Radial Cement Bond Log With VDL / CCL / GR And Cement Map

PIONEER
Pioneer Energy Services

Company	Anadarko Petroleum Corporation
Well	NRC 1C-5HZ
Field	Wattenberg
County	Weld
State	Colorado

Company Anadarko Petroleum Corporation
Well NRC 1C-5HZ
Field Wattenberg
County Weld State Colorado

Location: API # : 05-123-39192
500' FNL & 1260' FEL, NENE
SEC 8 TWP 1N RGE 67W

Other Services
None

Permanent Datum Ground Level Elevation 5009'
Log Measured From Kelly Bushing
Drilling Measured From 16'

Elevation
K.B. 5025'
D.F. 5024'
G.L. 5009'

Date	27 JULY 2014
Run Number	One
Depth Driller	12856'
Depth Logger	7800'
Bottom Logged Interval	7800'
Top Log Interval	Surface
Open Hole Size	UNK
Type Fluid	Water
Density / Viscosity	~8.34 #/Gal
Max. Recorded Temp.	NA
Estimated Cement Top	SEE LOG
Time Well Ready	12:00
Time Logger on Bottom	12:30
Equipment Number	P-96
Location	Fort Morgan
Recorded By	T. REESE
Witnessed By	MIKE

Borehole Record

Run Number	Bit	From	To

Tubing Record

Size	Weight	From	To

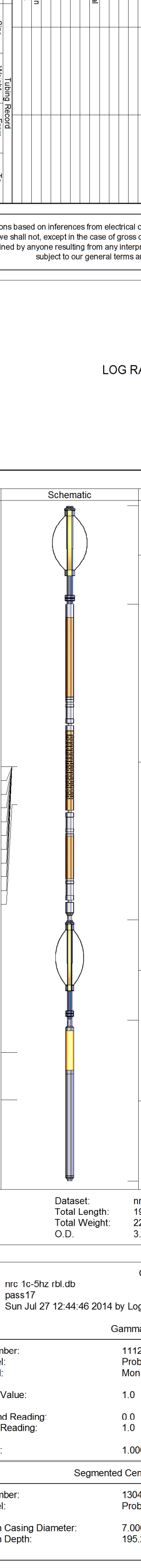
Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	9.625"	36	Surface	1308'
Prot. String	7"	26	Surface	7671'
Production String				
Liner	4.5"	11.6	7021'	12844'

<<< 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 RAN UNDER 2800 PSI



Sensor	Offset (ft)	Description	Len (ft)	OD (in)	Wt (lb)
		CSS_MID	2.79	3.00	36.00
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 (130433) 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: nrc 1c-5hz rbl.db: field/well/run1/pass17
Total Length: 19.08 ft
Total Weight: 226.00 lb
O.D. 3.00 in

Calibration Report

Database File: nrc 1c-5hz rbl.db
Dataset Pathname: pass17
Dataset Creation: Sun Jul 27 12:44:46 2014 by Log SCH 120430

Gamma Ray Calibration Report

Serial Number:	111211	
Tool Model:	Probe	
Performed:	Mon May 19 13:35:03 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:	130433	
Tool Model:	Probe	
Calibration Casing Diameter:	7.000	in
Calibration Depth:	195.233	ft

Master Calibration, performed Sun Jul 27 08:52:34 2014:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.015	1.343	1.000	62.000	45.914	0.326
CAL	0.015	0.376				
5'	0.015	1.553	1.000	62.000	39.652	0.419
SUM						
S1	0.015	1.185	0.000	100.000	85.470	-1.253
S2	0.015	1.259	0.000	100.000	80.352	-1.176
S3	0.015	1.372	0.000	100.000	73.649	-1.082
S4	0.015	1.465	0.000	100.000	68.968	-1.016
S5	0.015	1.470	0.000	100.000	68.720	-1.017
S6	0.015	1.432	0.000	100.000	70.566	-1.047
S7	0.015	1.304	0.000	100.000	77.586	-1.137
S8	0.014	1.186	0.000	100.000	85.328	-1.216

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	0.015	0.376	1.000	0.000

Air Zero Calibration, performed Mon Jun 16 13:41:42 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

MAIN PASS WELL LOGGED UNDER 2800 PSI

5"=100'

Database File: nrc 1c-5hz rbl.db
Dataset Pathname: pass17
Presentation Format: scbl02
Dataset Creation: Sun Jul 27 12:44:46 2014 by Log SCH 120430
Charted by: Depth in Feet scaled 1:240

3300
3400
3500
3600
3700
3800
3900
4000
4100
4200
4300
4400
4500
4600
4700
4800
4900
5000
5100
5200
5300
5400
5500
5600
5700
5800
5900
6000
6100
6200
6300
6400
6500
6600
6700
6800
6900
7000
7100
7200

PIONEER

Pioneer Energy Services

Company Anadarko Petroleum Corporation
Well NRC 1C-5HZ
Field Wattenberg
County Weld
State Colorado