KLX Energy Services

GAMMA RAY / CCL
CEMENT BOND OG

Company EXTRACTION OIL & GAS
Well GRAEBER 33-33_DX_CBL
Field WATTENBURG
County WELD
State COLOARADO Country USA

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Well	GRAEBER 33-33_DX_CBL
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County	WELD
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Location: API # : 05-123-23837

SENE

SEC 33 TWP 1N RGE 68W

Other Services

Permanent Datum	GROUND LEVEL	Elevation	5233'
Log Measured From	KB 16'		
Drilling Measured From	KELLY BUSHING		

Elevation
K.B. 5249'
D.F. 5248'
G.L. 5233'

Date	04-16-2018		
Run Number	ONE		
Depth Driller	N/A		
Depth Logger	1550'		
Bottom Logged Interval	500'		
Top Log Interval	SURFACE		
Open Hole Size	8-5/8"		
Type Fluid	WATER		
Density / Viscosity	8.34		
Max. Recorded Temp.	N/A		
Estimated Cement Top	820'		
Time Well Ready	7:00AM		
Time Logger on Bottom	8:00AM		
Equipment Number	WL-40		
Location	PLATTEVILLE		
Recorded By	BILL JEAN		
Witnessed By	JAY PAPE		

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"	11.6#	SURFACE	
Liner				

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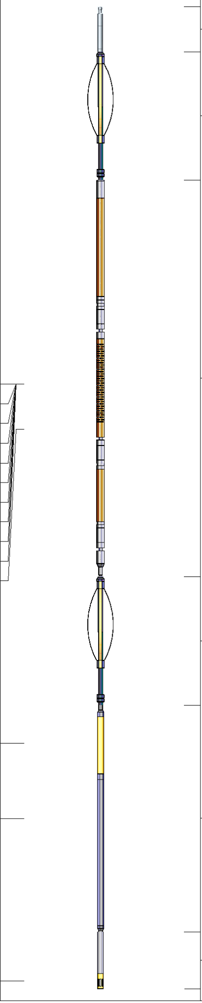
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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

Sensor	Offset (ft)
WVF3FT	13.33
WVFCAL	13.33
WVFS1	13.33
WVFS2	13.33
WVFS3	13.33
WVFS4	13.33
WVFS5	13.33
WVFS6	13.33
WVFS7	13.33
WVFS8	13.33
WVF5FT	12.33
CCL	5.42
GR	3.75
TEMP	0.17

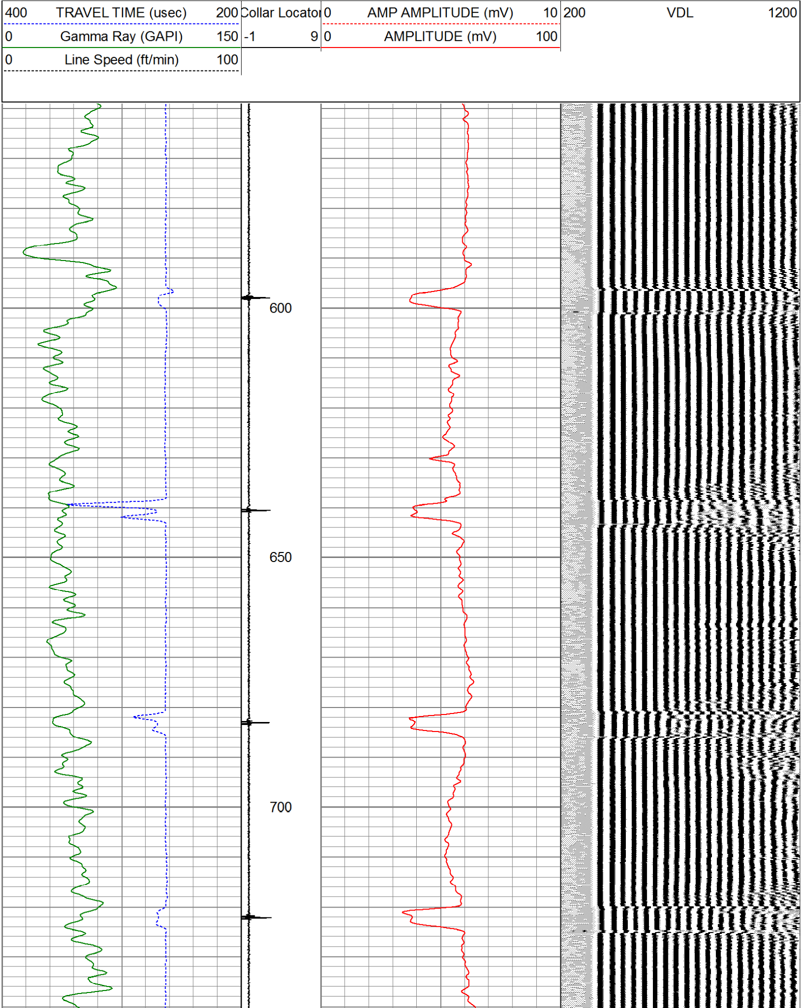
Schematic

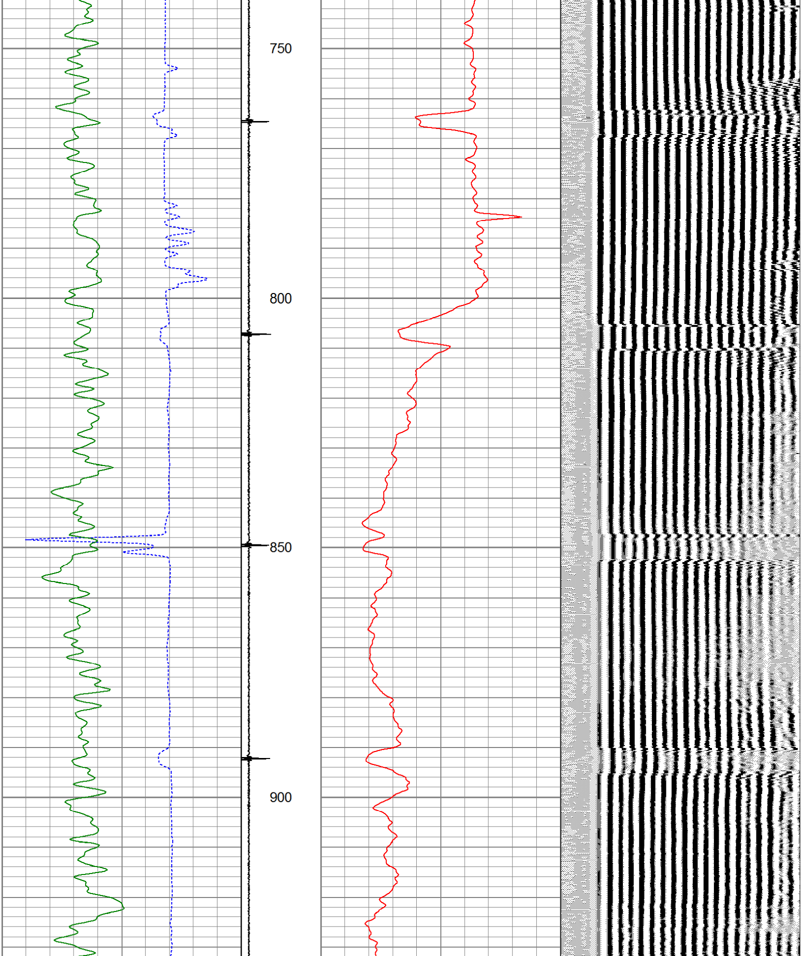


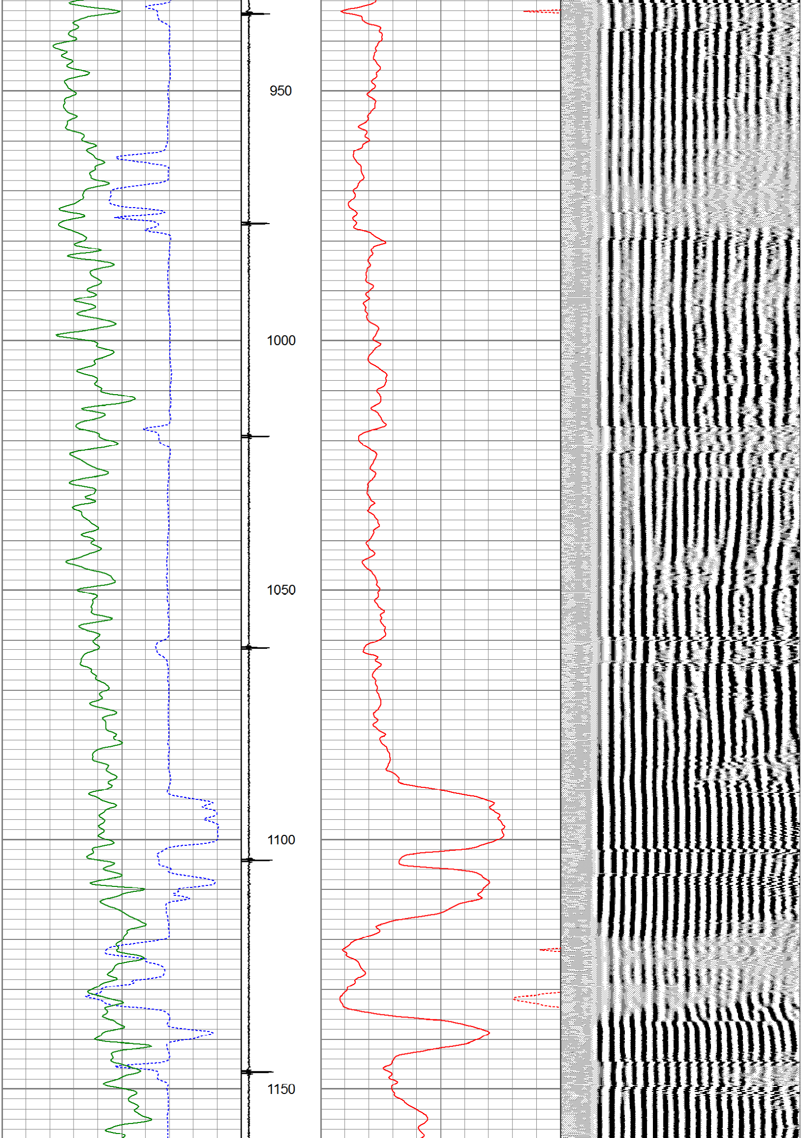
Description	Len (ft)	OD (in)	Wt (lb)
STNDRD Standard Cable Head	1.00	1.69	3.00
PTS275	2.83	2.75	
RBT-Probe LT Radii (1307-48) RADII LT	8.75	2.75	106.50
PTS275	2.83	2.75	
GR-Probe275dig (080221) Probe 2.75 High Temperature	5.00	2.75	57.00
TEMP-1.375TEMP (0001) Temperature Tool	1.25	1.38	30.00

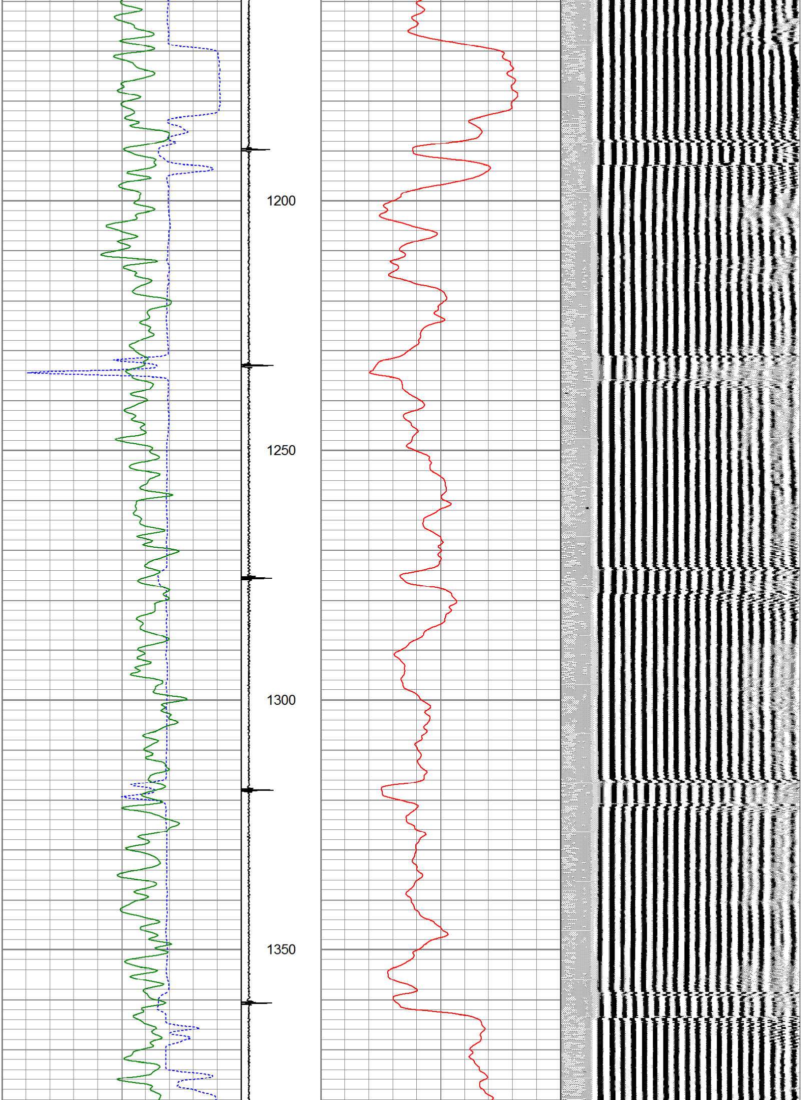
Dataset: exstration 4-16-18.db: field/well/run1/pass5
Total Length: 21.67 ft
Total Weight: 196.50 lb
O.D. 2.75 in

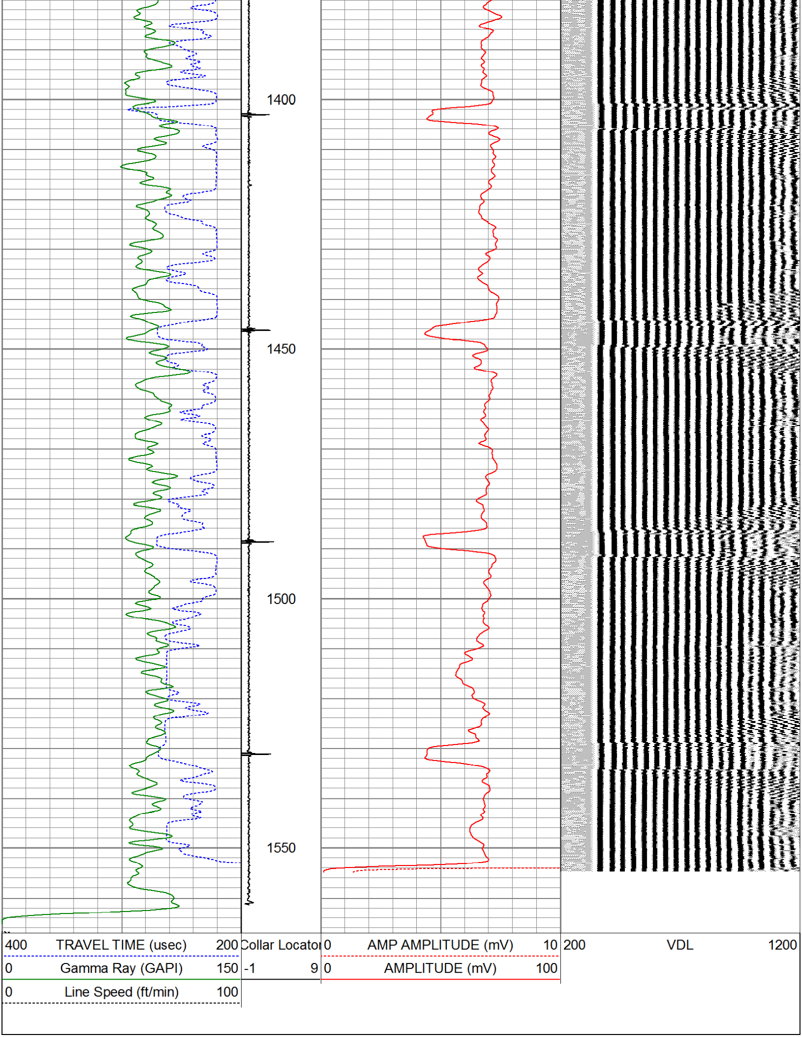
Database File: graeber_33-33ex_cbl.db
Dataset Pathname: pass2
Presentation Format: cbl_drs
Dataset Creation: Mon Apr 16 08:39:31 2018 by Log Std Casedhole 10081
Charted by: Depth in Feet scaled 1:240











Calibration Report

Database File: graeber_33-33ex_cbl.db
Dataset Pathname: pass2
Dataset Creation: Mon Apr 16 08:39:31 2018 by Log Std Casedhole 10081

Temperature Calibration Report

Serial Number: 0001
Tool Model: 1.375TEMP
Performed: Wed Mar 15 15:39:51 2006

	Reference		Reading	
Low Reference:	0.00	degF	0.00	cps
High Reference:	100.00	degF	1000.00	cps

Gain: 0.10
Offset: 0.00
Delta Spacing 2

Gamma Ray Calibration Report

Type / Serial: Probe275dig / 080221

SHOP CALIBRATION Thu Sep 08 10:58:32 2016

	Counts/Sec.	Gain	Offset	Jig	Units
Background	0.0				cps
Calibrator	1.0				cps
		1.0000			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: 1307-48
Tool Model: Probe LT Radii

Calibration Casing Diameter: 5.500 in
Calibration Depth: 23.803 ft

Master Calibration, performed Sun Mar 19 09:48:26 2017:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.002	0.806	1.500	71.921	87.541	1.341
CAL	0.001	0.863				
5'	0.002	0.778	1.500	71.921	90.667	1.343
SUM						
S1	0.002	0.840	2.000	100.000	116.858	1.800
S2	0.002	0.798	2.000	100.000	123.148	1.749
S3	0.002	0.804	2.000	100.000	122.181	1.764
S4	0.002	0.804	2.000	100.000	122.151	1.770
S5	0.002	0.815	2.000	100.000	120.474	1.772
S6	0.002	0.818	2.000	100.000	120.099	1.780

S7	0.002	0.812	2.000	100.000	121.008	1.775
S8	0.002	0.807	2.000	100.000	121.724	1.811

Internal Reference Calibration, performed Wed Dec 31 17:00:00 1969:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.001	0.863	1.000	0.000

Air Zero Calibration, performed Wed Dec 31 17:00:00 1969:

	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