

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. 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) (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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DUAL INDUCTION LOG

Company SCHABEN OIL, LLC
Well FOOS NO. 1-1
Field SCHABEN
County NESS
State KANSAS

Company SCHABEN OIL, LLC
Well FOOS NO. 1-1
Field SCHABEN
County NESS
State KANSAS

Location: API #: 15-135-26002-00-00
 650' FNL & 1900' FEL
 SEC 1 TWP 20S RGE 22W
 Permanent Datum GROUND LEVEL Elevation 2226'
 Log Measured From KELLY BUSHING
 Drilling Measured From KELLY BUSHING
 Other Services: CNL/CDL MEL/BHCS
 Elevation: K.B. 2231', D.F. N/A, G.L. 2226'

Date	6/25/2018
Run Number	ONE
Depth Driller	4460'
Depth Logger	4458'
Bottom Logged Interval	4457'
Top Log Interval	200'
Casing Driller	8.625" @ 218'
Casing Logger	7.875"
Bit Size	CHEMICAL
Type Fluid in Hole	13500
Salinity, ppm CL	9.5
Density / Viscosity	10.5
pH / Fluid Loss	55
Source of Sample	8.0
Rm @ Meas. Temp	FLOWLINE
Rmt @ Meas. Temp	.30 @ 68
Rmc @ Meas. Temp	.23 @ 68
Source of Rmf / Rmc	.41 @ 68
Rm @ BHT	CHARTS
Operating Rig Time	.17 @ 121
Max Rec. Temp. F	4 HOURS
Equipment Number	121 DEGF
Location	108
Recorded By	HAYS
Witnessed By	J. HENRICKSON
	KEN SCHABEN
	ANDREW STENZEL

<<< Fold Here >>>

All interpretations are opinions based on inferences from electrical or other measurements and Pioneer Wireline Services, LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Pioneer Wireline Services, LLC will not 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.

Comments

N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.
 BAZINE KANSAS
 SOUTH TO 60 RD, 1/2 WEST, SOUTH INTO

Log Measured From: KELLY BUSHING 5 Ft. Above Permanent Datum

THANK YOU FOR USING PIONEER ENERGY SERVICES
www.pioneerenergy.com 785-625-3858


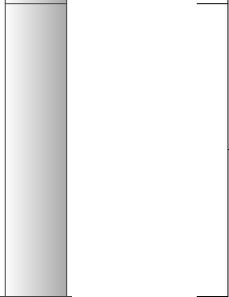
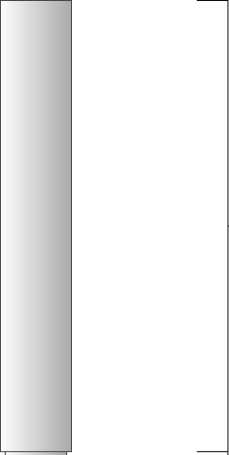

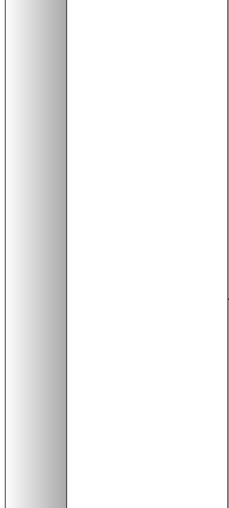
Your Pioneer Energy Services Crew Engineer: J. HENRICKSON Operator: Operator: Operator:	This Log Record Was Witnessed By Primary Witness: KEN SCHABEN Secondary Witness: ANDREW STENZEL Secondary Witness: Secondary Witness:
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Log Variables

DatabaseC:\ProgramData\Warrior\Data\schaben_oil_foos_1_1.db
 Dataset field/well/stack/pass3.1/_vars_

Top - Bottom

A	BOREID in	BOTTEMP degF	CASEOD in	CASETHCK in	FLUIDDEN g/cc	M	MATRXDEN g/cc
1	7.875	121	5.5	0	1	2	2.71
NPORSEL	PERFS	SNDERR mmho/m	SNDERRM mmho/m	SPSHIFT mV	SRFTEMP degF	SZCOR	TDEPTH ft
Limestone	0	8	-4	-220	87	Off	4458

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
GR	33.00		GR-M&W (89-M&W)	3.00	3.50	50.00
CNLSC CNSSC	29.90 29.15		CNT-M&W (tk10-MW)	5.50	3.50	100.00
LSD DCAL SSD	20.85 20.83 20.35		CDL-M&W (979-229)	8.50	4.00	250.00
RLL3 RLL3F	15.80 15.79					
CILD	8.00		DIL-M&W (1987)	18.50	3.50	220.00

CILM 4.70

SP 0.20

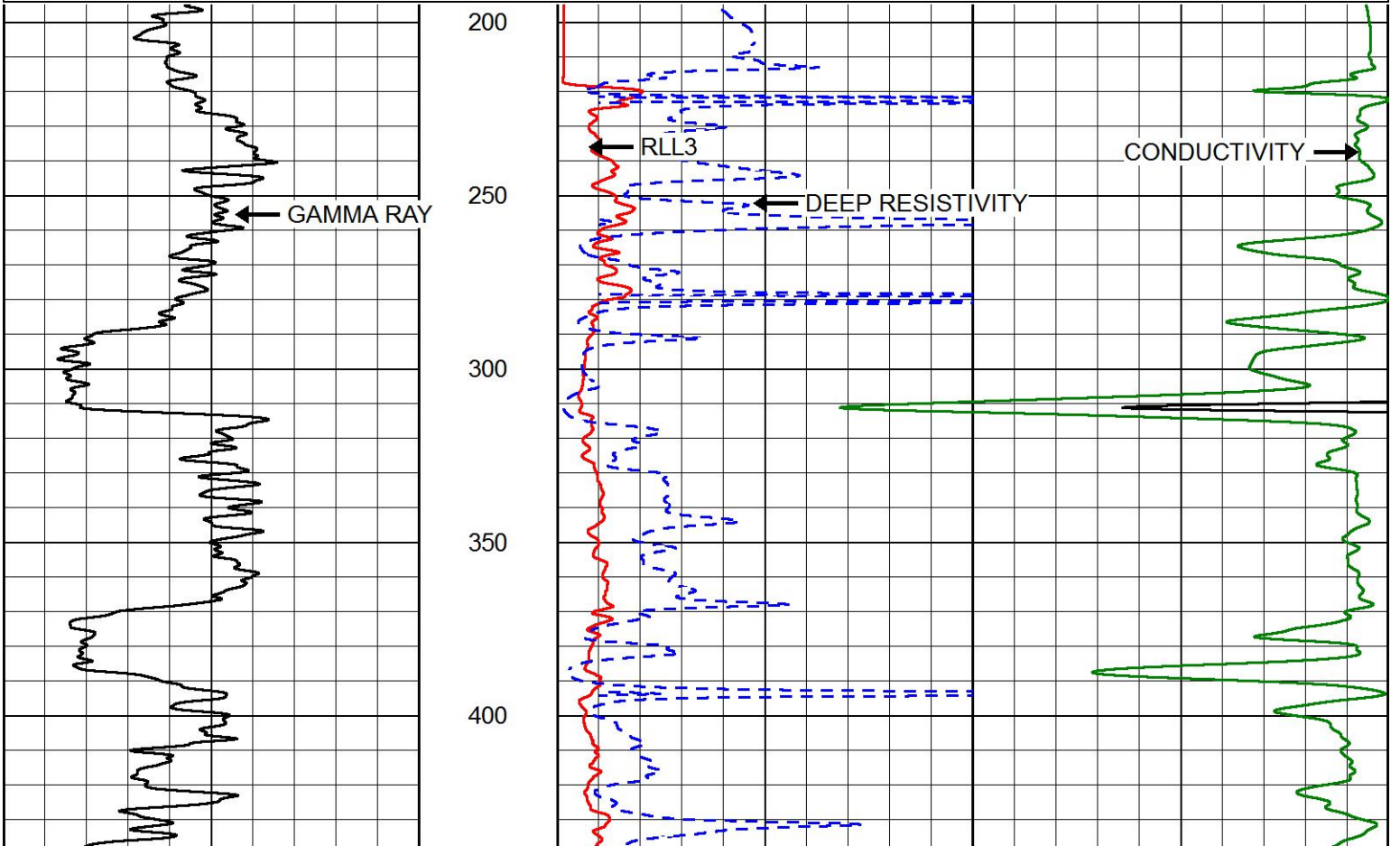
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 Total length: 35.50 ft
 Total weight: 620.00 lb
 O.D.: 4.00 in

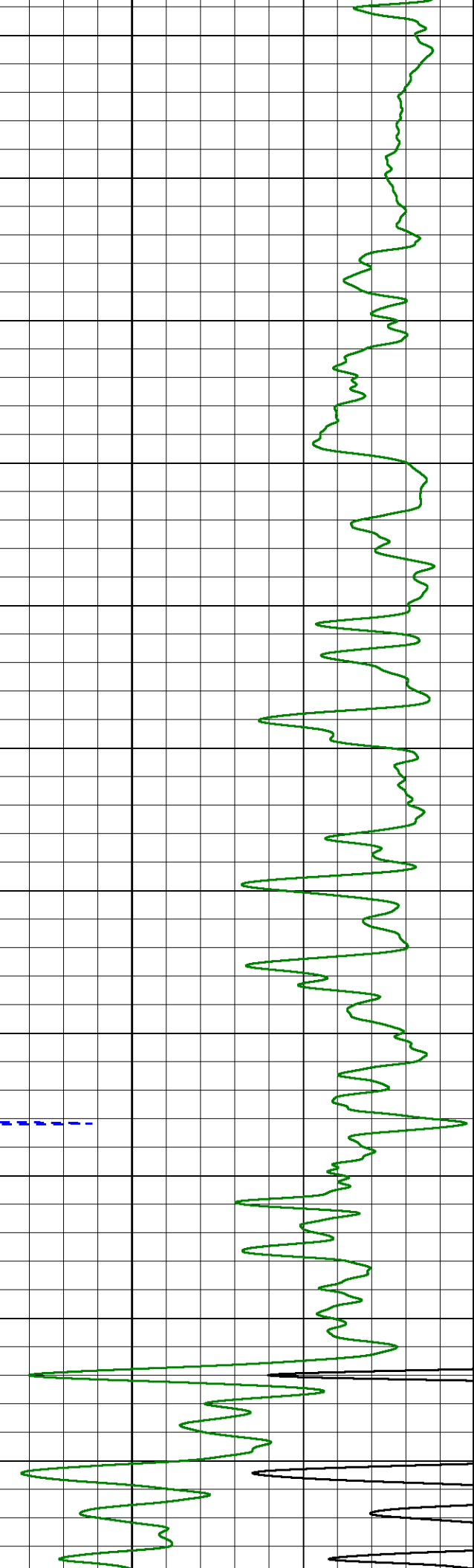
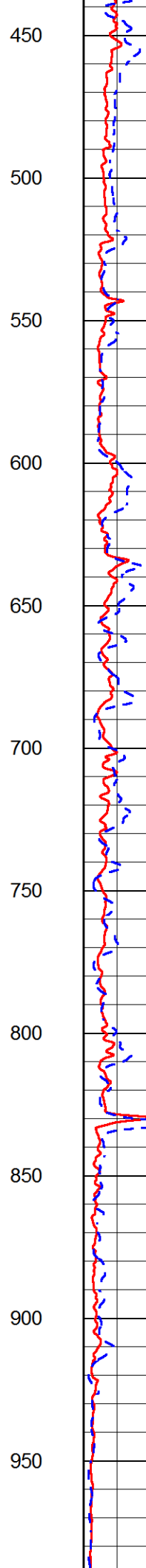
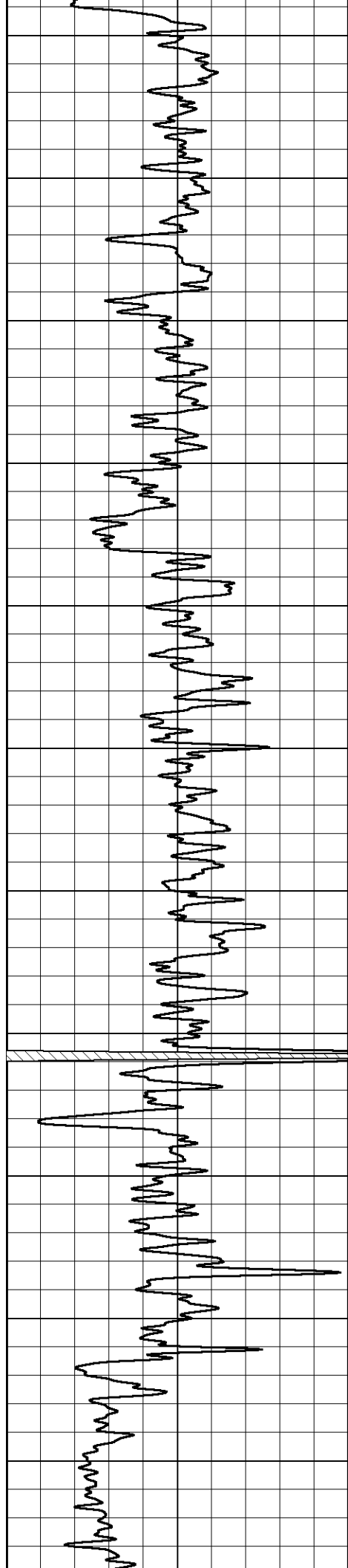


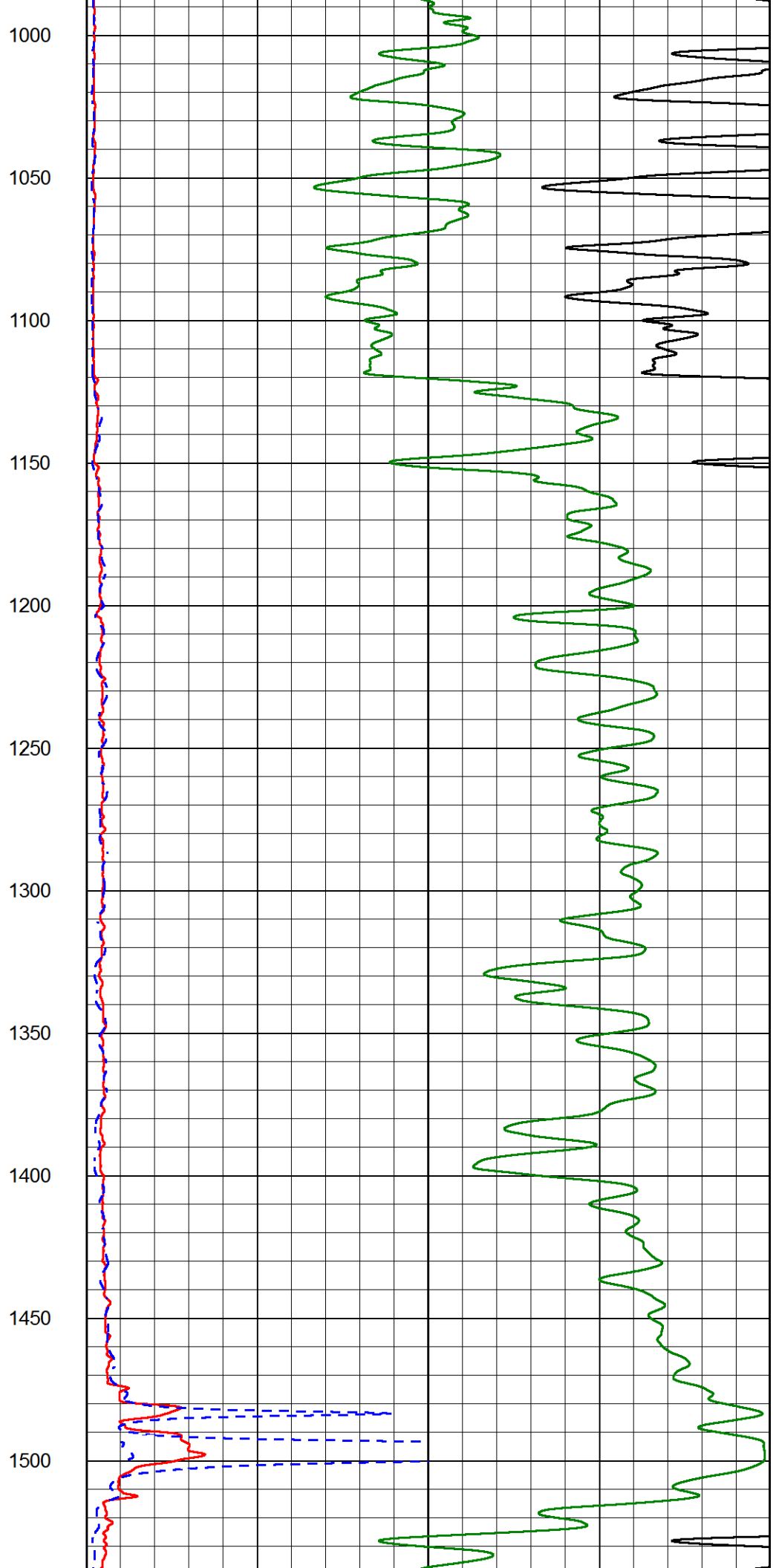
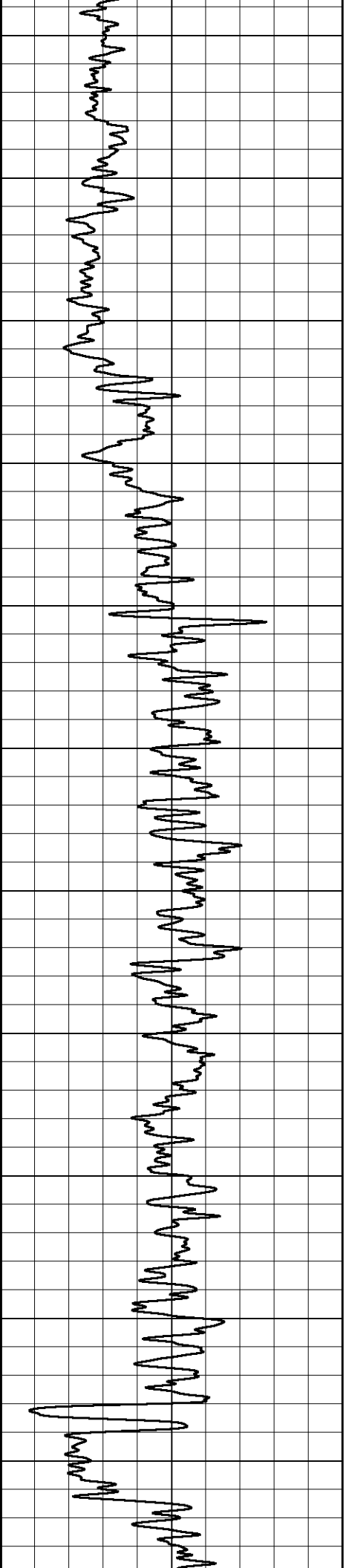
MAIN PASS

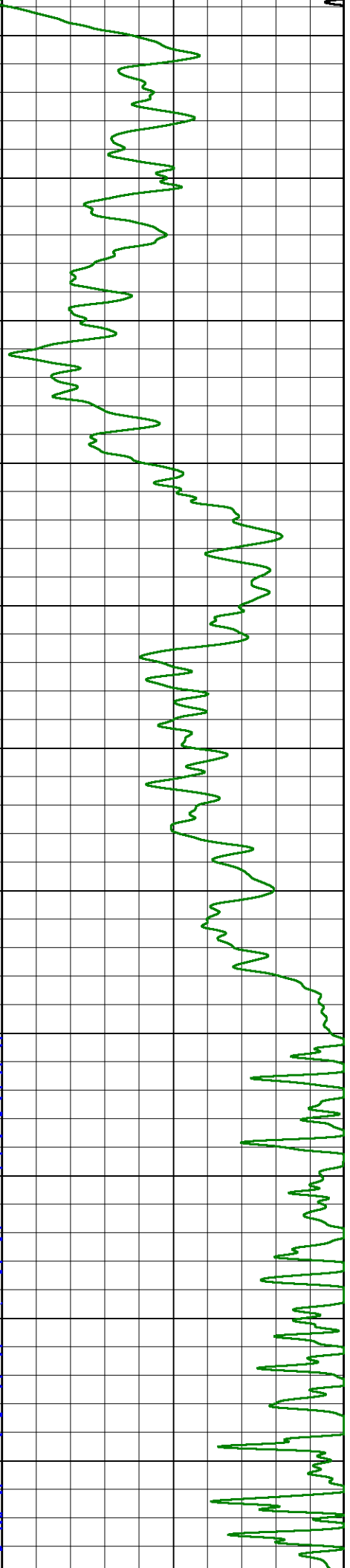
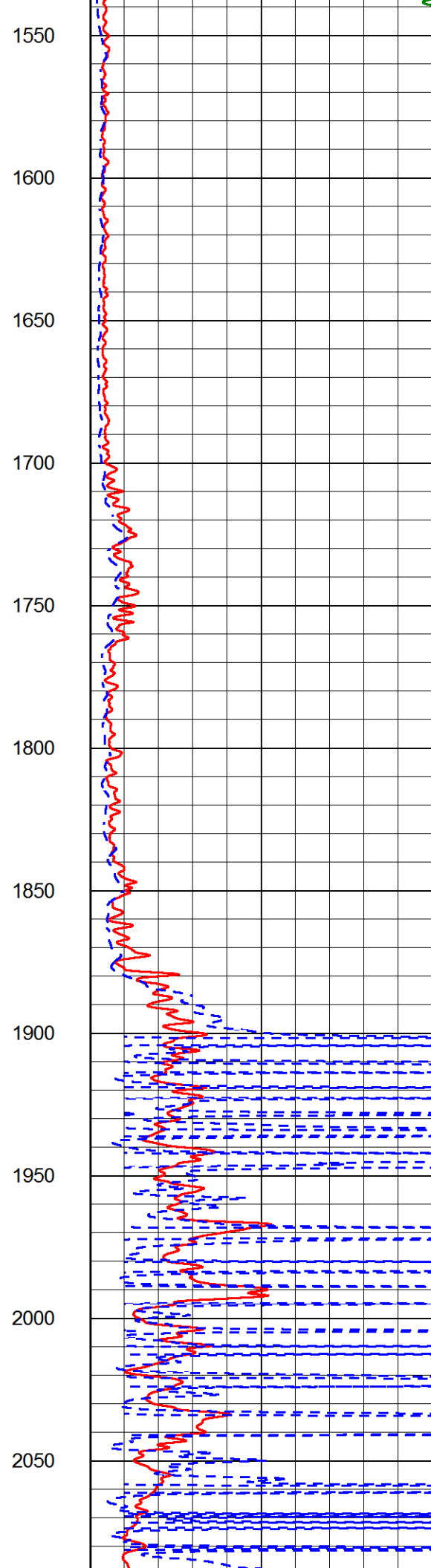
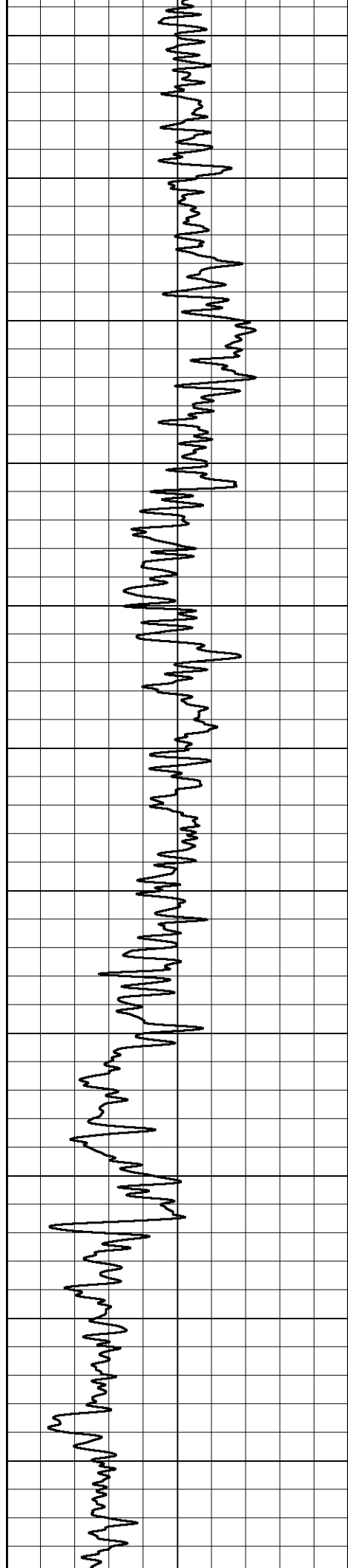
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 Dataset Pathname stack/pass3.1
 Presentation Format dil2in
 Dataset Creation Mon Jun 25 22:59:43 2018
 Charted by Depth in Feet scaled 1:600

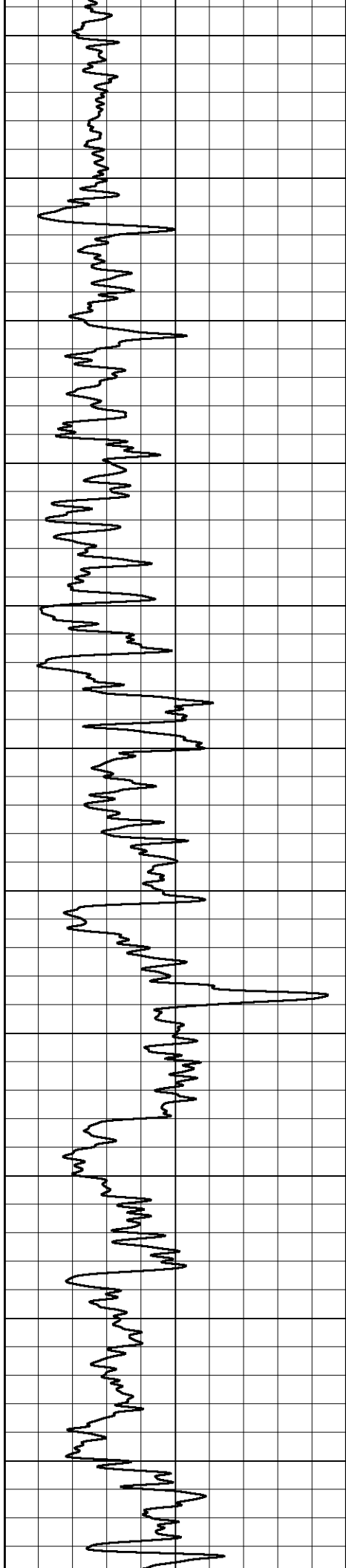
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			0	RLL3 (Ohm-m)	50
			0	DEEP RESISTIVITY (Ohm-m)	50
			50	RLL3 (Ohm-m)	500
				DEEP RESISTIVITY	
			50	(Ohm-m)	500



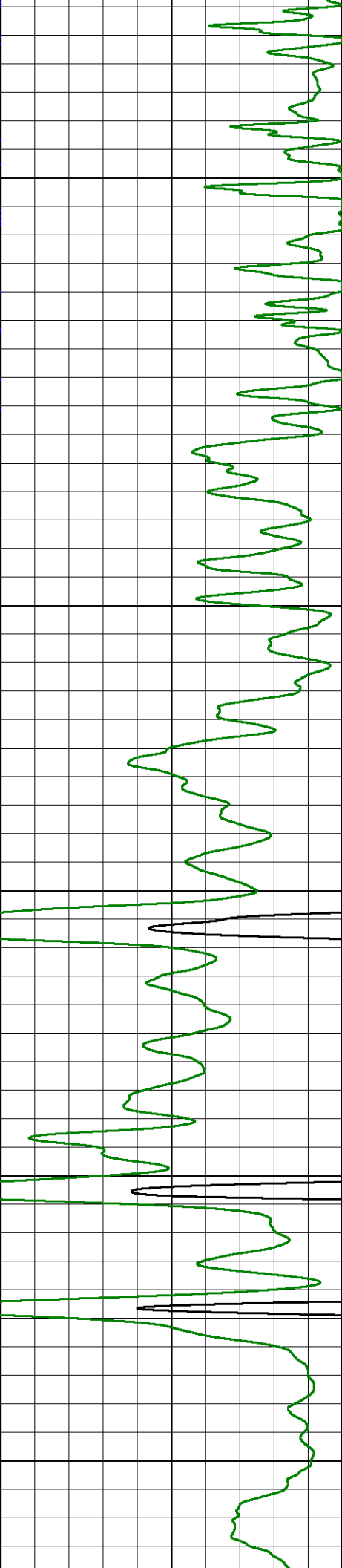
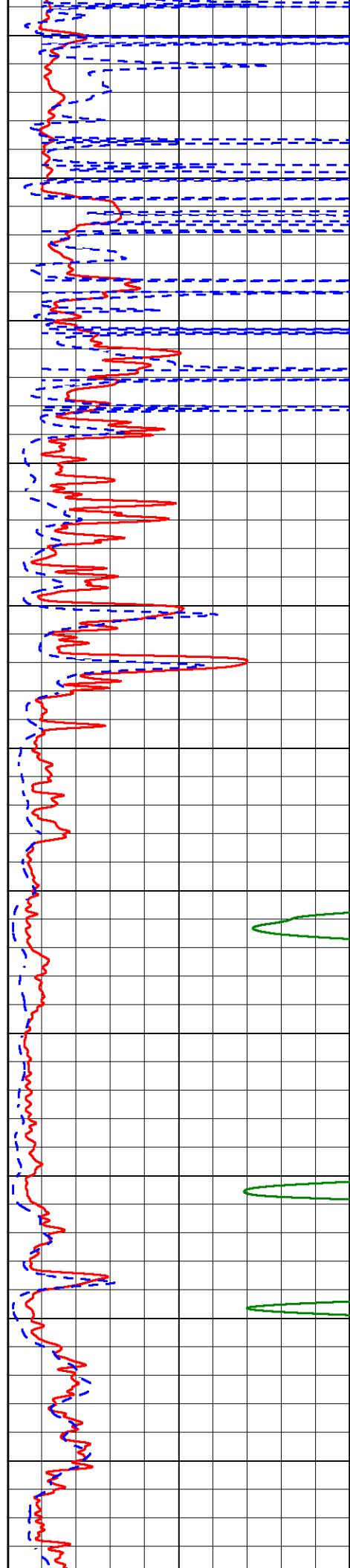


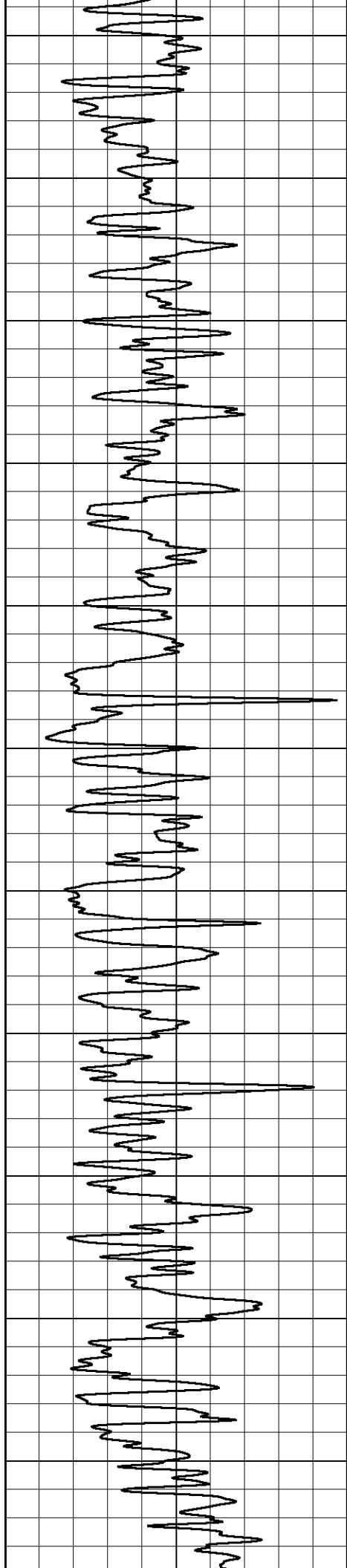




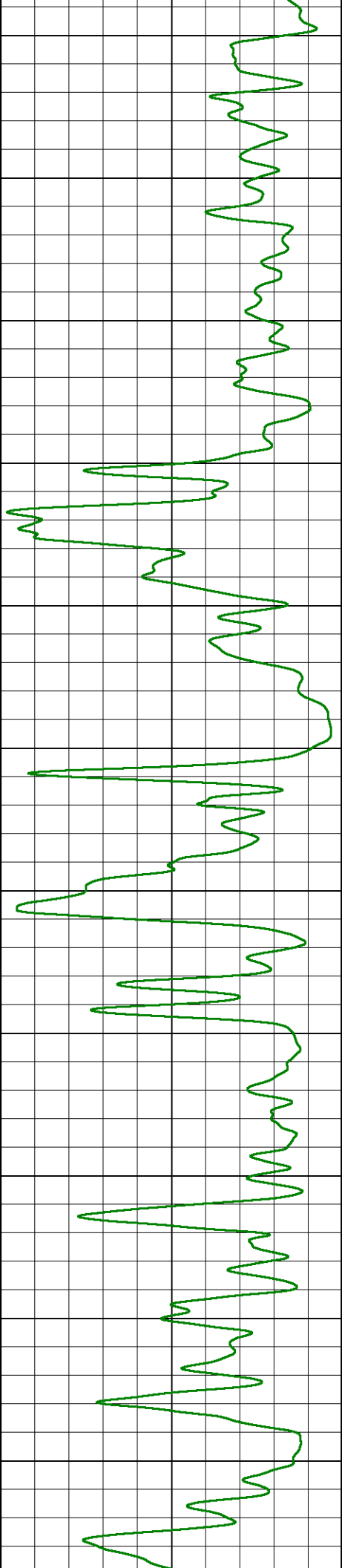
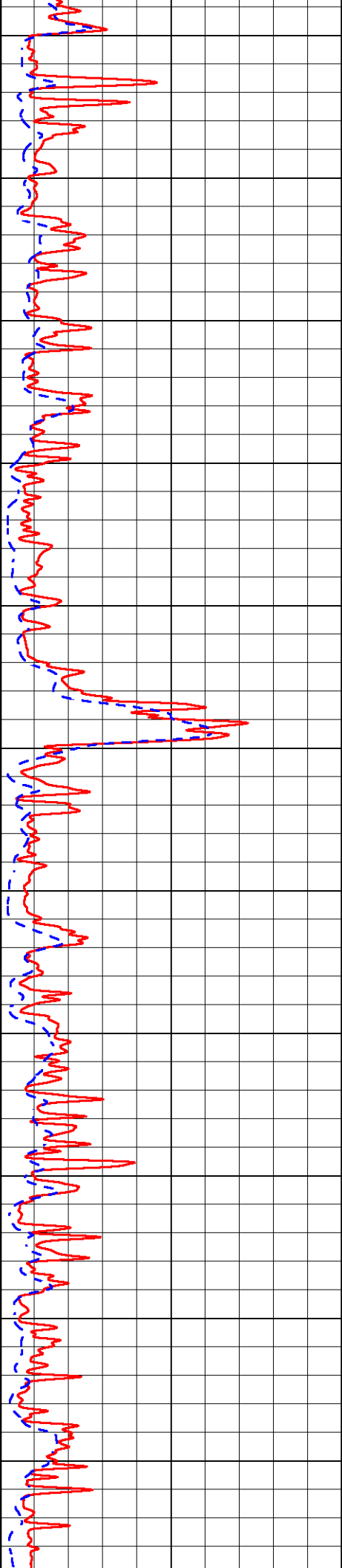


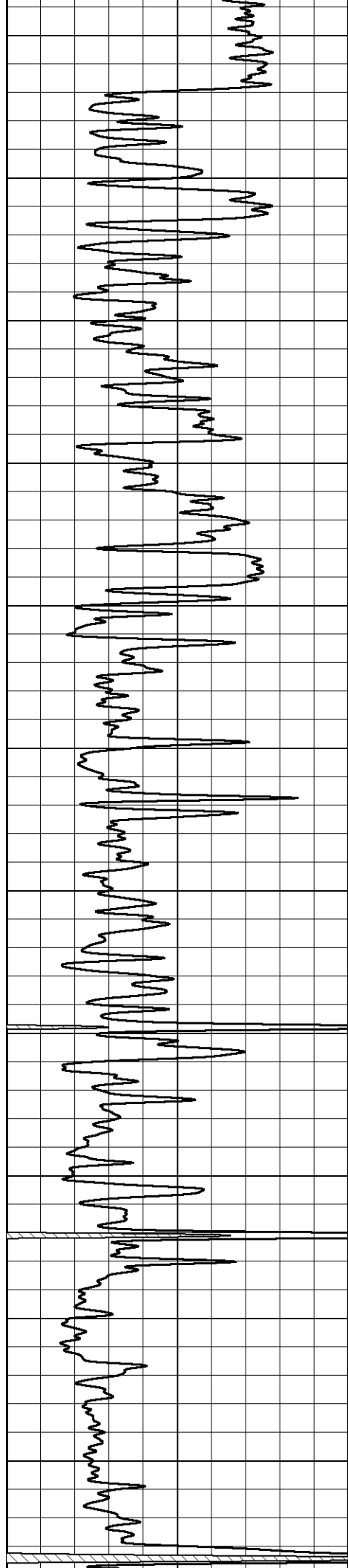
2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600





2650
2700
2750
2800
2850
2900
2950
3000
3050
3100
3150





3200

3250

3300

3350

3400

3450

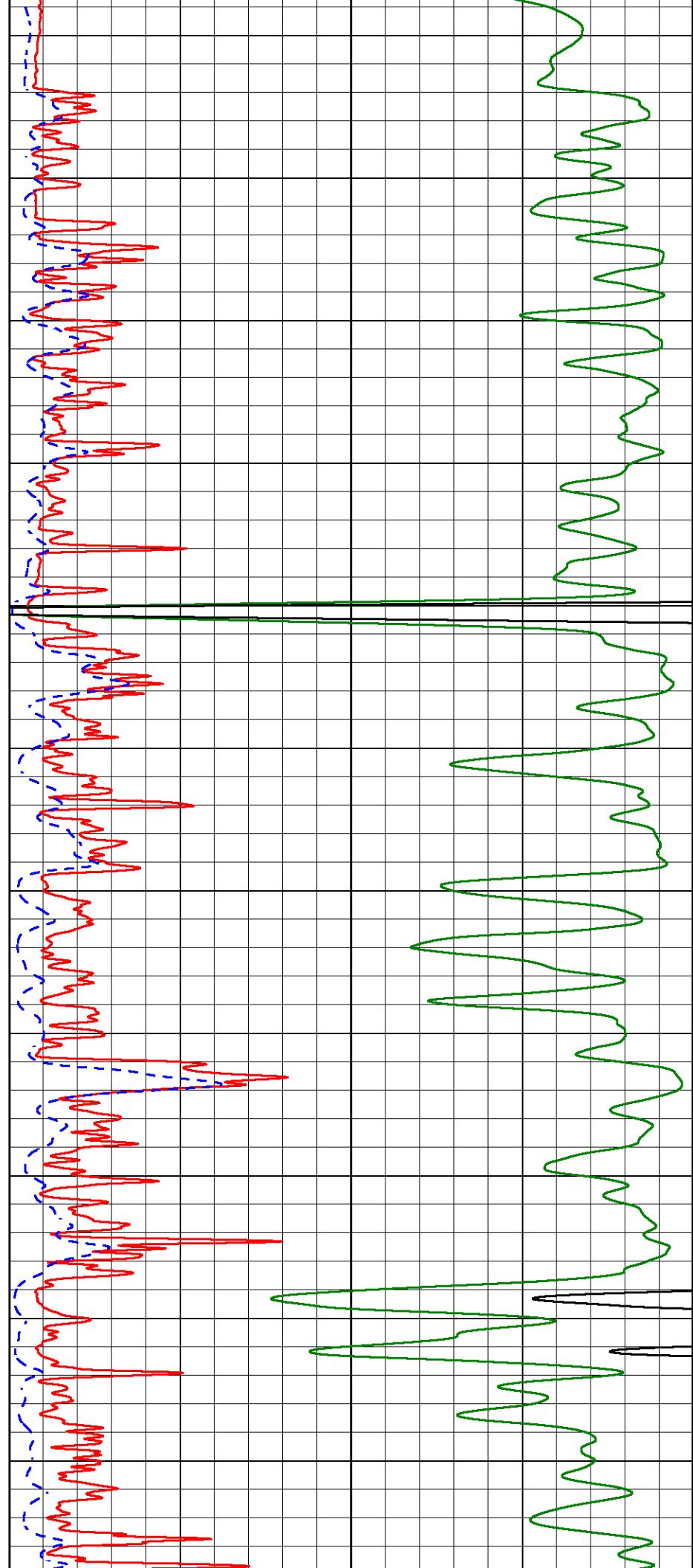
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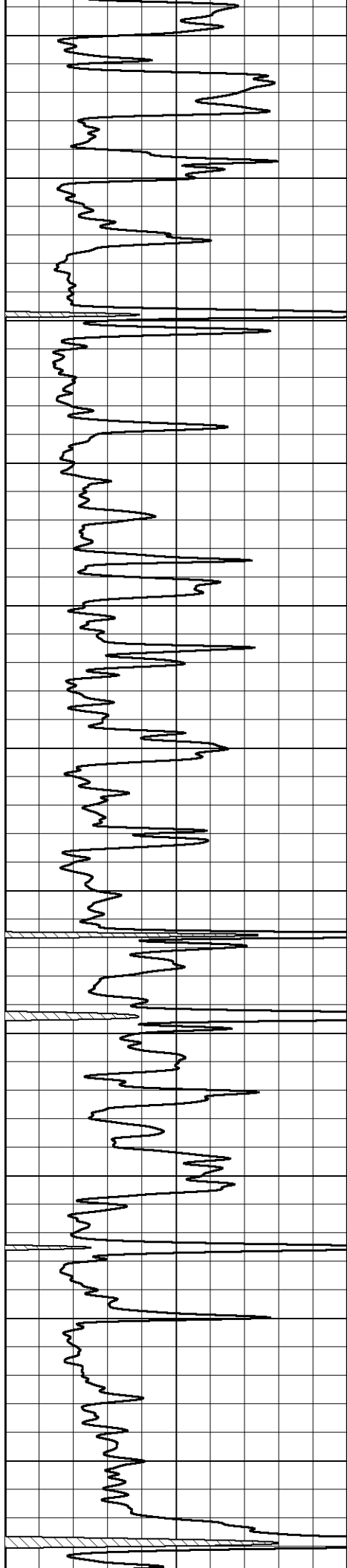
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3600

3650

3700





3750

3800

3850

3900

3950

4000

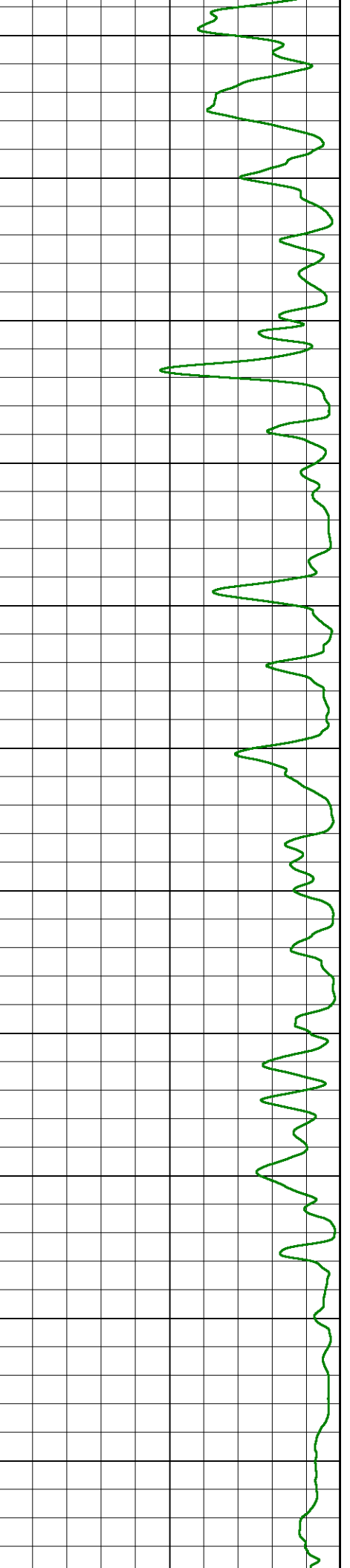
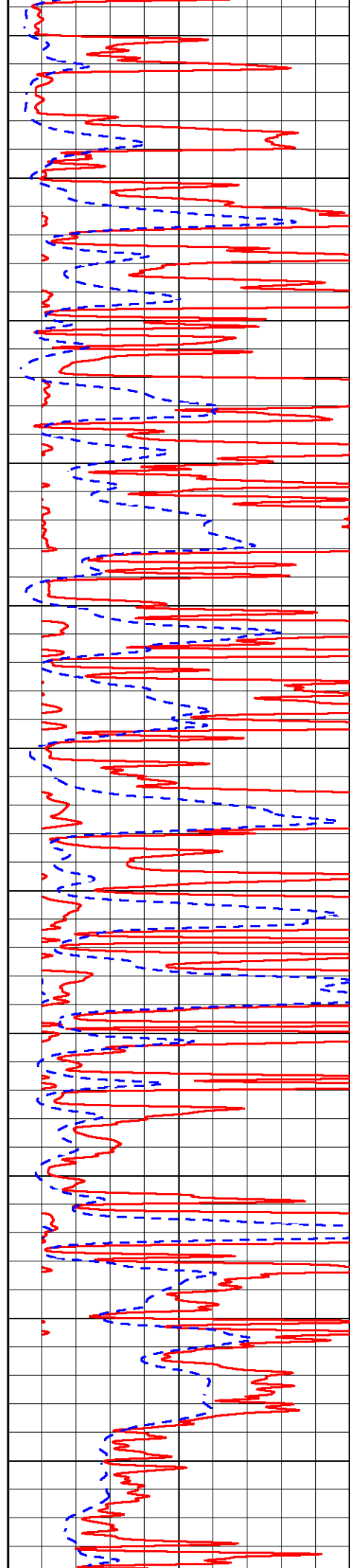
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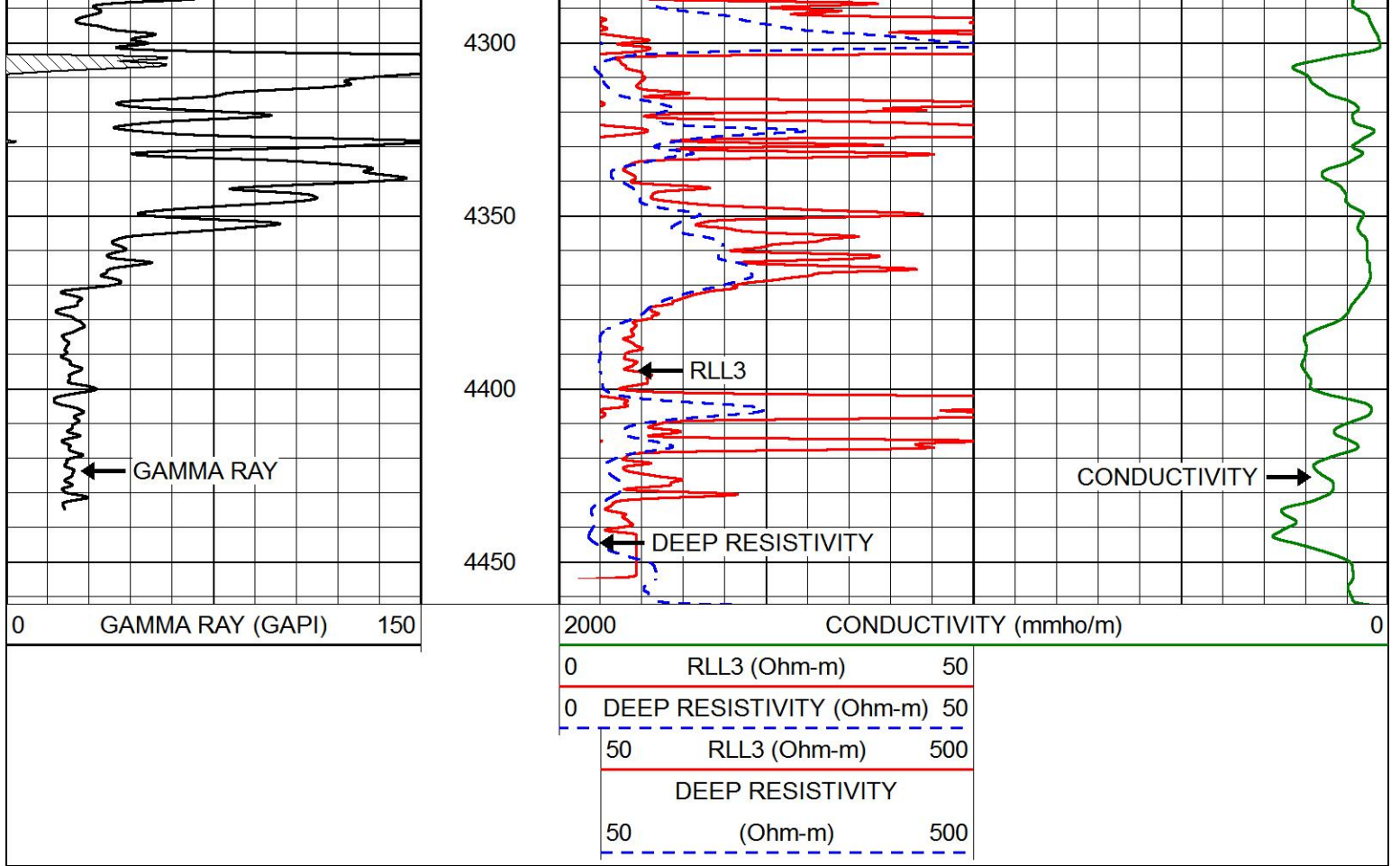
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4150

4200

4250

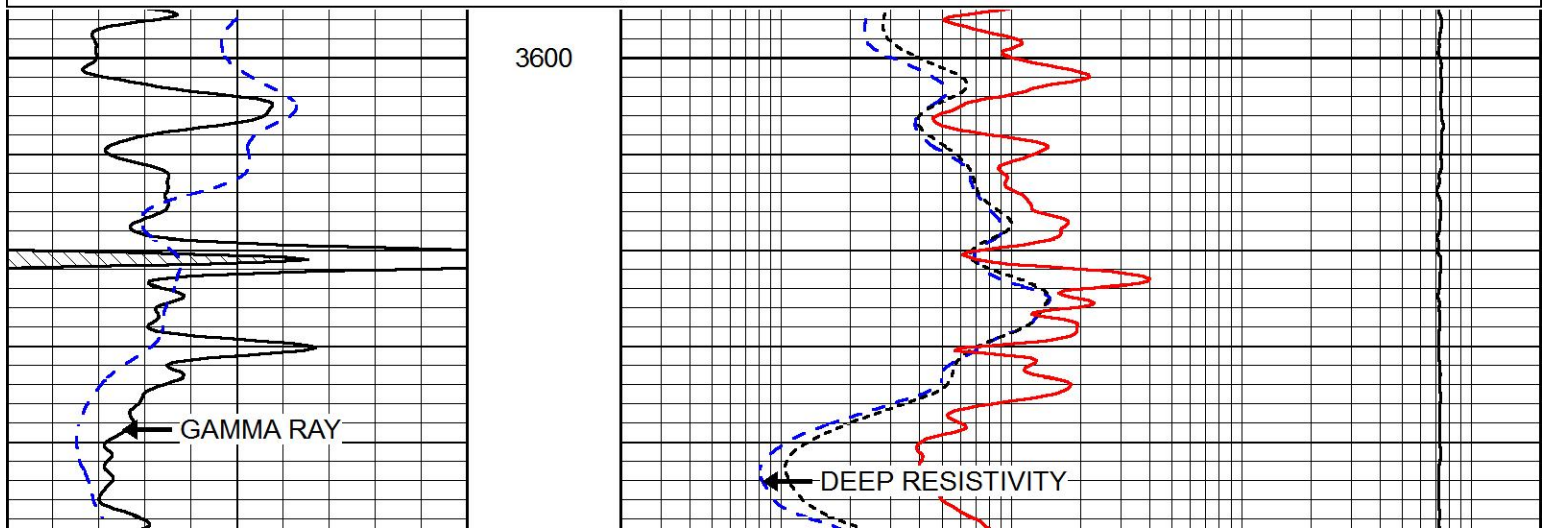


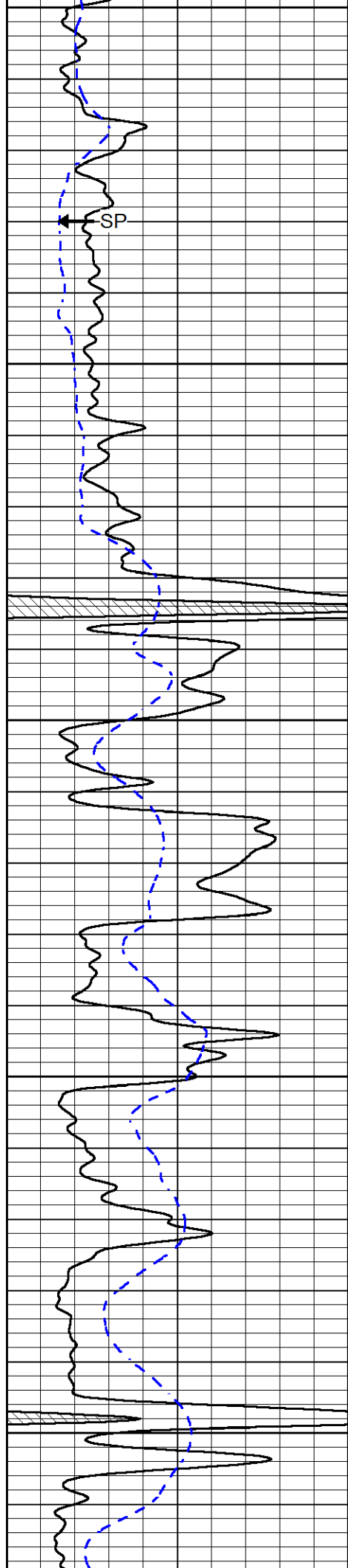


MAIN PASS

Database File schaben_oil_foos_1_1.db
 Dataset Pathname stack/pass3.1
 Presentation Format dil
 Dataset Creation Mon Jun 25 22:59:43 2018
 Charted by Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150	0.2	DEEP RESISTIVITY (Ohm-m)	2000
-200	SP (mV)	0	0.2	MEDIUM RESISTIVITY (Ohm-m)	2000
			0.2	RLL3 (Ohm-m)	2000
			15000	LINE TENSION (lb)	0





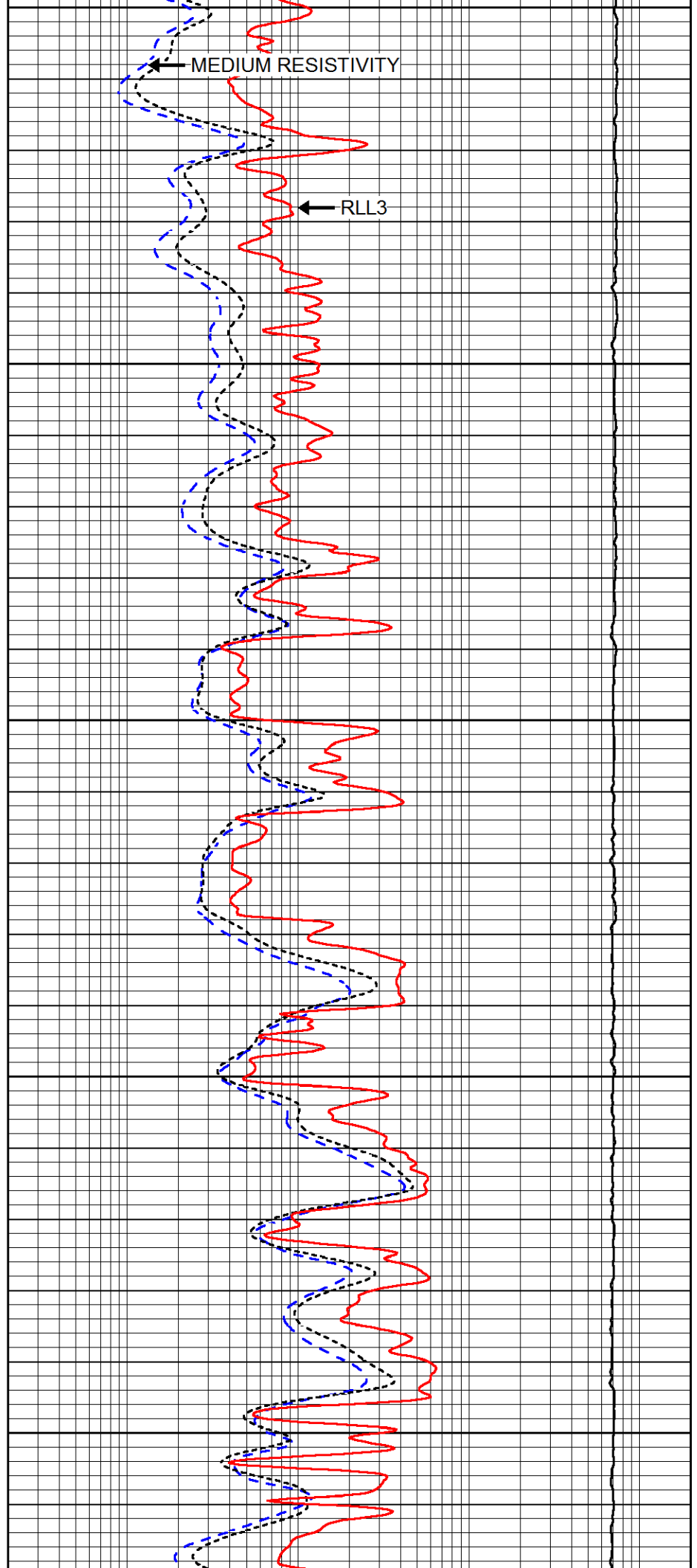
3650

3700

3750

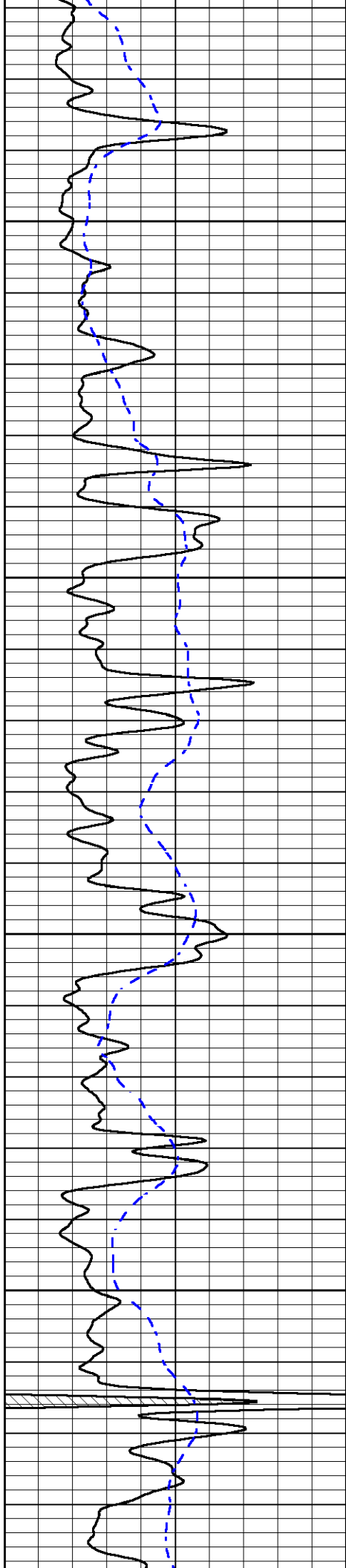
3800

3850



MEDIUM RESISTIVITY

RLL3

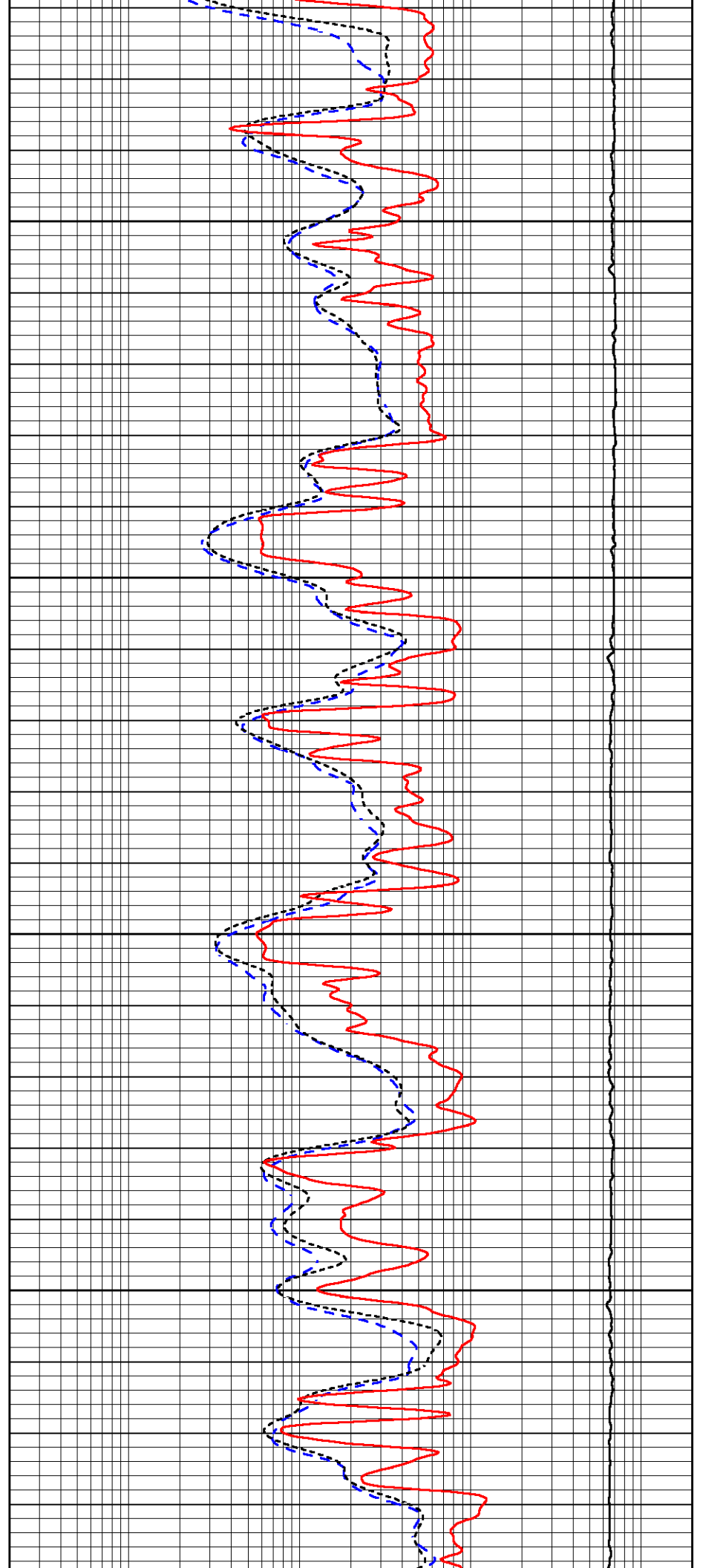


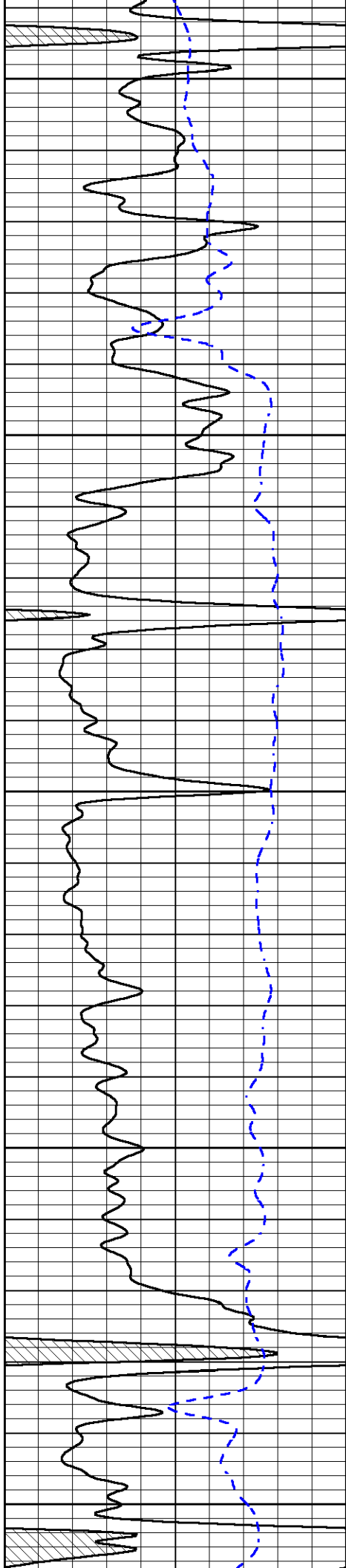
3900

3950

4000

4050





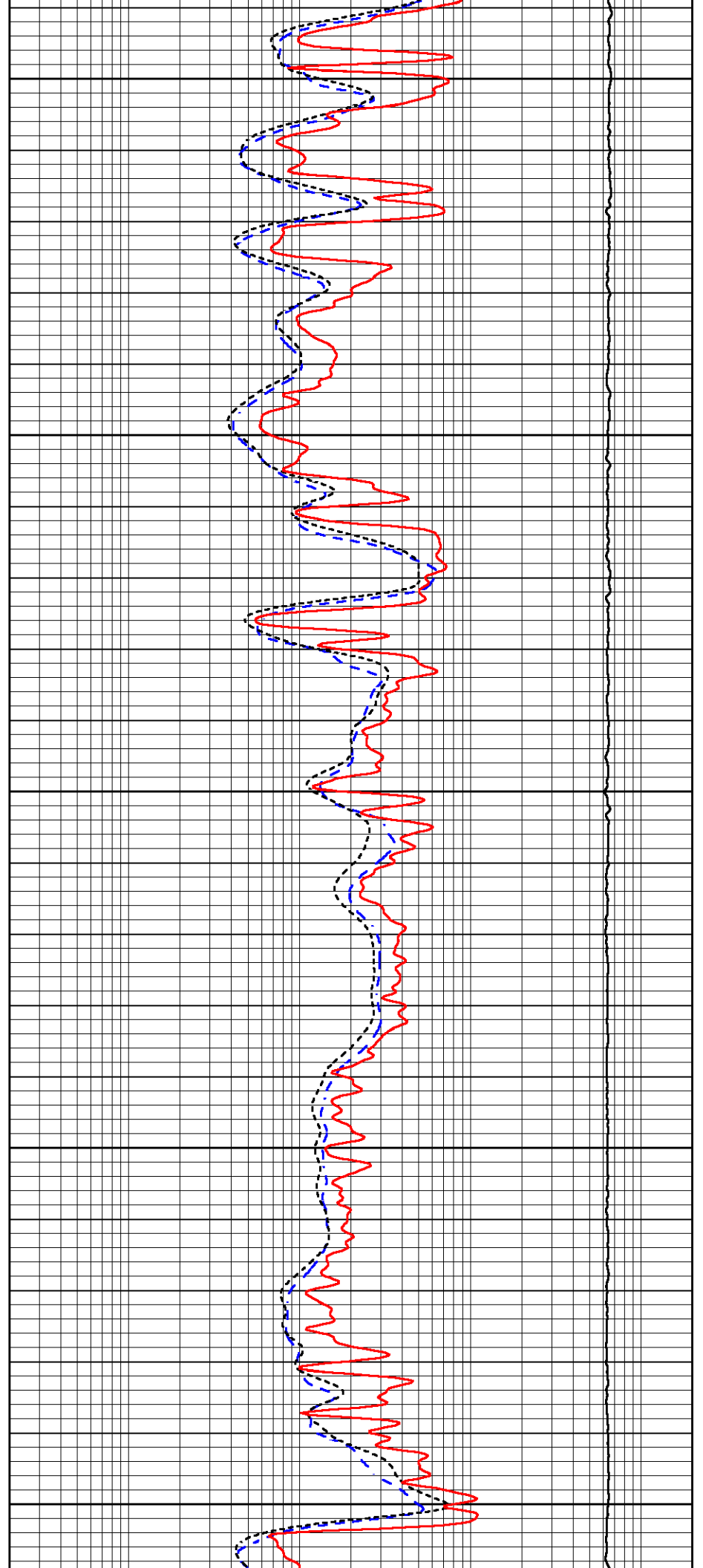
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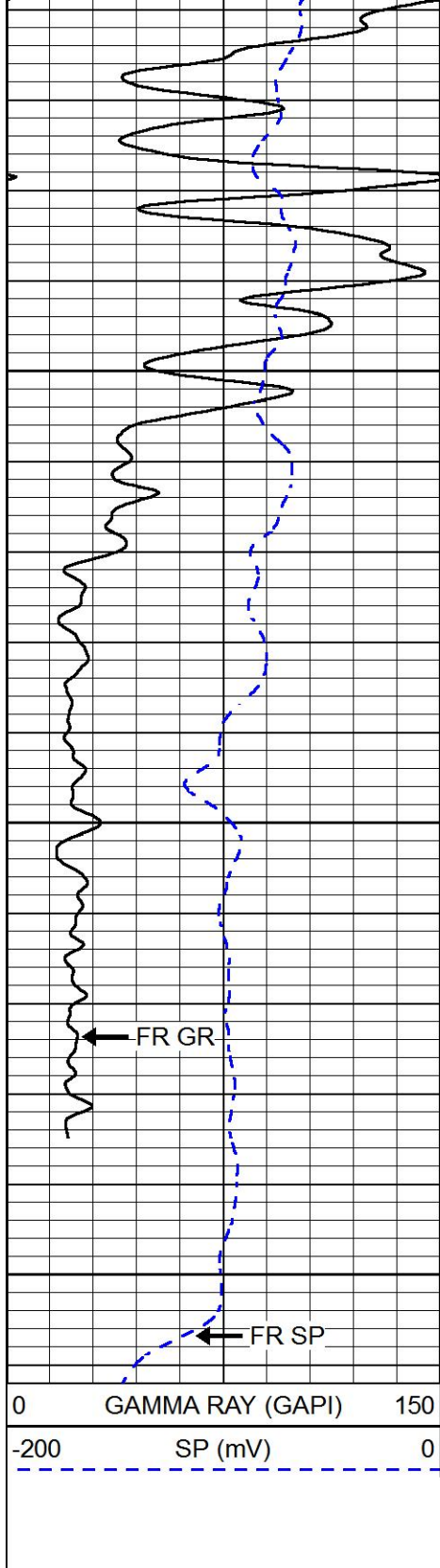
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4200

4250

4300





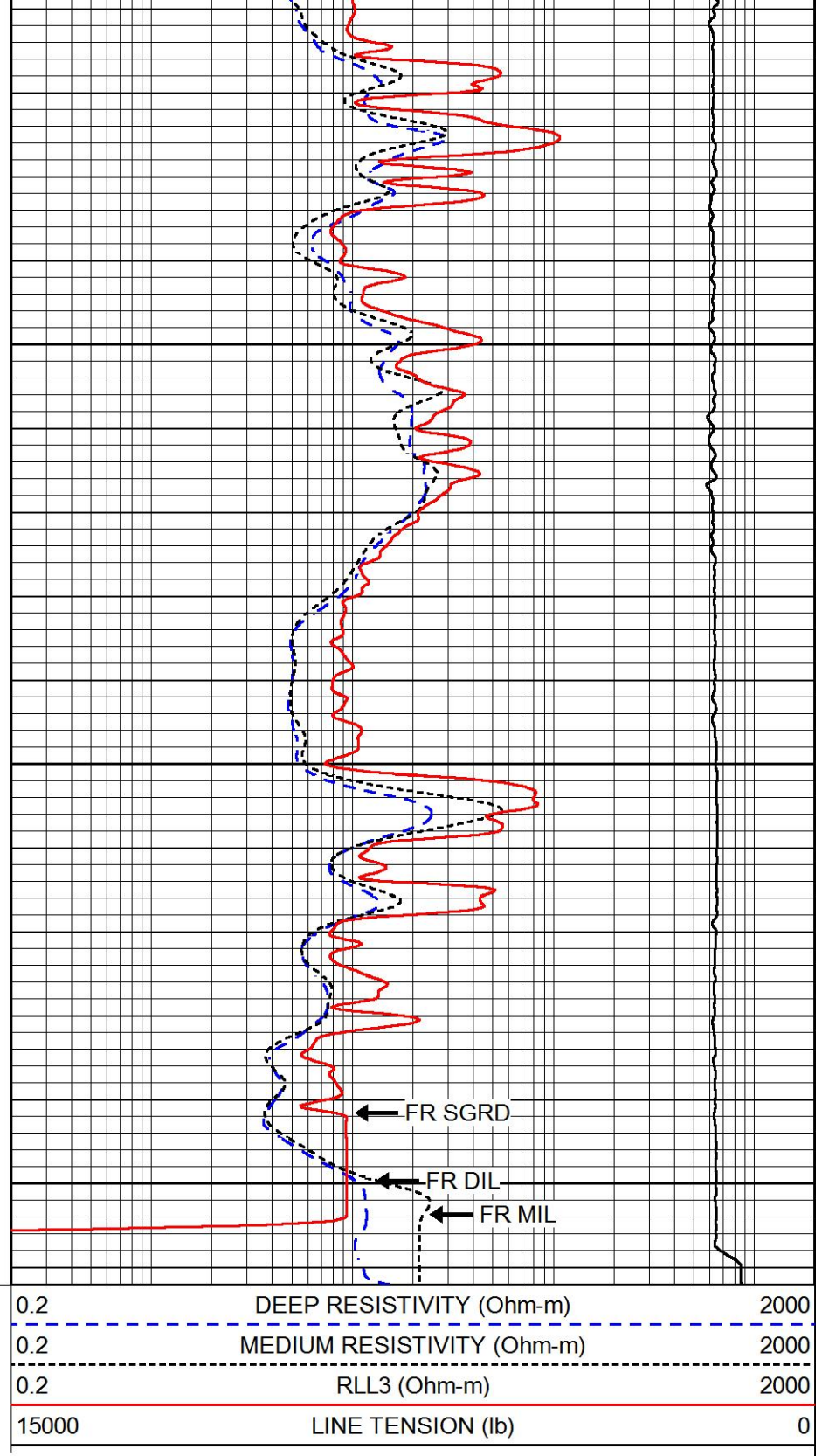
4350

4400

4450

FR GR

FR SP



FR SGRD

FR DIL

FR MIL

DEEP RESISTIVITY (Ohm-m)

MEDIUM RESISTIVITY (Ohm-m)

RLL3 (Ohm-m)

LINE TENSION (lb)

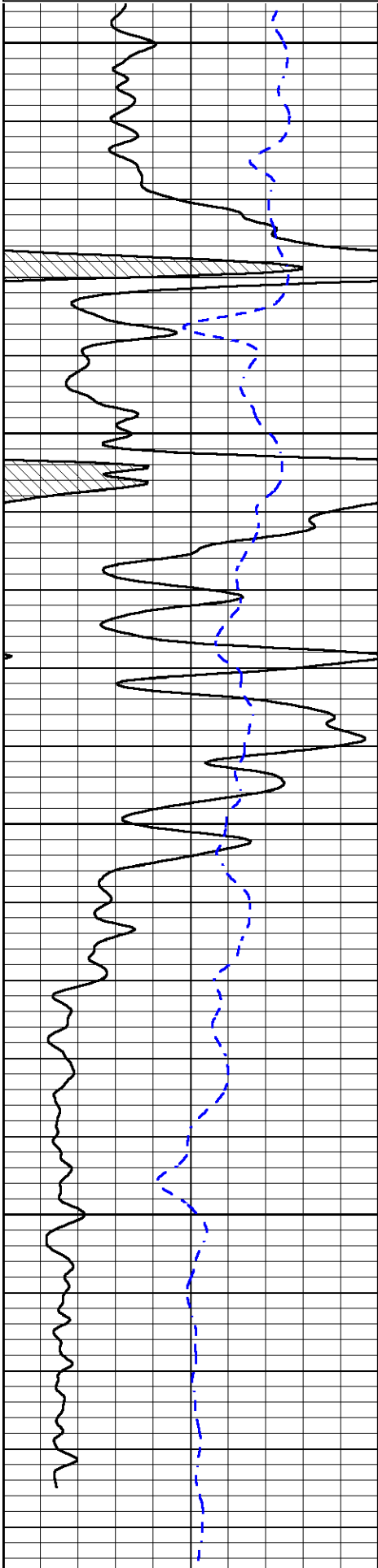


REPEAT SECTION

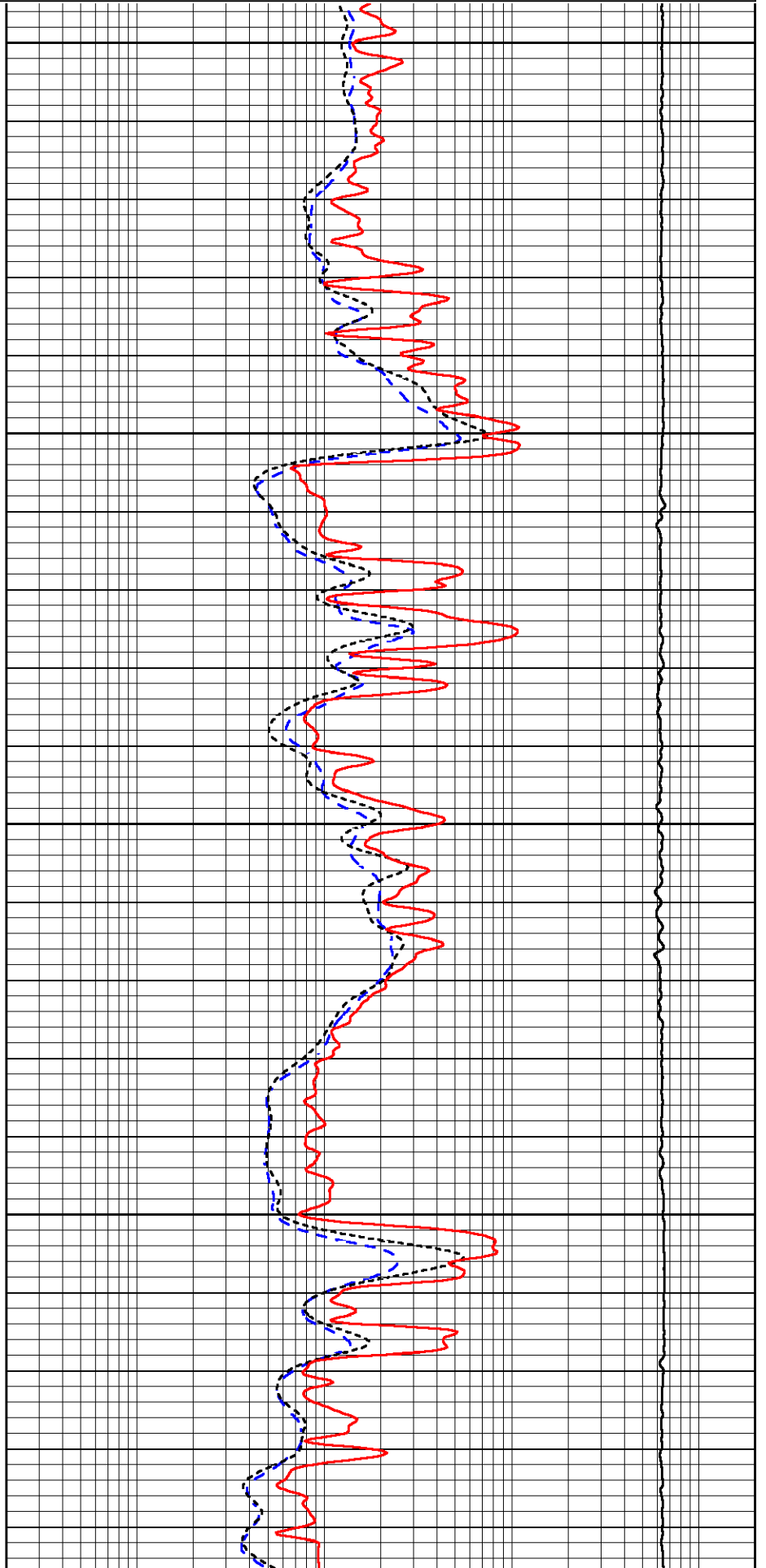
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 Dataset Pathname stack/pass2.1
 Presentation Format dil
 Dataset Creation Mon Jun 25 23:00:20 2018
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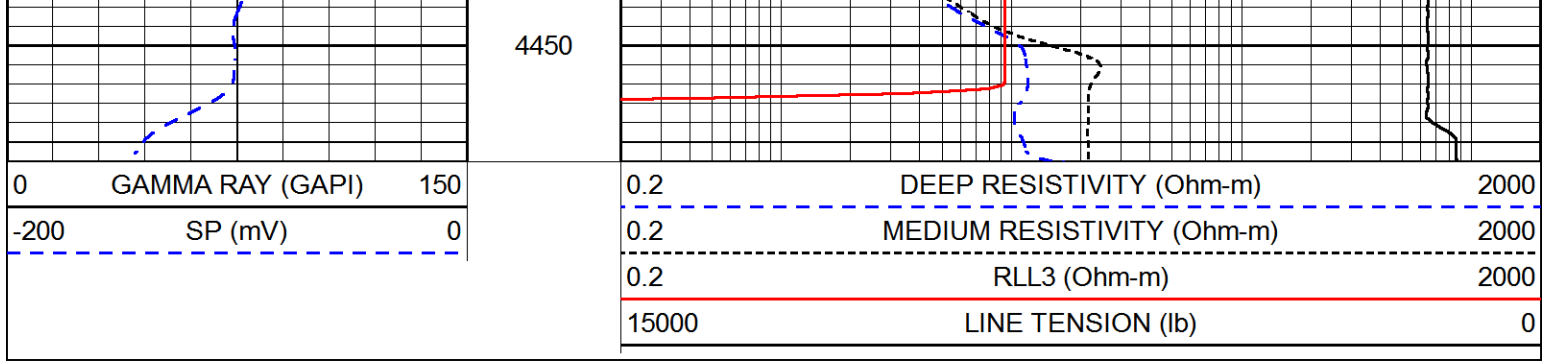
0	GAMMA RAY (GAPI)	150
-200	SP (mV)	0

0.2	DEEP RESISTIVITY (Ohm-m)	2000
0.2	MEDIUM RESISTIVITY (Ohm-m)	2000
0.2	RLL3 (Ohm-m)	2000
15000	LINE TENSION (lb)	0



4250
4300
4350
4400





Calibration Report

Database File schaben_oil_foos_1_1.db
 Dataset Pathname stack/pass3.1
 Dataset Creation Mon Jun 25 22:59:43 2018

Dual Induction Calibration Report

Serial-Model: 1987-M&W
 Calibration Performed: Tue Apr 11 17:07:38 2017

Loop:	Readings		References			Results	
	Air	Loop	Air	Loop		Gain	Offset
Deep	178.615	710.235	0.000	255.800	mmho/m	0.530	-36.500
Medium	161.982	1441.110	0.000	255.800	mmho/m	0.440	-110.500

Compensated Density Calibration Report

Serial-Model: 979-229-M&W
 Source / Verifier: 21170B /
 Master Calibration Performed: Fri Jun 22 09:12:59 2018

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.755	g/cc	7726.98	9910.47	cps
Aluminum	2.675	g/cc	1442.93	6391.03	cps
Spine Angle = 75.35			Density/Spine Ratio = 0.530		
	Size		Reading		
Small Ring	4.00	in	1.16		
Large Ring	16.00	in	1.03		

Compensated Neutron Calibration Report

Serial Number: tk10-MW
 Tool Model: M&W
 Calibration Performed: Wed Nov 16 11:21:36 2016

Detector	Readings		Target		Normalization
Short Space	6240.00	cps	1000.00	cps	1.6025
Long Space	460.00	cps	1000.00	cps	1.9500

Serial Number:	89-M&W	
Tool Model:	M&W	
Calibration Performed:	Tue Apr 11 17:08:01 2017	
Calibrator Value:	1000.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	6.2	cps
Sensitivity:	0.5200	GAPI/cps



PIONEER

Pioneer Energy Services

Company	SCHABEN OIL, LLC
Well	FOOS NO. 1-1
Field	SCHABEN
County	NESS
State	KANSAS



Company: Schaben Oil, LLC
Lease: Foos #1-1

SEC: 1 TWN: 20S RNG: 22W
 County: NESS
 State: Kansas
 Drilling Contractor: WW Drilling, LLC - Rig 10
 Elevation: 2238 EGL
 Field Name: Schaben
 Pool: Pool Ext.
 Job Number: 150

DATE
 June
25
 2018

DST #1 **Formation: Mississippi** **Test Interval: 4326 - 4384'** **Total Depth: 4384'**
 Time On: 02:33 06/25 Time Off: 10:26 06/25
 Time On Bottom: 05:10 06/25 Time Off Bottom: 08:10 06/25

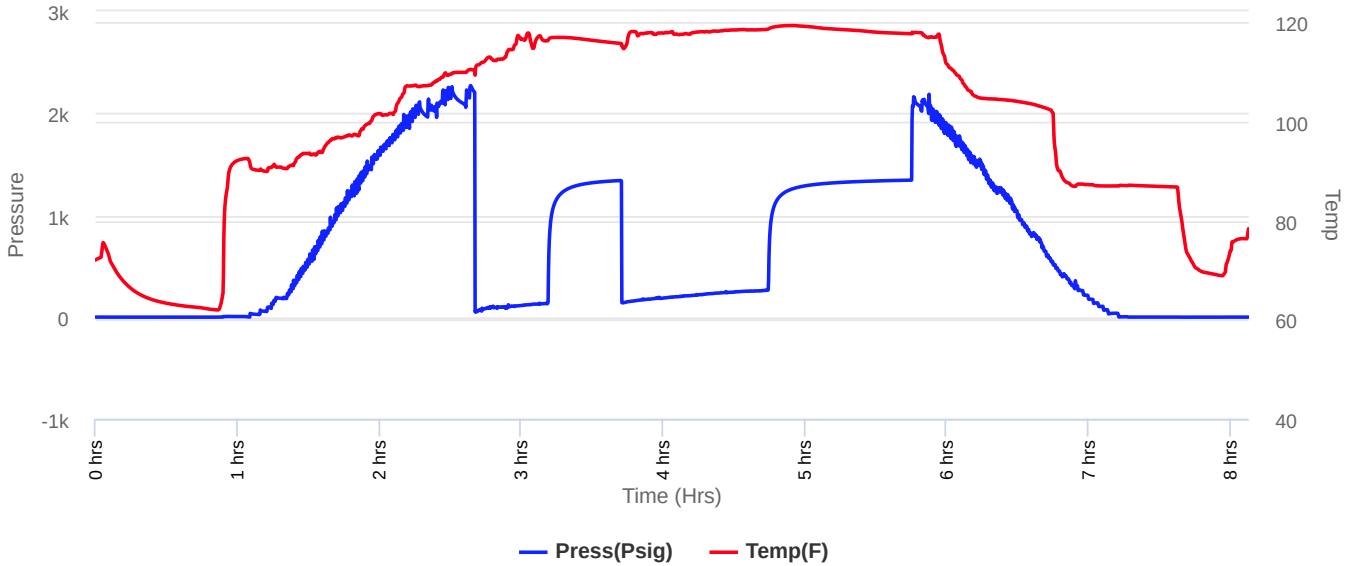
Electronic Volume Estimate:
 536'

1st Open
 Minutes: 30
 16.7" at 30 min

1st Close
 Minutes: 30
 0" at 30 min

2nd Open
 Minutes: 60
 24.8" at 60 min

2nd Close
 Minutes: 60
 0" at 60 min





Company: Schaben Oil, LLC
Lease: Foos #1-1

SEC: 1 TWN: 20S RNG: 22W
 County: NESS
 State: Kansas
 Drilling Contractor: WW Drilling, LLC - Rig 10
 Elevation: 2238 EGL
 Field Name: Schaben
 Pool: Pool Ext.
 Job Number: 150

DATE
 June
25
 2018

DST #1 **Formation: Mississippi** **Test Interval: 4326 - 4384'** **Total Depth: 4384'**
 Time On: 02:33 06/25 Time Off: 10:26 06/25
 Time On Bottom: 05:10 06/25 Time Off Bottom: 08:10 06/25

Recovered

Foot	BBLs	Description of Fluid	Gas %	Oil %	Water %	Mud %
3	0.04269	SLWCSLGCSLOCM	7	15	3	75
63	0.89649	SLOCWCM	0	10	25	65
189	2.68947	WCOCGCM	25	25	20	30
189	2.1439971	SLMCSLWCHOCG	40	35	15	10
63	0.30996	SLMCSLWCHOCG	45	40	10	5

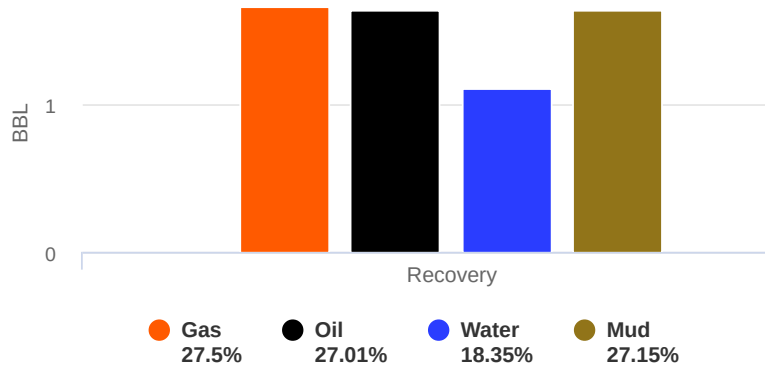
Total Recovered: 507 ft
 Total Barrels Recovered: 6.0826071

Reversed Out
NO

Initial Hydrostatic Pressure 2120 PSI
 Initial Flow 49 to 133 PSI
Initial Closed in Pressure 1340 PSI
 Final Flow Pressure 142 to 264 PSI
Final Closed in Pressure 1343 PSI
 Final Hydrostatic Pressure 2112 PSI
 Temperature 120 °F

 Pressure Change Initial 0.0 %
 Close / Final Close

Recovery at a glance





Company: Schaben Oil, LLC
Lease: Foos #1-1

SEC: 1 TWN: 20S RNG: 22W
County: NESS
State: Kansas
Drilling Contractor: WW Drilling, LLC -
Rig 10
Elevation: 2238 EGL
Field Name: Schaben
Pool: Pool Ext.
Job Number: 150

DATE June 25 2018
--

DST #1	Formation: Mississippi	Test Interval: 4326 - 4384'	Total Depth: 4384'
	Time On: 02:33 06/25	Time Off: 10:26 06/25	
	Time On Bottom: 05:10 06/25	Time Off Bottom: 08:10 06/25	

REMARKS:

1ft slide
lf:1" Bob in 20min
lc:nobb
Ff:wsb Bob in 25 min
Fc:nobb

Toolsample: 5g - 70o - 15w - 10m

Ph: 7

RW: .3 @ 72 degrees F

Chlorides: 23000 ppm



Company: Schaben Oil, LLC
Lease: Foos #1-1

SEC: 1 TWN: 20S RNG: 22W
 County: NESS
 State: Kansas
 Drilling Contractor: WW Drilling, LLC -
 Rig 10
 Elevation: 2238 EGL
 Field Name: Schaben
 Pool: Pool Ext.
 Job Number: 150

DATE June 25 2018
--

DST #1 **Formation:** Mississippi **Test Interval: 4326 - 4384'** **Total Depth: 4384'**

Time On: 02:33 06/25 Time Off: 10:26 06/25
 Time On Bottom: 05:10 06/25 Time Off Bottom: 08:10 06/25

Down Hole Makeup

Heads Up: 18.26 FT	Packer 1: 4321 FT
Drill Pipe: 4190.1 FT <i>ID-3 1/2</i>	Packer 2: 4326 FT
Weight Pipe: FT <i>ID-2 7/8</i>	Top Recorder: 4310.42 FT
Collars: 121.59 FT <i>ID-2 1/4</i>	Bottom Recorder: 4363 FT
Test Tool: 33.57 FT <i>ID-3 1/2-FH</i> <i>Jars</i> <i>Safety Joint</i>	Well Bore Size: 7 7/8
Total Anchor: 58	Surface Choke: 1"
Anchor Makeup	Bottom Choke: 5/8"
Packer Sub: 1 FT	
Perforations: (top): 2 FT <i>4 1/2-FH</i>	
Change Over: .5 FT	
Drill Pipe: (in anchor): 31.5 FT <i>ID-3 1/2</i>	
Change Over: 1 FT	
Perforations: (below): 22 FT <i>4 1/2-FH</i>	



Company: Schaben Oil, LLC
Lease: Foos #1-1

SEC: 1 TWN: 20S RNG: 22W
County: NESS
State: Kansas
Drilling Contractor: WW Drilling, LLC -
Rig 10
Elevation: 2238 EGL
Field Name: Schaben
Pool: Pool Ext.
Job Number: 150

DATE June 25 2018
--

DST #1 **Formation:** **Test Interval: 4326 -** **Total Depth: 4384'**
Mississippi **4384'**
Time On: 02:33 06/25 Time Off: 10:26 06/25
Time On Bottom: 05:10 06/25 Time Off Bottom: 08:10 06/25

Mud Properties

Mud Type: Chemical **Weight:** 9.0 **Viscosity:** 59 **Filtrate:** 7.8 **Chlorides:** 12300 ppm



Company: Schaben Oil, LLC
Lease: Foos #1-1

SEC: 1 TWN: 20S RNG: 22W
 County: NESS
 State: Kansas
 Drilling Contractor: WW Drilling, LLC - Rig 10
 Elevation: 2238 EGL
 Field Name: Schaben
 Pool: Pool Ext.
 Job Number: 150

DATE
 June
26
 2018

DST #2 **Formation: Lower miss** **Test Interval: 4385 - 4404'** **Total Depth: 4460'**
 Time On: 02:13 06/26 Time Off: 09:09 06/26
 Time On Bottom: 04:35 06/26 Time Off Bottom: 06:35 06/26

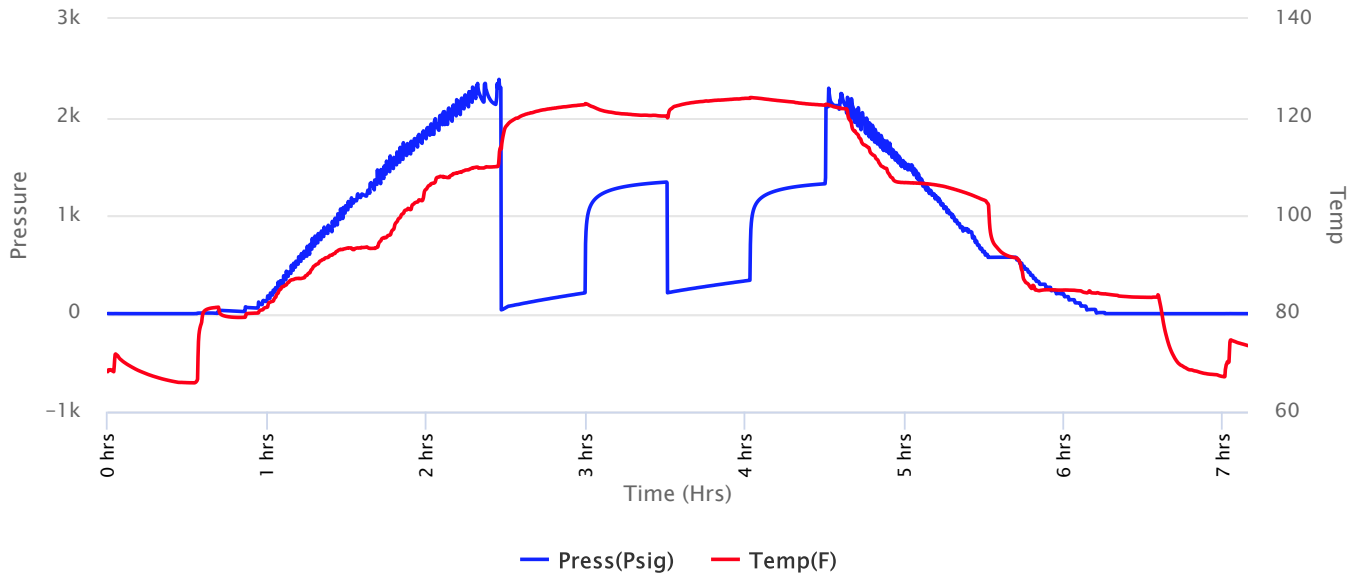
Electronic Volume Estimate:
 769'

1st Open
 Minutes: 30
 34" at 30 min

1st Close
 Minutes: 30
 .1" at 30 min

2nd Open
 Minutes: 30
 28.7" at 30 min

2nd Close
 Minutes: 30
 0" at 30 min





Company: Schaben Oil, LLC
Lease: Foos #1-1

SEC: 1 TWN: 20S RNG: 22W
 County: NESS
 State: Kansas
 Drilling Contractor: WW Drilling, LLC - Rig 10
 Elevation: 2238 EGL
 Field Name: Schaben
 Pool: Pool Ext.
 Job Number: 150

DATE
 June
26
 2018

DST #2 **Formation: Lower miss** **Test Interval: 4385 - 4404'** **Total Depth: 4460'**
 Time On: 02:13 06/26 Time Off: 09:09 06/26
 Time On Bottom: 04:35 06/26 Time Off Bottom: 06:35 06/26

Recovered

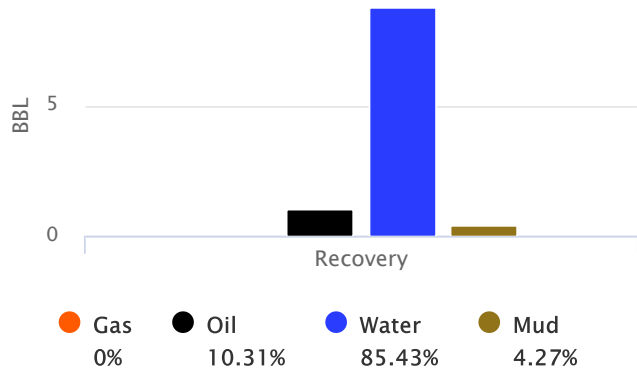
Foot	BBS	Description of Fluid	Gas %	Oil %	Water %	Mud %
15	0.21345	O	0	100	0	0
30	0.4269	SLOCMCW	0	10	65	25
126	1.79298	SLMCSLOCW	0	15	78	7
189	2.68947	SLMCSLOCW	0	15	82	3
189	2.68947	SLMCSLOCW	0	3	96	1
252	2.4539571	SLOCMLCW	0	2	94	4

Total Recovered: 801 ft
 Total Barrels Recovered: 10.2662271

Reversed Out
 NO

Initial Hydrostatic Pressure	2192	PSI
Initial Flow	38 to 212	PSI
Initial Closed in Pressure	1339	PSI
Final Flow Pressure	211 to 339	PSI
Final Closed in Pressure	1322	PSI
Final Hydrostatic Pressure	2181	PSI
Temperature	124	°F
Pressure Change Initial Close / Final Close	1.3	%

Recovery at a glance





Company: Schaben Oil, LLC
Lease: Foos #1-1

SEC: 1 TWN: 20S RNG: 22W
 County: NESS
 State: Kansas
 Drilling Contractor: WW Drilling, LLC - Rig 10
 Elevation: 2238 EGL
 Field Name: Schaben
 Pool: Pool Ext.
 Job Number: 150

DATE
 June
26
 2018

DST #2 **Formation: Lower miss** **Test Interval: 4385 - 4404'** **Total Depth: 4460'**
 Time On: 02:13 06/26 Time Off: 09:09 06/26
 Time On Bottom: 04:35 06/26 Time Off Bottom: 06:35 06/26

REMARKS:

If: 3/4" bob in 8 1/2min
 Ic: wsb
 Ff: 1/2" bob in 12min
 Fc: nobb

Toolsample: 2o - 94w - 4m

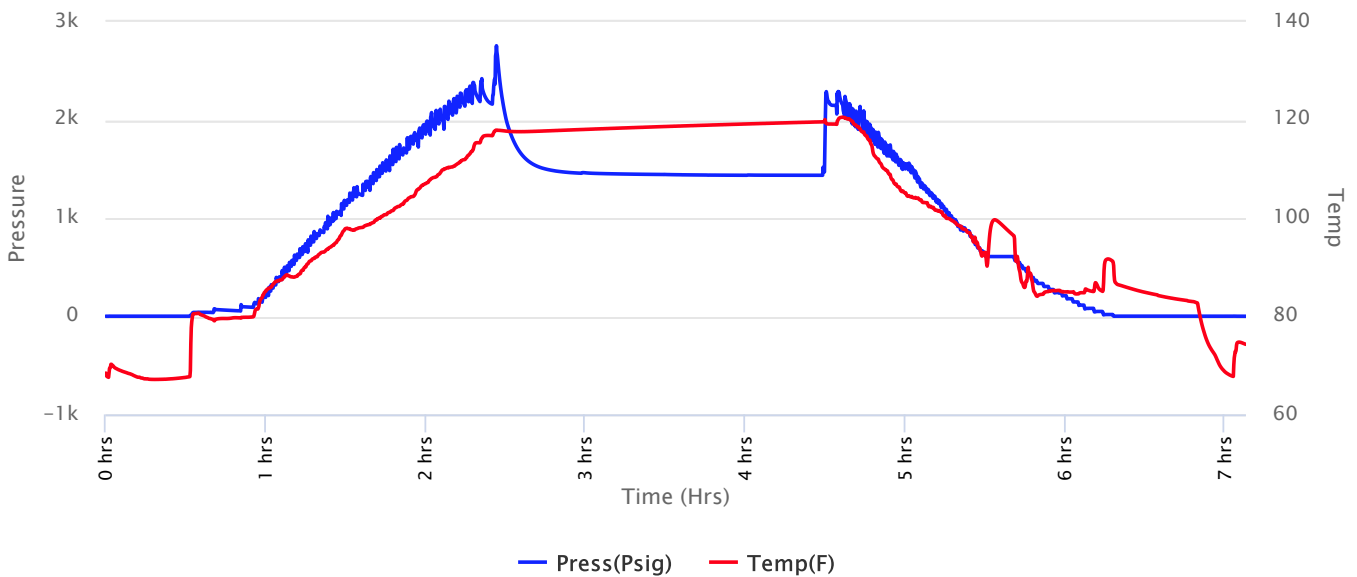
Gravity: 35.2 @ 60 degrees F

Ph: 7

RW: .35 @ 70 degrees F

Chlorides: 19000 ppm

Below Straddle Recorder





Company: Schaben Oil, LLC
Lease: Foos #1-1

SEC: 1 TWN: 20S RNG: 22W
 County: NESS
 State: Kansas
 Drilling Contractor: WW Drilling, LLC -
 Rig 10
 Elevation: 2238 EGL
 Field Name: Schaben
 Pool: Pool Ext.
 Job Number: 150

DATE
June
26
2018

DST #2 **Formation: Lower miss** **Test Interval: 4385 - 4404'** **Total Depth: 4460'**

Time On: 02:13 06/26 Time Off: 09:09 06/26
 Time On Bottom: 04:35 06/26 Time Off Bottom: 06:35 06/26

Down Hole Makeup

Heads Up: 22.36 FT	Packer 1: 4380 FT
Drill Pipe: 4253.2 FT <i>ID-3 1/2</i>	Packer 2: 4385 FT
Weight Pipe: FT <i>ID-2 7/8</i>	Packer 3: 4404 FT
Collars: 121.59 FT <i>ID-2 1/4</i>	Top Recorder: 4369.42 FT
Test Tool: 33.57 FT <i>ID-3 1/2-FH</i> <i>Jars</i> <i>Safety Joint</i>	Bottom Recorder: 4387 FT
Total Anchor: 19	Below Straddle Recorder: 4439 FT
	Well Bore Size: 7 7/8
	Surface Choke: 1"
	Bottom Choke: 5/8"

Anchor Makeup

Packer Sub: 1 FT

Perforations: (top): FT
4 1/2-FH

Change Over: FT

Drill Pipe: (in anchor): FT
ID-3 1/2

Change Over: FT

Perforations: (below): 18 FT
4 1/2-FH

STRADDLE

Straddle Packer(s): 1 FT

Change Over: 1 FT

Drill Pipe: 31.66 FT
ID-3 1/2"

Change Over: .5 FT

Perforations (in tail pipe): 22 FT
4 1/2-FH



Company: Schaben Oil, LLC
Lease: Foos #1-1

SEC: 1 TWN: 20S RNG: 22W
County: NESS
State: Kansas
Drilling Contractor: WW Drilling, LLC -
Rig 10
Elevation: 2238 EGL
Field Name: Schaben
Pool: Pool Ext.
Job Number: 150

DATE June 26 2018
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DST #2	Formation: Lower miss	Test Interval: 4385 - 4404'	Total Depth: 4460'
	Time On: 02:13 06/26	Time Off: 09:09 06/26	
	Time On Bottom: 04:35 06/26	Time Off Bottom: 06:35 06/26	

Mud Properties

Mud Type: Chemical **Weight:** 9.5 **Viscosity:** 55 **Filtrate:** 8.0 **Chlorides:** 13500 ppm



Home
(785) 798-2400

Andrew Stenzel Geologist

Ness City, Kansas



Cell
(785) 798-5977

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

Well Name: Foos 1-1
API: 15-135-26002
Location: SW-NE-NW-NE Sec. 1-20S-22W (Ness County)
License Number: 35033
Spud Date: 6/19/2018
Surface Coordinates: 650' FNL & 1900' FEL
Region: KANSAS
Drilling Completed: 6/26/2018

Bottom Hole
Coordinates:
Ground Elevation (ft): 2226
Logged Interval (ft): 3600 To: TD
Formation: MISSISSIPPI
Type of Drilling Fluid: Mud-Co Chemical
K.B. Elevation (ft): 2231
Total Depth (ft): 4460

Printed by MudLog from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: Schaben Oil LLC
Address: 4145 Keystone
Hays, KS 67601

GEOLOGIST

Name: Andrew Stenzel
Company: Petroleum Geologist
Address: 501 S. Franklin
Ness City, KS 67560

Drilling Report

DAILY DRILLING REPORT:

6/19/18 MIRU, Ran surface casing
6/20/18 Drilling @ 630'
6/21/18 Drilling @ 2439'
6/22/18 Drilling @ 3169'
6/23/18 Drilling @ 3756'
6/24/18 Drilling @ 4166'
6/25/18 DST #1, ran electric logs
6/26/18 DST #2, ran 5 1/2" casing

Services

RIG: WW DRILLING, Rig #10

MUD: MUDCO

LOGS: Pioneer Wireline, CNDL, DIL, ML, SL

Casing Record

SURFACE Casing: 5 jts new 8 5/8", 23# casing at 218'

PRODUCTION Casing: Ran 5 1/2" casing

Formation Tops

Sample Tops		LogTops	
Anhy.	1483 (+748)	Anhy.	1480 (+751)
Base Anhy.	1515 (+716)	Base Anhy.	1512 (+719)
Heebner	3736 (-1505)	Heebner	3730 (-1499)
Lansing	3779 (-1548)	Lansing	3778 (-1547)
BKC	4093 (-1862)	BKC	4092 (-1961)
Marmaton	4130 (-1899)	Marmaton	4131 (-1900)
Pawnee	4202 (-1971)	Pawnee	4202 (-1971)
Ft. Scott	4284 (-2053)	Ft. Scott	4282 (-2051)
Cher. Sh.	4306 (-2075)	Cher. Sh.	4303 (-2072)
Miss.	4365 (-2134)	Miss.	4356 (-2125)
RTD	4460 (-2229)	LTD	4458 (-2227)



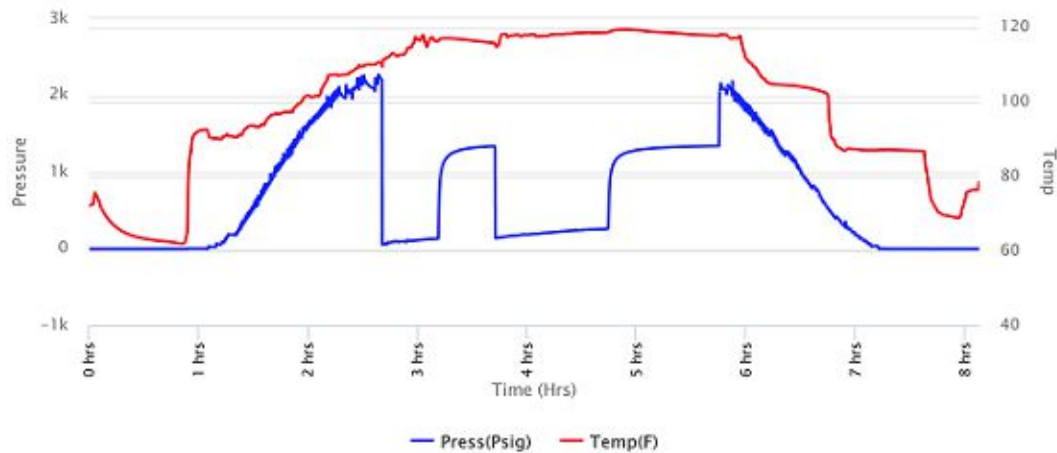
Company: Schaben Oil, LLC
Lease: Foos #1-1

SEC: 1 TWN: 20S RNG: 22W
 County: NESS
 State: Kansas
 Drilling Contractor: Good Rig (Demo Rig)
 Elevation: 2238 EGL
 Field Name: Schaben
 Pool: Pool Ext.
 Job Number: 150

DATE
 June
25
 2018

DST #1 **Formation: Mississippi** **Test Interval: 4326 - 4384'** **Total Depth: 4384'**
 Time On: 02:33 06/25 Time Off: 10:26 06/25
 Time On Bottom: 05:10 06/25 Time Off Bottom: 08:10 06/25

Electronic Volume Estimate: 536'	<u>1st Open</u> Minutes: 30 16.7" at 30 min	<u>1st Close</u> Minutes: 30 0" at 30 min	<u>2nd Open</u> Minutes: 60 24.8" at 60 min	<u>2nd Close</u> Minutes: 60 0" at 60 min
----------------------------------	---	---	---	---



Company: Schaben Oil, LLC
Lease: Foos #1-1

SEC: 1 TWN: 20S RNG: 22W
 County: NESS
 State: Kansas
 Drilling Contractor: Good Rig (Demo Rig)
 Elevation: 2238 EGL
 Field Name: Schaben
 Pool: Pool Ext.
 Job Number: 150

DATE
 June
25
 2018

DST #1 **Formation: Mississippi** **Test Interval: 4326 - 4384'** **Total Depth: 4384'**
 Time On: 02:33 06/25 Time Off: 10:26 06/25
 Time On Bottom: 05:10 06/25 Time Off Bottom: 08:10 06/25

Recovered

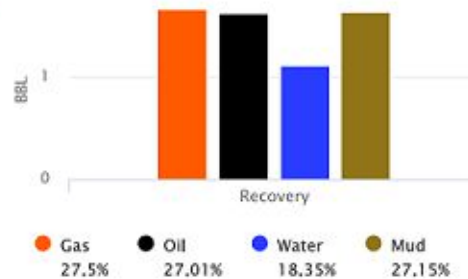
Foot	BBLs	Description of Fluid	Gas %	Oil %	Water %	Mud %
3	0.04269	SLWCSLGCSLOCM	7	15	3	75
63	0.89649	SLOCWCM	0	10	25	65
189	2.68947	WCOCGCM	25	25	20	30
189	2.1439971	SLMCSLWCHOCG	40	35	15	10
63	0.30996	SLMCSLWCHOCG	45	40	10	5

Total Recovered: 507 ft
 Total Barrels Recovered: 6.0826071

Reversed Out
NO

Initial Hydrostatic Pressure	2120	PSI
Initial Flow	49 to 133	PSI
Initial Closed in Pressure	1340	PSI
Final Flow Pressure	142 to 264	PSI
Final Closed in Pressure	1343	PSI
Final Hydrostatic Pressure	2112	PSI
Temperature	120	*F
Pressure Change Initial	0.0	%

Recovery at a glance





Company: Schaben Oil, LLC
Lease: Foos #1-1

SEC: 1 TWN: 20S RNG: 22W
 County: NESS
 State: Kansas
 Drilling Contractor: WW Drilling, LLC - Rig 10
 Elevation: 2238 EGL
 Field Name: Schaben
 Pool: Pool Ext.
 Job Number: 150

DATE
 June
26
 2018

DST #2 **Formation: Lower miss** **Test Interval: 4385 - 4404'** **Total Depth: 4460'**
 Time On: 02:13 06/26 Time Off: 09:09 06/26
 Time On Bottom: 04:35 06/26 Time Off Bottom: 06:35 06/26

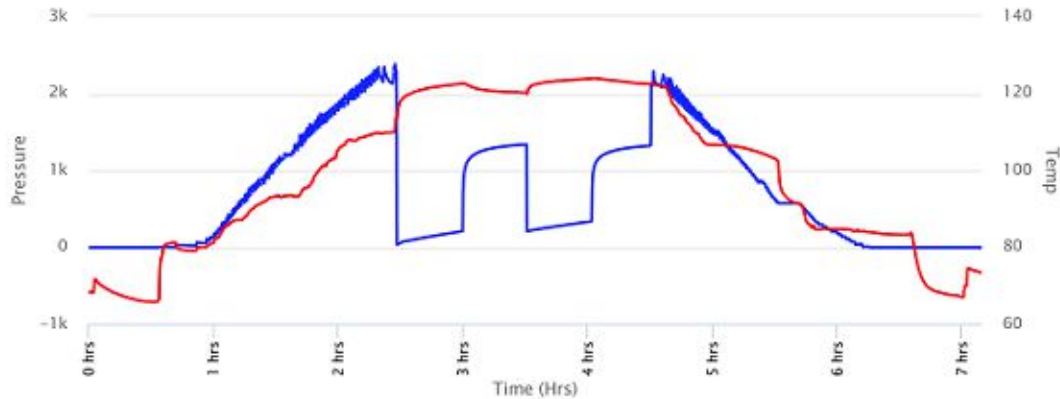
Electronic Volume Estimate:
 769'

1st Open
 Minutes: 30
 34" at 30 min

1st Close
 Minutes: 30
 .1" at 30 min

2nd Open
 Minutes: 30
 28.7" at 30 min

2nd Close
 Minutes: 30
 0" at 30 min



Company: Schaben Oil, LLC
Lease: Foos #1-1

SEC: 1 TWN: 20S RNG: 22W
 County: NESS
 State: Kansas
 Drilling Contractor: WW Drilling, LLC - Rig 10
 Elevation: 2238 EGL
 Field Name: Schaben
 Pool: Pool Ext.
 Job Number: 150

DATE
 June
26
 2018

DST #2 **Formation: Lower miss** **Test Interval: 4385 - 4404'** **Total Depth: 4460'**
 Time On: 02:13 06/26 Time Off: 09:09 06/26
 Time On Bottom: 04:35 06/26 Time Off Bottom: 06:35 06/26

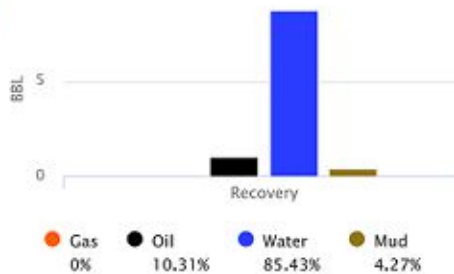
Recovered		Description of Fluid	Gas %	Oil %	Water %	Mud %
Foot	BBLs					
15	0.21345	O	0	100	0	0
30	0.4269	SLOCWCW	0	10	65	25
126	1.79298	SLMCSLOCW	0	15	78	7
189	2.68947	SLMCSLOCW	0	15	82	3
189	2.68947	SLMCSLOCW	0	3	96	1
252	2.4539571	SLOCSLMCW	0	2	94	4

Total Recovered: 801 ft
 Total Barrels Recovered: 10.2662271


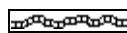
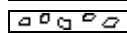
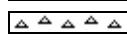
Reversed Out
 NO

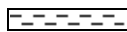


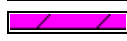
Initial Hydrostatic Pressure	2192	PSI
Initial Flow	38 to 212	PSI
Initial Closed in Pressure	1339	PSI
Final Flow Pressure	211 to 339	PSI
Final Closed in Pressure	1322	PSI
Final Hydrostatic Pressure	2181	PSI
Temperature	124	°F
Pressure Change Initial Close / Final Close	1.3	%





Recovery at a glance

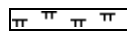

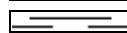
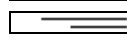


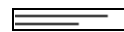



ROCK TYPES

-  Anhy
-  Bent
-  Brec
-  Cht

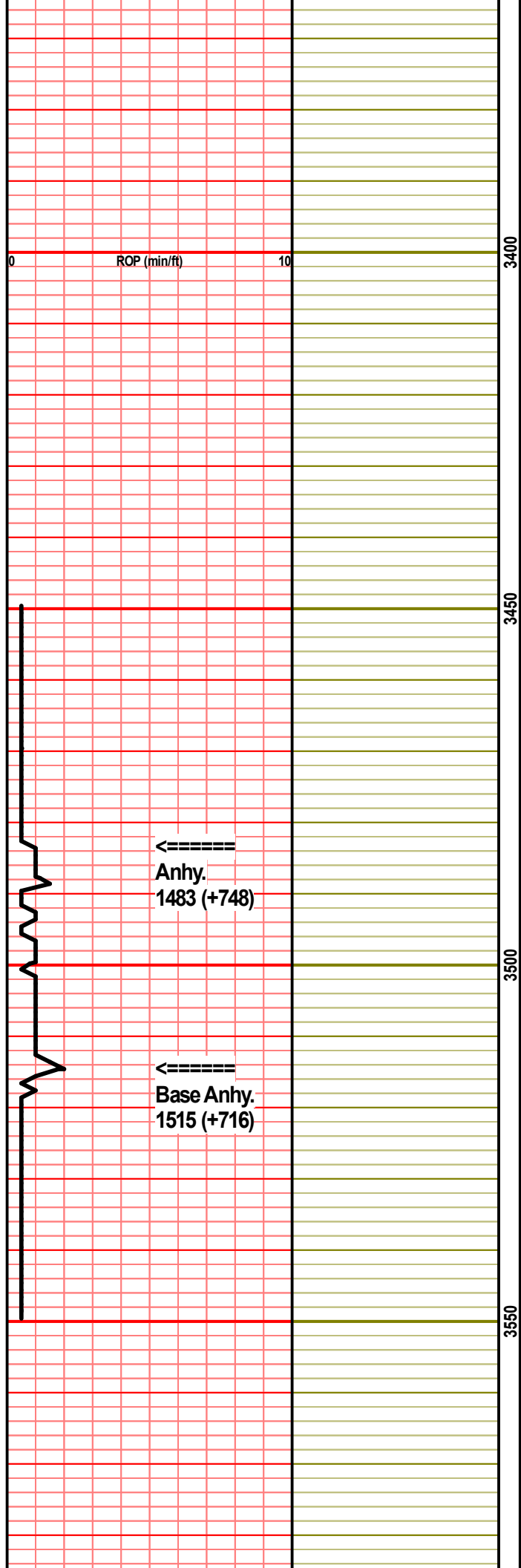
-  Clyst
-  Carb shale
-  Congl
-  Dol

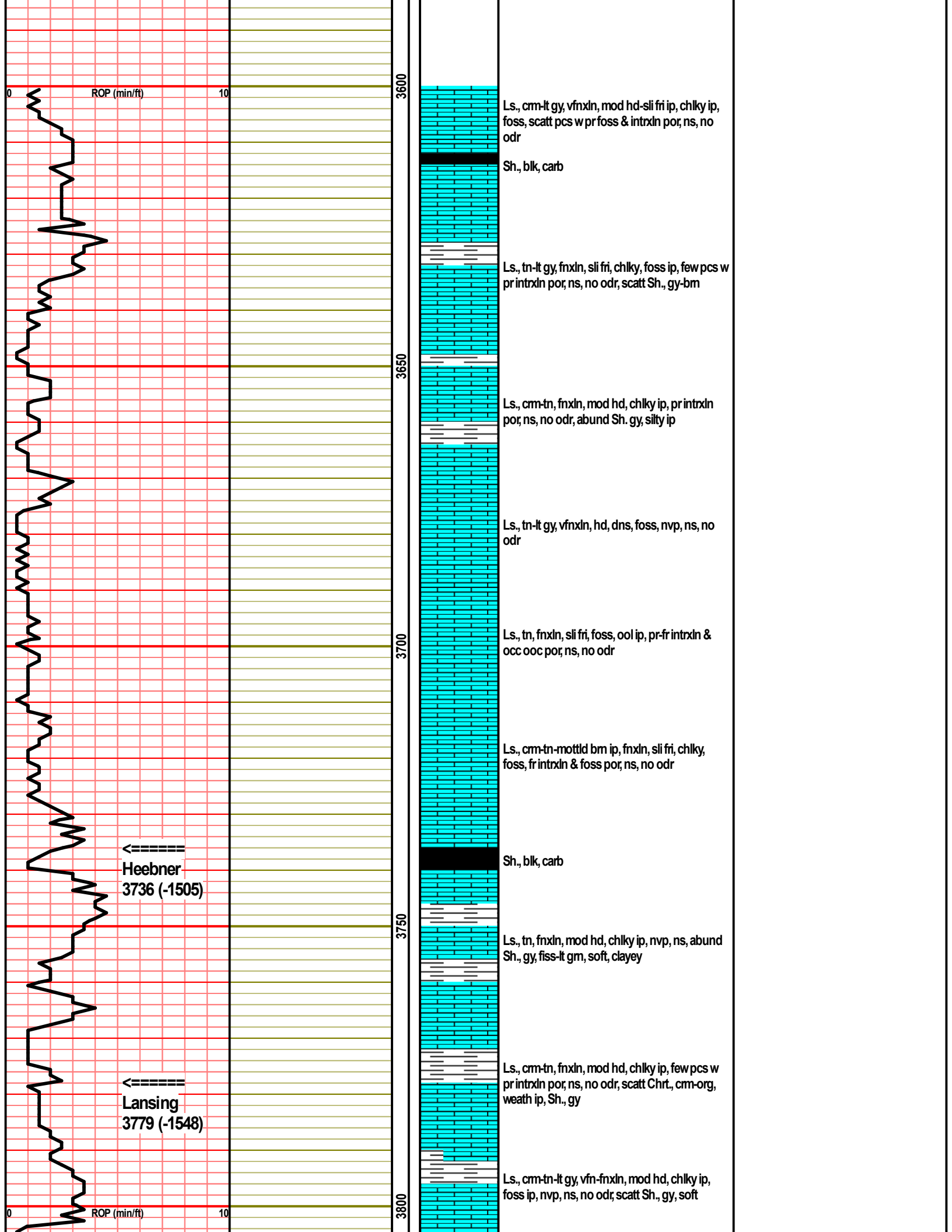
-  Gyp
-  Igne
-  Lmst
-  Meta

-  Mrlst
-  Salt
-  Shale
-  Shcol

-  Shgy
-  Sltst
-  Ss
-  Till

ROP ROP (min/ft)	Misc	Depth <small>Of Strata</small>	% Lithology	Geological Descriptions	DST
0		32			
10					
		3250			
		3300			
		3350			





ROP (min/ft)

10

3600

3650

3700

3750

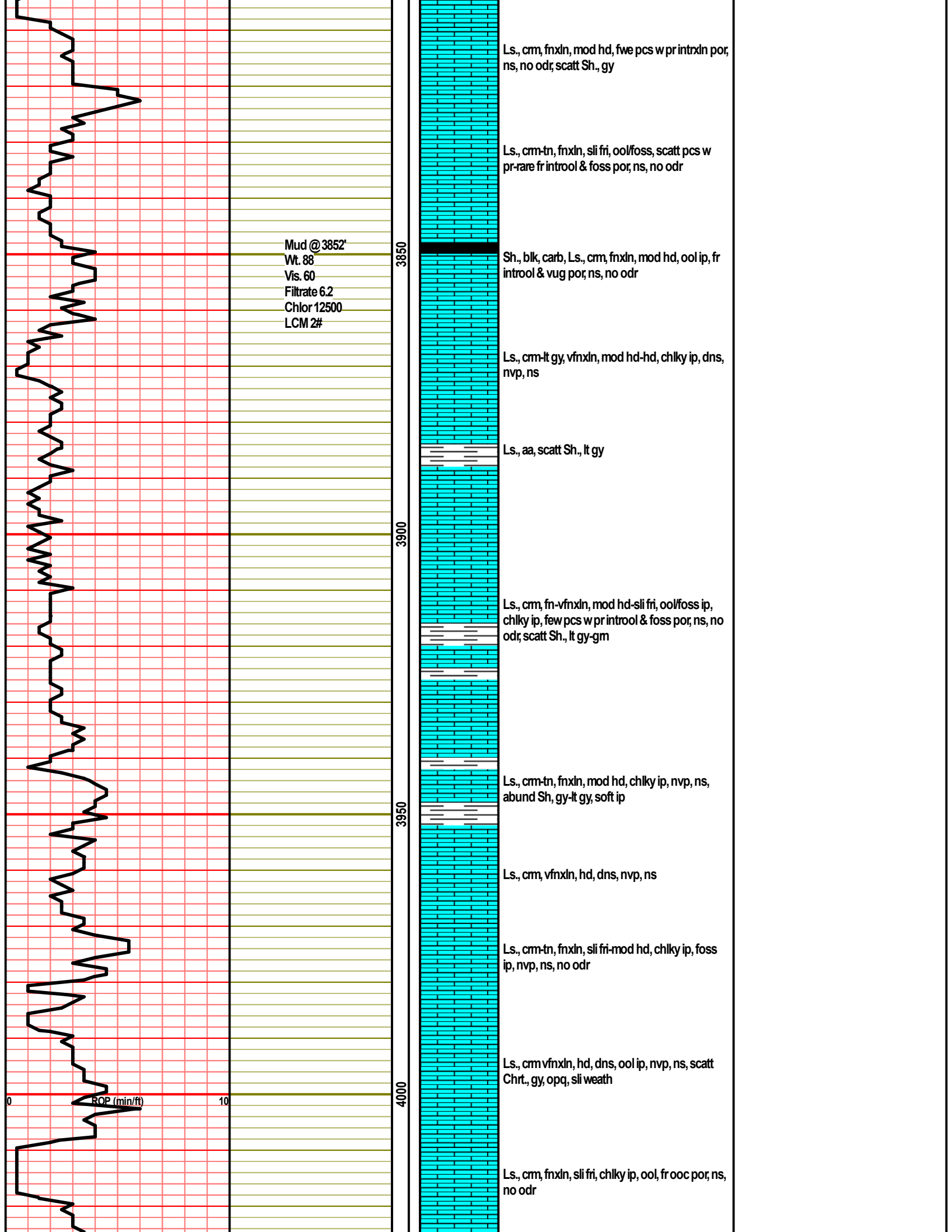
3800

Heebner
3736 (-1505)

Lansing
3779 (-1548)

ROP (min/ft)

10



Ls., cm, fnxn, mod hd, fve pcs w pr intrxn por, ns, no odr, scatt Sh., gy

Ls., cm-tn, fnxn, sli fri, ool/foss, scatt pcs w pr-rare fr introol & foss por, ns, no odr

Mud @ 3852'
Wt. 88
Vis. 60
Filtrate 6.2
Chlor 12500
LCM 2#

3850

Sh., blk, carb, Ls., cm, fnxn, mod hd, ool ip, fr introol & vug por, ns, no odr

Ls., cm-lt gy, vfnxn, mod hd-hd, chiky ip, dns, nvp, ns

Ls., aa, scatt Sh., lt gy

3900

Ls., cm, fn-vfnxn, mod hd-sli fri, ool/foss ip, chiky ip, few pcs w pr introol & foss por, ns, no odr, scatt Sh., lt gy-gm

Ls., cm-tn, fnxn, mod hd, chiky ip, nvp, ns, abund Sh, gy-lt gy, soft ip

3950

Ls., cm, vfnxn, hd, dns, nvp, ns

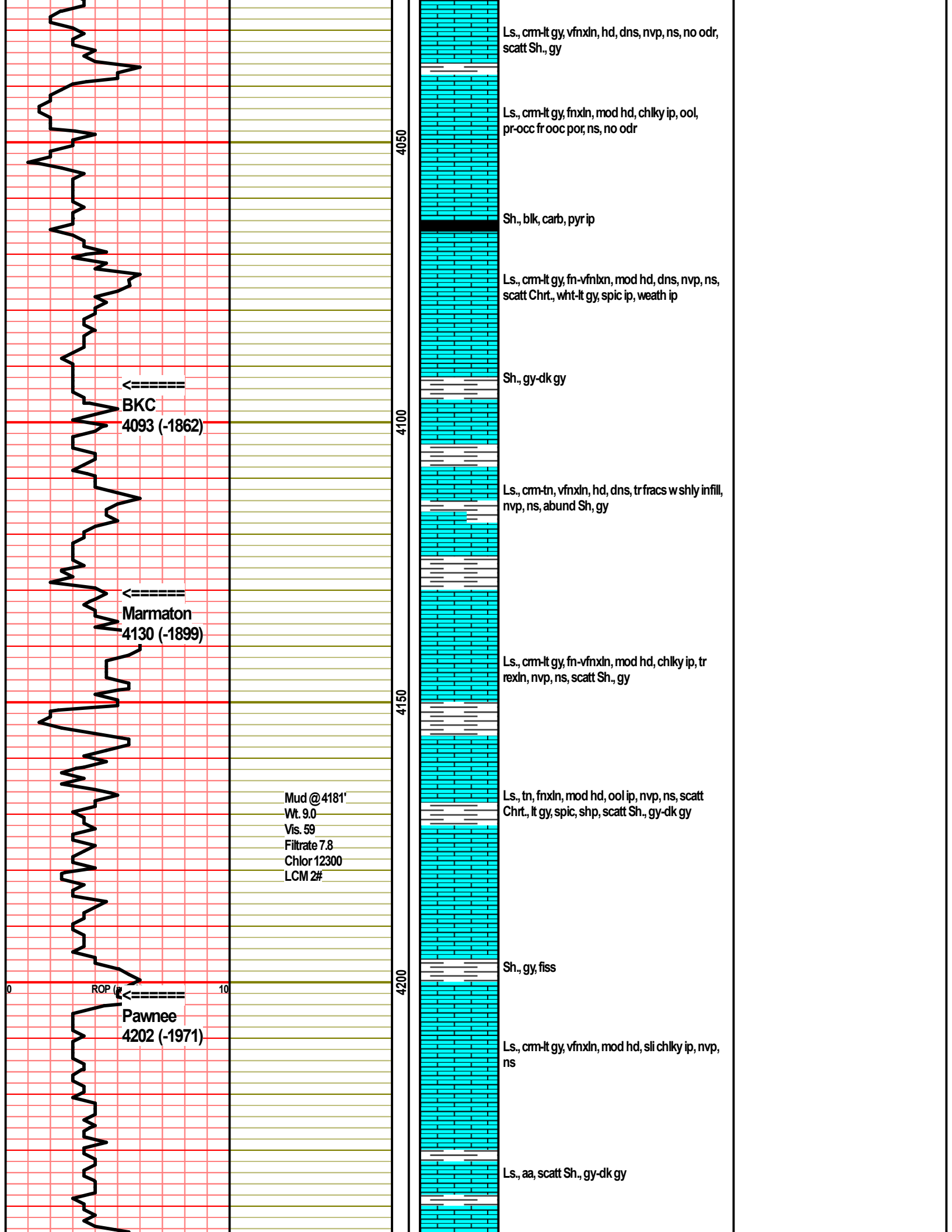
Ls., cm-tn, fnxn, sli fri-mod hd, chiky ip, foss ip, nvp, ns, no odr

Ls., cm vfnxn, hd, dns, ool ip, nvp, ns, scatt Chrt., gy, opq, sli weath

4000

Ls., cm, fnxn, sli fri, chiky ip, ool, fr ooc por, ns, no odr

ROP (min/ft) 0 10



Ls., cm-lt gy, vfnxn, hd, dns, nvp, ns, no odr, scatt Sh., gy

Ls., cm-lt gy, fnxn, mod hd, chky ip, ool, pr-occ fr ooc por, ns, no odr

Sh., blk, carb, pyr ip

Ls., cm-lt gy, fn-vfnxn, mod hd, dns, nvp, ns, scatt Chrt., wht-lt gy, spic ip, weath ip

Sh., gy-dk gy

← BKC
4093 (-1862)

Ls., cm-tn, vfnxn, hd, dns, tr frags wshly infill, nvp, ns, abund Sh, gy

← Marmaton
4130 (-1899)

Ls., cm-lt gy, fn-vfnxn, mod hd, chky ip, tr rexln, nvp, ns, scatt Sh., gy

Ls., tn, fnxn, mod hd, ool ip, nvp, ns, scatt Chrt., lt gy, spic, shp, scatt Sh., gy-dk gy

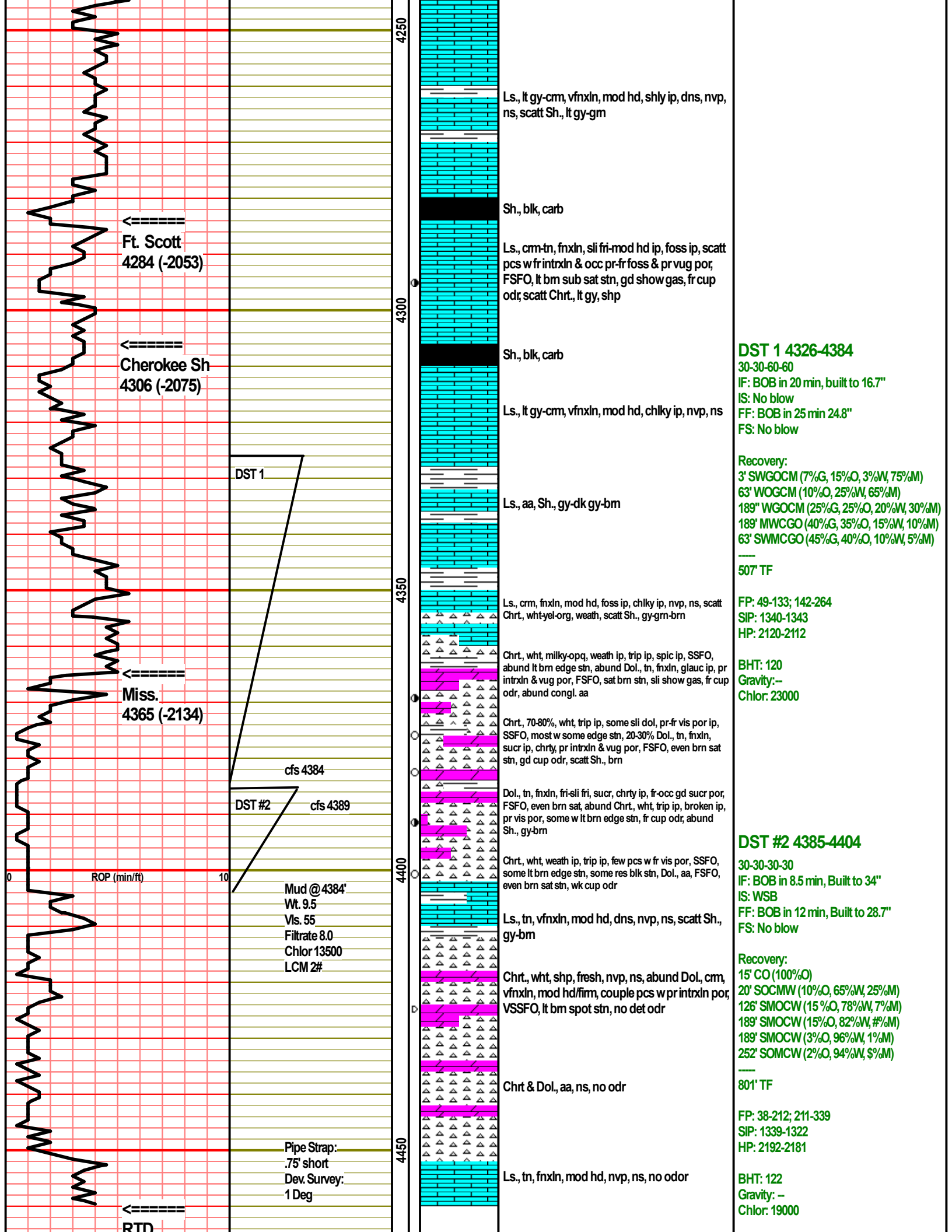
Mud @ 4181'
Wt. 9.0
Vis. 59
Filtrate 7.8
Chlor 12300
LCM 2#

Sh., gy, fiss

← ROP (ft)
Pawnee
4202 (-1971)

Ls., cm-lt gy, vfnxn, mod hd, sli chky ip, nvp, ns

Ls., aa, scatt Sh., gy-dk gy



RTD
4460 (-2229)

4500

4550

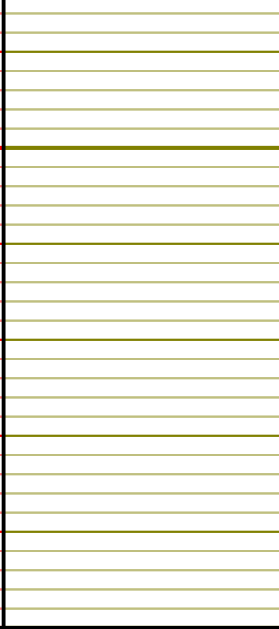
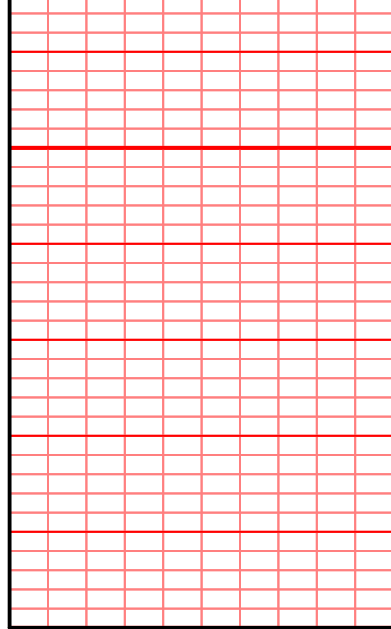
4600

4650

0

ROP (min/ft)

10



4700

50

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GLOBAL OIL FIELD SERVICES, LLC

3384

REMIT TO 24 S. Lincoln
Russell, KS 67665

SERVICE POINT Russell

DATE <u>7-2-12</u>	SEC.	TWP. <u>1-1</u>	RANGE	CALLED OUT	ON LOCATION	JOB START	JOB FINISH <u>11:30 AM</u>
LEASE <u>F005</u>	WELL #.		LOCATION <u>BAZINE 653W</u>		COUNTY <u>Ness</u>	STATE <u>KS</u>	
OLD OR NEW (CIRCLE ONE)							

CONTRACTOR	
TYPE OF JOB <u>Port collar</u>	
HOLE SIZE <u>7 7/8</u>	T.D.
CASING SIZE <u>5 1/2</u>	DEPTH <u>1618</u>
TUBING SIZE <u>3 1/2</u>	DEPTH
DRILL PIPE	DEPTH
TOOL	DEPTH
PRES. MAX	MINIMUM
MEAS. LINE	SHOE JOINT
CEMENT LEFT IN CSG.	
PERFS	
DISPLACEMENT	
EQUIPMENT	
PUMP TRUCK #	CEMENTER HELPER <u>Bill Tony</u>
BULK TRUCK #	DRIVER <u>Tom</u>
BULK TRUCK #	DRIVER

OWNER <u>4145</u>
CEMENT AMOUNT ORDERED <u>310 @ 6 3/4 40 6% gel 2% cc</u>
COMMON _____ @ _____
POZMIX _____ @ _____
GEL _____ @ _____
CHLORIDE _____ @ _____
ASC _____ @ _____
_____ @ _____
_____ @ _____
_____ @ _____
_____ @ _____
_____ @ _____
_____ @ _____
_____ @ _____
_____ @ _____
HANDLING _____ @ _____
MILEAGE _____ @ _____
TOTAL _____

REMARKS:

Port collar c. 1618
Open End Casing
Cement at 310 ft
Circulate to surface
Wash clean, pull tubing

CHARGE TO: Schaben

STREET _____

CITY _____ STATE _____ ZIP _____

SERVICE

DEPTH OF JOB _____	
PUMP TRUCK CHARGE _____	
EXTRA FOOTAGE _____ @ _____	
MILEAGE _____ @ _____	
MANIFOLD _____ @ _____	
_____ @ _____	
_____ @ _____	
TOTAL _____	

PLUG & FLOAT EQUIPMENT

_____ @ _____	
_____ @ _____	
_____ @ _____	
_____ @ _____	
_____ @ _____	
TOTAL _____	

Global Oil Field Services, LLC
You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME Ken Schaben SALES TAX (If Any) _____

SIGNATURE Ken Schaben TOTAL CHARGES _____

DISCOUNT _____ IF PAID IN 30 DAYS

GLOBAL OIL FIELD SERVICES, LLC

3373

REMIT TO 24 S. Lincoln
Russell, KS 67665

SERVICE POINT: SR 1877/25

DATE <u>6-26-18</u>	SEC. <u>1</u>	TWP. <u>20S</u>	RANGE <u>22W</u>	CALLED OUT	ON LOCATION	JOB START	JOB FINISH <u>10:00 PM</u>
LEASE <u>F005</u>	WELL #. <u>1-1</u>	LOCATION <u>7500 3/4" Port Collar @ 2 W 22 W</u>	COUNTY <u>NESS</u>	STATE <u>KS</u>			
OLD OR NEW (CIRCLE ONE)		<u>South into</u>					

CONTRACTOR W W Drilling Rig # 10

TYPE OF JOB Consisting Port Collar

HOLE SIZE 7 7/8 T.D. 4460

CASING SIZE 5 1/2 DEPTH 4456

TUBING SIZE LATCH DOWN @ DEPTH 4437

DRILL PIPE DEPTH

TOOL Port Collar @ DEPTH 1583'

PRES. MAX. MINIMUM

MEAS. LINE SHOE JOINT 19.07

CEMENT LEFT IN CSG. 19.07

PERFS

DISPLACEMENT 105 3/4/BBL

EQUIPMENT

OWNER Schaben Oil

CEMENT AMOUNT ORDERED 225 SX Comm.

COMMON @

POZMIX @

GEL @

CHLORIDE @

ASC @

HANDLING @

MILEAGE @

TOTAL

PUMP TRUCK CEMENTER Cody - Glen

417 HELPER Jason

BULK TRUCK

411 DRIVER Tony

BULK TRUCK

DRIVER

REMARKS: JOINT'S 51,108-109 OUT

30SX @ Rathole.

Ran a total of 100 MWD 315.50# CSG

Set @ 4456. Received circ. drop AFU

Ball circulate for 1 HR. Pump

500 gal mud flush, & pump 195 SX.

Cement (float) hold, clear-line, release

LATCH DOWN PLUG & DIS placed

TOTAL OF 105 3/4 BBL H₂O HAD 800 #

LIFT PRESSURE, & LAND PLUG @ 1750 #.

Release & FLOAT - PLUG - (HELD) THANK YOU!

CHARGE TO: Schaben Oil

STREET

CITY STATE ZIP

Global Oil Field Services, LLC

You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME Kenneth Schaben

SIGNATURE [Signature]

SERVICE

DEPTH OF JOB

PUMP TRUCK CHARGE

EXTRA FOOTAGE @

MILEAGE @

MANIFOLD @

TOTAL

5 1/2 CSG

PLUG & FLOAT EQUIPMENT

1 - FLOAT shoe

1 - LATCH DOWN ASSY

10 - TURBO Cent

2 - BASKETS

1 - Port Collar

TOTAL

SALES TAX (If Any)

TOTAL CHARGES

DISCOUNT IF PAID IN 30 DAYS

