

Sperry Drilling Services

1 : 1000



MWD

EWR Electromagnetic Wave Resistivity
DGR Dual Gamma Ray
ALD Azimuthal Litho-Density
CTN Comp Thermal Neutron
ACAL Acoustic Caliper

Country : Australia		<div>Company : Woodside Energy Ltd</div> <div>Rig : Maersk Guardian</div> <div>Well : THA01</div> <div>Field : Thylacine</div> <div>Country : Australia</div> <div>DOE Number :</div>	
Field : Thylacine			
Location : Lat: 39° 14' 14.41" South GDA94 Long: 142° 54' 7.74" East GDA94			
Well : THA01			
Company : Woodside Energy Ltd			
Rig : Maersk Guardian		LOCATION	
Latitude : Lat: 39° 14' 14.41" South GDA94 Longitude : Long: 142° 54' 7.74" East GDA94		Other Services	
UTM Easting = 664,164.9 m UTM Northing = 5,655,161.4 m		Directional Drilling	
Permanent Datum : LAT	Elevation : 0.00 m	Elev.	KB
Log Measured From : Drill Floor	50.50 m	Above Permanent Datum	DF 50.50 m GL WD 99.30 m
Drilling Measured From : Drill Floor	MD LOG		
Depth Logged : 149.80 m To 2,634.15 m	Unit No. : SDSS 40	Job No. : AU-FE-000330657	
Date Logged : 13-Apr-06 To 14-May-06	Plot Type : Final		
Total Depth MD : 2,634.15 m TVD : 2,389.92 m	Plot Date : 29-Aug-06		
Spud Date : 13-Apr-06			
Run No.	Borehole Record (MD)		To
	Size	From	
100	762,000 mm	149.80 m	220.00 m
200	584,000 mm	220.00 m	638.00 m
300	445,000 mm	638.00 m	1173.40 m
400	445,000 mm	1173.40 m	1357.80 m
500	445,000 mm	1357.80 m	1530.20 m
600	445,000 mm	1530.20 m	2240.00 m
700	311,000 mm	2240.00 m	2387.42 m
800	311,000 mm	2387.42 m	2634.15 m
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WELL INFORMATION

MWD Run Number	300	400	500	600	700
Date run completed	23-Apr-06	25-Apr-06	27-Apr-06	30-Apr-06	05-May-06
Rig Bit Number	3	4	5	3RR	6
Bit Size (mm)	445	445	445	445	311
Tool Nominal OD (mm)	241	241	203	241	203
Log Start Depth (MD, m)	638.00	1,173.40	1,357.80	1,530.20	2,240.00
Log End Depth (MD, m)	1,173.40	1,357.80	1,530.20	2,240.00	2,387.40
Drill or Wipe	Drilling	Drilling	Drilling	Drilling	Drilling
Drill/Wipe Start Date and Time	21-Apr-06 05:54	24-Apr-06 02:44	26-Apr-06 12:07	27-Apr-06 12:27	04-May-06 12:31
Drill/Wipe End Date and Time	22-Apr-06 22:11	25-Apr-06 04:23	26-Apr-06 17:39	29-Apr-06 07:55	05-May-06 01:19
Min Inc (deg) @ Depth (MD, m)	6.53 @ 640.81	29.18 @ 1,335.71	29.18 @ 1,364.19	29.68 @ 2,210.26	28.69 @ 2,361.59
Max Inc (deg) @ Depth (MD, m)	31.04 @ 1,074.02	30.09 @ 1,248.01	30.44 @ 1,508.90	31.44 @ 1,880.86	29.28 @ 2,245.78
Bit TFA(in2) / Bit Type	1.977 / Reed DS104DGW	1.841 / Reed DS619S	1.804 / Hughes MX-03	1.574 / DSC104DGW	1.374 / Hughes HC605S
Flow Rate (gpm)	1150	1000	980	900	900
Max AV (mpm) / CV (mpm) @ MWD	39.6 / 129.0	41.4 / 105.9	33.6 / 117.6	39.8 / 90.5	78.5 / 118.5
Fluid Type	Synteq	Synteq	Synteq	Synteq	Synteq
Density (sg) / Viscosity (spl)	1.25 / 110.00	1.25 / 106	1.25 / 100	1.25 / 84	1.25 / 107
Filtrate CL (ppm)	40000	38600	36300	33200	38700
pH / Fluid Loss (mptm)	N/A / 4.5	N/A / 3.2	N/A / 3.6	N/A / 3.6	N/A / 3.4
PV (cp) / YP (pa)	47 / 26	41 / 30	34 / 26	41 / 30	42 / 13
% Solids / % Sand	11.4 / 0.25	12.1 / 0.50	13.2 / 0.50	13.3 / 0.50	14.4 / 0.50
% Oil / Oil:Water Ratio	53 / 61:39	55 / 64:36	58 / 68:32	60 / 71:29	56 / 67:33
Rm @ Measured Temp (degC)	N/A @ N/A	N/A @ N/A	N/A @ N/A	N/A @ N/A	N/A @ N/A
Rmf @ Measured Temp (degC)	N/A @ N/A	N/A @ N/A	N/A @ N/A	N/A @ N/A	N/A @ N/A
Rmc @ Measured Temp (degC)	N/A @ N/A	N/A @ N/A	N/A @ N/A	N/A @ N/A	N/A @ N/A
Max Tool Temp (degC) / Source	76 / EWR-P4D	78 / EWR-P4D	76 / EWR-P4D	84 / EWR-P4D	89 / EWR-P4
Rm @ Max Tool Temp (degC)	N/A @ 76	N/A @ 78	N/A @ 76	N/A @ 84	N/A @ 89
Lead MWD Engineer	M. Lee	M. Lee	M. Lee	M. Lee	M. Lee
Customer Representative	S. Job	S. Job	S. Job	D. Rota	D. Rota

SENSOR INFORMATION

Downhole Processor Information

Tool Type	HCIM	HCIM	HCIM	HCIM	HCIM
Software Version	66.37	66.37	66.37	66.37	68.18
Sub Serial Number	10593967	10593967	10593967	10593967	152862
Insert Serial Number	132317	132317	132317	132317	134502
Logging String Serial Number	DM90085714H1GV	DM90085714H1GV	DM90085714H1GV	DM90085714H1GV	DM90103157HWRG
Date and Time Initialized	20-Apr-06 08:57	23-Apr-06 17:11:29	25-Apr-06 11:30:42	27-Apr-06 05:30:21	03-May-06 22:03
Date and Time Read	23-Apr-06 09:22:08	25-Apr-06 11:15:59	27-Apr-06 02:01:00	30-Apr-06 09:14:49	05-May-06 13:07:06

Directional Sensor Information

Tool Type	DM	DM	DM	DM	DM
Distance From Bit (m)	21.55	21.00	21.00	22.23	14.06
Software Version	3.15	3.15	3.15	3.15	3.15
Sub Serial Number	175042	175042	175042	175042	10718049
Sonde Serial Number	133447	133447	133447	133447	133447
Sensor ID Number	133447	133447	133447	133447	133447
Survey String Serial Number	N/A	N/A	N/A	N/A	N/A
Toolface Offset (deg)	279	256	256	311	N/A

Gamma Ray Sensor Information

Tool Type	DGR	DGR	DGR	DGR	DGR
Distance From Bit (m)	13.98	13.43	13.43	14.71	5.42
Recorded Sample Period (sec)	12	12	12	12	12
Software Version	N/A	N/A	N/A	N/A	N/A
Sub Serial Number	168140	168140	168140	168140	10718409
Insert/Sonde Serial Number	089766	089766	089766	089766	172498

Resistivity Sensor Information

Tool Type	EWR-P4D	EWR-P4D	EWR-P4D	EWR-P4D	EWR-P4
Distance From Bit (m)	16.44	15.89	15.89	17.17	7.78
Recorded Sample Period (sec)	16	16	16	16	14
Software Version	2.00	2.00	2.00	2.00	1.38
Sub Serial Number	147848	147848	147848	147848	37661
Receiver Insert Serial Number	160370	160370	160370	160370	205859
Transmitter Insert Serial Number	107102	107102	107102	107102	151389
Receiver Orientation	Down	Down	Down	Down	Down

Neutron Sensor Information

Tool Type					CTN
Distance From Bit (m)					25.13
Recorded Sample Period (sec)					14
Sub Serial Number					10507513
Insert Serial Number					194156
Source Serial Number					0102NN
Source Factor					
Pin Orientation					Up

Density Sensor Information

Tool Type					ALD
Distance From Bit (m)					19.85
Recorded Sample Period (sec)					14
Software Version					2.13
Sub Serial Number					158552
Insert Serial Number					159498
Sensor ID Number					23007

Source Serial Number					2432GW
Pin Orientation					Up
Stabilizer Blade O.D. (mm)					304.800
DPA Offset					271.00

Caliper Sensor Information					
Tool Type					ACAL
Distance From Bit (m)					23.89
Software Version					2.05
Sub Serial Number					10507513
Insert Serial Number					1

WELL INFORMATION					
MWD Run Number	800				
Date run completed	14-May-06				
Rig Bit Number	7				
Bit Size (mm)	311				
Tool Nominal OD (mm)	203				
Log Start Depth (MD, m)	2,387.40				
Log End Depth (MD, m)	2,634.15				
Drill or Wipe	Drilling				
Drill/Wipe Start Date and Time	12-May-06 07:38				
Drill/Wipe End Date and Time	13-May-06 16:31				
Min Inc (deg) @ Depth (MD, m)	26.55 @ 2,610.35				
Max Inc (deg) @ Depth (MD, m)	28.63 @ 2,419.44				
Bit TFA(in2) / Bit Type	1.977 / Smith MX6397				
Flow Rate (gpm)	911				
Max AV (mpm) / CV (mpm) @ MWD	79.1 / 115.5				
Fluid Type	Synteq				
Density (sg) / Viscosity (spl)	1.24 / 98				
Filtrate CL (ppm)	35700				
pH / Fluid Loss (mptm)	N/A / 4.4				
PV (cp) / YP (pa)	45 / 26				
% Solids / % Sand	13.2 / 0.50				
% Oil / Oil:Water Ratio	58 / 68:32				
Rm @ Measured Temp (degC)	N/A @ N/A				
Rmf @ Measured Temp (degC)	N/A @ N/A				
Rmc @ Measured Temp (degC)	N/A @ N/A				
Max Tool Temp (degC) / Source	94 / EWR-P4				
Rm @ Max Tool Temp (degC)	N/A @ 94				
Lead MWD Engineer	M. Lee				
Customer Representative	S. Job				

SENSOR INFORMATION

Downhole Processor Information					
Tool Type	HCIM				
Software Version	68.18				
Sub Serial Number	152862				
Insert Serial Number	134502				
Logging String Serial Number	DM90103157HWRG				
Date and Time Initialized	11-May-06 23:14				
Date and Time Read	14-May-06 07:05:32				

Directional Sensor Information					
Tool Type	DM				
Distance From Bit (m)	14.05				
Software Version	3.15				
Sub Serial Number	10718049				

Sonde Serial Number	133447				
Sensor ID Number	133447				
Survey String Serial Number	N/A				
Toolface Offset (deg)	N/A				

Gamma Ray Sensor Information

Tool Type	DGR				
Distance From Bit (m)	5.41				
Recorded Sample Period (sec)	12				
Software Version	N/A				
Sub Serial Number	10718409				
Insert/Sonde Serial Number	172498				

Resistivity Sensor Information

Tool Type	EWR-P4				
Distance From Bit (m)	7.77				
Recorded Sample Period (sec)	14				
Software Version	1.38				
Sub Serial Number	37661				
Receiver Insert Serial Number	205859				
Transmitter Insert Serial Number	151389				
Receiver Orientation	Down				

Neutron Sensor Information

Tool Type	CTN				
Distance From Bit (m)	25.12				
Recorded Sample Period (sec)	14				
Sub Serial Number	10507513				
Insert Serial Number	194156				
Source Serial Number	0102NN				
Source Factor					
Pin Orientation	Up				

Density Sensor Information

Tool Type	ALD				
Distance From Bit (m)	19.65				
Recorded Sample Period (sec)	14				
Software Version	2.13				
Sub Serial Number	158552				
Insert Serial Number	159498				
Sensor ID Number	23007				
Source Serial Number	2432GW				
Pin Orientation	Up				
Stabilizer Blade O.D. (mm)	304.800				
DPA Offset	271.00				

Caliper Sensor Information

Tool Type	ACAL				
Distance From Bit (m)	23.88				
Software Version	2.05				
Sub Serial Number	10507513				
Insert Serial Number	1				

REMARKS

- 1.) All depths are bit depths and are referenced to the driller's pipe tally unless otherwise noted.
- 2.) AV/CV values are calculated at the LWD collar using the Bingham Plastic Model for oil based mud, measured in m / min.

3.) Curve Mnemonics used are:

- SGRC - Smoothed Combined Gamma Ray, api
- SROP - Smoothed Rate of Penetration, m/hr
- SEXP - Smoothed Extra-Shallow Phase Resistivity, ohm-metre
- SESP - Smoothed Shallow Phase Resistivity, ohm-metre
- SEMP - Smoothed Medium Phase Resistivity, ohm-metre
- SEDP - Smoothed Deep Phase Resistivity, ohm-metre
- ACAL - Smoothed Acoustic Caliper Hole Size, inches
- SCO2 - Smoothed Stand Off Correction Low Count Rate, g/cc
- SBD2 - Smoothed Bulk Density Compensated Low Count Rate, g/cc
- SNP2 - Smoothed Rapid Sample Near Detector Pe, barns/electron
- TNPL - Smoothed Thermal Neutron Porosity - Limestone Matrix, v/v
- BATC - Smoothed Bi-Modal Acoustic Compressional Slowness, microsec/foot

4.) CTN data processed using the following parameters and is based on a Limestone matrix:

- MW = 1.24 - 1.27 sg
- Mud Salinity = 27,500 - 34,560 ppm Cl
- Matrix Density = 2.71 g/cc
- Fluid Density = 1.00 g/cc
- Formation Salinity = 5,000 ppm Cl

5.) CTN data has been reprocessed using hole size derived from the ACAL (Acoustic Caliper) tool.

6.) Data from 1763.9 to 1775.7 mMDRT bit depth is missing due to slip switch failure.

7.) ROP data between 1777.5 and 1792.5 mMDRT from WITS recieved.

8.) Cored interval from 2387.42 to 2596.04 mMDRT was logged while running in hole during run 800 with pumps on and rotating.

9.) ROP data from 2387.02 to 2596.04 mMDRT was obtained from Geoservices during coring.

10.) Gamma Data was recorded behind casing 2225.3 to 2230.0 mMDRT.

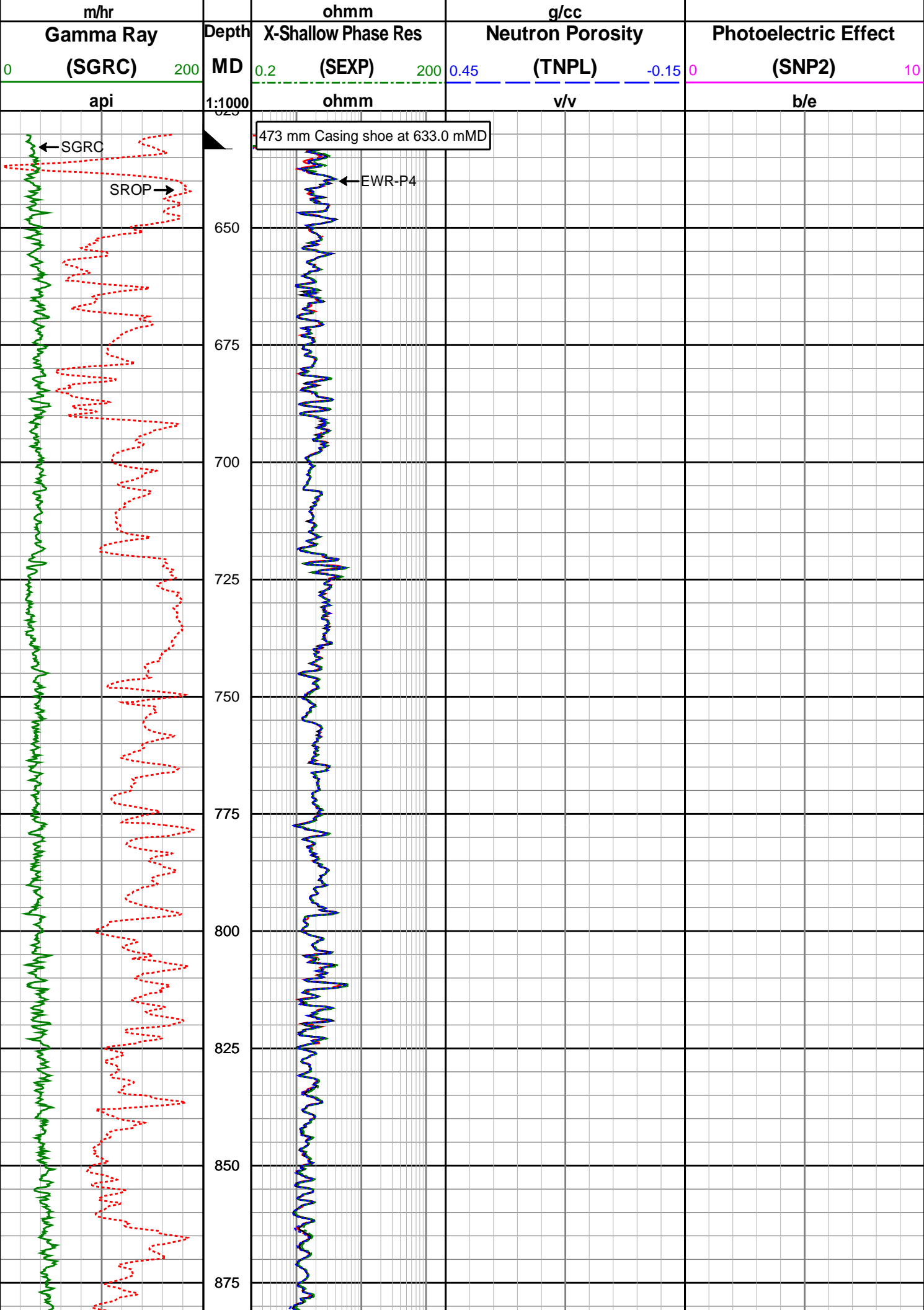
11.) Hole washed out at 340 mm Casing shoe at 2230.0 mMDRT.

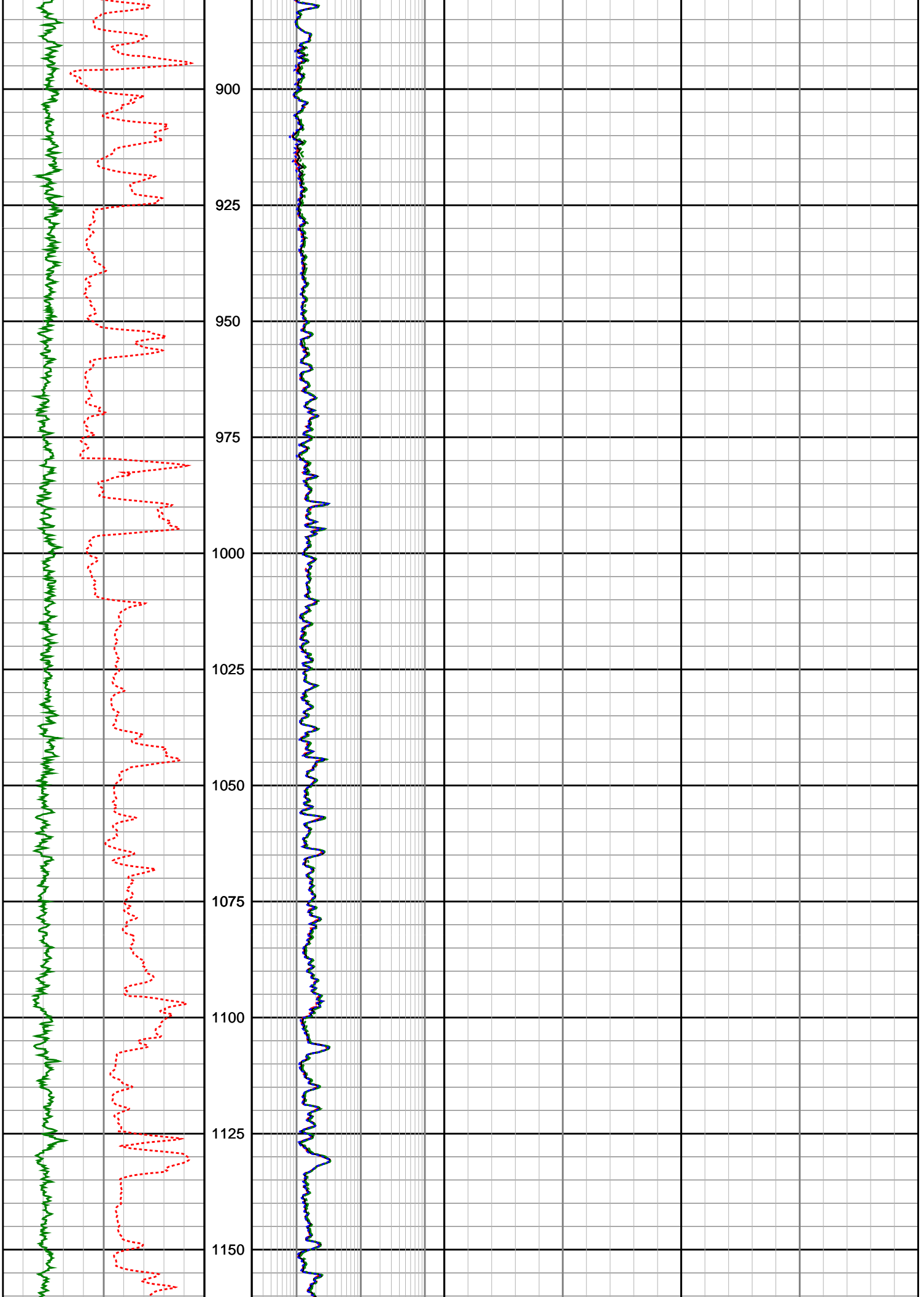
12.) Depth has been corrected from the original recoded depth to incorporate a depth shift due to a tally error.
See the end of well report for further details.

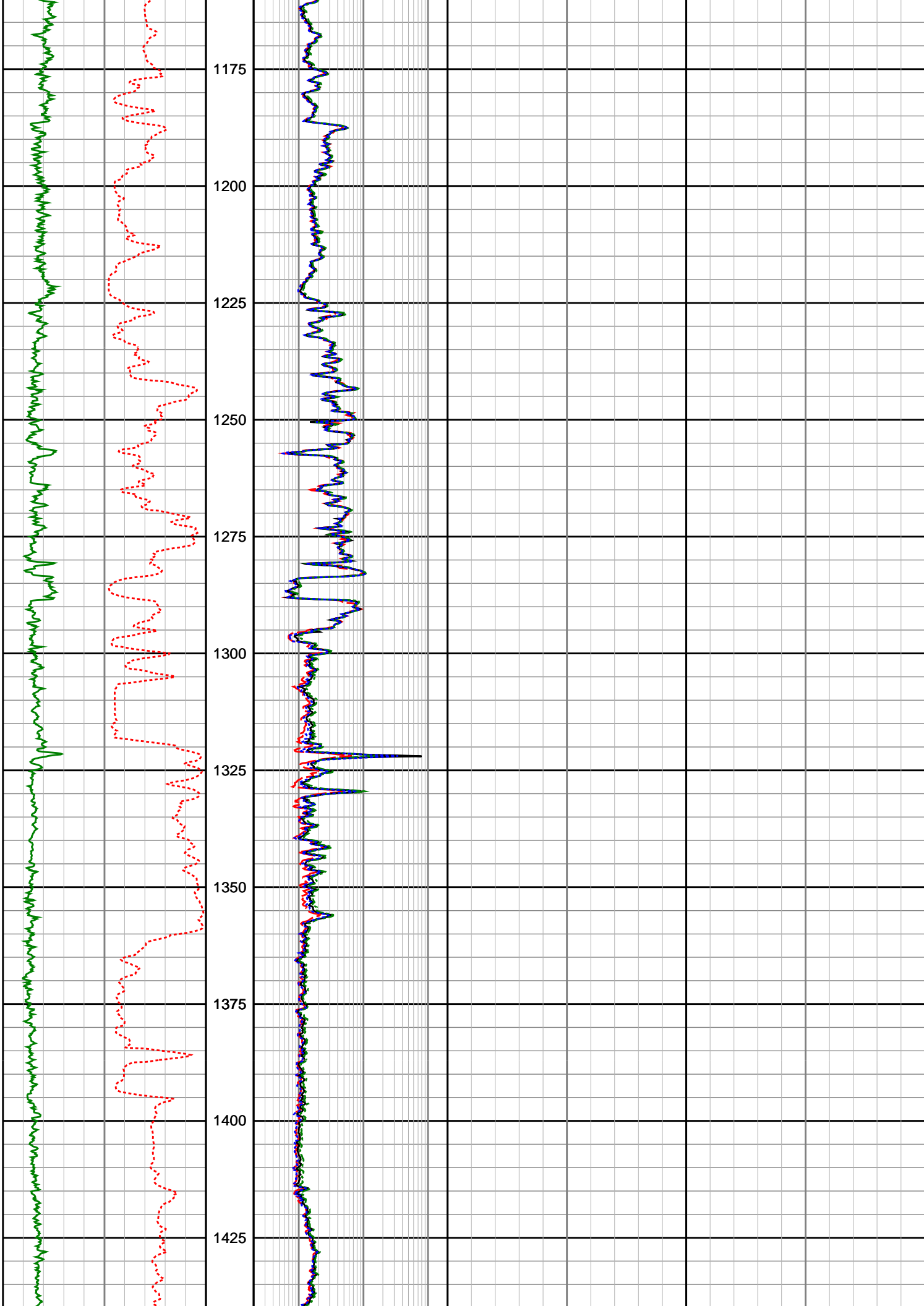
WARRANTY

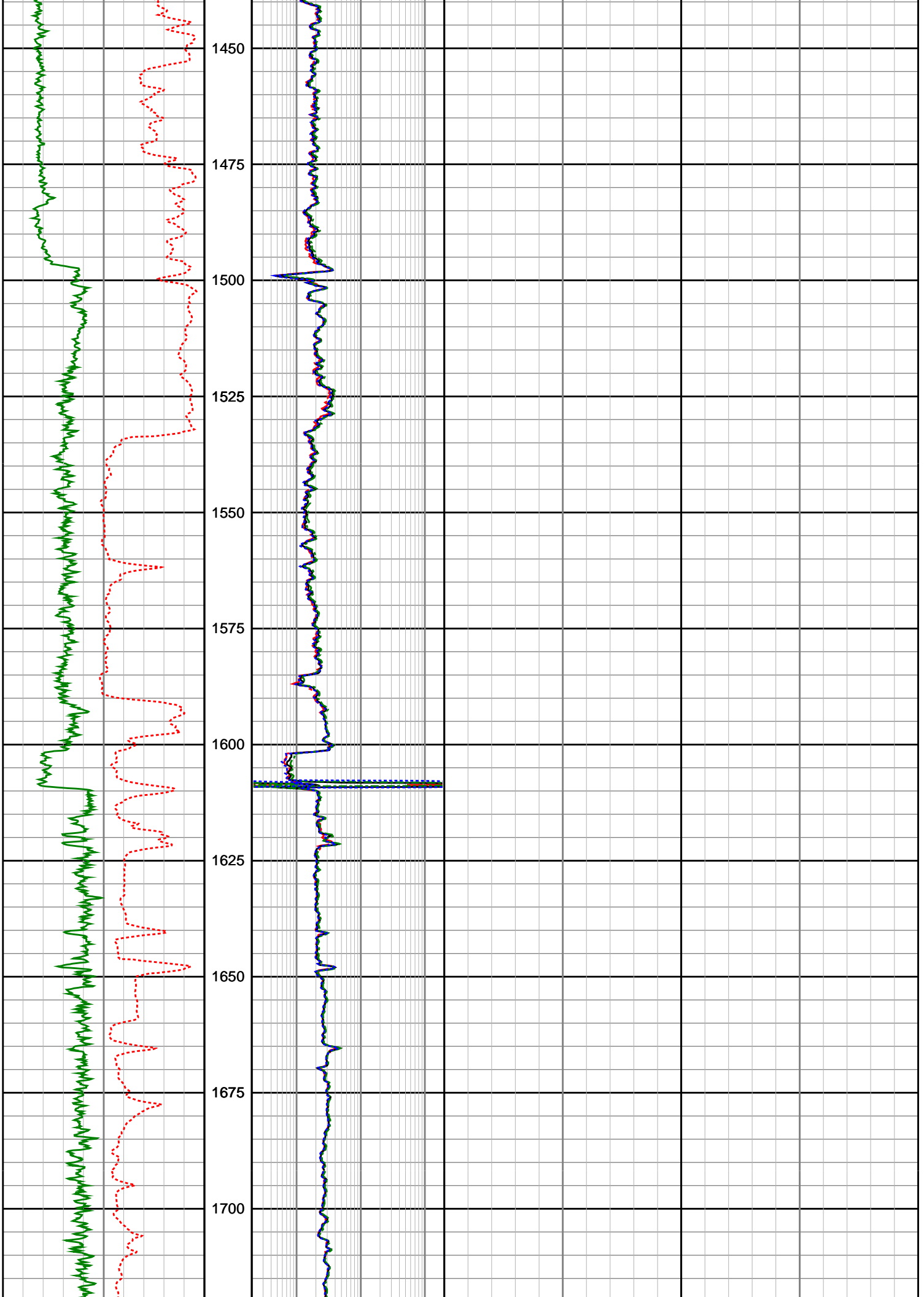
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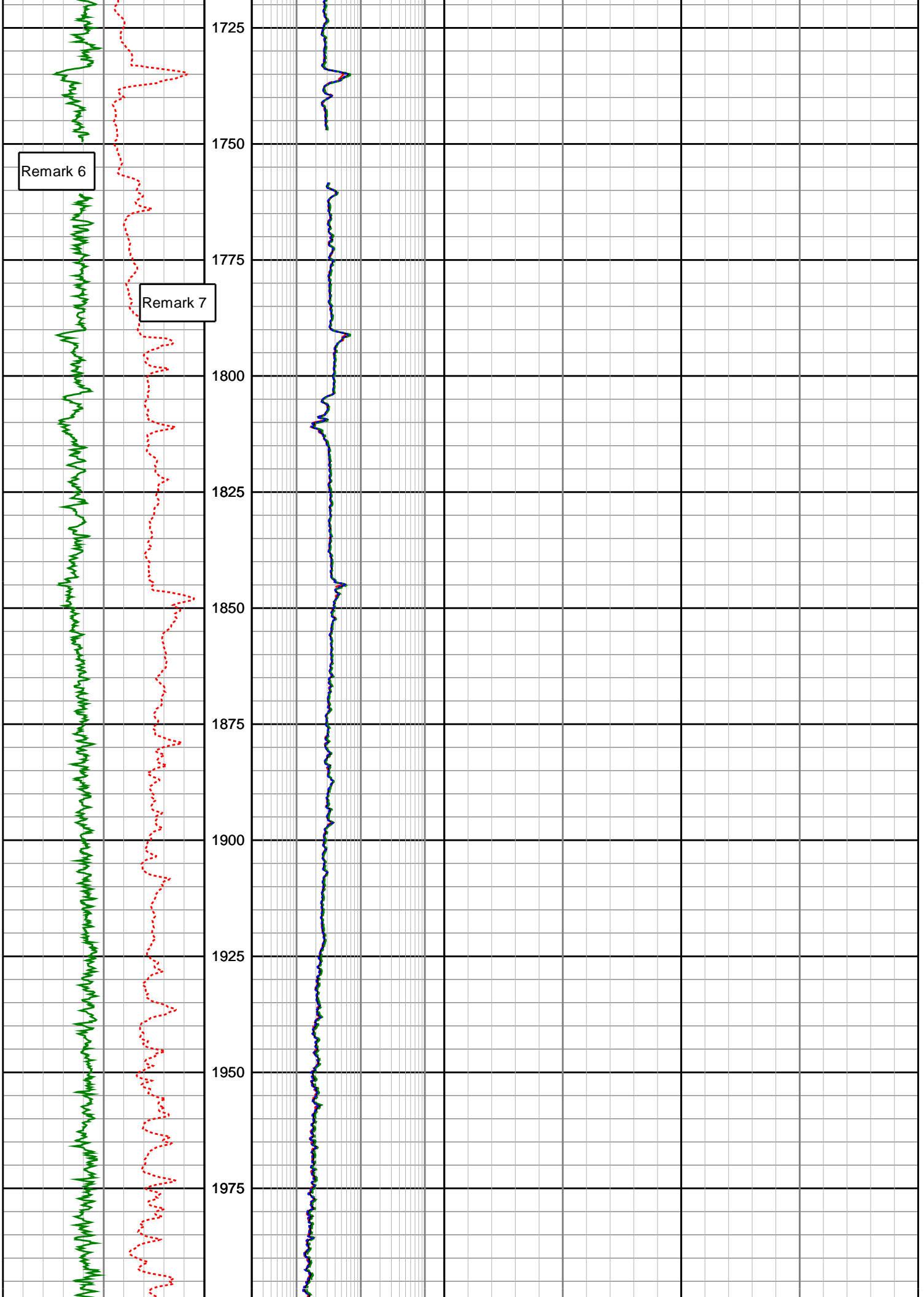
		Deep Phase Res			
		0.2	(SEDP)	200	
		ohmm			
Acoustic Caliper		Medium Phase Res		Standoff Correction	
10	(ACAL)	20	0.2	(SEMP)	200
		ohmm		-0.75	(SCO2)
inches				g/cc	
Rate of Penetration		Shallow Phase Res		Bulk Density	
100	(SROP)	0	0.2	(SESP)	200
				1.95	(SBD2)
				2.95	

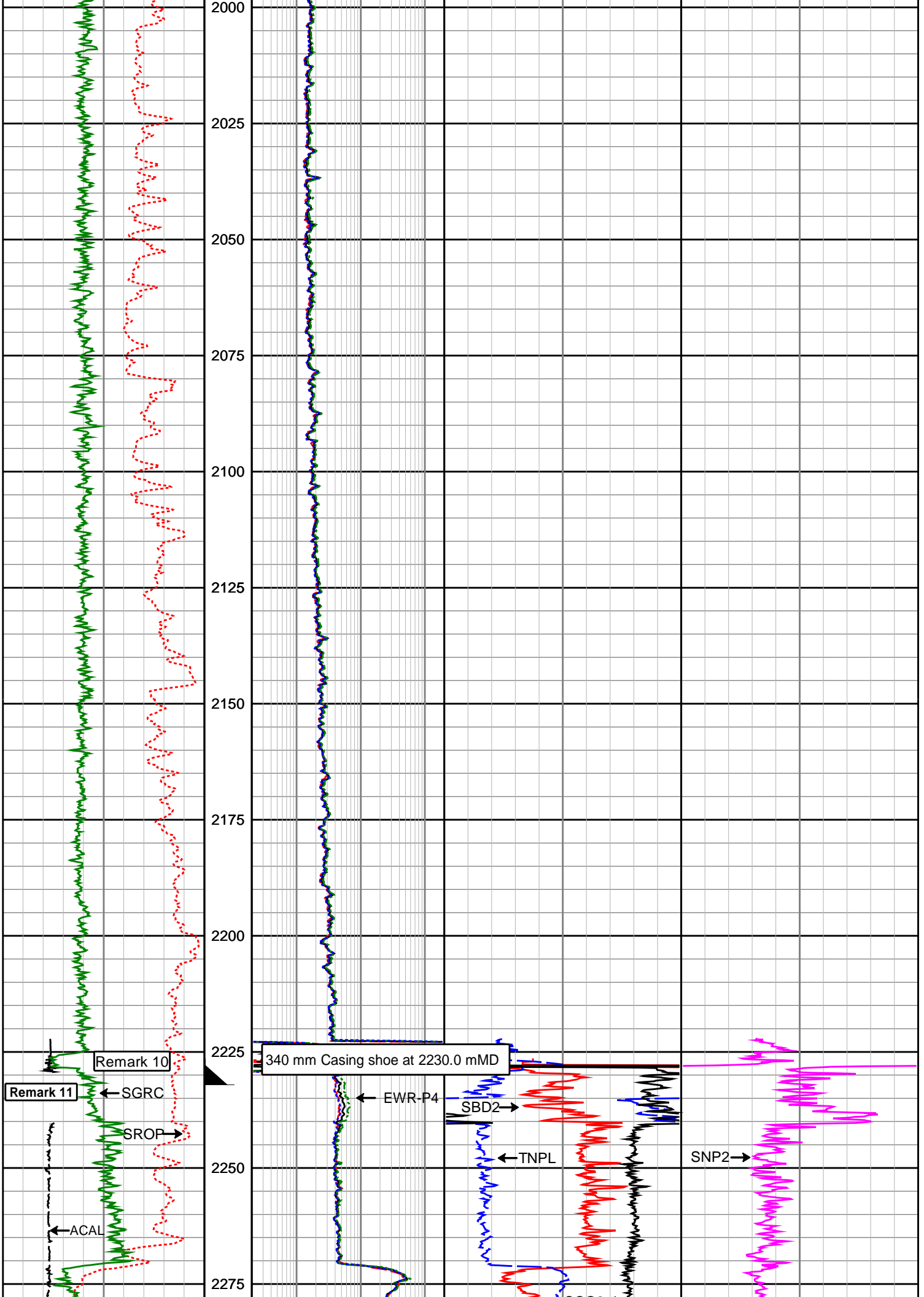


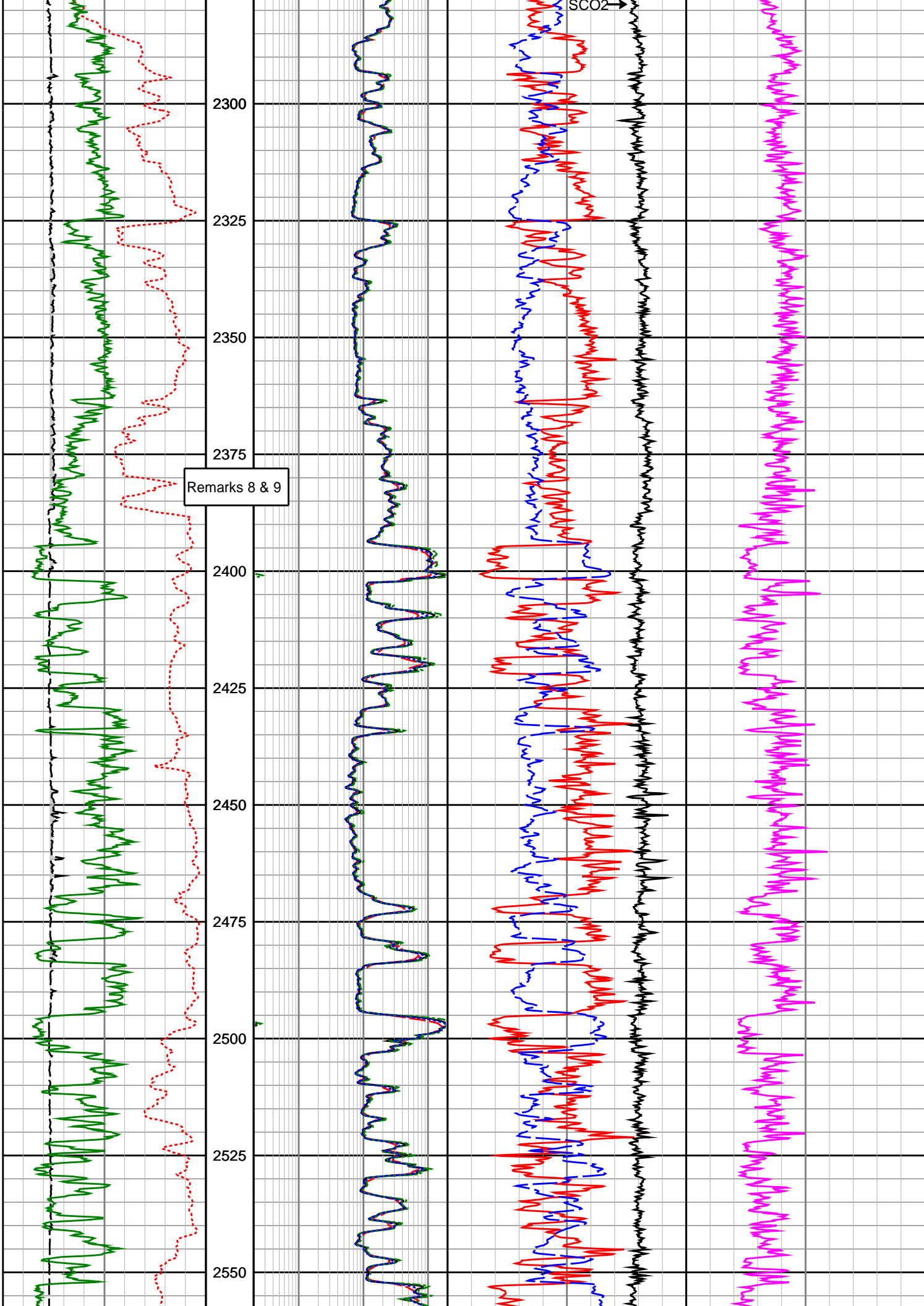


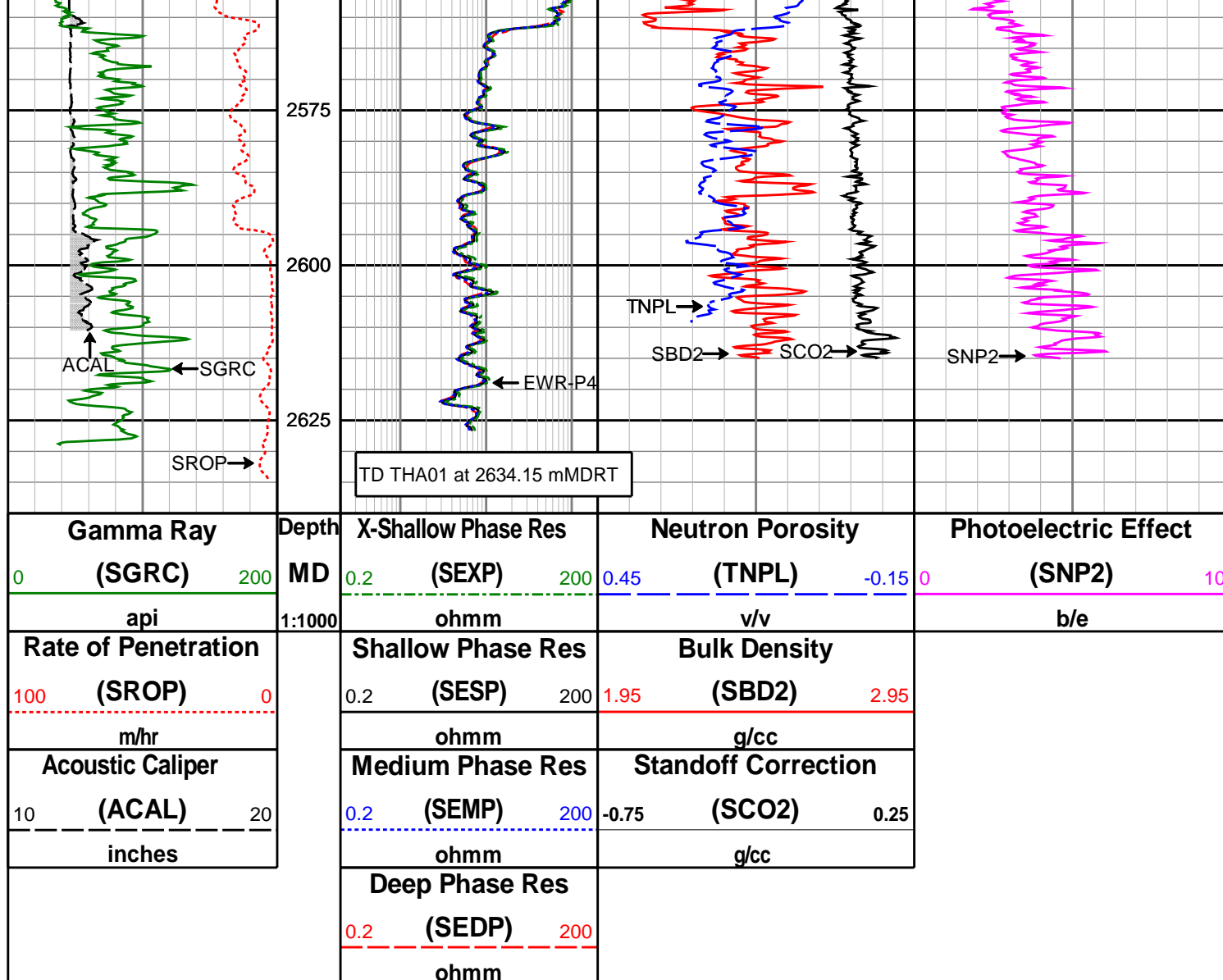












HALLIBURTON

DIRECTIONAL SURVEY REPORT

Woodside Energy Ltd

THA01

Thylacine

Tasmania

Australia

AU-FE-0003930657

Final Survey Projected to TD.RT-LAT=50.5m SAG & SUCOP Corrected

Measured Depth (metres)	Inclination (degrees)	Direction (degrees)	Vertical Depth (metres)	Latitude (metres)	Departure (metres)	Vertical Section (metres)	Dogleg (deg/30m)
0.000	0.00	0.00	0.000	0.000 N	0.000 E	0.000	TIE-IN
163.140	0.28	330.50	163.139	0.347 N	0.196 W	-0.304	0.05
203.270	0.35	355.01	203.269	0.554 N	0.255 W	-0.431	0.11
254.440	0.97	77.94	254.436	0.801 N	0.155 E	-0.132	0.58
283.460	2.33	80.80	283.443	0.946 N	0.977 E	0.590	1.41
312.360	2.85	90.00	312.314	1.040 N	2.276 E	1.776	0.69
341.240	2.50	93.77	341.162	0.999 N	3.622 E	3.053	0.41
399.180	2.95	84.56	399.037	1.057 N	6.367 E	5.609	0.32
428.140	3.24	89.90	427.955	1.129 N	7.928 E	7.048	0.42
457.080	5.47	114.63	456.812	0.556 N	10.000 E	9.191	2.97

485.008 5.50 127.25 484.702 0.814 S 12.282 E 11.806 1.20

485.096	5.30	127.25	484.702	0.814 S	12.282 E	11.806	1.29
514.930	5.48	119.95	514.398	2.390 S	14.655 E	14.577	0.70
543.880	4.83	118.81	543.231	3.668 S	16.920 E	17.145	0.68
576.140	4.59	112.73	575.382	4.821 S	19.301 E	19.777	0.51
601.810	5.28	114.52	600.957	5.708 S	21.323 E	21.981	0.83
620.180	5.93	112.34	619.239	6.420 S	22.970 E	23.773	1.12
640.850	6.53	117.05	639.787	7.360 S	25.004 E	26.007	1.14
669.800	8.25	114.52	668.495	8.971 S	28.360 E	29.713	1.81
698.750	9.30	115.20	697.106	10.829 S	32.367 E	34.114	1.09
727.730	11.92	116.21	725.588	13.148 S	37.171 E	39.425	2.72
756.700	14.85	114.68	753.768	16.020 S	43.230 E	46.103	3.06
785.630	17.15	113.69	781.576	19.282 S	50.506 E	54.058	2.40
814.550	19.89	114.23	808.995	23.015 S	58.898 E	63.223	2.85
843.510	22.77	113.13	835.969	27.239 S	68.546 E	73.737	3.01
872.470	26.16	112.14	862.325	31.848 S	79.616 E	85.718	3.54
901.410	29.68	110.55	887.893	36.769 S	92.239 E	99.263	3.73
930.340	30.11	110.28	912.973	41.798 S	105.752 E	113.682	0.47
958.830	29.97	110.16	937.636	46.728 S	119.135 E	127.944	0.16
988.030	30.18	110.96	962.905	51.867 S	132.836 E	142.577	0.46
1016.930	30.57	112.09	987.838	57.229 S	146.429 E	157.186	0.72
1045.850	30.84	111.75	1012.704	62.742 S	160.129 E	171.946	0.33
1074.810	31.04	111.85	1037.543	68.271 S	173.954 E	186.830	0.21
1103.730	30.29	111.03	1062.419	73.664 S	187.682 E	201.576	0.89
1132.680	29.94	110.39	1087.461	78.801 S	201.268 E	216.101	0.49
1161.870	29.62	110.09	1112.797	83.817 S	214.871 E	230.599	0.36
1190.880	29.73	109.69	1138.002	88.703 S	228.376 E	244.961	0.23
1219.830	30.03	108.77	1163.104	93.452 S	241.994 E	259.380	0.57
1248.800	30.09	108.92	1188.177	98.140 S	255.727 E	273.887	0.10
1278.620	29.97	108.50	1213.994	102.927 S	269.862 E	288.806	0.24
1307.580	29.37	108.59	1239.157	107.486 S	283.453 E	303.135	0.62
1336.500	29.18	108.40	1264.384	111.972 S	296.864 E	317.270	0.22
1364.980	29.18	108.33	1289.249	116.347 S	310.043 E	331.148	0.04
1393.920	29.27	108.34	1314.506	120.792 S	323.455 E	345.270	0.09
1423.280	29.41	108.65	1340.099	125.356 S	337.098 E	359.650	0.21
1452.190	29.98	108.87	1365.213	129.962 S	350.658 E	373.967	0.60
1481.130	30.17	109.42	1390.256	134.718 S	364.359 E	388.467	0.35
1510.100	30.44	109.59	1415.268	139.599 S	378.138 E	403.084	0.29
1539.010	30.67	109.39	1440.163	144.503 S	391.993 E	417.779	0.26
1566.710	30.92	108.40	1463.958	149.095 S	405.410 E	431.957	0.61
1595.260	30.84	110.12	1488.461	153.927 S	419.242 E	446.606	0.93
1624.090	31.10	110.73	1513.181	159.105 S	433.144 E	461.441	0.42
1653.400	31.30	110.75	1538.252	164.482 S	447.344 E	476.624	0.20
1682.730	31.12	110.78	1563.337	169.870 S	461.555 E	491.822	0.18
1711.880	30.99	110.81	1588.309	175.209 S	475.612 E	506.858	0.13
1740.740	30.96	110.74	1613.053	180.477 S	489.500 E	521.711	0.05
1769.690	30.86	110.56	1637.892	185.722 S	503.416 E	536.582	0.14
1797.900	30.74	110.75	1662.123	190.817 S	516.932 E	551.026	0.16
1826.420	31.05	110.35	1686.596	195.957 S	530.644 E	565.670	0.39
1855.220	31.23	110.09	1711.246	201.104 S	544.620 E	580.563	0.23
1884.140	31.44	110.25	1735.948	206.290 S	558.737 E	595.603	0.23
1913.010	31.37	110.49	1760.589	211.527 S	572.840 E	610.646	0.15
1942.300	31.06	110.63	1785.639	216.857 S	587.053 E	625.826	0.33
1971.500	30.95	110.31	1810.666	222.118 S	601.144 E	640.867	0.20
2000.790	30.65	110.04	1835.825	227.290 S	615.222 E	655.864	0.34
2030.040	30.44	109.78	1861.016	232.353 S	629.198 E	670.730	0.25
2058.970	30.44	109.72	1885.959	237.306 S	642.993 E	685.386	0.03
2087.930	30.35	109.35	1910.938	242.205 S	656.802 E	700.037	0.22
2116.860	30.29	108.46	1935.911	246.937 S	670.619 E	714.638	0.47
2145.830	30.30	108.31	1960.925	251.546 S	684.487 E	729.244	0.08
2174.750	30.08	107.65	1985.923	256.036 S	698.319 E	743.776	0.41
2203.640	29.85	107.35	2010.951	260.375 S	712.081 E	758.189	0.29
2215.280	29.68	108.09	2021.055	262.134 S	717.585 E	763.962	1.04
2250.800	29.28	106.47	2051.977	267.327 S	734.275 E	781.418	0.75
2279.770	28.73	104.23	2077.314	271.047 S	747.818 E	795.412	1.26
2308.690	28.80	105.02	2102.665	274.561 S	761.283 E	809.262	0.40
2337.660	28.83	105.23	2128.048	278.205 S	774.763 E	823.169	0.11
2366.610	28.69	105.53	2153.427	281.899 S	788.193 E	837.049	0.21
2424.460	28.63	105.55	2204.189	289.332 S	814.924 E	864.701	0.03
2453.360	28.37	105.46	2229.587	293.018 S	828.212 E	878.444	0.27
2482.040	28.21	105.80	2254.842	296.680 S	841.302 E	891.993	0.24
2511.000	27.83	105.50	2280.407	300.351 S	854.402 E	905.554	0.42
2539.990	27.63	105.58	2306.068	303.965 S	867.398 E	918.998	0.21

2568.880	27.38	105.20	2331.692	307.506 S	880.262 E	932.293	0.32
2597.760	27.04	106.24	2357.376	311.083 S	892.973 E	945.457	0.61
2615.500	26.55	106.25	2373.211	313.320 S	900.651 E	953.434	0.83
2634.150	26.22	106.67	2389.919	315.668 S	908.599 E	961.705	0.61










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 110.23 DEGREES (GRID)
A TOTAL CORRECTION OF 12.31 DEG FROM MAGNETIC NORTH TO GRID NORTH HAS BEEN APPLIED


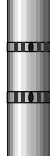







HORIZONTAL DISPLACEMENT IS RELATIVE TO THE WELL HEAD.
HORIZONTAL DISPLACEMENT(CLOSURE) AT 2634.150 METRES
IS 961.873 METRES ALONG 109.16 DEGREES (GRID)

MWD RUN 200 - BHA				MWD RUN 200 - MWD	
		Component Length (m)	Cumulative Length (m)		Sensor Measure Point Distance To Bit (m)
			156.30		
HWDP		58.140			
Sub		1.380	98.16		
			96.78		
Drill Collar		18.220		Positive Pulser	
			78.56		
Jar		9.680			
			68.88		
Drill Collar		26.830			
			42.05		
Sub		1.360			
			40.69	TM	
Drill Collar		9.530			
			31.16		
Stabilizer		2.870			
			28.29		
Drill Collar		8.920			

					
			19.37		
MWD		9.540			
					
Sub		.750	9.83	DM	15.860
			9.08		
Motor		8.540			
					
Bit		.540	0.54		


















MWD RUN 300 - BHA	MWD RUN 300 - MWD
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



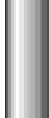




		Component Length (m)	Cumulative Length (m)			Sensor Measure Point Distance To Bit (m)
			258.94			
HWDP		145.070		Positive Pulser		
						
Sub		1.380	113.87			
			112.49			
Drill Collar		18.660				
				TM		
Jar		9.680	93.83			
						
			84.15			
Drill Collar		53.570		DM		21.550
						
Sub		1.360	30.58			
			29.22			
Drill Collar		4.260		HCIM		
						
			24.96			

MWD		12.140				
				EWR-P4D		
Sub		.840	12.82			16.440
Stabilizer		2.470	11.98			
			9.51			
Motor		8.550		DGR		
						13.980
Sub		.410	0.96			
Bit		.550	0.55			

MWD RUN 400 - BHA























MWD RUN 400 - MWD

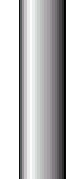




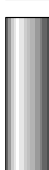

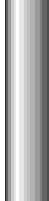




		Component Length (m)	Cumulative Length (m)			Sensor Measure Point Distance To Bit (m)
			258.67			
HWDP		145.350		Positive Pulser		
						
Sub		1.380	113.32			
			111.94			
Drill Collar		18.660		TM		
			93.28			
Jar		9.680				
						
Drill Collar		53.570	83.60	DM		21.000
Sub		1.360	30.03			
			28.67	HCIM		
Drill Collar		4.260				

							
			24.41				
MWD		12.140					15.890
			12.27				
Sub		.840					
Stabilizer		2.470	11.43				
			8.96				
Motor		8.540					13.430
Bit		.420	0.42				











MWD RUN 500 - BHA















MWD RUN 500 - MWD

		Component Length (m)	Cumulative Length (m)			Sensor Measure Point Distance To Bit (m)
			258.67			
HWDP		145.350		Positive Pulser		
			113.32			
Sub		1.380	111.94			
			18.660			
Drill Collar			93.28	TM		
			9.680			
Jar			83.60	DM		
			53.570			
Drill Collar		1.360	30.03			
Sub			28.67	HCIM		

Drill Collar		4.260			
			24.41		
MWD		12.140			15.890
Sub		.840	12.27		
Stabilizer		2.470	11.43		
			8.96		
Motor		8.540			13.430
Bit		.420	0.42		















MWD RUN 600 - BHA	MWD RUN 600 - MWD
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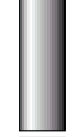

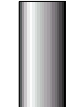

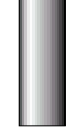

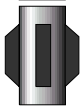

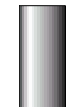
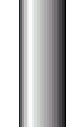
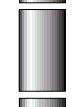


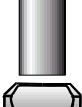

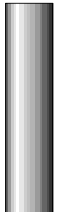

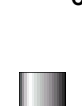
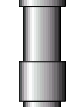
		Component Length (m)	Cumulative Length (m)		Sensor Measure Point Distance To Bit (m)
			259.67		
HWDP		145.070		Positive Pulser	
			114.60		
Sub		1.380	113.22		
					
Drill Collar		18.660		TM	
			94.56		
Jar		9.680			
			84.88	DM	
Drill Collar		53.570			22.230
Sub			31.31		

		1.360			
			29.95	HCIM	
Drill Collar		4.260			
					
			25.69		
MWD		12.140		EWR-P4D	17.170
					
Sub		.840	13.55		
					
Stabilizer		2.470	12.71		
			10.24		
Motor		9.690		DGR	14.710
					
Bit		.550	0.55		

MWD RUN 700 - BHA

MWD RUN 700 - MWD

		Component Length (m)	Cumulative Length (m)		Sensor Measure Point Distance To Bit (m)
			269.89		
HWDP		145.350		Positive Pulser	
					
					
Sub		1.380	124.54	TM	
			123.16		
					
Drill Collar		18.660		CTN	25.130
			104.50		
					
Jar		9.630		ACAL	23.890
					
			94.87	ASLD	
Drill Collar					

		53.570			
		41.30	PM		
Drill Collar		8.580	HCIM		
		32.72			
Stabilizer		2.500	PWD		10.280
		30.22			
MWD		25.900			
		4.32	EWR-P4		7.780
Sub		1.220			
		3.10			
Stabilizer		1.880			
		1.22	DGR		5.420
Sub		.880			
Bit		.340			

MWD RUN 800 - BHA

MWD RUN 800 - MWD

	Component Length (m)	Cumulative Length (m)		Sensor Measure Point Distance To Bit (m)
		269.88		
HWDP	145.350		Positive Pulser	
		124.53		
Sub	1.380	123.15	TM	
		104.49		
Drill Collar	18.660		CTN	25.120
		9.630	ACAL	23.880
Jar		04.86		

			94.86	ASLD	
Drill Collar		53.570			
			41.29	PM	
Drill Collar		8.580			
				HCIM	
Stabilizer		2.500	32.71		
			30.21	PWD	
MWD		25.900			10.270
Sub		1.220	4.31	EWR-P4	
					7.770
Stabilizer		1.880	3.09		
Sub		.880	1.21	DGR	
					5.410
Bit		.330	0.33		