Company : BAYSWATER EXPLORATION & PRODUCTION
Well : MATRIX L-29HC
Field : GREELEY

Date : 05-Mar-2015
Time : 09:38

PATHFINDER

A Schlumberger Company

NEUTRON DENSITY

1" = 100'
FEET MD

COMPANY : BAYSWATER EXPLORATION & PRODUCTION
WELL : MATRIX L-29HC
FIELD : GREELEY
COUNTY : WELD
STATE : CO
COUNTRY : USA
API No.: 05-123-40704

COMPANY : BAYSWATER EXPLORATION & PRODUCTION
COMPANY : BAYSWATER EXPLORATION & PRODUCTION
WELL : MATRIX L-29HC
FIELD : GREELEY
COUNTY : WELD
STATE : CO
COUNTRY : USA
API No.: 05-123-40704

WELL LOCATION

LAT:40°27'10"N LON:104°41'20"W
X:3,225,756 Y:1,408,856 NAD83

SEC: 29 TWP: 6N RANGE: 65W

OTHER SERVICES

DIRECTIONAL
ROP
CALIPER

DEPTH REF. : ROTARY TABLE
ELEVATION : 22.50 ft (ROTARY TABLE - GROUND LEVEL)
ALTITUDE : 4708.00 ft (GROUND LEVEL - MEAN SEA LEVEL)

BOREHOLE RECORD

HOLE SIZE in	FROM ft	TO ft
8 3/4	0	7558
6 1/8	7558	11492

CASING RECORD

CASING SIZE in	FROM ft	TO ft
9 5/8	0	748
7	0	7546

DEVIATION RECORD

INCLINATION deg	FROM ft	TO ft
00-13	0	2495
12+/-04	2495	6588
12-30	6588	6873
30-60	6921	7254
60-90	7254	8005
90+/-02	8005	11492

DRILLING Co.: FRONTIER
RIG : 8
LWD UNIT No.: RENTAL DISTRICT : COMMERCE CTY
SPUD DATE : 05-JAN-15
LWD START DATE : 02-MAR-15 DEPTH : 7558 ft
LWD END DATE : 05-MAR-15 DEPTH : 11492 ft
TOTAL DEPTH : 11492 ft

RUN DATA

RUN NUMBER	1
START DATE	02-MAR-15
START TIME	18:30
END DATE	05-MAR-15
END TIME	07:00
DEPTH IN ft	7558
DEPTH OUT ft	11492
LOG TOP ft	7546
LOG BOTTOM ft	11419
HOLE SIZE in	6 1/8
MUD DATA @ ft	10540
MUD TYPE	WATER BASED
DENSITY lb/gal	9.60
VISCOSITY s/qt	43
pH	
FLUID LOSS cm3/30	
SALINITY ppm	2805
Rm ohmm @ deg F	@
Rmf ohmm @ deg F	@

MAX REC TEMP deg F	215					
Rm @ MAX TEMP ohmm						
LWD ENGINEER #1	M.OBERHOFER					
LWD ENGINEER #2	T.RICKER					
LWD ENGINEER #3						

REMARKS

BAYSWATER EXPLORATION & PRODUCTION LLC AFE:40704
PATHFINDER JOB #: 15CCO0285

ALL LOGGING DATA IS MEMORY UNLESS STATED OTHERWISE.
ALL REFERENCES TO LOG TOP, LOG BOTTOM, OR LOGGING TOOL DEPTH REFER TO THE GAMMA-RAY SENSOR UNLESS STATED OTHERWISE. SENSOR OFFSETS FOR THE OTHER TOOLS ARE SHOWN IN THE BHA REPORT ON THE LOG TRAILER.
ALL ANNOTATIONS IN THE DEPTH TRACK ARE REFERENCED TO BIT DEPTH.

THIRD PARTY DEPTH TRACKING SERVICES PROVIDED BY PASON.

RUN #1: 4 3/4" HDS-1L/GAMMA/ISDNSC LOGGING RUN.

DENSITY POROSITY (DPHI) IS CALCULATED FOR A MATRIX DENSITY OF 2.68 G/CC AND A FLUID DENSITY OF 1.00 G/CC.

DENSITY DATA DENSITY (DDDN) TO THE LEFT OF THE DENSITY TRACK REPRESENTS 0-4 SAMPLES PER FOOT.
THE SLIDE INDICATOR TO THE LEFT 0F THE DENSITY TRACK IS OFFSET TO THE DENSITY MEASUREMENT POINT.

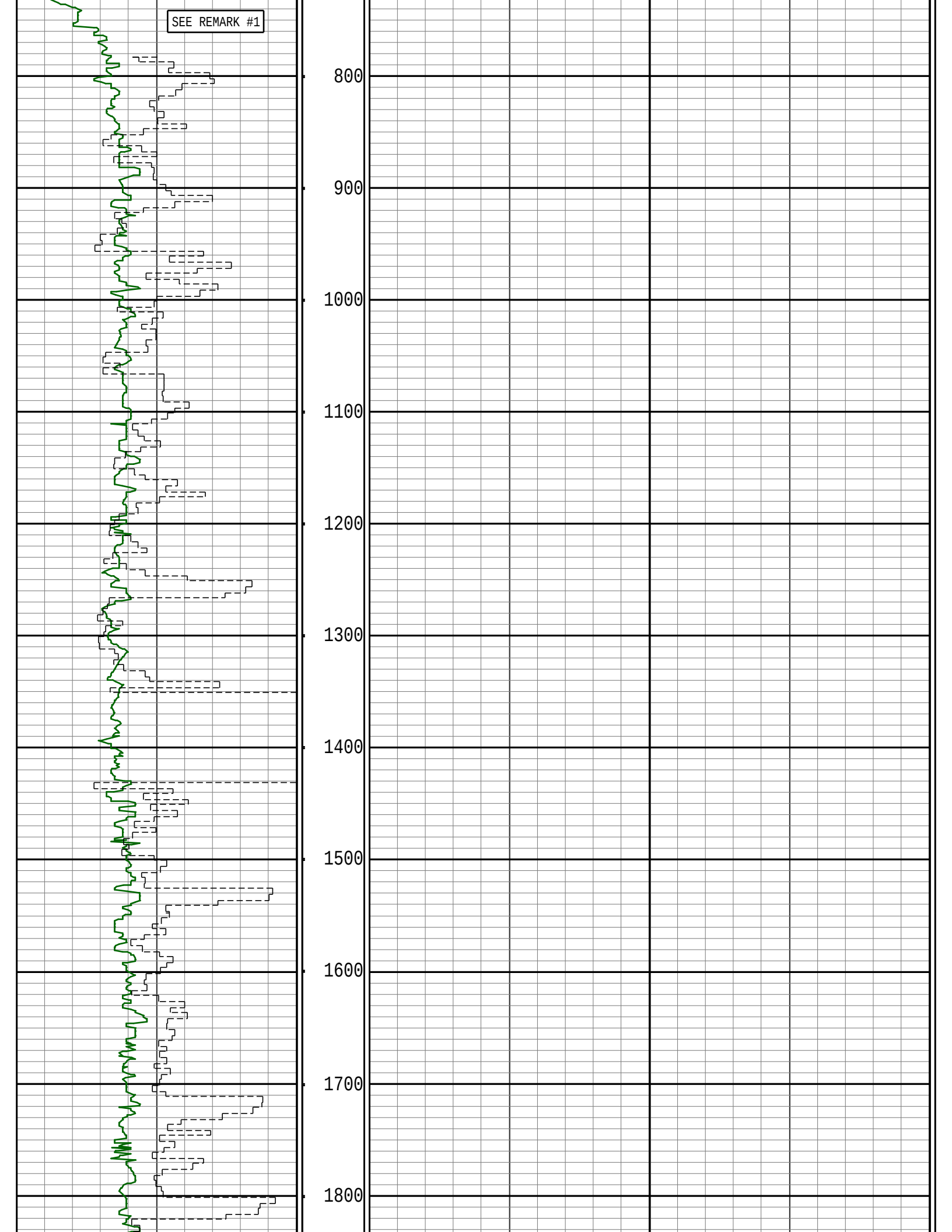
DENSITY MEASUREMENTS MAY BE SUBSTANDARD THROUGH INTERVALS OF HIGH WEIGHTED STANDOFF (WSOD).
HIGH WSOD IS CAUSED BY POOR WALL CONTACT AND MAY BE THE RESULT OF UNFAVORABLE STABILIZER POSITION, UNFAVORABLE TOOLFACE ORIENTATION DURING SLIDING, EXCESSIVE HOLE ENLARGEMENTM, OR HIGH ROP.

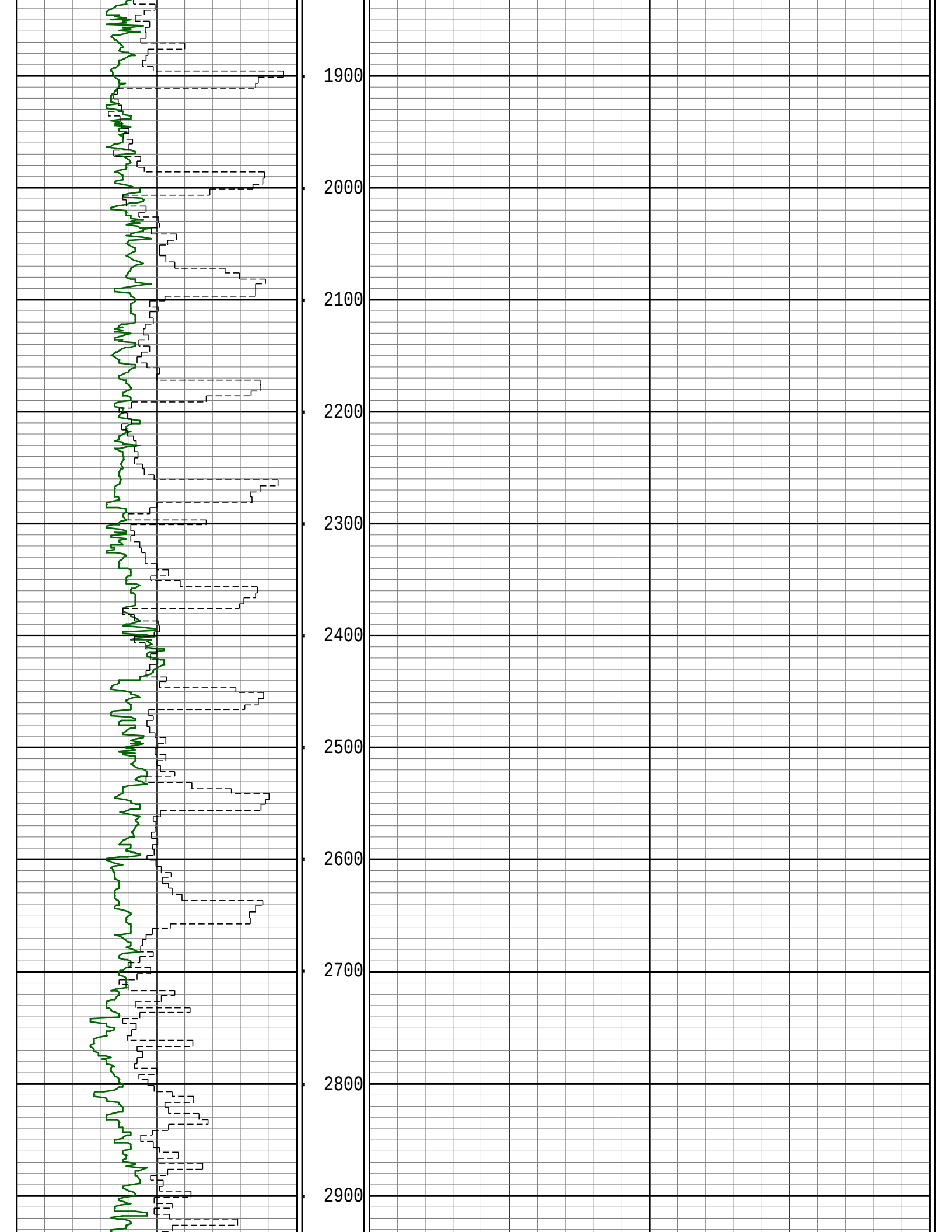
REMARK #1: GAMMA-RAY FROM 732'-7506'MD (732'-7097'TVD) IS PROVIDED BY ENSIGN DIRECTIONAL. ROP OVER CORRESPONDING INTERVAL ALSO PROVIDED BY ENSIGN DIRECTIONAL.
REMARK #2: GAMMA-RAY LOGGED THROUGH CASING FROM 7506'-7546'MD (7097'-7098'TVD).

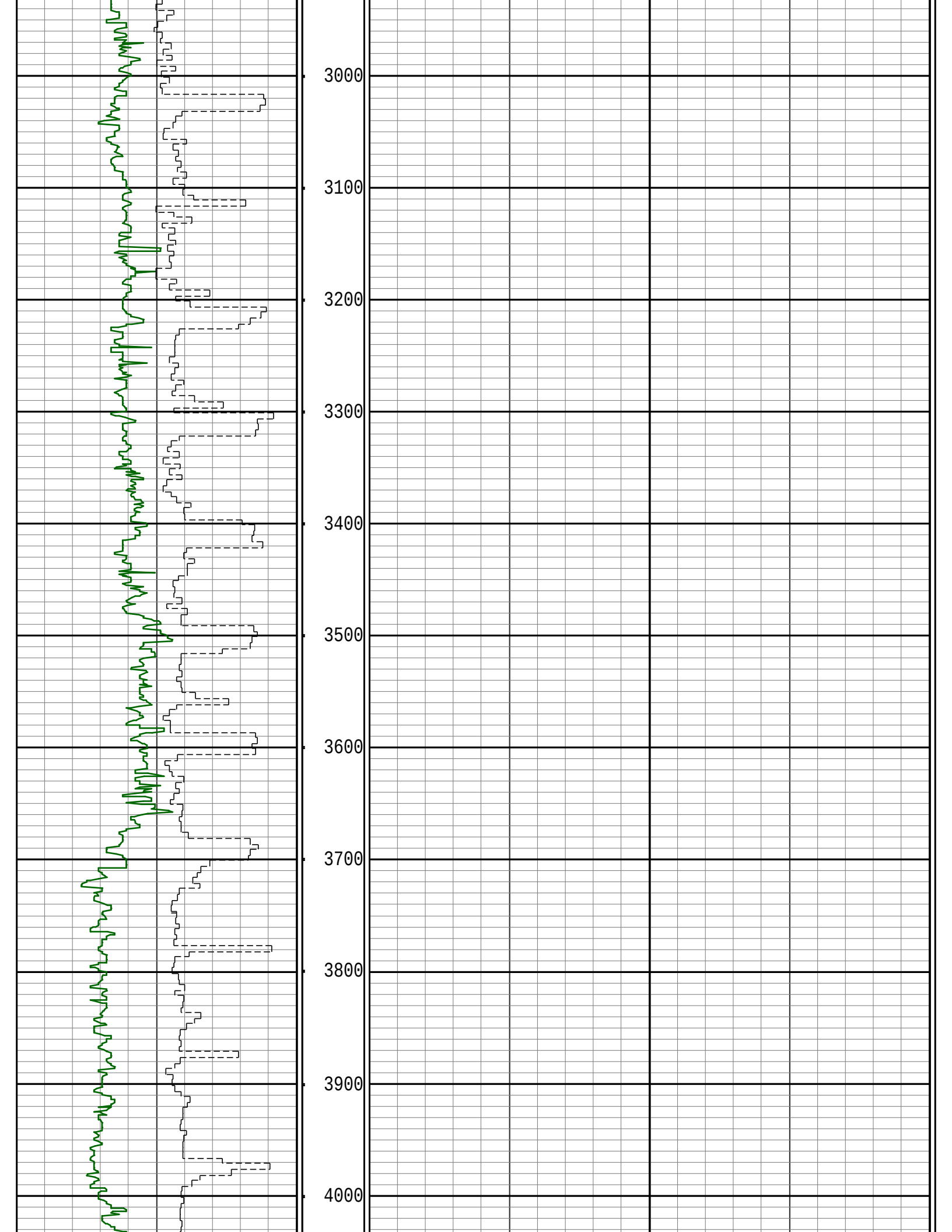
PATHFINDER - A Schlumberger Company

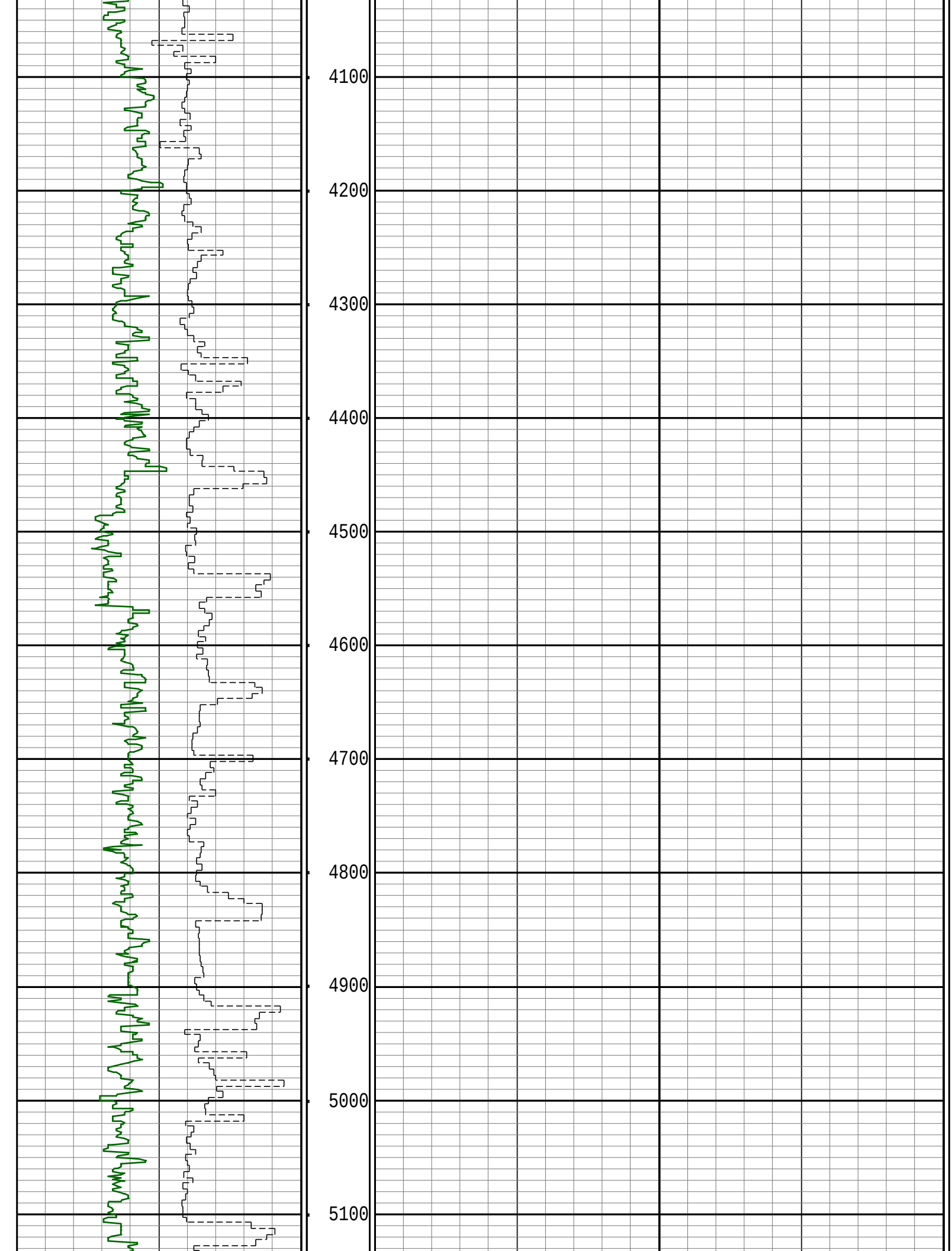
Version No : RX5 V6.05B Release 20Jun2014
Plot Time : 05-Mar-2015 09:38

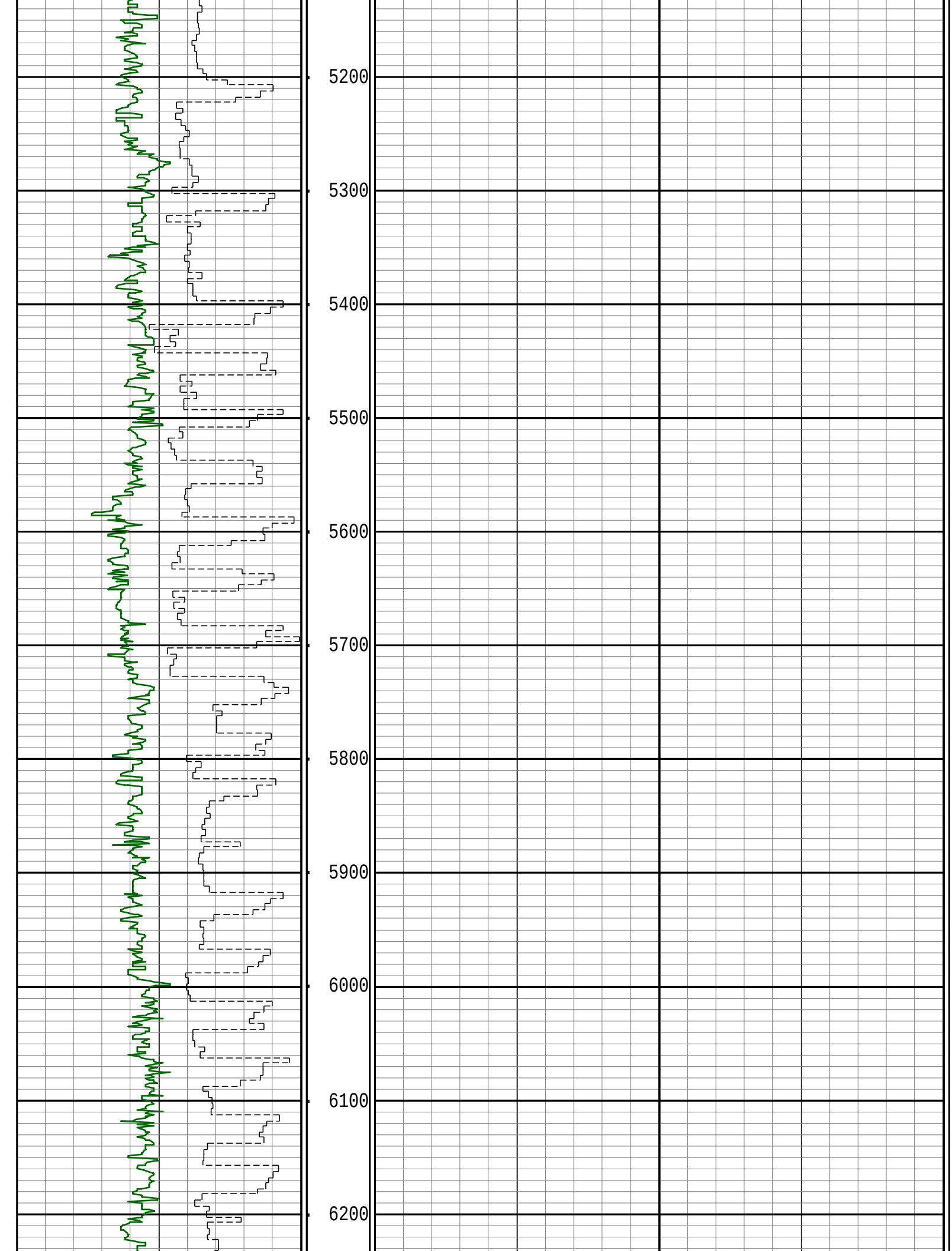
0	GRC API	300	DEPTH MD ft 1" = 100ft	20	DPHI pu	0	7150	TVD ft	7050
	avg = 6 in			-0.8	DRHO g/cc	0.2	0	GRFET Hr	10
1000	ROP ft/hr	0	SHOES	0	PE	10		avg = 1 ft	
	avg = 5 ft				SLIDE (DEN)			COMMENTS	
5	CALI in	15							
5	BS in	15							
0	WSOD in	10							
	SLIDE (BIT)								

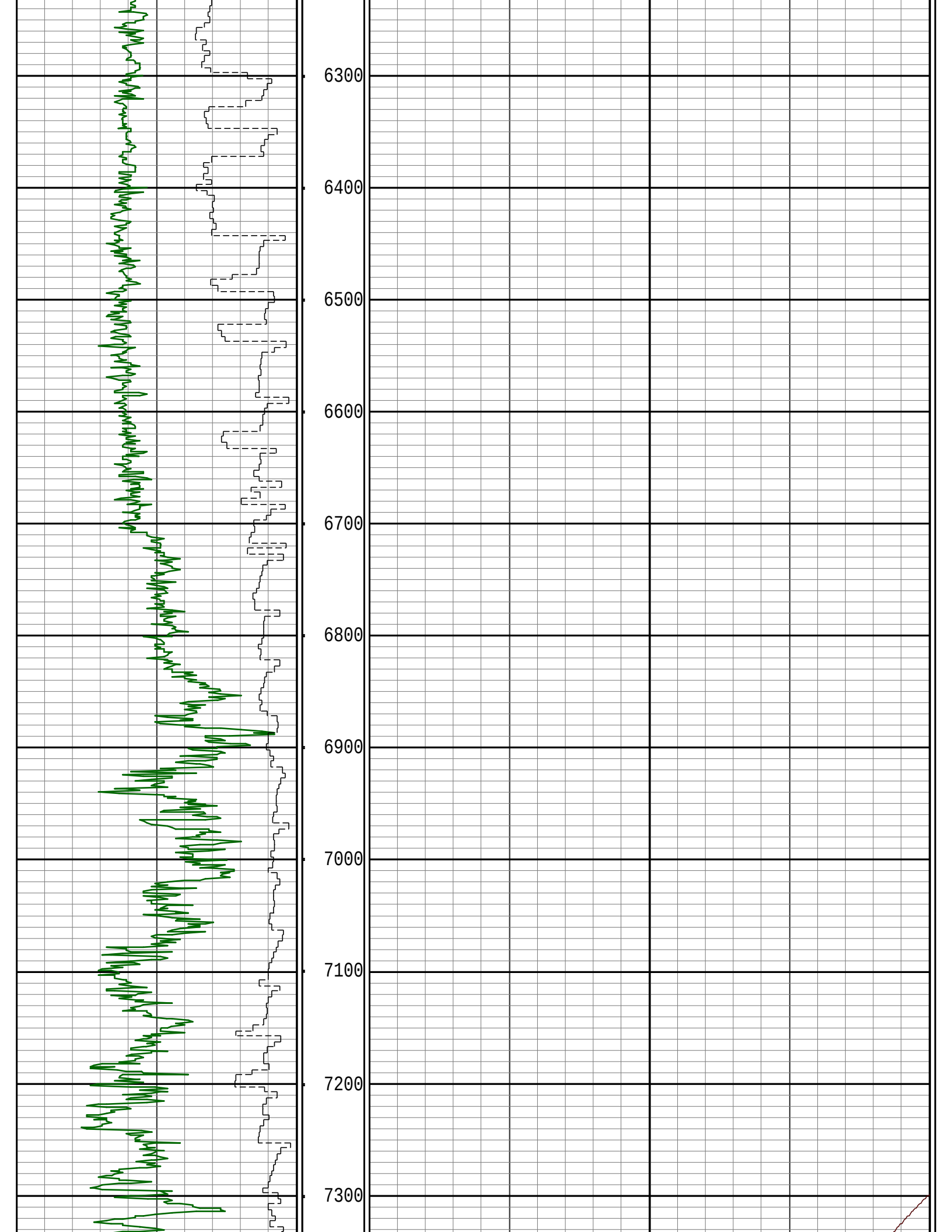

SEE REMARK #1
800
900
1000
1100
1200
1300
1400
1500
1600
1700
1800

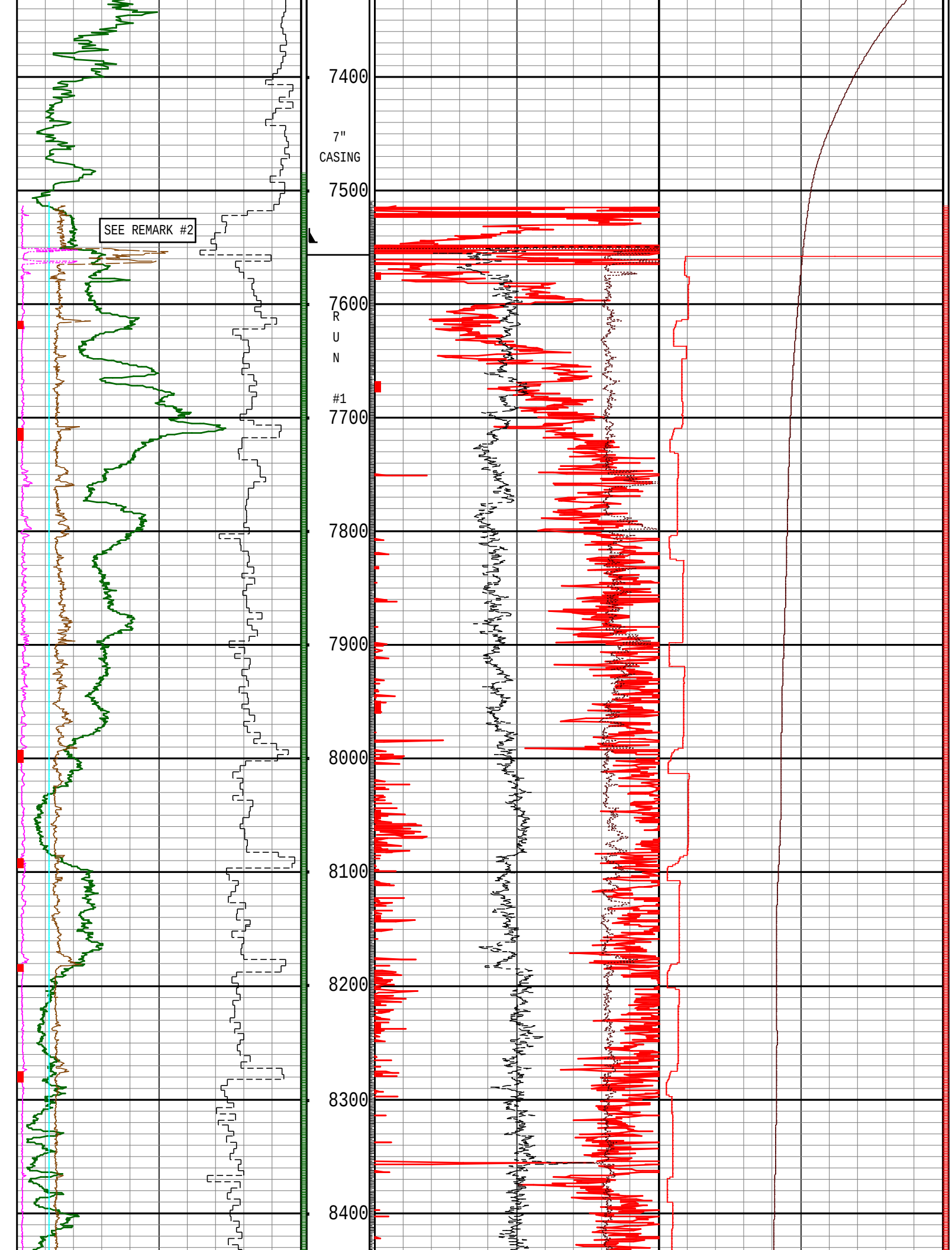

1900
2000
2100
2200
2300
2400
2500
2600
2700
2800
2900

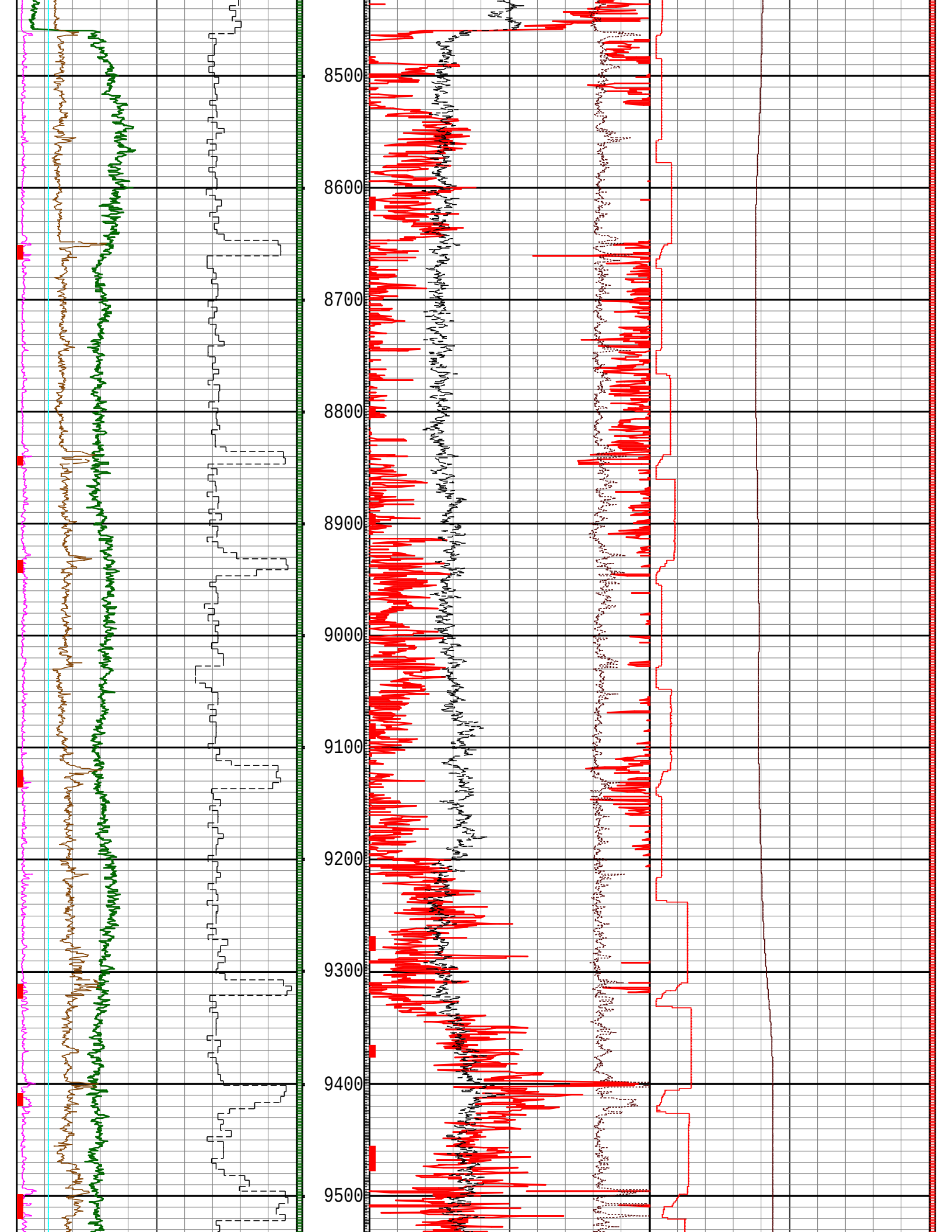

3000
3100
3200
3300
3400
3500
3600
3700
3800
3900
4000

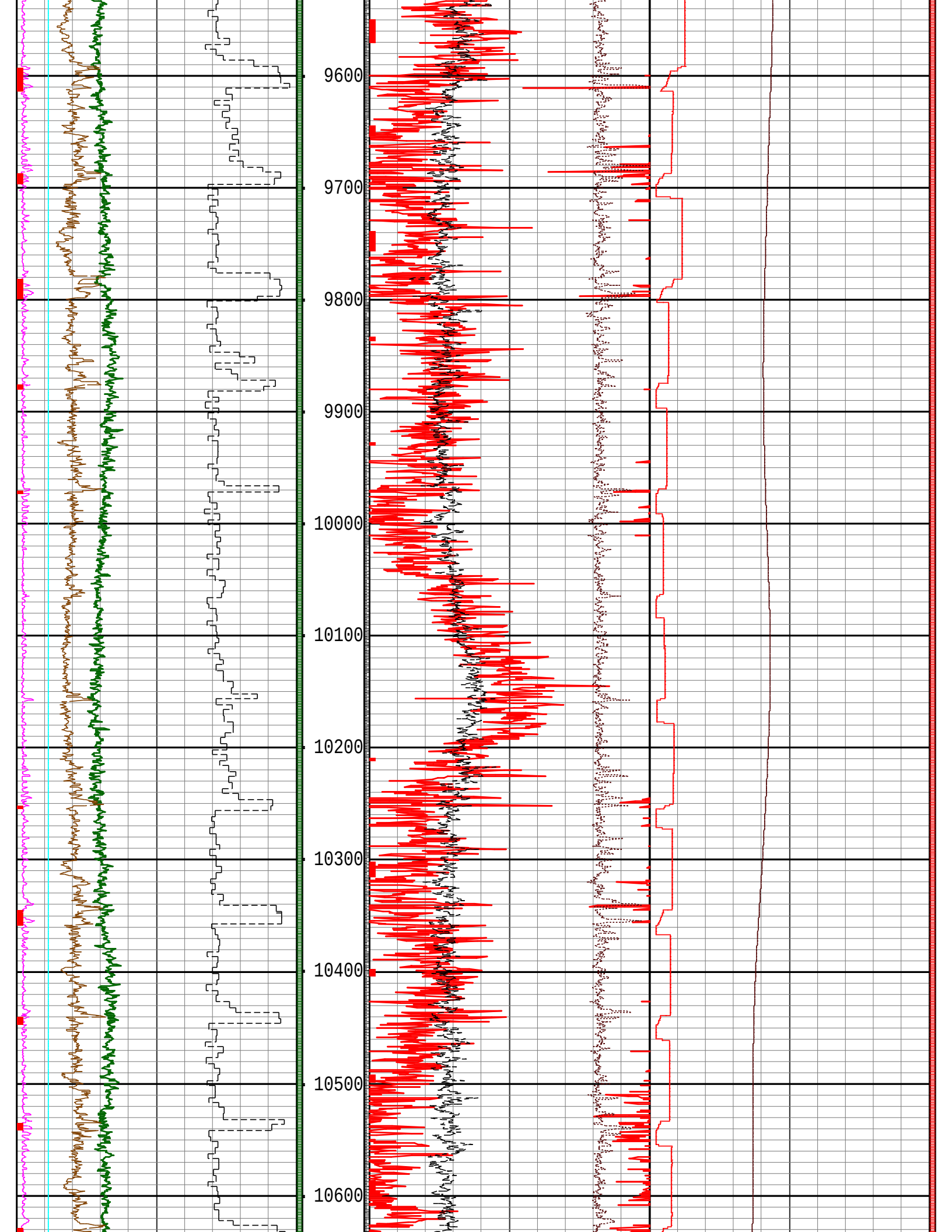

4100
4200
4300
4400
4500
4600
4700
4800
4900
5000
5100

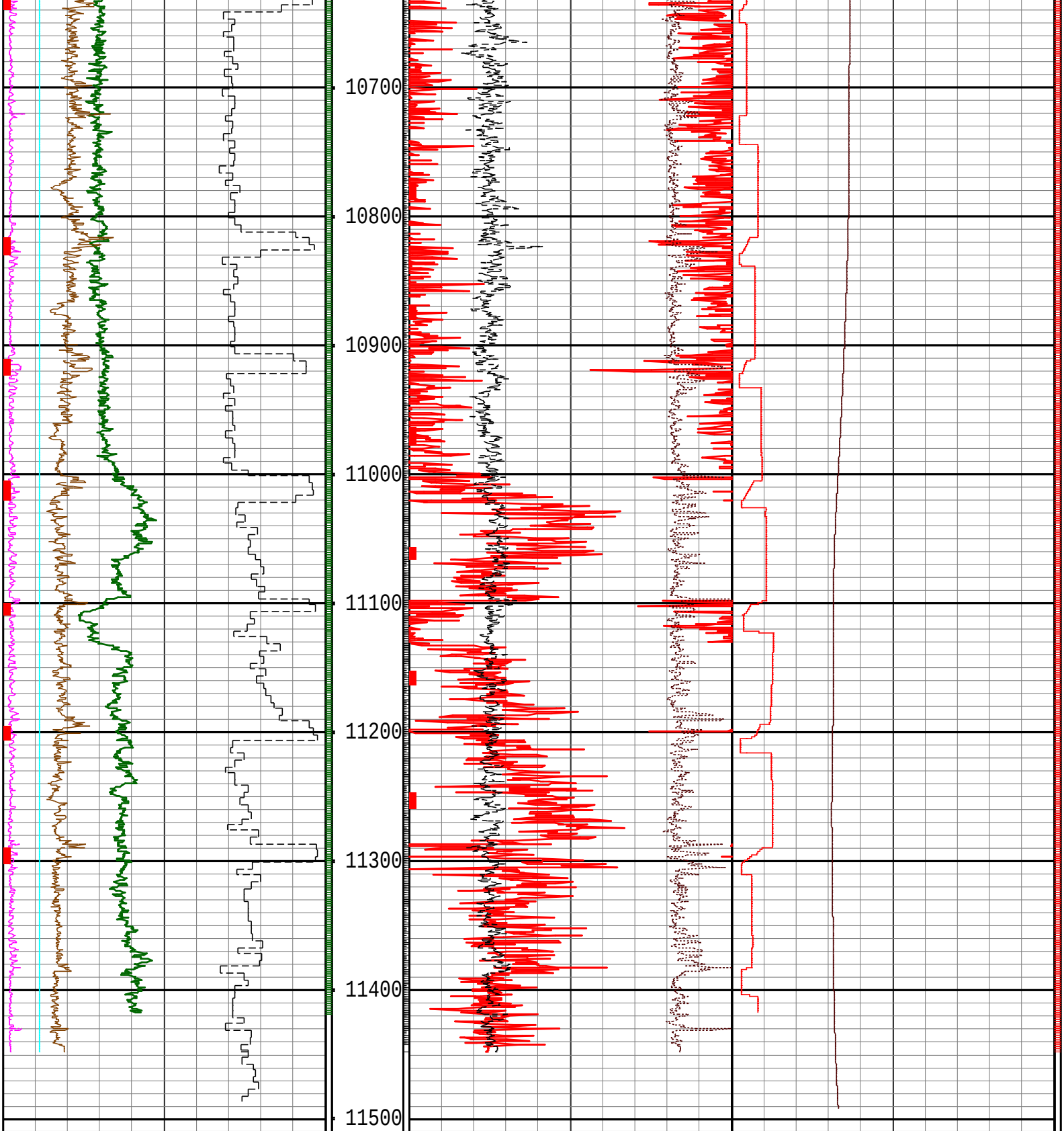

5200
5300
5400
5500
5600
5700
5800
5900
6000
6100
6200


6300
6400
6500
6600
6700
6800
6900
7000
7100
7200
7300


SEE REMARK #2
7400
7" CASING
7500
7600
RUN #1
7700
7800
7900
8000
8100
8200
8300
8400


8500
8600
8700
8800
8900
9000
9100
9200
9300
9400
9500


9600
9700
9800
9900
10000
10100
10200
10300
10400
10500
10600



0 GRC API 300	DEPTH MD ft	20 DPHI pu 0
avg = 6 in	1" = 100ft	-0.8 DRHO g/cc 0.2
1000 ROP ft/hr 0	SHOES	0 PE 10
avg = 5 ft		SLIDE (DEN)
5 CALI in 15		
5 BS in 15		
0 WSOD in 10		
SLIDE (BIT)		

7150 TVD ft 7050	
0 GRFET Hr 10	
avg = 1 ft	
COMMENTS	

Survey Report

Vertical Section Plane: 12.18°	Total Correction: 8.42° East to True
Calculation Method: Minimum Curvature	Survey Reference: Wellhead
North Aligned to: True North	Well: MATRIX L-29HC
22.5 FT ROTARY TABLE GROUND LEVEL	FIELD: GREELEY

Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	TVD (ft)	Sub Sea TVD (ft)	Vertical Section (ft)	Rect Co-ord North (ft)	Rect Co-ord East (ft)	Closure Distance (ft)	Closure Direction (deg)	Dog-leg Severity (dg/hft)	Temp (deg F)
ORIGIN OF WELL AT SURFACE.											
0.00	0.00	0.00	0.00	0.00	0.00	0.00 N	0.00 E	0.00	0.00		
THE FOLLOWING ARE ENSIGN MWD SURVEYS.											
128.00	0.30	258.90	128.00	128.00	-0.13	0.06 S	0.33 W	0.34	258.90	0.23	
220.00	0.30	189.90	220.00	220.00	-0.47	0.35 S	0.61 W	0.70	240.15	0.37	
312.00	0.40	211.10	312.00	312.00	-1.01	0.86 S	0.81 W	1.18	223.41	0.18	
404.00	0.60	207.20	403.99	403.99	-1.78	1.56 S	1.20 W	1.97	217.50	0.22	
496.00	0.80	32.80	495.99	495.99	-1.65	1.45 S	1.07 W	1.81	216.44	1.52	
588.00	1.20	18.00	587.98	587.98	-0.09	0.00 N	0.43 W	0.43	270.50	0.51	
680.00	0.40	3.30	679.97	679.97	1.19	1.24 N	0.11 W	1.25	354.92	0.89	
705.00	0.50	4.30	704.97	704.97	1.38	1.44 N	0.10 W	1.44	356.13	0.40	
828.00	0.60	22.90	827.96	827.96	2.55	2.56 N	0.19 E	2.57	4.32	0.17	
923.00	0.60	29.40	922.96	922.96	3.51	3.46 N	0.63 E	3.51	10.35	0.07	
1018.00	0.60	20.30	1017.95	1017.95	4.48	4.36 N	1.05 E	4.48	13.53	0.10	
1113.00	0.70	14.50	1112.94	1112.94	5.55	5.38 N	1.37 E	5.56	14.23	0.13	
1205.00	0.60	18.00	1204.94	1204.94	6.59	6.39 N	1.66 E	6.60	14.53	0.12	
1297.00	1.30	234.20	1296.93	1296.93	6.30	6.23 N	0.96 E	6.31	8.74	1.98	
1390.00	1.40	231.80	1389.91	1389.91	4.64	4.91 N	0.79 W	4.98	350.86	0.12	
1481.00	1.20	230.50	1480.88	1480.88	3.03	3.62 N	2.40 W	4.34	326.47	0.22	
1574.00	0.20	303.70	1573.88	1573.88	2.33	3.09 N	3.29 W	4.51	313.26	1.25	
1666.00	0.40	296.60	1665.87	1665.87	2.47	3.32 N	3.71 W	4.98	311.89	0.22	
1758.00	1.40	134.20	1757.87	1757.87	1.95	2.68 N	3.19 W	4.17	310.10	1.94	
1850.00	3.30	128.00	1849.78	1849.78	0.20	0.27 N	0.30 W	0.40	312.53	2.08	
1942.00	4.60	111.00	1941.57	1941.57	-1.52	2.68 S	5.24 E	5.88	117.12	1.89	
2034.00	6.10	106.80	2033.16	2033.16	-2.48	5.42 S	13.36 E	14.42	112.07	1.68	
2126.00	6.90	123.70	2124.58	2124.58	-4.90	9.90 S	22.64 E	24.71	113.61	2.24	
2218.00	8.30	119.10	2215.77	2215.77	-8.86	16.19 S	33.04 E	36.79	116.11	1.66	
2310.00	9.30	117.50	2306.69	2306.69	-12.75	22.85 S	45.43 E	50.86	116.70	1.12	
2403.00	10.50	120.00	2398.30	2398.30	-17.33	30.56 S	59.44 E	66.84	117.21	1.37	
2495.00	12.40	117.90	2488.47	2488.47	-22.58	39.38 S	75.43 E	85.09	117.57	2.11	
2590.00	12.10	120.80	2581.30	2581.30	-28.52	49.25 S	93.00 E	105.23	117.90	0.72	
2685.00	13.20	126.50	2674.00	2674.00	-36.16	60.80 S	110.27 E	125.92	118.87	1.75	
2781.00	14.30	127.00	2767.25	2767.25	-45.66	74.45 S	128.55 E	148.56	120.08	1.15	
2876.00	14.00	125.80	2859.37	2859.37	-55.18	88.24 S	147.24 E	171.66	120.93	0.44	
2971.00	12.20	121.70	2951.89	2951.89	-63.14	100.23 S	165.10 E	193.15	121.26	2.13	
3066.00	13.40	124.50	3044.53	3044.53	-70.68	111.74 S	182.72 E	214.18	121.45	1.42	
3161.00	10.90	119.30	3137.40	3137.40	-77.50	122.38 S	199.62 E	234.15	121.51	2.87	
3257.00	10.30	121.50	3231.76	3231.76	-83.02	131.30 S	214.86 E	251.80	121.43	0.75	
3352.00	9.90	126.10	3325.29	3325.29	-89.14	140.55 S	228.70 E	268.44	121.57	0.95	
3447.00	10.60	124.90	3418.77	3418.77	-95.82	150.36 S	242.46 E	285.30	121.81	0.77	
3542.00	11.70	128.00	3511.98	3511.98	-103.39	161.29 S	257.22 E	303.61	122.09	1.32	
3637.00	12.40	122.40	3604.89	3604.89	-111.12	172.69 S	273.42 E	323.39	122.28	1.43	
3733.00	13.80	124.90	3698.39	3698.39	-119.10	184.76 S	291.52 E	345.14	122.37	1.57	
3828.00	15.00	125.60	3790.40	3790.40	-128.36	198.40 S	310.81 E	368.74	122.55	1.28	
3923.00	16.40	126.50	3881.85	3881.85	-138.77	213.54 S	331.59 E	394.40	122.78	1.50	
4018.00	16.30	123.80	3973.01	3973.01	-149.21	228.93 S	353.45 E	421.11	122.93	0.81	
4113.00	15.10	121.40	4064.47	4064.47	-158.19	242.80 S	375.09 E	446.81	122.92	1.44	
4209.00	13.10	117.90	4157.57	4157.57	-165.26	254.40 S	395.38 E	470.15	122.76	2.26	
4304.00	11.80	117.30	4250.34	4250.34	-170.71	263.90 S	413.52 E	490.55	122.54	1.37	
4399.00	9.80	115.90	4343.65	4343.65	-175.16	271.88 S	429.43 E	508.26	122.34	2.12	
4494.00	9.70	123.80	4437.28	4437.28	-180.03	279.87 S	443.35 E	524.30	122.26	1.41	
4589.00	10.60	127.90	4530.80	4530.80	-186.77	289.69 S	456.90 E	541.00	122.38	1.21	
4684.00	11.60	127.20	4624.02	4624.02	-194.60	300.83 S	471.40 E	559.21	122.54	1.06	
4780.00	10.30	128.00	4718.27	4718.27	-202.42	311.95 S	485.85 E	577.38	122.70	1.36	
4875.00	11.60	130.50	4811.54	4811.54	-210.65	323.38 S	499.81 E	595.30	122.90	1.46	
4970.00	12.10	129.80	4904.51	4904.51	-219.80	335.96 S	514.72 E	614.66	123.13	0.55	
5065.00	11.30	129.60	4997.54	4997.54	-228.70	348.27 S	529.54 E	633.80	123.33	0.84	
5161.00	11.50	126.30	5091.64	5091.64	-236.94	359.93 S	544.50 E	652.71	123.47	0.71	
5256.00	10.40	121.00	5184.92	5184.92	-243.58	369.95 S	559.49 E	670.74	123.47	1.57	
5351.00	9.80	116.10	5278.44	5278.44	-248.29	377.92 S	574.10 E	687.32	123.36	1.10	
5446.00	9.40	120.70	5372.12	5372.12	-252.70	385.44 S	588.03 E	703.10	123.24	0.91	
5541.00	9.30	128.00	5465.86	5465.86	-258.51	394.13 S	600.75 E	718.50	123.27	1.25	
5636.00	11.10	129.10	5559.35	5559.35	-265.99	404.62 S	613.90 E	735.25	123.39	1.91	
5731.00	11.80	126.50	5652.46	5652.46	-274.13	416.17 S	628.80 E	754.05	123.50	0.92	
5826.00	13.20	124.20	5745.21	5745.21	-282.20	428.04 S	645.58 E	774.59	123.55	1.56	
5922.00	11.20	121.40	5839.04	5839.04	-289.38	439.06 S	662.61 E	794.87	123.53	2.17	
6017.00	11.70	123.50	5932.15	5932.15	-295.92	449.19 S	678.51 E	813.73	123.51	0.68	
6112.00	12.30	127.30	6025.07	6025.07	-303.72	460.64 S	694.60 E	833.46	123.55	1.04	
6207.00	13.20	127.50	6117.73	6117.73	-312.65	473.37 S	711.25 E	854.38	123.65	0.95	
6303.00	9.60	123.10	6211.82	6211.82	-320.20	484.42 S	726.66 E	873.32	123.69	3.86	
6398.00	9.80	120.00	6305.46	6305.46	-325.50	492.79 S	740.30 E	889.31	123.65	0.59	

Survey Report

Vertical Section Plane: 12.18°	Total Correction: 8.42° East to True
Calculation Method: Minimum Curvature	Survey Reference: Wellhead
North Aligned to: True North	Well: MATRIX L-29HC
22.5 FT ROTARY TABLE GROUND LEVEL	FIELD: GREELEY

Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	TVD (ft)	Sub Sea TVD (ft)	Vertical Section (ft)	Rect Co-ord North (ft)	Rect Co-ord East (ft)	Closure Distance (ft)	Closure Direction (deg)	Dog-leg Severity (dg/hft)	Temp (deg F)
6446.00	8.60	113.10	6352.84	6352.84	-327.43	496.24 S	747.14 E	896.92	123.59	3.39	
6493.00	10.00	100.60	6399.23	6399.23	-327.99	498.37 S	754.38 E	904.13	123.45	5.21	
6541.00	10.90	86.20	6446.44	6446.44	-326.62	498.83 S	763.01 E	911.60	123.18	5.74	
6588.00	12.80	64.90	6492.46	6492.46	-322.24	496.33 S	772.16 E	917.92	122.73	10.07	
6636.00	14.30	56.00	6539.13	6539.13	-314.74	490.76 S	781.89 E	923.15	122.11	5.34	
6683.00	16.10	49.80	6584.48	6584.48	-305.39	483.30 S	791.68 E	927.55	121.40	5.16	
6731.00	19.30	49.60	6630.21	6630.21	-293.82	473.86 S	802.81 E	932.23	120.55	6.67	
6778.00	21.80	40.00	6674.22	6674.22	-279.92	462.14 S	814.34 E	936.33	119.58	8.91	
6826.00	24.70	31.20	6718.33	6718.33	-262.55	446.73 S	825.27 E	938.42	118.43	9.41	
6873.00	27.70	23.50	6760.51	6760.51	-242.55	428.30 S	834.72 E	938.19	117.16	9.63	
6921.00	31.20	18.90	6802.31	6802.31	-219.25	406.30 S	843.20 E	935.98	115.73	8.68	
6969.00	35.40	15.70	6842.42	6842.42	-193.01	381.14 S	850.99 E	932.44	114.13	9.48	
7017.00	39.80	11.50	6880.45	6880.45	-163.75	352.68 S	857.82 E	927.49	112.35	10.60	
7064.00	44.50	8.70	6915.29	6915.29	-132.25	321.64 S	863.31 E	921.28	110.43	10.77	
7112.00	50.10	8.00	6947.83	6947.83	-97.07	286.75 S	868.42 E	914.54	108.27	11.72	
7159.00	53.90	7.60	6976.76	6976.76	-60.15	250.06 S	873.45 E	908.54	105.98	8.11	
7207.00	55.80	5.70	7004.39	7004.39	-21.09	211.08 S	877.98 E	903.00	103.52	5.11	
7254.00	60.10	5.40	7029.33	7029.33	18.47	171.44 S	881.83 E	898.34	101.00	9.16	
7296.00	65.20	4.50	7048.62	7048.62	55.47	134.29 S	885.04 E	895.17	98.63	12.29	
7349.00	71.90	3.80	7067.99	7067.99	104.28	85.12 S	888.61 E	892.67	95.47	12.70	
7397.00	77.90	2.70	7080.49	7080.49	150.04	38.87 S	891.23 E	892.07	92.50	12.69	
7445.00	80.20	2.20	7089.61	7089.61	196.49	8.21 N	893.24 E	893.28	89.47	4.90	
TIED IN TO ENSIGN MWD SURVEYS AT 7508'MD.											
7508.00	86.60	1.50	7096.84	7096.84	258.02	70.73 N	895.26 E	898.04	85.48	10.22	
THE FOLLOWING ARE PATHFINDER MWD SURVEYS.											
7566.00	87.85	1.21	7099.65	7099.65	314.92	128.64 N	896.63 E	905.81	81.84	2.21	173.31
7628.00	88.20	1.30	7101.79	7101.79	375.76	190.59 N	897.98 E	917.99	78.02	0.58	173.31
7723.00	89.25	0.16	7103.90	7103.90	468.84	285.56 N	899.19 E	943.45	72.38	1.63	166.08
7817.00	89.52	0.16	7104.91	7104.91	560.78	379.55 N	899.45 E	976.26	67.12	0.29	169.69
7910.00	89.08	359.28	7106.05	7106.05	651.58	472.54 N	899.00 E	1015.63	62.27	1.06	173.31
8005.00	90.04	359.19	7106.78	7106.78	744.16	567.53 N	897.73 E	1062.08	57.70	1.01	173.31
8099.00	88.72	359.54	7107.79	7107.79	835.81	661.52 N	896.69 E	1114.30	53.58	1.45	176.92
8193.00	90.40	0.16	7108.52	7108.52	927.64	755.51 N	896.44 E	1172.35	49.88	1.91	180.54
8287.00	89.69	359.89	7108.44	7108.44	1019.53	849.51 N	896.49 E	1235.05	46.54	0.81	180.54
8381.00	89.52	359.81	7109.09	7109.09	1111.36	943.51 N	896.24 E	1301.33	43.53	0.20	184.15
8475.00	89.52	359.54	7109.88	7109.88	1203.13	1037.50 N	895.71 E	1370.66	40.81	0.29	184.15
8569.00	88.90	358.58	7111.17	7111.17	1294.66	1131.48 N	894.16 E	1442.14	38.32	1.22	184.15
8664.00	89.96	359.28	7112.12	7112.12	1387.13	1226.45 N	892.39 E	1516.76	36.04	1.34	187.76
8758.00	90.13	358.93	7112.04	7112.04	1478.69	1320.44 N	890.92 E	1592.89	34.01	0.41	187.76
8852.00	90.48	358.84	7111.54	7111.54	1570.17	1414.42 N	889.09 E	1670.65	32.15	0.38	187.76
8946.00	90.22	359.89	7110.97	7110.97	1661.82	1508.41 N	888.05 E	1750.41	30.49	1.15	191.38
9041.00	89.78	358.75	7110.97	7110.97	1754.44	1603.41 N	886.92 E	1832.36	28.95	1.29	191.38
9135.00	90.48	359.19	7110.76	7110.76	1845.95	1697.39 N	885.23 E	1914.36	27.54	0.88	194.99
9229.00	90.75	358.49	7109.75	7109.75	1937.41	1791.36 N	883.33 E	1997.31	26.25	0.80	198.61
9323.00	92.07	358.93	7107.43	7107.43	2028.79	1885.31 N	881.22 E	2081.09	25.05	1.48	194.99
9417.00	89.87	358.05	7105.84	7105.84	2120.10	1979.26 N	878.74 E	2165.56	23.94	2.52	194.99
9510.00	90.04	356.91	7105.92	7105.92	2210.06	2072.17 N	874.65 E	2249.20	22.88	1.24	198.61
9605.00	89.16	358.66	7106.58	7106.58	2302.07	2167.09 N	870.98 E	2335.57	21.90	2.06	198.61
9699.00	89.34	359.37	7107.81	7107.81	2393.59	2261.06 N	869.36 E	2422.44	21.03	0.78	198.61
9793.00	89.34	1.39	7108.89	7108.89	2485.59	2355.05 N	869.99 E	2510.61	20.27	2.15	198.61
9887.00	90.22	2.71	7109.25	7109.25	2578.12	2448.99 N	873.35 E	2600.05	19.63	1.69	202.22
9981.00	90.84	3.15	7108.38	7108.38	2670.90	2542.86 N	878.15 E	2690.22	19.05	0.81	202.22
10075.00	90.75	1.74	7107.08	7107.08	2763.53	2636.76 N	882.16 E	2780.42	18.50	1.50	205.83
10170.00	89.25	359.72	7107.08	7107.08	2856.63	2731.75 N	883.37 E	2871.03	17.92	2.65	205.83
10264.00	88.72	358.31	7108.75	7108.75	2948.15	2825.72 N	881.76 E	2960.10	17.33	1.60	209.45
10358.00	88.46	359.89	7111.06	7111.06	3039.68	2919.67 N	880.28 E	3049.49	16.78	1.70	209.45
10453.00	89.52	0.16	7112.73	7112.73	3132.53	3014.66 N	880.32 E	3140.56	16.28	1.15	209.45
10547.00	90.13	358.84	7113.02	7113.02	3224.23	3108.65 N	879.50 E	3230.67	15.80	1.55	209.45
10642.00	89.60	359.02	7113.24	7113.24	3316.71	3203.63 N	877.73 E	3321.70	15.32	0.59	209.45
10736.00	90.04	358.84	7113.54	7113.54	3408.20	3297.62 N	875.97 E	3411.98	14.88	0.51	213.06
10830.00	89.34	358.31	7114.05	7114.05	3499.56	3391.59 N	873.64 E	3502.30	14.44	0.93	213.06
10924.00	88.99	358.66	7115.42	7115.42	3590.88	3485.54 N	871.15 E	3592.76	14.03	0.53	213.06
11019.00	88.64	359.98	7117.38	7117.38	3683.47	3580.51 N	870.02 E	3684.70	13.66	1.44	213.06
11113.00	90.13	1.12	7118.39	7118.39	3775.54	3674.50 N	870.93 E	3776.30	13.33	2.00	213.06
11207.00	89.52	0.86	7118.68	7118.68	3867.75	3768.48 N	872.55 E	3868.18	13.04	0.71	216.68
11301.00	90.31	1.30	7118.82	7118.82	3959.99	3862.47 N	874.32 E	3960.19	12.75	0.96	213.06
11395.00	90.31	1.30	7118.31	7118.31	4052.30	3956.44 N	876.45 E	4052.36	12.49	0.00	216.68
STRAIGHT LINE PROJECTION TO BIT DEPTH AT 11492'MD.											
11492.00	91.31	1.30	7116.94	7116.94	4147.54	4053.40 N	878.65 E	4147.54	12.23	1.03	

EQUIPMENT DATA

RUN NUMBER	1					
RES DTA						
RES MANDREL						
RES SIZE in						

RES SIZE in						
RES VERIFIER						
API BLANKET						
HDS-1M DTA						
HDS-1M MANDREL						
HDS-1M SIZE in						
DNSC DTA	4077					
DNSC MANDREL	N47M077D					
DNSC SIZE in	4 3/4					
DENSITY SOURCE NO.	5204GW					
NEUTRON SOURCE NO.						
CLSS DTA						
CLSS MANDREL						
CLSS SIZE in						
DPM DTA						
DPM SIZE in						
DFT DTA						
DFT MANDREL						
DFT SIZE in						
PZIG UXM DTA						
PZIG LXM DTA						
PZIG SIZE in						

BOTTOM HOLE ASSEMBLY RECORD

RUN 1	ft						
6.125" PDC BIT	0.50						
1.5° MUD MOTOR	28.75						
NM STAB	4.73						
IDNSC (DENSITY)	18.84						
ABS (BATTERY)	15.34						
X/O	1.19						
HDS-1L (DIR/GR)	28.74						
NM STAB	5.38						
NMDC	30.81						
FILTER SUB	3.08						
TOTAL BHA:	137.31						
SENSOR OFFSETS:							
NB INC	39.32						
DENSITY	42.64						
CALIPER	44.09						
GAMMA-RAY	72.81						
DIRECTIONAL	80.89						

NEUTRON DENSITY

PATHFINDER

A Schlumberger Company

1" = 100'

FEET MD