RADIAL CEMENT BOND LOG

Company	OCCIDENTAL PETROLEUM CORPORATION
Well	NORTHGLENN STATE 3-36
Field	WATTENBERG
County	WELD
State	CO
Country	USA

Company OCCIDENTAL PETROLEUM CORPORATION
Well NORTHGLENN STATE 3-36
Field WATTENBERG
County WELD
State CO
Country USA

Location: API #: 0512330987
SHL: 1153' FNL & 1473' FEL NWNE
Lat/Long: 40.011736 / -104.947832
SEC 36 TWP 1N RGE 68W

Other Services
SQZ PERF

Permanent Datum GROUND LEVEL Elevation 5103'
Log Measured From KELLY BUSHING 17' ABOVE GL
Drilling Measured From KELLY BUSHING

Elevation
K.B. 5120'
D.F. 5119'
G.L. 5103'

Date	4 MAY 2023
Run Number	ONE
Depth Driller	8825'
Depth Logger	6954'
Bottom Logged Interval	6952'
Top Log Interval	SURFACE
Open Hole Size	7.875"
Type Fluid	WATER
Density / Viscosity	8.3#
Max. Recorded Temp.	213° F
Estimated Cement Top	SEE LOG
Time Well Ready	ROA
Time Logger on Bottom	09:30
Equipment Number	8045
Location	WINDSOR, CO
Recorded By	SCHUMAN
Witnessed By	MR BRANDON RIVERA

Borehole Record			Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	8.625"	24 PPF	SURFACE	1041'
Prot. String				
Production String	4.5"	11.6 PPF	SURFACE	8811'
Liner				

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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.

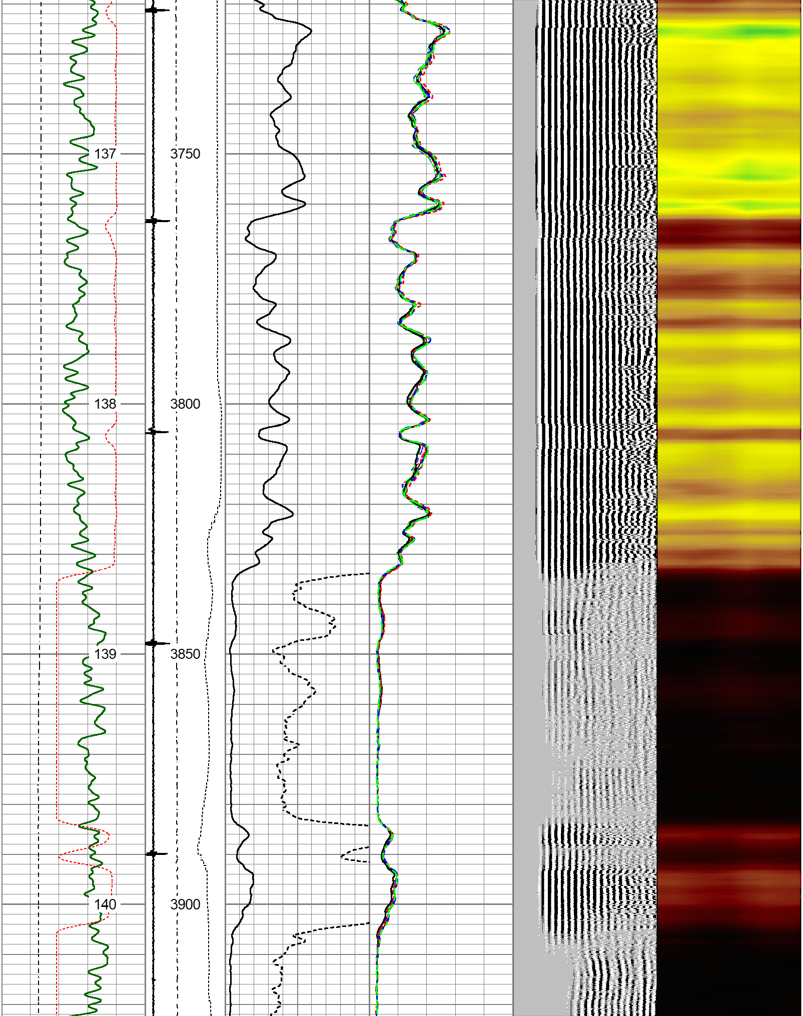
Comments

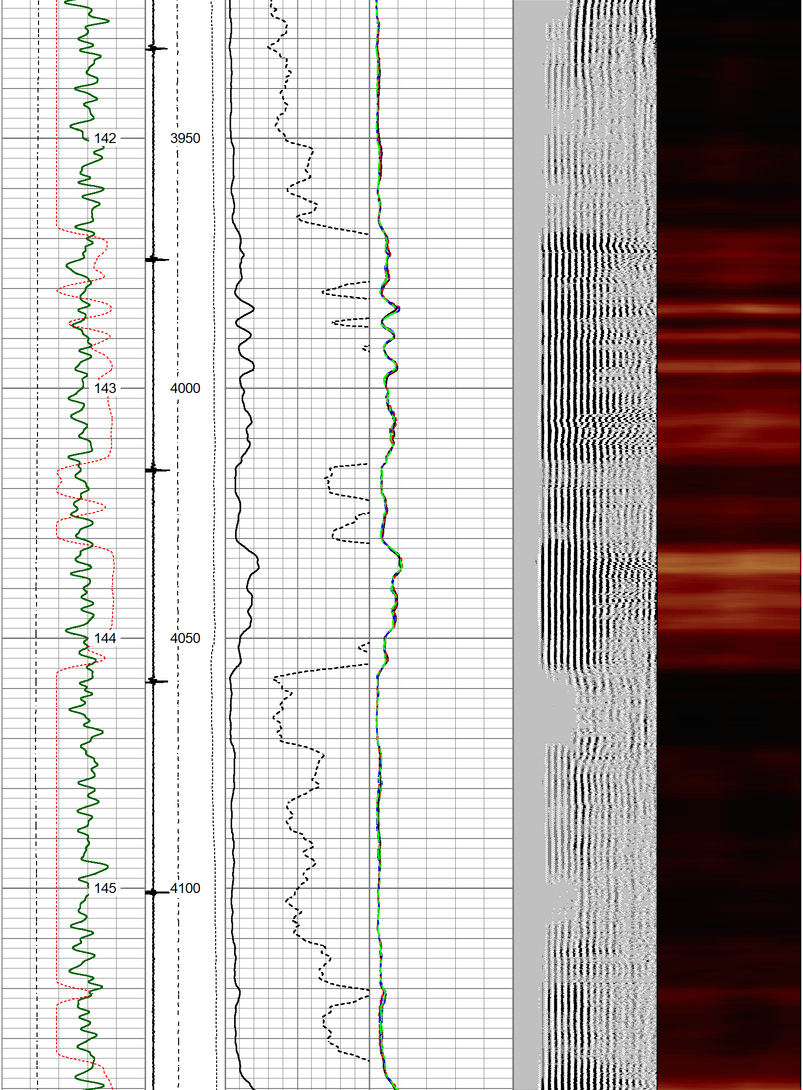
CORRELATED TO CBL DATED 6/25/2010
LOG RAN WITH 0 PSI AT WELLHEAD
CBL TAGGED AT 6954'
THANK YOU FOR CHOOSING THE WIRELINE GROUP!

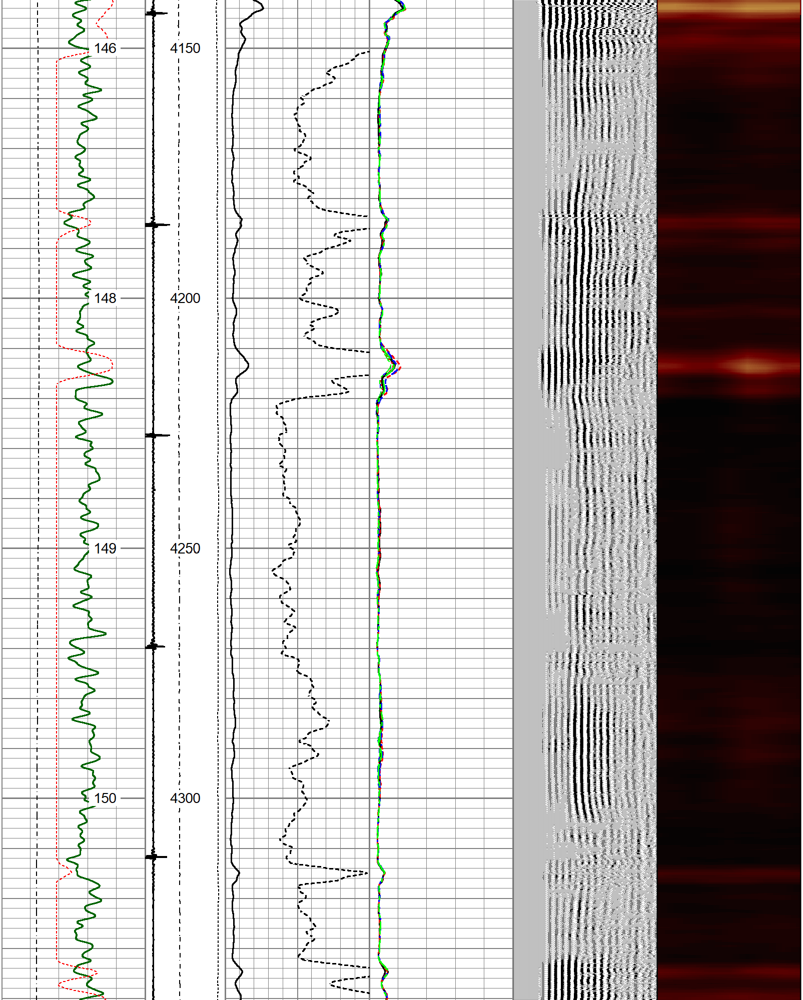
MAIN PASS

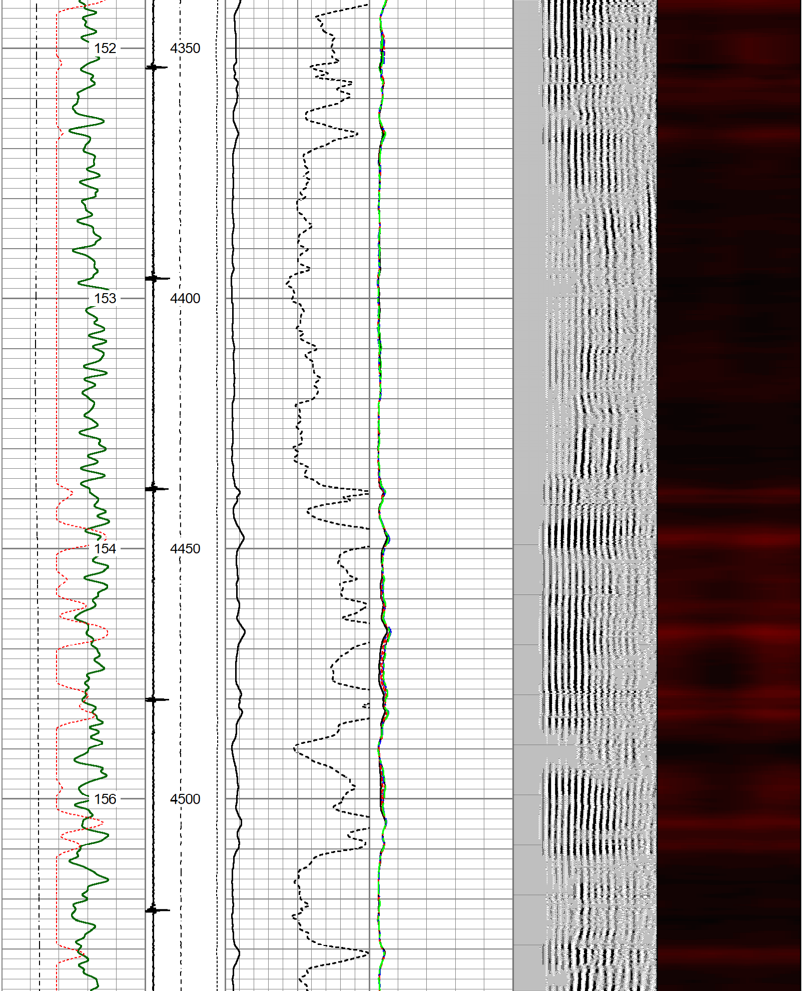
LOGGED WITH 0 PSI AT SURFACE
5"=100'

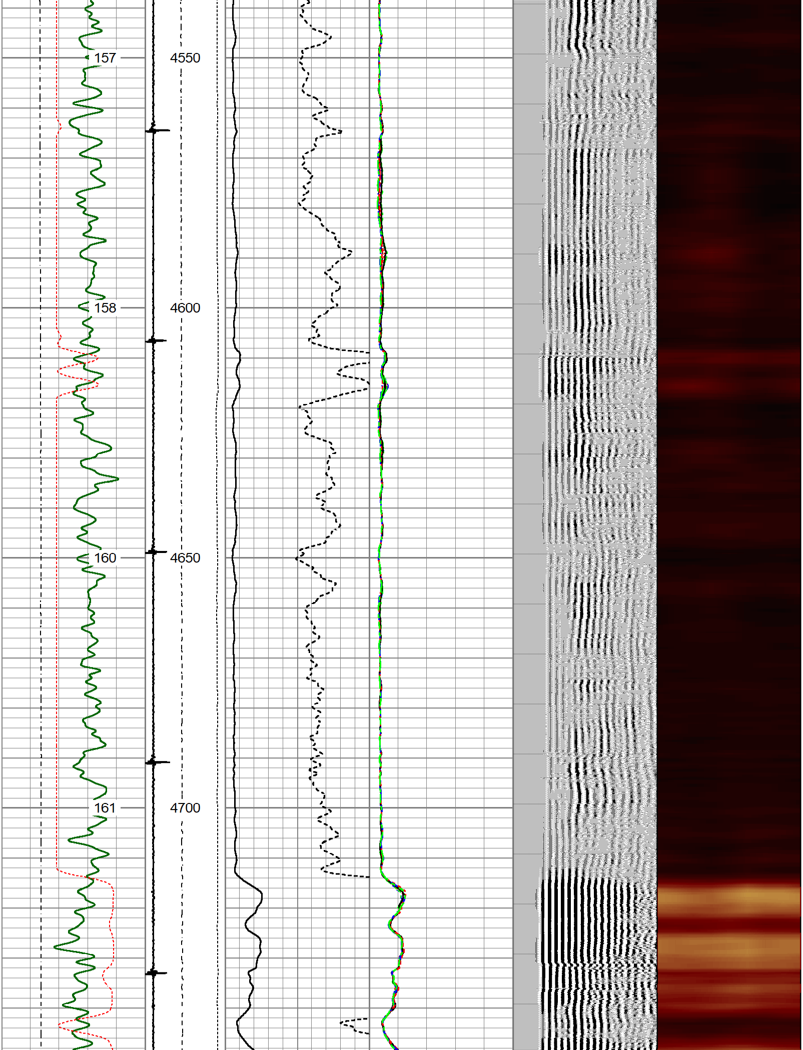
Database File	0512330987_northglenn state 3-36_oxy.db
Dataset Pathname	cbl/pass3
Presentation Format	rbt-gct8acc - ss
Dataset Creation	Thu May 04 09:27:23 2023
Charted by	Depth in Feet scaled 1:240

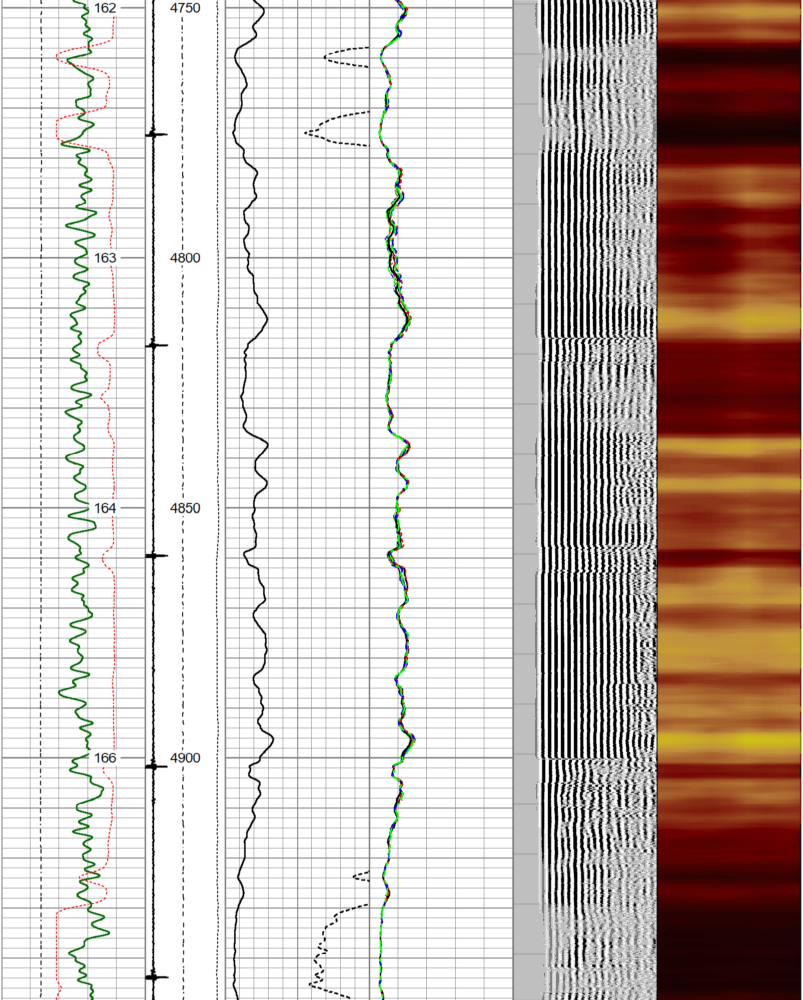


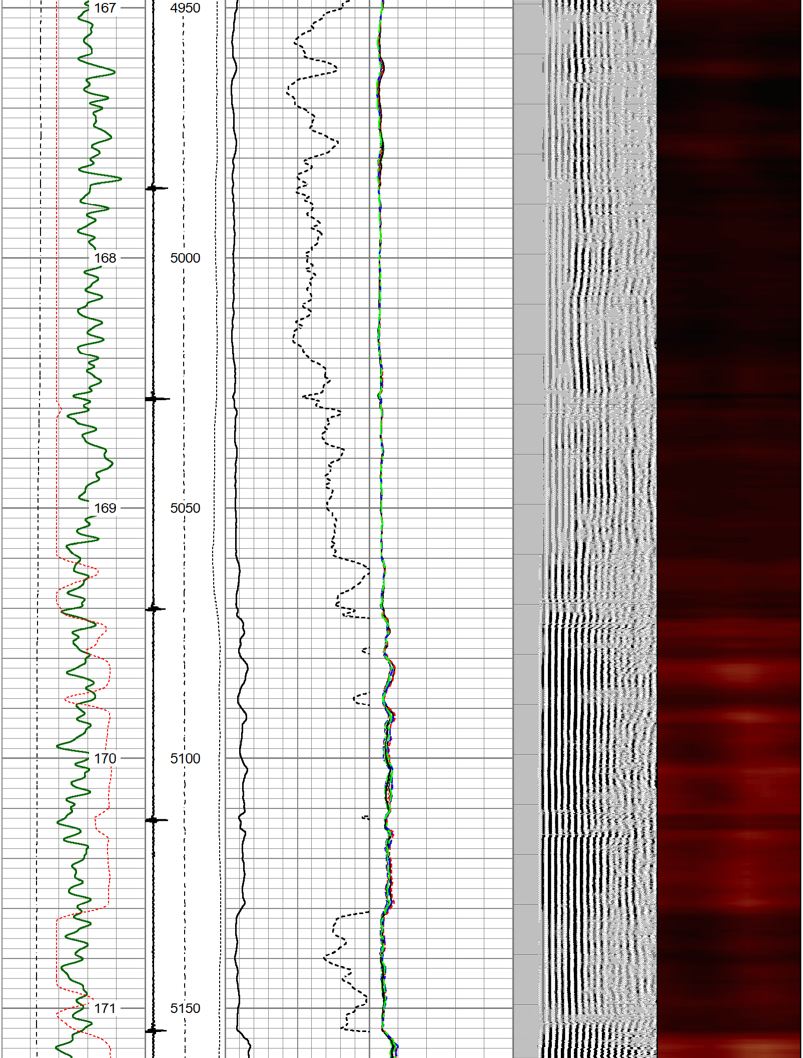


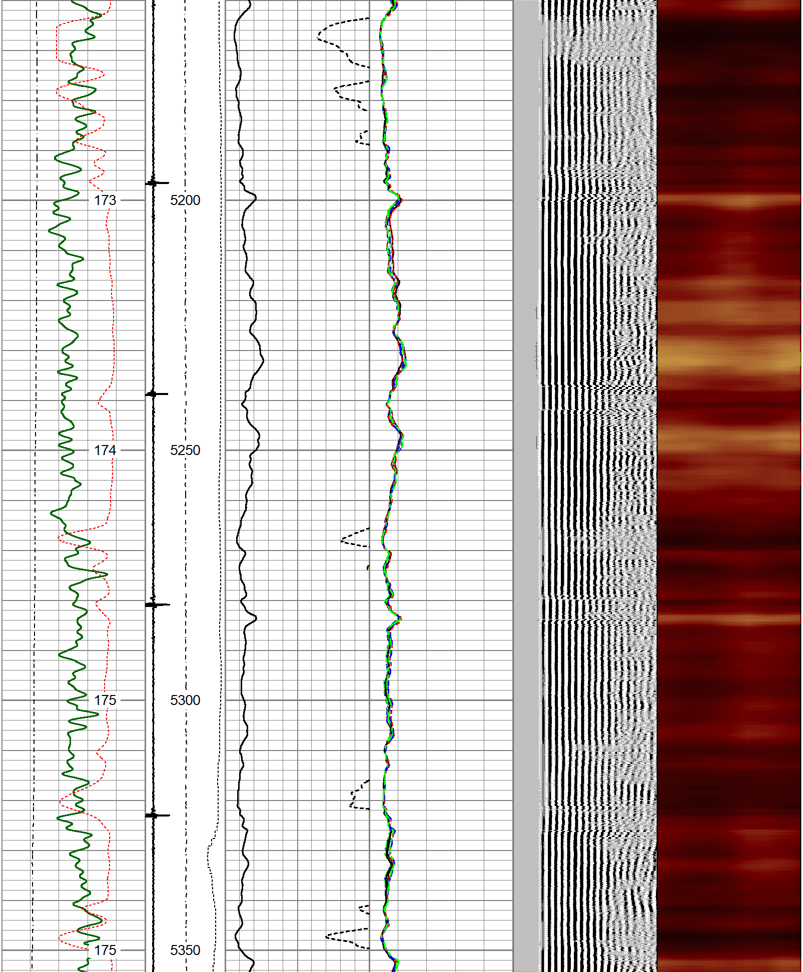


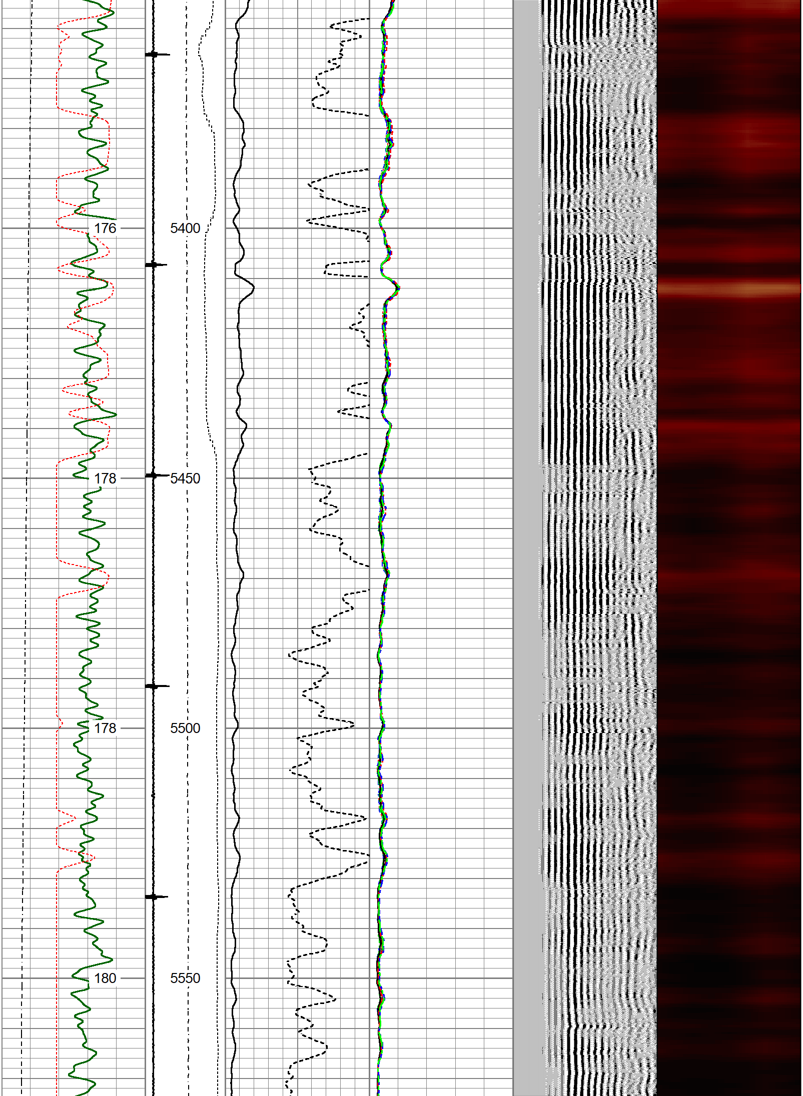


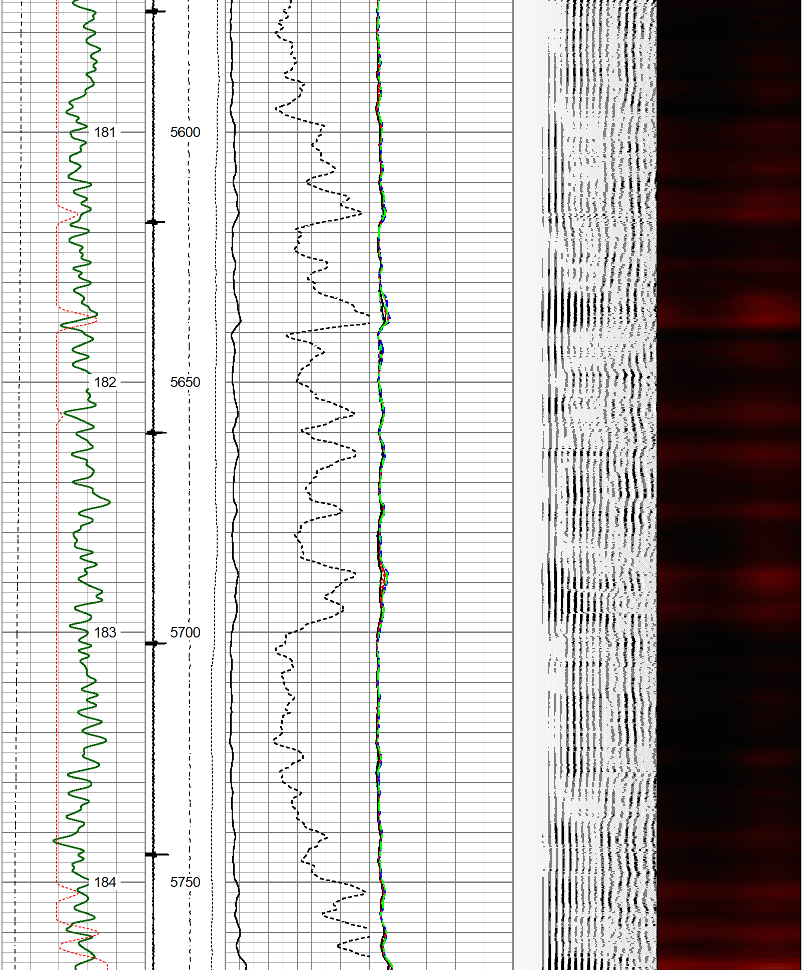


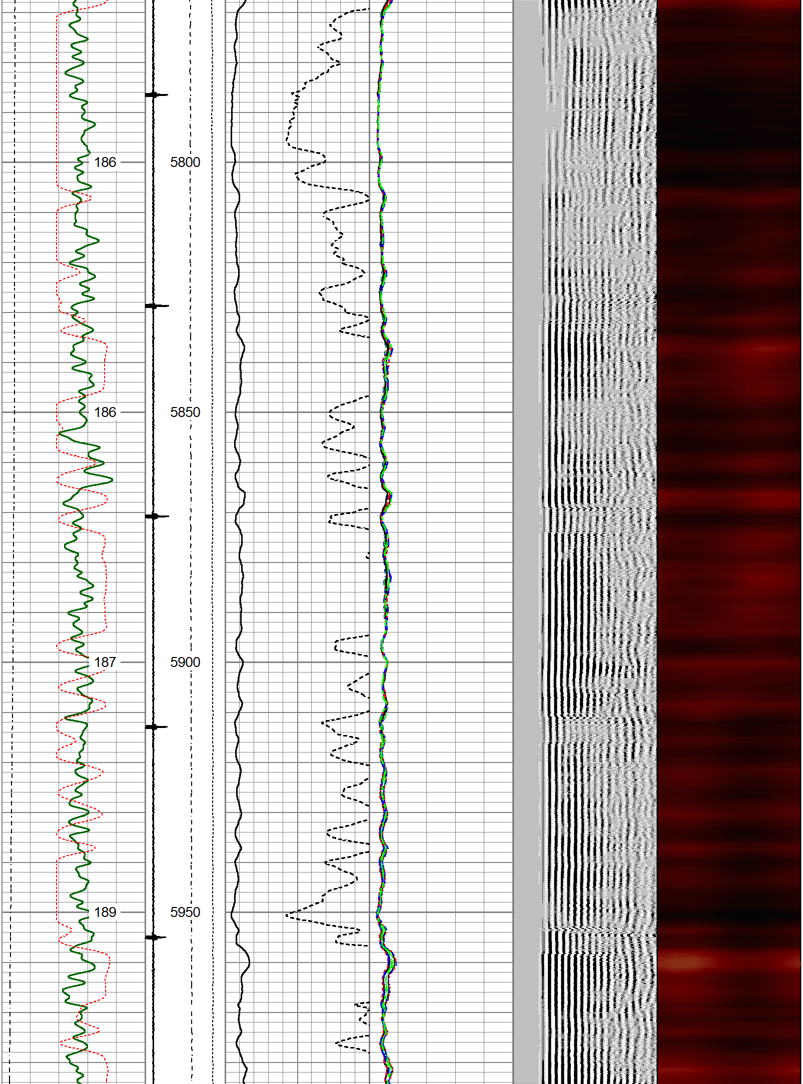


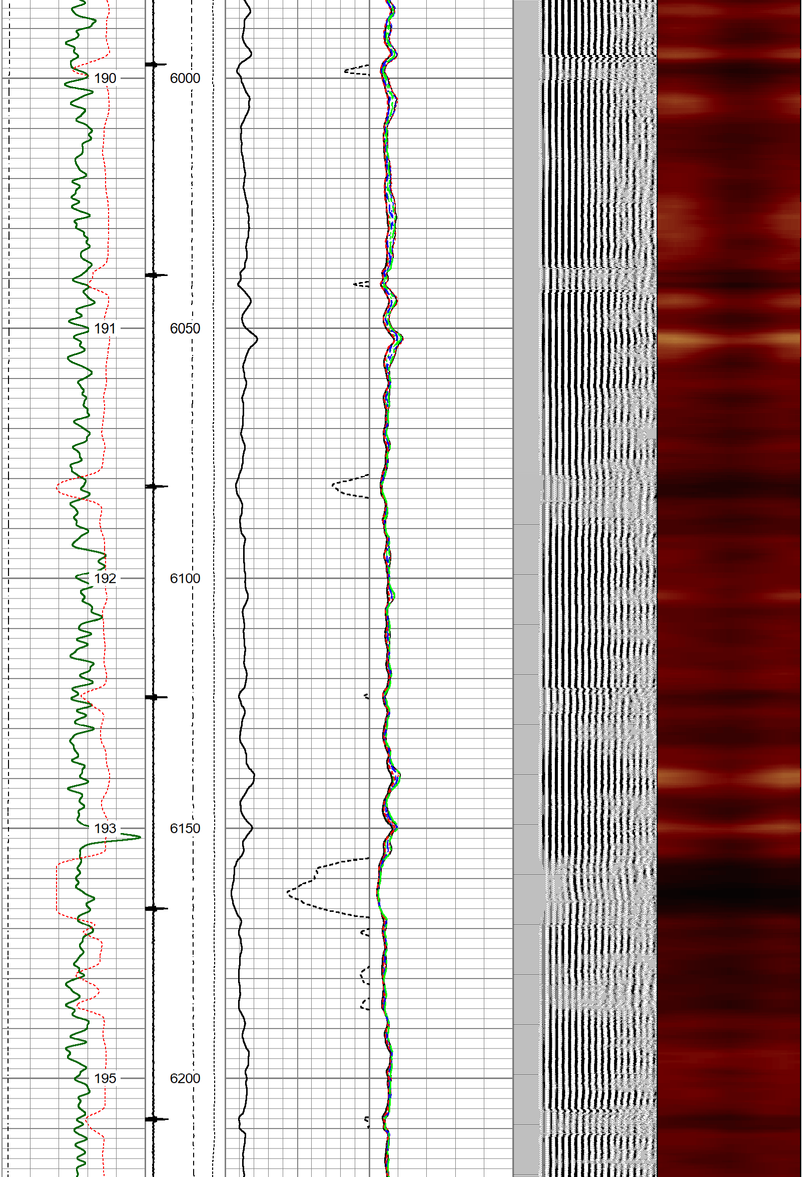


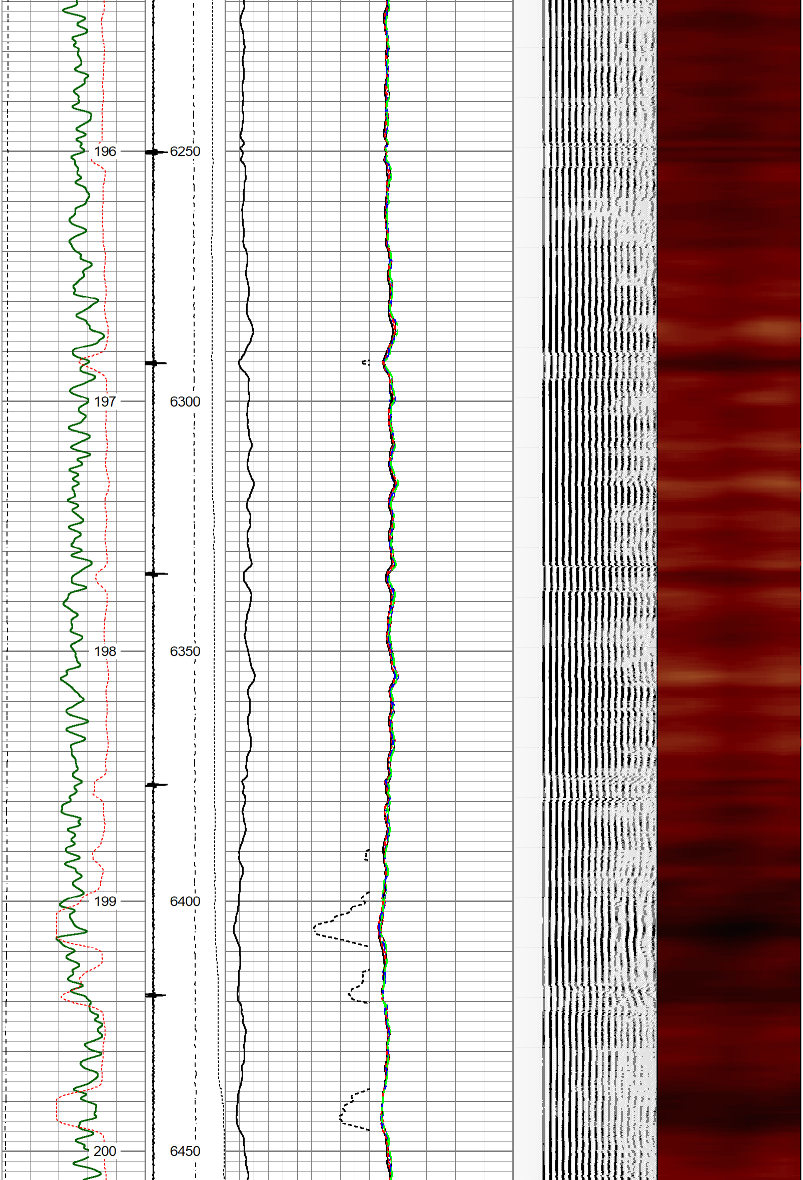


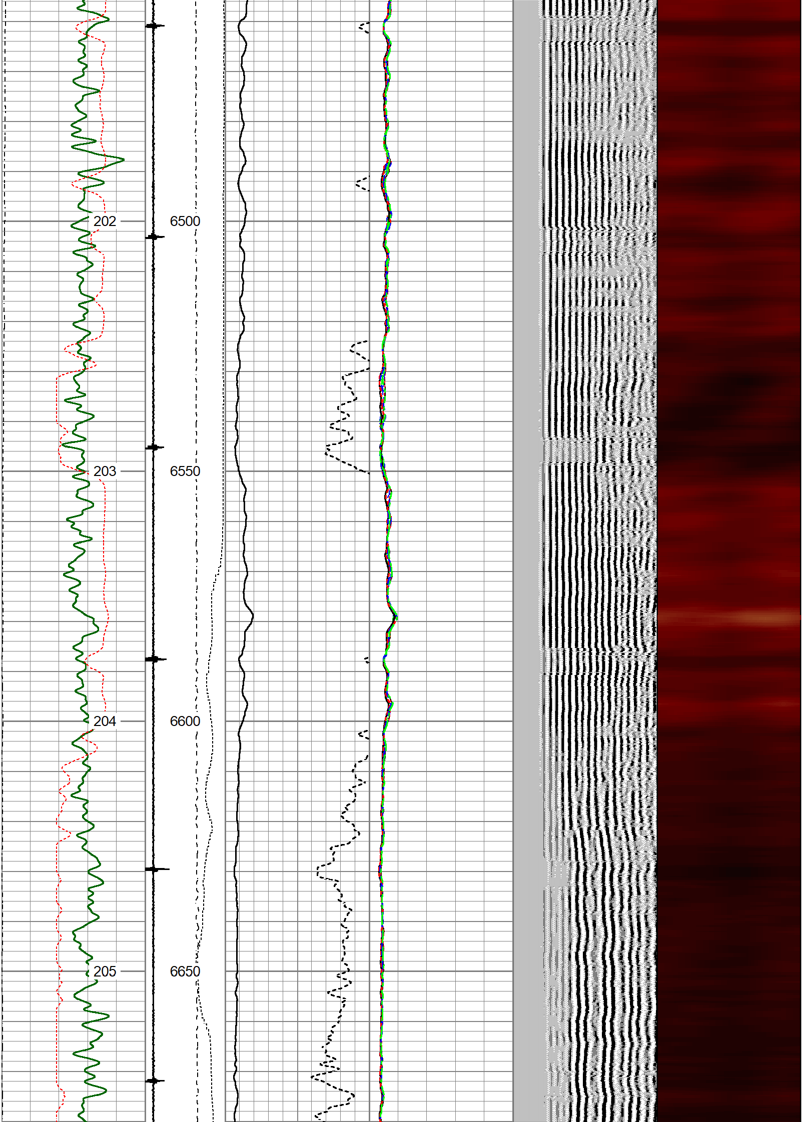


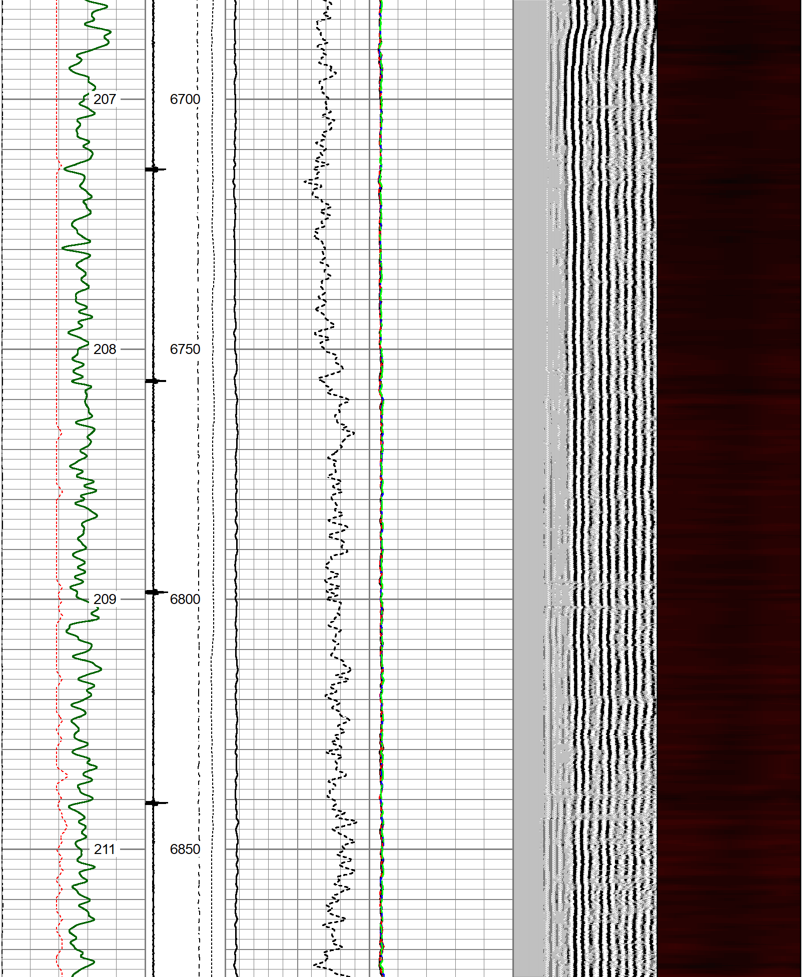


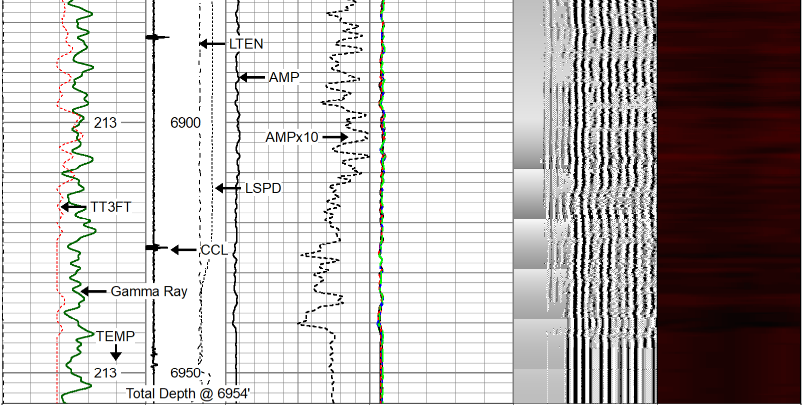












Gamma Ray	LTEN	0 AMP (mV) 100	-5 AMPS1 150	200 VDL (usec) 1200	1 Cement Map 8
0 (GAPI) 200	0 (lb 2500	0 AMPx10 (mV) 10	-5 AMPS2 150		
TT3FT	-1 CCL 9		-5 AMPS3 150		
320 (usec) 220	LSPD		-5 AMPS4 150		
0 Inclination (deg) 90	(ft/min)		-5 AMPS5 150		
TEMP	0 100		-5 AMPS6 150		
(degF)			-5 AMPS7 150		
			-5 AMPS8 150		

TWG
THE WIRELINE
GROUP

REPEAT SECTION

LOGGED WITH 0 PSI AT SURFACE
5"=100'

Database File	0512330987_northglenn state 3-36_oxy.db
Dataset Pathname	cbl/pass1
Presentation Format	rbt-gct8acc - ss
Dataset Creation	Thu May 04 09:18:18 2023
Charted by	Depth in Feet scaled 1:240

Gamma Ray	LTEN	0 AMP (mV) 100	-5 AMPS1 150	200 VDL (usec) 1200	1 Cement Map 8
0 (GAPI) 200	0 (lb 2500	0 AMPx10 (mV) 10	-5 AMPS2 150		
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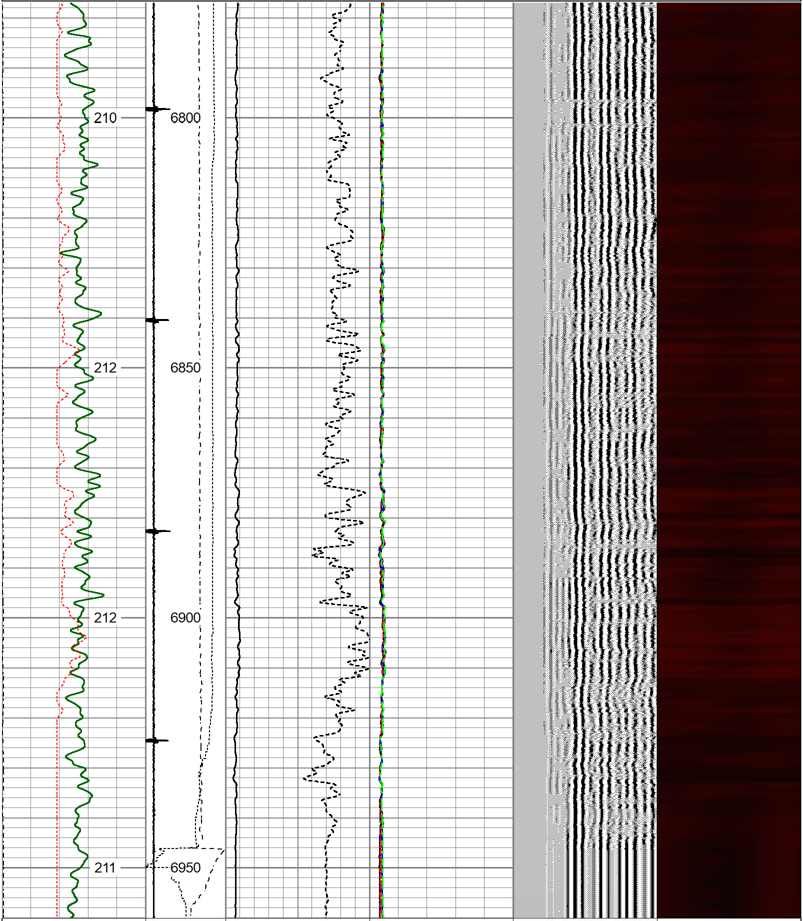
0 Inclination (deg) 90	(ft/min)		-5 AMPS5 150		
TEMP	0 100		-5 AMPS6 150		
(degF)			-5 AMPS7 150		
			-5 AMPS8 150		



Gamma Ray	LTEN	0 AMP (mV) 100	-5 AMPS1 150	200 VDL (usec) 1200	1 Cement Map 8
0 (GAPI) 200	0 (lb 2500	0 AMPx10 (mV) 10	-5 AMPS2 150		
TT3FT	-1 CCL 9		-5 AMPS3 150		
320 (usec) 220	LSPD		-5 AMPS4 150		
0 Inclination (deg) 90	(ft/min)		-5 AMPS5 150		
TEMP	0 100		-5 AMPS6 150		
(degF)			-5 AMPS7 150		
			-5 AMPS8 150		

Calibration Report

Database File 0512330987_northglenn state 3-36_oxy.db
Dataset Pathname cbl/pass1
Dataset Creation Thu May 04 09:18:18 2023

Gamma Ray Calibration Report

Serial Number: 110255
Tool Model: GCTacc_6-Pin-Base
Performed: Mon Feb 27 18:31:09 2023

Calibrator Value: 165.0 GAPI

Background Reading: 72.3 cps
Calibrator Reading: 300.9 cps

Sensitivity: 0.9050 GAPI/cps

Inclinometer Calibration Report

Performed: Thu Sep 22 15:14:31 2022

	Low Read.	High Read.	Low Ref.	High Ref.	
X Accelerometer	-910.00	1566.00	-1.00	1.00	gee
Y Accelerometer	-989.00	1748.00	-1.00	1.00	gee
Z Accelerometer	1.02	-895.47	0.00	1.00	gee

Segmented Cement Bond Log Calibration Report

Serial Number: 1905150_4.5
Tool Model: Probe275acc

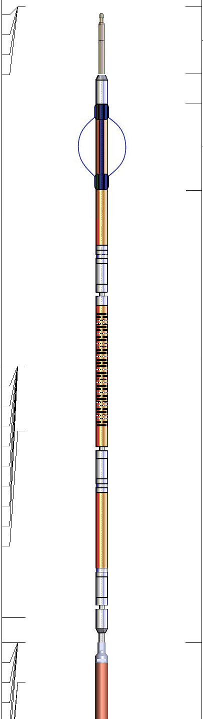
Calibration Casing Diameter: 4.500 in
Calibration Depth: 1555.776 ft

Master Calibration, performed Thu May 4 08:58:19 2023:

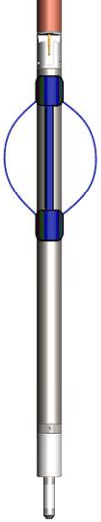
	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	-0.013	0.830	1.000	81.196	92.185	2.240
CAL	-0.015	1.007				
5'	-0.012	0.757	1.000	81.196	104.272	2.263
SUM						
S1	-0.014	0.778	0.000	100.000	126.344	1.734
S2	-0.012	0.806	0.000	100.000	122.190	1.511
S3	-0.012	0.853	0.000	100.000	115.607	1.439
S4	-0.013	0.947	0.000	100.000	104.074	1.399
S5	-0.013	1.028	0.000	100.000	96.010	1.285
S6	-0.009	0.946	0.000	100.000	104.721	0.972
S7	-0.012	0.846	0.000	100.000	116.546	1.433
S8	-0.012	0.781	0.000	100.000	126.054	1.542

Inclinometer Calibration Report

Performed:	(Not Performed)				
	Low Read.	High Read.	Low Ref.	High Ref.	
X Accelerometer	0.00	1.00	0.00	1.00	gee
Y Accelerometer	0.00	1.00	0.00	1.00	gee
Z Accelerometer	0.00	1.00	0.00	1.00	gee

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb
GCT_FMWR	15.11		Cable Head-Titan_144 1 7/16" Titan Cable Head	1.03	1.44	2.00
mSec_Count	15.11					
RBT_Status	15.11					
Error_Ct	15.11					
			SO BS CENT-2750-4500 Slip Over 2-3/4" I.D. for 4-1/2" O.D. Casing Bow Spring Centralizer	1.33	3.25	10.00
WVFS8	9.58		RBT8acc-Probe275acc (1905150_4.5) 2.75" Radial Corrosion with accelerometer	8.75	2.75	110.00
WVFS7	9.58					
WVFS6	9.58					
WVFS5	9.58					
WVFS4	9.58					
WVFS3	9.58					
WVFS2	9.58					
WVFS1	9.58					
WVF3FT	9.58					
WVF5FT	8.58					
GCT_HV	5.72					
RBT_HV	5.33					
RBT_ACCZ	5.33					
RBT_ACCY	5.33					
RBT_ACCX	5.33					

WVFSYNC	5.33
WVFCAL	5.33
CCL$2	4.72
CCL$1	4.72
GCT_TEMP	3.84
GR	3.04
GCT_IntTemp	2.00
GCT_ACCZ	0.33
GCT_ACCY	0.33
GCT_ACCX	0.33



SO BS CENT-2750-4500 Slip Over 2-3/4" I.D. for 4-1/2" O.D. Casing Bow Spring Centralizer	1.33	3.25	10.00
GCacc-GCTacc_6-Pin-Base (110255) Probe 2.75" Gamma Ray - CCL w/ Temp and 6 Pin Bottom	5.00	2.75	
Plug-FA108-0000 1.38" Bull Plug	0.33	1.38	1.00

Dataset: 0512330987_northglenn state 3-36_oxy.db: field/well/cbl/pass1
Total length: 15.11 ft
Total weight: 143.00 lb
O.D.: 3.25 in

THE WIRELINE GROUP

Company	OCCIDENTAL PETROLEUM CORPORATION		
Well	NORTHGLENN STATE 3-36		
Field	WATTENBERG		
County	WELD		
State	CO	Country	USA