NEXTIER
COMPLETION SOLUTIONS

RADIAL CEMENT BOND GAMMA RAY CCL LOG

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

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

Location: API #: Other Services

SEC 7 TWP 2N RGE 64W

Permanent Datum	GROUND LEVEL	Elevation	K.B.
Log Measured From	KELLY BUSHING		D.F.
Drilling Measured From	KELLY BUSHING		G.L.

Date	3 MARCH 2020
Run Number	ONE
Depth Driller	7730'
Depth Logger	6979'
Bottom Logged Interval	6976'
Top Log Interval	SURFACE
Casing Size	4.5"
Type Fluid	WATER
Max. Recorded Temp.	N/A
Estimated Cement Top	N/A
Time Well Ready	11:45 AM
Time Logger On Bottom	12:45 PM
Unit Number	200099
Tool Size / ID Number	2.75" RADIAL PROBE
Location	KEENESBURG, CO
Recorded By	ADAM GARDNER
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				
Prot. String				
Production String	4.5"	10.5#		
Liner				

<<< Fold Here >>>

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

LOG NOT CORRELATED. RAN WITH 10' K.B..
THANK YOU FOR CHOOSING NEXTIER COMPLETIONS SOLUTIONS

NEXTIER
COMPLETION SOLUTIONS

MAIN PASS (0 PSI)

Database File:	rcbl noble perkins usx y7-17 3-13-2020 ag.db
Dataset Pathname:	pass6
Presentation Format:	zwag
Dataset Creation:	Fri Mar 13 12:41:40 2020 by Log 7.0 B1
Charted by:	Depth in Feet scaled 1:240

50 CCL -5.5
0 GR (GAPI) 150
340 TT3 (usec) 272

0 AMP (mV) 100
AMPLIFIED AMP3
0 (mV) 20

0 AMPS1 100
0 AMPS2 100
0 AMPS3 100
0 AMPS4 100
0 AMPS5 100
0 AMPS6 100
0 AMPS7 100
0 AMPS8 100

200 VDL 1200

1 RADIAL MAP 8
80 1

Log Variables

Database:C:\Warrior\Data\rcbl noble perkins usx y7-17 3-13-2020 ag.db
Dataset: field/well/run1/pass6

Top - Bottom

PPT usec	CASEWGHT lb/ft	MAXAMPL mV	MINAMPL mV	MINATTN db/ft	SRFTEMP degF	CASEOD in	PERFS
358	10.5	81	0.4	0.8	34	4.5	0

TDEPTH ft	BOTTEMP degF	BOREID in
0	0	7.875

Calibration Report

Database File: rcbl noble perkins usx y7-17 3-13-2020 ag.db
Dataset Pathname: pass6
Dataset Creation: Fri Mar 13 11:41:40 2020 by Log 7.0 B1

Gamma Ray Calibration Report

Type / Serial: Probe275dig / 110785

SHOP CALIBRATION Fri Mar 13 12:37:30 2020

	Counts/Sec.	Gain	Offset	Jig	Units
Background	0.0				cps
Calibrator	1.0				cps
		0.4800			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: 2301.508 ft

Master Calibration, performed Fri Mar 13 12:10:41 2020:

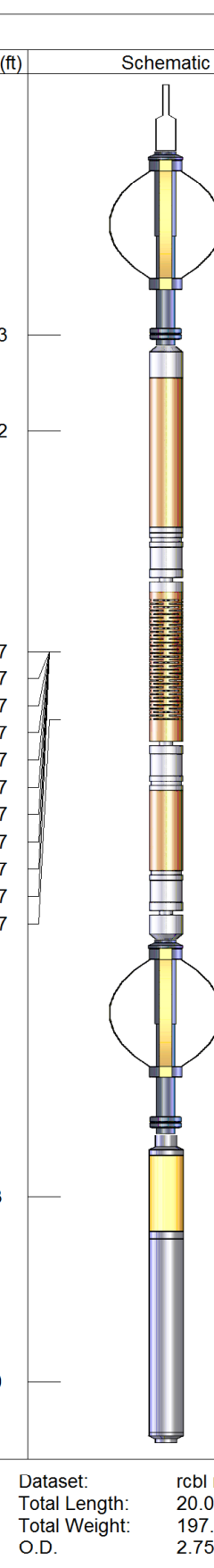
	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.008	2.151	0.800	81.196	37.512	0.506
CAL	0.008	0.704				
5'	0.008	2.033	0.800	81.196	39.697	0.492
SUM						
S1	0.008	2.131	0.000	81.000	38.147	-0.292
S2	0.008	2.180	0.000	81.000	37.291	-0.291
S3	0.008	2.217	0.000	81.000	36.668	-0.295
S4	0.008	2.201	0.000	81.000	36.922	-0.279
S5	0.008	2.182	0.000	81.000	37.257	-0.300
S6	0.008	2.124	0.000	81.000	38.265	-0.289
S7	0.008	2.111	0.000	81.000	38.510	-0.303
S8	0.008	2.117	0.000	81.000	38.402	-0.289

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	0.008	0.704	1.000	0.000

Air Zero Calibration, performed Mon Dec 30 15:19:04 2019:

	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

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
HEADVOLT	16.33					
IntTemp	14.92					
WVF3FT	11.67		RBT-Probe (101020) Probe Radii Bond Tool with Digital Telemetry	8.75	2.75	90.00
WVFCAL	11.67					
WVFS1	11.67					
WVFS2	11.67					
WVFS3	11.67					
WVFS4	11.67					
WVFS5	11.67					
WVFS6	11.67					
WVFS7	11.67					
WVFS8	11.67					
WVF5FT	10.67					
			Probe Probe 2 3/4 Centralizer	2.88	2.75	20.00
CCL	3.63					
			GR-Probe275dig (110785) Probe Gamma CCL	4.54	2.75	57.00
GR	0.90					

Dataset: rcbl noble perkins usx y7-17 3-13-2020 ag.db: field/well/run1/pass6
Total Length: 20.04 ft
Total Weight: 197.00 lb
O.D. 2.75 in