



SECTOR CEMENT BOND
GAMMA RAY
CCL LOG

Company OCCIDENTAL PETROLEUM
Well BURCHFIELD 39-20
Field WATTENBERG
County WELD State COLORADO

Location: API # : 05-123-26823 Other Services
SHL: 859' FSL & 534' FWL SW/SW
BHL:1571' FSL & 166' FEL SE/SE
SEC 20 TWP 3N RGE 67W
Permanent Datum GL Elevation 4789'
Log Measured From KB 12' Above Perm. Datum
Drilling Measured From KB
N/A
K.B. 4801'
D.F. 4800'
G.L. 4789'

Comp. OCCIDENTAL PETROLEUM
Well BURCHFIELD 39-20
Field WATTENBERG
Co. WELD
State COLORADO

Date of Service	OCTOBER 18, 2022		
Run Number	ONE		
Depth Driller or PBTID	7360'		
Depth Logger	1650'		
Bottom Log Interval	1648'		
Top Log Interval	SURFACE		
Open Hole Size	N/A		
Type Fluid	WATER		
Fluid Level	SURFACE		
Fluid Density	8.33 PPG		
Max. Recorded Temperature	190 DEG. F.		
Max. Wellhead Pressure	0		
Wellhead Connection	7-1/16" 5K		
Estimated Cement Top	SEE LOG		
Unit Number	1096		
Wireline Size	9/32"		
Location	BRIGHTON,CO		
Recorded By	HARPER		
Witnessed By	JOSE		
Size	WMt	Top	Bottom
Surface Casing	N/A	N/A	N/A
Production Casing	4.5"	11.6#	SURFACE
Liner Casing	N/A	N/A	N/A
Tubing Record	N/A	N/A	N/A

<<< Fold Here >>>

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.
LOG CORRELATED TO:
RANGER ENERGY SERVICES
SECTOR CEMENT BOND
GAMMA RAY
CCL LOG
DATED:05-OCT-2022

THANK YOU FOR USING RANGER ENERGY SERVICES! FIELD TICKET #

Your Ranger Energy Services Crew	Tool Data - Services	Serial Number
Engineer: B.HARPER Operator: B.HECHT Operator: J.BAILEY Operator:		

Quantity	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
----------	-------------	-----------	-------------	-------------	-----------	-------------

Log Variables

DatabaseC:\ProgramData\Warrior\Data\oxy_burchfield 39-20_05-123-26823_10-18-2022.db
Dataset field/well/run1/pass3/_vars_

Top - Bottom

BHTEMP_Src TEMP	BOREID in 8.75	BOTTEMP degF 100	CASEOD in 4.5	CASETHCK in 0.408	CASEWGHT lb/ft 11.6	MAXAMPL mV 81	MINAMPL mV 0.6
MINATTN db/ft 0.8	PERFS No	PPT usec 0	SRFTEMP degF 0	TDEPTH ft 0			

Variable Description

BHTEMP_Src : BHTEMP Input Source Selector
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

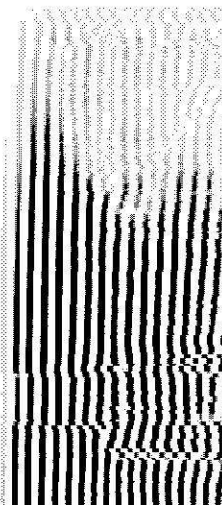
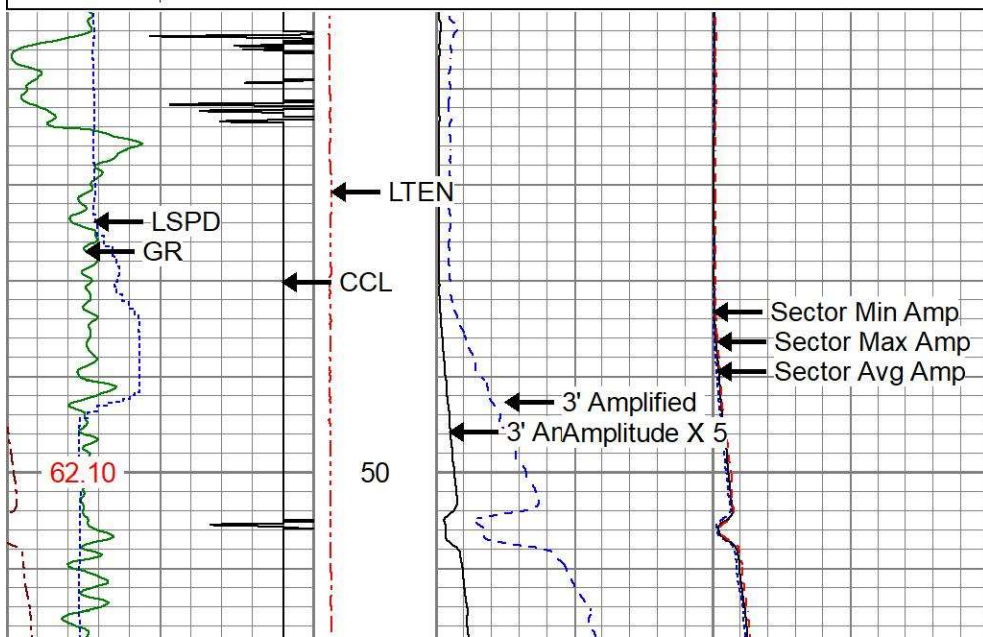


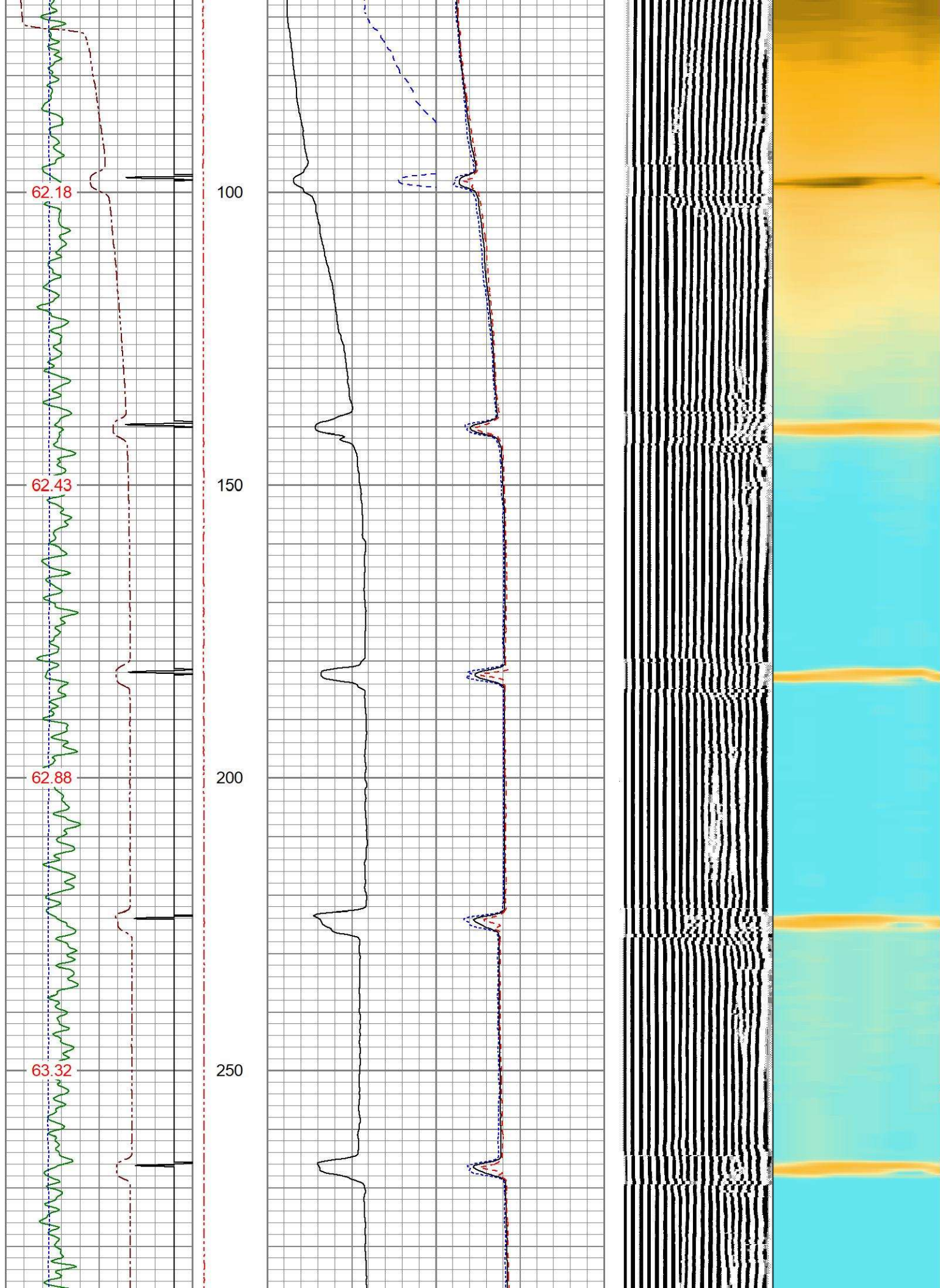
MAIN PASS

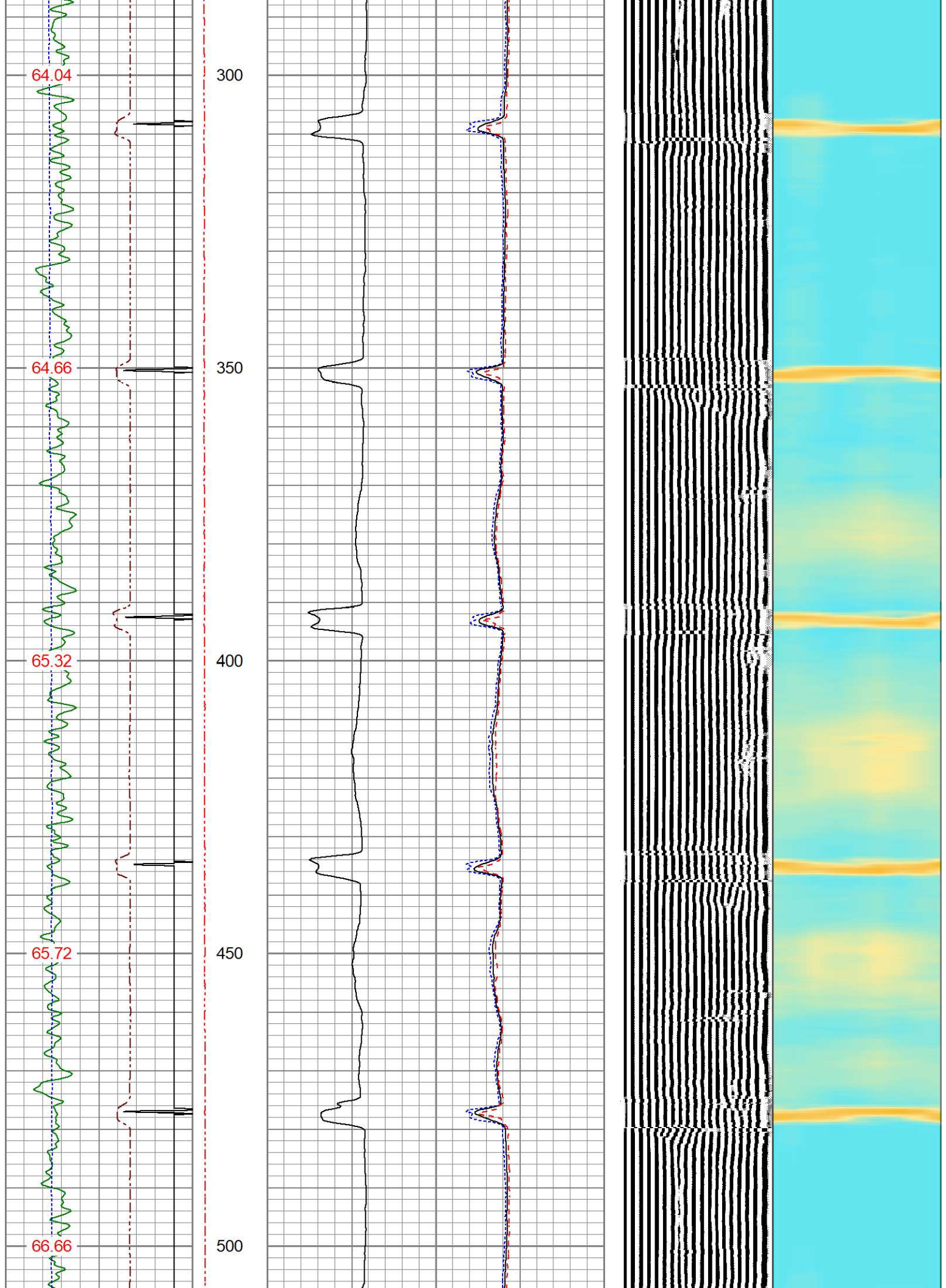
0 PSI APPLIED AT SURFACE

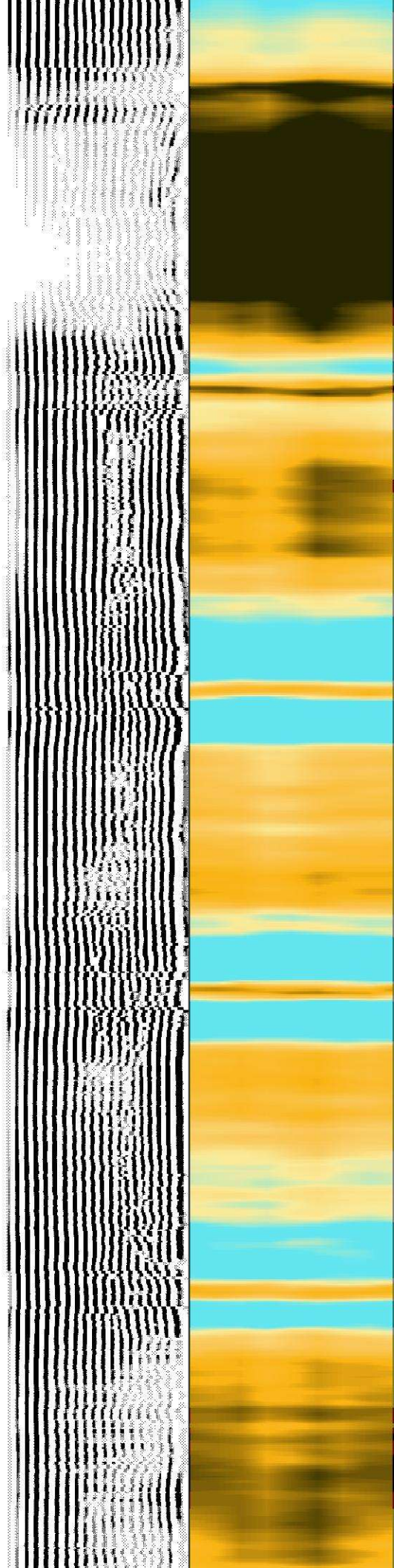
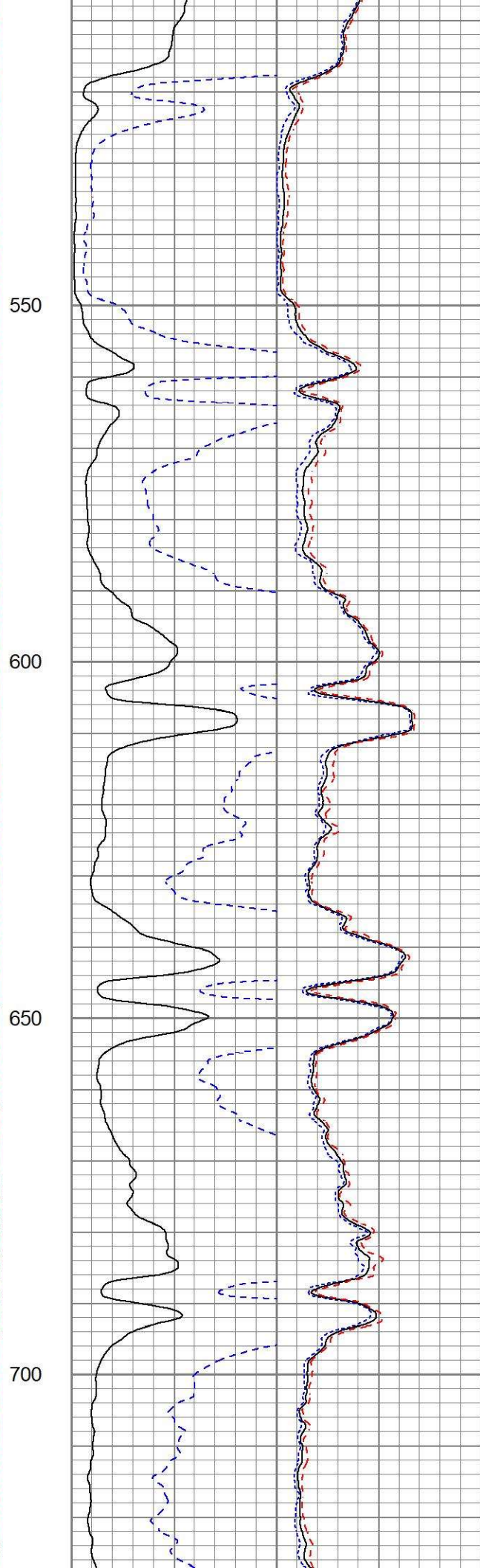
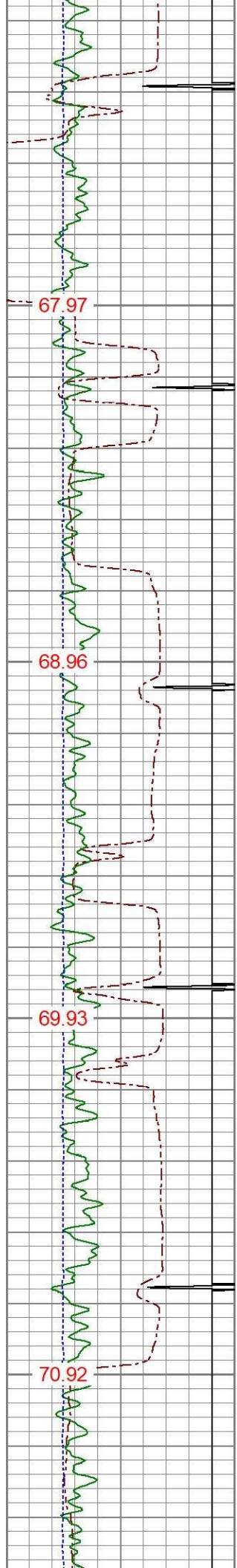
Database File oxy_burchfield 39-20_05-123-26823_10-18-2022.db
Dataset Pathname pass3
Presentation Format res_schl 8sec
Dataset Creation Tue Oct 18 13:12:50 2022
Charted by Depth in Feet scaled 1:240

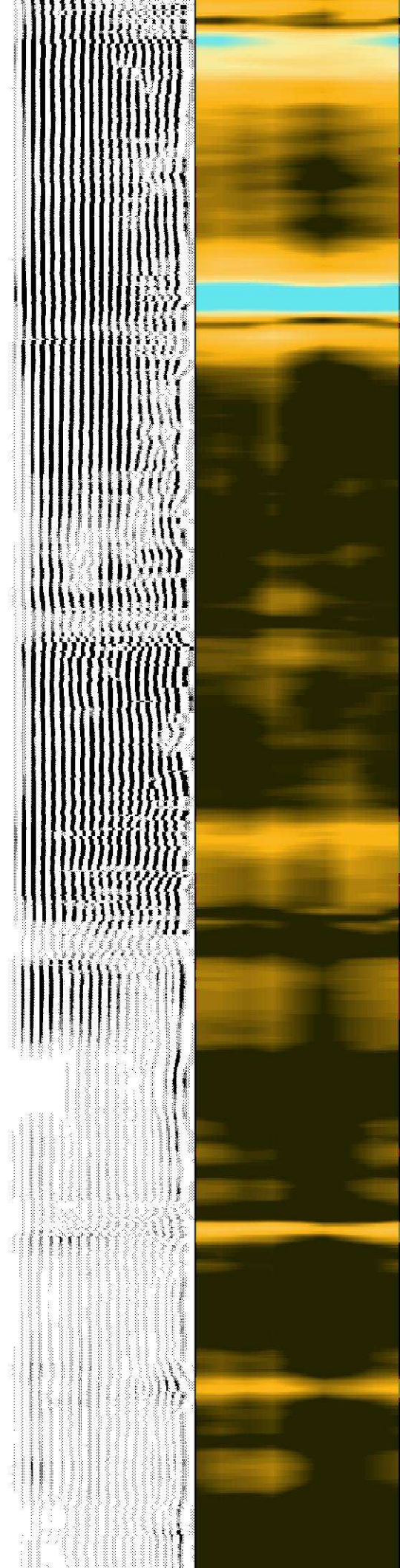
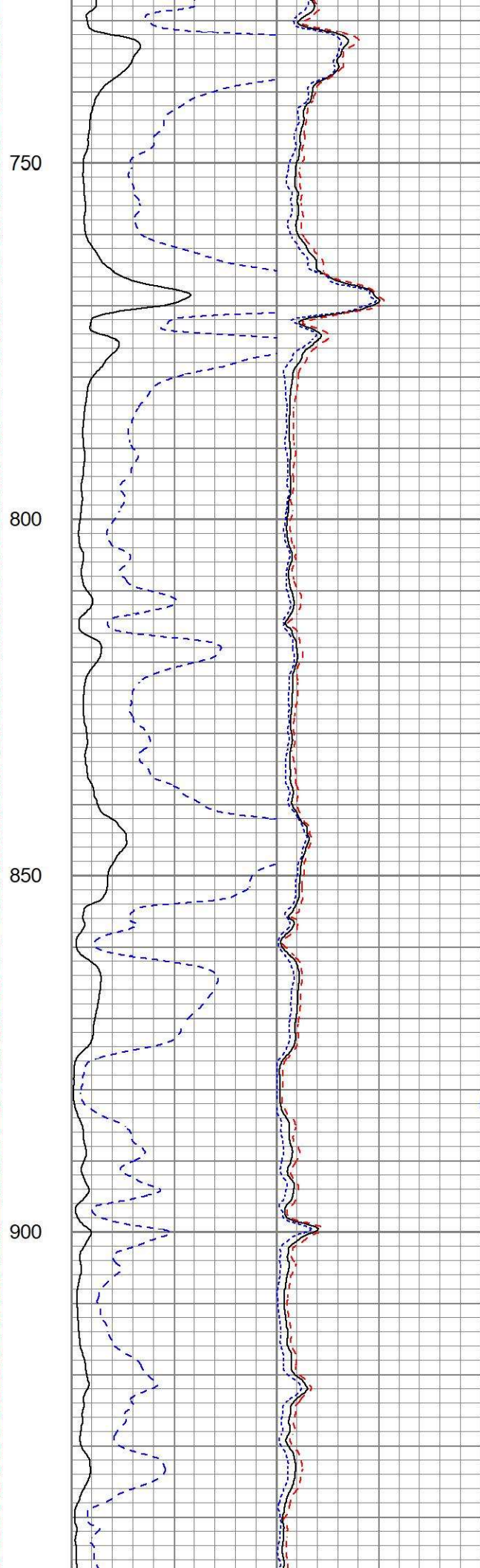
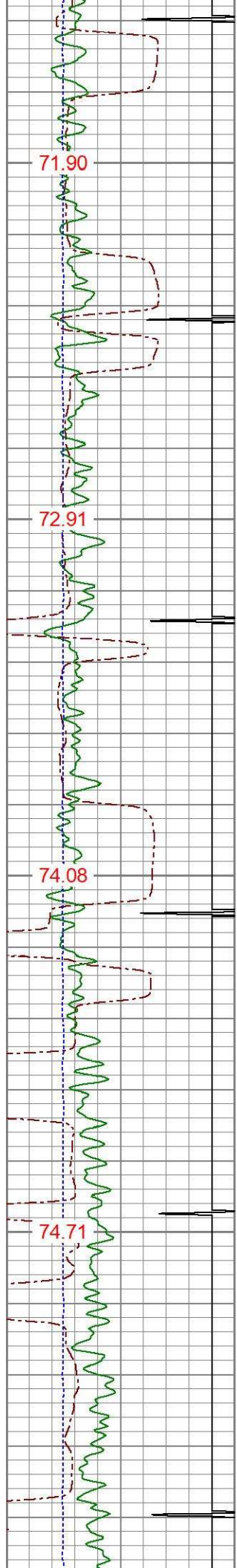
270 3FT TT (usec) 170	LTEN	3' Amplitude	0 Sector Min Amp150	200 VDL (usec) 1200	1 Sector Map 8
-9 CCL 1	(lb)	(mV) 100	Sector Avg Amp		
0 GR 150	0 2000	3' Amplified	0 150		
-150 LSPD (ft/min) 150		Amplitude X 5	Sector Max Amp		
TEMP		(mV) 20	0 150		
(degF)					

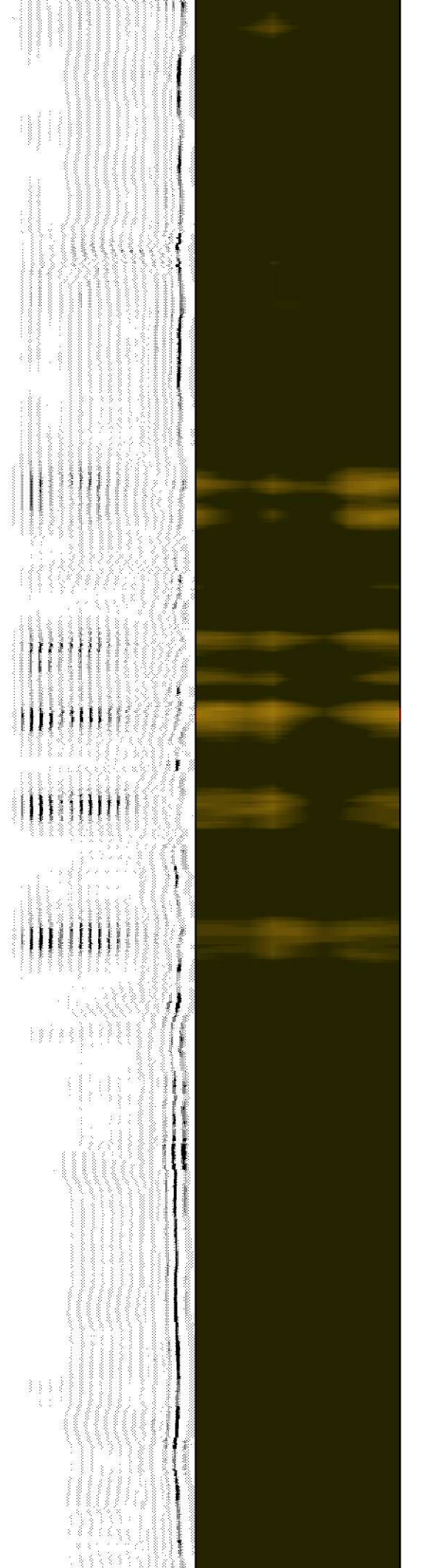
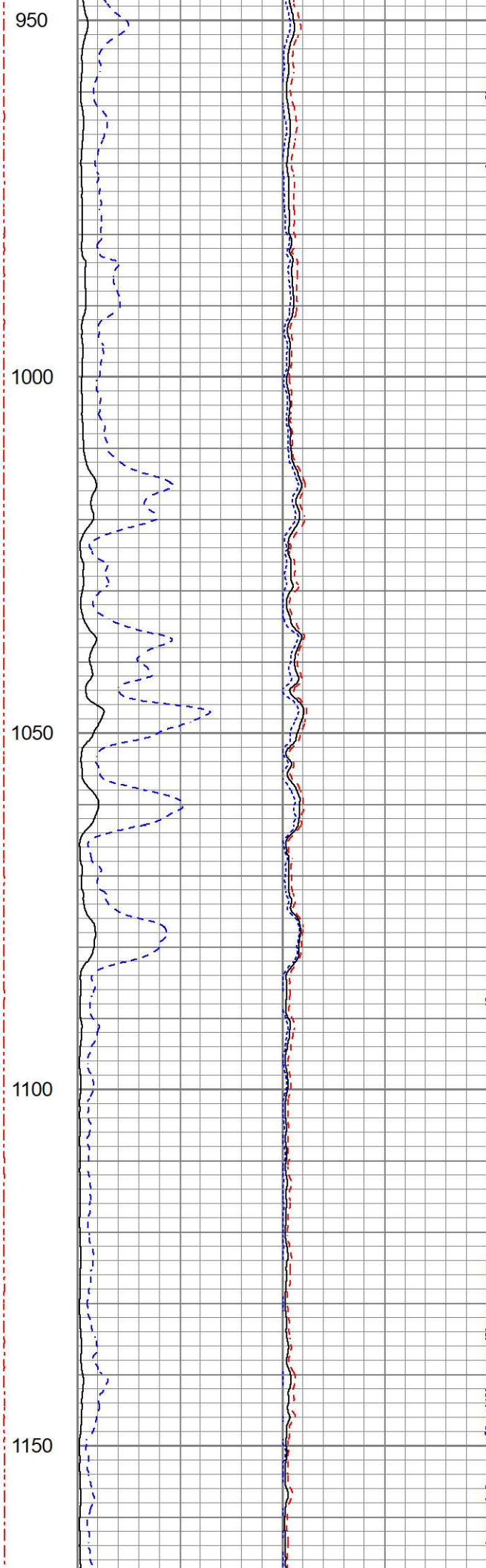
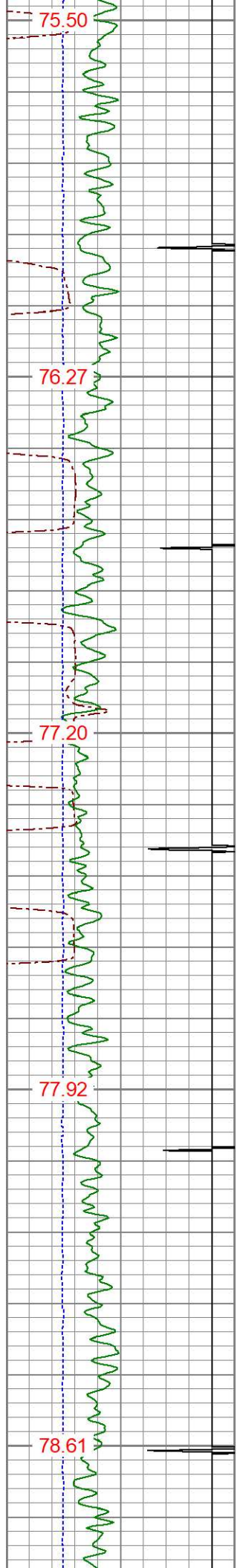


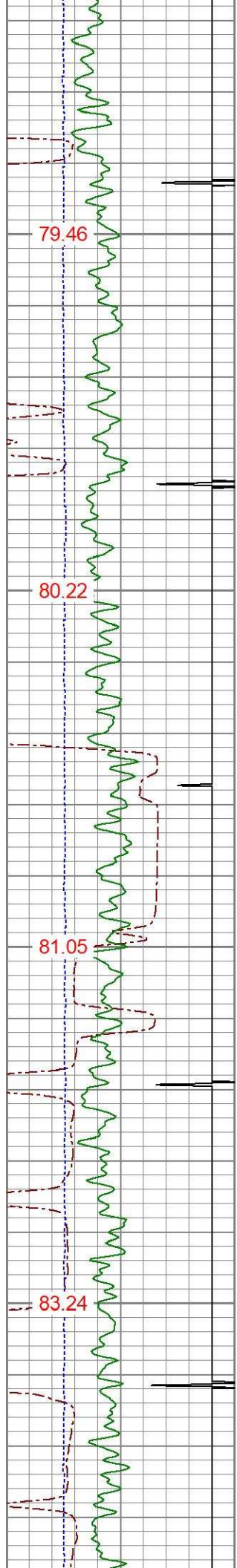










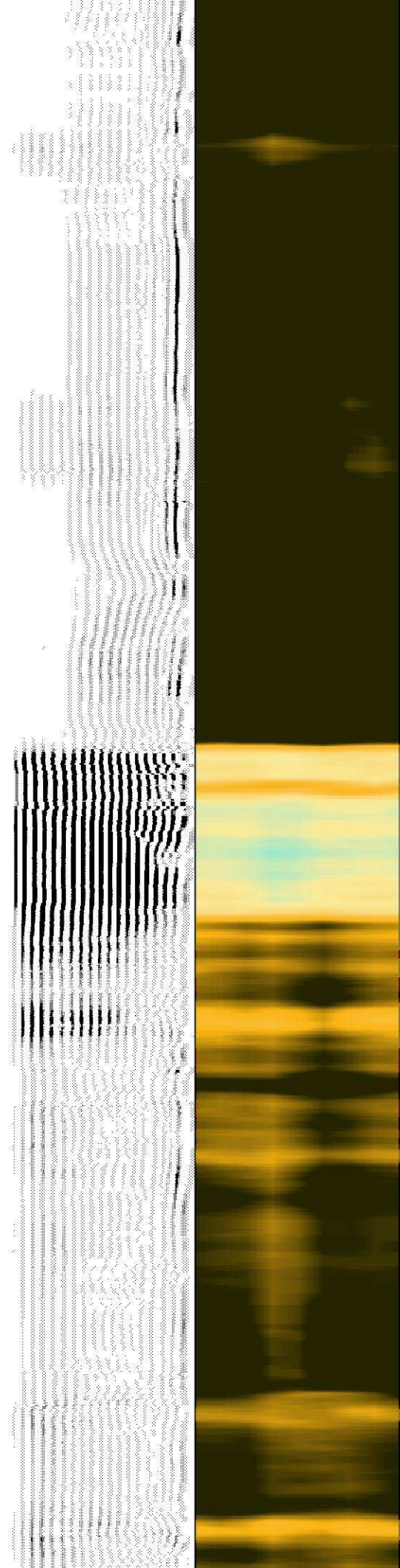
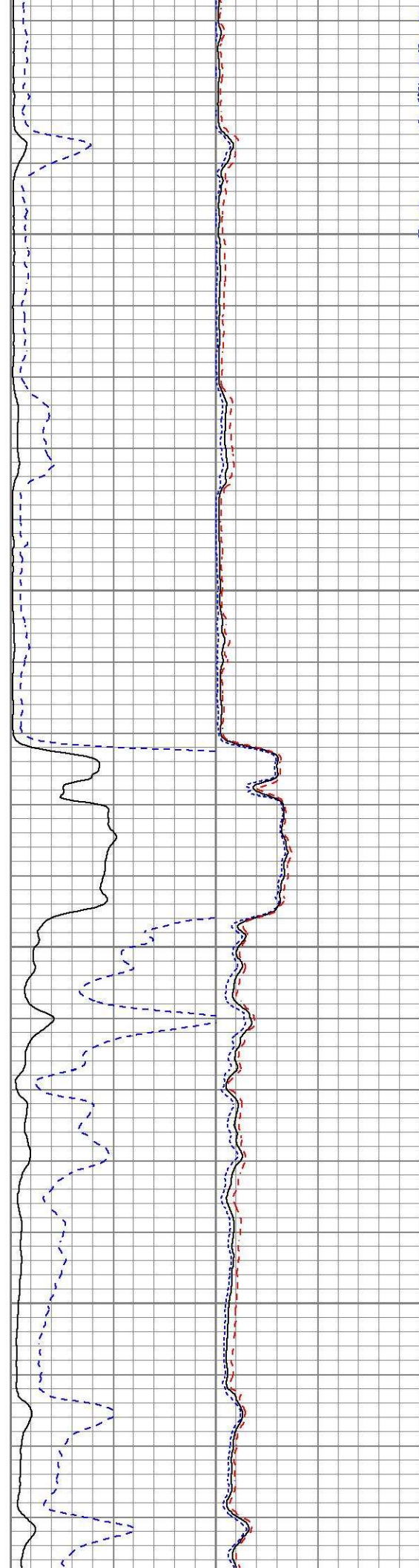


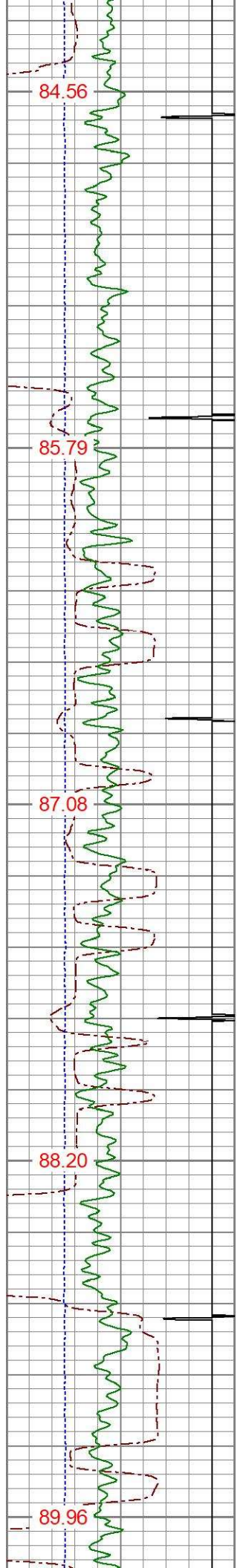
1200

1250

1300

1350





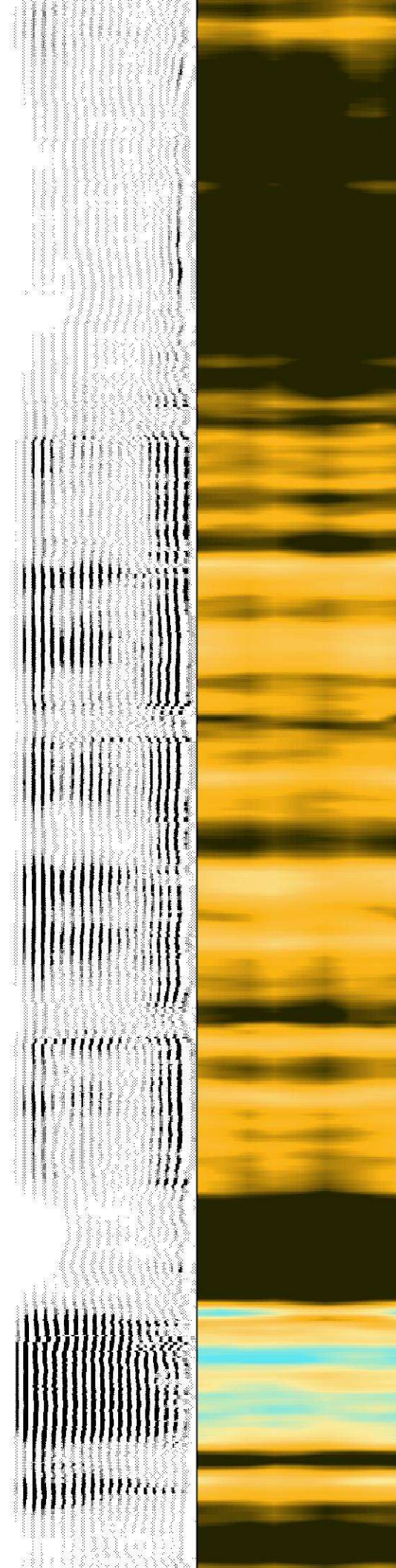
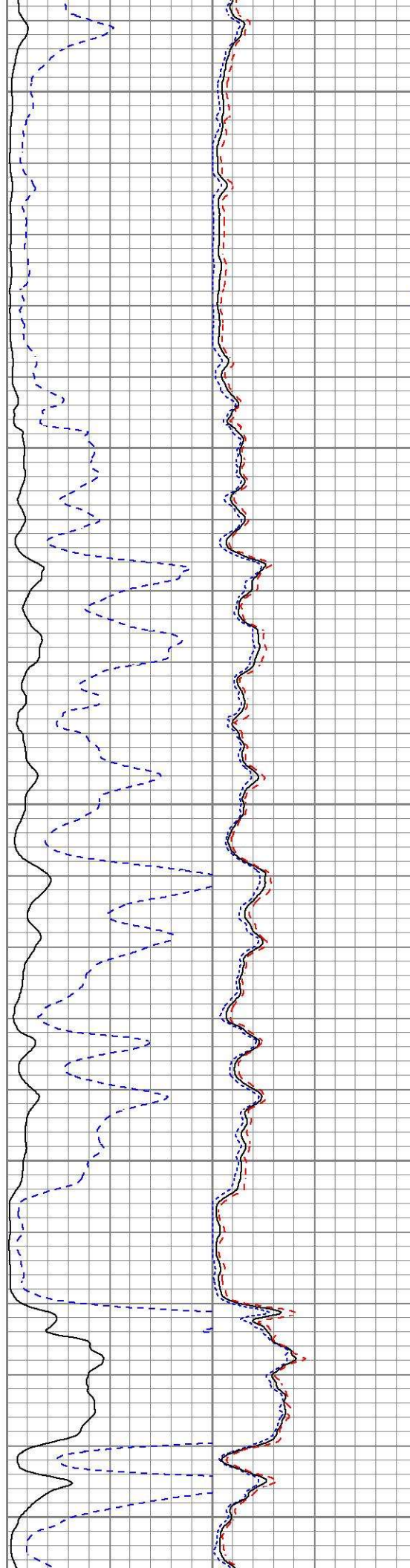
1400

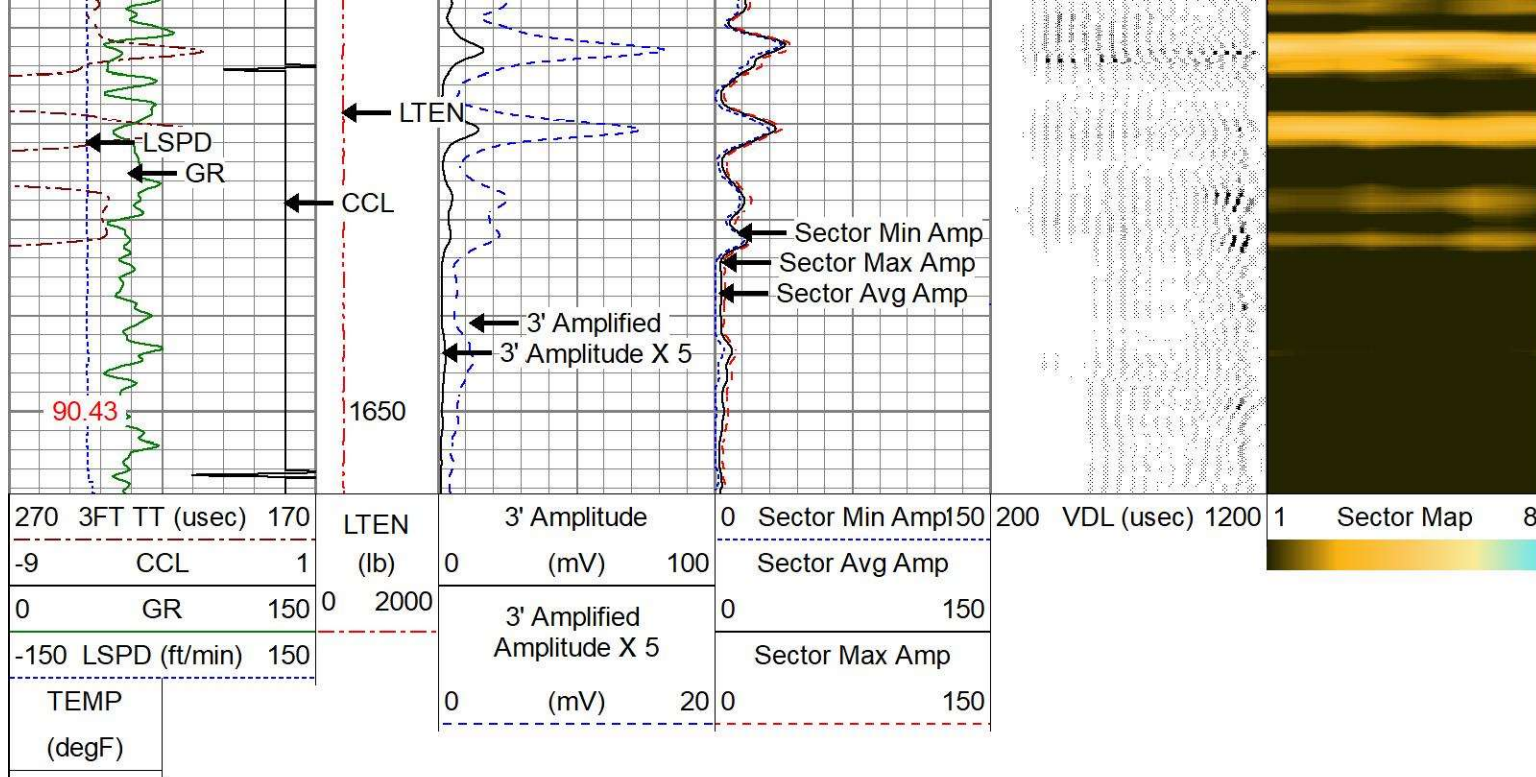
1450

1500

1550

1600





MAIN PASS

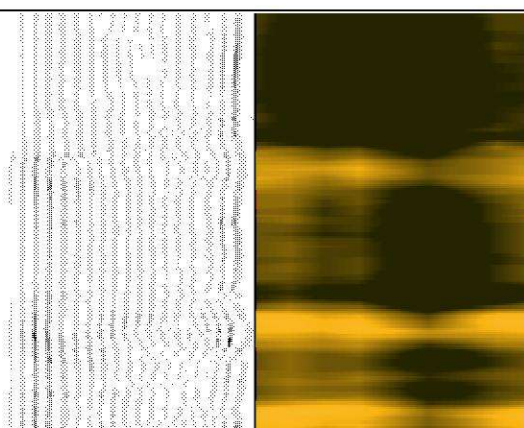
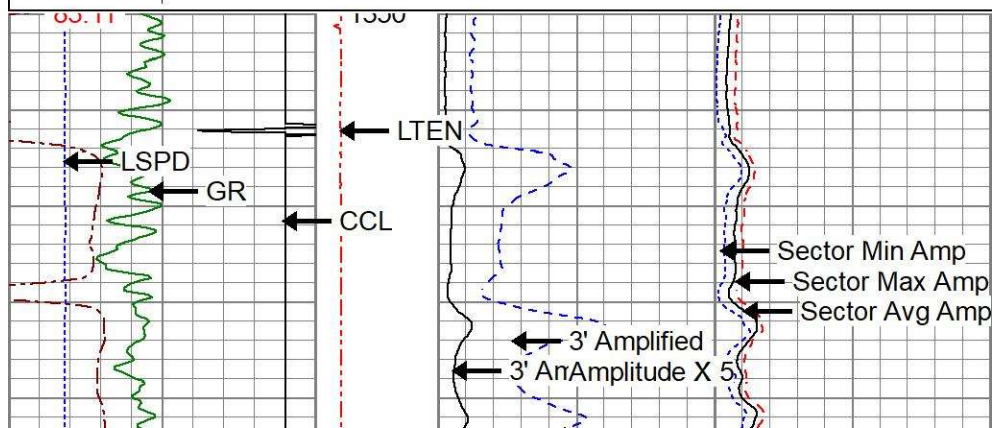
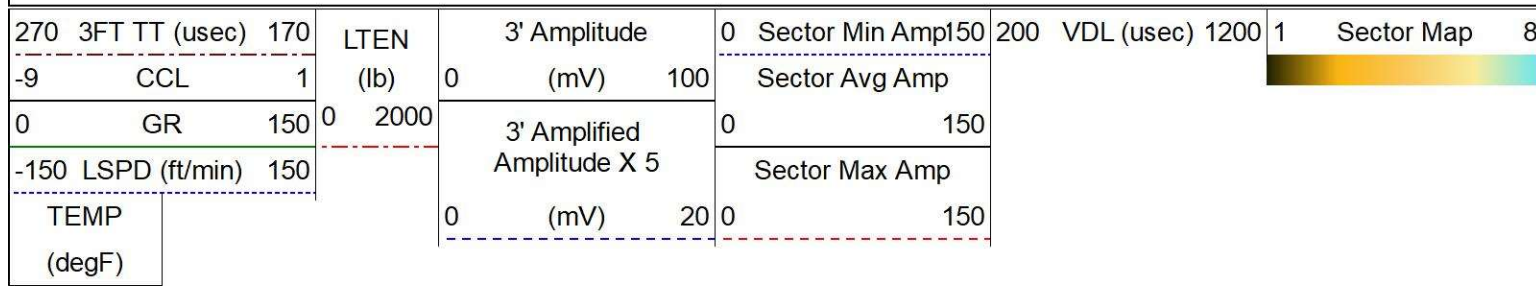
0 PSI APPLIED AT SURFACE

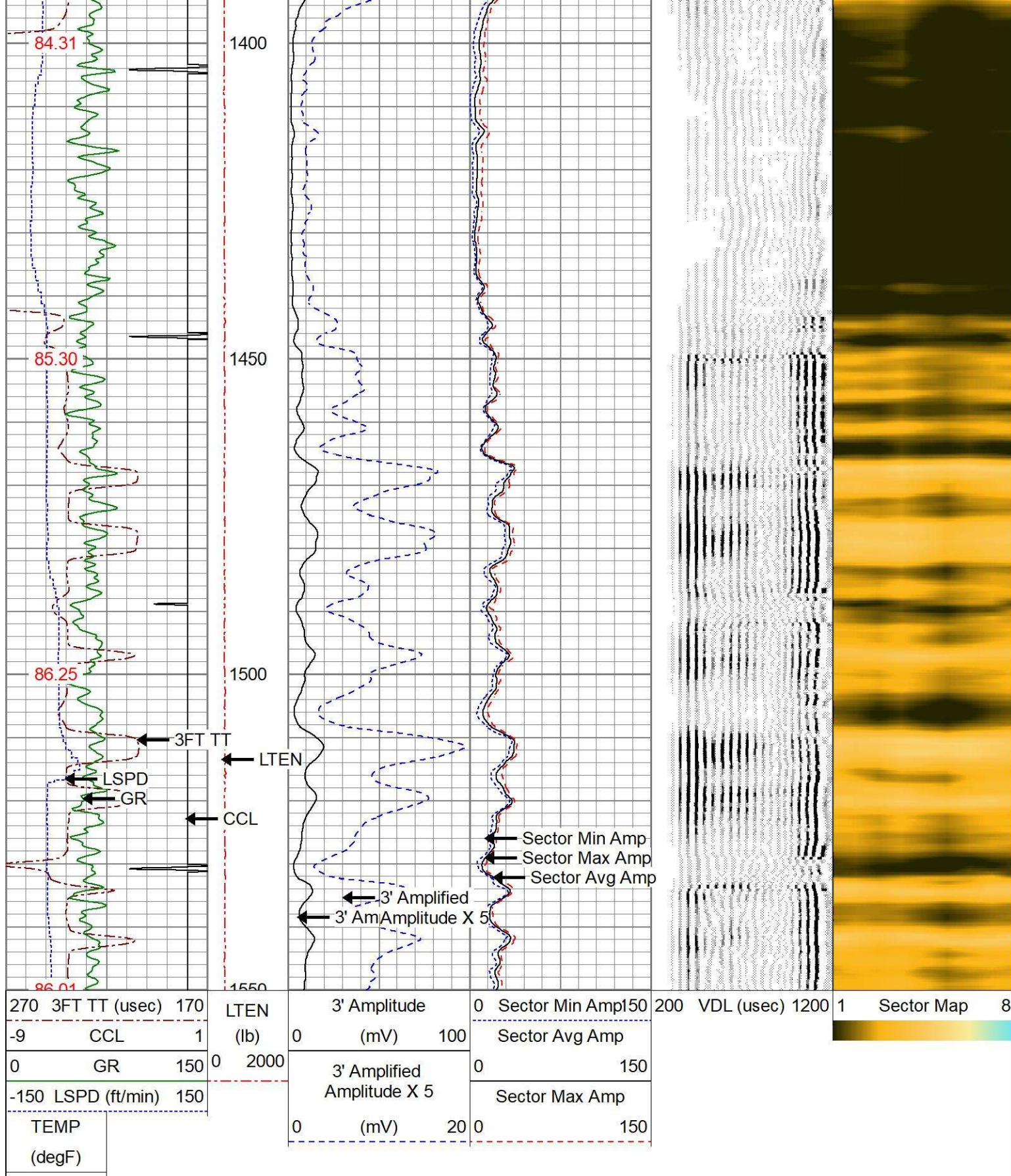


REPEAT PASS

0 PSI APPLIED AT SURFACE

Database File oxy_burchfield 39-20_05-123-26823_10-18-2022.db
 Dataset Pathname pass2
 Presentation Format res_scbl 8sec
 Dataset Creation Tue Oct 18 13:05:28 2022
 Charted by Depth in Feet scaled 1:240





REPEAT PASS

0 PSI APPLIED AT SURFACE

Gamma Ray Calibration Report

Serial Number:

0111

Tool Model:

Tek-Co 2 3/4

Performed:

Thu Oct 13 08:15:27 2022

Calibrator Value:

1.0

Background Reading:

0.0

cps

Calibrator Reading:

1.0

cps

Sensitivity:

0.6700

/cps

Segmented Cement Bond Log Calibration Report

Serial Number:

275001

Tool Model:

275 Temp JS

Calibration Casing Diameter:

4.500

in

Calibration Depth:

2366.507

ft

Master Calibration, performed Thu Oct 13 11:07:56 2022:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.003	1.459	0.600	81.196	55.362	0.441
CAL	0.003	1.015				
5'	0.003	2.216	0.600	81.196	36.410	0.502
SUM						
S1	0.003	1.680	0.000	100.000	59.625	-0.191
S2	0.003	1.705	0.000	100.000	58.769	-0.192
S3	0.003	1.642	0.000	100.000	61.025	-0.177
S4	0.003	1.533	0.000	100.000	65.369	-0.217
S5	0.003	1.477	0.000	100.000	67.835	-0.210
S6	0.003	1.476	0.000	100.000	67.918	-0.220
S7	0.003	1.601	0.000	100.000	62.601	-0.203
S8	0.003	1.626	0.000	100.000	61.626	-0.199

Internal Reference Calibration, performed (Not Performed):

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.003	1.015	1.000	0.000

Air Zero Calibration, performed Mon Sep 19 09:55:20 2022:

	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

S6	0.000	0.000	0.000
S7	0.000	0.000	0.000
S8	0.000	0.000	0.000

Temperature Calibration Report

Serial Number: 275001
Tool Model: 275 Temp JS
Performed: Thu Oct 13 08:15:31 2022

	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	1	



Company	OCCIDENTAL PETROLEUM
Well	BURCHFIELD 39-20
Field	WATTENBERG
County	WELD
State	COLORADO