



Composite Log

Natural Formation Evaluation
Gamma Ray
Propagation Resistivity

Company: Noble Energy

Well: KIDD LD22-770

Field: Weld County

Region: Continental US Country: United States

Surface Location:

Latitude: 40° 43' 51.060" N

Longitude: 103° 51' 16.884" W

Other Services:

Wellbore Survey
Drilling Dynamics

Scale:

1:1200 TVD

Status:

Final Print

API Number:

05-123-41590

Section: 22 TWN: 9N Range: 58E

Permanent Datum (P.D.): Ground Level Elevation: 4821.00 ft.

Log Measured From: Drill Floor 30.00 ft. Above P.D.

Depth Reference: Driller's Depth

Elevations: N/A

KB: 30.00 ft.

DF: 4821.00 ft.

GL:

Interval Logged

Dates

Magnetic Field Reference

Top: 726 ft. Date From: 28/Aug/15 Dip Angle: 67.39 ° Az Reference North: Grid

Bottom: 10396 ft. Date To: 01/Sept/15 Total Mag to Reference

Spud Date: 27/Aug/15 Field Strength: 52969.9 nT North Correction: 6.95 °

Borehole Record

Casing Record

Hole Size From To Size Weight From To

8.750 in. 726 ft. 6280 ft. 9.625 in. 55.00 lb/ft 0 ft. 758 ft.

6.125 in. 6280 ft. 10396 ft. 7.000 in. 36.00 lb/ft 758 ft. 6168 ft.

Mud Record

Deviation Record

Type From To Hole Size Interval Inc / Az (Start) Inc / Az (End)

Water Based Mud 824 ft. 10396 ft. 8.750 in. 5554 ft. 4.33° / 116.0° 84.0° / 356.5°

6.125 in. 4226 ft. 84.0° / 356.5° 92.6° / 358.2°

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Acquisition System Software Version

Other

Advantage 2.20U4 Rig: / Contractor: H&P 326 / Noble Energy

PATS 6.4.1.34 Job No.: 7469134 / District: / Unit: Rockies / D&E

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Log Run Summary

LWD Run No.	BHA Run No.	Bit Run No.	Bit Size (in.)	Bit Type	Bit Gauge Length (in.)	Assembly Type	Logged Interval		Bit Depth Interval		Date / Time		Circ. Time (hrs.)
							Top (ft.)	Bottom (ft.)	From (ft.)	To (ft.)	Start	End	
1	1	1	8.750	PDC	0.200	Mud Motor	680.77	5527.77	726	5573	28/Aug/2015 00:30	29/Aug/2015 01:00	15
2	2	2	8.750	PDC	0.200	Mud Motor	5531.39	6114.81	5761	6170	29/Aug/2015 04:20	29/Aug/2015 21:00	6.8
3	3	3	6.125	PDC	2.375	Mud Motor	6114.81	10341	6170	10396	30/Aug/2015 01:54	1/Sept/2015 09:30	38.2

Crew

Name	Arrive	Depart	Name	Arrive	Depart	Name	Arrive	Depart
	Wellsite	Wellsite		Wellsite	Wellsite		Wellsite	Wellsite
Bill Stavely	8/27/2015	8/27/2015	Mike Guernsey	8/28/2015	9/2/2015	Ken Perry	8/26/2015	9/1/2015
Nathan Leopold	8/26/2015	9/1/2015	Maia Matarrese	8/26/2015	9/1/2015			

Witness	
Name	LWD Run Number
John	Runs 1-3
Chris	Runs 1-3

Mud Properties Record												
Date / Time		LWD Run No.	Measured Depth (ft.)	Mud Type	Density (ppg)	Viscosity (cp)	pH	Fluid Loss (cc)	Oil / Water	Source	Total Chlorides (ppm)	K+ (%)
28/Aug/2015	02:30	1	824	Water Based Mud	8.6	2	11.9	N/A	0 / 98	Active Mud Pit	500	0.0
28/Aug/2015	14:00	1	4345	Water Based Mud	8.8	2	9.7	N/A	0 / 96	Active Mud Pit	600	0.0
29/Aug/2015	02:30	2	5574	Water Based Mud	10.7	12	9.4	N/A	0/88	Active Mud Pit	800	0.0
29/Aug/2015	14:00	2	6136	Water Based Mud	10.6	11	9.5	N/A	0/88.5	Active Mud Pit	800	0.0
30/Aug/2015	02:30	3	6168	Water Based Mud	10.9	12	9.3	N/A	0/87.5	Active Mud Pit	700	0.0
30/Aug/2015	14:00	3	6168	Water Based Mud	9.8	5	8.7	N/A	0/92.5	Active Mud Pit	1200	0.0
31/Aug/2015	05:00	3	7058	Water Based Mud	10.1	9	10.0	N/A	0/91.2	Active Mud Pit	1300	0.0
31/Aug/2015	17:00	3	8311	Water Based Mud	10.3	12	9.5	N/A	0/90.3	Active Mud Pit	1200	0.0

Mud Resistivity Record					Surface			Downhole			
Date / Time		LWD Run No.	Measured Depth (ft.)	Surface Temp (deg F)	Rm (ohm.m)	Rmf (ohm.m)	Rmc (ohm.m)	BHCT (deg F)	Rm @ BHCT (ohm.m)	Rmf @ BHCT (ohm.m)	Rmc @ BHCT (ohm.m)
28/Aug/2015	02:15	1	768	71	1.85	N/A	N/A	90	1.47	N/A	N/A
28/Aug/2015	18:08	1	1898	66	2.40	N/A	N/A	104	1.54	N/A	N/A
29/Aug/2015	06:15	1	5236	74	1.42	N/A	N/A	147	0.73	N/A	N/A
29/Aug/2015	23:54	1	5574	66	1.52	N/A	N/A	93	1.10	N/A	N/A

Mnemonics		
Curve	Description	Units
GRAM	Gamma Ray Apparant 0.5 ft Avg.	API
GRIM	Gamma Ray Data Point Indicator	Unitless
GRAX	Gamma Ray Apparant 0.5 ft. Avg.	API
GRIX	Gamma Ray Density	Unitless
GRSIM	Gamma Ray Sliding Indicator	ft
GRSI	Gamma Ray Sliding Indicator	ft
GRTX	Gamma Ray Time Since Drilled	min
GRTM	Gamma Ray Time Since Drilled	min
ROP_AVG	Rate of Penetration 3.0 ft Avg.	ft/hr
RPCHM	Resistivity Phase- Corrected- 2MHz	ohm-m
RPCLM	Resisitivity Phase- Corrected- 400kHz	ohm-m
RACHM	Resisitivity Attenuation- Corrected- 2MHz	ohm-m
RACLM	Resisitivity Attenuation- Corrected- 400kHz	ohm-m

RPTHM	Resistivity Time Since Drilled	min
RPSIHM	Resisitivity Sliding Indicator	ft
CACLM	Acoustic Caliper- Corrected	mmho/m

Equipment and Service Data

LWD Run No.	Tool	Serial Number	Measurement	Bit Offset (ft.)	Max O.D. (in.)	Min I.D. (in.)
1	CS	12601575	-	73.33	7.000	2.250
1	BCPM	11601761	Telemetry	62.83	7.000	2.250
1	FLEX SUB	12601575	-	55.87	5.000	2.250
1	OTK	12601575	Directional	51.04	7.031	2.165
1	OTK	12601575	Resistivity	45.23	7.031	2.165
1	OTK	12601575	Gamma	41.19	7.031	2.165
1	OTK	12601575	Pressure	40.31	7.031	2.165
1	CS	12601575	-	37.17	7.000	2.250
2	DIR	10428009	Directional	57.82	6.750	3.250
2	SRIG	12131437	Gamma	54.86	6.750	3.250
3	DIR	13153780	Directional	56.96	4.750	2.250
3	SRIG	12600744	Gamma	53.46	4.750	2.250

Service and Tool Mnemonics

Mnemonic	Name	Description
BCPM	BCPM	Mud pulse telemetry and downhole tool power module
DIR	Directional	Wellbore directional survey
FLEX SUB	Flex Sub	Flexible sub connection
OTK	OnTrak	Propagation resistivity, propagation conductivity, gamma ray, directional, annular pressure, system memory and VSS
SRIG	Inclination and Gamma	Probe based gamma ray and inclination module
CS	Closure Sub	BHA power ring isolator allowing insertion of inert sub into electrically powered BHA

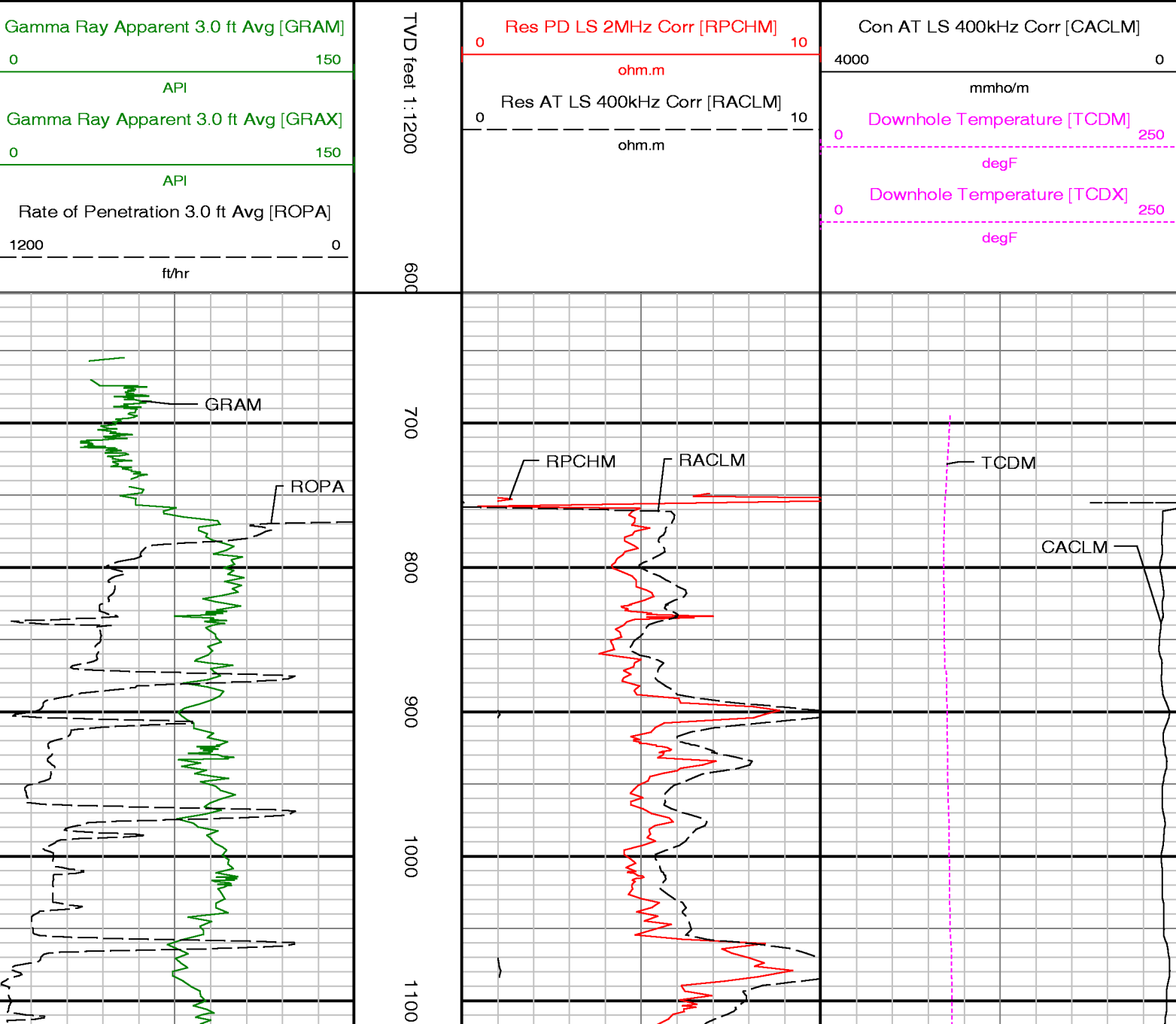
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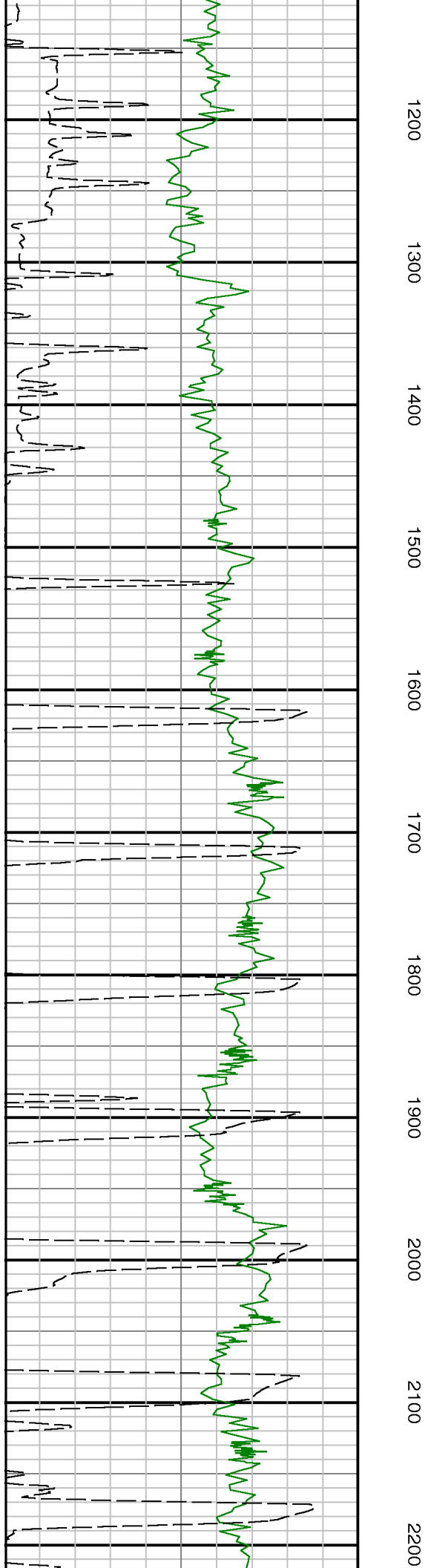
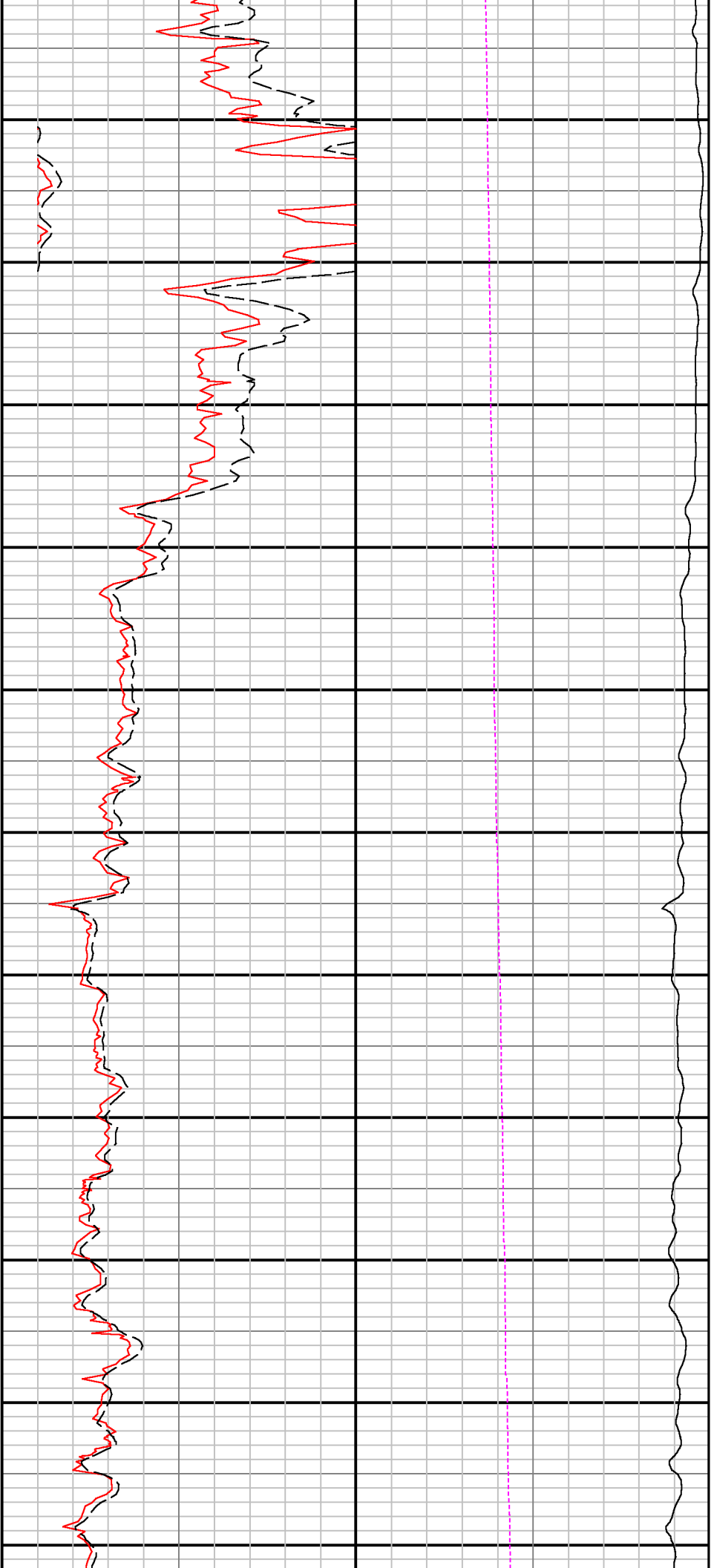
<p>(1) Baker Hughes Run 1 utilized 6 3/4 inch OnTrak service (Gamma Ray, Resisitivity, Directional and VSS) behind an 8 3/4 inch bit and steerable assembly from 726 feet to 5574 feet MD (726 feet to 5501.25 feet TVD).</p> <p>(2) Baker Hughes Run 2 utilized 6 3/4 NaviGamma service (Gamma Ray, Directional and VSS) behind an 8 3/4 inch bit and steerable assembly from 5574 to 6170 feet MD (5500 feet to 5742 feet TVD).</p> <p>(3) Baker Hughes Run 3 utilized 4 3/4 NaviGamma service (Gamma Ray, Directional and VSS) behind a 6 1/8 inch bit and steerable assembly to drill lateral from 6170 feet to 10396 feet MD.</p> <p>(2) Depth measurements are obtained from a depth control system (Pason EDR) not supplied or operated by Baker Hughes Inteq. Due to a lack of control by Baker Hughes Inteq logging engineers, depth calibrations & measurements could not be independtly verified. Unverified depths supplied to Inteq are being used in present logging data.</p> <p>(3) A sliding indicator is shown to the right edge of track 2 as a heavy line. The indicator has been depth-shifted to the resistivity sensor offset to correspond with resistivity data acquired while sliding.</p> <p>(4) A sliding indicator is shown to the left edge of track 1 as a heavy line. The indicator has been depth-shifted to the gamma sensor offset to correspond with gamma ray data acquired while sliding.</p>

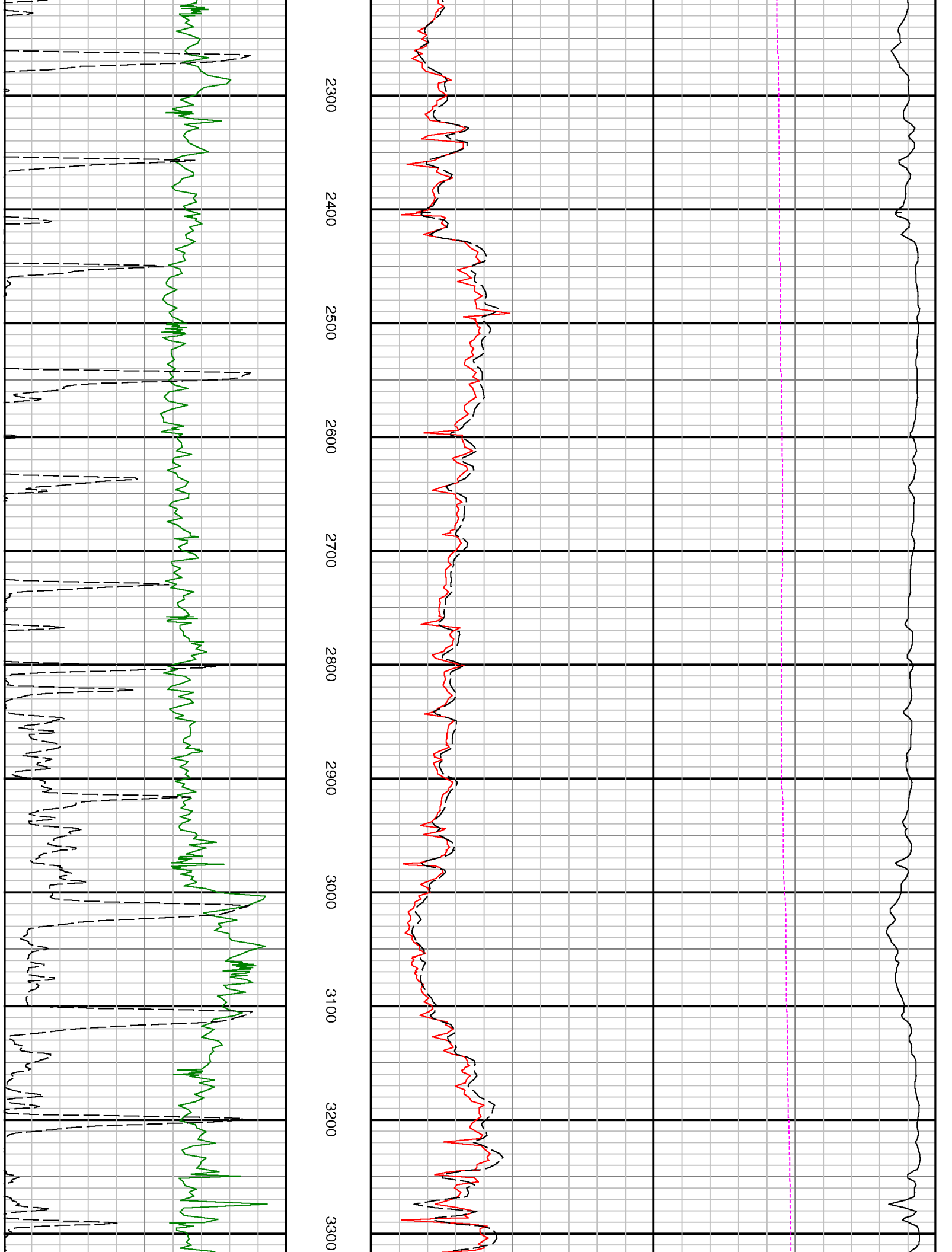
Remarks

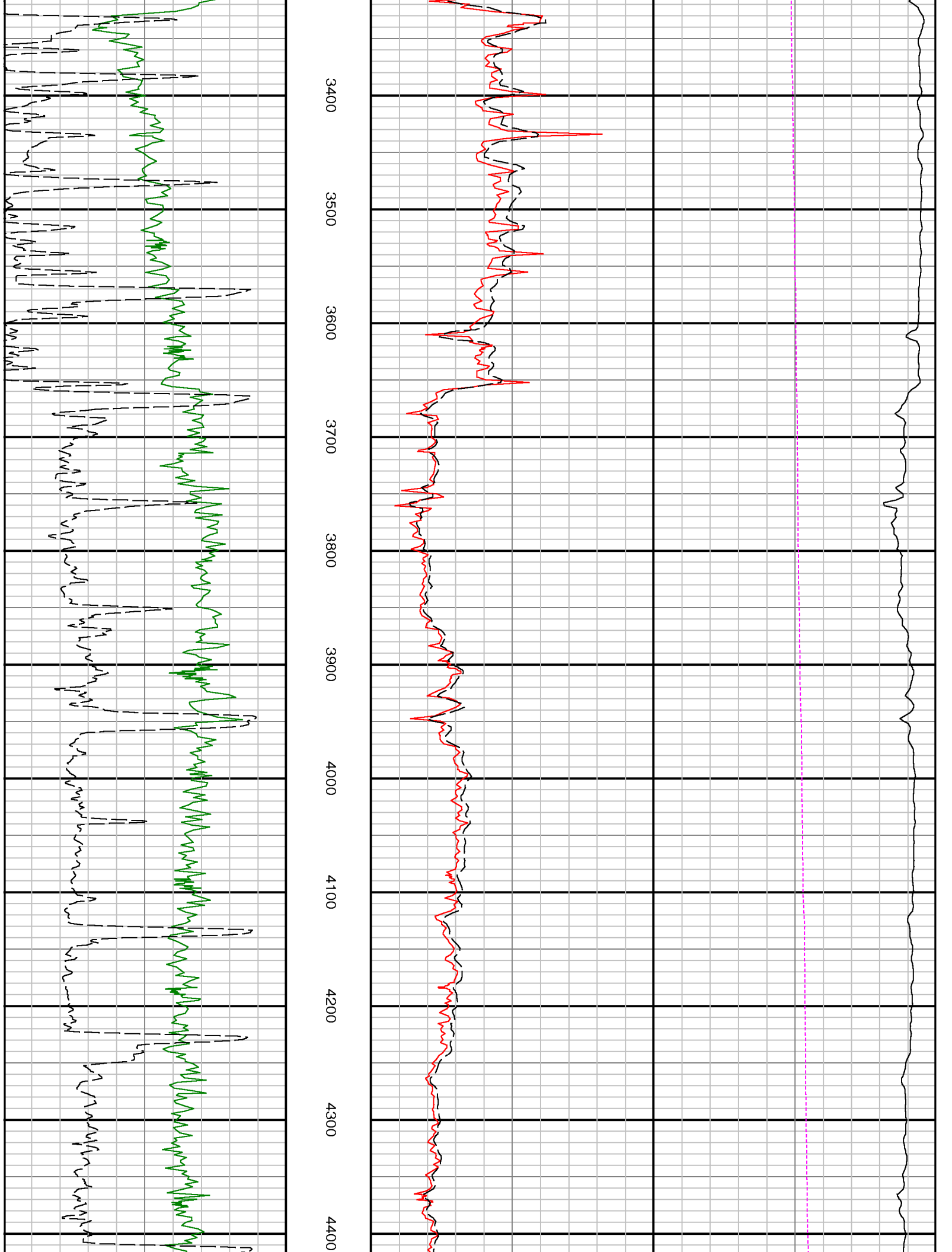
Number	Measured	Hole	LWD	Remark
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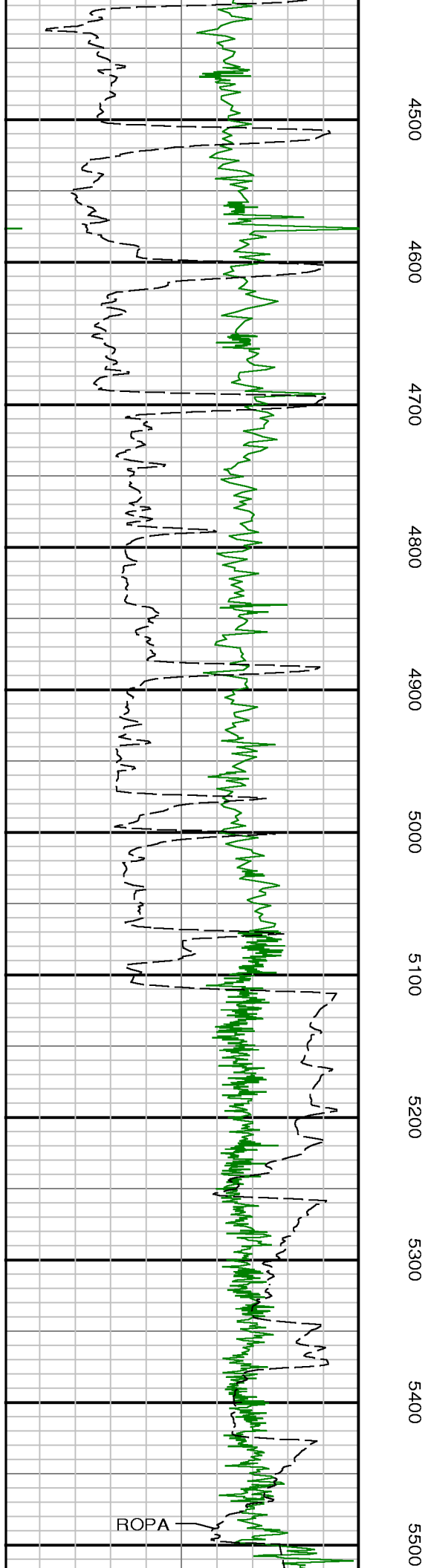
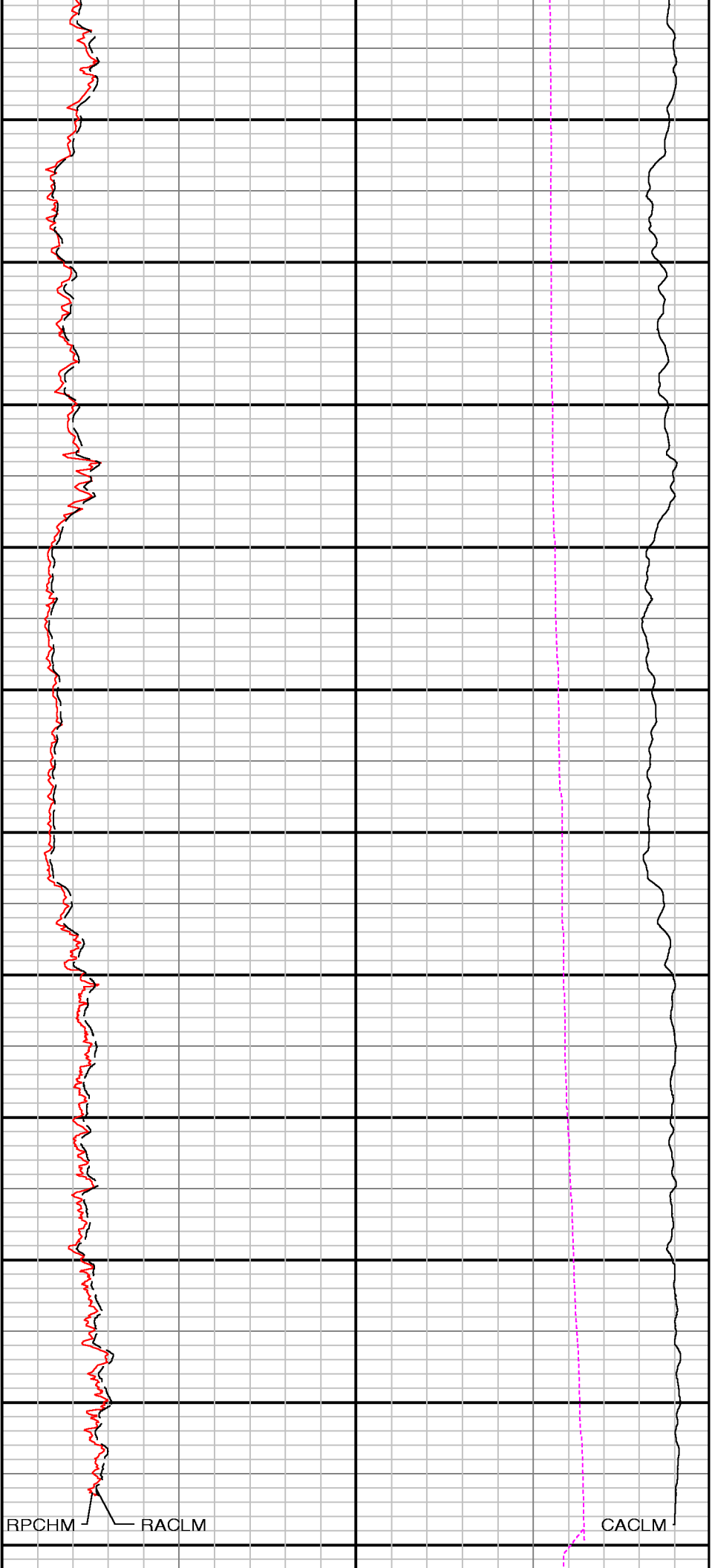
	Depth (ft.)	Section (in.)	Run No.	
1	750	8.750	1	The interval from 726 to 768 feet MD (726 to 768 feet TVD) Has no drilling data due to sensor to bit offset at the beginning of the well.
2	5550	8.750	2	The interval from 5528 to 5573 feet MD (5464 to 5500 feet TVD) was logged up to 16.0 hours after being drilled due to a trip out for an OnTrak BCMP1 desync.
3	6150	6.125	3	The interval from 6114 to 6170 feet MD (5737 to 5742 feet TVD) was logged up to 27.01 hours after being drilled due to a trip out to run 7" casing
4	10375	6.125	3	The interval from 10341 to 10396 feet MD was not logged due to the bit to gamma sensor offset.

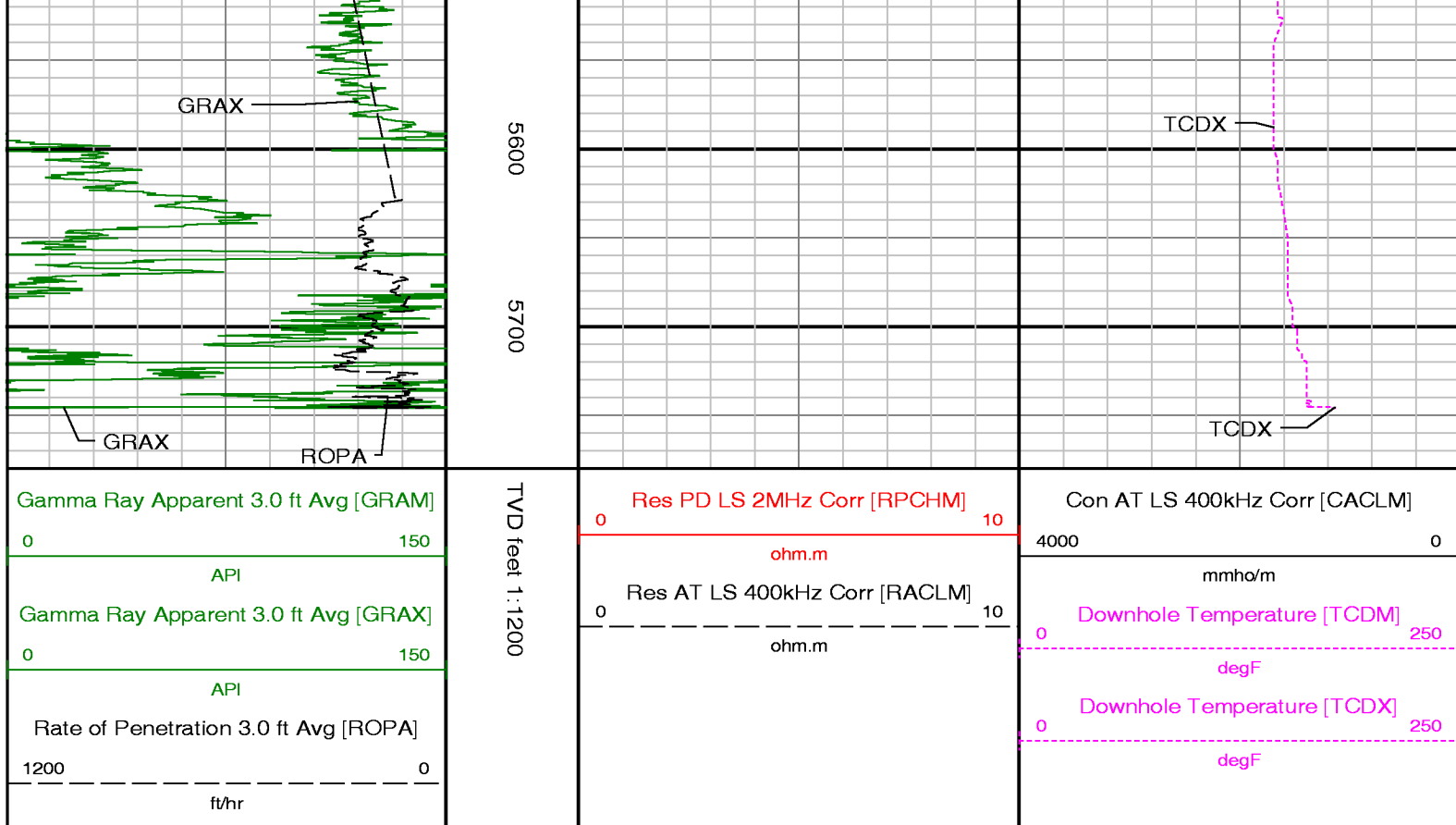












ADVANTAGE Final Survey Listing

Operator : Noble Energy	Field : Weld County	API No : 05-123-41590
Well : KIDD LD22-770	Rig : H&P 326	Job : 7469134
Wellbore : KIDD LD22-770 Orig Hole		

Well Origin

Latitude	40.7309 deg	Longitude	-103.8547 deg
North Reference	Grid	Drill Depth Zero	Rig Floor
Vertical Datum is	Ground Level	Vertical Datum to DDZ	0.00 ft
Vertical Section North	0.00 ft	Vertical Section East	0.00 ft
Vertical Section Azimuth	358.6200 deg	Vertical Section Depth	0.00ft
Grid Convergence	-1.0600 deg	Magnetic Declination	8.0100 deg
Total Correction	6.9500 deg	TVD Calculation Method	Minimal Curvature
D-Row Calculation	Magcorr1	Local Magnetic Field	52970 nT
Local Magnetic Dip Angle	67.3909 deg	Local Gravity Field	9.804 m/s^2

Tie	MD ft	Incl deg	Azim deg	North ft	East ft	TVD ft	VS ft	Incr VS ft	Crs Len ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft
	0.00	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00				
	820.00	4.3300	116.0100	-13.58	27.83	819.22	-14.25	30.97	820.00	0.53	0.53	14.15
	913.00	3.5300	95.3300	-15.39	33.84	912.00	-16.20	37.24	93.00	1.74	-0.86	-22.24
	1005.00	1.8300	100.4600	-15.92	38.10	1003.90	-16.83	41.54	92.00	1.86	-1.85	5.58
	1098.00	1.0700	162.5400	-17.01	39.83	1096.88	-17.97	43.58	93.00	1.75	-0.82	66.75
	1191.00	1.1800	172.7100	-18.79	40.21	1189.86	-19.76	45.40	93.00	0.24	0.12	10.94
	1284.00	1.1200	151.9200	-20.54	40.76	1282.84	-21.52	47.24	93.00	0.45	-0.06	-22.35
	1376.00	1.2100	150.2100	-22.18	41.66	1374.82	-23.18	49.11	92.00	0.10	0.10	-1.86
	1469.00	1.1800	166.0900	-23.96	42.38	1467.80	-24.98	51.03	93.00	0.36	-0.03	17.08
	1561.00	2.3900	191.6100	-26.76	42.22	1559.76	-27.77	53.83	92.00	1.54	1.32	27.74
	1655.00	3.3800	199.4600	-31.29	40.90	1653.64	-32.27	58.55	94.00	1.13	1.05	8.35
	1748.00	4.3500	209.3500	-36.95	38.26	1746.42	-37.86	64.80	93.00	1.26	1.04	10.63
	1842.00	5.4400	205.3700	-44.09	34.61	1840.08	-44.91	72.81	94.00	1.21	1.16	-4.23
	1934.00	7.3600	202.8300	-53.46	30.45	1931.50	-54.18	83.06	92.00	2.11	2.09	-2.76
	2028.00	8.9700	198.6100	-65.95	25.78	2024.55	-66.56	96.41	94.00	1.83	1.71	-4.49
	2120.00	10.1400	190.4600	-80.72	22.02	2115.27	-81.22	111.64	92.00	1.94	1.27	-8.86

	2214.00	10.5000	180.8300	-97.42	20.39	2207.76	-97.88	128.42	94.00	1.87	0.38	-10.24
	2309.00	10.4400	172.3300	-114.61	21.41	2301.18	-115.09	145.64	95.00	1.63	-0.06	-8.95
	2403.00	10.1400	170.8800	-131.22	23.86	2393.67	-131.75	162.43	94.00	0.42	-0.32	-1.54
	2497.00	10.0000	171.1000	-147.45	26.44	2486.22	-148.04	178.86	94.00	0.15	-0.15	0.23
	2592.00	9.3500	176.9200	-163.30	28.13	2579.87	-163.94	194.81	95.00	1.24	-0.68	6.13
	2686.00	9.1500	175.9100	-178.38	29.07	2672.65	-179.03	209.92	94.00	0.27	-0.21	-1.07
	2780.00	8.9200	174.7700	-193.10	30.27	2765.49	-193.77	224.68	94.00	0.31	-0.24	-1.21
	2875.00	8.4500	172.7000	-207.35	31.83	2859.40	-208.06	239.02	95.00	0.59	-0.49	-2.18
	2970.00	7.9400	171.9600	-220.78	33.63	2953.43	-221.52	252.56	95.00	0.55	-0.54	-0.78
	3064.00	7.6400	183.4300	-233.44	34.16	3046.56	-234.20	265.24	94.00	1.68	-0.32	12.20
	3158.00	8.2100	181.1500	-246.39	33.66	3139.67	-247.13	278.20	94.00	0.69	0.61	-2.43
	3252.00	8.5900	182.5700	-260.11	33.21	3232.66	-260.84	291.93	94.00	0.46	0.40	1.51
	3347.00	8.7300	182.5400	-274.40	32.57	3326.57	-275.11	306.23	95.00	0.15	0.15	-0.03
	3441.00	9.0600	183.3000	-288.92	31.83	3419.44	-289.60	320.77	94.00	0.37	0.35	0.81
	3536.00	9.2600	184.8600	-304.00	30.75	3513.23	-304.65	335.89	95.00	0.34	0.21	1.64
	3632.00	9.6100	177.7200	-319.71	30.41	3607.94	-320.35	351.60	96.00	1.27	0.36	-7.44
	3725.00	8.2700	175.7100	-334.13	31.22	3699.81	-334.79	366.05	93.00	1.48	-1.44	-2.16
	3819.00	8.4800	171.7300	-347.73	32.72	3792.80	-348.42	379.73	94.00	0.66	0.22	-4.23
	3913.00	8.5900	169.1700	-361.49	35.04	3885.76	-362.23	393.68	94.00	0.42	0.12	-2.72
	4008.00	7.8100	175.0900	-374.89	36.93	3979.79	-375.67	407.21	95.00	1.21	-0.82	6.23
	4102.00	7.0400	171.9100	-386.95	38.28	4073.00	-387.76	419.35	94.00	0.93	-0.82	-3.38
	4197.00	7.0800	172.5000	-398.52	39.87	4167.28	-399.37	431.03	95.00	0.09	0.04	0.62
	4291.00	6.7000	173.9300	-409.72	41.20	4260.60	-410.59	442.30	94.00	0.44	-0.40	1.52
	4385.00	6.0900	171.8200	-420.11	42.49	4354.02	-421.01	452.77	94.00	0.70	-0.65	-2.24
	4480.00	4.6500	176.9000	-428.94	43.42	4448.60	-429.86	461.65	95.00	1.59	-1.52	5.35
	4574.00	2.8800	179.3300	-435.11	43.65	4542.39	-436.03	467.82	94.00	1.89	-1.88	2.59
	4668.00	1.1200	172.5400	-438.38	43.80	4636.33	-439.31	471.10	94.00	1.89	-1.87	-7.22
	4763.00	0.6500	51.6400	-438.97	44.34	4731.33	-439.91	471.90	95.00	1.64	-0.49	-127.26
	4857.00	1.0800	58.7900	-438.18	45.52	4825.32	-439.14	473.32	94.00	0.47	0.46	7.61
	4952.00	0.5600	60.4100	-437.48	46.69	4920.31	-438.48	474.68	95.00	0.55	-0.55	1.71
	5046.00	0.4000	56.2700	-437.07	47.36	5014.30	-438.09	475.46	94.00	0.17	-0.17	-4.40
	5141.00	1.2800	8.6900	-435.84	47.80	5109.29	-436.86	476.77	95.00	1.11	0.93	-50.08
	5191.00	6.7900	4.5200	-432.34	48.11	5159.15	-433.37	480.29	50.00	11.03	11.02	-8.34
	5235.00	11.1800	6.0000	-425.50	48.76	5202.60	-426.55	487.16	44.00	9.99	9.98	3.36
Tie	MD ft	Incl deg	Azim deg	North ft	East ft	TVD ft	VS ft	Incr VS ft	Crs Len ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft
	5330.00	22.4600	3.0600	-398.13	50.70	5293.39	-399.24	514.59	95.00	11.90	11.87	-3.09
	5425.00	30.5000	358.6800	-355.83	51.12	5378.36	-356.96	556.89	95.00	8.70	8.46	-4.61
	5508.00	34.7000	359.2700	-311.13	50.33	5448.27	-312.26	601.60	83.00	5.07	5.06	0.71
	5602.00	43.0100	358.8500	-252.22	49.34	5521.41	-253.34	660.52	94.00	8.84	8.84	-0.45
	5697.00	49.3900	1.7700	-183.71	49.81	5587.13	-184.85	729.04	95.00	7.07	6.72	3.07
	5791.00	56.4400	0.9600	-108.79	51.57	5643.78	-110.00	803.97	94.00	7.53	7.50	-0.86
	5886.00	72.2200	358.6400	-23.44	51.15	5684.81	-24.67	889.32	95.00	16.75	16.61	-2.44
	5933.00	74.6900	358.3000	21.59	49.95	5698.19	20.38	934.37	47.00	5.30	5.26	-0.72
	5980.00	75.2600	357.9200	66.96	48.45	5710.38	65.77	979.76	47.00	1.44	1.21	-0.81
	6027.00	75.2300	357.7700	112.38	46.74	5722.35	111.22	1025.21	47.00	0.32	-0.06	-0.32
	6075.00	79.8800	356.2100	159.17	44.28	5732.69	158.06	1072.07	48.00	10.19	9.69	-3.25
	6108.00	84.0300	356.4500	191.77	42.19	5737.30	190.70	1104.74	33.00	12.60	12.58	0.73
	6239.00	89.5400	356.2800	322.25	33.90	5744.65	321.34	1235.48	131.00	4.21	4.21	-0.13
	6332.00	89.8500	355.7800	415.03	27.46	5745.14	414.24	1328.48	93.00	0.63	0.33	-0.54
	6424.00	89.8800	356.7500	506.83	21.47	5745.36	506.16	1420.48	92.00	1.05	0.03	1.05
	6518.00	90.4300	358.3400	600.74	17.44	5745.11	600.14	1514.48	94.00	1.79	0.59	1.69
	6611.00	90.8900	359.6400	693.72	15.80	5744.03	693.13	1607.47	93.00	1.48	0.49	1.40
	6706.00	88.1500	358.3400	788.69	14.13	5744.83	788.12	1702.45	95.00	3.19	-2.88	-1.37
	6800.00	90.6200	358.5700	882.64	11.59	5745.84	882.10	1796.44	94.00	2.64	2.63	0.24
	6895.00	91.3900	358.5900	977.60	9.24	5744.17	977.09	1891.43	95.00	0.81	0.81	0.02
	6989.00	91.5400	358.3700	1071.53	6.75	5741.77	1071.06	1985.39	94.00	0.28	0.16	-0.23
	7083.00	91.6000	358.4600	1165.46	4.15	5739.19	1165.02	2079.36	94.00	0.12	0.06	0.10
	7178.00	91.8500	359.2800	1260.40	2.27	5736.33	1259.98	2174.32	95.00	0.90	0.26	0.86
	7272.00	90.4600	358.5400	1354.36	0.49	5734.44	1353.95	2268.29	94.00	1.68	-1.48	-0.79
	7367.00	90.3700	358.5800	1449.33	-1.90	5733.75	1448.95	2363.29	95.00	0.10	-0.09	0.04
	7461.00	89.9700	358.5000	1543.30	-4.30	5733.47	1542.95	2457.29	94.00	0.43	-0.43	-0.09
	7556.00	90.0600	358.0900	1638.25	-7.12	5733.45	1637.95	2552.29	95.00	0.44	0.09	-0.43
	7651.00	88.8000	357.3300	1733.17	-10.92	5734.39	1732.93	2647.28	95.00	1.55	-1.33	-0.80
	7746.00	89.5700	356.6200	1828.03	-15.93	5735.74	1827.88	2742.27	95.00	1.10	0.81	-0.75
	7840.00	89.2300	357.0800	1921.88	-21.10	5736.73	1921.83	2836.27	94.00	0.61	-0.36	0.49
	7935.00	90.3700	358.9800	2016.82	-24.36	5737.06	2016.82	2931.26	95.00	2.33	1.20	2.00
	8029.00	90.0300	356.7200	2110.74	-27.89	5736.73	2110.80	3025.25	94.00	2.43	-0.36	-2.40
	8124.00	89.0500	356.8700	2205.59	-33.20	5737.50	2205.75	3120.25	95.00	1.04	-1.03	0.16
	8218.00	89.9400	356.6000	2299.43	-38.55	5738.32	2299.69	3214.24	94.00	0.99	0.95	-0.29
	8313.00	88.5100	356.5200	2394.25	-44.88	5738.75	2388.61	3288.24	95.00	0.94	0.92	-0.64

	8313.00	89.5400	356.7300	2394.27	-44.08	5738.75	2394.64	3309.24	95.00	0.44	-0.42	0.14
	8407.00	90.2200	356.6500	2488.11	-49.51	5738.95	2488.58	3403.24	94.00	0.73	0.72	-0.09
	8501.00	89.7500	357.2400	2581.98	-54.52	5738.98	2582.54	3497.24	94.00	0.80	-0.50	0.63
	8596.00	90.5500	357.3000	2676.87	-59.04	5738.73	2677.52	3592.24	95.00	0.84	0.84	0.06
	8690.00	90.6200	357.9300	2770.78	-62.95	5737.77	2771.50	3686.23	94.00	0.67	0.07	0.67
	8785.00	89.8800	357.8700	2865.72	-66.43	5737.35	2866.49	3781.23	95.00	0.78	-0.78	-0.06
	8879.00	90.8000	357.7400	2959.65	-70.03	5736.80	2960.47	3875.23	94.00	0.99	0.98	-0.14
	8974.00	90.8300	358.3600	3054.58	-73.27	5735.44	3055.46	3970.22	95.00	0.65	0.03	0.65
	9068.00	89.6300	357.8700	3148.53	-76.36	5735.07	3149.45	4064.22	94.00	1.38	-1.28	-0.52
	9162.00	89.1100	357.8500	3242.46	-79.87	5736.10	3243.44	4158.21	94.00	0.55	-0.55	-0.02
	9257.00	90.1800	357.7000	3337.38	-83.56	5736.69	3338.43	4253.21	95.00	1.14	1.13	-0.16
	9351.00	90.6500	358.6200	3431.33	-86.57	5736.01	3432.42	4347.20	94.00	1.10	0.50	0.98
	9446.00	90.5500	359.4900	3526.31	-88.14	5735.01	3527.41	4442.20	95.00	0.92	-0.11	0.92
	9540.00	90.0900	359.6600	3620.31	-88.84	5734.49	3621.40	4536.20	94.00	0.52	-0.49	0.18
	9634.00	89.0500	359.2500	3714.30	-89.73	5735.19	3715.38	4630.19	94.00	1.19	-1.11	-0.44
	9729.00	89.9100	358.5800	3809.28	-91.53	5736.06	3810.37	4725.19	95.00	1.15	0.91	-0.71
Tie	MD ft	Incl deg	Azim deg	North ft	East ft	TVD ft	VS ft	Incr VS ft	Crs Len ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft
	9823.00	89.7800	359.1700	3903.26	-93.38	5736.31	3904.37	4819.19	94.00	0.64	-0.14	0.63
	9918.00	91.2900	358.7100	3998.23	-95.13	5735.42	3999.36	4914.18	95.00	1.66	1.59	-0.48
	10012.00	89.9400	358.3600	4092.19	-97.54	5734.41	4093.36	5008.17	94.00	1.48	-1.44	-0.37
	10106.00	89.5700	358.1700	4186.15	-100.38	5734.82	4187.35	5102.17	94.00	0.44	-0.39	-0.20
	10200.00	91.1700	358.6100	4280.11	-103.02	5734.21	4281.35	5196.17	94.00	1.77	1.70	0.47
	10295.00	91.8500	358.3600	4375.04	-105.53	5731.71	4376.31	5291.13	95.00	0.76	0.72	-0.26
	10337.00	92.5600	358.2100	4416.99	-106.79	5730.09	4418.28	5333.10	42.00	1.73	1.69	-0.36
	Projection to TD: 10396.00	92.5600	358.2100	4475.90	-108.63	5727.45	4477.22	5392.04	59.00	0.00	0.00	0.00