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CEMENT BOND LOG WITH GAMMA RAY

Company KERR-MCGEE OIL AND GAS
Well GORDON TURK FM POOL 1
Field WATTENBERG
County WELD
State COLORADO

Company	**KERR-MCGEE OIL AND GAS**
Well	**GORDON TURK FM POOL 1**
Field	**WATTENBERG**
County	**WELD** State **COLORADO**

Location: API # : 05123072190000
LAT: 40.14700 LONG: -104.86950
SEC 10 TWP 2N RGE 67W

Other Services: NONE

Permanent Datum	GROUND LEVEL	Elevation 4957'	Elevation
Log Measured From	GROUND LEVEL		K.B.
Drilling Measured From	KELLY BUSHING		D.F.
			G.L. 4957'

Date of Service	10-FEBRUARY-2015
Run Number	ONE
Depth Driller or PBTD	8066'
Depth Logger	7820'
Bottom Log Interval	7818'
Top Log Interval	SURFACE
Open Hole Size	7 7/8"
Type Fluid	FSW
Fluid Level	SURFACE
Fluid Density	N/A
Max. Recorded Temperature	N/A
Max. Wellhead Pressure	0 PSI
Wellhead Connection	N/A
Estimated Cement Top	568'
Unit Number	53
Wireline Size	9/32"
Location	FT MORGAN
Recorded By	B. FONSECA
Witnessed By	C. ROW

	Size	Wt/Ft	Top	Bottom
Tubing Record				
Surface Casing	8 5/8"	24 #	SURFACE	242'
Production Casing	4 1/2"	11.6#	SURFACE	8164'
Liner Record				

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All interpretations are opinions based on inferences from electrical or other measurements and Pioneer Wireline Services, LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Pioneer Wireline Services, LLC will not 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.

Comments

N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.

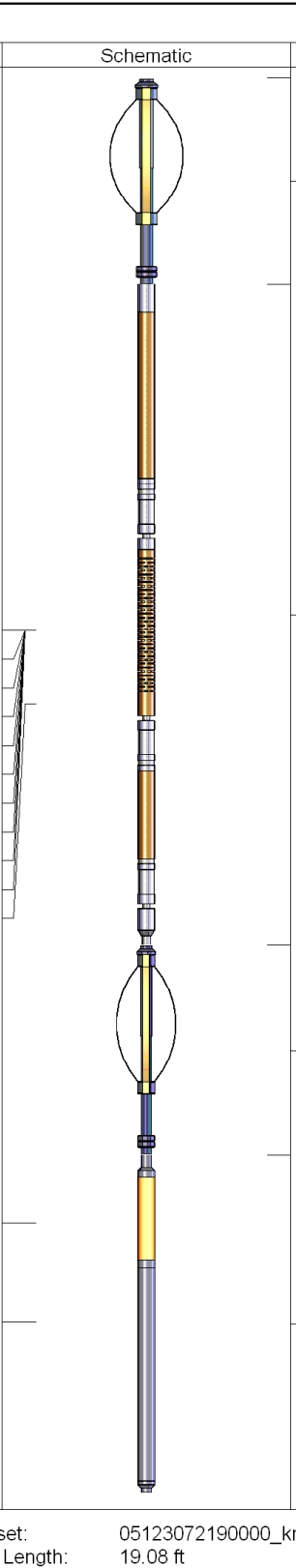
CORRELATED TO GROUND LEVEL

DV TOOL @ 825'

YOUR CREW TODAY: B. FONSECA, J. KING, M. ODOHERTY

THANK YOU FOR USING PIONEER ENERGY SERVICES

Your Pioneer Energy Services Crew	Tool Data - Services	Serial Number
Engineer: B. FONSECA		
Operator:		
Operator: M. ODOHERTY		
Operator: J. KING		



Sensor	Offset (ft)	Description	Len (ft)	OD (in)	Wt (lb)
		CSS_MID	2.79	3.00	36.00
WVF3FT WVFCAL WVFS1 WVFS2 WVFS3 WVFS4 WVFS5 WVFS6 WVFS7 WVFS8 WVF5FT	11.63 11.63 11.63 11.63 11.63 11.63 11.63 11.63 11.63 11.63 10.63	RBT-RBTC3 (070151)	8.92	2.75	90.00
		PTS275	2.83	2.75	
CCL	3.63				
GR	2.30	GR_CCL-Probe (110246) Probe Gamma CCL	4.54	2.75	100.00

Dataset: 05123072190000_kmg_gordon_turk_fm_pool_1_cbl.db: field/well/run1/pass5
Total Length: 19.08 ft
Total Weight: 226.00 lb
O.D. 3.00 in

Calibration Report
Database File: 05123072190000_kmg_gordon_turk_fm_pool_1_cbl.db
Dataset Pathname: pass5
Dataset Creation: Wed Feb 11 07:32:48 2015 by Log SCH 120430

Gamma Ray Calibration Report

Serial Number:	110246	
Tool Model:	Probe	
Performed:	Wed Feb 11 07:30:48 2015	
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:	070151	
Tool Model:	RBTC3	
Calibration Casing Diameter:	4.500	in
Calibration Depth:	2322.858	ft

Master Calibration, performed Wed Feb 11 07:07:13 2015:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.003	0.603	2.000	81.196	132.058	1.587
CAL	0.004	0.525				
5'	0.004	0.388	2.000	81.196	205.934	1.266
SUM						
S1	0.007	0.537	0.000	100.000	188.939	-1.400
S2	0.011	0.580	0.000	100.000	175.824	-1.910
S3	0.012	0.631	0.000	100.000	161.757	-2.016
S4	0.003	0.666	0.000	100.000	150.938	-0.457
S5	0.004	0.655	0.000	100.000	153.546	-0.645
S6	0.006	0.628	0.000	100.000	160.760	-0.922
S7	0.011	0.586	0.000	100.000	173.843	-1.910
S8	0.013	0.550	0.000	100.000	186.186	-2.421

Internal Reference Calibration, performed Wed Feb 11 07:27:42 2015:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.003	0.524	0.004	0.525	1.002	0.000

Air Zero Calibration, performed Wed Feb 11 06:47:06 2015:

	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

Log Variables

Database:C:\Warrior\Data\05123072190000_kmg_gordon_turk_fm_pool_1_cbl.db
Dataset: field/well/run1/pass5

Top - Bottom

PPT usec	CASEWGHT lb/ft	MAXAMPL mV	MINAMPL mV	MINATTN db/ft	CASEOD in	PERFS	TDEPTH ft
0	10.5	82	1	0.8	4.5	0	7900

BOTTEMP degF	BOREID in
100	7.875

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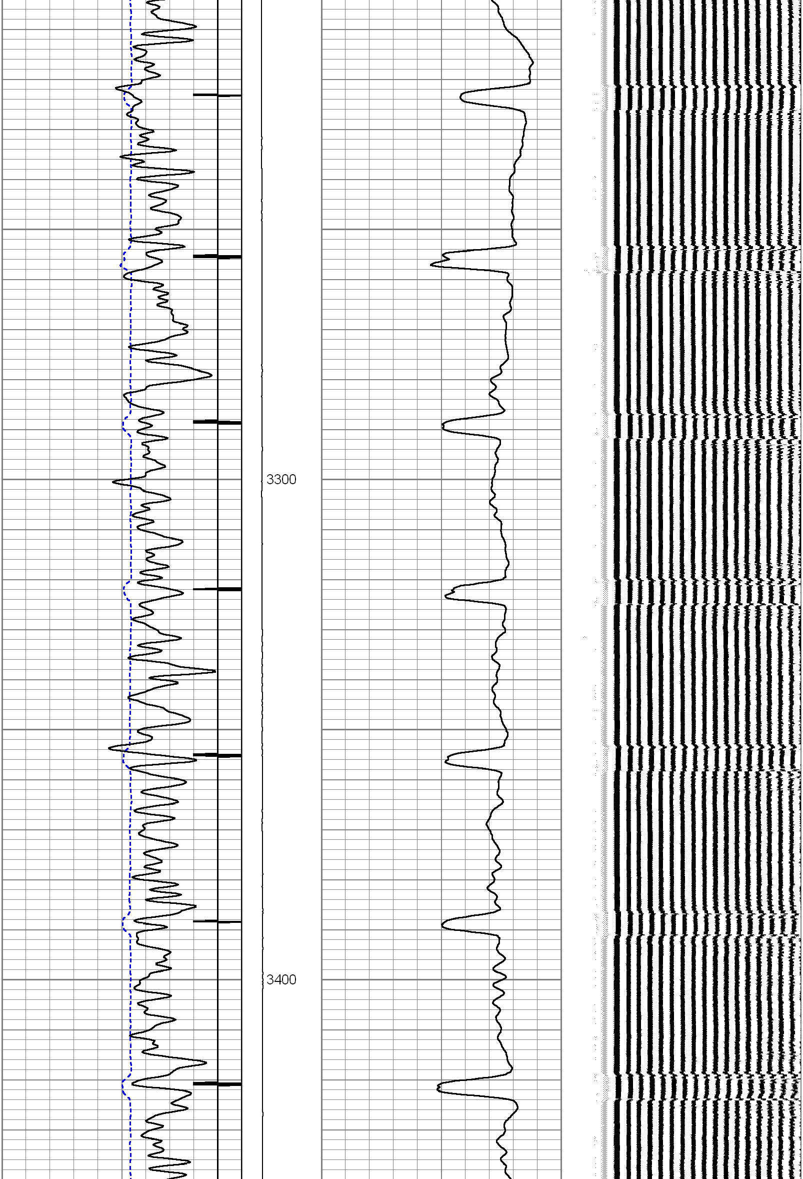
Main Pass

Database File: 05123072190000_kmg_gordon_turk_fm_pool_1_cbl.db
Dataset Pathname: pass5
Presentation Format: cbl_main
Dataset Creation: Wed Feb 11 07:32:48 2015 by Log SCH 120430
Charted by: Depth in Feet scaled 1:240

350 TRAVEL TIME (usec) 160	TENSION	0 AMP AMPLITUDE (mV) 10	200 MSG 1200
9 Collar Locator -1	0 (lb) 2500	0 PIPE AMP AMPLITUDE (mV) 100	
0 Gamma Ray (GAPI) 200			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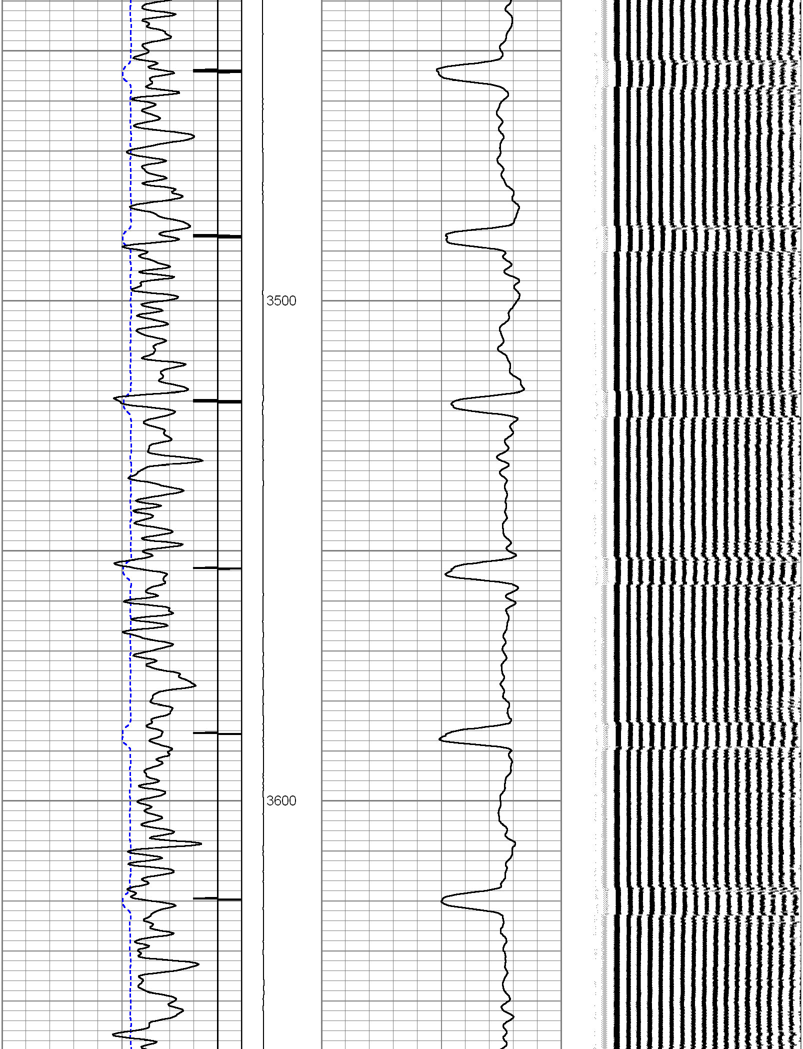
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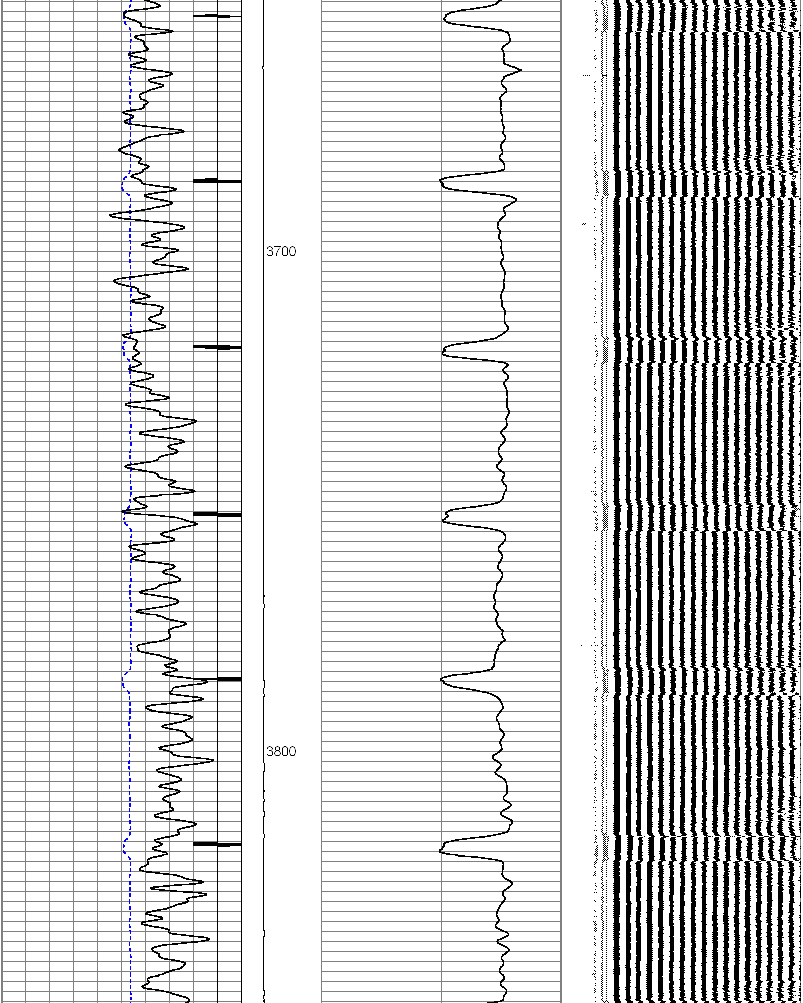
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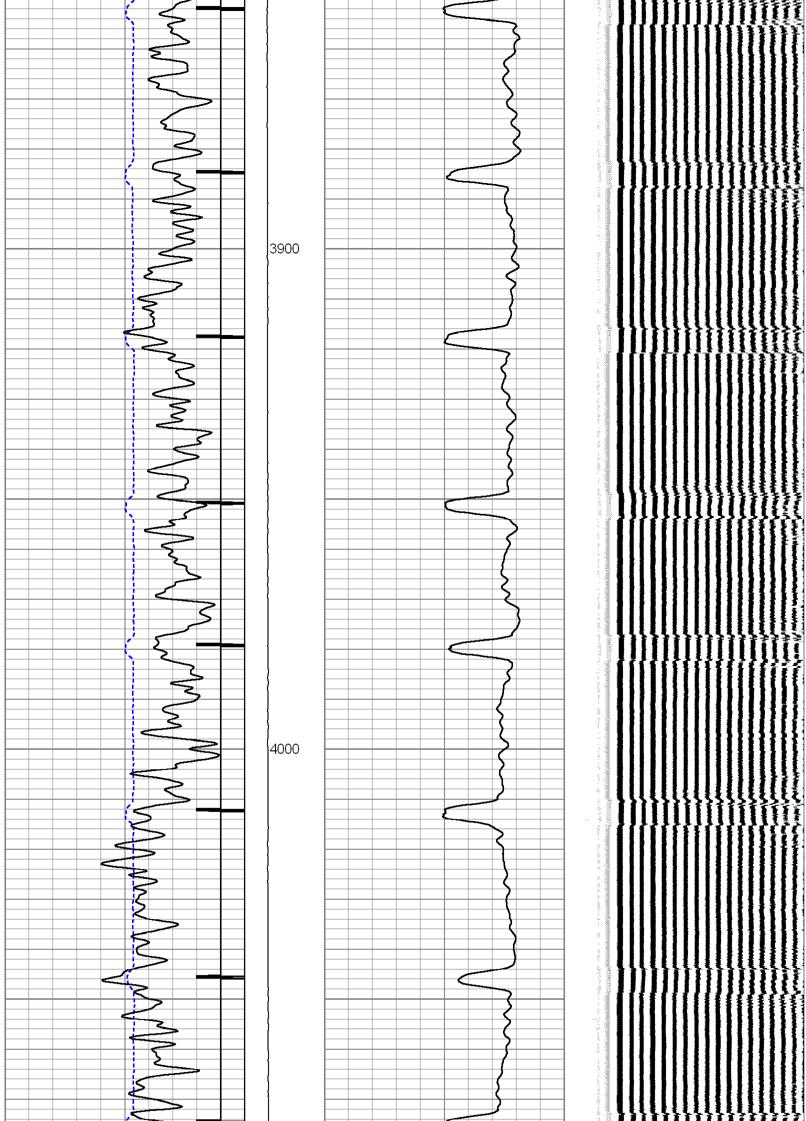
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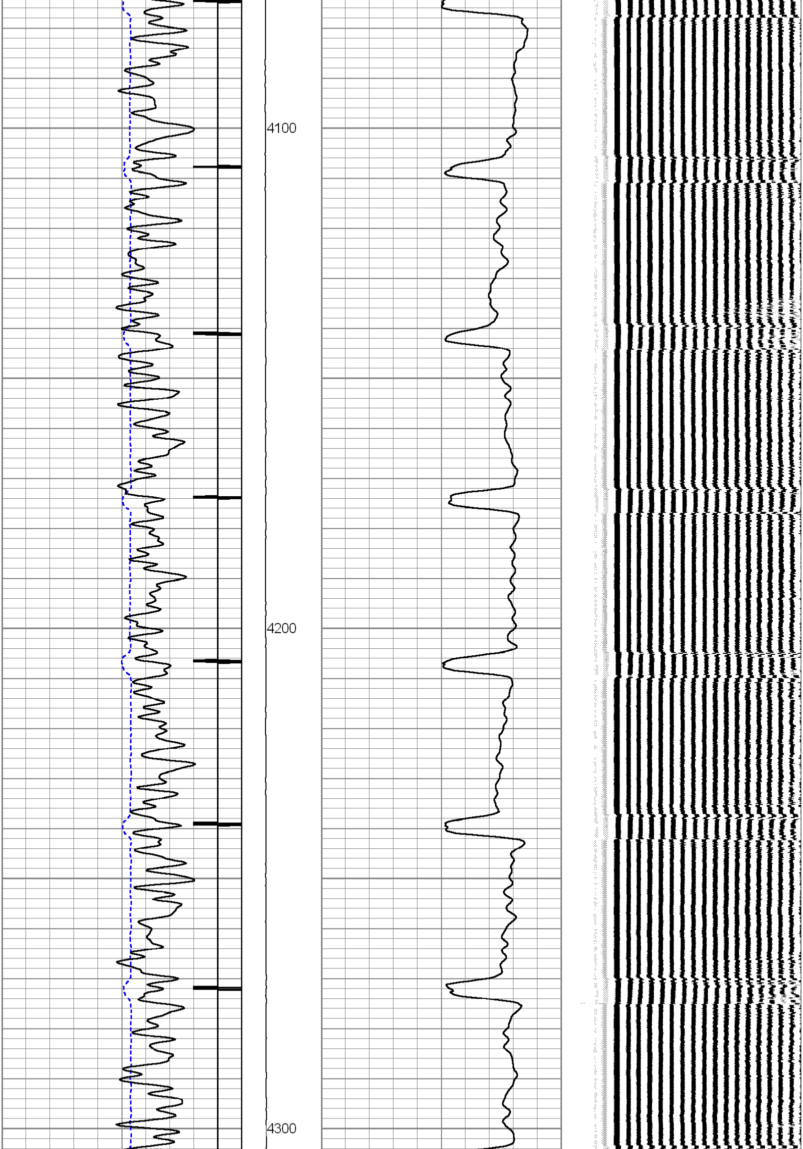
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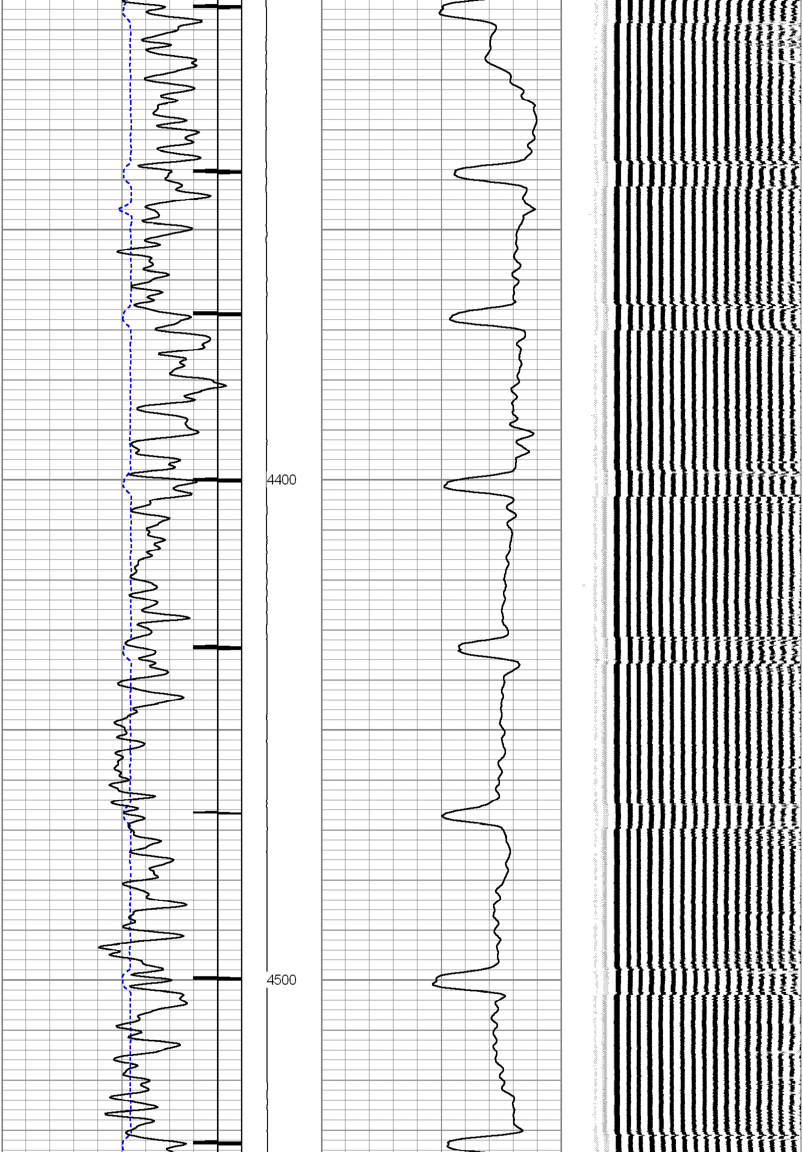
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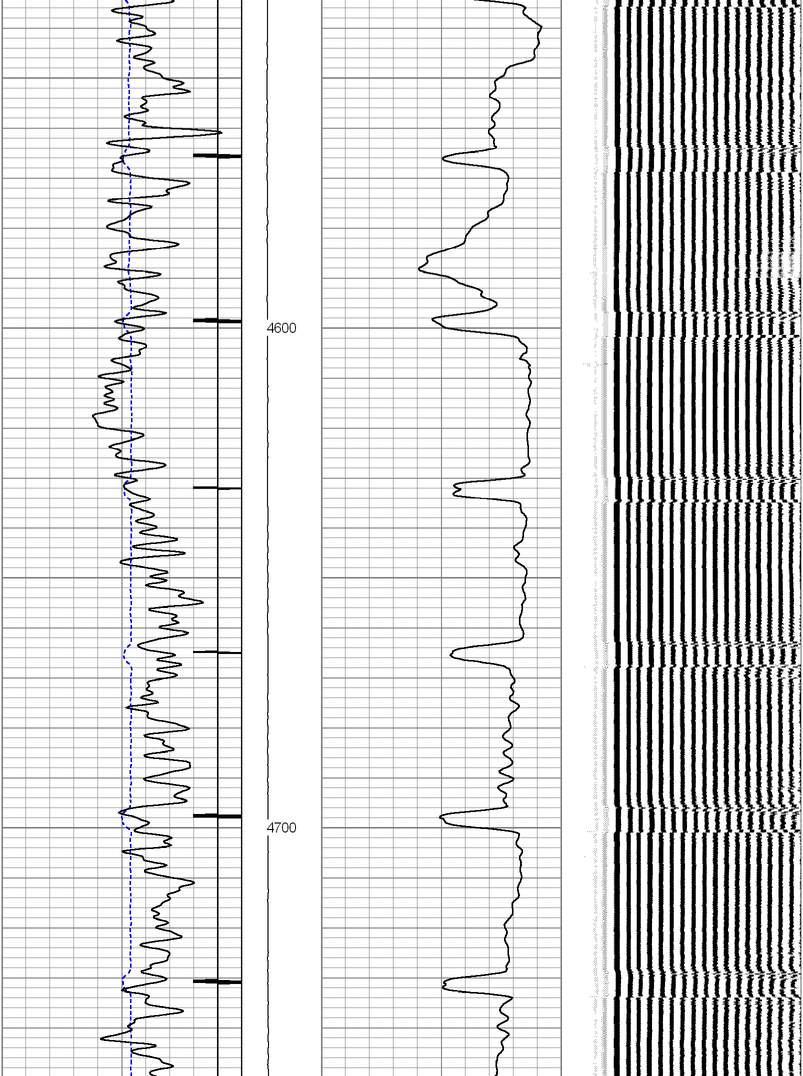
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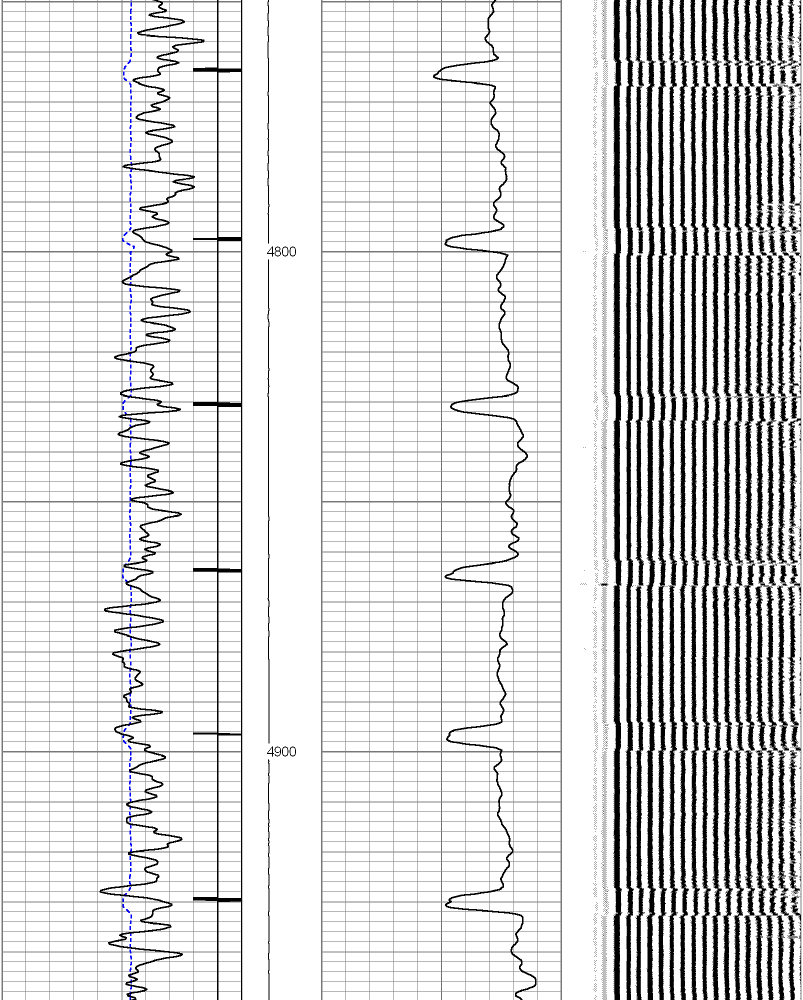
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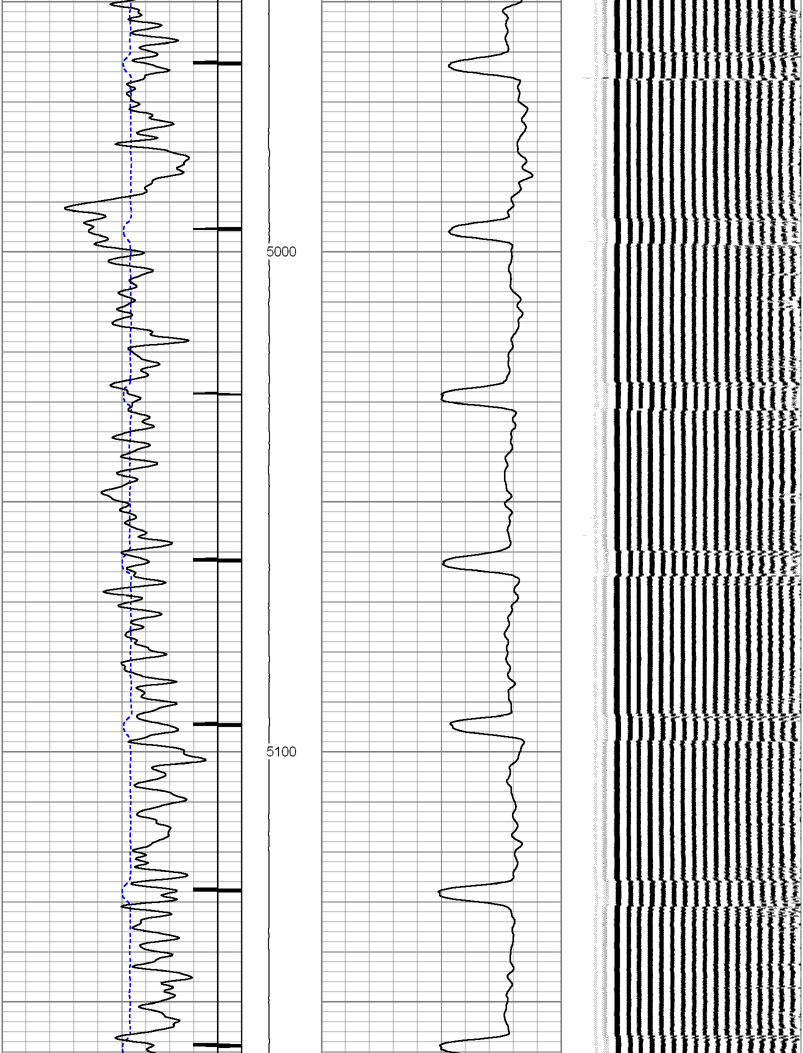
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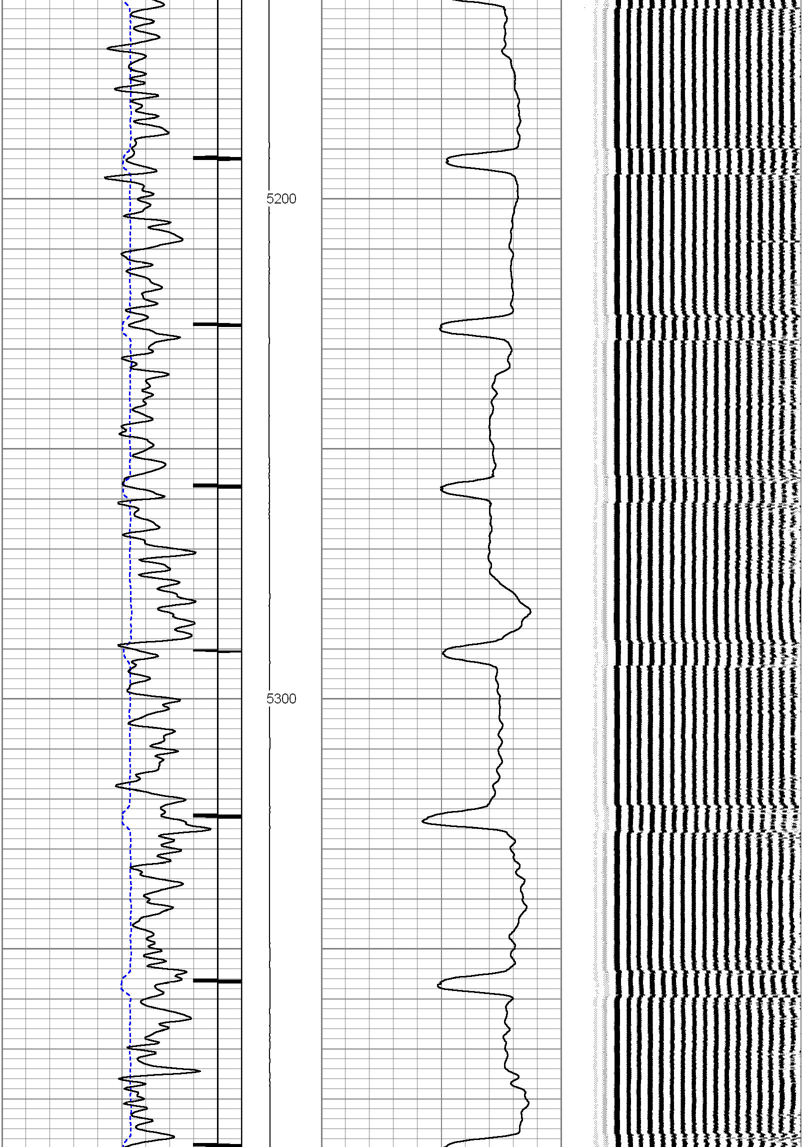

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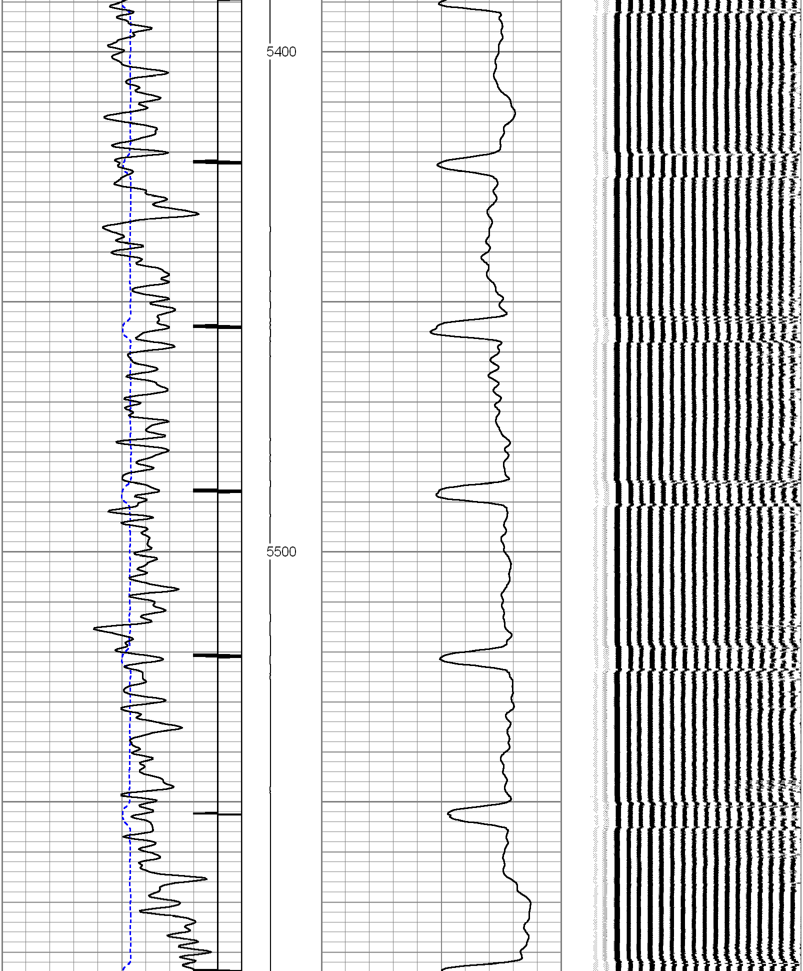
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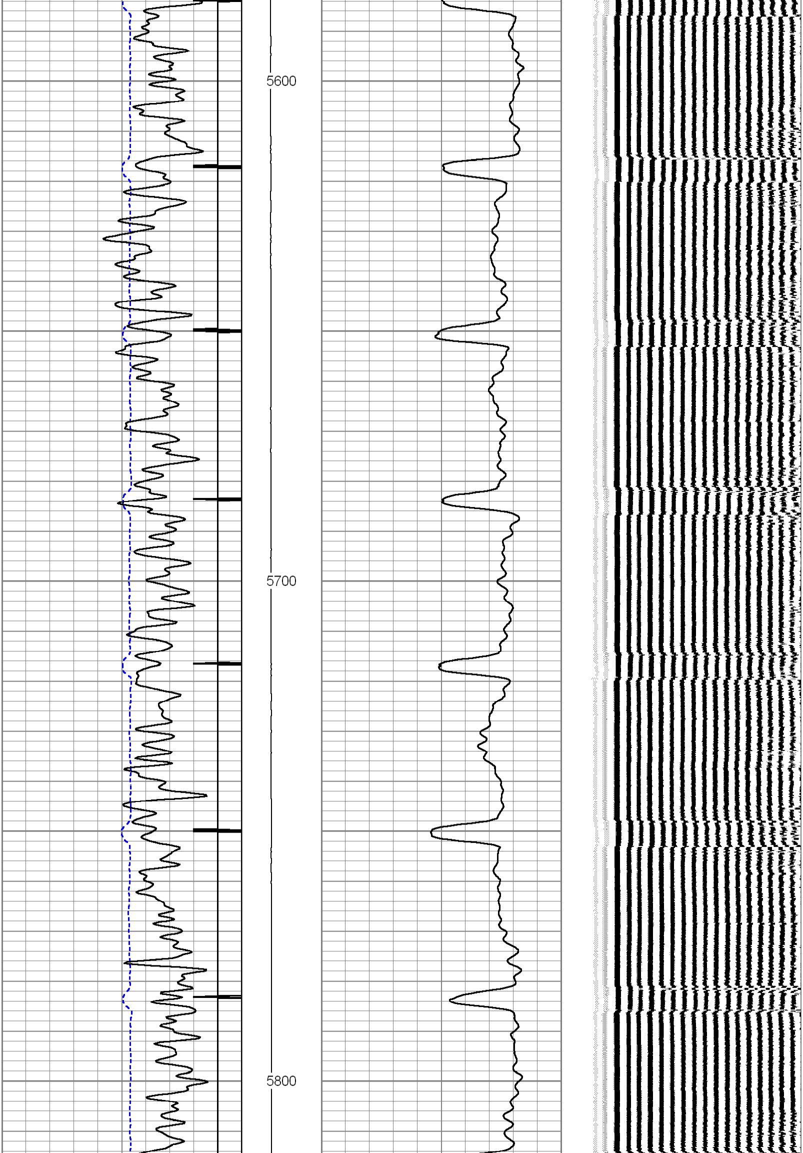
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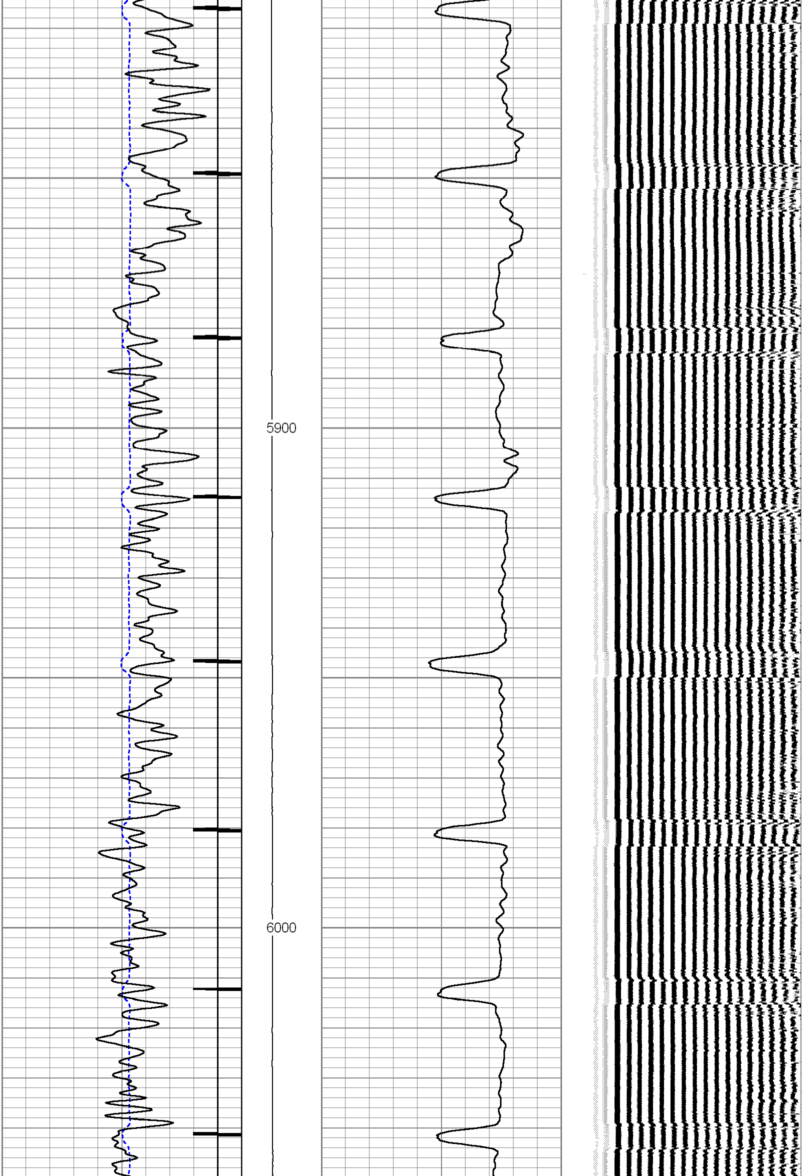
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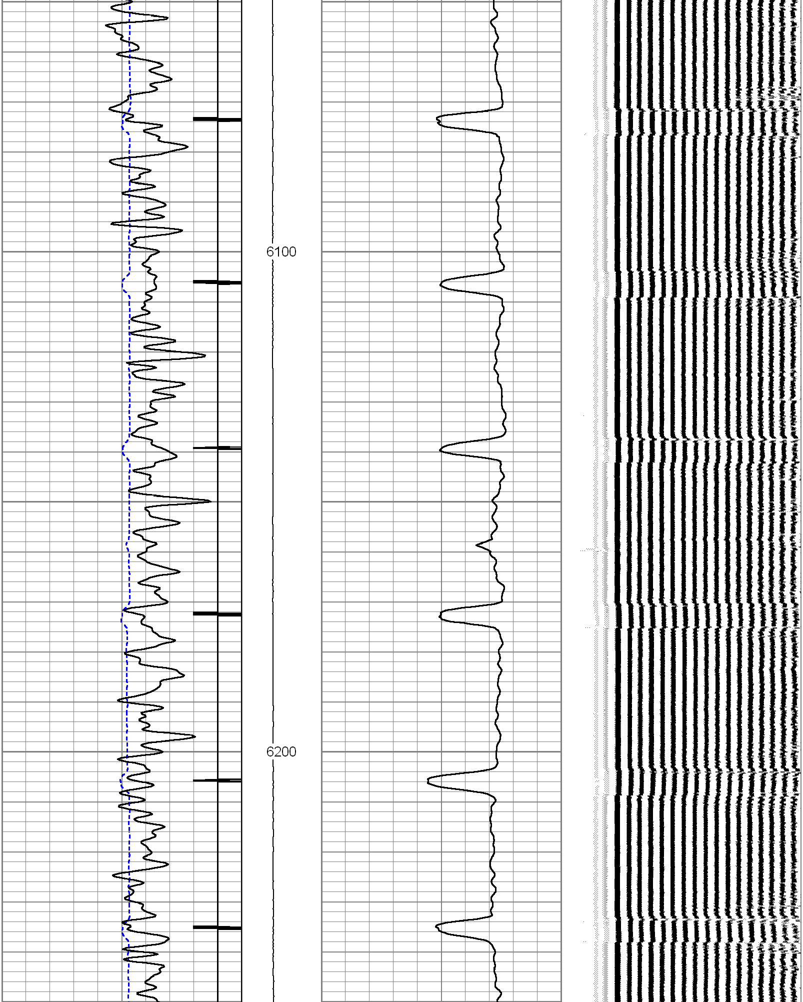
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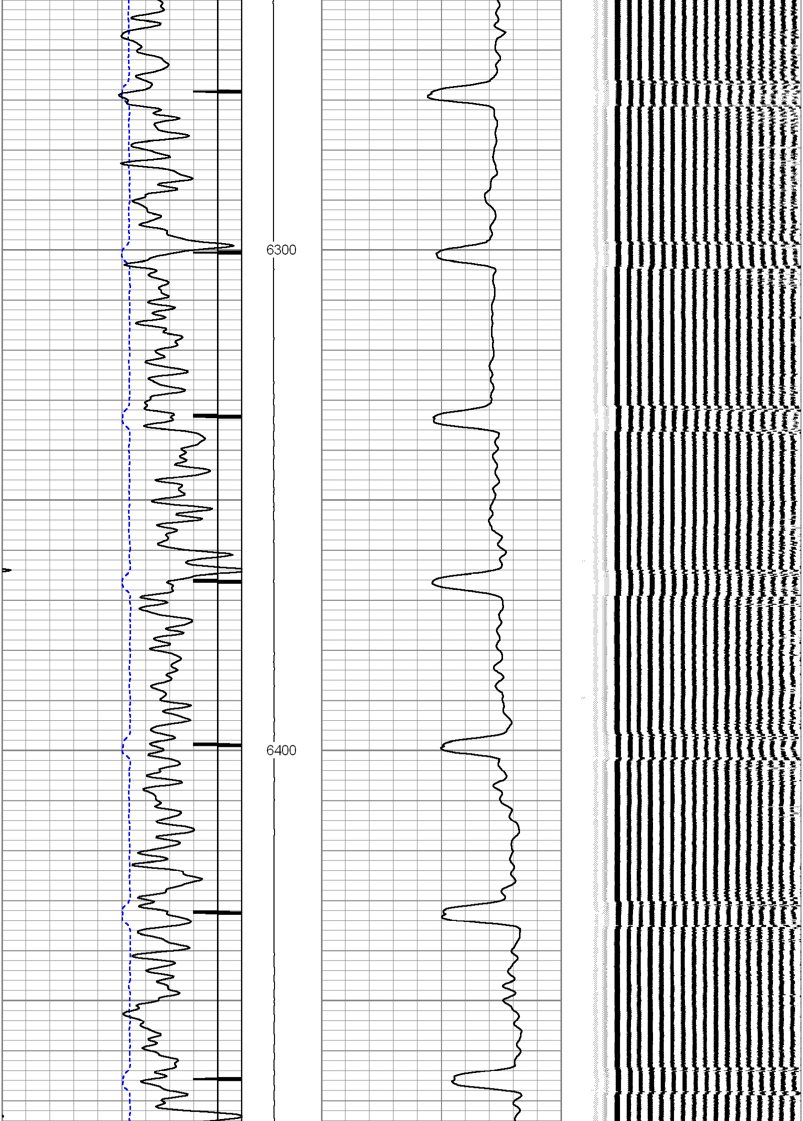
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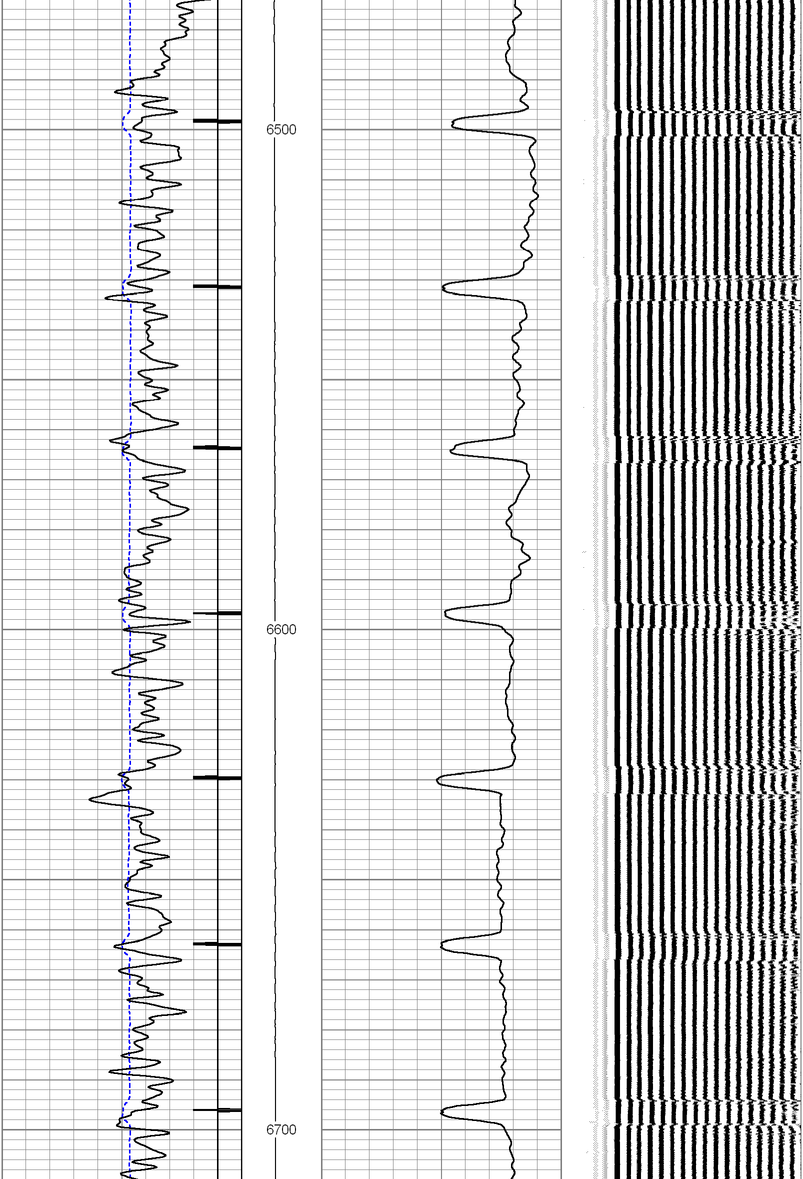
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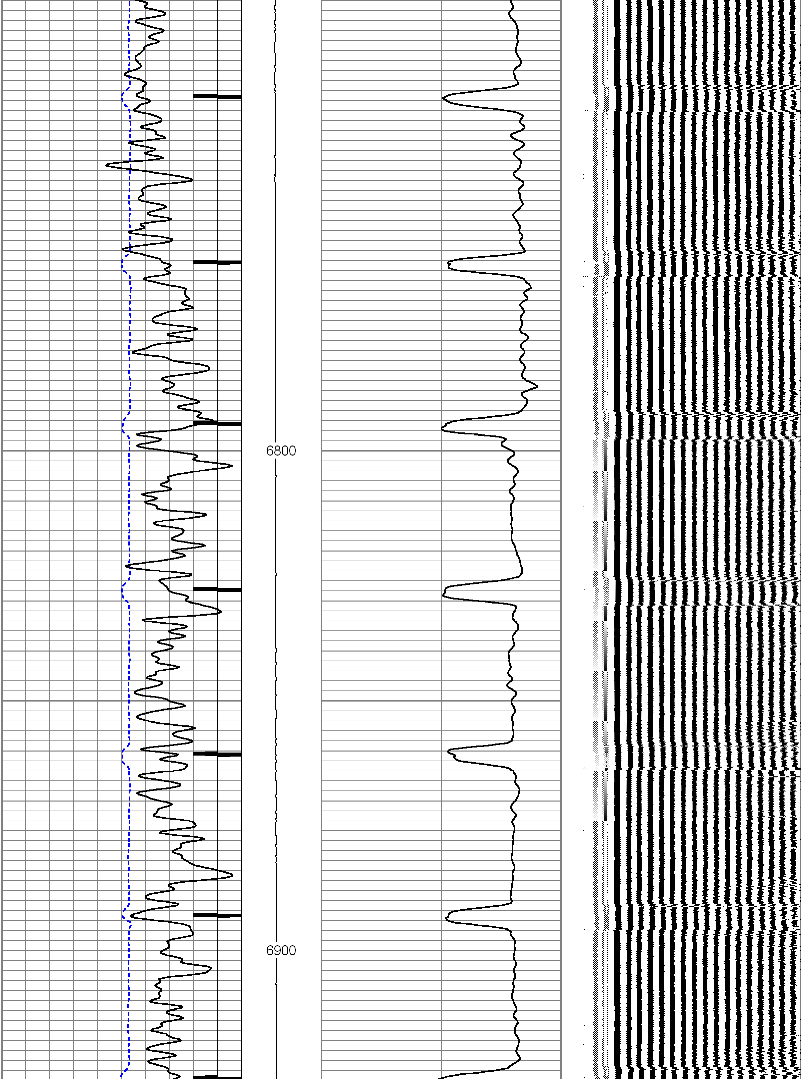
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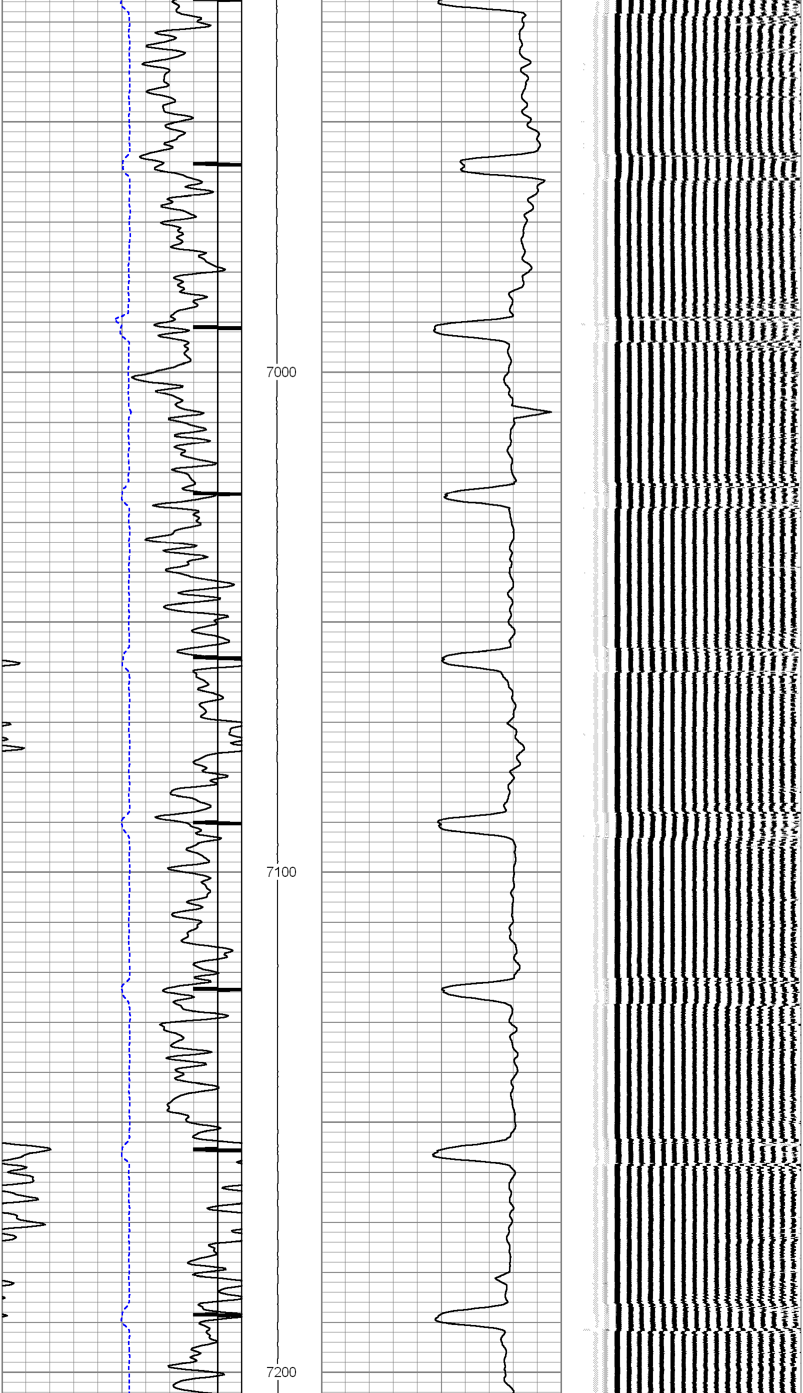
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7100
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350 TRAVEL TIME (usec) 160	TENSION	0 AMP AMPLITUDE (mV) 10	200 MSG 1200
9 Collar Locator -1	0 (lb) 2500	0 PIPE AMP AMPLITUDE (mV) 100	
0 Gamma Ray (GAPI) 200			

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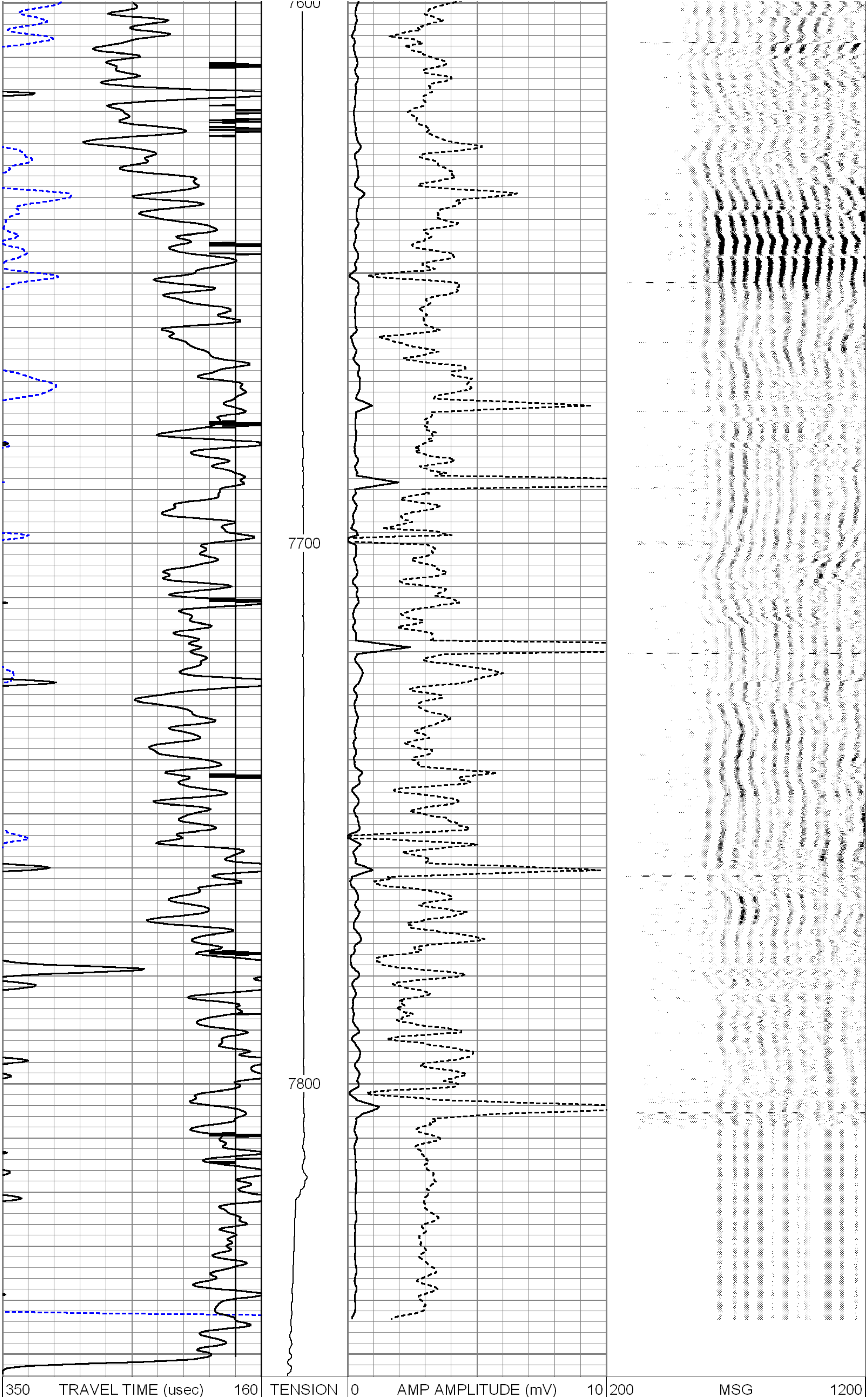
Repeat Pass

Database File: 05123072190000_kmg_gordon_turk_fm_pool_1_cbl.db
Dataset Pathname: pass4
Presentation Format: cbl_main
Dataset Creation: Wed Feb 11 07:27:44 2015 by Log SCH 120430
Charted by: Depth in Feet scaled 1:240

350 TRAVEL TIME (usec) 160	TENSION	0 AMP AMPLITUDE (mV) 10	200 MSG 1200
9 Collar Locator -1	0 (lb) 2500	0 PIPE AMP AMPLITUDE (mV) 100	
0 Gamma Ray (GAPI) 200			



350 TRAVEL TIME (usec) 160	TENSION	0 AMP AMPLITUDE (mV) 10	200 MSG 1200
9 Collar Locator -1	0 (lb) 2500	0 PIPE AMP AMPLITUDE (mV) 100	
0 Gamma Ray (GAPI) 200			

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Company	KERR-MCGEE OIL AND GAS
Well	GORDON TURK FM POOL 1
Field	WATTENBERG
County	WELD
State	COLORADO