PIONEER
Pioneer Energy Services

Cement Bond Log

Company	Kerr McGee
Well	Barnes Frank A Unit #1
Field	Wattenberg
County	Weld
State	Colorado

Company Kerr McGee
Well Barnes Frank A Unit #1
Field Wattenberg
County Weld State Colorado
Location: API # : 0512307938
SEC 24 TWP 3N RGE 68W

Other Services
CCL
Gamma Ray

Permanent Datum	Ground Level	Elevation	4945
Log Measured From	Kelly Bushing = 10'		
Drilling Measured From	Kelly Bushing		

Elevation
K.B. 4955'
D.F. 4956'
G.L. 4945'

Date	22 April 2014
Run Number	One
Depth Driller	N/A
Depth Logger	1020'
Bottom Logged Interval	1000'
Top Log Interval	Surface
Open Hole Size	N/A
Type Fluid	Water
Density / Viscosity	8.34#
Max. Recorded Temp.	N/A
Estimated Cement Top	
Time Well Ready	14:30
Time Logger on Bottom	14:40
Equipment Number	59
Location	Ft. Morgan
Recorded By	M. Mavros
Witnessed By	

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#	113'	TD
Liner				

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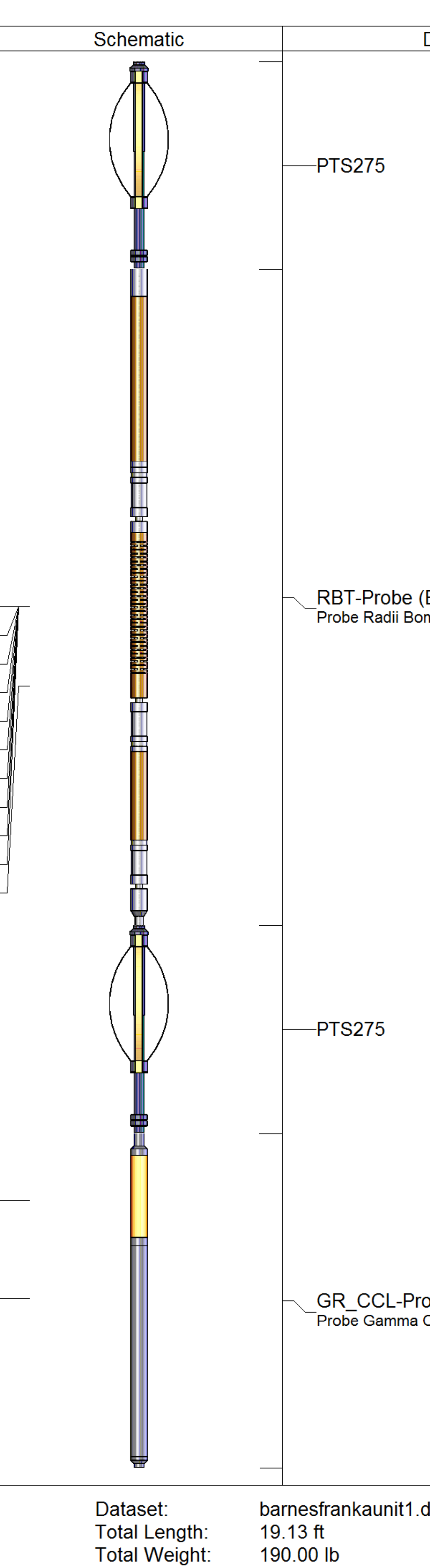
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			PTS275	2.83	2.75	
WVF3FT WVFCAL WVFS1 WVFS2 WVFS3 WVFS4 WVFS5 WVFS6 WVFS7 WVFS8 WVF5FT	11.71 11.71 11.71 11.71 11.71 11.71 11.71 11.71 11.71 11.71 10.63		RBT-Probe (Base) Probe Radii Bond Tool with Digital Telemetry	8.92	2.75	90.00
			PTS275	2.83	2.75	
CCL GR	3.63 2.30		GR_CCL-Probe (111211) Probe Gamma CCL	4.54	2.75	100.00

Dataset:	barnesfrankaunit1.db: field/well/run1/pass4
Total Length:	19.13 ft
Total Weight:	190.00 lb
O.D.	2.75 in

Database File:	c:\users\sdizmang\desktop\barnesfrankaunit1.db
Dataset Pathname:	pass4.1
Presentation Format:	cbl_drs
Dataset Creation:	Tue Apr 22 17:27:53 2014 by Calc 7.0 B1
Charted by:	Depth in Feet scaled 1:240

Calibration Report

Database File:	C:\Users\sdizmang\Desktop\barnesfrankaunit1.db
Dataset Pathname:	pass4
Dataset Creation:	Tue Apr 22 14:44:36 2014 by Log 7.0 B1

Gamma Ray Calibration Report

Serial Number:	111211	
Tool Model:	Probe	
Performed:	Fri Nov 08 12:58:35 2013	
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:	3006.950	ft

Master Calibration, performed Thu Mar 27 18:20:17 2014:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.001	0.632	2.000	81.196	125.459	1.850
CAL	0.001	0.968				
5'	0.001	0.558	2.000	81.196	142.278	1.812
SUM						
S1	0.001	0.627	0.000	95.000	151.893	-0.204
S2	0.001	0.682	0.000	95.000	139.590	-0.177
S3	0.001	0.702	0.000	95.000	135.518	-0.165
S4	0.001	0.704	0.000	95.000	135.266	-0.172
S5	0.001	0.657	0.000	95.000	144.824	-0.180
S6	0.001	0.610	0.000	95.000	156.179	-0.204
S7	0.001	0.576	0.000	95.000	165.274	-0.202
S8	0.001	0.591	0.000	95.000	161.146	-0.201

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	0.001	0.968	1.000	0.000

Air Zero Calibration, performed Sat Nov 09 07:23:33 2013:

	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

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