



BOREHOLE PROFILE

COMPANY	NAVEX RESOURCES LLC		
WELL	PFAFFLY #1-12		
FIELD	NORTH CHEYENNE PROJECT/ PFAFFLY PROSPECT		
COUNTY	KIT CARSON		
STATE	COLORADO		
LOCATION	1602' FSL & 1269' FWL		
SEC 12	TWP 11S	RGE 46W	Other Services
Latitude	39.1037632	ARRAY INDUCTION	NEUTRON
Longitude	-102.5167609	PHOTO-DENSITY	COMPENSATED SONIC
API Number	05-063-06363	MICRO LOG	
Permanent Datum GL, Elevation 4466.9 feet			
Log Measured From KB, 12.10 feet above Permanent Datum		Elevations: feet	
Drilling Measured From KB		KB	4479.00
		DF	4479.00
		GL	4466.90
Date	26-MAY-2023		
Run Number	ONE		
Service Order	T1-230526WFT		
Depth Driller	6076.00	feet	
Depth Logger	6082.00	feet	
First Reading	6037.00	feet	
Last Reading	648.00	feet	
Casing Driller	651.00	feet	
Casing Logger	648.00	feet	
Bit Size	7.875	inches	
Hole Fluid Type	WBM		
Density / Viscosity	9.10 lb/USg	63.00 sec/qt	
PH / Fluid Loss	10.00	8.00 ml/30Min	
Sample Source	FLOWLINE		
Rm @ Measured Temp	0.71 @ 86.0	ohm-m	
Rmf @ Measured Temp	0.61 @ 86.0	ohm-m	
Rmc @ Measured Temp	1.01 @ 86.0	ohm-m	
Source Rmf / Rmc	CALC	CALC	
Rm @ BHT	0.36 @154.0	ohm-m	
Time Since Circulation	8 HRS		
Max Recorded Temp	154.00	deg F	
Equipment / Base	10001	OKC	
Recorded By	B. GRAHMANN		
Witnessed By	CRAIG ADAMS		
Rig Name	DUKE #9		

BOREHOLE RECORD

Last Edited: 26-MAY-2023 11:08

Bit Size inches	Depth From feet	Depth To feet
12.250	0.00	651.00
7.875	651.00	6076.00

CASING RECORD

Type	Size inches	Depth From feet	Shoe Depth feet	Weight pounds/ft
SURFACE	8.625	0.00	651.00	36.00

REMARKS

WWLS VERSION 21.11

- TOOLSTRING:

RUN 1 : MAI, MSS, MFE, SKJ, MVC, MPD, MDN, MMR, MCG, SHA, MTA, CBHC

- HARDWARE USED:

MAI: 1" STANDOFF
MFE: 1" STANDOFF
MSS: 1" STANDOFFS
MDN: DUAL ECCENTERED BOWSPRING

- 2.71 G/CC DENSITY MATRIX USED TO CALCULATE POROSITY.

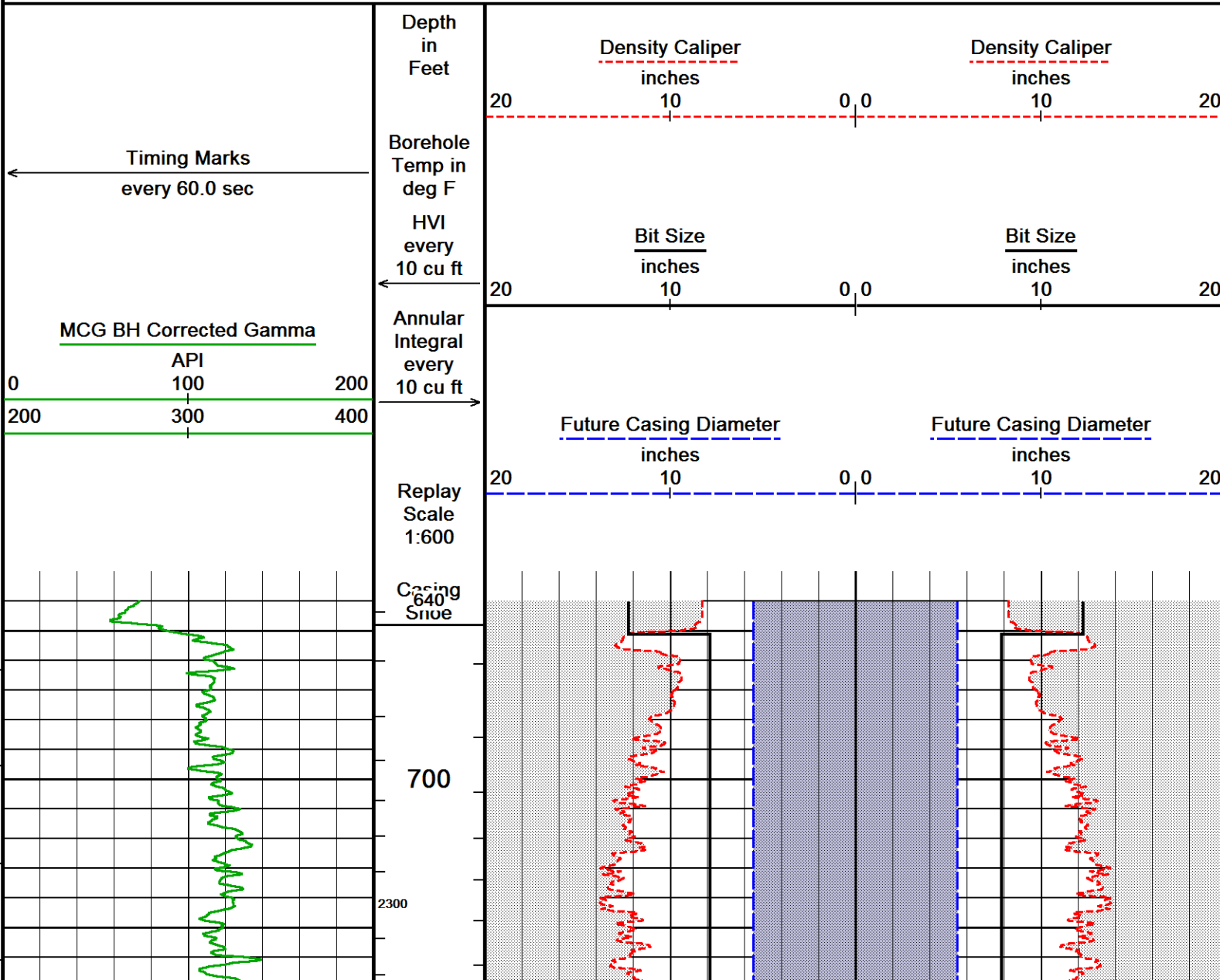
- ANNULAR HOLE VOLUME WITH 5.5 INCH PRODUCTION CASING FROM TD TO SURFACE CASING

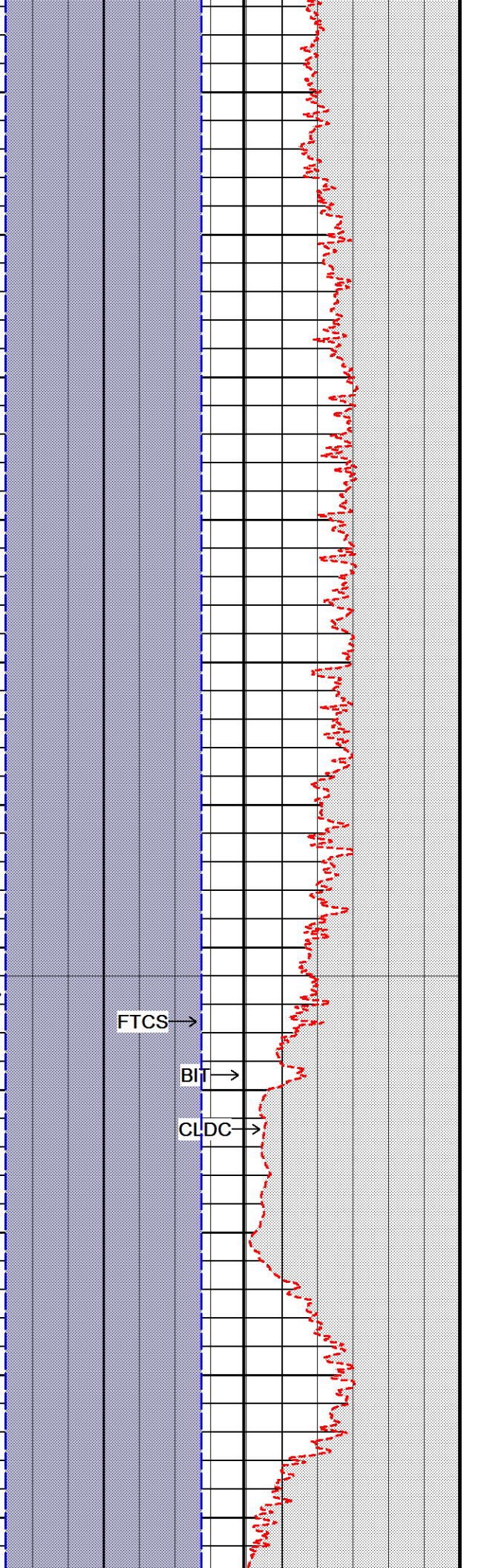
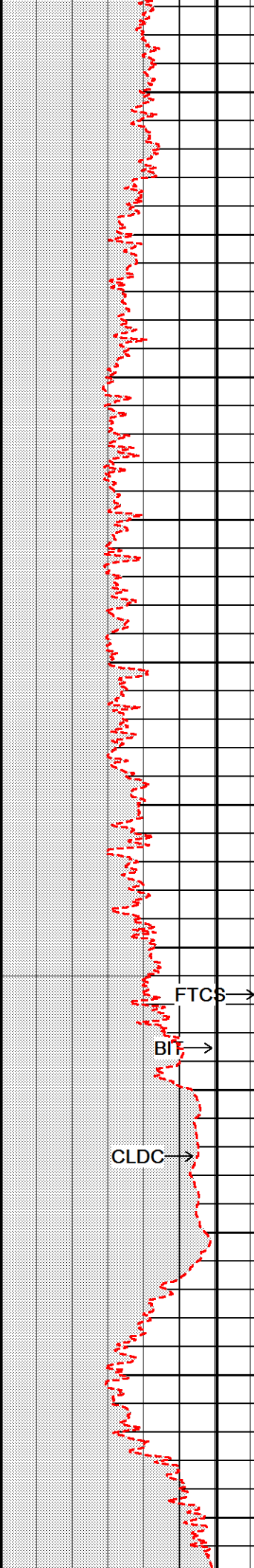
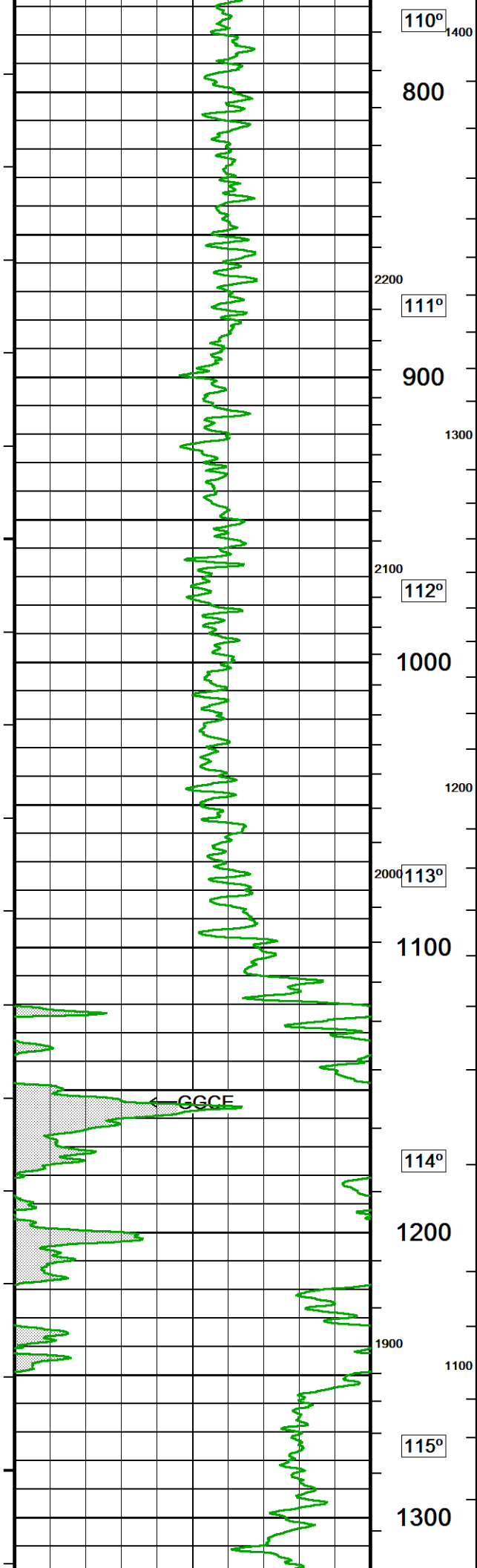
In interpreting, communicating or providing information and/or making recommendations, either written or oral, as to logs or test or other data, type or amount of material, or Work or other service to be furnished, or manner of performance, or in predicting results to be obtained, the Contractor will give the Company the benefit of the Contractor's best judgment based on its experience and will perform all such Work in a good and workmanlike manner. Any interpretation of test or other data, and any recommendation or reservoir description based upon such interpretations, are opinions based upon inferences from measurements and empirical relationships and assumptions, which inferences and assumptions are not infallible, and with respect to which professional engineers and analysts may differ. ACCORDINGLY ANY INTERPRETATION OR RECOMMENDATION RESULTING FROM THE SERVICES WILL BE AT THE SOLE RISK OF THE COMPANY, AND THE CONTRACTOR CANNOT AND DOES NOT WARRANT THE ACCURACY, CORRECTNESS OR COMPLETENESS OF ANY SUCH INTERPRETATION OR RECOMMENDATION, WHICH INTERPRETATIONS AND RECOMMENDATIONS SHOULD NOT, THEREFORE, UNDER ANY CIRCUMSTANCES BE RELIED UPON AS THE SOLE OR MAIN BASIS FOR ANY DRILLING, COMPLETION, WELL TREATMENT, PRODUCTION OR FINANCIAL DECISION, OR ANY PROCEDURE INVOLVING ANY RISK TO THE SAFETY OF ANY DRILLING ACTIVITY, DRILLING RIG OR ITS CREW OR ANY OTHER INDIVIDUAL. THE COMPANY HAS FULL RESPONSIBILITY FOR ALL DECISIONS CONCERNING THE SERVICES.

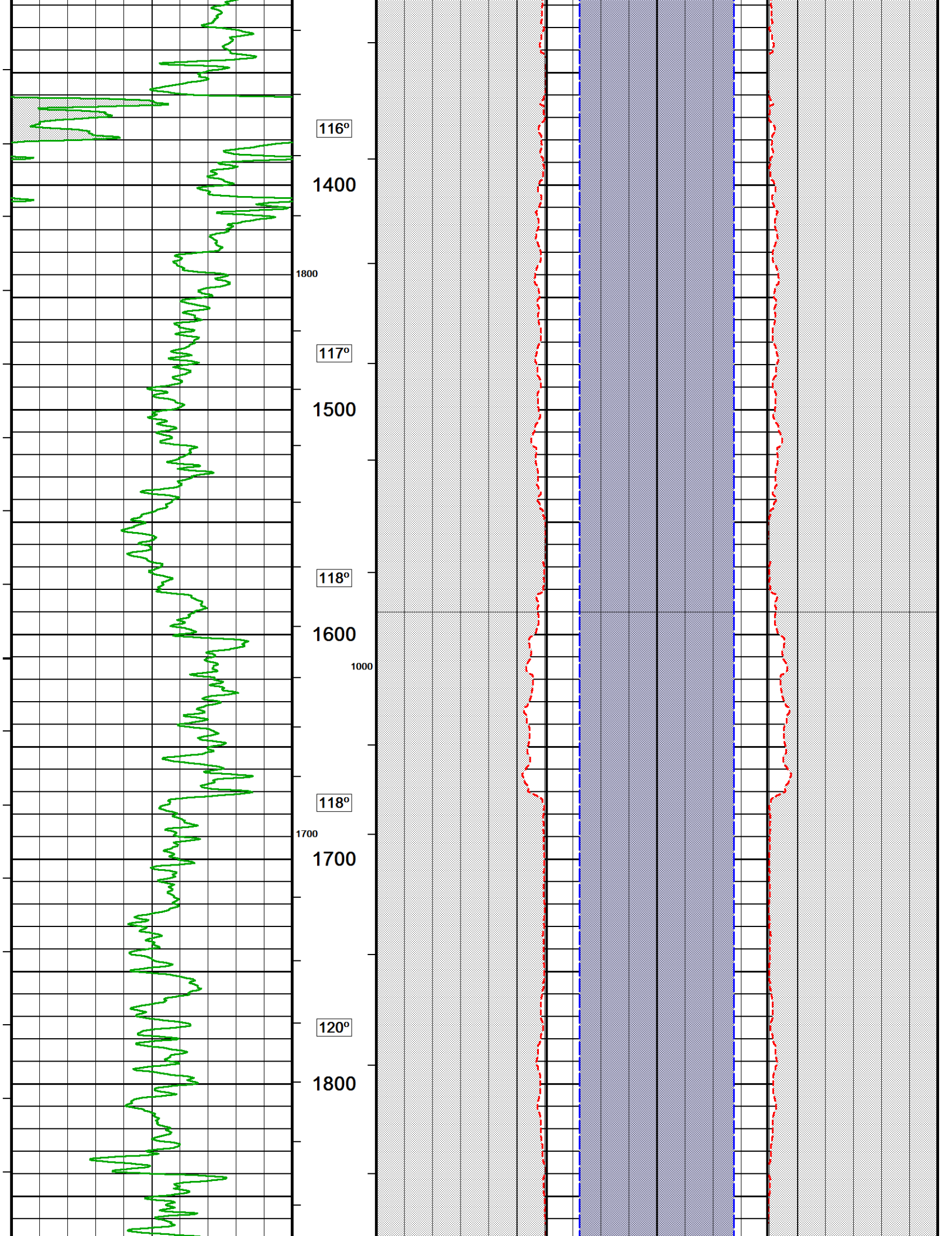
Powered by Weatherford tools, acquisition systems, and software

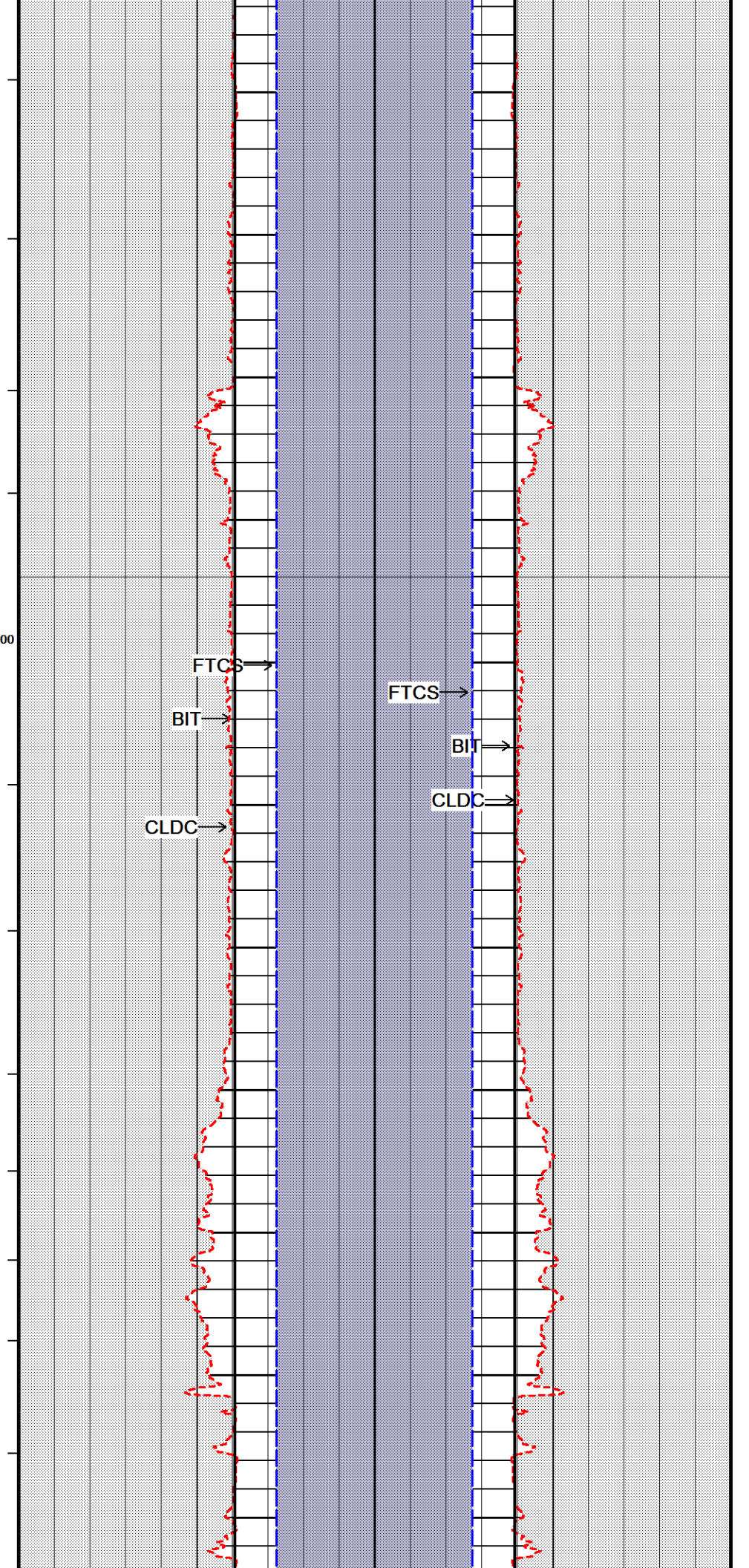
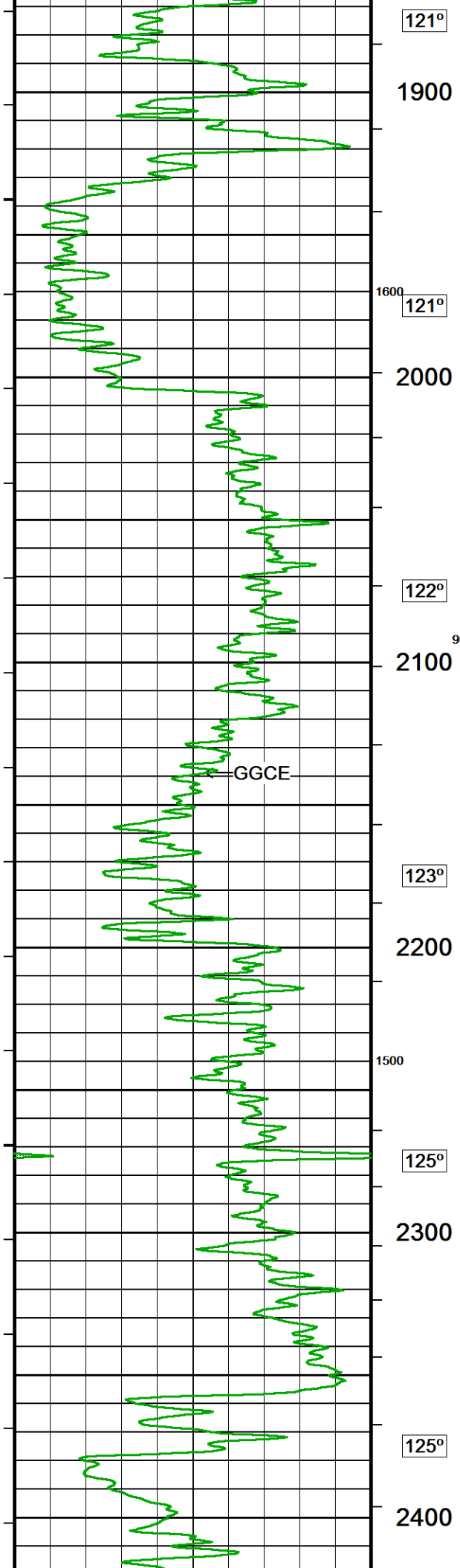
2 INCH MAIN PASS

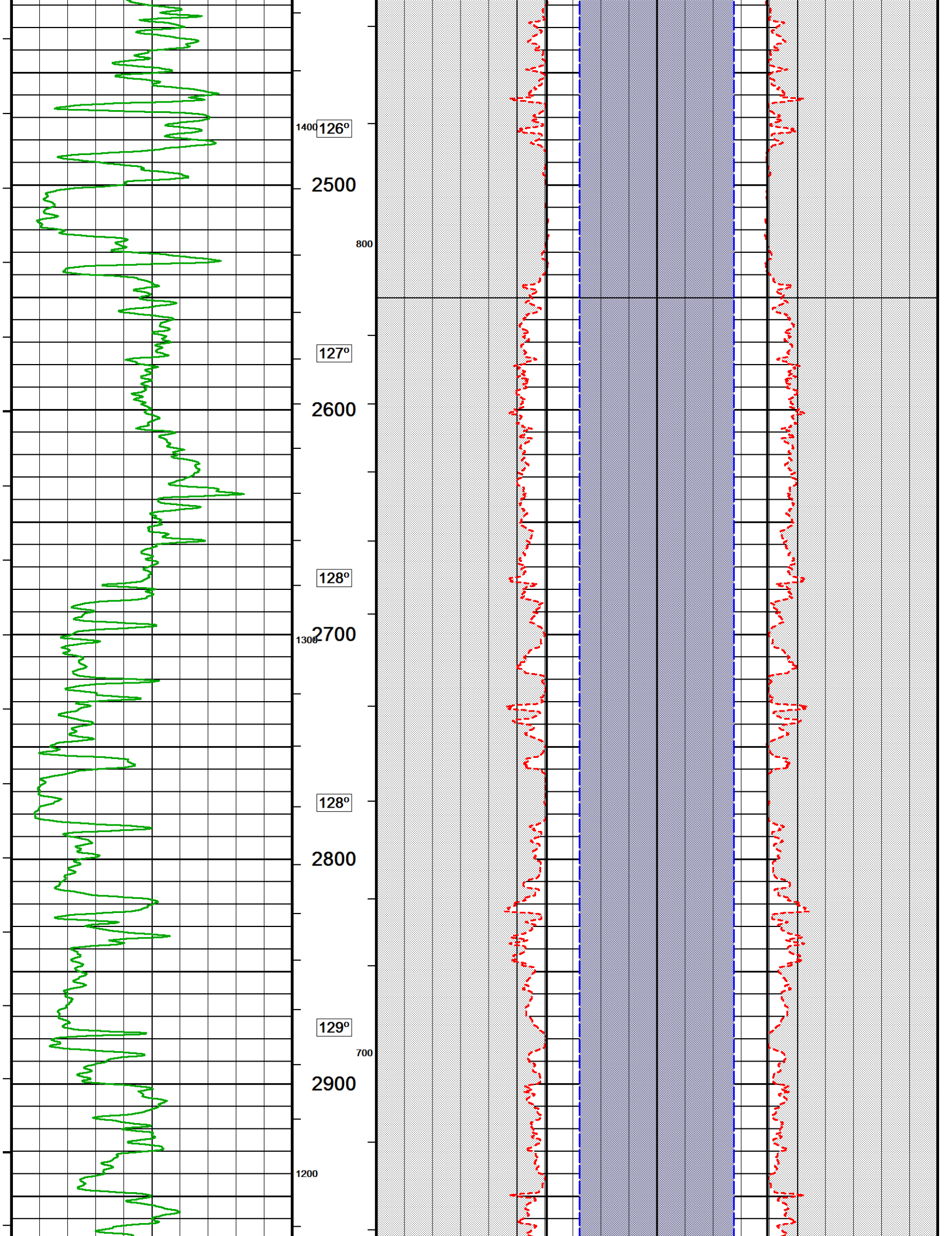
Depth Based Data - Maximum Sampling Increment 10.0cm
 Plotted on 26-MAY-2023 17:03
 Filename: C:_LOGS\Trek Resources\Pfaffly #1-12\MainPass.dta
 Recorded on 26-MAY-2023 13:17
 System Versions: Logged with 21.11.3172 Plotted with 21.11.3172

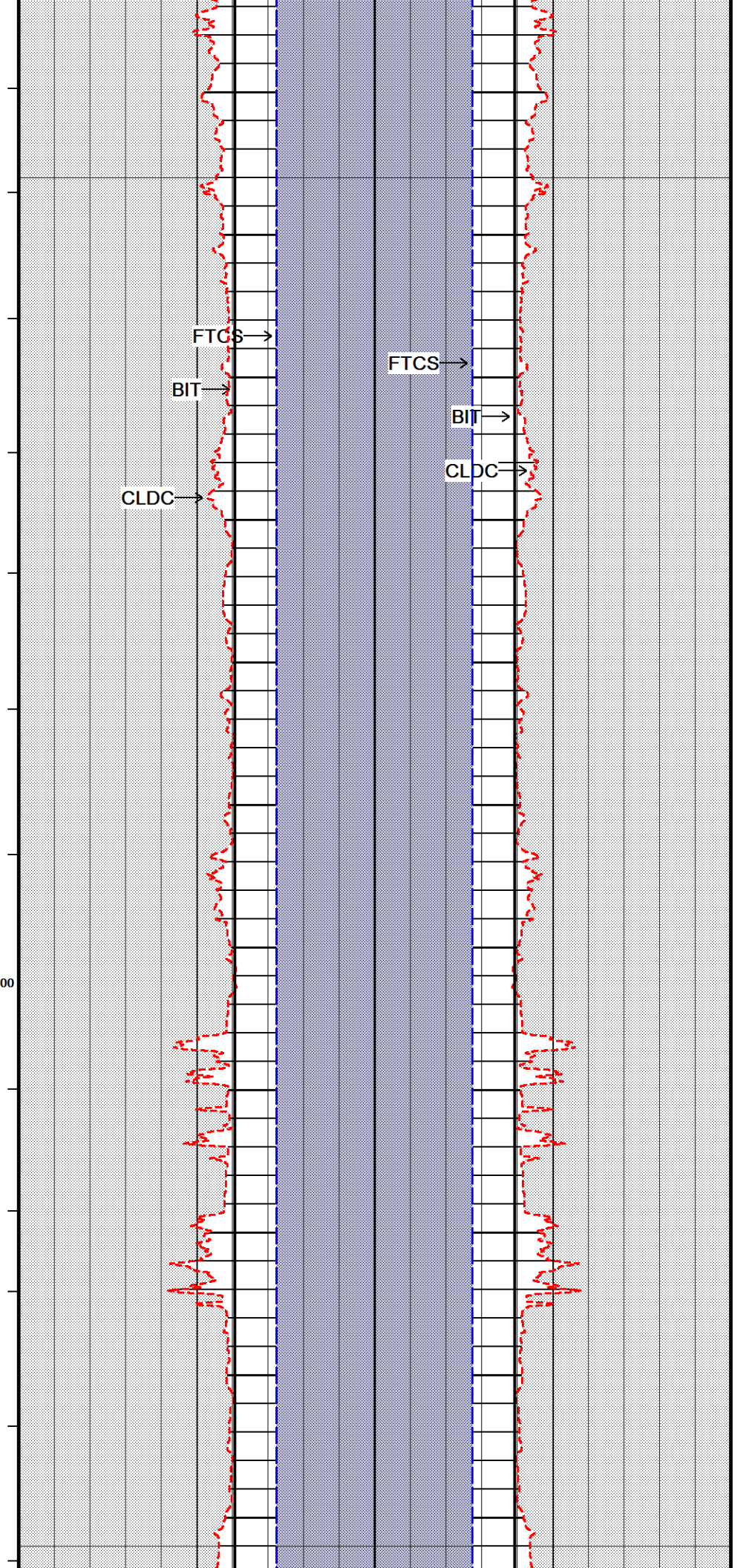
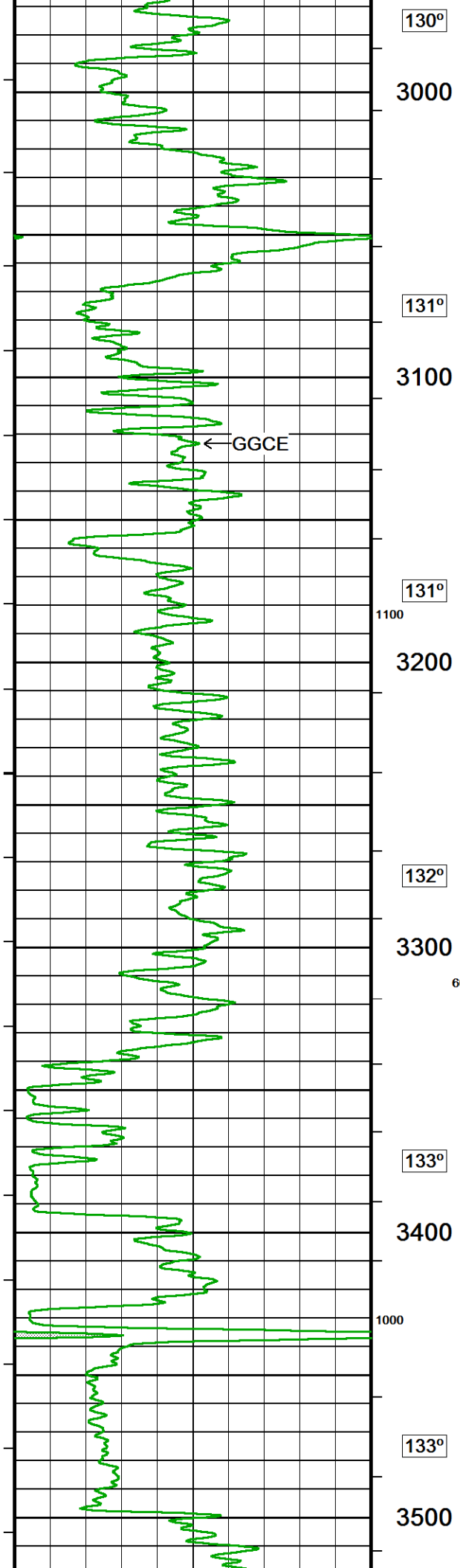


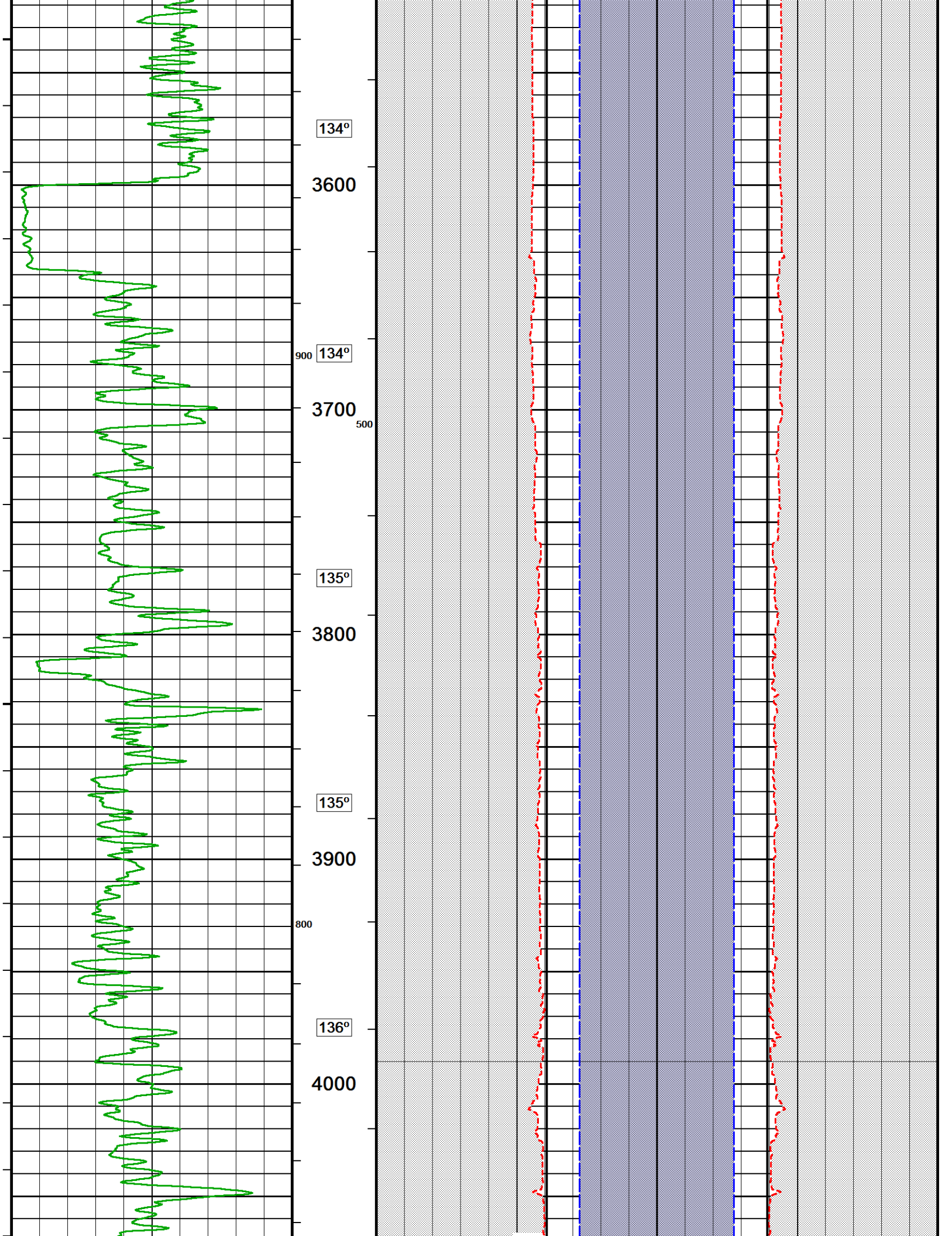


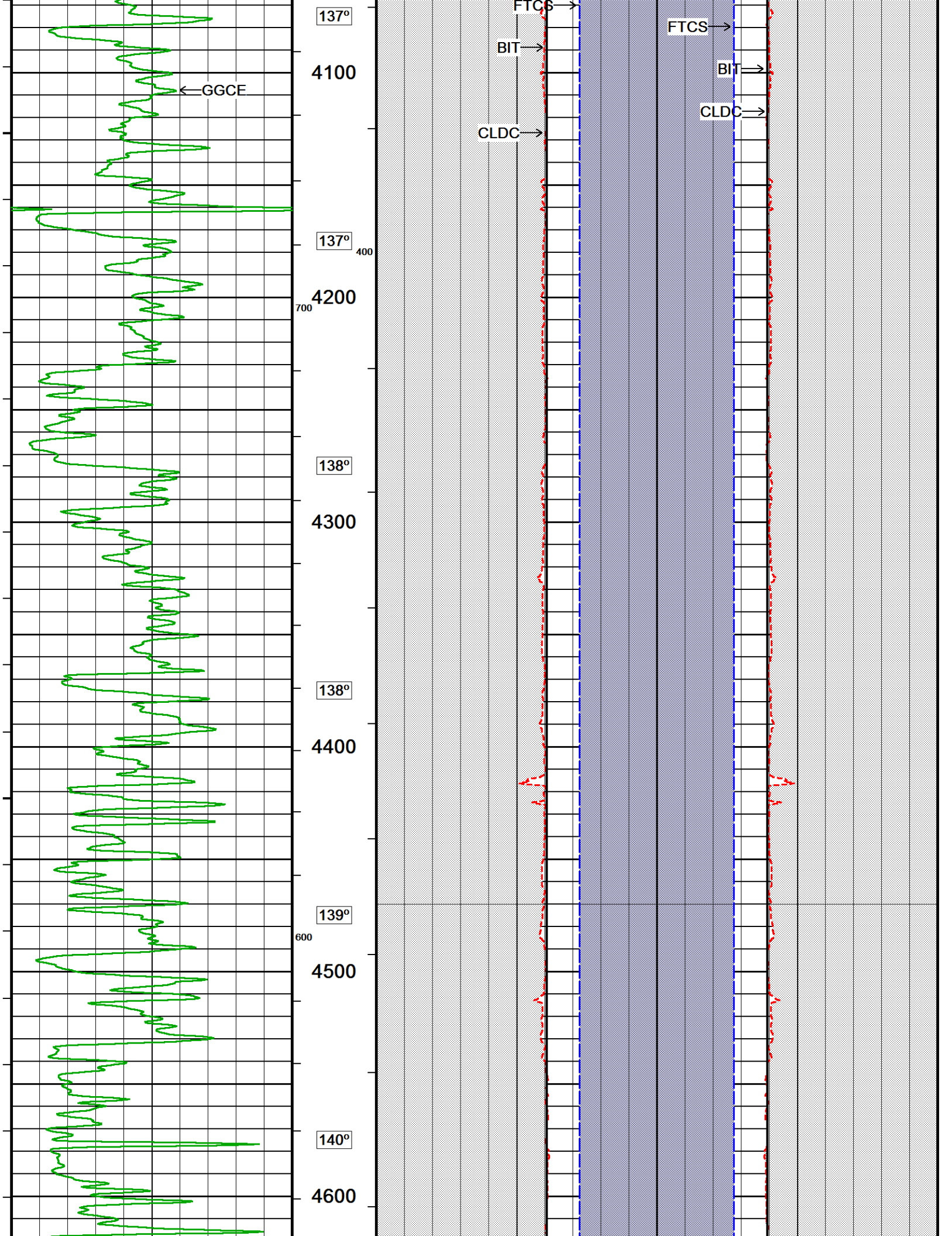


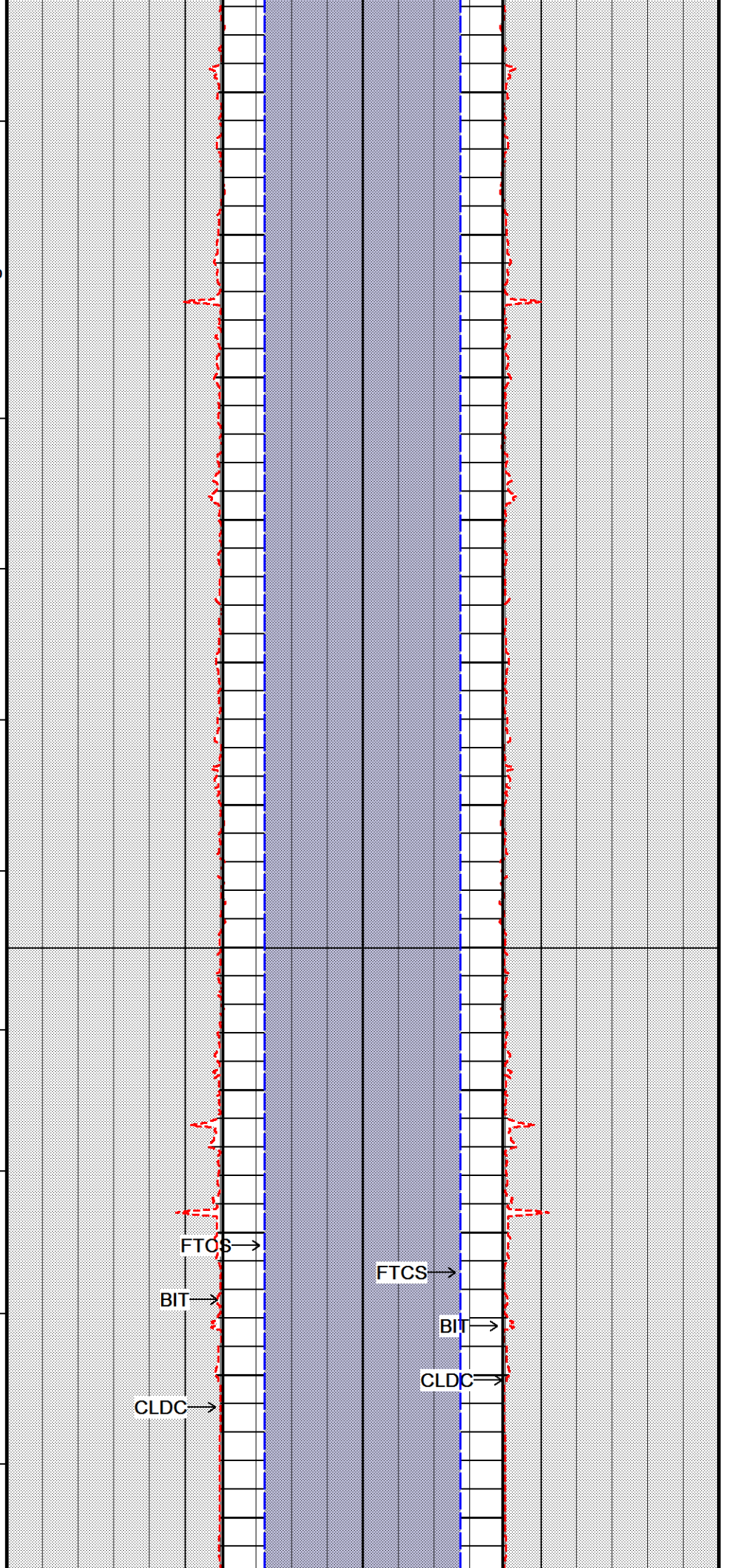
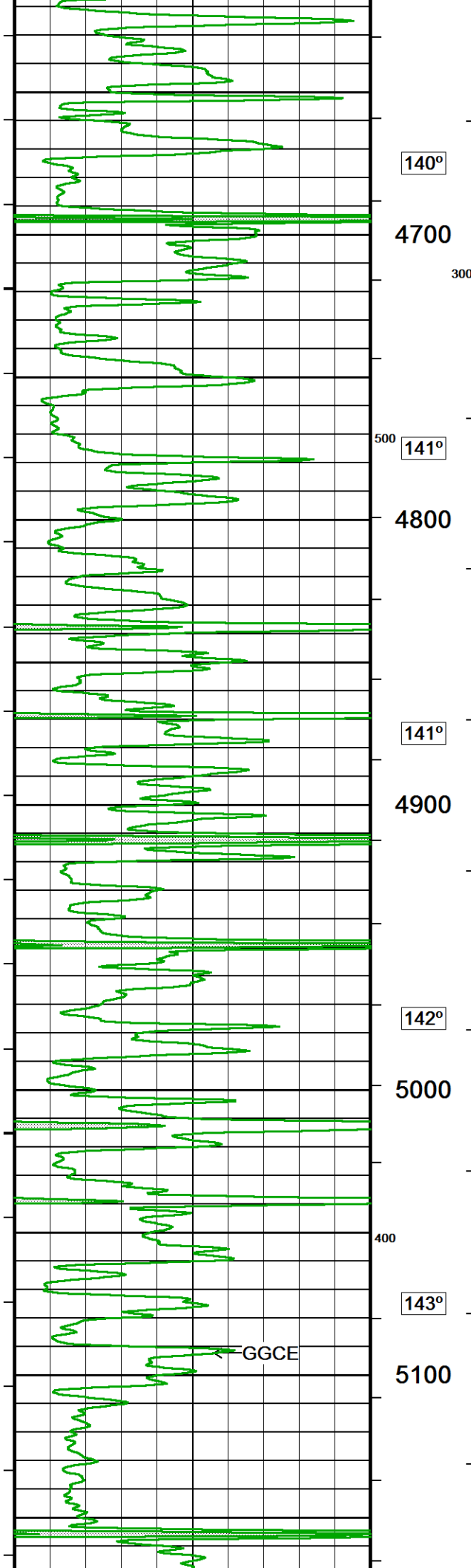


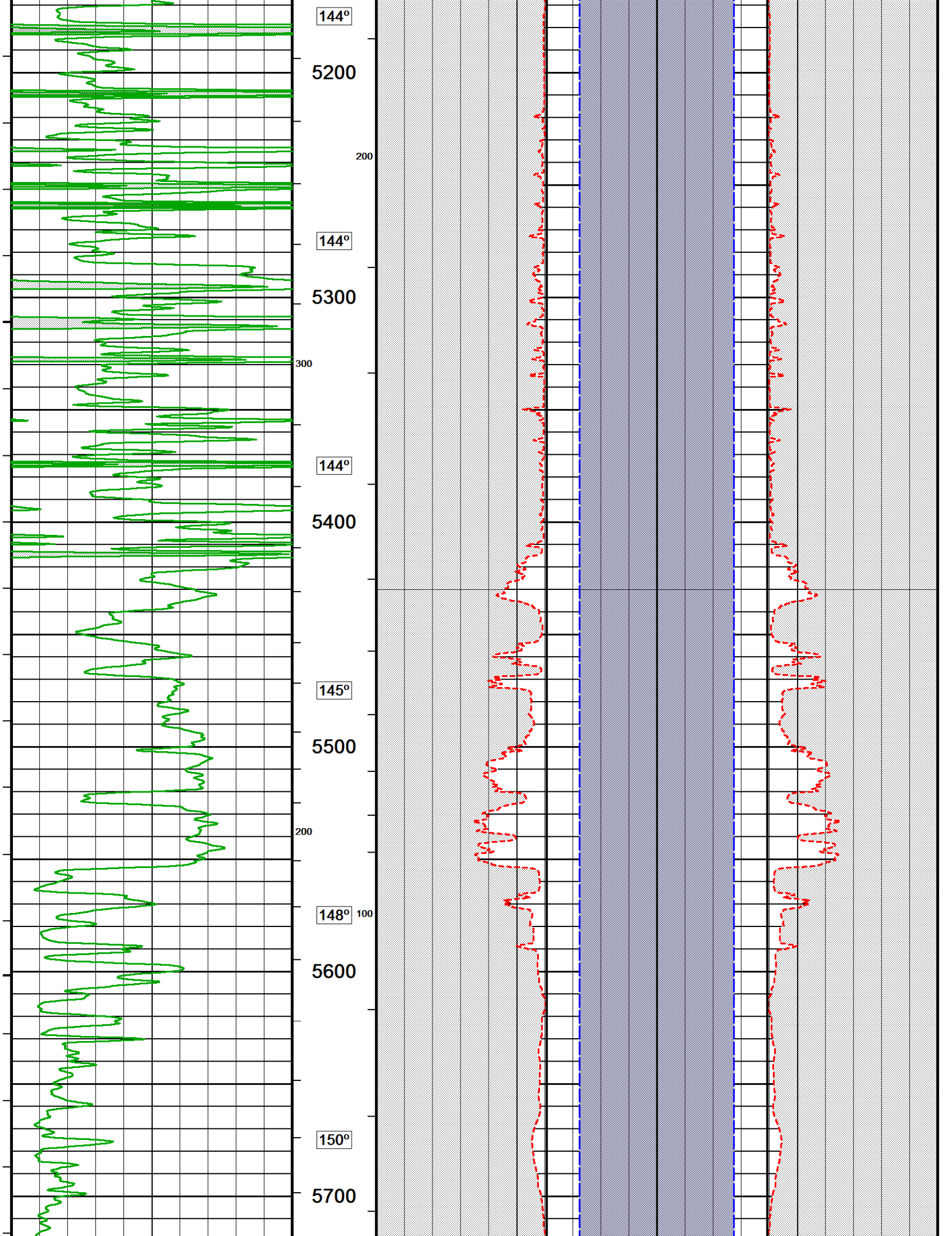


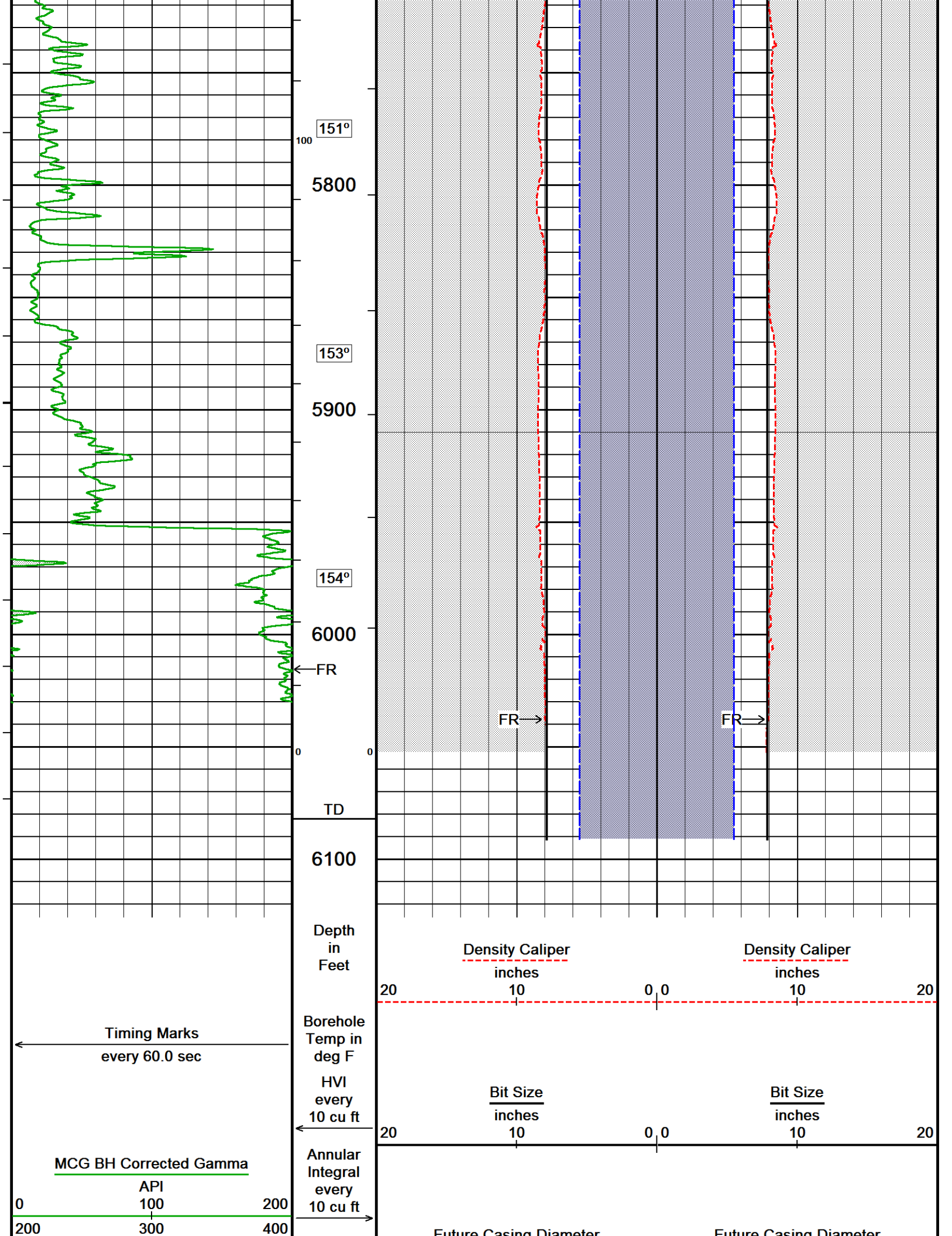




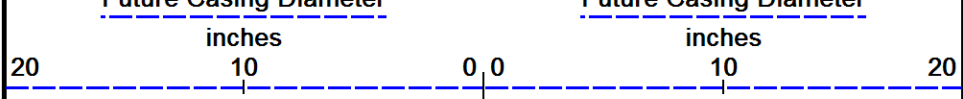








Replay
Scale
1:600



Depth Based Data - Maximum Sampling Increment 10.0cm
 Plotted on 26-MAY-2023 17:03
 Filename: C:_LOGS\Trek Resources\Pfaffly #1-12\MainPass.dta
 Recorded on 26-MAY-2023 13:17
 System Versions: Logged with 21.11.3172 Plotted with 21.11.3172

↑ 2 INCH MAIN PASS ↑

BEFORE SURVEY CALIBRATION

C:_LOGS\Trek Resources\Pfaffly #1-12\MainPass.dta

General Constants All 000 Last Edited on 26-MAY-2023,12:35

General Parameters

Mud Resistivity 0.750 ohm-metres
 Mud Resistivity Temperature 86.000 degrees F
 Water Level 0.000 feet
 Borehole Fluid Processing Wet Hole

Hole/Annular Volume and Differential Caliper Parameters

HVOL Method Single Caliper
 HVOL Caliper 1 Density Caliper
 HVOL Caliper 2 N/A
 Annular Volume Diameter 5.500 inches
 Caliper for Differential Caliper Density Caliper

Rwa Parameters

Porosity used Limestone Density Por.
 Resistivity used Array Ind. One Res Rt
 RWA Constant A 1.000
 RWA Constant M 2.000
 SW/APOR Tool Source 0.000

Down-hole Tension Calibration SMS 0 Field Calibration on 25-APR-2023 19:13

Reading No	Measured	Calibrated (lbs)
1	15436.25	0.00
2	16961.69	516.00

High Resolution Temperature Constants MCG-E.A 551

Pre-filter Length 11

Gamma Calibration MCG-E.A 551 Field Calibration on 20-APR-2023 13:00

	Measured	Calibrated (API)
Background	52	35
Calibrator (Gross)	860	568
Calibrator (Net)	807	533

Gamma Calibration Tolerances MCG-E.A 551

Ratio 1.515 Counts/API

Gamma Constants MCG-E.A 551 Last Edited on 26-MAY-2023,12:36

Gamma Calibrator Number MCG 111
 GRC-M Calibrator Jig in Use? NO
 Inactive Background Jig in Use? NO
 Mud Density 1.09 gm/cc
 Caliper Source for Processing Density Caliper
 Tool Position Eccentred
 Potassium Equivalence Chloride
 K Mud Concentration 0.00 %

Micro-Resistivity Caliper Constants MMR-C.A 257

Sonde Configuration

Resistivity Mode

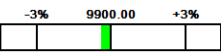
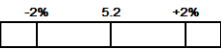
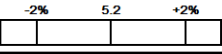
Micro Laterolog Calibration MMR-C.A 257

Base Calibration on 31-MAY-2021 11:30

Field Check on 31-MAY-2021 11:32

	Resistor 1 (ohm)	Resistor 2 (ohm)
	0.0	10000.0
Base Calibration	Measured	Calibrated (ohm-m)
	Ref 1 Ref 2	Ref 1 Ref 2
	0.0 9858.5	0.0 128.0
	Base Check (ohm-m)	Field Check (ohm-m)
	5.2	5.2

Micro Laterolog Calibration Tolerances MMR-C.A 257

Ref 2	9858.5		ohm
Base Check	5.2		ohm-m
Field Check	5.2		ohm-m

Micro Laterolog Constants MMR-C.A 257

Last Edited on 14-OCT-2020,10:32

Pad Type	6 in Solid Nylon B23059	
Standoff Offset	0.5000	inches
Micro Laterolog K Factor	0.0128	
Micro Laterolog Rm K Factor	N/A	
Mudcake Thickness Correction Constants		
Mud Cake Source	Differential Caliper	
Mud Cake Thickness	N/A	inches
Mud Cake Thickness Caliper	MMR Caliper	
Mud Cake Resistivity	0.0470	ohm-m
Mud Cake Resistivity Temp.	72.00	Deg F
Mud Cake Resistivity Source	Temperature Corr	
Temp. for Rmc Corr.	MCG External Temperature	

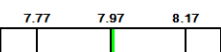
Caliper Calibration MMR-C.A 257

Base Calibration on 01-MAY-2023 11:12

Field Calibration on 01-MAY-2023 11:13

Base Calibration	Reading No	Measured	Calibrator Size (in)
	1	13341	5.96
	2	16469	7.97
	3	19652	9.86
	4	23513	11.88
	5	0	0.00
	6	N/A	N/A
Field Calibration	Measured Caliper (in)	Actual Caliper (in)	
	7.99	7.97	

Caliper Calibration Tolerances MMR-C.A 257

Short Arm Field Cal.	7.99		in
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Micro Normal and Micro Inverse Calibration MMR-C.A 257

Base Calibration on 01-MAY-2023 11:02

Field Check on 01-MAY-2023 11:04

	Resistor 1 (ohm)	Resistor 2 (ohm)
	10.0	50.0
Base Calibration	Measured	Calibrated (ohm-m)
Micro Normal	9.9 49.4	5.1100 25.5500
Micro Inverse	9.9 49.4	3.3800 16.9000
Channel	Base Check (ohm-m)	Field Check (ohm-m)
Micro Normal	94.3	94.3
Micro Inverse	62.3	62.3

Micro Normal & Micro Inverse Calibration Tolerance MMR-C.A 257

Micro Normal Res. 1	9.9		ohm
Micro Inverse Res. 1	9.9		ohm
Micro Normal Base Check	94.3		ohm-m
Micro Inverse Base Check	62.3		ohm-m
Micro Normal Field Check	94.3		ohm-m
Micro Inverse Field Check	62.3		ohm-m

Micro Normal Res. 2	49.4		ohm
Micro Inverse Res. 2	49.4		ohm

Micro Normal and Micro Inverse Constants MMR-C.A 257

Last Edited on 09-FEB-2023,09:37

Pad Type	8-12 in Soft Rubber Inflatable 006-9011-159		
Micro Normal K Factor	0.5110		
Micro Inverse K Factor	0.3380		
Standoff Offset	0.0000	inches	

Neutron Calibration MDN-C.A 399

Base Calibration on 19-APR-2023 11:09

Field Check on 19-APR-2023 11:27

Base Calibration					
	Measured		Calibrated (cps)		
	Near	Far	Near	Far	
	3110	96	3714	110	
Ratio	32.539		33.764		
Field Calibrator at Base					
			Calibrated (cps)		
			2014	2960	
Ratio			0.681		
Field Check					
			Calibrated (cps)		
			2016	2970	
Ratio			0.679		

Neutron Calibration Tolerances MDN-C.A 399

Ratio	32.539	
Base Check	0.681	
Field Check	0.679	

Neutron Constants MDN-C.A 399

Last Edited on 26-MAY-2023,12:36

Neutron Source Id	N-1054		
Neutron Jig Number	NJ5239		
Air Hole Processing	Modified Ratio		
Caliper Source for Processing	Density Caliper		
Stand-off	0.00	inches	
Mud Density	1.00	gm/cc	
Limestone Sigma	7.10	cu	
Sandstone Sigma	4.26	cu	
Dolomite Sigma	4.70	cu	
Formation Pressure Source	None		
Formation Pressure	N/A	kpsi	
Temperature Source	None		
Temperature	N/A	degrees F	
Mud Salinity	0.00	kppm	
Salinity Correction	Not Applied		
Formation Fluid Salinity Source	None		
Formation Fluid Salinity	N/A	kppm	
Barite Mud Correction	Not Applied		

Caliper Calibration MVC-A.A 146

Base Calibration on 02-MAR-2023 08:28

Field Calibration on 02-MAR-2023 08:31

Base Calibration			
Reading No	Measured	Calibrator Size (in)	
1	10494	4.01	
2	17351	5.96	
3	24152	7.87	

3	24456	7.97
4	31239	9.86
5	38707	11.88
6	N/A	N/A

Field Calibration

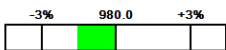
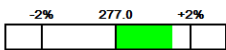
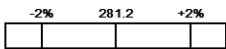
Measured Caliper (in)	Actual Caliper (in)
8.00	7.97

FE Calibration MFE-C.A 399

Base Calibration on 20-APR-2023 09:32
Field Check on 20-APR-2023 09:38

	Resistor 1 (ohm)	Resistor 2 (ohm)
Base Calibration	0.0	1000.0
	Measured	Calibrated (ohm-m)
Reference 1	0.0	0.0
Reference 2	964.6	126.8
Base Check		281.2
Field Check		281.2

FE Calibration Tolerances MFE-C.A 399

Reference 2	964.6		ohm
Base Check	281.2		ohm-m
Field Check	281.2		ohm-m

FE Constants MFE-C.A 399

Last Edited on 26-MAY-2023,12:37

Running Mode	No Sleeve
MFE K Factor	0.1268
Borehole Correction Constants	
Sonde Position	1.0 inches
Hole Size Source	Density Caliper
Hole Size Constant Value	N/A inches
Rm Source	Global Value: Temperature Corrected
Temp. for Rm Corr.	MCG External Temperature

Sonic Constants MSS-C.K 374

Maximum Boundary Contrast	70.00	micro-sec/ft
Fluid Transit Time	189.00	micro-sec/ft
Limestone Transit Time	47.50	micro-sec/ft
Sandstone Transit Time	55.50	micro-sec/ft
Dolomite Transit Time	43.50	micro-sec/ft
Sonic used for Porosities	3-5' Compensated	
Correction for Sonde Skew	Applied	
Cycle Stretch Algorithm	Applied	
MN3FT	0.00	micro-sec
MX3FT	1500.00	micro-sec
Hunt-Raymer Constant	83.13	micro-sec/ft

Sonde Mode	Compensated
Hole Type	Open Hole

Sonde Parameters

	Measured	Calibrated
Offset		0.0000
Free Pipe	0.0000	

Peak Amplitude Source

Waveform	Start Time (micro-sec)	Width (micro-sec)	Pre Gain	Start Gain	Discriminator (mV)
3'	N/A	N/A	N/A	N/A	N/A
4'	N/A	N/A	N/A	N/A	N/A
5'	N/A	N/A	N/A	N/A	N/A
6'	N/A	N/A	N/A	N/A	N/A

Processed Fixed Gate Parameters

Waveform Used For Processing	N/A			
Start Time (micro-sec)	End Time (micro-sec)	Discriminator (mV)	Depth (m)	
0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.00	

Full Waveform Parameters

Use 3' Waveform to derive TR	No		
Use 4' Waveform to derive TR	No		
Use 5' Waveform to derive TR	No		
Use 6' Waveform to derive TR	No		
3' Waveform Discriminator Level	0.30	mV	
4' Waveform Discriminator Level	0.30	mV	
5' Waveform Discriminator Level	0.15	mV	
6' Waveform Discriminator Level	0.15	mV	
Waveform Discriminator Filter	Not Applied		
Semblance Window Width	150.00	micro-sec	
Semblance Processing Enabled	Yes		
Tracking Boxes Enabled In Processing	Yes		

Induction Calibration MAI-C.A 490

Factory Loop Calibration 17-DEC-2012,20:04
Field Check on 10-MAY-2022 15:43

Factory Loop Calibration

High Conductivity Reference Resistor	3.3	ohm
Low Conductivity Reference Resistor	333.3	ohm

Array	Measured Signal (unitless)		Reference Conductivity (mmho/m)		Calibration	
	Low	High	Low	High	Gain	Offset
1 (near)	15.2	455.2	9.3	966.2	0.000	0.0
2	5.9	373.9	7.6	821.4	0.000	0.0
3	3.7	251.6	5.2	566.0	0.000	0.0
4 (far)	1.8	128.7	2.6	279.2	0.000	0.0
Array Temperature	75.6		Deg F			

Tool Checks

10-MAY-2022 15:40

Array	Factory Reference (mmho/m)		Before Survey (mmho/m)		Deg F
	Low	High	Low	High	
1 (near)	-2.2	2114.9	-2.2	2114.9	
2	14.0	1921.9	13.9	1922.0	
3	14.0	1678.9	14.0	1679.0	
4 (far)	10.3	1145.1	10.3	1145.2	
Array Temperature	89.0		89.2		Deg F

Tool Zero Corrections

Array	Low	High	mmho/m
1 (near)		0.0	mmho/m
2		0.0	mmho/m
3		0.0	mmho/m
4 (far)		0.0	mmho/m

Induction Check Tolerances MAI-C.A 490

Low Array 1	-2.2	<input type="text" value="-3.7"/> <input type="text" value="-2.2"/> <input type="text" value="-0.7"/>	mmho/m	High Array 1	2114.9	<input type="text" value="-0.5%"/> <input type="text" value="2114.9"/> <input type="text" value="+0.5%"/>	mmho/m
Low Array 2	13.9	<input type="text" value="12.5"/> <input type="text" value="14.0"/> <input type="text" value="15.5"/>	mmho/m	High Array 2	1922.0	<input type="text" value="-0.5%"/> <input type="text" value="1921.9"/> <input type="text" value="+0.5%"/>	mmho/m
Low Array 3	14.0	<input type="text" value="12.5"/> <input type="text" value="14.0"/> <input type="text" value="15.5"/>	mmho/m	High Array 3	1679.0	<input type="text" value="-0.5%"/> <input type="text" value="1678.9"/> <input type="text" value="+0.5%"/>	mmho/m
Low Array 4	10.3	<input type="text" value="8.8"/> <input type="text" value="10.3"/> <input type="text" value="11.8"/>	mmho/m	High Array 4	1145.2	<input type="text" value="-0.5%"/> <input type="text" value="1145.1"/> <input type="text" value="+0.5%"/>	mmho/m

Induction Constants MAI-C.A 490

Last Edited on 26-MAY-2023,12:37

Induction Model RtAP

Borehole Correction Constants

Tool Centred		No	
Hole Size Source		Density Caliper	
Hole Size Constant Value		N/A	inches
Stand-off Type		Fins	
Stand-off		0.50	inches
Number of Fins on Stand-off		6.0000	
Stand-off Fin Angle		60.00	degrees
Stand-off Fin Width		0.5000	inches
Rm Source	Global Value: Temperature Corrected		
Temp. for Rm Corr.	MCG External Temperature		
Borehole Correction Method		Default	
Squasher Start		0.0020	mhos/metre
Squasher Offset		N/A	mhos/metre
Borehole Normalisation			
DRM1	0.0000	DRC1	0.0000
DRM2	0.0000	DRC2	0.0000
MRM1	0.0000	MRC1	0.0000
MRM2	0.0000	MRC2	0.0000
SRM1	0.0000	SRC1	0.0000
SRM2	0.0000	SRC2	0.0000
Calibration Site Corrections			
Channel 1		0.00	mmhos/metre
Channel 2		0.00	mmhos/metre
Channel 3		0.00	mmhos/metre
Channel 4		0.00	mmhos/metre
Symmetrised Receiver Gains			
Receiver 1		1.00	
Receiver 2		1.00	
Receiver 3		1.00	
Receiver 4		1.00	
Apparent Porosity and Water Saturation Constants			
Archie Constant (A)		1.00	
Cementation Exponent (M)		2.00	
Saturation Exponent (N)		2.00	
Saturation of Water for Apor		100.00	percent
Resistivity of Water for Apor and Sw		0.05	ohm-m
Resistivity of Mud Filtrate for Sw		0.00	ohm-m
Source for Rt		0.00	
Source for Rxo		0.00	

High Resolution Temperature Calibration MAI-C.A 490

Field Calibration on 17-DEC-2012,07:08

	Measured	Calibrated(Deg C)
Lower	10.00	10.00
Upper	100.00	100.00

High Resolution Temperature Constants MAI-C.A 490

Last Edited on 17-DEC-2012,20:09

Pre-filter Length	11
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Photo Density Calibration MPD-C.J 438

Base Calibration on 06-APR-2023 14:01
Field Check on 06-APR-2023 14:07

Density Calibration	Measured		Calibrated (sdu)	
	Near	Far	Near	Far
Base Calibration				
Background	973	1140		
Reference 1	44856	20382	59814	31141
Reference 2	18117	2083	24963	2524
Field Check at Base	972.8	1140.5		
Field Check	974.0	1140.0		

PE Calibration

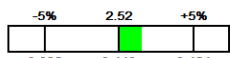
Base Calibration	Measured	Calibrated
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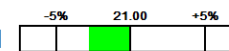
Base Calibration	WS	WH	Ratio	Ratio
Background	183	877		
Reference 1	20347	44708	0.460	0.368
Reference 2	5757	18012	0.325	0.273

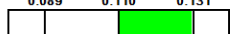
Field Check at Base
182.7 877.2

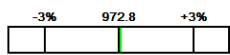
Field Check
182.8 875.9

Photo Density Calibration Tolerances MPD-C.J 438

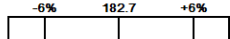
Near Density Ratio 2.56 

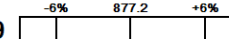
Far Density Ratio 20.41 

PE Calibration 0.131 

Near Den. Field Check 974.0 

Far Den. Field Check 1140.0 

PE WS Field Check 182.8 

PE WH Field Check 875.9 

Density Constants MPD-C.J 438

Last Edited on 26-MAY-2023,12:37

Density Source Id	H79956B	
Nylon Calibrator Number	DNCE 687	
Aluminium Calibrator Number	DACD 526	
Density Shoe Profile	8 inch	
Caliper Source for Processing	Density Caliper	
PE Correction to Density	Not Applied	
Mud Density	1.09	gm/cc
Mud Density Type	Non-Barite	
Mud Filtrate Density	1.00	gm/cc
Dry Hole Mud Filtrate Density	1.00	gm/cc
DNCT	0.00	gm/cc
CRCT	0.00	gm/cc
Density Z/A Correction	Hybrid	
Precision Enhanced Density Processing	Applied	
Matrix Density (gm/cc)	Depth (ft)	
2.71	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	

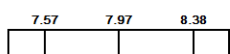
Caliper Calibration MPD-C.J 438

Base Calibration on 06-APR-2023 14:51
Field Calibration on 06-APR-2023 14:52

Base Calibration	Measured	Calibrator Size (in)
Reading No		
1	15285	4.01
2	23599	5.96
3	32288	7.97
4	40480	9.86
5	49552	11.88
6	N/A	N/A

Field Calibration
Measured Caliper (in) Actual Caliper (in)
7.98 7.97

Caliper Calibration Tolerances MPD-C.J 438

Long Arm Field Cal. 7.98  in

DOWNHOLE EQUIPMENT

Cablehead, 11 pin
 CBH-CC 348 LG: 2.40 ft WT: 24.3 lb OD: 2.244 in

11C-11B Compact Tool Adaptor
 MTA-K.A 189 LG: 1.53 ft WT: 13.2 lb OD: 2.240 in

Compact Comms Gamma
 MCG-E.A 551 LG: 8.70 ft WT: 63.9 lb OD: 2.244 in

Compact Micro-Resistivity
 MMR-C.A 257 LG: 8.59 ft WT: 81.6 lb OD: 4.882 in

Compact Neutron
 MDN-C.A 399 LG: 5.04 ft WT: 50.7 lb OD: 2.244 in

Compact Density/Caliper
 MPD-C.J 438 LG: 9.59 ft WT: 90.4 lb OD: 2.449 in

Compact Vee Arm Caliper
 MVC-A.A 146 LG: 8.06 ft WT: 61.7 lb OD: 2.244 in

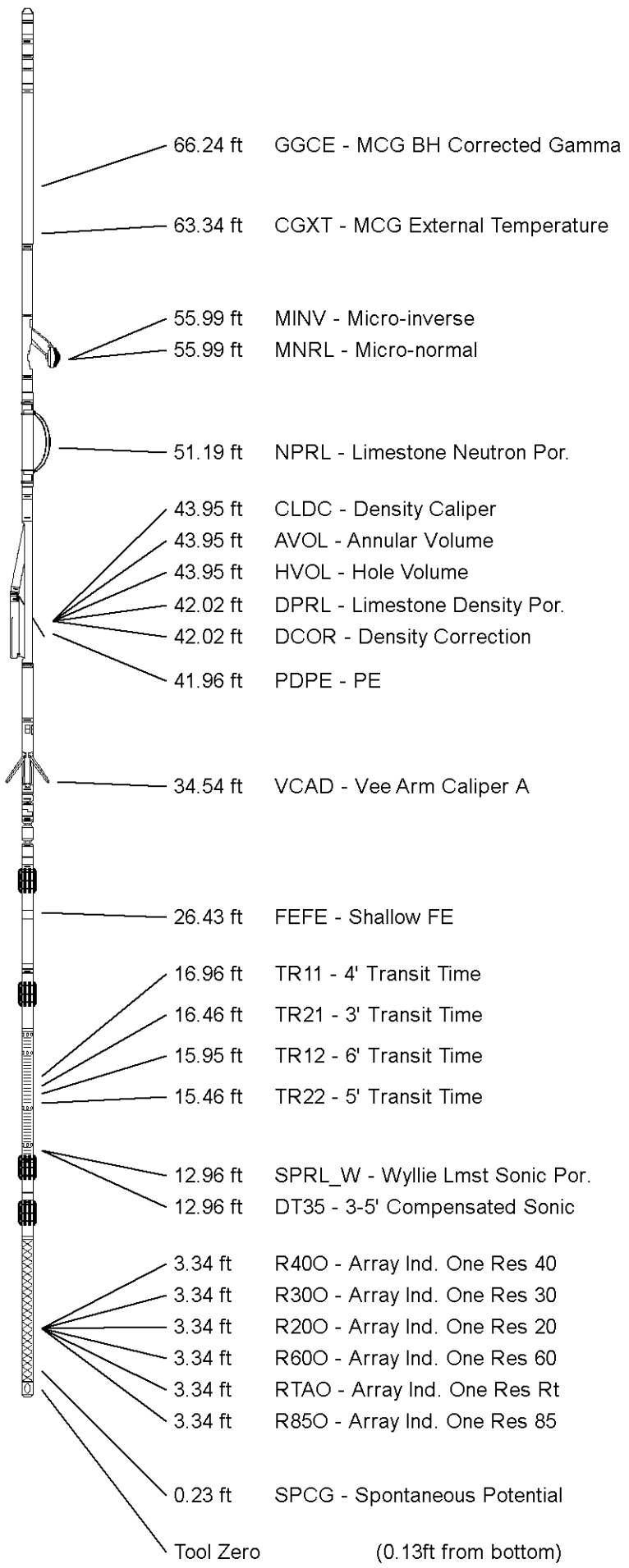
Compact Knuckle Joint
 SKJ-E.B 694 LG: 2.17 ft WT: 24.3 lb OD: 2.244 in

Compact Focussed Electric
 MFE-C.A 399 LG: 6.05 ft WT: 48.5 lb OD: 2.244 in

Compact Sonic
 MSS-C.K 374 LG: 12.52 ft WT: 72.8 lb OD: 2.244 in

Compact Induction
 MAI-C.A 490 LG: 10.81 ft WT: 48.5 lb OD: 2.244 in

Total Length: 75.45 ft Weight: 579.8 lb



All measurements relative to tool zero.

WELL PFAFFLY #1-12
FIELD NORTH CHEYENNE PROJECT/ PFAFFLY PROSPECT
PROVINCE/COUNTY KIT CARSON
COUNTRY/STATE COLORADO

Elevation Kelly Bushing	4479.00	feet	Last Reading	648.00	feet
Elevation Drill Floor	4479.00	feet	First Reading	6037.00	feet
Elevation Ground Level	4466.90	feet	Depth Driller	6076.00	feet
			Depth Logger	6082.00	feet



BOREHOLE PROFILE