

Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION  
OIL & GAS CONSERVATION DIVISION

Form ACO-1

January 2018

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

Gas  DH  EOR

OG  GSW

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 EOR  Conv. to SWD

Plug Back  Liner  Conv. to GSW  Conv. to Producer

Commingled Permit #: \_\_\_\_\_

Dual Completion Permit #: \_\_\_\_\_

SWD Permit #: \_\_\_\_\_

EOR Permit #: \_\_\_\_\_

GSW Permit #: \_\_\_\_\_

Spud Date or Date Reached TD Completion Date or Recompletion Date

API No.: \_\_\_\_\_

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  Drill Stem Tests Received

Geologist Report / Mud Logs Received

UIC Distribution

ALT  I  II  III Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

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 Geologist Report / Mud Logs <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
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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				

1. Did you perform a hydraulic fracturing treatment on this well?  Yes  No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?  Yes  No *(If No, skip question 3)*
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)*

Date of first Production/Injection or Resumed Production/Injection:	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____			
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio Gravity

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <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>	PRODUCTION INTERVAL: Top Bottom
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Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i>

TUBING RECORD:	Size:	Set At:	Packer At:	
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Form	ACO1 - Well Completion
Operator	PetroSantander (USA) Inc.
Well Name	NEELY 11
Doc ID	1428588

All Electric Logs Run

Dual Compensated Porosity
Microresistivity
Dual Induction
Cement Bond Log





PAGE	CUST NO	YARD #	INVOICE DATE
1 of 1	1003197	1718	07/23/2018
INVOICE NUMBER			
92761780			

Pratt (620) 672-1201  
 B PETRO SANTANDER USA INC  
 I 11130 E 7 MILE RD  
 L GARDEN CITY  
 L KS US 67846  
 T  
 O ATTN: PAM OR PETE

J LEASE NAME Neely 11  
 O LOCATION  
 B COUNTY Finney  
 S STATE KS  
 I JOB DESCRIPTION Cement-New Well Casing/Pi  
 T JOB CONTACT  
 E

JOB #	EQUIPMENT #	PURCHASE ORDER NO.	TERMS	DUE DATE
41121583	19919		Net - 30 days	08/22/2018

	QTY	U of M	UNIT PRICE	INVOICE AMOUNT
<b>For Service Dates: 07/21/2018 to 07/21/2018</b>				
0041121583				
171815806L Cement-New Well Casing/Pi 07/21/2018 Cement/Surface Casing				
A-Serv Lite	600.00	EA	7.15	4,290.00 T
Premium Plus Cement	150.00	EA	8.97	1,345.50 T
Calcium Chloride	1,848.00	EA	0.58	1,071.84 T
Celloflake	188.00	EA	2.04	383.52 T
"Top Rubber Cmt Plug, 8 5/8""	1.00	EA	225.00	225.00
"Guide Shoe - Regular, 8 5/8"" (Blue)"	1.00	EA	380.00	380.00
"Flapper Ins. Ft. Vlv., 8 5/8"" (Blue)"	1.00	EA	280.00	280.00
Heavy Equipment Mileage	180.00	MI	4.13	743.40
Blending & Mixing Service Charge	750.00	BAG	0.77	577.50
Proppant & Bulk Del. Chgs., per ton mil	1,989.00	EA	1.38	2,744.82
Depth Charge; 1001'-2000'	1.00	EA	825.00	825.00
Plug Container Util. Chg.	1.00	EA	137.50	137.50
"Unit Mileage Chg (PU, cars one way)"	60.00	MI	2.48	148.80
"Service Supervisor, first 8 hrs on loc.	1.00	EA	96.25	96.25
Cement Data Acquisition Monitor	1.00	EA	302.50	302.50

RECEIVED

BATCH CM180710

BAS110

JUL 26 2018

ACCT.# 200103 ACCT. NAME Cement  
 LOC.# 4001 LOC. NAME Oper  
 PROP.# 1448 PROP. NAME Neely II  
 AFE# 0002 BILLING# 01

PLEASE REMIT TO:	SEND OTHER CORRESPONDENCE TO:	SUB TOTAL	13,551.63
BASIC ENERGY SERVICES, LP	BASIC ENERGY SERVICES, LP	TAX	563.72
PO BOX 841903	801 CHERRY ST, STE 2100	INVOICE TOTAL	14,115.35
DALLAS, TX 75284-1903	FORT WORTH, TX 76102		





Liberal Yard #1717 - Phone 620-624-2277 - 1700 S. Country Estates Road, Liberal KS 67901

**PRESSURE PUMPING Job Log**

Customer:	Petrosantander	Cement Pump No.:	38117, 19919 8.5Hrs.	Operator TRK No.:	96816
Address:	11130 E 7 Mile RD	Ticket #:	1718 15806 L	Bulk TRK No.:	14354, 19578 Oscar 30464, 19883 Marc
City, State, Zip:	Garden City Ks 67846	Job Type:	Z42 - Cement Surface Casing		
Service District:	1718 - Liberal, Ks.	Well Type:	OIL		
Well Name and No.:	Neely #11	Well Location:	33,23,32	County:	Finney
				State:	Ks

Type Of Cement	Sacks	Additives	Truck Loaded On		
A-Serv Lite	600	3% Calcium Chloride, 1/4# Polyflake	14354, 19578 Oscar	Front	Back
Premium Plus Cement	150	2% Calcium Chloride, 1/4# Polyflake	30464, 19883 Marc	Front	Back
				Front	Back

Lead/Tail:	Weight #1 Gal.	Cu/Ft/sk	Water Requirements	CU. FT.	Man Hours / Personnel	
<b>Lead:</b>	12.3	2.08	11.52	1248	TT Man Hours:	72.5
<b>Tail:</b>	14.8	1.34	6.33	201	# of Men on Job:	5

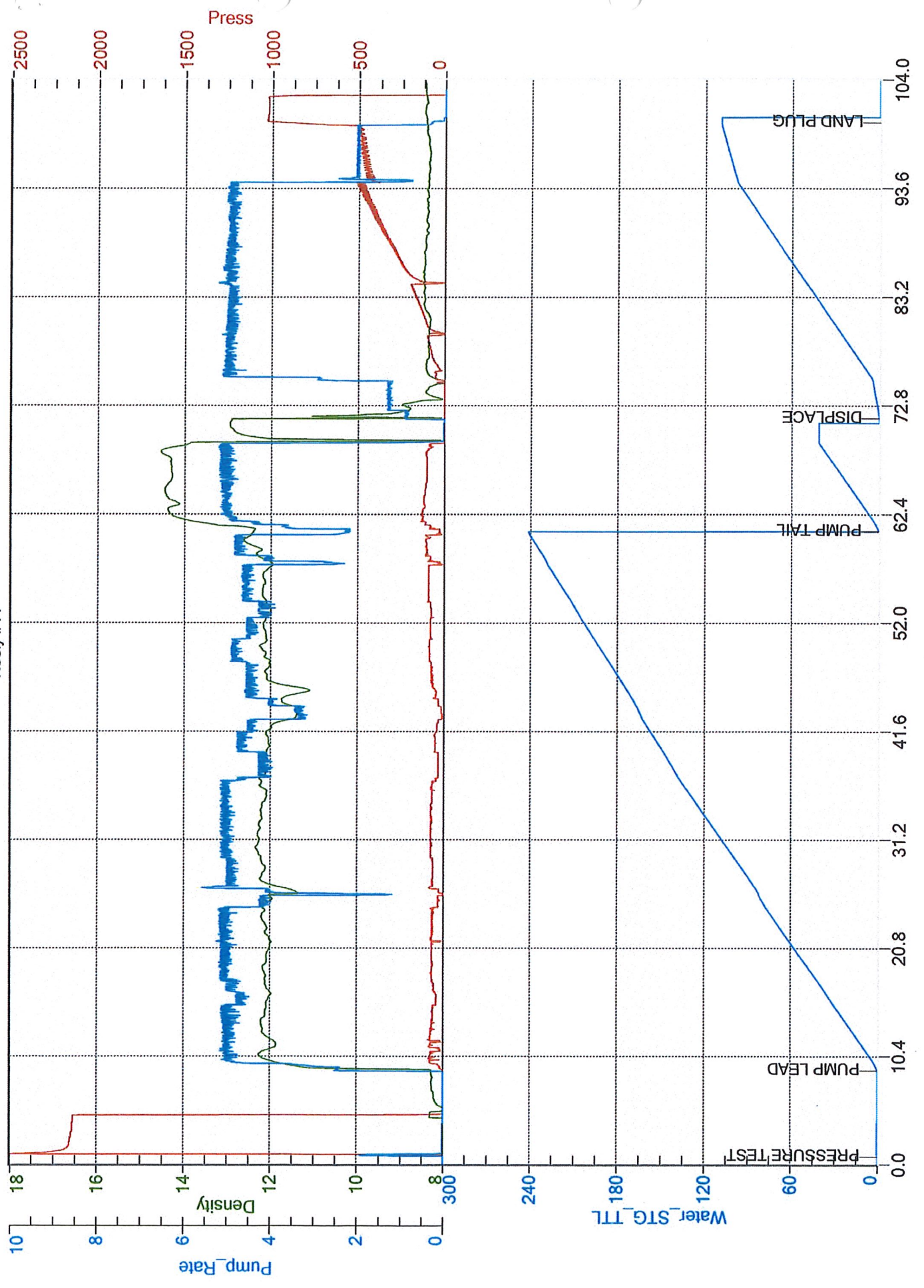
Time (am/pm)	(BPM)	Volume (BBLS)	Pumps		Pressure (PSI)		Description of Operation and Materials
			T	C	Tubing	Casing	
14:15							ON LOCATION
14:20							SAFETY MEETING & WAIT
5:30 PM							RIG UP
6:45 PM							RIG TO CIRCULATE
7:30 PM							RIG TO P.T.
19:35							PRESSURE TEST TO 2200PSI
19:44	5	222.2 slurry				70	PUMP 600SX LEAD @ 12.3#
8:35 PM	5	35.7 slurry				120	PUMP 150SX TAIL @ 14.8#
20:44							SHUTDOWN / DROP PLUG
20:46	5	10				40	DISPLACE
	5	20				80	AT 20:43 CEMENT RETURNS 1BBL BEFORE
	5	30				100	DISPLACEMENT
	5	40				150	
	5	50				180	
	5	60				280	
	5	70				350	
	5	80				410	
	5	90				470	
21:09	5	93				510	SLOW RATE TO 2.0BPM @ 440PSI
	2	100				480	
21:15	2	103.8				510	LAND PLUG / PRESSURE UP TO PSI
21:17							RELEASE BACK --- FLOAT HELD
							JOB COMPLETE

Size Hole	12 1/4"	Depth			TYPE	Plug Container	
Size & Wt. Csg.	8 5/8" 24#	Depth	1715.62'	New / Used	Packer	Depth	
Landing Press.	379.3psi	Depth			Retainer	Depth	
Shoe Jt.	83.10'	Type			Perfs	CIBP	

Customer Signature:		Basic Representative:	Daniel Beck
		Basic Signature:	
		Date of Service:	7/21/2018

# Petrosantander

Neely #11







PAGE 1 of 1	CUST NO 1003197	YARD # 1718	INVOICE DATE 08/09/2018
INVOICE NUMBER <b>92776441</b>			

Pratt (620) 672-1201  
 B PETRO SANTANDER USA INC  
 11130 E 7 MILE RD  
 GARDEN CITY  
 KS US 67846  
 O ATTN: PAM OR PETE

J LEASE NAME Neely 11  
 O LOCATION  
 B COUNTY Finney  
 S STATE KS  
 I JOB DESCRIPTION Cement-New Well Casing/Pi  
 T JOB CONTACT  
 E

JOB #	EQUIPMENT #	PURCHASE ORDER NO.	TERMS	DUE DATE
41125654	19842		Net - 30 days	09/08/2018

	QTY	U of M	UNIT PRICE	INVOICE AMOUNT
<b>For Service Dates: 08/08/2018 to 08/08/2018</b>				
0041125654				
171815793L Cement-New Well Casing/Pi 08/08/2018 Cement/Production Casing				
50/50 POZ	325.00	EA	6.05	1,966.25 T
Gypsum	1,365.00	EA	0.41	559.65 T
Salt	1,802.00	EA	0.28	504.56 T
C-17	137.00	LB	11.00	1,507.00 T
C-41P	69.00	EA	2.20	151.80 T
Gilsonite	1,300.00	EA	0.37	481.00 T
"Latch Down Plug & Baffle, 5 1/2" (Blue)	1.00	EA	400.00	400.00
"Auto Fill Float Shoe 5 1/2" (Blue)"	1.00	EA	360.00	360.00
"Turbolizer, 5 1/2" (Blue)"	24.00	EA	110.00	2,640.00
Mud Flush	500.00	EA	0.83	415.00 T
Heavy Equipment Mileage	120.00	MI	4.13	495.60
Blending & Mixing Service Charge	325.00	BAG	0.77	250.25
Proppant & Bulk Del. Chgs., per ton mil	819.00	EA	1.38	1,130.22
Depth Charge; 4001'-5000'	1.00	EA	1,486.80	1,486.80
Plug Container Util. Chg.	1.00	EA	145.00	145.00
"Unit Mileage Chg (PU, cars one way)"	60.00	MI	2.48	148.80
"Service Supervisor, first 8 hrs on loc.	1.00	EA	96.25	96.25
Cement Data Acquisition Monitor	1.00	EA	302.50	302.50

RECEIVED

BATCH CM180804

BAS110

AUG 13 2018

ACCT.# 7200103 ACCT. NAME Cementing  
 LOC.# 4001 LOC. NAME Open  
 PROP.# 1448 PROP. NAME Neely II  
 AFE# 0882 BILLING# 01

PLEASE REMIT TO:	SEND OTHER CORRESPONDENCE TO:	SUB TOTAL	13,040.68
BASIC ENERGY SERVICES, LP	BASIC ENERGY SERVICES, LP	TAX	444.03
PO BOX 841903	801 CHERRY ST, STE 2100	INVOICE TOTAL	13,484.71
DALLAS, TX 75284-1903	FORT WORTH, TX 76102		





Liberal Yard #1717 - Phone 620-624-2277 - 1700 S. Country Estates Road, Liberal KS 67901

**Job Log**

Customer:	Petrosantander	Cement Pump No.:	38750-19842	Operator TRK No.:	78938 Ruben
Address:	11130 E 7 Mile RD	Ticket #:	1718 15793 L 2 Hrs	Bulk TRK No.:	37723-37547 Rogelio
City, State, Zip:	Garden City Ks 67846	Job Type:	Z42 - Cement Production Casing		
Service District:	1718-Liberal Ks	Well Type:	OIL		
Well Name and No.:	Neely #11	Well Location:	33,23,32	County:	Finney State: Ks

Type of Cmt	Sacks	Additives	Truck Loaded On		
50/50 Poz	325	5%Gypsum,10%Salt,5#Gilsonite, .5% C-17,1/4#Defoamer	37723-37547 Rogelio	Front	Back
				Front	Back
				Front	Back

Lead/Tail:	Weight #1 Gal.	Cu/Ft/sk	Water Requirements	CU. FT.	Man Hours / Personnel	
<b>Lead:</b>	13.8	1.49	6.65	484.25	Man Hours:	52
<b>Tail:</b>					# of Men on Job:	4

Time (am/pm)	(BPM)	Volume (BBLs)	Pumps		Pressure(PSI)		Description of Operation and Materials
			T	C	Tubing	Casing	
23:00							ON LOCATION
4:00							SAFETY MEETING
4:15 AM							RIG UP
6:00 AM	0.3	0.4				3000	PRESSURE TEST
6:15 AM	6	10				200	PUMP 500 Gal. Mud Flush
6:21	3	5.3			50		PLUG MOUSE HOLE 20SX@13.8#
6:28	3	8			50		PLUG RAT HOLE 30SX@13.8#
6:32 AM	6	73				470	PUMP 275SX @13.8#
6:50	4	6				50	DROP PLUG/WASH UP
6:55	6.6	20				160	DISPLACE
		30				160	
	7	40				200	
	7	50				200	
	6.6	60				360	
	6.2	70				470	
	5.6	80				620	
	5	90				720	
	4.7	100				870	
7:11	2	110				850	SLOW RATE
7:16	2	118				920	PLUG LANDED
7:20							RELEASE PRESSURE 0 PSI /FLOAT HELD
7:25							SHUT DOWN / RIG DOWN

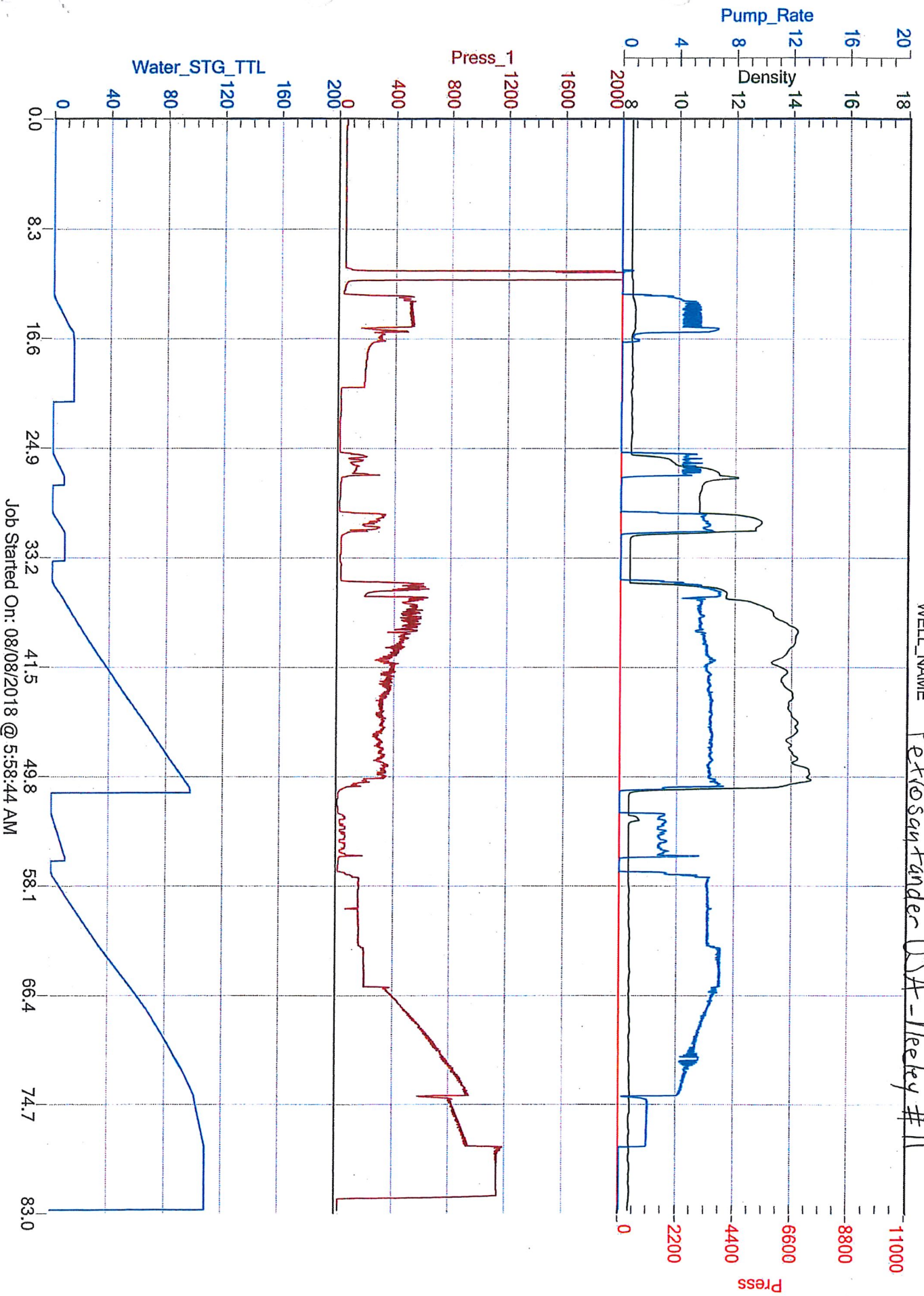
Size Hole	7 7/8	Depth	5000'		TYPE	
Size & Wt. Csg.	5 1/2 15.5#	Depth	4993'	New / Used	Packer	Depth
tbg.		Depth			Retainer	Depth
Top Plugs	4971.8'	Type			Perfs	CIBP

Customer Signature:		Basic Representative:	RUBEN MARTINEZ
		Basic Signature:	
		Date of Service:	8/8/2018

CUSTOMER

WELL\_NAME

Petrosyan Fander USA - Neelby #11



Job Started On: 08/08/2018 @ 5:58:44 AM



**CEMENT  
BOND  
LOG**

Company Petrosanantander (USA) Inc.

Well Neely # 11

Field Congden

County Finny

State Kansas

**Location:**

2175' FNL & 3350' FEL

Permanent Datum SEC 33 TWP 23S RGE 32W

Log Measured From Ground Level Elevation 2826'

Drilling Measured From KB K.B. 11' AGL

Other Services Elevation

K.B. 2387'

D.F. 1111'

G.L. 2826'

Date 9-11-18

Run Number One

Depth Driller 5011'

Depth Logger 4946'

Bottom Logged Interval 4944'

Top Log Interval 2400'

Open Hole Size 7 7/8"

Type Fluid Water

Density / Viscosity

Max. Recorded Temp. 2716'

Estimated Cement Top 2716'

Time Well Ready ROA

Time Logger on Bottom 8:00 a.m.

Equipment Number T-968

Location Hays, KS

Recorded By L. Smith

Witnessed By Mr. Pete Kunejvl

**Borehole Record**

Run Number

Bit

From

To

**Tubing Record**

Run Number

Size

Weight

From

Top

Bottom

WdUFI

23#

1715'

0

4990.5'

15.5#

Production String

Liner

<<< Fold Here >>>

All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

**Comments**

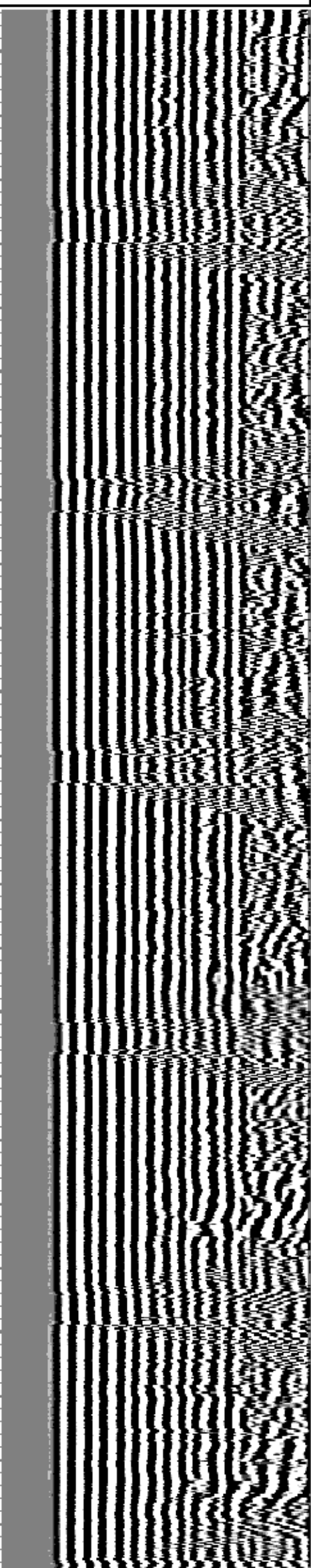
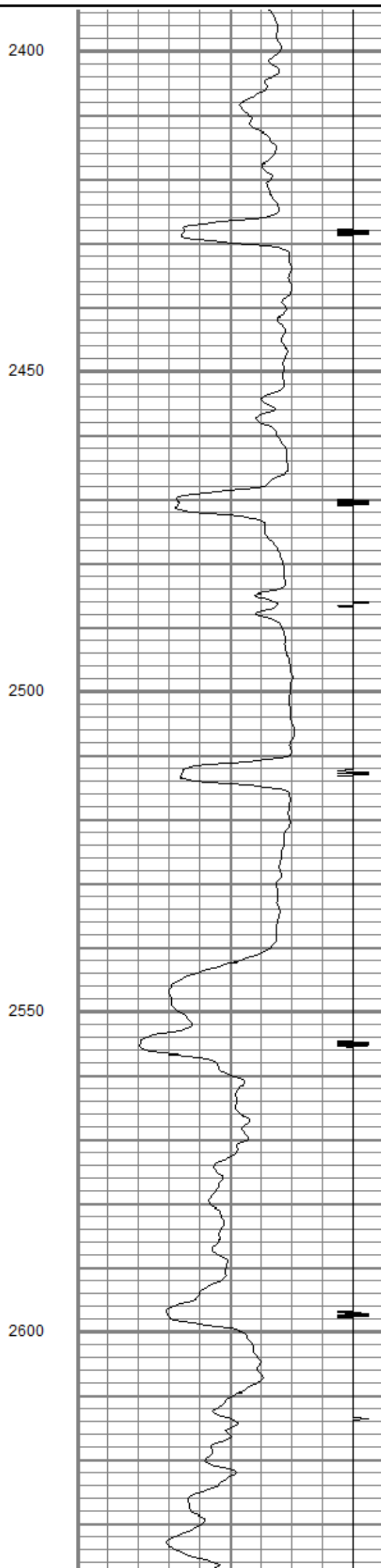
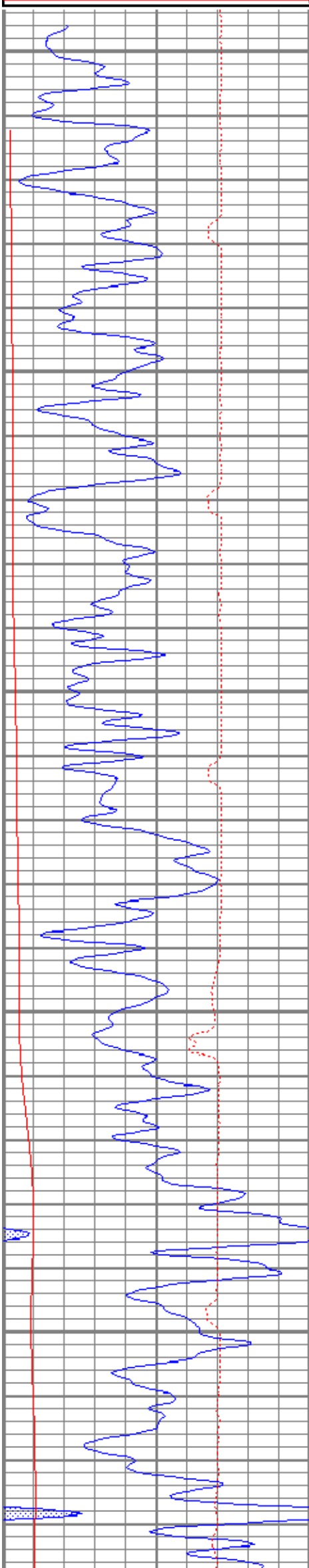
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785-625-1182

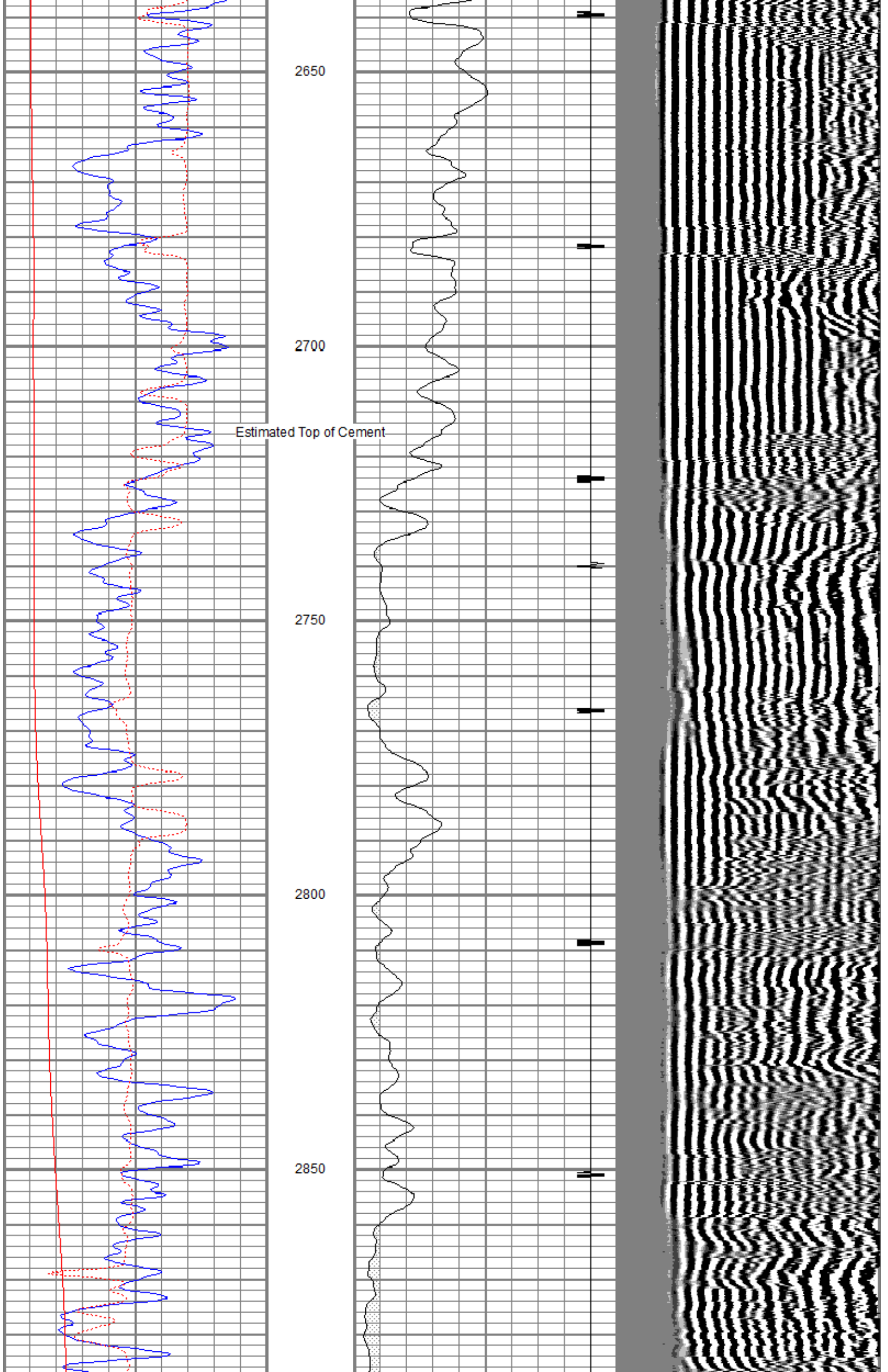


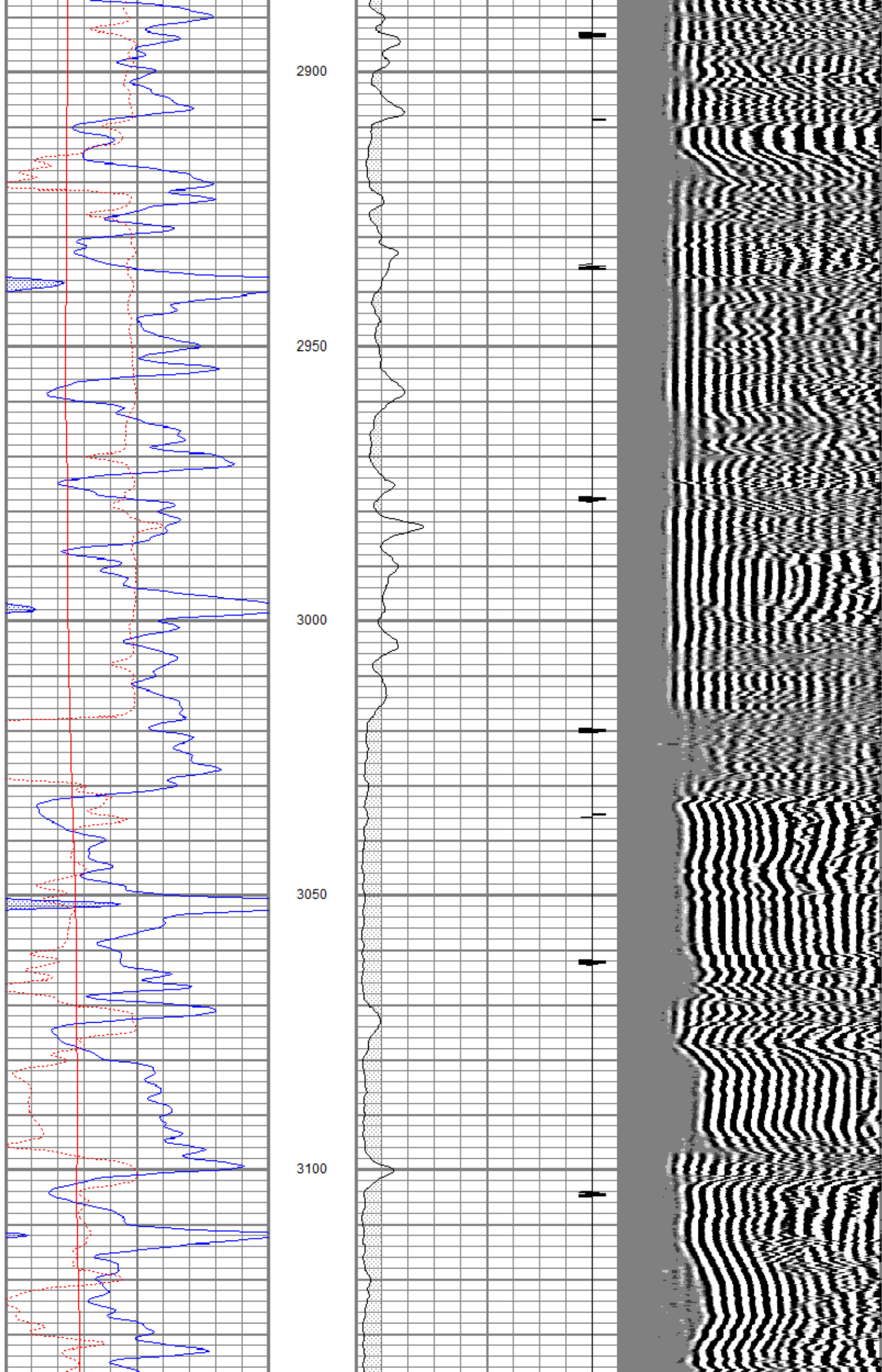
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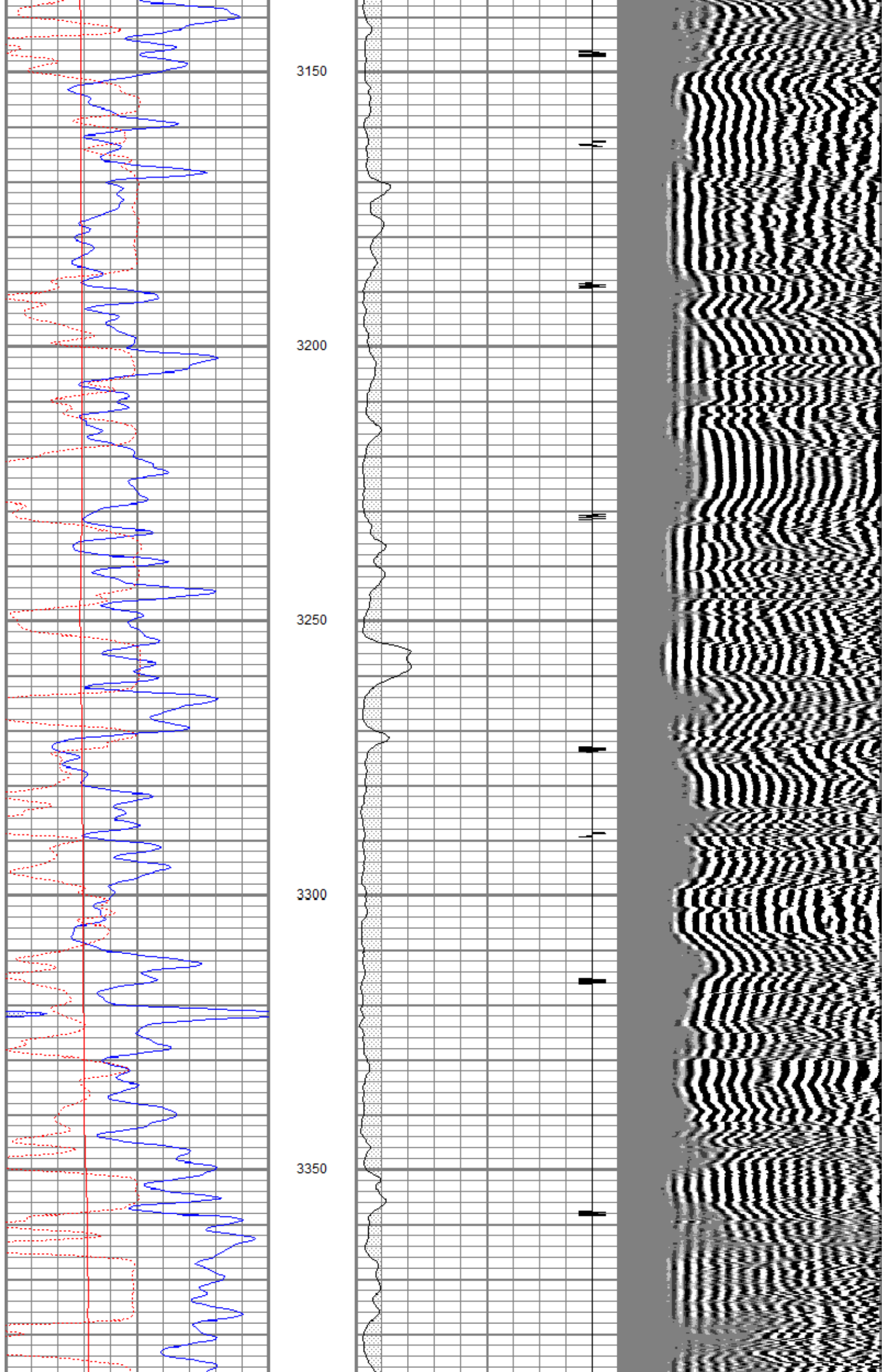
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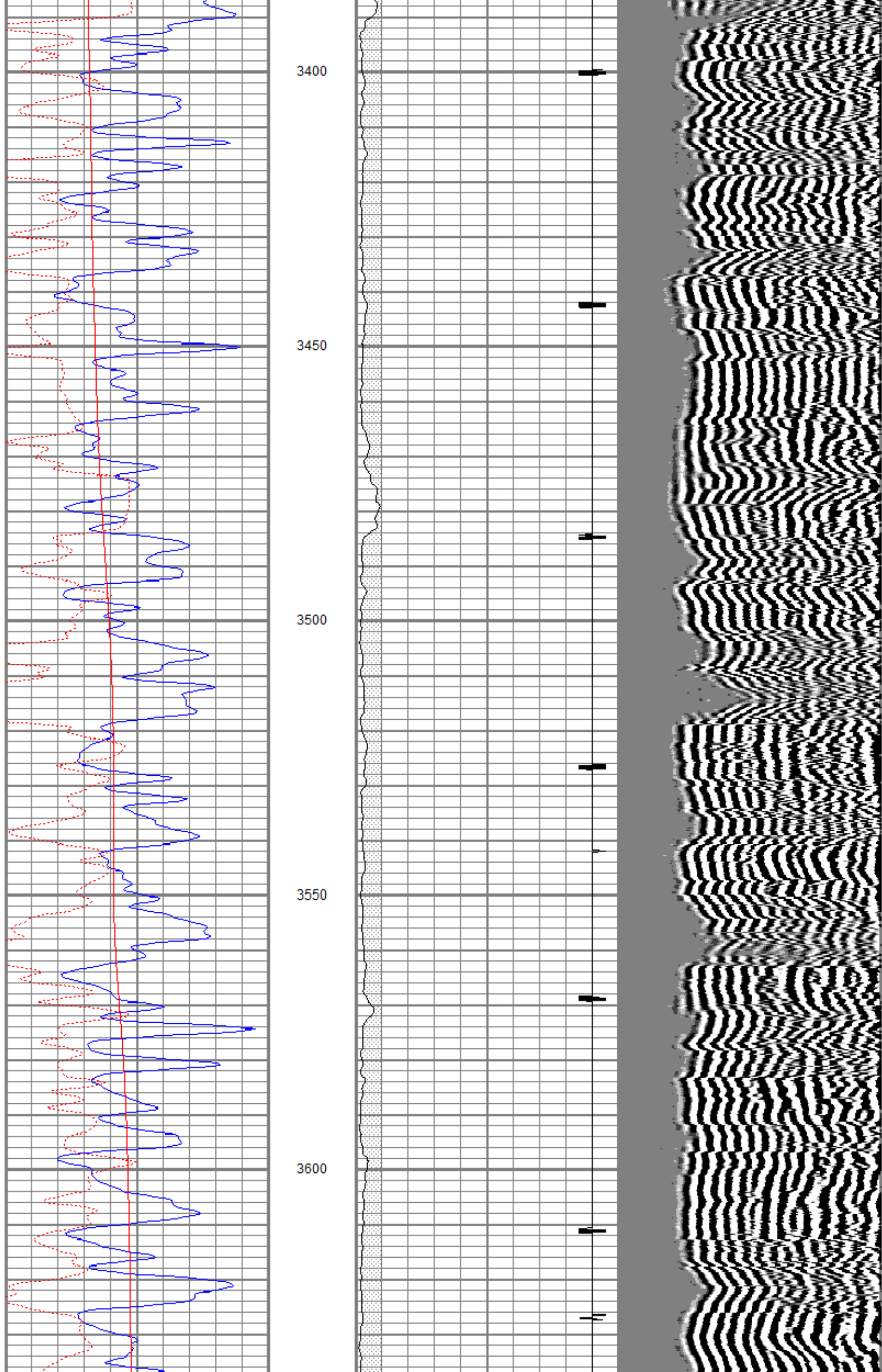


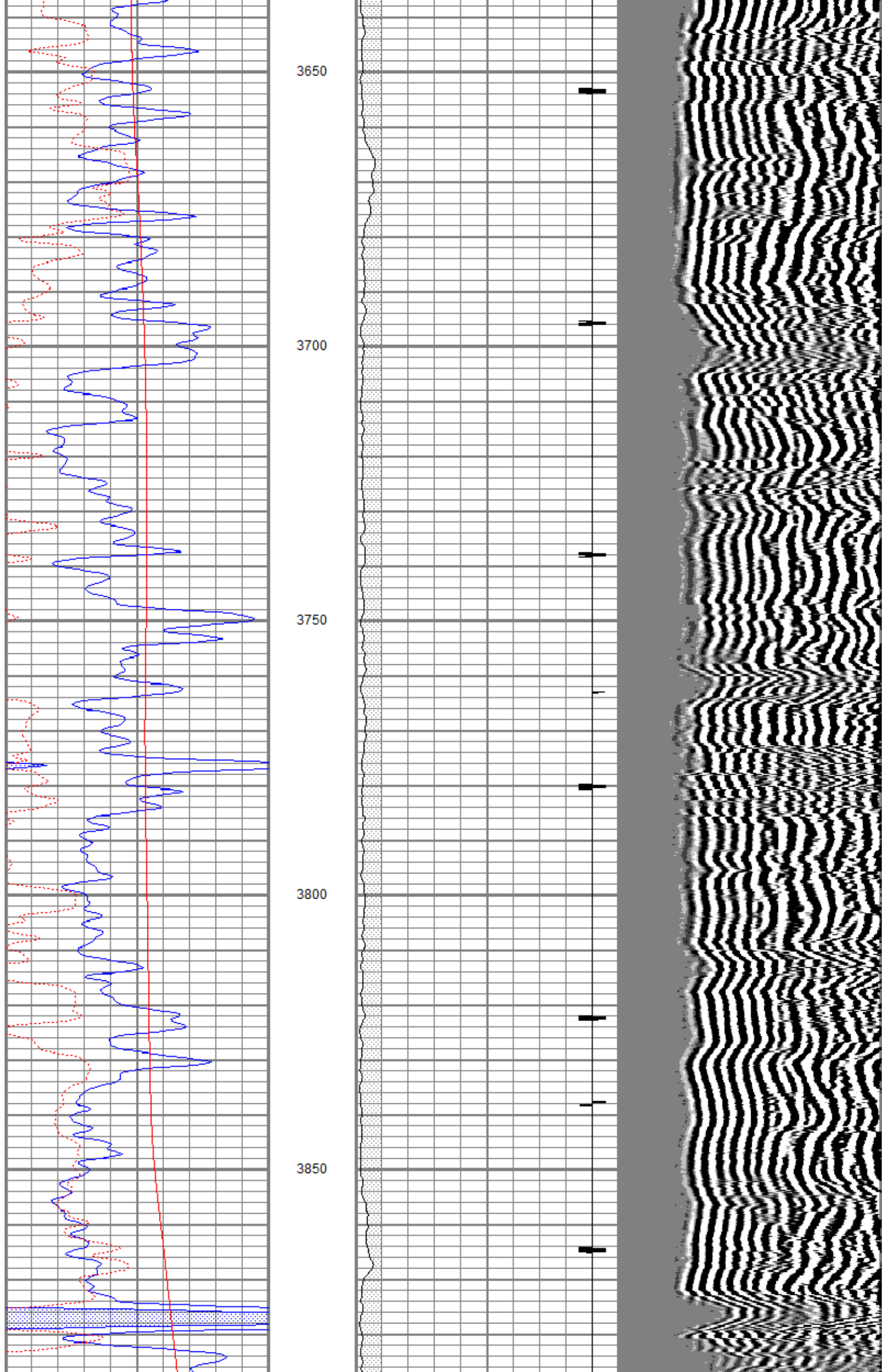


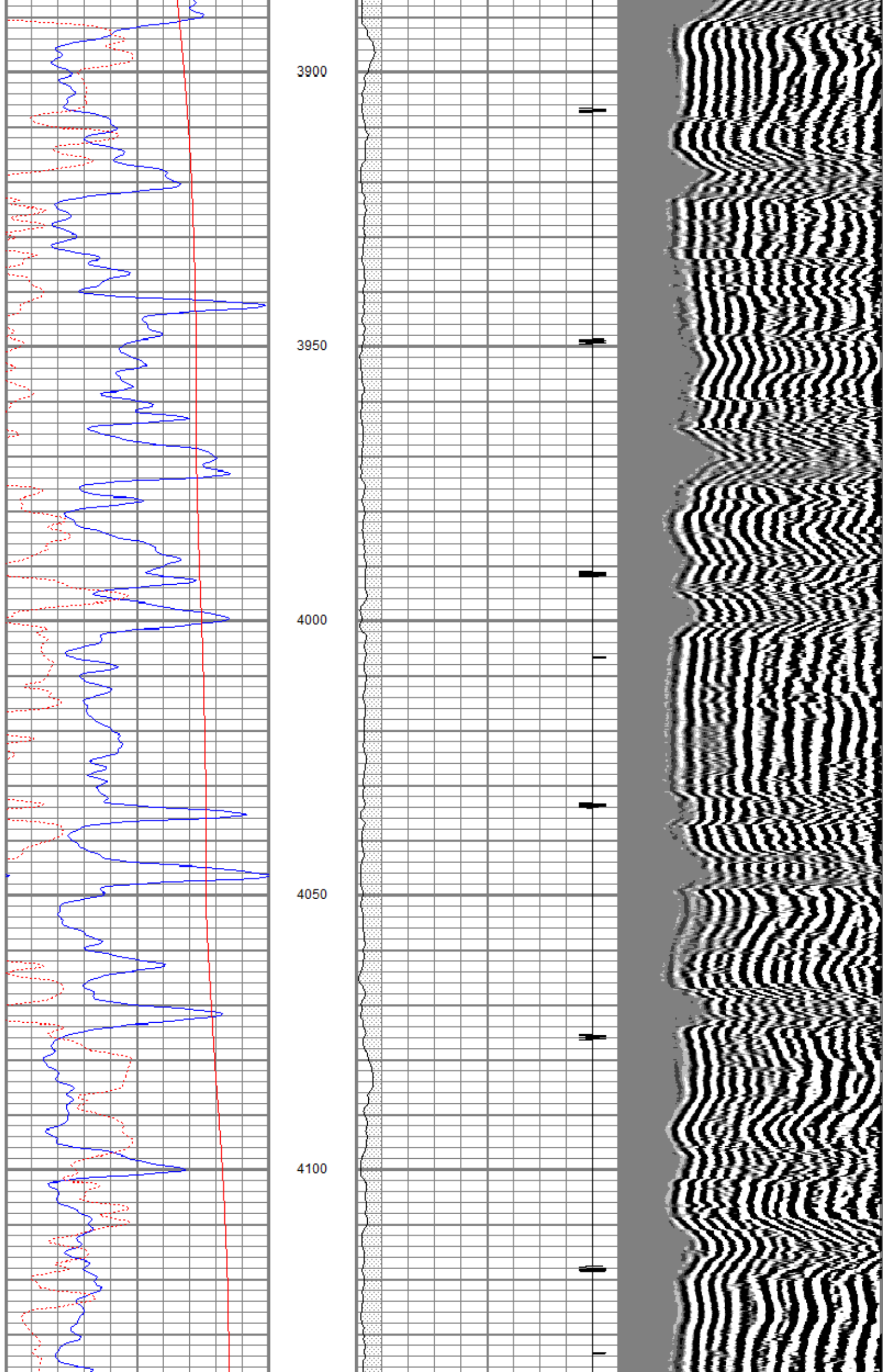


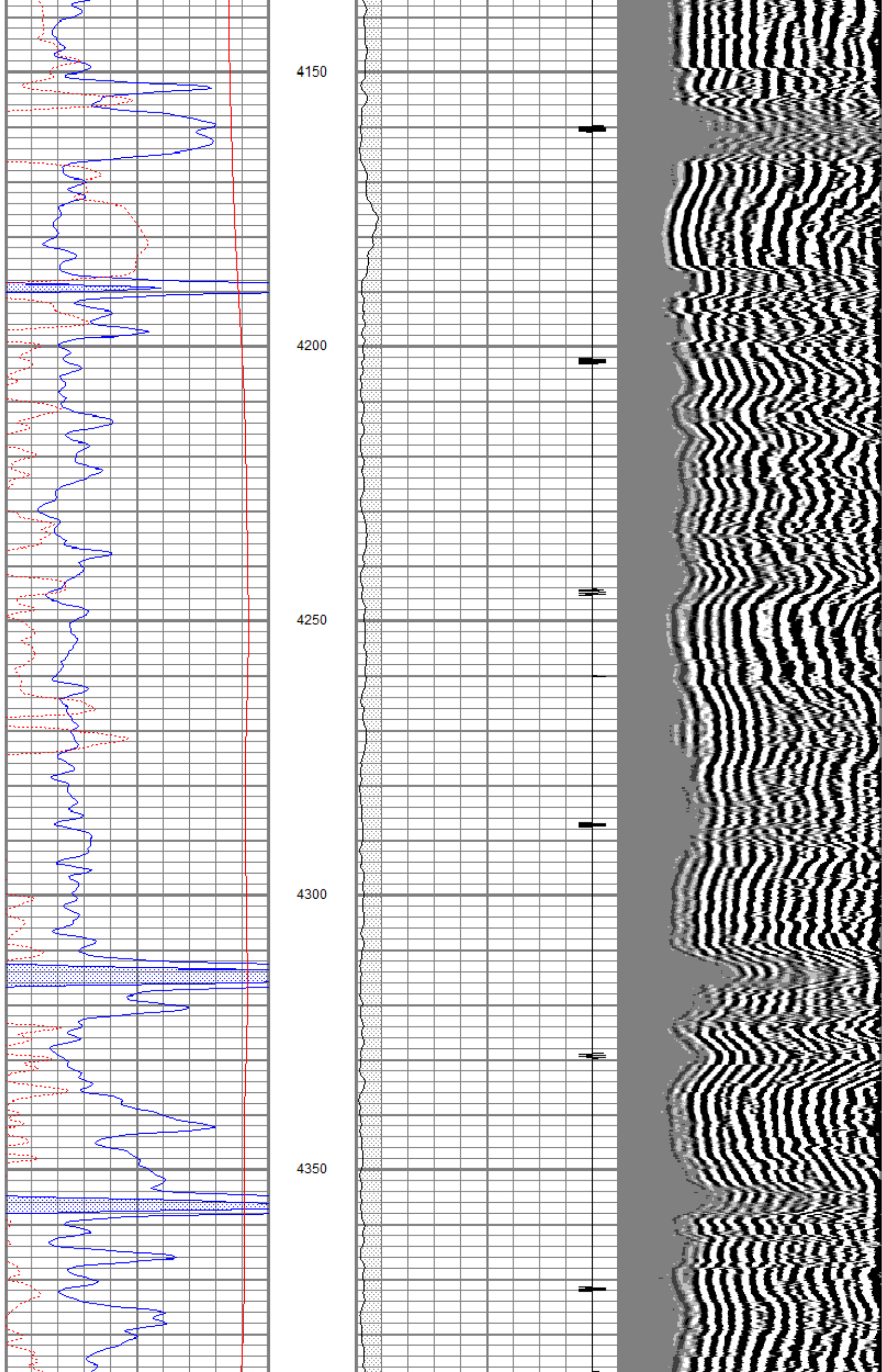


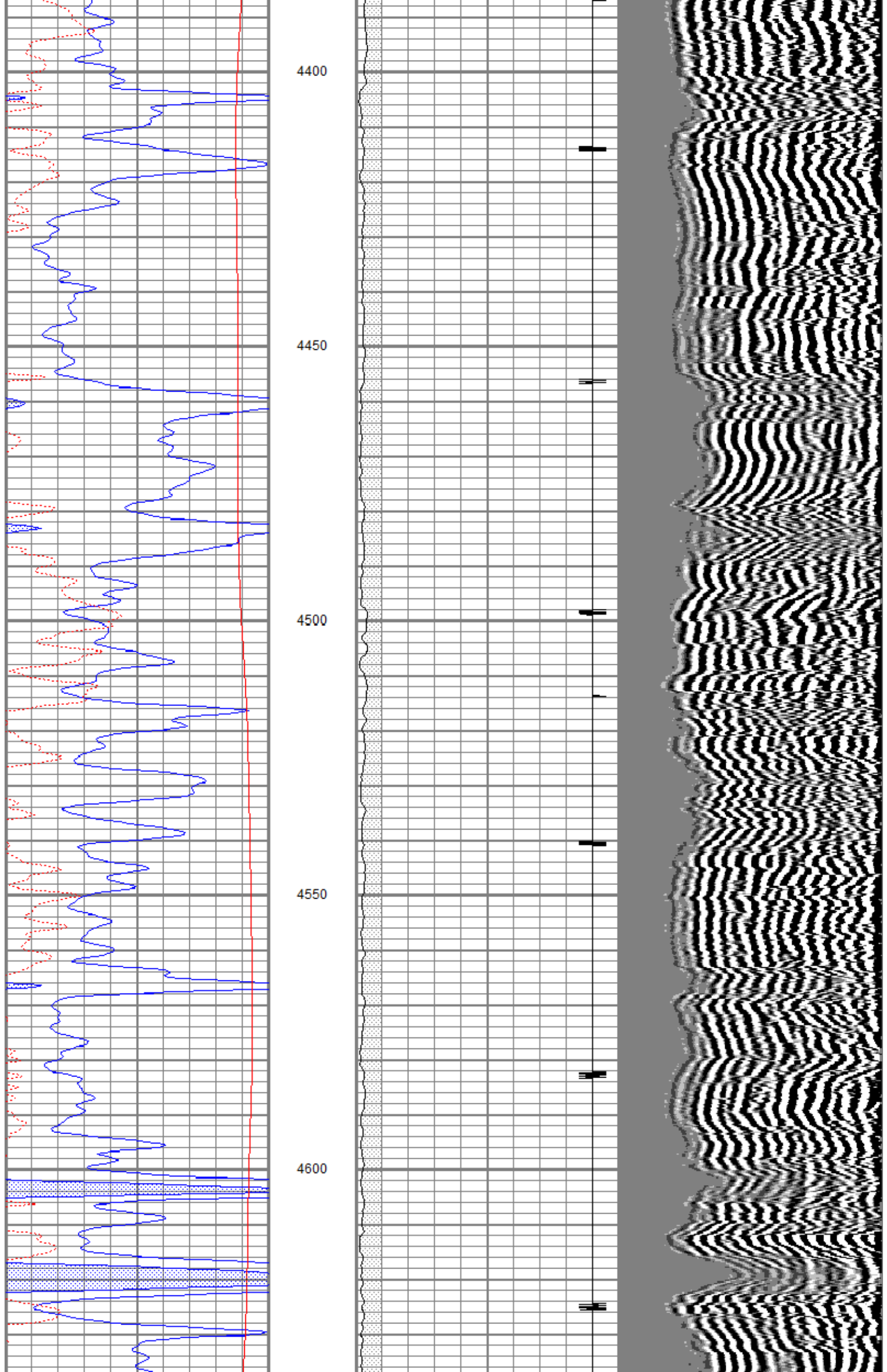


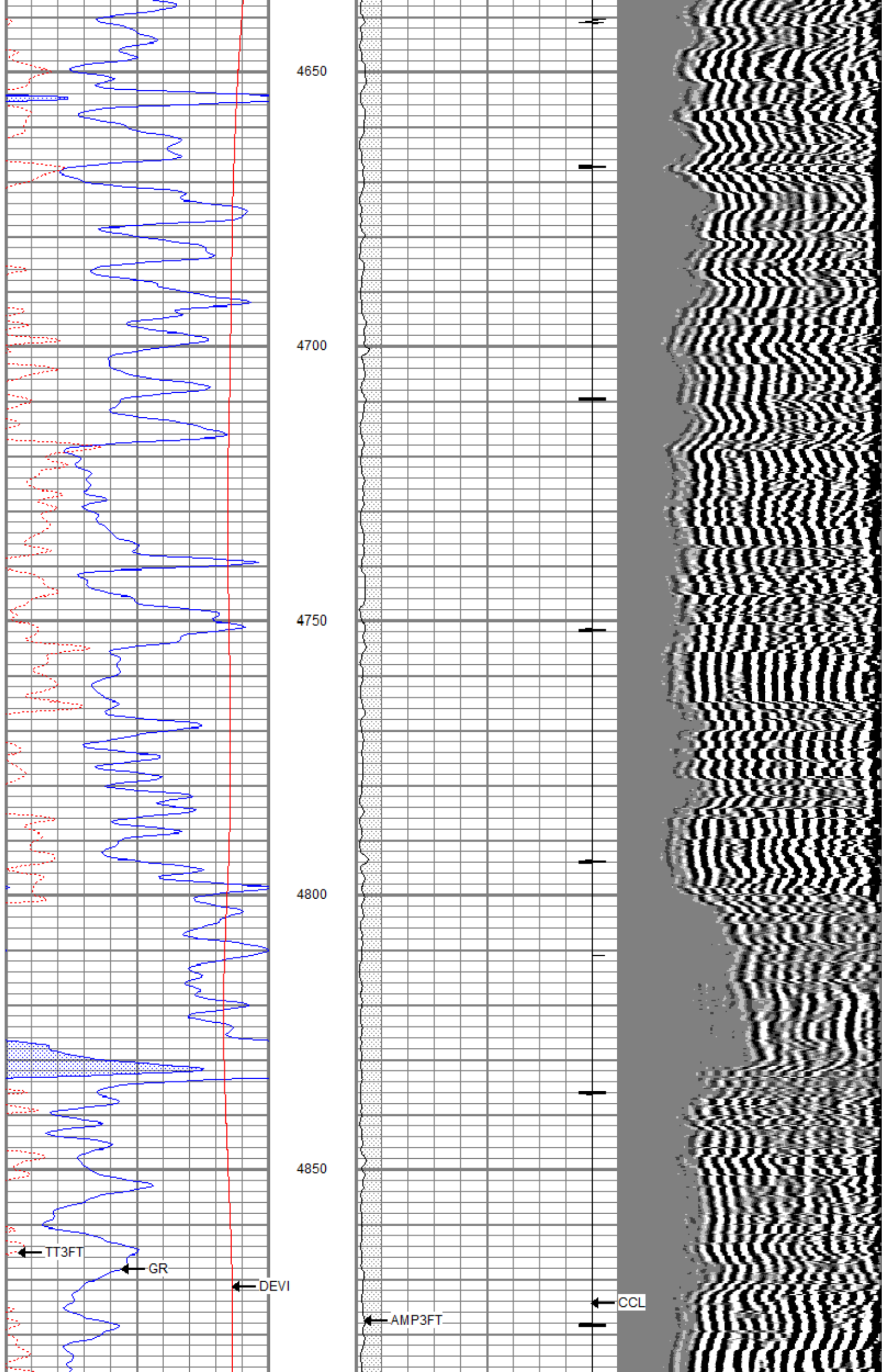


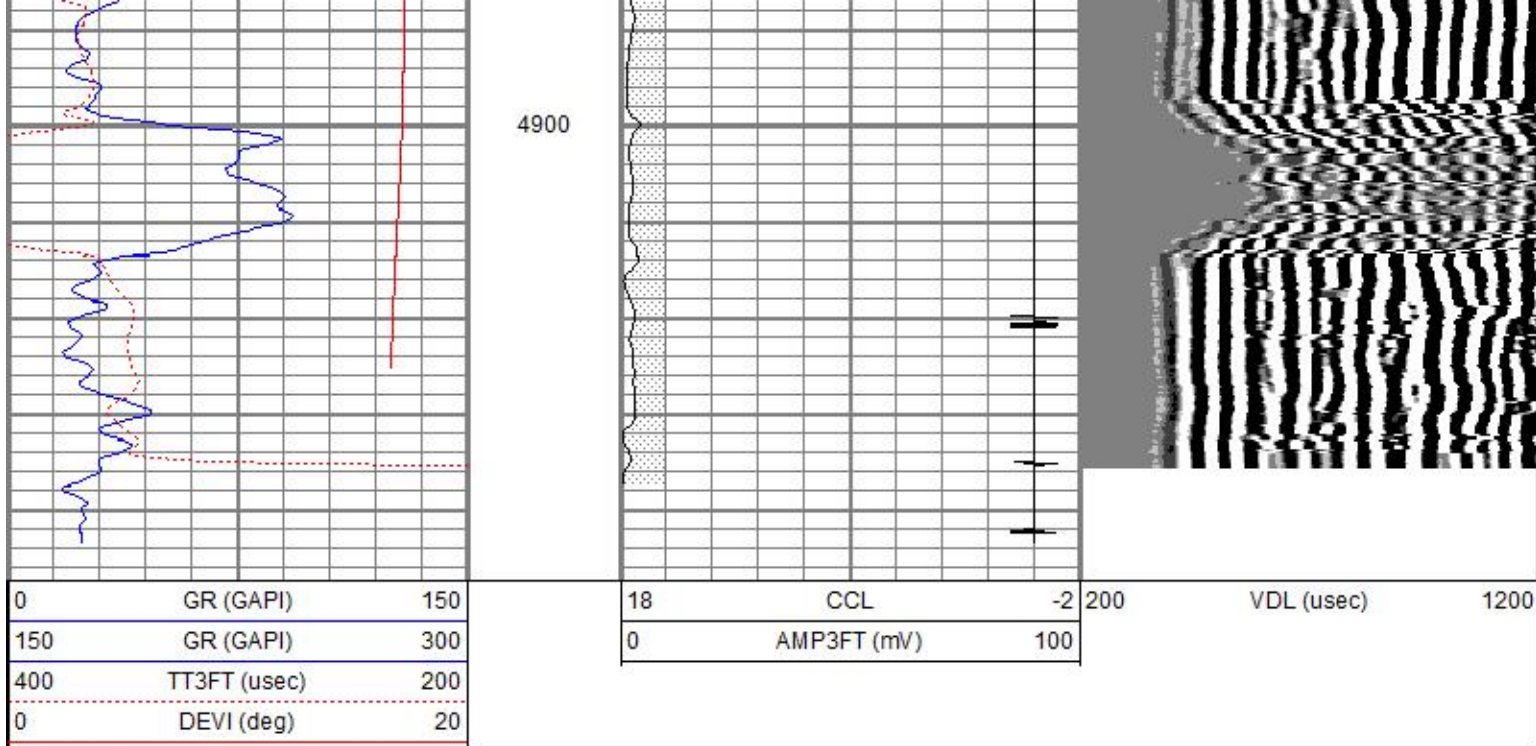






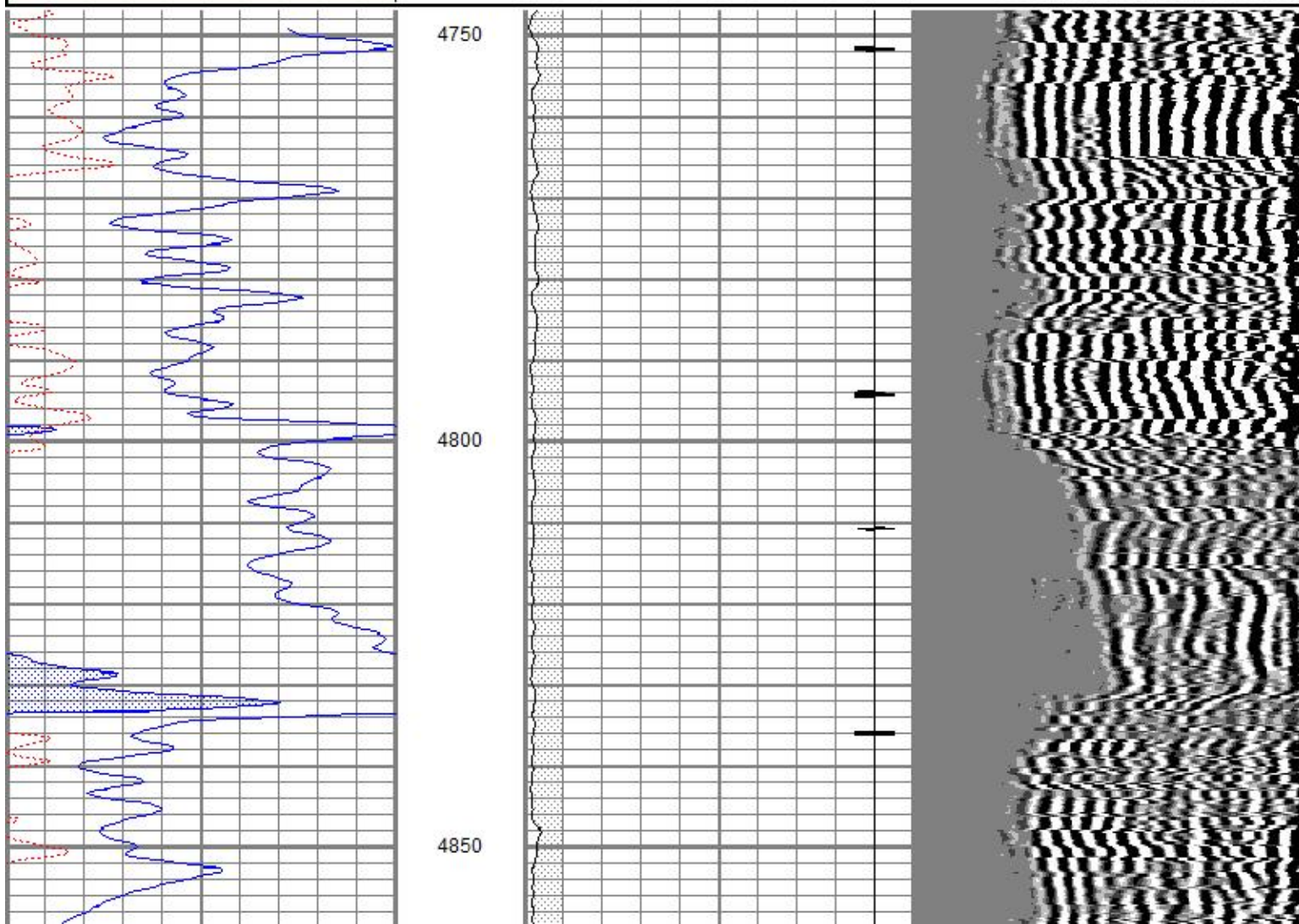
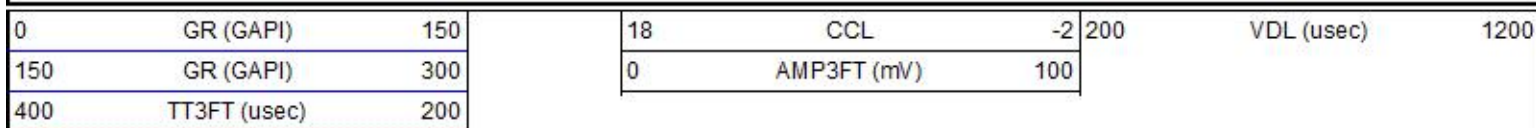




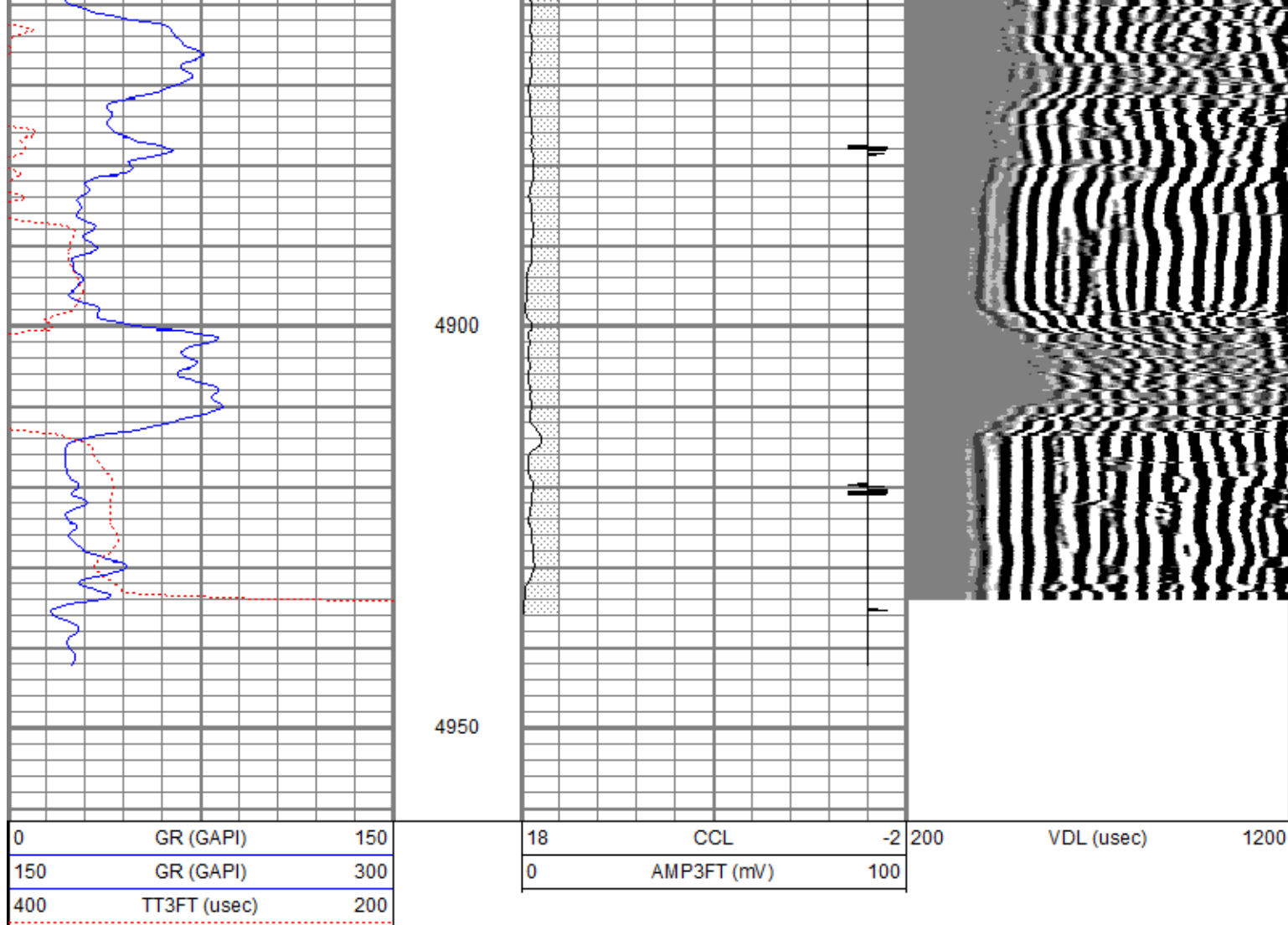


# Repeat Pass

Database File     petroneely#11cbl.db  
 Dataset Pathname   pass2  
 Presentation Format   cbl  
 Dataset Creation    Tue Sep 11 08:10:02 2018  
 Charted by         Depth in Feet scaled 1:240







### Calibration Report

Database File: petroneely#11cbl.db  
 Dataset Pathname: pass2  
 Dataset Creation: Tue Sep 11 08:10:02 2018

### Gamma Ray Calibration Report

Serial Number: 080616  
 Tool Model: 275D\_INC  
 Performed: Sat Apr 22 13:20:36 2017

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps  
 Calibrator Reading: 1.0 cps

Sensitivity: 1.6000 GAPI/cps

### Inclinometer Calibration Report

Performed: Mon Feb 22 09:45:37 2016

	Low Read.	High Read.	Low Ref.	High Ref.	
X Accelerometer	-3560.40	3602.00	-1.00	1.00	gee
Y Accelerometer	-3645.40	3546.20	-1.00	1.00	gee
Z Accelerometer	6.60	3581.20	0.00	1.00	gee

### Segmented Cement Bond Log Calibration Report

Serial Number: 061007  
 Tool Model: DigitalCBL

Calibration Casing Diameter: 5.500 in  
 Calibration Depth: 2362.032 ft

Master Calibration, performed Fri Aug 31 08:47:00 2018:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3' CAL	0.006	1.250	1.000	71.921	57.021	0.645
5'	0.006	0.719	1.000	71.921	99.549	0.378
SUM						
S1						
S2						
S3						
S4						
S5						
S6						
S7						
S8						

Internal Reference Calibration, performed (Not Performed):

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL						

Air Zero Calibration, performed Wed Nov 22 14:44:16 2017:

	Raw (v)		Calibrated (v)		Results	
	Zero		Zero		Offset	
3'	0.000		0.000		0.000	
5'	0.000		0.000		0.000	
SUM						
S1						
S2						
S3						
S4						
S5						
S6						
S7						
S8						

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
			CHD-sdschd	0.75	1.44	3.00
			CENT-275 2 3/4" Centralizer	2.94	2.75	10.00
WVF5FT WVF3FT	11.69 11.69		Probedig-DigitalCBL (061007) 2 3/4 Bond Tool	8.77	2.75	92.00
			CENT-275 2 3/4" Centralizer	2.94	2.75	10.00
CCL ACCZ ACCY ACCX GR	3.50 1.83 1.83 1.83 0.83		GR-275D_INC (080616) 2-3/4" GR-CCL with Inclination	4.50	2.75	

Dataset: petroneely#11cbl.db: field/well/run1/pass3  
 Total length: 19.89 ft  
 Total weight: 115.00 lb  
 O.D.: 2.75 in





## DRILL STEM TEST REPORT

Prepared For: **Petro Santander USA Inc**

ATTN: Justin Carter

### **Neeley #11**

#### **33-23s-32w Finney, Ks**

Start Date: 2018.08.06 @ 10:04:25

End Date: 2018.08.06 @ 20:39:25

Job Ticket #: 63907                      DST #: 1

Trilobite Testing, Inc  
PO Box 362 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2018.08.06 @ 21:19:38



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Petro Santander USA Inc

**33-23s-32w Finney, Ks**

**Neeley #11**

Job Ticket: 63907

**DST#: 1**

ATTN: Justin Carter

Test Start: 2018.08.06 @ 10:04:25

## GENERAL INFORMATION:

Formation: **Morrow - St Gen**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:52:25

Time Test Ended: 20:39:25

Test Type: Conventional Bottom Hole (Initial)

Tester: Brandon Turley

Unit No: 79

**Interval: 4792.00 ft (KB) To 4890.00 ft (KB) (TVD)**

Reference Elevations: 2837.00 ft (KB)

Total Depth: 5000.00 ft (KB) (TVD)

2826.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

**Serial #: 8166 Outside**

Press@RunDepth: 166.07 psig @ 4793.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2018.08.06

End Date:

2018.08.06

Last Calib.:

2018.08.06

Start Time: 10:04:30

End Time:

20:39:25

Time On Btm:

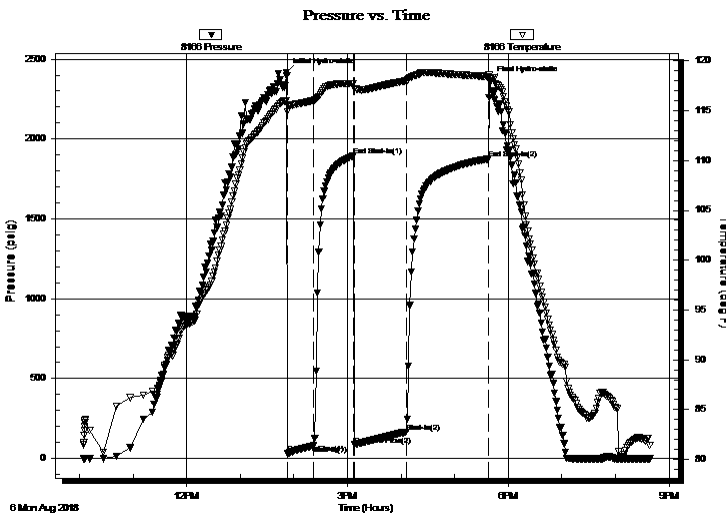
2018.08.06 @ 13:51:25

Time Off Btm:

2018.08.06 @ 17:39:25

**TEST COMMENT:** IF: 1/4 blow built to 9.  
IS: No return.  
FF: BOB in 45 min. 12 1/2"  
FS: No return.

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2416.82	116.02	Initial Hydro-static
1	29.94	114.91	Open To Flow (1)
31	80.90	116.02	Shut-In(1)
76	1894.36	117.73	End Shut-In(1)
77	85.19	117.21	Open To Flow (2)
135	166.07	118.01	Shut-In(2)
227	1874.69	118.45	End Shut-In(2)
228	2366.89	118.33	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
188.00	mcw 80%w 20%m	2.64
125.00	mcw oil spots 60%w 40%m	1.75

## Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Petro Santander USA Inc

**33-23s-32w Finney, Ks**

**Neeley #11**

Job Ticket: 63907

**DST#: 1**

ATTN: Justin Carter

Test Start: 2018.08.06 @ 10:04:25

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

44000 ppm

Viscosity: 45.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.40 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
188.00	mcw 80%w 20%m	2.637
125.00	mcw oil spots 60%w 40%m	1.753

Total Length: 313.00 ft      Total Volume: 4.390 bbl

Num Fluid Samples: 0

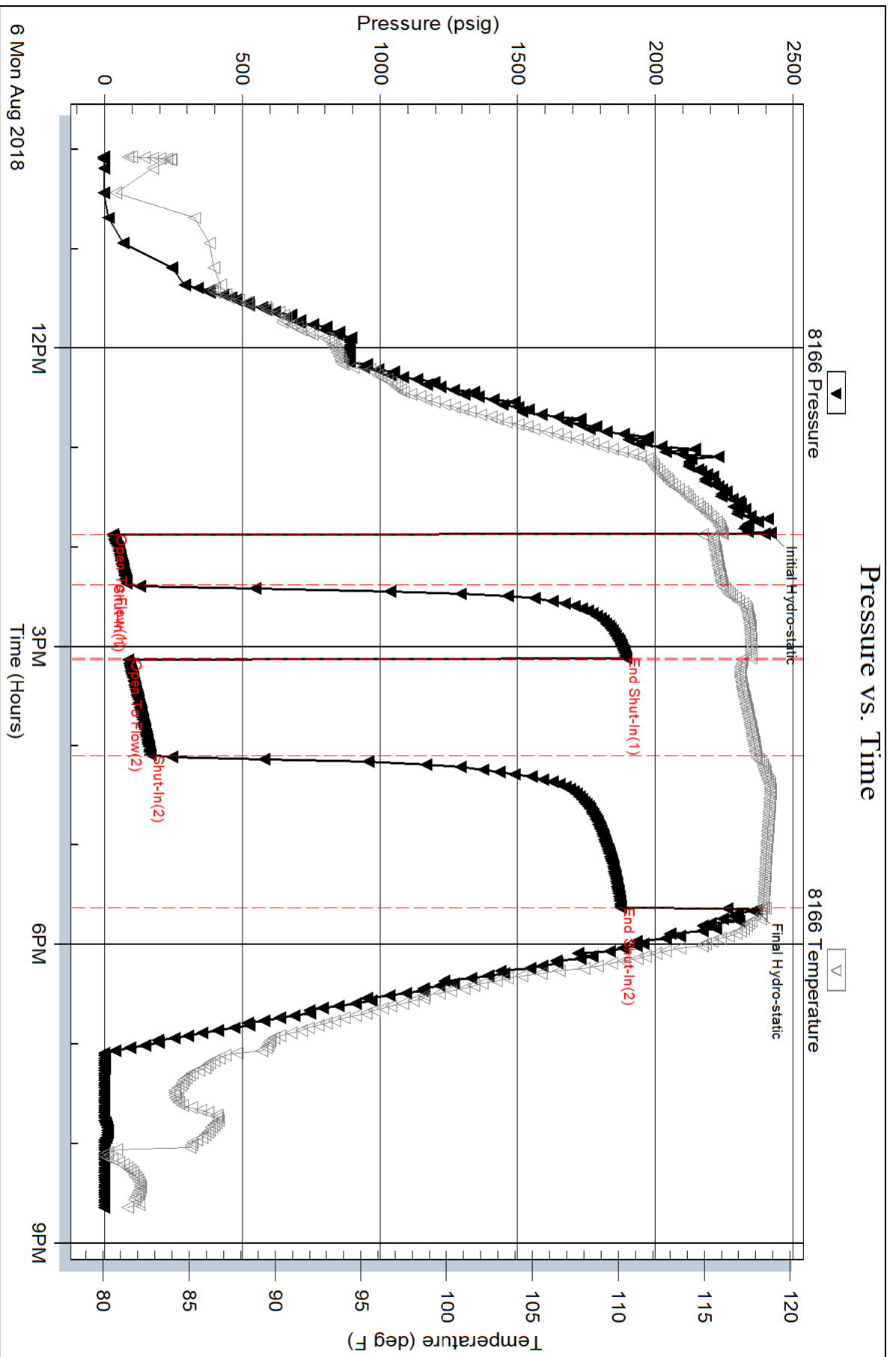
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: .13@88=440000



# JUSTIN D. CARTER

## CONSULTING GEOLOGIST

Scale 1:240 (5"=100') Imperial  
Measured Depth Log

Well Name: NEELEY #11  
Well Id:  
Location: NW, SE, SE, NE Sec.33 - 23S - 32W Finney Co., KS  
License Number: 15-055-22489-0000  
Spud Date: 07/20/18  
Surface Coordinates: 2175' FNL, 335' FEL  
Region: Congdon  
Drilling Completed: 08/05/18

Bottom Hole  
Coordinates:  
Ground Elevation (ft): 2826'      K.B. Elevation (ft): 2837'  
Logged Interval (ft): 3911'      To: 5011'      Total Depth (ft): 5011'  
Formation: MORROW, ST. LOUIS  
Type of Drilling Fluid: Chemical Mud

Printed by WellSight Log Viewer from WellSight Systems 1-800-447-1534 [www.WellSight.com](http://www.WellSight.com)

### OPERATOR

Company: PetroSantander (USA), INC.  
Address: 6363 Woodway Dr., Suite 350  
Houston, TX 77057-1798  
Co. Rep.: Mr. Pete Kuneyl

### GEOLOGIST

Name: Justin D. Carter  
Company: Consulting Geologist  
Address: 1640 N. Roosevelt Ave.  
Liberal, KS 67901  
Phone: 620-655-1187

### Comments

Drilling Contractor: Quest Drilling Rig #101  
Tool Pusher: Miguel Sanchez

8 5/8" surface casing set at 1715'

Mud: Winter Mud  
Engineer: Drew Smith

Gas Detector: Earth Tech OGL, Inc.

Directional Drillers: Phoenix Drilling Systems

Open-Hole Loggers: Pioneer Wireline





**TRILOBITE TESTING, INC.**

**DRILL STEM TEST REPORT**

Petro Santander USA Inc

**33-23s-32w Finney, Ks**

ATTN: Justin Carter

**Neeley #11**

Job Ticket: 63907

**DST#: 1**

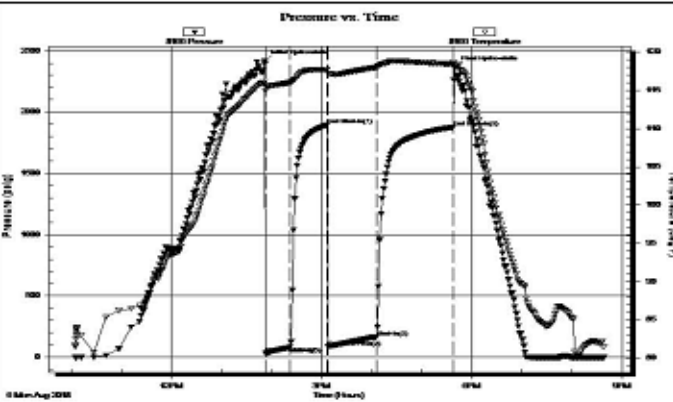
Test Start: 2018.08.06 @ 10:04:25

**GENERAL INFORMATION:**

Formation: **Morrow - St Gen**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 13:52:25  
 Tester: Brandon Turley  
 Time Test Ended: 20:39:25  
 Unit No: 79  
 Interval: **4792.00 ft (KB) To 4890.00 ft (KB) (TVD)**  
 Reference Elevations: 2837.00 ft (KB)  
 Total Depth: 5000.00 ft (KB) (TVD)  
 2826.00 ft (CF)  
 Hole Diameter: 7.88 inches  
 Hole Condition: Good  
 KB to GR/CF: 11.00 ft

**Serial #: 8166 Outside**  
 Press@RunDepth: 166.07 psig @ 4793.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2018.08.06 End Date: 2018.08.06 Last Calib.: 2018.08.06  
 Start Time: 10:04:30 End Time: 20:39:25 Time On Btm: 2018.08.06 @ 13:51:25  
 Time Off Btm: 2018.08.06 @ 17:39:25

**TEST COMMENT:** IF: 1/4 blow built to 9.  
 IS: No return.  
 FF: BOB in 45 min. 12 1/2"  
 FS: No return.



**PRESSURE SUMMARY**

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2416.82	116.02	Initial Hydro-static
1	29.94	114.91	Open To Flow (1)
31	80.90	116.02	Shut-In(1)
76	1894.36	117.73	End Shut-In(1)
77	85.19	117.21	Open To Flow (2)
135	166.07	118.01	Shut-In(2)
227	1874.69	118.45	End Shut-In(2)
228	2366.89	118.33	Final Hydro-static

**Recovery**

Length (ft)	Description	Volume (bbl)
188.00	mcw 80%w 20%m	2.64
125.00	mcw oil spots 60%w 40%m	1.75

**Gas Rates**

Choke (inches)	Pressure (psig)	Gas Rate (Mcfd)

Trilobite Testing, Inc

Ref. No: 63907

Printed: 2018.08.06 @ 21:19:38

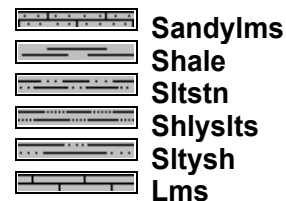
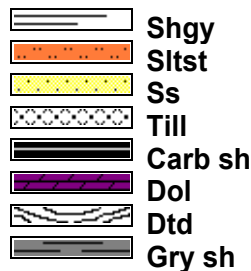
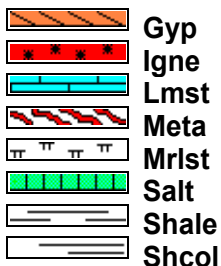
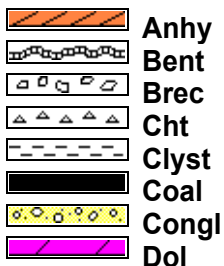
**Remarks**

After careful review of the sample log, electric logs, and DST reports, the decision was made to run 5 1/2" casing to do further testing of the L/KC and Morrow in the Neeley #11.

Respectfully submitted,

**Justin D. Carter**  
 Consulting Geologist

### ROCK TYPES



### ACCESSORIES

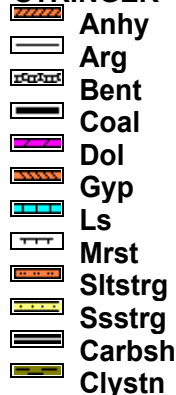
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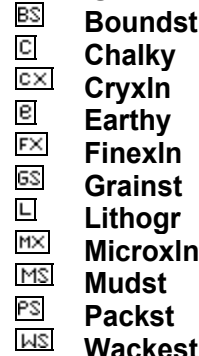
#### MINERAL



#### STRINGER

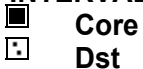


#### TEXTURE

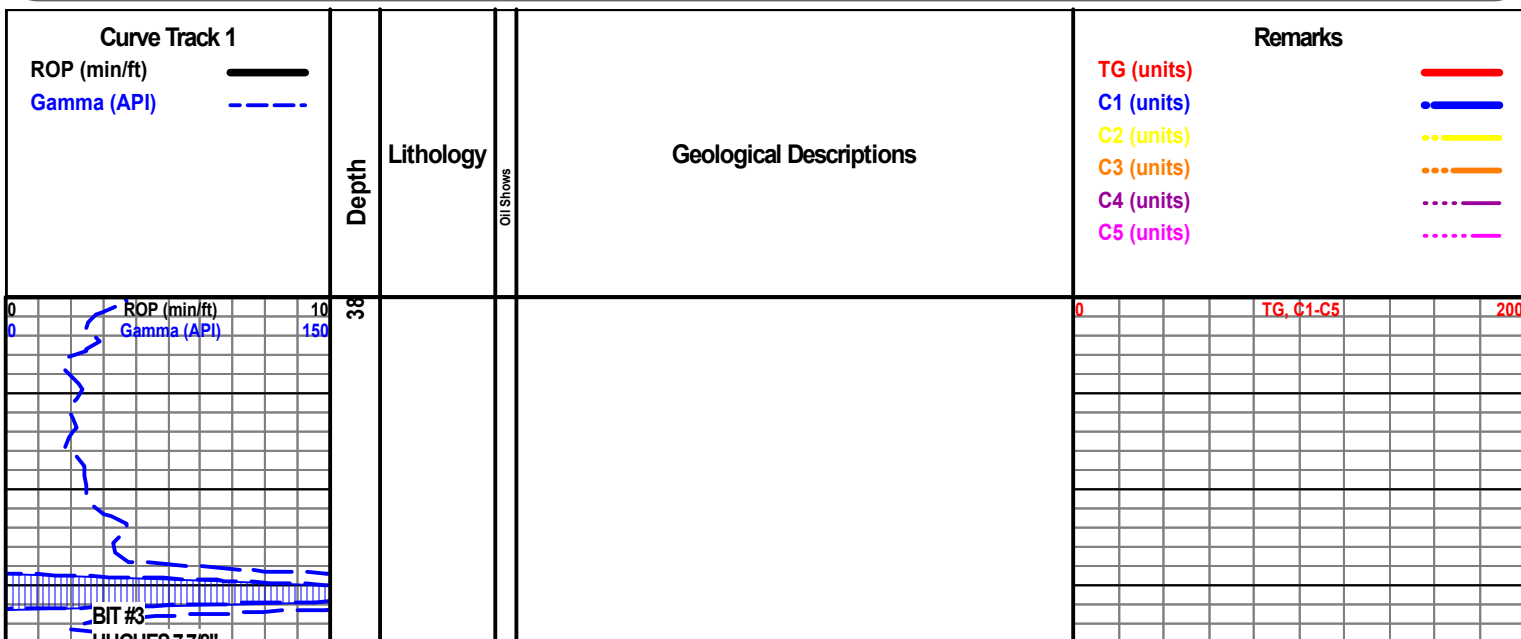
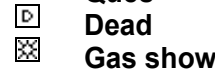
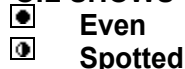


### OTHER SYMBOLS

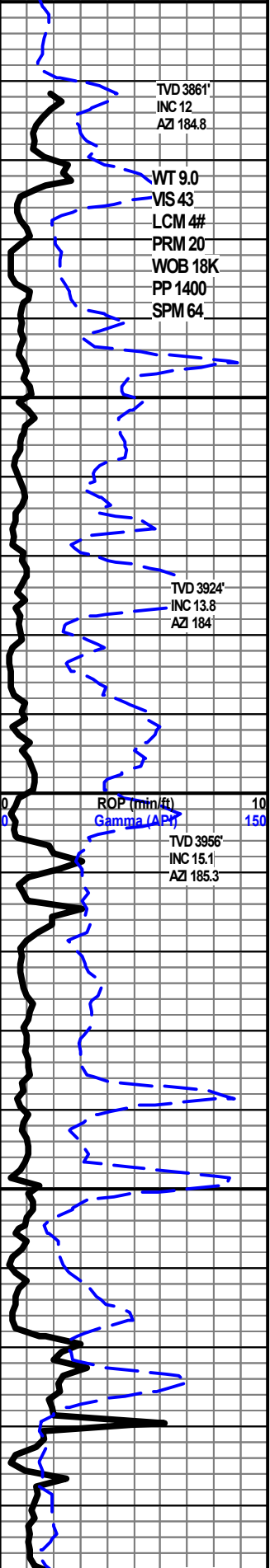
#### INTERVALS



#### OIL SHOWS



HUGHES 7 7/8  
T60SX  
S/N: 527620  
6'15s  
IN @2400'



3900  
3950  
4000  
4050  
4100

GEOLOGIST ON LOCATION 11:00 A.M. 08/04/18

LS- OFF WHT, HRD DNS, VF-XLN, RE-XLN MTRX IP, NO FLO, NO VIS POR

**LANSING 3924' TVD 3874' (-1037')**

LS- CRM OFF WHT, HRD DNS, VF-XLN, RE-XLN MTRX IP TO TR SUB-CHLKY, TR WHT CHRT, NO FLO, NO VIS POR

LS- CRM, HRD DNS, VF-XLN, RE-XLN MTRX IP, NO FLO, NO VIS POR

LS- WHT TN, BRITT, FVF-XLN, SUB-CHLKY THRU TO TR GRST, TR OOL, DLL YEL FLO THRU, NO VIS CUT, TR INTER-XLN POR, ABDT OIL IN SAMPLE FROM MUD

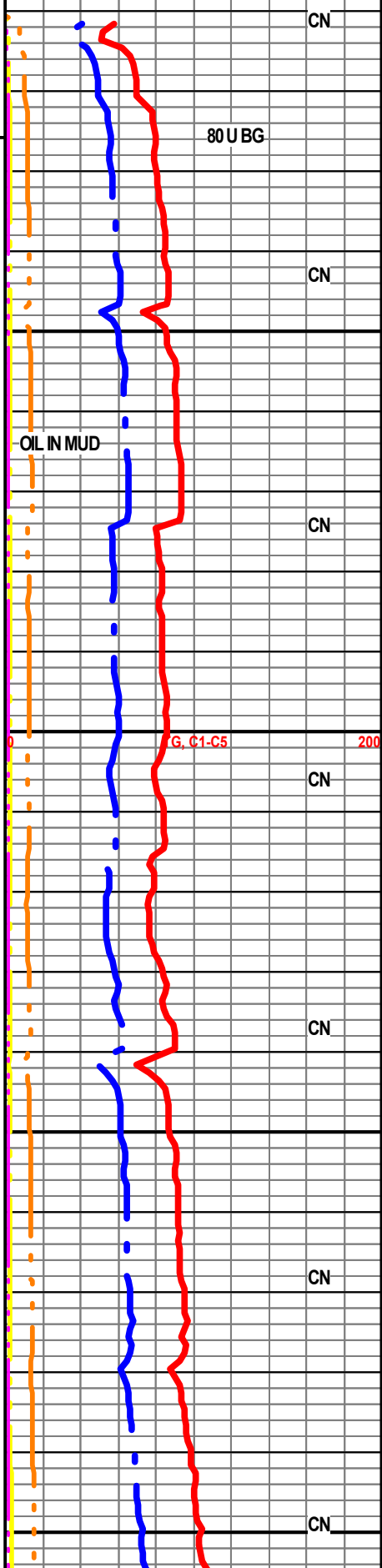
LS- CRM TN, HRD TO BRITT IP, VF-XLN, SUB-SUCRO MTRX THRU, IMBED OOL SCAT THRU, NO FLO, PR/FR INTER-OOL POR IP, NS

LS- BFF, HRD DNS, VF-XLN, RE-XLN MTRX IP, TR SFT WHT CHLK, TR OOL, NO FLO, TR INTER-OOL POR TO NO VIS POR IP, NS

LS- BFF, HRD TO BRITT IP, VF-XLN, RE-XLN MTRX THRU, TR SFT WHT CHLK, TR OOL, NO FLO, NO VIS POR

LS- BFF, BRITT TO HRD IP, VF-XLN, RE-XLN MTRX IP, IMBED OOL IP, TR SFT WHT CHLK, NO FLO, TR INTER-OOL POR TO NO VIS POR IP, NS

LS- BFF CRM, HRD DNS, FVF-XLN, SUB-SUCRO MTRX THRU, TR IMBED OOL, NO FLO, NO VIS POR



WT 9.1  
VIS 43  
LCM 4#  
PRM 20  
WOB 18K  
PP 1400  
SPM 64

TVD 4142'  
INC 17.7  
AZI 181.9

ROP (min/ft) 10  
Gamma (API) 150

TVD 4236'  
INC 18.9  
AZI 182.7

WT 9.3  
VIS 42  
LCM 6#  
PRM 20  
WOB 20K

4150

4200

4250

4300

LS- BFF CRM, HRD, FMF-XLN, SUB-SUCRO MTRX THRU, OPQ  
CHRT IP, NO FLO, NO VIS POR

LS- CRM, BRITT, F-XLN, GRST, TR OOL, OOMLD THRU, DLL YEL  
FLO THRU, FAINT SLO BLU STRM CUT, GD OOMLD POR THRU,  
TR STAIN, FAINT ODOR

LS- BFF CRM, HRD DNS, VF-XLN, RE-XLN MTRX IP TO  
SUB-SUCRO MTRX IP TO TR SUB-CHLKY, NO FLO, NO VIS POR

LS- OFF WHT BFF, BRITT, VF-XLN, SUB-CHLKY MTRX THRU TO  
TR RE-XLN MTRX, NO FLO, NO VIS POR

LS- BFF CRM, BRITT TO HRD IP, FMF-XLN, SUB-SUCRO MTRX  
IP TO TR SUB-CHLKY, TR IMBED OOL, TR OOMLD, NO FLO, TR  
OOMLD POR TO NO VIS POR THRU, NS

LS- LT GY, BRITT, F-XLN, SUCRO MTRX THRU, IMBED OOL  
THRU, NO FLO, FR INTER-OOL POR SCAT THRU, NS

LS- CRM LT GY, BRITT, F-XLN, SUB-SUCRO MTRX THRU, SFT  
WHT CHLK IP, OOL IP, NO FLO, FR OOMLD POR THRU, NS

LS- BFF LT TN, BRITT, MD/VF-XLN, GRST, TR IMBED OOL, SFT  
WHT CHLK IP, NO FLO, GD OOMLD POR THRU, NS

LS- OFF WHT TN, HRD TO BRITT IP, VF-XLN, SUB-CHLKY MTRX  
THRU, IMBED DK GY OOL IP, SFT WHT CHLK IP, NO FLO, NO VIS  
POR

LS- BFF CRM, HRD DNS, VF-XLN, RE-XLN MTRX IP TO  
SUB-SUCRO MTRX IP TO TR SUB-CHLKY, NO FLO, NO VIS POR

110 U BG

CN

CN

CN

C1-C5 200

CN

CN

CN

CN

PP 1600  
SPM 64

LS-LI TN, HRD DNS, VF-XLN, RE-XLN MTRX IP, NO FLO, NO VIS POR

LS- GY TN WHT, MOTT, HRD TO BRITT IP, VF-XLN, SUB-CHLKY MTRX IP TO TR RE-XLN MTRX, TR SFT WHT CHLK, TR IMBED & LAM DK GY/BLK SH, NO FLO, NO VIS POR

LS- LT GY, HRD DNS, VF-XLN, SLI SUCRO MTRX THRU, NO FLO, NO VIS POR

**BKC 4404' TVD 4354' (-1517')**

LS- GY TN, MOTT, HRD TO BRITT IP, F/VF-XLN, SUB-SUCRO MTRX IP TO RE-XLN MTRX IP, IMBED BLK SH IP, NO FLO, NO VIS POR

LS- LT TN OFF WHT, BRITT, VF-XLN, SUB-CHLKY MTRX IP TO SUB-SUCRO MTRX IP, IMBED DK GY FOSS FRAGS SCAT THRU, TR SFT WHT CHLK, NO FLO, TR INTER-FOSS POR TO NO VIS POR THRU, NS

SH- GY, FRM, SLTY, IMBED FOSS IP

LS- LT CRM GY, HRD TO BRITT IP, VF-XLN, RE-XLN MTRX IP TO SUB-CHLKY MTRX IP, IMBED FOSS FRAGS SCAT THRU, NO FLO, NO VIS POR

LS- GY, HRD DNS, VF-XLN, SUCRO MTRX THRU, SLI SNDY, NO FLO, NO VIS POR

SH- GY BLK, FRM, BLKY, SLTY

LS- CRM LT BRN, HRD TO BRITT IP, VF-XLN, SUCRO MTRX IP, IMBED OOL SCAT THRU, NO FLO, TR INTER-OOL POR TO NO VIS POR, NS

CN

95 U BG

CN

TG, C1-C

CN

CN

CN

CN

100 U BG

CN

4350

4400

4450

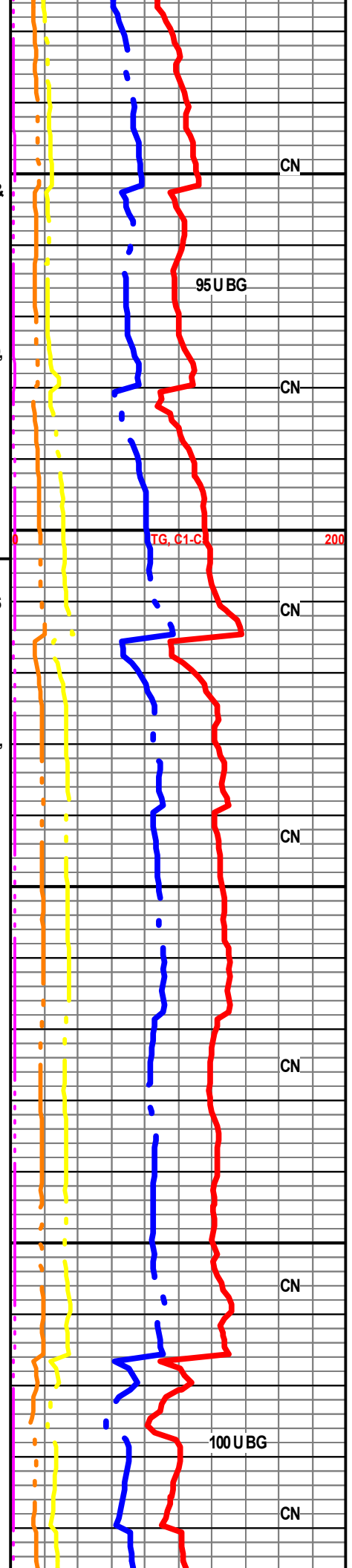
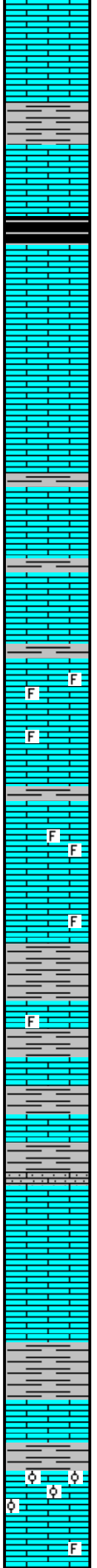
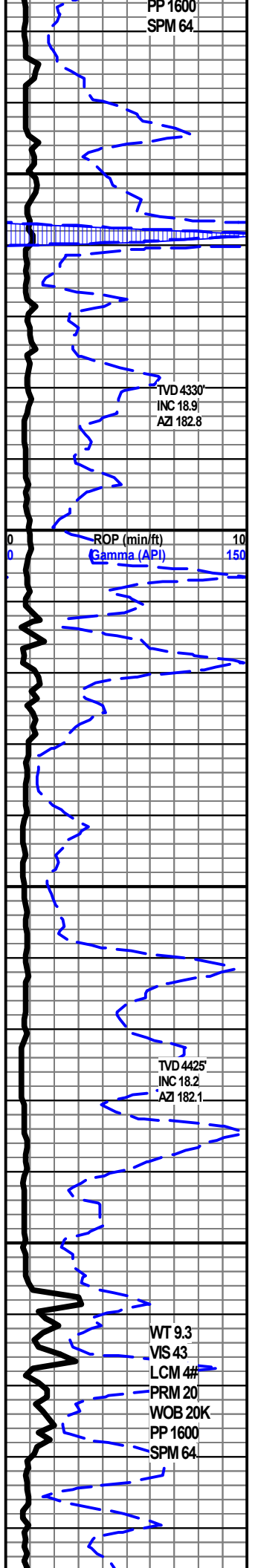
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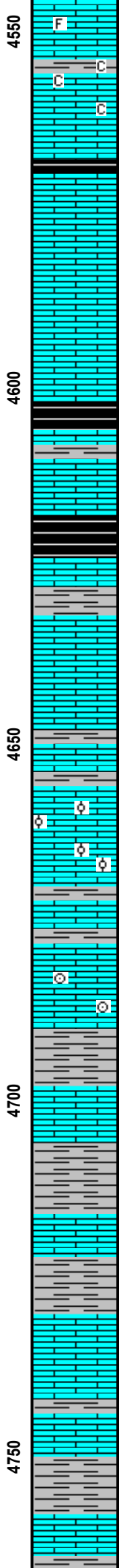
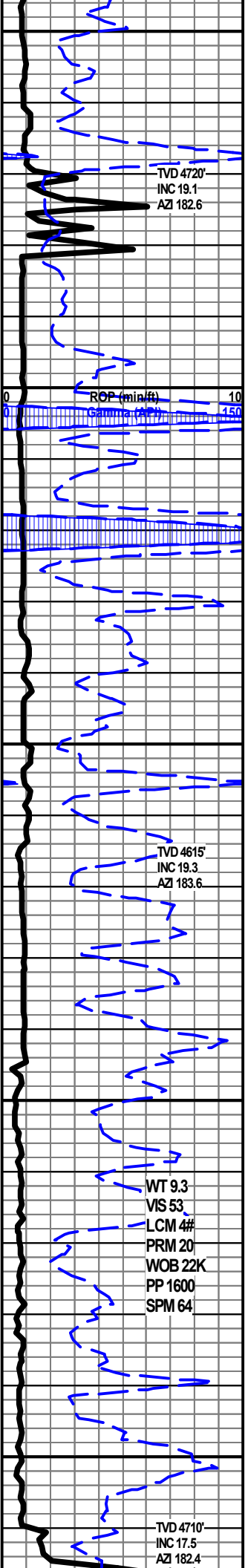
TVD 4330'  
INC 18.9'  
AZI 182.8

ROP (min/ft) 10  
Gamma (API) 150

TVD 4425'  
INC 18.2  
AZI 182.1

WT 9.3  
VIS 43  
LCM 4#  
PRM 20  
WOB 20K  
PP 1600  
SPM 64





LS- WHT GY, HRD DNS, VF-XLN, SUB-CHLKY MTRX THRU, TR IMBED FOSS FRAGS, NO FLO, NO VIS POR

LS- CRM, HRD DNS, VF-XLN, RE-XLN MTRX IP, TR SFT WHT CHLK, NO FLO, NO VIS POR

**FT. SCOTT 4602' TVD 4524' (-1687')**

LS- GY CRM, HRD TO BRITT IP, VF-XLN, RE-XLN MTRX IP TO SUB-CHLKY MTRX IP, IMBED SH IP, NO FLO, NO VIS POR

LS- GY TN, MOTT, HRD TO BRITT IP, VF-XLN, RE-XLN MTRX IP TO TR SUB-SUCRO MTRX TO TR SUB-CHLKY, TR IMBED SH W/ DISS SH IP, TR PYR, NO FLO, NO VIS POR

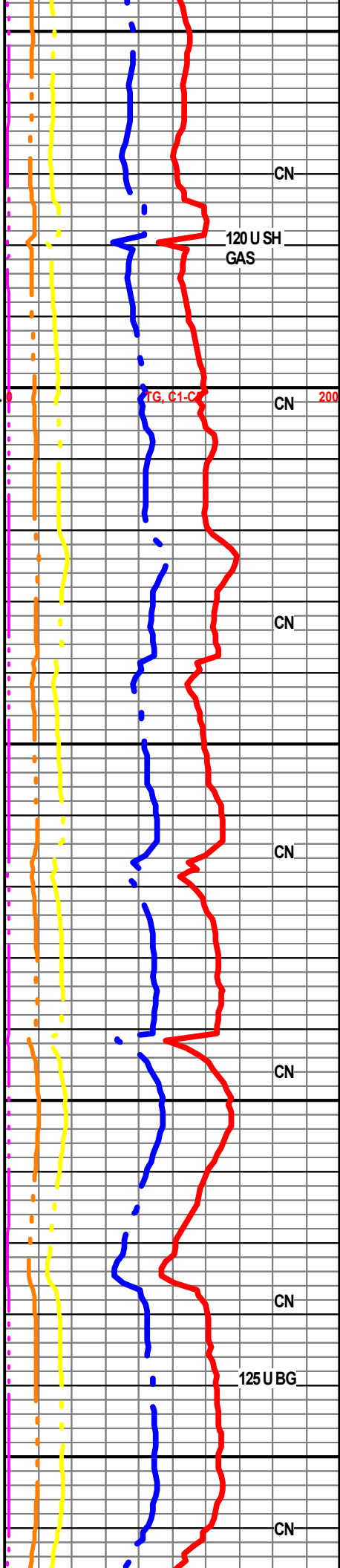
LS- TN WHT, BRITT, F-XLN, SUCRO MTRX, IMBED OOL SCAT THRU, SFT WHT CHLK IP, NO FLO, TR INTER-OOL POR TO NO VIS POR THRU, NS

LS- TN OFF WHT, HRD, VF-XLN, RE-XLN MTRX IP TO TR SUB-CHLKY, TR IMBED FOSS FRAGS (CRIN), NO FLO, NO VIS POR

LS- TN BFF, HRD DNS, VF-XLN, RE-XLN MTRX IP TO TR SUB-CHLKY, NO FLO, NO VIS POR

LS- OFF WHT TN, HRD TO BRITT IP, F/VF-XLN, SUB-SUCRO MTRX THRU, NO FLO, TR INTER-XLN POR TO NO VIS POR IP, NS

LS- BFF, HRD DNS, VF/CRYPTO-XLN, RE-XLN MTRX THRU TO TR SUB-CHLKY, NO FLO, NO VIS POR



TVD 4720'  
INC 19.1  
AZI 182.6

ROP (min/ft)  
0 10  
4.50

TVD 4615'  
INC 19.3  
AZI 183.6

WT 9.3  
VIS 53  
LCM 4#  
PRM 20  
WOB 22K  
PP 1600  
SPM 64

TVD 4710'  
INC 17.5  
AZI 182.4

CN

120 U SH GAS

CN

200

CN

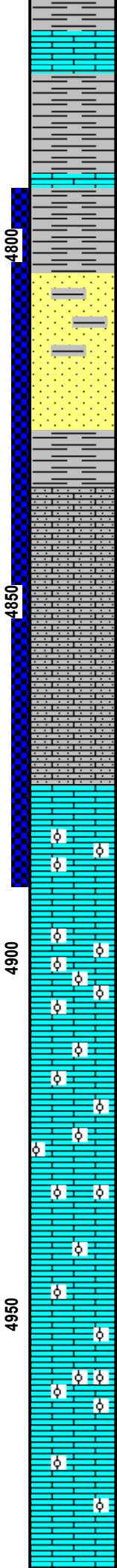
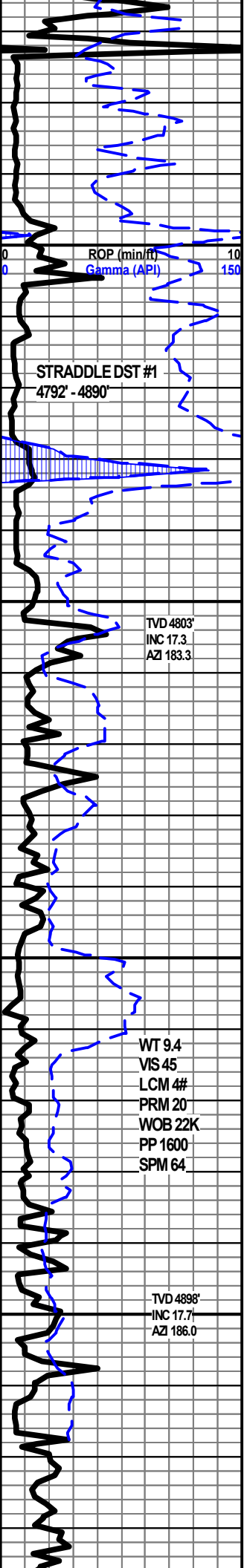
CN

CN

CN

125 U BG

CN



SH-DK GY, FRM, BLKY, LMY, WXY IP

**MORROW SS 4800' TVD 4750' (-1913')**

CN

SS-WHT, TT, F-GRN, GD SRT, SUB-RND GRNS, CALC CMNT, TR GLAUC, NO FLO, NO VIS CUT, PR INTER-GRN POR SCAT THRU, NO ODOR

SS-OFF WHT CLR, TT, FVF-GRNS, FR/GD SRT, SUB-ANG GRNS, CALC CMNT, DISS BLK SH IP, TR GLAUC, TR FINE SUB-RND CLR QTZ.XLS, NO FLO, NO VIS CUT, V/PR INTER-GRN POR IP, NO ODOR

SS-LT GRN, TT, F-GRN, GD SRT, CALC CMNT, NO FLO, PR/FR INTER-GRN POR THRU, NS

CN

**ST. GEN 4834' TVD 4784' (-1947')**

SNDY LS-LT GY, HRD DNS, VF-XLN, SUCRO MTRX THRU, NO FLO, NO VIS POR

CN

SNDY LS-A/A

**ST. LOUIS 4876' TVD 4826' (-1989')**

LS-TN, BRITT TO HRD IP, FVF-XLN, RE-XLN MTRX IPTO TR SUB-SUCRO MTRX, IMBED OOL IP, V/DLL YEL FLO THRU, NO VIS CUT, TR INTER-OOL POR, TR TN STAIN, NO ODOR

CN

LS-CRM WHT, BRITT, F-XLN, GRST, IMBED OOL SCAT THRU, V/DLL YEL FLO THRU, NO VIS CUT, PR INTER-OOL POR THRU, NO STAIN, NO ODOR

CN

LS-CRM OFF WHT, BRITT, F-XLN, GRST, SM OOL IMBED THRU, TR SFT WHT CHLK, PR INTER-OOL POR THRU, NS

CN

LS-LT TN, HRD DNS, VF-XLN, RE-XLN MTRX IP, TR IMBED OOL, TR IMBED BLK SH, NO FLO, NO VIS POR

CN

LS-LT TN, BRITT, F-XLN, GRST TO TR SUB-CHLKY, IMBED OOL SCAT THRU, NO FLO, PR/FR INTER-OOL POR IP, NS

ROP (min/ft) 10  
Gamma (API) 150

STRADDLE DST #1  
4792' - 4890'

TVD 4803'  
INC 17.3  
AZI 183.3

WT 9.4  
VIS 45  
LCM 4#  
PRM 20  
WOB 22K  
PP 1600  
SPM 64

TVD 4898'  
INC 17.7  
AZI 186.0

0 200

C1-C5

130 U POSS  
SHOW

LS- BFF OFF WHT, BRITT TO HRD IP, F/VF-XLN, GRST IPTO  
RE-XLN MTRX IP, IMBED OOL IP, NO FLO, TR INTER-OOL POR  
TO NO VIS POR IP, NS

