



Natural Formation Evaluation
Gamma Ray

Realtime log

Scale:

Company: Anadarko

1:240

Well: NRC 27C-4HZ

Measured Depth

Field: Weld County (Kerr Mcgee)

Region: Continental US Country: United States

Status:

Final Print

Surface Location:

Latitude: 40° 3' 32.681" N

Longitude: 104° 53' 19.619" W

Other Services:

Directional VSS

API Number: 05123389970000

Section: 09

TWN: 1N

Range: 67W

Permanent Datum (P.D.): Ground Level

Elevation:

5046.00 ft.

Elevations:

Log Measured From:

Kelly Bushing

16.00 ft.

Above P.D.

KB: N/A

DF: 5062.00 ft.

Depth Reference: Driller's Depth

GL: 5046.00 ft.

Interval Logged

Dates

Magnetic Field Reference

Top: 7063.0 ft. Date From: 04/Apr/14

Dip Angle: 66.49 °

Azi Reference North: True

Bottom: 17334.0 ft. Date To: 01/May/14

Total

Mag to Reference

Field Strength: 52806.0 nT

Spud Date: 04/Apr/14

North Correction:

8.47 °

Borehole Record

Casing Record

Hole Size From To

8.750 in. 1072.0 ft. 8075.0 ft.

Size 9.265 in.

Weight 36.00 lb/ft

From Surface

To 1068.0 ft.

6.125 in. 8075.0 ft. 17383.0 ft.

7.000 in.

26.00 lb/ft

Surface

8065.0 ft.

Mud Record

Deviation Record

Type From To

Drill Water Surface 8075.0 ft.

Hole Size 8.750 in.

Interval 85.0 ft.

Inc / Az (Start) 0.1 ° / 303.3 °

Inc / Az (End) 1.1 ° / 195.4 °

LSND 8075.0 ft. 17383.0 ft.

8.750 in.

42.5 ft.

1.1 ° / 195.4 °

84.0 ° / 357.6 °

6.125 in.

85.0 ft.

84.0 ° / 357.6 °

91.4 ° / 360.0 °

/

/

/

/

/

/

Acquisition System Software Version

Other

Advantage

2.20U4

Rig: / Contractor: Xtreme 24

/ Advance Drilling

PATS

6.4.1.34

Job No: 6262116

RMD

/ D & E

District: / Unit:

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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	Bottom	From	To	Start		End		
2	2	2	8.750	PDC	2.000	Steerable	7063.0	8031.0	7113.0	8075.0	07/Apr/2014 18:18	08/Apr/2014 09:06	15.9		
3	3	3	6.125	PDC	6.000	Steerable	8032.0	8938.0	8076.0	9024.0	28/Apr/2014 14:18	28/Apr/2015 22:55	10.7		
4	4	4	6.125	PDC	2.000	Steerable	8939.0	17331.0	9025.0	17383.0	29/Apr/2014 09:19	01/May/2015 17:45	38.5		

Crew

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

Trey Smith	04/Apr/14	02/May/14	Osagie Otoikhine	04/Apr/14	02/May/14			
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Mud Properties Record

Date / Time		LWD Run No.	Measured Depth (ft.)	Mud Type	Density (ppg)	Viscosity (sec/qt)	pH	Fluid Loss (cc)	Oil / Water	Source	Total Chlorides (mg/L)	K+ (%)
04/Apr/14	18:00	1	1066.0	Water Based	8.6	30	8.4	N/A	0.0/97.8	Active Pits	2300	N/A
06/Apr/14	18:00	1	3483.0	Water Based	8.4	28	9.3	N/A	0.0/99.0	Active Pits	2400	N/A
08/Apr/14	18:00	2	7904.0	Water Based	9.8	43	9.3	N/A	0.6/91.0	Active Pits	2600	N/A
29/Apr/14	18:00	3	8998.0	Oil Based	9.3	62	N/A	N/A	55.0/34.5	Active Pits	59000	N/A
30/Apr/14	18:00	4	12590.0	Oil Based	9.4	47	N/A	N/A	56.0/32.0	Active Pits	69000	N/A
01/May/14	18:00	4	15707.0	Oil Based	9.3	50	N/A	N/A	57.0/31.5	Active Pits	66000	N/A

Mnemonics

Curve	Description	Units
GRAX	Gamma Ray Apparent 0.5 ft AVG	API
GRIX	Gamma Ray Data Density	points
GRSI	Gamma Ray Sliding Indicator	unitless
GRTX	Gamma Ray Time Since Drilled	min.
ROPA	Rate of Penetration, 3.0 ft Avg	ft/hr
TCDX	Downhole Temperature	degF
TVD	True Vertical Depth	ft.
WOBA	Surface Weight on Bit, 1.0 ft Avg	klbs

Equipment and Service Data

LWD Run No.	Tool	Serial Number	Measurement	Bit Offset (ft.)	Max O.D. (in.)	Min I.D. (in.)
1	DIR	12592552	Directional	57.46	6.750	2.810
1	SRIG	ZSGM 120239	Gamma	54.09	6.750	2.810
2	DIR	12323378	Directional	49.04	6.750	2.810
2	SRIG	12416860	Gamma	45.67	6.750	2.810
3	DIR	10264844	Directional	51.96	4.750	2.810
3	SRIG	12461716	Gamma	48.58	4.750	2.810
4	DIR	10264844	Directional	51.96	4.750	2.810
4	SRIG	12461716	Gamma	48.58	4.750	2.810

Service and Tool Mnemonics

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

Comments

1.) Baker Hughes Run 2 utilized a 6 1/2 inch NaviGamma (Directional and Gamma Ray) tool behind an 8 3/4 inch bit and steerable assembly from 7113 feet to 8075 feet MD (7084 feet to 7698 feet TVD).

2.) Baker Hughes Run 3 and 4 utilized a 4 3/4 inch NaviGamma (Directional and Gamma Ray) tool behind a 6 1/8 inch bit and steerable assembly from 8076 feet to 17383 feet MD (7698 feet to 7712 feet TVD).

3.) A sliding indicator is shown on the left side of track 1 as a heavy line. This indicator has been depth-shifted to the Gamma Ray sensor offset to correspond with Gamma Ray data acquired while sliding.

Remarks

Number	Measured Depth (ft.)	Hole Section (in.)	LWD Run No.	Remark
1	7063	8.750	1	Run 1 was used to drill vertical, however no logging data was accumulated with this run.
2	7063	8.750	2	The interval from surface to 7063 feet MD (7034 feet TVD) was not logged since logging services began at kick off point.
3	8075	6.125	3	The Interval from 8031 feet to 8075 feet MD (7696 feet to 7698 feet TVD) was logged more than 30 hours after drilling due to tripping for casing and picking up lateral BHA.
4	8938	6.125	4	The Interval from 8938 feet to 9024 feet MD (7711 feet to 7710 feet TVD) was logged more than 12 hours after drilling due to a trip out of hole due to low ROP. Change out motor and bit.
5	17383	6.125	4	The interval from 17331 feet to 17383 feet MD (7713 feet to 7712 feet TVD) was not logged due to bit sensor offset at TD.

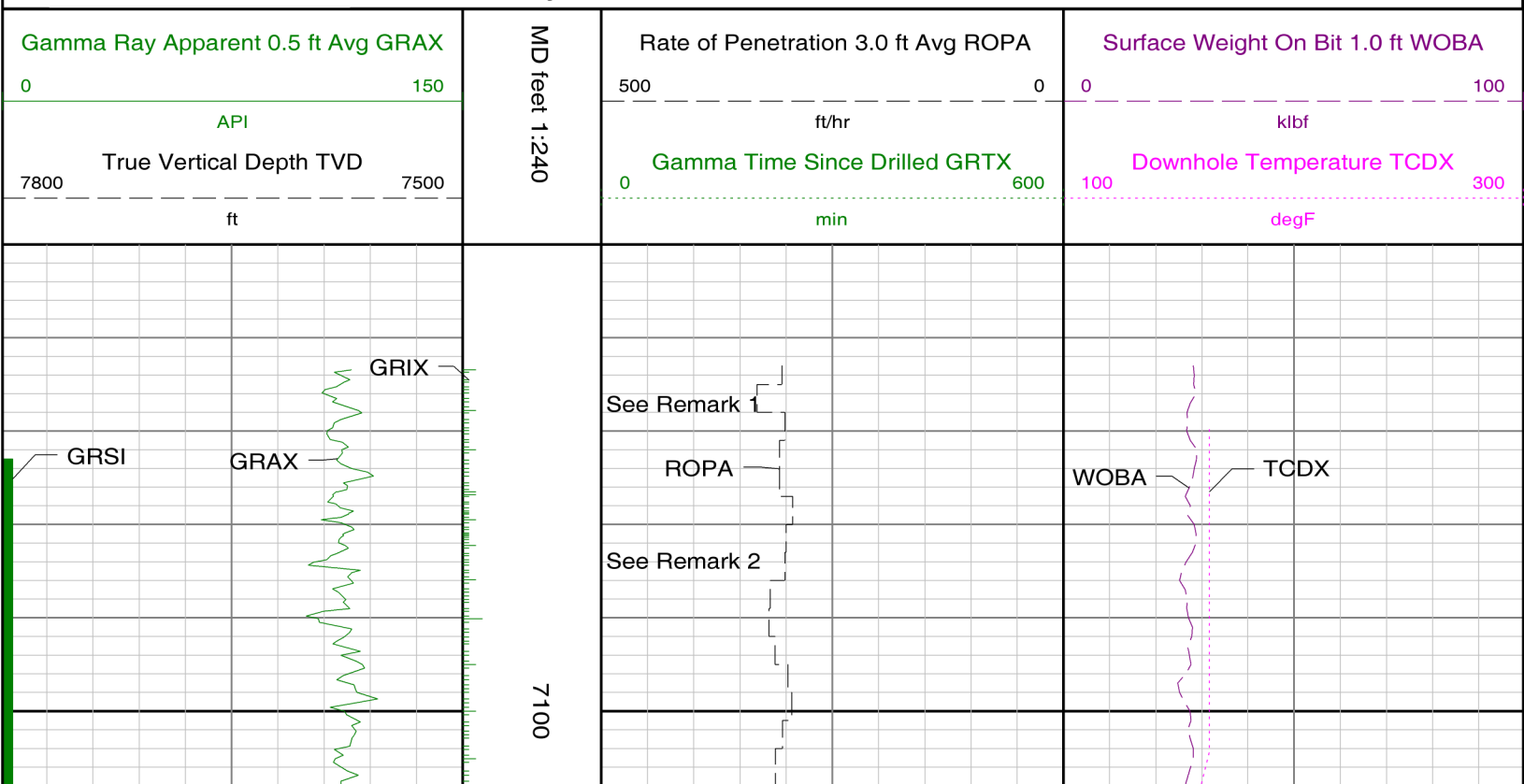


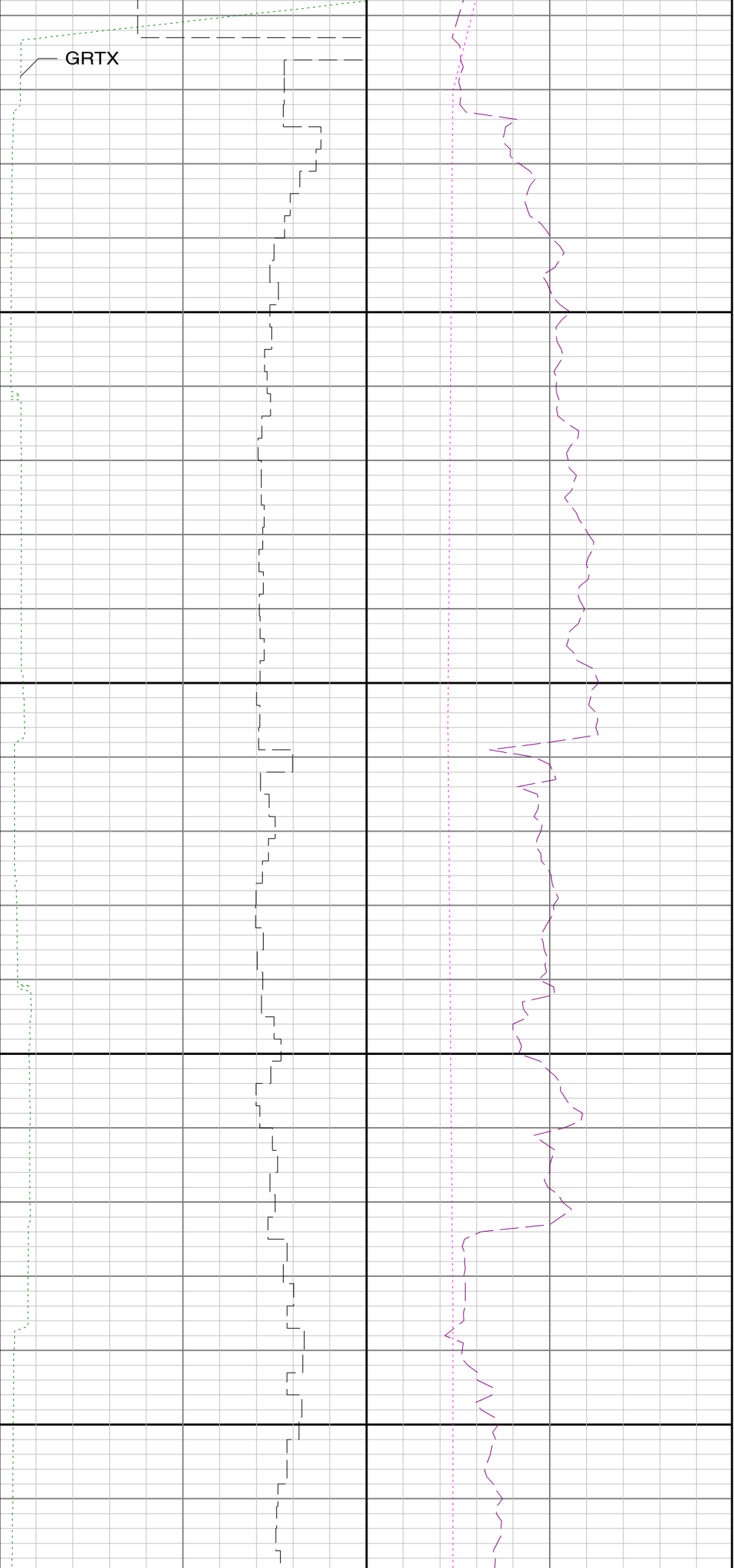
Company : Anadarko

Well : NRC 27C-4HZ

Interval : 7050.00 - 17395.00 feet

Created : 02/May/2014 2:18:34 AM

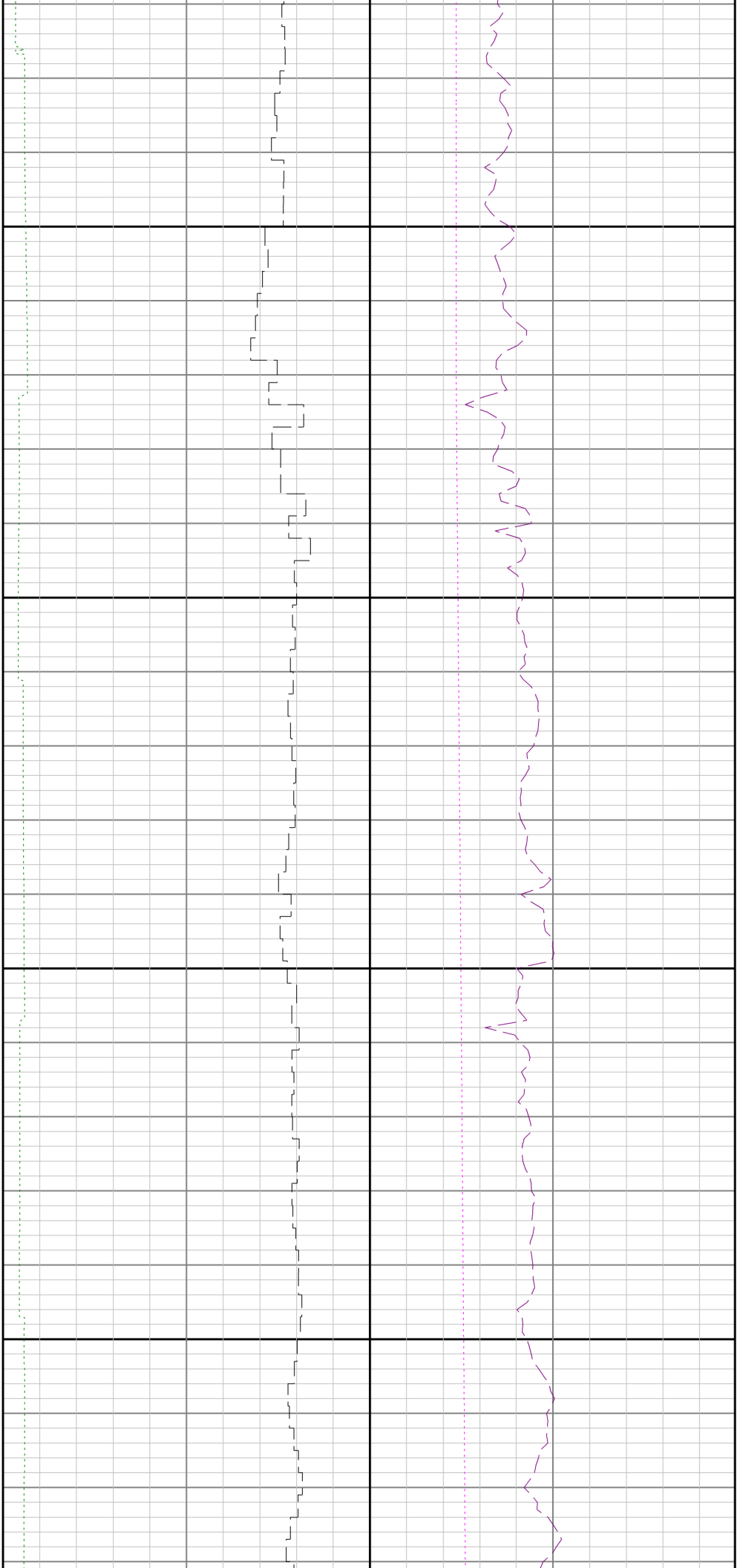




> Run 2

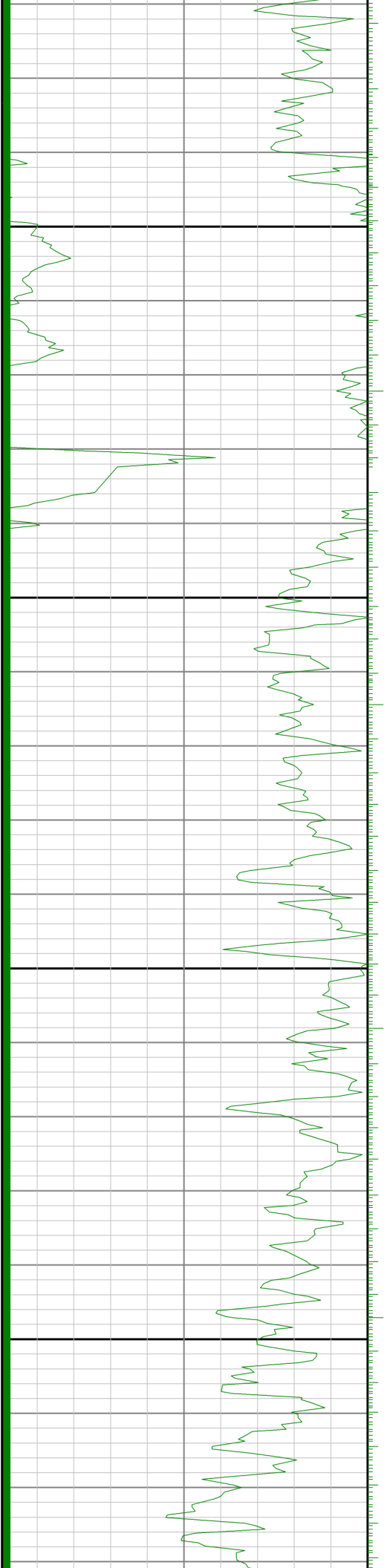
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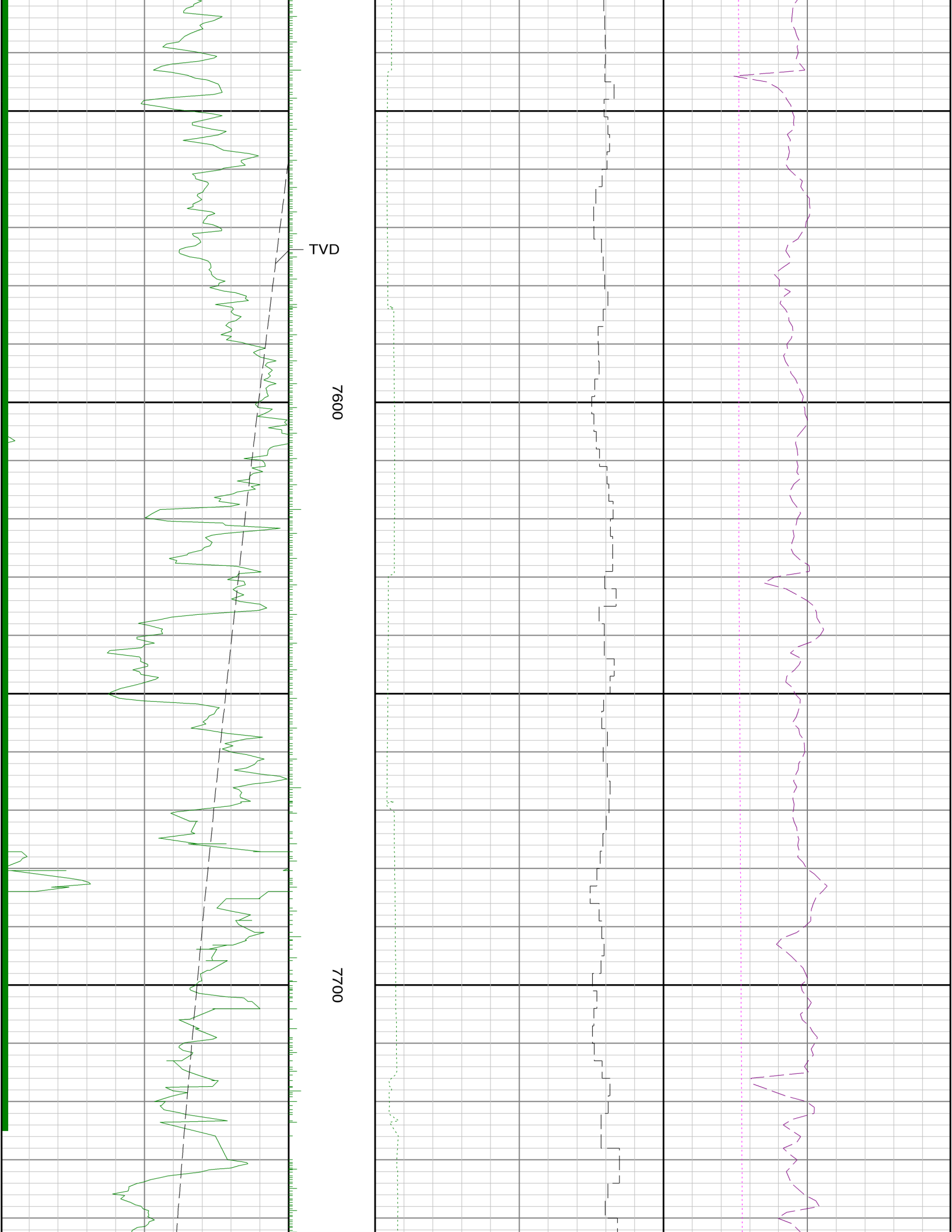
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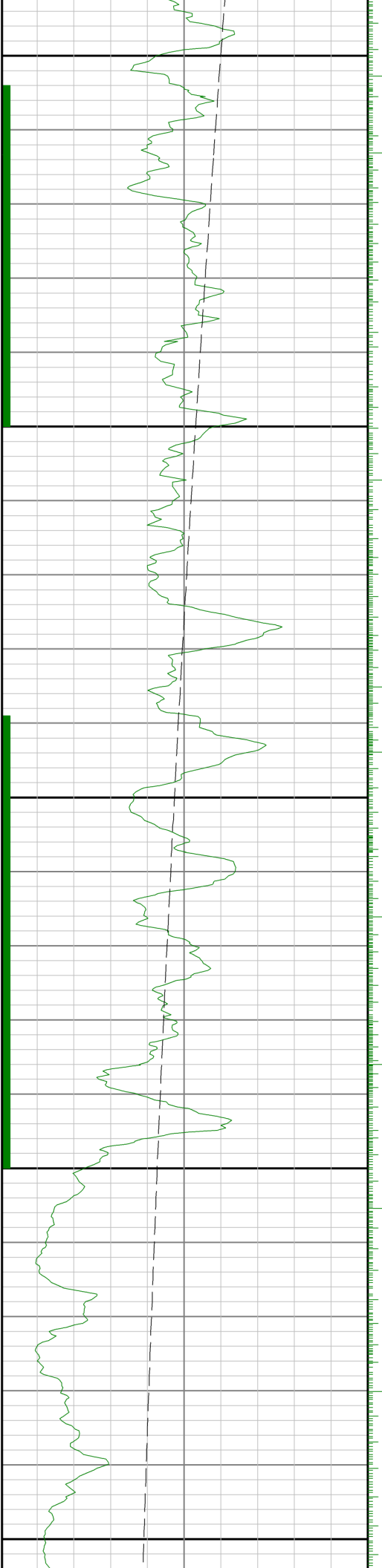


7400

7500







7800

7900

