NEXTIER
COMPLETION SOLUTIONS

RADIAL BOND LOG
GAMMA RAY / CCL
CEMENT BOND / VDL

Company	NOBLE ENERGY INC.
Well	PERKINS USX Y7-17
Field	WATTENBERG
County	WELD
State	COLORADO

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Field WATTENBERG
County WELD State COLORADO

Location: API #: 5-123-09505
1320 FNL & 1320 FEL
CNE

Other Services
NONE

SEC 7 TWP 2N RGE 64W

Permanent Datum	GL	Elevation	4878'
Log Measured From	KB		
Drilling Measured From	KB		

Elevation
K.B. 4888'
D.F. 4887'
G.L. 4878'

Date	30 MAR 2020
Run Number	ONE
Depth Driller	7730'
Depth Logger	920'
Bottom Logged Interval	920'
Top Log Interval	SURFACE
Casing Size	4.5"
Type Fluid	WATER
Max. Recorded Temp.	---
Estimated Cement Top	---
Time Well Ready	10:30AM
Time Logger On Bottom	11:15AM
Unit Number	20054
Tool Size / ID Number	2.75" RBL
Location	CR 51 & 20
Recorded By	MICHAEL RAMSEY
Witnessed By	MR. TOM DUNN

Borehole Record			Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	8 5/8"	24#	SURFACE	249'
Prot. String				
Production String	4.5"	10.5#	SURFACE	7730'
Liner				

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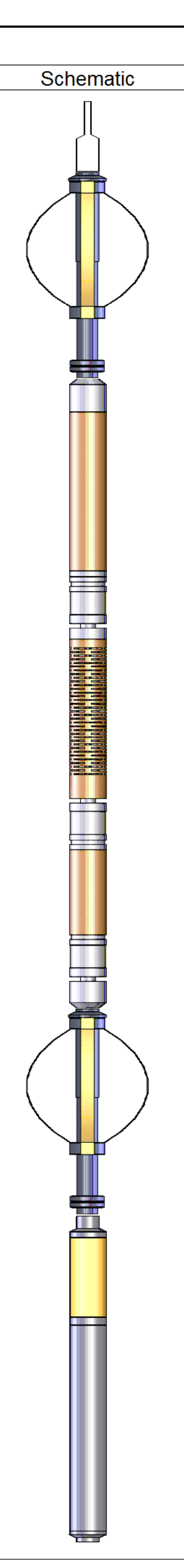
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

Comments

THANK YOU FOR USING NEXTIER COMPLETION SOLUTIONS!
LOG CORRELATED TO NEXTIER RBL
DATED MARCH 26-2020
DV TOOL FOUND AT 500-504'

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			STNDRD Standard Cable Head	1.00	1.69	10.00
			Probe Probe 2 3/4 Centralizer	2.88	2.75	20.00
WVF3FT WVFCAL WVFS1 WVFS2 WVFS3 WVFS4 WVFS5 WVFS6 WVFS7 WVFS8 WVF5FT	11.67 11.67 11.67 11.67 11.67 11.67 11.67 11.67 11.67 11.67 10.67		RBT-Probe (101020) Probe Radii Bond Tool with Digital Telemetry	8.75	2.75	90.00
			Probe Probe 2 3/4 Centralizer	2.88	2.75	20.00
CCL	3.63		GR-Probe275dig (101010) Probe Gamma CCL	4.54	2.75	57.00
GR	0.90					

Dataset: perkins usx y 7-17 rbl tom dunn.db: field/well/run1/pass5
Total Length: 20.04 ft
Total Weight: 197.00 lb
O.D. 2.75 in

Database File: perkins usx y 7-17 rbl tom dunn.db
Dataset Pathname: pass5
Presentation Format: zwag
Dataset Creation: Mon Mar 30 11:15:28 2020 by Log 7.0 B1
Charted by: Depth in Feet scaled 1:240

Calibration Report

Database File: perkins usx y 7-17 rbl tom dunn.db
Dataset Pathname: pass5
Dataset Creation: Mon Mar 30 11:15:28 2020 by Log 7.0 B1

Gamma Ray Calibration Report

Type / Serial: Probe275dig / 101010

SHOP CALIBRATION Fri Dec 28 09:41:10 2018

	Counts/Sec.	Gain	Offset	Jig	Units
Background	0.0				cps
Calibrator	1.0				cps
		0.6500			GAPI/cps

PRIMARY VERIFICATION

Background	0.0		cps
Calibrator	0.0		cps
Difference		0.0	GAPI

BEFORE SURVEY VERIFICATION

Background	0.0		cps
Calibrator	0.0		cps
Difference		0.0	GAPI

AFTER SURVEY VERIFICATION

Background	0.0		cps
Calibrator	0.0		cps
Difference		0.0	GAPI

Segmented Cement Bond Log Calibration Report

Serial Number:	101020	
Tool Model:	Probe	
Calibration Casing Diameter:	4.500	in
Calibration Depth:	491.100	ft

Master Calibration, performed Mon Mar 30 11:08:16 2020:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	-0.012	1.500	1.500	81.196	52.702	2.133
CAL	-0.012	1.556				
5'	-0.012	1.474	1.500	81.196	53.621	2.149
SUM						
S1	-0.012	1.694	0.000	81.921	48.035	0.565
S2	-0.012	1.667	0.000	81.921	48.804	0.579
S3	-0.012	1.572	0.000	81.921	51.729	0.619
S4	-0.012	1.427	0.000	81.921	56.922	0.675
S5	-0.012	1.273	0.000	81.921	63.762	0.750
S6	-0.011	1.268	0.000	81.921	64.026	0.705
S7	-0.013	1.453	0.000	81.921	55.915	0.704
S8	-0.012	1.655	0.000	81.921	49.134	0.594

Internal Reference Calibration, performed Fri Jan 13 14:30:16 2012:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	-0.012	1.556	1.000	0.000

Air Zero Calibration, performed Tue Feb 25 13:16:04 2014:

	Raw (v)	Calibrated (v)	Results
	Zero	Zero	Offset
3'	0.000	0.000	0.000
5'	0.000	0.000	0.000
SUM			
S1	0.000	0.000	0.000
S2	0.000	0.000	0.000
S3	0.000	0.000	0.000
S4	0.000	0.000	0.000
S5	0.000	0.000	0.000
S6	0.000	0.000	0.000
S7	0.000	0.000	0.000
S8	0.000	0.000	0.000