



Realtime Log

Natural Formation Evaluation
Gamma Ray

Scale: 1:240 Measure Depth

Company: Bonanza Creek

Well: State Antelope F-J-30HNB

Field: Weld County

Region: Continental US Country: United States

Status: Final Print

Surface Location: Latitude: 40° 22' 33.312" N Longitude: 104° 22' 13.296" W

API Number: 05-123-37288

Section80 TMW: 5S Range62W

Other Services: Wellbore Survey VSS

Permanent Datum (P.D.): Mean Sea Level Elevation: 4626.00 ft. Elevations: N/A

Log Measured From: Rotary Table 17.00 ft. Above P.D. DFI: 4626.00 ft. GL: 4609.00 ft.

Depth Reference: Driller's Depth

Interval Logged

Top: 5800.0 ft. Date From: 19/Jul/13 Dip Angle: 67.01° Azi Reference North: True

Bottom: 10845.0 ft. Date To: 26/Jul/13 Total Mag to Reference

Spud Date: 19/Jul/13 Field Strength: 52871.7 nT North Correction: 8.39°

Borehole Record

Casing Record

Hole Size	From	To	Size	Weight	From	To
13.500 in.	0.0 ft.	435.0 ft.	9.625 in.	36.00 lb/ft	0.0 ft.	435.0 ft.
8.750 in.	435.0 ft.	6820.0 ft.	7.000 in.	26.00 lb/ft	0.0 ft.	6814.0 ft.
6.125 in.	6820.0 ft.	10845.0 ft.				

Mud Record

Deviation Record

Type	From	To	Hole Size	Interval	Inc / Az (Start)	Inc / Az (End)
Water Based	0.0 ft.	10845.0 ft.	13.500 in.	435.0 ft.	0.0° / 0.0°	0.3° / 159.3°
			8.750 in.	6385.0 ft.	0.3° / 159.3°	86.7° / 181.0°
			6.125 in.	4025.0 ft.	86.7° / 181.0°	91.2° / 179.6°
					/	/
					/	/
					/	/
					/	/

Acquisition System Software Version Other

Advantage 2.20U4 Rig: / Contractor: Cade 22 / Cade Drilling

PATS 6.4.1.34 Job No: 5621986 / D&E

District / Unit: RMD

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Log Run Summary

LWD	BHA	Bit	Bit	Bit	Bit	Assembly	Logged Interval		Bit Depth Interval		Date / Time				Circ.
Run	Run	Run	Size	Type	Gauge	Type	Top	Bottom	From	To	Start		End		Time
No.	No.	No.	(in.)		(in.)		(ft.)	(ft.)	(ft.)	(ft.)					(hrs.)
1	1	1	13.500	PDC	0.330	Steerable	N/A	N/A	0.0	435.0	19/Jul/2013	12:03	19/Jul/2013	14:06	1.5
2	2	2	8.750	PDC	0.330	Steerable	N/A	N/A	435.0	4172.0	20/Jul/2013	08:36	21/Jul/2013	01:21	15.2
3	3	3	8.750	PDC	0.330	Steerable	5800.0	6131.0	4172.0	6173.0	21/Jul/2013	07:43	22/Jul/2013	12:04	25.3
4	4	4	8.750	PDC	0.500	Steerable	6131.0	6782.0	6173.0	6820.0	22/Jul/2013	22:47	23/Jul/2013	13:37	16.9
5	5	5	6.125	PDC	0.600	Steerable	6782.0	10798.0	6820.0	10848.0	25/Jul/2013	00:41	26/Jul/2013	11:02	36.2

Crew

Name	Arrive	Depart	Name	Arrive	Depart	Name	Arrive	Depart
	Wellsite	Wellsite		Wellsite	Wellsite		Wellsite	Wellsite

Brent Cass	22/July/2013	27/July/2013	Edward Aviles	19/July/2013	22/July/2013	Gregory Wheeler Jr.	19/July/2013	27/July/2013
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Mnemonics		
Curve	Description	Units
GRAX	Gamma Ray Apparent, 0.5 ft Avg.	cps
GRIX	Gamma Ray Data Point Indicator	unitless
GRTX	Gamma Ray Time Since Drilled	s
ROP_AVG	Rate of Penetration, 3.0ft Avg.	ft/hr
TCDX	Downhole Temperature	degF
TVD	True Vertical Depth	ft
WOB_AVG	Weight on bit, 3.0 ft Avg.	klbf

Equipment and Service Data						
LWD Run No.	Tool	Serial Number	Measurement	Bit Offset (ft.)	Max O.D. (in.)	Min I.D. (in.)
1	DIR	10359337	Directional	54.65	6.750	3.250
1	SRIG	12554666	Gamma	51.28	6.750	3.250
2	DIR	10359337	Directional	48.63	6.750	3.250
2	SRIG	12554666	Gamma	45.26	6.750	3.250
3	DIR	10359337	Directional	43.62	6.750	3.250
3	SRIG	12554666	Gamma	40.25	6.750	3.250
4	DIR	10359337	Directional	43.56	6.750	3.250
4	SRIG	12554666	Gamma	40.19	6.750	3.250
5	DIR	12366166	Directional	53.44	4.750	0.000
5	SRIG	12131429	Gamma	50.06	4.750	2.560

Service and Tool Mnemonics		
Mnemonic	Name	Description
DIR	Directional	Wellbore directional survey
SRIG	Inclination and Gamma	Probe based gamma ray and inclination module

Comments
<p>1) Baker Hughes run 1 utilized 6 3/4" NaviTrak (Directional) services behind a 13 1/2" bit and steerable motor to drill from 0 to 435 ft. MD (0 to 435 ft. TVD).</p> <p>2) Baker Hughes run 2 utilized 6 3/4" NaviTrak (Directional) services behind an 8 3/4" bit and steerable motor to drill from 435 to 4172 ft. MD (435 to 4137.63 ft. TVD).</p> <p>3) Baker Hughes run 3 utilized 6 3/4" NaviTrak (Directional) services behind an 8 3/4" bit and steerable motor to drill from 4172 to 6173 ft. MD (4137.63 to 6103.12 ft. TVD).</p> <p>4) Baker Hughes run 4 utilized 6 3/4" NaviTrak (Directional) services behind an 8 3/4" bit and steerable motor to drill from 6173 to 6820 ft. MD (6103.12 to 6356.66 ft. TVD).</p> <p>5) Baker Hughes runs 5 utilized 4 3/4" NaviGamma (Directional and Gamma Ray) services behind an 6 1/8" bit and steerable motor to drill the lateral section from 6820 to 10845 ft. MD (6356.66 to 6353.73 ft. TVD).</p> <p>6) A sliding indicator is shown on the left edge of track 1 as a heavy green line. This indicator has been depth shifted to the Gamma Ray sensor offset to correspond with gamma ray data acquired while sliding.</p>

7) Depth measurements were obtained from a depth tracking system not supplied or operated by Baker Hughes. Due to the lack of control by Baker Hughes LWD logging engineers, depth calibrations and measurements could not be independently verified and the unverified depths as supplied to Baker Hughes are being used to present logging data.

Remarks

Number	Measured Depth (ft.)	Hole Section (in.)	LWD Run No.	Remark
1	6150	8.750	3-4	The interval from 6131 to 6173 ft MD (6066.82 to 6103.12 ft TVD) contains was logged up to 10 hours after being drilled due to TOOH to change out BHA.
2	6800	8.750	4-5	The interval from 6782 to 6820 ft MD (6354.81 to 6356.66 ft TVD) contains was logged up to 35 hours after being drilled due to casing operations.
3	10840	6.125	5	The interval from 10798 to 10845 ft MD (6354.81 to 6353.73 ft TVD) contains no logging data due to sensor to bit offset at the end of the run.



Company : Bonanza Creek

Well : State Antelope F-J-30HNB

Interval : 5780.00 - 10890.00 feet

Created : 26/Jul/2013 1:07:16 PM

Gamma Ray Apparent 0.5 ft Avg GRAX

0 150

API

True Vertical Depth TVD

6400 6100

ft

MD feet 1:240

Gamma Time Since Drilled GRTX

0 600

min

Rate of Penetration 3.0 ft Avg ROPA

500 0

ft/hr

Surface Weight On Bit 1.0 ft Avg WOBA

0 100

klbf

Downhole Temperature TCDX

0 250

degF

GRSI

GRAX

GRIX

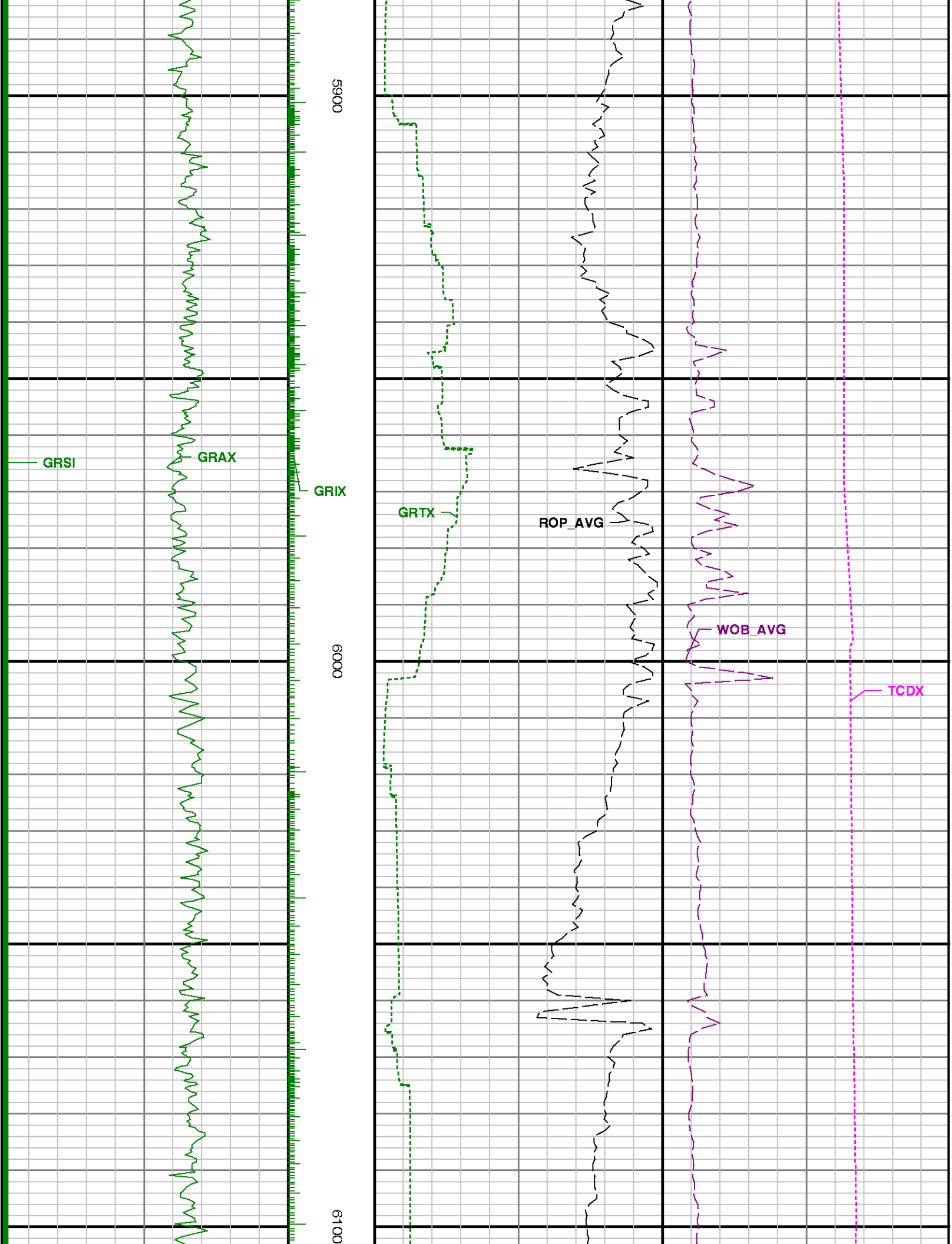
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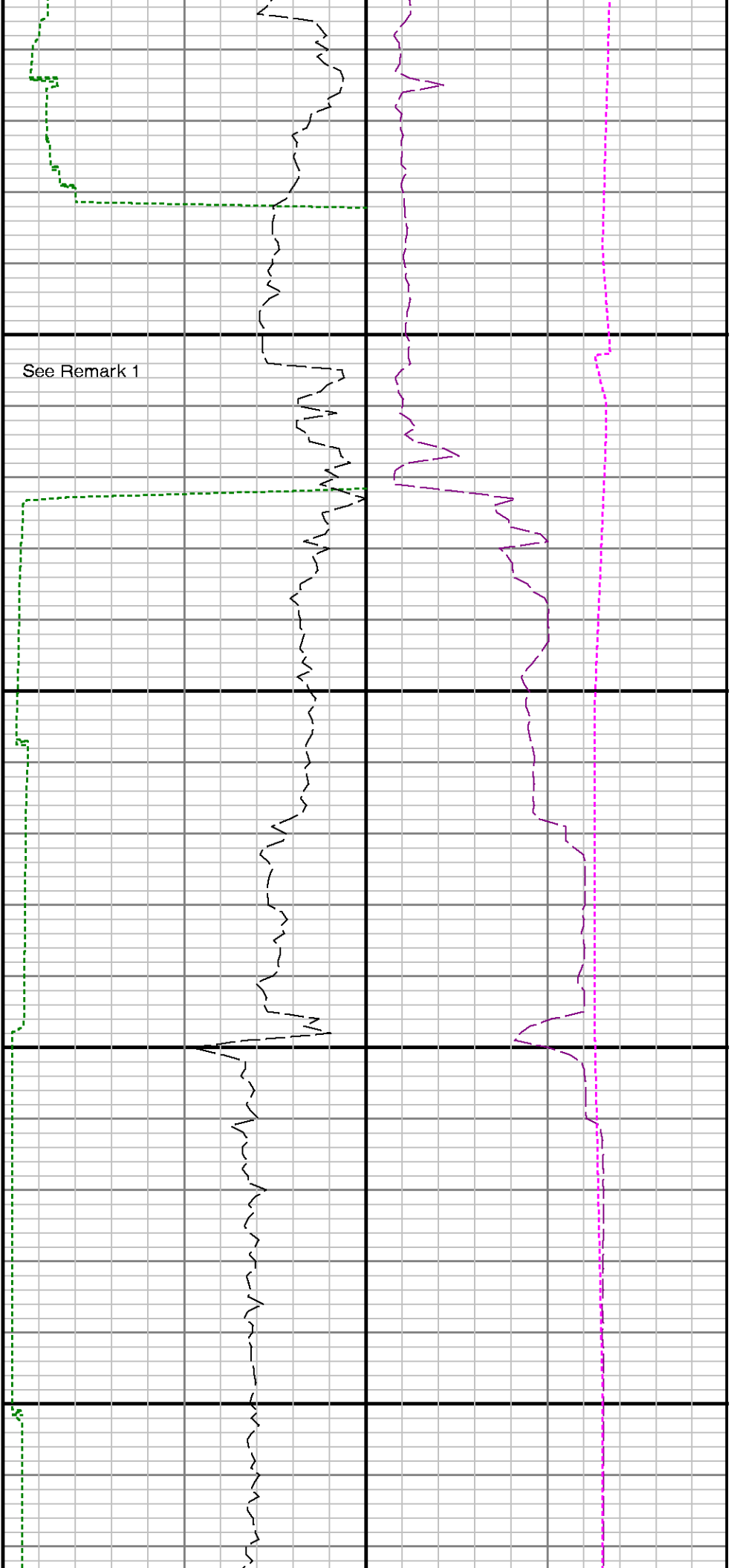
GRTX

ROP_AVG

WOB_AVG

TCDX



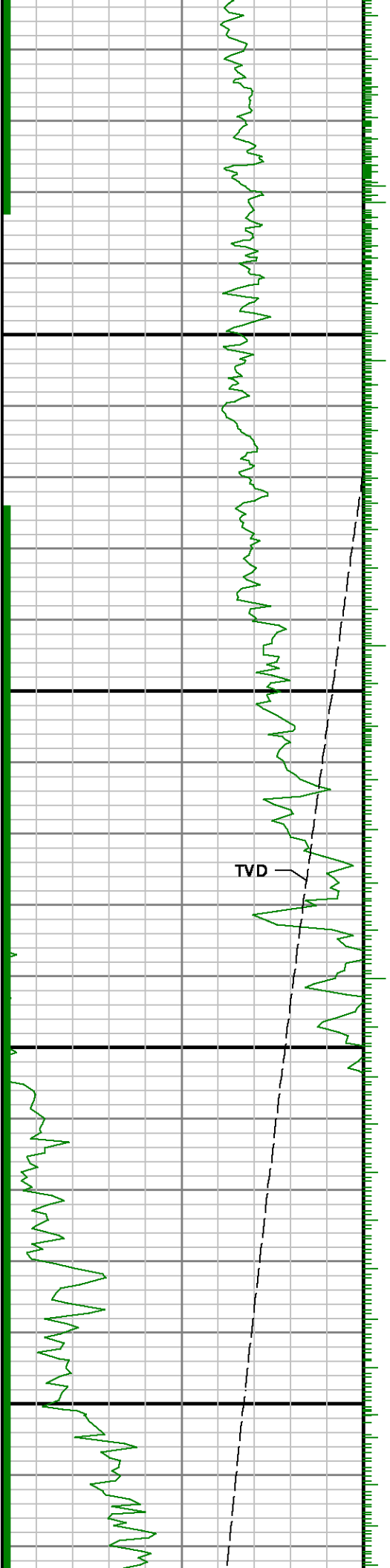


See Remark 1

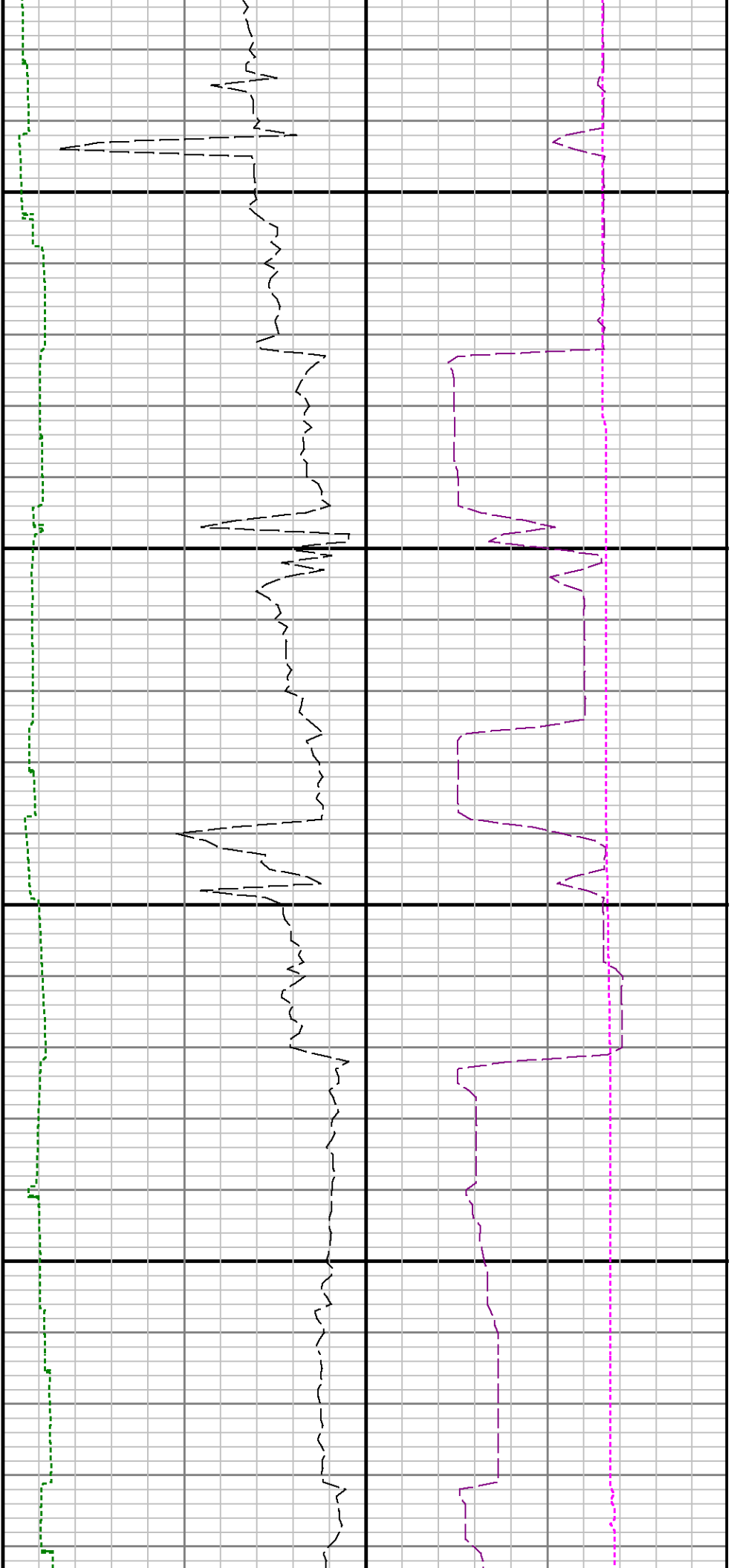
Run 3 <> Run 4

6200

6300

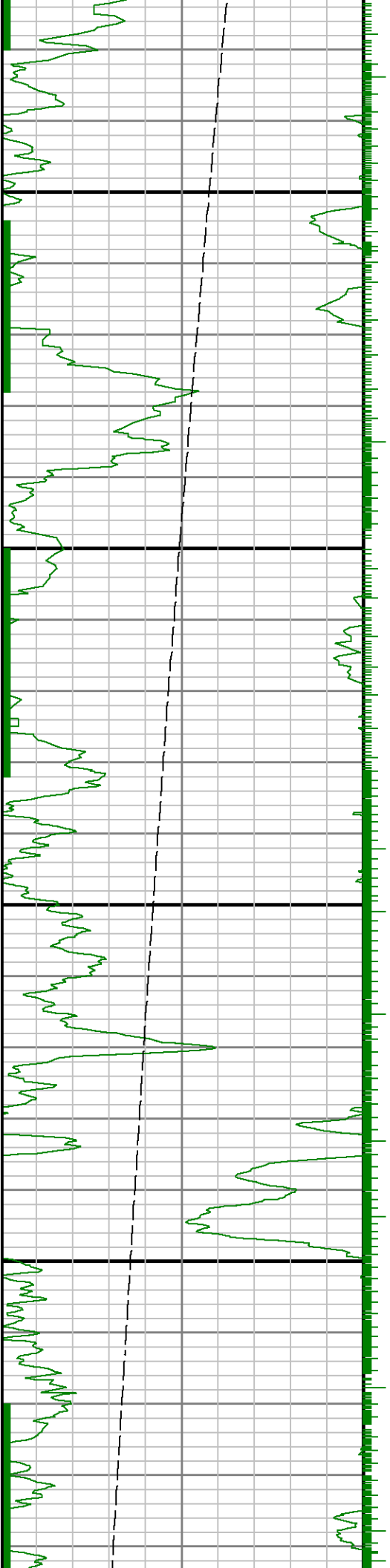


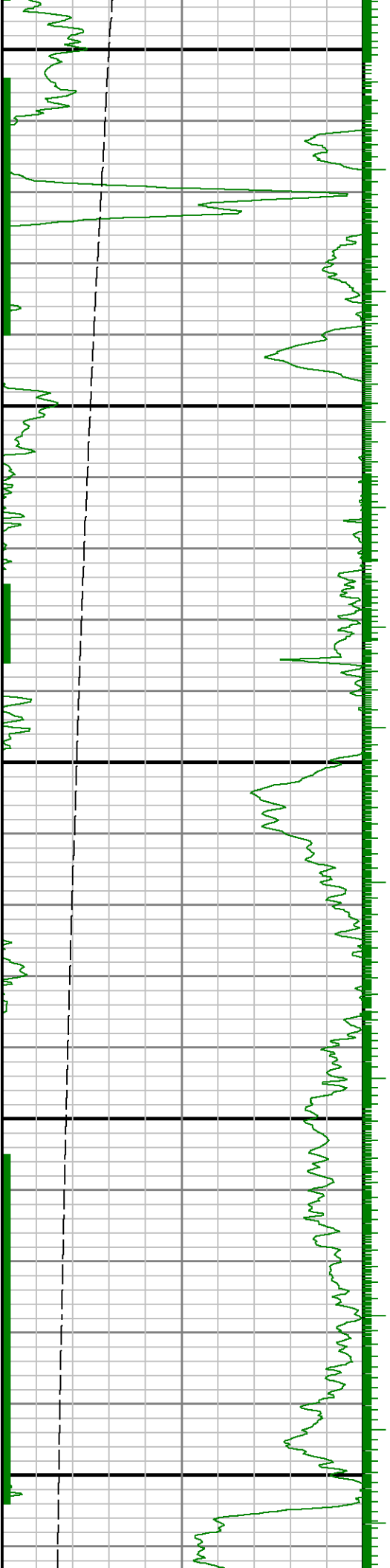
TVD



6400

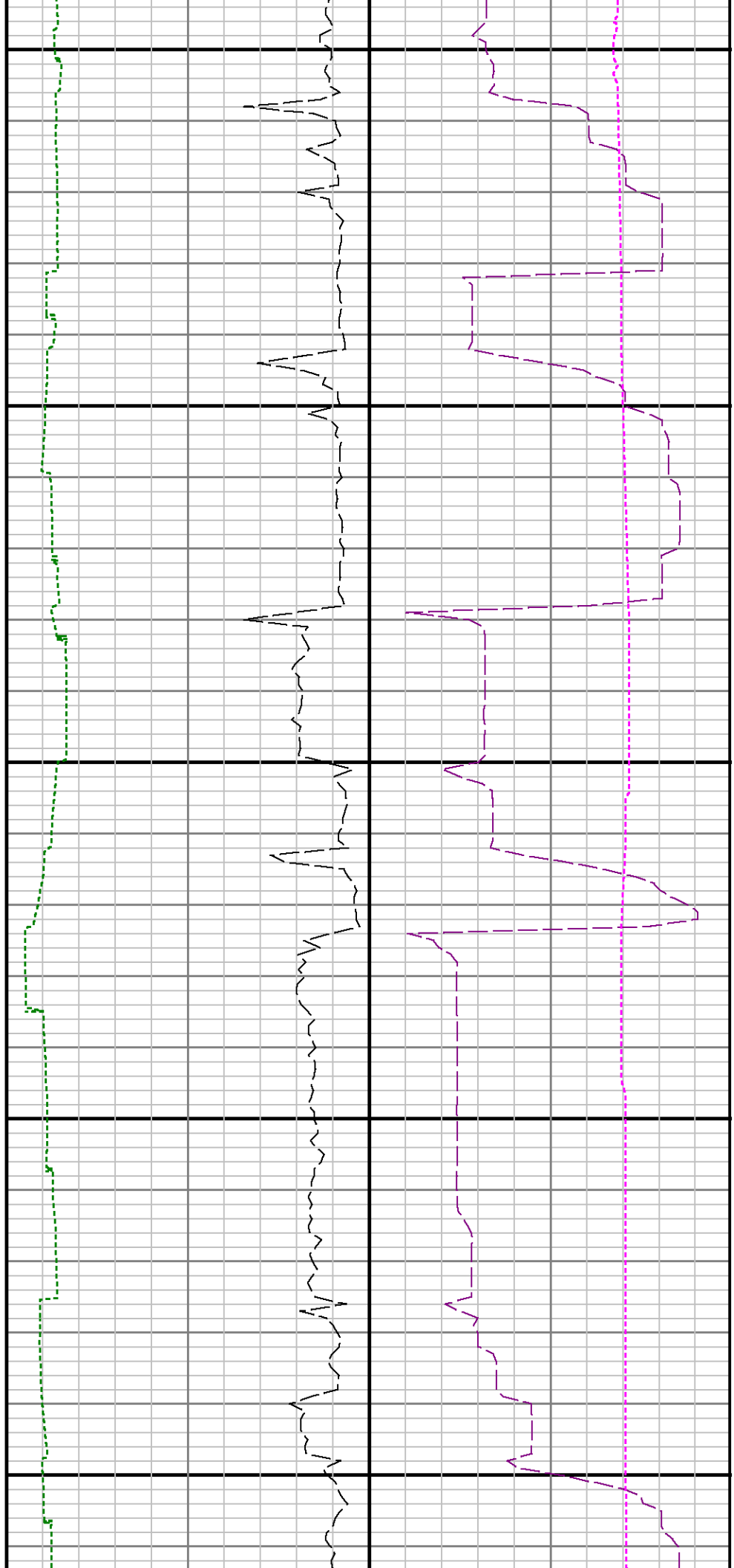
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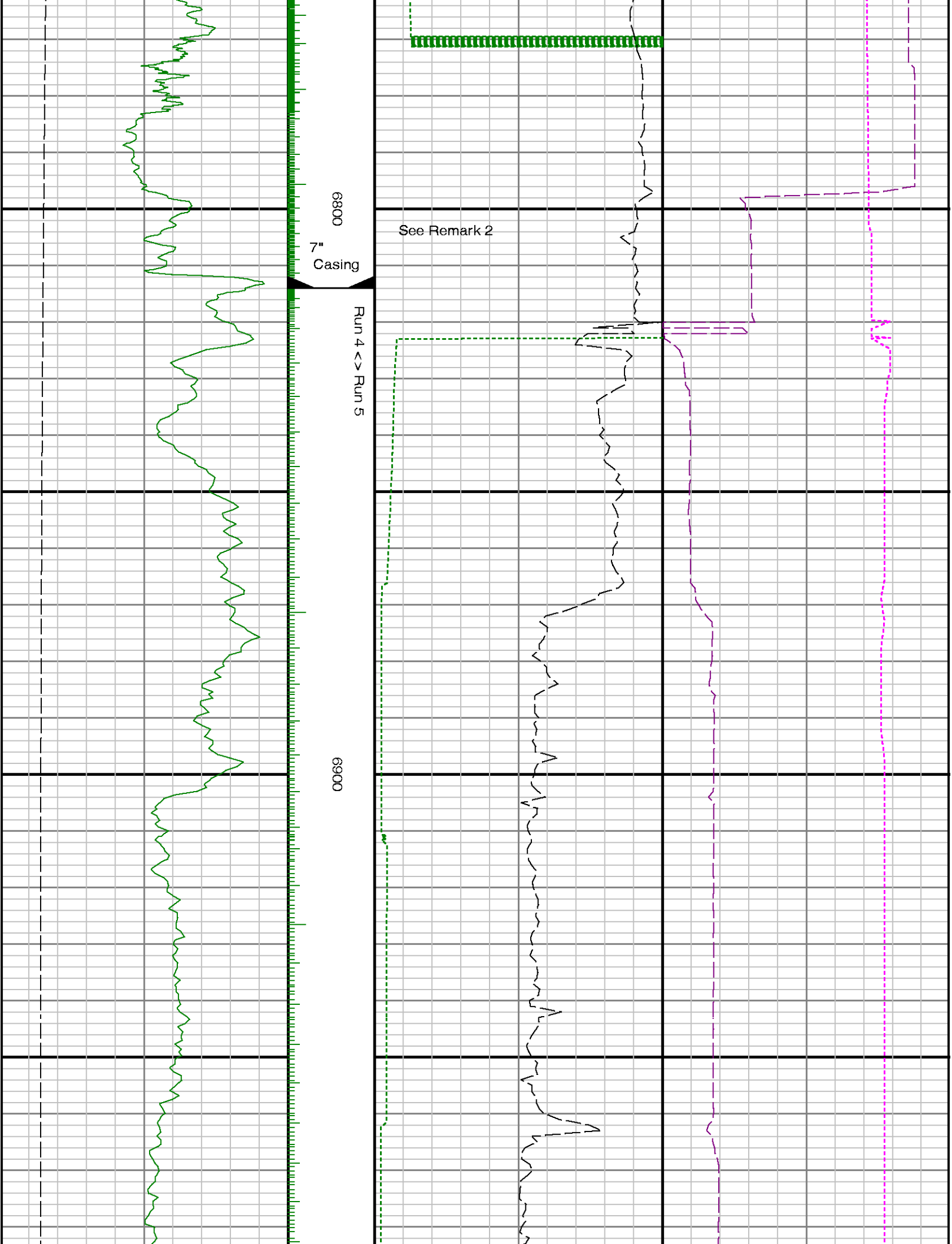


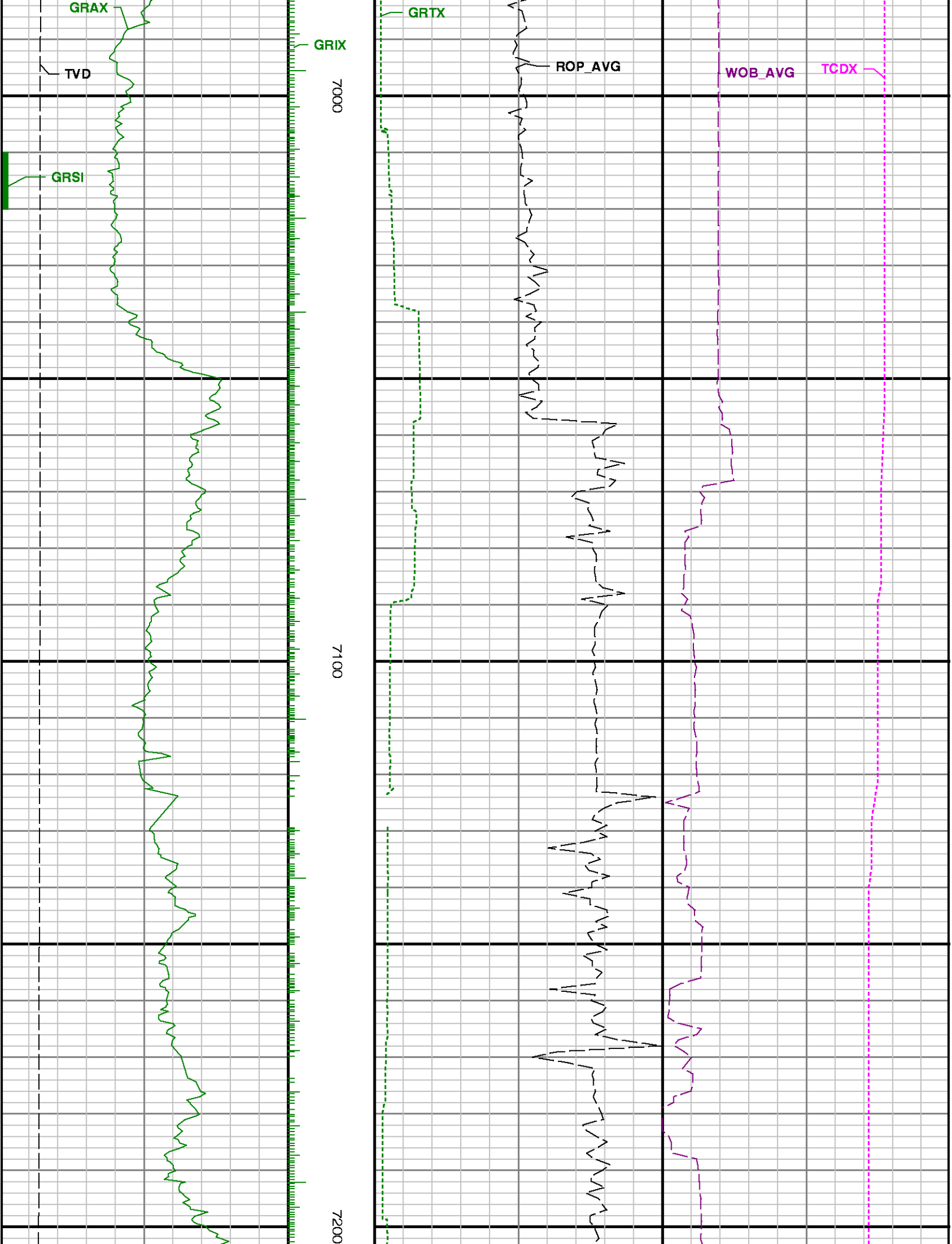


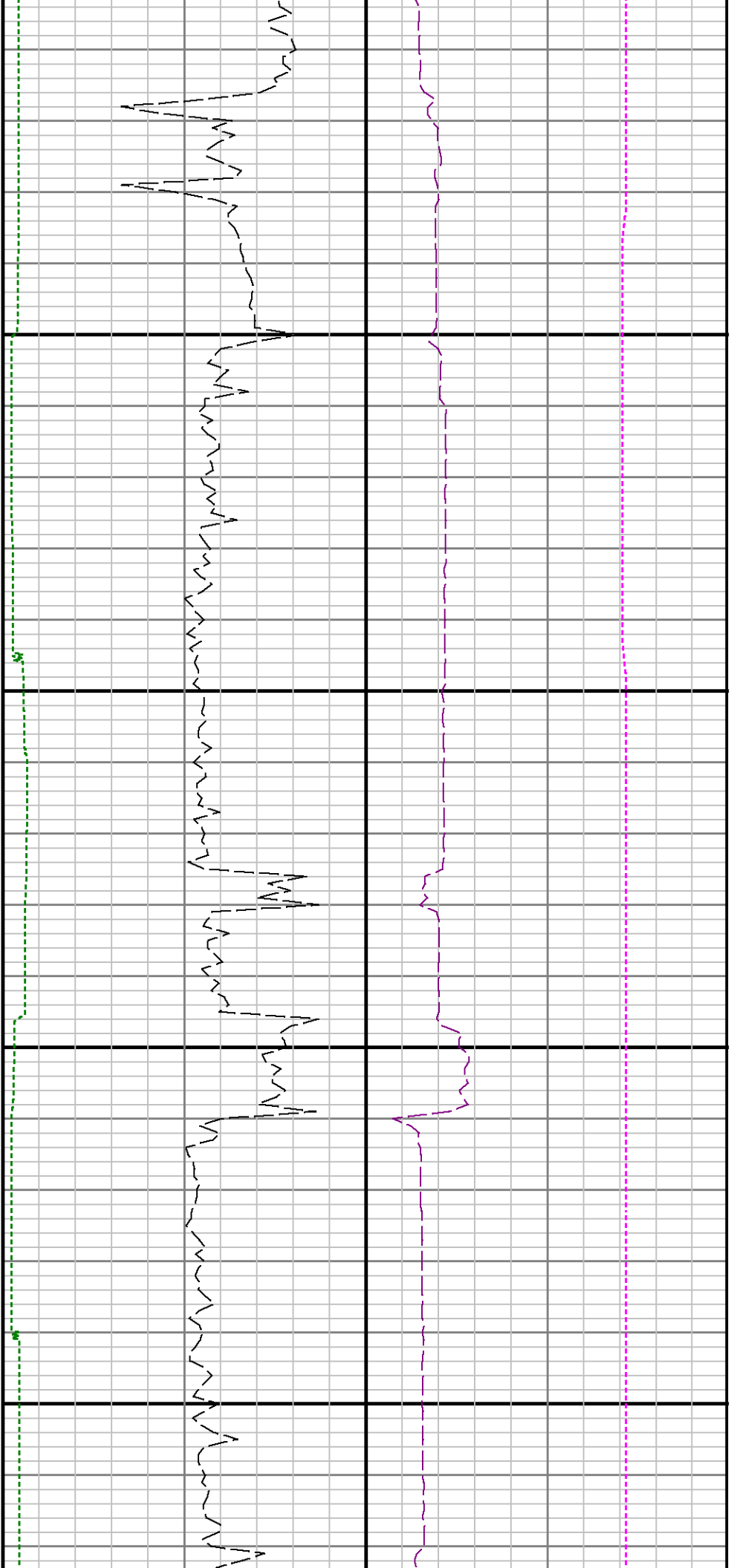
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6700



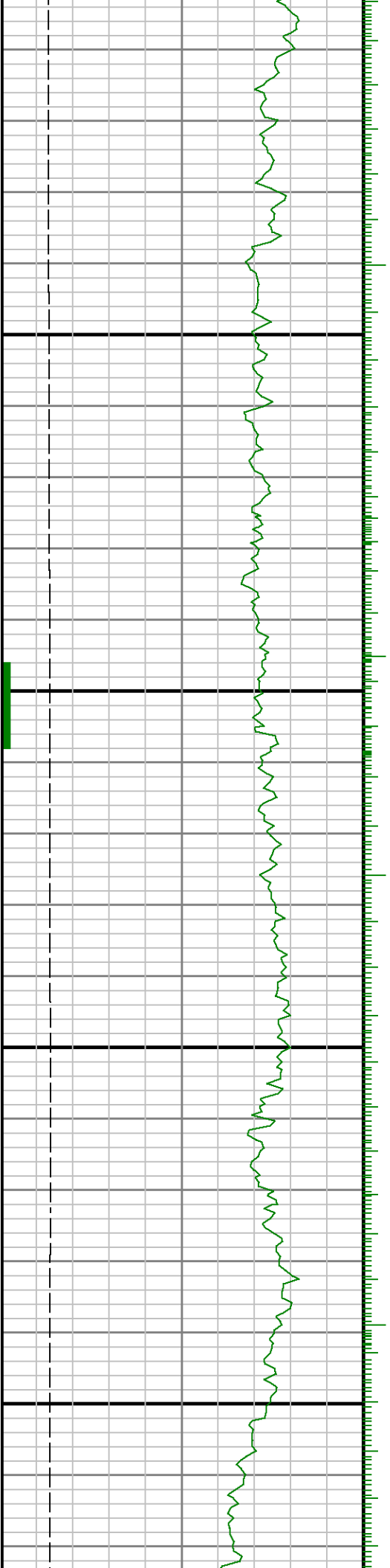


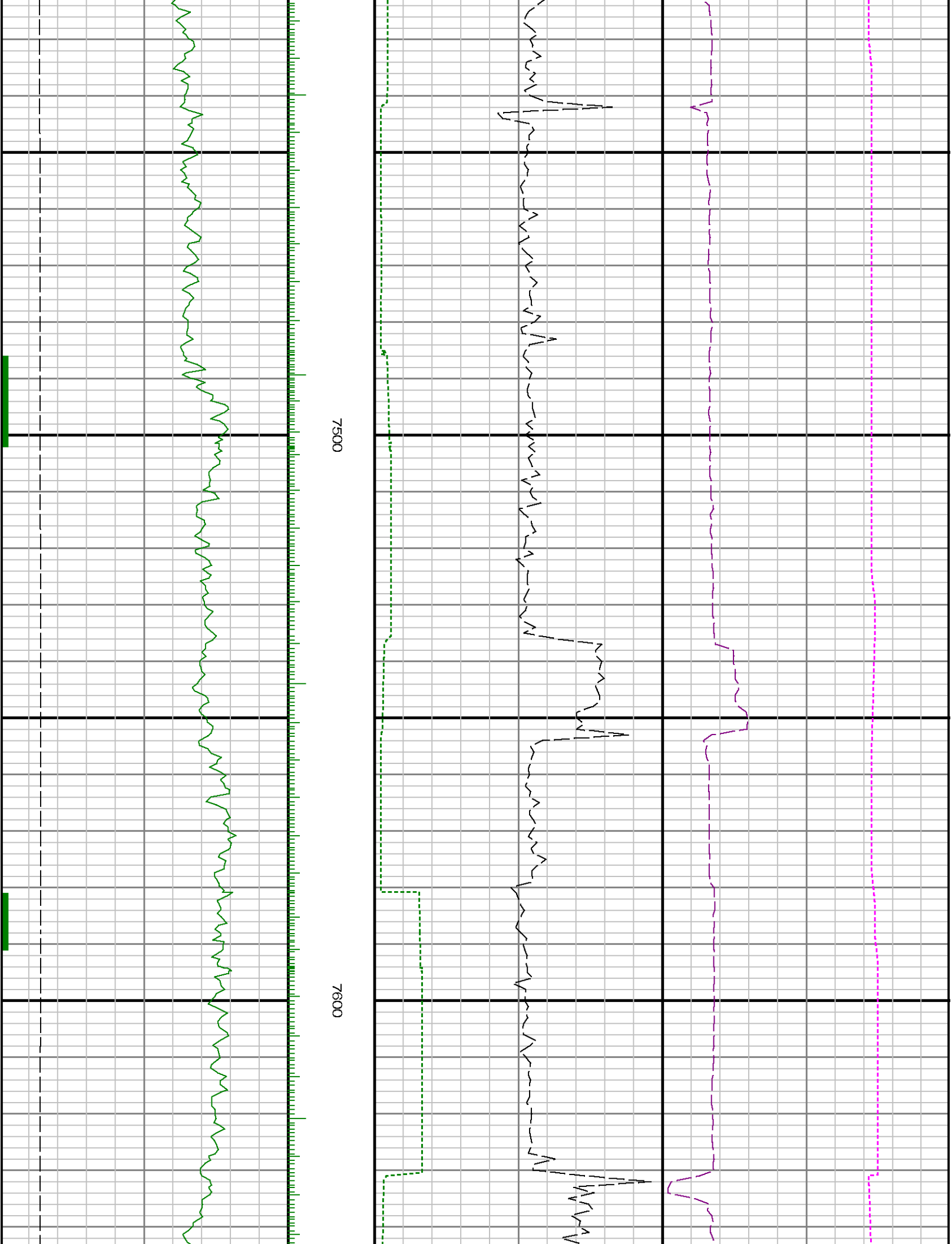


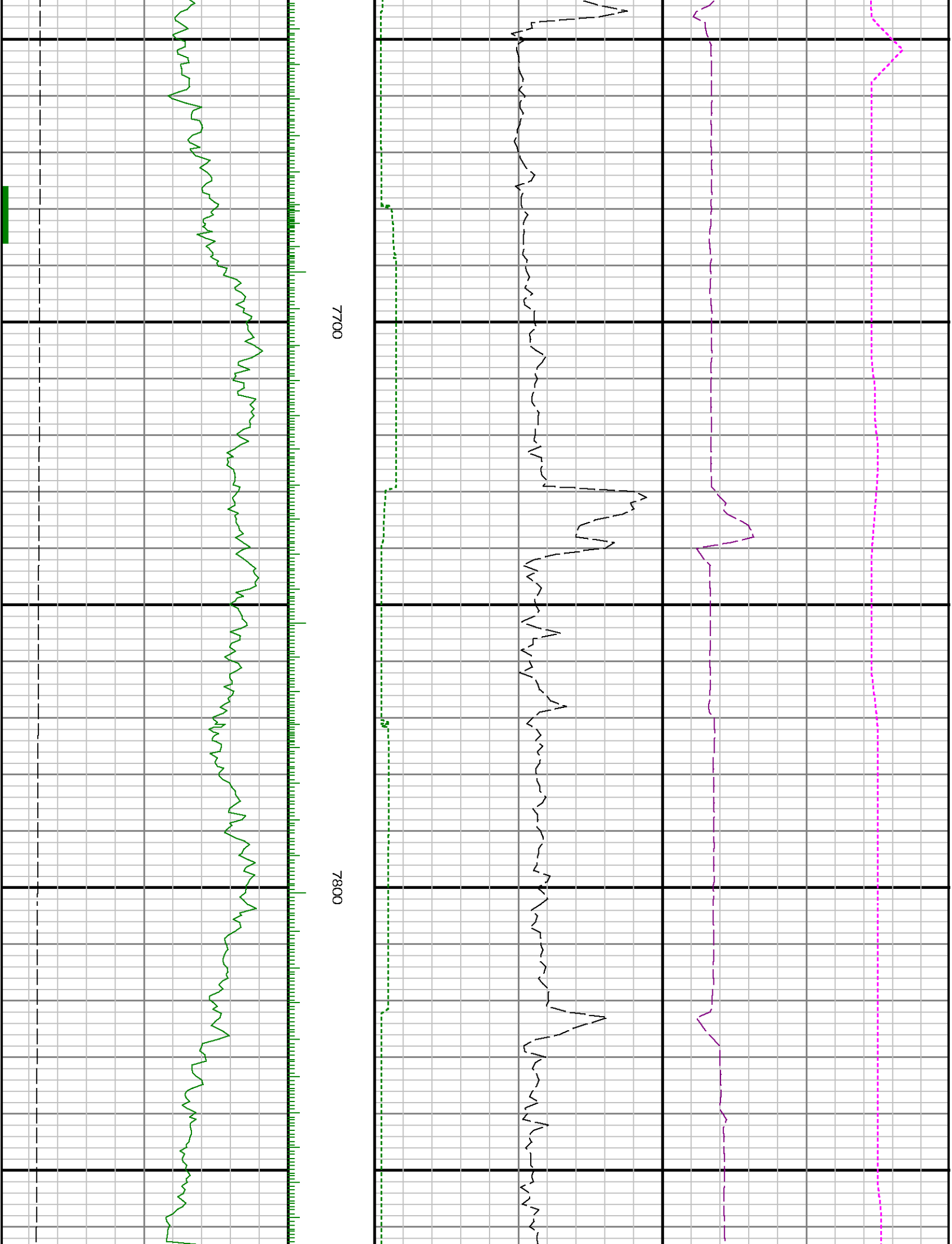


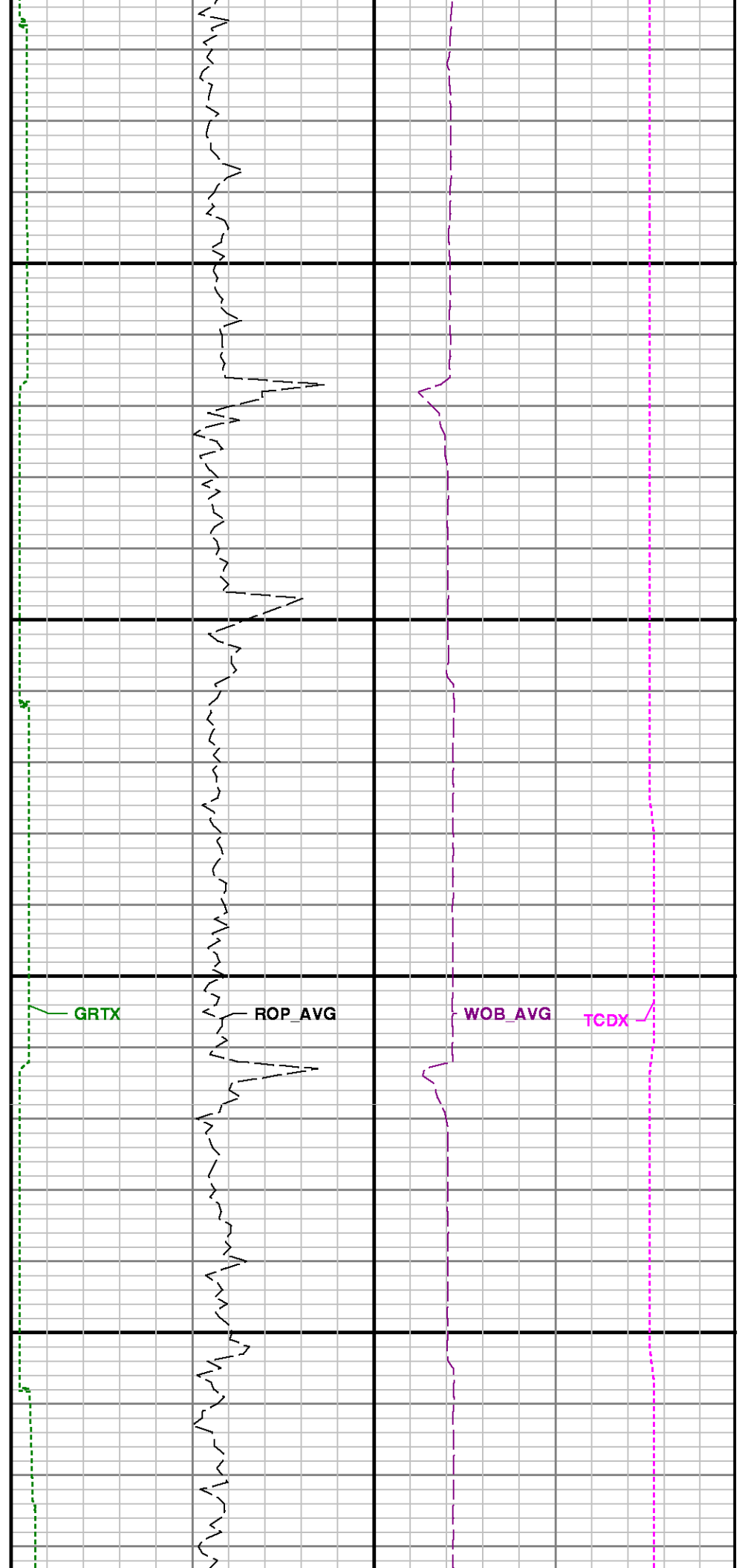
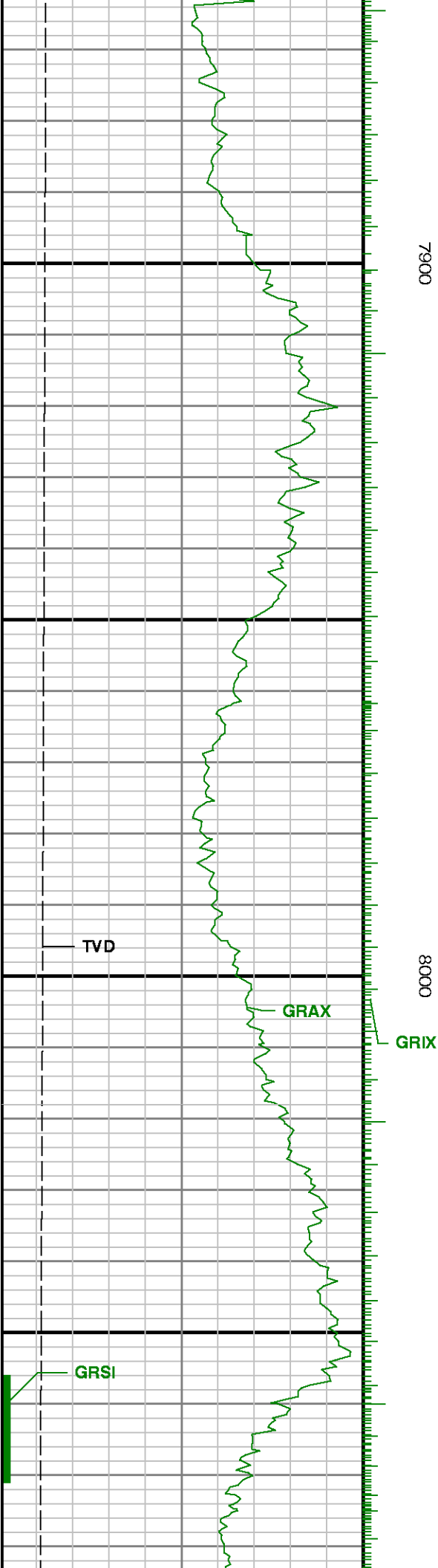
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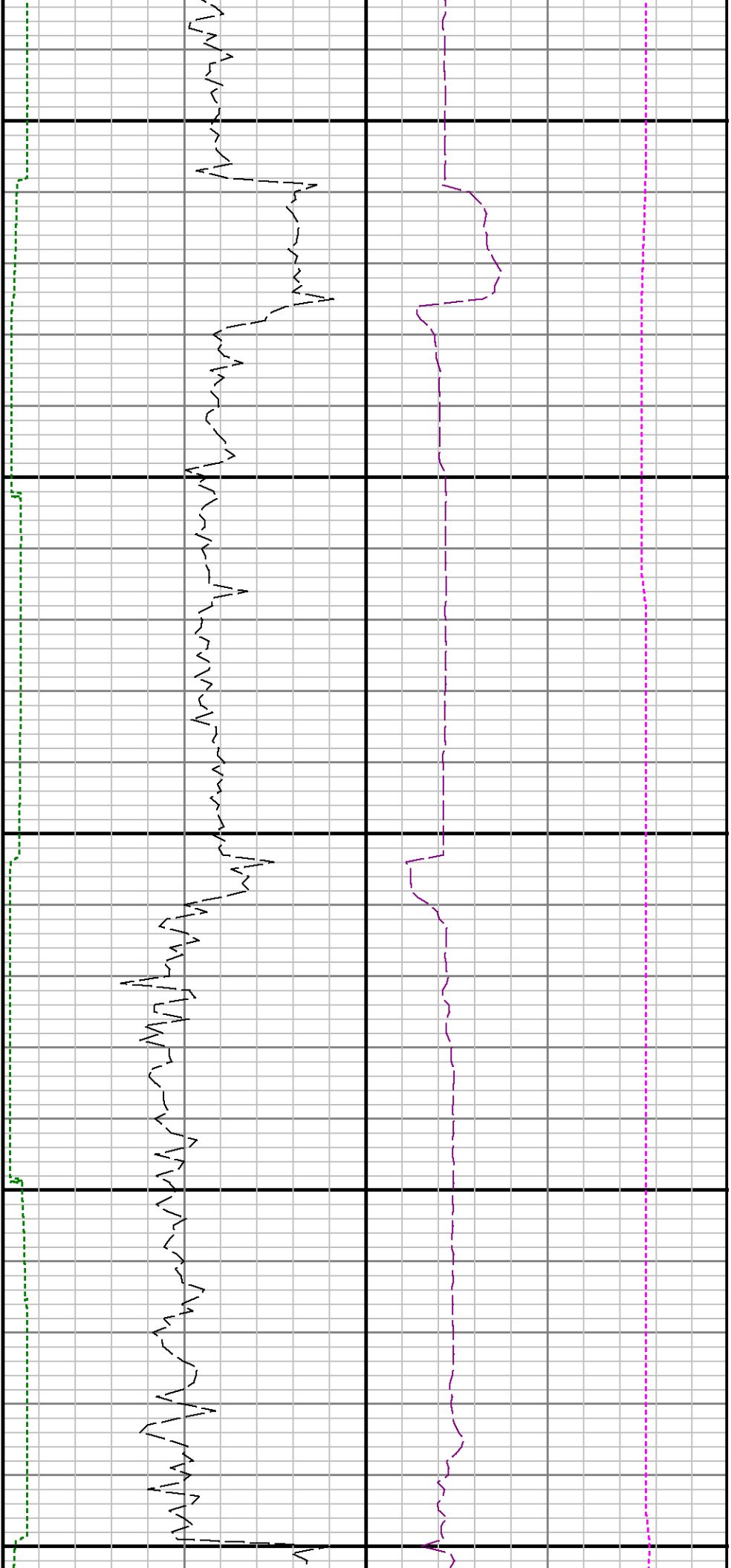
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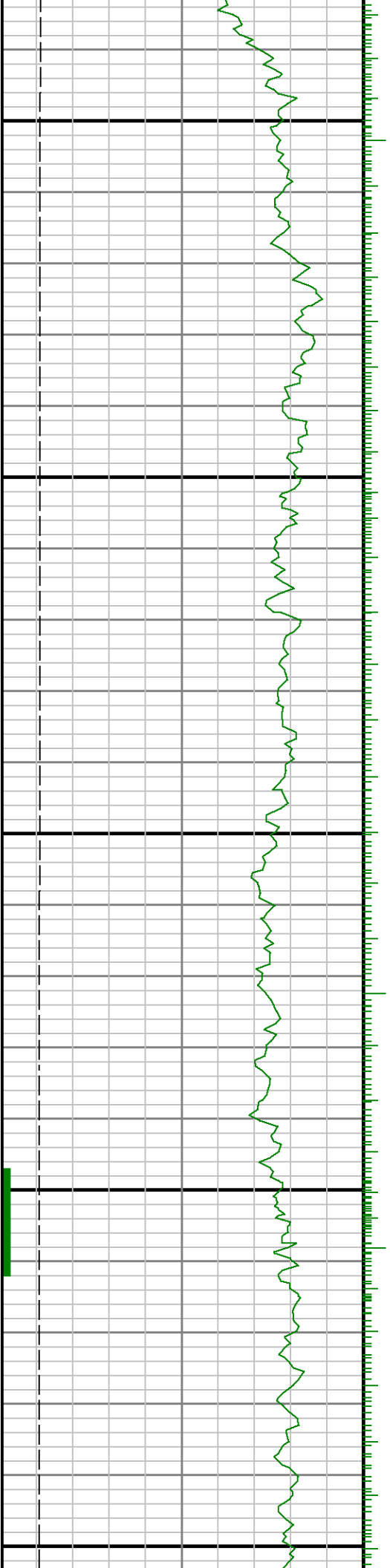


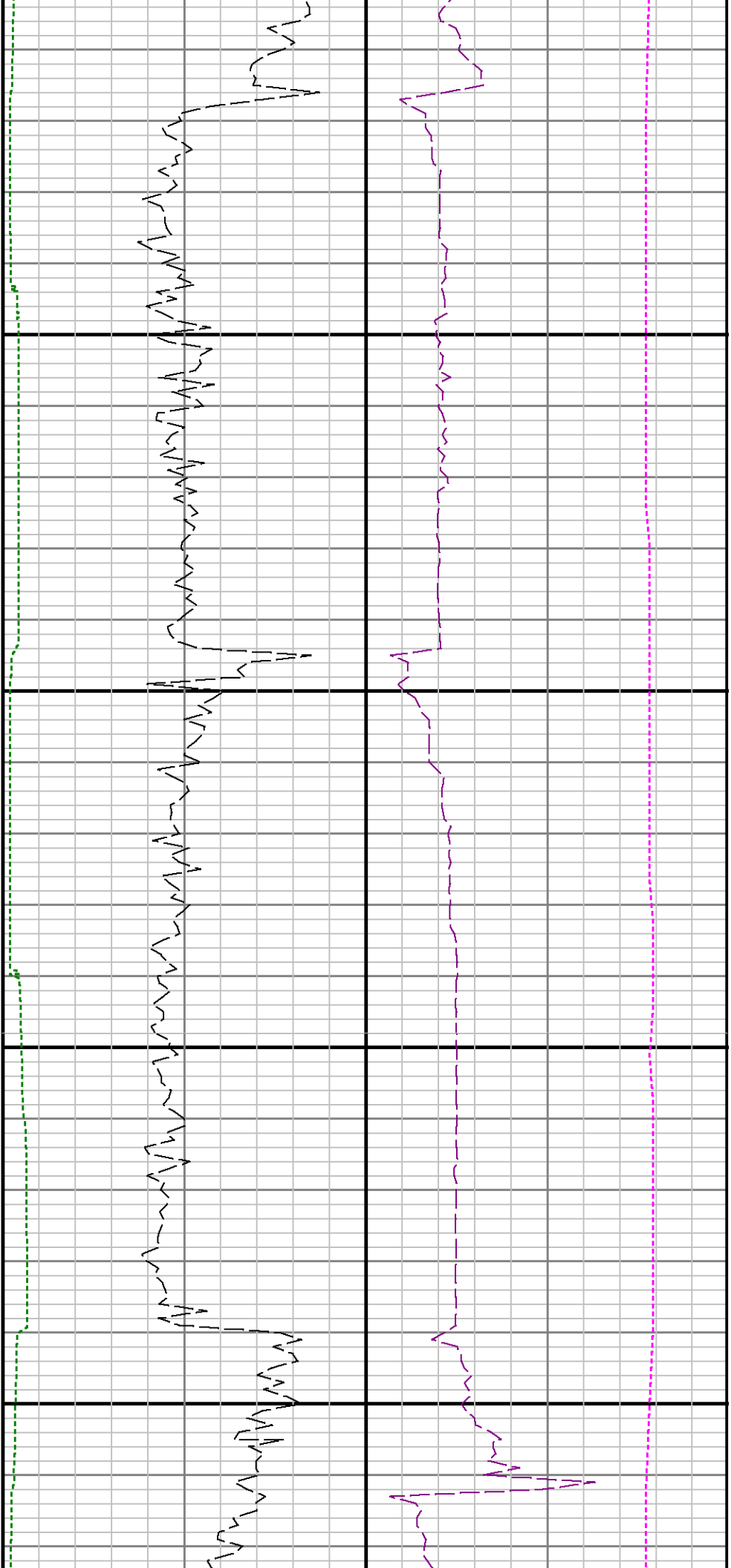


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8200

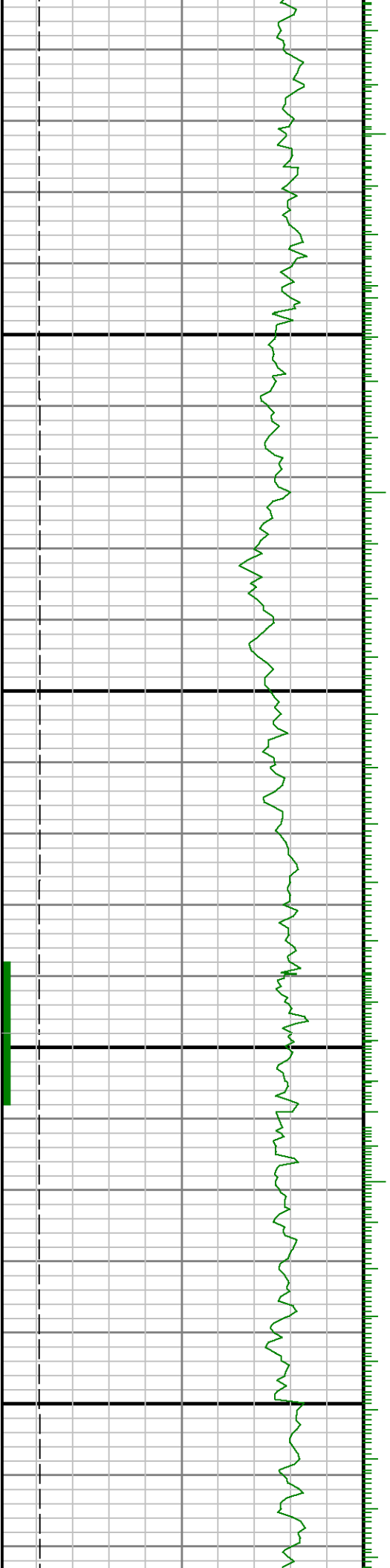
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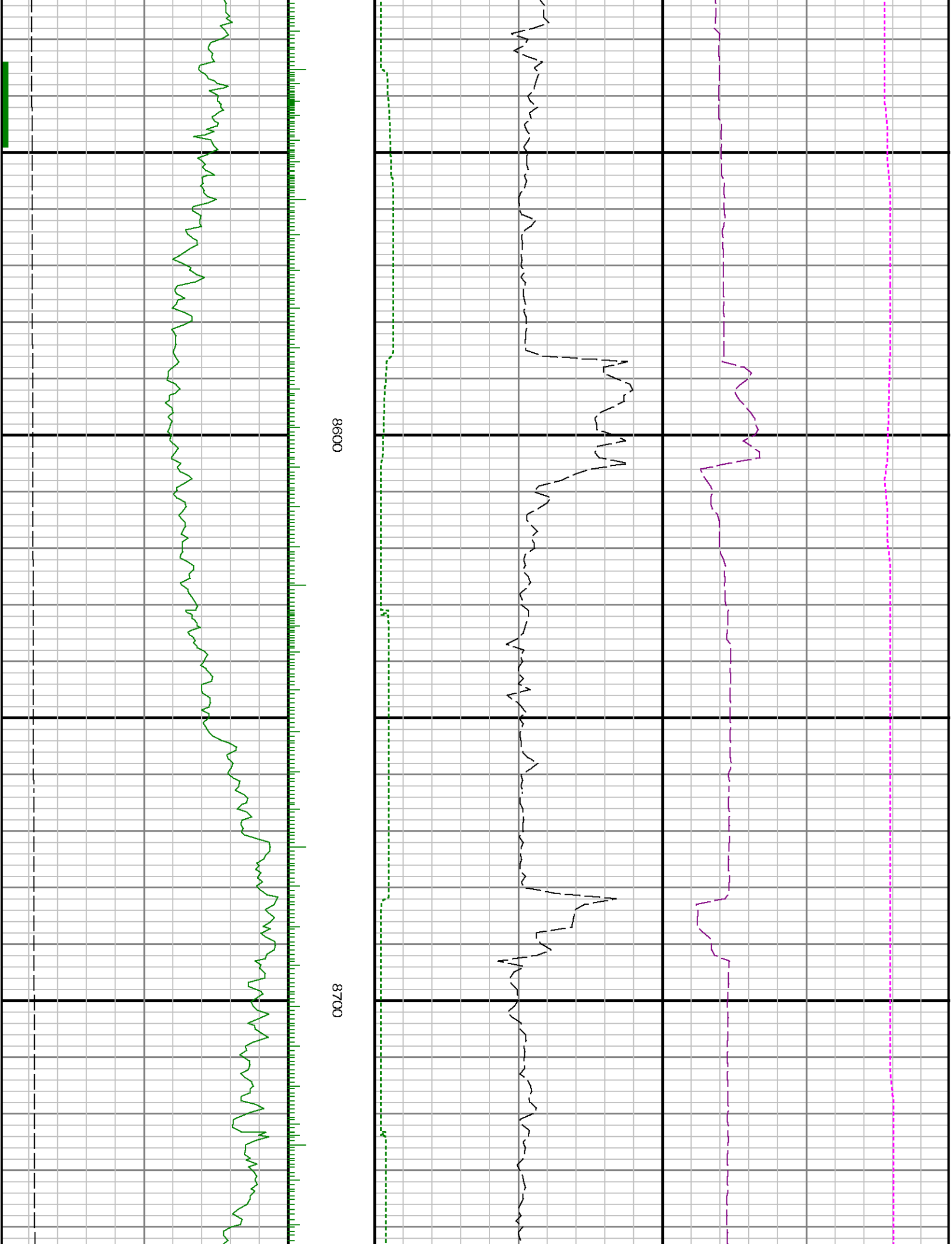


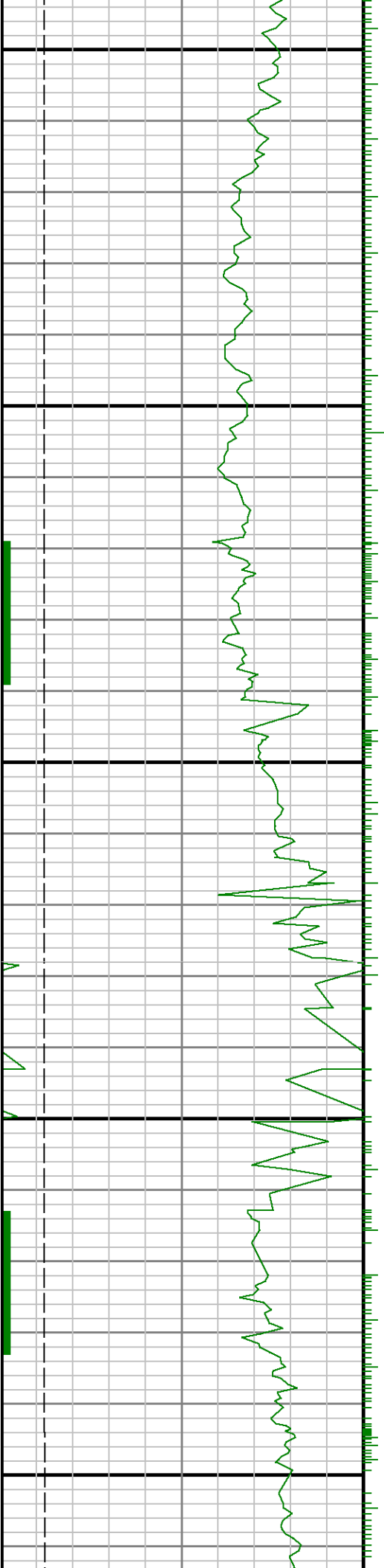


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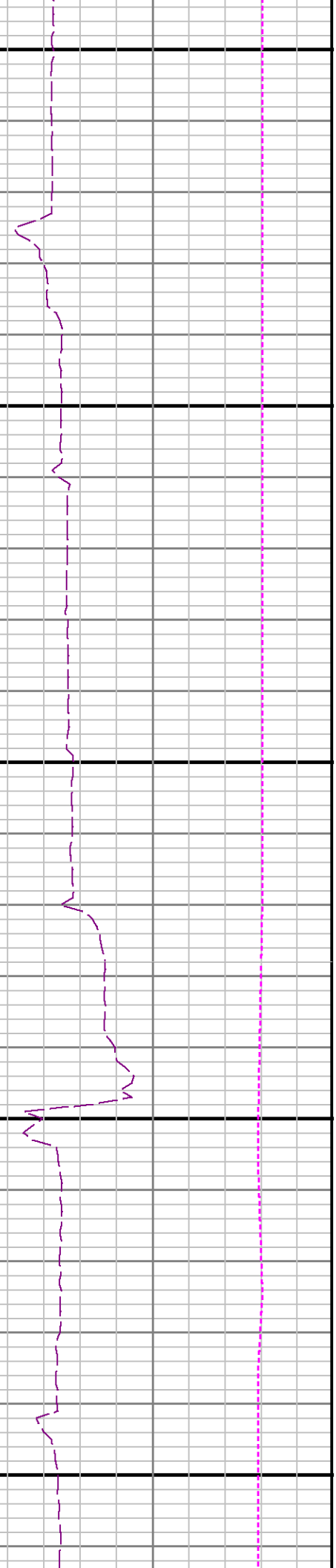
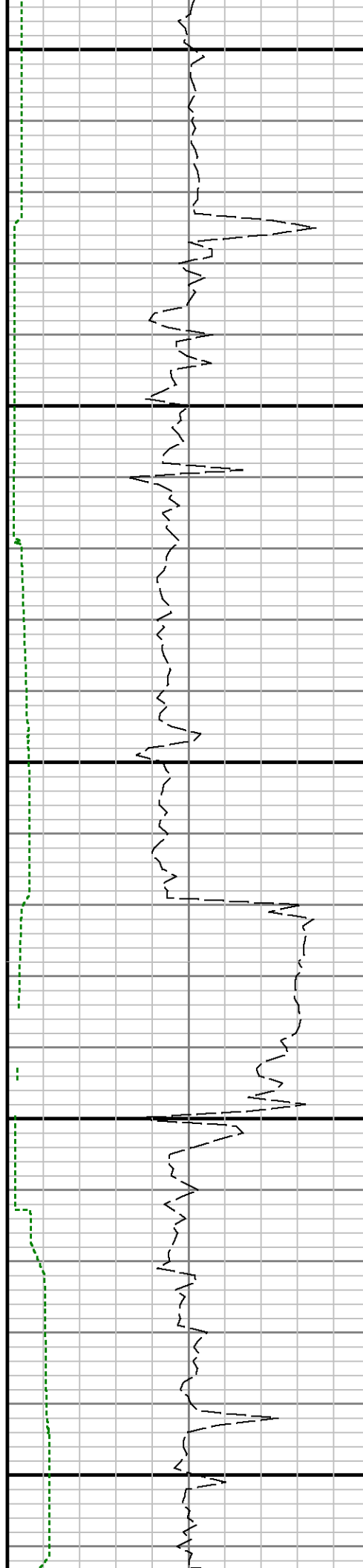


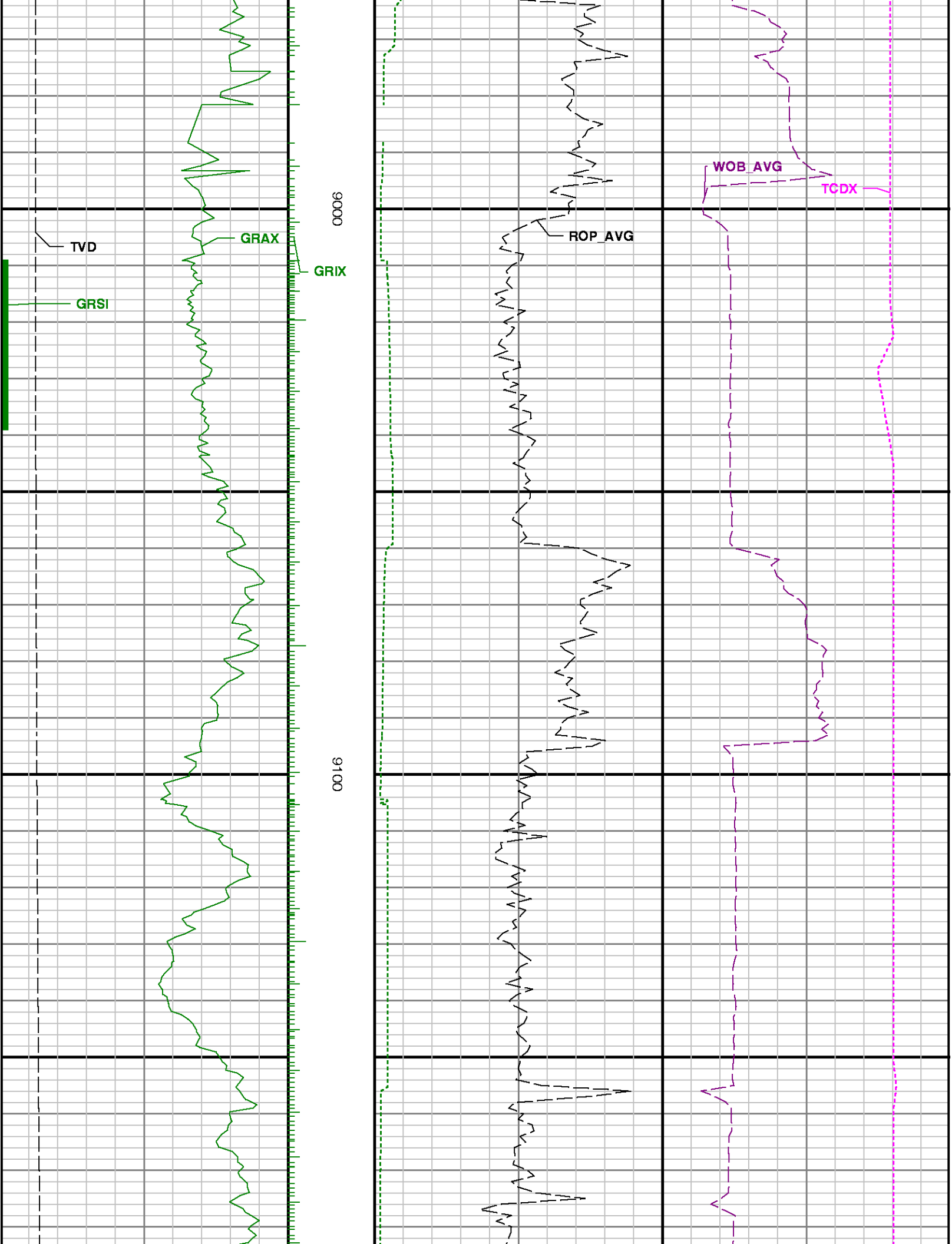


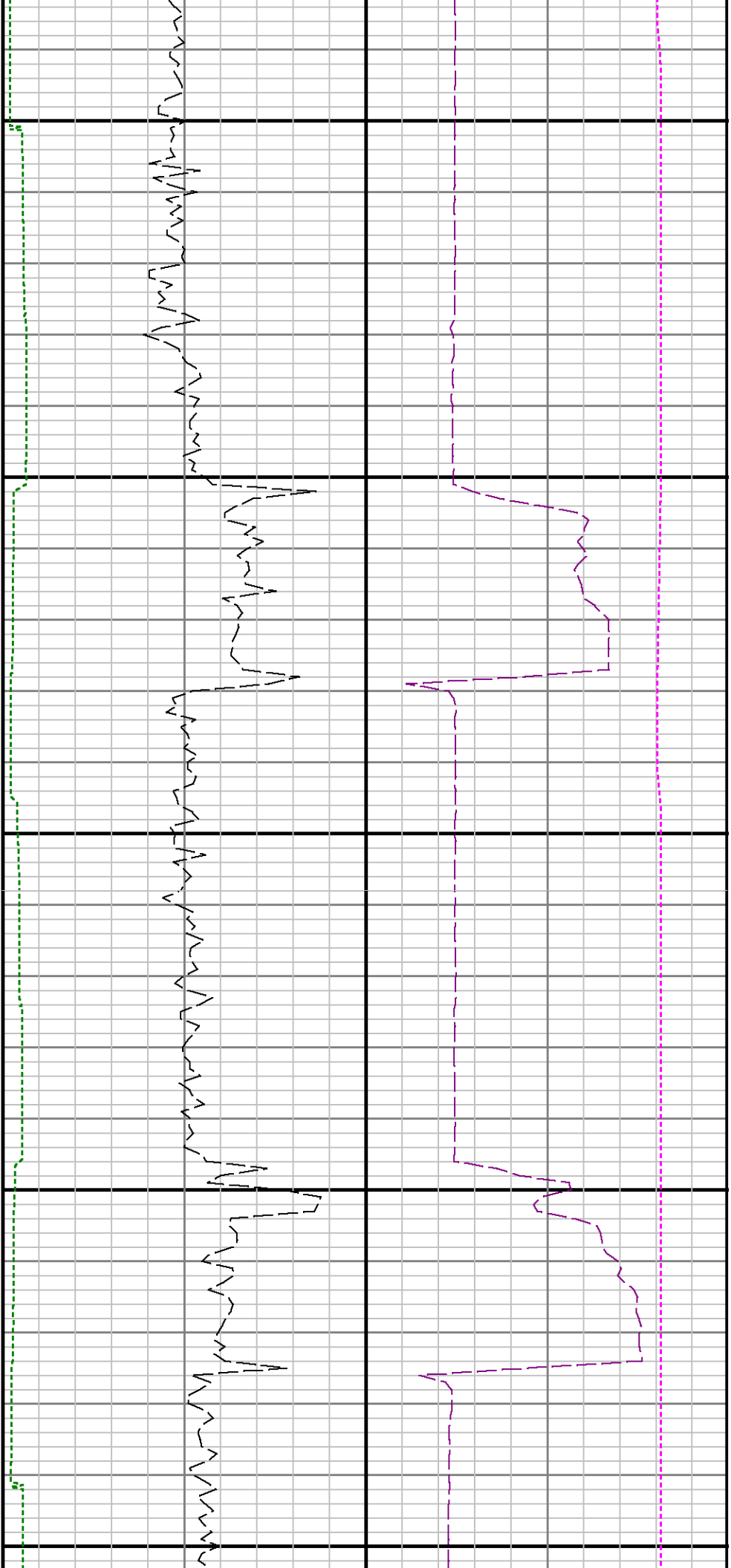


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8900



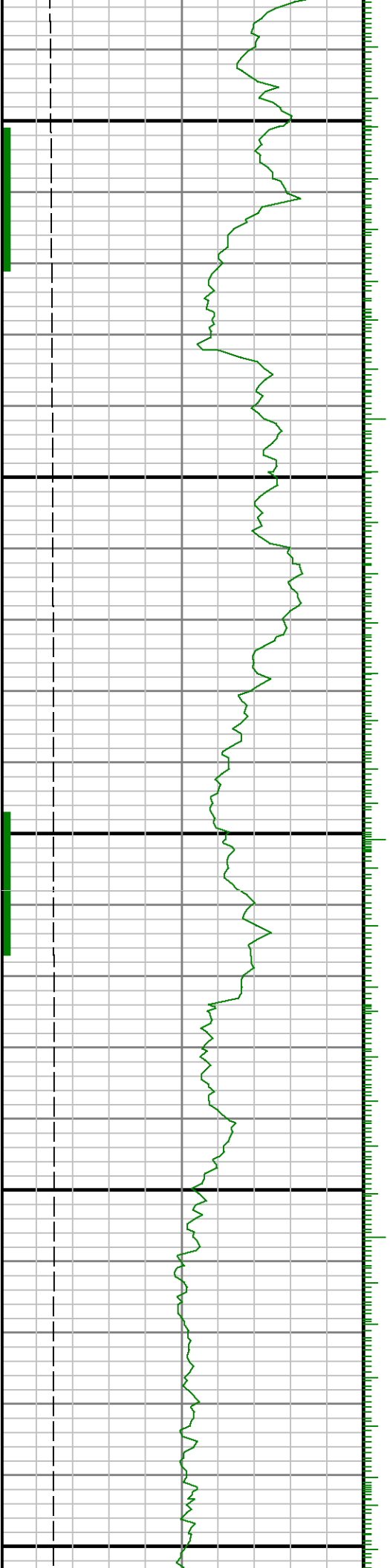


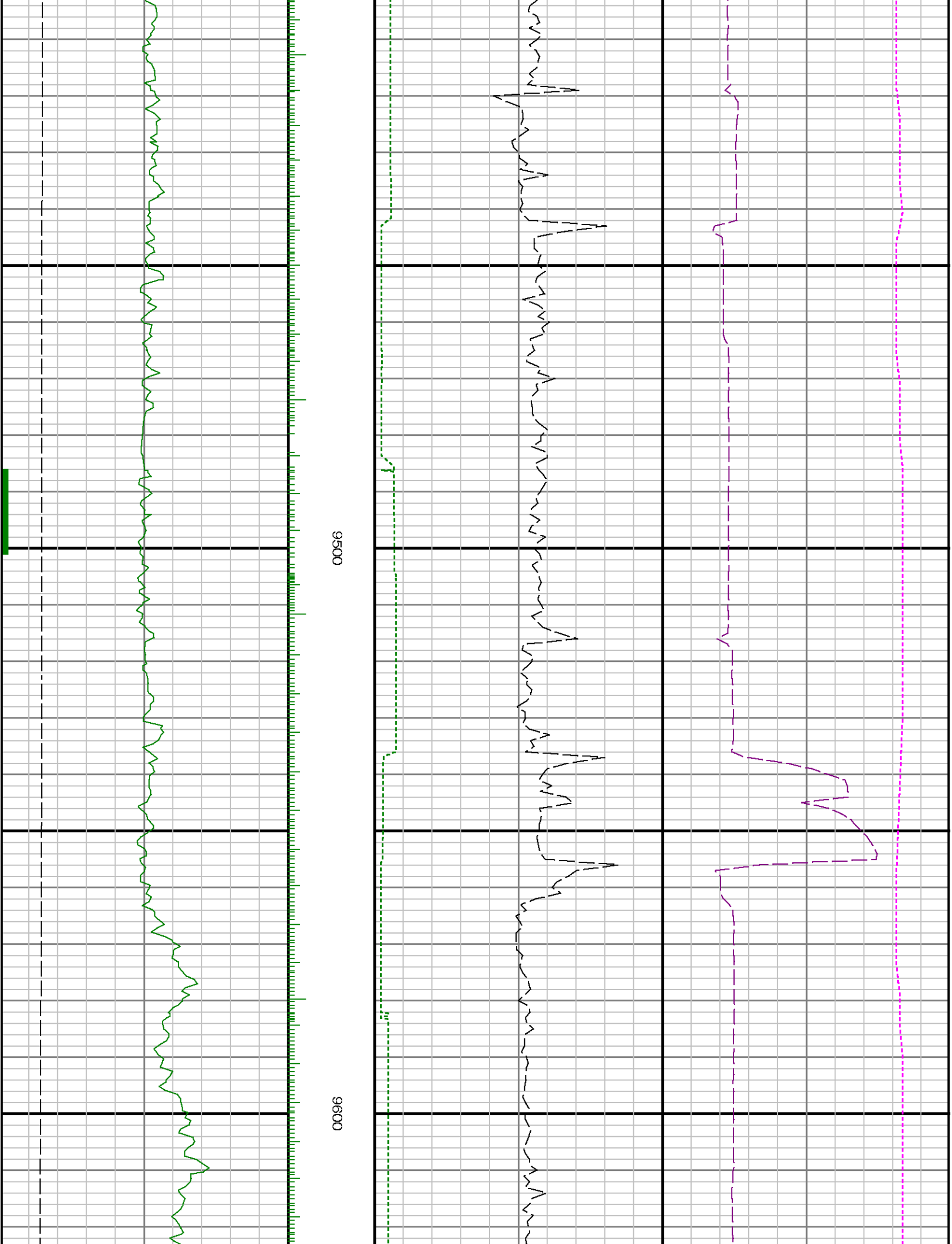


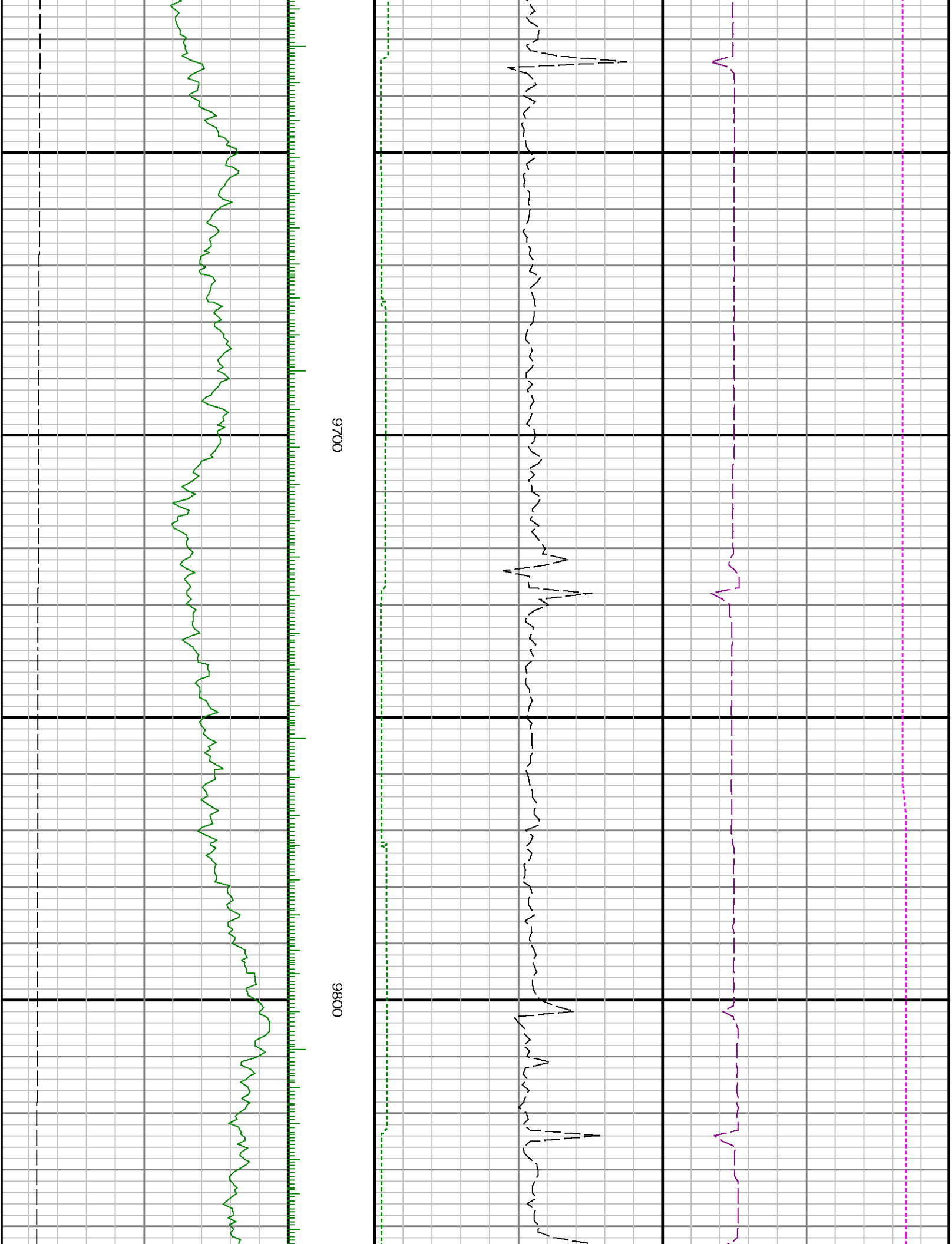
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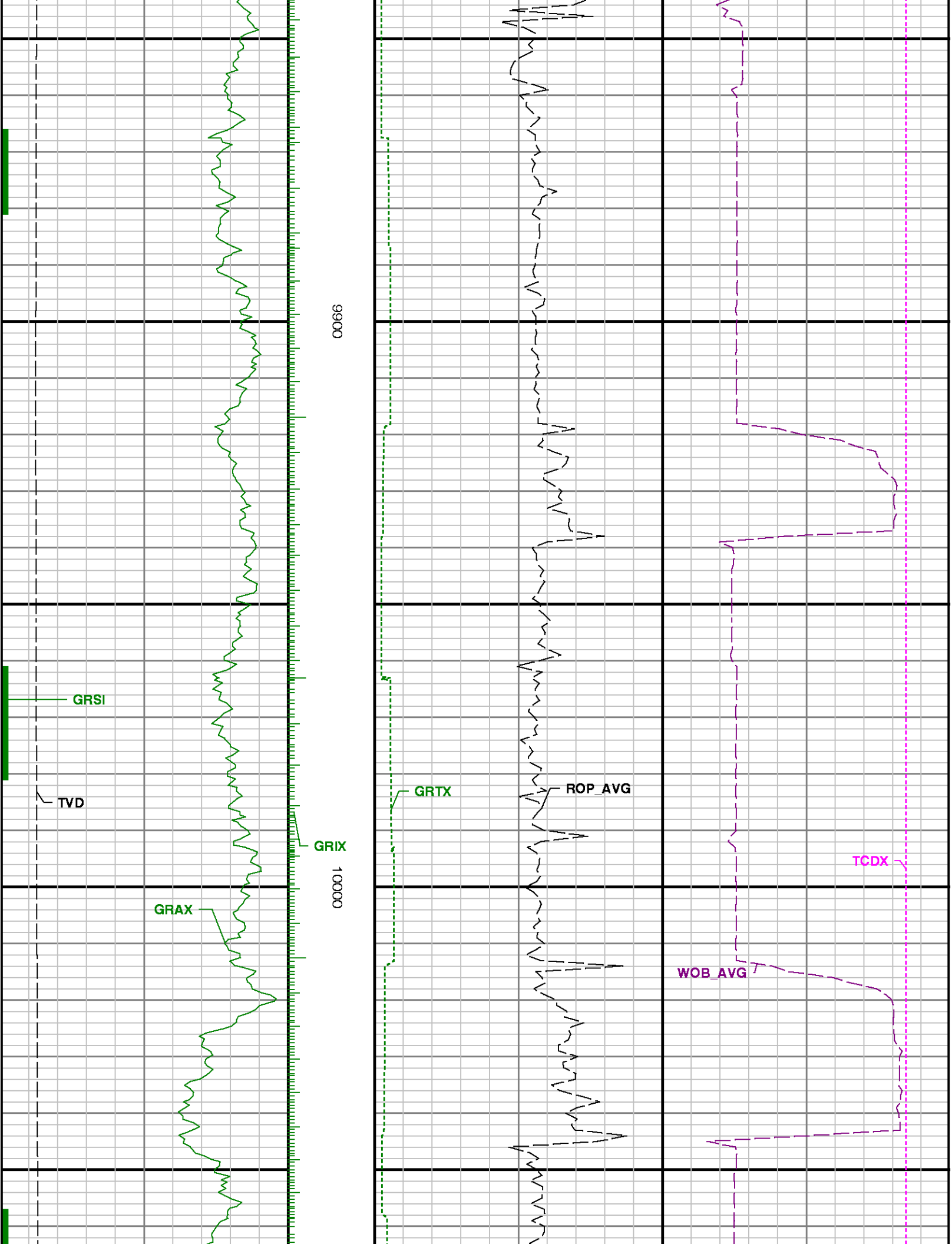
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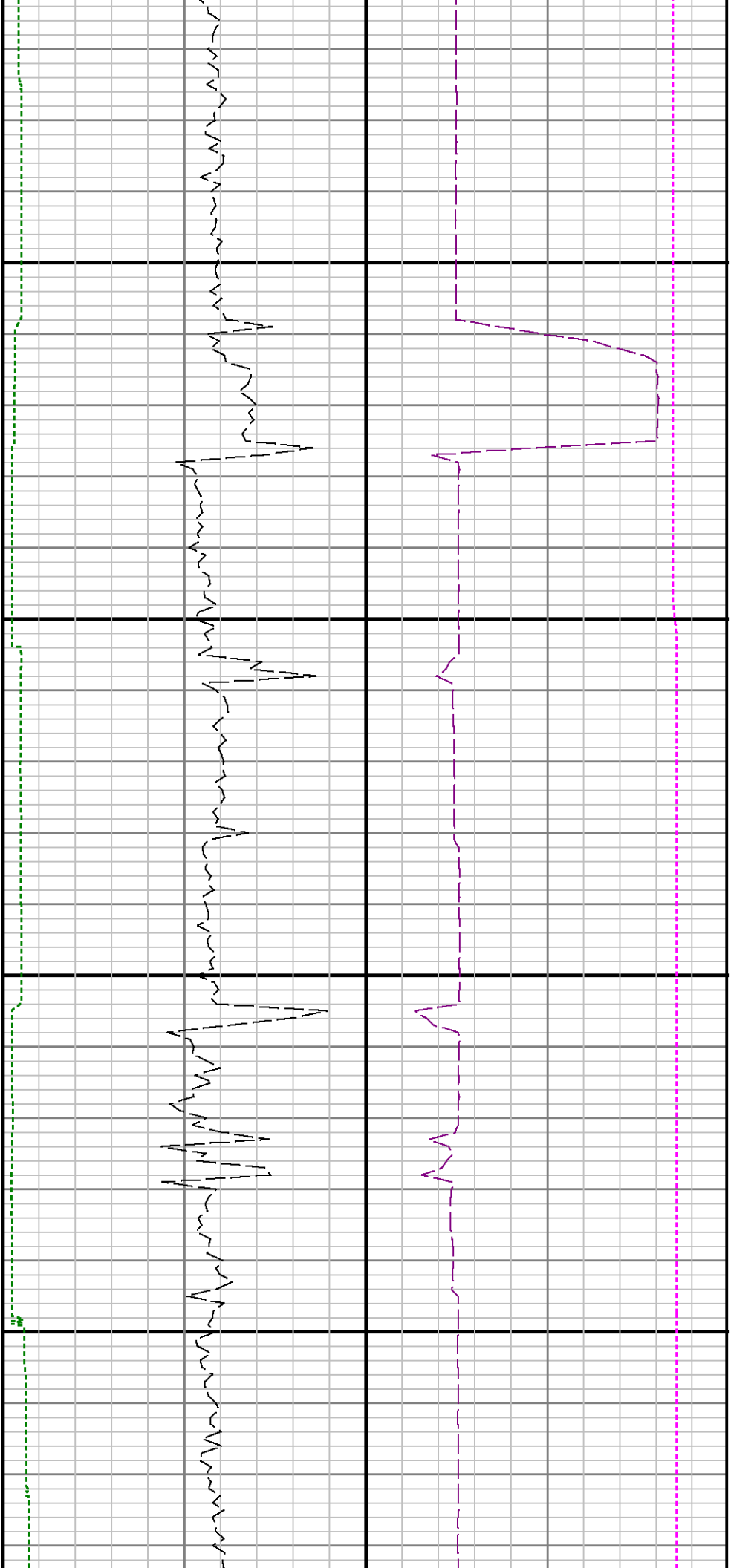
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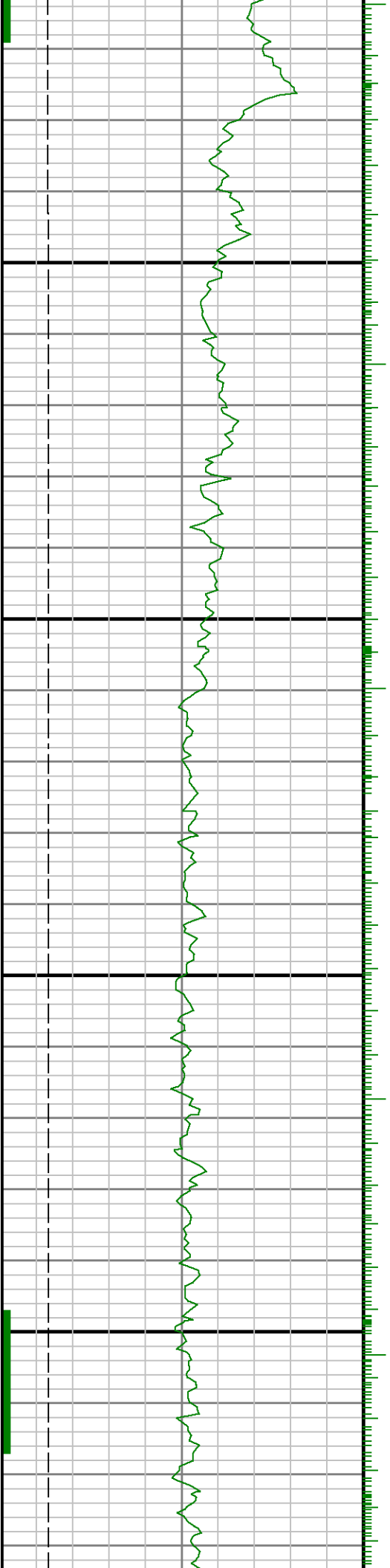


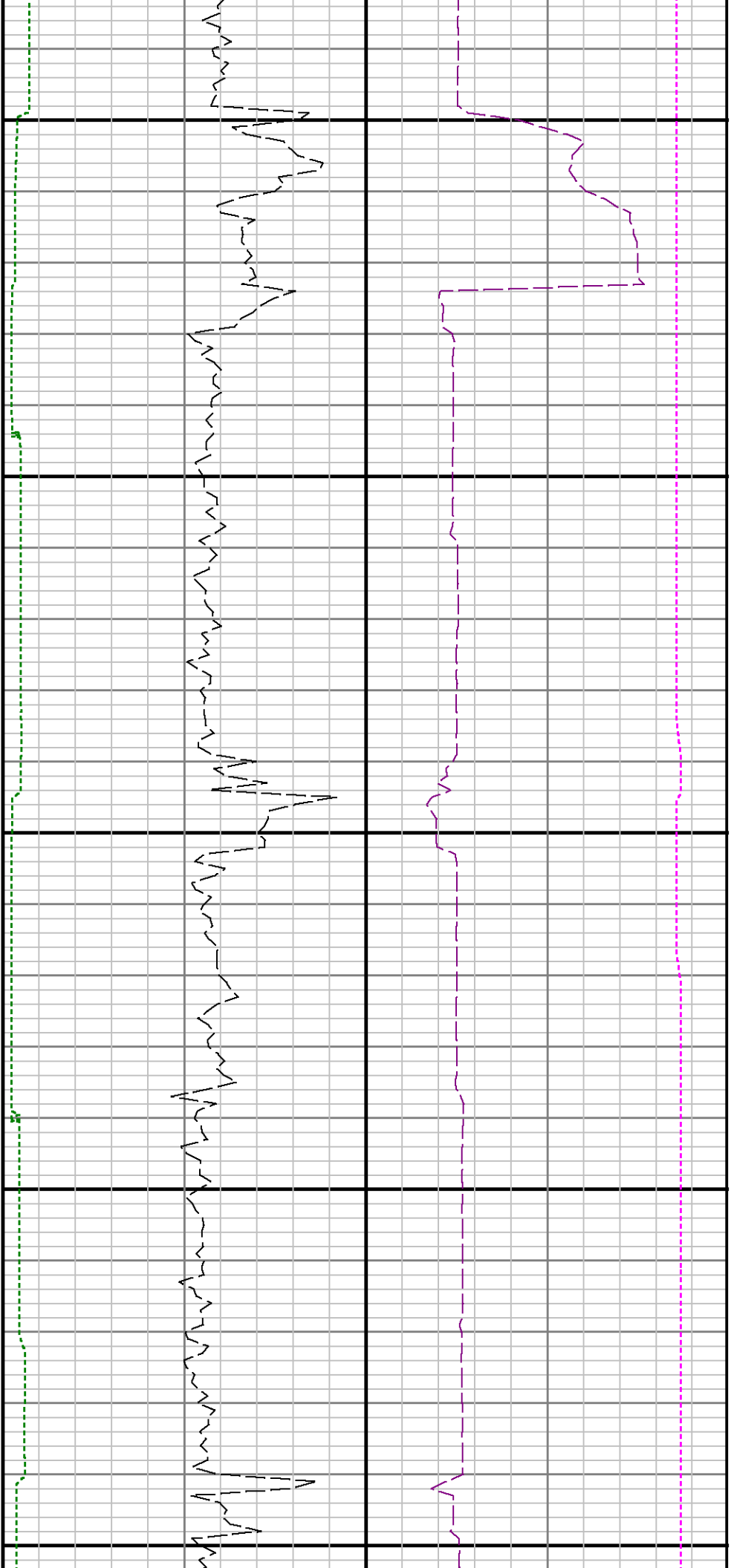




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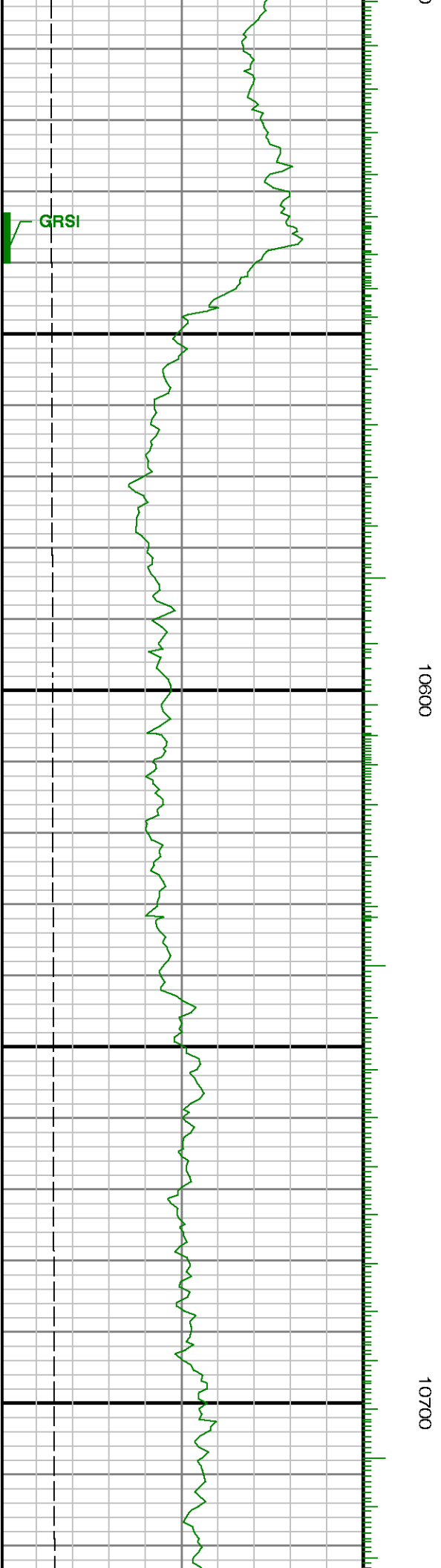
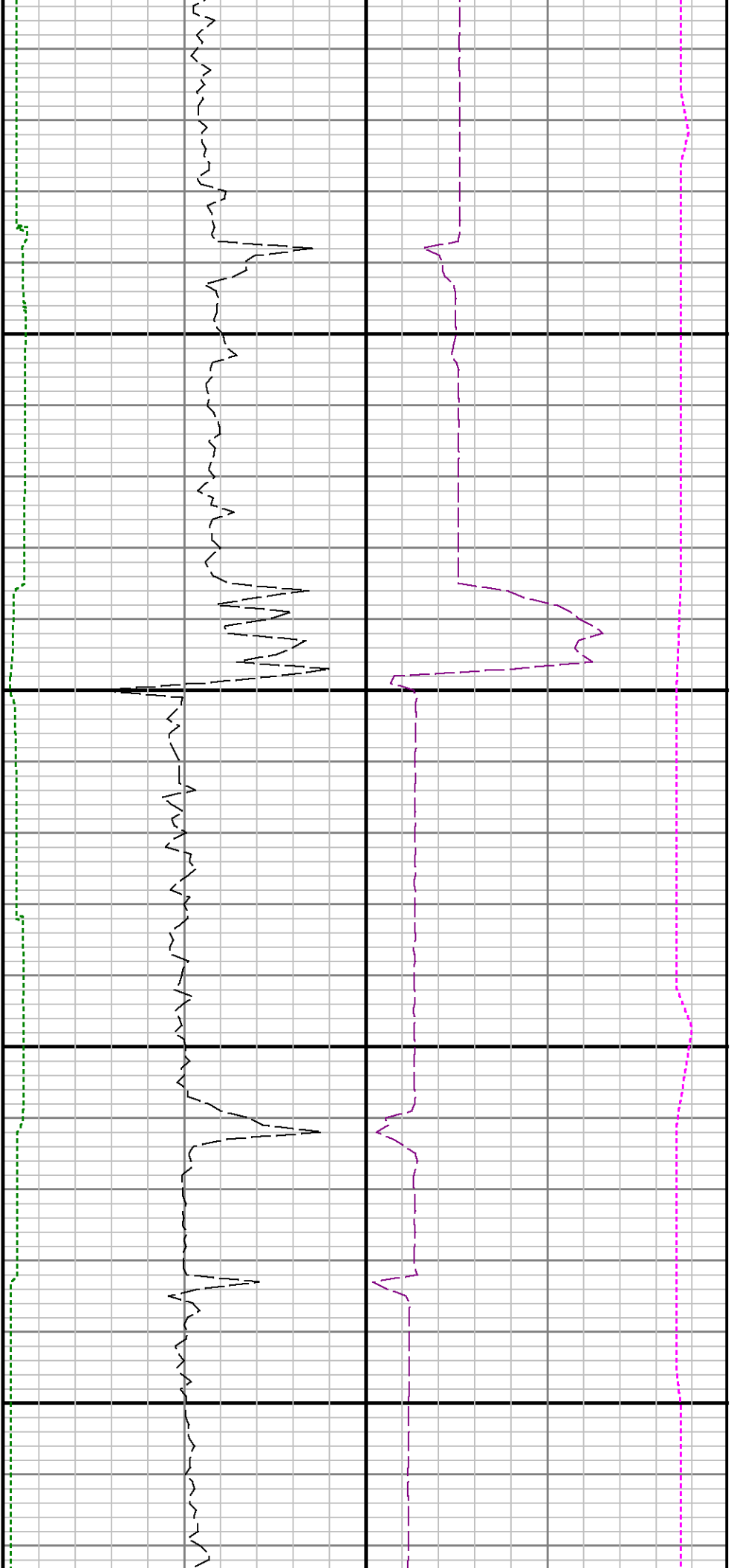


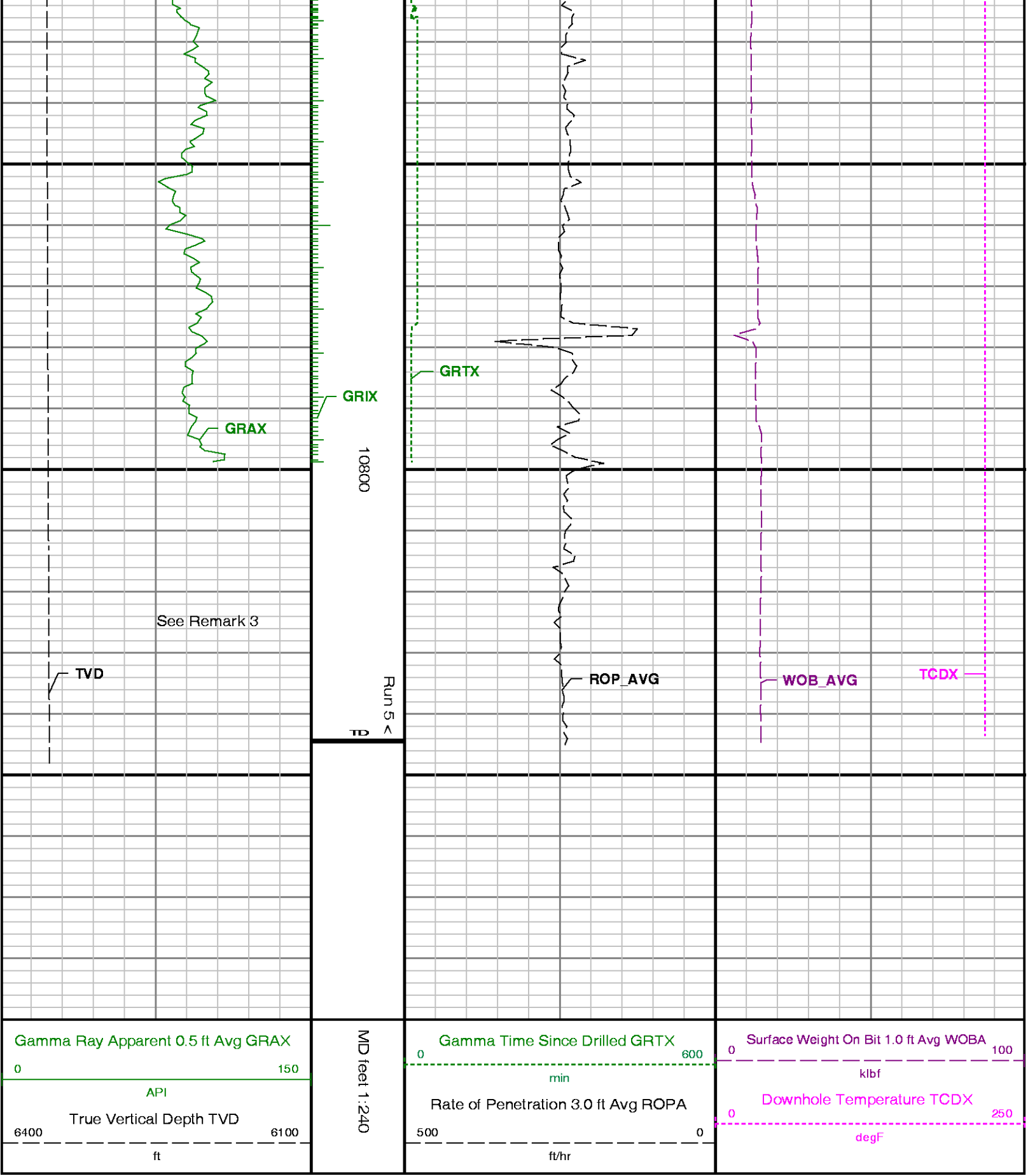


10300

10400

10500





ADVANTAGE Final Survey Listing

Operator : Bonanza Creek
Well : State Antelope F-J-30HNB

Field : Weld County
Rig : Cade 22

API No :
Job : 5624986

Well Origin												
Latitude	40.3759 deg					Longitude	-104.3704 deg					
North Reference	True					Drill Depth Zero	NULL					
Vertical Datum is	Mean Sea Level					Vertical Datum to DDZ	4626.00 ft					
Vertical Section North	0.00 ft					Vertical Section East	0.00 ft					
Vertical Section Azimuth	180.8900 deg					Vertical Section Depth	0.00ft					
Grid Convergence	0.0000 deg					Magnetic Declination	8.3922 deg					
Total Correction	8.3922 deg					TVD Calculation Method	Minimal Curvature					
D-Row Calculation	Magecorr1					Local Magnetic Field	52872 uT					
Local Magnetic Dip Angle	67.0128 deg					Local Gravity Field	9.799 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
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U	17.00	0.0000	212.4600	0.00	0.00	17.00	0.00	0.00				
	147.00	0.2800	212.4600	-0.27	-0.17	147.00	0.27	0.32	130.00	0.22	0.22	0.00
	242.00	0.1800	124.4900	-0.55	-0.17	242.00	0.55	0.60	95.00	0.34	-0.11	-92.60
	337.00	0.3000	165.3800	-0.87	0.01	337.00	0.87	0.97	95.00	0.21	0.13	43.04
	379.00	0.2700	159.2700	-1.07	0.08	379.00	1.07	1.18	42.00	0.10	-0.07	-14.55
	529.00	0.6200	189.4500	-2.20	0.07	528.99	2.20	2.31	150.00	0.27	0.23	20.12
	625.00	0.4700	166.3400	-3.10	0.08	624.99	3.10	3.21	96.00	0.27	-0.16	-24.07
	720.00	0.4600	191.5600	-3.85	0.09	719.99	3.85	3.96	95.00	0.21	-0.01	26.55
	815.00	0.3600	183.1900	-4.52	-0.00	814.98	4.52	4.64	95.00	0.12	-0.11	-8.81
	910.00	0.2800	160.5600	-5.04	0.06	909.98	5.04	5.16	95.00	0.16	-0.08	-23.82
	1006.00	0.5600	141.4500	-5.63	0.43	1005.98	5.62	5.85	96.00	0.32	0.29	-19.91
	1099.00	0.6900	131.5300	-6.35	1.13	1098.97	6.34	6.86	93.00	0.18	0.14	-10.67
	1191.00	0.6900	137.1100	-7.13	1.92	1190.97	7.10	7.97	92.00	0.07	0.00	6.07
	1284.00	0.6500	147.3800	-7.98	2.59	1283.96	7.94	9.05	93.00	0.14	-0.04	11.04
	1376.00	0.7800	138.6300	-8.89	3.28	1375.95	8.84	10.20	92.00	0.18	0.14	-9.51
	1468.00	0.8300	123.5100	-9.73	4.25	1467.94	9.66	11.48	92.00	0.24	0.05	-16.43
	1560.00	1.0200	117.3700	-10.47	5.54	1559.93	10.39	12.96	92.00	0.23	0.21	-6.67
	1653.00	0.9400	101.6600	-11.01	7.02	1652.92	10.90	14.54	93.00	0.30	-0.09	-16.89
	1744.00	1.1100	102.4700	-11.35	8.61	1743.90	11.21	16.17	91.00	0.19	0.19	0.89
	1837.00	1.1400	44.7400	-10.89	10.14	1836.89	10.73	17.77	93.00	1.17	0.03	-62.08
	1926.00	1.9300	31.8400	-8.98	11.56	1925.86	8.80	20.14	89.00	0.96	0.89	-14.49
	2017.00	3.4800	29.9500	-5.29	13.74	2016.75	5.08	24.43	91.00	1.71	1.70	-2.08
	2108.00	4.4200	17.4800	0.45	16.17	2107.54	-0.70	30.66	91.00	1.39	1.03	-13.70
	2200.00	5.7800	15.1900	8.30	18.45	2199.17	-8.59	38.84	92.00	1.49	1.48	-2.49
	2292.00	6.9700	356.6900	18.35	19.35	2290.61	-18.64	48.92	92.00	2.56	1.29	-20.11
	2387.00	8.2000	353.2900	30.83	18.22	2384.78	-31.11	61.46	95.00	1.38	1.29	-3.58
	2482.00	9.8700	353.5600	45.65	16.52	2478.60	-45.90	76.37	95.00	1.76	1.76	0.28
	2578.00	11.2300	357.9700	63.17	15.26	2572.97	-63.40	93.94	96.00	1.65	1.42	4.59
	2673.00	11.3300	357.4300	81.74	14.52	2666.14	-81.95	112.52	95.00	0.15	0.11	-0.57
	2769.00	11.0800	356.4900	100.36	13.53	2760.31	-100.56	131.17	96.00	0.32	-0.26	-0.98
	2864.00	11.5500	358.2600	118.98	12.68	2853.46	-119.16	149.81	95.00	0.62	0.49	1.86
	2959.00	10.5700	356.6900	137.19	11.89	2946.70	-137.36	168.03	95.00	1.08	-1.03	-1.65
	3055.00	10.8500	358.5900	155.01	11.16	3041.02	-155.16	185.87	96.00	0.47	0.29	1.98
	3151.00	9.5000	1.4200	171.96	11.13	3135.51	-172.12	202.83	96.00	1.50	-1.41	2.95
	3247.00	9.6300	2.6900	187.90	11.71	3230.18	-188.06	218.78	96.00	0.26	0.14	1.32
	3341.00	10.4600	2.4700	204.28	12.44	3322.74	-204.45	235.17	94.00	0.88	0.88	-0.23
	3438.00	11.4700	3.8700	222.70	13.47	3417.96	-222.89	253.62	97.00	1.08	1.04	1.44
	3532.00	11.7300	4.0900	241.56	14.78	3510.04	-241.76	272.52	94.00	0.28	0.28	0.23
	3627.00	12.1900	2.4300	261.21	15.90	3602.98	-261.43	292.21	95.00	0.60	0.48	-1.75
	3722.00	12.4400	2.3400	281.46	16.74	3695.80	-281.68	312.47	95.00	0.26	0.26	-0.09
	3817.00	11.8300	2.2500	301.41	17.54	3788.67	-301.65	332.44	95.00	0.64	-0.64	-0.09
	3913.00	11.3200	3.4200	320.65	18.49	3882.72	-320.90	351.70	96.00	0.58	-0.53	1.22
	4009.00	10.6300	0.9700	338.91	19.20	3976.96	-339.16	369.97	96.00	0.87	-0.72	-2.55
	4105.00	9.5100	0.8800	355.69	19.47	4071.48	-355.95	386.76	96.00	1.17	-1.17	-0.09
	4199.00	8.5000	2.5200	370.40	19.90	4164.32	-370.66	401.47	94.00	1.11	-1.07	1.74
	4295.00	11.3700	11.2400	386.77	22.06	4258.88	-387.07	417.99	96.00	3.37	2.99	9.08
	4389.00	10.2200	9.0900	404.09	25.18	4351.21	-404.43	435.59	94.00	1.30	-1.22	-2.29
	4485.00	11.6100	359.0100	423.16	26.36	4445.48	-423.52	453.70	96.00	2.45	1.45	10.50
	4581.00	11.6100	359.0100	423.16	26.36	4445.48	-423.52	453.70	96.00	2.45	1.45	10.50
	4677.00	11.6100	359.0100	423.16	26.36	4445.48	-423.52	453.70	96.00	2.45	1.45	10.50

	4483.00	11.8100	339.0100	422.18	28.38	4443.48	-422.32	433.70	98.00	2.43	1.43	-10.36
	4581.00	10.5800	355.7800	440.61	25.54	4539.69	-440.96	472.16	96.00	1.25	-1.07	-3.36
	4677.00	10.4300	352.9100	458.02	23.82	4634.08	-458.34	489.66	96.00	0.57	-0.16	-2.99
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
	4772.00	11.7000	358.2700	476.19	22.47	4727.32	-476.48	507.87	95.00	1.72	1.34	5.64
	4867.00	11.5500	357.5500	495.32	21.77	4820.37	-495.60	527.02	95.00	0.22	-0.16	-0.76
	4961.00	9.7700	0.0500	512.70	21.38	4912.74	-512.97	544.40	94.00	1.96	-1.89	2.66
	5057.00	8.1200	353.7200	527.58	20.64	5007.57	-527.84	559.30	96.00	2.00	-1.72	-6.59
	5152.00	6.8200	346.4000	539.73	18.58	5101.77	-539.96	571.63	95.00	1.69	-1.37	-7.71
	5247.00	5.9400	338.6800	549.80	15.47	5196.18	-549.97	582.16	95.00	1.29	-0.93	-8.13
	5343.00	4.4100	326.1700	557.49	11.61	5291.79	-557.60	590.77	96.00	1.97	-1.59	-13.03
	5438.00	1.5100	295.3400	561.06	8.44	5386.66	-561.12	595.54	95.00	3.38	-3.05	-32.45
	5534.00	1.9500	301.4700	562.45	5.90	5482.61	-562.48	598.44	96.00	0.50	0.46	6.39
	5630.00	1.6100	285.6200	563.67	3.21	5578.57	-563.65	601.39	96.00	0.62	-0.35	-16.51
	5726.00	1.5800	282.4900	564.32	0.62	5674.53	-564.26	604.06	96.00	0.10	-0.03	-3.26
	5774.00	1.8300	276.1100	564.54	-0.79	5722.51	-564.46	605.49	48.00	0.65	0.52	-13.29
	5822.00	1.3200	276.1200	564.69	-2.10	5770.49	-564.58	606.81	48.00	1.06	-1.06	0.02
	5870.00	3.5700	196.1900	563.31	-3.06	5818.45	-563.19	608.49	48.00	7.46	4.69	-166.52
	5917.00	8.7500	187.5000	558.36	-3.94	5865.17	-558.23	613.52	47.00	11.17	11.02	-18.49
	6012.00	17.8100	179.2300	536.62	-4.69	5957.54	-536.48	635.27	95.00	9.72	9.54	-8.71
	6058.00	21.7800	180.6700	521.04	-4.69	6000.81	-520.91	650.84	46.00	8.69	8.63	3.13
	6108.00	26.5500	178.6200	500.58	-4.53	6046.42	-500.45	671.30	50.00	9.69	9.54	-4.10
	6156.00	30.4900	176.0000	477.70	-3.43	6088.58	-477.59	694.21	48.00	8.61	8.21	-5.46
	6204.00	34.8900	176.0400	451.85	-1.63	6128.97	-451.77	720.13	48.00	9.17	9.17	0.08
	6252.00	43.3400	178.3900	421.63	-0.21	6166.18	-421.58	750.38	48.00	17.87	17.60	4.90
	6298.00	50.1400	180.9200	388.16	-0.05	6197.69	-388.11	783.86	46.00	15.31	14.78	5.50
	6346.00	58.5100	182.0900	349.21	-1.10	6225.66	-349.15	822.81	48.00	17.55	17.44	2.44
	6394.00	61.4300	180.7500	307.68	-2.12	6249.68	-307.60	864.36	48.00	6.55	6.08	-2.79
	6442.00	65.7600	177.9100	264.70	-1.60	6271.02	-264.65	907.34	48.00	10.46	9.02	-5.92
	6489.00	68.8200	176.5200	221.40	0.51	6289.17	-221.39	950.69	47.00	7.06	6.51	-2.96
	6537.00	69.1800	176.4200	176.68	3.27	6306.37	-176.71	995.50	48.00	0.77	0.75	-0.21
	6584.00	72.4100	177.8400	132.36	5.49	6321.83	-132.43	1039.88	47.00	7.44	6.87	3.02
	6630.00	77.4900	179.5100	87.96	6.51	6333.77	-88.05	1084.28	46.00	11.59	11.04	3.63
	6679.00	80.0000	179.6100	39.91	6.88	6343.33	-40.01	1132.34	49.00	5.13	5.12	0.20
	6774.00	86.6620	181.0147	-54.39	6.36	6354.36	54.29	1226.64	95.00	7.16	7.01	1.48
	6908.00	89.4500	180.9400	-188.28	4.07	6358.91	188.20	1360.55	134.00	2.08	2.08	-0.06
	7004.00	90.0300	180.2400	-284.27	3.08	6359.34	284.19	1456.55	96.00	0.95	0.60	-0.73
	7098.00	89.2300	180.5800	-378.27	2.41	6359.95	378.19	1550.54	94.00	0.92	-0.85	0.36
	7194.00	89.6600	180.8900	-474.26	1.18	6360.88	474.18	1646.54	96.00	0.55	0.45	0.32
	7290.00	90.8600	180.5500	-570.25	-0.03	6360.44	570.18	1742.53	96.00	1.30	1.25	-0.35
	7385.00	89.7200	179.5200	-665.24	-0.08	6359.96	665.16	1837.53	95.00	1.62	-1.20	-1.08
	7480.00	90.6500	179.1200	-760.23	1.04	6359.65	760.13	1932.53	95.00	1.07	0.98	-0.42
	7575.00	89.8800	180.2000	-855.23	1.61	6359.22	855.10	2027.53	95.00	1.40	-0.81	1.14
	7670.00	89.3800	180.4000	-950.22	1.11	6359.83	950.09	2122.52	95.00	0.57	-0.53	0.21
	7765.00	88.8000	180.6200	-1045.21	0.26	6361.34	1045.08	2217.51	95.00	0.65	-0.61	0.23
	7859.00	88.8300	181.1000	-1139.18	-1.15	6363.28	1139.06	2311.49	94.00	0.51	0.03	0.51
	7954.00	88.9200	181.5100	-1234.13	-3.31	6365.15	1234.04	2406.47	95.00	0.44	0.09	0.43
	8050.00	88.4900	181.0200	-1330.09	-5.43	6367.32	1330.01	2502.45	96.00	0.68	-0.45	-0.51
	8145.00	89.9700	180.4100	-1425.07	-6.61	6368.59	1425.00	2597.44	95.00	1.69	1.56	-0.64
	8241.00	89.3500	179.4000	-1521.06	-6.46	6369.16	1520.98	2693.43	96.00	1.23	-0.65	-1.05
	8336.00	90.7400	179.5100	-1616.06	-5.55	6369.09	1615.95	2788.43	95.00	1.47	1.46	0.12
	8432.00	89.4800	178.3100	-1712.04	-3.73	6368.90	1711.89	2884.43	96.00	1.81	-1.31	-1.25
	8528.00	91.0200	180.2700	-1808.02	-2.54	6368.49	1807.84	2980.42	96.00	2.60	1.60	2.04
	8623.00	90.8900	181.3200	-1903.00	-3.85	6366.90	1902.83	3075.40	95.00	1.11	-0.14	1.11
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
	8718.00	90.8900	180.6800	-1997.97	-5.51	6365.43	1997.81	3170.39	95.00	0.67	0.00	-0.67
	8813.00	89.9400	180.3500	-2092.96	-6.37	6364.74	2092.81	3265.39	95.00	1.06	-1.00	-0.35
	8907.00	90.1800	181.3700	-2186.95	-7.78	6364.64	2186.81	3359.39	94.00	1.11	0.26	1.09
	9003.00	90.2200	181.1100	-2282.93	-9.85	6364.30	2282.80	3455.39	96.00	0.27	0.04	-0.27
	9099.00	91.6100	183.6500	-2378.82	-13.84	6362.77	2378.75	3551.36	96.00	3.02	1.45	2.65
	9195.00	92.1900	183.7800	-2474.57	-20.06	6359.59	2474.58	3647.31	96.00	0.62	0.60	0.14

9291.00	90.7100	183.6000	-2570.33	-26.23	6357.16	2570.43	3743.28	96.00	1.55	-1.54	-0.19
9385.00	89.3500	182.9700	-2664.18	-31.62	6357.11	2664.35	3837.27	94.00	1.59	-1.45	-0.67
9480.00	90.0600	182.9700	-2759.05	-36.54	6357.60	2759.28	3932.27	95.00	0.75	0.75	0.00
9575.00	88.7000	183.2700	-2853.90	-41.71	6358.63	2854.20	4027.26	95.00	1.47	-1.43	0.32
9670.00	88.9500	183.2600	-2948.72	-47.12	6360.58	2949.10	4122.24	95.00	0.26	0.26	-0.01
9766.00	89.3500	183.1900	-3044.56	-52.52	6362.00	3045.01	4218.23	96.00	0.42	0.42	-0.07
9860.00	88.8900	183.4100	-3138.39	-57.93	6363.44	3138.92	4312.22	94.00	0.54	-0.49	0.23
9955.00	90.8900	182.9900	-3233.24	-63.23	6363.63	3233.83	4407.22	95.00	2.15	2.11	-0.44
10051.00	90.9900	180.8300	-3329.17	-66.43	6362.05	3329.80	4503.20	96.00	2.25	0.10	-2.25
10146.00	89.9100	181.7700	-3424.14	-68.59	6361.30	3424.79	4598.19	95.00	1.51	-1.14	0.99
10241.00	90.2500	181.9300	-3519.09	-71.65	6361.17	3519.78	4693.19	95.00	0.40	0.36	0.17
10337.00	90.0900	179.5200	-3615.07	-72.87	6360.89	3615.77	4789.18	96.00	2.52	-0.17	-2.51
10432.00	90.6500	179.6800	-3710.07	-72.21	6360.27	3710.74	4884.18	95.00	0.61	0.59	0.17
10527.00	90.9600	179.4800	-3805.06	-71.51	6358.94	3805.71	4979.17	95.00	0.39	0.33	-0.21
10623.00	90.6200	179.8100	-3901.05	-70.91	6357.61	3901.68	5075.16	96.00	0.49	-0.35	0.34
10717.00	90.9300	179.8100	-3995.04	-70.60	6356.34	3995.65	5169.15	94.00	0.33	0.33	0.00
10789.00	91.2000	179.5800	-4067.02	-70.22	6355.01	4067.62	5241.14	72.00	0.49	0.37	-0.32
Projection to TD:											
10845.00	91.2000	179.5800	-4123.01	-69.81	6353.83	4123.60	5297.13	56.00	0.00	0.00	0.00