Pioneer Energy Services

RADIAL SECTOR BOND LOG WITH GAMMA RAY

Company	**Kerr-McGee Oil & Gas Onshore**
Well	**FRANK 6-8**
Field	**WATTENBERG**
County	**WELD**
State	**CO**

Location: API # : 05123265820000

2624' FNL & 1559' FWL

SEC 8 TWP 5N RGE 67W

Other Services

NONE

Permanent Datum	GL	Elevation	4912'
Log Measured From	KB	12'	
Drilling Measured From	KB		

Elevation
K.B. 4924'
D.F. 4923'
G.L. 4912'

CompanyKerr-McGee Oil & Gas Onshore
Well FRANK 6-8
Field WATTENBERG
County WELD State CO

Date of Service	6-4-14
Run Number	ONE
Depth Driller or PBTD	7954'
Depth Logger	1475'
Bottom Log Interval	1475'
Top Log Interval	SURFACE
Open Hole Size	NA
Type Fluid	WATER
Fluid Level	SURFACE
Fluid Density	NA
Max. Recorded Temperature	85.64
Max. Wellhead Pressure	O PSI
Wellhead Connection	5K PACKOFF
Estimated Cement Top	490'
Unit Number	59
Wireline Size	9/32"
Location	FORT MORGAN
Recorded By	JOHN HOLLIS
Witnessed By	Mr. Aaron Holten

	Size	Wt/Ft	Top	Bottom
Tubing Record				
Surface Casing				
Production Casing	4.5"	11.6#	surface	7954'
Liner Record				

<<< Fold Here >>>

All interpretations are opinions based on inferences from electrical or other measurements and Pioneer Wireline Services, LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Pioneer Wireline Services, LLC will not 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.

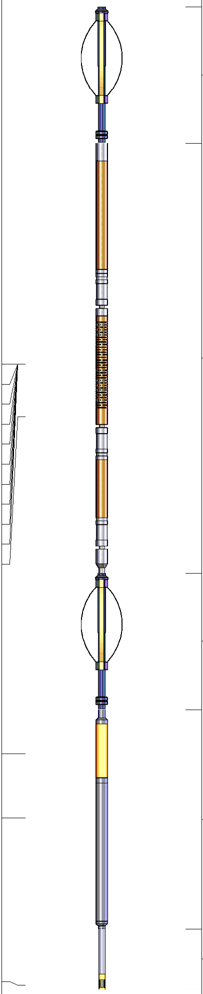
Comments

N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.
S.O.# 2-260047

CORRELATED TO J-W LOG RAN 4-14-2008

THANK YOU FOR USING PIONEER Energy SERVICES

Your Pioneer Energy Services Crew	Tool Data - Services	Serial Number
Engineer: J. HOLLIS Operator: P. DOLPH Operator: E. MILLER Operator:		

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			PTS275	2.83	2.75	
WVF3FT	12.96		RBT-Probe (Base) Probe Radii Bond Tool with Digital Telemetry	8.92	2.75	90.00
WVFCAL	12.96					
WVFS1	12.96					
WVFS2	12.96					
WVFS3	12.96					
WVFS4	12.96					
WVFS5	12.96					
WVFS6	12.96					
WVFS7	12.96					
WVFS8	12.96					
WVF5FT	11.88					
			PTS275	2.83	2.75	
CCL	4.88					
GR	3.55		GR_CCL-Probe (111211) Probe Gamma CCL	4.54	2.75	100.00
TEMP	0.08		TEMP-1.375TEMP (0001) Temperature Tool	1.25	1.38	30.00

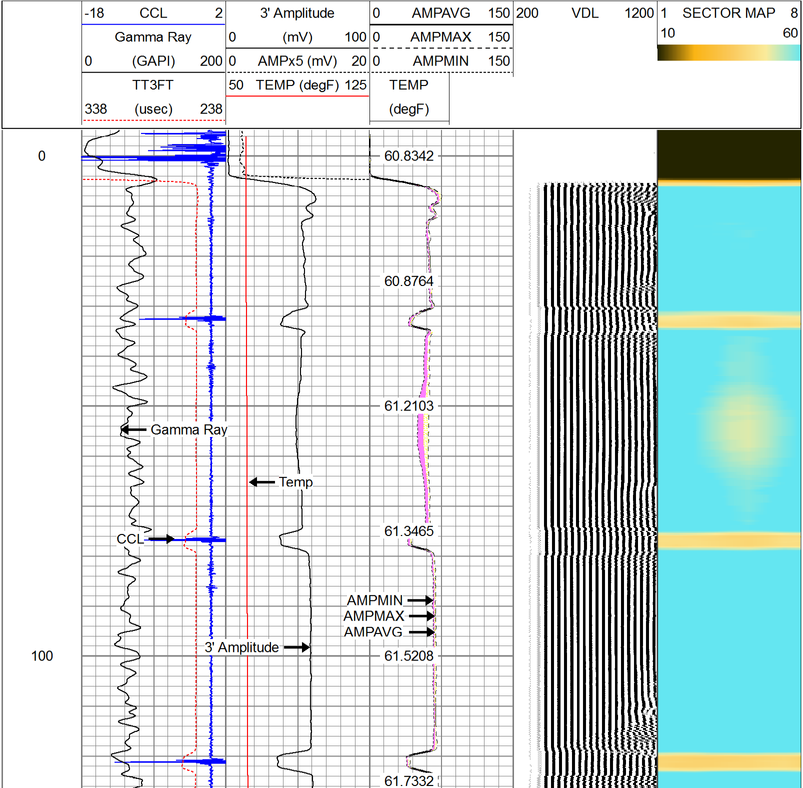
Dataset:	franks_6_8_05123265820000_anadarko.db: field/well/run1/pass5.1
Total Length:	20.38 ft
Total Weight:	220.00 lb
O.D.	2.75 in

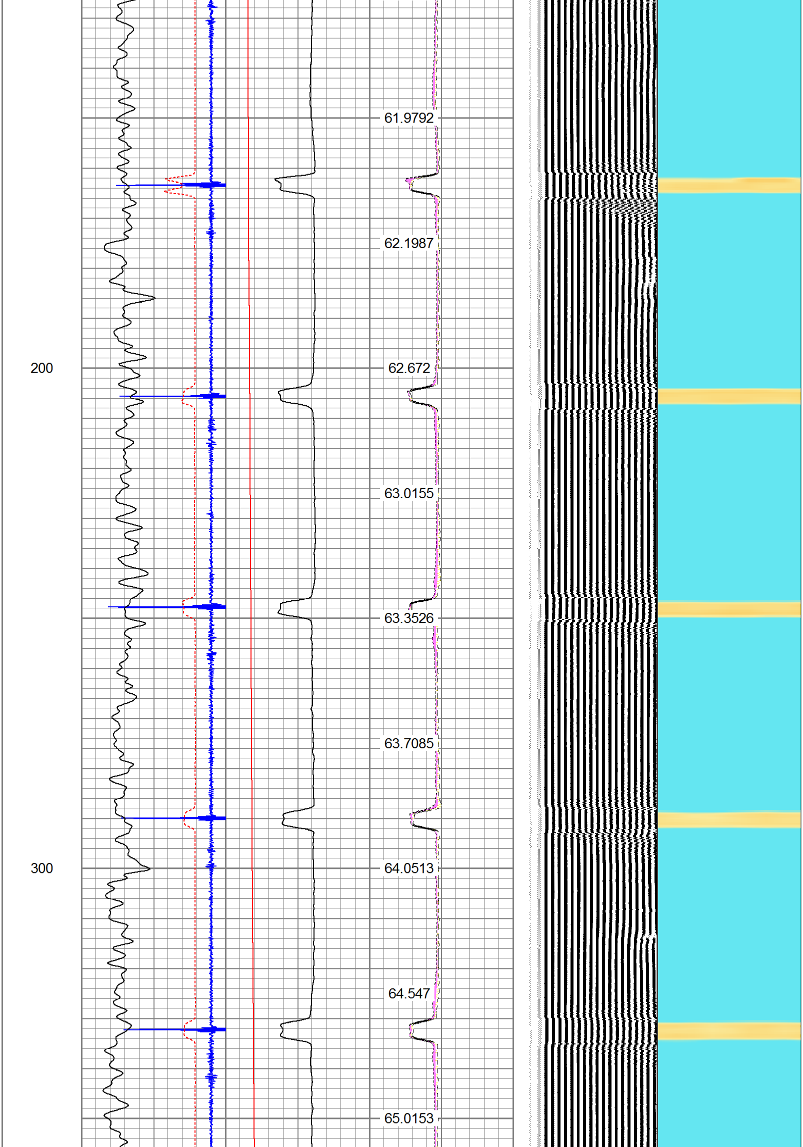
PIONEER

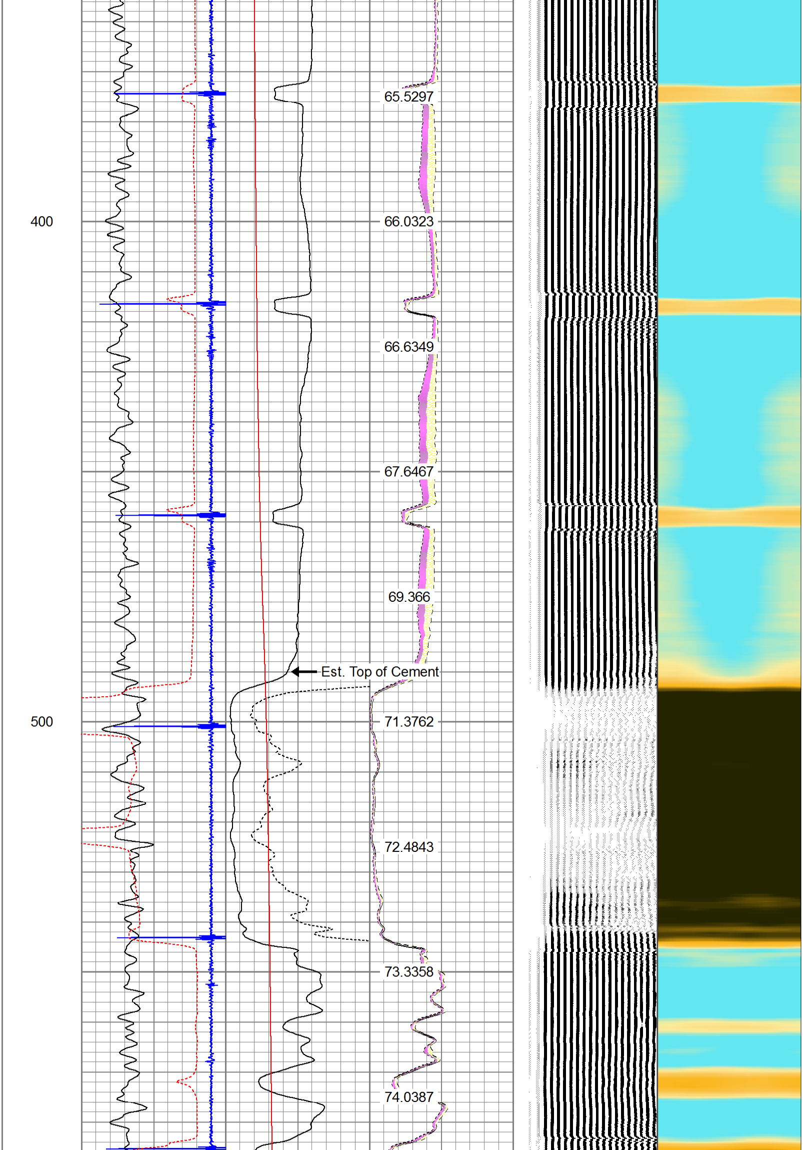
Pioneer Energy Services

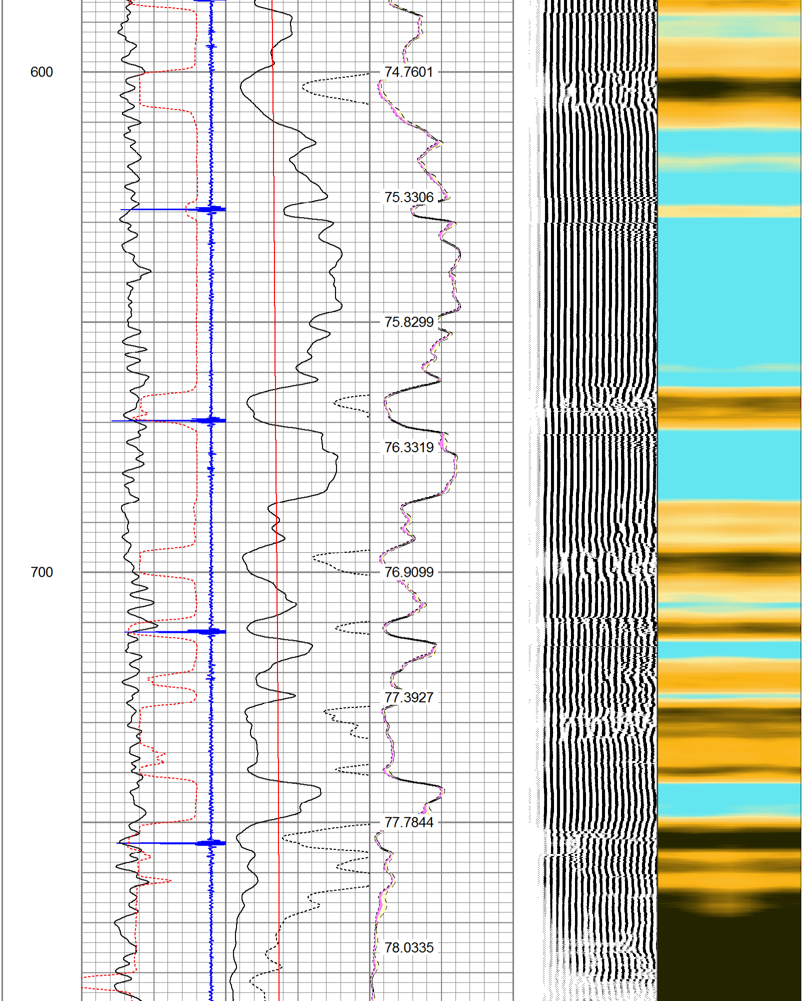
Main Pass

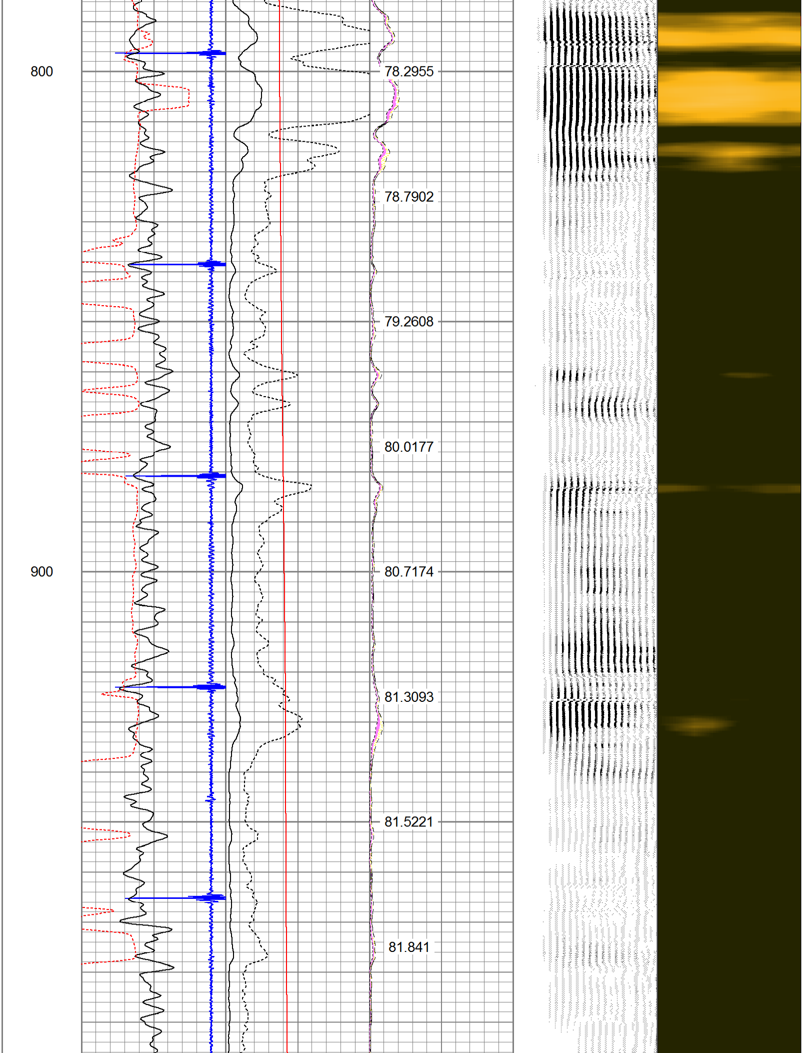
Database File:	franks_6_8_05123265820000_anadarko.db
Dataset Pathname:	pass5.1
Presentation Format:	scbl02
Dataset Creation:	Wed Jun 04 08:07:01 2014 by Calc 7.0 B1
Charted by:	Depth in Feet scaled 1:240

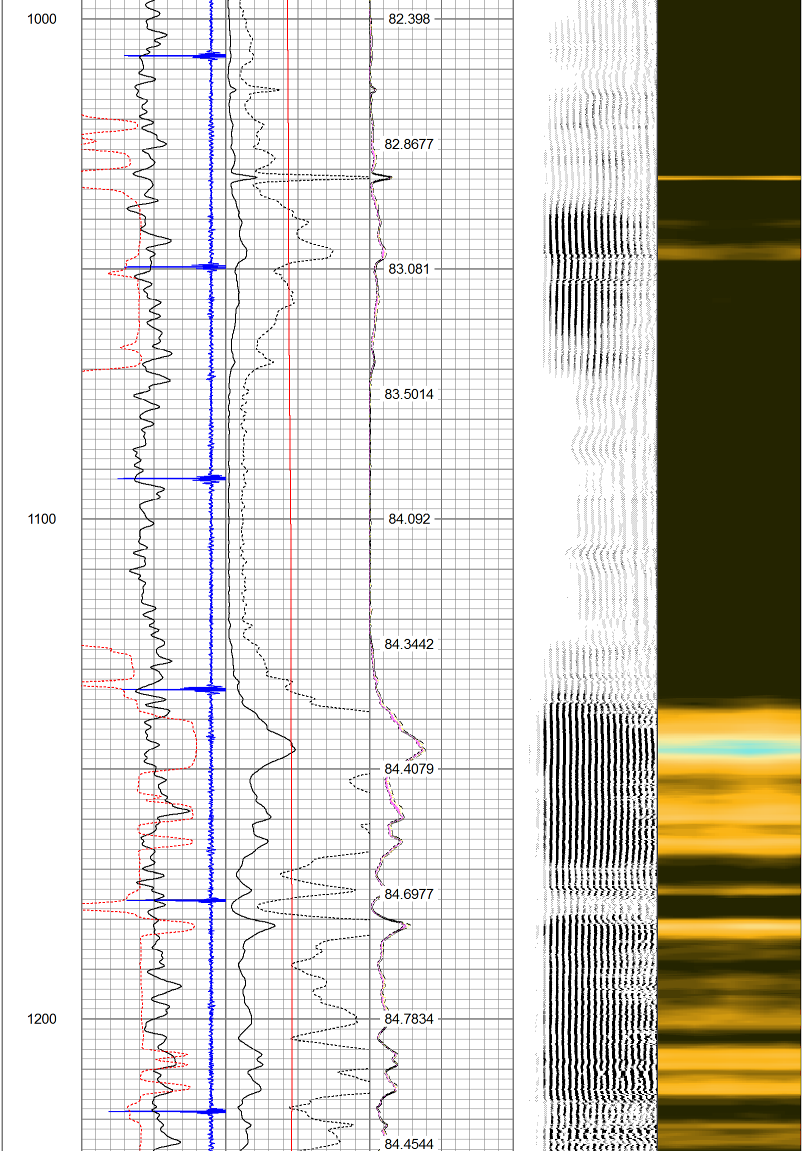


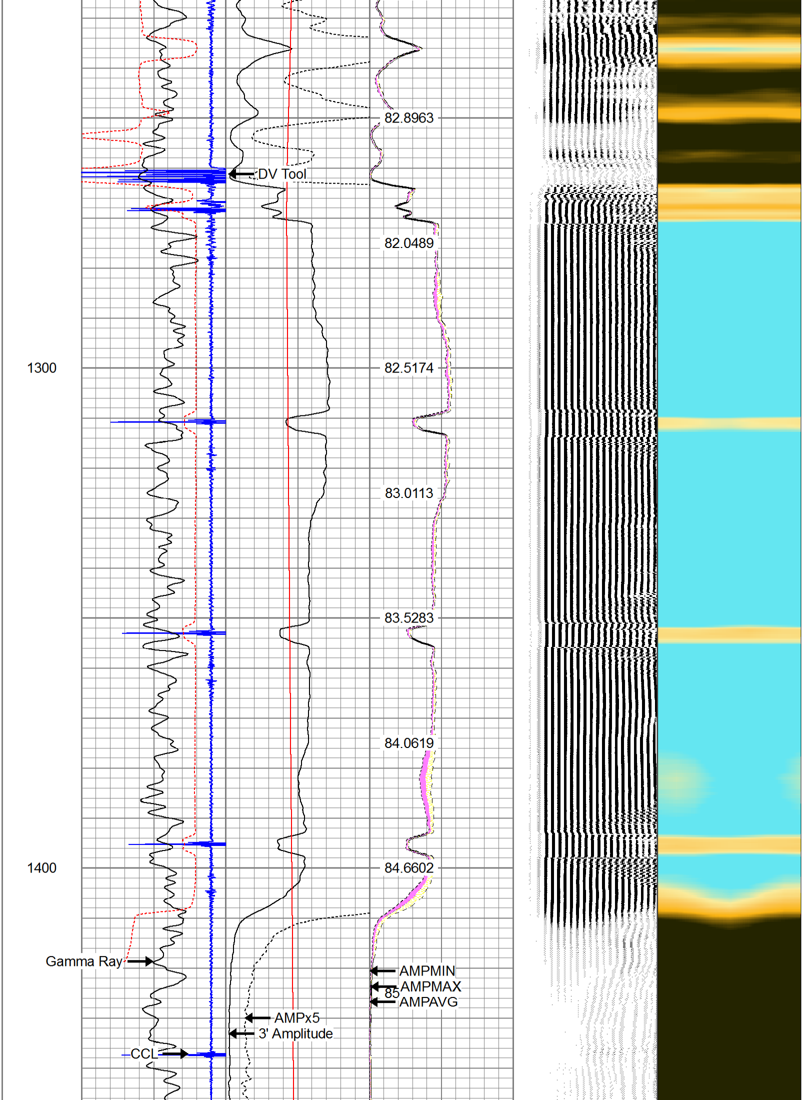


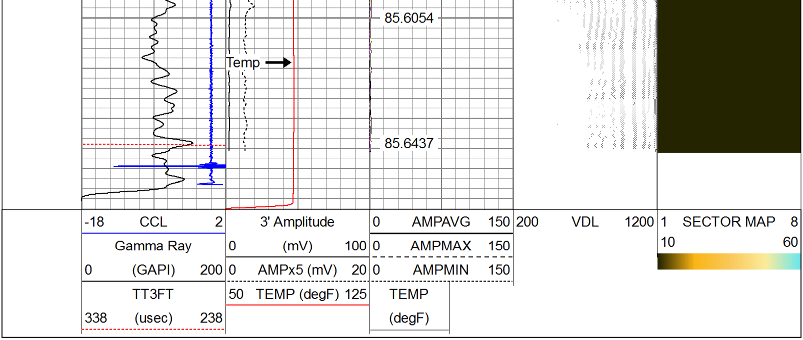












Calibration Report

Database File: franks_6_8_05123265820000_anadarko.db
Dataset Pathname: pass5.1
Dataset Creation: Wed Jun 04 08:07:01 2014 by Calc 7.0 B1

Temperature Calibration Report

Serial Number: 0001
Tool Model: 1.375TEMP
Performed: Wed Jun 04 07:20:14 2014

	Reference	Reading
Low Reference:	32.00 degF	320.00 cps
High Reference:	500.00 degF	5000.00cps

Gain: 0.09
Offset: 10.96
Delta Spacing 2

Gamma Ray Calibration Report

Serial Number: 111211
Tool Model: Probe
Performed: Sun Jun 01 16:54:18 2014

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 1.0000 GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number: Base
Tool Model: Probe

Calibration Casing Diameter: 4.500 in
Calibration Depth: 245.125 ft

Master Calibration, performed Wed Jun 04 08:06:59 2014:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	-0.008	0.773	2.000	81.196	101.497	2.762
CAL	-0.003	0.876				
5'	-0.009	0.622	2.000	81.196	125.530	3.099
SUM						
S1	-0.009	0.757	0.000	95.000	123.871	1.169
S2	-0.005	0.779	0.000	95.000	121.231	0.563
S3	-0.006	0.800	0.000	95.000	117.972	0.654
S4	-0.003	0.812	0.000	95.000	116.550	0.379
S5	-0.005	0.820	0.000	95.000	115.257	0.547
S6	-0.004	0.800	0.000	95.000	118.133	0.453
S7	-0.008	0.775	0.000	95.000	121.370	0.913
S8	-0.006	0.754	0.000	95.000	124.927	0.744

Internal Reference Calibration, performed Wed Aug 21 11:08:58 2013:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	-0.003	0.876	1.000	0.000

Air Zero Calibration, performed Thu May 08 15:48:13 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

PIONEER

Pioneer Energy Services

Company	Kerr-McGee Oil & Gas Onshore
Well	FRANK 6-8
Field	WATTENBERG
County	WELD
State	CO