



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1095333  
OIL & GAS CONSERVATION DIVISION

Form ACO-1

August 2013

Form must be Typed  
Form must be Signed  
All blanks must be Filled

WELL COMPLETION FORM  
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Address 1: \_\_\_\_\_

Address 2: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ + \_\_\_\_\_

Contact Person: \_\_\_\_\_

Phone: ( \_\_\_\_\_ ) \_\_\_\_\_

CONTRACTOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Wellsite Geologist: \_\_\_\_\_

Purchaser: \_\_\_\_\_

Designate Type of Completion:

- New Well       Re-Entry       Workover
- Oil       WSW       SWD       SIOW
- Gas       D&A       ENHR       SIGW
- OG       GSW       Temp. Abd.
- CM (Coal Bed Methane)
- Cathodic       Other (Core, Expl., etc.): \_\_\_\_\_

If Workover/Re-entry: Old Well Info as follows:

Operator: \_\_\_\_\_

Well Name: \_\_\_\_\_

Original Comp. Date: \_\_\_\_\_ Original Total Depth: \_\_\_\_\_

- Deepening       Re-perf.       Conv. to ENHR       Conv. to SWD
- Plug Back       Conv. to GSW       Conv. to Producer
- Commingled      Permit #: \_\_\_\_\_
- Dual Completion      Permit #: \_\_\_\_\_
- SWD      Permit #: \_\_\_\_\_
- ENHR      Permit #: \_\_\_\_\_
- GSW      Permit #: \_\_\_\_\_

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
-----------------------------------	-----------------	---

API No. 15 - \_\_\_\_\_

Spot Description: \_\_\_\_\_

\_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

\_\_\_\_\_ Feet from  North /  South Line of Section

\_\_\_\_\_ Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE       NW       SE       SW

GPS Location: Lat: \_\_\_\_\_, Long: \_\_\_\_\_  
(e.g. xx.xxxxx)      (e.g. -xxx.xxxxx)

Datum:  NAD27       NAD83       WGS84

County: \_\_\_\_\_

Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Field Name: \_\_\_\_\_

Producing Formation: \_\_\_\_\_

Elevation: Ground: \_\_\_\_\_ Kelly Bushing: \_\_\_\_\_

Total Vertical Depth: \_\_\_\_\_ Plug Back Total Depth: \_\_\_\_\_

Amount of Surface Pipe Set and Cemented at: \_\_\_\_\_ Feet

Multiple Stage Cementing Collar Used?  Yes  No

If yes, show depth set: \_\_\_\_\_ Feet

If Alternate II completion, cement circulated from: \_\_\_\_\_

feet depth to: \_\_\_\_\_ w/ \_\_\_\_\_ sx cmt.

Drilling Fluid Management Plan

*(Data must be collected from the Reserve Pit)*

Chloride content: \_\_\_\_\_ ppm Fluid volume: \_\_\_\_\_ bbls

Dewatering method used: \_\_\_\_\_

Location of fluid disposal if hauled offsite:

Operator Name: \_\_\_\_\_

Lease Name: \_\_\_\_\_ License #: \_\_\_\_\_

Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

County: \_\_\_\_\_ Permit #: \_\_\_\_\_

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

- Confidentiality Requested  
Date: \_\_\_\_\_
- Confidential Release Date: \_\_\_\_\_
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT  I  II  III Approved by: \_\_\_\_\_ Date: \_\_\_\_\_



1095333

Operator Name: \_\_\_\_\_ Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West County: \_\_\_\_\_

**INSTRUCTIONS:** Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to [kcc-well-logs@kcc.ks.gov](mailto:kcc-well-logs@kcc.ks.gov). Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i>  Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No  Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No  List All E. Logs Run: _____	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample  Name Top Datum
--	---

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone				

Did you perform a hydraulic fracturing treatment on this well?  Yes  No *(If No, skip questions 2 and 3)*  
 Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?  Yes  No *(If No, skip question 3)*  
 Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry?  Yes  No *(If No, fill out Page Three of the ACO-1)*

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD:      Size: \_\_\_\_\_ Set At: \_\_\_\_\_ Packer At: \_\_\_\_\_ Liner Run:  Yes  No

Date of First, Resumed Production, SWD or ENHR. \_\_\_\_\_ Producing Method:  
 Flowing  Pumping  Gas Lift  Other *(Explain)* \_\_\_\_\_

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

<b>DISPOSITION OF GAS:</b> <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	<b>METHOD OF COMPLETION:</b> <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	<b>PRODUCTION INTERVAL:</b> _____ _____
--	---	---

Form	ACO1 - Well Completion
Operator	Reeder Operating LLC
Well Name	BROWN-TODD 1 SWD
Doc ID	1095333

All Electric Logs Run

MRIL
Microlog
BSAT
DSNT, SDLT

# HALLIBURTON

## ARRAY COMPENSATED TRUE RESISTIVITY LOG

COMPANY	REEDER OPERATING, LLC		
WELL	BROWN-TODD 1-7 SWD		
FIELD			
COUNTY	COMANCHE		
STATE	KANSAS		
COMPANY	REEDER OPERATING, LLC	API No.	15-033-21656
WELL	BROWN-TODD 1-7 SWD	Location	450' FSL & 515' FEL
FIELD			
COUNTY	COMANCHE	Other Services:	MICROLOG BSAT DSNT, SDLT MRIL
STATE	KANSAS		
Sect.	7	Twp.	32S
Rge.			17W
Elev.			2086.0 ft
			2085.0 ft
			2075.0 ft

Permanent Datum	GL	Elev.	2075.0 ft
Log measured from	KB	D.F.	2085.0 ft
Drilling measured from	KB	G.L.	2075.0 ft

Date	10-Aug-12		
Run No.	TWO		
Depth - Driller	6163.00 ft		
Depth - Logger	6160.0 ft		
Bottom - Logged Interval	6150.0 ft		
Top - Logged Interval	793.0 ft		
Casing - Driller	9.625 in @ 800.0 ft		
Casing - Logger	793.0 ft		
Bit Size	8.750 in		@
Type Fluid in Hole	WATER BASED MUD		
Density	9.1 ppg	11.00	sg/qt
PH	10.50 pH	9.2	cp/m
Source of Sample	FLOWLINE		
Rm @ Meas. Temperature	0.450 ohmm @ 75.00 degF		@
Rmf @ Meas. Temperature	0.37 ohmm @ 75.00 degF		@
Rmc @ Meas. Temperature	0.580 ohmm @ 75.00 degF		@
Source Rmf	MEASURED	MEASURED	
Rm @ BHT	0.25 ohmm @ 138.0 degF		@
Time Since Circulation	5.0 hr		
Time on Bottom	10-Aug-12 04:34		
Max. Rec. Temperature	139.0 degF @ 6160.0 ft		@
Equipment Location	10782954	LIBERAL	
Recorded By	JAMIES BOLLOW		
Witnessed By	G. WENTE		

Fold here

Service Ticket No.: 9721957		API Serial No.: 15-033-21656		PGM Version: WL INSITE R3.6.0 (Build 3)			
CHANGE IN MUD TYPE OR ADDITIONAL SAMPLE				RESISTIVITY SCALE CHANGES			
Date	Sample No.			Type Log	Depth	Scale Up Hole	Scale Down Hole
Depth-Driller							
Type Fluid in Hole							
Density	Viscosity						
Ph	Fluid Loss						
Source of Sample				RESISTIVITY EQUIPMENT DATA			
Rm @ Meas. Temp	@	@		Run No.	Tool Type & No.	Pad Type	Tool Pos.
Rmf @ Meas. Temp.	@	@		ONE	ACRT	N/A	1.5 S.O.
Rmc @ Meas. Temp.	@	@			I1256_S0784		
Source Rmf	Rmc						
Rm @ BHT	@	@					
Rmf @ BHT	@	@					
Rmc @ BHT	@	@					
EQUIPMENT DATA							
GAMMA		ACOUSTIC		DENSITY		NEUTRON	
Run No.	ONE	Run No.		Run No.		Run No.	
Serial No.	10811258	Serial No.		Serial No.		Serial No.	
Model No.	GTET	Model No.		Model No.		Model No.	
Diameter	3.625"	No. of Cent.		Diameter		Diameter	
Detector Model No.	GTET	Spacing		Log Type		Log Type	
Type	SCINT			Source Type		Source Type	
Length	8'	LSA [Y/N]		Serial No.		Serial No.	
Distance to Source	10'	FWDA [Y/N]		Strength		Strength	
LOGGING DATA							
GENERAL		GAMMA		ACOUSTIC		DENSITY	
NEUTRON							

Run No.	GENERAL		Speed ft/min	GAMMA		ACOUSTIC		Matrix	DENSITY		Matrix	NEUTRON			
	Depth			L	R	L	R		Scale			L	R	Scale	
	From	To							L	R				L	R
ONE	6160	793	REC	0	150										

DIRECTIONAL INFORMATION

Maximum Deviation @ KOP @

Remarks: ANNULAR HOLE VOLUME CALCULATED FOR 7-INCH CASING

CHLORIDES REPORTED AT 1600 MG/L

LCM REPORTED AT 1 LB/BBL

GTET-DSNT-SDLT-BSAT-ACRT RUN IN COMBINATION

LOGS SPLICED AT 5800' FROM FIRST RUN

TODAY'S CREW: F. VILLA & B. TERRELL

THANK YOU FOR CHOOSING HALLIBURTON ENERGY SERVICES LIBERAL, KS. 620-624-8123

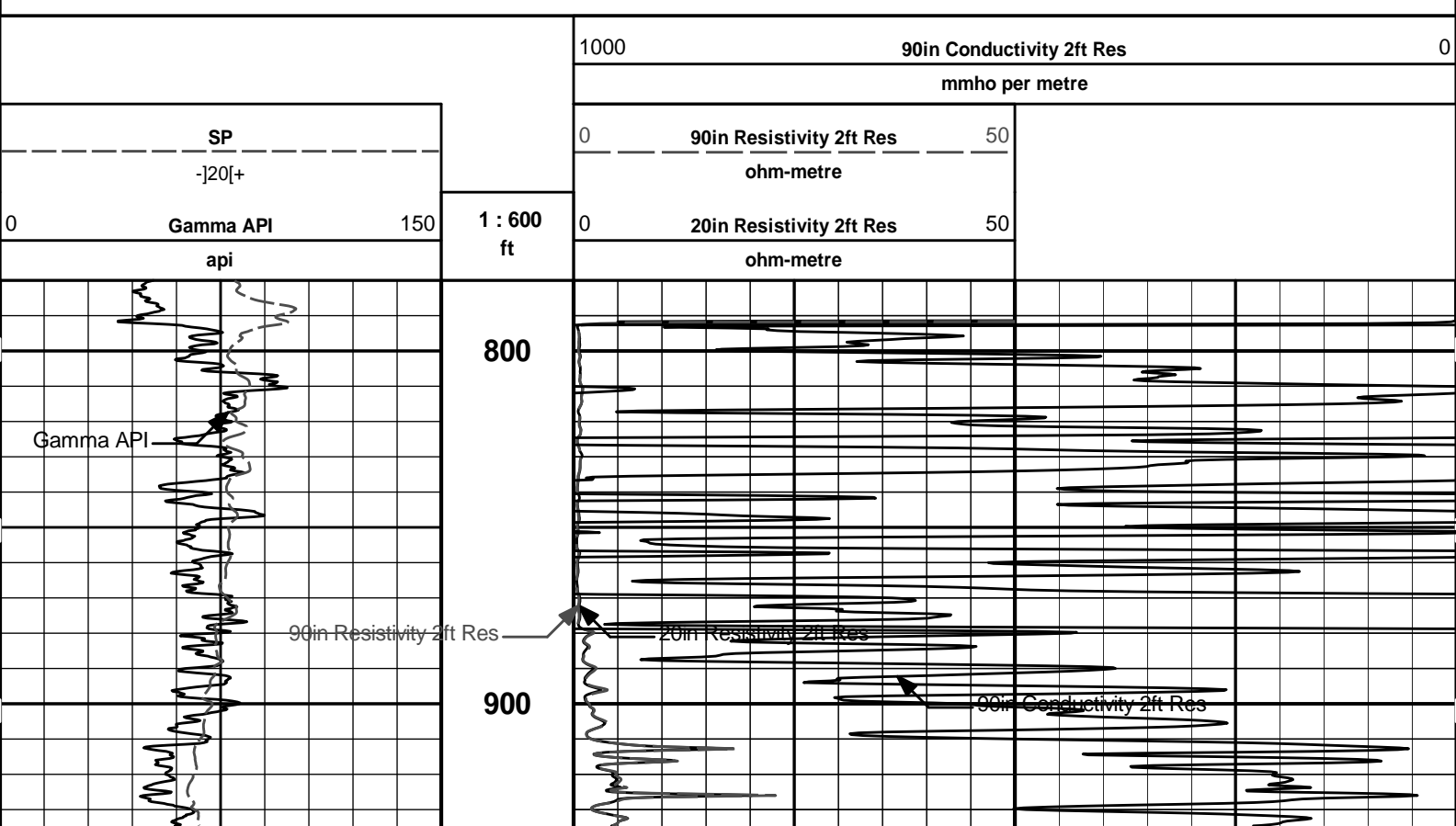
HALLIBURTON DOES NOT GUARANTEE THE ACCURACY OF ANY INTERPRETATION OF THE LOG DATA, CONVERSION OF LOG DATA TO PHYSICAL ROCK PARAMETERS OR RECOMMENDATIONS WHICH MAY BE GIVEN BY HALLIBURTON PERSONNEL OR WHICH APPEAR ON THE LOG OR IN ANY OTHER FORM. ANY USER OF SUCH DATA, INTERPRETATIONS, CONVERSIONS, OR RECOMMENDATIONS AGREES THAT HALLIBURTON IS NOT RESPONSIBLE EXCEPT WHERE DUE TO GROSS NEGLIGENCE OR WILLFUL MISCONDUCT, FOR ANY LOSS, DAMAGES, OR EXPENSES RESULTING FROM THE USE THEREOF.

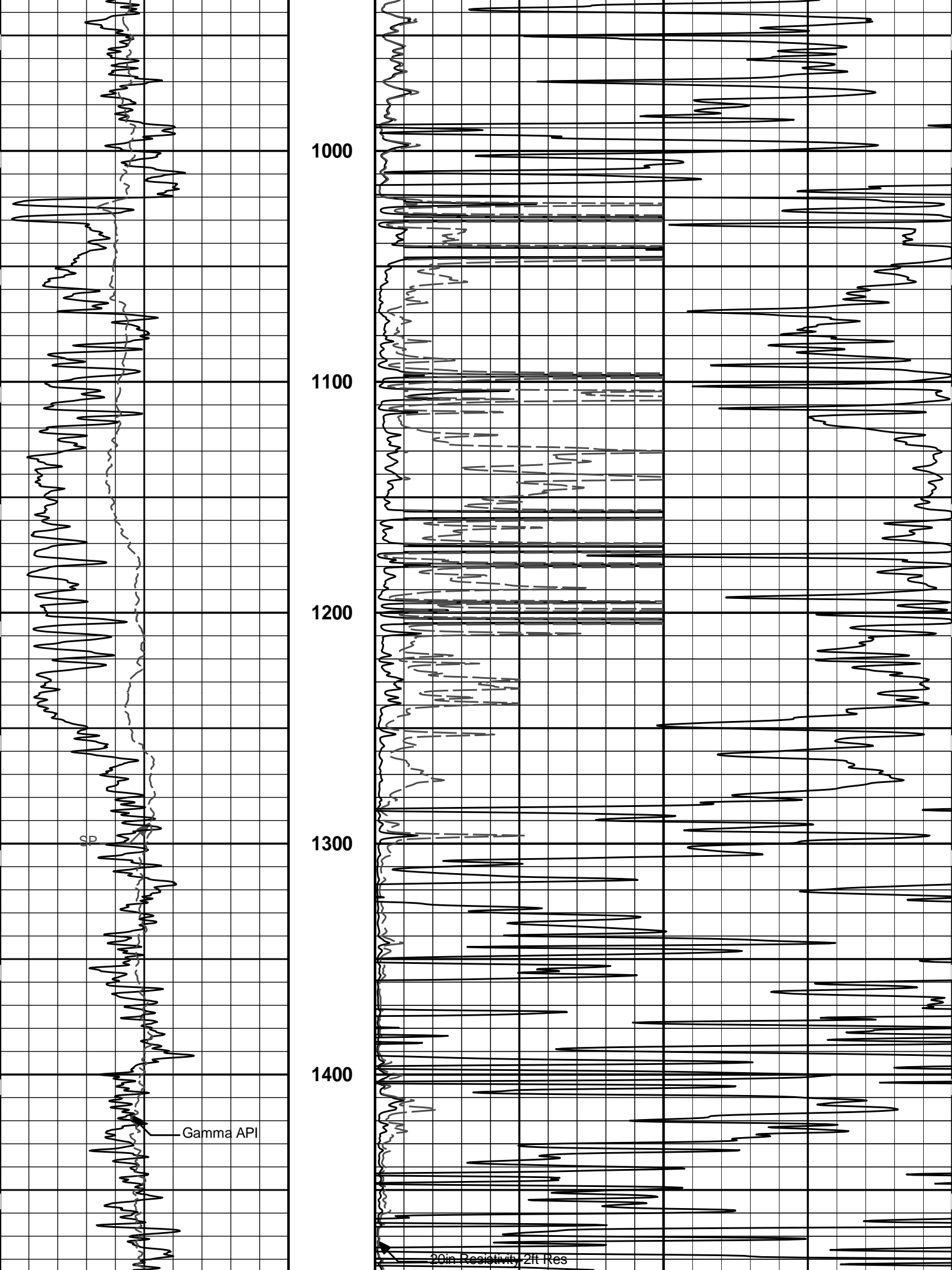
HALLIBURTON

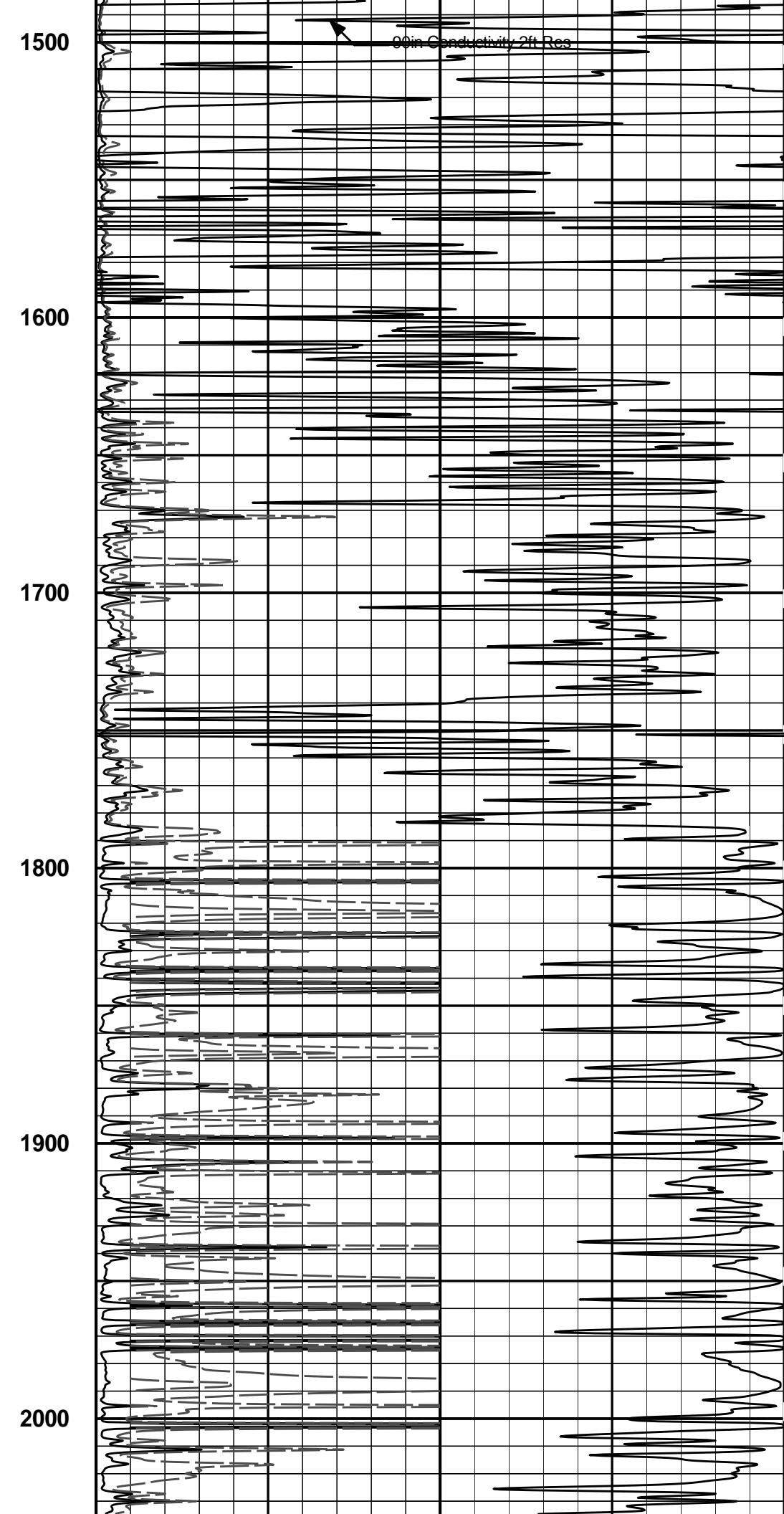
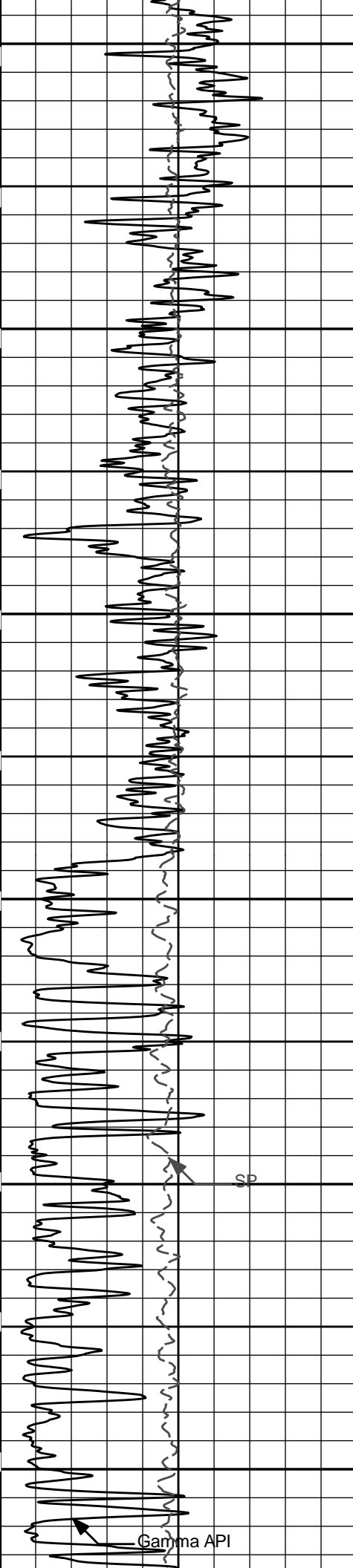


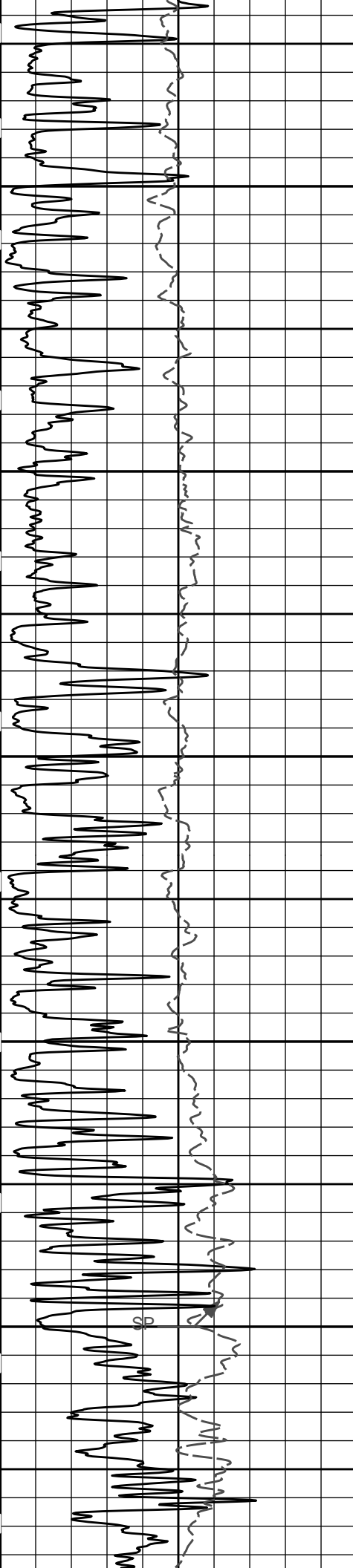
Plot Time: 10-Aug-12 08:04:14  
 Plot Range: 780 ft to 6164.58 ft  
 Data: BROWN\_TODD\_SWD\Well Based\SPLICE\_CASING\  
 Plot File: \\-LOCAL-BROWN\_TODD\_SWD\0001 SP-GTET-DSNT-SDLT-FLEX-BSAT-ACRT-CHACRT\ACRT\_2.lib

## 2 INCH MAIN LOG









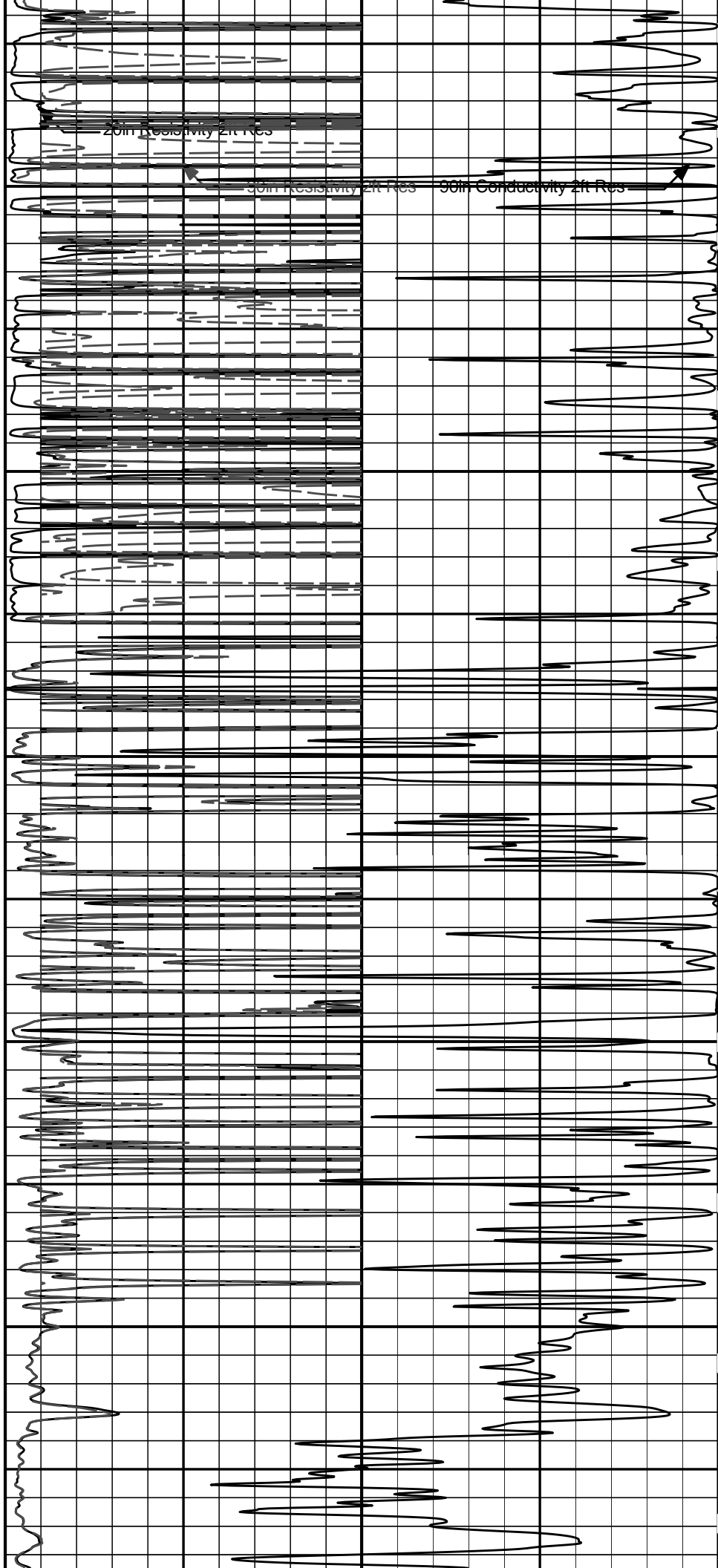
2100

2200

2300

2400

2500

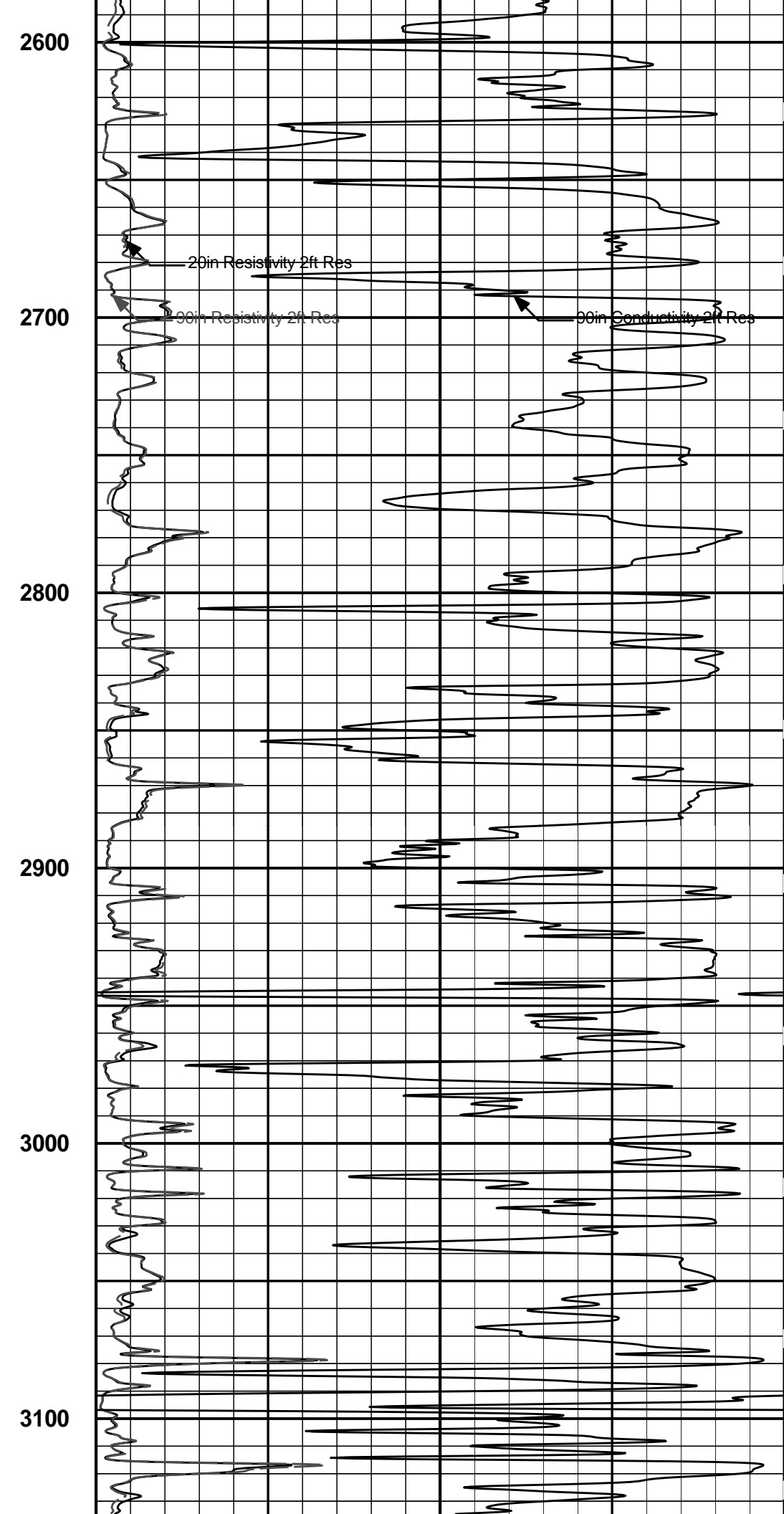
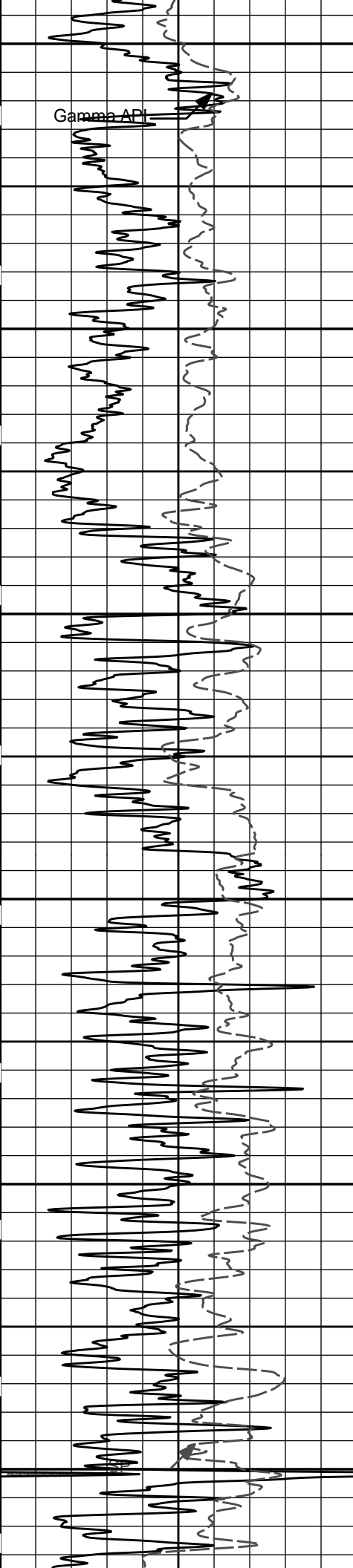


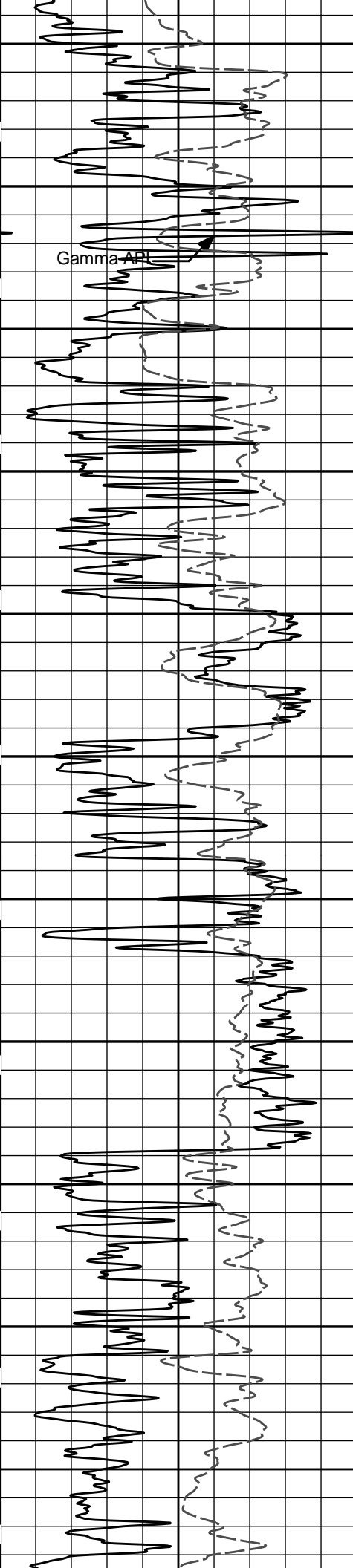
20ft Resistivity 2ft Res

30ft Resistivity 2ft Res

90ft Conductivity 2ft Res







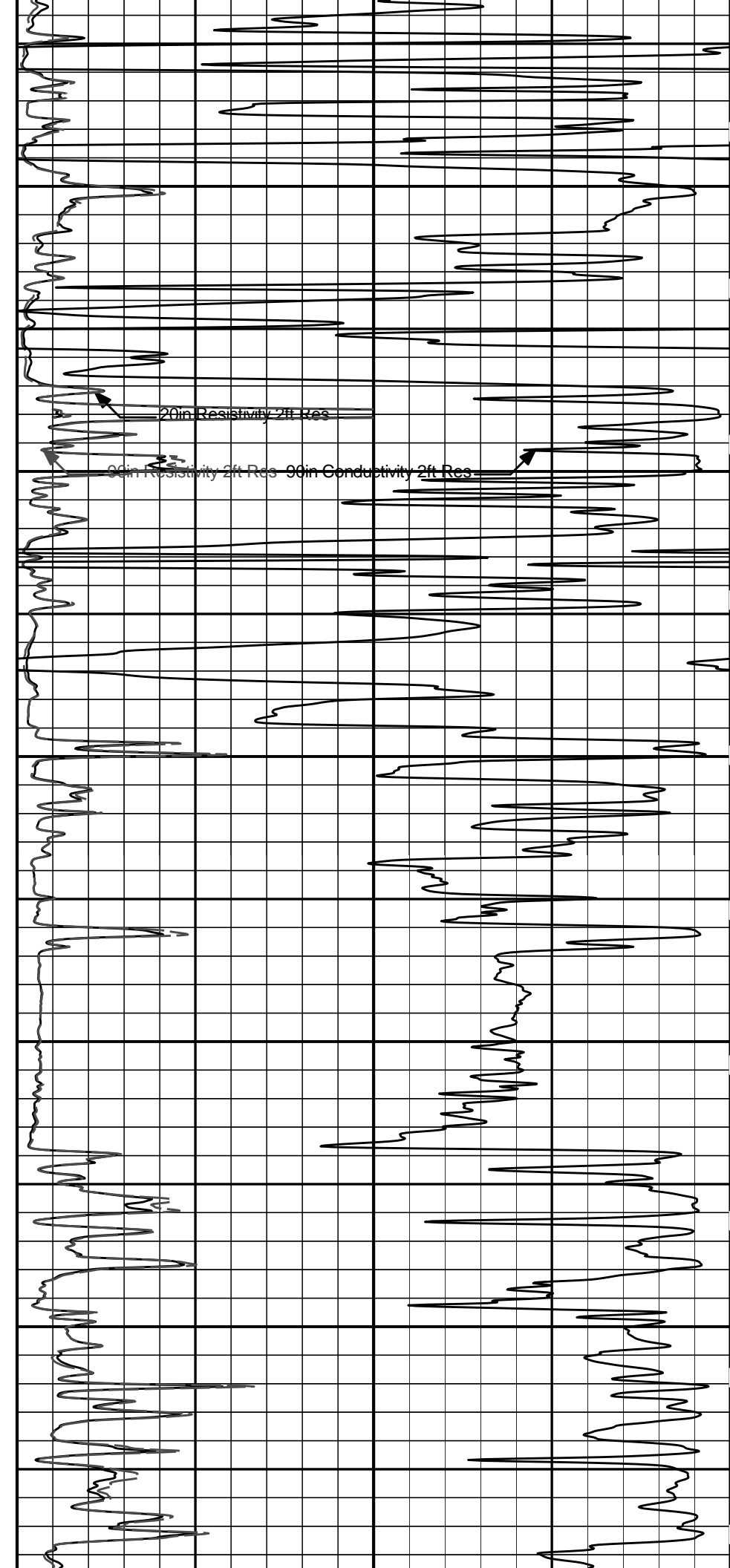
3200

3300

3400

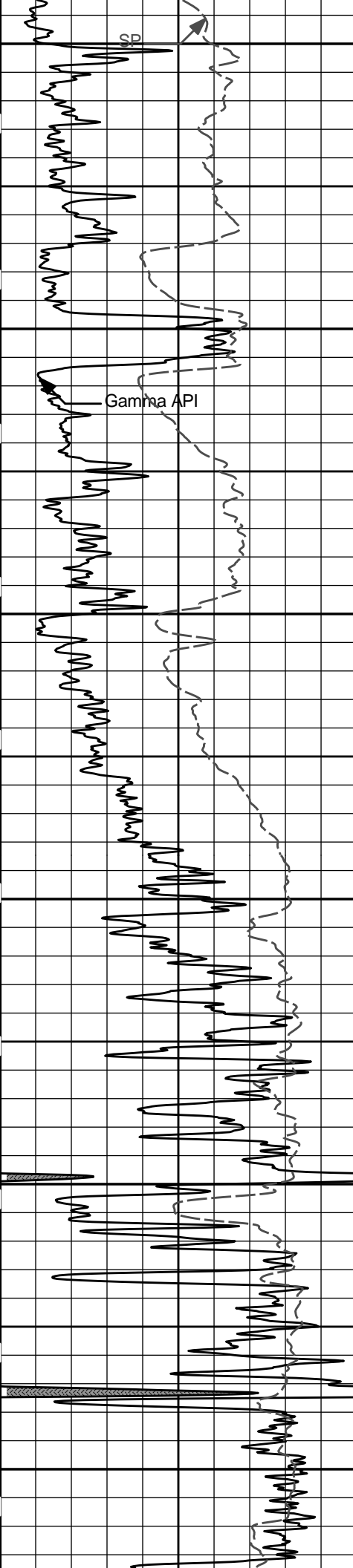
3500

3600

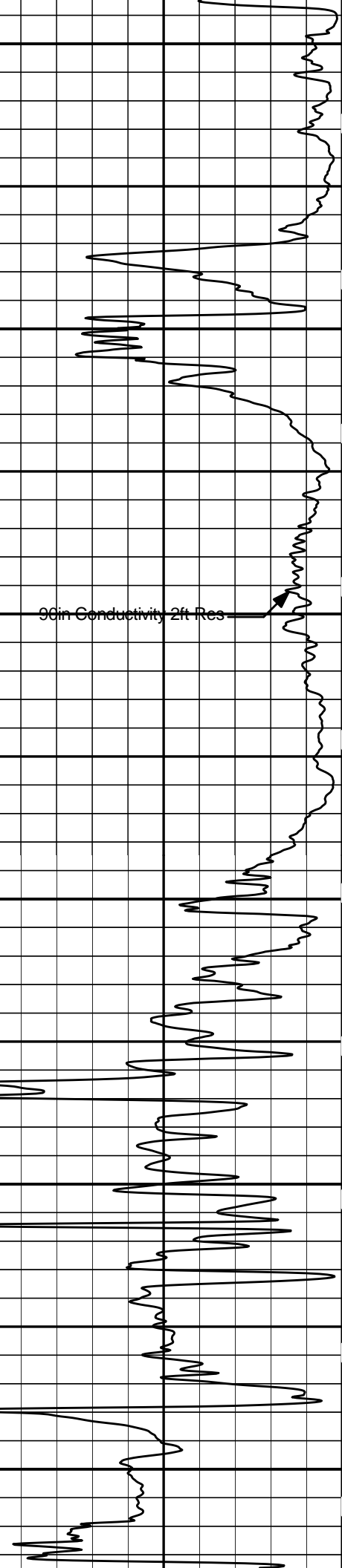
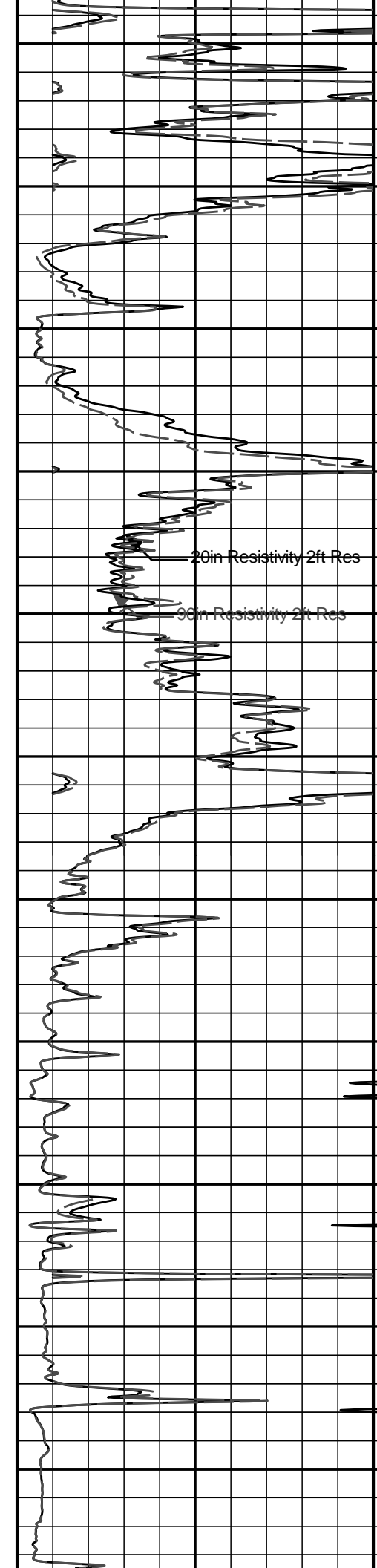


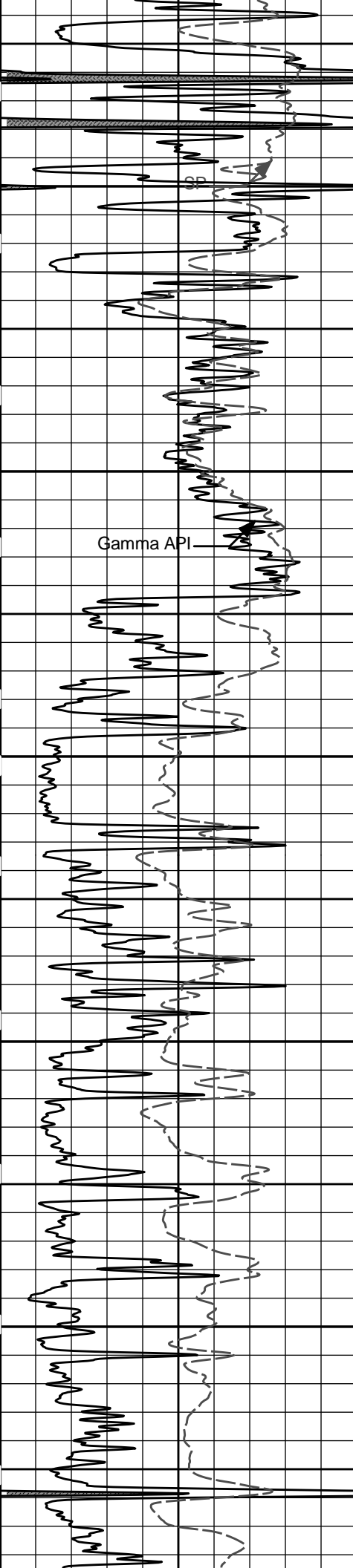
20in Resistivity 2ft Res

90in Resistivity 2ft Res 90in Conductivity 2ft Res

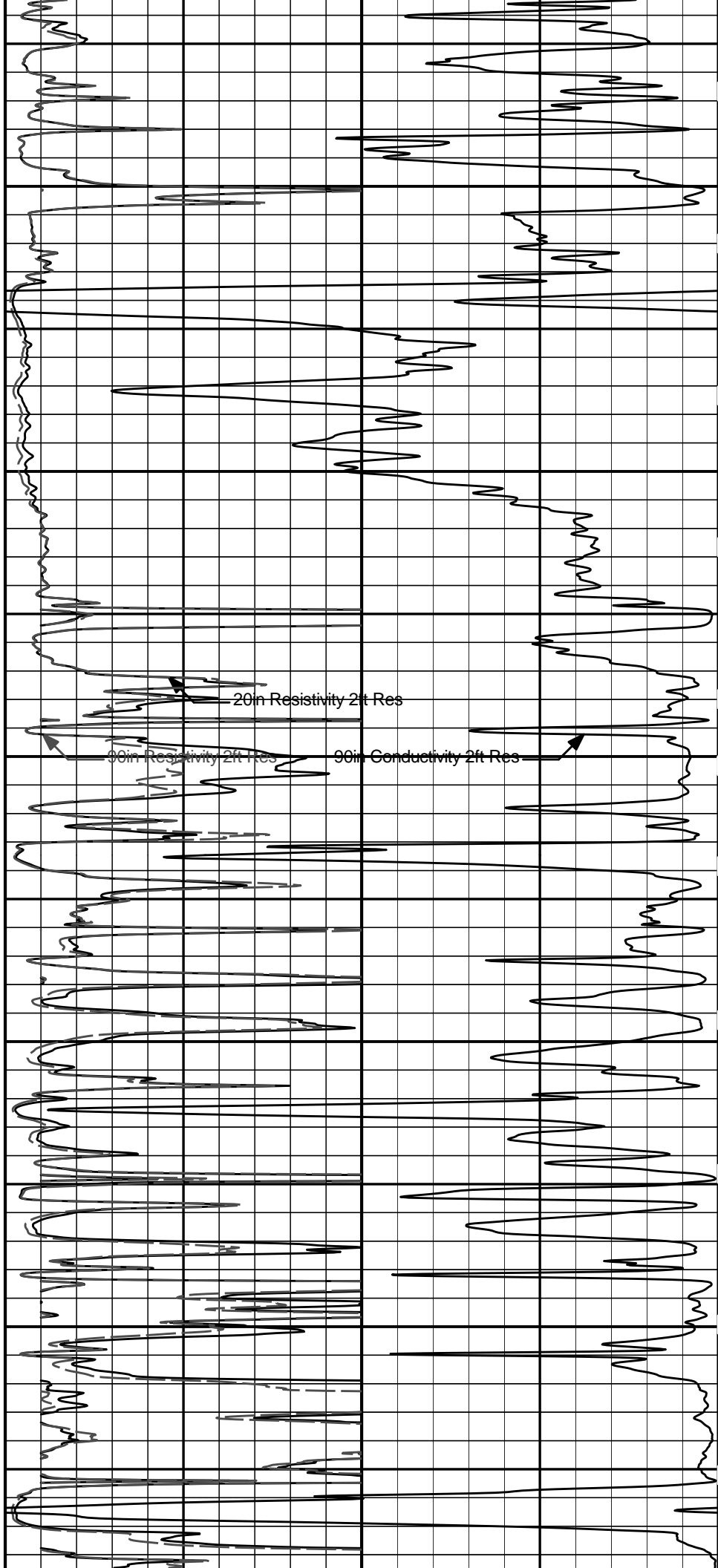


3700  
3800  
3900  
4000  
4100  
4200





4300  
4400  
4500  
4600  
4700

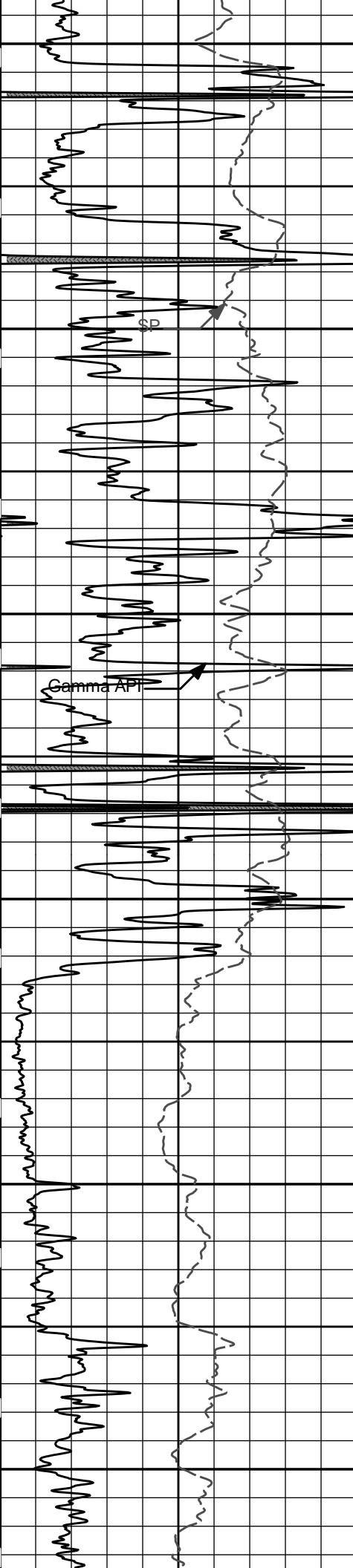


Gamma API

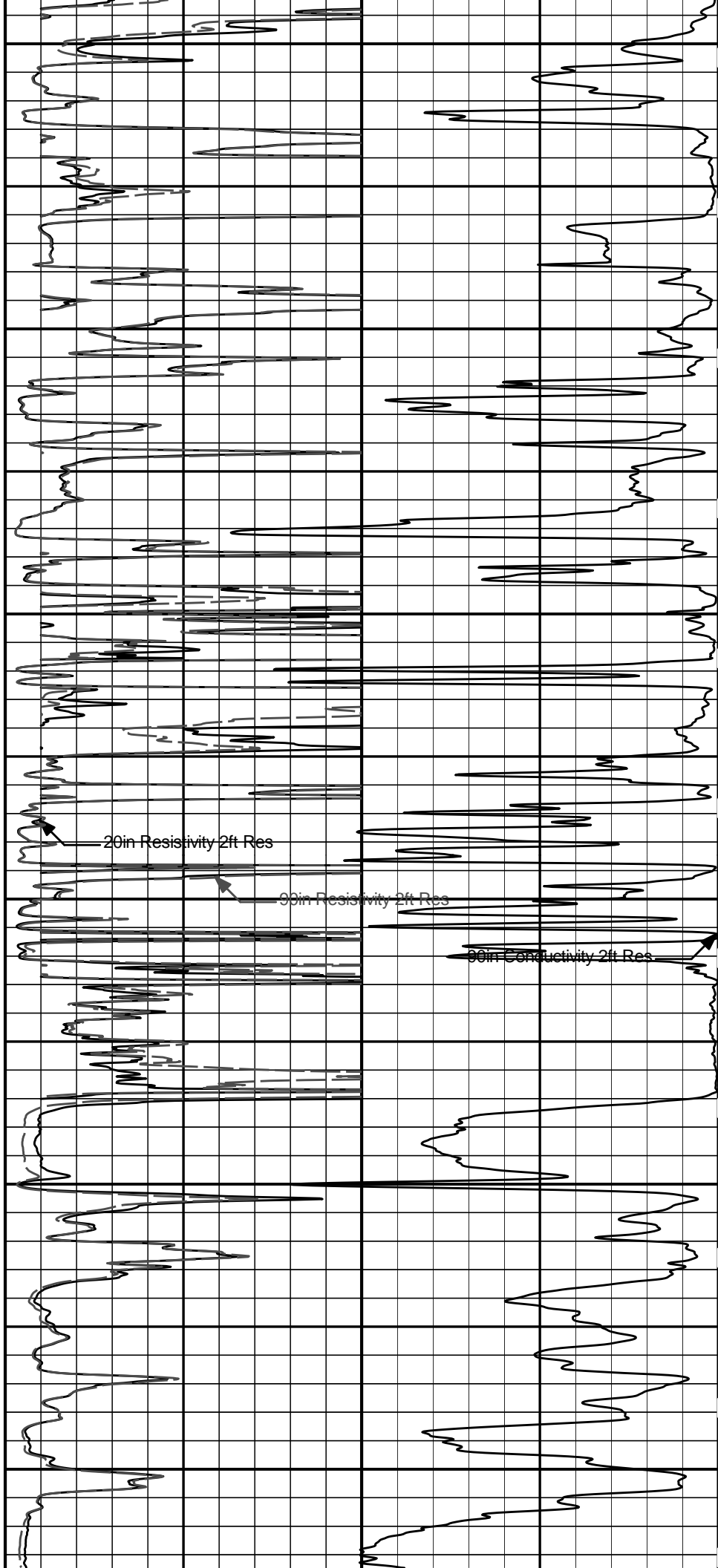
20in Resistivity 2ft Res

80in Resistivity 2ft Res

90in Conductivity 2ft Res



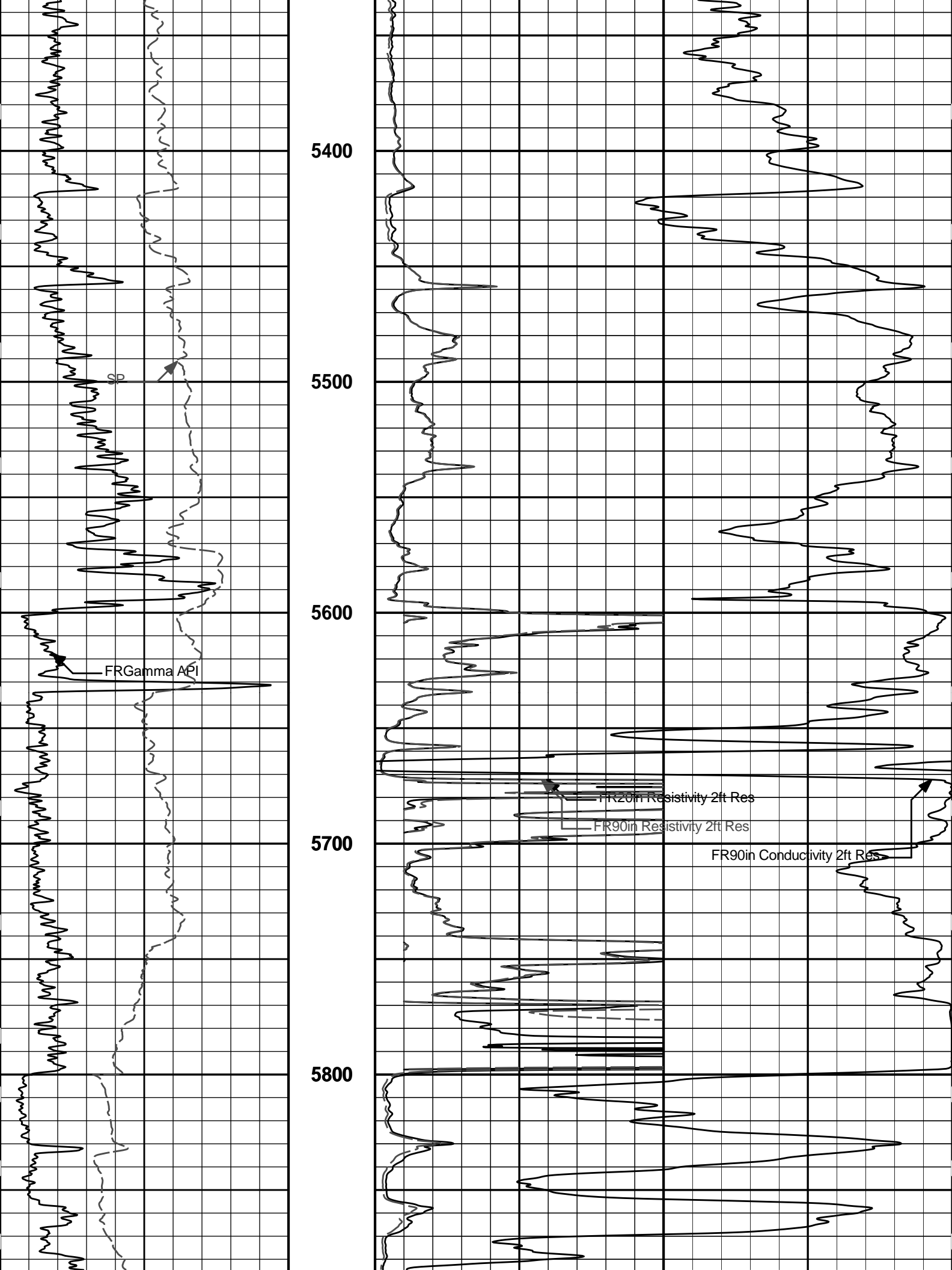
4800  
4900  
5000  
5100  
5200  
5300

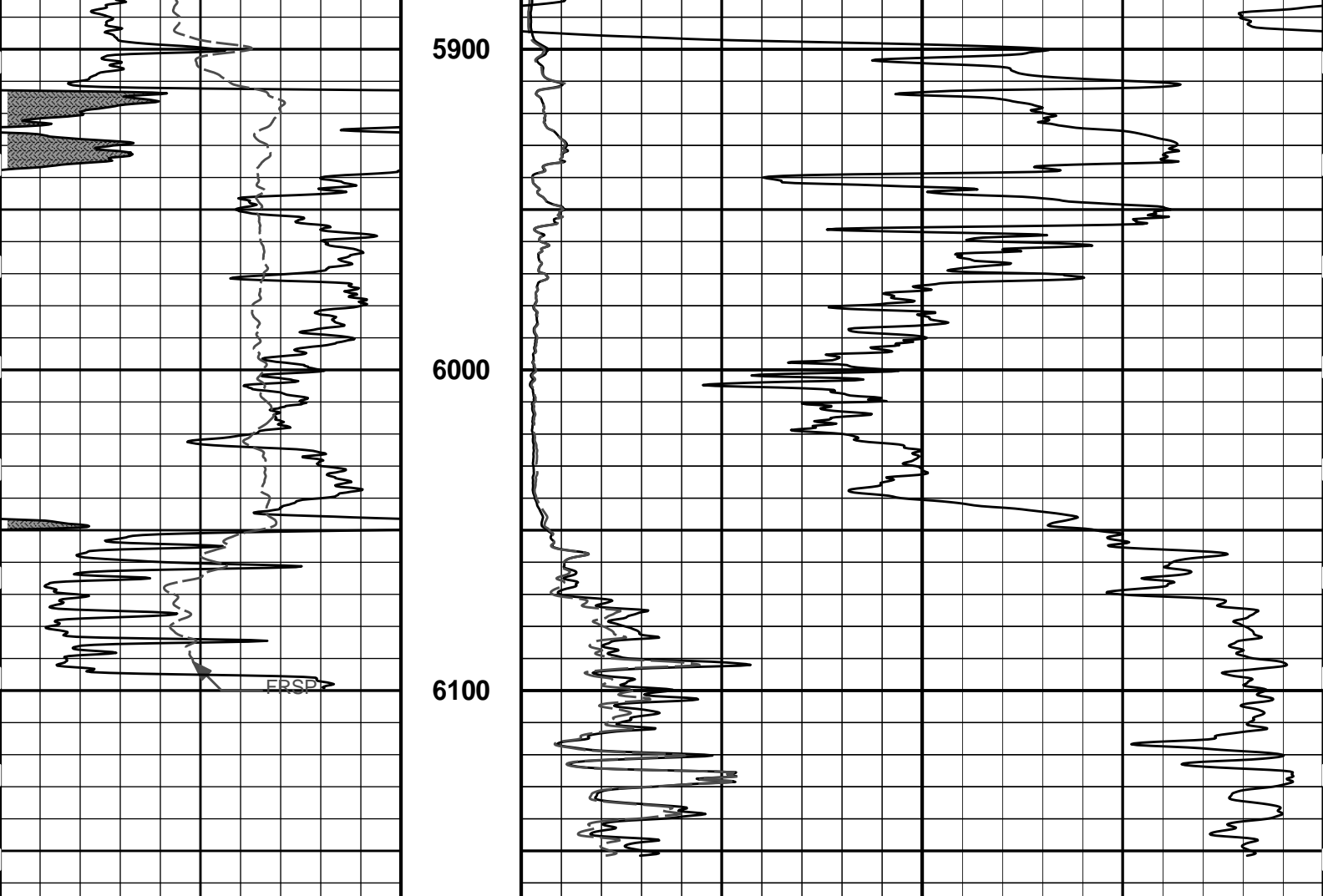


20in Resistivity 2ft Res

99in Resistivity 2ft Res

99in Conductivity 2ft Res





0	Gamma API	150
	api	
	SP	
	- 20 +	

1 : 600  
ft

0	20in Resistivity 2ft Res	50
	ohm-metre	
0	90in Resistivity 2ft Res	50
	ohm-metre	

1000	90in Conductivity 2ft Res	0
	mmho per metre	

**HALLIBURTON**

Plot Time: 10-Aug-12 08:04:24  
 Plot Range: 780 ft to 6164.58 ft  
 Data: BROWN\_TODD\_SWD\Well Based\SPLICE\_CASING\  
 Plot File: \\LOCAL\BROWN\_TODD\_SWD\0001 SP-GTET-DSNT-SDLT-FLEX-BSAT-ACRT-CHACRTVACRT\_2\_lib

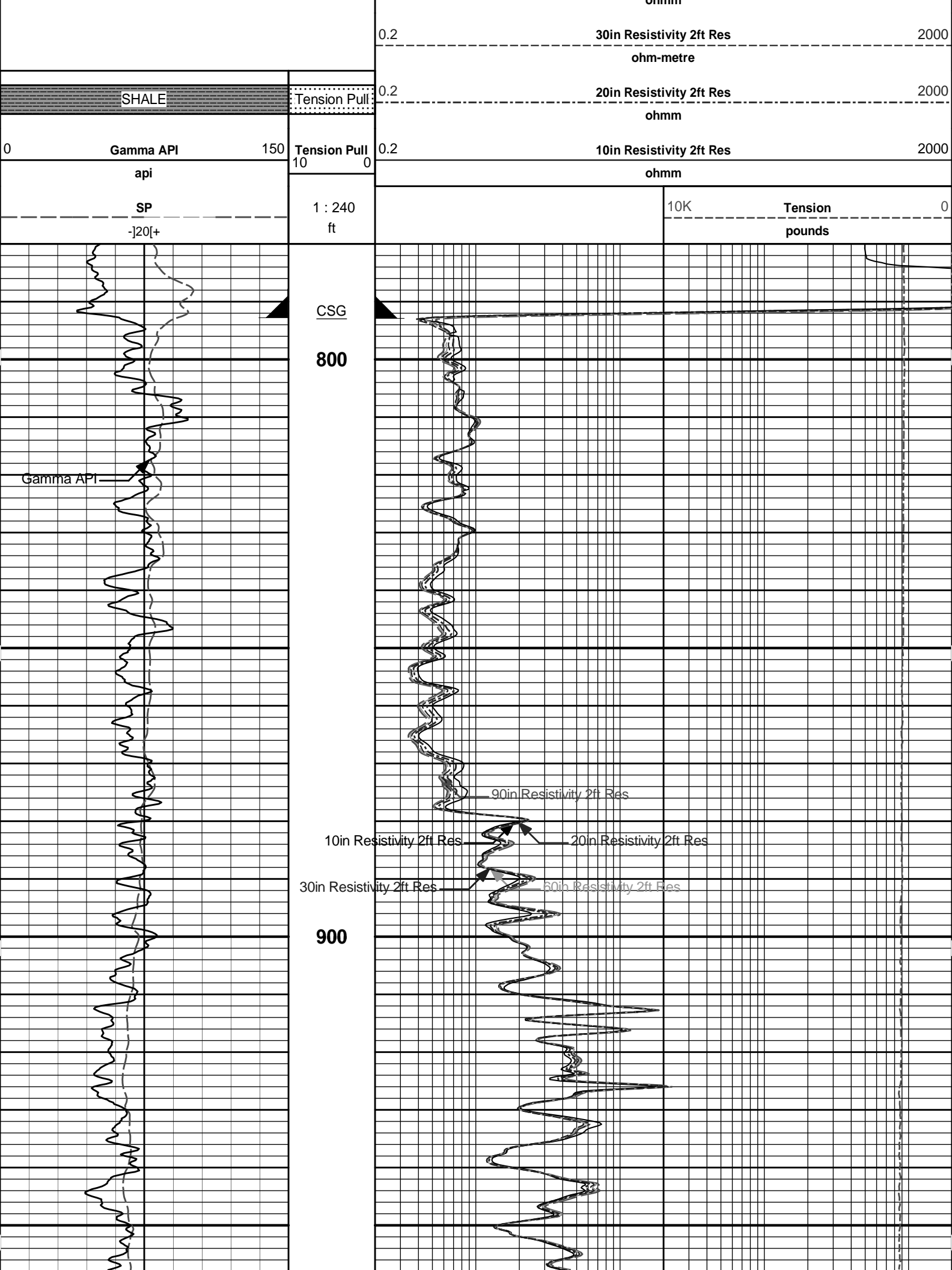
## 2 INCH MAIN LOG

**HALLIBURTON**

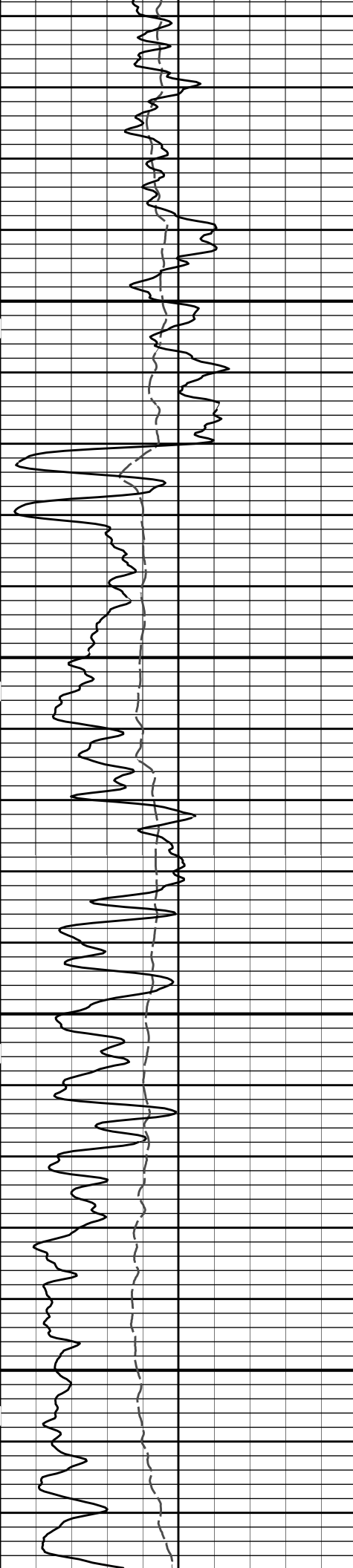
Plot Time: 10-Aug-12 08:04:24  
 Plot Range: 780 ft to 6164.58 ft  
 Data: BROWN\_TODD\_SWD\Well Based\SPLICE\_CASING\  
 Plot File: \\LOCAL\BROWN\_TODD\_SWD\0001 SP-GTET-DSNT-SDLT-FLEX-BSAT-ACRT-CHACRTVACRT\_5\_main\_lib

## 5 INCH MAIN LOG

0.2	90in Resistivity 2ft Res	2000
	ohmm	
0.2	60in Resistivity 2ft Res	2000
	ohmm	

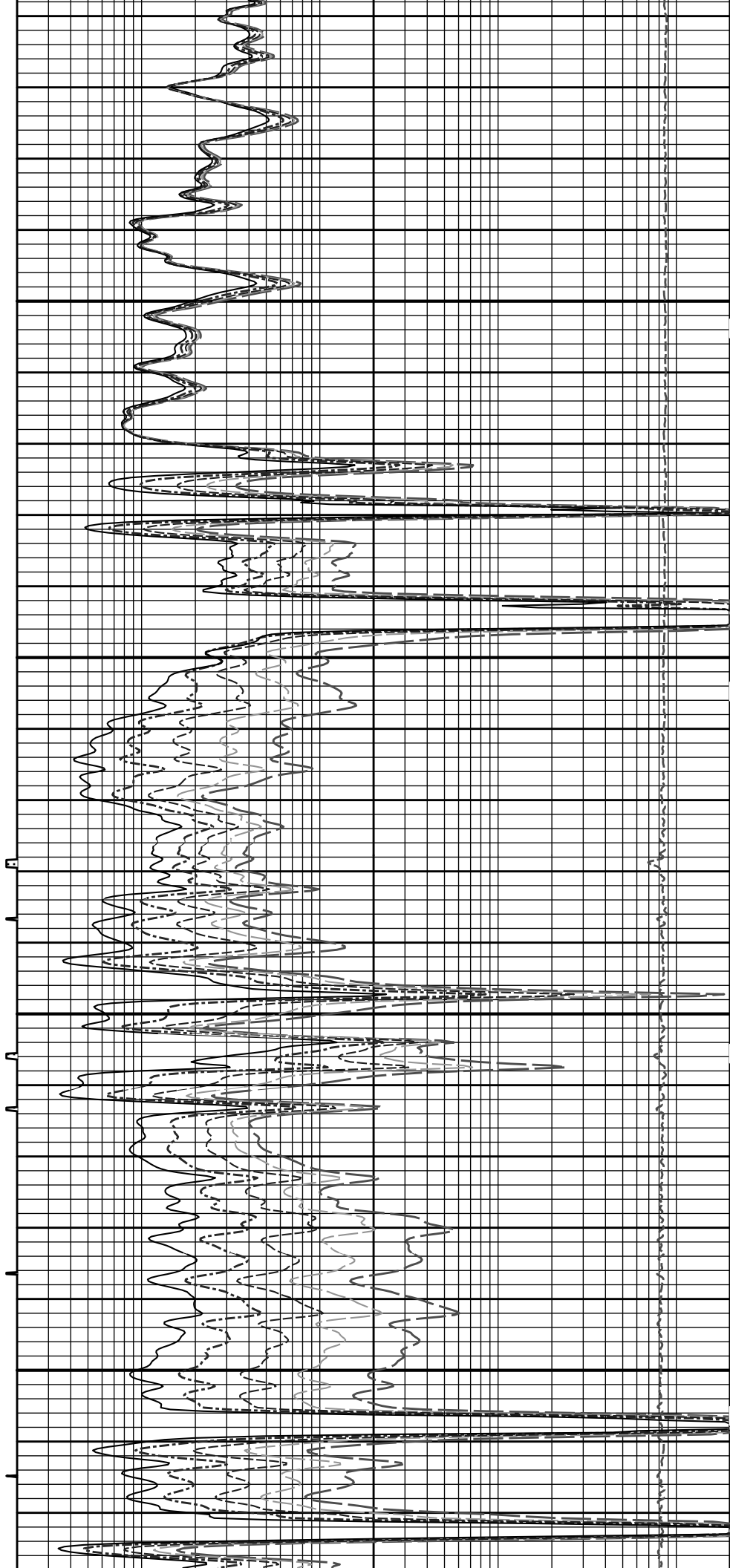


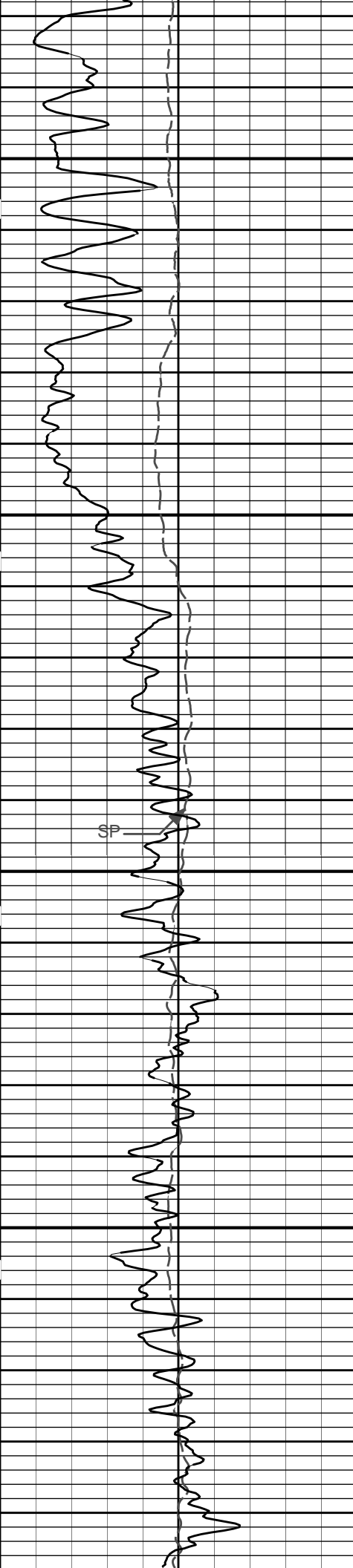




1000

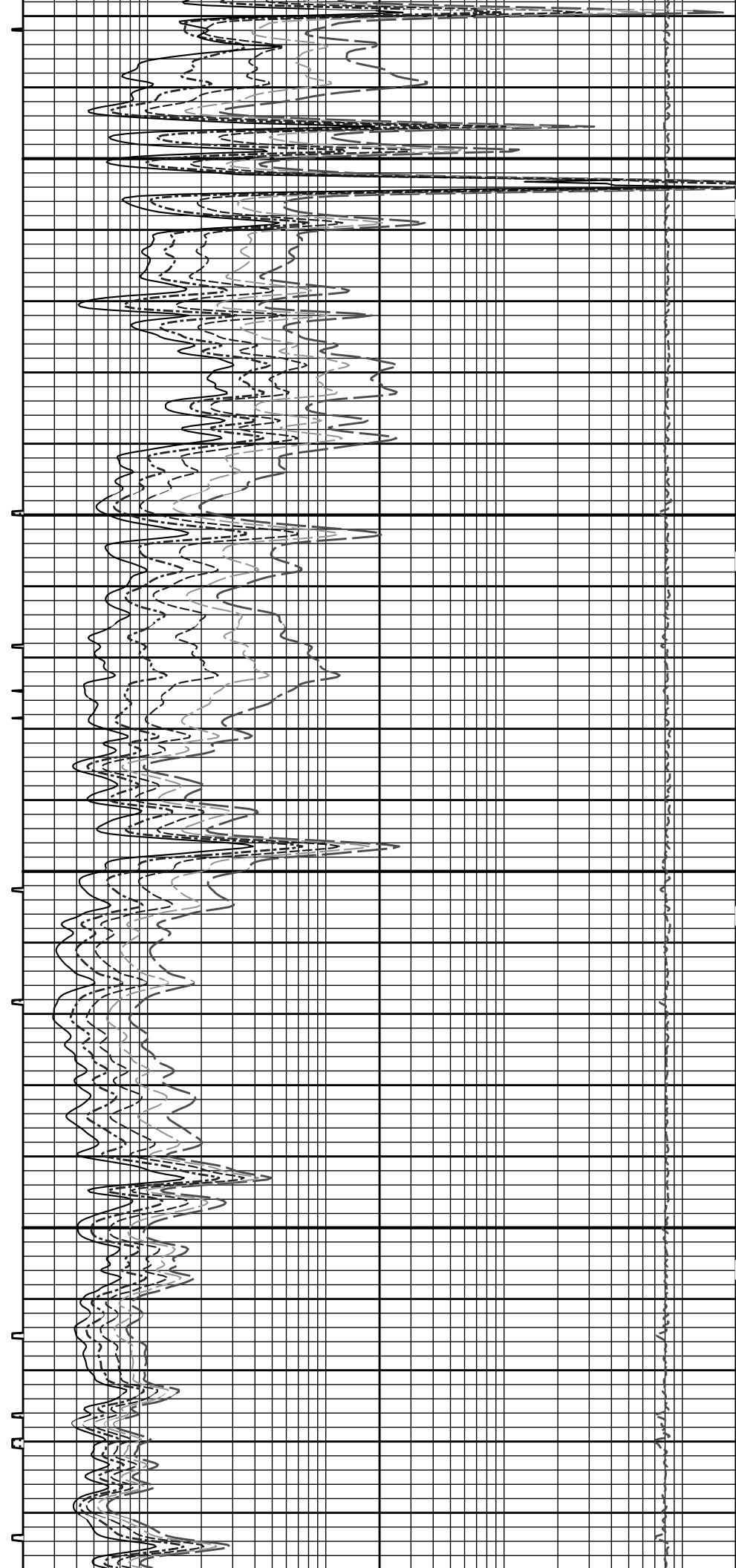
1100

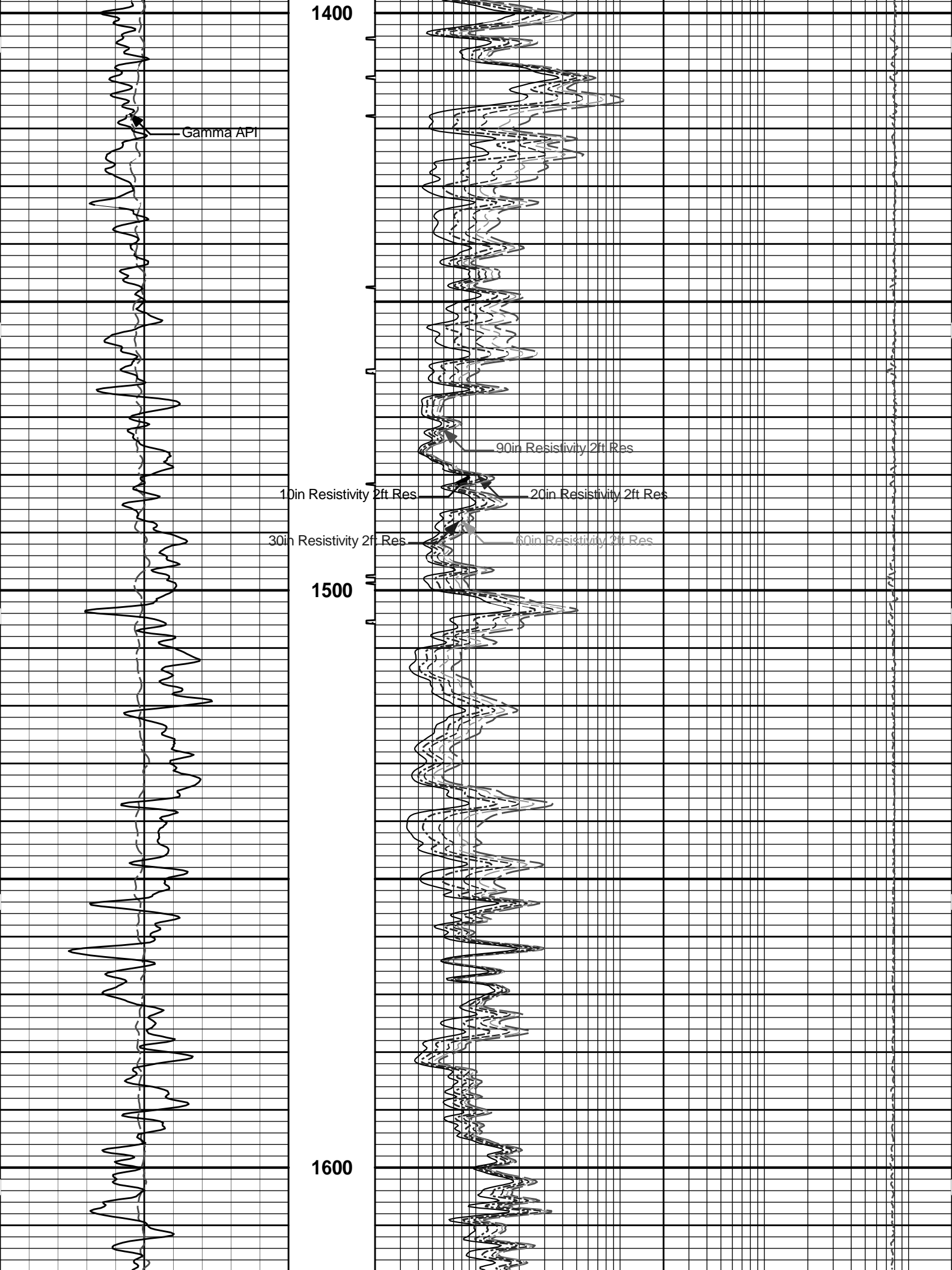




1200

1300

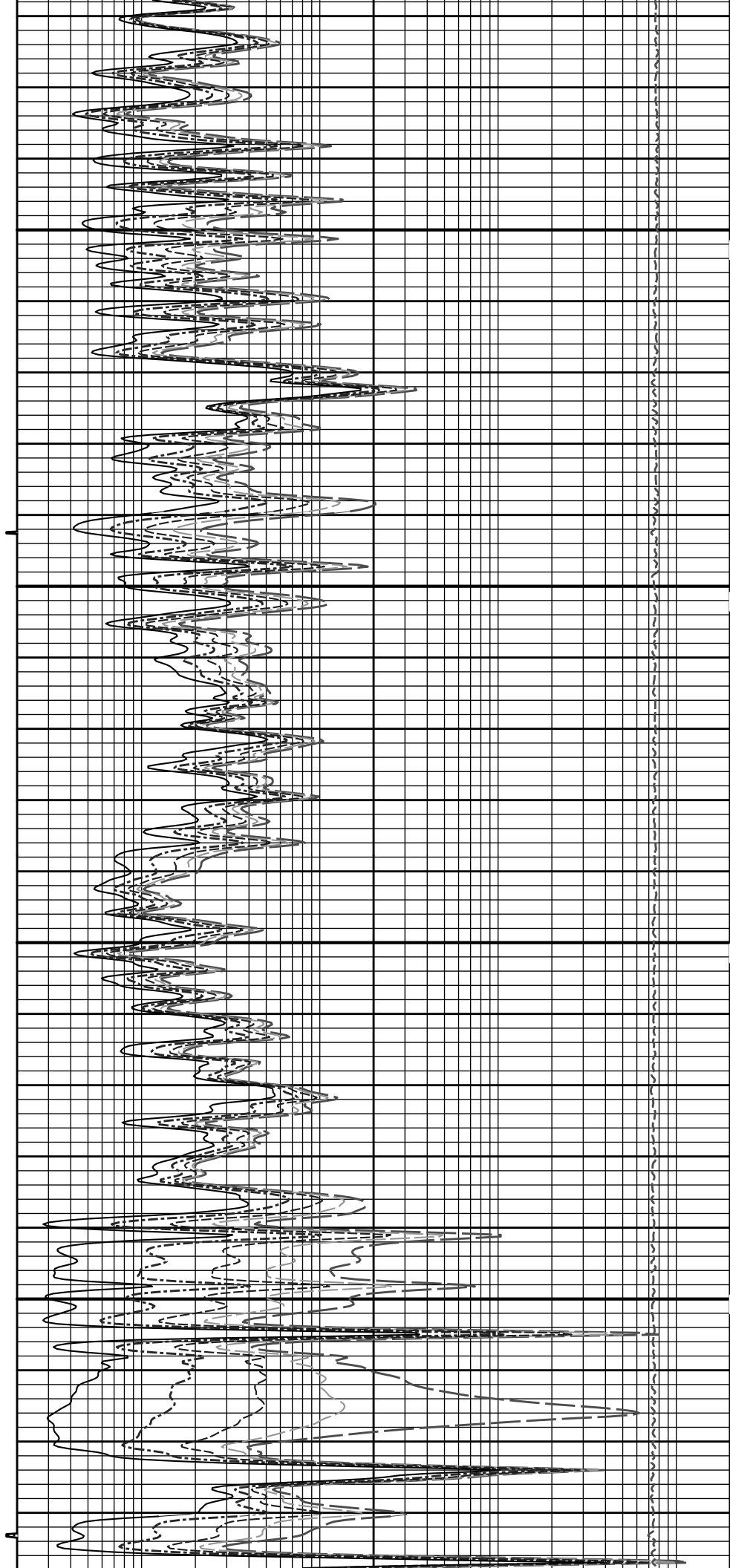


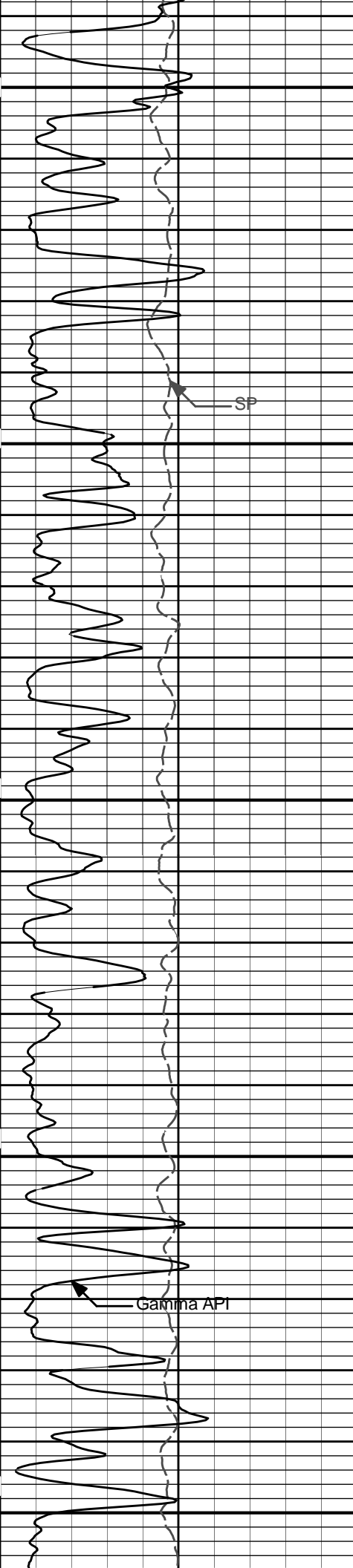




1700

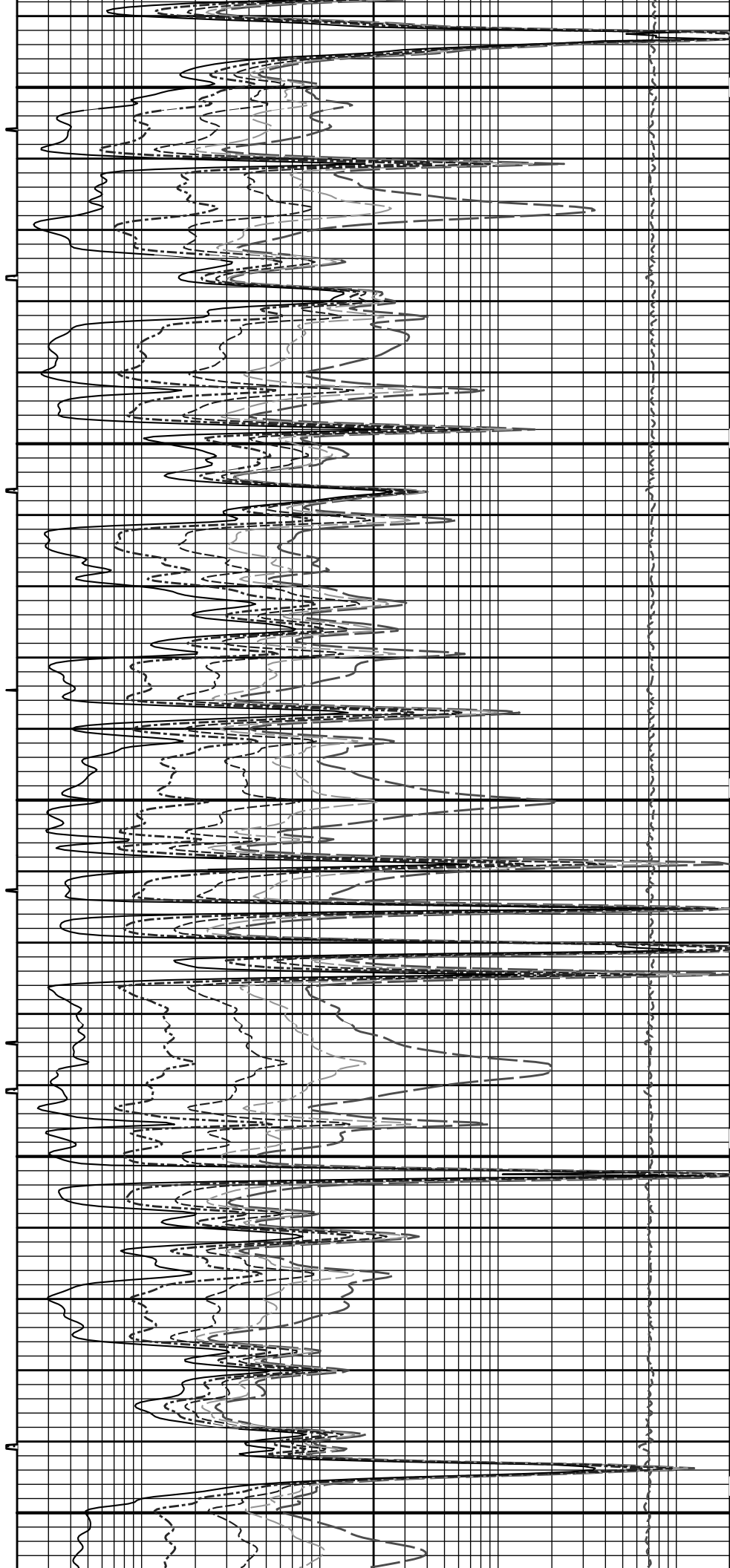
1800

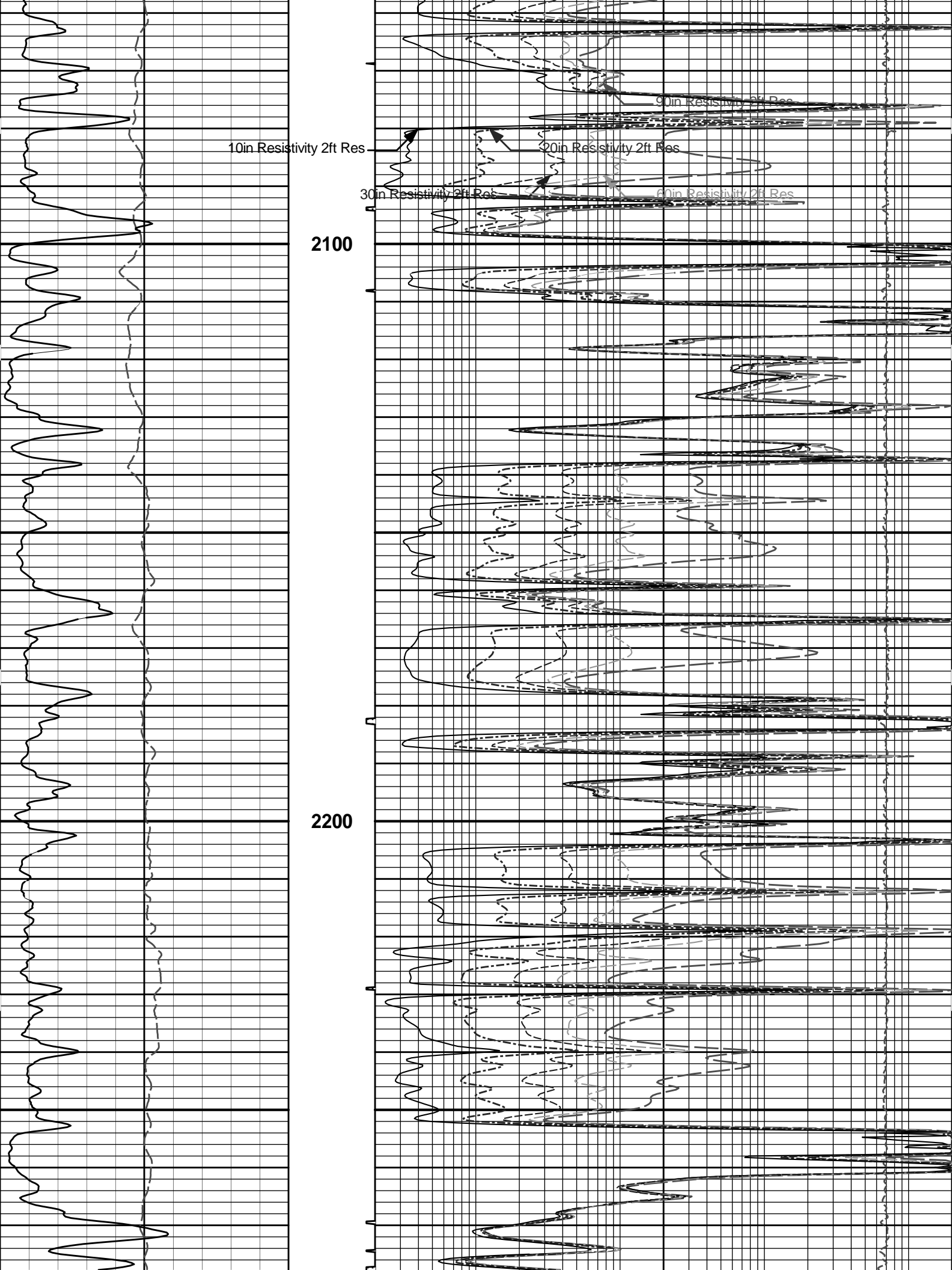




1900

2000





10in Resistivity 2ft Res

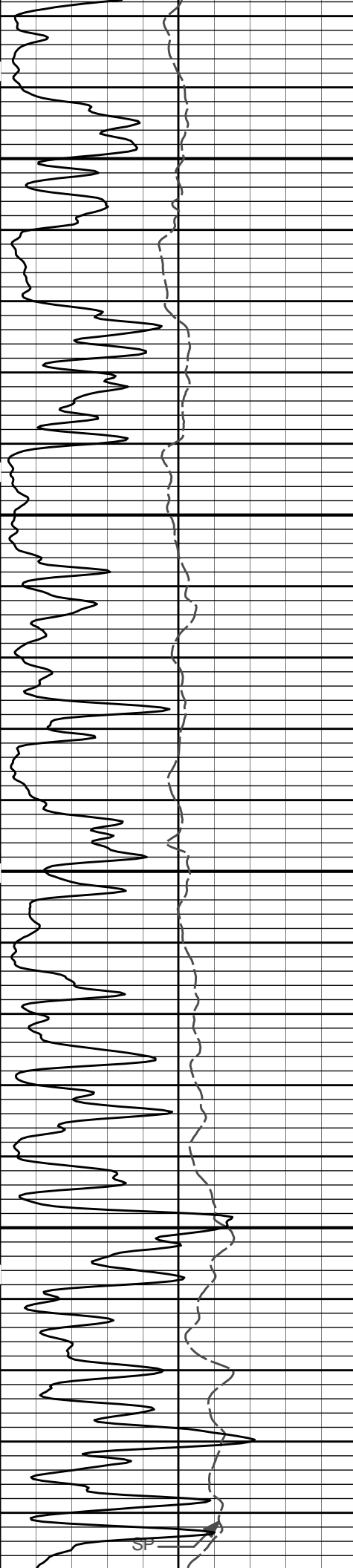
20in Resistivity 2ft Res

30in Resistivity 2ft Res

60in Resistivity 2ft Res

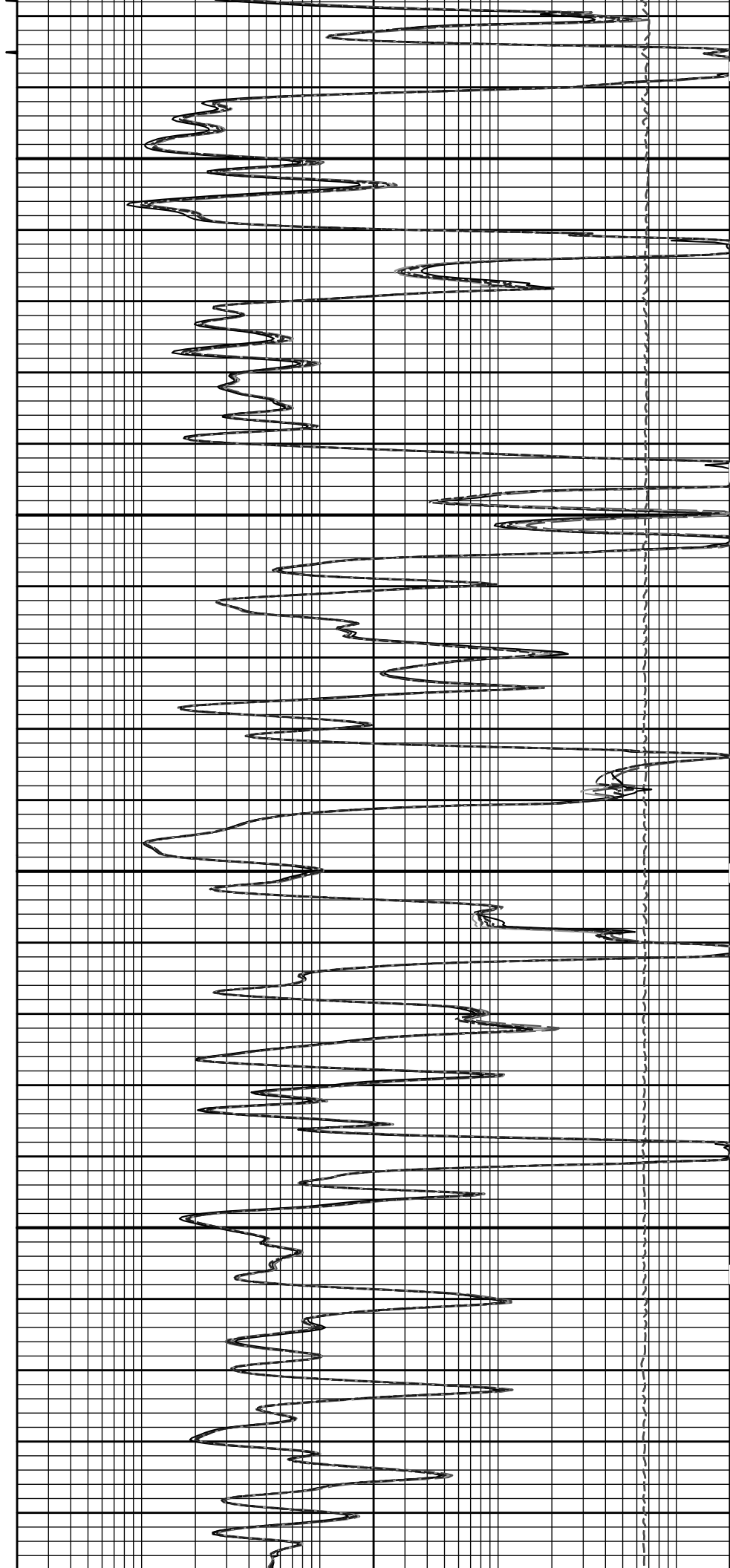
2100

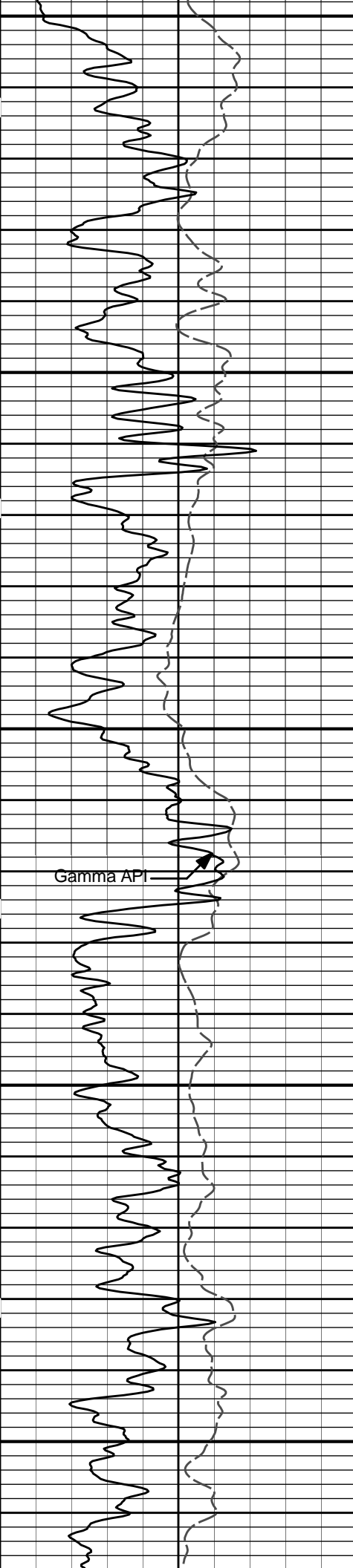
2200



2300

2400





2500

2600

2700

Gamma API

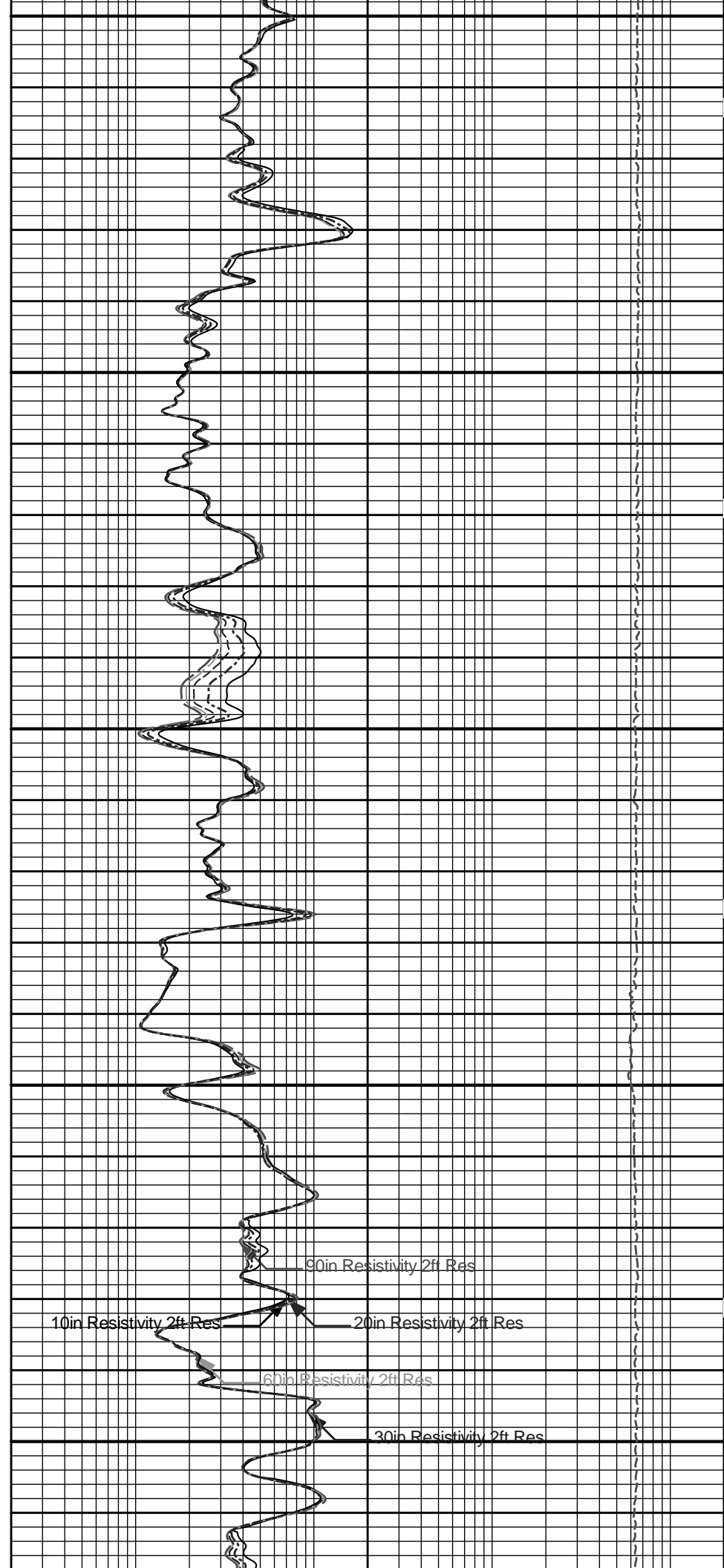
10in Resistivity 2ft Res

60in Resistivity 2ft Res

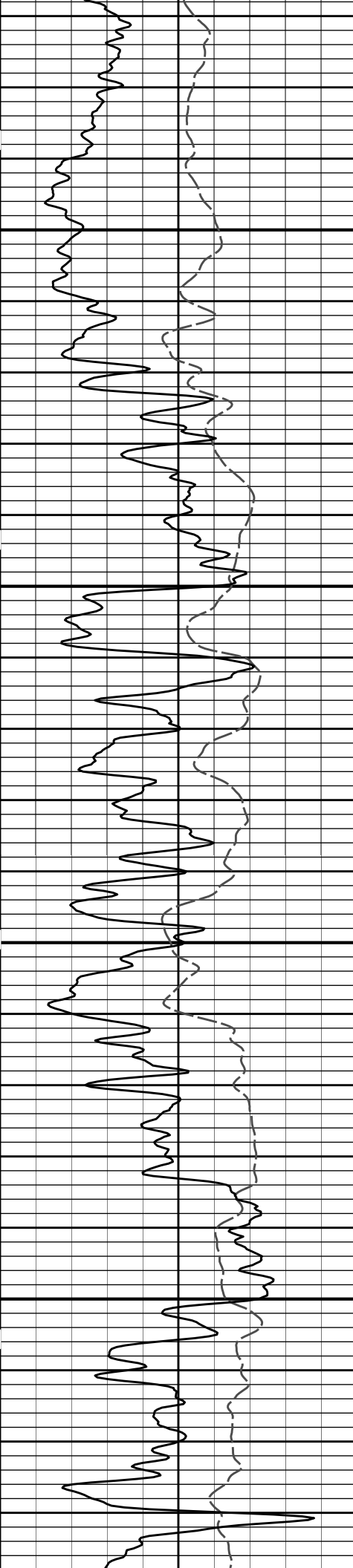
90in Resistivity 2ft Res

20in Resistivity 2ft Res

30in Resistivity 2ft Res

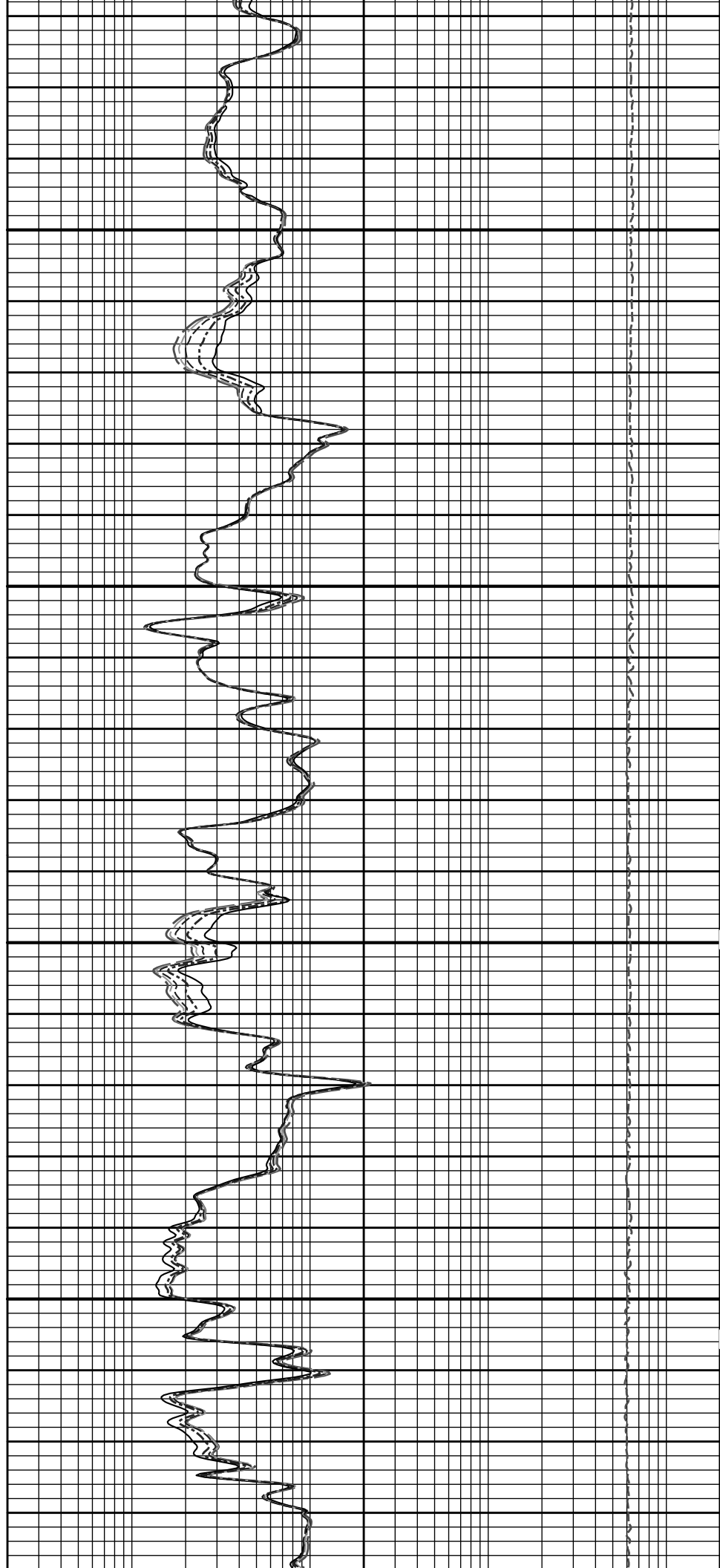


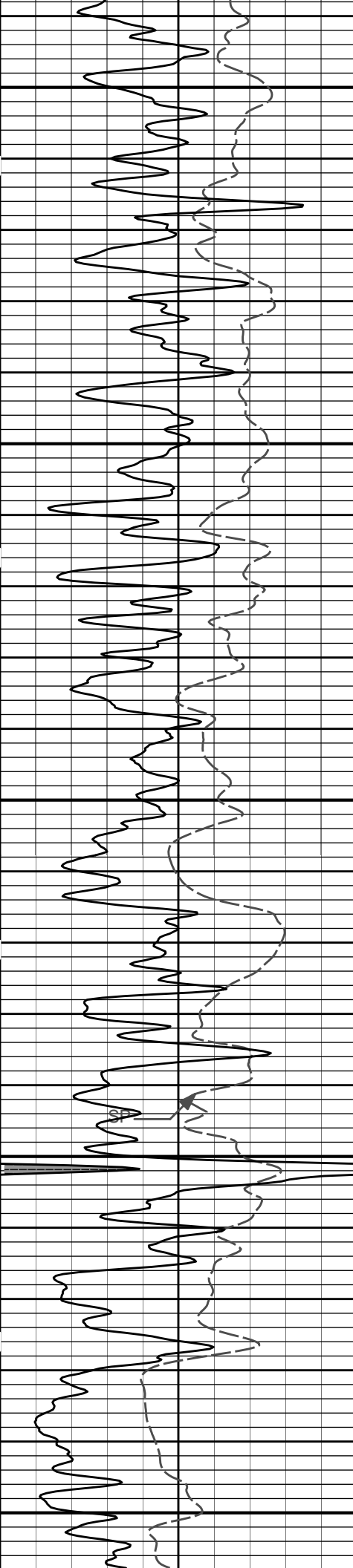




2800

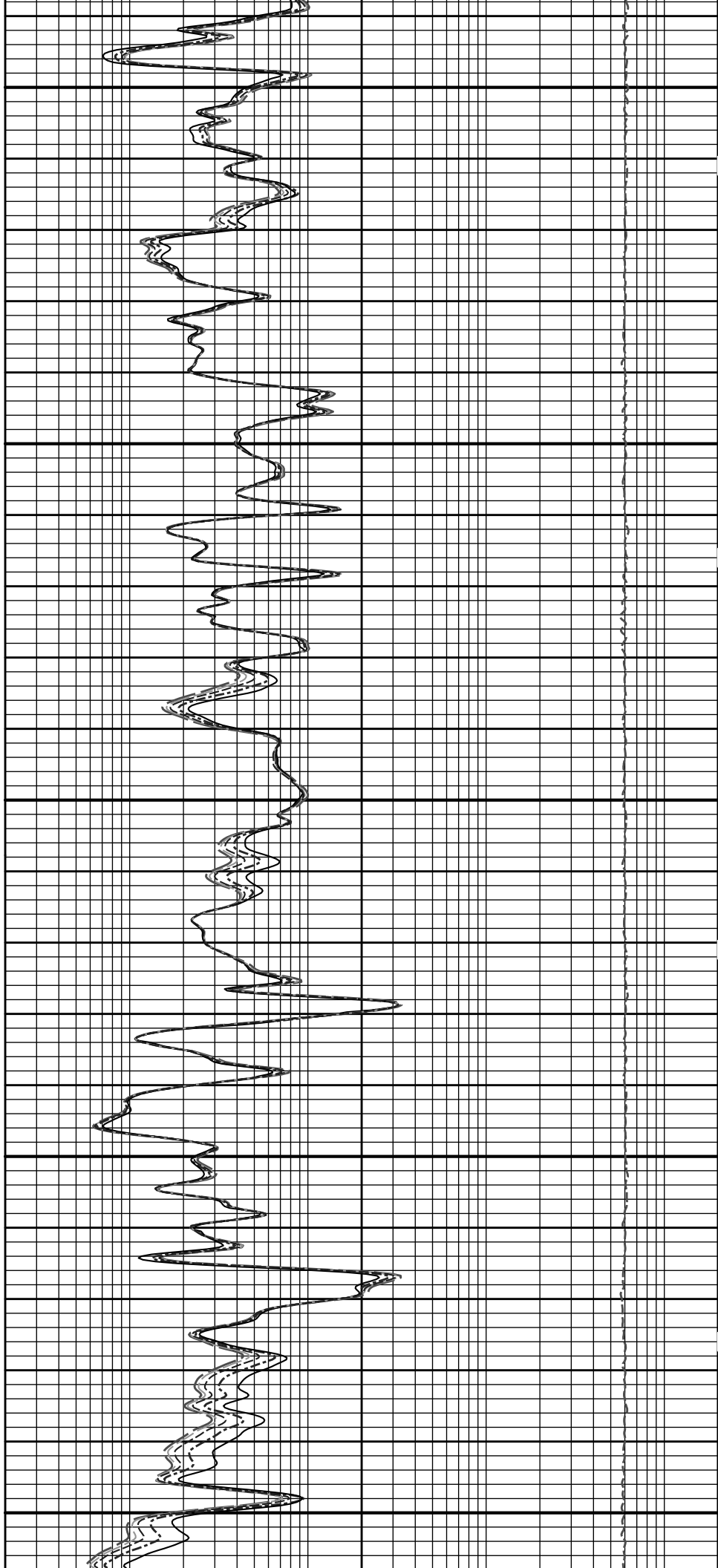
2900

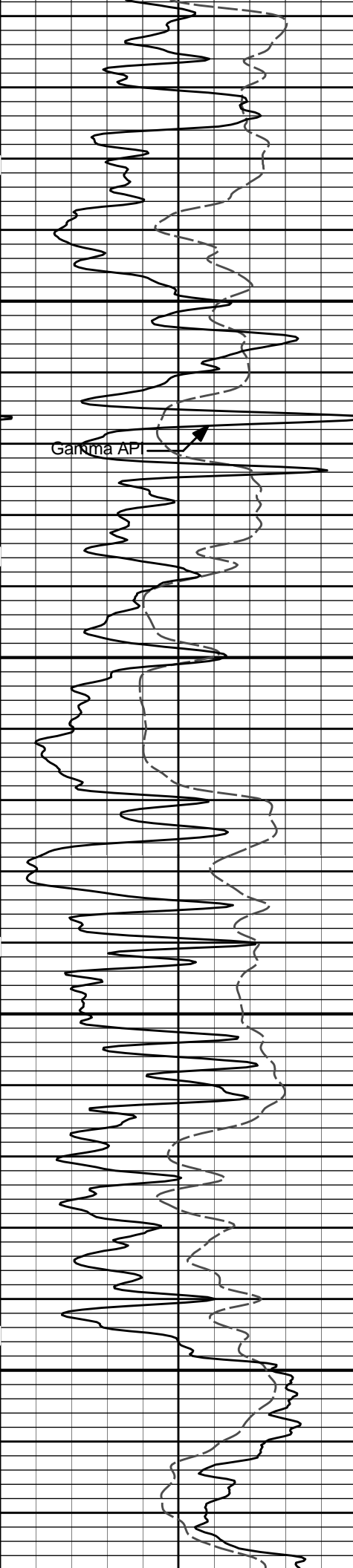




3000

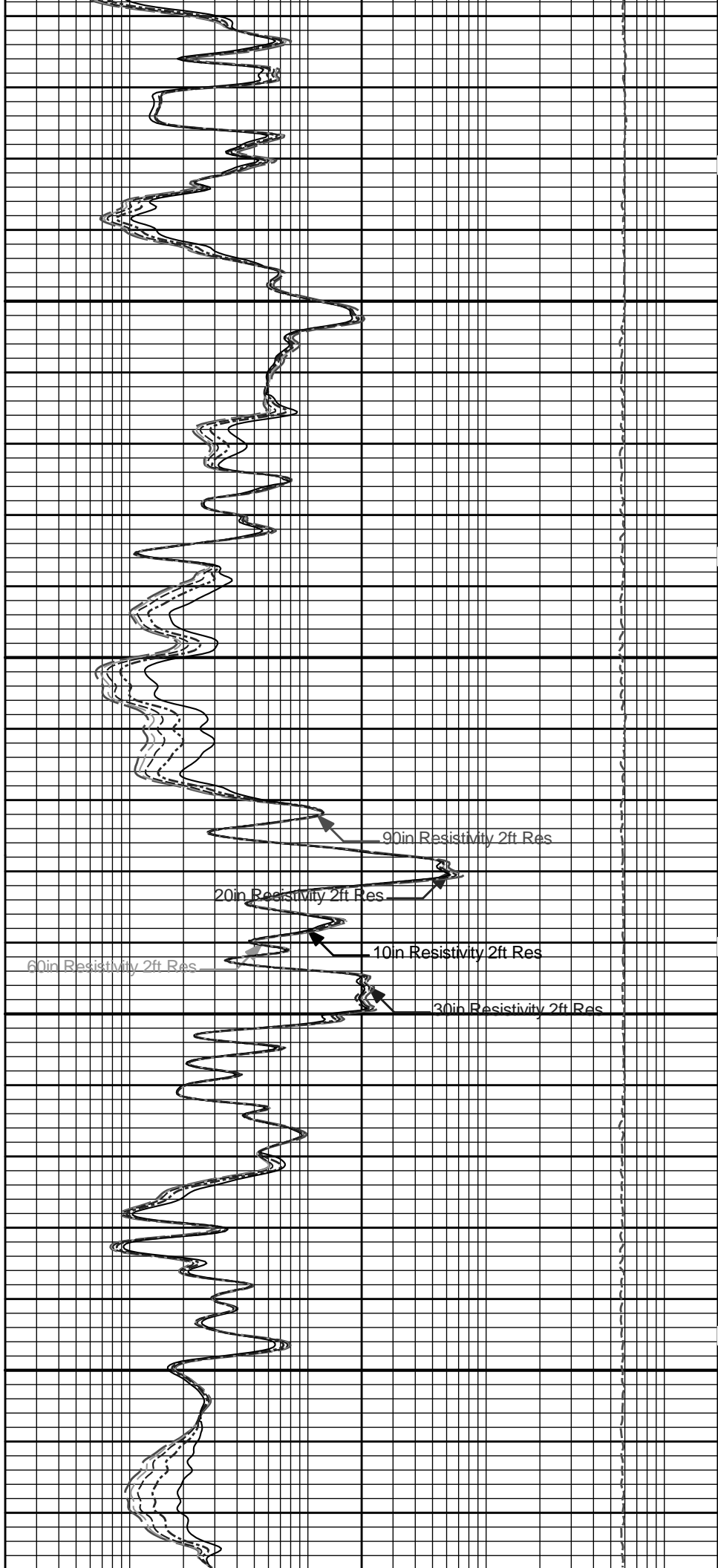
3100

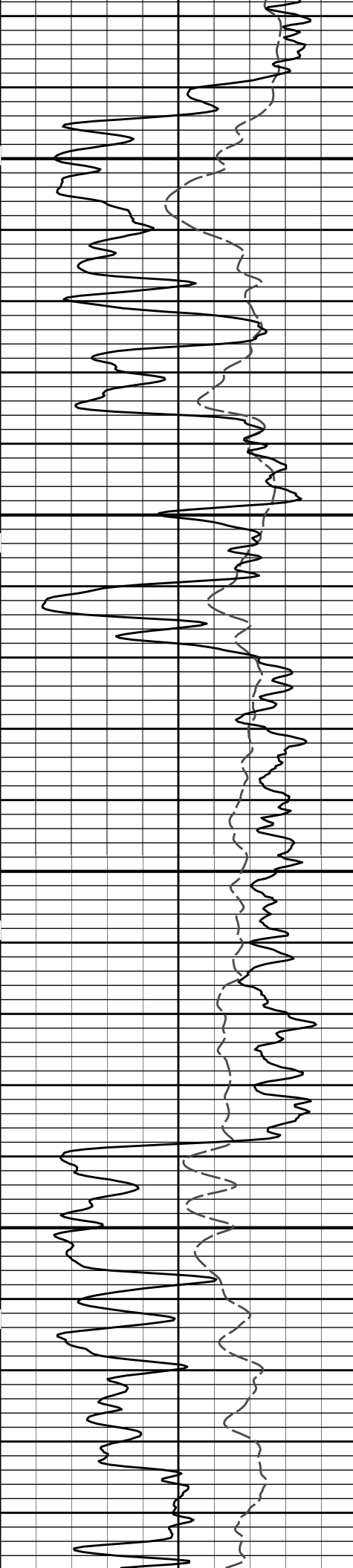




3200

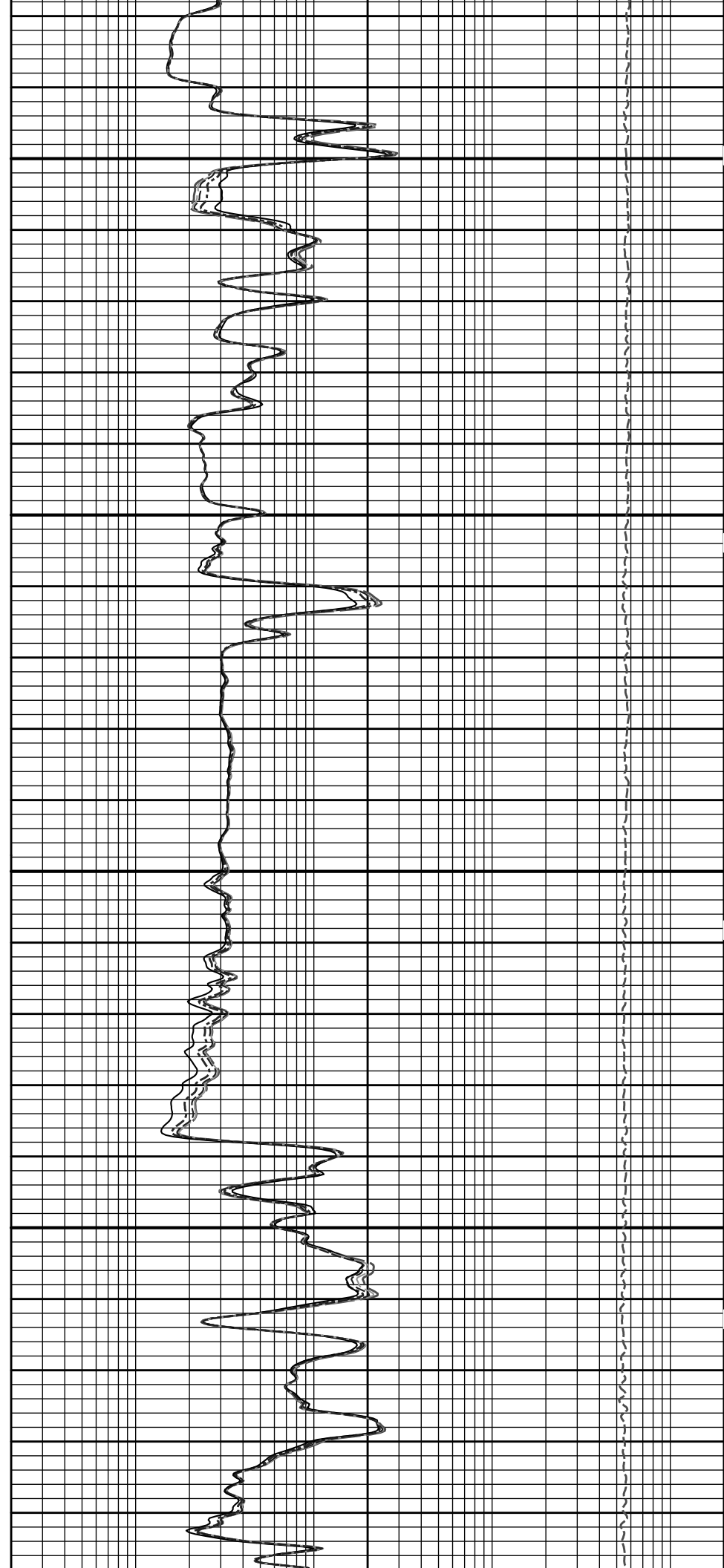
3300

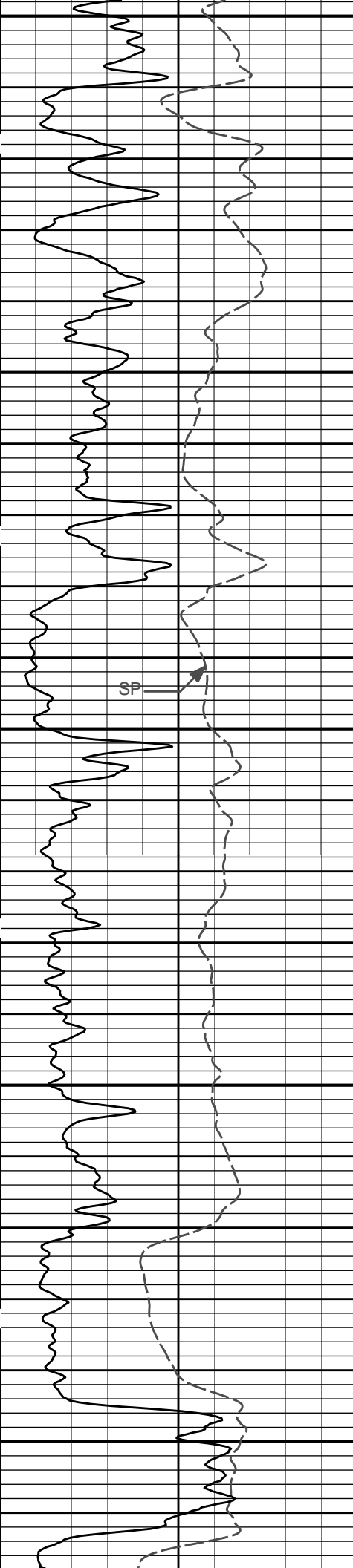




3400

3500

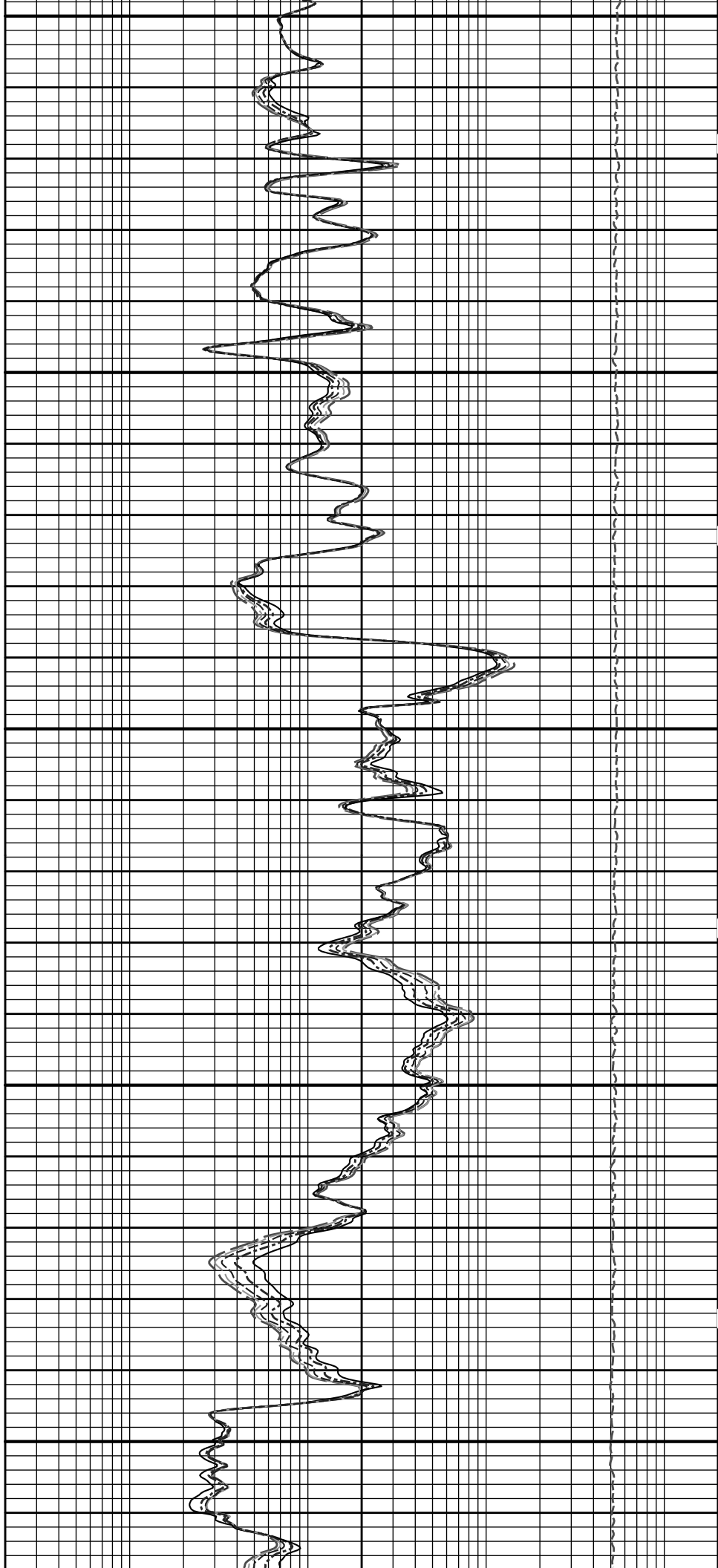


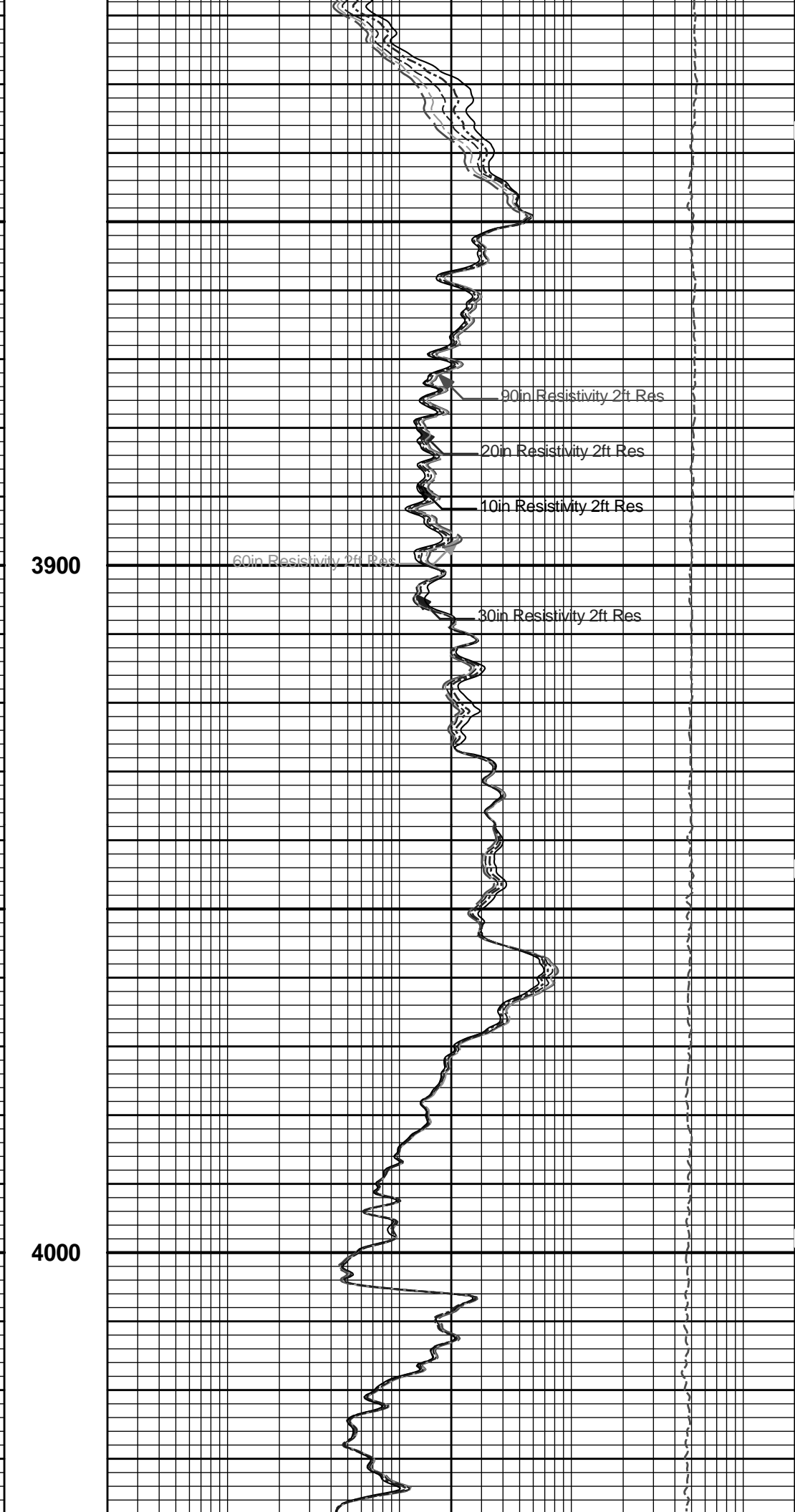
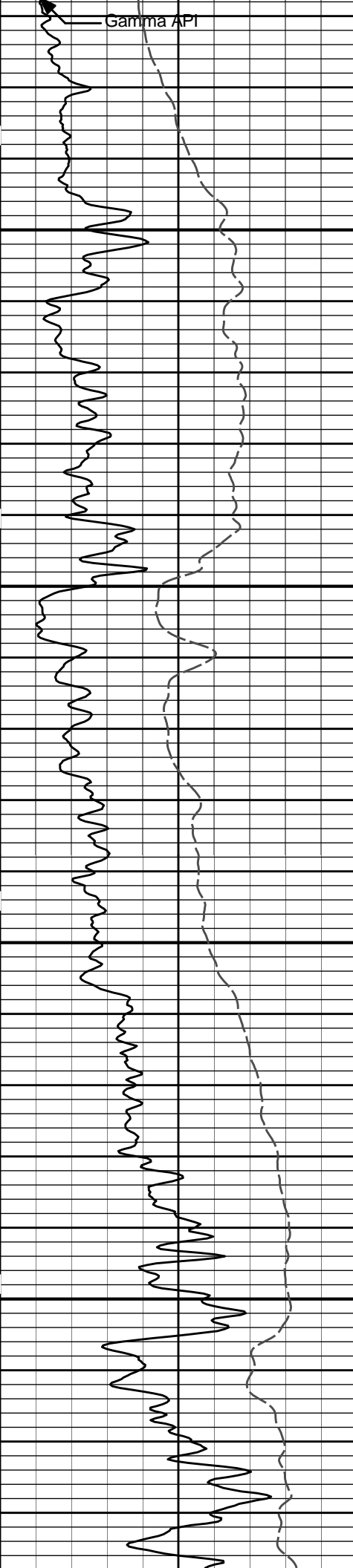


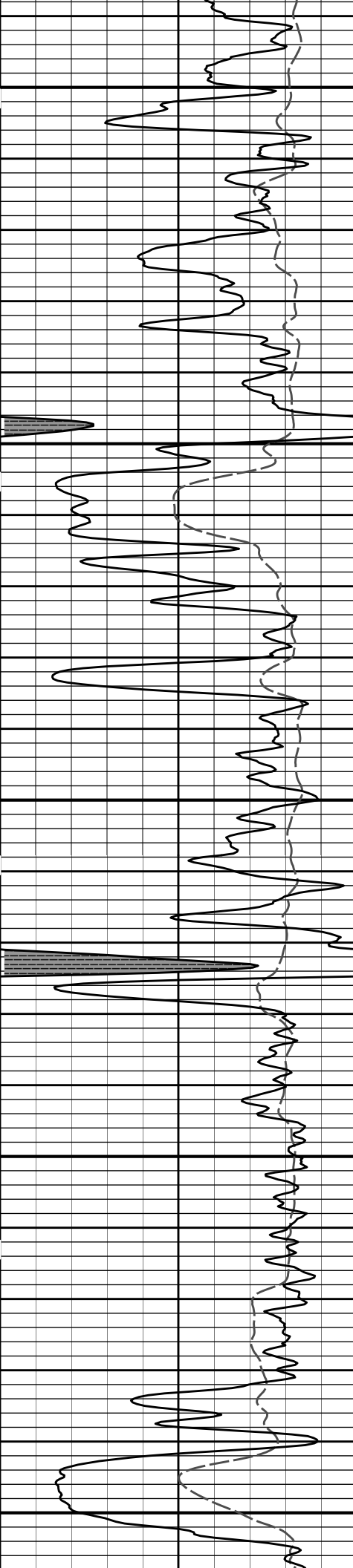
3600

3700

3800

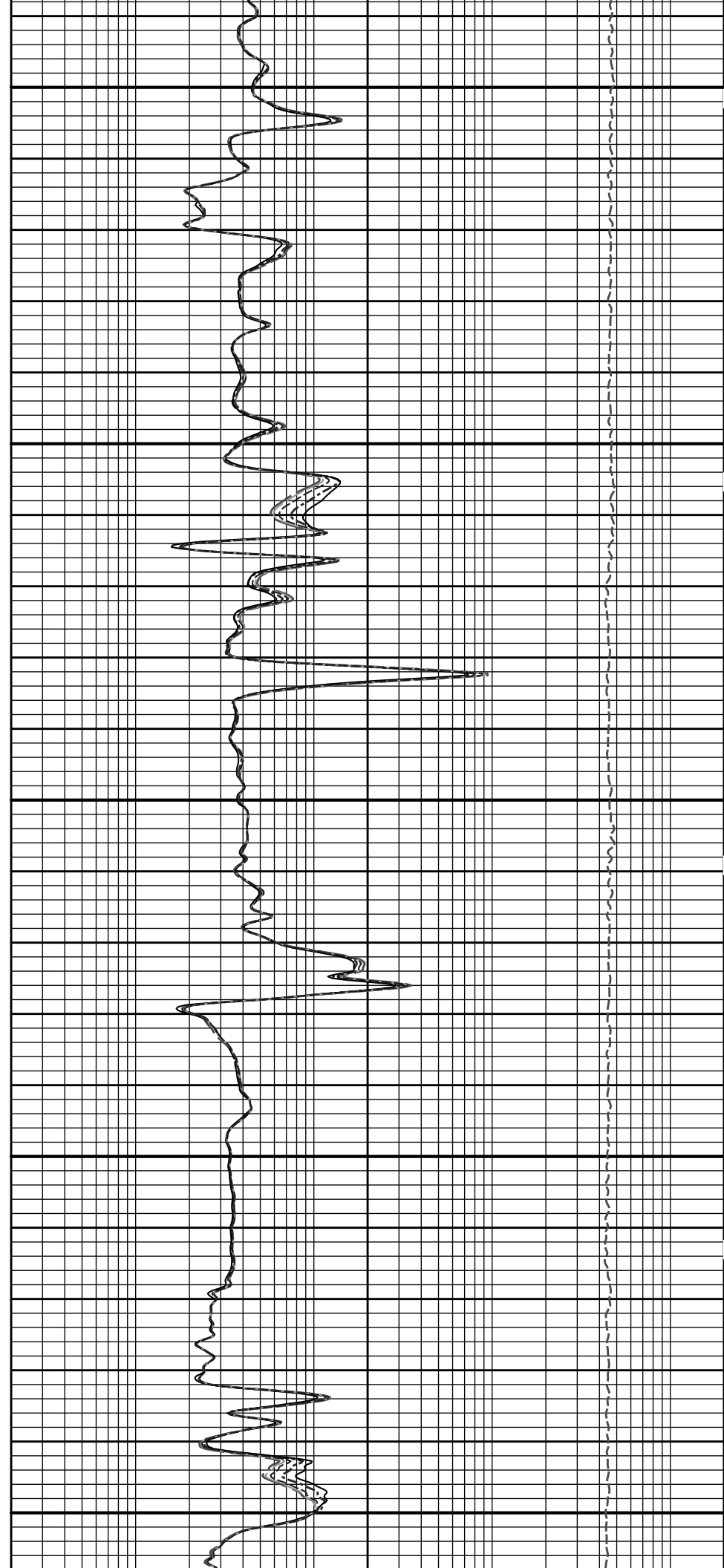


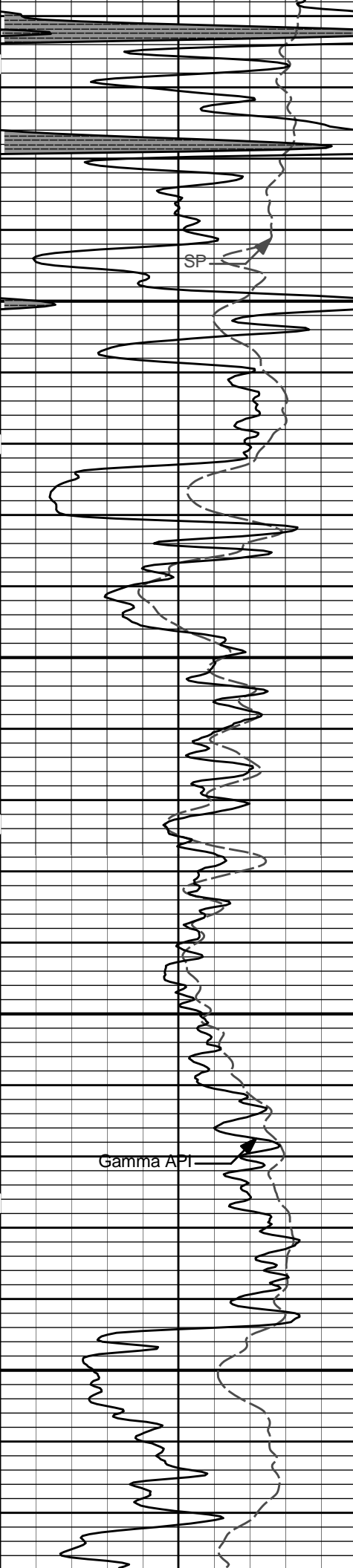




4100

4200



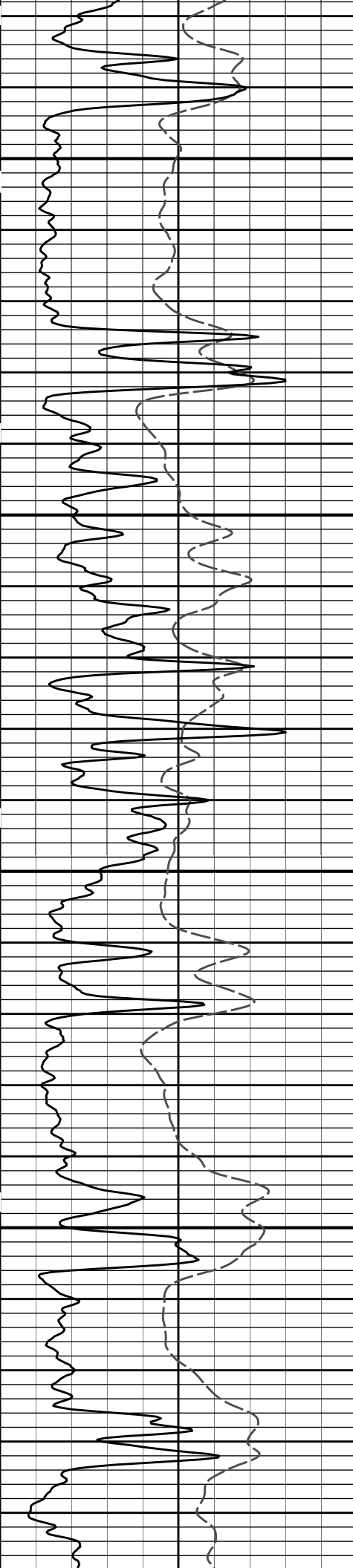


4300

4400

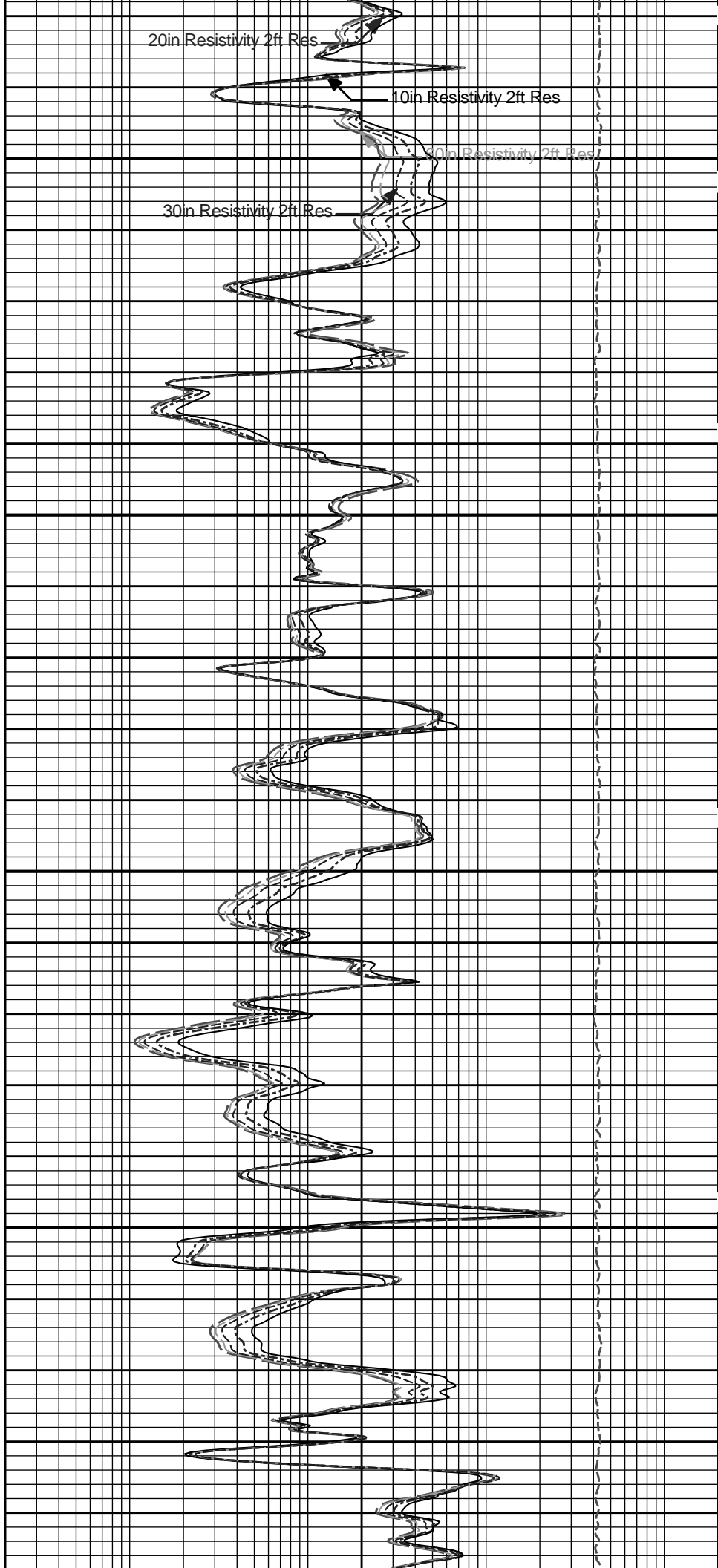
90in Resistivity 2ft Res





4500

4600



20in Resistivity 2ft Res

10in Resistivity 2ft Res

60in Resistivity 2ft Res

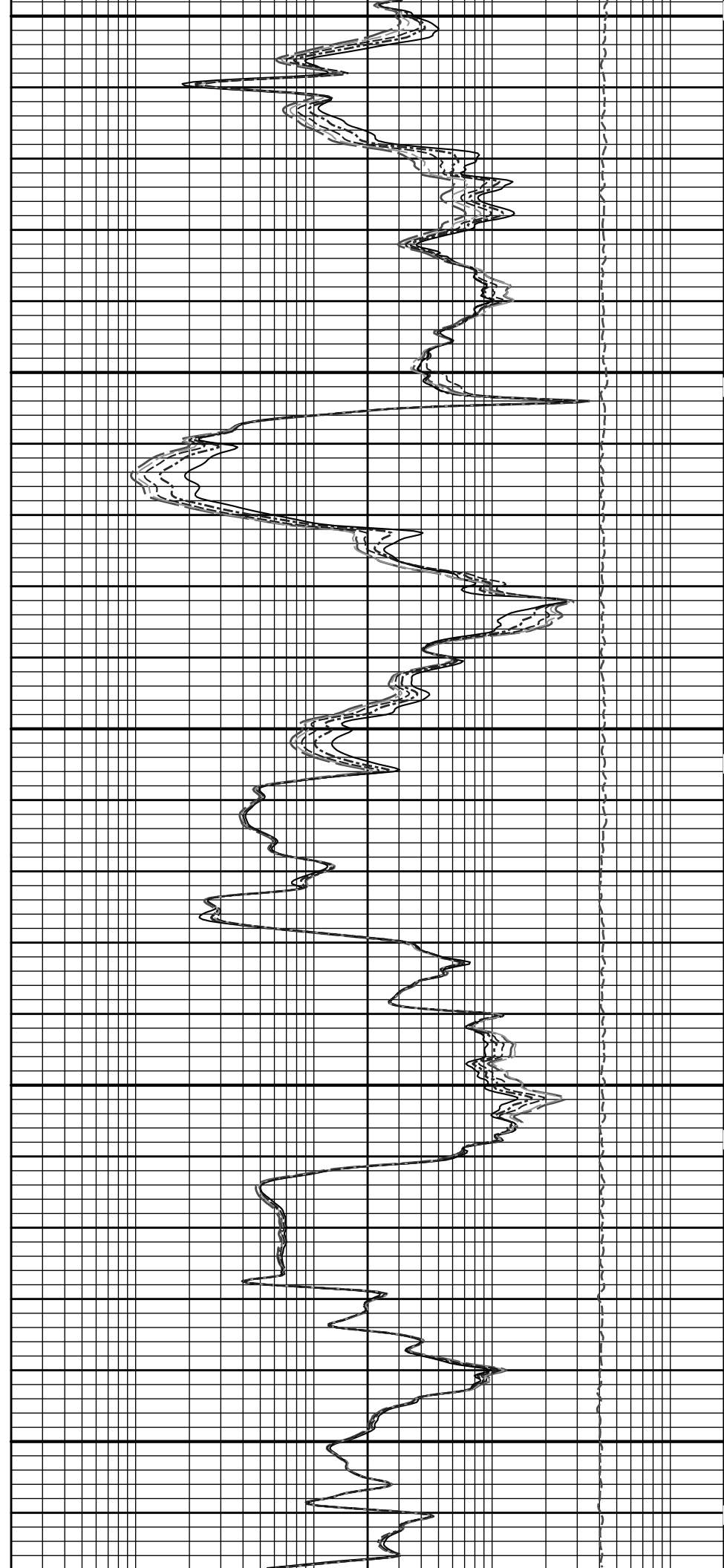
30in Resistivity 2ft Res

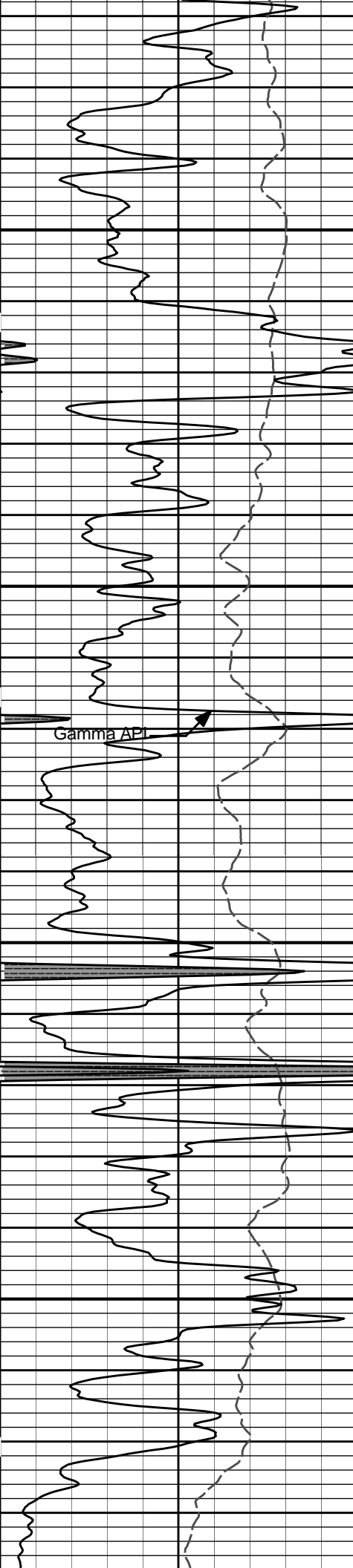


4700

4800

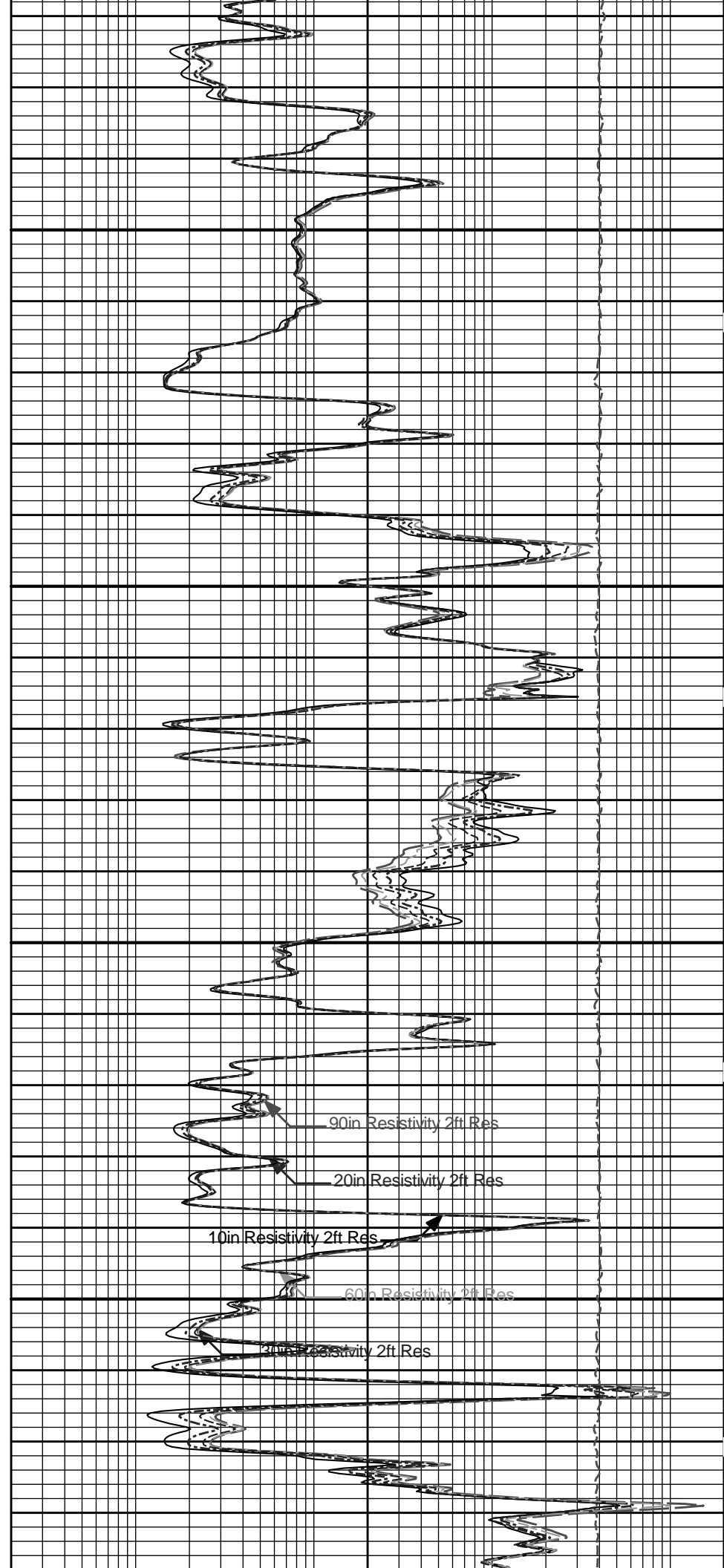
4900





5000

5100



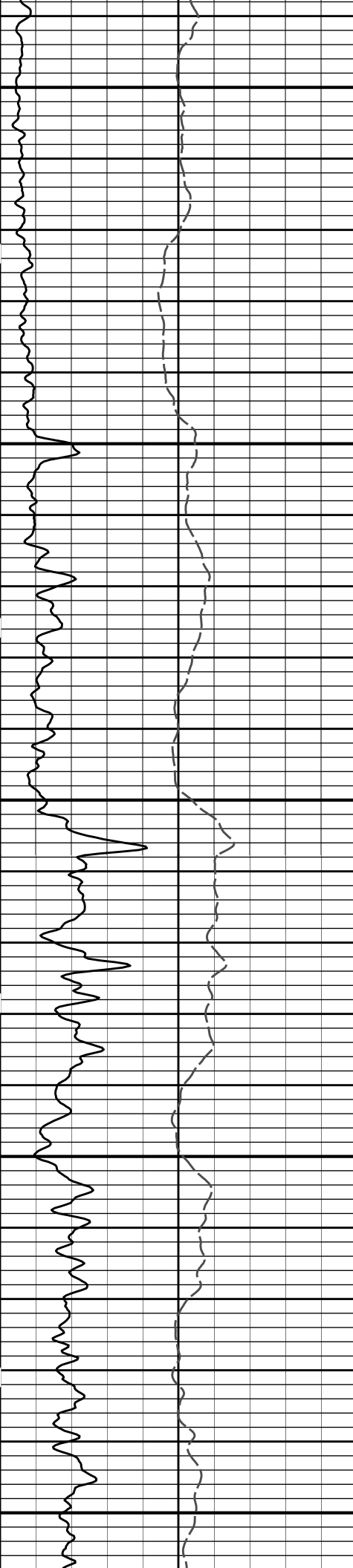
.90in Resistivity 2ft Res

.20in Resistivity 2ft Res

10in Resistivity 2ft Res

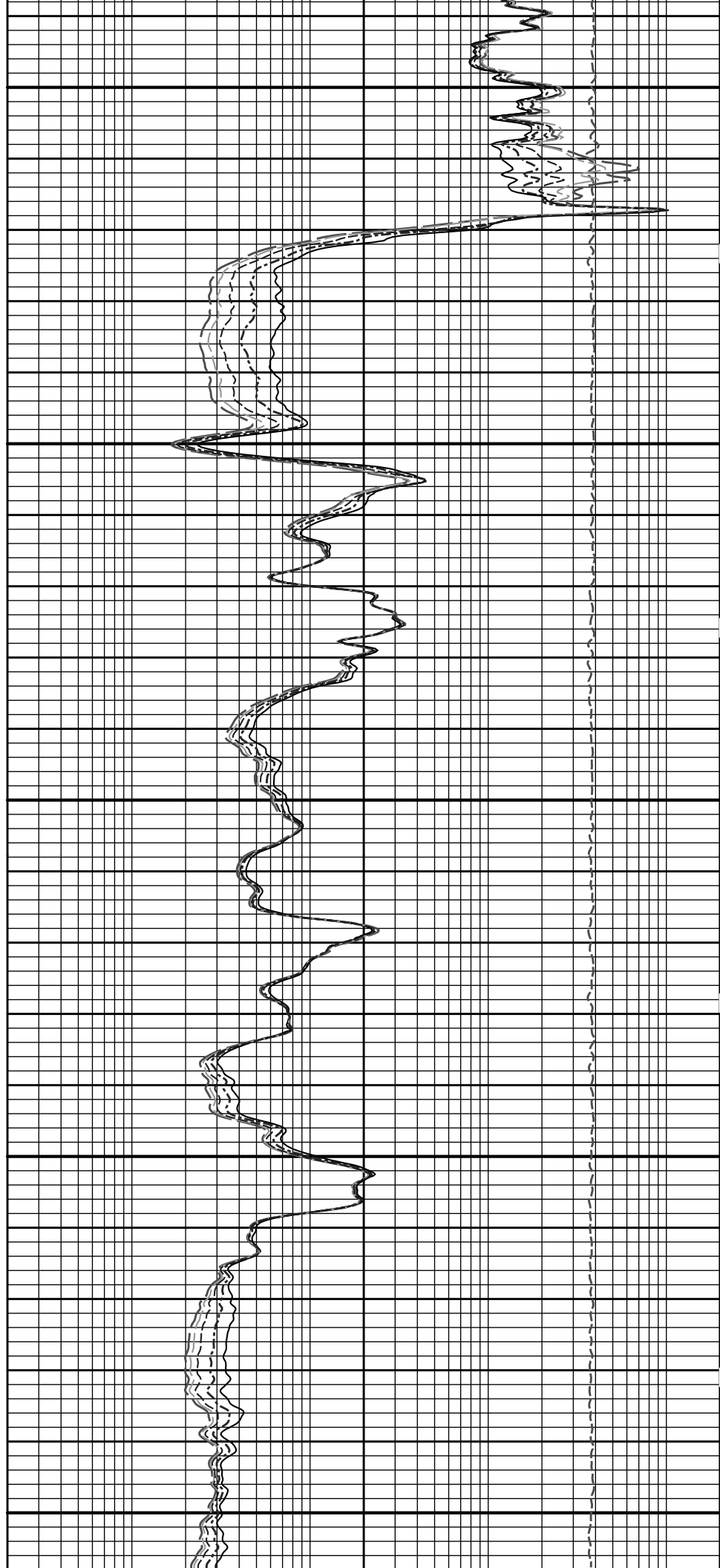
.60in Resistivity 2ft Res

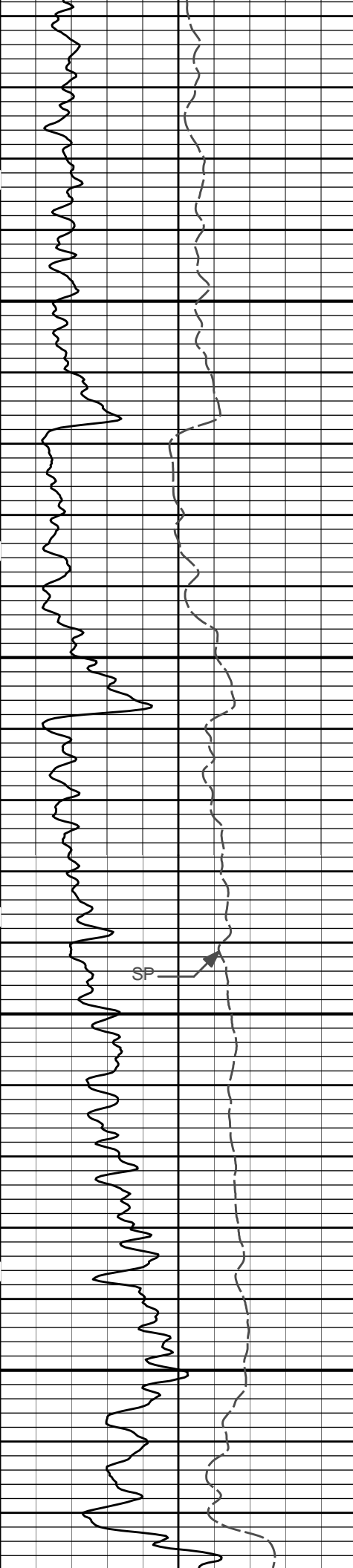
.30in Resistivity 2ft Res



5200

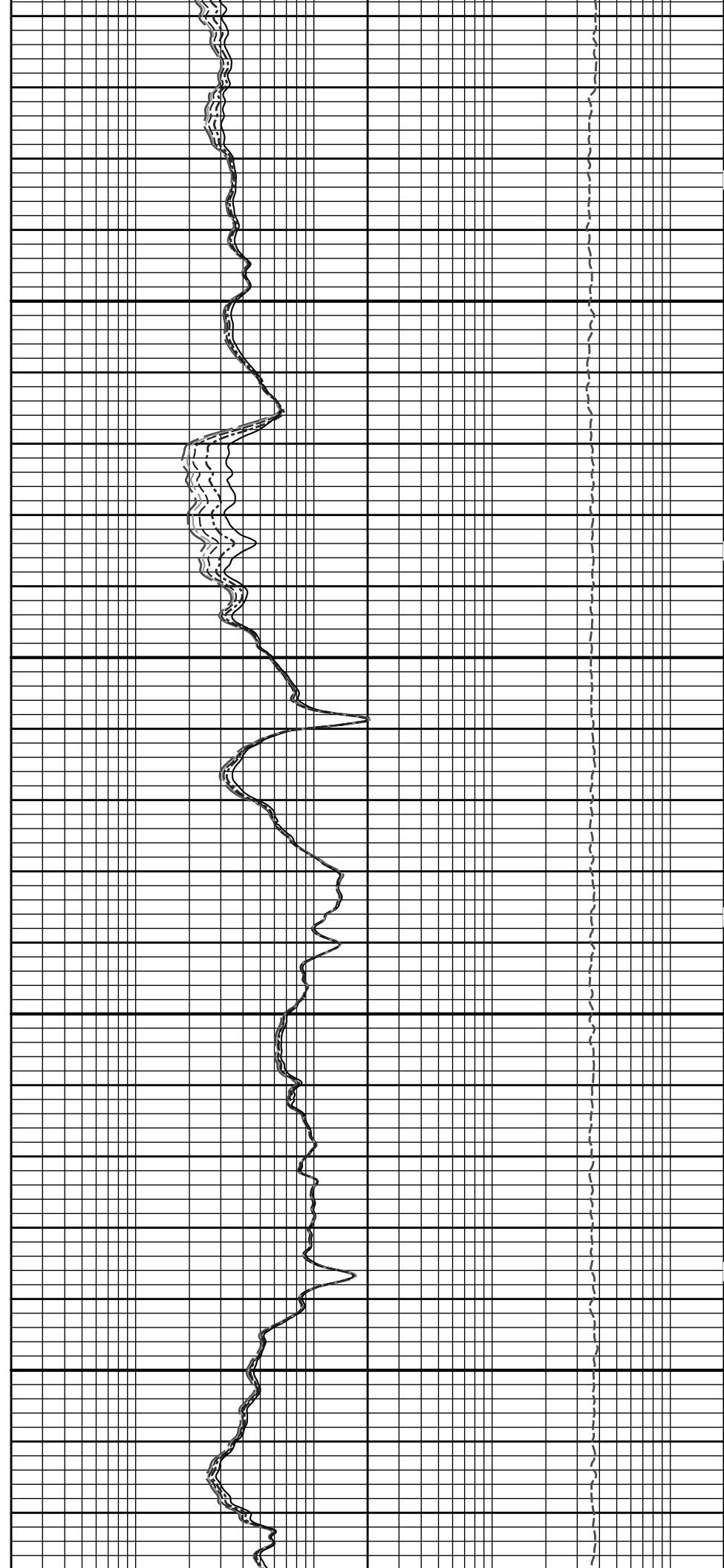
5300





5400

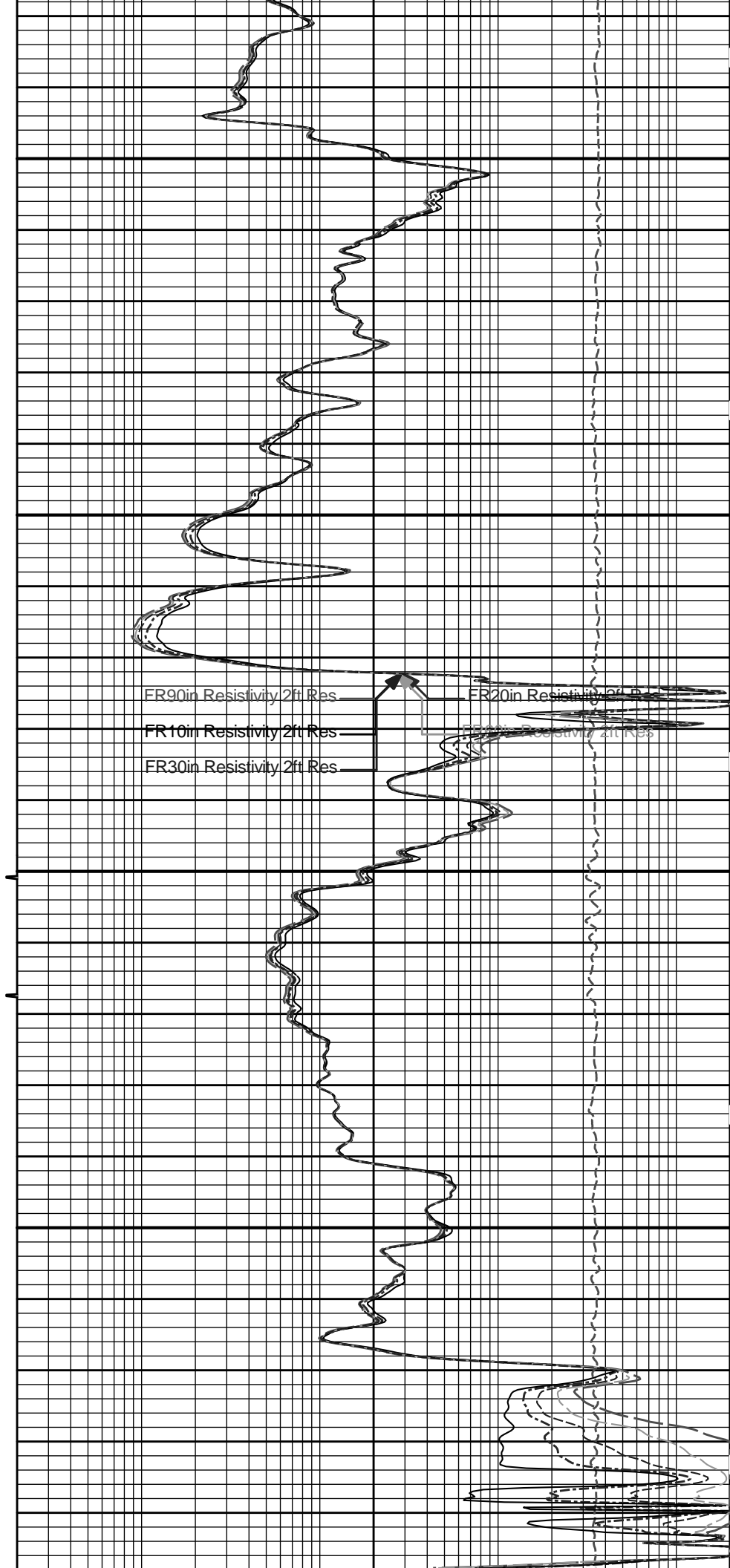
5500

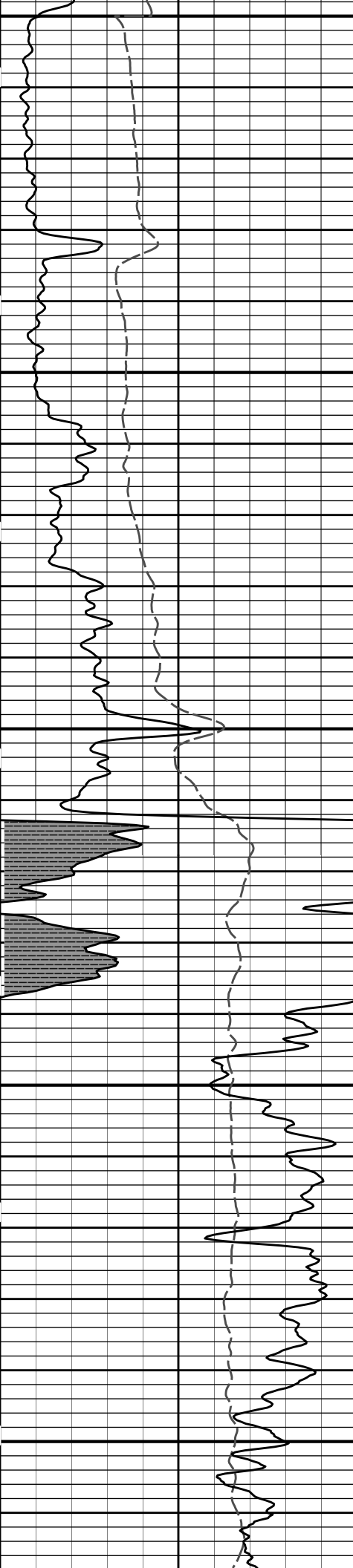




5600

5700

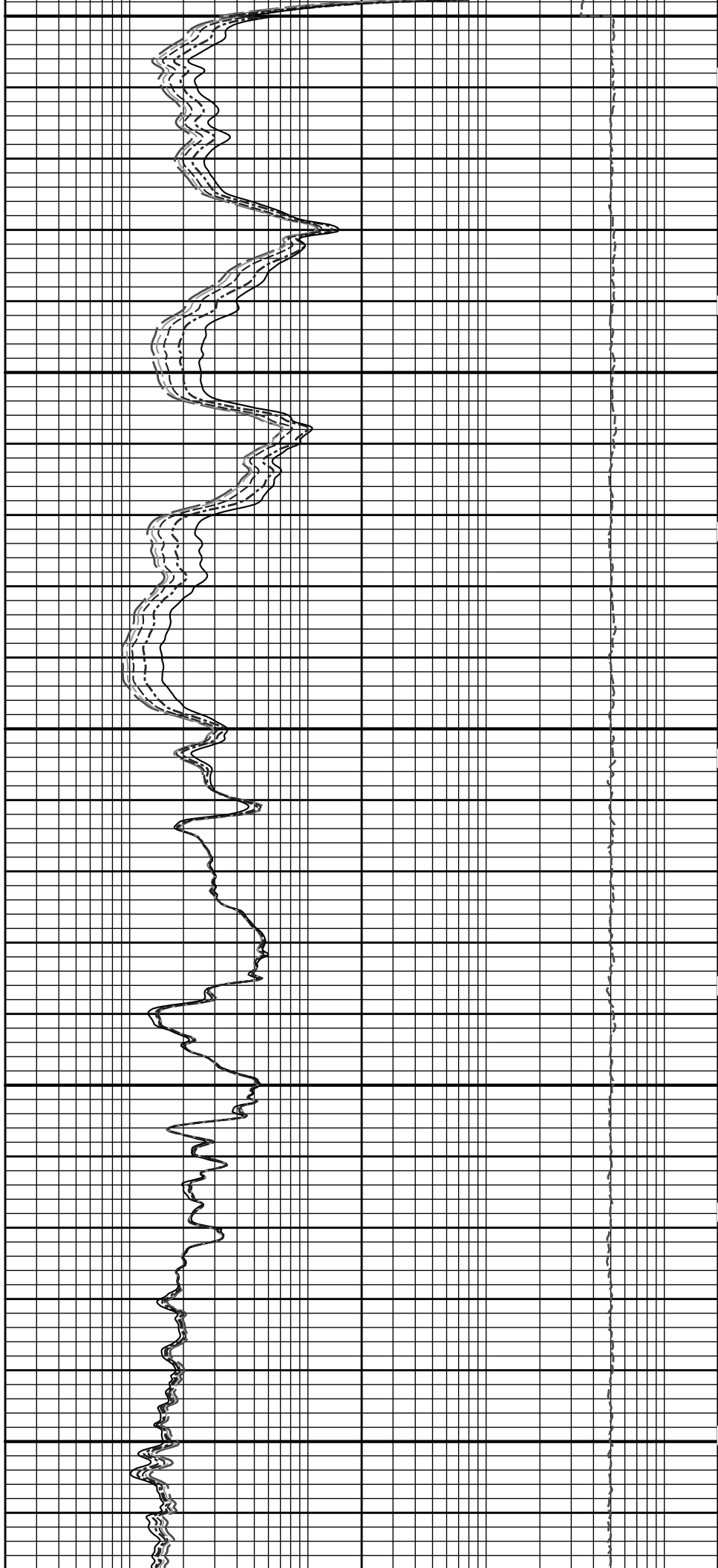


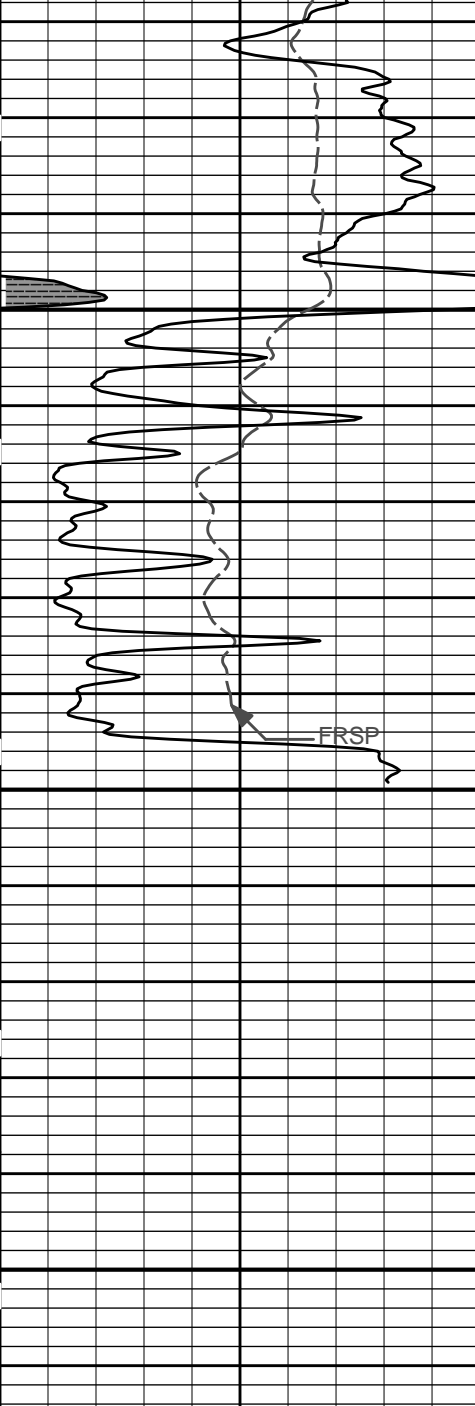


5800

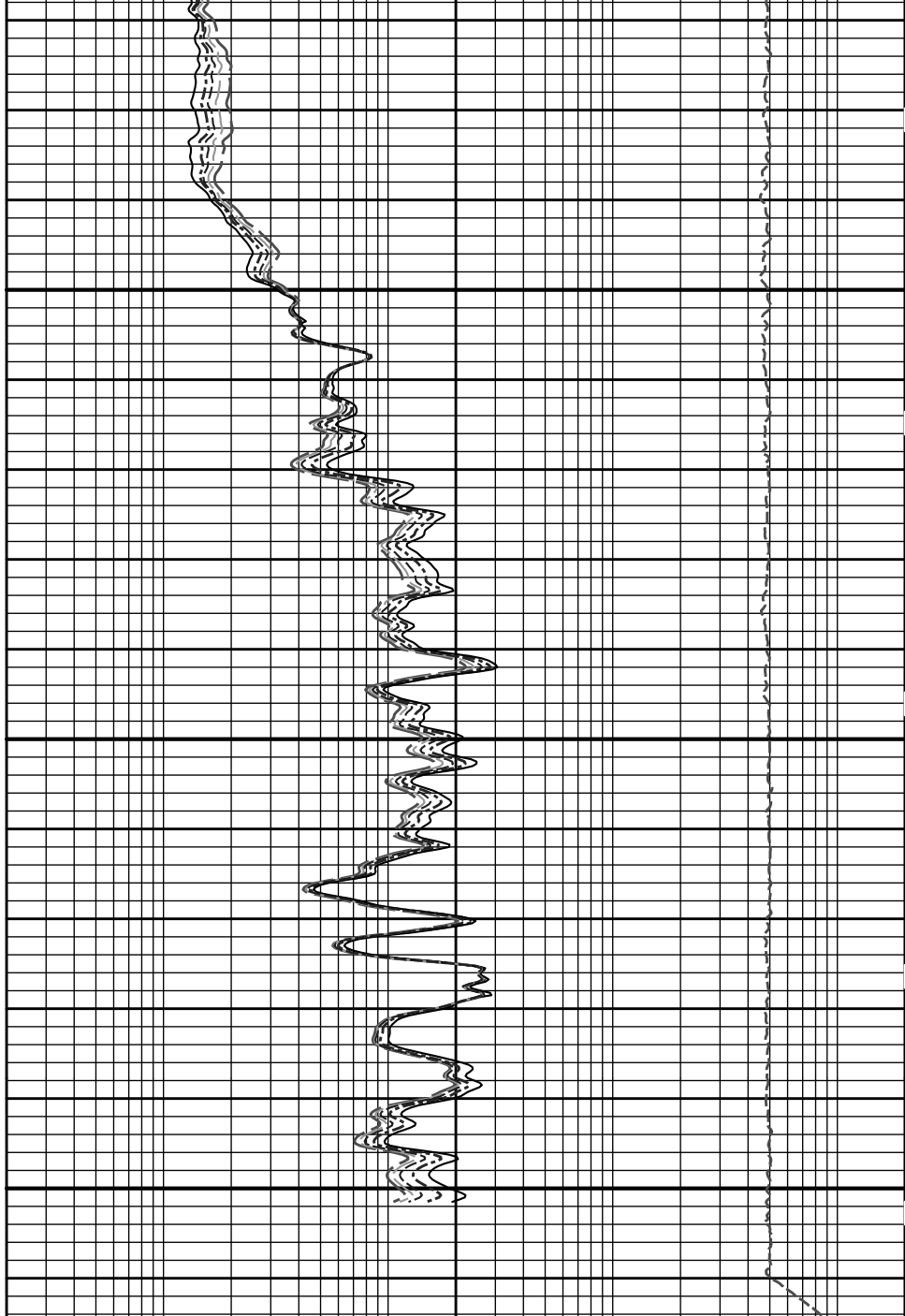
5900

TD  
6000





6100



SP - 20 +	1 : 240 ft	10K	Tension pounds	0
0	Gamma API	150	Tension Pull 10	0
	api			
	SHALE		Tension Pull	
		0.2	10in Resistivity 2ft Res	2000
			ohmm	
		0.2	20in Resistivity 2ft Res	2000
			ohmm	
		0.2	30in Resistivity 2ft Res	2000
			ohm-metre	
		0.2	60in Resistivity 2ft Res	2000
			ohmm	
		0.2	90in Resistivity 2ft Res	2000
			ohmm	

**HALLIBURTON**

Plot Time: 10-Aug-12 08:04:42  
 Plot Range: 780 ft to 6164.58 ft  
 Data: BROWN\_TODD\_SWD\Well Based\SPLICE\_CASING\  
 Plot File: \\-LOCAL-IBROWN TODD SWD\0001 SP-GTET-DSNT-SDLT-FLEX-BSAT-ACRT-CH\ACRTACRT 5 main.lib



# 5 INCH MAIN LOG

**HALLIBURTON**

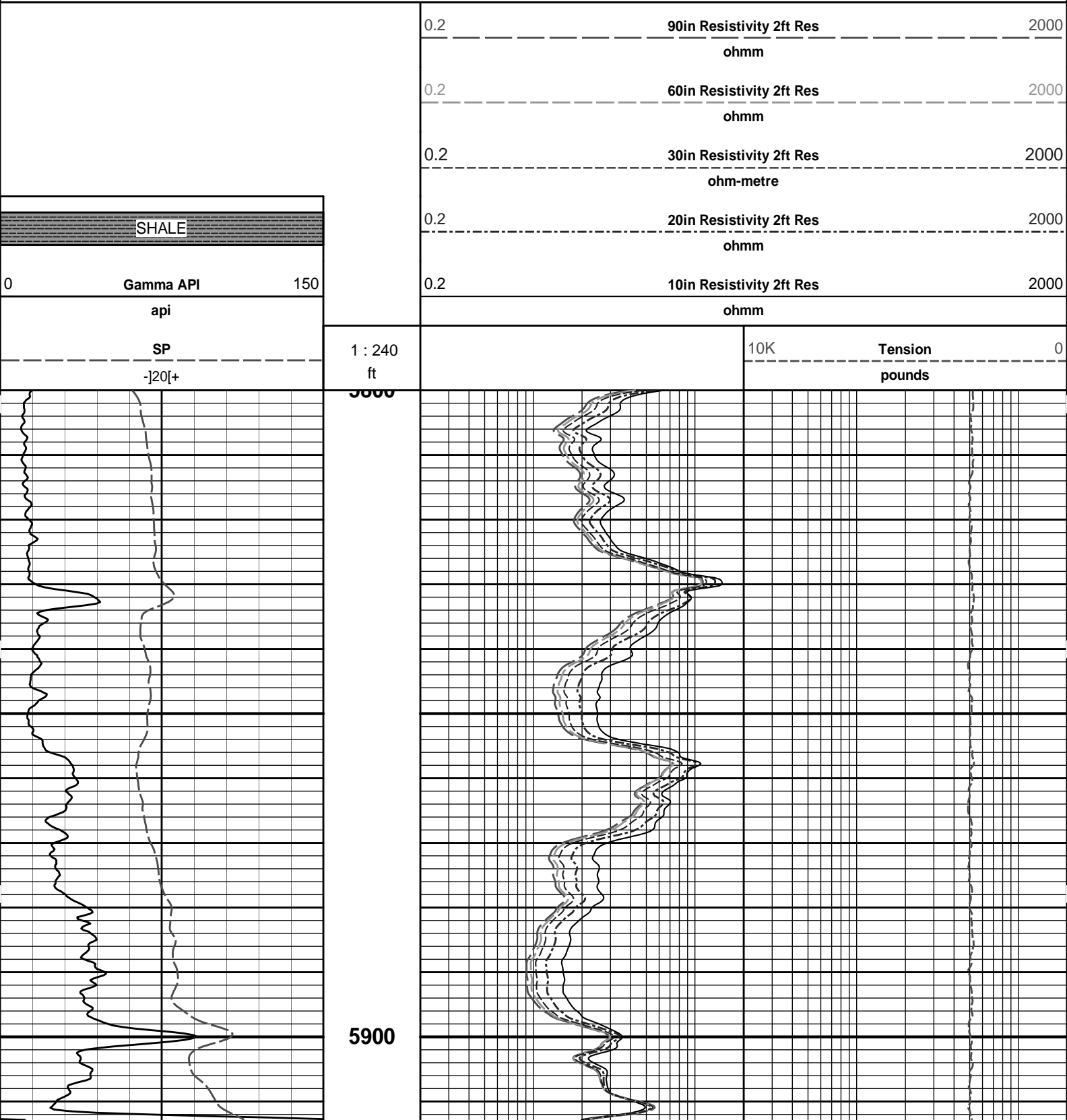
Plot Time: 10-Aug-12 08:04:43

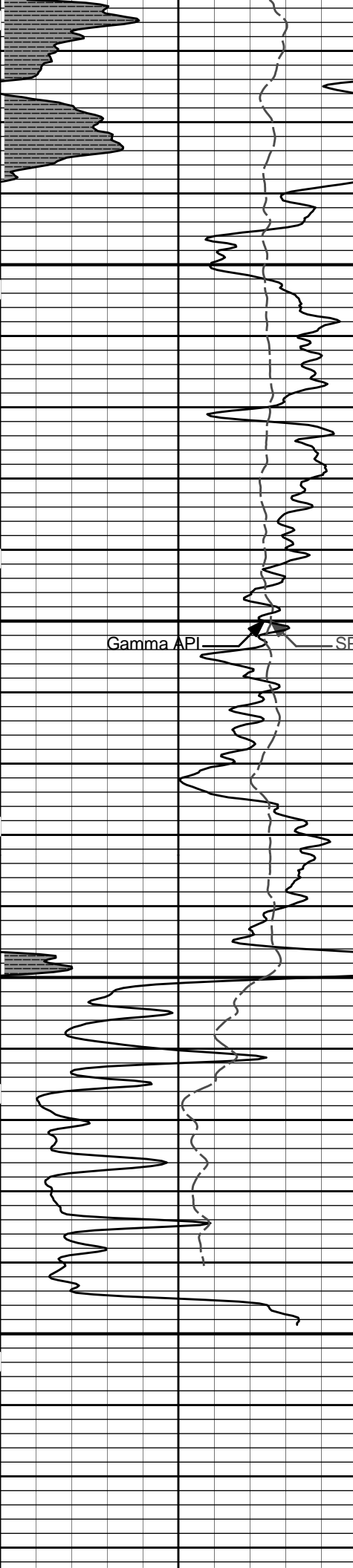
Plot Range: 5800 ft to 6163.92 ft

Data: BROWN\_TODD\_SWDIWell Based\REPEAT\_TWO\

Plot File: \\LOCAL\BROWN\_TODD\_SWD\0001 SP-GTET-DSNT-SDLT-FLEX-BSAT-ACRT-CH\ACRT\ACRT\_5\_repeat.lib

## REPEAT SECTION



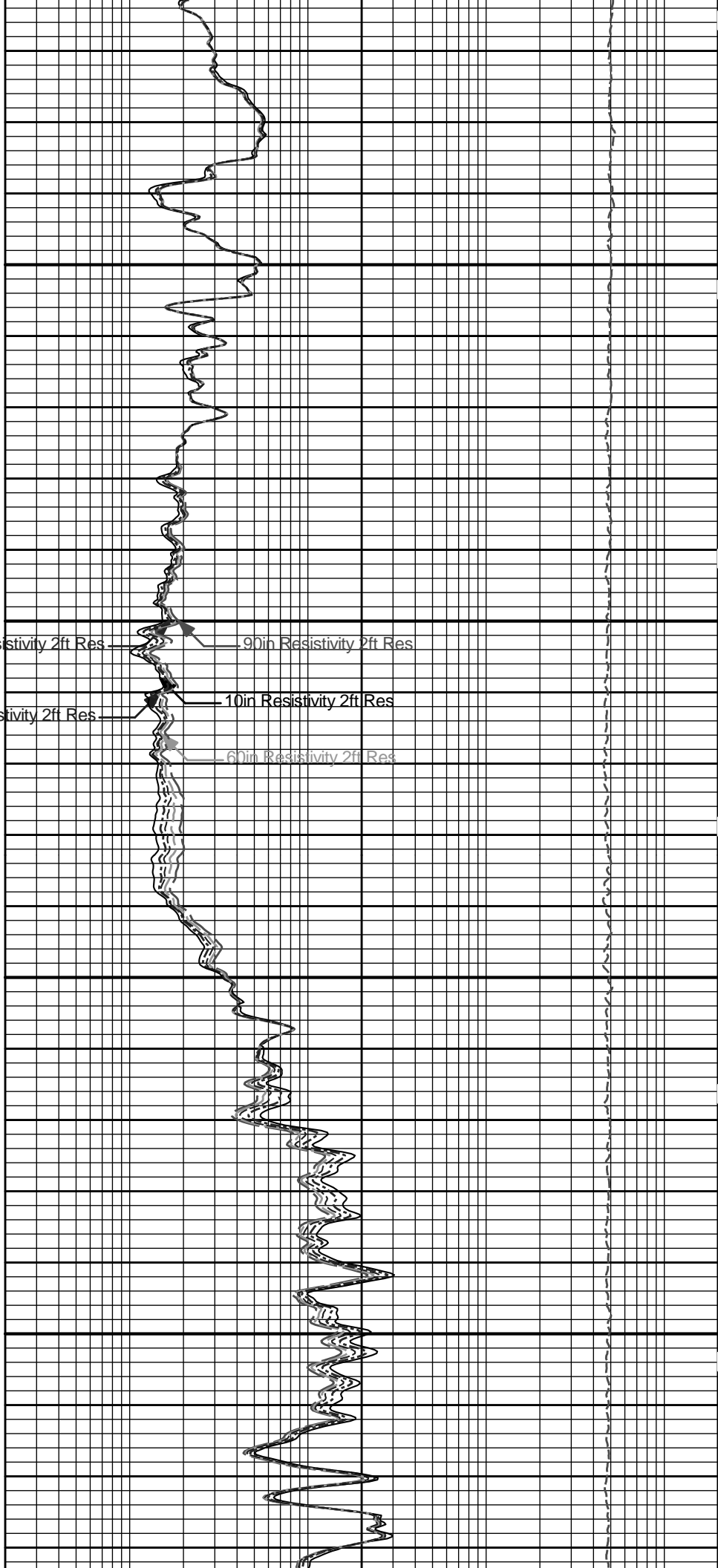


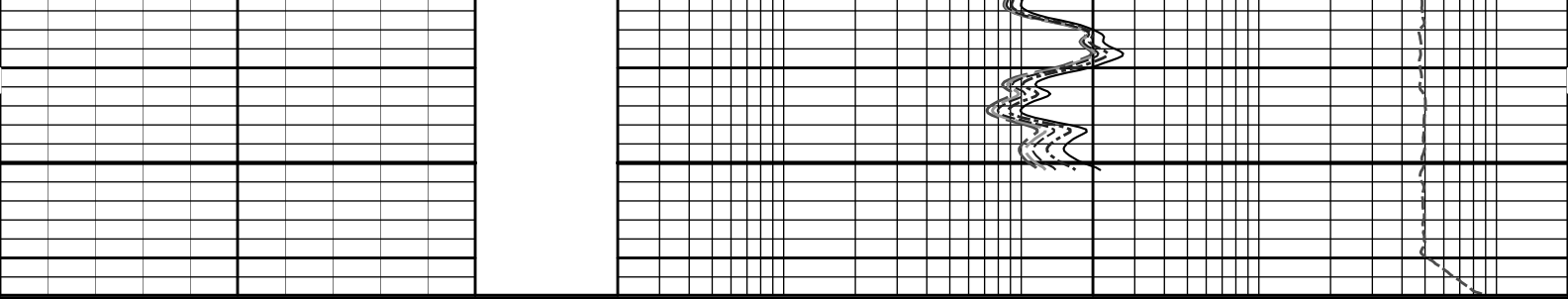
6000

20in Resistivity 2ft Res

30in Resistivity 2ft Res

6100





SP -]20[+	1 : 240 ft	10K	Tension pounds	0
0      Gamma API      150 api		0.2	10in Resistivity 2ft Res	2000
SHALE		0.2	20in Resistivity 2ft Res	2000
		0.2	30in Resistivity 2ft Res	2000
		0.2	60in Resistivity 2ft Res	2000
		0.2	90in Resistivity 2ft Res	2000

**HALLIBURTON**

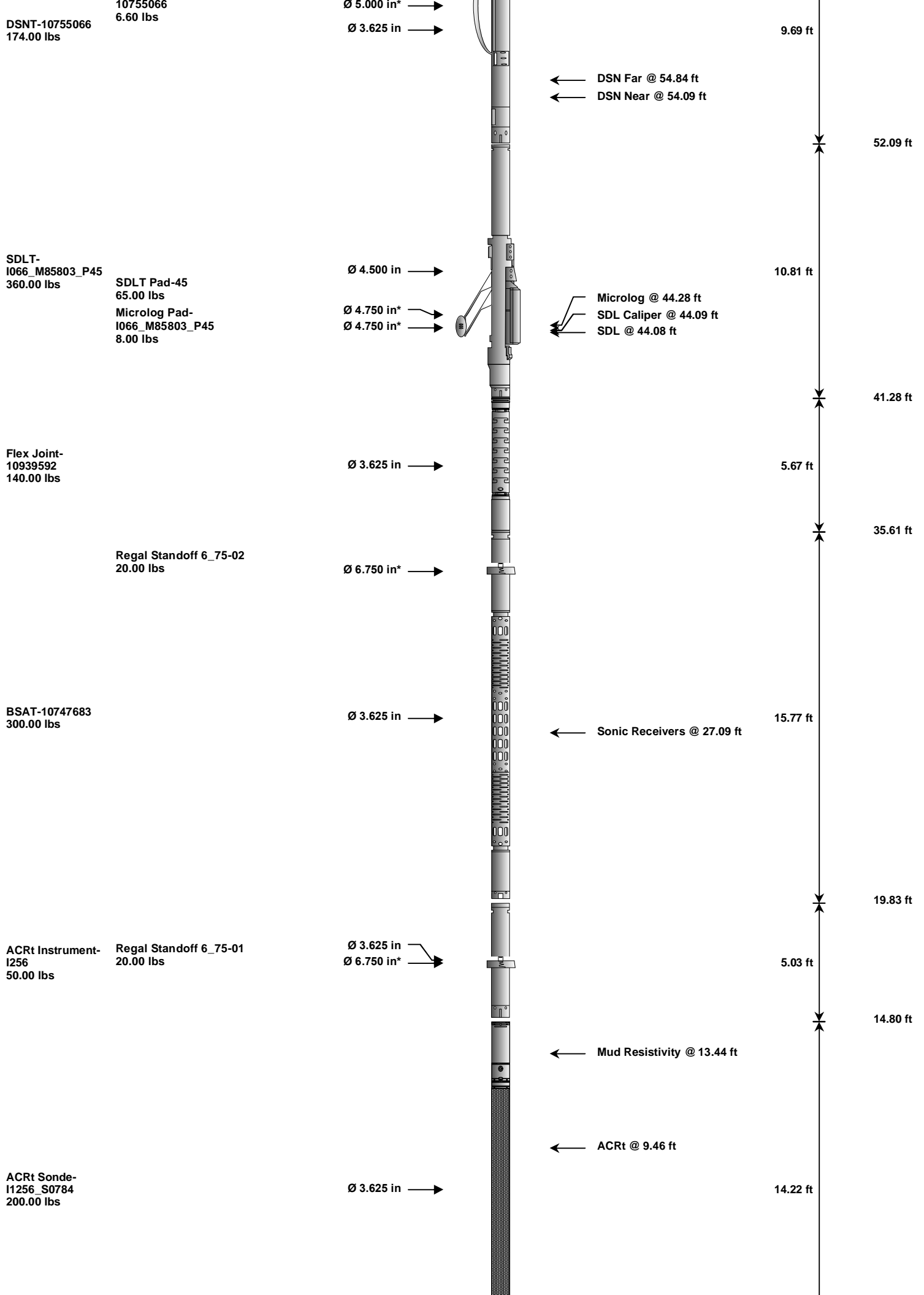
Plot Time: 10-Aug-12 08:04:46  
 Plot Range: 5800 ft to 6163.92 ft  
 Data: BROWN\_TODD\_SWDIWell Based\REPEAT\_TWO\  
 Plot File: \\-LOCAL-IBROWN\_TODD\_SWDI0001 SP-GTET-DSNT-SDLT-FLEX-BSAT-ACRT-CHACRTACRT\_5\_repeat\_lib

## REPEAT SECTION

**HALLIBURTON**

## TOOL STRING DIAGRAM REPORT

Description	Overbody Description	O.D.	Diagram	Sensors @ Delays	Length	Accumulated Length	
Cable Head- PROT01 30.00 lbs		Ø 3.625 in →			1.92 ft	75.95 ft	
SP Sub-11441709 60.00 lbs		Ø 3.625 in →		← SP @ 72.26 ft	3.74 ft	74.03 ft	
GTET-10811258 165.00 lbs		Ø 3.625 in →		← GammaRay @ 64.23 ft	8.52 ft	70.30 ft	
						61.78 ft	



Cabbage Head-  
TRK954  
10.00 lbs

Ø 3.625 in  
Ø 6.000 in



0.58 ft  
0.58 ft  
0.00 ft

Mnemonic	Tool Name	Serial Number	Weight (lbs)	Length (ft)	Accumulated Length (ft)	Max.Log. Speed (fpm)
CH	Standard OH Cable Head	PROT01	30.00	1.92	74.03	300.00
SP	SP Sub	11441709	60.00	3.74	70.30	300.00
GTET	Gamma Telemetry Tool	10811258	165.00	8.52	61.78	60.00
DSNT	Dual Spaced Neutron	10755066	174.00	9.69	52.09	60.00
DCNT	DSN Decentralizer	10755066	6.60	5.13 *	55.42	300.00
SDLT	Spectral Density Tool	I066_M85803_P45	360.00	10.81	41.28	60.00
MICP	Microlog Pad	I066_M85803_P45	8.00	1.00 *	43.78	60.00
SDLP	Density Insite Pad	45	65.00	2.55 *	43.49	60.00
FLEX	Flex Joint	10939592	140.00	5.67	35.61	300.00
BSAT	Borehole Sonic Array Tool	10747683	300.00	15.77	19.83	60.00
RSOF	Regal Standoff 6.75in	02	20.00	0.52 *	33.69	300.00
ACRt	Array Compensated True Resistivity Instrument Section	I256	50.00	5.03	14.80	300.00
RSOF	Regal Standoff 6.75in	01	20.00	0.52 *	17.02	300.00
ACRt	Array Compensated True Resistivity Sonde Section	I1256_S0784	200.00	14.22	0.58	300.00
CBHD	Cabbage Head	TRK954	10.00	0.58	0.00	300.00
<b>Total</b>			<b>1,608.60</b>	<b>75.95</b>		

\* Not included in Total Length and Length Accumulation.

Data: BROWN\_TODD\_SWDI0001 SP-GTET-DSNT-SDLT-FLEX-BSAT-ACRT-CHNDLE Date: 08-Aug-12 23:38:59

# HALLIBURTON

## CALIBRATION REPORT

### NATURAL GAMMA RAY TOOL SHOP CALIBRATION

Tool Name: GTET - 10811258 Reference Calibration Date: 29-Jun-12 10:45:01  
 Engineer: T. HYDE Calibration Date: 29-Jun-12 10:47:38  
 Software Version: WL INSITE R3.6.0 (Build 3) Calibration Version: 1

Calibrator Source S/N: TB-185  
 Calibrator API Reference:228.00 api  
 Equivalent Calibrator API Reference:232.0 api

Measurement	Measured	Calibrated	Units
Background	46.1	47.6	api
Background + Calibrator	270.8	279.6	api
Calibrator	224.7	232.0	api

### NATURAL GAMMA RAY TOOL FIELD CALIBRATION

Tool Name: GTET - 10811258 Reference Calibration Date: 29-Jun-12 10:47:38  
 Engineer: JAMES BOLLUM Calibration Date: 08-Aug-12 23:34:30  
 Software Version: WL INSITE R3.6.0 (Build 3) Calibration Version: 1

Calibrator Source S/N: TB-185  
 Calibrator API Reference:228.00 api  
 Equivalent Calibrator API Reference:232.0 api

Field Verification	Shop	Field	Units
Background	47.6	30.3	api
Background + Calibrator	279.6	264.7	api
Calibrator	232.0	234.4	api

Shop	Field	Difference	Tolerance
232.0	234.4	-2.4	+/- 9.00

**ARRAY COMPENSATED TRUE RESISTIVITY SHOP CALIBRATION**

**Tool Name:** ACRt Sonde - I1256\_S0784      **Reference Calibration Date:** 07-Jul-12 12:08:04  
**Engineer:** T. HYDE      **Calibration Date:** 11-Jul-12 09:38:13  
**Software Version:** WL INSITE R3.6.0 (Build 3)      **Calibration Version:** 1  
**Host Tool Name:** ACRt Instrument - I256

TYPICAL GAIN RANGE									
Subarray	R12KHz			R36KHz			R72KHz		
	Lower	(mmho/m)	Upper	Lower	(mmho/m)	Upper	Lower	(mmho/m)	Upper
A1 (80")	0.95	1.01	1.05	0.95	1.01	1.05	0.95	1.00	1.05
A2 (50")	0.95	1.01	1.05	0.95	1.01	1.05	0.95	1.00	1.05
A3 (29")	0.95	1.01	1.05	0.95	1.01	1.05	0.95	1.00	1.05
A4 (17")	0.95	1.01	1.05	0.95	1.01	1.05	0.95	1.00	1.05
A5 (10")	N/A	N/A	N/A	0.95	1.00	1.05	0.95	0.99	1.05
A6 (6")	N/A	N/A	N/A	0.95	0.98	1.05	0.95	0.98	1.05

TYPICAL SONDE OFFSET RANGE									
Subarray	R12KHz			R36KHz			R72KHz		
	Lower	(mmho/m)	Upper	Lower	(mmho/m)	Upper	Lower	(mmho/m)	Upper
A1 (80")	-5	-0.61	2	-6	-4.02	-2	-8	-5.17	-2
A2 (50")	-7	-1.85	0	-7	-3.61	0	-7	-4.31	0
A3 (29")	-27	-16.24	-9	-9	-4.70	-3	-7	-3.29	-1
A4 (17")	-180	-98.13	-60	-45	-32.80	-15	-39	-26.77	-13
A5 (10")	N/A	N/A	N/A	-150	-97.06	-50	-80	-48.76	-10
A6 (6")	N/A	N/A	N/A	175	293.49	525	90	155.40	270

TRANSMITTER CURRENT GAIN			
Signal	Lower	R	Upper
12K	0.6	0.88	1.3
36K	1.0	1.20	2.0
72K	1.0	1.54	2.0

R-MUD VERIFICATION			
Signal	Lower (ohm-m)	Measured (ohm-m)	Upper (ohm-m)
Mud Cell	0.95	1.00	1.05

PASS/FAIL SUMMARY	
GAIN RANGE CHK	PASS
SONDE OFFSET RANGE CHK	PASS
Tx CURRENT GAIN	PASS
Rmud VERIFICATION	PASS

TOOL OK TO LOG

CALIBRATION SUMMARY						
Sensor	Shop	Field	Post	Difference	Tolerance	Units
GTET-10811258						
Gamma Ray Calibrator	232.0	234.4	-----	-2.4	+/- 9.00	api
ACRt Sonde-I1256_S0784						
Mud Cell	1.00	-----	-----	0.00	-----	ohm-m

## PARAMETERS REPORT

Depth (ft)	Tool Name	Mnemonic	Description	Value	Units
TOP					
	SHARED	BS	Bit Size	8.750	in
	SHARED	UBS	Use Bit Size instead of Caliper for all applications.	No	
	SHARED	MDBS	Mud Base	Water	
	SHARED	MDWT	Borehole Fluid Weight	9.300	ppg
	SHARED	WAGT	Weighting Agent	Natural	
	SHARED	BSAL	Borehole salinity	0.00	ppm
	SHARED	FSAL	Formation Salinity NaCl	0.00	ppm
	SHARED	KPCT	Percent K in Mud by Weight?	0.00	%
	SHARED	RMUD	Mud Resistivity	2.000	ohmm
	SHARED	TRM	Temperature of Mud	75.0	degF
	SHARED	CSD	Logging Interval is Cased?	No	
	SHARED	ICOD	AHV Casing OD	7.000	in
	SHARED	ST	Surface Temperature	75.0	degF
	SHARED	TD	Total Well Depth	6026.00	ft
	SHARED	BHT	Bottom Hole Temperature	200.0	degF
	SHARED	SVTM	Navigation and Survey Master Tool	NONE	
	SHARED	AZTM	High Res Z Accelerometer Master Tool	GTET	
	SHARED	TEMM	Temperature Master Tool	NONE	
	SHARED	BHSM	Borehole Size Master Tool	NONE	
	Rwa / CrossPlot	XPOK	Process Crossplot?	Yes	
	Rwa / CrossPlot	FCHO	Select Source of F	Automatic	
	Rwa / CrossPlot	AFAC	Archie A factor	0.6200	
	Rwa / CrossPlot	MFAC	Archie M factor	2.1500	
	Rwa / CrossPlot	RMFR	Rmf Reference	0.10	ohmm
	Rwa / CrossPlot	TMFR	Rmf Ref Temp	75.00	degF
	Rwa / CrossPlot	RWA	Resistivity of Formation Water	0.05	ohmm
	Rwa / CrossPlot	ADP	Use Air Porosity to calculate CrossplotPhi	No	
	GTET	GROK	Process Gamma Ray?	Yes	
	GTET	GRSO	Gamma Tool Standoff	0.000	in
	GTET	GEOK	Process Gamma Ray EVR?	No	
	GTET	TPOS	Tool Position for Gamma Ray Tools.	Eccentered	
	DSNT	DNOK	Process DSN?	Yes	
	DSNT	DEOK	Process DSN EVR?	No	
	DSNT	NLIT	Neutron Lithology	Limestone	
	DSNT	DNSO	DSN Standoff - 0.25 in (6.35 mm) Recommended	0.250	in
	DSNT	DNTP	Temperature Correction Type	None	
	DSNT	DPRS	DSN Pressure Correction Type	None	
	DSNT	SHCO	View More Correction Options	No	
	DSNT	UTVD	Use TVD for Gradient Corrections?	No	
	DSNT	LHWT	Logging Horizontal Water Tank?	No	
	SDLT	CLOK	Process Caliper Outputs?	Yes	
	SDLT Pad	DNOK	Process Density?	Yes	
	SDLT Pad	DNOK	Process Density EVR?	No	
	SDLT Pad	CP	Logging Calibration Block?	No	

SDLT Pad	CB	Logging Calibration Blocks?	No	
SDLT Pad	SPVT	SDLT Pad Temperature Valid?	Yes	
SDLT Pad	DTWN	Disable temperature warning	No	
SDLT Pad	DMA	Formation Density Matrix	2.710	g/cc
SDLT Pad	DFL	Formation Density Fluid	1.000	g/cc
Microlog Pad	MLOK	Process MicroLog Outputs?	Yes	
BSAT	MBOK	Compute BCAS Results?	Yes	
BSAT	FLLO	Frequency Filter Low Pass Value?	5000	Hz
BSAT	FLHI	Frequency Filter High Pass Value?	27000	Hz
BSAT	DTFL	Delta -T Fluid	189.00	uspf
BSAT	DTMT	Delta -T Matrix Type	User define	
BSAT	DTMA	Delta -T Matrix	47.60	uspf
BSAT	DTSH	Delta -T Shale	100.00	uspf
BSAT	SPEQ	Acoustic Porosity Equation	Wylie	
ACRt Sonde	RTOK	Process ACRt?	Yes	
ACRt Sonde	MNSO	Minimum Tool Standoff	1.50	in
ACRt Sonde	TCS1	Temperature Correction Source	FP Lwr & FP Upr	
ACRt Sonde	TPOS	Tool Position	Free Hanging	
ACRt Sonde	RMOP	Rmud Source	Mud Cell	
ACRt Sonde	RMIN	Minimum Resistivity for MAP	0.20	ohmm
ACRt Sonde	RMIN	Maximum Resistivity for MAP	200.00	ohmm
ACRt Sonde	THQY	Threshold Quality	0.50	
ACRt Sonde	MRFX	Fixed mud resistivity	2000	ohmm

BOTTOM\_\_\_\_\_

Data: BROWN\_TODD\_SWD\0001 SP-GTET-DSNT-SDLT-FLEX-BSAT-ACRT-CHNIDLE

Date: 08-Aug-12 23:43:04

# HALLIBURTON

## INPUTS, DELAYS AND FILTERS TABLE

Mnemonic	Input Description	Delay (ft)	Filter Type	Filter Length (ft)
<b>Depth Panel</b>				
TENS	Tension	0.00	NO	
<b>SP Sub</b>				
PLTC	Plot Control Mask	72.25	NO	
SP	Spontaneous Potential	72.25	BLK	1.250
SPR	Raw Spontaneous Potential	72.25	NO	
SPO	Spontaneous Potential Offset	72.25	NO	
<b>GTET</b>				
TPUL	Tension Pull	64.23	NO	
GR	Natural Gamma Ray API	64.23	TRI	1.750
GRU	Unfiltered Natural Gamma Ray API	64.23	NO	
EGR	Natural Gamma Ray API with Enhanced Vertical Resolution	64.23	W	1.416 , 0.750
ACCZ	Accelerometer Z	0.00	BLK	0.083
DEVI	Inclination	0.00	NO	
<b>DSNT</b>				
TPUL	Tension Pull	53.99	NO	
RNDS	Near Detector Telemetry Counts	54.09	BLK	1.417
RFDS	Far Detector Telemetry Counts	54.84	TRI	0.583
DNTT	DSN Tool Temperature	54.09	NO	
DSNS	DSN Tool Status	53.99	NO	



ERND	Near Detector Telemetry Counts EVR	54.09	BLK	0.000
ERFD	Far Detector Telemetry Counts EVR	54.84	BLK	0.000
ENTM	DSN Tool Temperature EVR	54.09	NO	
<b>SDLT</b>				
TPUL	Tension Pull	44.09	NO	
PCAL	Pad Caliper	44.09	TRI	0.250
ACAL	Arm Caliper	44.09	TRI	0.250
<b>BSAT</b>				
TPUL	Tension Pull	27.09	NO	
STAT	Status	27.09	NO	
DLYT	Delay Time	27.09	NO	
SI	Sample Interval	27.09	NO	
TXRX	Raw Telemetry 10 Receivers	27.09	NO	
FRMC	Tool Frame Count	27.09	NO	
GMOD	Gain processing mode	19.83	NO	
<b>ACRt Sonde</b>				
TPUL	Tension Pull	2.97	NO	
F1R1	ACRT 12KHz - 80in R value	9.22	BLK	0.000
F1X1	ACRT 12KHz - 80in X value	9.22	BLK	0.000
F1R2	ACRT 12KHz - 50in R value	6.72	BLK	0.000
F1X2	ACRT 12KHz - 50in X value	6.72	BLK	0.000
F1R3	ACRT 12KHz - 29in R value	5.22	BLK	0.000
F1X3	ACRT 12KHz - 29in X value	5.22	BLK	0.000
F1R4	ACRT 12KHz - 17in R value	4.22	BLK	0.000
F1X4	ACRT 12KHz - 17in X value	4.22	BLK	0.000
F1R5	ACRT 12KHz - 10in R value	3.72	BLK	0.000
F1X5	ACRT 12KHz - 10in X value	3.72	BLK	0.000
F1R6	ACRT 12KHz - 6in R value	3.47	BLK	0.000
F1X6	ACRT 12KHz - 6in X value	3.47	BLK	0.000
F2R1	ACRT 36KHz - 80in R value	9.22	BLK	0.000
F2X1	ACRT 36KHz - 80in X value	9.22	BLK	0.000
F2R2	ACRT 36KHz - 50in R value	6.72	BLK	0.000
F2X2	ACRT 36KHz - 50in X value	6.72	BLK	0.000
F2R3	ACRT 36KHz - 29in R value	5.22	BLK	0.000
F2X3	ACRT 36KHz - 29in X value	5.22	BLK	0.000
F2R4	ACRT 36KHz - 17in R value	4.22	BLK	0.000
F2X4	ACRT 36KHz - 17in X value	4.22	BLK	0.000
F2R5	ACRT 36KHz - 10in R value	3.72	BLK	0.000
F2X5	ACRT 36KHz - 10in X value	3.72	BLK	0.000
F2R6	ACRT 36KHz - 6in R value	3.47	BLK	0.000
F2X6	ACRT 36KHz - 6in X value	3.47	BLK	0.000
F3R1	ACRT 72KHz - 80in R value	9.22	BLK	0.000
F3X1	ACRT 72KHz - 80in X value	9.22	BLK	0.000
F3R2	ACRT 72KHz - 50in R value	6.72	BLK	0.000
F3X2	ACRT 72KHz - 50in X value	6.72	BLK	0.000
F3R3	ACRT 72KHz - 29in R value	5.22	BLK	0.000
F3X3	ACRT 72KHz - 29in X value	5.22	BLK	0.000
F3R4	ACRT 72KHz - 17in R value	4.22	BLK	0.000
F3X4	ACRT 72KHz - 17in X value	4.22	BLK	0.000
F3R5	ACRT 72KHz - 10in R value	3.72	BLK	0.000
F3X5	ACRT 72KHz - 10in X value	3.72	BLK	0.000
F3R6	ACRT 72KHz - 6in R value	3.47	BLK	0.000
F3X6	ACRT 72KHz - 6in X value	3.47	BLK	0.000

RMUD	Mud Resistivity	12.76	BLK	0.000
F1RT	Transmitter Reference 12 KHz Real Signal	2.97	BLK	0.000
F1XT	Transmitter Reference 12 KHz Imaginary Signal	2.97	BLK	0.000
F2RT	Transmitter Reference 36 KHz Real Signal	2.97	BLK	0.000
F2XT	Transmitter Reference 36 KHz Imaginary Signal	2.97	BLK	0.000
F3RT	Transmitter Reference 72 KHz Real Signal	2.97	BLK	0.000
F3XT	Transmitter Reference 72 KHz Imaginary Signal	2.97	BLK	0.000
TFPU	Upper Feedpipe Temperature Calculated	2.97	BLK	0.000
TFPL	Lower Feedpipe Temperature Calculated	2.97	BLK	0.000
ITMP	Instrument Temperature	2.97	BLK	0.000
TCVA	Temperature Correction Values Loop Off	2.97	NO	
TIDV	Instrument Temperature Derivative	2.97	NO	
TUDV	Upper Temperature Derivative	2.97	NO	
TLDV	Lower Temperature Derivative	2.97	NO	
TRBD	Receiver Board Temperature	2.97	NO	

### SDLT Pad

TPUL	Tension Pull	44.08	NO	
NAB	Near Above	43.90	BLK	0.920
NHI	Near Cesium High	43.90	BLK	0.920
NLO	Near Cesium Low	43.90	BLK	0.920
NVA	Near Valley	43.90	BLK	0.920
NBA	Near Barite	43.90	BLK	0.920
NDE	Near Density	43.90	BLK	0.920
NPK	Near Peak	43.90	BLK	0.920
NLI	Near Lithology	43.90	BLK	0.920
NBAU	Near Barite Unfiltered	43.90	BLK	0.250
NLIU	Near Lithology Unfiltered	43.90	BLK	0.250
FAB	Far Above	44.26	BLK	0.250
FHI	Far Cesium High	44.26	BLK	0.250
FLO	Far Cesium Low	44.26	BLK	0.250
FVA	Far Valley	44.26	BLK	0.250
FBA	Far Barite	44.26	BLK	0.250
FDE	Far Density	44.26	BLK	0.250
FPK	Far Peak	44.26	BLK	0.250
FLI	Far Lithology	44.26	BLK	0.250
PTMP	Pad Temperature	44.09	BLK	0.920
NHV	Near Detector High Voltage	43.49	NO	
FHV	Far Detector High Voltage	43.49	NO	
ITMP	Instrument Temperature	43.49	NO	
DDHV	Detector High Voltage	43.49	NO	

### Microlog Pad

TPUL	Tension Pull	44.28	NO	
MINV	Microlog Lateral	44.28	BLK	0.750
MNOR	Microlog Normal	44.28	BLK	0.750

Data: BROWN\_TODD\_SWD\0001 SP-GTET-DSNT-SDLT-FLEX-BSAT-ACRT-CH\IDLE

Date: 08-Aug-12 23:42:37

COMPANY REEDER OPERATING, LLC

WELL BROWN-TODD 1-7 SWD

FIELD

COUNTY COMANCHE

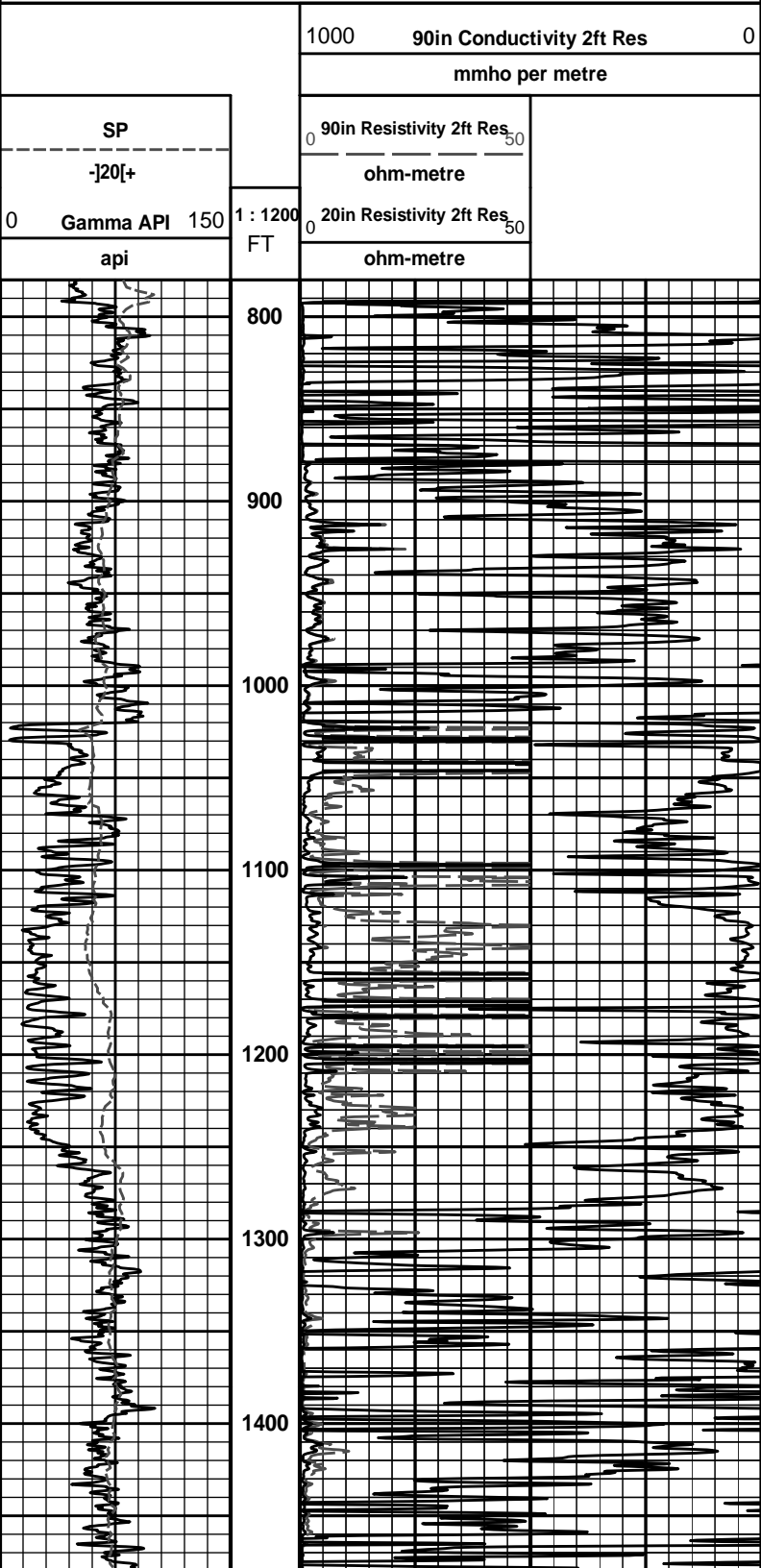
STATE

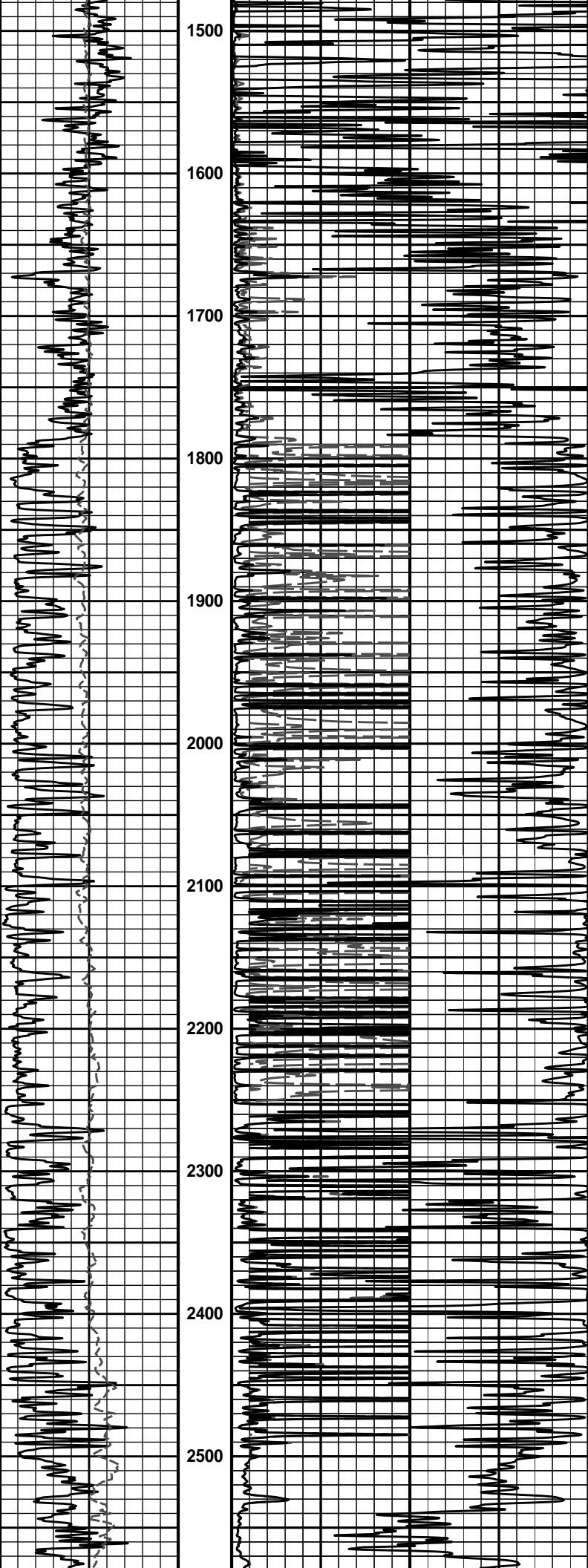
KANSAS

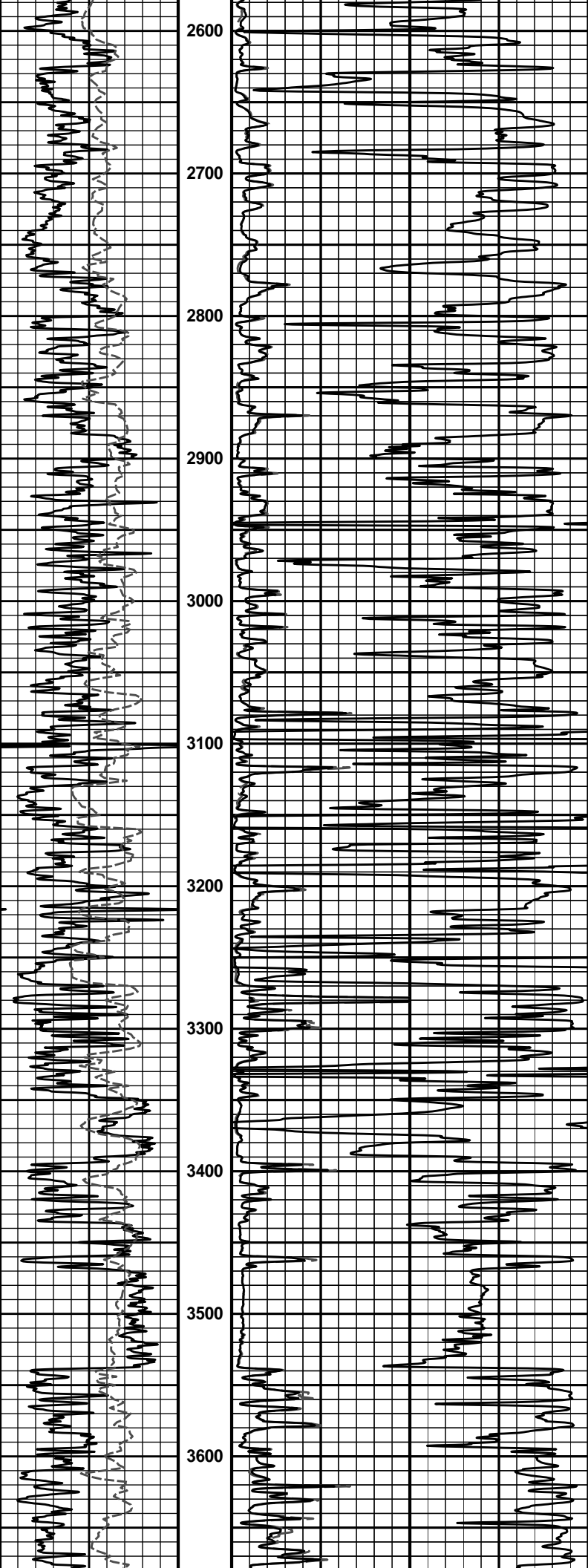
## HALLIBURTON

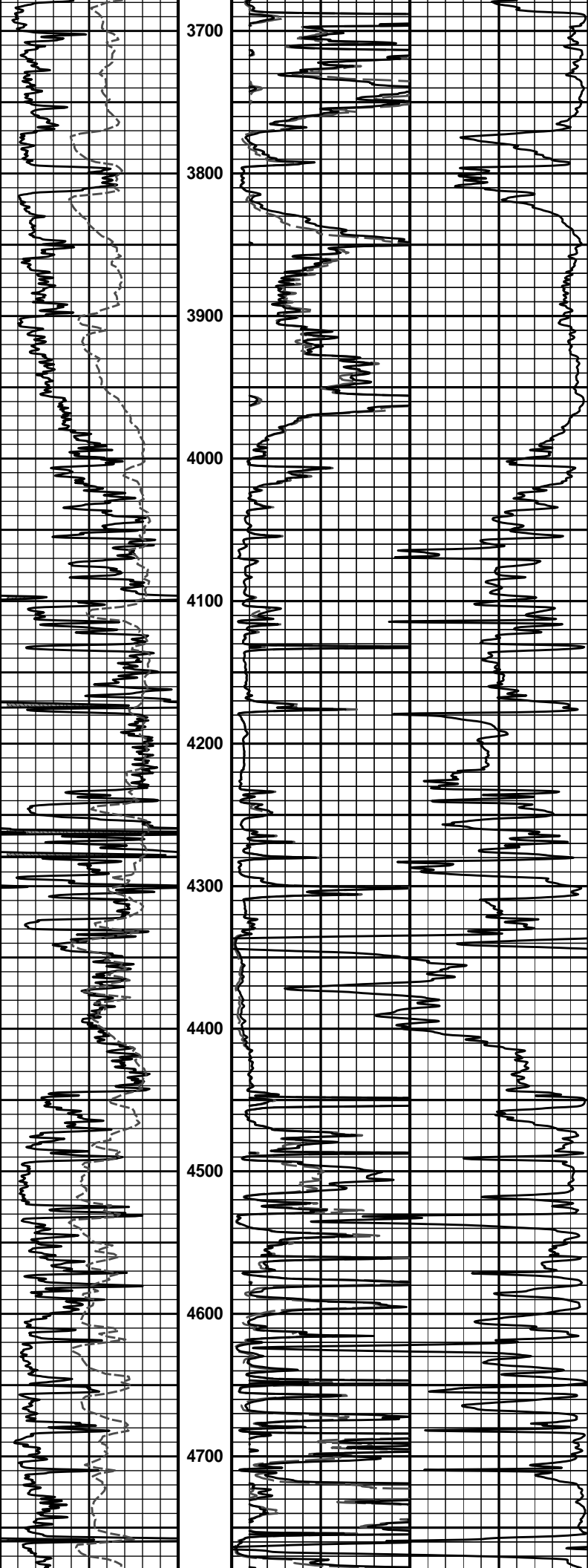
Plot Time: 10-Aug-12 08:04:46  
 Plot Range: 780 ft to 6151.5 ft  
 Data: BROWN\_TODD\_SWDIWell Based\SPLICE\_CASING\  
 Plot File: \\LOCAL\BROWN\_TODD\_SWD\0001 SP-GTET-DSNT-SDLT-FLEX-BSAT-ACRT-CH...ACRT\_1.lib

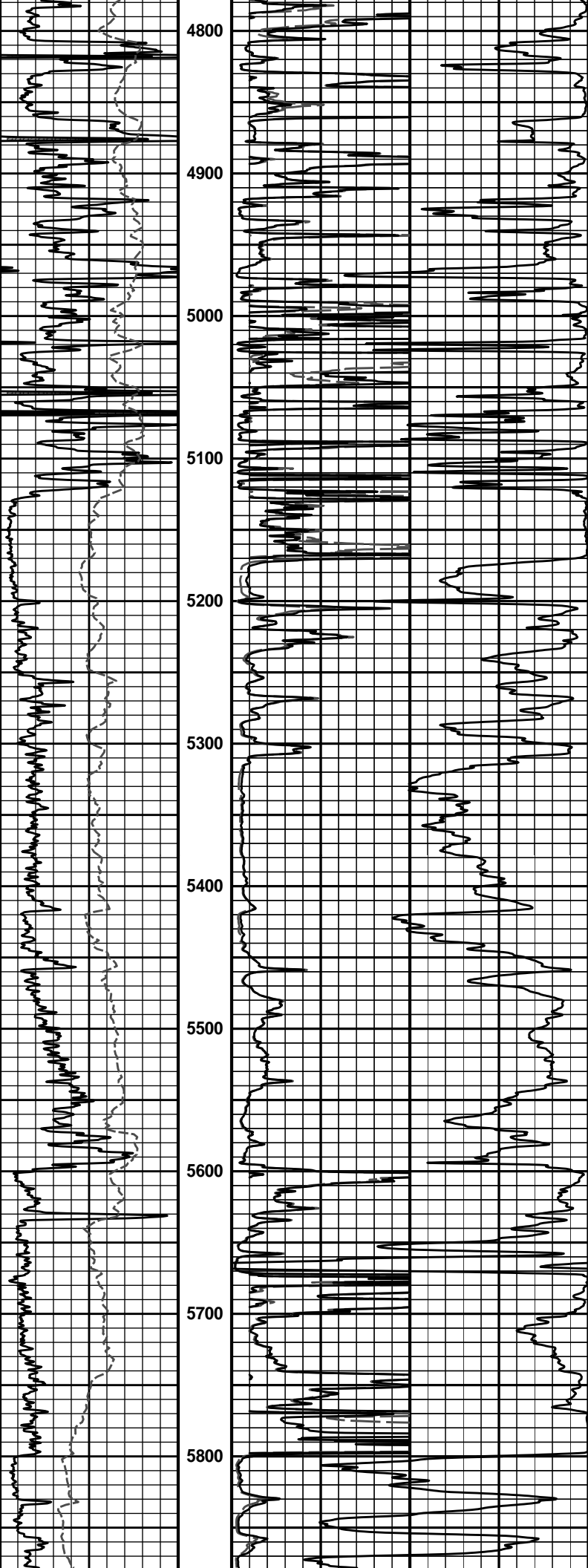
### 1 INCH MAIN LOG

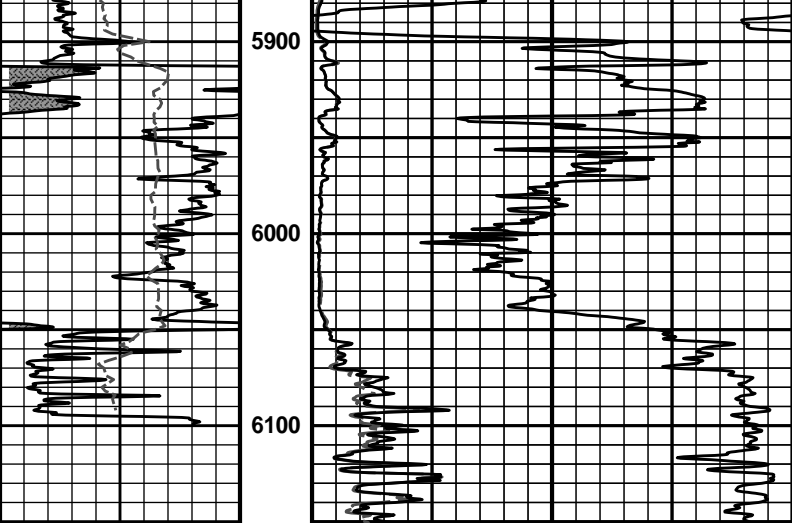












0	Gamma API	150	1 : 1200	0	20in Resistivity 2ft Res <sub>50</sub>	0
	api		FT		ohm-metre	
	SP			0	90in Resistivity 2ft Res <sub>50</sub>	
	-]20[+				ohm-metre	
				1000	90in Conductivity 2ft Res	0
					mmho per metre	

**HALLIBURTON**

Plot Time: 10-Aug-12 08:04:51  
 Plot Range: 780 ft to 6151.5 ft  
 Data: BROWN\_TODD\_SWD\Well Based\SPLICE\_CASING\  
 Plot File: \\LOCAL-BROWN\_TODD\_SWD\0001 SP-GTET-DSNT-SDLT-FLEX-BSAT-ACRT-CHL..ACRT\_1\_lib

**1 INCH MAIN LOG**



Conservation Division  
Finney State Office Building  
130 S. Market, Rm. 2078  
Wichita, KS 67202-3802



Phone: 316-337-6200  
Fax: 316-337-6211  
<http://kcc.ks.gov/>

Mark Sievers, Chairman  
Thomas E. Wright, Commissioner  
Shari Feist Albrecht, Commissioner

Sam Brownback, Governor

October 01, 2012

Gary Wente  
Reeder Operating LLC  
4925 GREENVILLE AVE., STE 1400  
DALLAS, TX 75206

Re: ACO1  
API 15-033-21656-00-00  
BROWN-TODD 1 SWD  
SE/4 Sec.07-32S-17W  
Comanche County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,  
Gary Wente

<b>JOB SUMMARY</b>			PROJECT NUMBER <b>SOK 1743</b>	TICKET DATE <b>08/11/12</b>
COUNTY <b>Comanche</b>	State <b>Oklahoma</b>	COMPANY <b>Reeder Operating, LLC</b>	CUSTOMER REP <b>Edward</b>	
LEASE NAME <b>Brown Todd SWD</b>	Well No. <b>1-7</b>	JOB TYPE <b>Intermediate</b>	EMPLOYEE NAME <b>LOUIS ARNEY</b>	

EMP NAME					
<b>LOUIS ARNEY</b>	<b>0</b>				
<b>JASON JONES</b>					
<b>MARCOS QUINTANA</b>					
<b>0.00</b>					

Form. Name \_\_\_\_\_ Type: \_\_\_\_\_

Packer Type \_\_\_\_\_ Set At **0**

Bottom Hole Temp. **138** Pressure \_\_\_\_\_

Retainer Depth \_\_\_\_\_ Total Depth **6022**

Date	Called Out	On Location	Job Started	Job Completed
	<b>8/11/2012</b>	<b>8/11/2012</b>	<b>8/11/2012</b>	<b>8/11/2012</b>
Time	<b>5:00</b>	<b>12:00</b>	<b>18:54</b>	<b>19:27</b>

Type and Size	Qty	Make
Auto Fill Tube	<b>0</b>	<b>IR</b>
Insert Float Val	<b>0</b>	<b>IR</b>
Centralizers	<b>0</b>	<b>IR</b>
Top Plug	<b>0</b>	<b>IR</b>
HEAD	<b>0</b>	<b>IR</b>
Limit clamp	<b>0</b>	<b>IR</b>
Weld-A	<b>0</b>	<b>IR</b>
Texas Pattern Guide Shoe	<b>0</b>	<b>IR</b>
Cement Basket	<b>0</b>	<b>IR</b>

Well Data						
	New/Used	Weight	Size	Grade	From To	Max. Allow
Casing		<b>26#</b>	<b>7"</b>		<b>Surface</b>	<b>5,000</b>
Liner						
Liner						
Tubing			<b>0</b>			
Drill Pipe						
Open Hole			<b>8 3/4"</b>		<b>Surface</b>	<b>6,022</b> Shots/Ft.
Perforations						
Perforations						

Materials			
Mud Type	WBM	Density	Lb/Gal
Disp. Fluid	Fresh Water	<b>8.33</b>	Lb/Gal
Spacer type	resh Water BBL.	<b>20</b>	<b>8.33</b>
Spacer type	MUD WASI BBL.	<b>10</b>	<b>8.40</b>
Acid Type	Gal.		%
Acid Type	Gal.		%
Surfactant	Gal.		ln
NE Agent	Gal.		ln
Fluid Loss	Gal/Lb		ln
Gelling Agent	Gal/Lb		ln
Fric. Red.	Gal/Lb		ln
MISC.	Gal/Lb		ln

Perfpac Balls \_\_\_\_\_ Qty. \_\_\_\_\_

Other \_\_\_\_\_

Other \_\_\_\_\_

Other \_\_\_\_\_

Other \_\_\_\_\_

Hours On Location		Operating Hours		Description of Job
Date	Hours	Date	Hours	
<b>8/11</b>	<b>8.0</b>	<b>8/11</b>	<b>1.3</b>	<b>Intermediate</b>
<b>Total</b>	<b>8.0</b>	<b>Total</b>	<b>1.3</b>	

<b>MAX 5,000 PSI</b>	<b>AVG. 500</b>
<b>MAX 8 BPM</b>	<b>AVG 6</b>
<b>Feet 90'</b>	<b>Reason SHOE JOINT</b>

Stage	Sacks	Cement	Additives	W/Rq.	Yield	Lbs/Gal
<b>1</b>	<b>460</b>	<b>50/50 POZ PREMIUM</b>	<b>4% Gel - 0.4% C-12 - 0.1% C-37 - 0.5% C-41P - 1 lb/sk Phenoseal - 1/4#/sk</b>	<b>6.77</b>	<b>1.44</b>	<b>13.60</b>
<b>2</b>	<b>0</b>	<b>0</b>		<b>0</b>	<b>0.00</b>	<b>0.00</b>
<b>3</b>	<b>0</b>	<b>0</b>		<b>0</b>	<b>0.00</b>	<b>0.00</b>

Summary					
Preflush Breakdown	<b>20</b>	Type: <b>H2O</b>	Preflush: BBI	<b>10.00</b>	Type: <b>Mud Wash</b>
		<b>MAXIMUM</b>	Load & Bkdn: Gal - BBI	<b>N/A</b>	Pad: Bbl - Gal <b>N/A</b>
		Lost Returns-N	Excess /Return BBI	<b>N/A</b>	Calc. Disp Bbl <b>233</b>
		Actual TOC	Calc. TOC:	<b>3141'</b>	Actual Disp. <b>229.00</b>
Average		Bump Plug PSI: <b>1,700</b>	Final Circ. PSI:	<b>1,100</b>	Disp: Bbl
ISIP	<b>5 Min.</b>	<b>10 Min</b>	Cement Slurry: BBI	<b>118.0</b>	
		<b>15 Min</b>	Total Volume BBI	<b>357.00</b>	

CUSTOMER REPRESENTATIVE \_\_\_\_\_ SIGNATURE \_\_\_\_\_

<b>JOB SUMMARY</b>			PROJECT NUMBER <b>SOK1712</b>	TICKET DATE <b>08/02/12</b>
COUNTY <b>COMANCHE</b>	State <b>KANSAS</b>	COMPANY <b>REEDER ENERGY</b>	CUSTOMER REP <b>EDWARD</b>	
LEASE NAME <b>BROWN TODD SWD</b>	Well No. <b>1-7</b>	JOB TYPE <b>Surface</b>	EMPLOYEE NAME <b>Johnny Breeze</b>	

EMP NAME					
Johnny Breeze		0			
Daniel Wells					
Jared Green					
0.00					

Form. Name \_\_\_\_\_ Type: \_\_\_\_\_  
Packer Type \_\_\_\_\_ Set At **0**  
Bottom Hole Temp. \_\_\_\_\_ Pressure \_\_\_\_\_  
Retainer Depth \_\_\_\_\_ Total Depth **800'**

Date	Called Out <b>8/1/2012</b>	On Location <b>8/2/2012</b>	Job Started <b>8/2/2012</b>	Job Completed <b>8/2/2012</b>
Time	<b>2200</b>	<b>0300</b>	<b>0918</b>	<b>1100</b>

Tools and Accessories		
Type and Size	Qty	Make
Auto Fill Tube	0	IR
Insert Float Val	0	IR
Centralizers	0	IR
Top Plug	1	IR
HEAD	1	IR
Limit clamp	0	IR
Weld-A	0	IR
Texas Pattern Guide Shoe	0	IR
Cement Basket	0	IR

Well Data					
	New/Used	Weight	Size	Grade	From To
Casing		<b>36#</b>	<b>9 5/8</b>		Surface
Liner					
Liner					
Tubing			<b>0</b>		
Drill Pipe					
Open Hole			<b>12 1/4</b>		Surface
Perforations					<b>800'</b>
Perforations					
Perforations					

Materials			
Mud Type	WBM	Density	Lb/Gal
Disp. Fluid	Fresh Water	<b>8.33</b>	
Spacer type	mud wash BBL.	<b>20</b>	<b>8.40</b>
Spacer type	H2O BBL.	<b>10</b>	<b>8.33</b>
Acid Type	Gal.		%
Acid Type	Gal.		%
Surfactant	Gal.		In
NE Agent	Gal.		In
Fluid Loss	Gal/Lb		In
Gelling Agent	Gal/Lb		In
Fric. Red.	Gal/Lb		In
MISC.	Gal/Lb		In

Hours On Location		Operating Hours		Description of Job
Date	Hours	Date	Hours	
8/2	<b>8.0</b>	8/2	<b>4.0</b>	Surface
Total	<b>8.0</b>	Total	<b>4.0</b>	

Pressures	
MAX <b>5,000 PSI</b>	AVG <b>200</b>
Average Rates in BPM	
MAX <b>8 BPM</b>	AVG <b>6</b>
Cement Left in Pipe	
Feet <b>44</b>	Reason <b>SHOE JOINT</b>

Cement Data						
Stage	Sacks	Cement	Additives	W/Rq.	Yield	Lbs/Gal
1	450	CLASS C	1/4 pps CELLOFLAKE	6.32	1.32	14.80
2						
3	0	0		0	0.00	0.00

Summary					
Preflush Breakdown	Type: _____	MAXIMUM	1,500	Preflush: BBI	<b>20.00</b>
	Lost Returns-N	NO/FULL		Load & Bkdn: Gal - BBI	<b>N/A</b>
	Actual TOC	Surface		Excess /Return BBI	<b>25</b>
Average	Bump Plug PSI:	920		Calc. TOC:	Surface
ISP	5 Min.	10 Min.	15 Min.	Final Circ. PSI:	<b>370</b>
				Cement Slurry: BBI	<b>105.8</b>
				Total Volume BBI	<b>186.86</b>

CUSTOMER REPRESENTATIVE *Edward Wells* SIGNATURE \_\_\_\_\_

# Job Data Sheet



COMPANY <b>REEDER ENERGY</b>		PROJECT NUMBER <b>SOK1712</b>	AFEWK ORDER	DATE <b>8/1/2012</b>
CONTRACTOR <b>DUKE RIG #20</b>		Owner <b>Same</b>	LEGAL DESCRIPTION	API <b>15-033-21656-00-00</b>
LEASE & WELL # <b>BROWN TODD 1-7 SWD</b>		COUNTY <b>COMANCHE</b>	STATE <b>KANSAS</b>	MILEAGE <b>100</b>
DIRECTIONS				

**F/ NORTH OF COLWATER @ 183N & 160E GO EAST 6 MI, TURN SOUTH 1 MI,  
1 MI EAST, NORTH INTO!**

<b>Pumping Services</b>	<input checked="" type="checkbox"/> Surface <input type="checkbox"/> Intermediate <input type="checkbox"/> Long String <input type="checkbox"/> Plug Back <input type="checkbox"/> Squeeze <input type="checkbox"/> Acid <input type="checkbox"/> PTA <input type="checkbox"/> Other      ( ) H2S										
	Casing Size <b>9 5/8</b>	Casing Weight <b>36#</b>	Thread <b>STC</b>	Tbng/DP Size	Thread	Plug. Cont. <b>YES</b>	Swage <b>YES</b>	Top Plug <b>YES</b>	Bottom Plug <b>NO</b>	% Excess <b>100%</b>	
	Number and Type Units <b>Pump Truck &amp; Bulk Materials</b>							Casing Depth <b>800'</b>	Hole Depth <b>800'</b>	Hole Size <b>12 1/4</b>	
	Remarks					Est. BHST	KOP	Depth-TVD <b>800'</b>	Mud Weight/Type <b>9.0ppg WBM</b>		
<b>Materials</b>	<b>LEAD</b>	# of Sacks <b>450</b>	Type <b>CLASS C</b>	Additives							
	<b>H2O TO MIX</b>	Weight PPG <b>14.80</b>	Yield Ft3/Sk <b>1.32</b>	Water Gal/Sk <b>6.32</b>	<b>1/4 pps CELLOFLAKE</b>						
	<b>TAIL</b>	# of Sacks	Type	Additives							
	<b>H2O TO MIX</b>	Weight PPG	Yield Ft3/Sk	Water Gal/Sk							
		# of Sacks	Type	Additives							
		Weight PPG	Yield Ft3/Sk	Water Gal/Sk							
		ACID	Type	Additives							
		Inhibitor	Surfactant	clay cont.							
	Spacer or Flush	Quantity <b>20bbls</b>	Type <b>H2O</b>	Additives							
	Spacer or Flush	Quantity	Type	Additives							
Other	Quantity	Type	Additives								
<b>Crew Called</b>	<b>Cementer</b>		<b>Pumper</b>		<b>Bulky</b>		<b>Bulky</b>		<b>Bulky</b>		
<b>Special Request</b>											
<b>Sales Items</b>	Casing Size		Casing Weight			Thread					
	Guide Shoe		Float Shoe			Float Collar		Insert Float Valve			
	Centralizers - Number		Size			Type					
	Wall Cleaners - Number		Type			MSC (DV Tool)			MSC Plug Set		
	Limit Clamps		Thread lock			Other					
	Remarks										
Customer Rep. <b>EDWARD</b>		Cell Phone <b>832-426-6227</b>		Office Phone		Fax		Time of Call			
Call Taken By <b>ROGER YELLOWWOLF</b>							Date Ready <b>8/1/12</b>	Time Ready			
Crew Called							Time				

<b>JOB SUMMARY</b>			PROJECT NUMBER <b>SOK 1743</b>	TICKET DATE <b>08/11/12</b>
COUNTY <b>Comanche</b>	State <b>Oklahoma</b>	COMPANY <b>Reeder Operating, LLC</b>	CUSTOMER REP <b>Edward</b>	
LEASE NAME <b>Brown Todd SWD</b>	Well No. <b>1-7</b>	JOB TYPE <b>Intermediate</b>	EMPLOYEE NAME <b>LOUIS ARNEY</b>	

EMP NAME					
<b>LOUIS ARNEY</b>	<b>0</b>				
<b>JASON JONES</b>					
<b>MARCOS QUINTANA</b>					
<b>0.00</b>					

Form. Name \_\_\_\_\_ Type: \_\_\_\_\_

Packer Type \_\_\_\_\_ Set At **0**

Bottom Hole Temp. **138** Pressure \_\_\_\_\_

Retainer Depth \_\_\_\_\_ Total Depth **6022**

Date	Called Out	On Location	Job Started	Job Completed
	<b>8/11/2012</b>	<b>8/11/2012</b>	<b>8/11/2012</b>	<b>8/11/2012</b>
Time	<b>5:00</b>	<b>12:00</b>	<b>18:54</b>	<b>19:27</b>

Type and Size	Qty	Make
Auto Fill Tube	<b>0</b>	<b>IR</b>
Insert Float Val	<b>0</b>	<b>IR</b>
Centralizers	<b>0</b>	<b>IR</b>
Top Plug	<b>0</b>	<b>IR</b>
HEAD	<b>0</b>	<b>IR</b>
Limit clamp	<b>0</b>	<b>IR</b>
Weld-A	<b>0</b>	<b>IR</b>
Texas Pattern Guide Shoe	<b>0</b>	<b>IR</b>
Cement Basket	<b>0</b>	<b>IR</b>

Well Data					
New/Used	Weight	Size	Grade	From	To
Casing	<b>26#</b>	<b>7"</b>		Surface	
Liner					
Liner					
Tubing		<b>0</b>			
Drill Pipe					
Open Hole		<b>8 3/4"</b>		Surface	<b>6,022</b>
Perforations					Shots/Ft.
Perforations					
Perforations					

Materials			
Mud Type	WBM	Density	Lb/Gal
Disp. Fluid	Fresh Water	<b>8.33</b>	Lb/Gal
Spacer type	resh Water BBL.	<b>20</b>	<b>8.33</b>
Spacer type	MUD WASI BBL.	<b>10</b>	<b>8.40</b>
Acid Type	Gal.		%
Acid Type	Gal.		%
Surfactant	Gal.		ln
NE Agent	Gal.		ln
Fluid Loss	Gal/Lb		ln
Gelling Agent	Gal/Lb		ln
Fric. Red.	Gal/Lb		ln
MISC.	Gal/Lb		ln

Perfpac Balls \_\_\_\_\_ Qty. \_\_\_\_\_

Other \_\_\_\_\_

Other \_\_\_\_\_

Other \_\_\_\_\_

Other \_\_\_\_\_

Hours On Location		Operating Hours		Description of Job
Date	Hours	Date	Hours	
<b>8/11</b>	<b>8.0</b>	<b>8/11</b>	<b>1.3</b>	Intermediate
<b>Total</b>	<b>8.0</b>	<b>Total</b>	<b>1.3</b>	

Pressures	
<b>MAX 5,000 PSI</b>	<b>AVG. 500</b>
Average Rates in BPM	
<b>MAX 8 BPM</b>	<b>AVG 6</b>
Cement Left in Pipe	
<b>Feet 90'</b>	<b>Reason SHOE JOINT</b>

Cement Data						
Stage	Sacks	Cement	Additives	W/Rq.	Yield	Lbs/Gal
<b>1</b>	<b>460</b>	<b>50/50 POZ PREMIUM</b>	<b>4% Gel - 0.4% C-12 - 0.1% C-37 - 0.5% C-41P - 1 lb/sk Phenoseal - 1/4#/sk</b>	<b>6.77</b>	<b>1.44</b>	<b>13.60</b>
<b>2</b>	<b>0</b>	<b>0</b>		<b>0</b>	<b>0.00</b>	<b>0.00</b>
<b>3</b>	<b>0</b>	<b>0</b>		<b>0</b>	<b>0.00</b>	<b>0.00</b>

Summary					
Preflush Breakdown	<b>20</b>	Type: <b>H2O</b>	Preflush: BBI	<b>10.00</b>	Type: <b>Mud Wash</b>
		<b>MAXIMUM</b>	Load & Bkdn: Gal - BBI	<b>N/A</b>	Pad: Bbl - Gal <b>N/A</b>
		Lost Returns-N	Excess /Return BBI	<b>N/A</b>	Calc. Disp Bbl <b>233</b>
		Actual TOC	Calc. TOC:	<b>3141'</b>	Actual Disp. <b>229.00</b>
Average		Bump Plug PSI: <b>1,700</b>	Final Circ. PSI:	<b>1,100</b>	Disp: Bbl
ISIP	<b>5 Min.</b>	<b>10 Min.</b>	Cement Slurry: BBI	<b>118.0</b>	
		<b>15 Min.</b>	Total Volume BBI	<b>357.00</b>	

CUSTOMER REPRESENTATIVE \_\_\_\_\_ SIGNATURE \_\_\_\_\_