J-W WIRELINE COMPANY

Company KERR-McGEE OIL & GAS ONSHORE LP
Well CAMP 2-31
Field WATTENBERG
County WELD
State COLORADO

GAMMA RAY CCL CEMENT BOND VDL

Company	KERR-McGEE OIL & GAS ONSHORE LP
Well	CAMP 2-31
Field	WATTENBERG
County	WELD
State	COLORADO
Location:	API #: 0512324809 489' FNL & 2169' FEL NE NW
	SEC 31 TWP 3N RGE 65W
Other Services	

Permanent Datum	GL	Elevation 4922	Elevation K.B. 4936 D.F. G.L. 4922
Log Measured From	KB		
Drilling Measured From	KB		

Date	22-MAY-2014
Run Number	ONE
Depth Driller	7470
Depth Logger	3250
Bottom Logged Interval	3250
Top Log Interval	160
Open Hole Size	--
Type Fluid	WATER
Density / Viscosity	--
Max. Recorded Temp.	160
Estimated Cement Top	472
Time Well Ready	--
Time Logger on Bottom	--
Equipment Number	2829
Location	STERLING, CO
Recorded By	BRIAN HECHT
Witnessed By	AARON HOLTEN

Borehole Record

Run Number	Bit	From	To

Tubing Record

Size	Weight	From	To

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String				
Prot. String	4.5"			
Production String				
Liner				

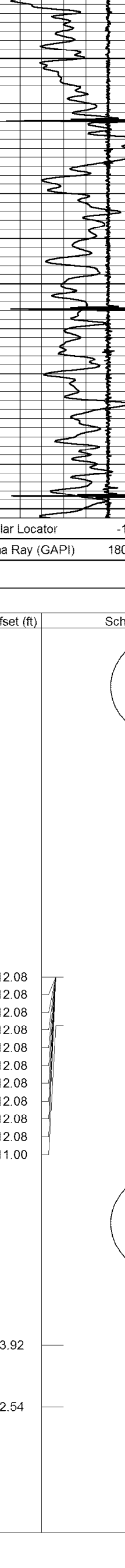
<<< Fold Here >>>

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

15.8 CLASS G CEMENT

Database File: camp 2-31.db
Dataset Pathname: pass9
Presentation Format: scbl_dr
Dataset Creation: Thu May 22 08:05:24 2014 by Log Std Casedhole 10121
Charted by: Depth in Feet scaled 1:240



Sensor	Offset (ft)	Description	Len (ft)	OD (in)	Wt (lb)
		CENT-Probe (Probe1) PROBE 2.75 CENT	3.00	2.75	25.00
WVF3FT WVFCAL WVFS1 WVFS2 WVFS3 WVFS4 WVFS5 WVFS6 WVFS7 WVFS8 WVF5FT	12.08 12.08 12.08 12.08 12.08 12.08 12.08 12.08 12.08 12.08 11.00	RBT-Probe (4.5040904) Probe Radii Bond Tool with Digital Telemetry	8.92	2.75	90.00
		CENT-Probe (Probe2) PROBE 2.75 CENT	3.00	2.75	25.00
CCL	3.92				
GR	2.54	GR-Probe275dig (pr051112) Probe Digital Gamma CCL	4.75	2.75	57.00

Dataset: camp 2-31.db: field/well/run1/pass9
Total Length: 19.67 ft
Total Weight: 197.00 lb
O.D. 2.75 in

Calibration Report

Database File: camp 2-31.db
Dataset Pathname: pass9
Dataset Creation: Thu May 22 08:05:24 2014 by Log Std Casedhole 10121

Gamma Ray Calibration Report

Type / Serial: Probe275dig / pr051112

SHOP CALIBRATION	Counts/Sec.	Gain	Offset	Jig	Units
Sun Jun 13 14:33:21 1993					
Background	0.0				cps
Calibrator	1.0				cps
		1.0000			GAPI/cps
PRIMARY VERIFICATION					
Background	0.0				cps
Calibrator	0.0				cps
Difference				0.0	GAPI
BEFORE SURVEY VERIFICATION					
Background	0.0				cps
Calibrator	0.0				cps
Difference				0.0	GAPI
AFTER SURVEY VERIFICATION					
Background	0.0				cps
Calibrator	0.0				cps
Difference				0.0	GAPI

Segmented Cement Bond Log Calibration Report

Serial Number: 4.5040904
Tool Model: Probe

Calibration Casing Diameter: 4.500 in
Calibration Depth: 366.300 ft

Master Calibration, performed Thu May 22 07:55:03 2014:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.000	1.514	1.000	81.196	52.980	1.000
CAL	0.000	2.330				
5'	0.000	1.464	1.000	81.196	54.773	1.000
SUM						
S1	0.000	1.645	0.000	81.000	49.229	0.000
S2	0.000	1.531	0.000	81.000	52.906	0.000
S3	0.000	1.437	0.000	81.000	56.375	0.000
S4	0.000	1.390	0.000	81.000	58.258	0.000
S5	0.000	1.409	0.000	81.000	57.498	0.000
S6	0.000	1.496	0.000	81.000	54.152	0.000
S7	0.000	1.627	0.000	81.000	49.787	0.000
S8	0.000	1.657	0.000	81.000	48.896	0.000

Internal Reference Calibration, performed Wed Dec 31 18:00:00 1969:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.000	2.330	1.000	0.000

Air Zero Calibration, performed Wed Apr 02 16:37:00 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