



**SECTOR CEMENT BOND
GAMMA RAY
CCL LOG**

Comp. OCCIDENTAL PETROLEUM CORP.
Well KERN L 04-32D
Field WATTENBURG
Co. WELD
State CO

Company **OCCIDENTAL PETROLEUM CORP.**
Well **KERN L 04-32D**
Field **WATTENBURG**
County **WELD** State **CO**

Location: API # : 05-123-31702 Other Services
1990' FNL & 587' FWL
SEC 4 TWP 3N RGE 66W
PERF

Permanent Datum GL Elevation 4794'
Log Measured From KB 13' Above Perm. Datum
Drilling Measured From KB
K.B. 4807'
D.F. NA
G.L. 4794'

Date of Service	17-DEC-2024
Run Number	ONE
Depth Driller or PBTD	8032'
Depth Logger	1230'
Bottom Log Interval	1230'
Top Log Interval	SURFACE
Open Hole Size	7-7/8"
Type Fluid	H2O
Fluid Level	SURFACE
Fluid Density	8.33 LB/GAL
Max. Recorded Temperature	NA
Max. Wellhead Pressure	ZERO
Wellhead Connection	5K
Estimated Cement Top	NONE
Unit Number	1010
Wireline Size	1/4"
Location	BRIGHTON
Recorded By	C. SHEPPARD
Witnessed By	L. MORALES

Surface Casing	8-5/8"	24#	SURFACE	741'
Production Casing	4-1/2"	11.6#	SURFACE	8022'
Liner Casing				
Tubing Record				

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

THANK YOU FOR USING RANGER ENERGY SERVICES! FIELD TICKET #

Your Ranger Energy Services Crew	Tool Data - Services	Serial Number
Engineer: Operator: Operator: Operator:		

Quantity	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
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Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)	
ErrCt	17.60		Cable_Head-1_7/16 Titan 1 7/16" Cable Head	1.02	1.44	3.31	
IntTemp	15.34		RBT-Probe (070150) Probe Radii Bond Tool with Digital Telemetry	8.75	2.75	90.00	
WVFS8	12.09						
WVFS7	12.09						
WVFS6	12.09						
WVFS5	12.09						
WVFS4	12.09						
WVFS3	12.09						
WVFS2	12.09						
WVFS1	12.09						
WVFCAL	12.09						
WVF3FT	12.09						
WVF5FT	11.09						
CCL	6.89						
GR	5.65	GR_analog-GR275B (071129) 275 Gamma-CCL (Pulse) Top Detector	4.57	2.75	55.00		
		Centralizers-Sondex PRC 2.75" Roller Centralizers Tekco 2 3/4" Adjustable Centralizer	3.00	2.75	25.00		
		Bull_Plug-1_7/16_GO Titan 1 7/16" Female Bull Plug	0.27	1.44	1.00		

Dataset: 778359_occidental_kernl04-32d_0512331702_20241217_scbl.db: field/well/run1/pass3
 Total length: 17.60 ft
 Total weight: 174.31 lb
 O.D.: 2.75 in

Log Variables

DatabaseC:\ProgramData\Warrior\Data\778359_occidental_kernl04-32d_0512331702_20241217_s
 Dataset field/well/run1/pass3/_vars_

Top - Bottom

BOREID in 8.75	BOTTEMP degF 100	CASEOD in 4.5	CASETHCK in 0.25	CASEWGHT lb/ft 11.6	MAXAMPL mV 81.2	MINAMPL mV 0.7	MINATTN db/ft 13
PERFS No	PPT usec 249	SRFTEMP degF 45	TDEPTH ft 1230				

Variable Description

BOREID : Borehole I.D.
 BOTTEMP : Bottom Hole Temperature
 CASEOD : Casing O.D.
 CASETHCK : Casing Thickness

CASEWGHT : Casing Weight
 MAXAMPL : Maximum Amplitude
 MINAMPL : Minimum Amplitude
 MINATTN : Minimum Attenuation

PERFS : Perforation Flag
 PPT : Predicted Pipe Time
 SRFTEMP : Surface Temperature
 TDEPTH : Total Depth

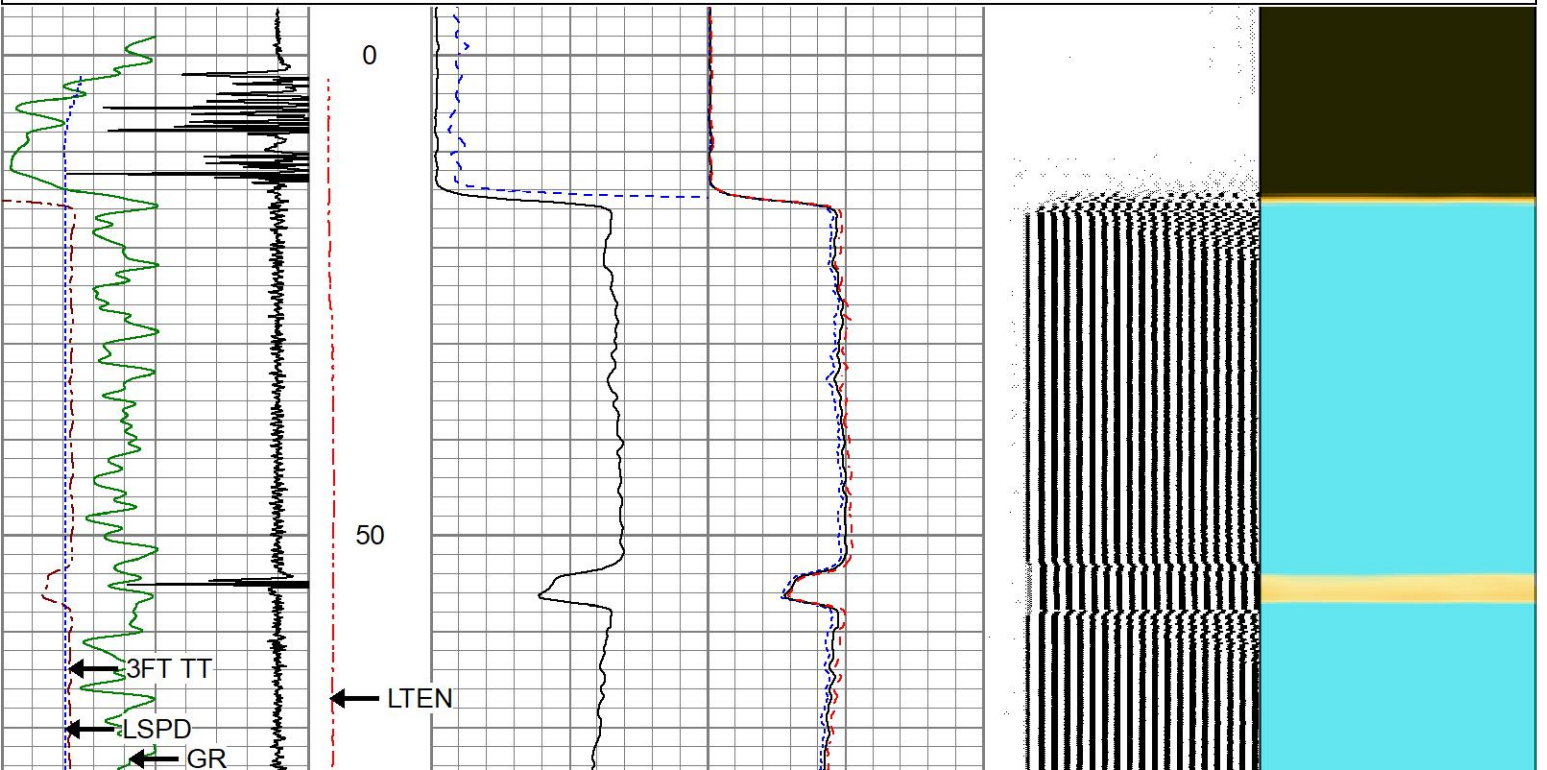


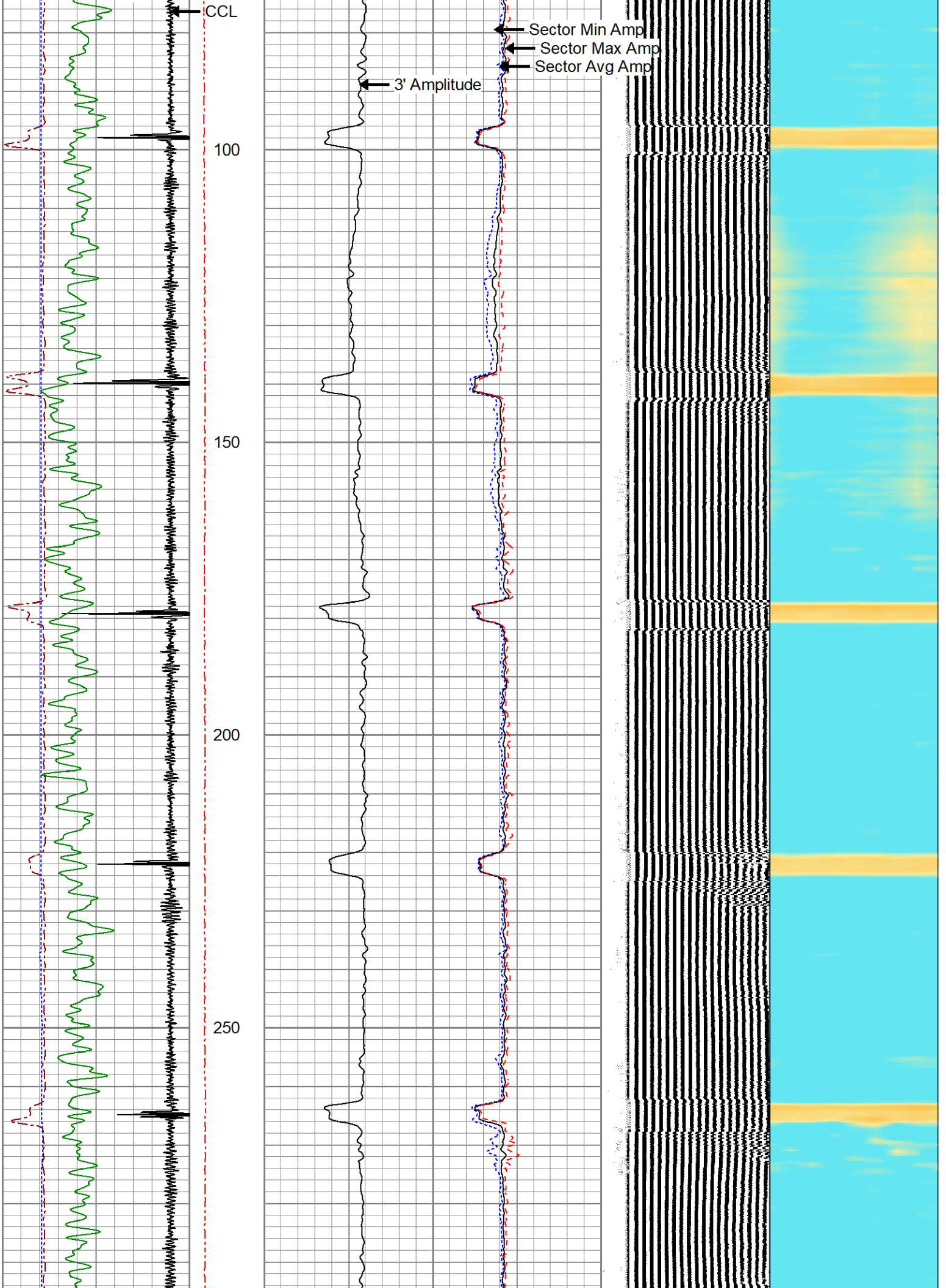
MAIN PASS

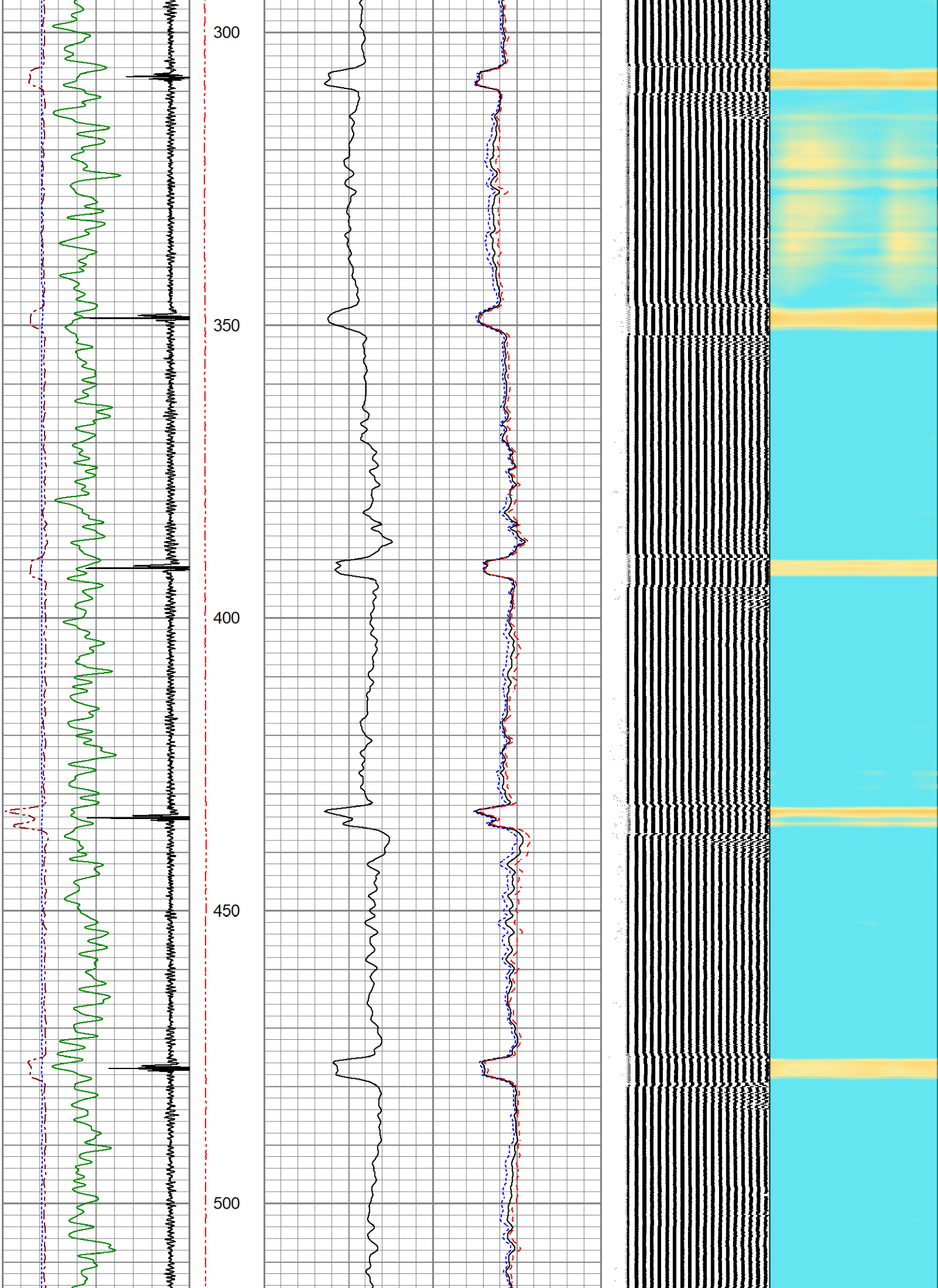
0 PSI APPLIED AT SURFACE

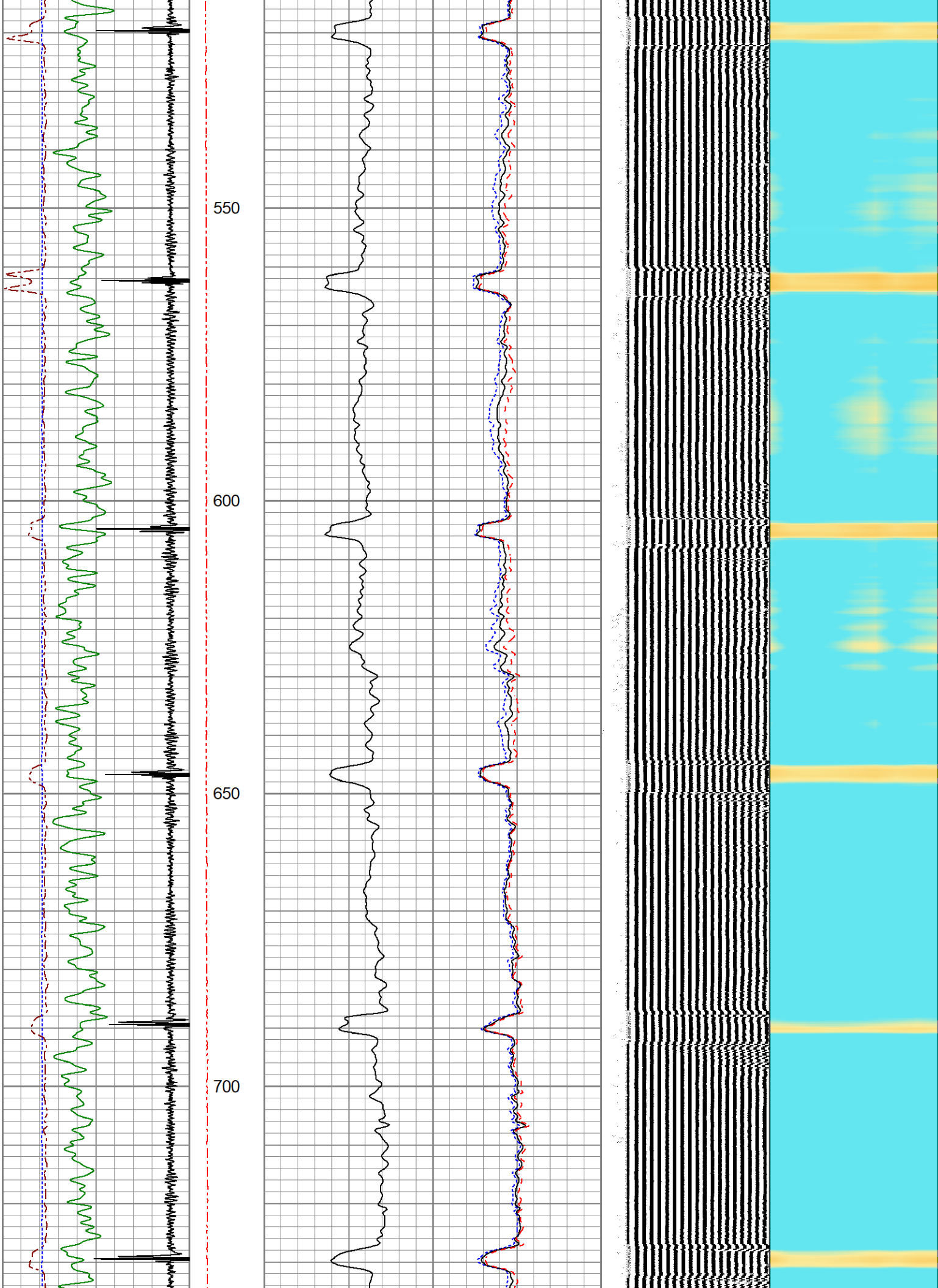
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 Dataset Pathname pass3
 Presentation Format res_scbl 8sec
 Dataset Creation Tue Dec 17 10:29:49 2024
 Charted by Depth in Feet scaled 1:240

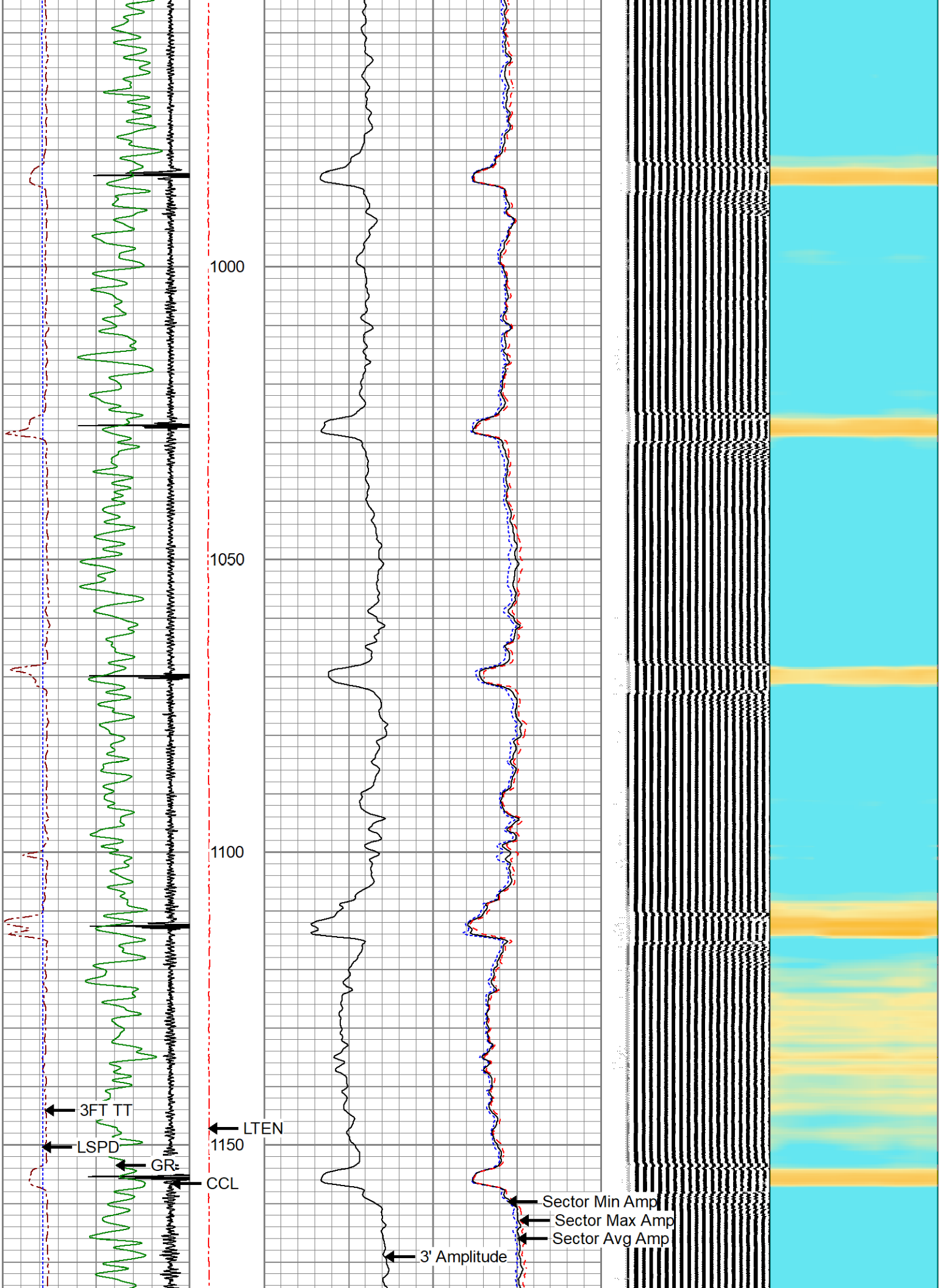
260 3FT TT (usec) 160	LTEN	3' Amplitude	0 Sector Min Amp 150	200 VDL (usec) 1200	1 Sector Map	8
-9 CCL 1	(lb)	(mV) 100	Sector Avg Amp			
0 GR (GAPI) 150	0 2000	3' Amplified	0 150			
-150 LSPD (ft/min) 150		Amplitude X 5	Sector Max Amp			
		(mV) 20	0 150			

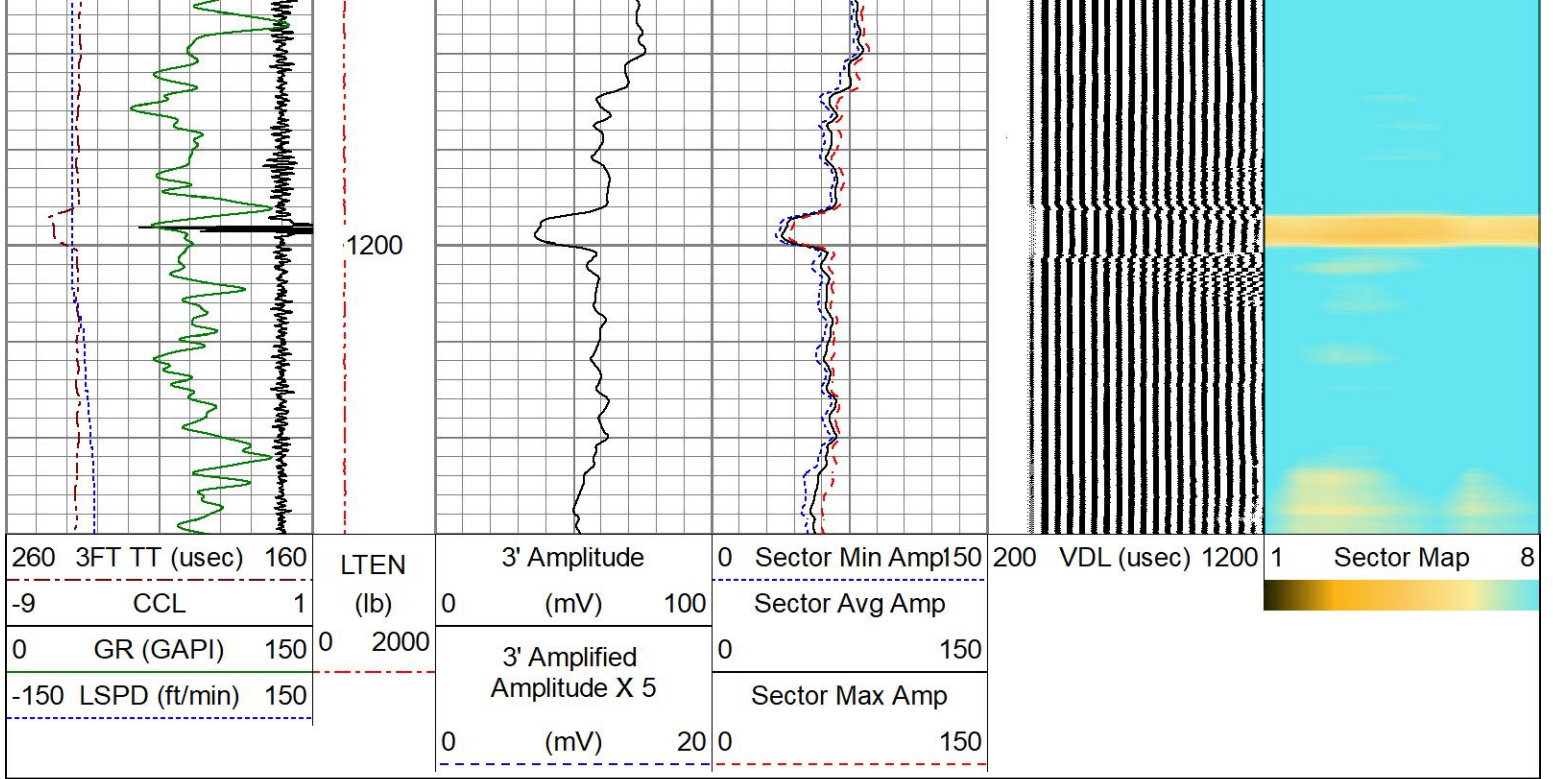








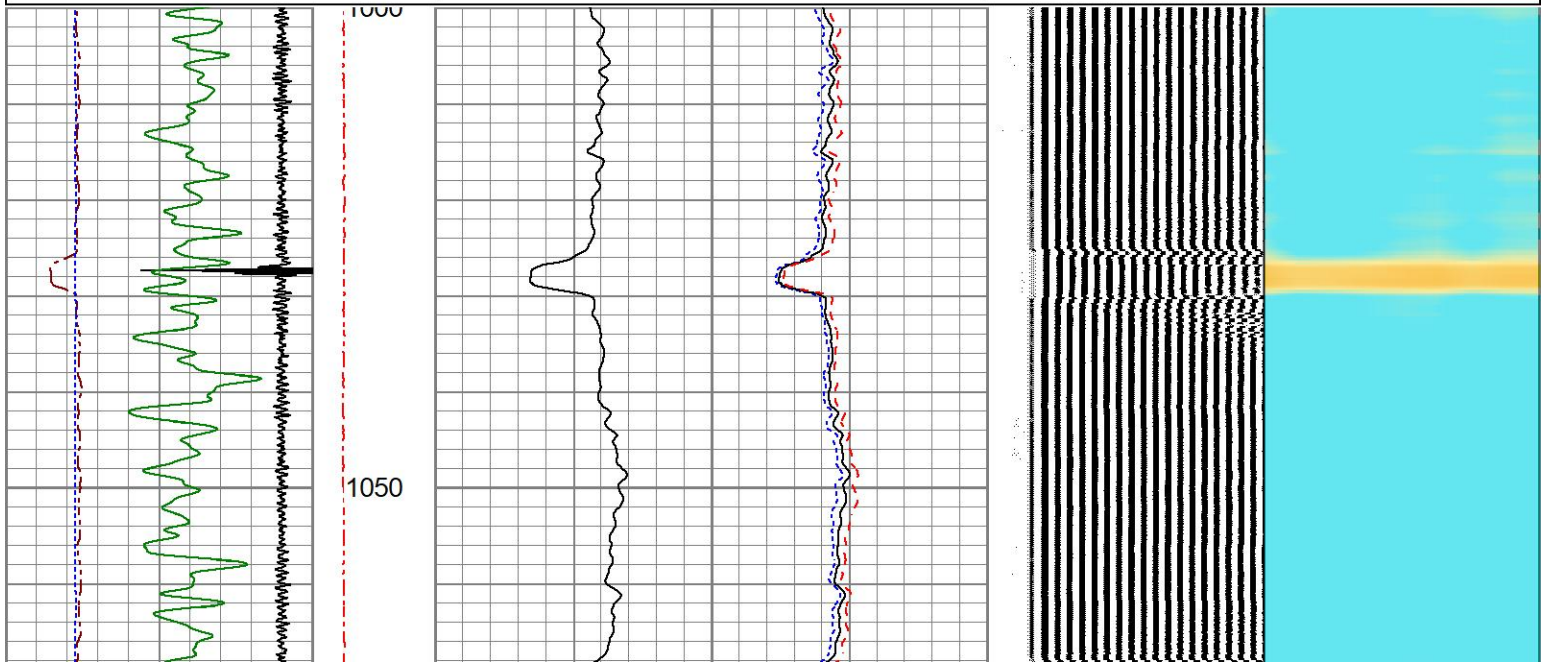
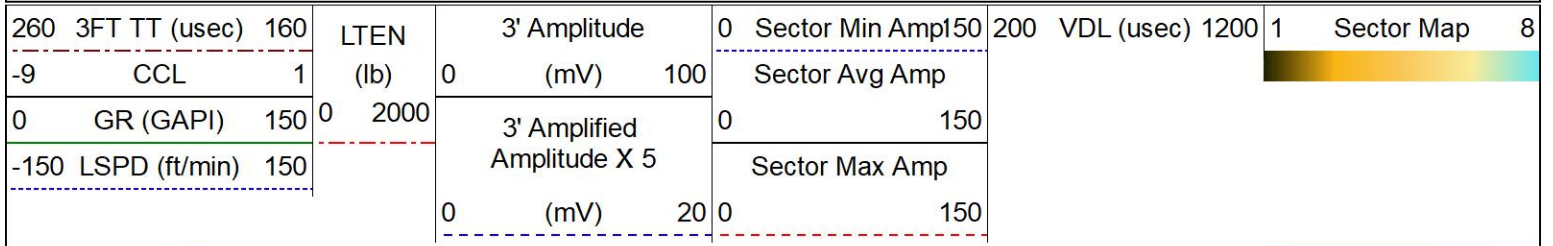




REPEAT PASS

0 PSI APPLIED AT SURFACE

Database File 778359_occidental_kernl04-32d_0512331702_20241217_scbl.db
 Dataset Pathname pass2
 Presentation Format res_scbl 8sec
 Dataset Creation Tue Dec 17 10:24:58 2024
 Charted by Depth in Feet scaled 1:240



Segmented Cement Bond Log Calibration Report

Serial Number: 070150
 Tool Model: Probe
 Calibration Casing Diameter: 5.500 in
 Calibration Depth: 2056.792 ft

Master Calibration, performed Thu Nov 07 11:36:41 2024:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	-0.007	1.147	0.700	81.200	69.756	1.197
CAL	-0.007	1.147				
5'	-0.007	1.145	0.700	81.200	69.896	1.194
SUM						
S1	-0.007	1.185	0.000	100.000	83.892	0.583
S2	-0.007	1.094	0.000	100.000	90.787	0.653
S3	-0.007	1.113	0.000	100.000	89.276	0.611
S4	-0.007	1.147	0.000	100.000	86.638	0.619
S5	-0.007	1.171	0.000	100.000	84.910	0.587
S6	-0.007	1.179	0.000	100.000	84.328	0.584
S7	-0.007	1.130	0.000	100.000	87.894	0.637
S8	-0.007	1.185	0.000	100.000	83.927	0.568

Internal Reference Calibration, performed (Not Performed):

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	-0.007	1.147	1.000	0.000

Air Zero Calibration, performed Wed Jun 05 06:12:56 2024:

	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



Company **OCCIDENTAL PETROLEUM CORP.**
 Well **KERN L 04-32D**
 Field **WATTENBURG**
 County **WELD**
 State **CO**