Company ANANDARKO PETROLEUM CORPORATION
Well ZIEMER 35C-5HZ
Field Wattenberg
County Weld
State Colorado

PIONEER
Pioneer Energy Services

SECTOR LOG
GAMMA RAY C.C.L.
CEMENT BOND V.D.L.

Company	ANANDARKO PETROLEUM CORPORATION		
Well	ZIEMER 35C-5HZ		
Field	Wattenberg		
County	Weld	State	Colorado
Location:	API # : 05.123.37828 SHL: 460' FSL & 2010' FWL NE NW SEC 5 TWP 1N RGE 65W	Other Services	RADIAL BOND LOG
Permanent Datum	GL	Elevation	4946'
Log Measured From	KB ---------------- 14'	Elevation	K.B. 4960' D.F. 4960' G.L. 4946'
Drilling Measured From	KB		

Date	24-NOV-2013	
Run Number	ONE	
Depth Driller	11,330	
Depth Logger	6770'	
Bottom Logged Interval	6770'	
Top Log Interval	Surface	
Open Hole Size	8.75"	
Type Fluid	Water	
Density / Viscosity	8.33 ppg	
Max. Recorded Temp.	236° F	
Estimated Cement Top	238'	
Time Well Ready	PM	
Time Logger on Bottom	13:55	
Equipment Number	75	
Location	FORT MORGAN	
Recorded By	LEROY HOBBS	SHAUN SCHUMAN
Witnessed By	MR. SONNY SEGURA	

Borehole Record			Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	9-5/8"	36#	SURFACE	1037'
Prot. String	7"	26#	SURFACE	7748'
Production String				
Liner	4.5"	11.6#	6650'	11379'

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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

THANK YOU FOR USING PIONEER WIRELINE.

WELL WAS LOGGED UNDER 2200 PSI.
LOG WAS RAN OFF A 14' K.B.
LINER TOP @ 6650'

S.O. # 2-206009

Database File: 0512337828.db
Dataset Pathname: pass1M
Presentation Format: scbl02
Dataset Creation: Sun Nov 24 15:53:01 2013
Charted by: Depth in Feet scaled 1:240

Calibration Report

Database File: 0512337828.db
Dataset Pathname: pass1
Dataset Creation: Sun Nov 24 13:41:01 2013 by Log 7.0 B1

Gamma Ray Calibration Report

Serial Number:	111211	
Tool Model:	Probe	
Performed:	Sat Nov 16 08:23:39 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:	7.000	in
Calibration Depth:	829.750	ft

Master Calibration, performed Sat Nov 23 14:26:58 2013:

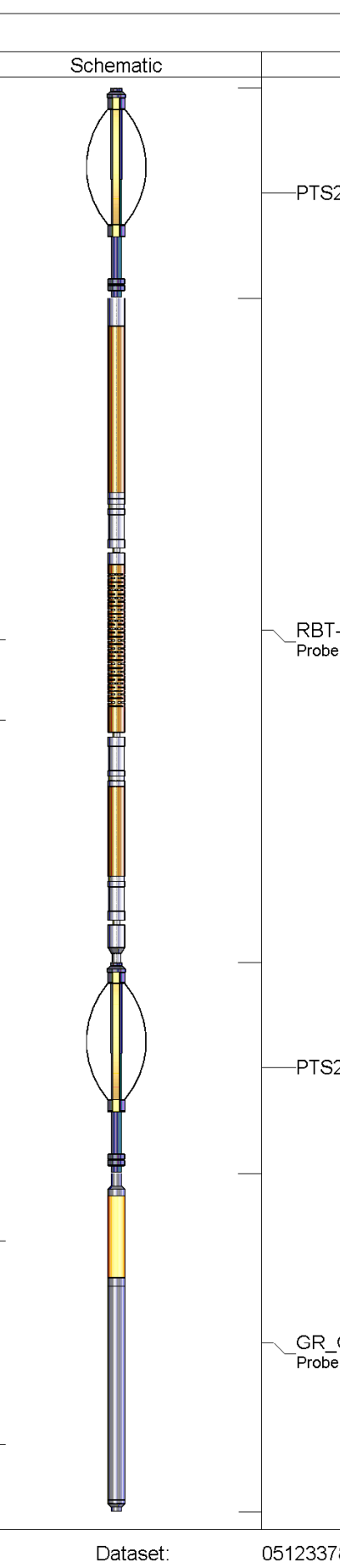
	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.013	2.074	1.500	62.165	29.435	1.131
CAL	0.012	0.592				
5'	0.012	0.410	1.500	62.165	152.758	-0.400
SUM						
S1	0.013	0.358	0.000	95.000	275.162	-3.456
S2	0.012	0.382	0.000	95.000	256.845	-3.164
S3	0.012	0.402	0.000	95.000	243.482	-2.999
S4	0.012	0.409	0.000	95.000	239.267	-2.938
S5	0.012	0.397	0.000	95.000	246.473	-2.961
S6	0.012	0.376	0.000	95.000	261.260	-3.221
S7	0.012	0.361	0.000	95.000	272.550	-3.354
S8	0.012	0.349	0.000	95.000	282.216	-3.421

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	0.012	0.592	1.000	0.000

Air Zero Calibration, performed Wed Aug 21 10:24:02 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

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 0.90		GR_CCL-Probe (111211) Probe Gamma CCL	4.54	2.75	100.00

Dataset: 0512337828.db: field/well/run1/pass1
Total Length: 19.13 ft
Total Weight: 190.00 lb
O.D. 2.75 in