



**SECTOR CEMENT BOND
GAMMA RAY
CCL LOG**

Company **OXY**
 Well **MILLER X 31-03**
 Field **WATTENBERG**
 County **WELD** State **COLORADO**

Location: **API # : 05-123-33374** Other Services
 SEC 31 TWP 2N RGE 65W
 Permanent Datum
 Log Measured From **0** Above Perm. Datum
 Drilling Measured From **K.B.**

Date of Service **9-SEPT-2022**
 Run Number **ONE**
 Depth Driller or PBTD **8025'**
 Depth Logger **1071'**
 Bottom Log Interval **1070'**
 Top Log Interval **SURFACE**
 Open Hole Size **7.875**
 Type Fluid **WATER**
 Fluid Level **SURFACE**
 Fluid Density **N/A**
 Max. Recorded Temperature **83 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 **DUTY**

Size	W/Ft	Top	Bottom
Surface Casing 8-5/8"	24#	SURFACE	1042'
Production Casing 4.5"	11.6#	SURFACE	7973'
Liner Casing N/A	N/A	N/A	N/A
Tubing Record N/A	N/A	N/A	N/A

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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.
LOG CORRELATED TO GROUND LEVEL = 0

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: 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)	
			Cable_Head-1_7/16 Titan 1 7/16" Cable Head	1.02	1.44	3.31	
			Centralizers-8071-275-200 Tekco 2 3/4" Adjustable Centralizer	2.73	2.75	25.00	
WVFSYNC	18.73						
WVFCAL	18.73						
TEMP	17.60						
WVFS8	16.31						
WVFS7	16.31						
WVFS6	16.31						
WVFS5	16.31						
WVFS4	16.31						
WVFS3	16.31						
WVFS2	16.31						
WVFS1	16.31						
WVF3FT	15.56						
WVF5FT	14.56						
WVFTEMP	11.23						
			Centralizers-8071-275-200 Tekco 2 3/4" Adjustable Centralizer	2.73	2.75	25.00	
CCL	7.35		CCL-275tekco (111) Tekco 2 3/4" 450 Deg. F Rare Earth Magnets	1.83	2.75	33.00	
GR	4.04		GR-Tek-Co 2 3/4 (0111) Tekco 2 3/4" 400 Deg. F Logging Gamma Ray	3.67	2.75	40.00	
			Centralizers-8071-275-200 Tekco 2 3/4" Adjustable Centralizer	2.73	2.75	25.00	
			Bull_Plug-1_7/16_GO Titan 1 7/16" Female Bull Plug	0.27	1.44	1.00	

Dataset: oxy_miller x 31-03_05-123-33374_9-9-22.db: field/well/run1/pass3
 Total length: 24.10 ft
 Total weight: 282.31 lb
 O.D.: 2.75 in

Log Variables

DatabaseC:\ProgramData\Warrior\Data\oxy_miller x 31-03_05-123-33374_9-9-22.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 1
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

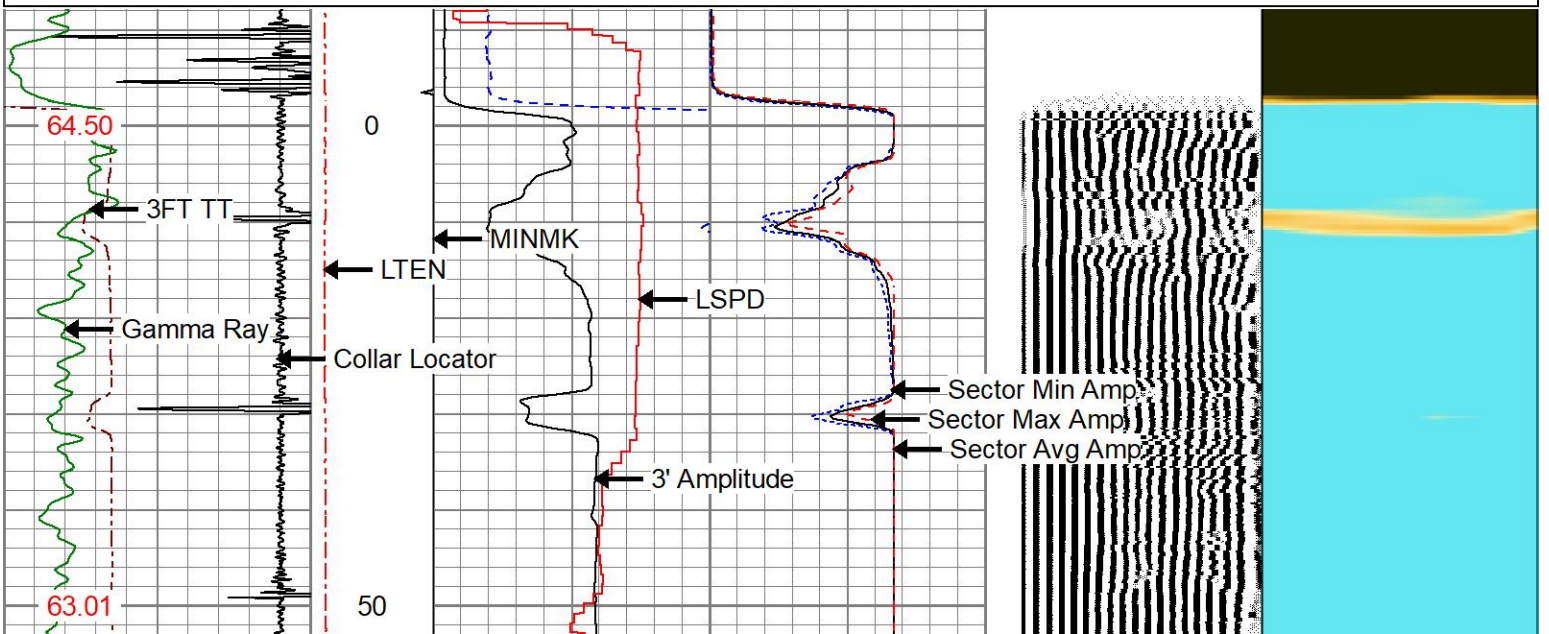


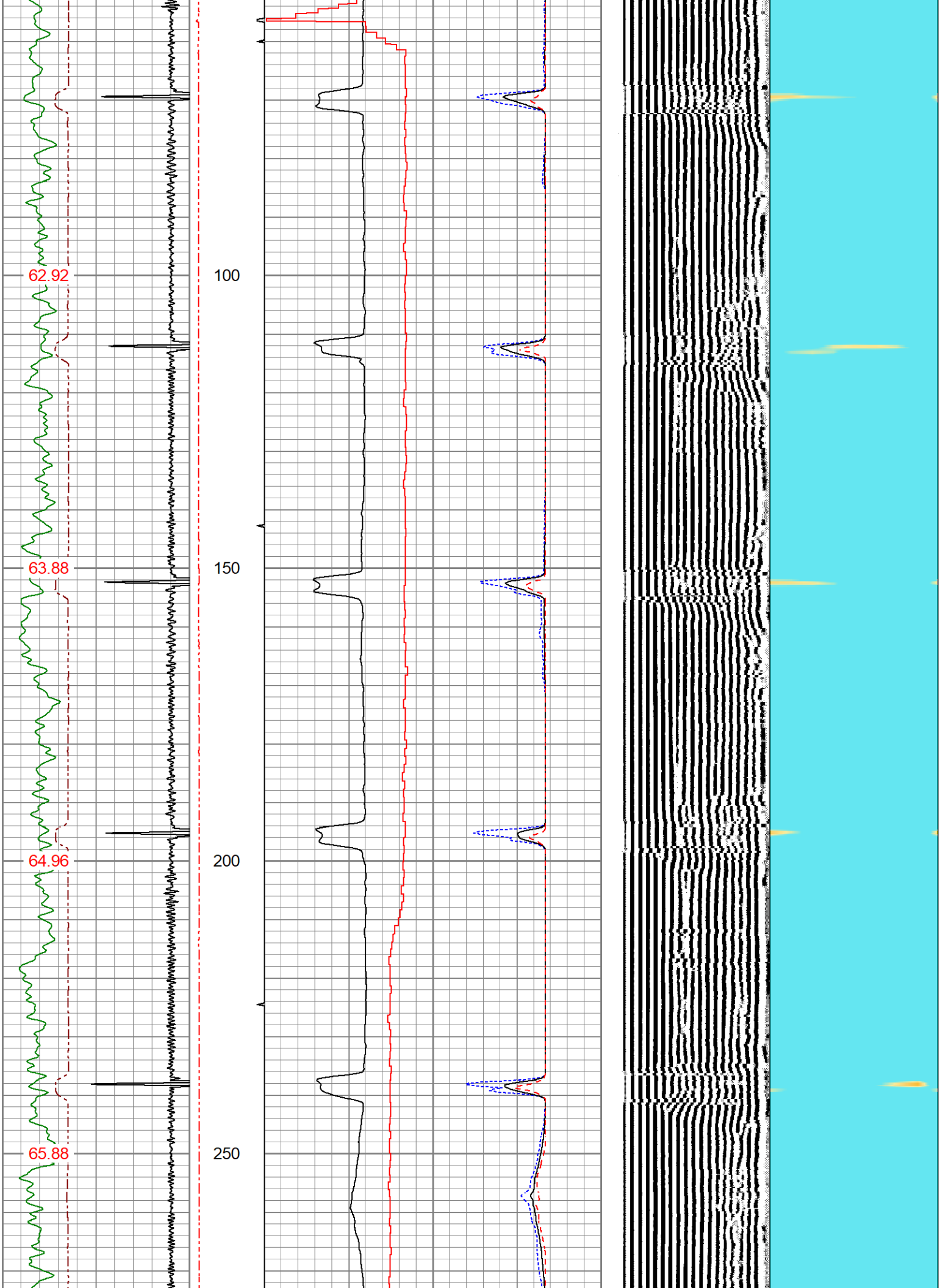
MAIN PASS

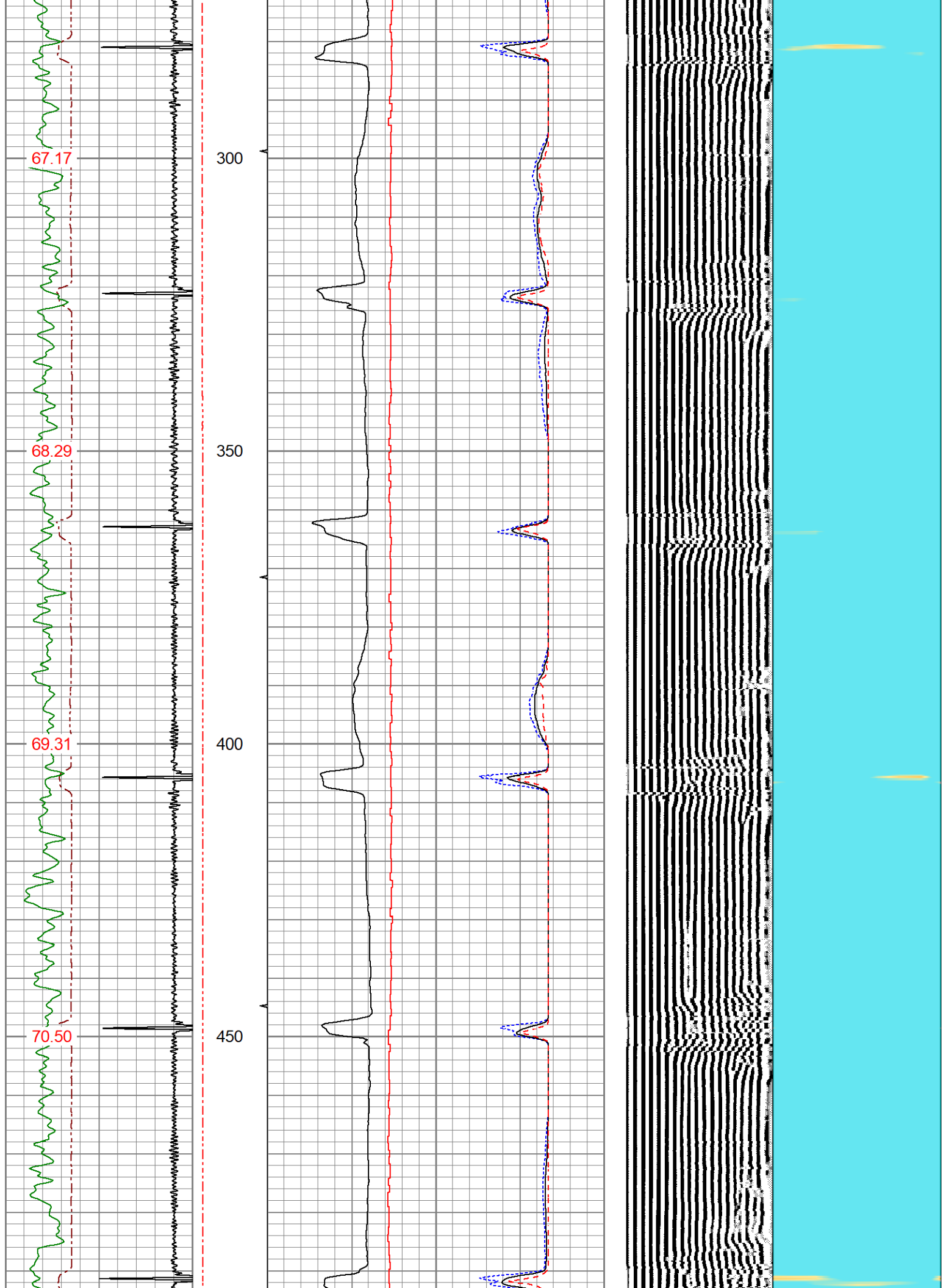
0 PSI APPLIED AT SURFACE

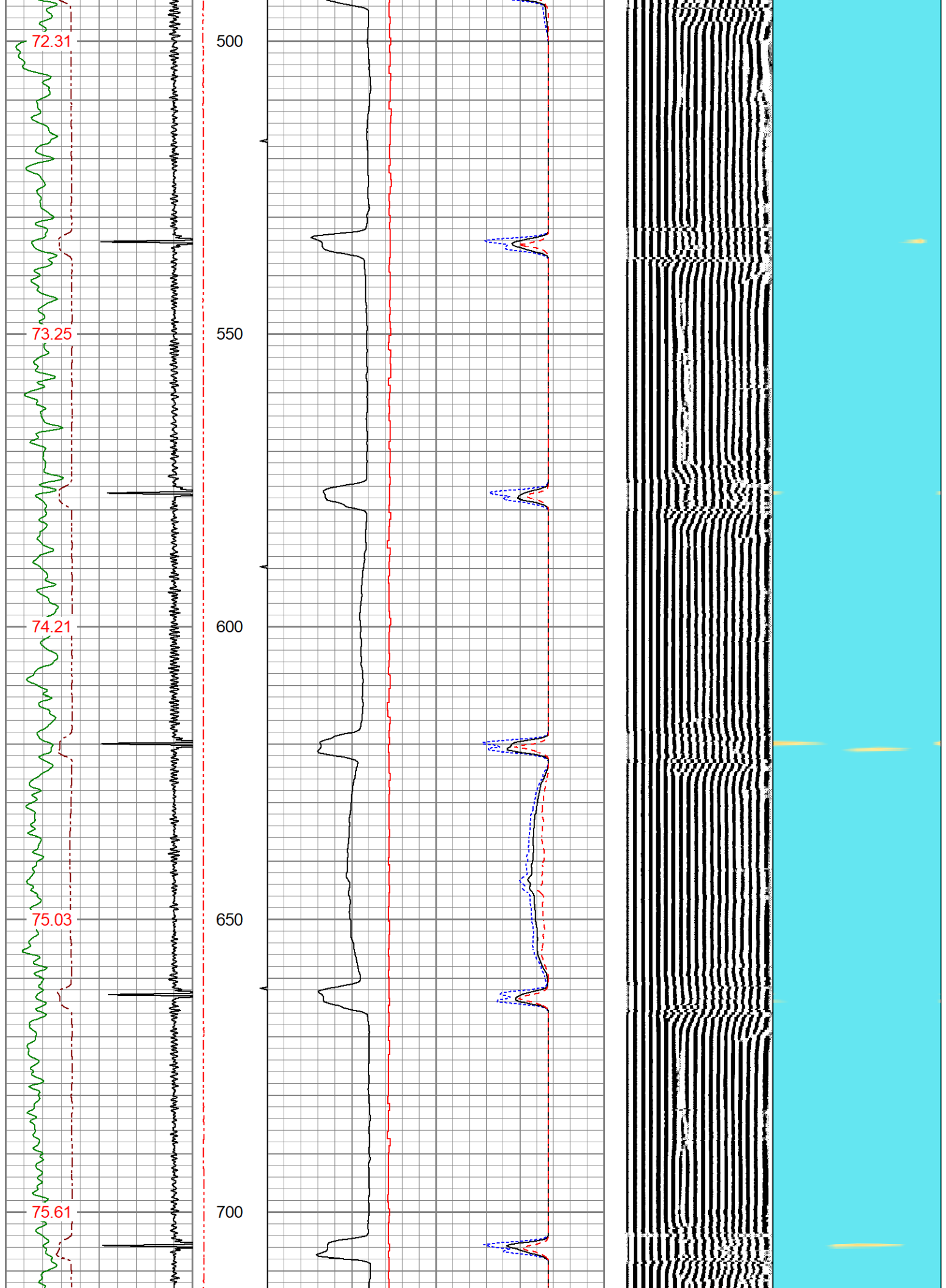
Database File oxy_miller x 31-03_05-123-33374_9-9-22.db
 Dataset Pathname pass3
 Presentation Format res_scb1_co
 Dataset Creation Fri Sep 09 09:43:55 2022
 Charted by Depth in Feet scaled 1:240

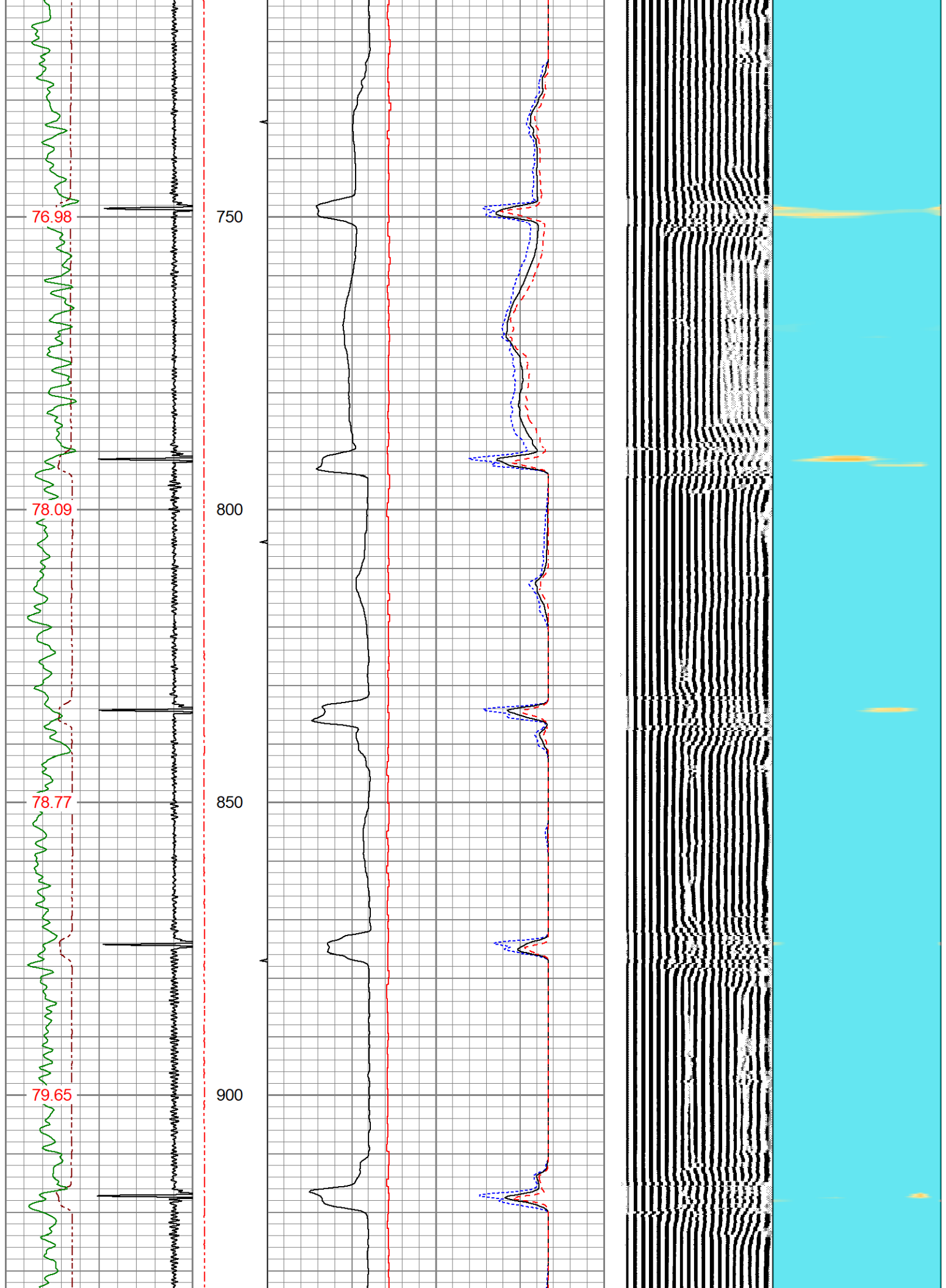
250 3FT TT (usec) 150	LTEN	3' Amplitude	0 Sector Min Amp	150	200 VDL (usec) 1200	1 Sector Map	8
-9 Collar Locator 1	(lb)	(mV) 100	Sector Avg Amp				
0 Gamma Ray 150	0 2000	3' Amplified Amplitude X 5	0	150			
TEMP (degF)	MINMK	(mV) 20	Sector Max Amp	0			
	10 0 0	0 LSPD (ft/min)-100		150			

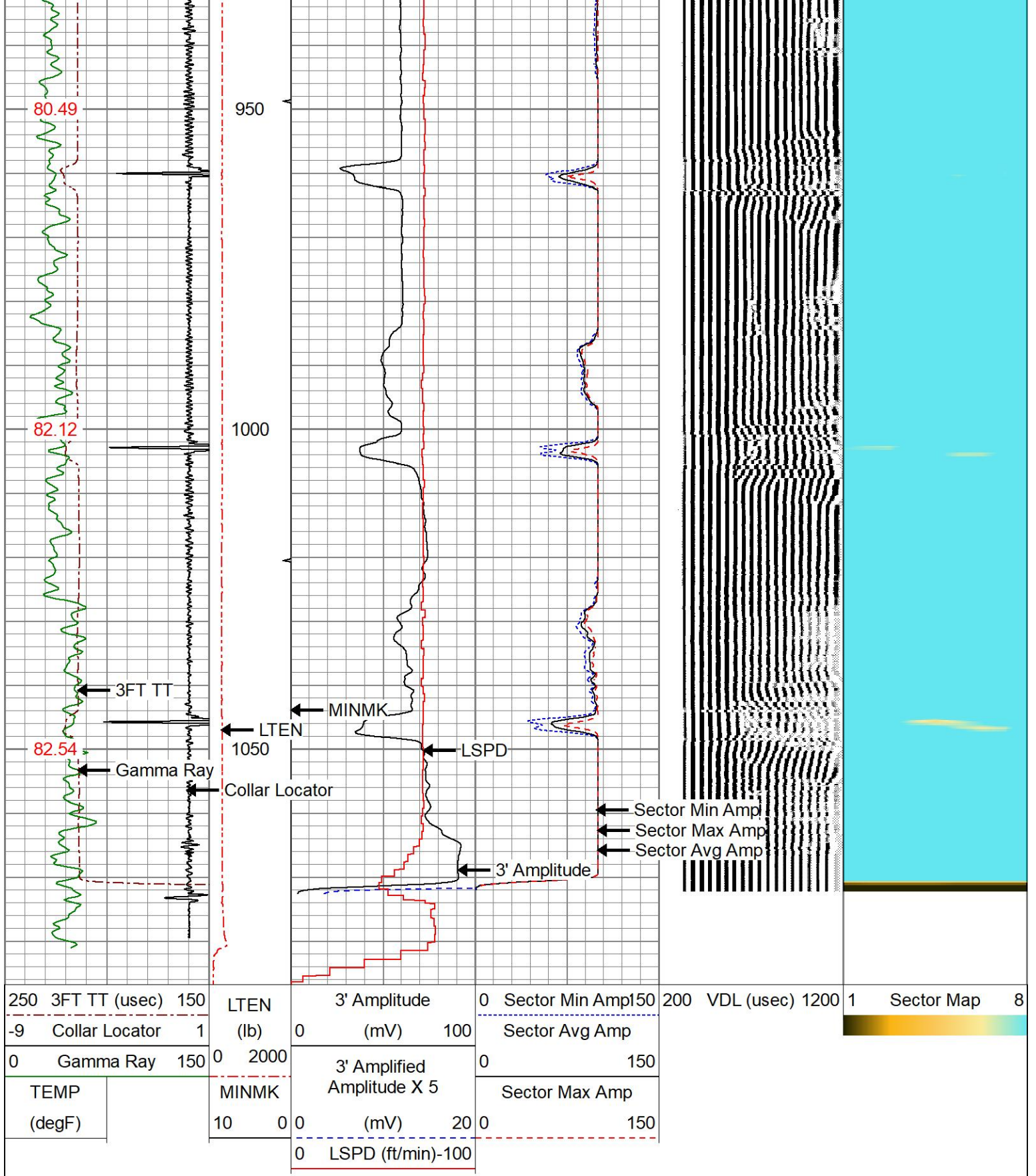












250	3FT TT (usec)	150	LTEN	3' Amplitude	0	Sector Min Amp	150	200	VDL (usec)	1200	1	Sector Map	8
-9	Collar Locator	1	(lb)	(mV)	100	Sector Avg Amp							
0	Gamma Ray	150	0	2000		0	150						
TEMP			MINMK	3' Amplified Amplitude X 5		Sector Max Amp							
(degF)			10	(mV)	20	0	150						
			0	LSPD (ft/min)-100									



MAIN PASS

0 PSI APPLIED AT SURFACE

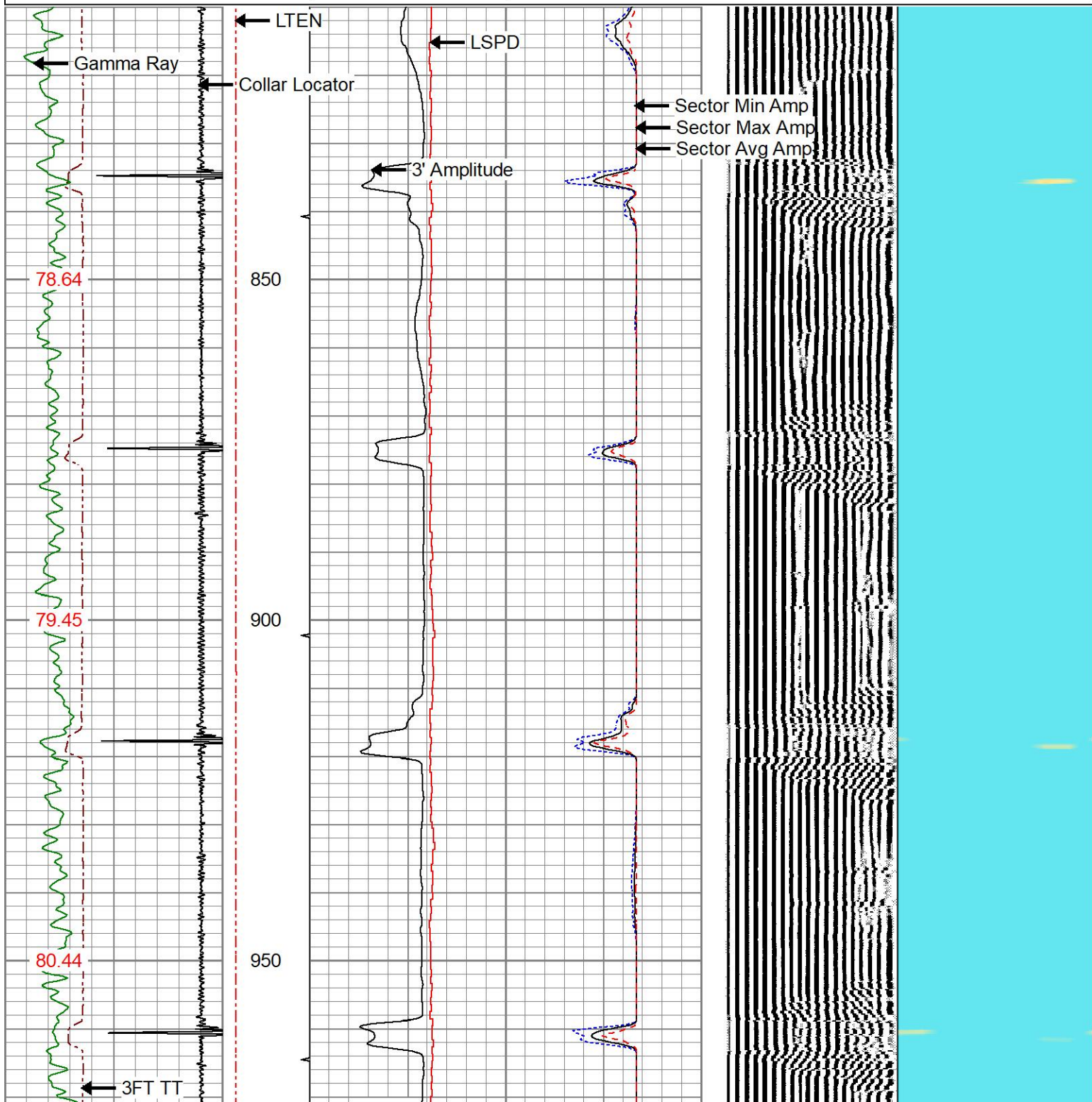


REPEAT PASS



Database File oxy_miller x 31-03_05-123-33374_9-9-22.db
 Dataset Pathname pass2
 Presentation Format res_scb1_co
 Dataset Creation Fri Sep 09 09:35:44 2022
 Charted by Depth in Feet scaled 1:240

250	3FT TT (usec)	150	LTEN	3' Amplitude	0	Sector Min Amp	150	200	VDL (usec)	1200	1	Sector Map	8
-9	Collar Locator	1	(lb)	(mV)	100	Sector Avg Amp							
0	Gamma Ray	150	0	2000	3' Amplified Amplitude X 5	0	150						
	TEMP (degF)		MINMK	(mV)	20	Sector Max Amp	150						
			10	0	0								
				0	LSPD (ft/min)-100								



S5	0.020	2.500	0.000	100.000	50.000	0.150
S6	0.000	2.500	0.000	100.000	40.000	-0.000
S7	0.000	2.500	0.000	100.000	40.000	-0.000
S8	0.000	2.500	0.000	100.000	40.000	-0.000

Internal Reference Calibration, performed (Not Performed):

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.003	1.005	1.000	0.000

Air Zero Calibration, performed (Not Performed):

	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	

Temperature Calibration Report

Serial Number: 275001
 Tool Model: 275 Temp JS
 Performed: Wed Dec 21 10:28:52 2016

	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: **OXY**
 Well: **MILLER X 31-03**
 Field: **WATTENBERG**
 County: **WELD**
 State: **COLORADO**