



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 (ft)	Bottom (ft)	From (ft)	To (ft)	Start Logging	End Logging	
1	1	8.500	PDC	2.00	AutoTrak Curve	1955.00	13957.00	1967.00	13969.00	2017-09-13 16:51	2017-09-15 12:16	38.90

Crew

Name	Arrive Wellsite	Depart Wellsite	Name	Arrive Wellsite	Depart Wellsite	Name	Arrive Wellsite	Depart Wellsite
Steven Cano	2017-09-13	2017-09-15	Wayne Burge	2017-09-13	2017-09-15			

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+ (%)
2017-09-13 02:19	1	5000.00	Oil Based Mud	9.2	9	N/A	N/A	83.3/16.7	Active Pit	27000	0.00
2017-09-15 14:12	1	10250.00	Oil Based Mud	9.3	9	N/A	N/A	83.2/16.8	Active Pit	30000	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	14192926	Near Bit Inclination	5.93	6.76	7.000	4.330
1	ATC_SU	14192926	Near Bit VSS	5.93	6.76	7.000	4.330
1	ATC_MWD	12332799	Gamma (single)	2.20	12.38	6.960	3.250
1	ATC_MWD	12332799	Directional (mag)	12.27	22.45	6.960	3.250

Service and Tool Mnemonics

Mnemonic	Name	Description
ATC_SU	ATC_SU	Auto Trak Curve Steering Unit
ATC_MWD	ATC_MWD	Auto Trak Curve MWD

Comments

1	Baker Hughes LWD run 1 utilized a 6 3/4 inch Navigamma service (Gamma Ray and Directional) behind a 8 1/2 inch bit and rotary steerable from 1967 to 13969 feet MD (1966 to 6460 feet TVD).
2	Depth measurements obtained from a depth control system not supplied or operated by Baker Hughes. Due to lack of control by Baker Hughes logging engineers, depth calibration and measurements could not be independently verified.

Remarks

Number	Measured Depth (ft)	Hole Section (in)	Run No.	Remark
1	13957.00	8.500	1	The interval from 13957 to 13969 feet MD (6460 feet TVD). was not logged du to sensor offset at well TD.

	<b>Company</b> Noble Energy <b>Well</b> Wells Ranch BR11-627
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