PIONEER
Pioneer Energy Services

GAMMA RAY, C.C.L. SECTOR BOND LOG

Company ANADARKO PETROLEUM CORPORATION
Well SACK STATE 30C-30HZ
Field WATTENBERG
County WELD
State COLORADO

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County	WELD
State	COLORADO

API # : 0512339244

Location: SHL:825' FSL X 895' FWL
SEC 31 TWP 1N RGE 67W

Other Services: XIPE

			Elevation
Permanent Datum	GL	Elevation 5065'	K.B. 5090'
Log Measured From	KB		D.F. 5089'
Drilling Measured From	KB		G.L. 5065'

Date	12-DEC-14
Run Number	ONE
Depth Driller	17,415'
Depth Logger	7160'
Bottom Logged Interval	7148'
Top Log Interval	SURFACE
Open Hole Size	NA
Type Fluid	WATER
Density / Viscosity	NA
Max. Recorded Temp.	218 DEG. F.
Estimated Cement Top	NA
Time Well Ready	ROA
Time Logger on Bottom	15:03
Equipment Number	41
Location	FORT MORGAN CO
Recorded By	RANDY AZEVEDO
Witnessed By	RYAN SCHOCK

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	1264'
Prot. String				
Production String	7"	26#	SURFACE	8208'
Liner	4.5"	11.6#	7121'	17,365'

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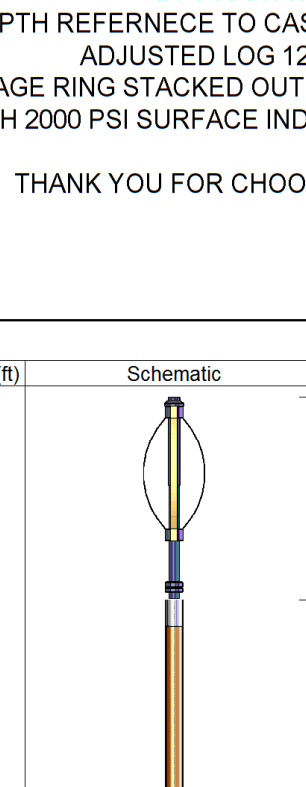
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

LOG RAN AS PER CUSTOMER REQUEST.
DEPTH REFERNECE TO CASING TALLY REPORTED LINER TOP AT 7121'.
ADJUSTED LOG 12' TO CORRELATE WITH LINER TOP
GUAGE RING STACKED OUT TWICE AT 7210'. CAME OUT OF HOLE CLEAN
LOG RAN WITH 2000 PSI SURFACE INDUCED PRESSURE. MAX HYDROTESTER COULD HOLD.

THANK YOU FOR CHOOSING PIONEER ENERGY SERVICES INC.
SO # 2-310010



Sensor	Offset (ft)	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: sackstate 30c-30hz rbl.db: field/well/run1/pass3
Total Length: 20.38 ft
Total Weight: 220.00 lb
O.D. 2.75 in

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7" Main pass

Log ran under 2000 PSI surface induced pressure.

Database File: sackstate 30c-30hz rbl.db
Dataset Pathname: pass3
Presentation Format: scbl02
Dataset Creation: Fri Dec 12 15:02:53 2014 by Log 7.0 B1
Charted by: Depth in Feet scaled 1:240

Calibration Report

Database File: sackstate 30c-30hz rbl.db
Dataset Pathname: pass3
Dataset Creation: Fri Dec 12 15:02:53 2014 by Log 7.0 B1

Temperature Calibration Report

Serial Number: 0001
Tool Model: 1.375TEMP
Performed: Wed Dec 10 17:24:24 2014

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

Gain: 0.10
Offset: 0.00
Delta Spacing 2

Gamma Ray Calibration Report

Serial Number: 111211
Tool Model: Probe
Performed: Sun Jun 13 13:33:21 1993

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: 519.842 ft

Master Calibration, performed Fri Dec 12 15:37:53 2014:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.018	0.998	0.000	62.165	63.416	-1.136
CAL	0.012	1.510				
5'	0.012	0.733	0.000	62.165	86.316	-1.064
SUM						
S1	0.024	0.838	0.000	100.000	122.857	-2.998
S2	0.027	0.862	0.000	100.000	119.700	-3.219
S3	0.027	0.947	0.000	100.000	108.721	-2.981
S4	0.031	1.070	0.000	100.000	96.264	-2.964
S5	0.035	1.161	0.000	100.000	88.803	-3.137
S6	0.020	1.138	0.000	100.000	89.474	-1.791
S7	0.030	1.023	0.000	100.000	100.691	-3.003
S8	0.026	0.905	0.000	100.000	113.751	-2.995

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	1.510	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

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