PIONEER
Pioneer Energy Services

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

Company	Kerr-McGee Oil & Gas Onshore LP
Well	Rocky MNT Coors GU 2
Field	Wattenberg
County	Weld
State	Colorado

Company Kerr-McGee Oil & Gas Onshore LP
Well Rocky MNT Coors GU 2
Field Wattenberg
County Weld State Colorado

Location: API # : 05.123.09941
SW NW
SEC 1 TWP 2n RGE 68w

Other Services

Permanent Datum	GL	Elevation 4825	Elevation
Log Measured From	KB ----------13'		K.B. 4838
Drilling Measured From	KB		D.F. 4837
			G.L. 4825

Date	21-NOV-2013
Run Number	ONE
Depth Driller	7832'
Depth Logger	7625'
Bottom Logged Interval	7625'
Top Log Interval	SURFACE
Open Hole Size	N/A
Type Fluid	WATER
Density / Viscosity	8.33
Max. Recorded Temp.	N/A
Estimated Cement Top	
Time Well Ready	AM
Time Logger on Bottom	9:40
Equipment Number	75
Location	FORT MORGAN
Recorded By	LEROY HOBBS
Witnessed By	DAVE DONAHOE

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

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	8-5/8"			
Prot. String				
Production String	4-1/2"			
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

LOG IS CORRELATED TO A 13' K.B.

THANK YOU FOR USING PIONEER WIRELINE.

S.O. # 2-206004

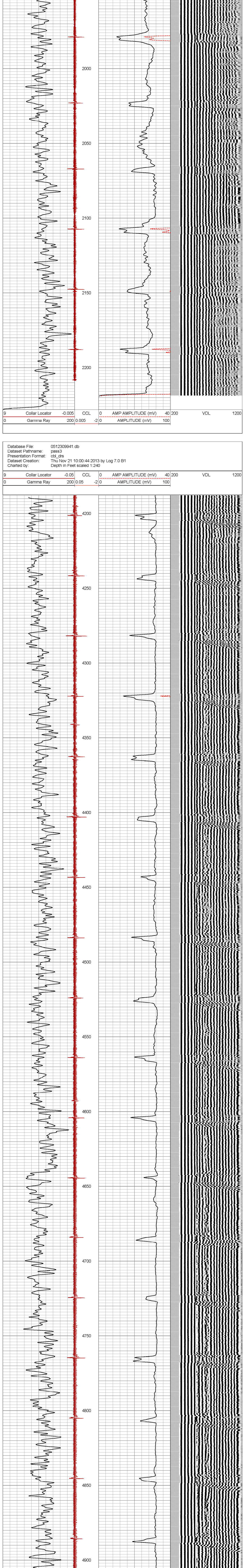
Database File: 0512309941.db
Dataset Pathname: pass5
Presentation Format: cbl_drs
Dataset Creation: Thu Nov 21 10:30:51 2013 by Log 7.0 B1
Charted by: Depth in Feet scaled 1:240

9 Collar Locator -0.005	CCL	0 AMP AMPLITUDE (mV) 40	200	VDL	1200
0 Gamma Ray 200	0.005 -2	0 AMPLITUDE (mV) 100			

0 Collar Locator -0.05	CCL	0 AMP AMPLITUDE (mV) 40	200	VDL	1200
0 Gamma Ray 200	0.05 -2	0 AMPLITUDE (mV) 100			

Database File: 0512309941.db
Dataset Pathname: pass3
Presentation Format: cbl_drs
Dataset Creation: Thu Nov 21 10:00:44 2013 by Log 7.0 B1
Charted by: Depth in Feet scaled 1:240

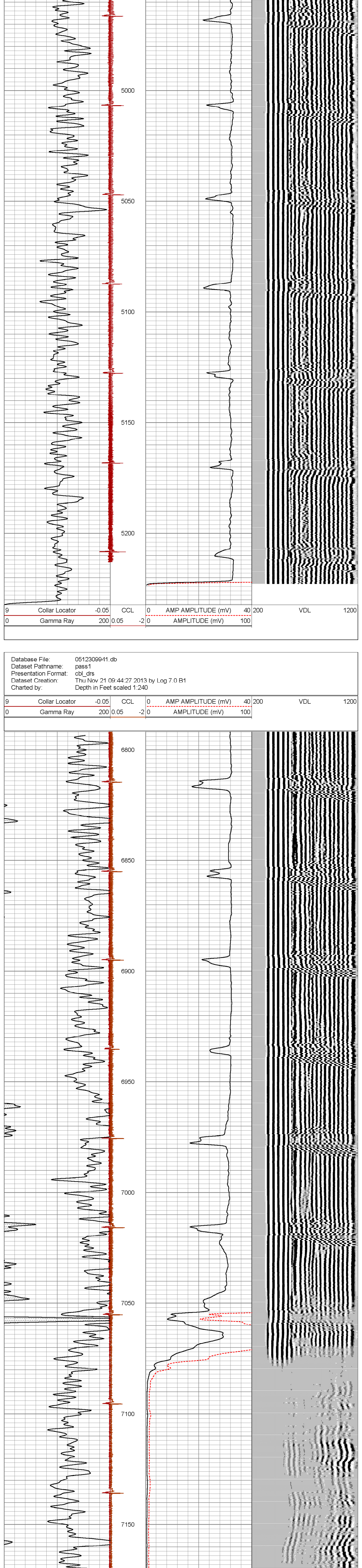
0 Collar Locator -0.05	CCL	0 AMP AMPLITUDE (mV) 40	200	VDL	1200
0 Gamma Ray 200	0.05 -2	0 AMPLITUDE (mV) 100			

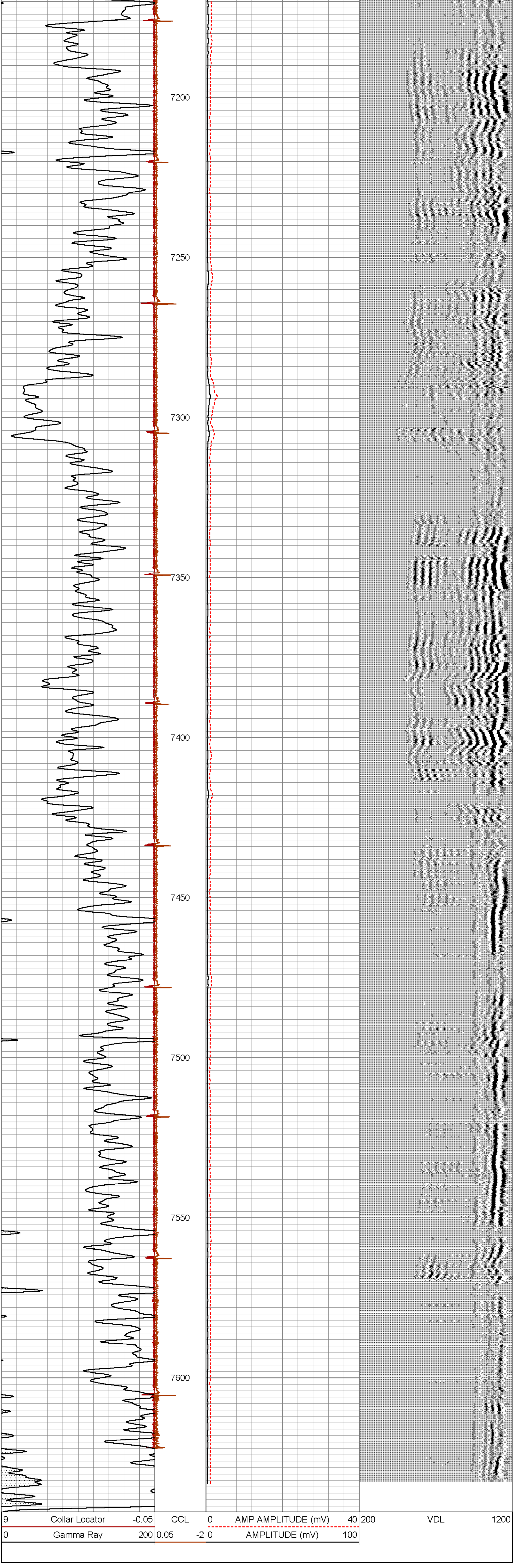


0 Collar Locator -0.05	CCL	0 AMP AMPLITUDE (mV) 40	200	VDL	1200
0 Gamma Ray 200	0.05 -2	0 AMPLITUDE (mV) 100			

Database File: 0512309941.db
Dataset Pathname: pass1
Presentation Format: cbl_drs
Dataset Creation: Thu Nov 21 09:44:27 2013 by Log 7.0 B1
Charted by: Depth in Feet scaled 1:240

0 Collar Locator -0.05	CCL	0 AMP AMPLITUDE (mV) 40	200	VDL	1200
0 Gamma Ray 200	0.05 -2	0 AMPLITUDE (mV) 100			





Calibration Report

Database File: 0512309941.db
Dataset Pathname: pass5
Dataset Creation: Thu Nov 21 10:30:51 2013 by Log 7.0 B1

Gamma Ray Calibration Report

Serial Number: 011
Tool Model: Tek-Co
Performed: Mon Aug 05 20:30:02 2013

Calibrator Value: 1.0

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 2.0000 /cps

Segmented Cement Bond Log Calibration Report

Serial Number: T169t_001
Tool Model: T169Temp

Calibration Casing Diameter: 4.500 in
Calibration Depth: 6440.175 ft

Master Calibration, performed Thu Nov 21 09:34:36 2013:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	-0.009	2.250	0.900	81.196	35.532	1.235
CAL	-0.009	-0.013				
5'	-0.009	2.500	0.900	81.196	31.998	1.202
SUM						
S1	-0.009	0.579	0.000	100.000	170.100	1.570
S2	-0.009	0.673	0.000	100.000	146.466	1.361
S3	-0.009	0.700	0.000	100.000	141.037	1.305
S4	-0.009	0.638	0.000	100.000	154.476	1.416
S5	-0.009	0.583	0.000	100.000	168.685	1.596
S6	-0.009	0.530	0.000	100.000	185.230	1.739
S7						
S8						

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	-0.009	-0.013	1.000	0.000

Air Zero Calibration, performed Wed Dec 31 17:00:00 1969:

	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			
S8			

Temperature Calibration Report

Serial Number: T169t_001
Tool Model: T169Temp
Performed: Tue Nov 10 07:40:57 2009

	Reference		Reading	
Low Reference:	0.00	degF	0.00	usec
High Reference:	1.00	degF	1.00	usec

Gain: 0.33
Offset: 0.00
Delta Spacing 2