

	Wellsite	Wellsite		Wellsite	Wellsite		Wellsite	Wellsite
Merek Roman	30 Dec 14	04 Jan 15	Emily Cazzell	30 Dec 14	04 Jan 15	Emily Cazzell	29 Jan 15	05 Feb 15
Robert Dix	30 Dec 14	04 Jan 15	Steven Basagoitia	30 Dec 14	01 Jan 15	Steven Basagoitia	29 Jan 15	05 Feb 15
Ahmed Bani-Saad	29 Jan 15	01 Feb 15	Scott Sanford	02 Jan 15	04 Jan 15	Scott Sanford	29 Jan 15	05 Feb 15
Maia Matarrese	01 Feb 15	05 Feb 15						

Mud Properties Record

Date / Time	LWD Run No.	Measured Depth (ft.)	Mud Type	Density (sg)	Viscosity (cp)	pH	Fluid Loss (cc)	Oil / Water	Source	Total Chlorides (ppm)	K+ (%)
31 Dec 14 11:00	1	810.0	Water Based Mud	9.0	32	7.0	N/A	0/95.05	Active Mud Pit	500	N/A
02 Jan 15 11:00	2	3483.0	Water Based Mud	8.4	26	7.5	N/A	0/99.6	Active Mud Pit	500	N/A
03 Jan 15 02:00	2	7503.0	Water Based Mud	10.0	40	8.5	N/A	0/91.7	Active Mud Pit	400	N/A
30 Jan 15 10:30	3	7503.0	Water Based Mud	9.1	35	7.5	N/A	0/96.2	Active Mud Pit	400	N/A
31 Jan 15 11:00	3	11085.0	Water Based Mud	9.4	36	9.0	N/A	0/90.7	Active Mud Pit	500	N/A
01 Feb 15 9:50	4	11986.0	Water Based Mud	9.4	40	8.5	N/A	0/90.7	Active Mud Pit	500	N/A
02 Feb 15 10:00	4	15512.0	Water Based Mud	9.4	40	8.5	N/A	0/89.7	Active Mud Pit	500	N/A

Mnemonics

Curve	Description	Units
WOBA	Surface Weight On Bit 1.0 ft Avg WOBA	klbf
ROPA	Rate of Penetration 3.0 ft Avg ROPA	ft/hr
TCDX	Downhole Temperature	degF
GRAX	Gamma Ray - Apparent	API
TVD	True Vertical Depth	ft

Equipment and Service Data

LWD Run No.	Tool	Serial Number	Measurement	Bit Offset (ft.)	Max O.D. (in.)	Min I.D. (in.)
1	DIR	12546343	Directional	68.01	6.750	2.813
1	SRIG	12613300	Gamma	64.64	6.750	2.813
2	DIR	12546343	Directional	55.98	6.750	2.813
2	SRIG	12613300	Gamma	52.61	6.750	2.813
3	DIR	11924683	Directional	53.99	4.750	2.813
3	SRIG	10585205	Gamma	50.61	4.750	2.813
4	DIR	11924683	Directional	53.99	4.750	2.813
4	SRIG	10585205	Gamma	50.61	4.750	2.813

Service and Tool Mnemonics

Mnemonic	Name	Description
DIR	Directional	Wellbore directional survey

Comments

- (1) Depth measurements obtained from a depth control system not supplied or operated by Baker Hughes INTEQ. Due to lack of control by Baker Hughes INTEQ logging engineers, depth calibrations and measurements could not be independently verified.
- (2) A sliding indicator 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 to Gamma Ray data acquired while sliding.
- (3) Baker Hughes INTEQ run 1 utilized 6 3/4" NaviGamma (Gamma Ray and Directional) behind a 13 1/2 inch bit and rotary steerable assembly from 0 ft to 810 ft MD (0 ft to 809 ft TVD). POOH due to section TD pick up vertical & curve assembly.
- (4) Baker Hughes INTEQ run 2 utilized 6 3/4" NaviGamma (Gamma Ray and Directional) behind an 8 3/4 inch bit and conventional assembly from 810 ft to 7504 ft MD (809 ft to 6963.22 ft TVD). POOH due to section TD, pick up 4 3/4 assembly after casing operations.
- (5) Baker Hughes INTEQ run 3 utilized 4 3/4" NaviGamma (Gamma Ray and Directional) behind a 6 1/8 inch bit and conventional assembly from 7425 ft to 11740 ft MD (6963.22 ft to 6976.78 ft TVD). POOH for a bit change.
- (5) Baker Hughes INTEQ run 4 utilized 4 3/4" NaviGamma (Gamma Ray and Directional) behind a 6 1/8 inch bit and conventional assembly from 11740 ft to 16905 ft MD (6976.78 ft to 6959.99 ft TVD). Well TD.

Remarks

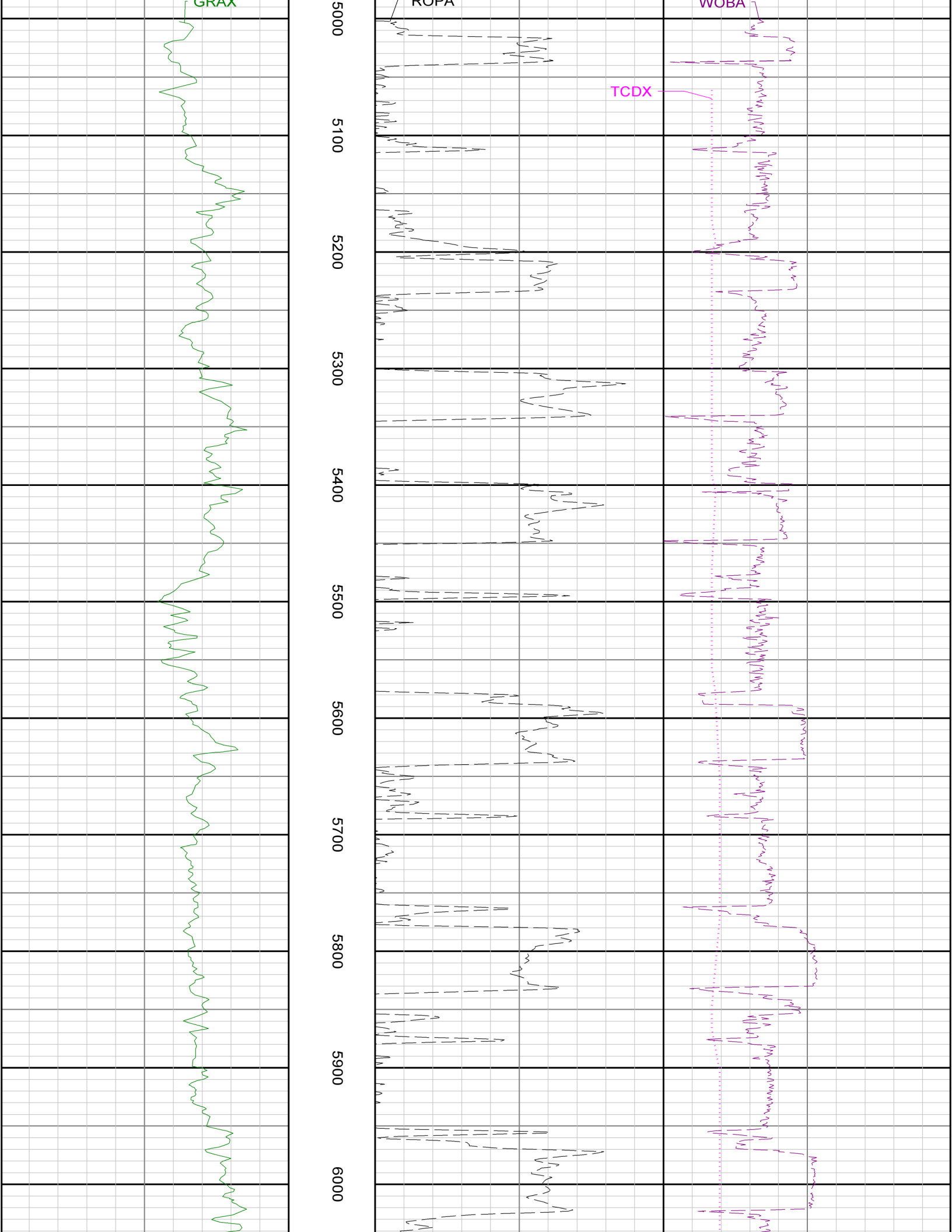
Number	Measured Depth (ft.)	Hole Section (in.)	LWD Run No.	Remark
1	5000	8.750	2	Logging begins on the vertical and curve assembly (run # 2) 5000 ft MD (4873.67 ft TVD) at client's request.
2	7470	8.750	2	Gamma Ray Apparent from 7450 ft to 7505 ft MD (6961.01 ft to 6963.25 ft TVD) was logged up to 27.30 days after being drilled due to curve section TD and to proceed with casing operations and rig skid.
3	11720	6.125	3	Gamma Ray Apparent from 11690 ft to 11741 ft MD (6976.59 ft to 6976.78 ft TVD) was logged up to 14.8 hours after being drilled due to curve section for a bit trip.
4	13210	6.125	4	Gamma Ray Apparent from 13203.90 ft to 13217.10 ft MD (6965.29 ft to 6965.37 ft TVD) was logged up to due to a block height jump.
5	16875	6.125	4	Gamma Ray Apparent from 16854.73 ft to 16905 ft MD (6960.59 ft to 6959.99 ft TVD) was logged up to due the sensor to bit offset of 50.61 ft.

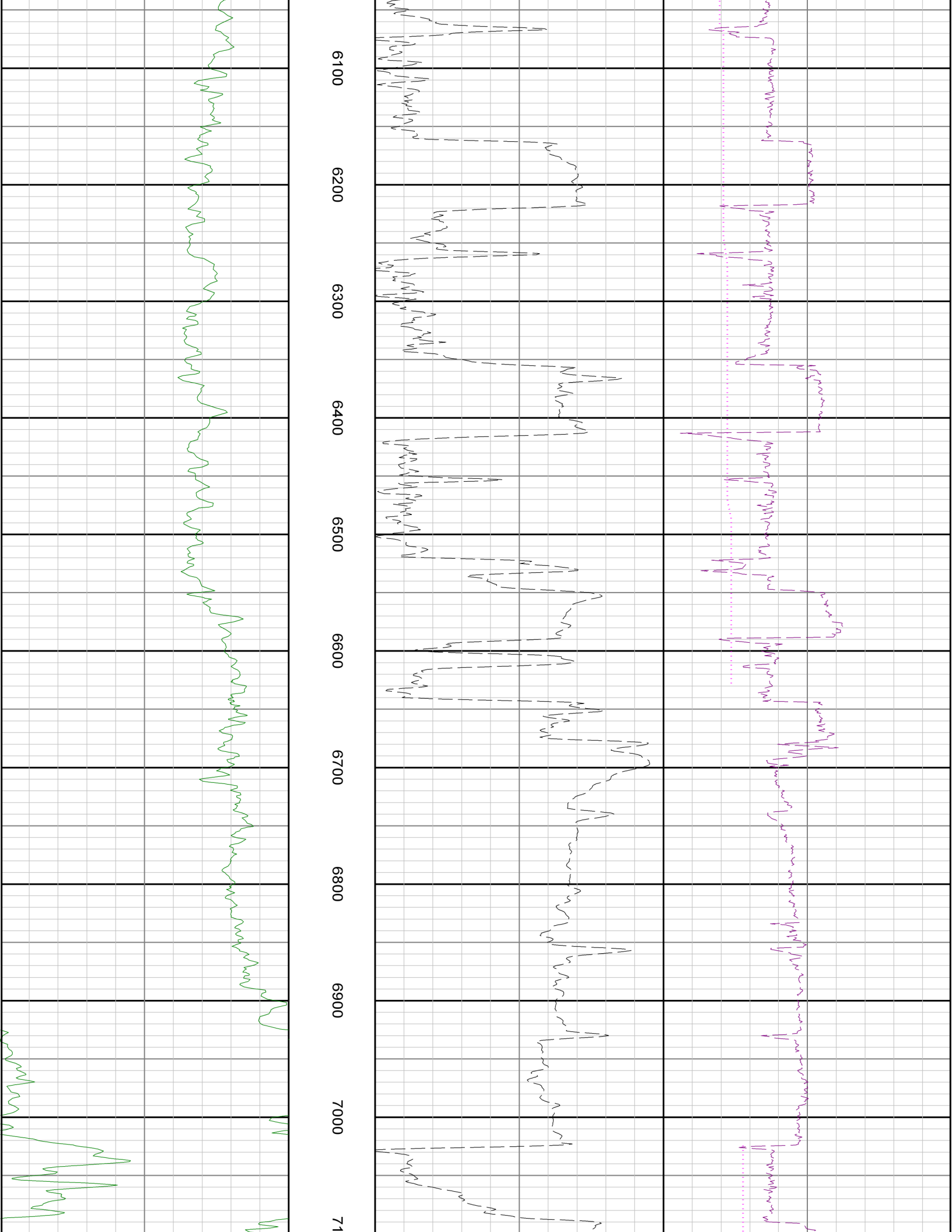


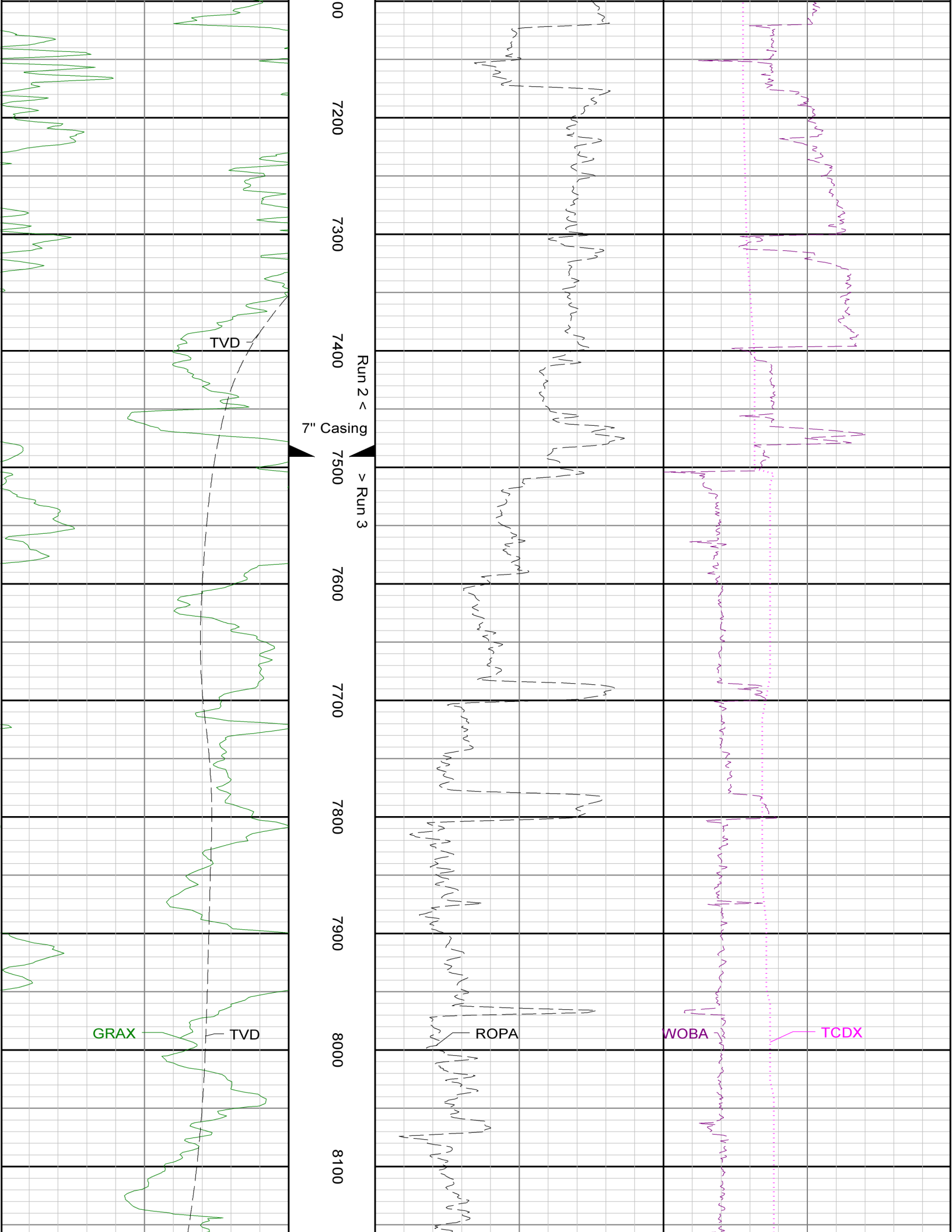
Company : Extraction Oil & Gas
 Well : Kodak 10
 Interval : 4950.00 - 17000.00 feet
 Created : 03/Feb/2015 6:11:45 AM

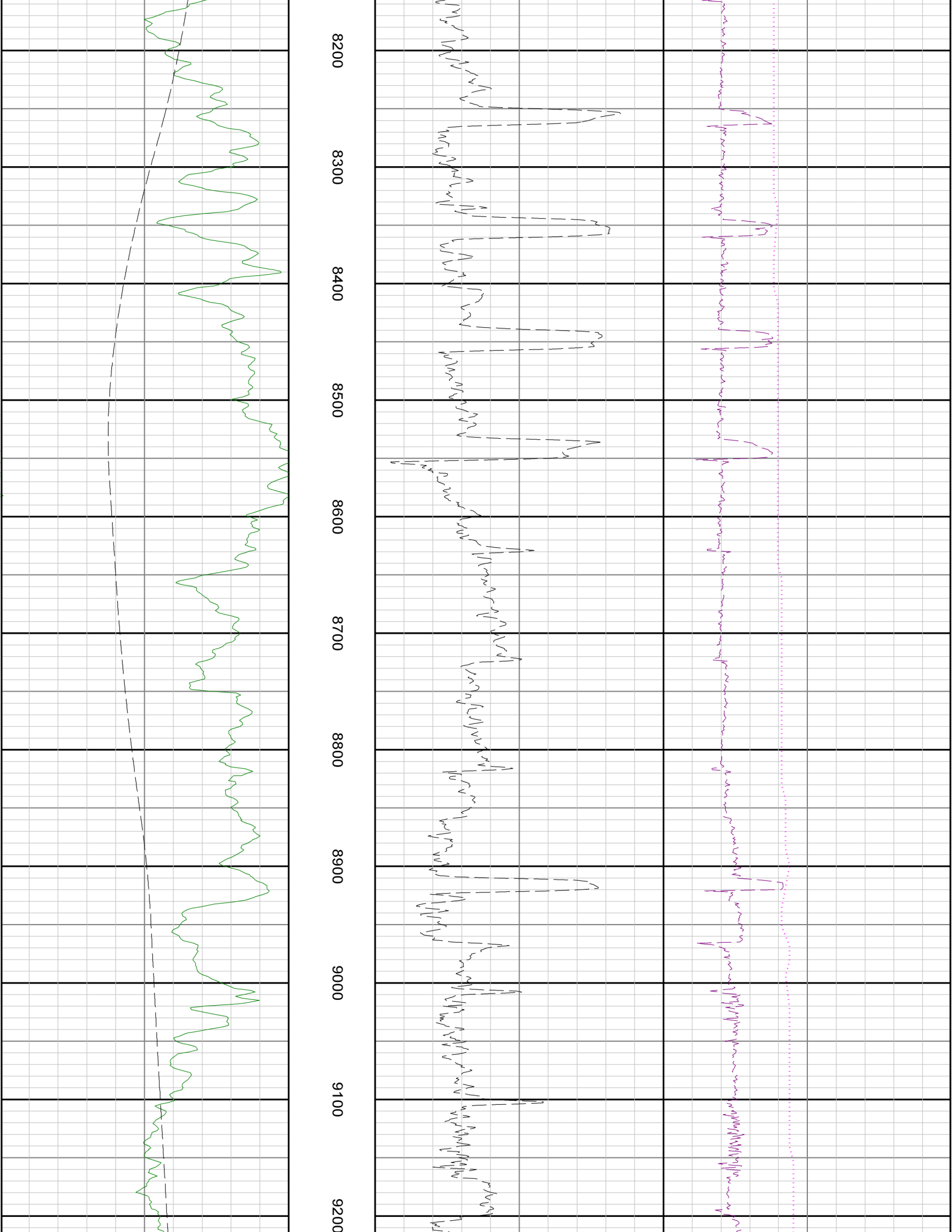
Gamma Ray Apparent 3.0 ft Avg GRAX 0 150	MD feet 1:1200	Rate of Penetration 3.0 ft Avg ROPA 600 0	Downhole Temperature TCDX 100 300 degF
API True Vertical Depth TVD 7000 6950 ft		ft/hr	Surface Weight On Bit 1.0 ft Avg WOBA 0 100 klbF

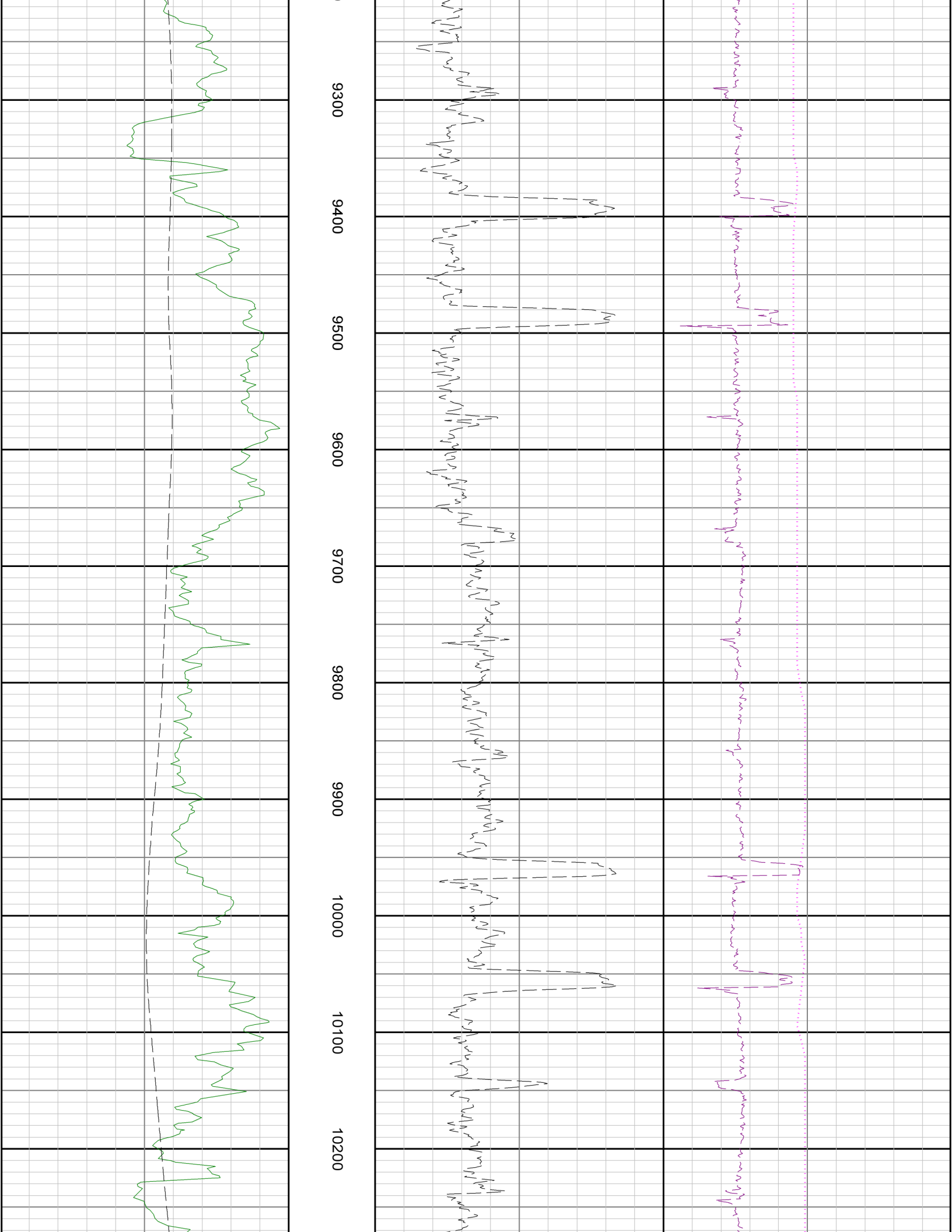
GRAX		ROPA	WOBA
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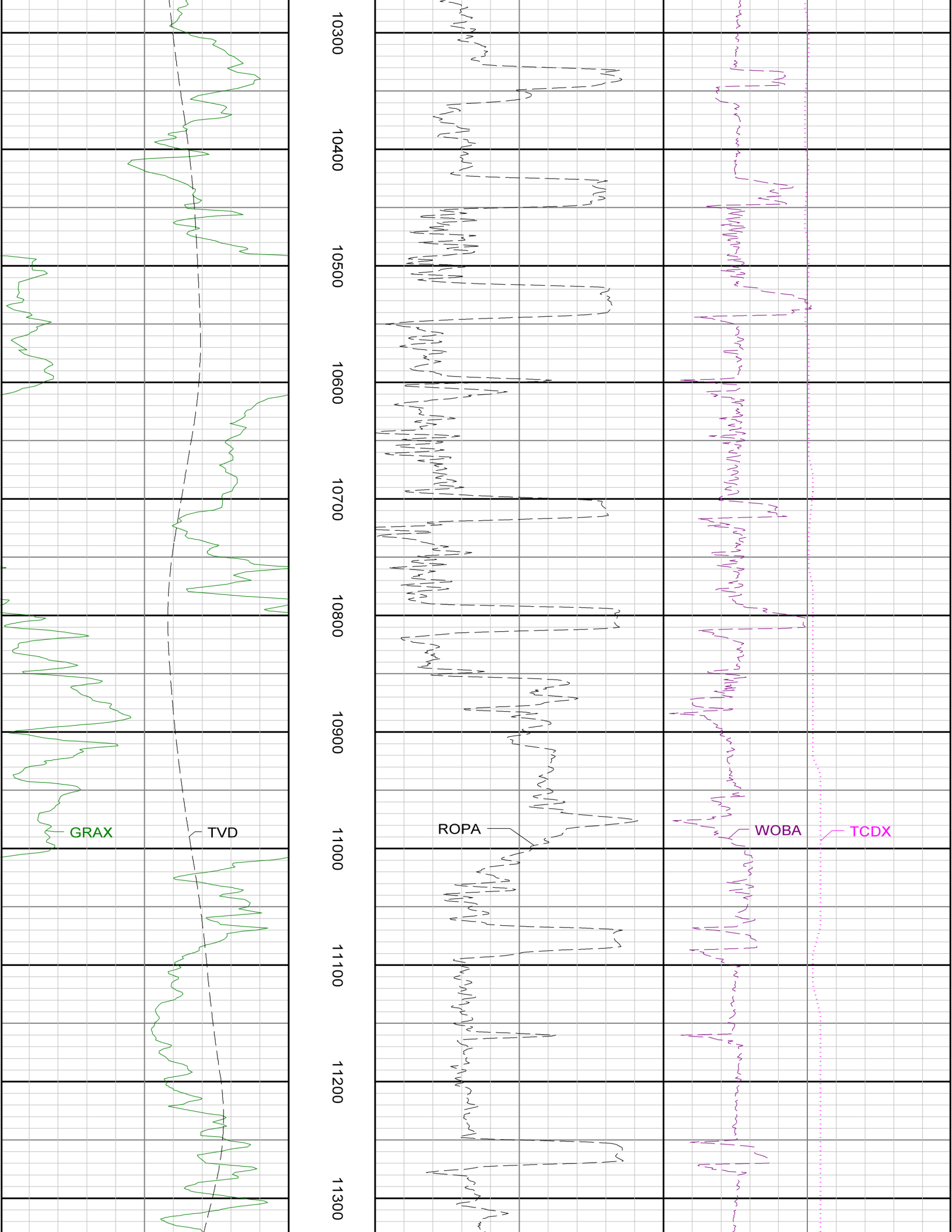


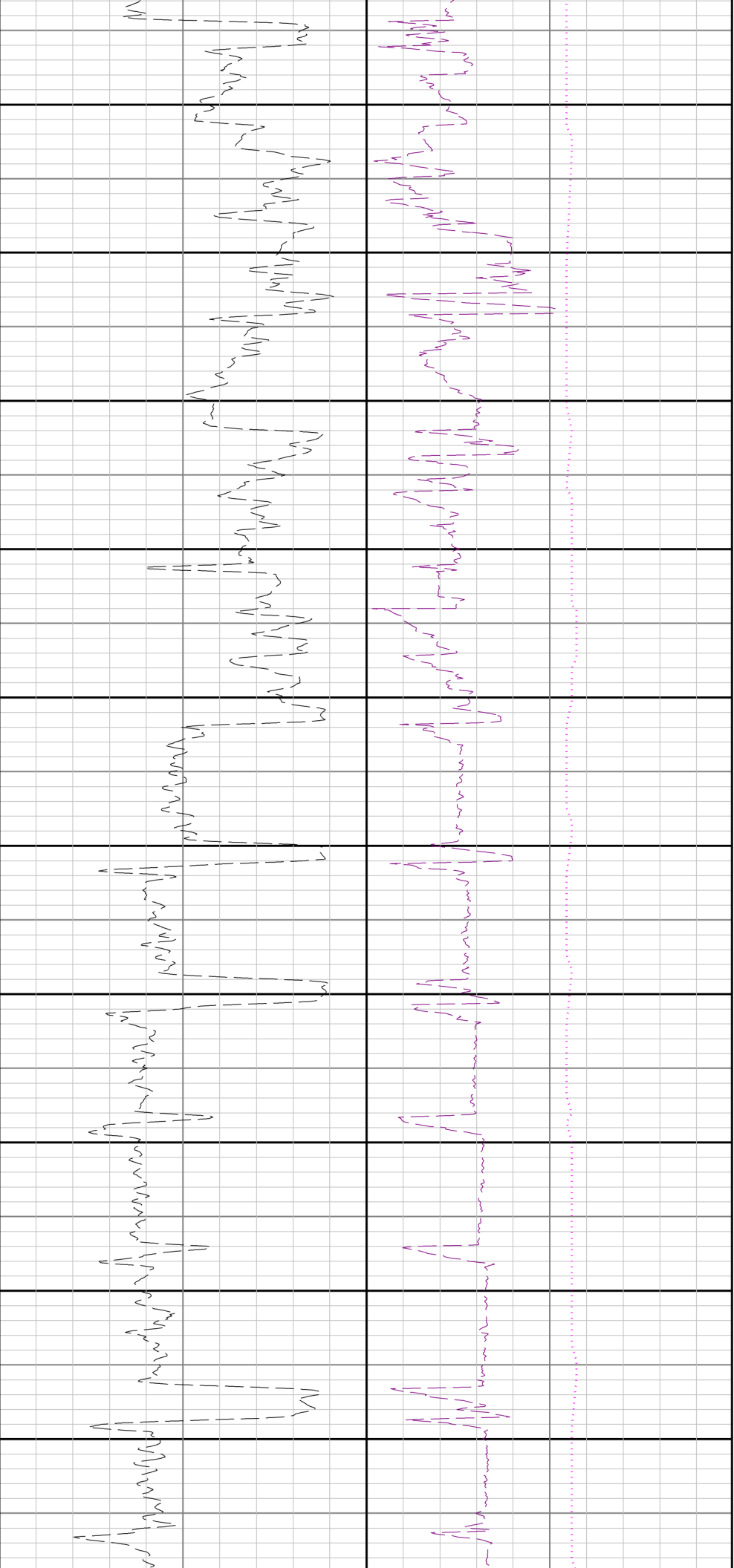












Run 3 ⇄ Run 4

11400

11500

11600

11700

11800

11900

12000

12100

12200

12300

1

