JW WIRELINE COMPANY

GAMMA RAY CCL
CEMENT BOND VDL
SECTOR MAP

Company	KERR-MCGEE OIL & GAS ONSHORE LP
Well	HUDSON 36N-35HZ
Field	WATTENBERG
County	WELD
State	COLO

Company KERR-MCGEE OIL & GAS ONSHORE LP
Well HUDSON 36N-35HZ
Field WATTENBERG
County WELD State COLO

Location: API #: 05-123-35948-0000
352' FNL & 2140' FWL
NENW
SEC 26 TWP 2N RGE 65W

Other Services

Permanent Datum GL Elevation 4910
Log Measured From KB 16'
Drilling Measured From KB

Elevation
K.B. 4926
D.F.
G.L. 4910

Date	MAY-2-2013
Run Number	ONE
Depth Driller	16950
Depth Logger	6510
Bottom Logged Interval	6510
Top Log Interval	SURFACE
Open Hole Size	--------
Type Fluid	WATER
Density / Viscosity	--------
Max. Recorded Temp.	N/A
Estimated Cement Top	32
Time Well Ready	8:00 AM
Time Logger on Bottom	10:00 AM
Equipment Number	2833
Location	STERLING
Recorded By	KYLE GIRDLER
Witnessed By	FERNANDO ORTEGA

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	1328
Prot. String				
Production String	7	26#	SURFACE	7415
Liner	4 1/2	11.6#	6461	16935

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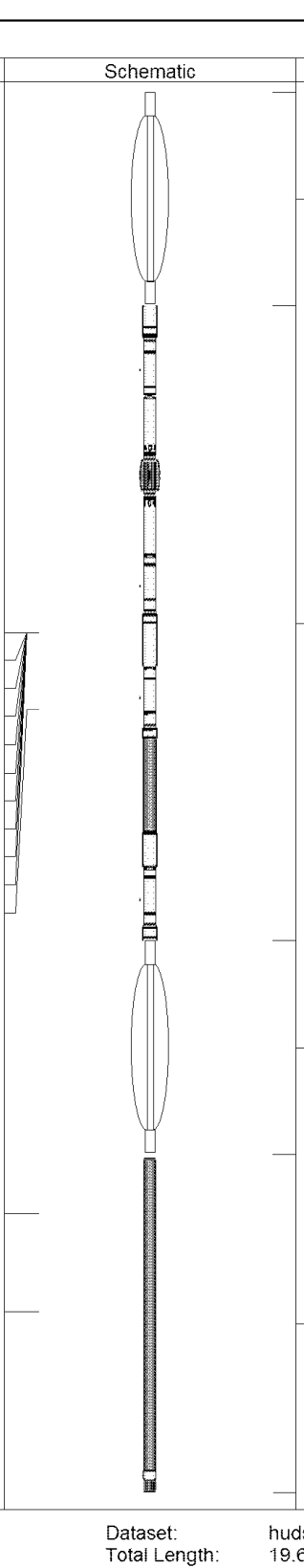
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

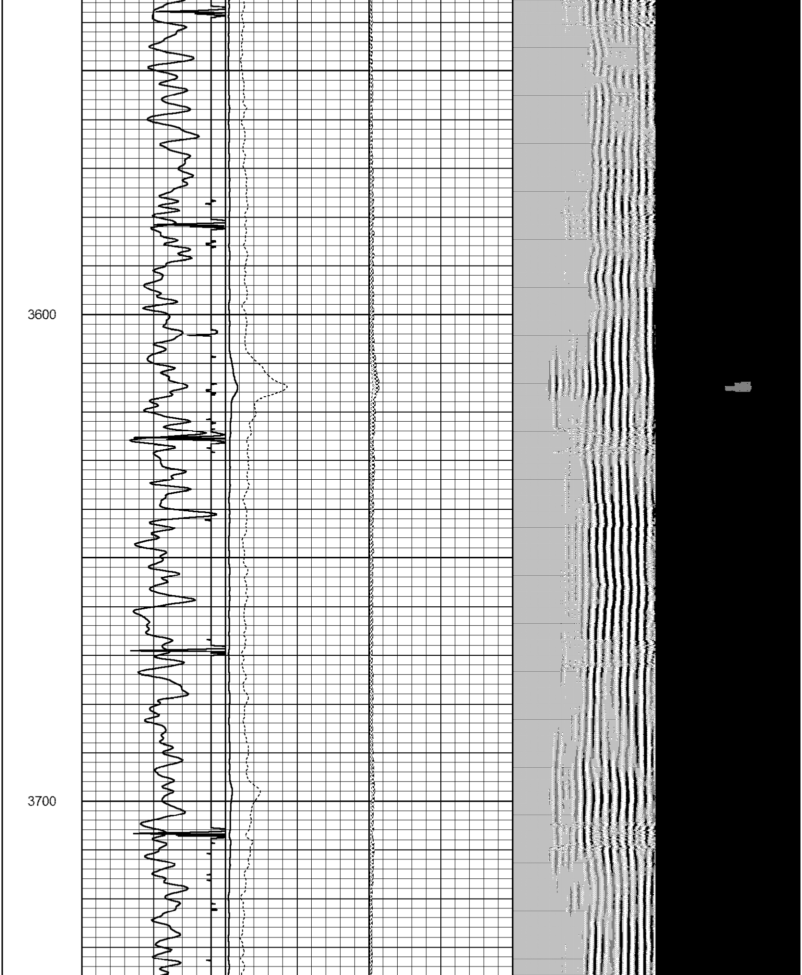
LOGGED UNDER 2800 PSI

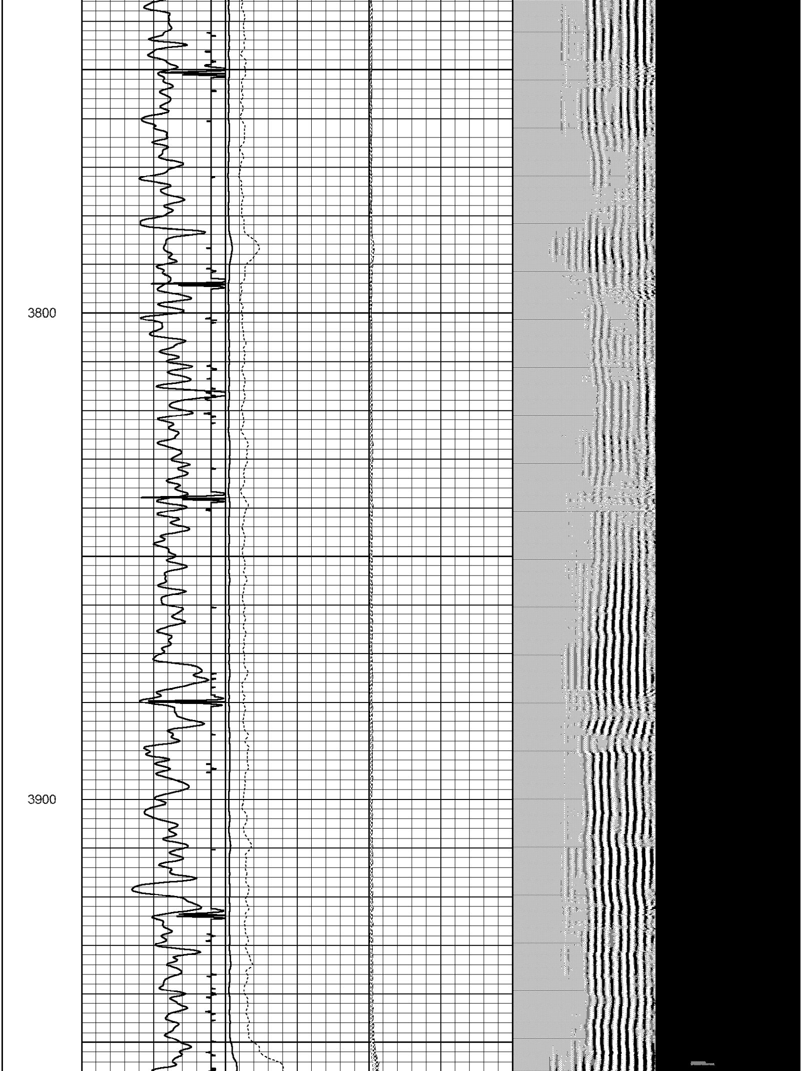
Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			CENT-Probe (Probe1) PROBE 2.75 CENT	3.00	2.75	25.00
WVF3FT WVFCAL WVFS1 WVFS2 WVFS3 WVFS4 WVFS5 WVFS6 WVFS7 WVFS8 WVF5FT	12.08 12.08 12.08 12.08 12.08 12.08 12.08 12.08 12.08 12.08 11.00		RBT-Probe (4.5040904) Probe Radii Bond Tool 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

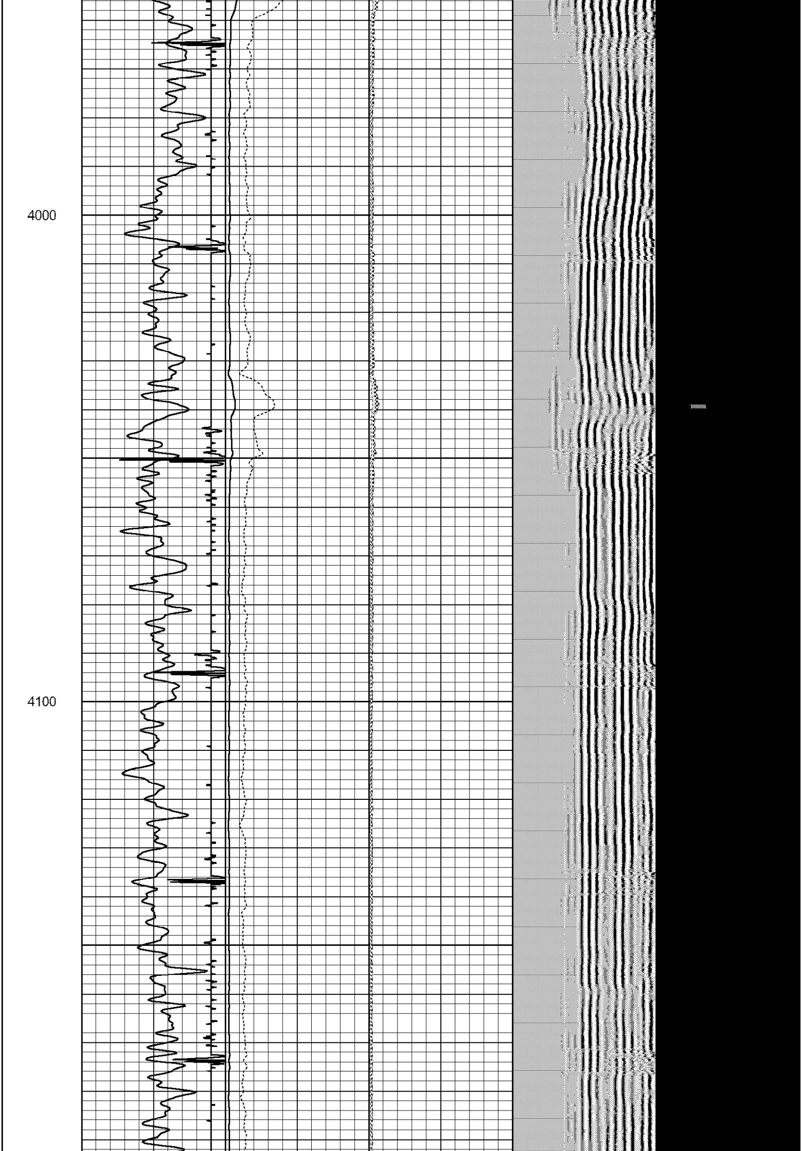
Dataset:	hudson 36n-35hz.db: field/well/run1/pass11
Total Length:	19.67 ft
Total Weight:	197.00 lb
O.D.	2.75 in

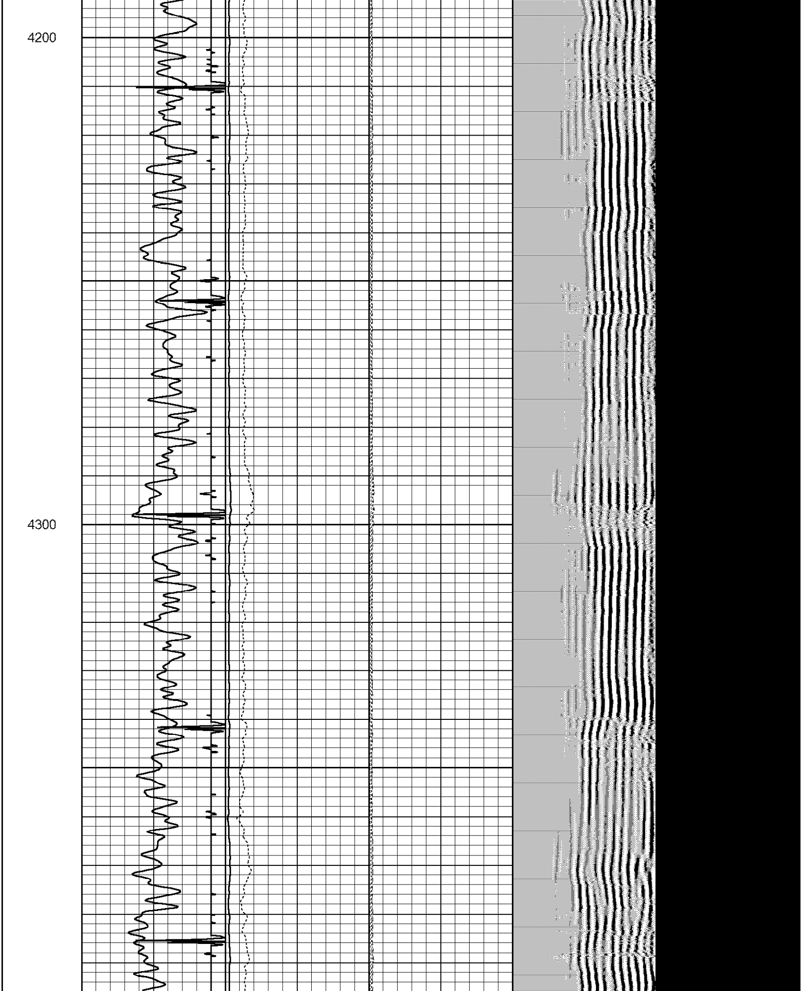
Database File:	hudson 36n-35hz.db
Dataset Pathname:	pass11
Presentation Format:	scbl02
Dataset Creation:	Thu May 02 09:55:17 2013 by Log 0
Charted by:	Depth in Feet scaled 1:240

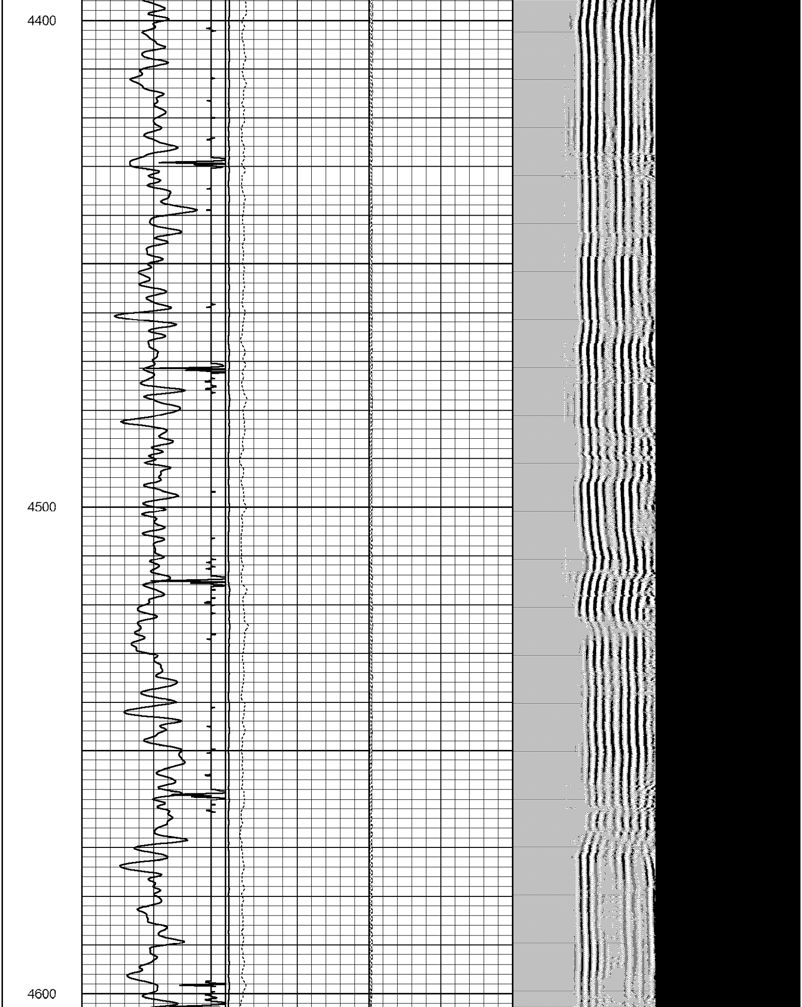
320 TT (usec) 220	0 AMP (mV) 100	-2 AMPAVG 200	200 VDL 1200
-9 CCL 1	0 AMPx5 (mV) 20	-2 AMPMAX 200	1 Cement Map 8
0 GR (GAPI) 200		-2 AMPMIN 200	■▩▨░

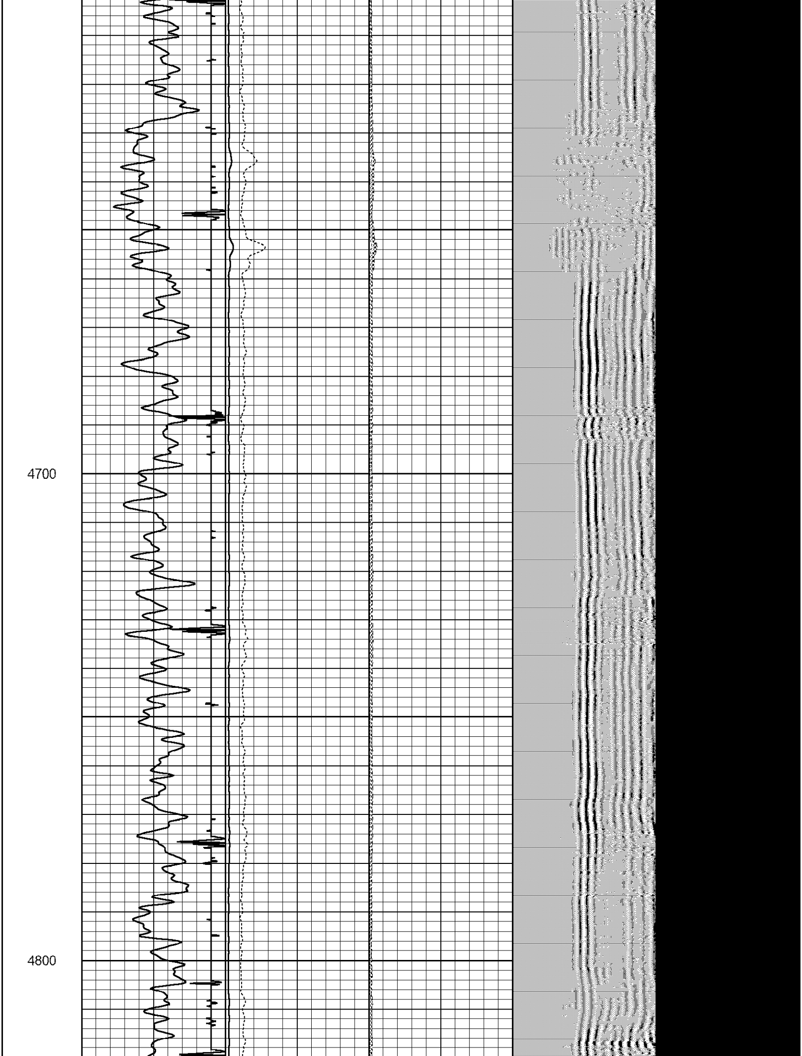


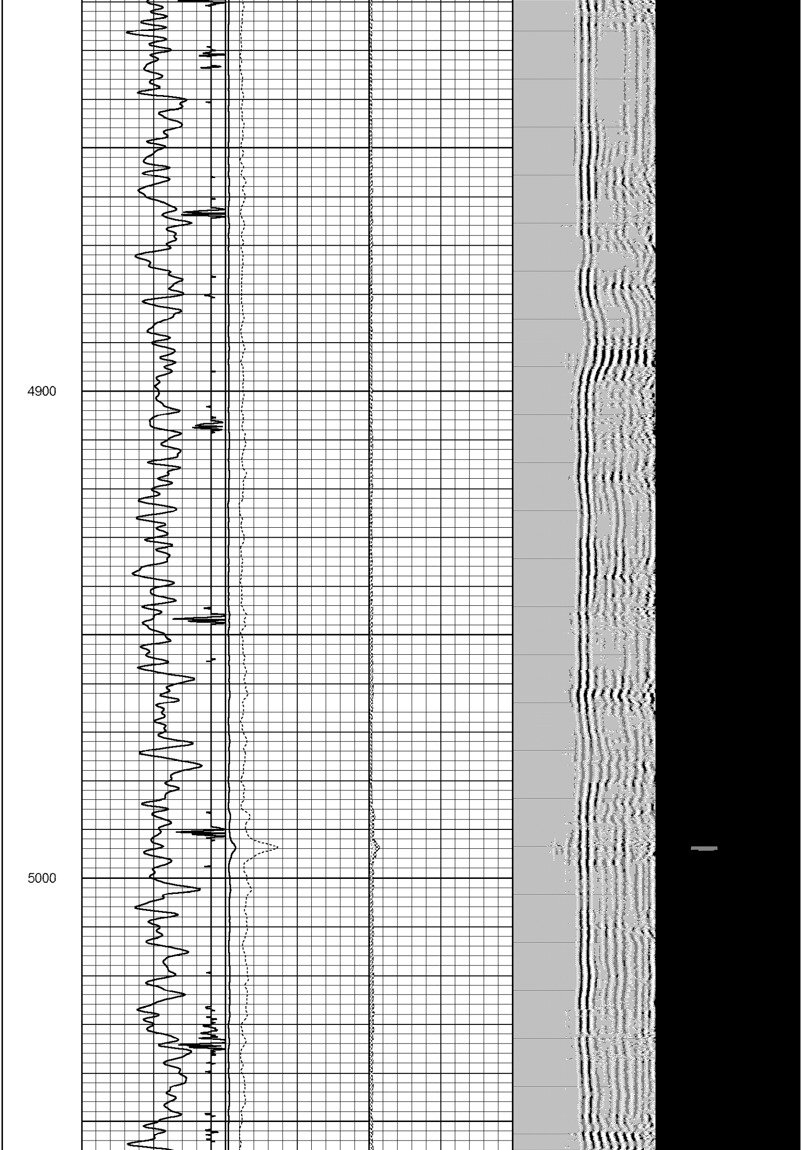


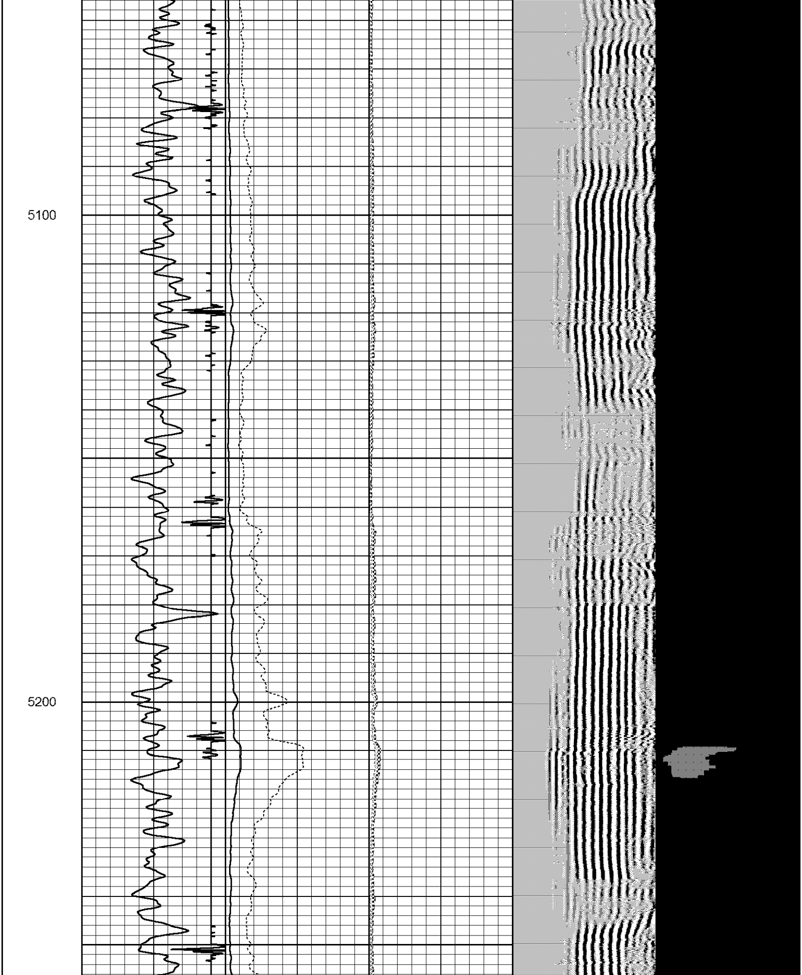


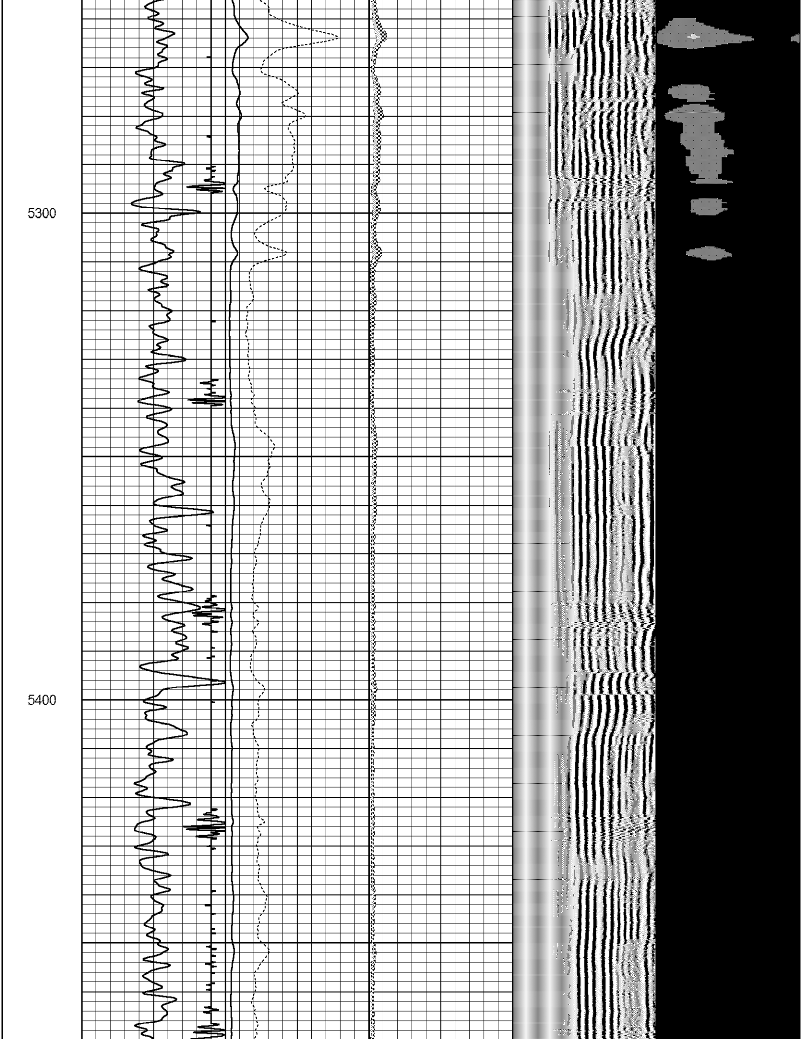


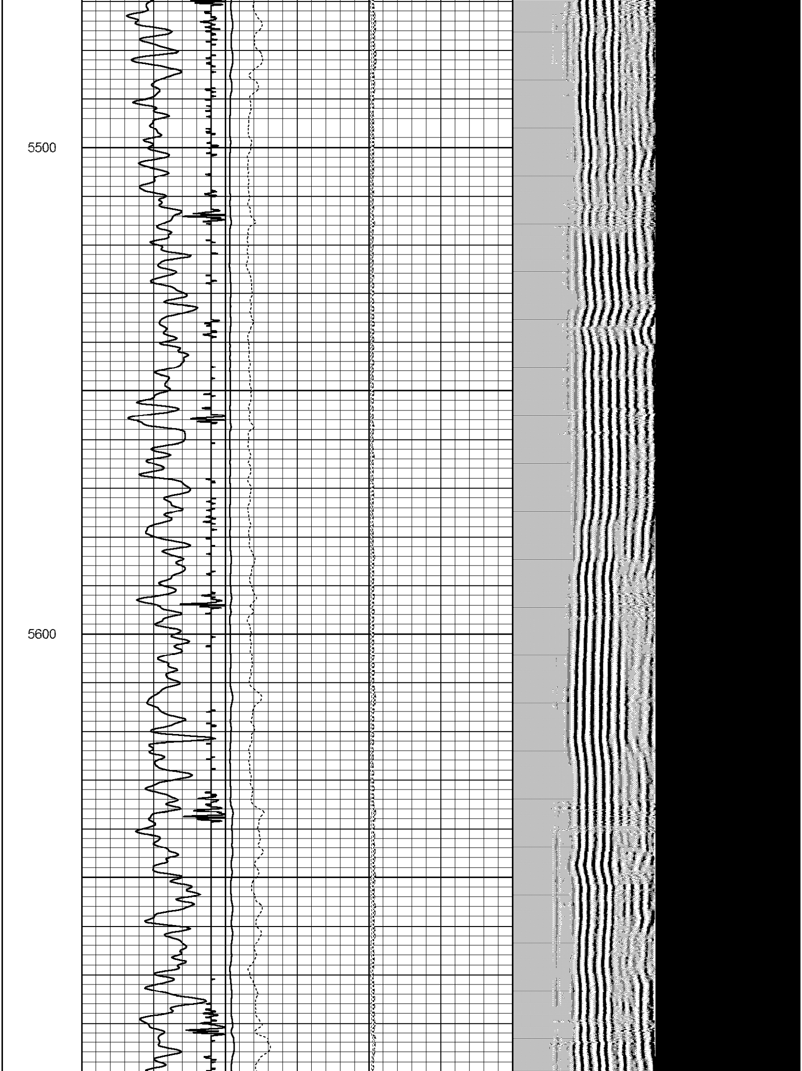


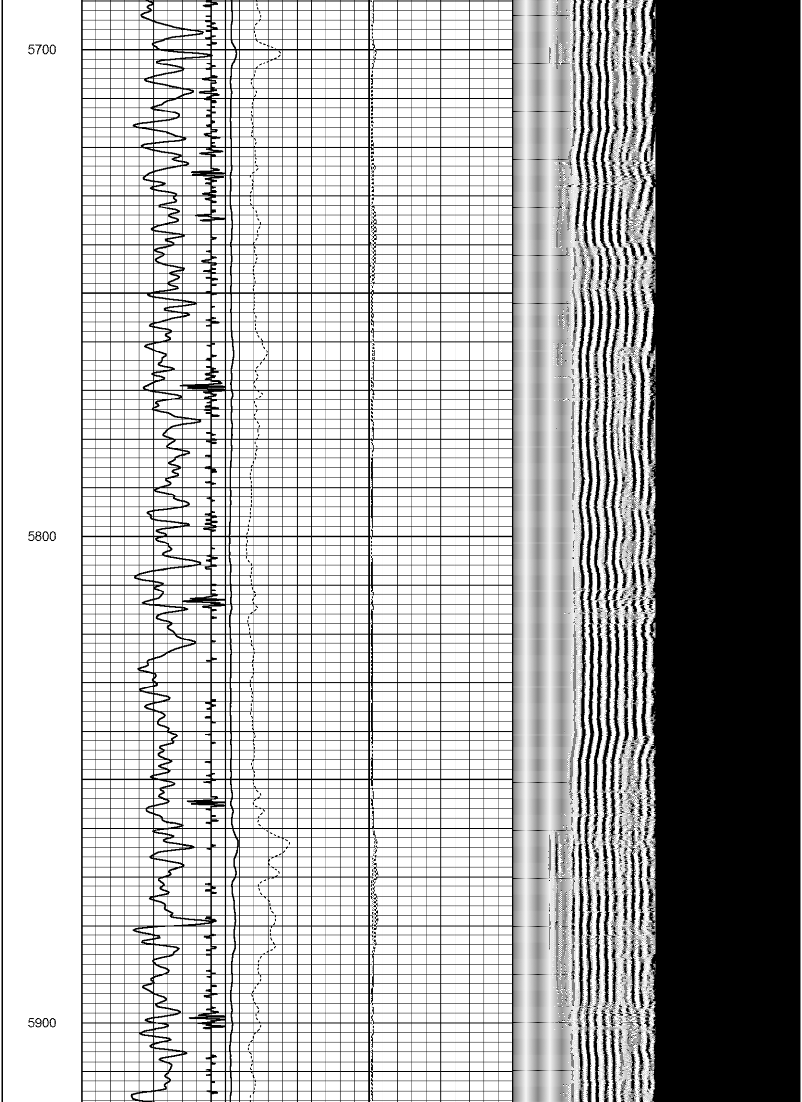


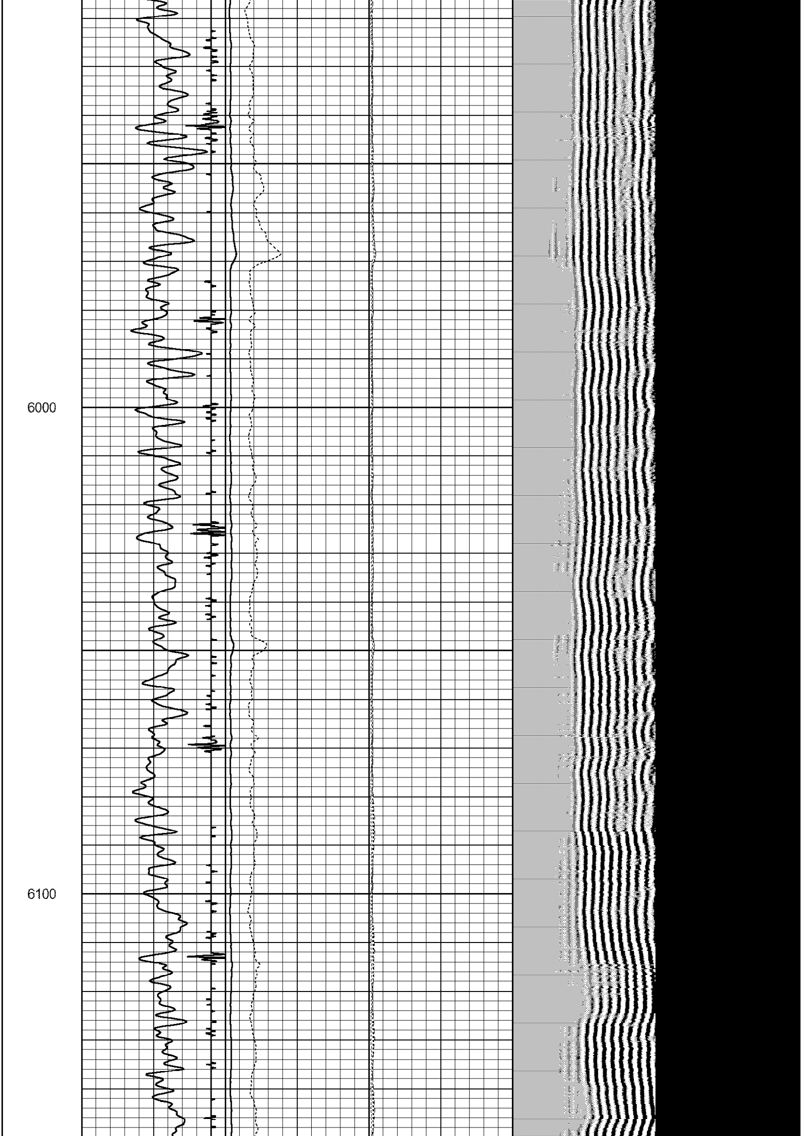


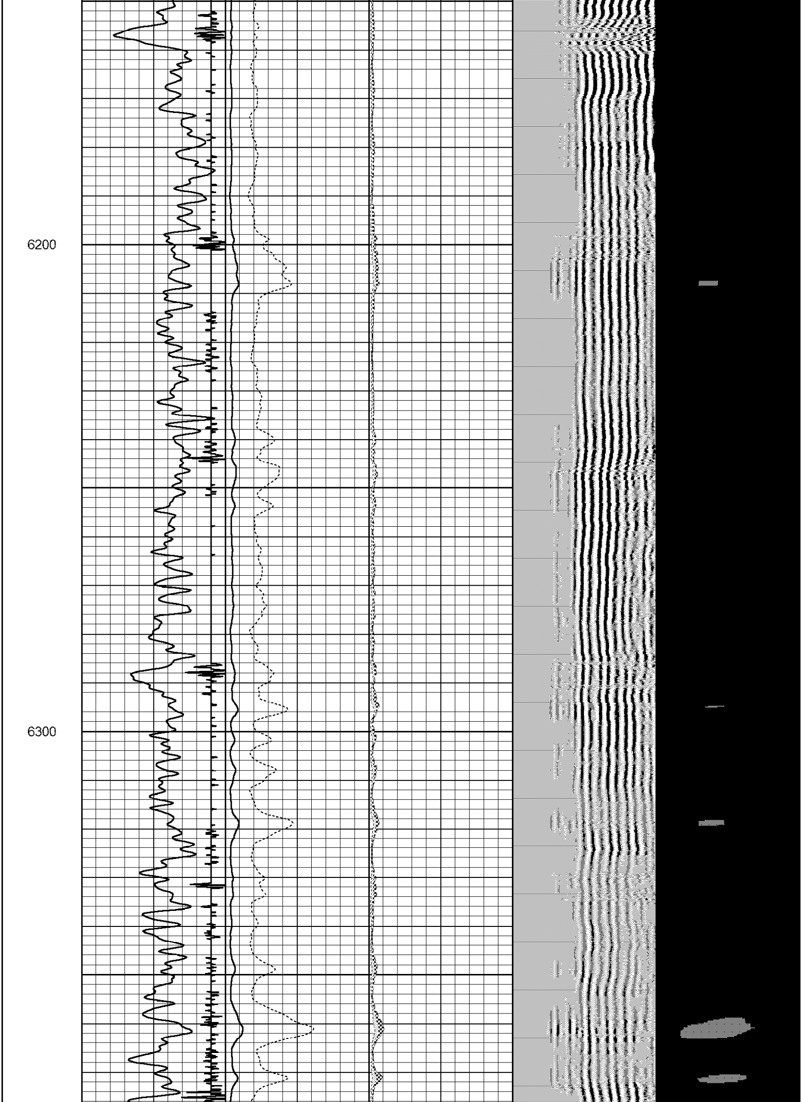


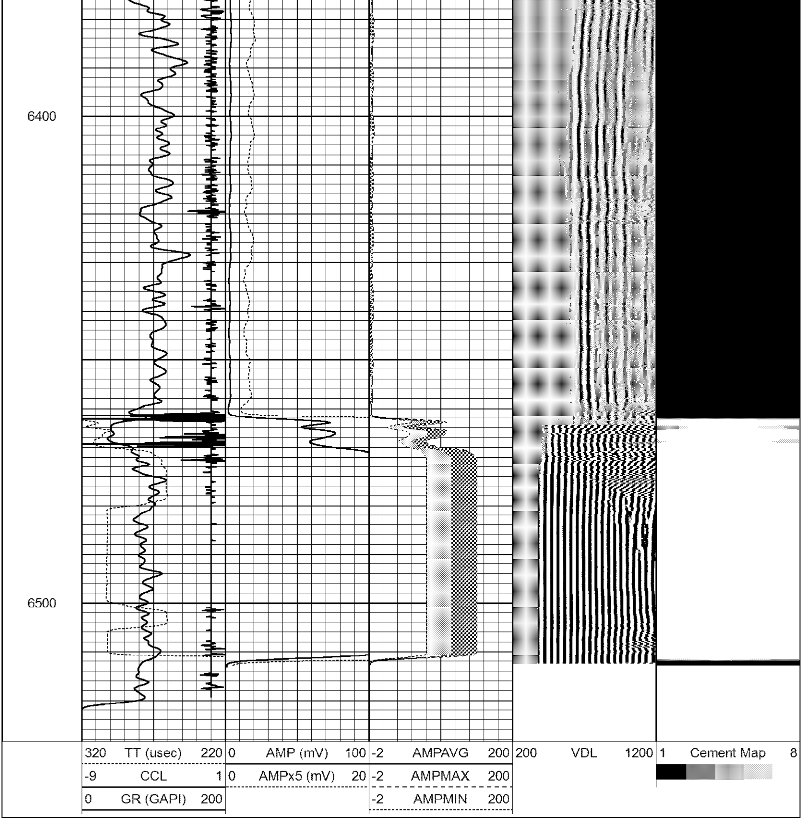












Calibration Report

Database File: hudson 36n-35hz.db
Dataset Pathname: pass11
Dataset Creation: Thu May 02 09:55:17 2013 by Log 0

Gamma Ray Calibration Report

Type / Serial: Probe275dig / pr051112

SHOP CALIBRATION

Sun Jun 13 13:33:21 1993

	Counts/Sec.	Gain	Offset	Jig	Units
Background	0.0				cps
Calibrator	1.0				cps
		1.0000			GAPI/cps

PRIMARY VERIFICATION

	Counts/Sec.	Gain	Offset	Jig	Units
Background	0.0				cps
Calibrator	0.0				cps
Difference				0.0	GAPI

BEFORE SURVEY VERIFICATION

	Counts/Sec.	Gain	Offset	Jig	Units
Background	0.0				cps
Calibrator	0.0				cps
Difference				0.0	GAPI

AFTER SURVEY VERIFICATION

	Counts/Sec.	Gain	Offset	Jig	Units
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:	7.000	in
Calibration Depth:	424.917	ft

Master Calibration, performed Thu May 02 09:20:12 2013:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.000	1.433	1.000	62.165	42.676	1.000
CAL	0.000	1.875				
5'	0.000	0.417	1.000	62.165	146.647	1.000
SUM						
S1	0.000	1.926	0.000	62.000	32.183	0.000
S2	0.000	1.578	0.000	62.000	39.290	0.000
S3	0.000	1.204	0.000	62.000	51.493	0.000
S4	0.000	1.037	0.000	62.000	59.773	0.000
S5	0.000	1.029	0.000	62.000	60.252	0.000
S6	0.000	1.197	0.000	62.000	51.804	0.000
S7	0.000	1.558	0.000	62.000	39.788	0.000
S8	0.000	1.925	0.000	62.000	32.204	0.000

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	0.000	1.875	1.000	0.000

Air Zero Calibration, performed Thu May 02 09:11:57 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