N/A / N/A
Fluid Type	Polymer	Polymer
Density (ppg) / Viscosity (spl)	9.18 / 82.45	9.18 / 49.15
Filtrate CL (ppm)	77,000.00	81,700.00
pH / Fluid Loss (m3pm)	12.23 / 0	12.30 / 0
PV (mPsec) / YP (pa)	31 / 14.84	31 / 14.84
% Solids / % Sand	8 / 0.4	8.00 / 0.4
% Oil / Oil:Water Ratio	N/A / N/A	N/A / N/A
Rm @ Measured Temp (degC)	.100 @ 24.00	.100 @ 24.00
Rmf @ Measured Temp (degC)	.100 @ 24.00	.080 @ 24.00
Rmc @ Measured Temp (degC)	.100 @ 24.00	.140 @ 24.00
Max Tool Temp (degC) / Source	25.00 / PCM	37.00 / EWR
Rm @ Max Tool Temp (degC)	.0979 @ 25.00	N/A @ 37.00
Lead MWD Engineer	Joe Lyman	Joe Lyman
Customer Representative	Dr Moe	Dr Moe

SENSOR INFORMATION

Downhole Processor Information

Tool Type	HCIM	HCIM
Software Version	88.48	88.48
Sub Serial Number	12060986	12060986
Insert Serial Number	11296577	11296577
Date and Time Initialized	02-Nov-13 10:59	11-Nov-13 02:23
Date and Time Read	10-Nov-13 18:23	15-Nov-13 09:54
ECMB SW Version	N/A	N/A

Directional Sensor Information

Tool Type	PCDC	PCDC
Distance From Bit (m)	22.270	19.180
Software Version	6.21	6.21
Sub Serial Number	11025002	11025002
Sonde Serial Number	10919528	10919473
Sensor ID Number	N/A	N/A
Toolface Offset (deg)	0	0

Gamma Ray Sensor Information

Tool Type	DGR	DGR
Distance From Bit (m)	12.750	10.190
Recorded Sample Period (sec)	10	10
Software Version	N/A	N/A
Sub Serial Number	11199632	11199632
Insert/Sonde Serial Number	11354963	11354963

Resistivity Sensor Information

Tool Type	EWR-P4	EWR-P4
Distance From Bit (m)	15.200	12.120
Recorded Sample Period (sec)	10	10
Software Version	1.50	1.50
Sub Serial Number	12165429	12165429
Receiver Insert Serial Number	12222544	12222544
Transmitter Insert Serial Number	12207317	12207317
Receiver Orientation	Down	Down

Pressure Sensor Information

Tool Type	PWD	PWD
Distance From Bit (m)	17.700	14.620
Recorded Sample Period (sec)	2	2
Software Version	4.12	4.12
Collar Serial Number	0	12070384
Insert Serial Number	0	11832609

REMARKS

1. All depths are referenced to the driller's pipe tally and are measured from the drill floor.
2. Formation exposure time is presented for the resistivity sensor.
3. The following smoothing parameters have been applied to the data:

   Gamma, Resistivity,& Exposure Time

   0.1524m interval,0.60960m coercion distance
4. Environmental Information.

   Hole size : 17 Inches
   Mud weight : 9.3-9.4 ppg
   Mud Type : Polymer
   Mud Resistivity : 0.1 Ohmm
   KCL Concentration : 4.58-5.96 % wt
5. Curve Definitions:

   ROPA : Smoothed Rate of Penetration.
   DGRCC : Smoothed Comb Gamma Ray BCorr (X+ and Borehole Corrected)
   R39PC : Smoothed Phase Resistivity BCorr(Extra Shallow Spacing).
   R15PC : Smoothed Phase Resistivity BCorr(Shallow Spacing).
   R27PC : Smoothed Phase Resistivity BCorr(Medium Spacing).
   R09PC : Smoothed Phase Resistivity BCorr(Deep Spacing).
   EWXT : Smoothed Formation Exposure Time.
   EWTEMP : Smoothed EWR Temperature
   PWEA : PWD Annular EMW
   PWPA : PWD Annular Pressure
6. All data presented is recorded data unless otherwise noted.
7. Spike in ROPA over interval 3117 - 3118mBRT and 3158 - 3160mBRT due to short trip.

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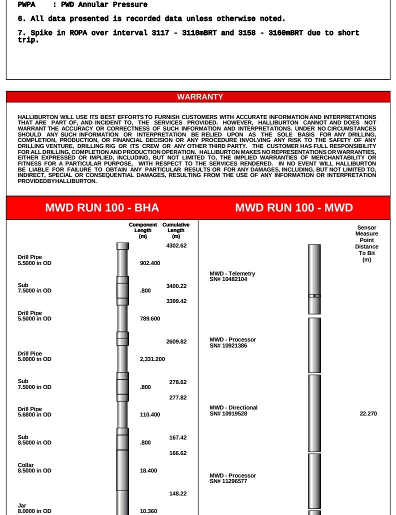
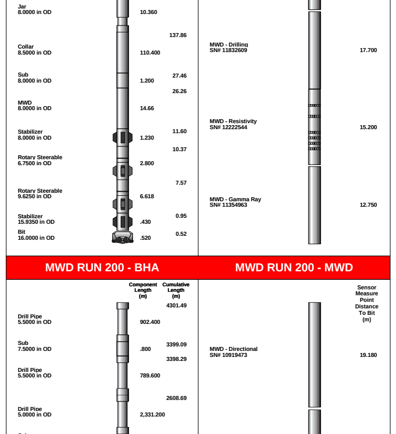
MWD RUN 100 - BHA



MWD RUN 200 - BHA



HALLIBURTON

INSITE

DIRECTIONAL SURVEY REPORT
JAMSTEC
C0002N
Nankai Trough
Japan
JP-XX-0900526576

Measured Depth (metres)	Inclination (degrees)	Direction (degrees)	Vertical Depth (metres)	Latitude (metres)	Departure (metres)	Vertical Section (metres)	Dogleg (deg/30m)
2827.800	0.00	0.00	2827.800	0.000 N	0.000 E	0.000	TIE-IN
2861.970	1.43	169.41	2861.966	0.420 S	0.078 E	-0.420	1.26
2890.590	3.40	159.39	2890.559	1.567 S	0.443 E	-1.567	2.11
2928.740	5.12	140.76	2928.604	3.945 S	1.919 E	-3.945	1.72
2966.900	5.18	106.59	2966.619	5.756 S	4.648 E	-5.756	2.38
3010.810	5.07	76.58	3010.361	5.872 S	8.436 E	-5.872	1.81
3043.630	5.11	51.56	3043.056	4.626 S	10.992 E	-4.626	2.01
3084.170	5.36	38.78	3083.428	2.026 S	13.594 E	-2.026	0.88
3123.580	4.98	25.39	3122.679	0.955 N	15.481 E	0.955	0.96
3162.077	4.18	4.38	3161.055	3.864 N	16.305 E	3.864	1.44
3199.713	2.00	1.06	3198.635	5.888 N	16.422 E	5.888	1.74
3238.190	0.31	209.19	3237.104	6.469 N	16.384 E	6.469	1.77
3276.890	0.44	239.16	3275.803	6.302 N	16.207 E	6.302	0.18
3314.845	0.41	269.76	3313.758	6.228 N	15.945 E	6.228	0.18
3353.037	0.12	310.15	3351.949	6.253 N	15.776 E	6.253	0.26
3391.259	0.50	336.21	3390.171	6.432 N	15.678 E	6.432	0.31
3429.137	0.50	334.26	3428.048	6.731 N	15.540 E	6.731	0.01
3468.361	0.62	352.84	3467.269	7.094 N	15.439 E	7.094	0.16
3505.565	0.31	333.27	3504.472	7.382 N	15.369 E	7.382	0.28
3544.482	0.19	98.24	3543.389	7.467 N	15.384 E	7.467	0.34
3581.982	0.25	209.19	3580.889	7.385 N	15.404 E	7.385	0.29
3620.055	0.31	210.19	3618.961	7.221 N	15.310 E	7.221	0.05
3657.981	0.84	245.28	3656.886	7.015 N	15.005 E	7.015	0.48
3691.657	0.36	224.61	3690.559	6.836 N	14.707 E	6.836	0.46
3729.632	0.25	132.00	3728.534	6.695 N	14.686 E	6.695	0.36
3767.900	0.44	166.60	3766.801	6.496 N	14.782 E	6.496	0.21
3887.578	0.31	300.87	3886.478	6.218 N	14.611 E	6.218	0.17
3958.213	0.06	111.53	3957.113	6.302 N	14.483 E	6.302	0.16
3996.520	0.22	133.05	3995.420	6.244 N	14.557 E	6.244	0.13
4035.150	0.12	133.34	4034.049	6.164 N	14.642 E	6.164	0.08
4073.329	0.20	202.74	4072.228	6.076 N	14.647 E	6.076	0.15
4111.480	0.19	233.67	4110.379	5.979 N	14.572 E	5.979	0.08
4144.580	0.14	244.78	4143.479	5.931 N	14.493 E	5.931	0.05
4187.910	0.22	244.60	4186.809	5.872 N	14.370 E	5.872	0.06
4235.245	0.31	274.39	4234.144	5.843 N	14.157 E	5.843	0.10
4277.760	0.40	240.57	4276.657	5.780 N	13.913 E	5.780	0.16
4297.500	0.40	240.57	4296.397	5.713 N	13.794 E	5.713	0.01

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 0.00 DEGREES (GRID)
A TOTAL CORRECTION OF -7.66 DEG FROM MAGNETIC NORTH TO GRID NORTH HAS BEEN APPLIED

HORIZONTAL DISPLACEMENT IS RELATIVE TO THE WELL HEAD.
HORIZONTAL DISPLACEMENT(CLOSURE) AT 4297.500 METRES
IS 14.930 METRES ALONG 67.50 DEGREES (GRID)

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