KOLAR Document ID: 1482330

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 # 31000
Name: Prater Oil & Gas Operations, Inc.
Address 1: 10356 BLUESTEM BLVD
Address 2:
City: PRATT State: KS Zip: 67124 + 6712
Contact Person: Ron Prater
Phone: (620) 672-7600
CONTRACTOR: License # 5142
Name: Sterling Drilling Company
Wellsite Geologist: Kent Roberts
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 #:

09/27/2019 — Spud Date or Recompletion Date
10/03/2019 — Date Reached TD
10/03/2019 — Completion Date or Recompletion Date

API No.: 15-151-22503-00-00
Spot Description:
NW - NW - SE - NE Sec. 2 Twp. 27 S. R. 12 ☐ East ☑ West
1464 Feet from ☑ North / ☐ South Line of Section
1089 Feet from ☑ East / ☐ West Line of Section
Footages Calculated from Nearest Outside Section Corner:
☑ NE ☐ NW ☐ SE ☐ SW
GPS Location: Lat: *(e.g. xx.xxxxx)* , Long: *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Pratt
Lease Name: FISHER Well #: 1
Field Name:
Producing Formation: Kinderhook
Elevation: Ground: 1863 Kelly Bushing: 1874
Total Vertical Depth: 4325 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 321 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: 65000 ppm Fluid volume: 480 bbls
Dewatering method used: Hauled to Disposal
Location of fluid disposal if hauled offsite:
Operator Name: Studer Oil Co
Lease Name: Studer 3 License #: 9582
Quarter SW Sec. 4 Twp. 27 S. R. 12 ☐ East ☑ West
County: Pratt Permit #: D24220.0

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: 11/13/2019
☐ **Confidential Release Date:** 11/12/2021
☑ **Wireline Log Received** ☑ **Drill Stem Tests Received**
☑ **Geologist Report / Mud Logs Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** Karen Ritter **Date:** 11/13/2019

Operator Name: Prater Oil & Gas Operations, Inc. Lease Name: FISHER Well #: 1

Sec. 2 Twp. 27 S. R. 12 ☐ East ☑ West County: Pratt

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 ☑ Yes ☐ No
(Attach Additional Sheets)

Samples Sent to Geological Survey ☑ Yes ☐ No

Cores Taken ☐ Yes ☑ No

Electric Log Run ☑ Yes ☐ No

Geologist Report / Mud Logs ☑ Yes ☐ No

List All E. Logs Run:

Dual Induction
Dual Comp Porosity Log

☐ Log Formation (Top), Depth and Datum ☑ Sample

Name: Attached Top: Attached Datum: Attached

CASING RECORD ☑ New ☐ 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
Surface	14.75	10.75	32.75	321	60/40 POZ 25 Gel	300	2% Gel, 3% CC, 1/4# CF

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
☐ Perforate ☐ Protect Casing ☐ Plug Back TD ☐ 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: ☐ Flowing ☐ Pumping ☐ Gas Lift ☐ Other *(Explain)*

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

DISPOSITION OF GAS:	METHOD OF COMPLETION:	PRODUCTION INTERVAL: Top / Bottom
☐ Vented ☐ Sold ☐ Used on Lease *(If vented, Submit ACO-18.)*	☐ Open Hole ☐ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*	

Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record *(Amount and Kind of Material Used)*

TUBING RECORD: Size: Set At: Packer At:

Mail to: KCC - Conservation Division, 266 N. Main, Suite 220, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	Prater Oil & Gas Operations, Inc.
Well Name	FISHER 1
Doc ID	1482330

Tops

Name	Top	Datum
Anhydrite	655	1219
Base Anhydrite	673	1201
Topeka	3159	-1285
Heebner Shale	3492	-1618
Douglas Shale	3530	-1656
Brown Lime	3678	-1804
Lansing	3690	-1816
Lansing Drum	3860	-1986
Stark Shale	3986	-2112
Mississippi Chert	4126	-2252
Mississippi Lime	4188	-2314
Kinderhook Shale	4296	-2422
RTD	4325	-2451

Form	ACO1 - Well Completion
Operator	Prater Oil & Gas Operations, Inc.
Well Name	FISHER 1
Doc ID	1482330

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	14.75	10.75	32.75	321	60/40 POZ 25 Gel	300	2% Gel, 3% CC, 1/4# CF

BASIC ENERGY SERVICES

PAGE	CUST NO	YARD #	INVOICE DATE
1 of 1	1005628	1718	09/30/2019

INVOICE NUMBER

93058201

Pratt (620) 672-1201

BILL TO
PRATER OIL & GAS
10356 BLUESTEM BLVD
PRATT
KS US 67124
ATTN:

JOB SITE
LEASE NAME FISHER #1
LOCATION
COUNTY PRATT
STATE KS
JOB DESCRIPTION Cement-New Well Casing/Pi
JOB CONTACT

JOB #	EQUIPMENT #	PURCHASE ORDER NO.	TERMS	DUE DATE
41191421			Net - 30 days	10/30/2019

	QTY	U of M	UNIT PRICE	INVOICE AMOUNT
For Service Dates: 09/28/2019 to 09/28/2019				
0041191421				
171818343A Cement-New Well Casing/Pi 09/28/2019				
SURFACE CASING				
60/40 Poz	300.00	SK	9.99	2,997.00 T
Celloflake	75.00	LB	1.48	111.00 T
Calcium Chloride	774.00	LB	0.37	286.38 T
Light Vehicle Mileage	15.00	MI	1.85	27.75
Heavy Equipment Mileage	30.00	MI	2.96	88.80
Depth Charge, 0'-1000'	1.00	HR	444.00	444.00
Blending & Mixing Service Charge	1.00	SK	155.40	155.40
Service Supervisor Charge	1.00	EA	75.00	75.00
Driver Charge	3.00	EA	35.00	105.00

PLEASE REMIT TO:
BASIC ENERGY SERVICES,LP
PO BOX 841903
DALLAS,TX 75284-1903

SEND OTHER CORRESPONDENCE TO:
BASIC ENERGY SERVICES,LP
801 CHERRY ST, STE 2100
FORT WORTH, TX 76102

SUB TOTAL	4,290.33
TAX	280.04
INVOICE TOTAL	4,570.37

BASIC ENERGY SERVICES

PRESSURE PUMPING & WIRELINE TMH 30

10244 NE Hwy. 61
P.O. Box 8613
Pratt, Kansas 67124
Phone 620-672-1201

FIELD SERVICE TICKET

1718 18343 A

DATE TICKET NO.

DATE OF JOB 9-28-2019	DISTRICT Pratt KS. #1718	NEW WELL ☒ OLD WELL ☐ PROD ☐ INJ ☐ WDW ☐	CUSTOMER ORDER NO.:
CUSTOMER Mater Oil + Gas		LEASE Fisher	WELL NO. 1
ADDRESS		COUNTY Pratt	STATE Kansas
CITY	STATE	SERVICE CREW Joel B Eichem Hoobs M	
AUTHORIZED BY		JOB TYPE: 10 3/4 Surface	2-42

EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQUIPMENT#	HRS
37463	.75				
1990-21010	.50				

TRUCK CALLED	9-28-19 DATE	AM PM TIME 1:30
ARRIVED AT JOB		AM PM 3:00
START OPERATION		AM PM 5:30
FINISH OPERATION		AM PM 7:00
RELEASED		AM PM 7:30
MILES FROM STATION TO WELL		10

CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered).
The undersigned is authorized to execute this contract as an agent of the customer. As such, the undersigned agrees and acknowledges that this contract for services, materials, products, and/or supplies includes all of and only those terms and conditions appearing on the front and back of this document. No additional or substitute terms and/or conditions shall become a part of this contract without the written consent of an officer of Basic Energy Services LP.

SIGNED: [signature]
(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	$ AMOUNT
BC 132	60/40/ Poz	SK	300	/	8100 —
CC 102	Cello Flake	lb	75	/	300 —
CC 109	Calcium Chloride	lb	774	/	774 —
ME 101	Light Vehicle Mileage	Mi	15	/	75 —
ME 102	Heavy Equipment Mileage	mi	30	/	240 —
CE 1	Pump Charge 0-1000'	Hr	1	/	1200 —
CE 240	Blending + Mixing Charge	SK	300	/	420 —
BC 143	Service Supervisor Charge	ea	1	/	75 —
BC 144	Driver Charge	ea	3	/	105 —

CHEMICAL / ACID DATA:			

SUB TOTAL		11,289 —
SERVICE & EQUIPMENT	%TAX ON $	
MATERIALS	%TAX ON $	
TOTAL		4290.55

JHW

SERVICE REPRESENTATIVE Carl Bolling

THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY: [signature]
(WELL OWNER OPERATOR CONTRACTOR OR AGENT)

FIELD SERVICE ORDER NO.

BASiC energy services, L.P.

TREATMENT REPORT

Customer	Lease No.	Date
Porter Oil + Gas		9-28-2019
Lease: Fisher	Well #: 1	

Field Order #	Station	Casing	Depth	County	State
18593	Pratt KS. #1718	10 3/4	308.64	Pratt	Kansas

Type Job	Formation	Legal Description
10 3/4 Surface		22-27s-12w

PIPE DATA		PERFORATING DATA		FLUID USED	TREATMENT RESUME			
Casing Size 10 3/4	Tubing Size	Shots/Ft		Acid		RATE	PRESS	ISIP
Depth 308	Depth	From	To	Pre Pad	Max			5 Min.
Volume 29.5	Volume	From	To	Pad	Min			10 Min.
Max Press	Max Press	From	To	Frac	Avg			15 Min.
Well Connection	Annulus Vol.	From	To		HHP Used			Annulus Pressure
Plug Depth	Packer Depth	From	To	Flush	Gas Volume			Total Load

Customer Representative: | Station Manager: Justin Workman | Treater: Carl Botting

Service Units	27463	19960	21010					
Driver Names	Eddie M	Harold W	M.					

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
3:00 (AM)					on location + Rig up
					Run 308.64 10 3/4 casing
					+ 12.3' 8 5/8 Landing Joint
					Pipe on Break circulation w/ Rig
					Rig up to cement
6:20	100		3	3	Start Freshwater
	100		64.11	4	Pump 300 sx 60:40:Poz + Additives
					Cement in
			15	3	Start Displacement
			10	4	Steady Rate
	125		4	2	Slow Rate
	125		(20.75 Total)		Stop pumps
					Leave 20' Cement in Casing
7:00 AM					Shut in.
					Cement Did circulate

10244 NE Hiway 61 • P.O. Box 8613 • Pratt, KS 67124-8613 • (620) 672-1201 • Fax (620) 672-5383

DRILL STEM TEST REPORT

Prater Oil & Gas Oper., Inc.

10356 Bluestem BLVD
Pratt, Ks. 67124

ATTN: Kent Roberts

2-27s-12w Pratt Co., Ks.

Fisher # 1

Job Ticket: 64946 **DST#: 1**

Test Start: 2019.10.01 @ 06:38:43

GENERAL INFORMATION:

Formation: **LKC " B " Zone**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 09:05:28
Time Test Ended: 15:01:43

Test Type: Conventional Bottom Hole (Initial)
Tester: Matt Smith
Unit No: 68

Interval: 3716.00 ft (KB) To 3740.00 ft (KB) (TVD)
Total Depth: 3740.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

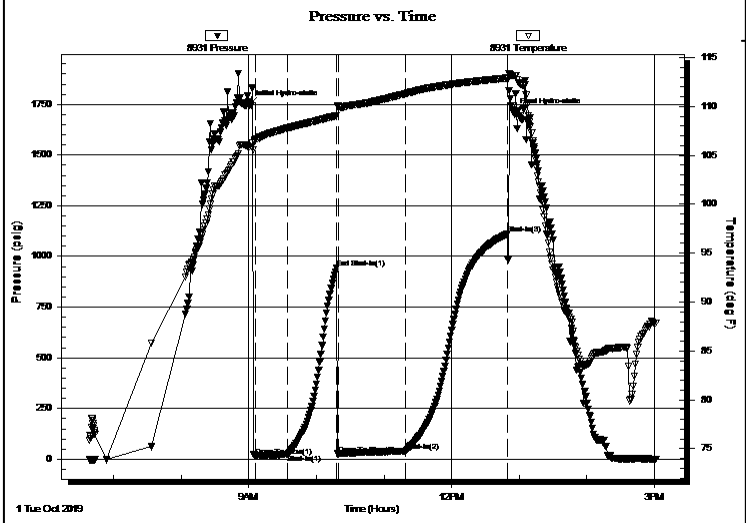
Reference Elevations: 1874.00 ft (KB)
1863.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8931 **Inside**

Press@RunDepth: 23.49 psig @ 3717.00 ft (KB)
Start Date: 2019.10.01 End Date: 2019.10.01
Start Time: 06:38:48 End Time: 15:01:42

Capacity: 8000.00 psig
Last Calib.: 2019.10.01
Time On Btm: 2019.10.01 @ 09:00:58
Time Off Btm: 2019.10.01 @ 12:54:58

TEST COMMENT: IF: Strong Blow . B.O.B. in 28 mins. Built to 12.65".
ISI: No Blow .
FF: Strong Blow . B.O.B. in 29 mins. Built to 16.41".
FSI: No Blow .



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1746.49	105.89	Initial Hydro-static
5	16.96	106.62	Open To Flow (1)
33	23.49	107.78	Shut-In(1)
77	941.57	109.06	End Shut-In(1)
79	26.30	110.07	Open To Flow (2)
138	40.29	111.30	Shut-In(2)
229	1110.82	112.92	Shut-In(3)
234	1708.94	113.16	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
118.00	GOWCM 15%g 25%o 5%w 55%m	0.90
3.00	OCM 80%o 20%m	0.02
0.00	314' G.I.P. 100%g	0.00

Gas Rates

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

DRILL STEM TEST REPORT

Prater Oil & Gas Oper., Inc.

10356 Bluestem BLVD
Pratt, Ks. 67124

ATTN: Kent Roberts

2-27s-12w Pratt Co., Ks.

Fisher # 1

Job Ticket: 64946 **DST#: 1**

Test Start: 2019.10.01 @ 06:38:43

GENERAL INFORMATION:

Formation: **LKC " B " Zone**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 09:05:28
Time Test Ended: 15:01:43

Test Type: Conventional Bottom Hole (Initial)
Tester: Matt Smith
Unit No: 68

Interval: 3716.00 ft (KB) To 3740.00 ft (KB) (TVD)
Total Depth: 3740.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

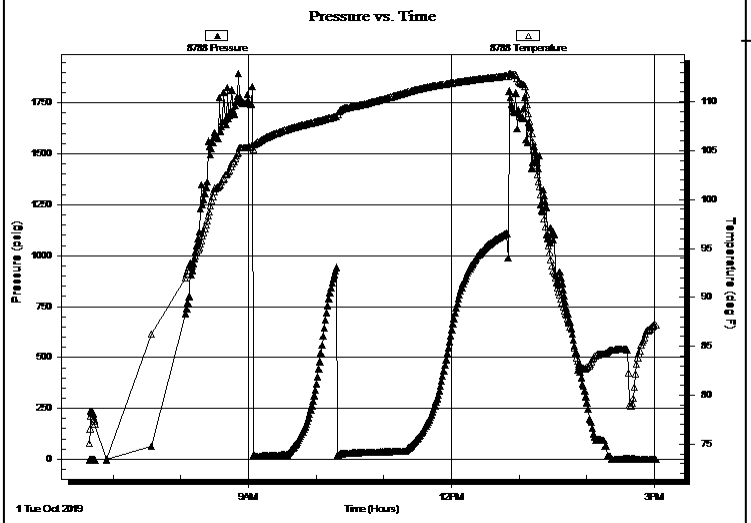
Reference Elevations: 1874.00 ft (KB)
1863.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8788 **Outside**

Press@RunDepth: psig @ 3717.00 ft (KB)
Start Date: 2019.10.01 End Date: 2019.10.01
Start Time: 06:39:01 End Time: 15:01:55

Capacity: 8000.00 psig
Last Calib.: 2019.10.01
Time On Btm:
Time Off Btm:

TEST COMMENT: IF: Strong Blow . B.O.B. in 28 mins. Built to 12.65".
ISI: No Blow .
FF: Strong Blow . B.O.B. in 29 mins. Built to 16.41".
FSI: No Blow .



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
118.00	GOWCM 15%g 25%o 5%w 55%m	0.90
3.00	OCM 80%o 20%m	0.02
0.00	314' G.I.P. 100%g	0.00

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Prater Oil & Gas Oper., Inc.

10356 Bluestem BLVD
Pratt, Ks. 67124

ATTN: Kent Roberts

2-27s-12w Pratt Co., Ks.

Fisher # 1

Job Ticket: 64946 **DST#: 1**

Test Start: 2019.10.01 @ 06:38:43

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	3500 ppm
Viscosity:	58.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	8.79 in³	Gas Cushion Type:			
Resistivity:	3500.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	ppm				
Filter Cake:	0.20 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
118.00	GOWCM 15%g 25%o 5%w 55%m	0.899
3.00	OCM 80%o 20%m	0.023
0.00	314' G.I.P. 100%g	0.000

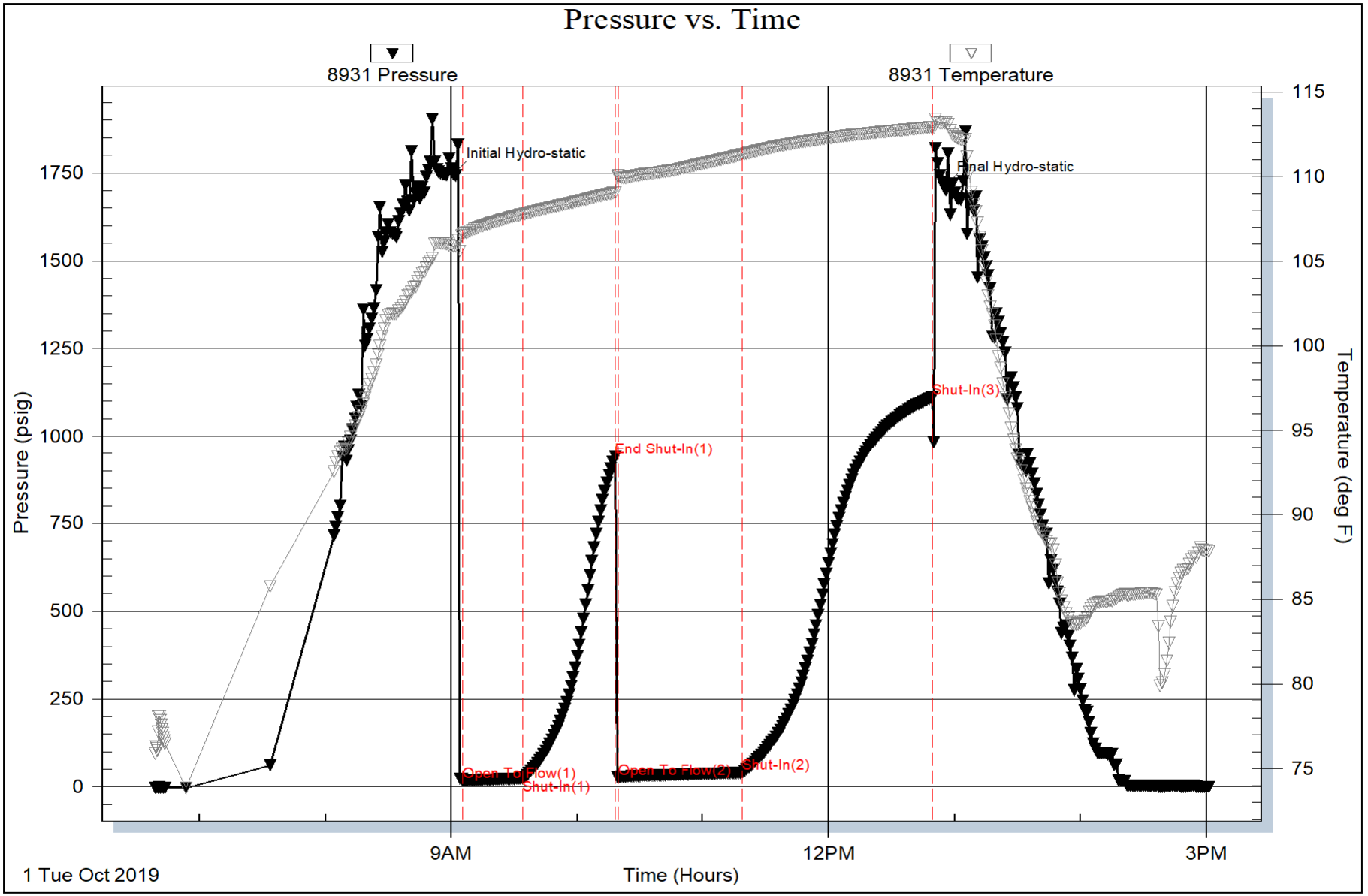
Total Length: 121.00 ft Total Volume: 0.922 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #: None

Laboratory Name: Laboratory Location:

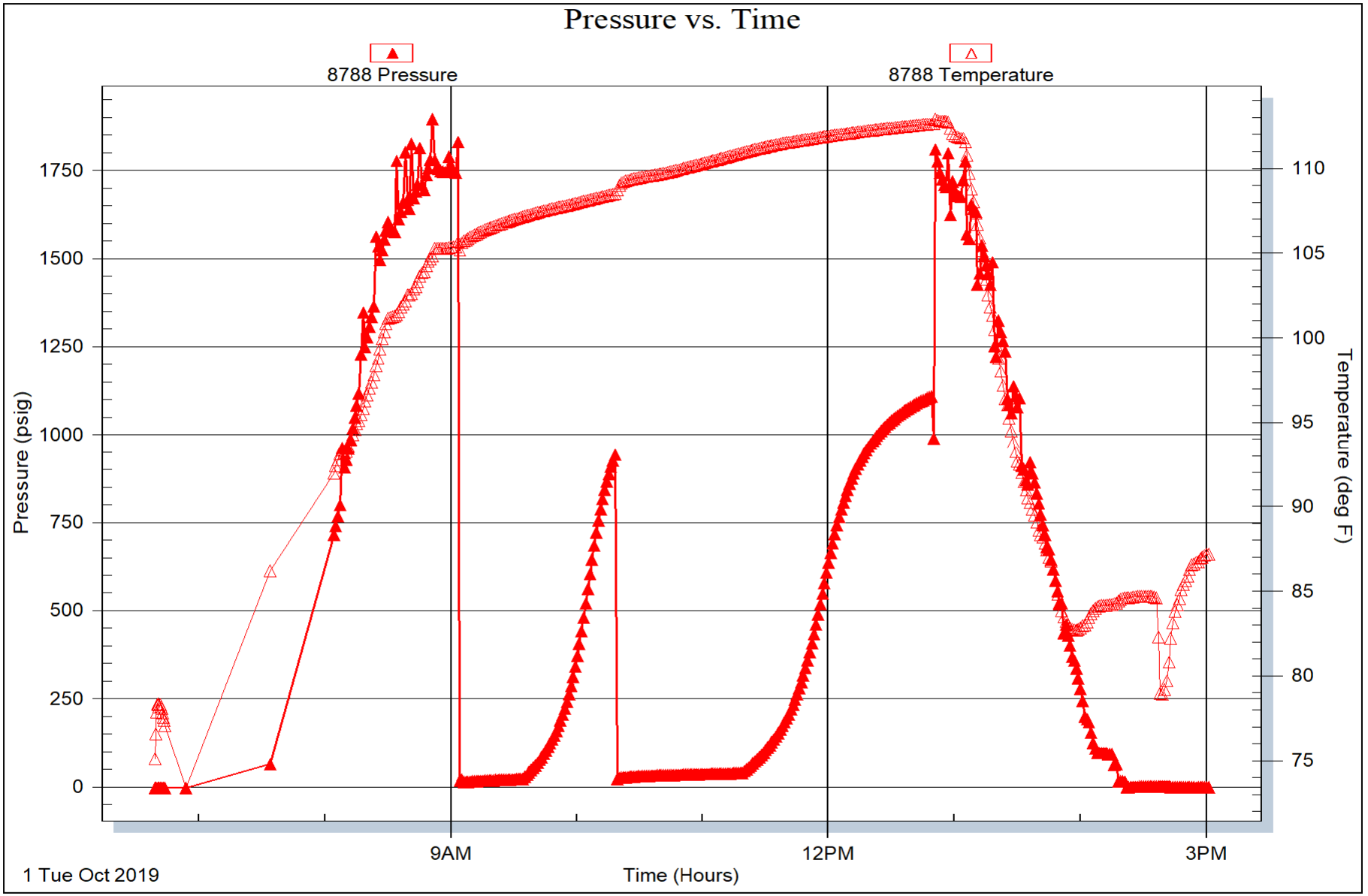
Recovery Comments: 314 Ft G.I.P.

Serial #: 8931 **Inside** Prater Oil & Gas Oper., Inc. Fisher # 1 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 64946 Printed: 2019.10.01 @ 15:32:45

Serial #: 8788 **Outside** Prater Oil & Gas Oper., Inc. Fisher # 1 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 64946 Printed: 2019.10.01 @ 15:32:45

DRILL STEM TEST REPORT

Prater Oil & Gas Oper., Inc.

10356 Bluestem BLVD
Pratt, Ks. 67124

ATTN: Kent Roberts

2-27s-12w Pratt Co., Ks.

Fisher # 1

Job Ticket: 64947 **DST#: 2**

Test Start: 2019.10.02 @ 15:21:41

GENERAL INFORMATION:

Formation: **Mississippi Chert**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 17:49:26
Time Test Ended: 00:10:56

Test Type: Conventional Bottom Hole (Reset)
Tester: Matt Smith
Unit No: 68

Interval: 4115.00 ft (KB) To 4194.00 ft (KB) (TVD)
Total Depth: 4194.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

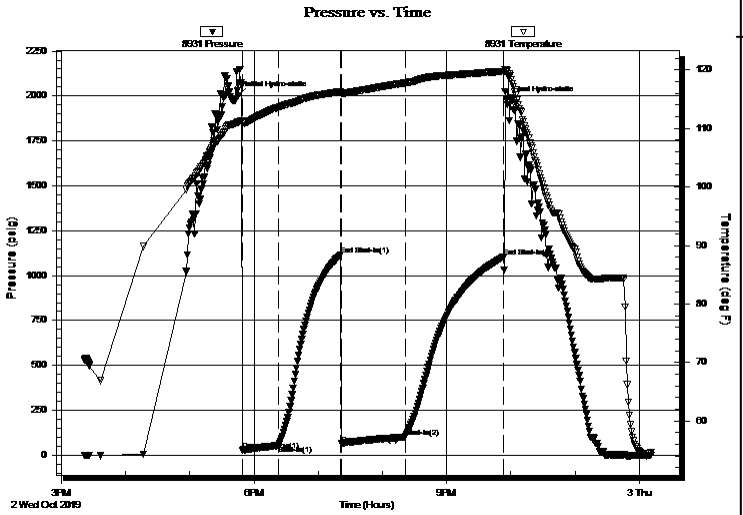
Reference Elevations: 1874.00 ft (KB)
1863.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8931 **Inside**

Press@RunDepth: 100.90 psig @ 4116.00 ft (KB)
Start Date: 2019.10.02 End Date: 2019.10.03
Start Time: 15:21:46 End Time: 00:10:56

Capacity: 8000.00 psig
Last Calib.: 2019.10.03
Time On Btm: 2019.10.02 @ 17:45:41
Time Off Btm: 2019.10.02 @ 21:55:41

TEST COMMENT: IF: Strong Blow . B.O.B. in 5 mins. Built to 25.87".
ISI: No Blow .
FF: Strong Blow . B.O.B. 27 mins. Built t 18.92".
FSI: No Blow .



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2003.75	111.07	Initial Hydro-static
4	27.67	110.92	Open To Flow (1)
37	53.33	113.59	Shut-In(1)
95	1114.61	116.26	End Shut-In(1)
97	62.88	116.03	Open To Flow (2)
156	100.90	117.78	Shut-In(2)
248	1102.61	119.74	End Shut-In(2)
250	1976.71	119.96	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
170.00	GOSM 5%g 95%m	1.29

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

Prater Oil & Gas Oper., Inc.

10356 Bluestem BLVD
Pratt, Ks. 67124

ATTN: Kent Roberts

2-27s-12w Pratt Co., Ks.

Fisher # 1

Job Ticket: 64947 **DST#: 2**

Test Start: 2019.10.02 @ 15:21:41

GENERAL INFORMATION:

Formation: **Mississippi Chert**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 17:49:26
Time Test Ended: 00:10:56

Test Type: Conventional Bottom Hole (Reset)
Tester: Matt Smith
Unit No: 68

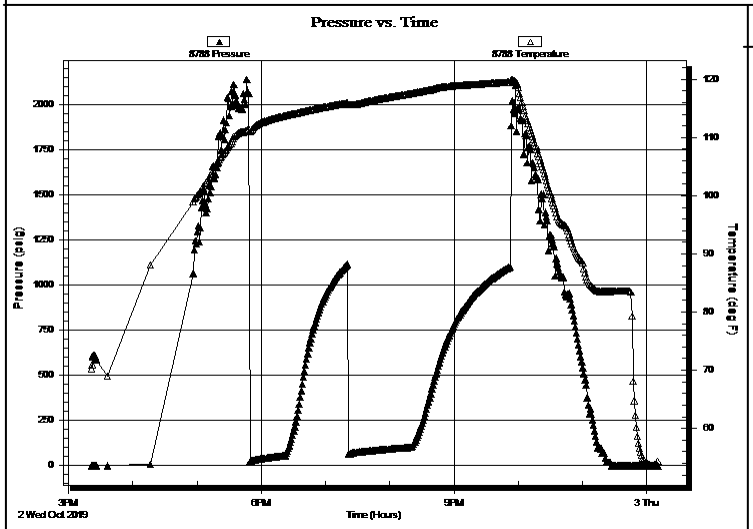
Interval: 4115.00 ft (KB) To 4194.00 ft (KB) (TVD)
Total Depth: 4194.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1874.00 ft (KB)
1863.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8788 **Outside**
Press@RunDepth: psig @ 4116.00 ft (KB)
Start Date: 2019.10.02 End Date: 2019.10.03
Start Time: 15:21:28 End Time: 00:10:38

Capacity: 8000.00 psig
Last Calib.: 2019.10.03
Time On Btm:
Time Off Btm:

TEST COMMENT: IF: Strong Blow . B.O.B. in 5 mins. Built to 25.87".
ISI: No Blow .
FF: Strong Blow . B.O.B. 27 mins. Built t 18.92".
FSI: No Blow .



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
170.00	GOSM 5%g 95%m	1.29

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Prater Oil & Gas Oper., Inc.

10356 Bluestem BLVD
Pratt, Ks. 67124

ATTN: Kent Roberts

2-27s-12w Pratt Co., Ks.

Fisher # 1

Job Ticket: 64947 **DST#: 2**

Test Start: 2019.10.02 @ 15:21:41

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	6000 ppm
Viscosity:	54.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	9.99 in³	Gas Cushion Type:			
Resistivity:	6000.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	ppm				
Filter Cake:	0.20 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
170.00	GOSM 5%g 95%m	1.295

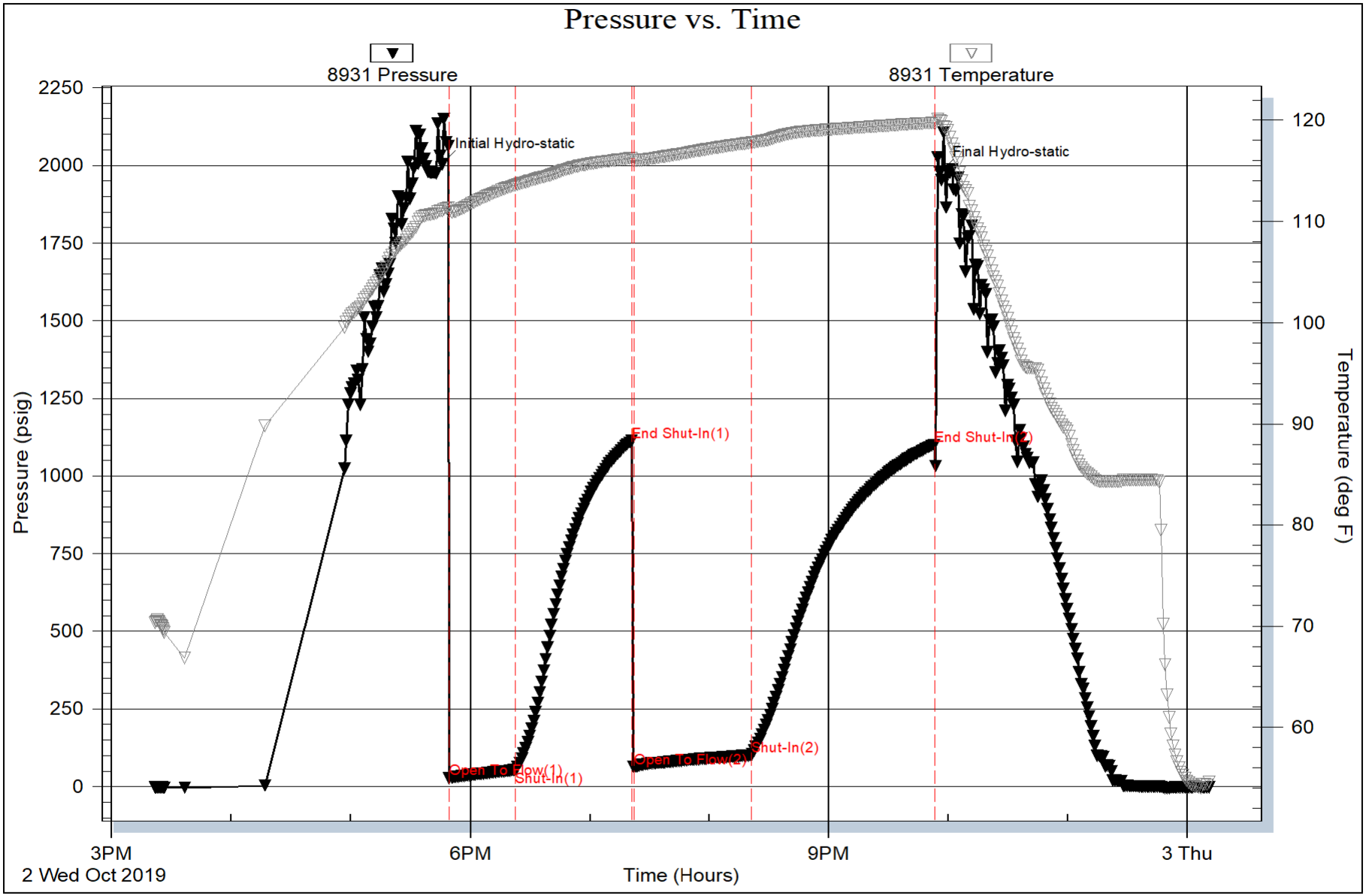
Total Length: 170.00 ft Total Volume: 1.295 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #: None

Laboratory Name: Laboratory Location:

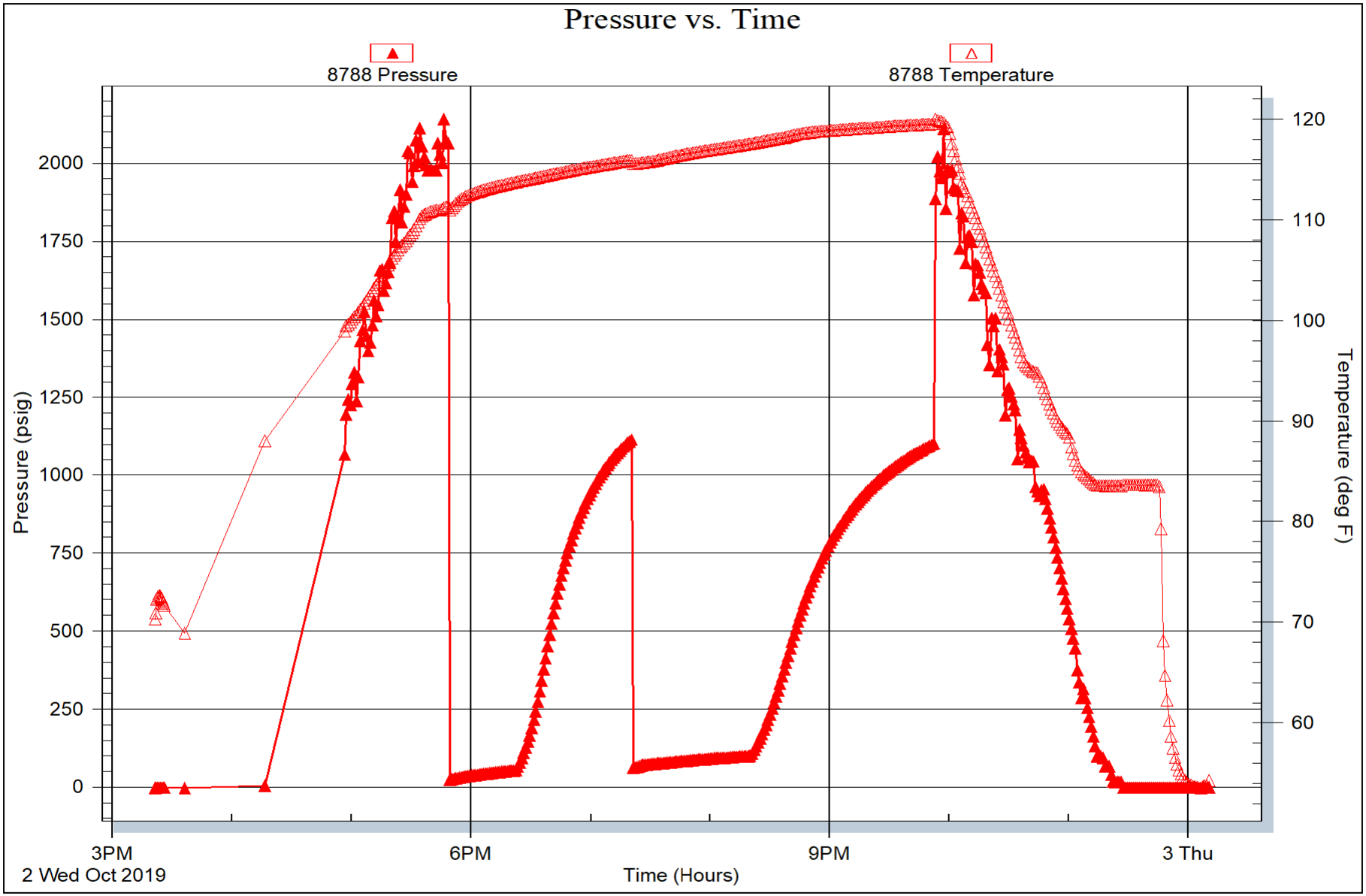
Recovery Comments: Oil spotted Mud

Serial #: 8931 **Inside** Prater Oil & Gas Oper., Inc. Fisher # 1 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 64947 Printed: 2019.10.03 @ 06:07:37

Serial #: 8788 **Outside** Prater Oil & Gas Oper., Inc. Fisher # 1 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 64947 Printed: 2019.10.03 @ 06:07:38

PLOTTED GEOLOGICAL LOG

WellSight Systems

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

Well Name:	**Fisher #1**		
Location:	**1464' FNL & 1089' FEL of Sec. 2-T27S-R12W**		
Licence Number:	**API# 15-151-22503-00-00**	**Region:**	**Pratt County, Kansas**
Spud Date:	**Sept. 27, 2019**	**Drilling Completed:**	**Oct. 3, 2019**
Surface Coordinates:	**Lat. 37.72870, Long. -98.59481 (NAD83)**		
Bottom Hole Coordinates:	**Vertical Well**		
Ground Elevation (ft):	**1863**	**K.B. Elevation (ft):**	**1874**
Logged Interval (ft):	**1800 To: RTD**	**Total Depth (ft):**	**4325**
Formation:	**Kinderhook**		
Type of Drilling Fluid:	**Chemical Mud by Mud-Co**		

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

OPERATOR

Company: Prater Oil & Gas Operations, Inc.
Address: 10356 Bluestem Blvd.
Pratt, Kansas 67124

GEOLOGIST

Name: Kent Roberts
Company: Roberts Resources, Inc.
Address: P.O. Box 75187
Wichita, KS 67275
Phone 316-215-1683

INFORMATION

DRILLING CONTRACTOR: Sterling Drilling Rig #4

MUD TYPE: Chemical by Mud-Co

DRILLING TIME KEPT FROM: 1800' to RTD

SAMPLES SAVED FROM: 3300' to RTD

SAMPLES EXAMINED FROM: 3300' to RTD

GEOLOGICAL SUPERVISION FROM: 2600' to RTD

ELECTRICAL SURVEYS: CNL/CDL, DIL by Pioneer

CASING DATA

CONDUCTOR CASING: None

SURFACE CASING: 10-3/4" Set @ 321' w/ 300 sx

PRODUCTION : None

MORNING DRILLING REPORT

Sterling Drilling Company, Rig #4
Box 1008, Pratt, Kansas 67124-1008
Office Phone (620) 672-8608, Fax 672-8608

Wellsite Geologist: Kent Roberts

Rig #4 Phone Numbers (Dog House)				IN USE	Toolpusher
Rig Cellular			(620) 388-4182	Yes	Lanny Saloga
Geologist Cellular			(620) 388-5866	Yes	C (620) 388-4183

Fax to:	Ron Prater						
# of Pages	1	Fax#	Email out				
WELL NAME	Fisher #1						
LOCATION	NW NW SE NE						
SEC	2	TWP	27s	RNG	12w	CO	Pratt

Prater Oil & Gas Operations
10356 Bluestem Blvd
Pratt, Kansas 67124

ELEVATION	G.L.	1863	K.B.	1874	API#	15-151-22503-00-00

Langfeld called Dig-Safe. KCC inpected and approved for earthen reserve pit. On Thursday September 19, 2019 Langfeld leveled location and dug earthen reserve pit. On 09/20/19 Kelly's Water Well Svc drilled a 141' deep water well with a 50' water level. Will set pump at 110'. Mikes Septic for trash trailer, ditches and toilets. Sterling reported spud to KCC District 1 office (Ken Jehlik) Dist #1 on 09/26/19. Had 0.80" rain 09/24. Delayed move one day to Friday 09/27/19. Location is in a low area.

Day 1 Date: 09/27/19 Friday — Perfect weather, no wind, 80's! Location dry.
Moving off Garner Elwell location in Stafford County at 7 am. Plan move/rig up and spud tonight.

Day 2 Date: 09/28/19 Saturday — **Spud at 6:30pm 09/27/19.** Survey at 325'= 0 degrees, Location dry at report time.
Cementing 10-3/4" casing at 325' at 7:00 am. Drilled 325' in 24.00 hours.
Ran 4.00 hours, down 20.00 hours - (11.50 Rig up, 2.50 Mouse/Rat holes, 1.25 Connections, .50 Wiper trip to bit, .25 CTCH and jet cellar, .25 CTCH at 325', CTCH casin at 321', .50 Tripping, .75 Set up casing casers and cementers, 1.00 Wait on different cement truck)
Mud Properties: Vis 50, Wt. 9.6, LCM 5#; Wt. On Bit 5-15,000, RPM 140-150, Pump Pressure 350-580, SPM 50-60.
Surface Bit: HTC RR/RT 14-3/4" GTX-C1 (Tooth), SN#5043847, (3-15's), made 325' in 4.00 hours. 81 < Last 24-ROP- 14-3/4"

Surface Casing:
Spud at 6:30 pm on 09/27/19. Drilled 14-3/4" hole to 325'. Ran 7 joints new, 32.75#, 10-3/4" casing. Tallied 308.64' + 12.30' LJ. Set at 321' KB. Cut shoe. Welded straps on bottom 3 joints. Welded collars on top 4 jts. Cemented with 300 sks 60/40 Poz, 2% Gel, 3%CC, 1/4# CF. Plug down at 7:00am on 09/28/19. Basic Energy Cementing ticket # 18343, Cement did circulate.

Cum Mud $ NA

Day 3 Date: 09/29/19 Sunday — Test BOP at 500 psi, Tag cement at 317', Started losing returns at 450', then down to 25% returns at 506', trip in to surface, raise LCM and OK. Location still dry.
Drilling at 1,100'. Drilled 775' in 24 hours.
Ran 8.00 hours, down 16.00 hours (.50 Rig check, 2.00 Jet/Connections, .25 Drill plug, 10.00 WOC, .50 Tripping (pulled 5 stands for Lost Circ), 2.75 Lost circulation - at 508' (250 Bbl), mix mud).
Mud Properties: Vis. 34, Wt. 8.6, pH 7.0, LCM 10#; Wt. On Bit 12,000, RPM 95+, Pump Pressure 580, SPM 55.
Bit #1: 7-7/8" TXT, TXT516, SN #S11378, (5-15's), in at 325', drilled 775' in 8.00 hours. 97 - Last 24<ROP>7-7/8"- 92 Cum Mud $ $5,708

Day 4 Date: 09/30/19 Monday — No fluid losses. At 1300' kick pump up to 60 spm, then 65 spm. Location still dry.
CFS at 2,660'. Drilled 1,560' in 24 hours. Anhydrite (655' - 673')
Ran 17.50 hours, down 6.50 hours (1.25 Rig check, 4.25 Connections, 1.00 CFS at 2660').
Mud Properties: Wt. 9.5, Vis 34, pH 7.0, Chl. 14,000, LCM 5#; Wt. On Bit 14,000, RPM 95, Pump Pressure 650, SPM 65.
Bit #1: 7-7/8" TXT, TXT516, SN #S11378, (5-15's), in at 325', drilled 2,335' in 25.50 hours. 89 - Last 24<ROP>7-7/8"- 90 Cum Mud $ $7,816

Day 5 Date: 10/01/19 Tuesday — No fluid losses. Displace at 3297', DST #1 (3716' to 3740'), Survey at 3740' = 3/4 deg.
Tripping for DST #1 at 3,740'. Drilled 1,080' in 24 hours. Location still dry. Too windy for pipe strap before DST #1.
Ran 14.75 hours, down 9.25 hours (1.00 Rig check, 2.75 Connections, .25 CFS at 2660', 1.00 CFS at 3740', 1.25 CTCH at 3740', 1.50 Tripping, 1.50 25 stand Short trip to 2150', 0.00 Displaced at 3297' during rig check on evening tour).
Mud Properties: Chemical/Pac - Wt. 8.7, Vis. 56, LCM 5#; WOB 14,000, RPM 95, Pump Pressure 800, SPM 65.
Bit #1: 7-7/8" TXT, TXT516, SN #S11378, (5-15's), in at 325', drilled 3,415' in 40.25 hours. 73 - Last 24<ROP>7-7/8"- 85 Cum Mud $ $11,522

Day 6 Date: 10/02/19 Wednesday — Rained .61" last night and early this am. Location wet and foggy at 7am.
Drilling at 4,100' at 7am. Drilled 360' in 24 hours. Bullseye hauled 240 Bbls off reserve pit on 10/1/19 to the Studer disposal.
Ran 8.25 hours, down 15.75 hours (.50 Rig check, 1.00 Connections, 4.50 Tripping, 1.00 Handle test tool, .50 Pick up 13 jts of DP, .50 Break circ at 2400' & 3300', 1.00 CTCH at 3740', 1.00 CFS at 3868', 1.00 CFS at 3970', 1.00 CFS at 4000', 3.75 DST #1).
Mud Properties: Chemical/Pac - Wt. 9.1, Vis. 52, PV/YP 17/18, WL 8.8, pH 10.5, Chl. 3,500, LCM 6#; WOB 14,000, RPM 95, Pump Pressure 750, SPM 65.
Bit #1: 7-7/8" TXT, TXT516, SN #S11378, (5-15's), in at 325', drilled 3,775' in 48.50 hours. 44 - Last 24<ROP>7-7/8"- 78 Cum Mud $ $12,776

Day 7 Date: 10/03/19 Thursday — DST #2 (4115' - 4194'). Survey at 4194' = 3/4 deg. Cold front came through 50 deg!!
CTCH at 4325' (RTD) at 7am. Drilled 225' in 24 hours. Rained .06" early this am. Location wet and soft. 0.67" total rain.
Ran 3.75 hours, down 20.25 hours (.50 Connections, 7.00 Tripping, 1.00 Handle test tool, .25 Clean floor, .50 Break circ at 2400'&3300', 1.50 CFS at 4160', 1.25 CFS at 4194', .25 CTCH at 4325', 1.50 CTCH at 4194', 1.00 CTCH at 4194', 4.00 DST #2, 1.25 Short trip 17 stands to 3136').
Mud Properties: Chemical/Pac - Wt. 9.1, Vis. 58, PV/YP 13/14, WL 10.0, pH 9.50, Chl. 6,000, LCM 6#; WOB 14,000, RPM 95, Pump Pressure 780, SPM 65.
Bit #1: 7-7/8" TXT, TXT516, SN #S11378, (5-15's), in at 325', drilled 4,000' in 52.25 hours. 60 - Last 24<ROP>7-7/8"- 77 Cum Mud $ $13,969

Day 8 Date: 10/04/19 Friday — Survey at 4325' = 1 degree, RTD=4325', LTD=4328' Plugged Well at 11:15pm 10/3/19
Tearing down for move off location at 4325'. Drilled 0' in 24 hours. Rained 0.04" overnight for a total during this well of 0.71".
Ran 0.00 hours, down 24.00 hours (1.25 Set cement plugs, 1.50 Jet cellar and pits, 3.50 Tripping, .75 Rig up loggers, 2.75 Logging, .50 Rig up lay down line, 1.25 CTCH at 4325', .25 Survey, 3.50 Lay down DP and DC, 1.50 Pull BOP, 1.00 Break kelly and lay down, 6.25 Rig down and prepare for move).
Mud Properties: Chemical/Pac - Wt. 9.4, Vis. 59, PV/YP 17/17, WL 8.8, pH 10.0, Chl. 7,000, LCM 5#
Bit #1: 7-7/8" TXT, TXT516, SN #S11378, (5-15's), in at 325'm out at 4325, drilled 4,000' in 52.25 hours 0 - Last 24<ROP>7-7/8"- 77 Final Cum Mud $ $14,546

Sterling will schedule the water well to be plugged.

Plugging Data:
Plugged well on 10/03/19. Plugged with heavy mud from 4325' (RTD) to 690' where the first plug was set with 50 sacks, then second plug set 350' with 70 sacks, then third plug set at 60' with 30 sacks. Plugged Rathole with 30 sacks and mousehole with 20 sacks. 200 Total sacks used containing 60/40 Poz, 4%Gel. Plugging Job completed at 11:15pm on 10/03/19. Plugging services provided by Basic, Ticket # 18149. Plugging orders received on 10/03/19 at 1:30pm by Kenny Sullivan. Reported to KCC (Heath Walsh) on 10/07/19

DRILL STEM TEST REPORT

Prater Oil & Gas Oper., Inc.

10356 Bluestem BLVD
Pratt, Ks. 67124

ATTN: Kent Roberts

2-27s-12w Pratt Co., Ks.

Fisher # 1

Job Ticket: 64946 **DST#: 1**

Test Start: 2019.10.01 @ 06:38:43

GENERAL INFORMATION:

Formation: **LKC " B " Zone**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 09:05:28
Time Test Ended: 15:01:43

Test Type: Conventional Bottom Hole (Initial)
Tester: Matt Smith
Unit No: 68

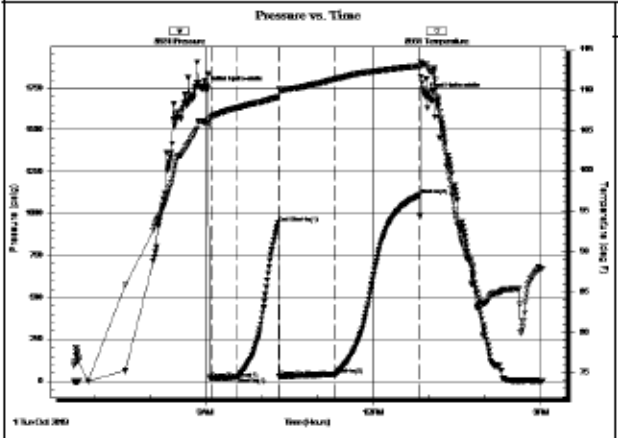
Interval: 3716.00 ft (KB) To 3740.00 ft (KB) (TVD)
Total Depth: 3740.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1874.00 ft (KB)
1863.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8931 **Inside**
Press@RunDepth: 23.49 psig @ 3717.00 ft (KB)
Start Date: 2019.10.01 End Date: 2019.10.01
Start Time: 06:38:48 End Time: 15:01:42

Capacity: 8000.00 psig
Last Calib.: 2019.10.01
Time On Btm: 2019.10.01 @ 09:00:58
Time Off Btm: 2019.10.01 @ 12:54:58

TEST COMMENT: IF: Strong Blow . B.O.B. in 28 mins. Built to 12.65".
ISI: No Blow .
FF: Strong Blow . B.O.B. in 29 mins. Built to 16.41".
FSI: No Blow .



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1746.49	105.89	Initial Hydro-static
5	16.96	106.62	Open To Flow (1)
33	23.49	107.78	Shut-In(1)
77	941.57	109.06	End Shut-In(1)
79	26.30	110.07	Open To Flow (2)
138	40.29	111.30	Shut-In(2)
229	1110.82	112.92	Shut-In(3)
234	1708.94	113.16	Final Hydro-static

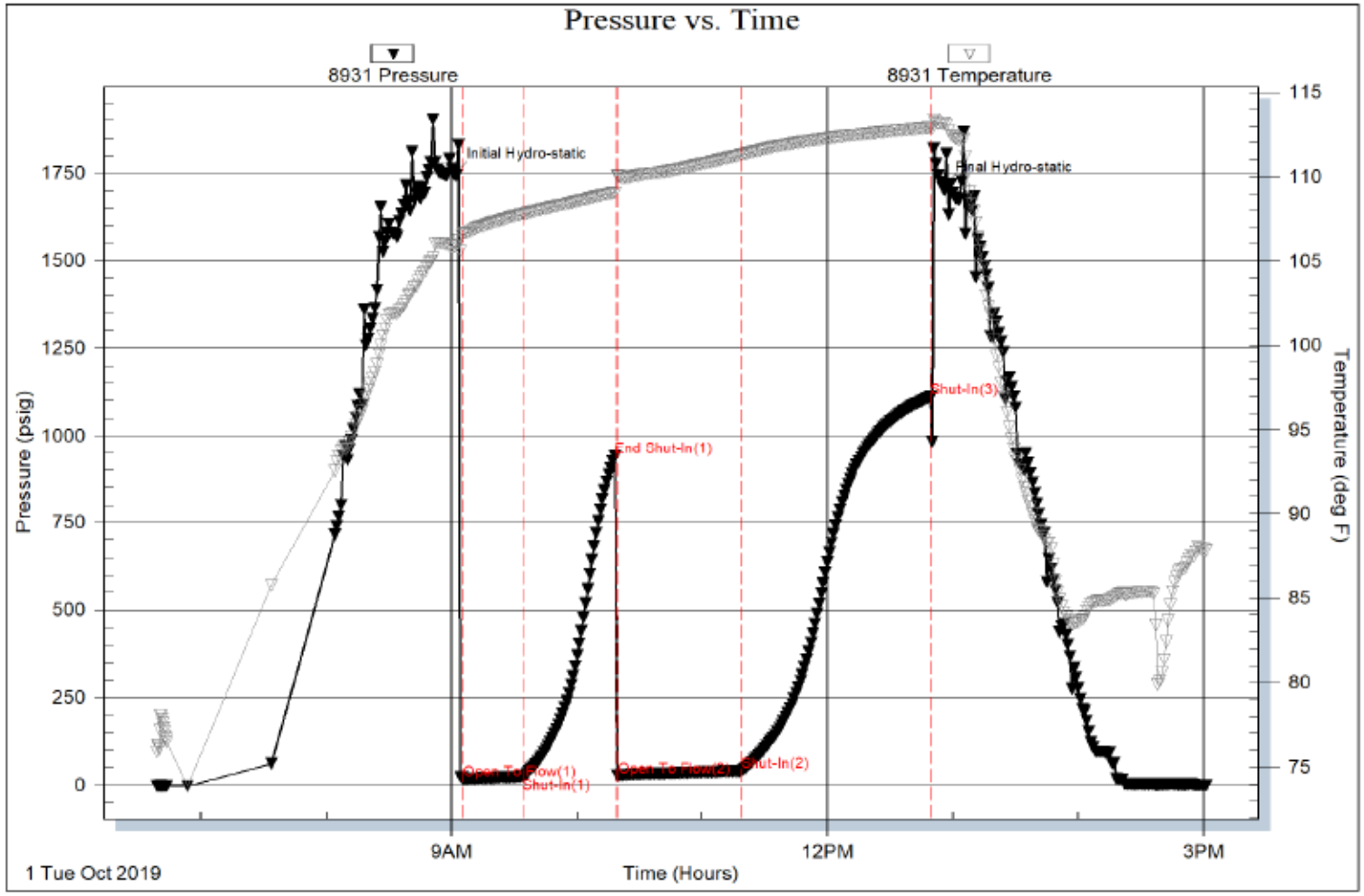
Recovery

Length (ft)	Description	Volume (bbl)
118.00	GOWCM 15%g 25%o 5%w 55%m	0.90
3.00	OCM 80%o 20%m	0.02
0.00	314' G.I.P. 100%g	0.00

Gas Rates

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

Serial #: 8931 **Inside** Prater Oil & Gas Oper., Inc. Fisher # 1 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 64946 Printed: 2019.10.01 @ 15:32:45

DRILL STEM TEST REPORT

Prater Oil & Gas Oper., Inc.

10356 Bluestem BLVD
Pratt, Ks. 67124

ATTN: Kent Roberts

2-27s-12w Pratt Co., Ks.

Fisher # 1

Job Ticket: 64947 **DST#: 2**

Test Start: 2019.10.02 @ 15:21:41

GENERAL INFORMATION:

Formation: **Mississippi Chert**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 17:49:26
Time Test Ended: 00:10:56

Test Type: Conventional Bottom Hole (Reset)
Tester: Matt Smith
Unit No: 68

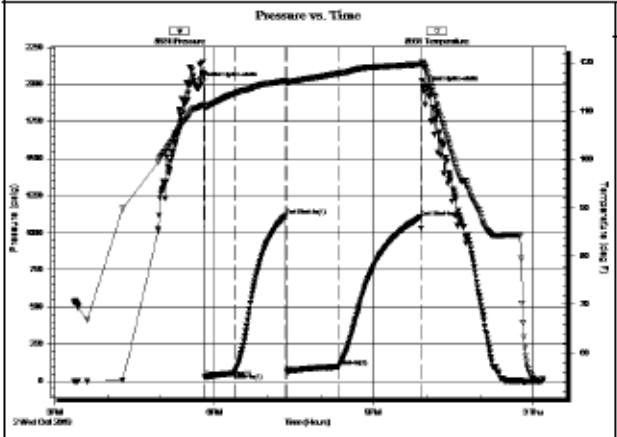
Interval: 4115.00 ft (KB) To 4194.00 ft (KB) (TVD)
Total Depth: 4194.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1874.00 ft (KB)
1863.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8931 **Inside**
Press@RunDepth: 100.90 psig @ 4116.00 ft (KB)
Start Date: 2019.10.02 End Date: 2019.10.03
Start Time: 15:21:46 End Time: 00:10:56

Capacity: 8000.00 psig
Last Calib.: 2019.10.03
Time On Btm: 2019.10.02 @ 17:45:41
Time Off Btm: 2019.10.02 @ 21:55:41

TEST COMMENT: IF: Strong Blow . B.O.B. in 5 mins. Built to 25.87".
ISI: No Blow .
FF: Strong Blow . B.O.B. 27 mins. Built t 18.92".
FSI: No Blow .



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2003.75	111.07	Initial Hydro-static
4	27.67	110.92	Open To Flow (1)
37	53.33	113.59	Shut-In(1)
95	1114.61	116.26	End Shut-In(1)
97	62.88	116.03	Open To Flow (2)
156	100.90	117.78	Shut-In(2)
248	1102.61	119.74	End Shut-In(2)
250	1976.71	119.96	Final Hydro-static

Recovery

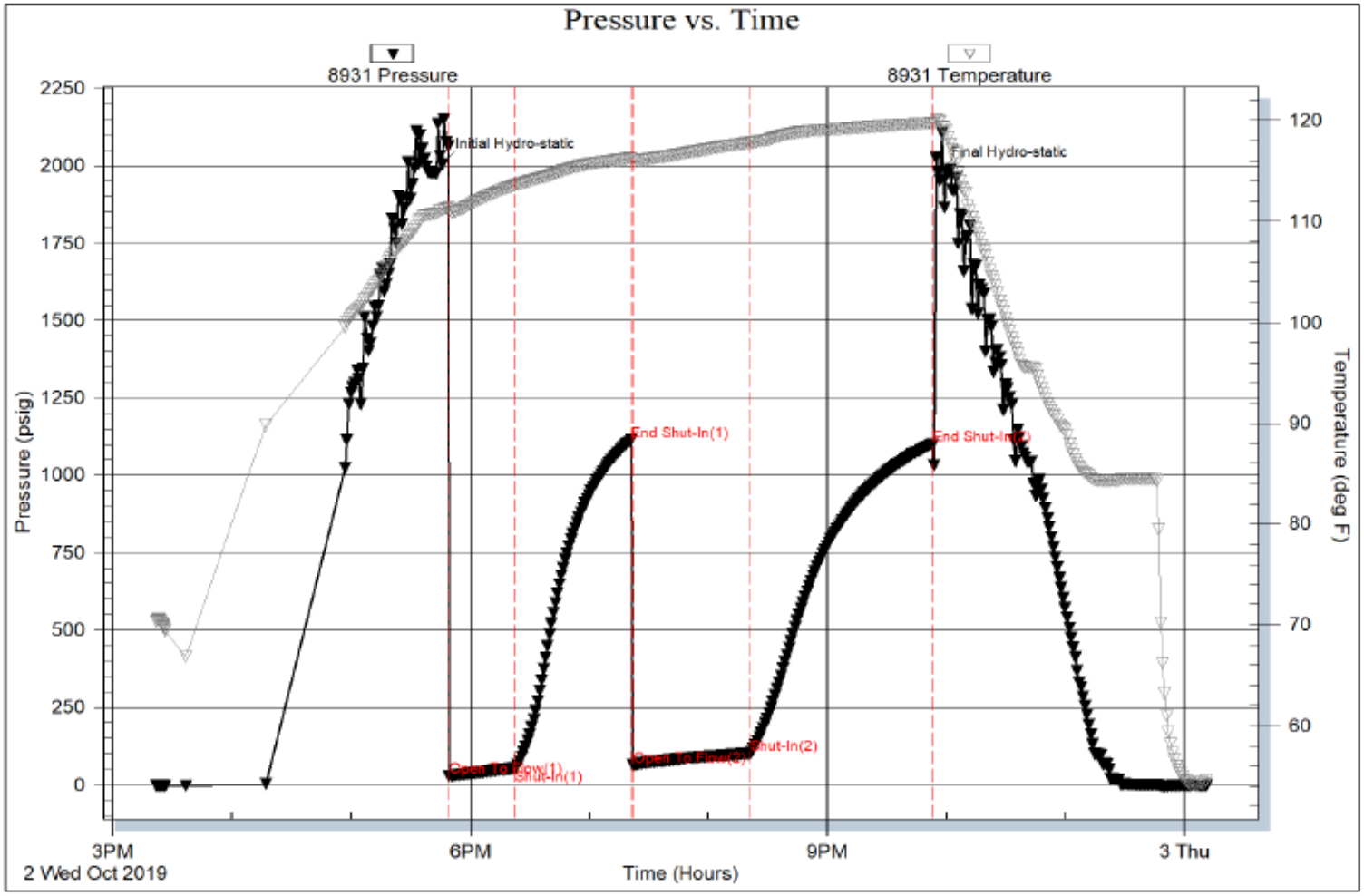
Length (ft)	Description	Volume (bbl)
170.00	GOSM 5%g 95%m	1.29

* Recovery from multiple tests

Gas Rates

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

Serial #: 8931 **Inside** Prater Oil & Gas Oper., Inc. Fisher # 1 DST Test Number: 2

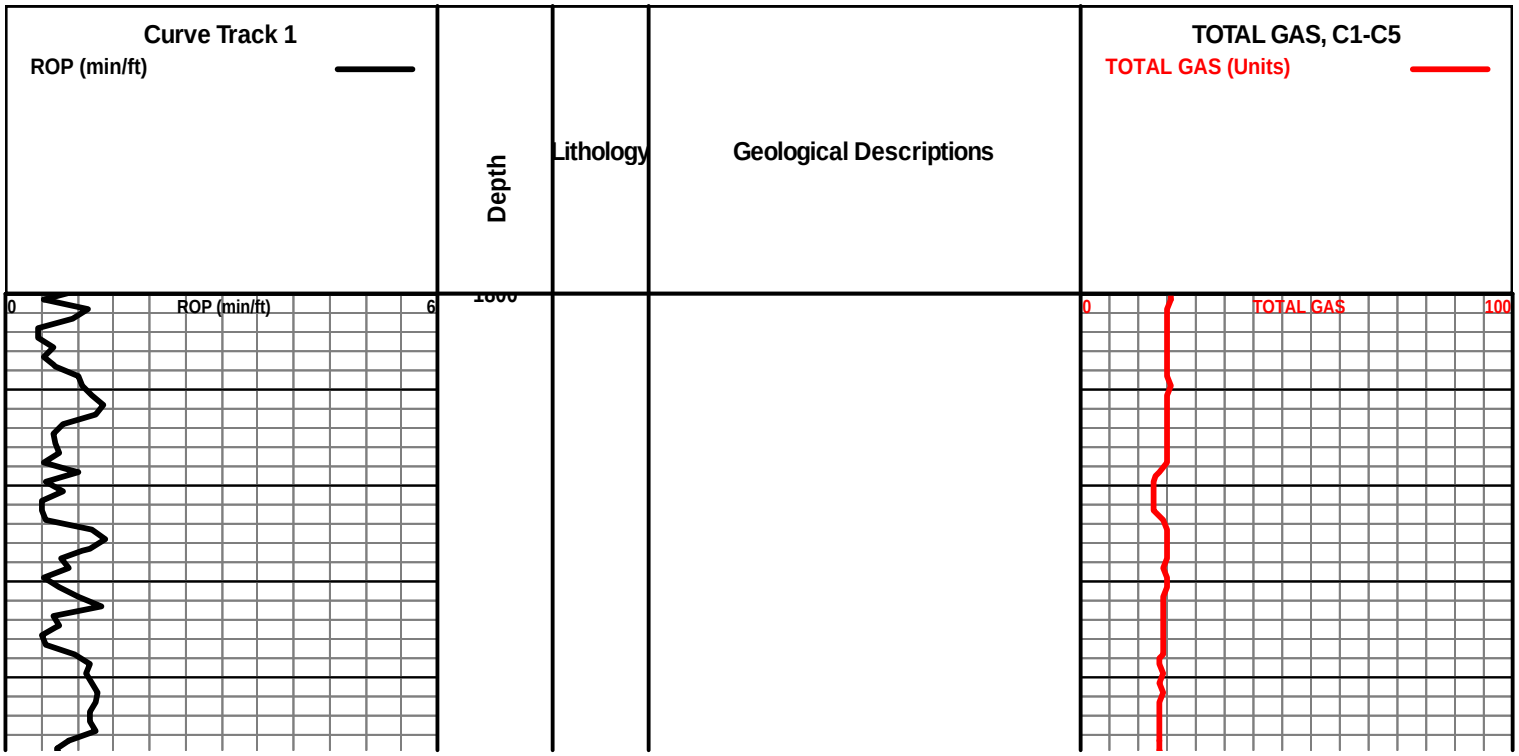


Trilobite Testing, Inc Ref. No: 64947 Printed: 2019.10.03 @ 06:07:37

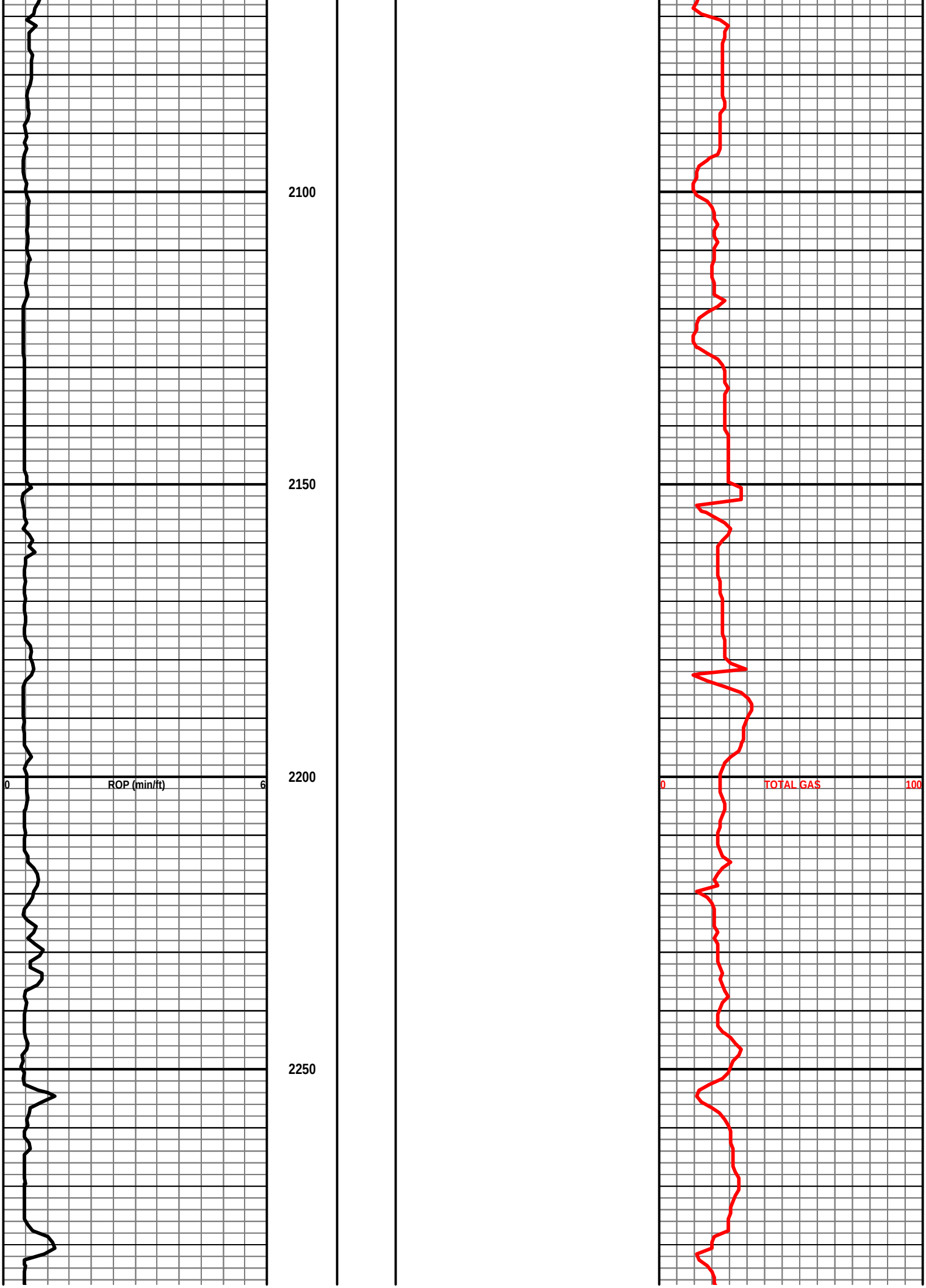
Prater Oil and Gas
Fisher #1

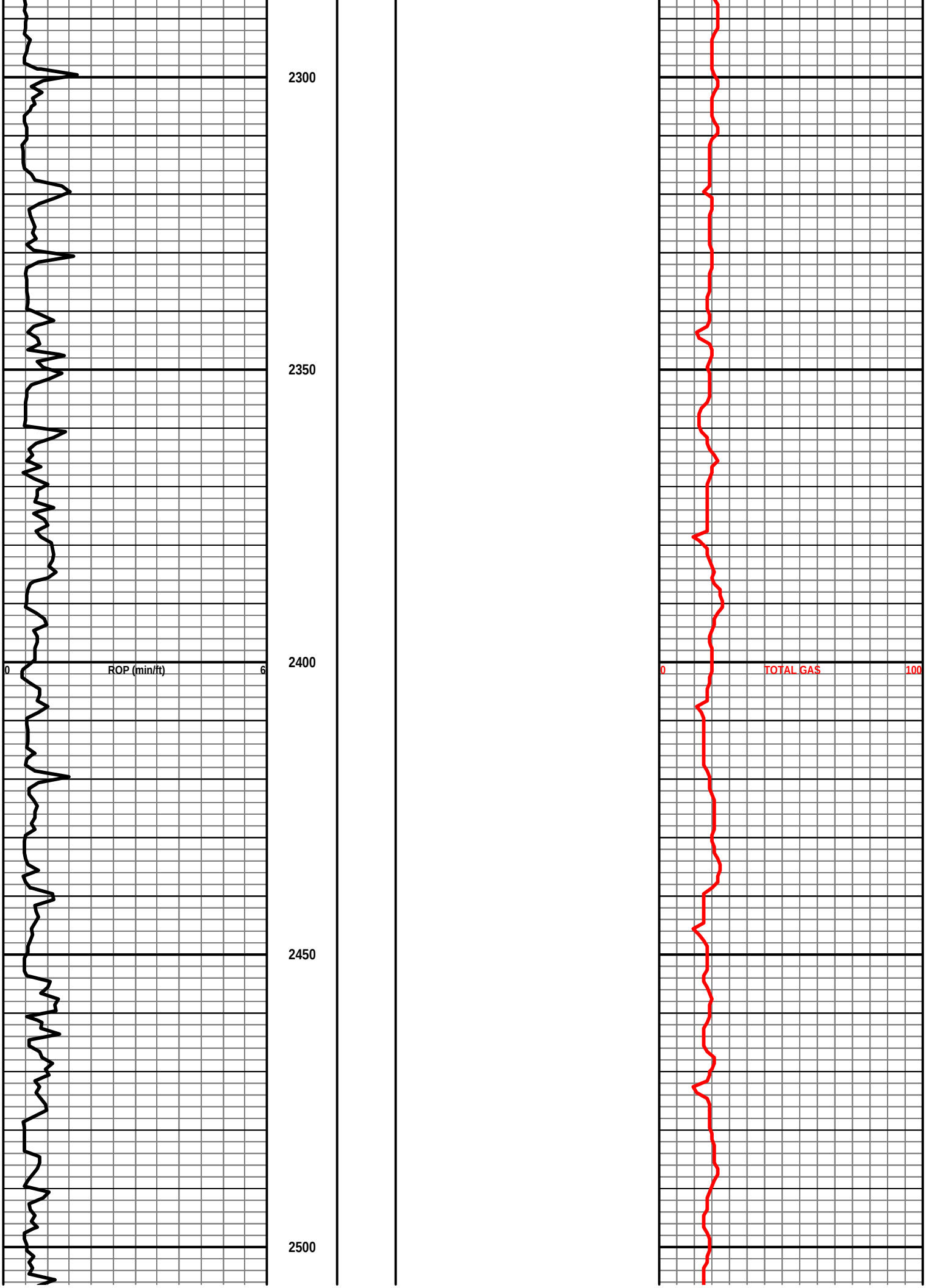
Formation	Sample Top	Datum	Log Top	Datum
Anhydrite	655	1219	655	1219
Base Anhydrite	673	1201	673	1201
Topeka	3159	-1285	3160	-1286
Heebner Shale	3492	-1618	3495	-1621
Douglas Shale	3530	-1656	3532	-1658
Brown Lime	3678	-1804	3678	-1804
Lansing	3690	-1816	3691	-1817
Lansing Drum	3860	-1986	3862	-1988
Stark Shale	3986	-2112	3988	-2114
Mississippi Chert	4126	-2252	4148	-2274
Mississippi Lime	4188	-2314	4193	-2319
Kinderhook Shale	4296	-2422	4298	-2424
RTD	4325	-2451	4328	-2454

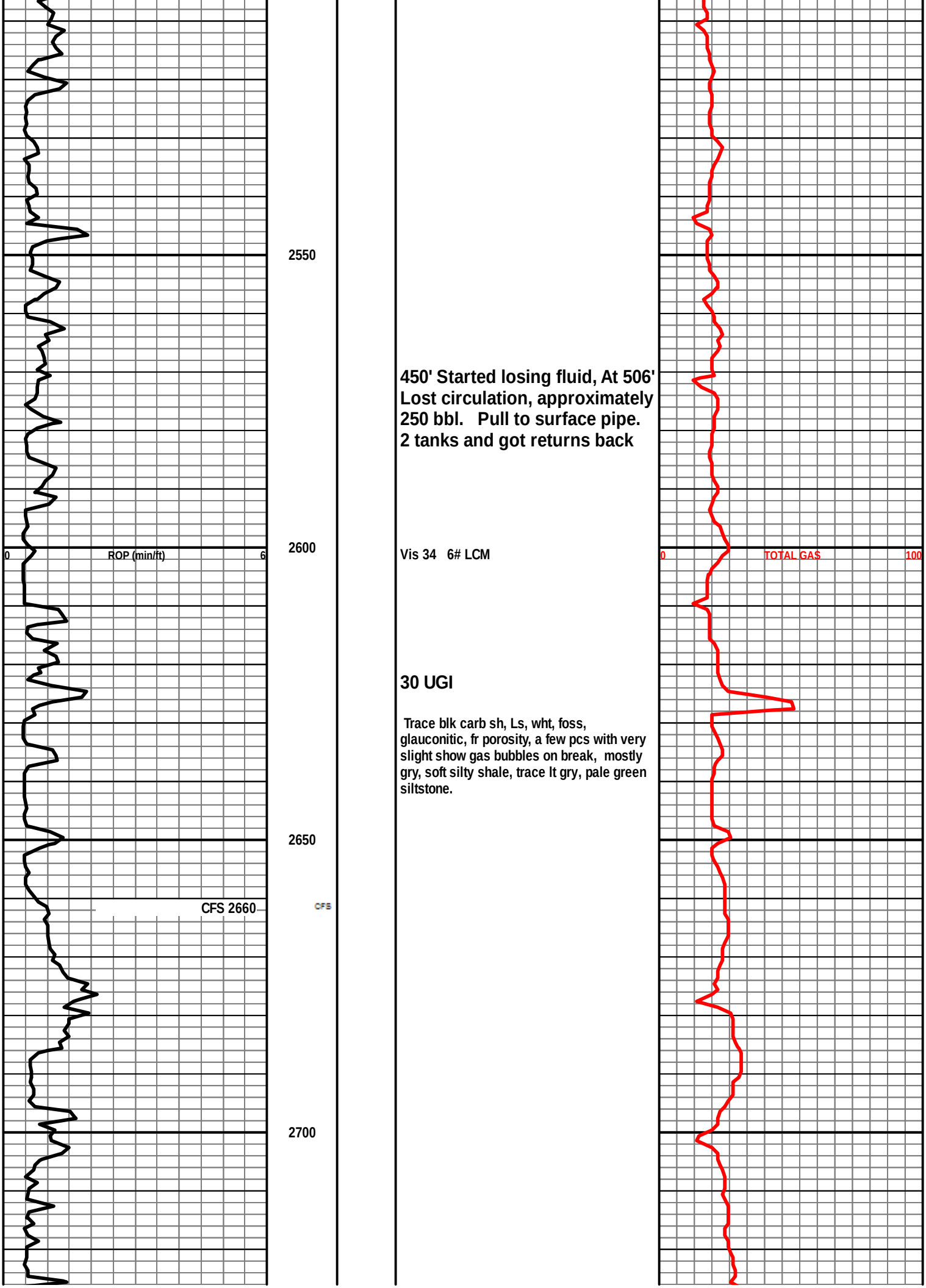
ROCK TYPES

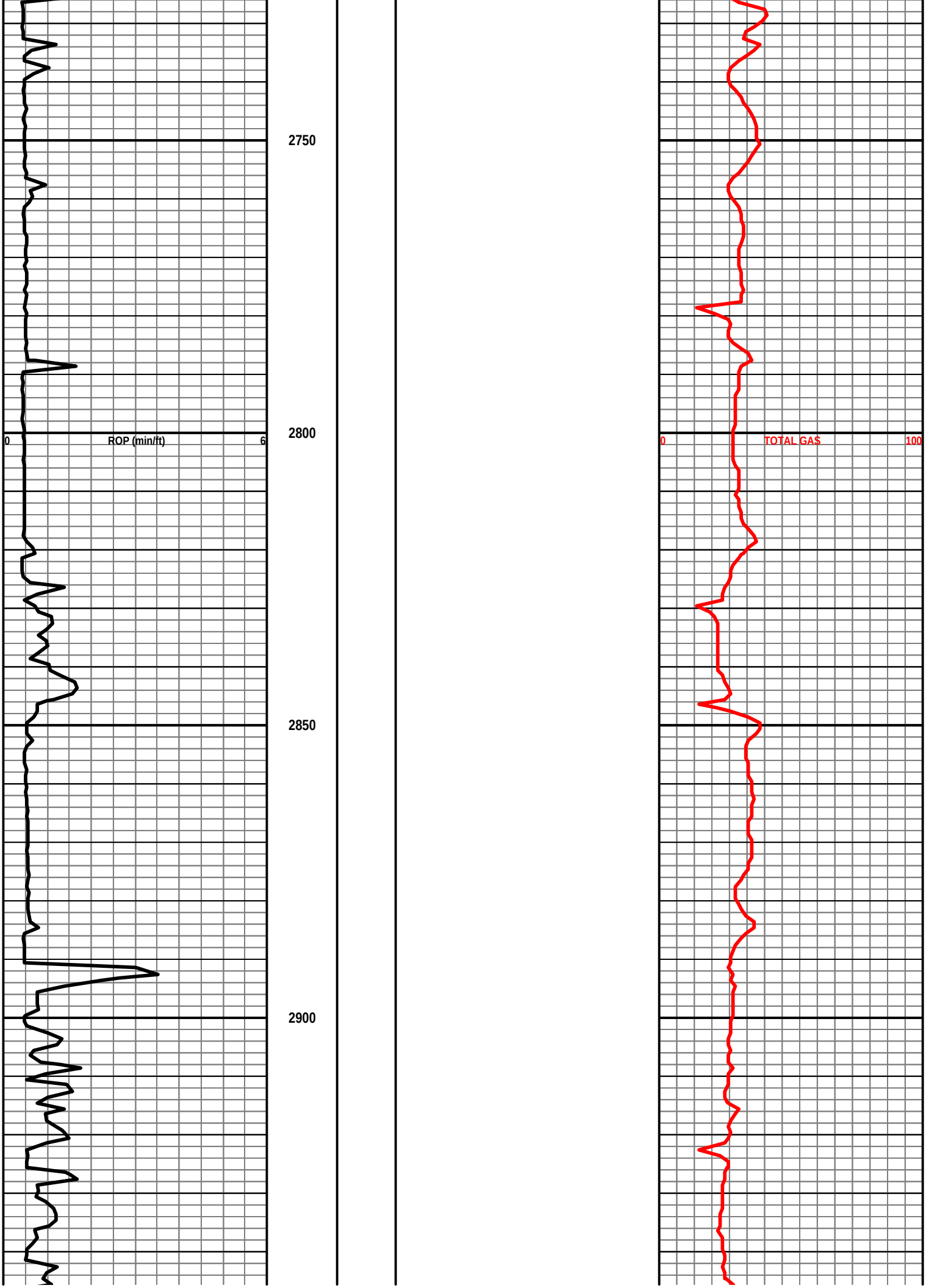


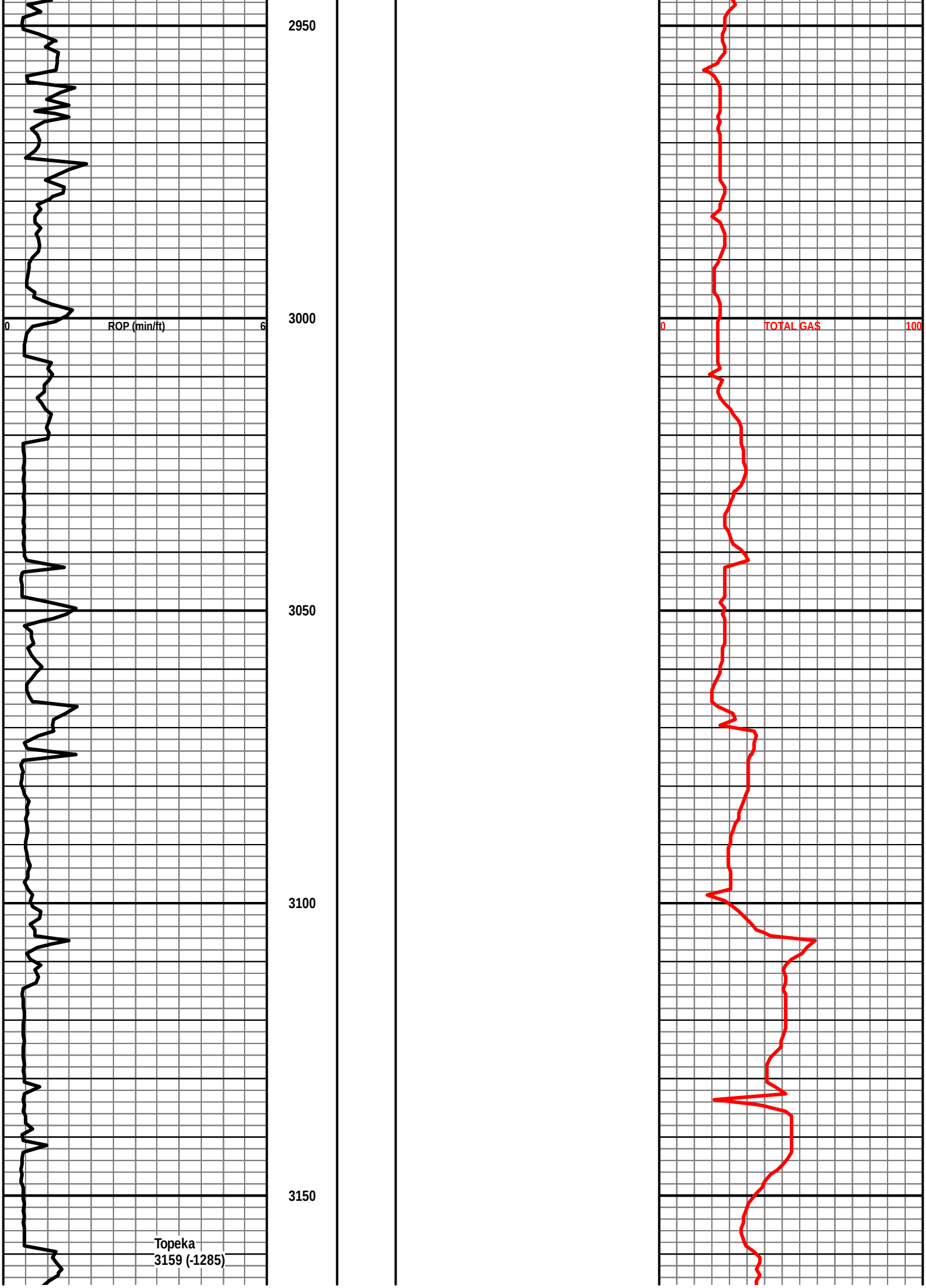

1850
1900
1950
2000
2050
0
ROP (min/ft)
6
0
TOTAL GA$
100

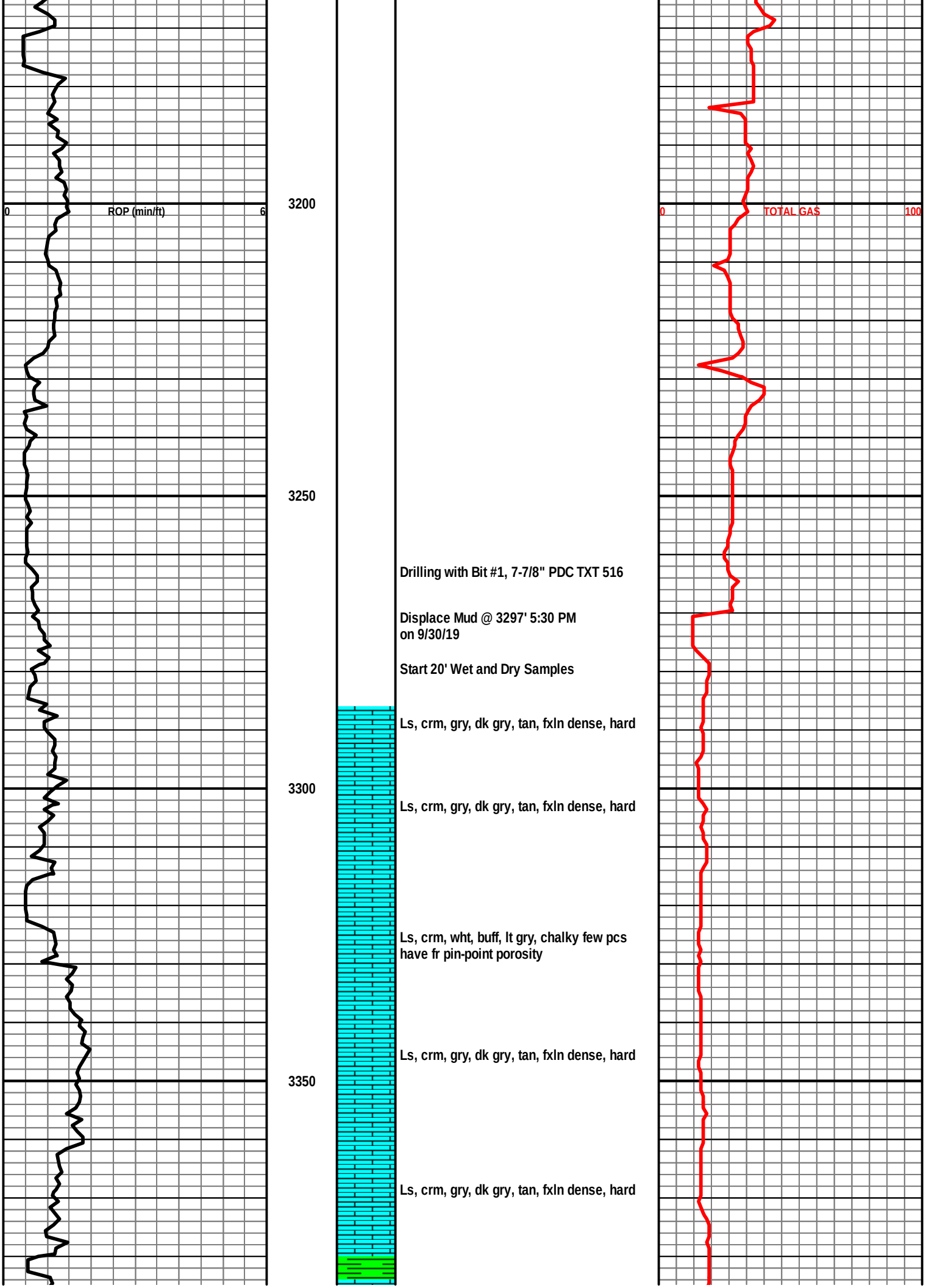

2100
2150
2200
2250
0
ROP (min/ft)
6
0
TOTAL GAS
100

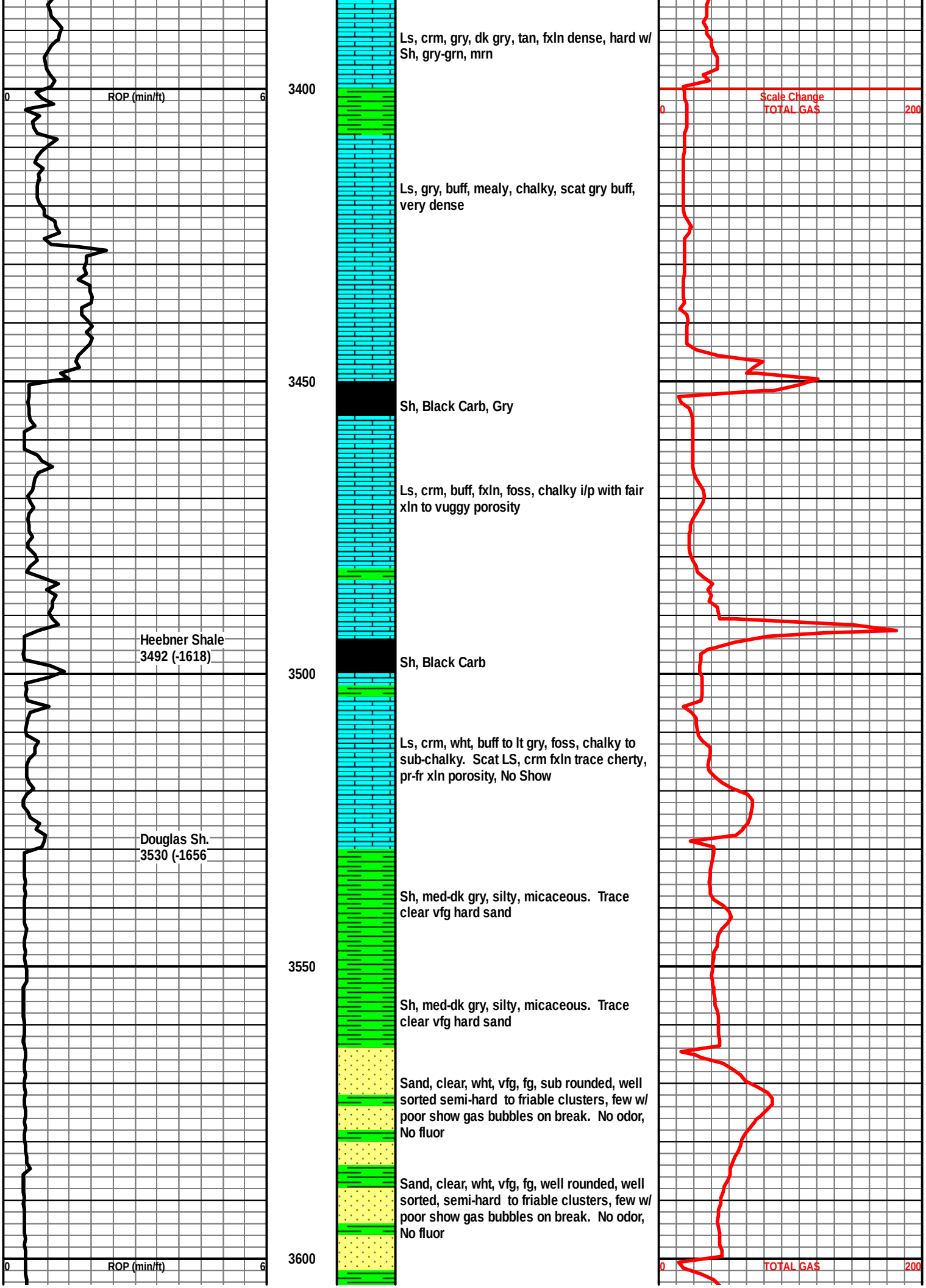

2300
2350
0
ROP (min/ft)
6
2400
0
TOTAL GA$
100
2450
2500

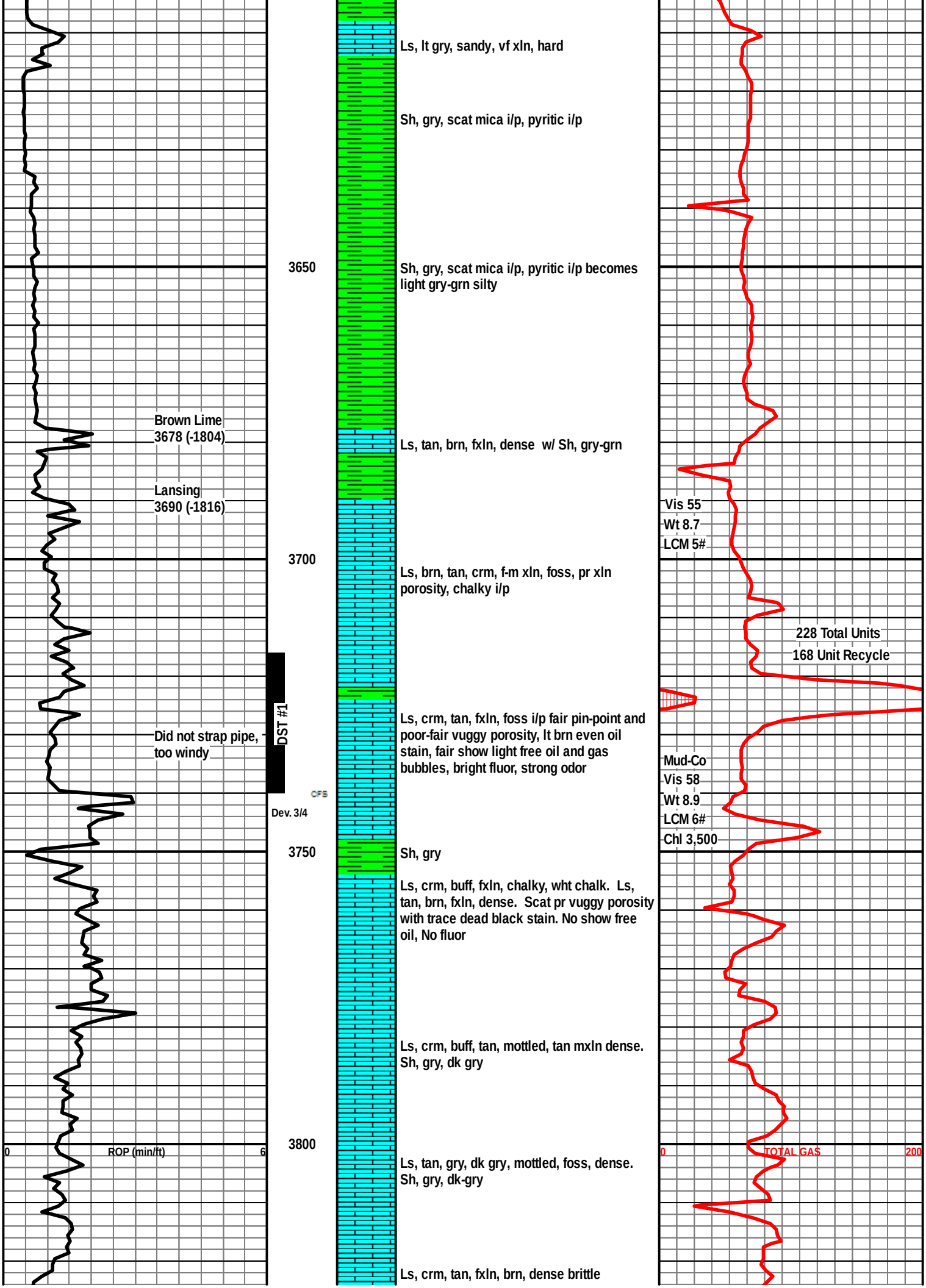

2550
2600
0
ROP (min/ft)
6
2650
CFS 2660
CFS
2700
450' Started losing fluid, At 506'
Lost circulation, approximately
250 bbl. Pull to surface pipe.
2 tanks and got returns back
Vis 34 6# LCM
30 UGI
Trace blk carb sh, Ls, wht, foss, glauconitic, fr porosity, a few pcs with very slight show gas bubbles on break, mostly gry, soft silty shale, trace lt gry, pale green siltstone.
0
TOTAL GAS
100

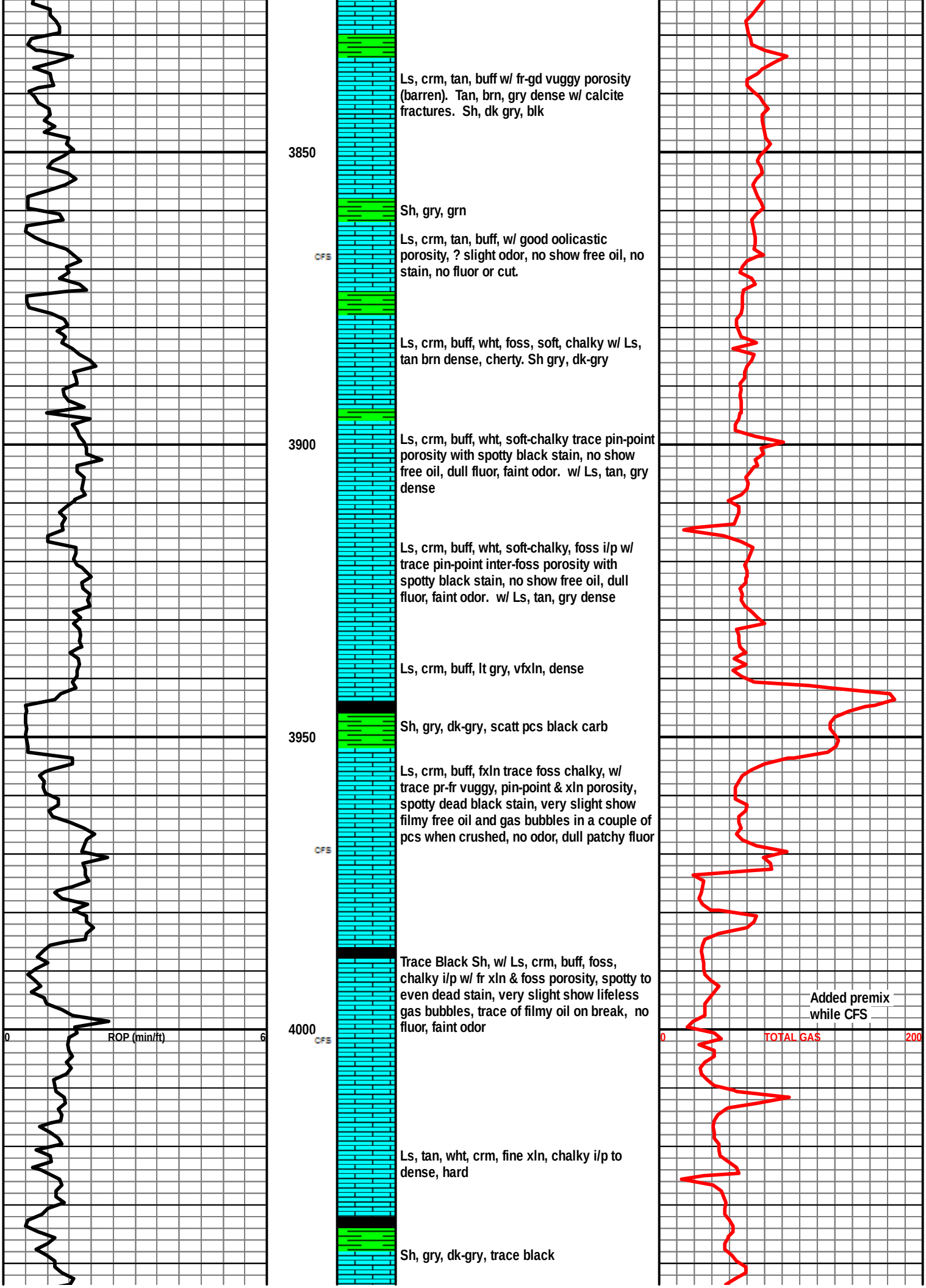

2750
2800
0
ROP (min/ft)
6
0
TOTAL GA$
100
2850
2900

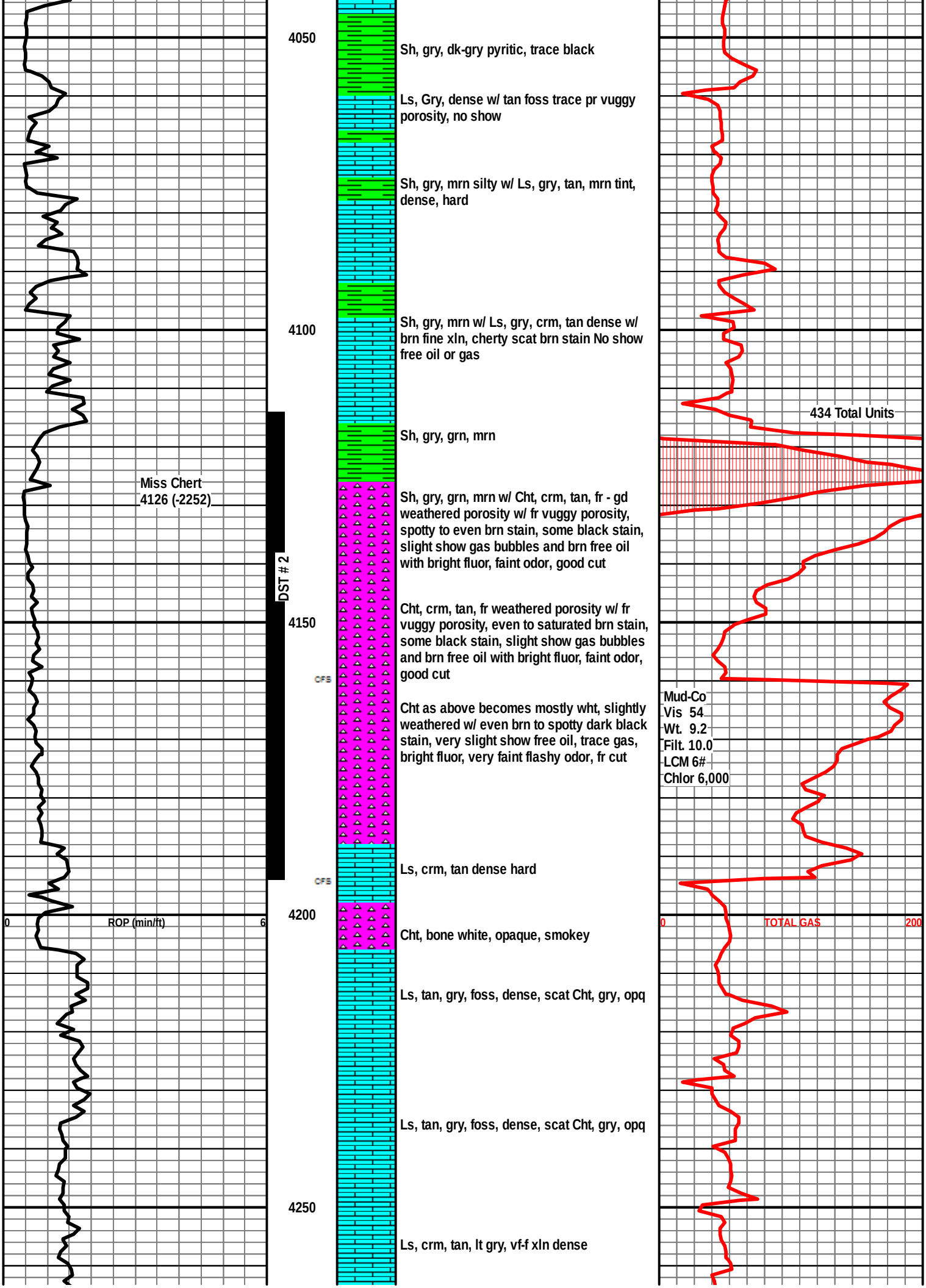

2950
3000
3050
3100
3150
0
ROP (min/ft)
6
0
TOTAL GAS
100
Topeka
3159 (-1285)

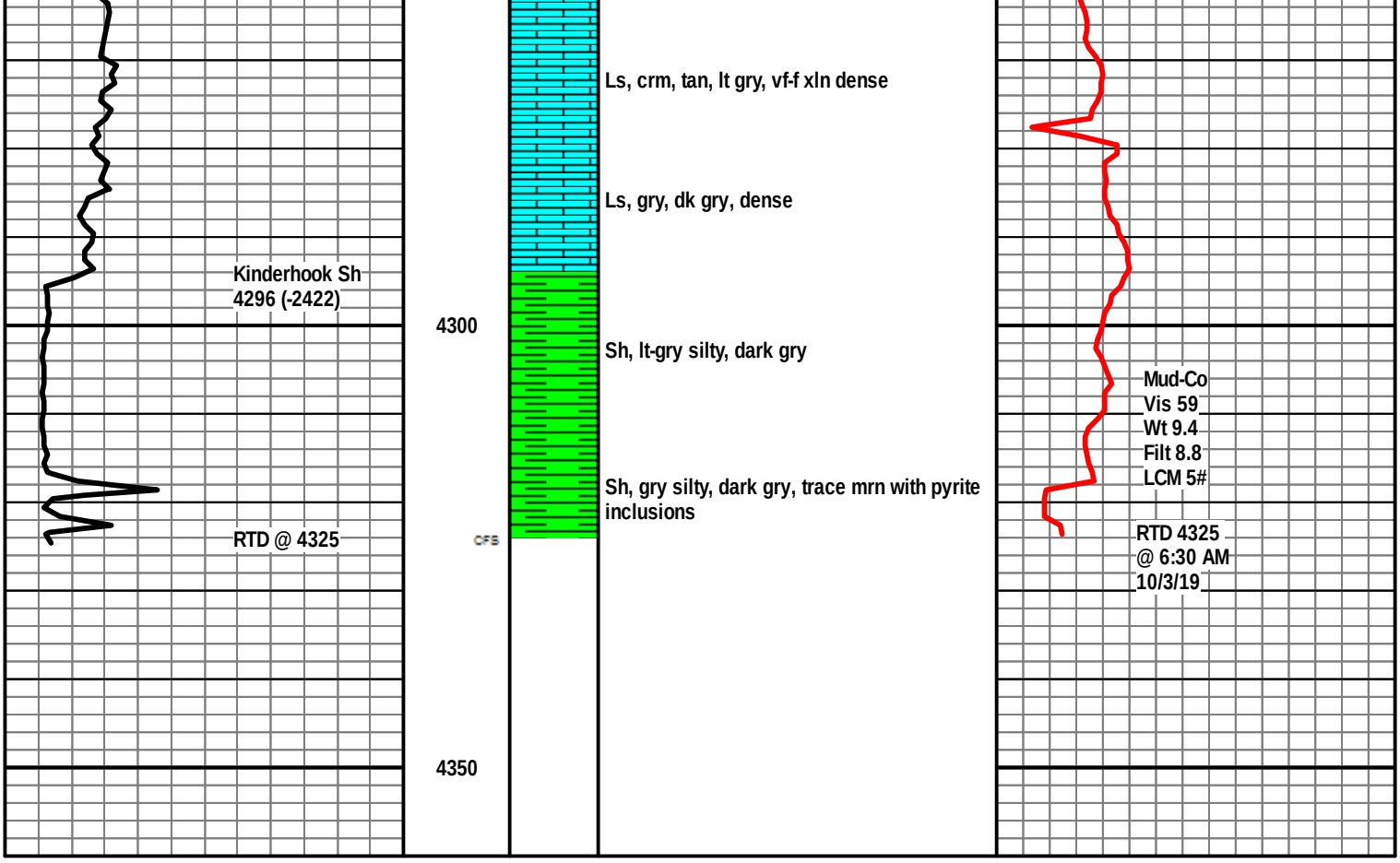

0
ROP (min/ft)
6
3200
3250
3300
3350
Drilling with Bit #1, 7-7/8" PDC TXT 516
Displace Mud @ 3297' 5:30 PM
on 9/30/19
Start 20' Wet and Dry Samples
Ls, crm, gry, dk gry, tan, fxln dense, hard
Ls, crm, gry, dk gry, tan, fxln dense, hard
Ls, crm, wht, buff, lt gry, chalky few pcs
have fr pin-point porosity
Ls, crm, gry, dk gry, tan, fxln dense, hard
Ls, crm, gry, dk gry, tan, fxln dense, hard
0
TOTAL GA$
100


0
ROP (min/ft)
6
3400
Ls, crm, gry, dk gry, tan, fxln dense, hard w/ Sh, gry-grn, mrn
Scale Change
0
TOTAL GAS
200
Ls, gry, buff, mealy, chalky, scat gry buff, very dense
3450
Sh, Black Carb, Gry
Ls, crm, buff, fxln, foss, chalky i/p with fair xln to vuggy porosity
Heebner Shale
3492 (-1618)
Sh, Black Carb
3500
Ls, crm, wht, buff to lt gry, foss, chalky to sub-chalky. Scat LS, crm fxln trace cherty, pr-fr xln porosity, No Show
Douglas Sh.
3530 (-1656
Sh, med-dk gry, silty, micaceous. Trace clear vfg hard sand
3550
Sh, med-dk gry, silty, micaceous. Trace clear vfg hard sand
Sand, clear, wht, vfg, fg, sub rounded, well sorted semi-hard to friable clusters, few w/ poor show gas bubbles on break. No odor, No fluor
Sand, clear, wht, vfg, fg, well rounded, well sorted, semi-hard to friable clusters, few w/ poor show gas bubbles on break. No odor, No fluor
3600
0
ROP (min/ft)
6
0
TOTAL GAS
200


Ls, lt gry, sandy, vf xln, hard
Sh, gry, scat mica i/p, pyritic i/p
3650
Sh, gry, scat mica i/p, pyritic i/p becomes light gry-grn silty
Brown Lime
3678 (-1804)
Ls, tan, brn, fxln, dense w/ Sh, gry-grn
Lansing
3690 (-1816)
Vis 55
Wt 8.7
LCM 5#
3700
Ls, brn, tan, crm, f-m xln, foss, pr xln porosity, chalky i/p
228 Total Units
168 Unit Recycle
DST #1
Did not strap pipe, too windy
Ls, crm, tan, fxln, foss i/p fair pin-point and poor-fair vuggy porosity, lt brn even oil stain, fair show light free oil and gas bubbles, bright fluor, strong odor
Mud-Co
Vis 58
Wt 8.9
LCM 6#
Chl 3,500
CFB
Dev. 3/4
3750
Sh, gry
Ls, crm, buff, fxln, chalky, wht chalk. Ls, tan, brn, fxln, dense. Scat pr vuggy porosity with trace dead black stain. No show free oil, No fluor
Ls, crm, buff, tan, mottled, tan mxln dense. Sh, gry, dk gry
3800
0
ROP (min/ft)
6
Ls, tan, gry, dk gry, mottled, foss, dense. Sh, gry, dk-gry
0
TOTAL GAS
200
Ls, crm, tan, fxln, brn, dense brittle


Ls, crm, tan, buff w/ fr-gd vuggy porosity (barren). Tan, brn, gry dense w/ calcite fractures. Sh, dk gry, blk
3850
Sh, gry, grn
Ls, crm, tan, buff, w/ good oolicastic porosity, ? slight odor, no show free oil, no stain, no fluor or cut.
CFS
Ls, crm, buff, wht, foss, soft, chalky w/ Ls, tan brn dense, cherty. Sh gry, dk-gry
3900
Ls, crm, buff, wht, soft-chalky trace pin-point porosity with spotty black stain, no show free oil, dull fluor, faint odor. w/ Ls, tan, gry dense
Ls, crm, buff, wht, soft-chalky, foss i/p w/ trace pin-point inter-foss porosity with spotty black stain, no show free oil, dull fluor, faint odor. w/ Ls, tan, gry dense
Ls, crm, buff, lt gry, vfxln, dense
Sh, gry, dk-gry, scatt pcs black carb
3950
Ls, crm, buff, fxln trace foss chalky, w/ trace pr-fr vuggy, pin-point & xln porosity, spotty dead black stain, very slight show filmy free oil and gas bubbles in a couple of pcs when crushed, no odor, dull patchy fluor
CFS
Trace Black Sh, w/ Ls, crm, buff, foss, chalky i/p w/ fr xln & foss porosity, spotty to even dead stain, very slight show lifeless gas bubbles, trace of filmy oil on break, no fluor, faint odor
4000
CFS
Added premix while CFS
0
ROP (min/ft)
6
0
TOTAL GA$
200
Ls, tan, wht, crm, fine xln, chalky i/p to dense, hard
Sh, gry, dk-gry, trace black


4050
Sh, gry, dk-gry pyritic, trace black
Ls, Gry, dense w/ tan foss trace pr vuggy porosity, no show
Sh, gry, mrn silty w/ Ls, gry, tan, mrn tint, dense, hard
4100
Sh, gry, mrn w/ Ls, gry, crm, tan dense w/ brn fine xln, cherty scat brn stain No show free oil or gas
434 Total Units
Sh, gry, grn, mrn
Miss Chert
4126 (-2252)
Sh, gry, grn, mrn w/ Cht, crm, tan, fr - gd weathered porosity w/ fr vuggy porosity, spotty to even brn stain, some black stain, slight show gas bubbles and brn free oil with bright fluor, faint odor, good cut
DST # 2
4150
Cht, crm, tan, fr weathered porosity w/ fr vuggy porosity, even to saturated brn stain, some black stain, slight show gas bubbles and brn free oil with bright fluor, faint odor, good cut
CFS
Mud-Co
Vis 54
Wt. 9.2
Filt. 10.0
LCM 6#
Chlor 6,000
Cht as above becomes mostly wht, slightly weathered w/ even brn to spotty dark black stain, very slight show free oil, trace gas, bright fluor, very faint flashy odor, fr cut
Ls, crm, tan dense hard
CFS
4200
0
ROP (min/ft)
6
0
TOTAL GAS
200
Cht, bone white, opaque, smokey
Ls, tan, gry, foss, dense, scat Cht, gry, opq
Ls, tan, gry, foss, dense, scat Cht, gry, opq
4250
Ls, crm, tan, lt gry, vf-f xln dense


Kinderhook Sh
4296 (-2422)
RTD @ 4325
4300
4350
CFS
Ls, crm, tan, lt gry, vf-f xln dense
Ls, gry, dk gry, dense
Sh, lt-gry silty, dark gry
Sh, gry silty, dark gry, trace mrn with pyrite inclusions
Mud-Co
Vis 59
Wt 9.4
Filt 8.8
LCM 5#
RTD 4325
@ 6:30 AM
10/3/19