

Schlumberger

Company: Kerr-McGee Oil & Gas Onshore LP

Well: Barney 35-14

Field: **Wattenberg**

County: **Weld** State: **Colorado**

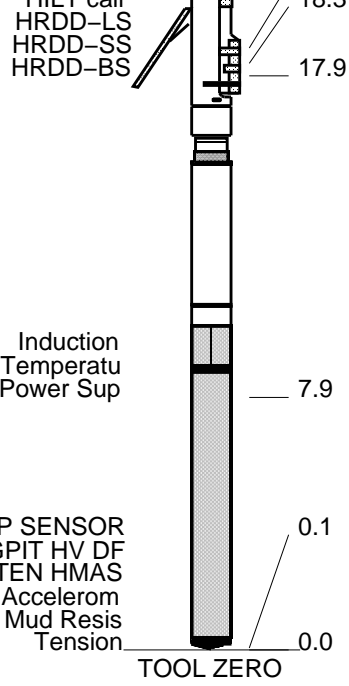
State: Colorado

PLATFORM EXPRESS ARRAY INDUCTION LINEAR CORRELATION

County: Weld	
Field: Wattenberg	
Location: SESW Sec 14, T3N, R66W	
Well: Barney 35-14	
Company: Kerr-McGee Oil & Gas Onshore	
<div style="text-align: center;"> <h1>PLATFORM EXPRESS</h1> <h2>ARRAY INDUCTION</h2> <h3>LINEAR CORRELATION</h3> </div>	
LOCATION	
SESW Sec 14, T3N, R66W SHL: 509' FSL & 2137' FWL BHL: 50' FSL & 1400' FWL (Estimated)	Elev.: K.B. 4942 ft G.L. 4930 ft D.F. 4943 ft
Permanent Datum: _____ Log Measured From: KELLY BUSHING _____ Drilling Measured From: KELLY BUSHING _____	Elev.: 4930 ft _____ 12.0 ft above Perm. Datum
API Serial No. 05-123-24141	Section 14 Township 3N Range 66W

[illegible]

Logging Date						10-Sep-2006					
Run Number						1					
Depth Driller						7670 ft					
Schlumberger Depth						7676 ft					
Bottom Log Interval						7669 ft					
Top Log Interval						672 ft					
Casing Driller Size @ Depth						8.625 in @ 630 ft					
Casing Schlumberger						672 ft					
Bit Size						7.875 in					
Type Fluid In Hole						FRESH WATER GEL					
Density						9.2 lbm/gal					
Viscosity						40 s					
Fluid Loss						PH					
Source Of Sample						AIT Sensor					
RM @ Measured Temperature						4.090 ohm.m @ 85 degF					
RMF @ Measured Temperature						3.500 ohm.m @ 85 degF					
RMC @ Measured Temperature						4.500 ohm.m @ 85 degF					
Source RMF						Calculated					
RMC						Calculated					
RM @ MRT						1.824 @ 199 1.561 @ 199					
Maximum Recorded Temperatures											
Circulation Stopped						Time					
Logger On Bottom						Time					
Unit Number						Location					
Recorded By						ROY DAVIS					
Witnessed By						RON BROWN					



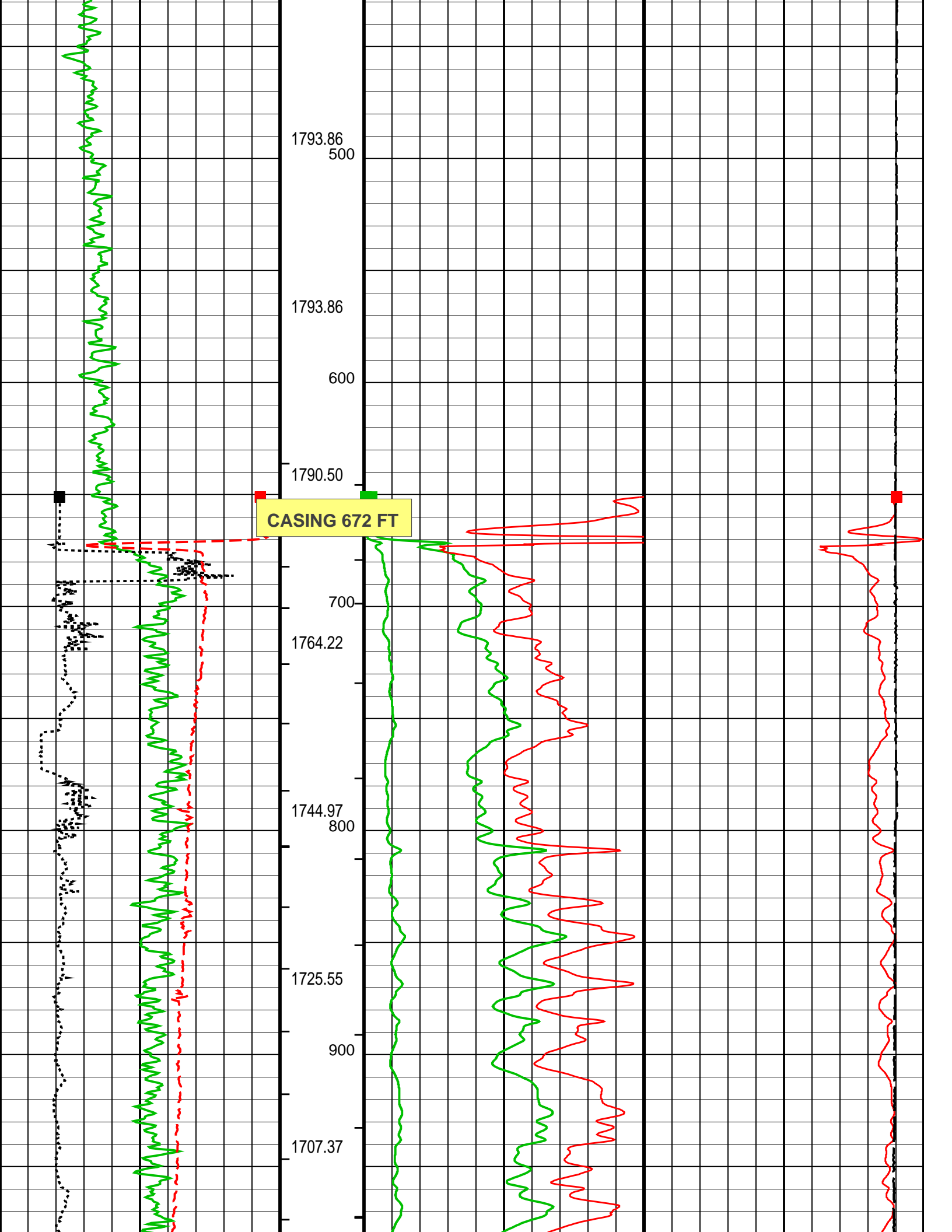
MAXIMUM STRING DIAMETER 4.63 IN
MEASUREMENTS RELATIVE TO TOOL ZERO
ALL LENGTHS IN FEET

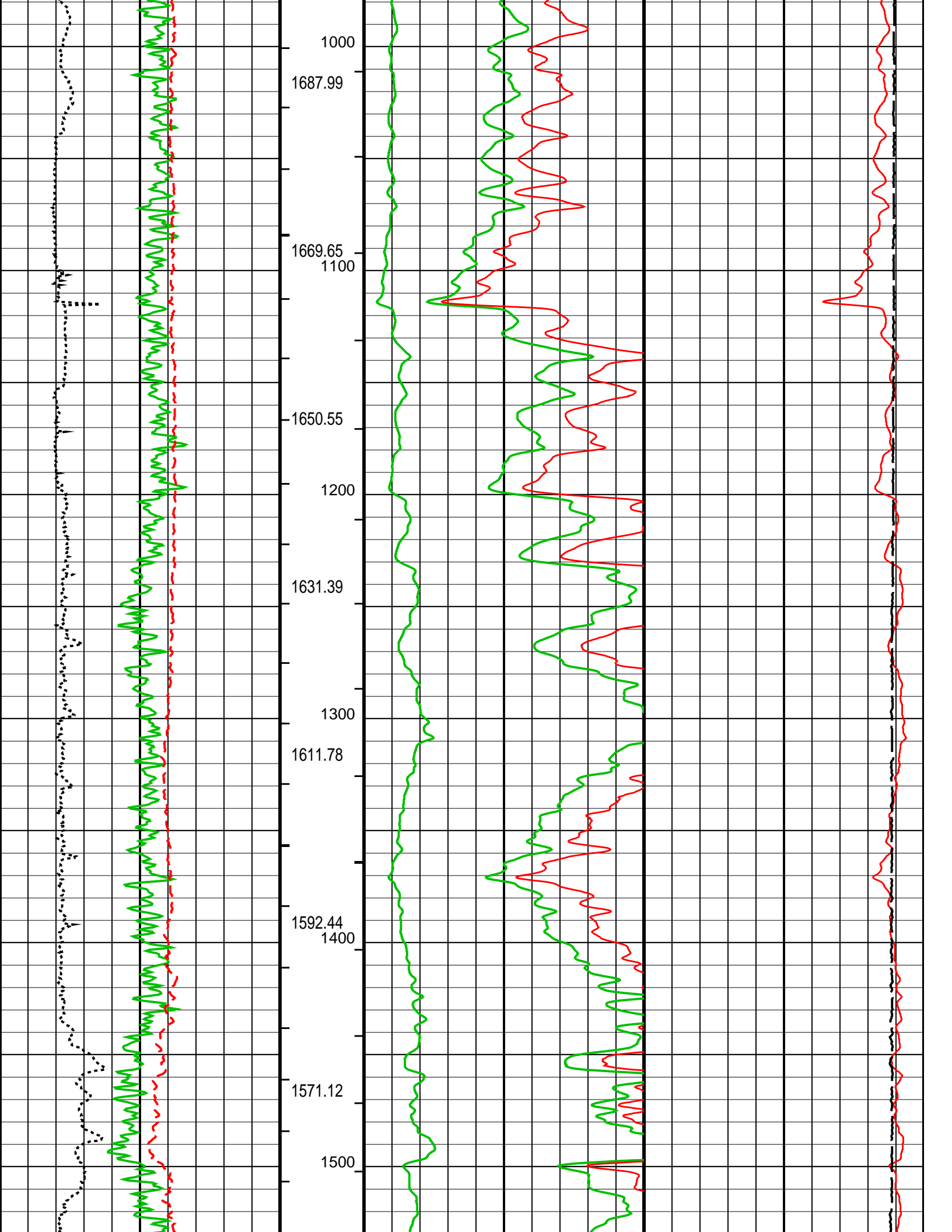
Client: Kerr-Mcgee
Well: Barney 35-14
Field:
State: CO
Country: USA

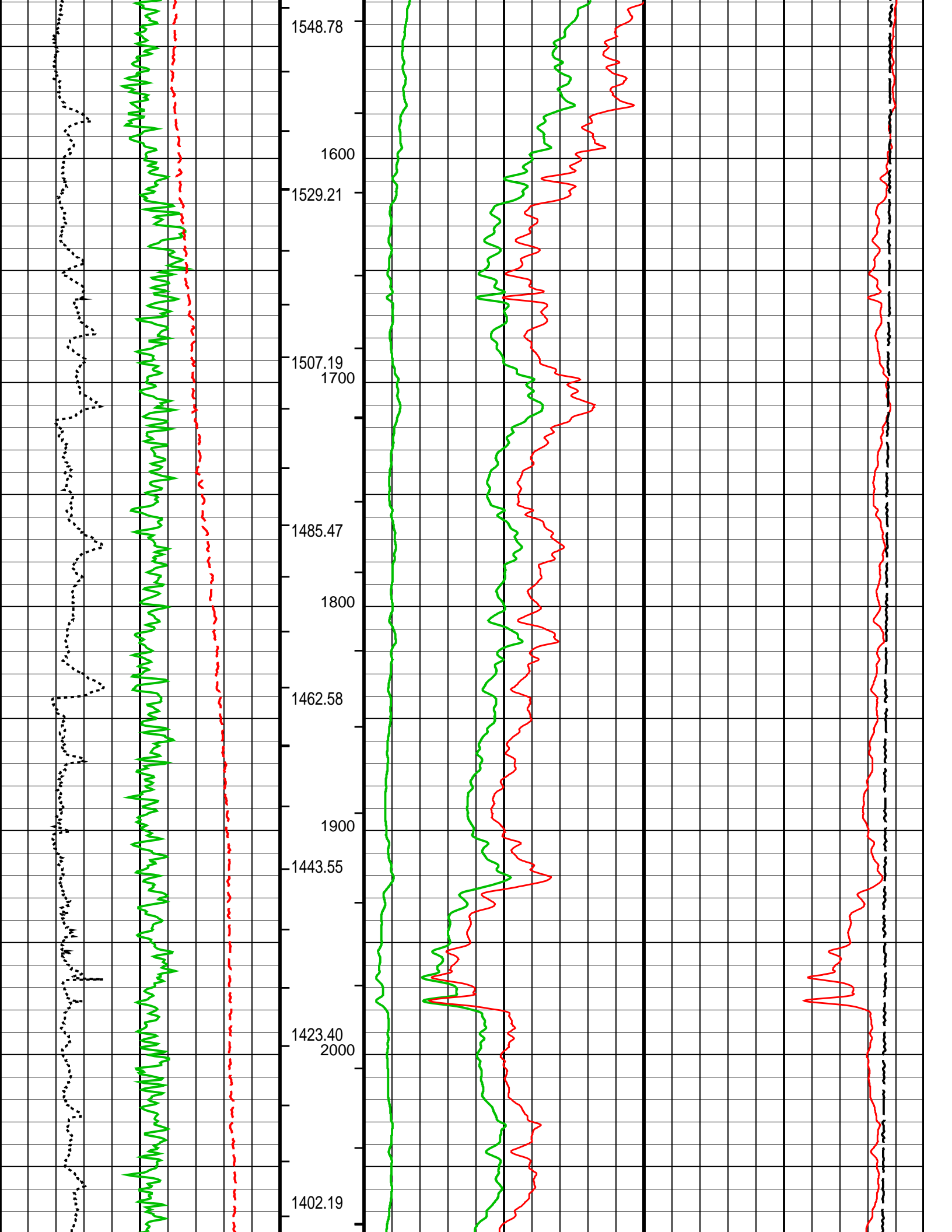
Drawing Date 9/9/2006
API #05-123-24141

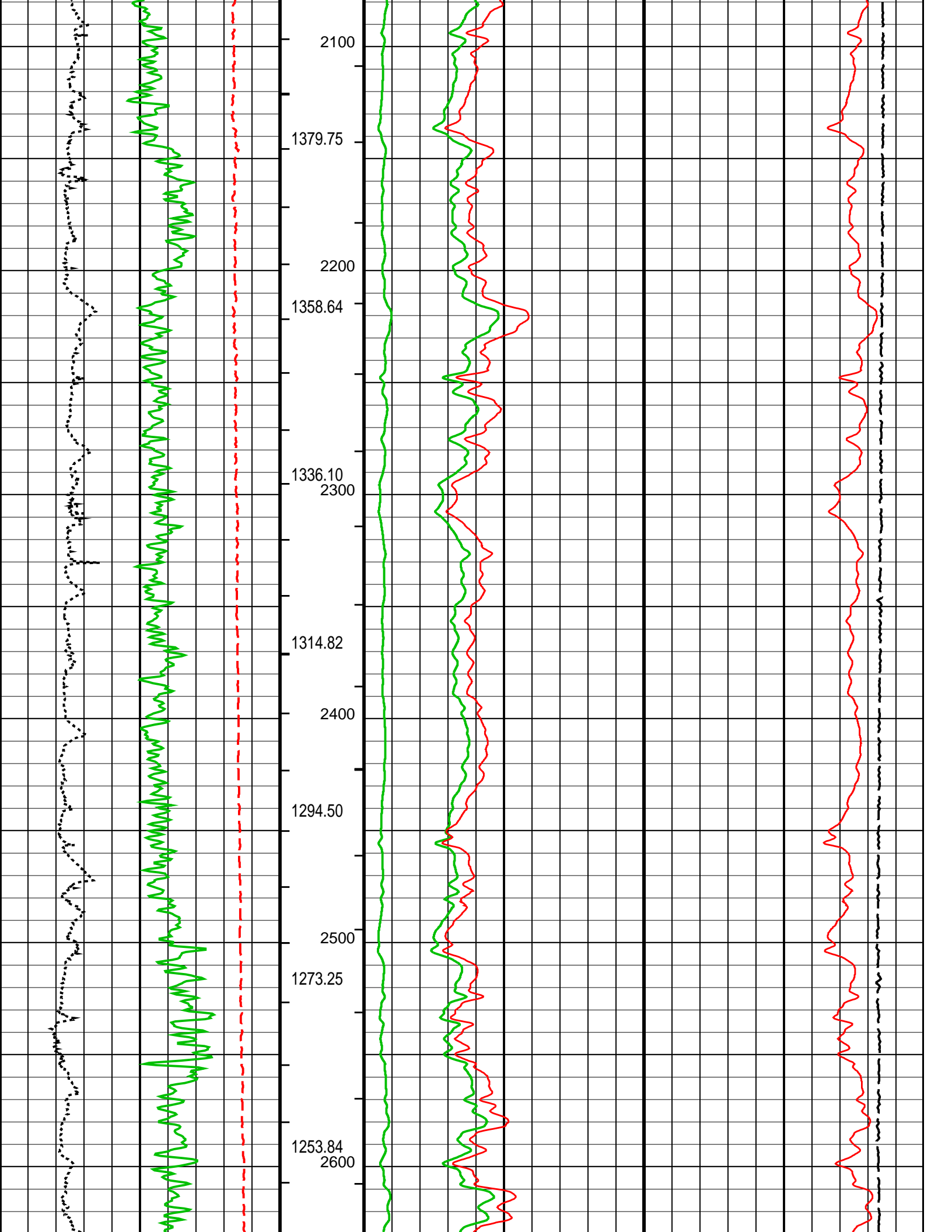
Rig Name: Patterson 184
Reference Datum: Kelly Bushing
Elevation: 4930.0 ft

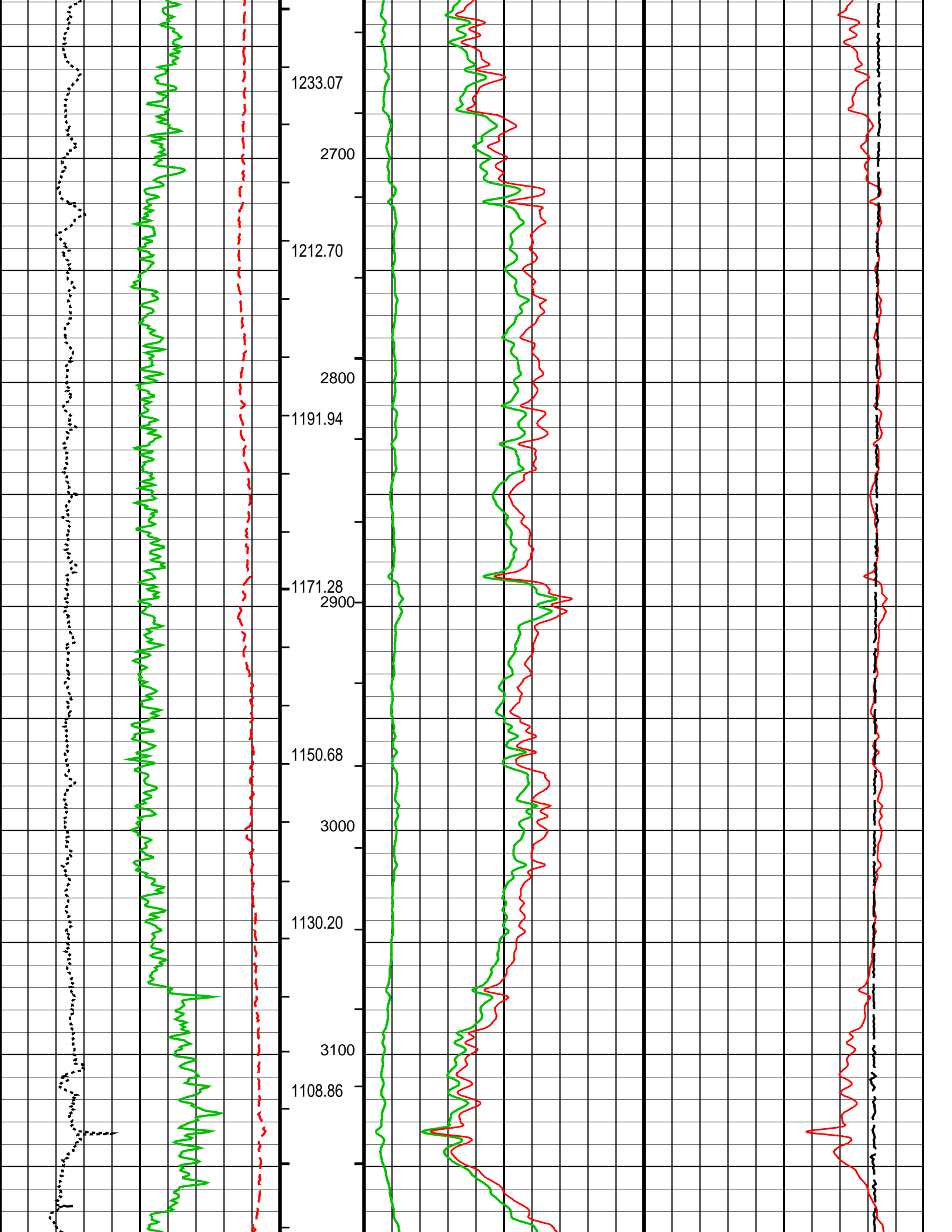
Production String	(in)		(ft)	Well Schematic	(ft)	(in)		Casing String
	OD	ID	MD		MD	OD	ID	
					0.0	8.625		Casing String, 24.0 lbm/ft
					630.0	8.625		Casing Shoe
					630.0	7.875		Borehole Segment

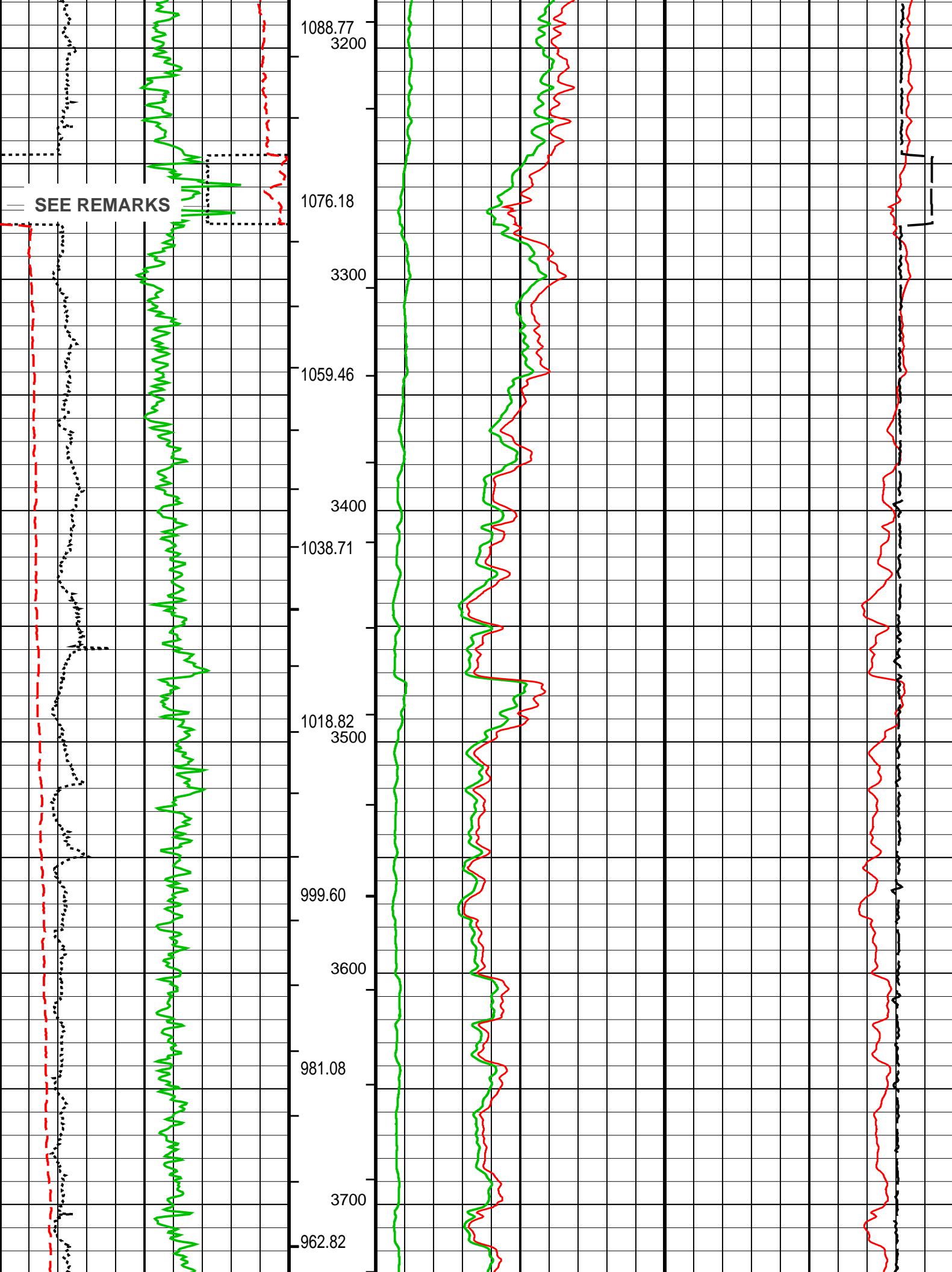


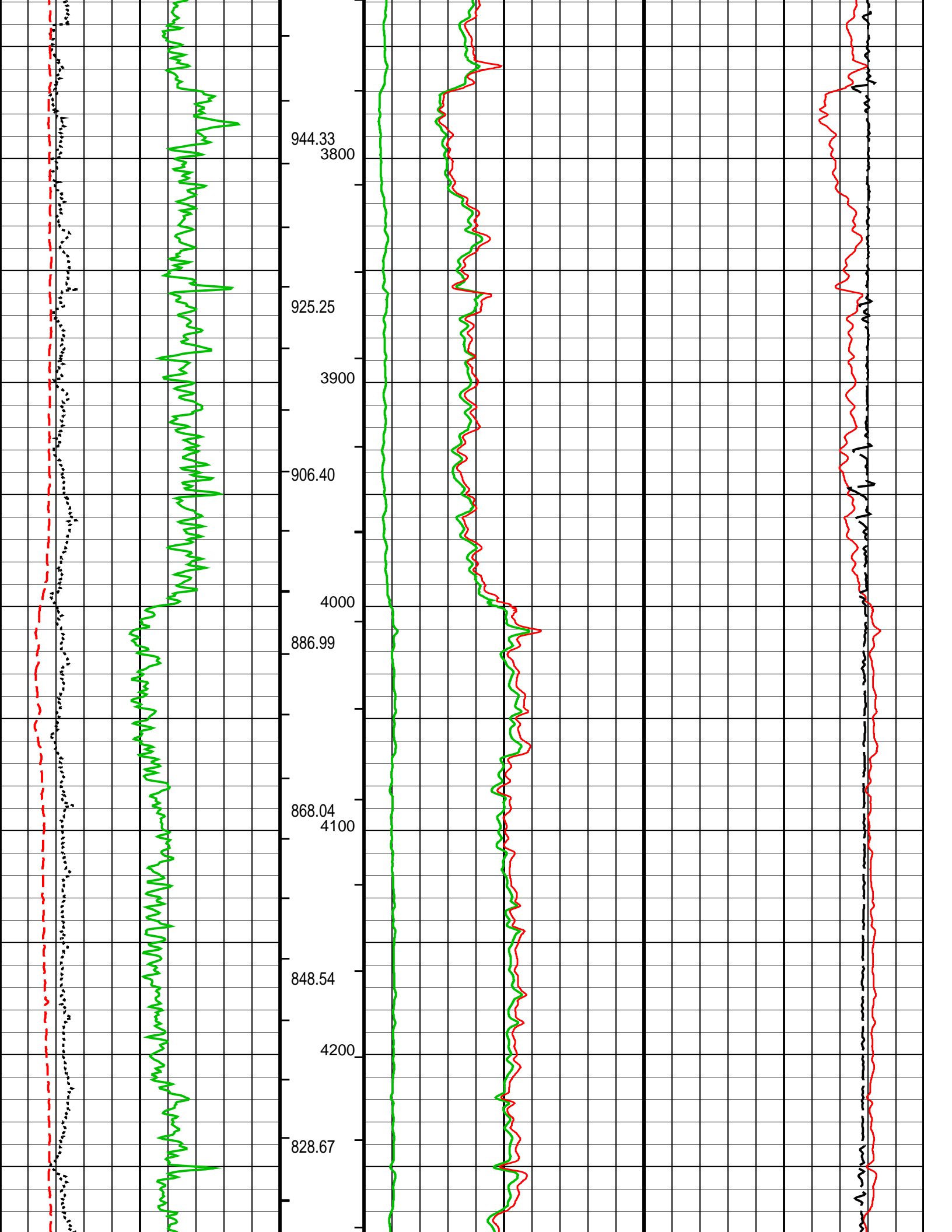


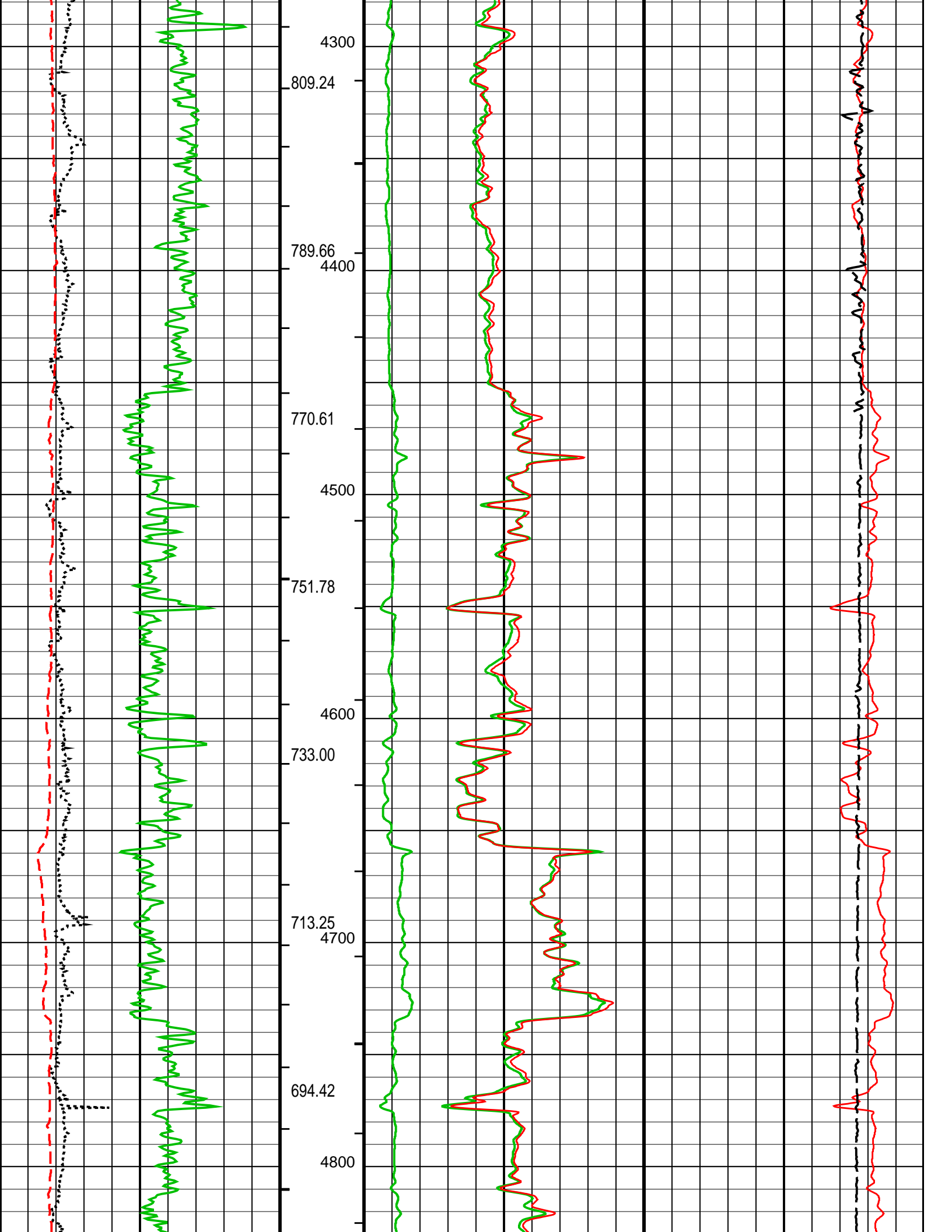


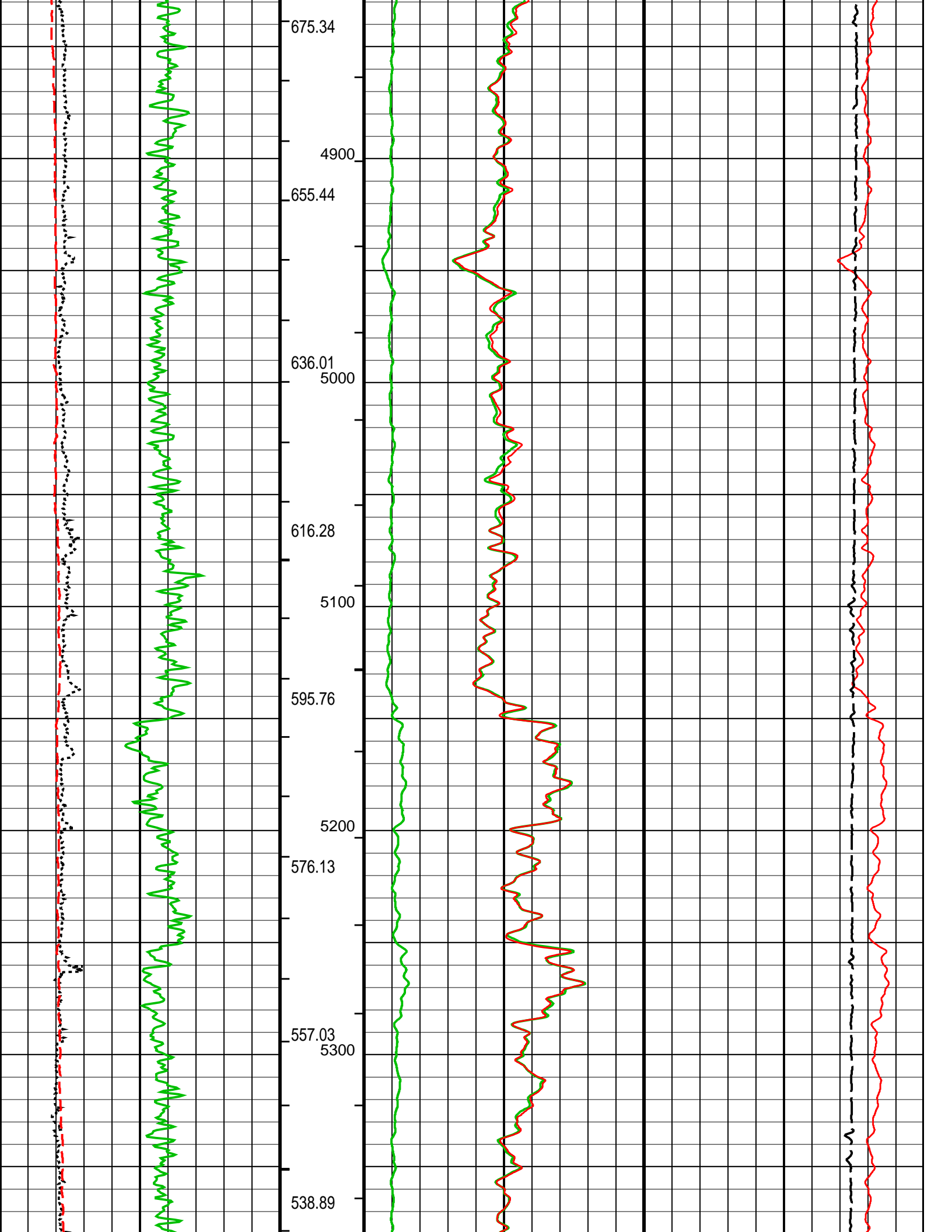


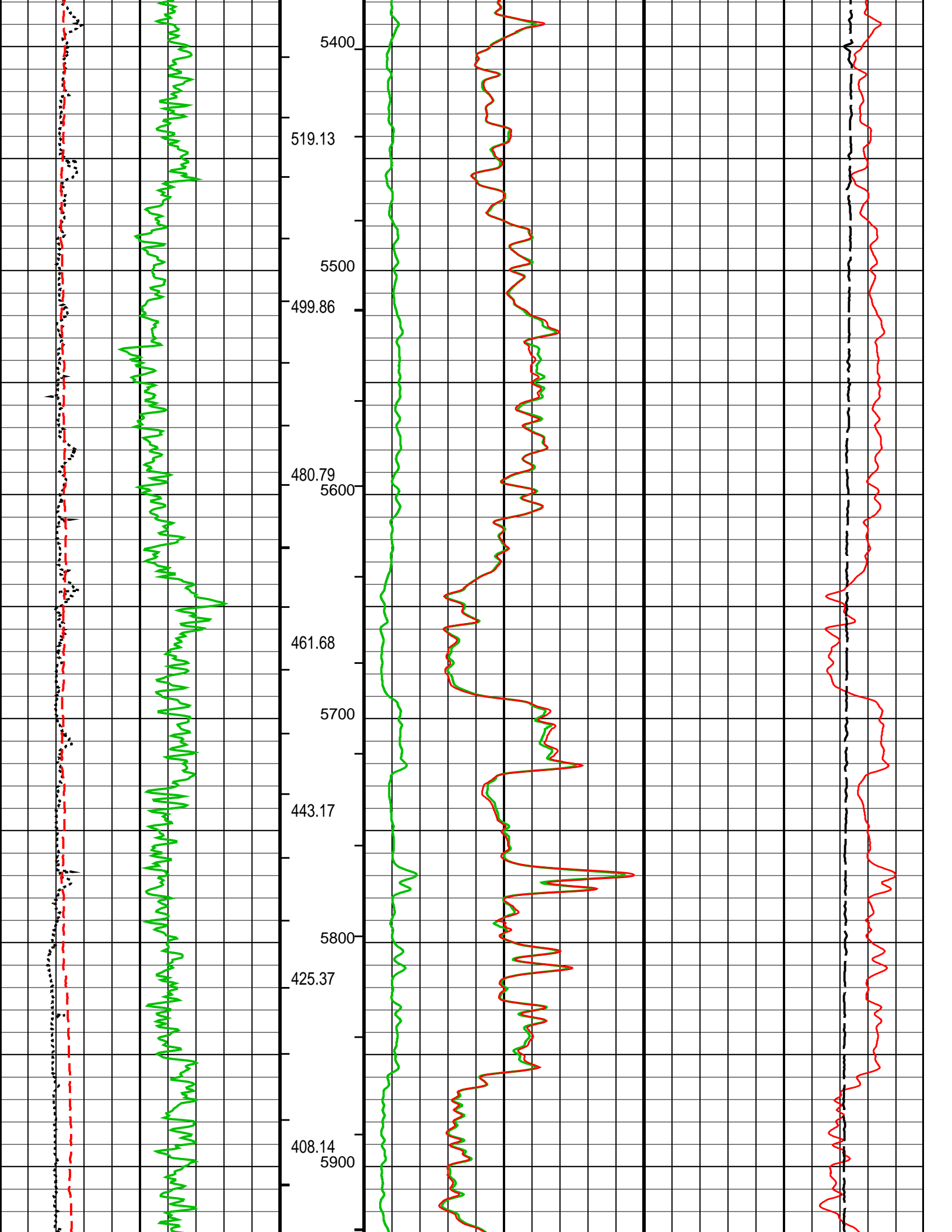


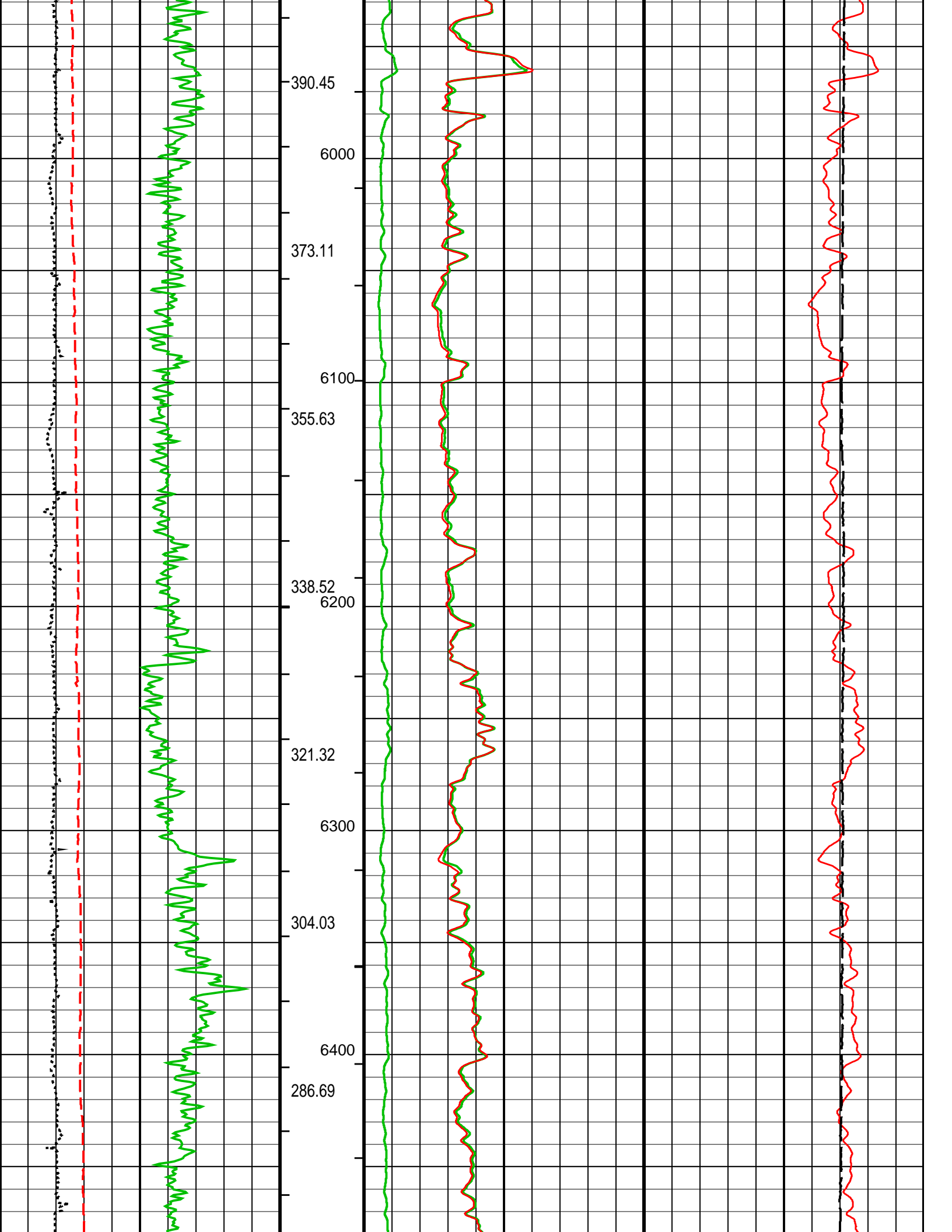


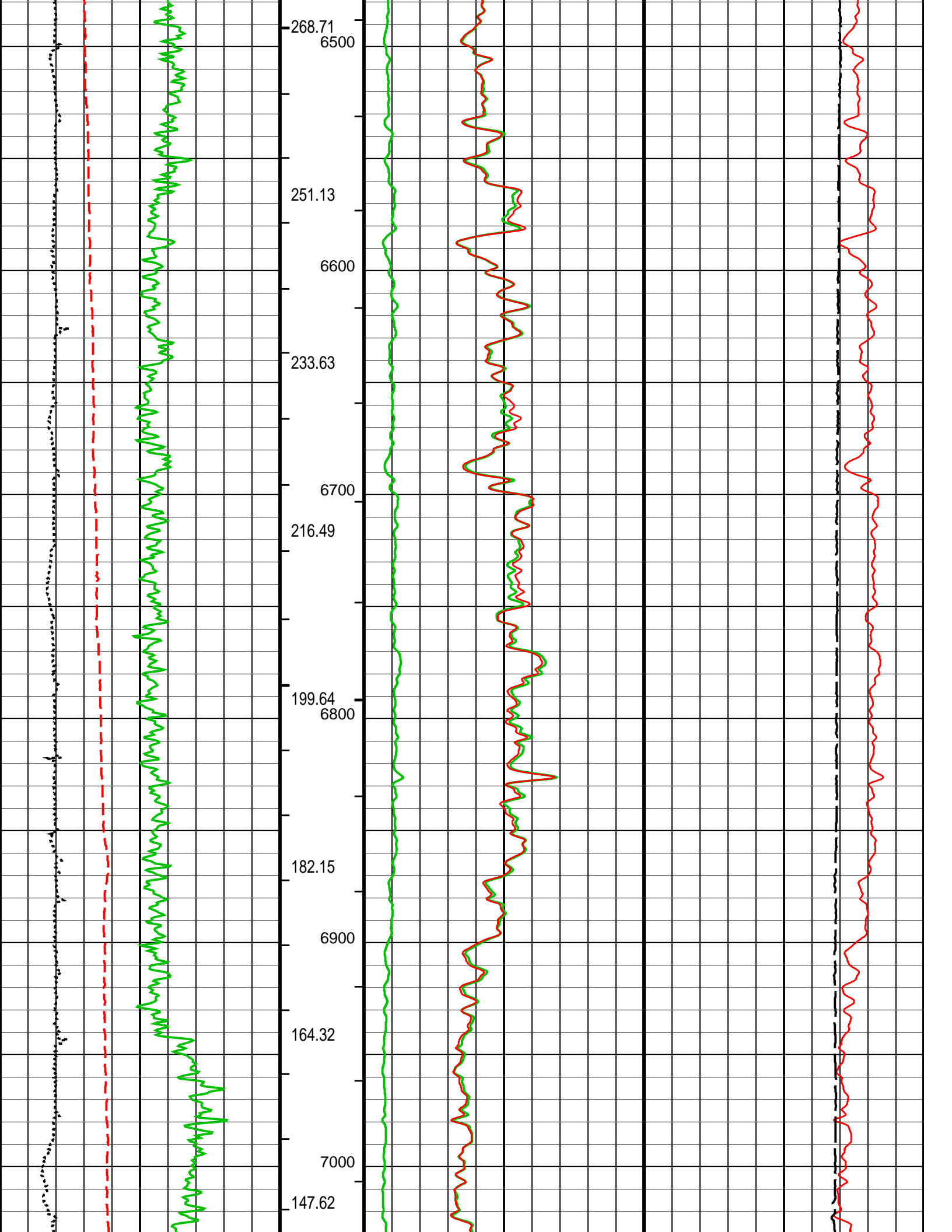


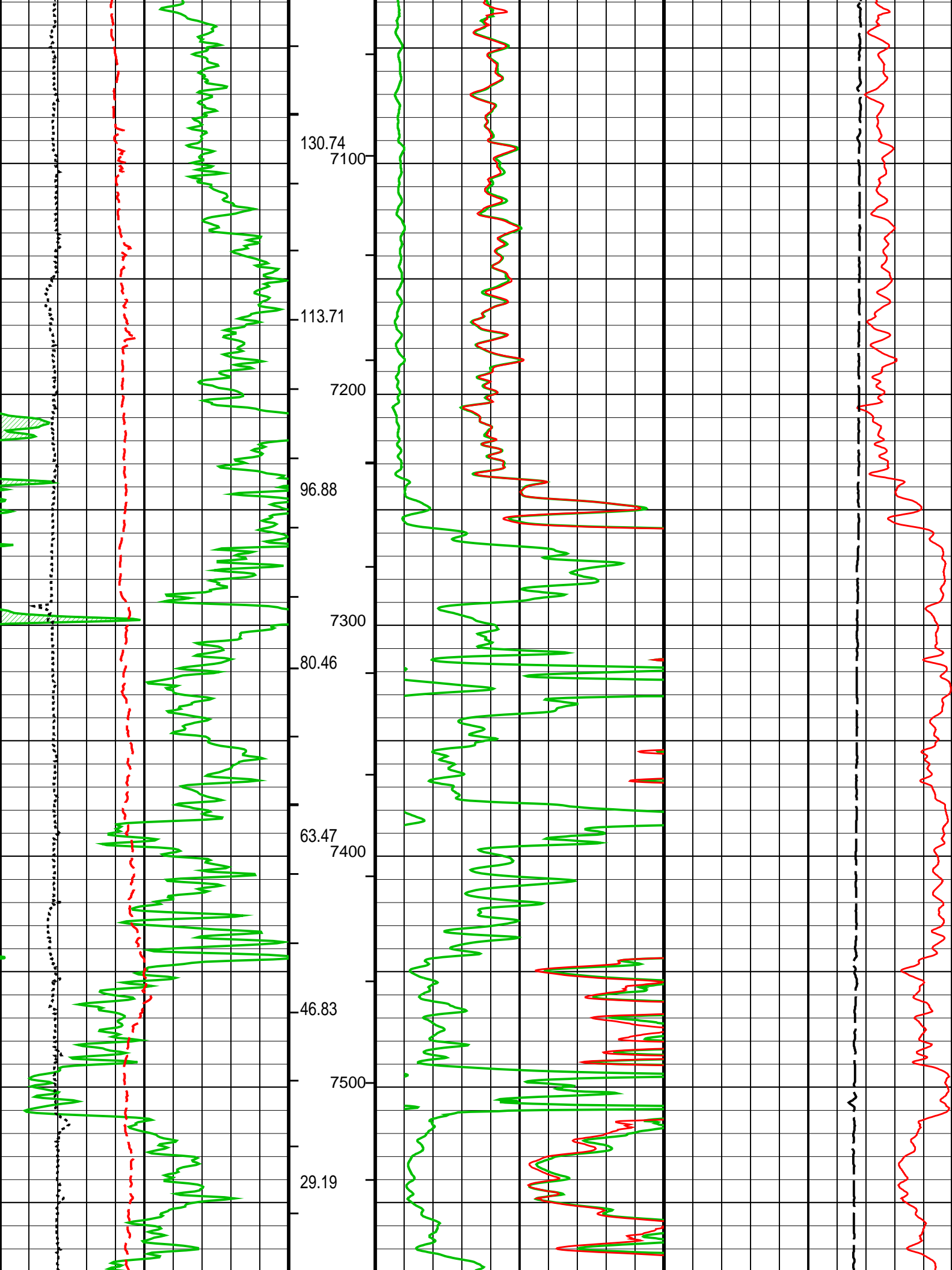


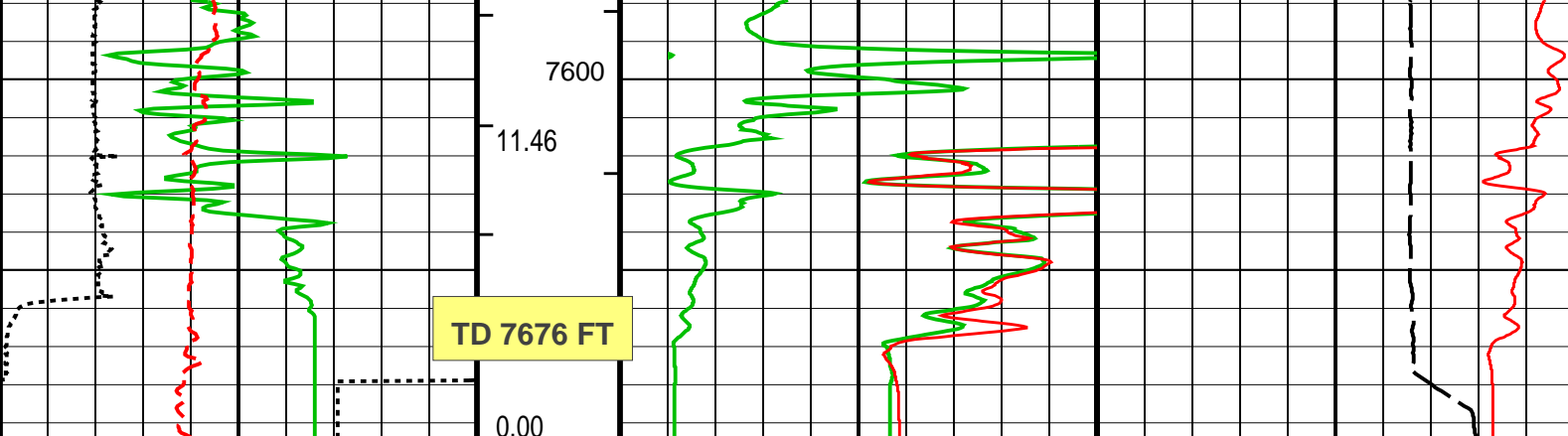












MAIN PASS: * PLATFORM EXPRESS – ARRAY INDUCTION *****

<div>Gamma Ray Backup</div>	Cement Volume (ICV) (F3)	<div>AIT-H 10 Inch Investigation (AHF10)</div> <div>0 (OHMM) 50</div>	<div>AIT-H 90 Inch Investigation Conductivity (AHFCO90)</div> <div>1000 (MM/M) 0</div>
<div>Gamma Ray (GR)</div> <div>0 (GAPI) 200</div>		<div>AIT-H 10 Inch Investigation (AHF10)</div> <div>0 (OHMM) 10</div>	<div>Tension (TENS)</div> <div>10000 (LBF) 0</div>
<div>Caliper (HCAL)</div> <div>6 (IN) 16</div>		<div>AIT-H 90 Inch Investigation (AHF90)</div> <div>0 (OHMM) 10</div>	
<div>SP (SP)</div> <div>-160 (MV) 40</div>			

PIP SUMMARY

- └ Integrated Cement Volume Major Pip Every 100 F3
- └ Integrated Cement Volume Minor Pip Every 10 F3
- └ Integrated Hole Volume Major Pip Every 100 F3
- └ Integrated Hole Volume Minor Pip Every 10 F3

Parameters

DLIS Name	Description	Value	
HILTB-FTB: High resolution Integrated Logging Tool-DTS			
AHBHM	Array Induction Borehole Correction Mode	2_ComputeStandoff	
AHBHV	Array Induction Borehole Correction Code Version Number	880	
AHBLM	Array Induction Basic Logs Mode	6_One_Two_and_Four	
AHBLV	Array Induction Basic Logs Code Version Number	108	
AHCDE	Array Induction Casing Detection Enable	Yes	
AHCEN	Array Induction Tool Centering Flag (in Borehole)	Eccentered	
AHFRSV	Array Induction Response Set Version for Four ft Resolution	40.70.24.21	
AHMRF	Array Induction Mud Resistivity Factor	1	
AHORSV	Array Induction Response Set Version for One ft Resolution	40.70.24.21	
AHRFV	Array Induction Radial Profiling Code Version Number	700	
AHRPV	Array Induction Radial Parametrization Code Version Number	223	
AHSTA	Array Induction Tool Standoff	1.5	IN
AHTRSV	Array Induction Response Set Version for Two ft Resolution	40.70.24.21	
BHT	Bottom Hole Temperature (used in calculations)	212	DEGF
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	AITH_RESIST	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
SHT	Surface Hole Temperature	68	DEGF
SPNV	SP Next Value	0	MV
DIR: Directional Survey Computation			
SPVD	TVD of Starting Point	0	FT
TIMD	Along-hole depth of Tie-in Point	0	FT
TIVD	TVD of Tie-in Point	0	FT
FEQL: Formation Evaluation Quick Look			
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
HOLEV: Integrated Hole/Cement Volume			
BHT	Bottom Hole Temperature (used in calculations)	212	DEGF
FCD	Future Casing (Outer) Diameter	4.5	IN
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG

GGRD	Geothermal Gradient	0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	AITH_RESIST	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
HVCS	Integrated Hole Volume Caliper Selection	HCAL	
SHT	Surface Hole Temperature	68	DEGF
PERT: Preliminary Evaluation – Real Time			
BHT	Bottom Hole Temperature (used in calculations)	212	DEGF
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	AITH_RESIST	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
SHT	Surface Hole Temperature	68	DEGF
System and Miscellaneous			
BS	Bit Size	7.875	IN
DFD	Drilling Fluid Density	9.20	LB/G
DO	Depth Offset for Playback	0.0	FT
MST	Mud Sample Temperature	85.00	DEGF
PP	Playback Processing	NORMAL	
TD	Total Depth	7676	FT

Format: ERES_S2 Vertical Scale: 2" per 100' Graphics File Created: 11-Sep-2006 15:05

OP System Version: 13C0-300

MCM

HILTB-FTB	SRPC-2788-HILT	GPIT-C	13C0-300
DTC-H	13C0-300		

Input DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_049PUP	FN:40	PRODUCER	11-Sep-2006 14:39	7694.0 FT	56.0 FT
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Output DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_053PUP	FN:44	PRODUCER	11-Sep-2006 15:05		
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Schlumberger

UPPER RESISTIVITY LOG 5" = 100'

MAXIS Field Log

Input DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_015LUP	FN:14	PRODUCER	10-Sep-2006 04:31	7692.0 FT	3248.5 FT
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Output DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_030PUP	FN:28	PRODUCER	10-Sep-2006 07:01	6000.0 FT	3503.5 FT
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Integrated Hole/Cement Volume Summary

Hole Volume = 909.02 F3

Cement Volume = 633.31 F3 (assuming 4.50 IN casing O.D.)

Computed from 6000.0 FT to 3504.0 FT using data channel(s) HCAL

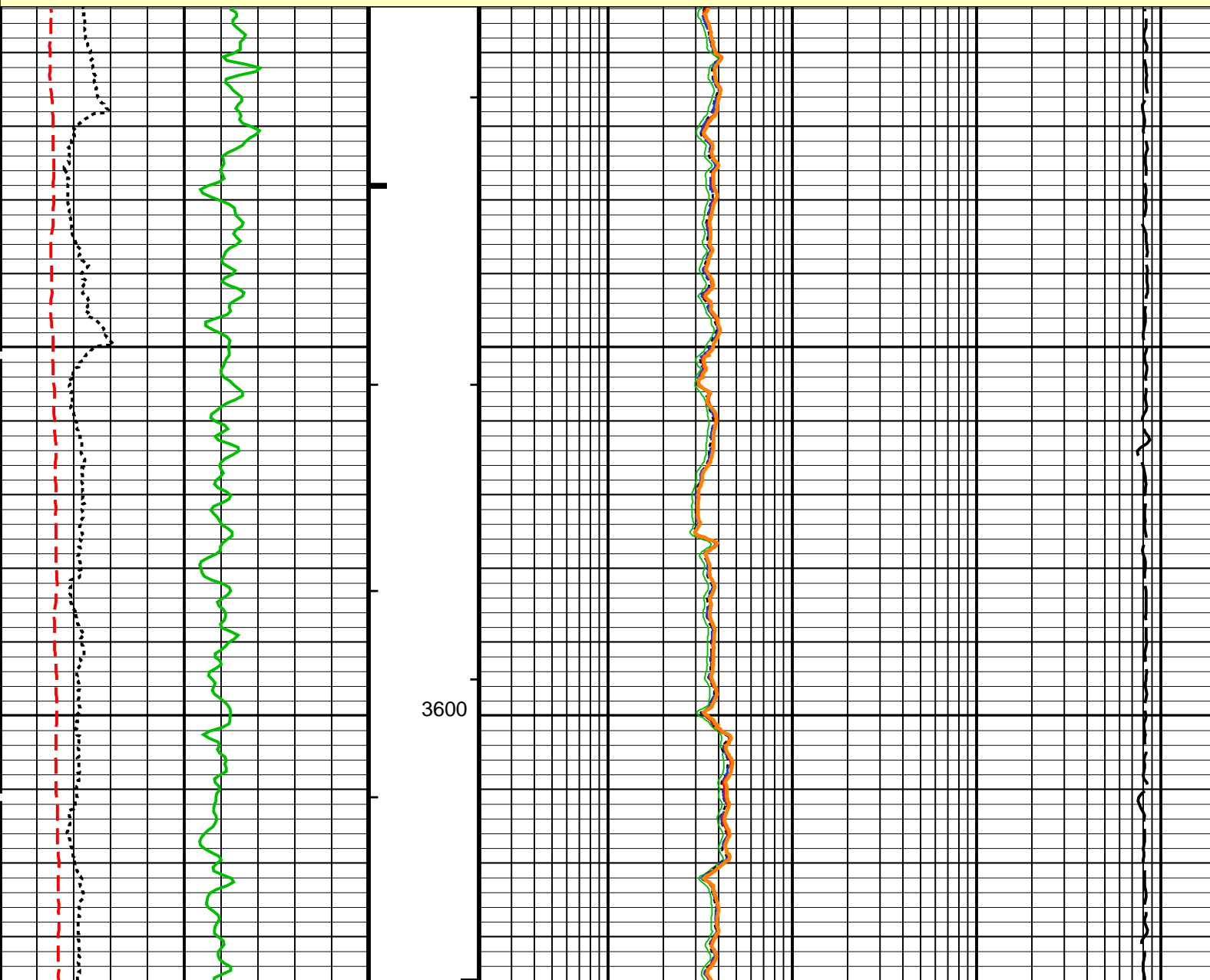
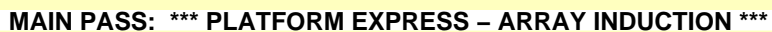
OP System Version: 13C0-300

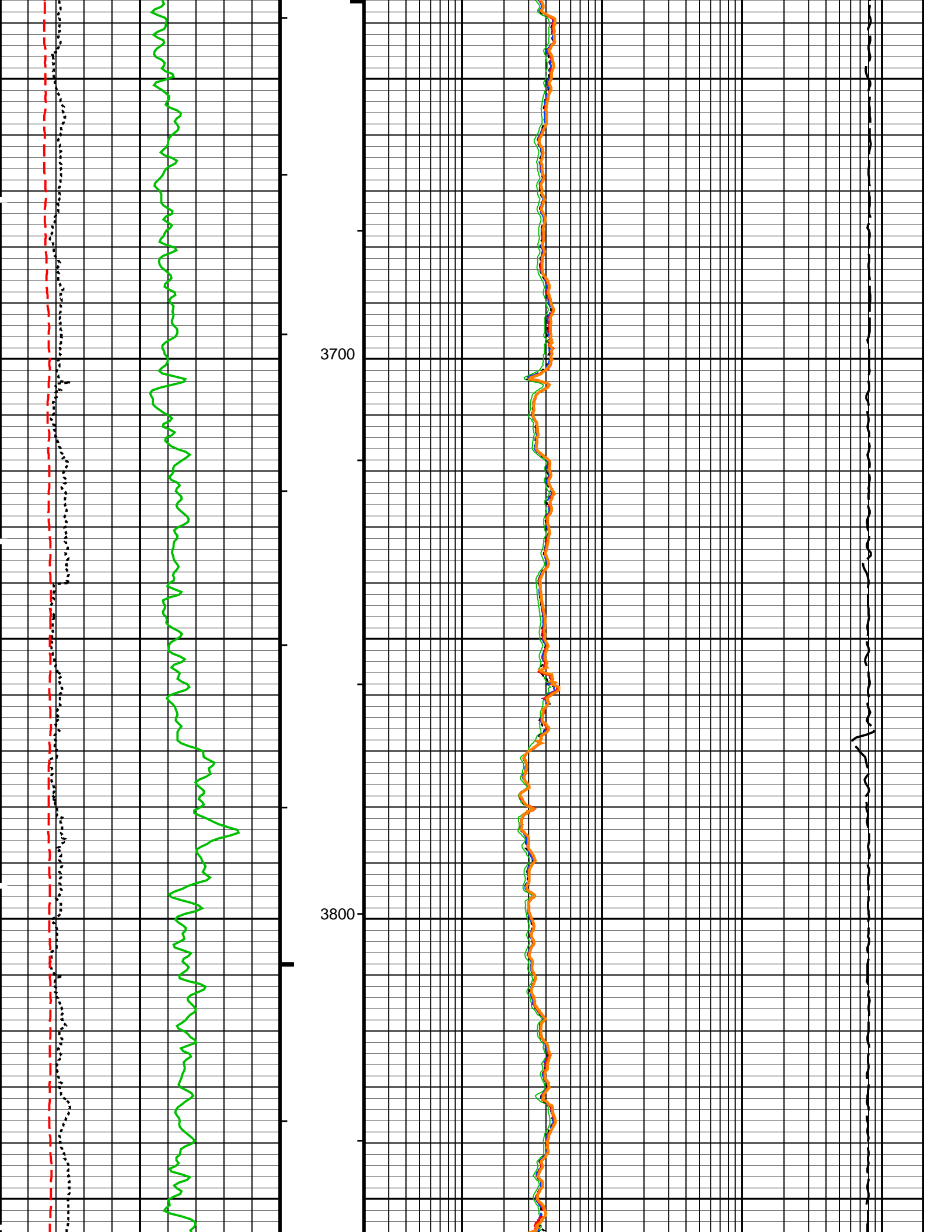
MCM

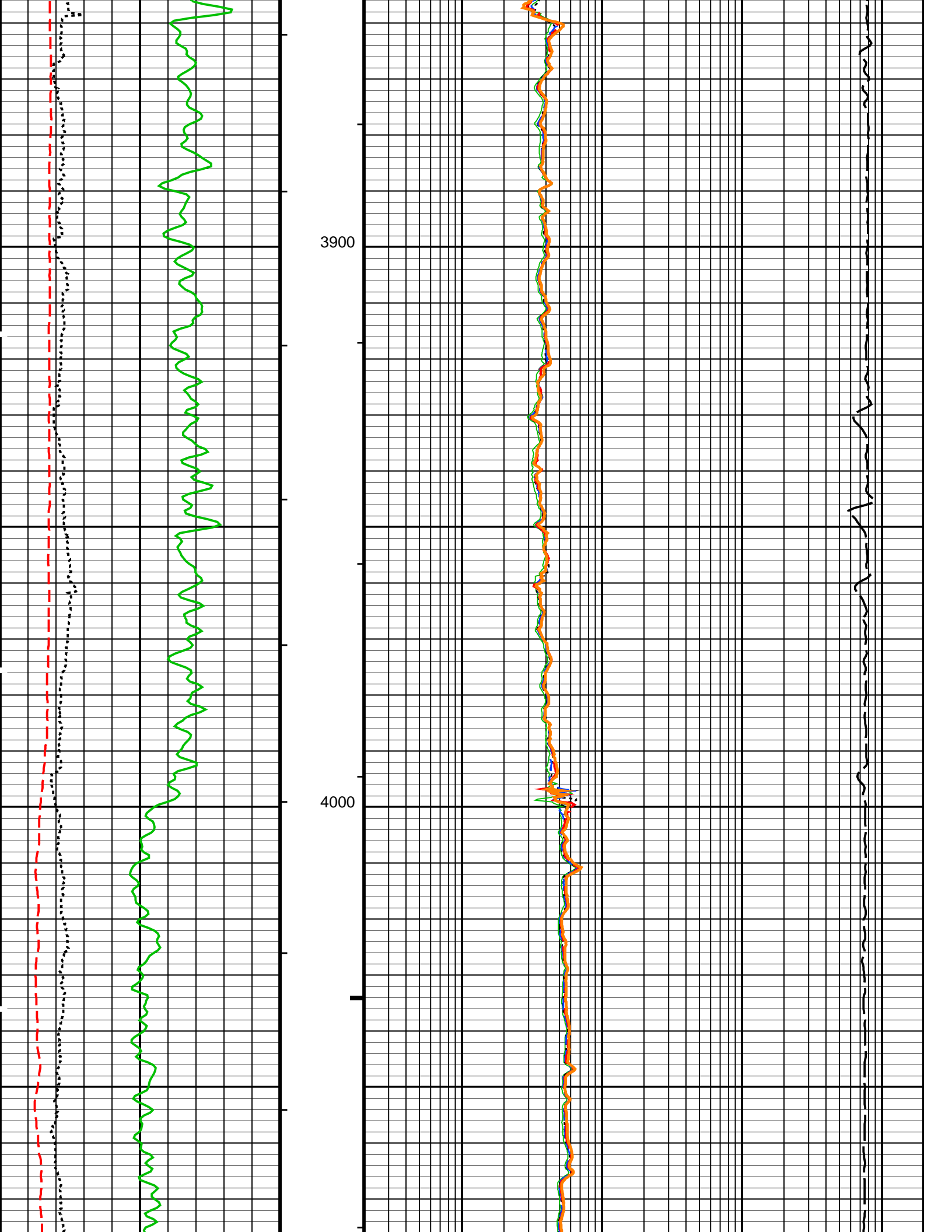
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DTC-H	13C0-300		

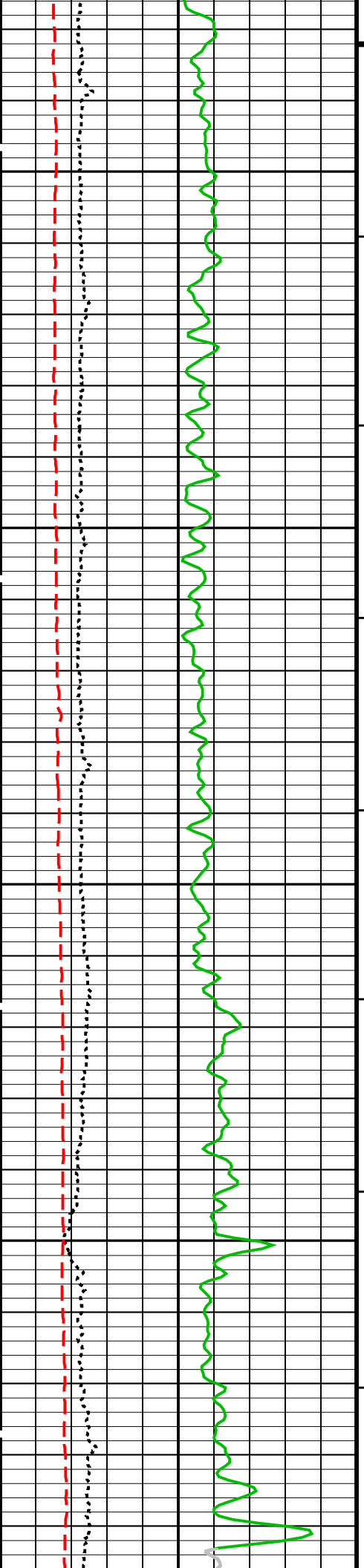
PIP SUMMARY

Time Mark Every 60 S



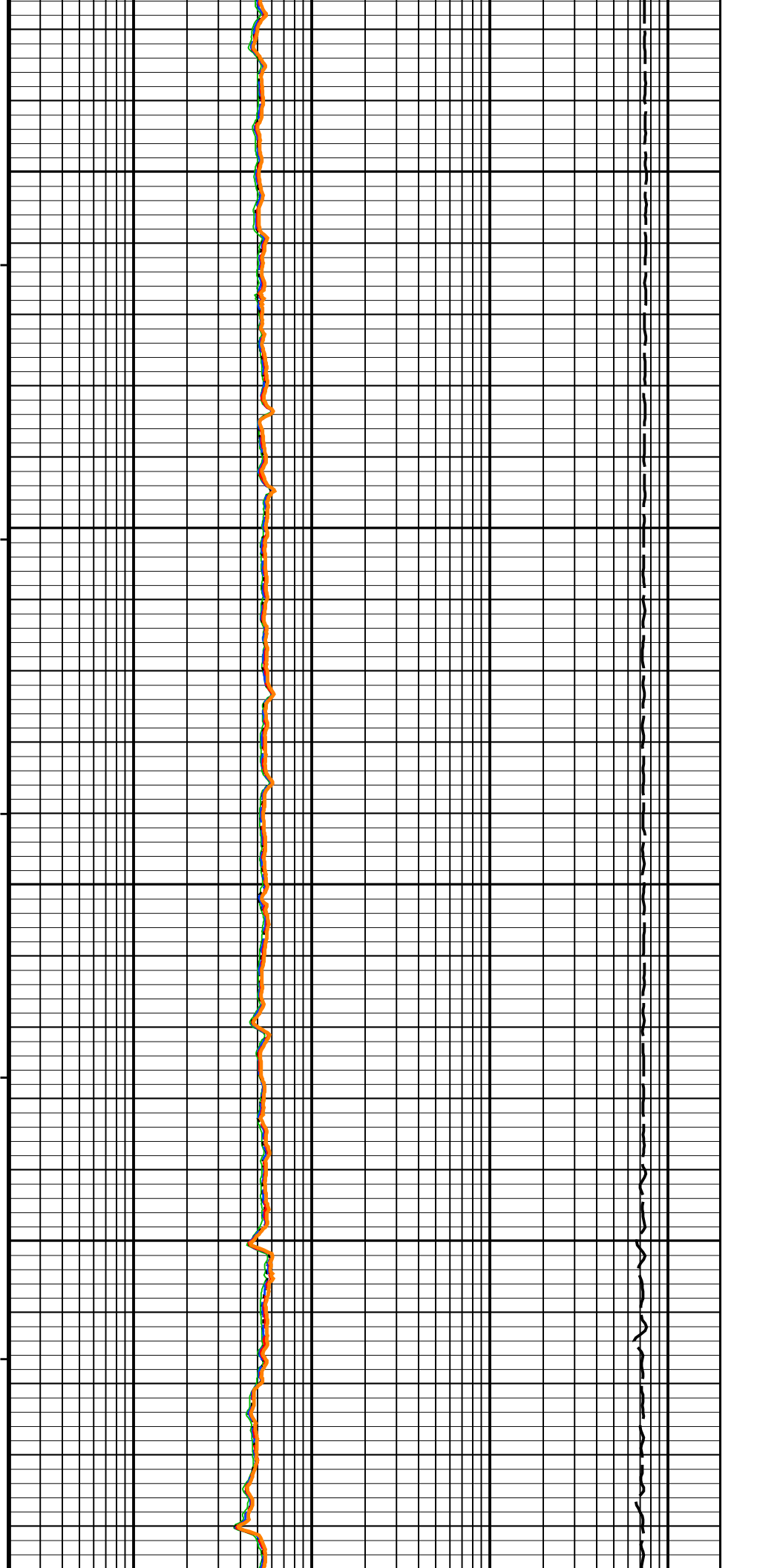


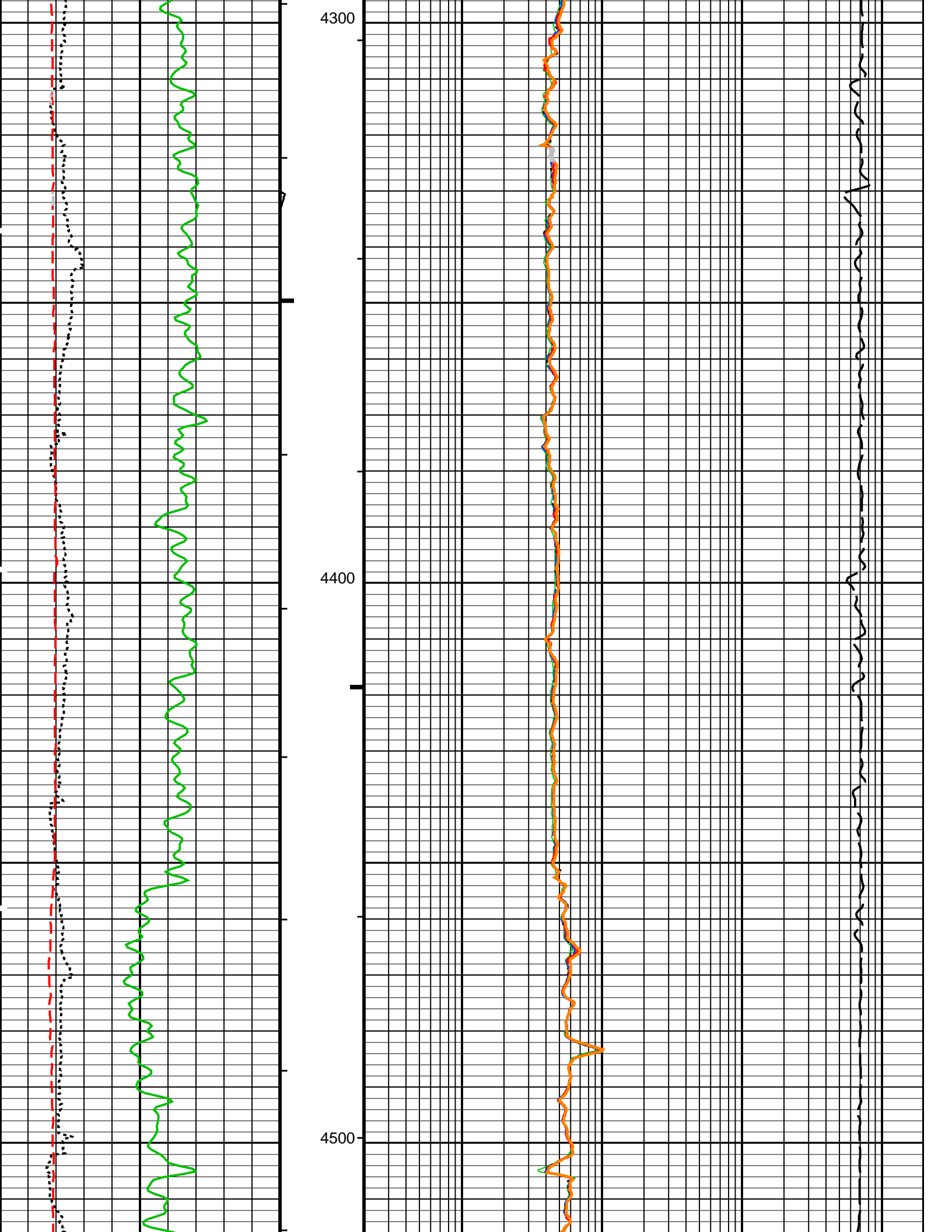


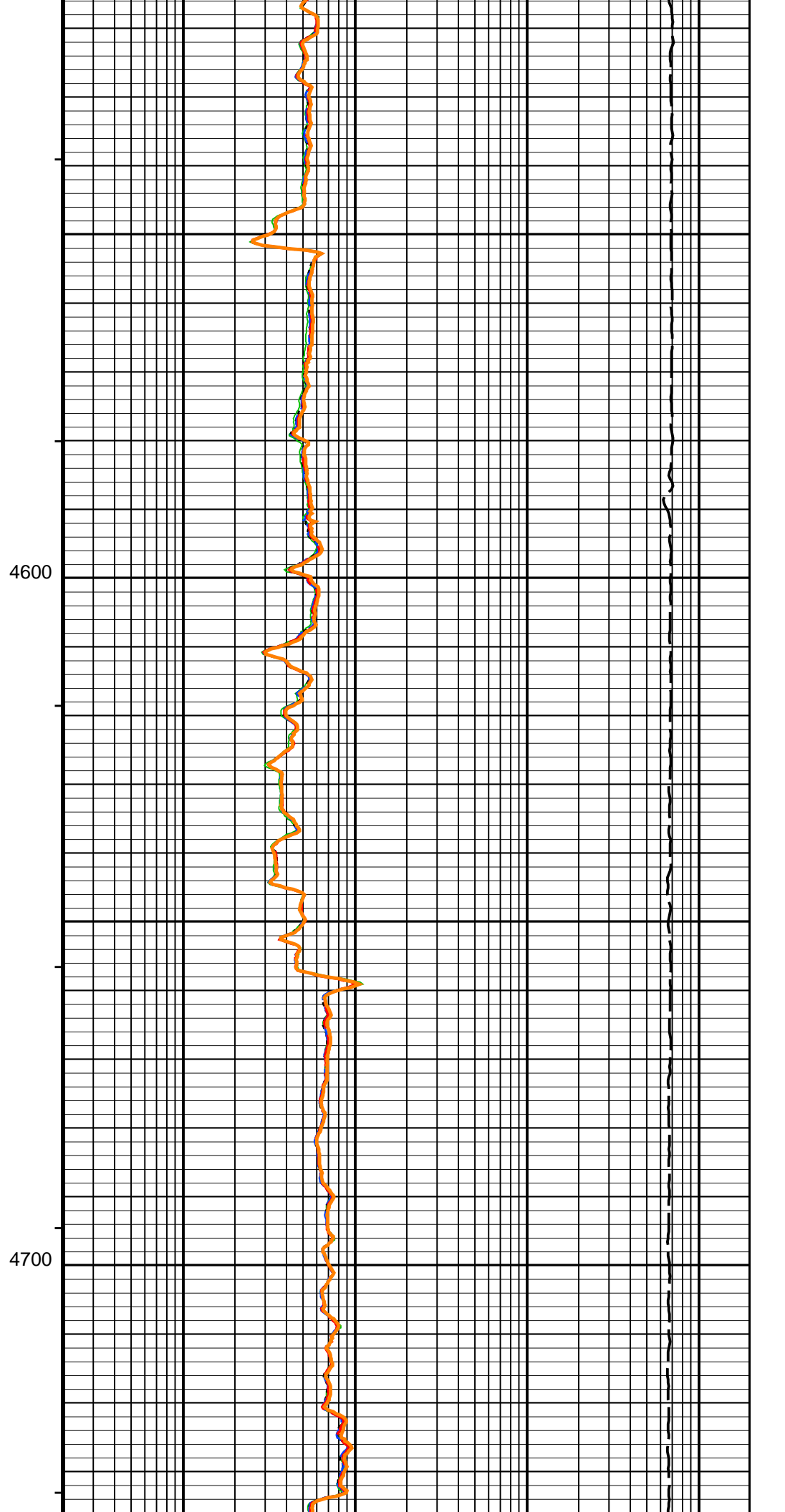
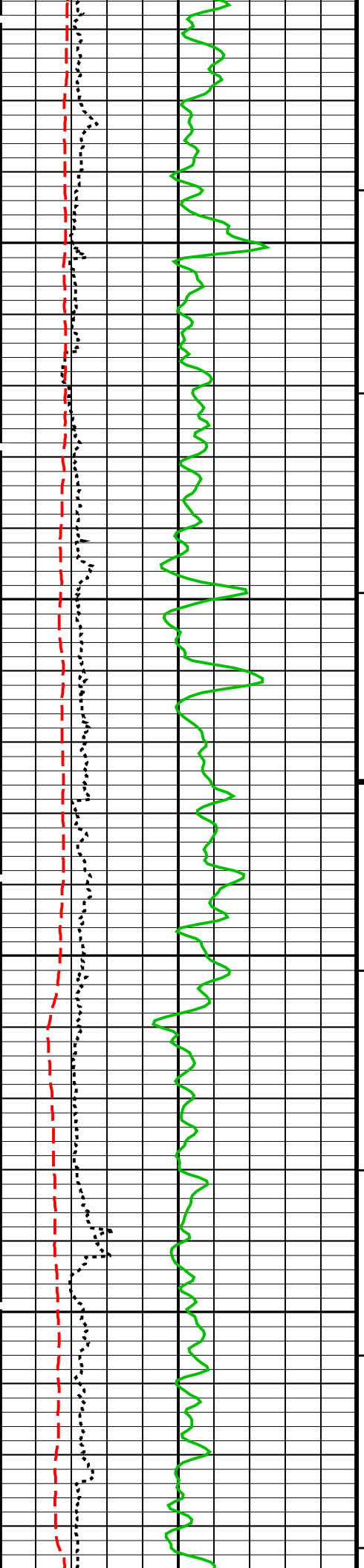


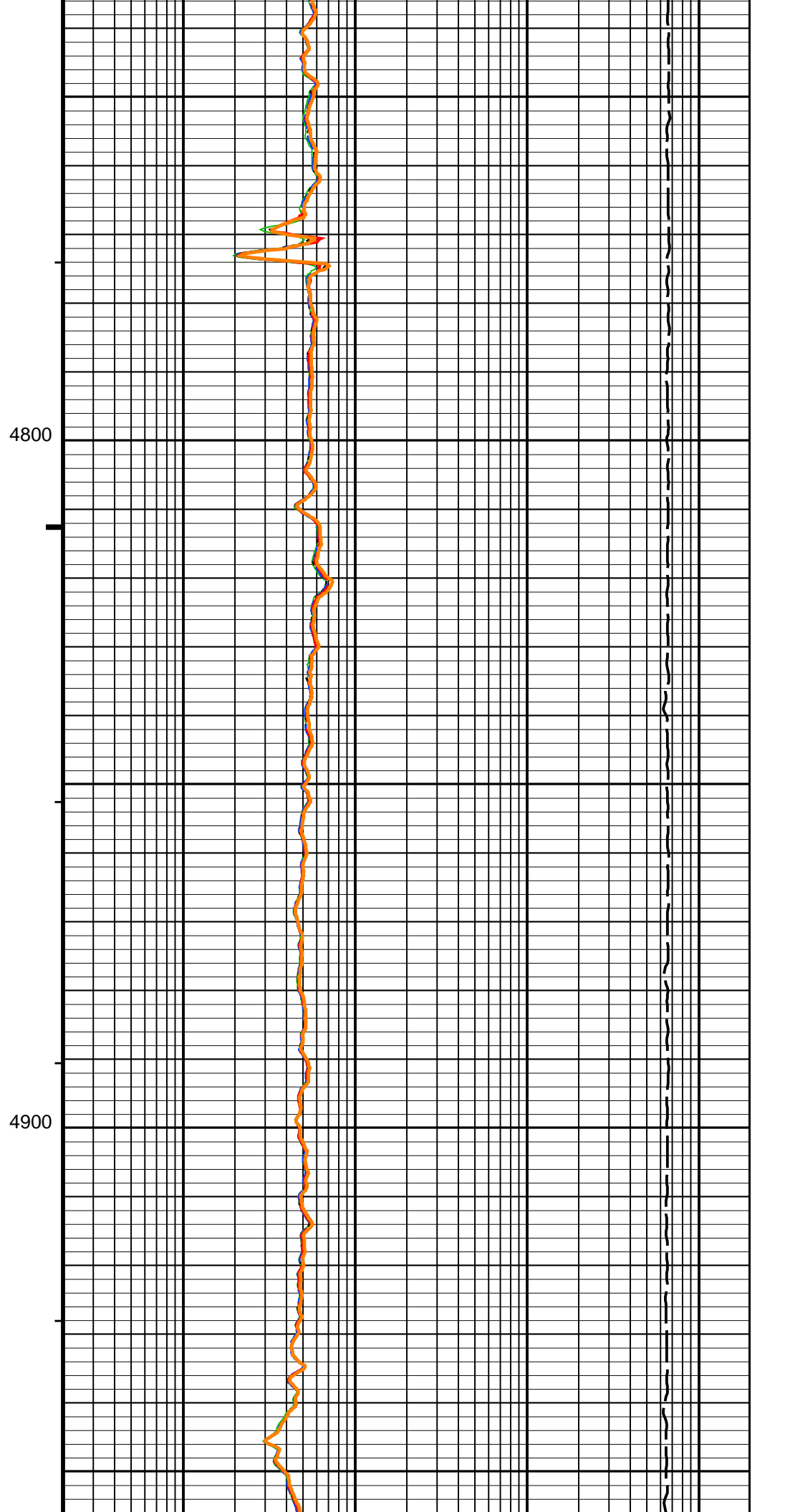
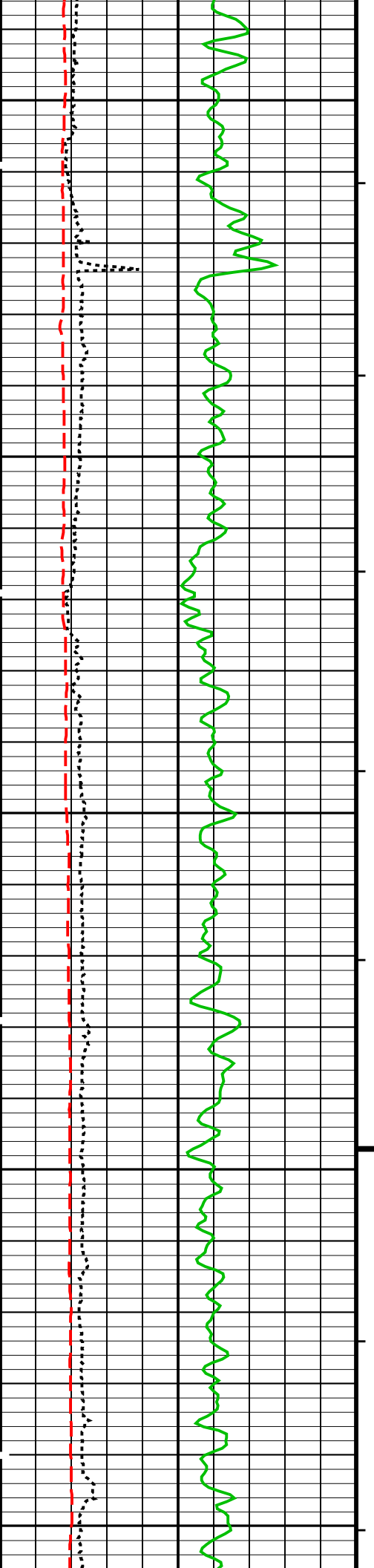
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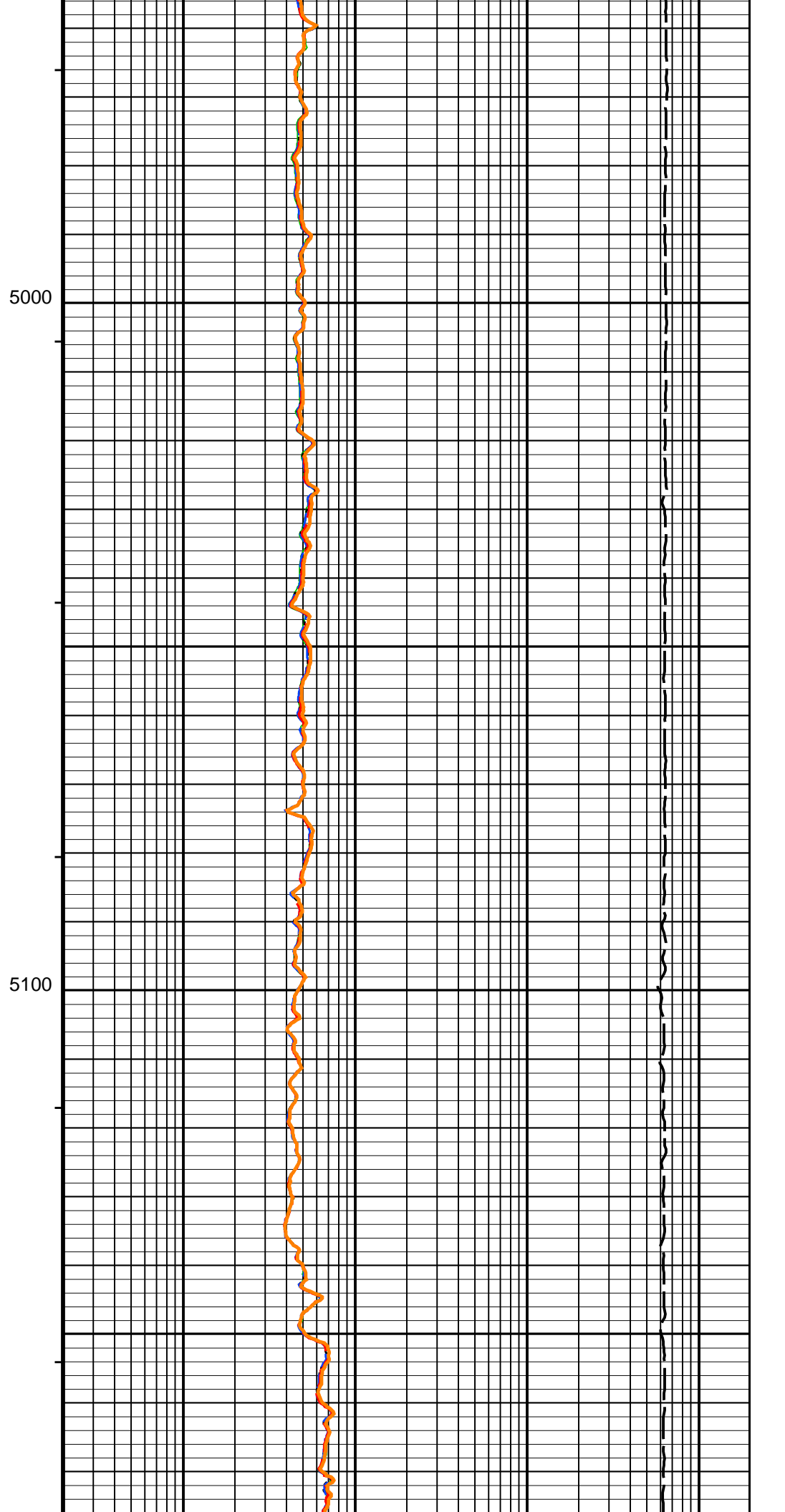
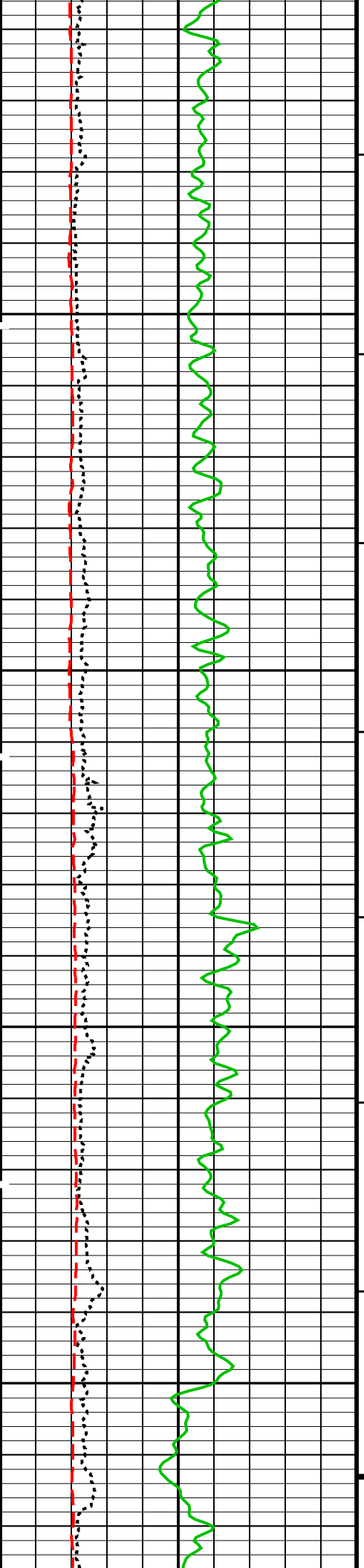
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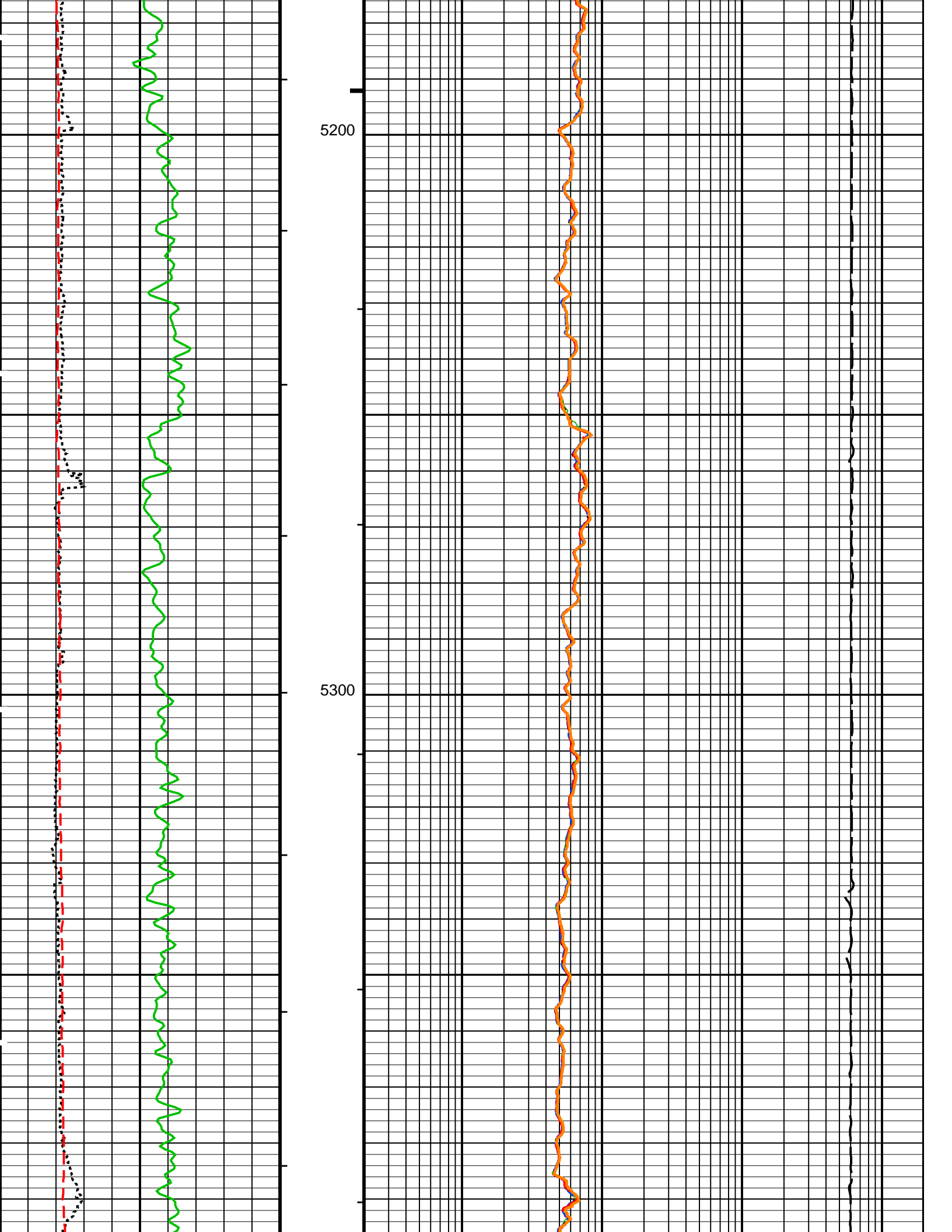


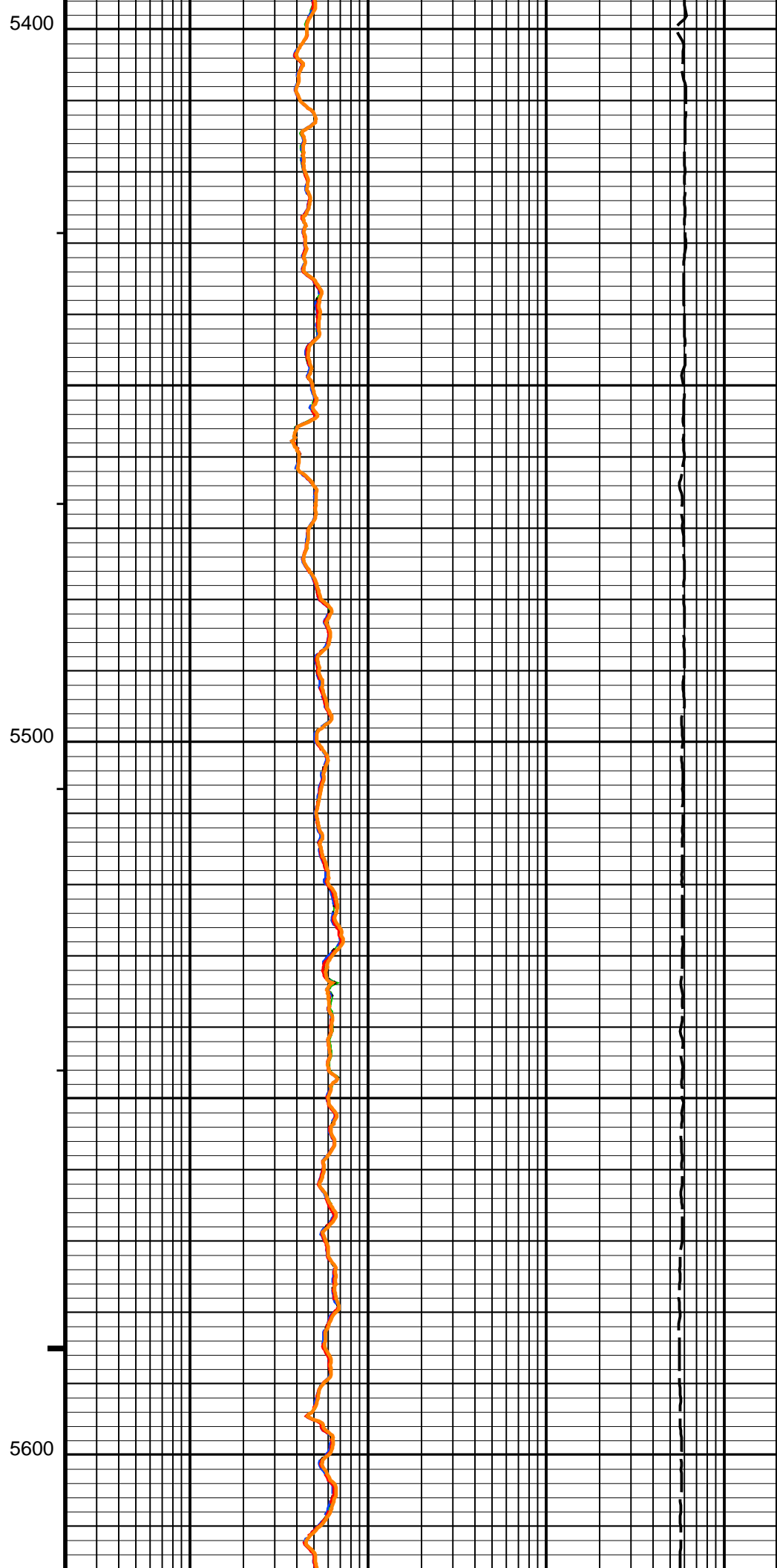
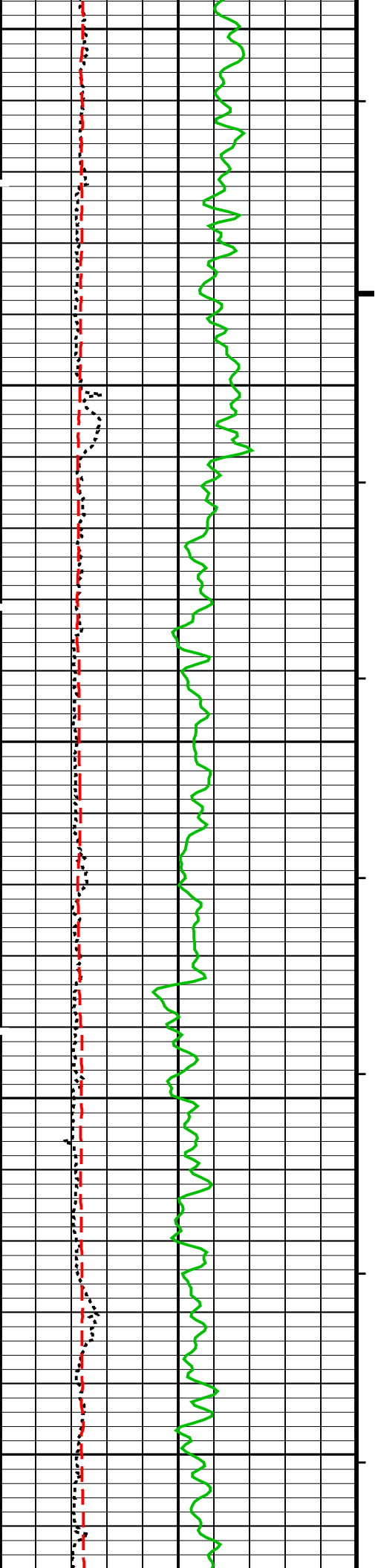


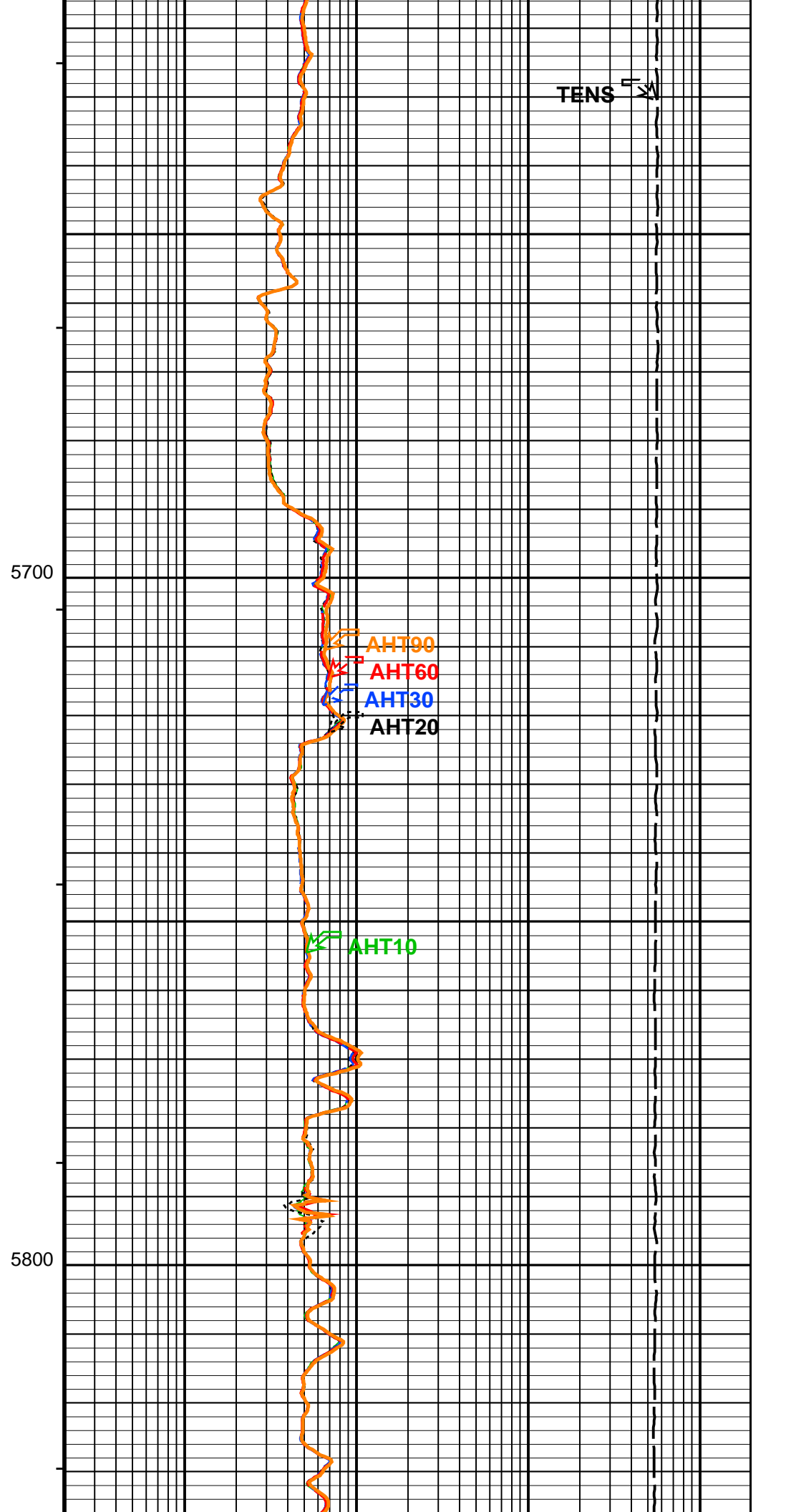
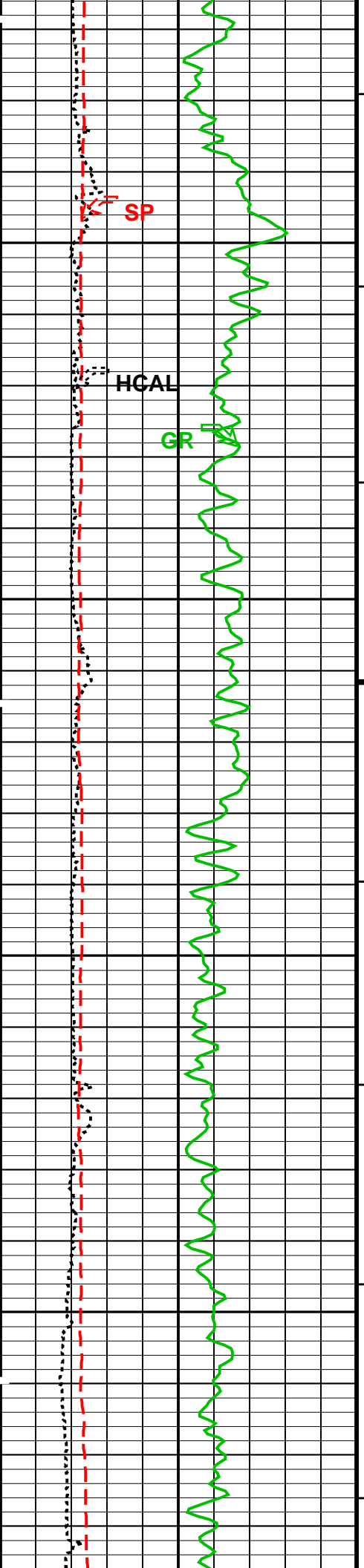


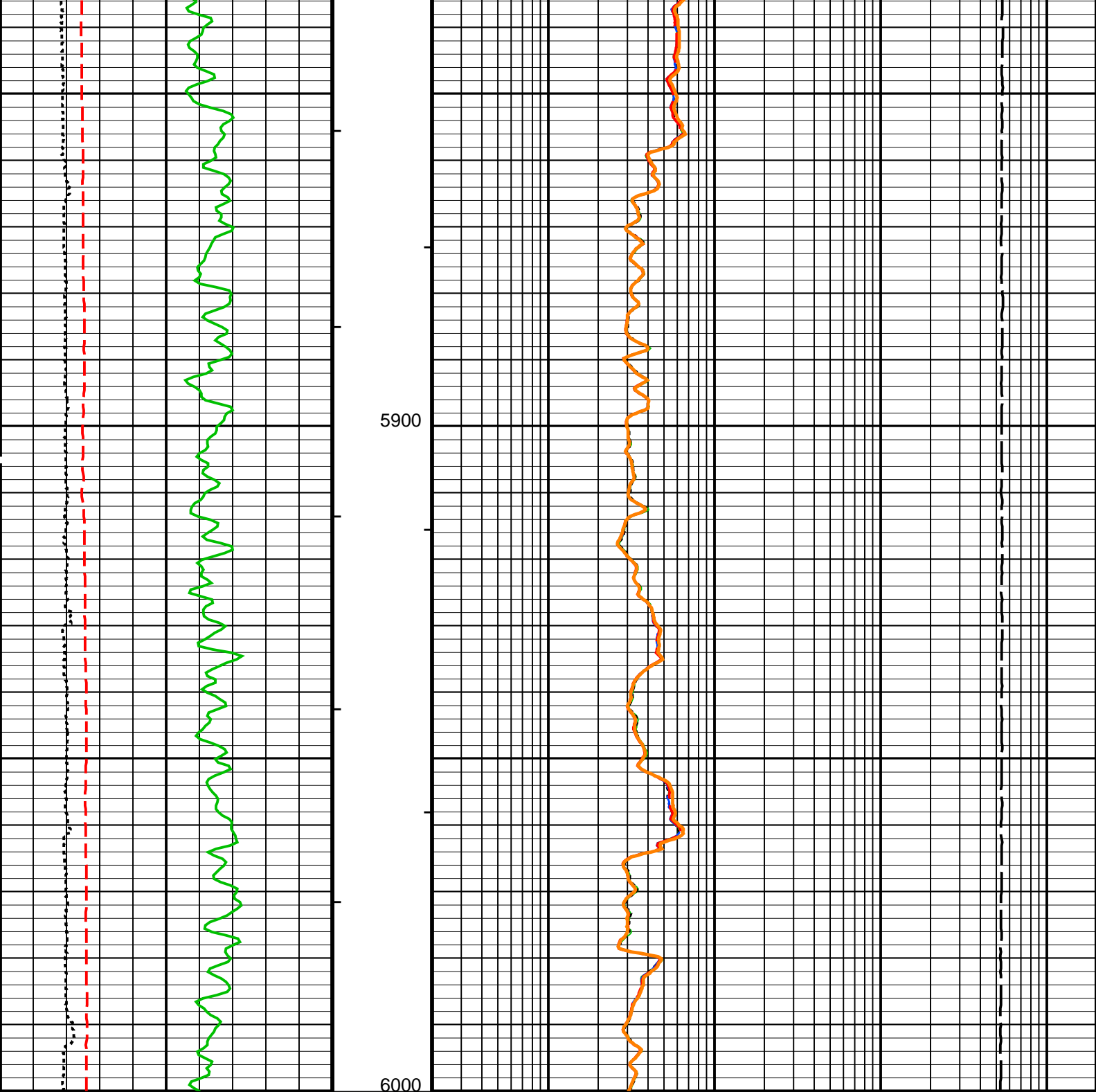












MAIN PASS: *** PLATFORM EXPRESS – ARRAY INDUCTION ***

Gamma Ray Backup	Cable Drag	AIT-H 10 Inch Investigation (AHT10) (OHMM) 2000
Gamma Ray (GR) (GAPI) 0 200	Tool/Tot. Drag	AIT-H 20 Inch Investigation (AHT20) (OHMM) 2000
Caliper (HCAL) (IN) 6 16	Stuck Stretch (STIT) (F) 0 50	AIT-H 30 Inch Investigation (AHT30) (OHMM) 2000
SP (SP) (MV) -160 40		AIT-H 60 Inch Investigation (AHT60) (OHMM) 2000
		AIT-H 90 Inch Investigation (AHT90)

	Tension (TENS)	
10000	(LBF)	0

PIP SUMMARY

- └ Integrated Hole Volume Minor Pip Every 10 F3
- └ Integrated Hole Volume Major Pip Every 100 F3
 - └ Integrated Cement Volume Minor Pip Every 10 F3
 - └ Integrated Cement Volume Major Pip Every 100 F3

Time Mark Every 60 S

AIT-H Answer Product Processing Summary. Data taken with Tool # 397 (AHTNO)

...Acquired data from HILT/HAIT

***** Borehole Correction *****

Effective Tool Standoff computed. Borehole diameter and mud res. taken as input (see GCSE and GRSE parameters)

Tool is run in ECCENTERED mode with a tool stand-off of 1.50 IN. Bit Size is 7.88 IN.

***** Input Selections to AIT-H Answer Product Processing *****

Caliper (GCSE): HCAL Mud Resistivity (GRSE): AHMF Temperature (GTSE): HTEM Porosity (FPHI): DPHZ

***** Other Parameters used by AIT-H Answer Product Processing *****

Form Factor Exponent (FEXP) 2.000 Form Factor Numerator (FNUM) 1.000
 Mud Filtrate Sample Resistivity (RMFS) 3.500 OHMM Mud Filtrate Sample Temperature (MFST) 85.000 DEGF
 Resistivity Connate Water (RW) 1.000 OHMM

***** AIT-H Answer Product Processing Control Parameters *****

Playback Mode: NORMAL

Parameters

DLIS Name	Description	Value	
HILTB-FTB: High resolution Integrated Logging Tool-DTS			
AHBHM	Array Induction Borehole Correction Mode	2_ComputeStandoff	
AHBHV	Array Induction Borehole Correction Code Version Number	880	
AHBLM	Array Induction Basic Logs Mode	6_One_Two_and_Four	
AHBLV	Array Induction Basic Logs Code Version Number	108	
AHCDE	Array Induction Casing Detection Enable	Yes	
AHCEN	Array Induction Tool Centering Flag (in Borehole)	Eccentered	
AHFRSV	Array Induction Response Set Version for Four ft Resolution	40.70.24.21	
AHMRF	Array Induction Mud Resistivity Factor	1	
AHORSV	Array Induction Response Set Version for One ft Resolution	40.70.24.21	
AHRFV	Array Induction Radial Profiling Code Version Number	700	
AHRPV	Array Induction Radial Parametrization Code Version Number	223	
AHSTA	Array Induction Tool Standoff	1.5	IN
AHTRSV	Array Induction Response Set Version for Two ft Resolution	40.70.24.21	
BHT	Bottom Hole Temperature (used in calculations)	212	DEGF
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	AITH_RESIST	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
SHT	Surface Hole Temperature	68	DEGF
SPNV	SP Next Value	0	MV
DIR: Directional Survey Computation			
SPVD	TVD of Starting Point	0	FT
TIMD	Along-hole depth of Tie-in Point	0	FT
TIVD	TVD of Tie-in Point	0	FT
FEQL: Formation Evaluation Quick Look			
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
HOLEV: Integrated Hole/Cement Volume			
BHT	Bottom Hole Temperature (used in calculations)	212	DEGF
FCD	Future Casing (Outer) Diameter	4.5	IN
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	AITH_RESIST	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
HVCS	Integrated Hole Volume Caliper Selection	HCAL	
SHT	Surface Hole Temperature	68	DEGF
PERT: Preliminary Evaluation - Real Time			
BHT	Bottom Hole Temperature (used in calculations)	212	DEGF

BHT	Bottom Hole Temperature (used in calculations)	212	DEGF
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	AITH_RESIST	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
SHT	Surface Hole Temperature	68	DEGF
STI: Stuck Tool Indicator			
LBFR	Trigger for MAXIS First Reading Label	TDL	
STKT	STI Stuck Threshold	2.5	FT
TDD	Total Depth - Driller	7670.00	FT
TDL	Total Depth - Logger	7676.00	FT
System and Miscellaneous			
BS	Bit Size	7.875	IN
DFD	Drilling Fluid Density	9.20	LB/G
DO	Depth Offset for Playback	2.0	FT
MST	Mud Sample Temperature	85.00	DEGF
PP	Playback Processing	NORMAL	
TD	Total Depth	7676	FT

Format: GRES Vertical Scale: 5" per 100' Graphics File Created: 10-Sep-2006 07:01

OP System Version: 13C0-300

MCM

HILTB-FTB SRPC-2788-HILT GPIT-C 13C0-300
DTC-H 13C0-300

Input DLIS Files

DEFAULT AIT_TLD_MCFL_CNL_015LUP FN:14 PRODUCER 10-Sep-2006 04:31 7692.0 FT 3248.5 FT

Output DLIS Files

DEFAULT AIT_TLD_MCFL_CNL_030PUP FN:28 PRODUCER 10-Sep-2006 07:01

Schlumberger

MAIN RESISTIVITY LOG 5" = 100'

MAXIS Field Log

Input DLIS Files

DEFAULT AIT_TLD_MCFL_CNL_015LUP FN:14 PRODUCER 10-Sep-2006 04:31 7692.0 FT 3248.5 FT

Output DLIS Files

DEFAULT AIT_TLD_MCFL_CNL_029PUP FN:27 PRODUCER 10-Sep-2006 06:47 7694.0 FT 5903.5 FT

Integrated Hole/Cement Volume Summary

Hole Volume = 601.42 F3

Cement Volume = 405.67 F3 (assuming 4.50 IN casing O.D.)

Computed from 7676.0 FT to 5904.0 FT using data channel(s) HCAL

OP System Version: 13C0-300

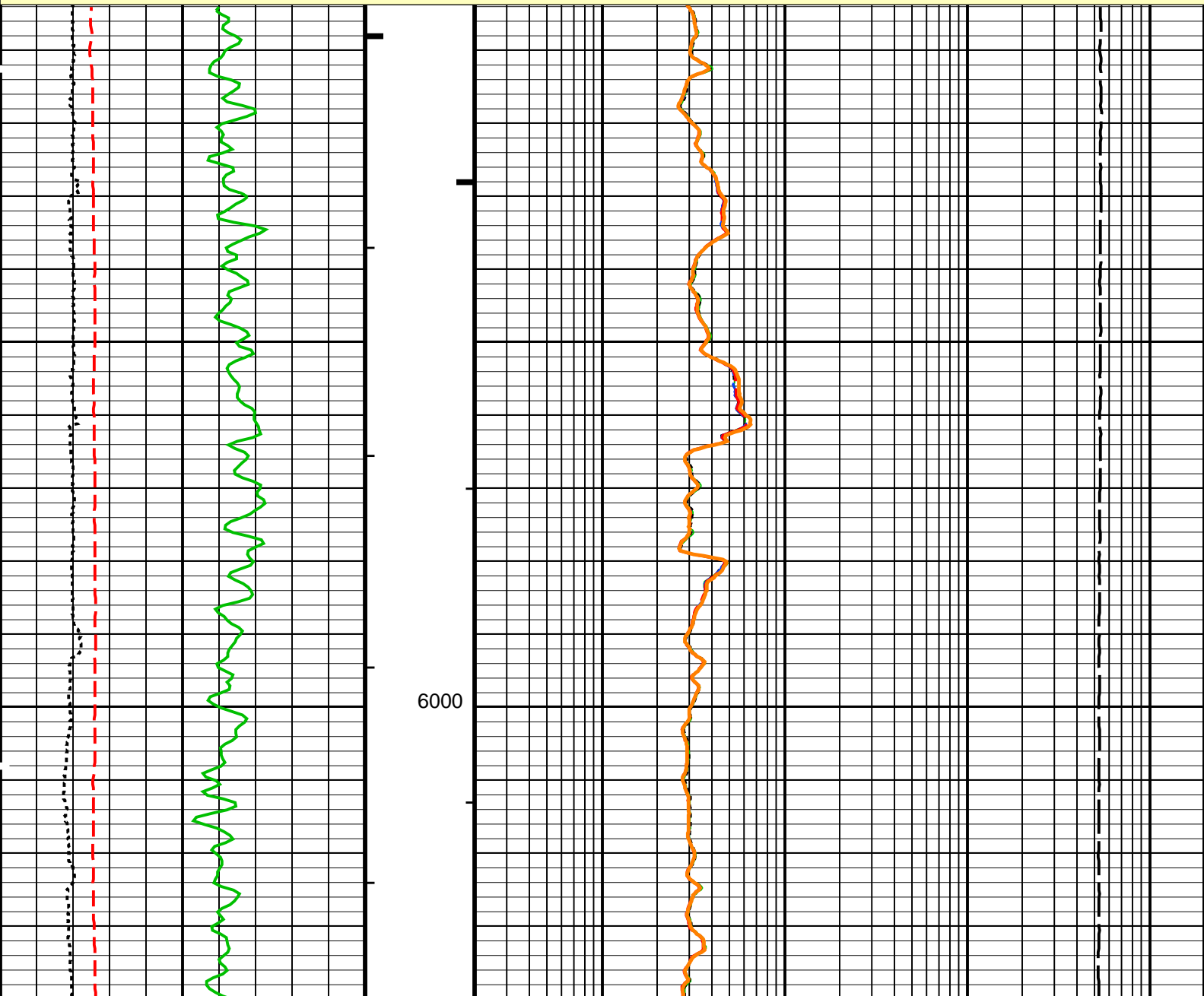
MCM

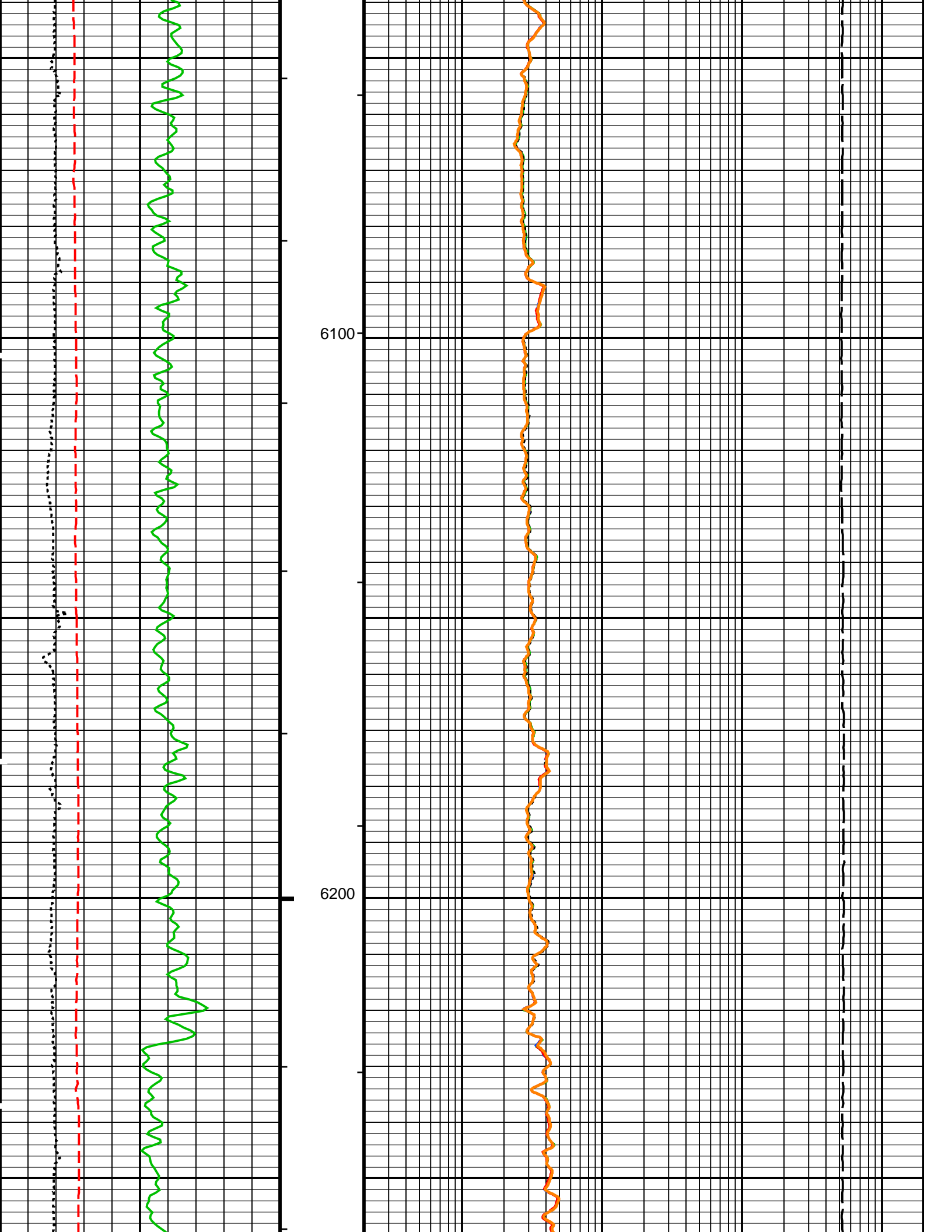
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DTC-H 13C0-300

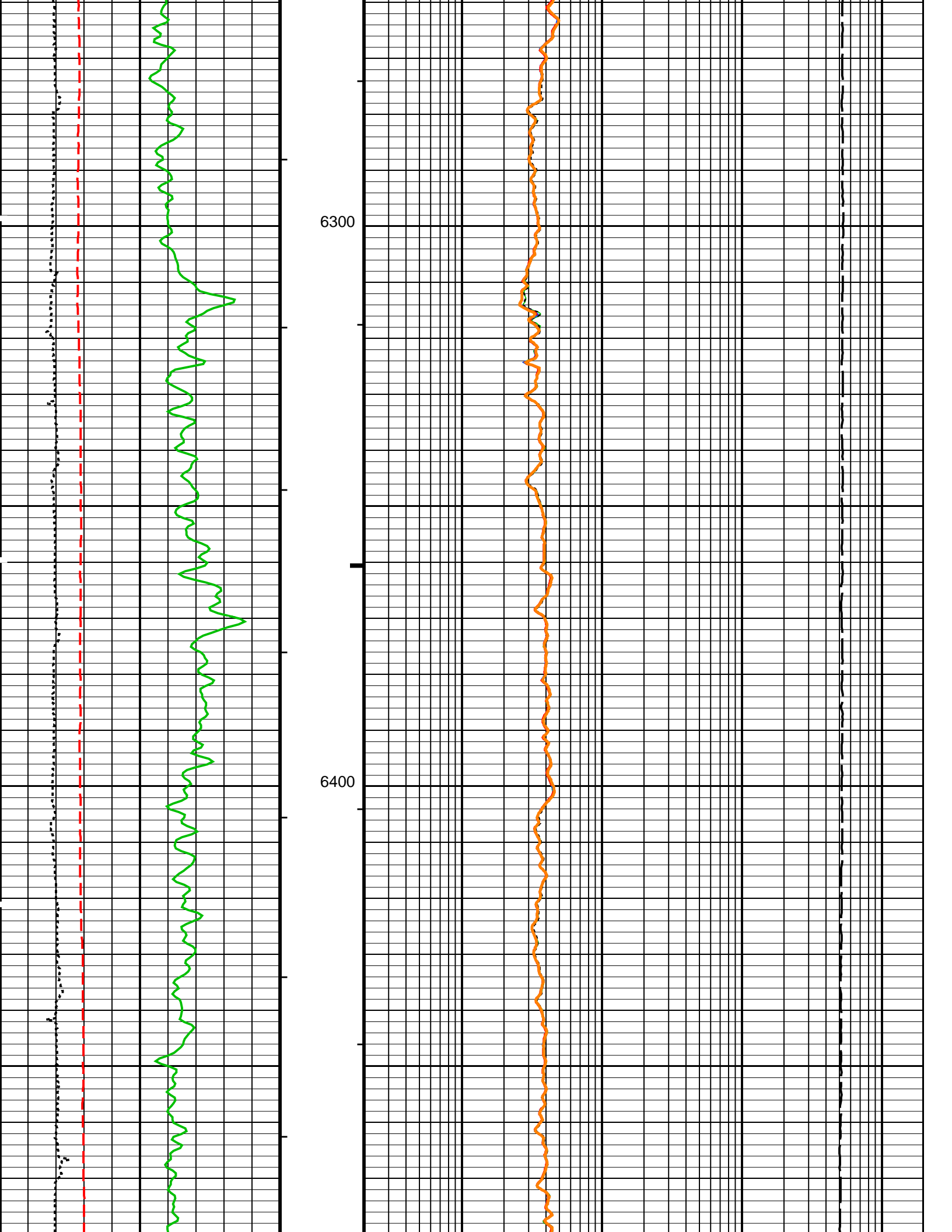
PIP SUMMARY

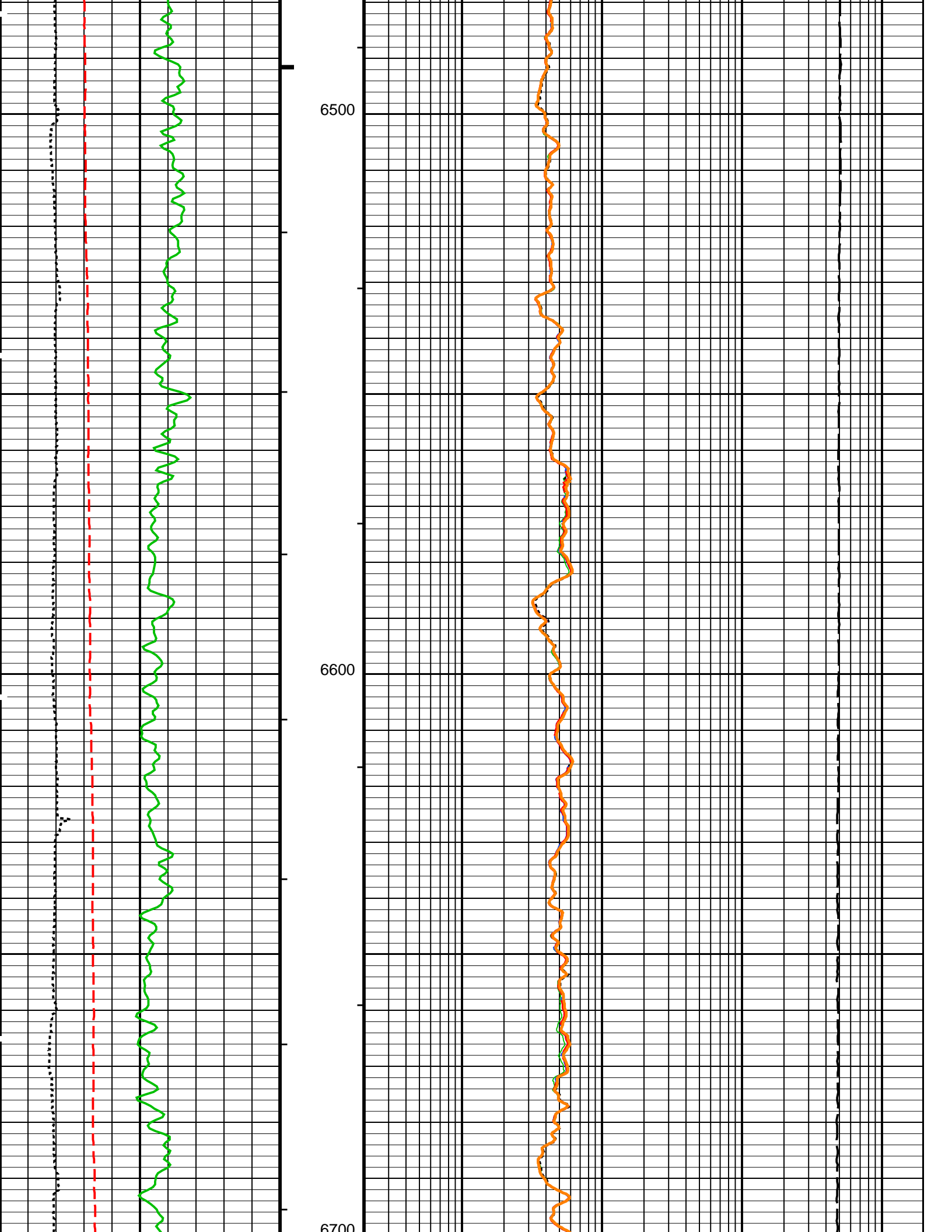
Integrated Hole Volume Minor Pin Every 10 F3

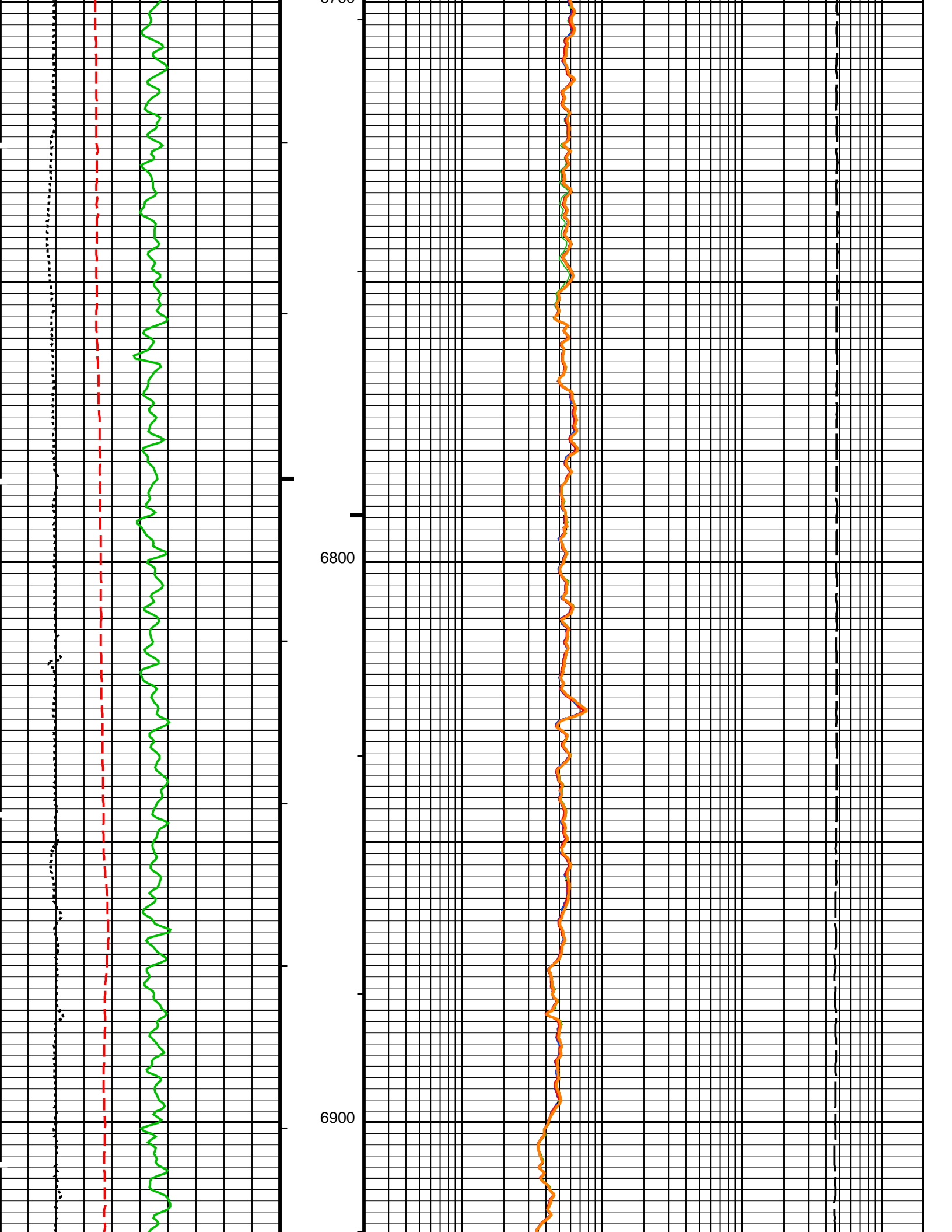
		Integrated Hole Volume Minor Pip Every 10 F3 Integrated Cement Volume Minor Pip Every 10 F3 Integrated Cement Volume Major Pip Every 100 F3	
Time Mark Every 60 S			
		Tension (TENS) 10000 (LBF) 0	
		AIT-H 90 Inch Investigation (AHT90) 0.2 (OHMM) 2000	
SP (SP) (MV) -160 40		AIT-H 60 Inch Investigation (AHT60) (OHMM) 2000	
Caliper (HCAL) (IN) 6 16		AIT-H 30 Inch Investigation (AHT30) (OHMM) 2000	
		0 (F) 50	
Gamma Ray (GR) (GAPI) 0 200		AIT-H 20 Inch Investigation (AHT20) (OHMM) 2000	
Gamma Ray Backup		AIT-H 10 Inch Investigation (AHT10) (OHMM) 2000	
		Cable Drag	
MAIN PASS: *** PLATFORM EXPRESS – ARRAY INDUCTION ***			

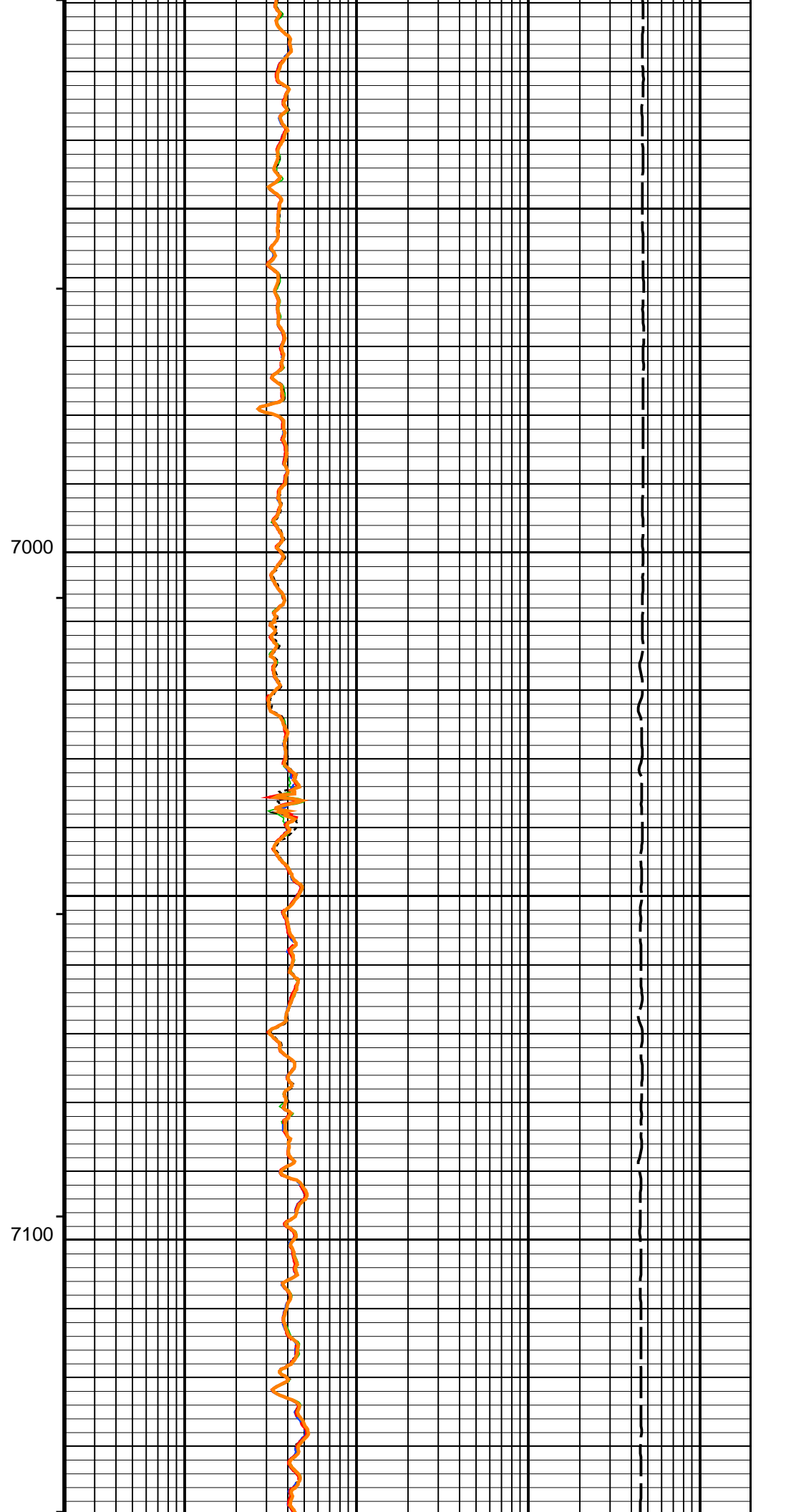
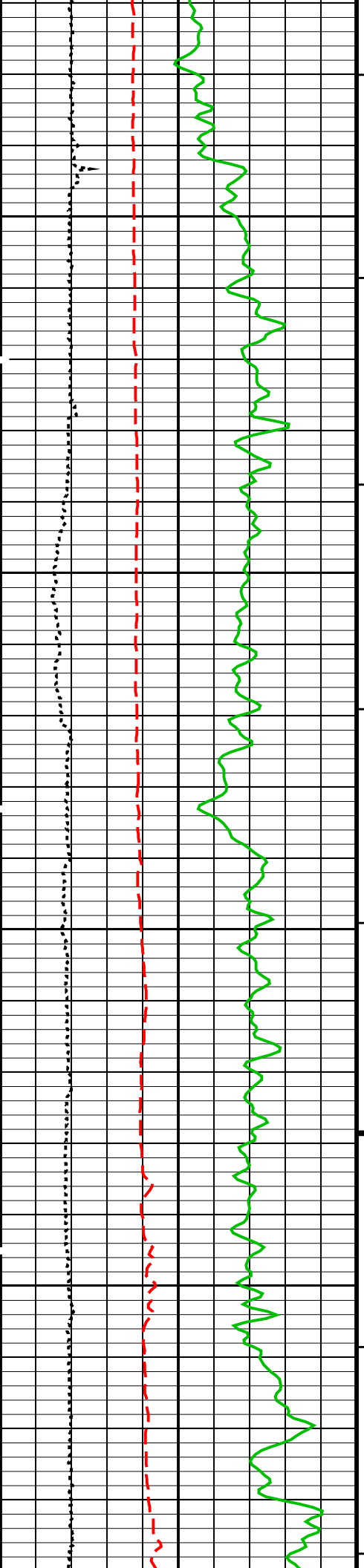


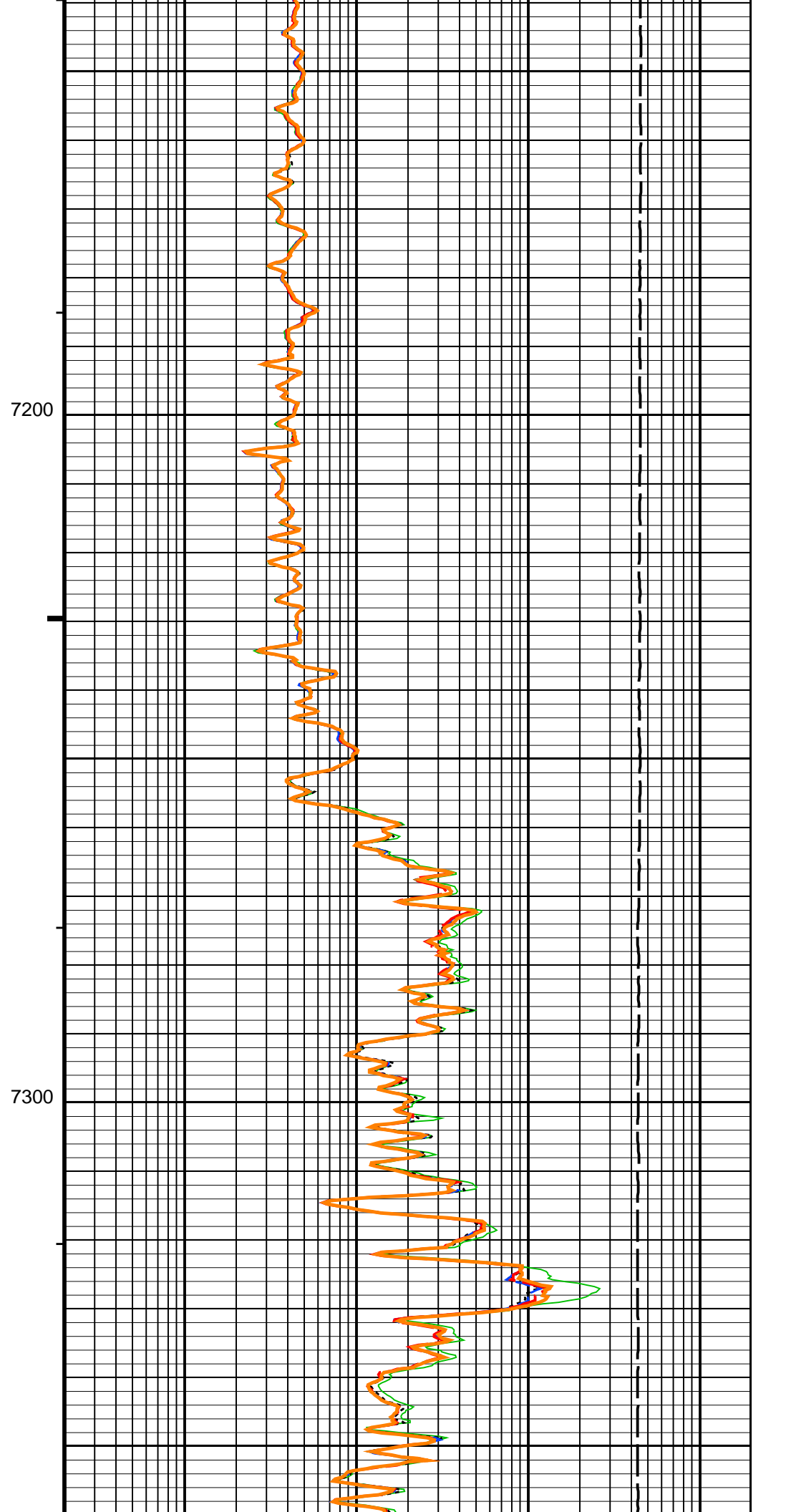
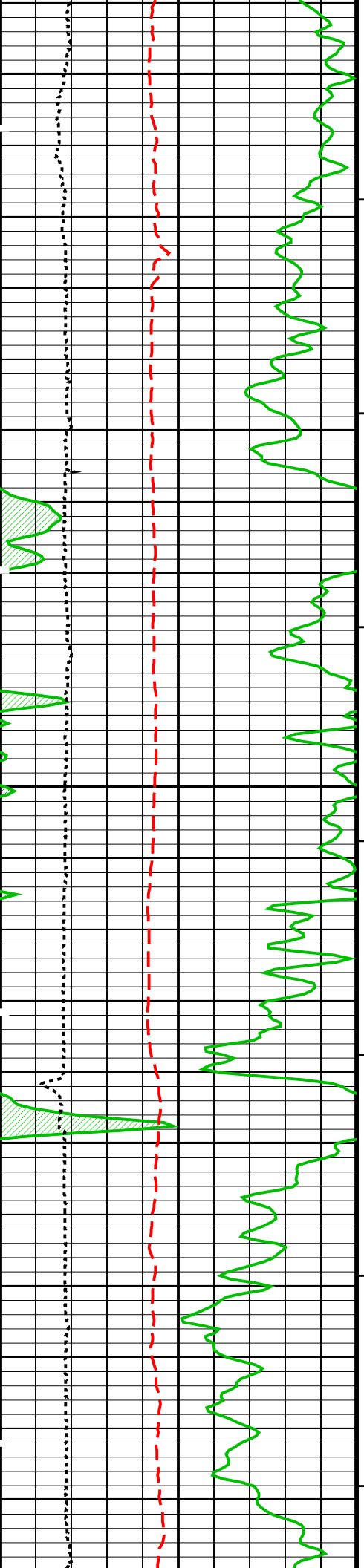


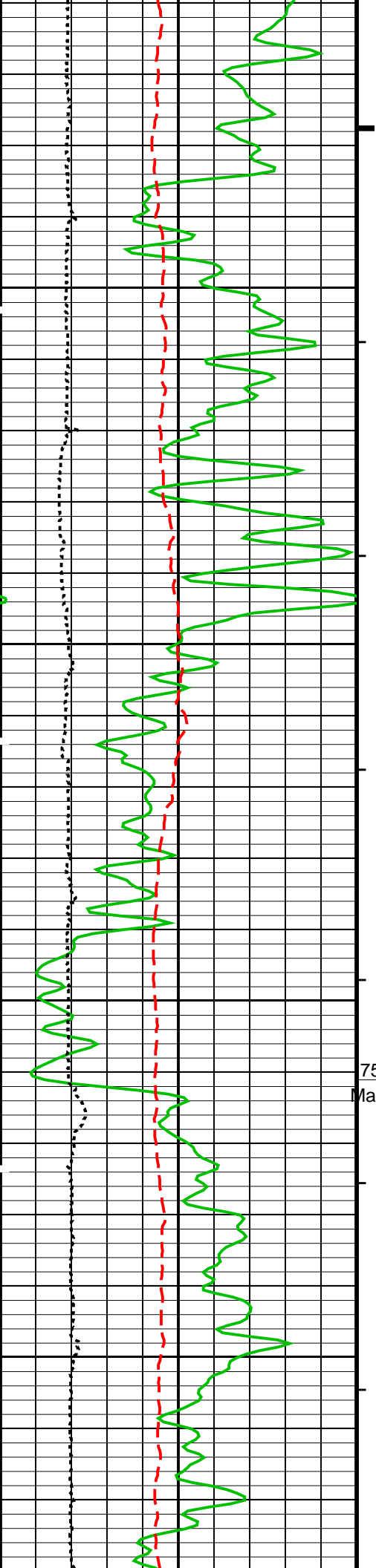








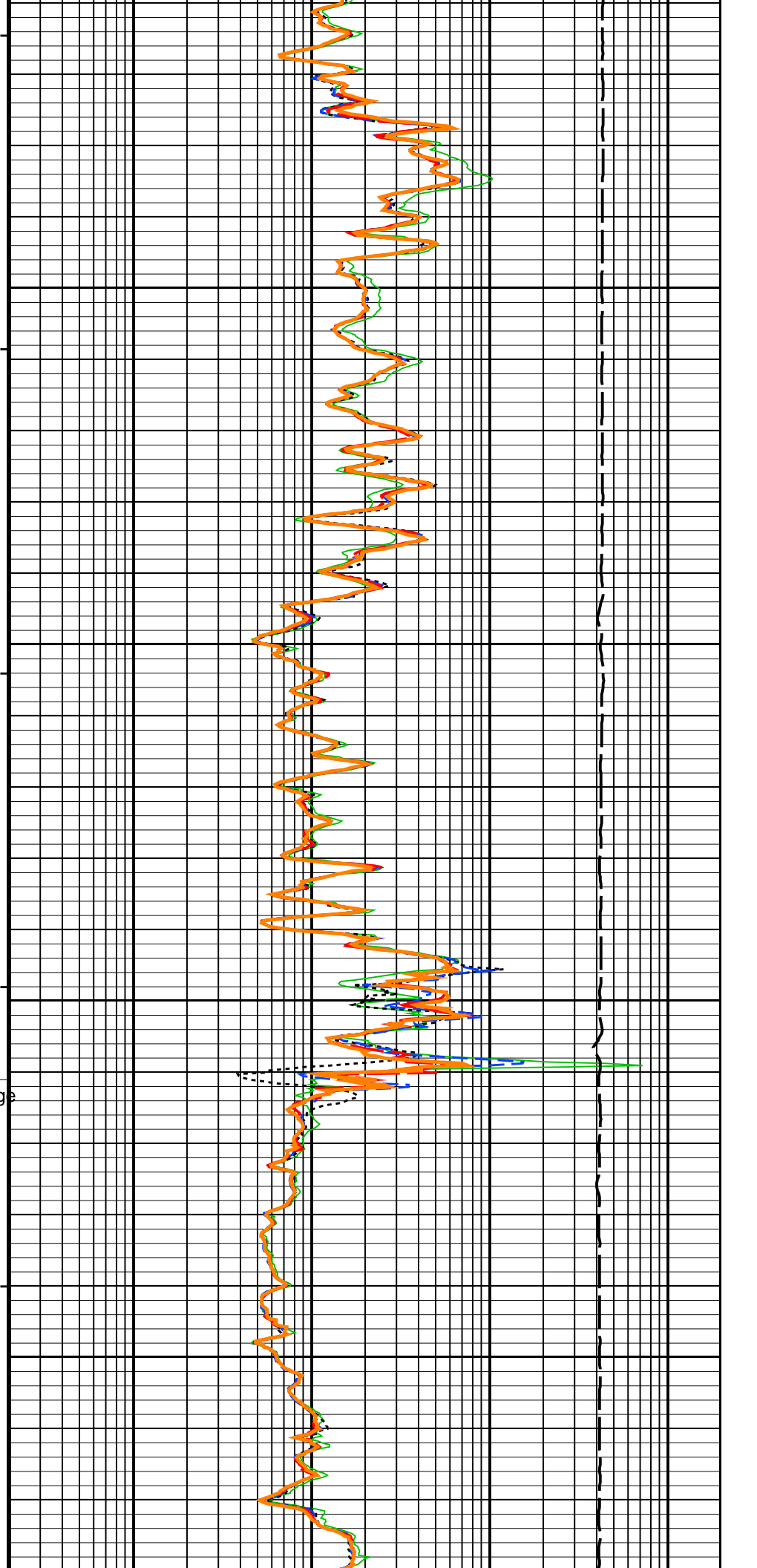


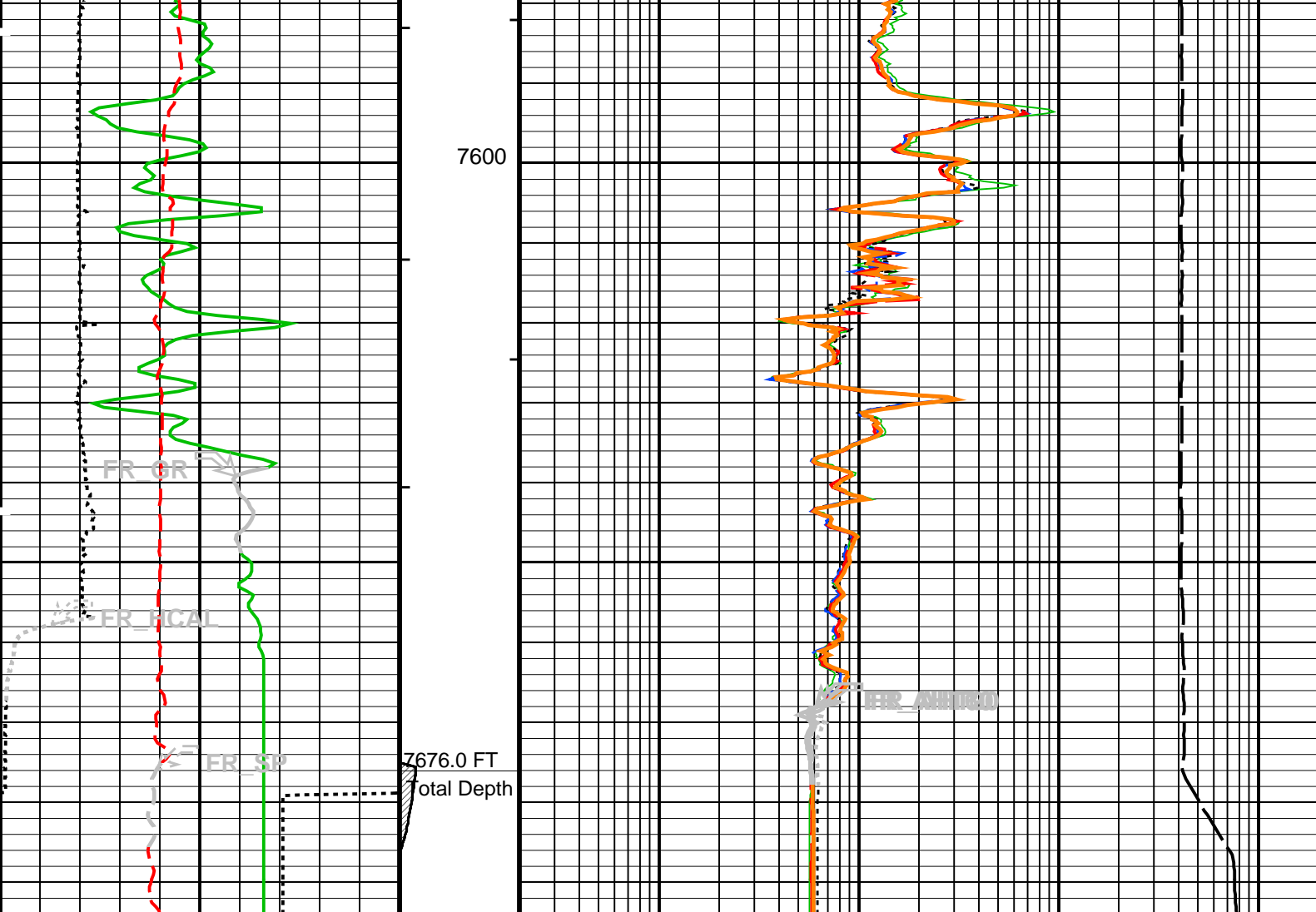


7400

7500

7511.0 FT
Matrix Change





MAIN PASS: *** PLATFORM EXPRESS – ARRAY INDUCTION ***

Gamma Ray Backup	Cable Drag	0.2	AIT-H 10 Inch Investigation (AHT10) (OHMM)	2000
Gamma Ray (GR) (GAPI)	Tool/Tot. Drag	0.2	AIT-H 20 Inch Investigation (AHT20) (OHMM)	2000
Caliper (HCAL) (IN)	Stuck Stretch (STIT) (F)	0.2	AIT-H 30 Inch Investigation (AHT30) (OHMM)	2000
SP (SP) (MV)		0.2	AIT-H 60 Inch Investigation (AHT60) (OHMM)	2000
		0.2	AIT-H 90 Inch Investigation (AHT90) (OHMM)	2000
		Tension (TENS) (LBF)		
		10000 0		

PIP SUMMARY

- ┌ Integrated Hole Volume Minor Pip Every 10 F3
- └ Integrated Hole Volume Major Pip Every 100 F3
- ┌ Integrated Cement Volume Minor Pip Every 10 F3
- └ Integrated Cement Volume Major Pip Every 100 F3

Time Mark Every 60 S

AIT-H Answer Product Processing Summary. Data taken with Tool # 397 (AHTNO)

...Acquired data from HILT/HAIT

***** Borehole Correction *****

Effective Tool Standoff computed Borehole diameter and mud res. taken as input (see GCSE and GRSE parameters)

Effective Tool Standoff computed. Borehole diameter and mud res. taken as input (see GCSE and GRSE parameters)
Tool is run in ECCENTERED mode with a tool stand-off of 1.50 IN. Bit Size is 7.88 IN.

***** Input Selections to AIT-H Answer Product Processing *****

Caliper (GCSE): HCAL Mud Resistivity (GRSE): AHMF Temperature (GTSE): HTEM Porosity (FPHI): DPHZ

***** Other Parameters used by AIT-H Answer Product Processing *****

Form Factor Exponent (FEXP) 2.000 Form Factor Numerator (FNUM) 1.000
Mud Filtrate Sample Resistivity (RMFS) 3.500 OHMM Mud Filtrate Sample Temperature (MFST) 85.000 DEGF
Resitivity Connate Water (RW) 1.000 OHMM

***** AIT-H Answer Product Processing Control Parameters *****

Playback Mode: NORMAL

Parameters

DLIS Name	Description	Value	
HILTB-FTB: High resolution Integrated Logging Tool-DTS			
AHBHM	Array Induction Borehole Correction Mode	2_ComputeStandoff	
AHBHV	Array Induction Borehole Correction Code Version Number	880	
AHBLM	Array Induction Basic Logs Mode	6_One_Two_and_Four	
AHBLV	Array Induction Basic Logs Code Version Number	108	
AHCDE	Array Induction Casing Detection Enable	Yes	
AHCEN	Array Induction Tool Centering Flag (in Borehole)	Eccentered	
AHFRSV	Array Induction Response Set Version for Four ft Resolution	40.70.24.21	
AHMRF	Array Induction Mud Resistivity Factor	1	
AHORSV	Array Induction Response Set Version for One ft Resolution	40.70.24.21	
AHRFV	Array Induction Radial Profiling Code Version Number	700	
AHRPV	Array Induction Radial Parametrization Code Version Number	223	
AHSTA	Array Induction Tool Standoff	1.5	IN
AHTRSV	Array Induction Response Set Version for Two ft Resolution	40.70.24.21	
BHT	Bottom Hole Temperature (used in calculations)	212	DEGF
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	AITH_RESIST	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
SHT	Surface Hole Temperature	68	DEGF
SPNV	SP Next Value	0	MV
DIR: Directional Survey Computation			
SPVD	TVD of Starting Point	0	FT
TIMD	Along-hole depth of Tie-in Point	0	FT
TIVD	TVD of Tie-in Point	0	FT
FEQL: Formation Evaluation Quick Look			
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
HOLEV: Integrated Hole/Cement Volume			
BHT	Bottom Hole Temperature (used in calculations)	212	DEGF
FCD	Future Casing (Outer) Diameter	4.5	IN
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	AITH_RESIST	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
HVCS	Integrated Hole Volume Caliper Selection	HCAL	
SHT	Surface Hole Temperature	68	DEGF
PERT: Preliminary Evaluation - Real Time			
BHT	Bottom Hole Temperature (used in calculations)	212	DEGF
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	AITH_RESIST	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
SHT	Surface Hole Temperature	68	DEGF
STI: Stuck Tool Indicator			
LBFR	Trigger for MAXIS First Reading Label	TDL	
STKT	STI Stuck Threshold	2.5	FT
TDD	Total Depth - Driller	7670.00	FT
TDL	Total Depth - Logger	7676.00	FT
System and Miscellaneous			
BS	Bit Size	7.875	IN
DFD	Drilling Fluid Density	9.20	LB/G
DO	Depth Offset for Playback	2.0	FT
DORL	Depth Offset for Repeat Analysis	0.0	FT
MST	Mud Sample Temperature	85.00	DEGF

MSI PP TD	Mud Sample Temperature Playback Processing Total Depth	85.00 NORMAL 7676	DEGR FT
Format: LOWER_GRES Vertical Scale: 5" per 100'		Graphics File Created: 10-Sep-2006 06:47	
OP System Version: 13C0-300 MCM			
HILTB-FTB DTC-H	SRPC-2788-HILT 13C0-300	GPIT-C	13C0-300
Input DLIS Files			
DEFAULT	AIT_TLD_MCFL_CNL_015LUP	FN:14 PRODUCER	10-Sep-2006 04:31 7692.0 FT 3248.5 FT
Output DLIS Files			
DEFAULT	AIT_TLD_MCFL_CNL_029PUP	FN:27 PRODUCER	10-Sep-2006 06:47



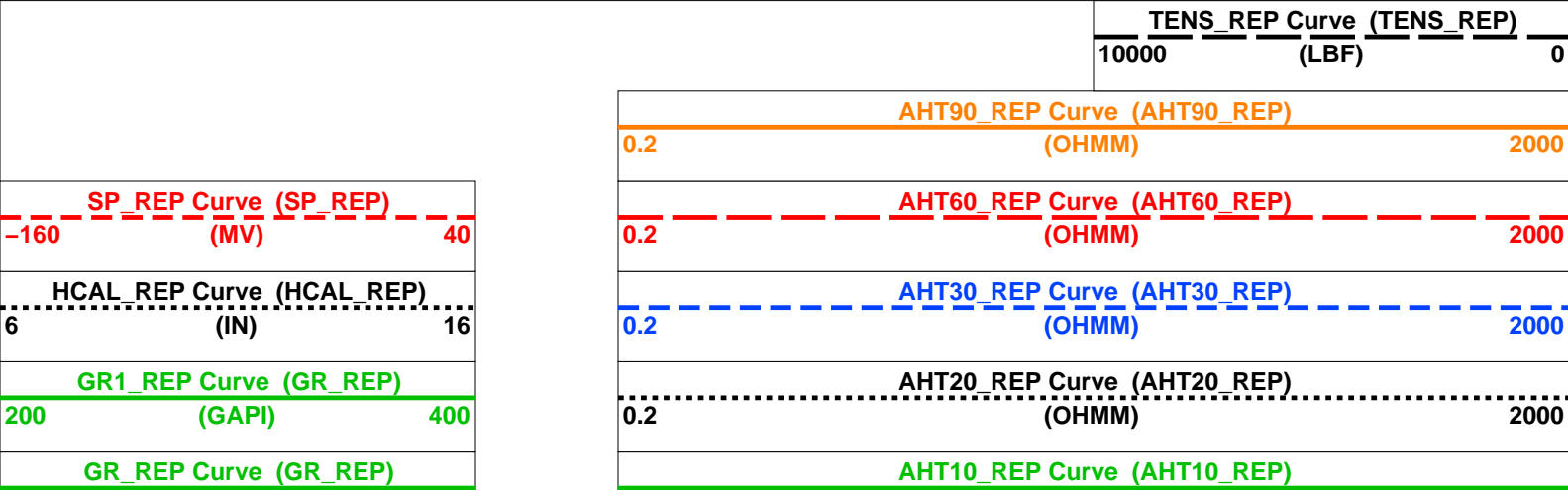
EXTRA REPEAT ANALYSIS

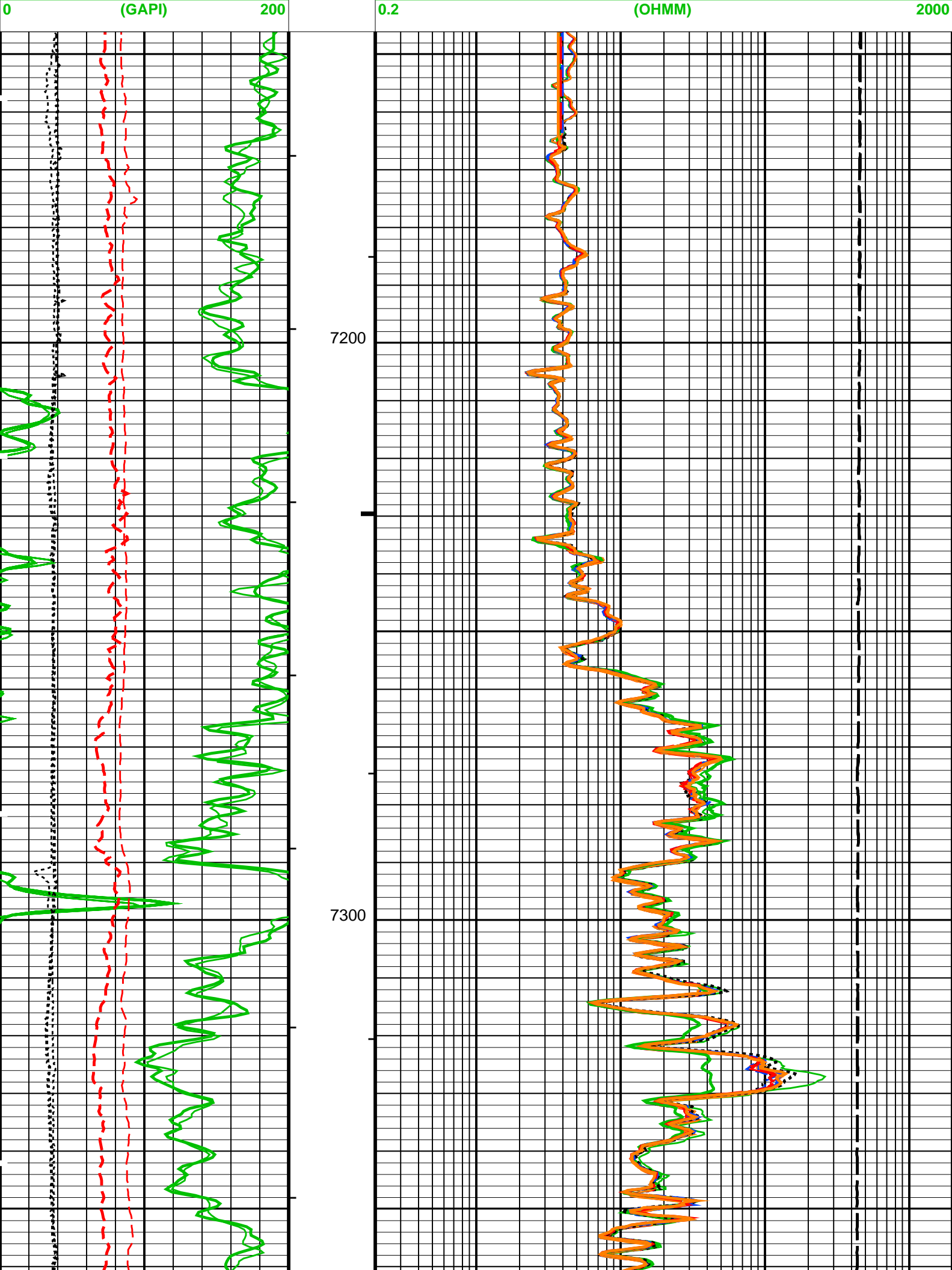
MAXIS Field Log

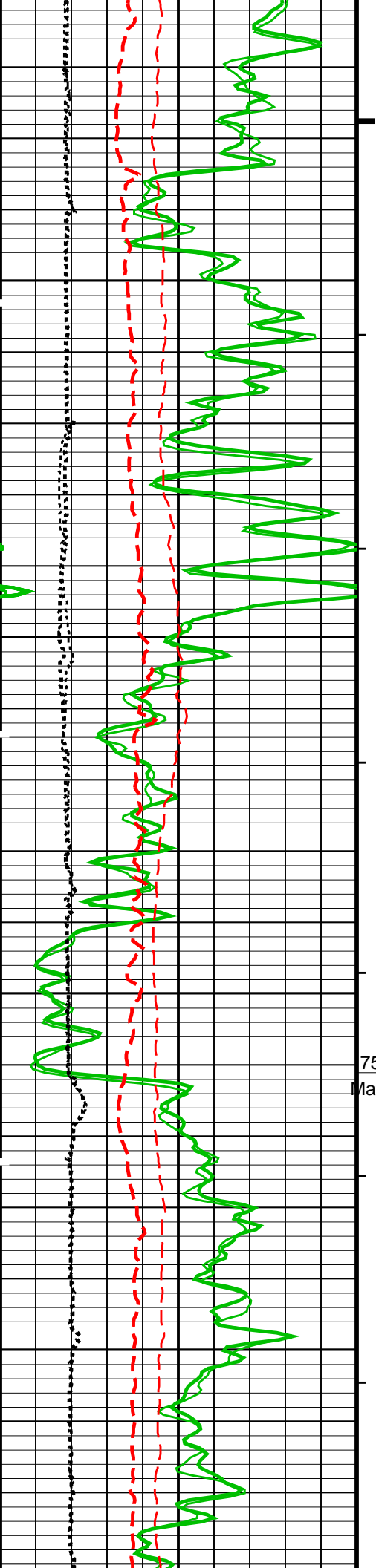
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DEFAULT	AIT_TLD_MCFL_CNL_014PUP	FN:13	PRODUCER	10-Sep-2006 04:30	7700.0 FT	7145.5 FT
Output DLIS Files						
DEFAULT	AIT_TLD_MCFL_CNL_029PUP	FN:27	PRODUCER	10-Sep-2006 06:47		

OP System Version: 13C0-300 MCM			
HILTB-FTB DTC-H	SRPC-2788-HILT 13C0-300	GPIT-C	13C0-300

PIP SUMMARY	
└ Integrated Hole Volume Minor Pip Every 10 F3	
└ Integrated Hole Volume Major Pip Every 100 F3	
└ Integrated Cement Volume Minor Pip Every 10 F3	
└ Integrated Cement Volume Major Pip Every 100 F3	
■ Time Mark Every 60 S	



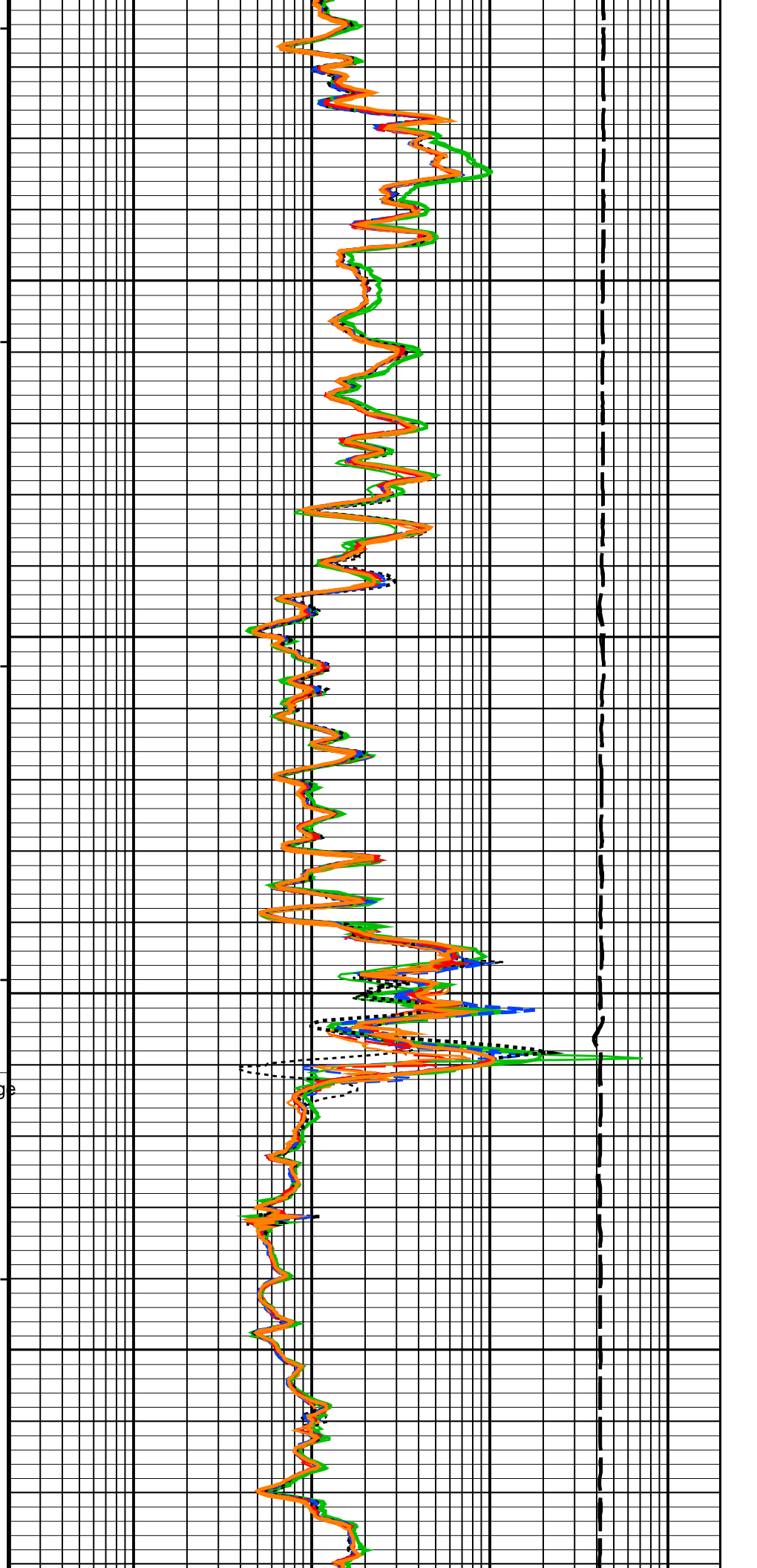


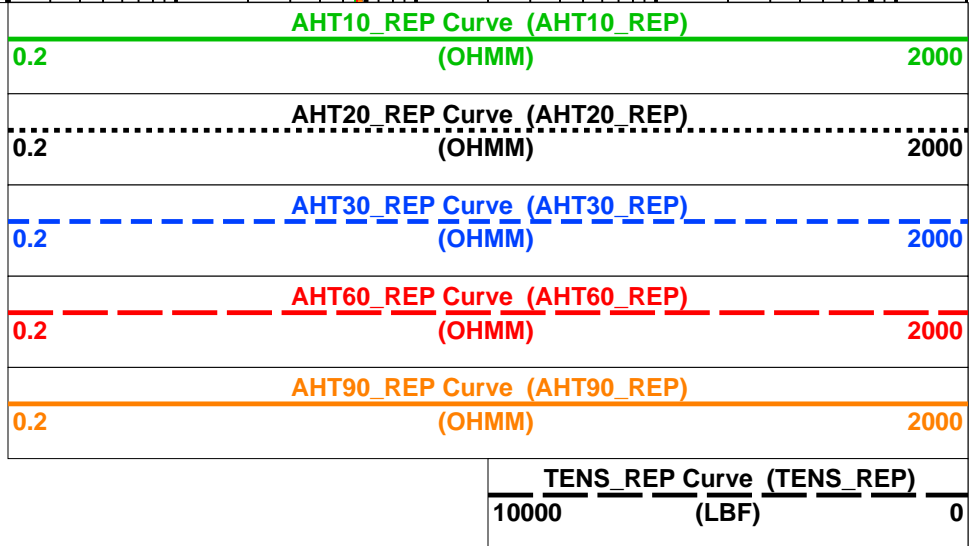
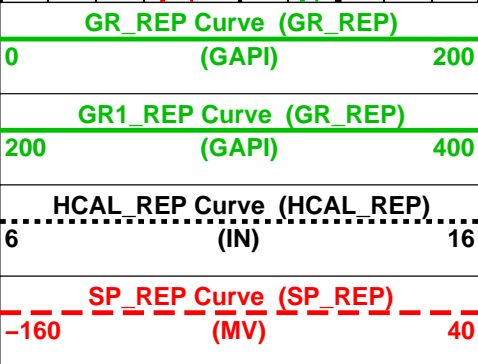
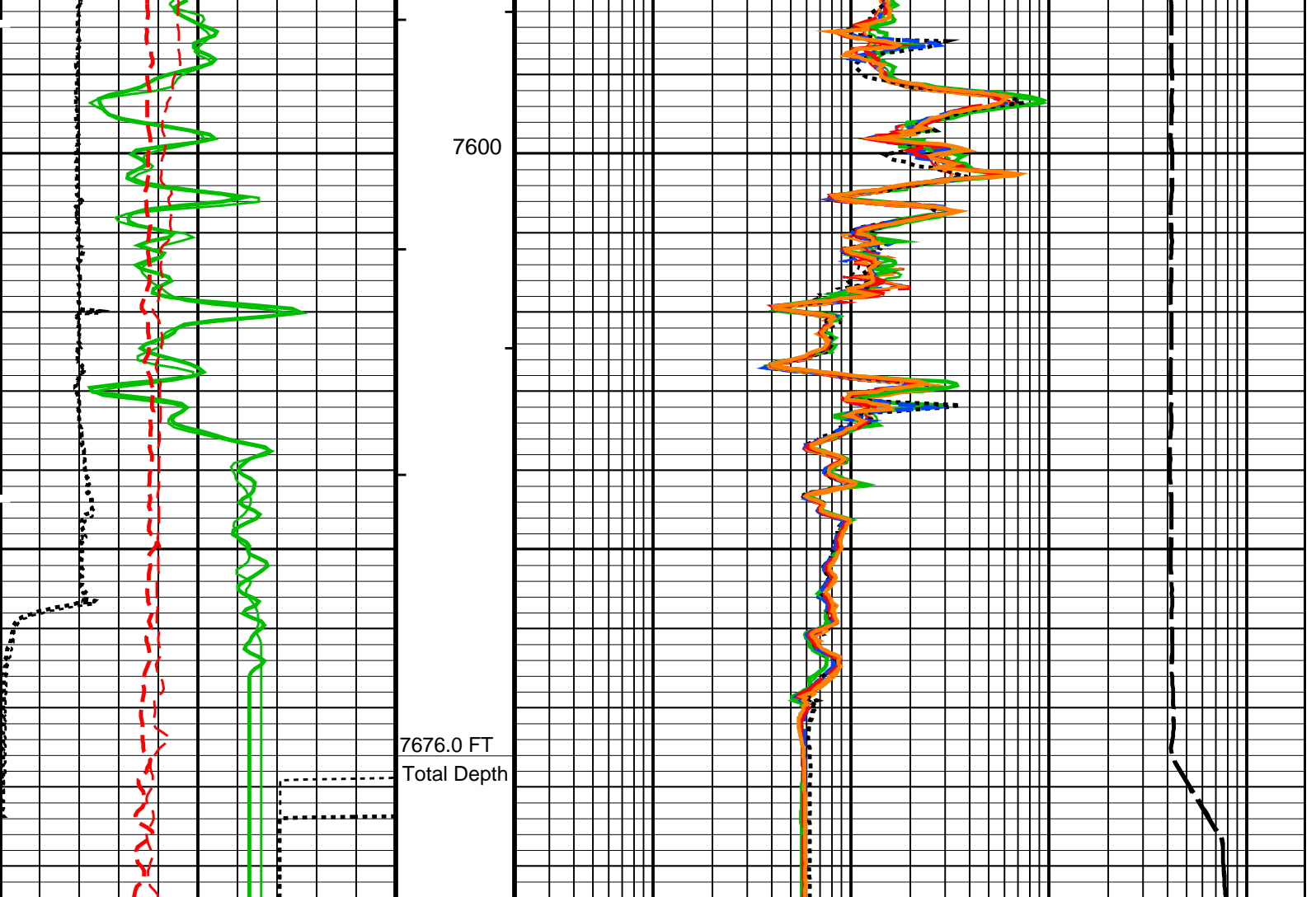


7400

7500

7511.0 FT
Matrix Change





PIP SUMMARY

- └ Integrated Hole Volume Minor Pip Every 10 F3
- └ Integrated Hole Volume Major Pip Every 100 F3
- └ Integrated Cement Volume Minor Pip Every 10 F3
- └ Integrated Cement Volume Major Pip Every 100 F3

Time Mark Every 60 S

AIT-H Answer Product Processing Summary. Data taken with Tool # 397 (AHTNO)

...Acquired data from HILT/HAIT

***** Borehole Correction *****

Effective Tool Standoff computed. Borehole diameter and mud res. taken as input (see GCSE and GRSE parameters)

Tool is run in ECCENTERED mode with a tool stand-off of 1.50 IN. Bit Size is 7.88 IN.

***** Input Selections to AIT-H Answer Product Processing *****

Caliper (GCSE): HCAL Mud Resistivity (GRSE): AHMF

Temperature (GTSE): HTEM

Porosity (FPHI): DPHZ

Form Factor Exponent (FEXP)	2.000	Form Factor Numerator (FNUM)	1.000
Mud Filtrate Sample Resistivity (RMFS)	3.500 OHMM	Mud Filtrate Sample Temperature (MFST)	85.000 DEGF
Resitivity Connate Water (RW)	1.000 OHMM		

***** AIT-H Answer Product Processing Control Parameters *****

Playback Mode: NORMAL

Parameters

DLIS Name	Description	Value	
HILTB-FTB: High resolution Integrated Logging Tool-DTS			
AHBHM	Array Induction Borehole Correction Mode	2_ComputeStandoff	
AHBHV	Array Induction Borehole Correction Code Version Number	880	
AHBLM	Array Induction Basic Logs Mode	6_One_Two_and_Four	
AHBLV	Array Induction Basic Logs Code Version Number	108	
AHCDE	Array Induction Casing Detection Enable	Yes	
AHCEN	Array Induction Tool Centering Flag (in Borehole)	Eccentered	
AHFRSV	Array Induction Response Set Version for Four ft Resolution	40.70.24.21	
AHMRF	Array Induction Mud Resistivity Factor	1	
AHORSV	Array Induction Response Set Version for One ft Resolution	40.70.24.21	
AHRFV	Array Induction Radial Profiling Code Version Number	700	
AHRPV	Array Induction Radial Parametrization Code Version Number	223	
AHSTA	Array Induction Tool Standoff	1.5	IN
AHTRSV	Array Induction Response Set Version for Two ft Resolution	40.70.24.21	
BHT	Bottom Hole Temperature (used in calculations)	212	DEGF
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	AITH_RESIST	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
SHT	Surface Hole Temperature	68	DEGF
SPNV	SP Next Value	0	MV
DIR: Directional Survey Computation			
SPVD	TVD of Starting Point	0	FT
TIMD	Along-hole depth of Tie-in Point	0	FT
TIVD	TVD of Tie-in Point	0	FT
FEQL: Formation Evaluation Quick Look			
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
HOLEV: Integrated Hole/Cement Volume			
BHT	Bottom Hole Temperature (used in calculations)	212	DEGF
FCD	Future Casing (Outer) Diameter	4.5	IN
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	AITH_RESIST	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
HVCS	Integrated Hole Volume Caliper Selection	HCAL	
SHT	Surface Hole Temperature	68	DEGF
PERT: Preliminary Evaluation - Real Time			
BHT	Bottom Hole Temperature (used in calculations)	212	DEGF
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	AITH_RESIST	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
SHT	Surface Hole Temperature	68	DEGF
System and Miscellaneous			
BS	Bit Size	7.875	IN
DFD	Drilling Fluid Density	9.20	LB/G
DO	Depth Offset for Playback	2.0	FT
DORL	Depth Offset for Repeat Analysis	0.0	FT
MST	Mud Sample Temperature	85.00	DEGF
PP	Playback Processing	NORMAL	
TD	Total Depth	7676	FT

Format: GRES_REP Vertical Scale: 5" per 100'

Graphics File Created: 10-Sep-2006 06:47

OP System Version: 13C0-300

MCM

HILTB-FTB SRPC-2788-HILT
DTC-H 13C0-300

GPIT-C

13C0-300

Input DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_015LUP	FN:14	PRODUCER	10-Sep-2006 04:31	7692.0 FT	3248.5 FT
DEFAULT	AIT_TLD_MCFL_CNL_014PUP	FN:13	PRODUCER	10-Sep-2006 04:30	7700.0 FT	7145.5 FT

Output DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_029PUP	FN:27	PRODUCER	10-Sep-2006 06:47
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Schlumberger

BEFORE CALIBRATIONS

MAXIS Field Log

Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
High resolution Integrated Logging Tool-DTS Wellsite Calibration – Electronics Calibration Check – Thru Cal Mag. & Phase							
Master: 4-Aug-2006 15:08 Before: 9-Sep-2006 19:49							
Thru Cal Magnitude – 0	0	0.6339	0.6354	N/A	N/A	N/A	V
Thru Cal Magnitude – 1	0	1.301	1.304	N/A	N/A	N/A	V
Thru Cal Magnitude – 2	0	0.6445	0.6456	N/A	N/A	N/A	V
Thru Cal Magnitude – 3	0	0.7284	0.7303	N/A	N/A	N/A	V
Thru Cal Magnitude – 4	0	1.361	1.365	N/A	N/A	N/A	V
Thru Cal Magnitude – 5	0	1.969	1.975	N/A	N/A	N/A	V
Thru Cal Magnitude – 6	0	1.972	1.978	N/A	N/A	N/A	V
Thru Cal Magnitude – 7	0	1.380	1.390	N/A	N/A	N/A	V
Phase – 0	0	68.81	69.84	N/A	N/A	N/A	DEG
Phase – 1	0	67.81	68.85	N/A	N/A	N/A	DEG
Phase – 2	0	63.70	64.79	N/A	N/A	N/A	DEG
Phase – 3	0	62.83	63.93	N/A	N/A	N/A	DEG
Phase – 4	0	56.03	57.20	N/A	N/A	N/A	DEG
Phase – 5	0	53.82	55.08	N/A	N/A	N/A	DEG
Phase – 6	0	53.79	55.05	N/A	N/A	N/A	DEG
Phase – 7	0	47.88	49.68	N/A	N/A	N/A	DEG
High resolution Integrated Logging Tool-DTS Wellsite Calibration – Electronics Calibration Check – Auxilliary							
Master: 4-Aug-2006 15:08 Before: 9-Sep-2006 19:49							
Array Induction SPA Plus	990.5	992.9	991.9	N/A	N/A	N/A	MV
Array Induction SPA Zero	0	-0.2051	-0.2051	N/A	N/A	N/A	MV
Array Induction Temperature PI	0.9150	0.9196	0.9187	N/A	N/A	N/A	V
Array Induction Temperature Ze	0	-0.0002045	-0.0002051	N/A	N/A	N/A	V
High resolution Integrated Logging Tool-DTS Wellsite Calibration – Test Loop Gain Correction							
Master: 4-Aug-2006 15:08							
Test Loop Gain Magnitude – 0	0	1.014	N/A	N/A	N/A	N/A	V
Test Loop Gain Magnitude – 1	0	1.018	N/A	N/A	N/A	N/A	V
Test Loop Gain Magnitude – 2	0	1.014	N/A	N/A	N/A	N/A	V
Test Loop Gain Magnitude – 3	0	1.017	N/A	N/A	N/A	N/A	V
Test Loop Gain Magnitude – 4	0	1.001	N/A	N/A	N/A	N/A	V
Test Loop Gain Magnitude – 5	0	0.9926	N/A	N/A	N/A	N/A	V
Test Loop Gain Magnitude – 6	0	1.004	N/A	N/A	N/A	N/A	V
Test Loop Gain Magnitude – 7	0	1.008	N/A	N/A	N/A	N/A	V
Phase – 0	0	0.5333	N/A	N/A	N/A	N/A	DEG
Phase – 1	0	0.5303	N/A	N/A	N/A	N/A	DEG
Phase – 2	0	-0.1135	N/A	N/A	N/A	N/A	DEG
Phase – 3	0	0.09604	N/A	N/A	N/A	N/A	DEG
Phase – 4	0	-0.08085	N/A	N/A	N/A	N/A	DEG
Phase – 5	0	-0.2575	N/A	N/A	N/A	N/A	DEG
Phase – 6	0	0.1060	N/A	N/A	N/A	N/A	DEG
Phase – 7	0	-0.1925	N/A	N/A	N/A	N/A	DEG

High resolution Integrated Logging Tool-DTS Wellsite Calibration – Sonde Error Correction

Master: 4-Aug-2006 15:08							
R Sonde Error Correction – 0	0	–49.94	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction – 1	0	160.6	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction – 2	0	112.4	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction – 3	0	61.29	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction – 4	0	25.17	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction – 5	0	10.94	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction – 6	0	12.99	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction – 7	0	–1.652	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction – 0	0	–38.52	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction – 1	0	52.55	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction – 2	0	–78.82	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction – 3	0	–75.45	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction – 4	0	–23.77	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction – 5	0	14.54	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction – 6	0	7.196	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction – 7	0	9.048	N/A	N/A	N/A	N/A	MM/M

High resolution Integrated Logging Tool-DTS Wellsite Calibration – Mud Gain Correction

Master: 4-Aug-2006 15:08							
Coarse – Mag, Real, Imag – 0	0	1.175	N/A	N/A	N/A	N/A	
Coarse – Mag, Real, Imag – 1	0	1.176	N/A	N/A	N/A	N/A	
Coarse – Mag, Real, Imag – 2	0	1.176	N/A	N/A	N/A	N/A	
Fine – Mag, Real, Imag – 0	0	1.175	N/A	N/A	N/A	N/A	
Fine – Mag, Real, Imag – 1	0	1.175	N/A	N/A	N/A	N/A	
Fine – Mag, Real, Imag – 2	0	1.175	N/A	N/A	N/A	N/A	

High resolution Integrated Logging Tool-DTS Wellsite Calibration – Stab Measurement Summary

Before: 9-Sep-2006 20:01							
BS Window Ratio	0.7399	N/A	0.7415	N/A	N/A	N/A	
BS Window Sum	11900	N/A	11890	N/A	N/A	N/A	CPS
SS Window Ratio	0.4823	N/A	0.4839	N/A	N/A	N/A	
SS Window Sum	11820	N/A	11780	N/A	N/A	N/A	CPS
LS Window Ratio	0.2955	N/A	0.2947	N/A	N/A	N/A	
LS Window Sum	1263	N/A	1264	N/A	N/A	N/A	CPS

High resolution Integrated Logging Tool-DTS Wellsite Calibration – Photo-multiplier High Voltages Calibrations

Before: 9-Sep-2006 20:01							
BS PM High Voltage (Command)	1503	N/A	1531	N/A	N/A	N/A	V
SS PM High Voltage (Command)	2020	N/A	2024	N/A	N/A	N/A	V
LS PM High Voltage (Command)	1999	N/A	1995	N/A	N/A	N/A	V

High resolution Integrated Logging Tool-DTS Wellsite Calibration – Crystal Quality Resolutions Calibration

Before: 9-Sep-2006 20:01							
BS Crystal Resolution	11.75	N/A	11.89	N/A	N/A	N/A	%
SS Crystal Resolution	9.721	N/A	9.820	N/A	N/A	N/A	%
LS Crystal Resolution	9.595	N/A	9.490	N/A	N/A	N/A	%

High resolution Integrated Logging Tool-DTS Wellsite Calibration – MCFL Calibration

Before: 9-Sep-2006 19:49							
Raw B0 Resistivity	3875	N/A	3873	N/A	N/A	N/A	OHMM
Raw B1 Resistivity	3830	N/A	3813	N/A	N/A	N/A	OHMM
Raw B2 Resistivity	3830	N/A	3810	N/A	N/A	N/A	OHMM

High resolution Integrated Logging Tool-DTS Wellsite Calibration – HILT Caliper Calibration

Before: 9-Sep-2006 19:46							
HILT Caliper Zero Measurement	8.000	N/A	8.104	N/A	N/A	N/A	IN
HILT Caliper Plus Measurement	12.00	N/A	12.28	N/A	N/A	N/A	IN

High resolution Integrated Logging Tool-DTS Wellsite Calibration – Detector Calibration

Before: 9-Sep-2006 20:05							
Gamma Ray Background	30.00	N/A	90.60	N/A	N/A	N/A	GAPI
Gamma Ray (Jig – Bkg)	169.6	N/A	169.6	N/A	N/A	15.42	GAPI
Gamma Ray (Calibrated)	165.0	N/A	165.0	N/A	N/A	15.00	GAPI

High resolution Integrated Logging Tool-DTS Wellsite Calibration – Zero Measurement

Master: 30-Aug-2006 15:26 Before: 9-Sep-2006 19:49								
CNTC Background	28.03	28.03	27.61	N/A	N/A	4.205	CPS	
CFTC Background	28.12	28.12	29.43	N/A	N/A	4.218	CPS	

High resolution Integrated Logging Tool-DTS Wellsite Calibration – Ratio Measurement

Master: 30-Aug-2006 15:26							
Thermal Near Corr. (Tank)	6031	5387	N/A	N/A	N/A	N/A	CPS
Thermal Far Corr. (Tank)	2793	2272	N/A	N/A	N/A	N/A	CPS
CNTC/CFTC (Tank)	2.159	2.372	N/A	N/A	N/A	N/A	

High resolution Integrated Logging Tool-DTS Wellsite Calibration – Accelerometer Calibration

Before: 10-Sep-2006 2:50							
Z-Axis Acceleration	32.19	N/A	32.20	N/A	N/A	N/A	F/S2

High resolution Integrated Logging Tool-DTS Master Calibration – Inversion results

Master: 2-Sep-2006 0:43							
Rho Aluminum	2.596	2.596	--	--	--	--	G/C3
Rho Magnesium	1.686	1.687	--	--	--	--	G/C3
Pe Aluminum	2.570	2.562	--	--	--	--	
Pe Magnesium	2.650	2.642	--	--	--	--	

High resolution Integrated Logging Tool–DTS Master Calibration – Deviation Summary

Master: 2-Sep-2006 0:43							
BS Average Deviation	0	0.5212	--	--	--	--	%
BS Max Deviation	0	1.060	--	--	--	--	%
SS Average Deviation	0	0.2784	--	--	--	--	%
SS Max Deviation	0	0.8036	--	--	--	--	%
LS Average Deviation	0	0.6005	--	--	--	--	%
LS Max Deviation	0	2.069	--	--	--	--	%

General Purpose Inclinatorometer Wellsite Calibration – CROUZET ACCELEROMETER PROM HAS BEEN READ CORRECTLY

Before: 10-Sep-2006 2:50							
TEMPERATURE REFERENCE :	N/A	N/A	68	N/A	N/A	N/A	DEGF
YEAR OF CALIBRATION :	N/A	N/A	3	N/A	N/A	N/A	
MONTH OF CALIBRATION :	N/A	N/A	10	N/A	N/A	N/A	
SERIAL NUMBER :	N/A	N/A	897	N/A	N/A	N/A	

General Purpose Inclinatorometer Wellsite Calibration – CROUZET MAGNETOMETER PROM HAS BEEN READ CORRECTLY

Before: 10-Sep-2006 2:50							
TEMPERATURE REFERENCE :	N/A	N/A	73	N/A	N/A	N/A	DEGF
YEAR OF CALIBRATION :	N/A	N/A	98	N/A	N/A	N/A	
MONTH OF CALIBRATION :	N/A	N/A	2	N/A	N/A	N/A	
SERIAL NUMBER :	N/A	N/A	375	N/A	N/A	N/A	

The GLS–VJ source activity is acceptable.

The HGNS Neutron Master Calibration was done with the following parameters :

NCT–B Water Temperature	71.0	DEGF.
Thermal Housing Size	3.354	IN.
NSR–F serial number	5068	

High resolution Integrated Logging Tool–DTS / Equipment Identification

Primary Equipment:		
Array Induction Tool – H	AIT – H	397
Rm/SP Bottom Nose	AHRM – A	
Array Induction Sonde	AHIS – BA	397
HILT high–Resolution Mechanical Sonde	HRMS – B	1929
HILT Rxo Gamma–ray Device	HRGD – B	1921
HILT Micro Cylindrically Focused Log Dev	MCFL –	
GR Logging Source	GLS – VJ	1827
HILT High Res. Control Cartridge	HRCC – B	1866

Auxiliary Equipment:

High resolution Integrated Logging Tool–DTS Wellsite Calibration							
Electronics Calibration Check – Thru Cal Mag. & Phase							
Idx	Phase	Value	Thru Cal Magnitude V	Nominal	Value	Phase DEG	Nominal
0	Master	0.6339	<div><div></div></div>	0.6050	68.81	<div><div></div></div>	71.00
	Before	0.6354	<div><div></div></div>		69.84	<div><div></div></div>	
1	Master	1.301	<div><div></div></div>	1.270	67.81	<div><div></div></div>	70.00
	Before	1.304	<div><div></div></div>		68.85	<div><div></div></div>	
2	Master	0.6445	<div><div></div></div>	0.6230	63.70	<div><div></div></div>	66.00
	Before	0.6456	<div><div></div></div>		64.79	<div><div></div></div>	
3	Master	0.7284	<div><div></div></div>	0.7040	62.83	<div><div></div></div>	65.00
	Before	0.7303	<div><div></div></div>		63.93	<div><div></div></div>	
4	Master	1.361	<div><div></div></div>	1.337	56.03	<div><div></div></div>	59.00
	Before	1.365	<div><div></div></div>		57.20	<div><div></div></div>	

Before	Master	1.363			1.955	53.82			57.00
	Before	1.975				55.08			
6	Master	1.972			1.955	53.79			57.00
	Before	1.978				55.05			
7	Master	1.380			1.415	47.88			53.00
	Before	1.390				49.68			
		60.00 % (Minimum)	(Nominal)	140.0 % (Maximum)		Nom -60.00 (Minimum)	(Nominal)	Nom + 60.00 (Maximum)	
Master: 4-Aug-2006 15:08					Before: 9-Sep-2006 19:49				

High resolution Integrated Logging Tool–DTS Wellsite Calibration							
Electronics Calibration Check – Auxilliary							
Phase	Array Induction SPA Plus MV		Value	Phase	Array Induction SPA Zero MV		Value
Master			992.9	Master			-0.2051
Before			991.9	Before			-0.2051
	941.0 (Minimum)	990.5 (Nominal)	1040 (Maximum)		-50.00 (Minimum)	0 (Nominal)	50.00 (Maximum)
Phase	Array Induction Temperature Plus V		Value	Phase	Array Induction Temperature Zero V		Value
Master			0.9196	Master			-0.0002045
Before			0.9187	Before			-0.0002051
	0.8700 (Minimum)	0.9150 (Nominal)	0.9600 (Maximum)		-0.05000 (Minimum)	0 (Nominal)	0.05000 (Maximum)
Master: 4-Aug-2006 15:08				Before: 9-Sep-2006 19:49			

High resolution Integrated Logging Tool-DTS Wellsite Calibration						
Test Loop Gain Correction						
Idx	Value	Test Loop Gain Magnitude V			Value	Phase DEG
0	1.014				0.5333	
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal) 3.000 (Maximum)
1	1.018				0.5303	
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal) 3.000 (Maximum)
2	1.014				-0.1135	
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal) 3.000 (Maximum)
3	1.017				0.09604	
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal) 3.000 (Maximum)
4	1.001				-0.08085	
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal) 3.000 (Maximum)
5	0.9926				-0.2575	
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal) 3.000 (Maximum)
6	1.004				0.1060	
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal) 3.000 (Maximum)
7	1.008				-0.1925	
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal) 3.000 (Maximum)
Master: 4-Aug-2006 15:08						

High resolution Integrated Logging Tool–DTS Wellsite Calibration							
Sonde Error Correction							
Idx	Value	R Sonde Error Correction MM/M			Value	X Sonde Error Correction MM/M	
0	-49.94				-38.52		
		-231.0 (Minimum)	-56.00 (Nominal)	119.0 (Maximum)		-2250 (Minimum)	0 (Nominal) 2250 (Maximum)
1	160.6				52.55		
		114.0	159.0	204.0		-625.0	0 625.0

Master: 4-Aug-2006 15:08



Master: 4-Aug-2006 15:08





Before: 9-Sep-2006 20:01


Before: 9-Sep-2006 20:01

Before: 9-Sep-2006 20:01

High resolution Integrated Logging Tool–DTS Wellsite Calibration									
MCFL Calibration									
Phase	Raw B0 Resistivity OHMM	Value	Phase	Raw B1 Resistivity OHMM	Value	Phase	Raw B2 Resistivity OHMM	Value	





High resolution Integrated Logging Tool-DTS Wellsite Calibration							
HILT Caliper Calibration							
Phase	HILT Caliper Zero Measurement IN		Value	Phase	HILT Caliper Plus Measurement IN		Value
Before			8.104	Before			12.28
	6.000 (Minimum)	8.000 (Nominal)	10.00 (Maximum)		9.000 (Minimum)	12.00 (Nominal)	15.00 (Maximum)
Before: 9-Sep-2006 19:46							

















High resolution Integrated Logging Tool–DTS Wellsite Calibration									
Zero Measurement									
Phase	CNTC Background CPS			Value	Phase	CFTC Background CPS			Value
Master				28.03	Master				28.12
Before				27.61	Before				29.43
5.000 (Minimum)28.03 (Nominal)40.00 (Maximum)					5.000 (Minimum)28.12 (Nominal)40.00 (Maximum)				
Master: 30–Aug–2006 15:26					Before: 9–Sep–2006 19:49				













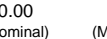

High resolution Integrated Logging Tool-DTS Wellsite Calibration		
Accelerometer Calibration		
Phase	Z-Axis Acceleration F/S2	Value
Before		32.20
	<div>31.53</div> <div>(Minimum)</div> <div>32.19</div> <div>(Nominal)</div> <div>32.84</div> <div>(Maximum)</div>	

Before: 10-Sep-2006 2:50

Master: 4-Aug-2006 15:08

High resolution Integrated Logging Tool–DTS Master Calibration							
Electronics Calibration Check – Auxilliary							
Phase	Array Induction SPA Plus MV		Value	Phase	Array Induction SPA Zero MV		Value
Master			992.9	Master			−0.2051
	941.0 (Minimum)	990.5 (Nominal)			1040 (Maximum)	−50.00 (Minimum)	
Phase	Array Induction Temperature Plus V		Value	Phase	Array Induction Temperature Zero V		Value
Master			0.9196	Master			−0.0002045
	0.8700 (Minimum)	0.9150 (Nominal)			0.9600 (Maximum)	−0.05000 (Minimum)	
Master: 4–Aug–2006 15:08							

High resolution Integrated Logging Tool–DTS Master Calibration								
Test Loop Gain Correction								
Idx	Value	Test Loop Gain Magnitude V			Value	Phase DEG		
0	1.014				0.5333			
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)		-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
1	1.018				0.5303			
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)		-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
2	1.014				-0.1135			
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)		-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
3	1.017				0.09604			
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)		-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
4	1.001				-0.08085			
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)		-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
5	0.9926				-0.2575			
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)		-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
6	1.004				0.1060			
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)		-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
7	1.008				-0.1925			
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)		-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
Master: 4–Aug–2006 15:08								

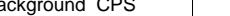
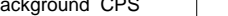
High resolution Integrated Logging Tool–DTS Master Calibration								
Sonde Error Correction								
Idx	Value	R Sonde Error Correction MM/M			Value	X Sonde Error Correction MM/M		
0	-49.94				-38.52			
		-231.0 (Minimum)	-56.00 (Nominal)	119.0 (Maximum)		-2250 (Minimum)	0 (Nominal)	2250 (Maximum)
1	160.6				52.55			
		114.0 (Minimum)	159.0 (Nominal)	204.0 (Maximum)		-625.0 (Minimum)	0 (Nominal)	625.0 (Maximum)
2	112.4				-78.82			
		66.00 (Minimum)	111.0 (Nominal)	156.0 (Maximum)		-350.0 (Minimum)	0 (Nominal)	350.0 (Maximum)
3	61.29				-75.45			
		39.00 (Minimum)	64.00 (Nominal)	89.00 (Maximum)		-250.0 (Minimum)	0 (Nominal)	250.0 (Maximum)
4	25.17				-23.77			
		15.00 (Minimum)	25.00 (Nominal)	35.00 (Maximum)		-63.00 (Minimum)	0 (Nominal)	63.00 (Maximum)
5	10.94				14.54			
		4.000 (Minimum)	14.00 (Nominal)	24.00 (Maximum)		-50.00 (Minimum)	0 (Nominal)	50.00 (Maximum)
6	12.99				7.196			
		5.000 (Minimum)	10.00 (Nominal)	15.00 (Maximum)		-30.00 (Minimum)	0 (Nominal)	30.00 (Maximum)

7	-1.652			9.048		
	-5.000 (Minimum)	0 (Nominal)	5.000 (Maximum)	-30.00 (Minimum)	0 (Nominal)	30.00 (Maximum)
Master: 4-Aug-2006 15:08						

High resolution Integrated Logging Tool–DTS Master Calibration								
Mud Gain Correction								
Idx	Value	Coarse – Mag, Real, Imag			Value	Fine – Mag, Real, Imag		
0	1.175				1.175			
		0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)		0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)
1	1.176				1.175			
		0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)		0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)
2	1.176				1.175			
		0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)		0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)
Master: 4–Aug–2006 15:08								

High resolution Integrated Logging Tool-DTS Master Calibration									
Inversion results									
Phase	Rho Aluminum G/C3			Value	Phase	Rho Magnesium G/C3			Value
Master	<div><div></div><div></div><div></div></div>			2.596	Master	<div><div></div><div></div><div></div></div>			1.687
	2.586 (Minimum)	2.596 (Nominal)	2.606 (Maximum)			1.676 (Minimum)	1.686 (Nominal)	1.696 (Maximum)	
Phase	Pe Aluminum			Value	Phase	Pe Magnesium			Value
Master	<div><div></div><div></div><div></div></div>			2.562	Master	<div><div></div><div></div><div></div></div>			2.642
	2.470 (Minimum)	2.570 (Nominal)	2.670 (Maximum)			2.550 (Minimum)	2.650 (Nominal)	2.750 (Maximum)	
Master: 2-Sep-2006 0:43									

High resolution Integrated Logging Tool-DTS Master Calibration									
Deviation Summary									
Phase	BS Average Deviation %			Value	Phase	SS Average Deviation %			Value
Master				0.5212	Master				0.2784
	-0.6000 (Minimum)	0 (Nominal)	0.6000 (Maximum)			-1.000 (Minimum)	0 (Nominal)	1.000 (Maximum)	
Phase	BS Max Deviation %			Value	Phase	SS Max Deviation %			Value
Master				1.060	Master				0.8036
	-1.600 (Minimum)	0 (Nominal)	1.600 (Maximum)			-2.500 (Minimum)	0 (Nominal)	2.500 (Maximum)	
Phase	LS Average Deviation %			Value	Phase	LS Max Deviation %			Value
Master				0.6005	Master				2.069
	-1.500 (Minimum)	0 (Nominal)	1.500 (Maximum)			-3.500 (Minimum)	0 (Nominal)	3.500 (Maximum)	
Master: 2-Sep-2006 0:43									

High resolution Integrated Logging Tool—DTS Master Calibration									
Zero Measurement									
Phase	CNTC Background CPS			Value	Phase	CFTC Background CPS			Value
Master				28.03	Master				28.12
	5.000 (Minimum)	28.03 (Nominal)	40.00 (Maximum)			5.000 (Minimum)	28.12 (Nominal)	40.00 (Maximum)	
Master: 30-Aug-2006 15:26									

High resolution Integrated Logging Tool-DTS Master Calibration									
Tank Measurement									
Phase	Thermal Near Corr. (Tank) CPS			Value	Phase	Thermal Far Corr. (Tank) CPS			Value
Master				5387	Master				2272
	5000 (Minimum)	6031 (Nominal)	7200 (Maximum)			2075 (Minimum)	2793 (Nominal)	3125 (Maximum)	
Phase	CNTC/CFTC (Tank)			Value	Phase	CNTC/CFTC (Tank)			Value
Master				2.372	Master				2.372
	2.120 (Minimum)	2.159 (Nominal)	2.540 (Maximum)			2.120 (Minimum)	2.159 (Nominal)	2.540 (Maximum)	
Master: 30-Aug-2006 15:26									

General Purpose Inclinometer / Equipment Identification	
Primary Equipment: GPIT Cartridge – C	GPIC – C
Auxiliary Equipment:	

Company: **Kerr–McGee Oil & Gas Onshore LP**

Schlumberger

Well: **Barney 35–14**

Field: **Wattenberg**

County: **Weld**

State: **Colorado**

PLATFORM EXPRESS
ARRAY INDUCTION
LINEAR CORRELATION