

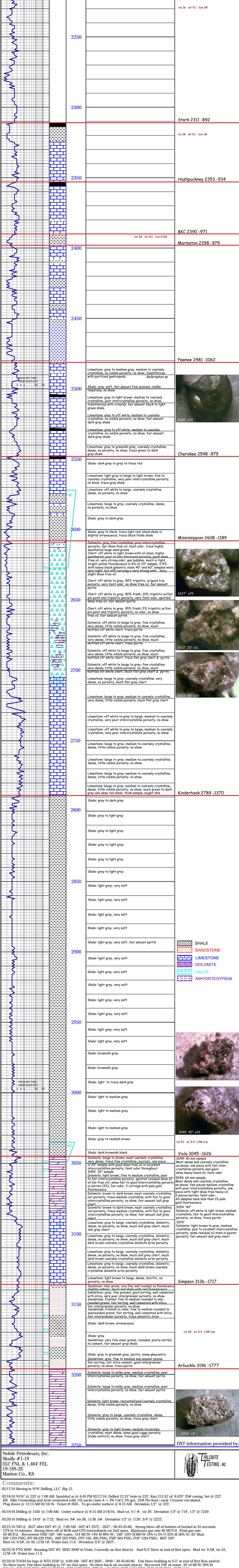
## GEOLOGICAL REPORT

### DRILLING TIME & SAMPLE LOG

REPORT PREPARED BY: FRANKLIN M. DEERDORFER



COMPANY	Noble Petroleum, Inc.	K/B	ELEVATION
LEASE	Scully #1-19	K/B	1419
FIELD	Wildcat	O.L.	
LOCATION	352' FNL & 1,484' FEL	G.L.	1411
SEC	19	R/WSP	18S
COUNTY	Marion	STATE	Kansas
CONTRACTOR	WW Drilling, LLC, Rig 12	DEPTH MEASURED FROM	KB
SPUD	2-17-16	COMP	2-23-16
SAMPLES SAVED FROM	2500' TO	RTD	
REPORT PREPARED BY	FRANKLIN M. DEERDORFER	DATE	01/19/17

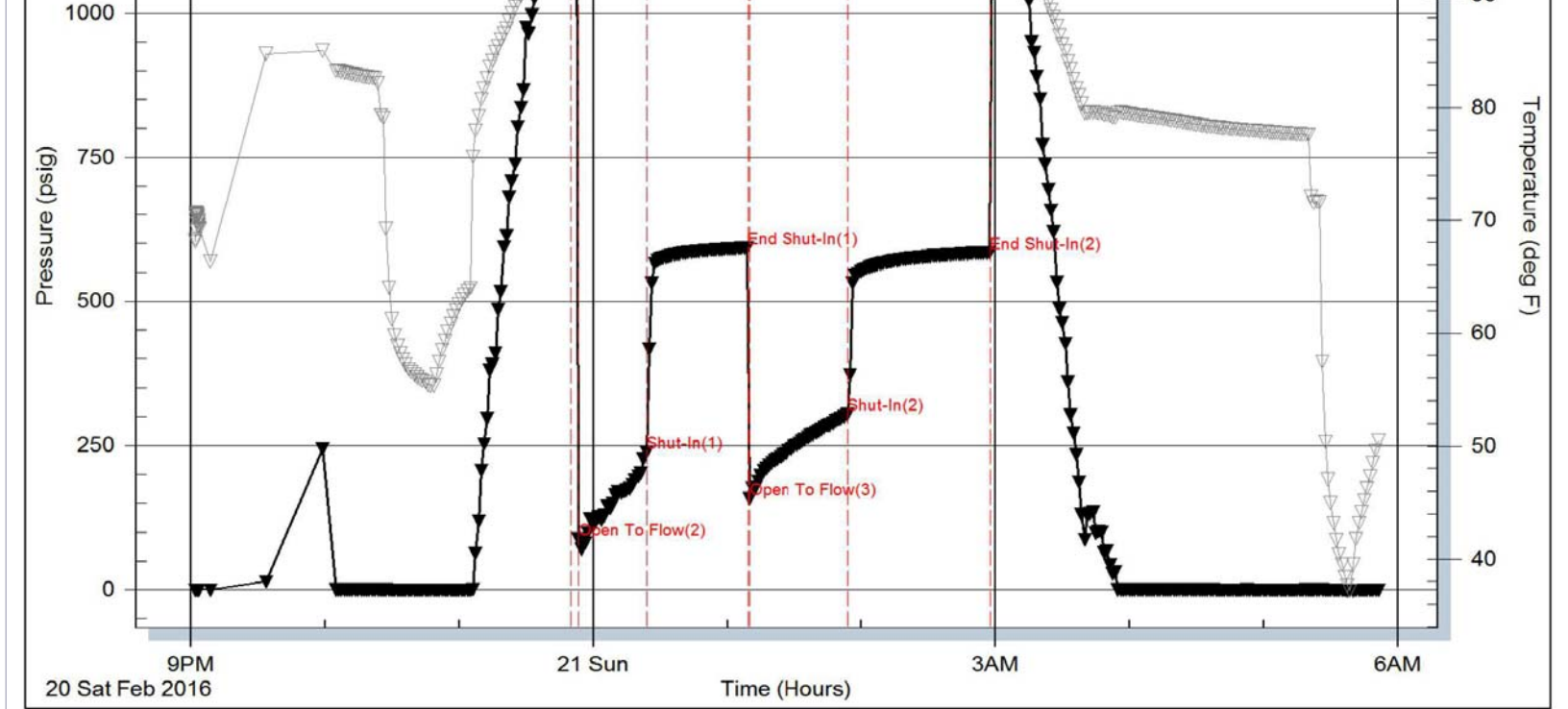


Formation	Mississippi	ft (KB)	Test Type	Conventional Bottom Hole (Initial)
Deviated	No Whipstock	ft (KB)	Tester	Leal Cason
Time Tool Opened	06:31:50	ft (KB)	Unit No.	74
Time Test Ended	11:53:20	ft (KB)	Reference Elevations	1418.00 ft (KB) 1411.00 ft (CF)
Interval	2627.00 ft (KB) To 2627.00 ft (KB) (TVD)		KB to GR/CF:	7.00 ft
Total Depth	2627.00 ft (KB) (TVD)			
Hole Diameter	7.88 inches	Hole Condition:	Good	

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1292.99	96.37	Open To Flow (1)
4	88.26	96.05	Open To Flow (2)
34	238.52	101.89	Shut-In (1)
79	591.73	102.14	End Shut-In (1)
80	157.92	90.02	Open To Flow (3)
125	304.85	103.09	Shut-In (2)
188	583.70	114.01	End Shut-In (2)
190	1283.71	102.81	Final Hydro-static

Length (ft)	Description	Volume (bbl)
0.00	1928 GIP	0.00
188.00	Water	1.50
124.00	MCW 14%M 86%W	3.48
248.00	GSV SOMCW 10% C 2% O 32% M 56% W	3.74
82.00	Mud	1.15

Gas Rates	Chase (inches)	Pressure (psig)	Gas Rate (Mcfd)
First Gas Rate	0.25	26.00	64.79
Last Gas Rate	0.25	22.00	57.74
Max. Gas Rate	0.25	40.00	86.30

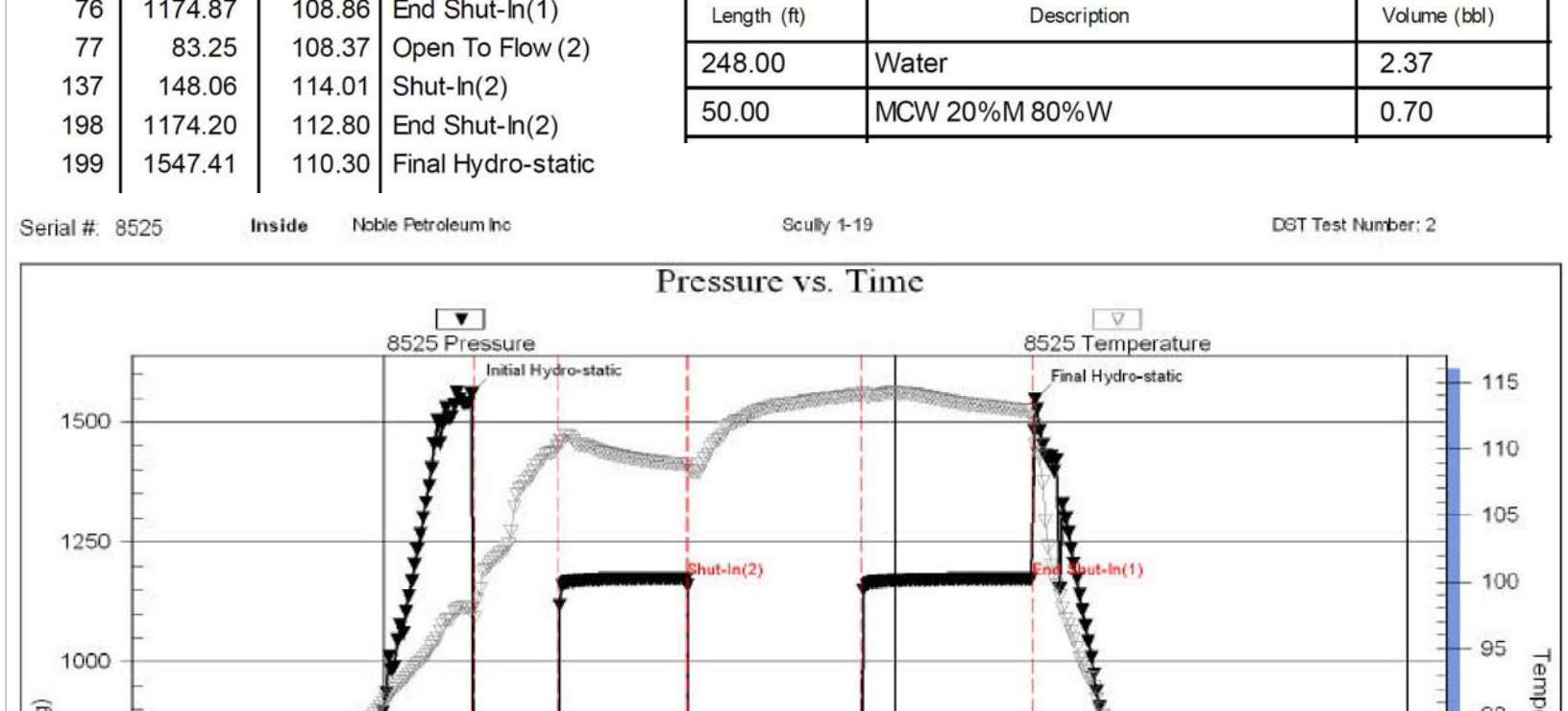


GENERAL INFORMATION:

Formation: Viola  
Deviated: No Whipstock  
Time Tool Opened: 06:31:50  
Time Test Ended: 11:53:20  
Interval: 3035.00 ft (KB) To 3049.00 ft (KB) (TVD)  
Total Depth: 3049.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches

PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1559.50	98.07	Initial Hydro-static
1	14.88	97.31	Open To Flow (1)
31	82.76	110.24	Shut-In (1)
76	1174.87	108.88	End Shut-In (1)
77	83.25	108.37	Open To Flow (2)
137	148.06	114.01	Shut-In (2)
198	1174.20	112.80	End Shut-In (2)
199	1547.41	110.30	Final Hydro-static



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137	148.06	114.01	Shut-In (2)
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Recovery

Length (ft)	Description	Volume (bbl)
248.00	Water	2.37
50.00	MCW 20%M 80%W	0.70

Gas Rates

Chase (inches)	Pressure (psig)	Gas Rate (Mcfd)
0.25	26.00	64.79
0.25	22.00	57.74
0.25	40.00	86.30

DST information provided by: TROLOBITE TESTING, INC.