

LWD Composite Log



Natural Formation Evaluation
Gamma Ray

Scale:

1:1200 MD

Company: Noble Energy

Well: Moser H34-735

Depth Reference:

Field: Weld County

Driller's Depth

County: Weld State: United States

Status:

Final Print

Surface Location:

Latitude:

040° 12' 9.720" N

Other Services:

API No: 05-123-40860-00

Longitude:

104° 38' 49.236" W

Job ID: 7610845

SEC: 27

TWN: 3N

RGE: 65W

Permanent Datum (P.D.): Ground Level

Elevation: 8411.00 ft

KB: 0.00 ft

Log Measured From: Rig Floor

Above P.D.

DF: 8441.00 ft

GL: 8411.00 ft

Dates Interval Logged

Magnetic Field Reference

Date From:

Top: (ft)

Date To:

Bottom: (ft)

Azi Reference North:

Dip Angle: (deg)

Spud Date:

Total Magnetic Field Strength: (nT)

Mag to Reference North Correction: (deg)

Borehole Record

Casing Record

Hole Size (in)	From (ft)	To (ft)	Size (in)	Weight (lb/ft)	From (ft)	To (ft)
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8.500	1859.00	16444.95	9.625	36.00	30.00	1849.00
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Mud Record

Deviation Record

Type	From (ft)	To (ft)	Hole Size (in)	Interval (ft)	Inc Az (Start)	Inc Az (End)
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Oil Based Mud	1859.00	16444.95	8.500	14586.95	5.04 83.15	89.85 177.25
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Acquisition System

Software Version

Other

Baker Hughes Cadence

G3.1

Rig:

H&P 321

Pilot Studio

3.1.7162.3

Contractor:

Helmerich & Payne Drilling Co

District:

RMD

Unit:

D&E

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Log Run Summary

Run No	Bit Run No.	Bit Size (in)	Bit Type	Bit Gauge Length (in)	Assembly Type	Logged Interval		Bit Depth Interval		Date / Time		Circ. Hours (h)
						Top	Bottom	From	To	Start Logging	End Logging	
						(ft)	(ft)	(ft)	(ft)			
1	2	8.500	PDC	2.00	AutoTrak Curve	1845.83	11492.30	1858.00	11498.85	2015-12-17 22:01	2015-12-20 12:27	58.04
2	3	8.500	PDC	2.00	AutoTrak Curve	11486.12	16438.39	11498.85	16444.95	2015-12-21 03:07	2015-12-22 16:43	51.71

Crew

Name		Arrive Wellsite	Depart Wellsite	Name		Arrive Wellsite	Depart Wellsite	Name		Arrive Wellsite	Depart Wellsite
Adam Schlenz		2015-12-16	2015-12-23	Dustin Zink		2015-12-16	2015-12-23	Garrett Gerdsen		2015-12-16	2015-12-23
Matthew Delmore		2015-12-16	2015-12-22	Mike Gurnsey		2015-12-16	2015-12-23				

Mud Properties Record

Date / Time		Run No.	Measured Depth (ft)	Mud Type	Density (ppg)	Viscosity (cP)	pH	Fluid Loss (cm3)	Oil / Water	Source	Total Chlorides (ppm)	K+ (%)
2015-12-18 02:00		1	3017.00	Oil Based Mud	9.5	16	N/A	10.4	63.0/26.1	Active Pit	35000	0.00
2015-12-18 13:30		1	5070.00	Oil Based Mud	9.6	17	N/A	9.2	62.5/26.0	Active Pit	56000	0.00
2015-12-19 02:30		1	6524.00	Oil Based Mud	9.8	18	N/A	8.8	61.0/27.0	Active Pit	53000	0.00
2015-12-19 13:30		1	8320.00	Oil Based Mud	10.4	24	N/A	11.0	60.0/25.0	Active Pit	44000	0.00
2015-12-20 02:30		1	10240.00	Oil Based Mud	10.6	31	N/A	10.0	59.0/24.3	Active Pit	45000	0.00
2015-12-20 13:30		1	11501.00	Oil Based Mud	10.8	35	N/A	10.4	59.0/23.0	Active Pit	48000	0.00
2015-12-21 02:30		2	11501.00	Oil Based Mud	10.8	34	N/A	9.8	59.0/23.3	Active Pit	36000	0.00
2015-12-21 13:30		2	12866.00	Oil Based Mud	10.8	40	N/A	10.8	58.0/23.8	Active Pit	44000	0.00
2015-12-22 02:30		2	14843.00	Oil Based Mud	11.0	50	N/A	11.0	57.5/23.0	Active Pit	38000	0.00

Equipment and Service Data

Run No.	Tool	Serial Number	Measurement	Sensor Offset (ft)	Bit Offset (ft)	Max O.D. (in)	Min I.D. (in)
1	ATC_SU	12099238	Near Bit Inclination	5.93	6.55	7.000	4.330
1	ATC_MWD	12398256	Gamma (single)	2.21	12.17	7.000	3.250
1	ATC_MWD	12398256	Directional (mag)	12.28	22.24	7.000	3.250
2	ATC_SU	12185879	Near Bit Inclination	5.93	6.56	7.000	4.330
2	ATC_MWD	12232962	Gamma (single)	2.75	12.73	7.000	3.250

2	ATC_MWD	12232962	Directional (mag)	12.27	22.25	7.000	3.250
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Comments

- 1

Baker Hughes Runs 1 and 2 utilized a 6 3/4 inch AutoTrak Curve (Directional and Gamma Ray) tool behind an 8 1/2 inch bit and rotary steerable assembly from 1859 feet MD (1854.55 feet TVD) to 16441 feet MD (6935.96 feet TVD).
- 2

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

Remarks

Number	Measured Depth (ft)	Hole Section (in)	Run No.	Remark
1	11491.00	8.500	2	The interval between 11483 feet MD (6943.96 feet TVD) to 11500 feet MD (6943.93 feet TVD) was logged up to 15.5 hours after being drilled due to a trip out of the hole to lay down a lateral hole assembly and to pick up a new lateral hole assembly



Company

Well

Interval

Created

Noble Energy

Moser H34-735

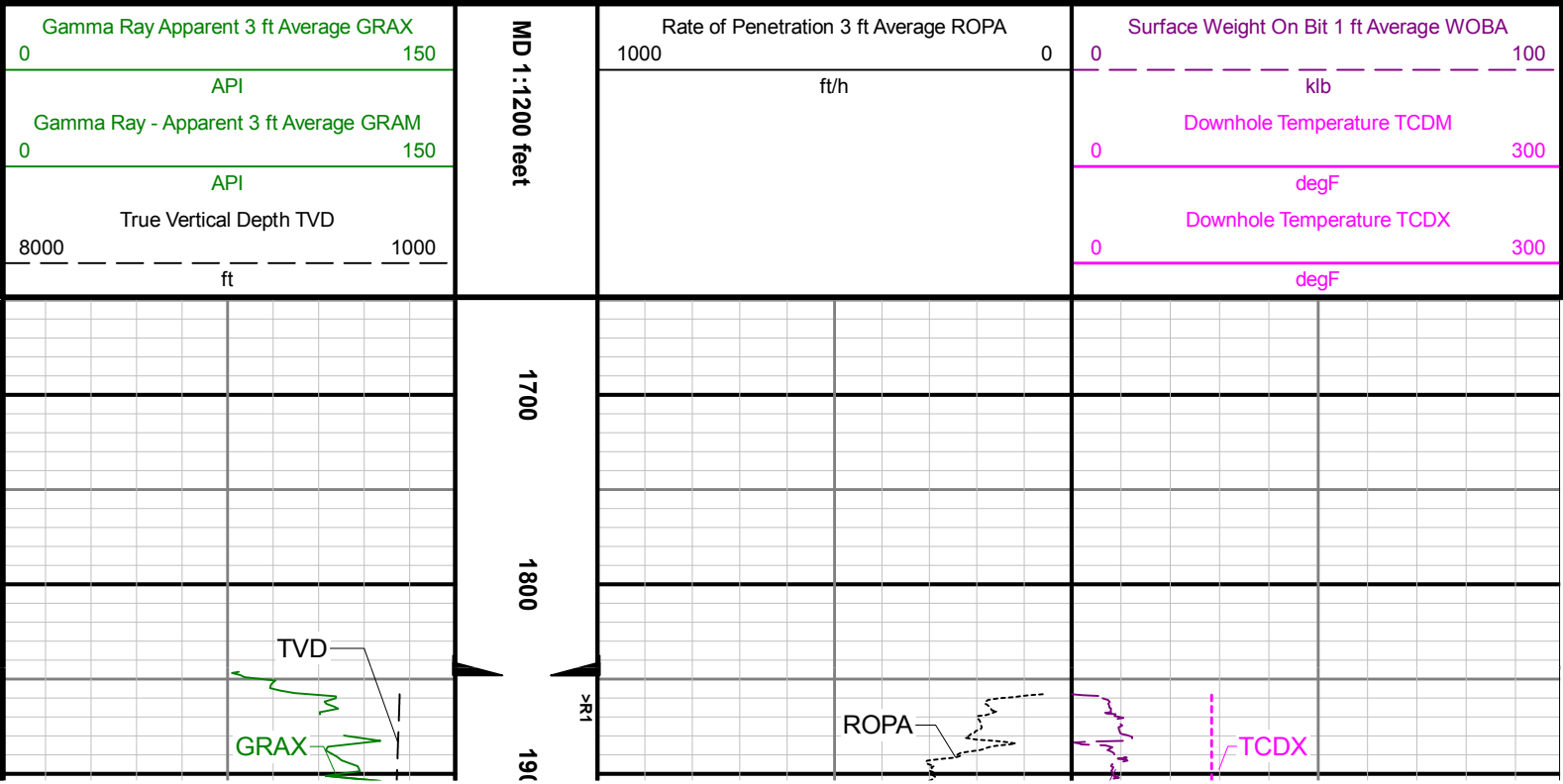
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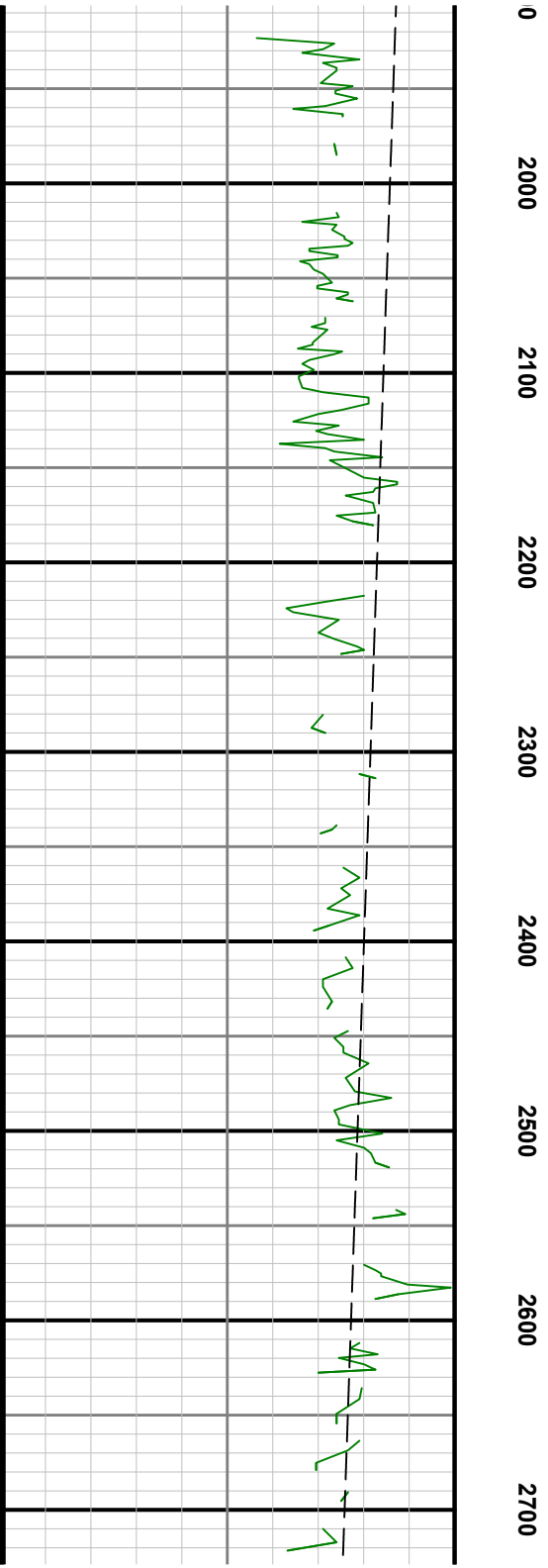
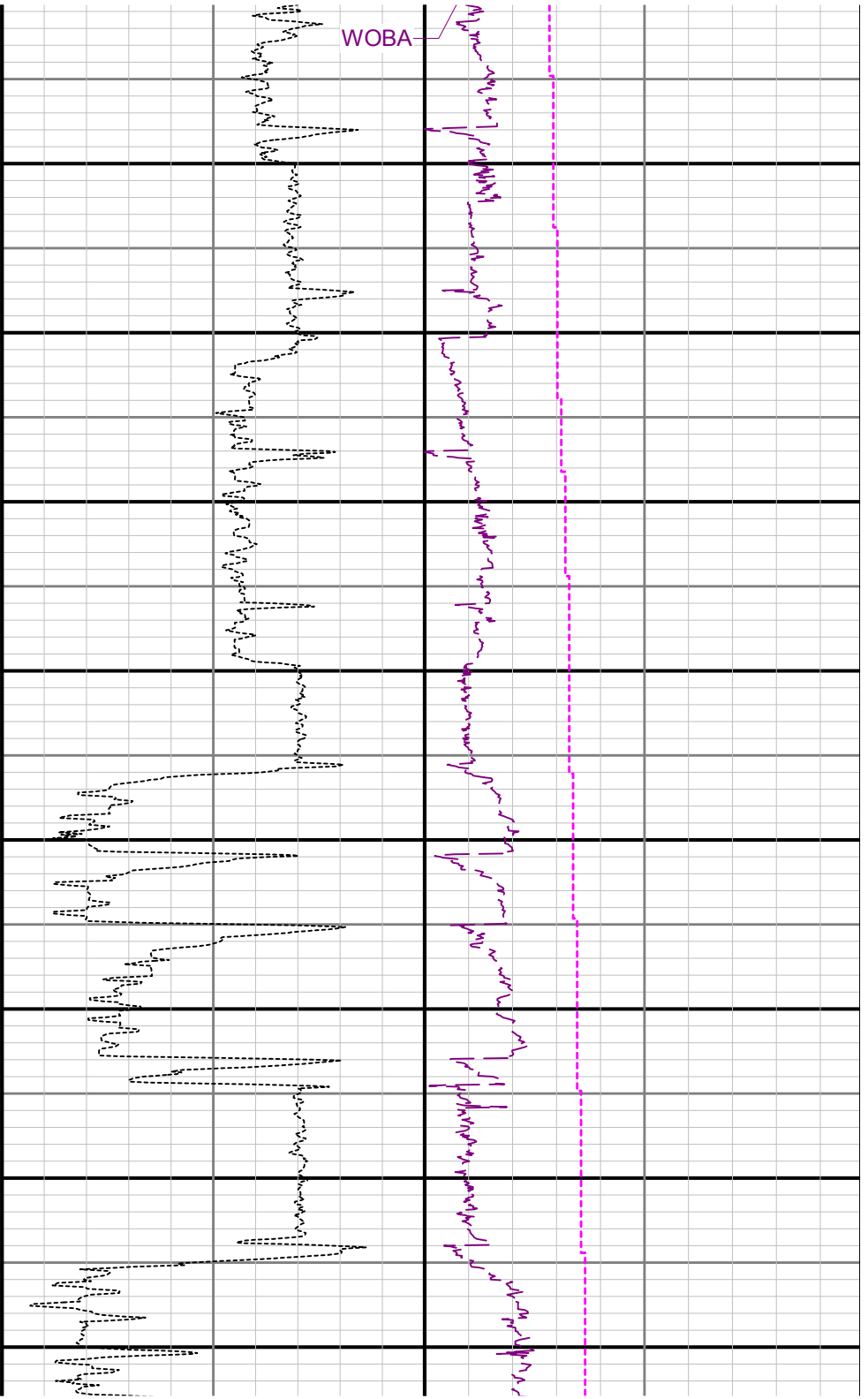
Date To:

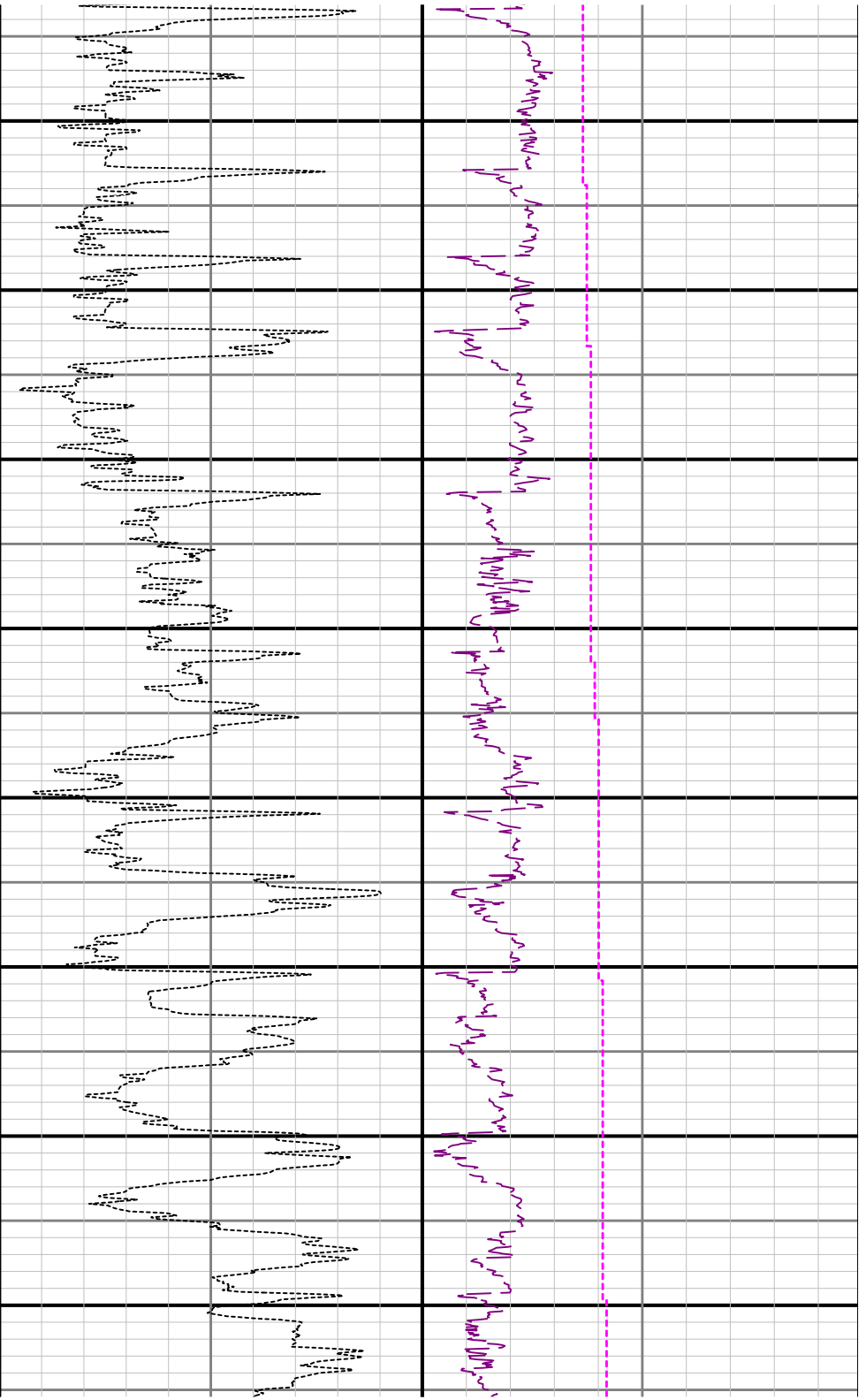
2015-12-23 08:27

Top:

Bottom:







2800

2900

3000

3100

3200

3300

3400

3500

