Company	EXTRACTION OIL & GAS INC.
Well	KALLSEN 24-09 #1
Field	WATTENBERG
County	WELD
State	COLORADO

C&J ENERGY SERVICES

GAMMA RAY CCL CEMENT BOND VDL

Company EXTRACTION OIL & GAS INC.
Well KALLSEN 24-09 #1
Field WATTENBERG
County WELD State COLORADO
Location: API #: 05-001-07732
SE/SW
SEC 9 TWP 1S RGE 65W
Other Services

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

Elevation
K.B.
D.F.
G.L.

Date	JULY 1, 2018
Run Number	ONE
Depth Driller	8079
Depth Logger	7300
Bottom Logged Interval	6350-7830
Top Log Interval	SURFACE-1500
Open Hole Size	7-7/8
Type Fluid	WATER
Density / Viscosity	N/A
Max. Recorded Temp.	N/A
Estimated Cement Top	
Time Well Ready	TEK RIG
Time Logger on Bottom	13:15
Equipment Number	922338
Location	FORT LUPTON
Recorded By	GREG NOLAN
Witnessed By	RICK MAXWELL

Borehole Record

Run Number	Bit	From	To

Tubing Record

Size	Weight	From	To

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	8-5/8	254#	SURFACE	263
Prot. String				
Production String	5-1/2	15.5# & 17#	SURFACE	8079
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

Database File: cbl extraction kallsen 24-9 #1.db
Dataset Pathname: pass4
Presentation Format: sec 3-5
Dataset Creation: Wed Aug 01 13:30:46 2018 by Log 7.0 B1
Charted by: Depth in Feet scaled 1:240

50	CCL	-5.5
0	Gamma Ray (GAPI)	200
340	TT3 (usec)	240

0	Amplified Amplitude (mV)	20
0	Amplitude (mV)	100

200 Variable Density 1200

50	CCL	-5.5
0	Gamma Ray (GAPI)	200
340	TT3 (usec)	240

0	Amplified Amplitude (mV)	20
0	Amplitude (mV)	100

200 Variable Density 1200

Database File: cbl extraction kallsen 24-9 #1.db
Dataset Pathname: pass3
Presentation Format: sec 3-5
Dataset Creation: Wed Aug 01 13:09:56 2018 by Log 7.0 B1
Charted by: Depth in Feet scaled 1:240

50	CCL	-5.5
0	Gamma Ray (GAPI)	200
340	TT3 (usec)	240

0	Amplified Amplitude (mV)	20
0	Amplitude (mV)	100

200 Variable Density 1200

50	CCL	-5.5
0	Gamma Ray (GAPI)	200
340	TT3 (usec)	240

0	Amplified Amplitude (mV)	20
0	Amplitude (mV)	100

200 Variable Density 1200

Calibration Report

Database File: cbl extraction kallsen 24-9 #1.db
Dataset Pathname: pass3
Dataset Creation: Wed Aug 01 13:09:56 2018 by Log 7.0 B1

Gamma Ray Calibration Report

Type / Serial: Probe275dig / 110785

SHOP CALIBRATION Tue Mar 27 07:56:41 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:	5.500	in
Calibration Depth:	126.775	ft

Master Calibration, performed Wed Aug 01 12:52:52 2018:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.007	1.490	1.500	71.921	47.500	1.161
CAL	0.007	0.401				
5'	0.007	1.471	1.500	71.921	48.098	1.152
SUM						
S1	0.007	1.693	0.000	71.921	42.669	-0.309
S2	0.007	1.666	0.000	71.921	43.357	-0.312
S3	0.007	1.492	0.000	71.921	48.438	-0.346
S4	0.007	1.411	0.000	71.921	51.222	-0.363
S5	0.007	1.435	0.000	71.921	50.382	-0.365
S6	0.007	1.471	0.000	71.921	49.141	-0.353
S7	0.007	1.564	0.000	71.921	46.184	-0.330
S8	0.007	1.499	0.000	71.921	48.222	-0.354

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	0.007	0.401	1.000	0.000

Air Zero Calibration, performed Wed Aug 01 12:48:25 2018:

	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