KOLAR Document ID: 1319671

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 # 5004
Name: Vincent Oil Corporation
Address 1: 200 W DOUGLAS AVE #725
Address 2:
City: WICHITA State: KS Zip: 67202 + 3013
Contact Person: M.L. Korphage
Phone: (316) 262-3573
CONTRACTOR: License # 5929
Name: Duke Drilling Co., Inc.
Wellsite Geologist: Tom Dudgeon
Purchaser: None

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 #:

6/21/2016 Spud Date or Recompletion Date
6/28/2016 Date Reached TD
6/29/2016 Completion Date or Recompletion Date

API No.: 15-057-20972-00-00
Spot Description:
W2 - NW - NW - NE Sec. 4 Twp. 28 S. R. 24 ☐ East ☑ West
330 Feet from ☑ North / ☐ South Line of Section
2385 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: Ford
Lease Name: FISCHER Well #: 1-4
Field Name: Wildcat
Producing Formation: None - D&A
Elevation: Ground: 2546 Kelly Bushing: 2559
Total Vertical Depth: 5230 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 439 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: 23500 ppm Fluid volume: 1100 bbls
Dewatering method used: Hauled to Disposal
Location of fluid disposal if hauled offsite:
Operator Name: Vincent Oil Corporation
Lease Name: Bleumer License #: 5004
Quarter SW Sec. 4 Twp. 26 S. R. 24 ☐ East ☑ West
County: Ford Permit #: D30666

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: 10/14/2016
☑ **Confidential Release Date:** 10/14/2018
☑ **Wireline Log Received** ☐ **Drill Stem Tests Received**
☑ **Geologist Report / Mud Logs Received**
☐ **UIC Distribution**
ALT ☐ I ☑ II ☐ III **Approved by:** Karen Ritter **Date:** 10/17/2016

Operator Name: Vincent Oil Corporation Lease Name: FISCHER Well #: 1-4

Sec. 4 Twp. 28 S. R. 24 ☐ East ☑ West County: Ford

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 *(Attach Additional Sheets)*	☑ Yes	☐ No
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:
Attached

☑ 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	12.25	8.625	23	439	Common	275	2% Gel, 3% CC & 1/4# Cell-Flake/sx

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

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	Vincent Oil Corporation
Well Name	FISCHER 1-4
Doc ID	1319671

All Electric Logs Run

Dual Induction
Density - Neutron
Microlog
Sonic

Form	ACO1 - Well Completion
Operator	Vincent Oil Corporation
Well Name	FISCHER 1-4
Doc ID	1319671

Tops

Name	Top	Datum
Heebner Shale	4300	(-1741)
Brown Limestone	4422	(-1863)
Lansing	4433	(-1874)
Stark Shale	4741	(-2182)
Base Kansas City	4864	(-2305)
Pawnee	4961	(-2402)
Cherokee Shale	5008	(-2449)
Base Penn Limestone	5109	(-2550)
Mississippian	5134	(-2575)
RTD	5230	(-2671)

Form	ACO1 - Well Completion
Operator	Vincent Oil Corporation
Well Name	FISCHER 1-4
Doc ID	1319671

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	12.25	8.625	23	439	Common	275	2% Gel, 3% CC & 1/4# Cell-Flake/sx

QUALITY WELL SERVICE, INC.

6529

Federal Tax I.D. # 481187368

Home Office 324 Simpson St., Pratt, KS 67124

Office 620-727-3410
Fax 620-672-3663

Rich's Cell 620-727-3409
Brady's Cell 620-727-6964

Date	Sec.	Twp.	Range	County	State	On Location	Finish
6-22-16	4	28	24	Ford	Ks	12:00	3:00

Lease Fischer | Well No. 1-4 | Location Ford + Saddle RD 10.5 miles west South into

Contractor Duke Rig 9

Type Job Surface

Hole Size 12¼ | T.D. 440

Csg. 8⅝ 23# | Depth 421.88

Tbg. Size | Depth

Tool Loading Jt 16' | Depth Total 437

Cement Left in Csg. 20 | Shoe Joint

Meas Line | Displace 26.56

Owner

To Quality Well Service, Inc.
You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.

Charge To Vincent Oil

Street

City State

The above was done to satisfaction and supervision of owner agent or contractor.

Cement Amount Ordered 275sx Common 3% cc 2% Gel ¼lb C.F.

EQUIPMENT

Pumptrk 8	No.	Mike	
Bulktrk 7	No.	Derek	
Bulktrk	No.		
Pickup	No.	David	

JOB SERVICES & REMARKS

Ran 10 jts 8⅝ Established circulation with Rig. Pumped 5bbls H²O mixed 275 sx. common cement 3% cc 2% Gel ¼ C.F. Released Plug. Displaced with 26.56bbls H²O. to 417' Shut in 500psi

Cement Circulated to surface

Common	275
Poz. Mix	
Gel.	5
Calcium	10
Hulls	
Salt	
Flowseal	68.75
Kol-Seal	
Mud CLR 48	
CFL-117 or CD110 CAF 38	
Sand	
Handling	290
Mileage	50

FLOAT EQUIPMENT

Guide Shoe	
Centralizer	
Baskets	
AFU Inserts	
Float Shoe	
Latch Down	
LMV	50
Service Supervisor	
Pumptrk Charge	Surface
Mileage	50 x 2
Tax	
Discount	
Total Charge	

X Signature

QUALITY WELL SERVICE, INC.

6531

Federal Tax I.D. # 481187368

Home Office 324 Simpson St., Pratt, KS 67124

Office 620-727-3410
Fax 620-672-3663

Rich's Cell 620-727-3409
Brady's Cell 620-727-6964

Date	Sec.	Twp.	Range	County	State	On Location	Finish
6-29-16	4	28	24	Ford	Ks	12:30	4:30

Lease Fisher | Well No. 1-4 | Location

Contractor Duke 9 | Owner

Type Job Rotary Plug | To Quality Well Service, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.

Hole Size 7 7/8 | T.D. 5230

Csg. 8 5/8 | Depth 437 | Charge To Vincent Oil

Tbg. Size | Depth | Street

Tool | Depth | City | State

Cement Left in Csg. | Shoe Joint | The above was done to satisfaction and supervision of owner agent or contractor.

Meas Line | Displace | Cement Amount Ordered 250 sx 60/40 4% Gel

EQUIPMENT

Pumptrk 8	No.	Mike
Bulktrk 10	No.	Dino
Bulktrk	No.	
Pickup	No.	

JOB SERVICES & REMARKS

Rat Hole 30sx 60/40 4% Gel

Mouse Hole 20 sx 60/40 4% Gel

Centralizers

Baskets

D/V or Port Collar

1st Drill pipe @ 1570 Load hole with mud. pumped water spacer pumped 50sx 60/40 4% Gel Displaced with 18 1/2 bbls H2o.

2nd Drill pipe @ 840 Load hole with Mud. pumped water spacer pumped 80sx 60/40 4% Gel Displaced with 8 bbls H2o

3rd Drill pipe @ 470 Load hole with Mud pumped 50sx 60/40 4% Gel displaced with 4 bbls H2o.

4th Drill pipe @ 60' pumped 20sx 60/40 4% gel to surface.

Common	150
Poz. Mix	100
Gel.	9
Calcium	
Hulls	
Salt	
Flowseal	
Kol-Seal	
Mud CLR 48	
CFL-117 or CD110 CAF 38	
Sand	
Handling	259
Mileage	50

FLOAT EQUIPMENT

Guide Shoe	
Centralizer	
Baskets	
AFU Inserts	
Float Shoe	
Latch Down	
LMV	50
Service Supervisor	
Pumptrk Charge	Rotary Plug
Mileage	50 x 2
Tax	
Discount	
Total Charge	

X Signature Timothy Brady

Taylor Printing, Inc.

DRILL STEM TEST REPORT

Vincent Oil Corporation

200 W Douglas Ave # 725
Wichita, KS 67202

ATTN: Tom Dudgeon

4-28S-24W Ford

Fischer 1-4

Job Ticket: 57996 **DST#: 1**

Test Start: 2016.06.28 @ 23:19:01

GENERAL INFORMATION:

Formation: **Conglomerate**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 01:37:16
Time Test Ended: 08:10:16

Test Type: Conventional Straddle (Initial)
Tester: Leal Cason
Unit No: 74

Interval: 5037.00 ft (KB) To 5150.00 ft (KB) (TVD)
Total Depth: 5236.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

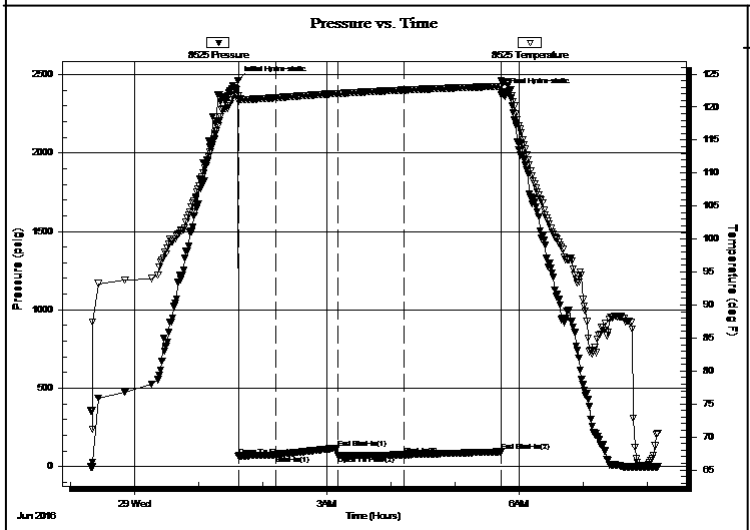
Reference Elevations: 2559.00 ft (KB)
2546.00 ft (CF)
KB to GR/CF: 13.00 ft

Serial #: 8525 **Inside**

Press@RunDepth: 74.79 psig @ 5038.00 ft (KB)
Start Date: 2016.06.28 End Date: 2016.06.29
Start Time: 23:19:02 End Time: 08:10:16

Capacity: 8000.00 psig
Last Calib.: 2016.06.29
Time On Btm: 2016.06.29 @ 01:37:01
Time Off Btm: 2016.06.29 @ 05:44:01

TEST COMMENT: IF: Weak 1 inch Blow , Died Off to 1/4 inch
ISI: No Blow Back
FF: No Blow
FSI: No Blow Back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2462.31	121.79	Initial Hydro-static
1	67.63	120.91	Open To Flow (1)
35	74.62	121.42	Shut-In(1)
93	119.38	122.08	End Shut-In(1)
94	73.27	122.06	Open To Flow (2)
155	74.79	122.59	Shut-In(2)
246	95.11	123.16	End Shut-In(2)
247	2387.20	123.81	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	SGCM 5%G 95%M	0.05

Gas Rates

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

DRILL STEM TEST REPORT

Vincent Oil Corporation

200 W Douglas Ave # 725
Wichita, KS 67202

ATTN: Tom Dudgeon

4-28S-24W Ford

Fischer 1-4

Job Ticket: 57996 **DST#: 1**

Test Start: 2016.06.28 @ 23:19:01

GENERAL INFORMATION:

Formation: **Conglomerate**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 01:37:16
Time Test Ended: 08:10:16

Test Type: Conventional Straddle (Initial)
Tester: Leal Cason
Unit No: 74

Interval: 5037.00 ft (KB) To 5150.00 ft (KB) (TVD)
Total Depth: 5236.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

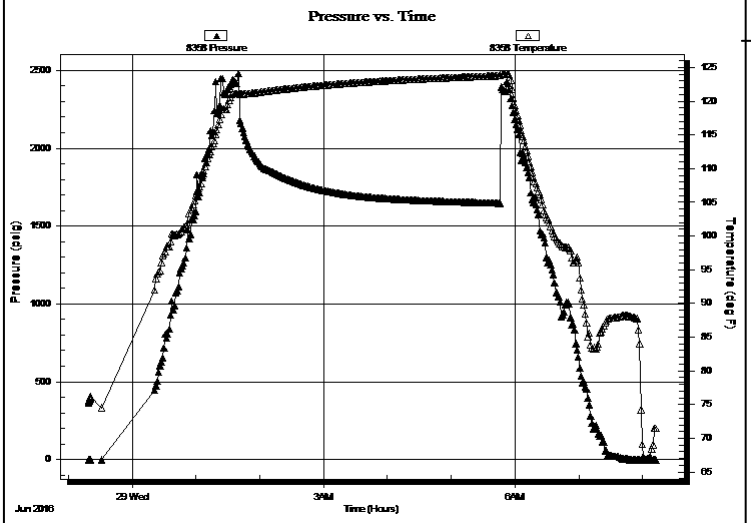
Reference Elevations: 2559.00 ft (KB)
2546.00 ft (CF)
KB to GR/CF: 13.00 ft

Serial #: 8358 **Below (Straddle)**

Press@RunDepth: psig @ 5169.00 ft (KB)
Start Date: 2016.06.28 End Date: 2016.06.29
Start Time: 23:19:02 End Time: 08:13:16

Capacity: 8000.00 psig
Last Calib.: 2016.06.29
Time On Btm:
Time Off Btm:

TEST COMMENT: IF: Weak 1 inch Blow , Died Off to 1/4 inch
ISI: No Blow Back
FF: No Blow
FSI: No Blow Back



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
10.00	SGCM 5%G 95%M	0.05

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Vincent Oil Corporation

200 W Douglas Ave # 725
Wichita, KS 67202

ATTN: Tom Dudgeon

4-28S-24W Ford

Fischer 1-4

Job Ticket: 57996 **DST#: 1**

Test Start: 2016.06.28 @ 23:19:01

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:	ppm
Viscosity:	54.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.20 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	3100.00 ppm				
Filter Cake:	0.02 inches				

Recovery Information

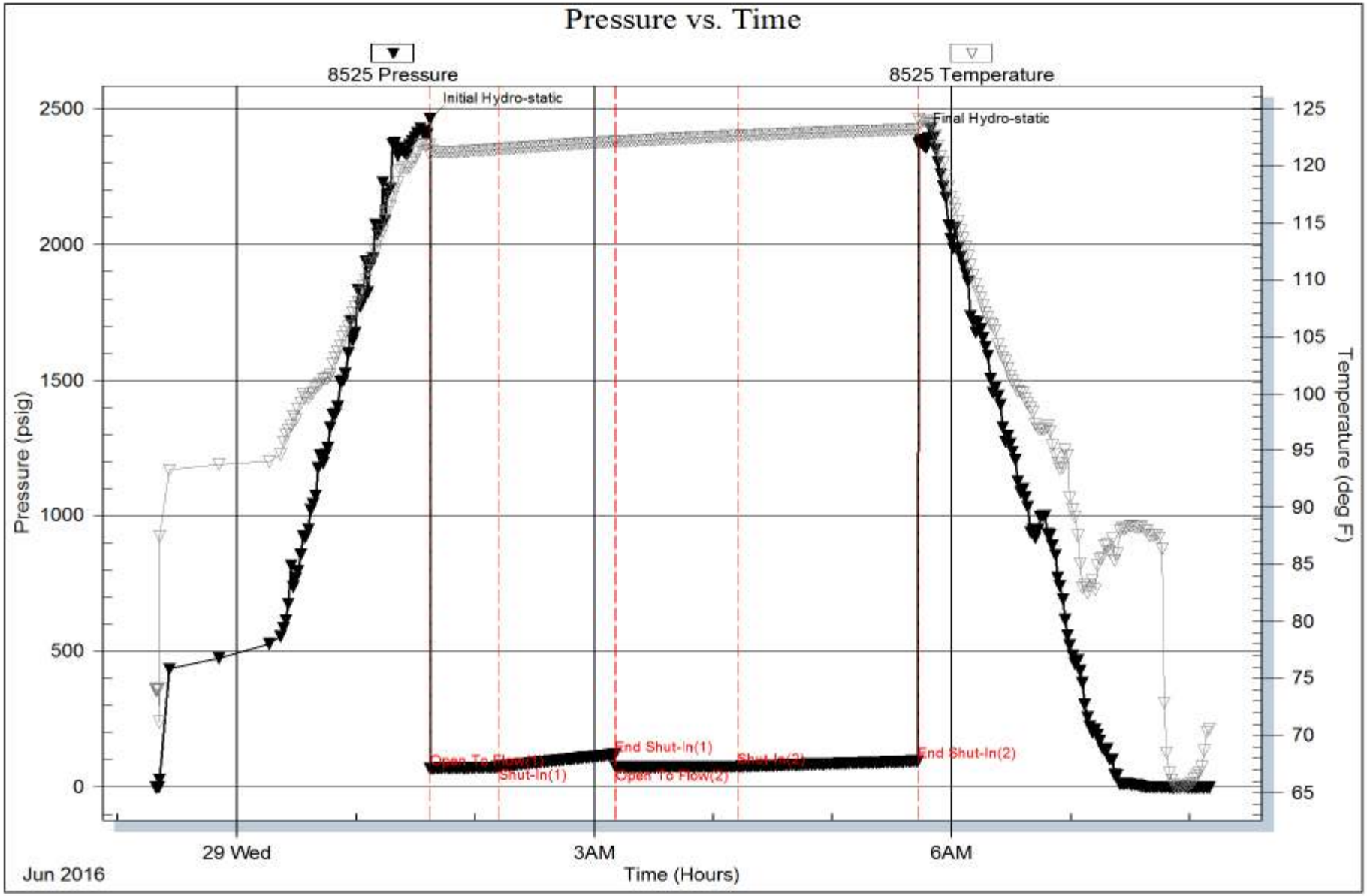
Recovery Table

Length ft	Description	Volume bbl
10.00	SGCM 5%G 95%M	0.049

Total Length: 10.00 ft Total Volume: 0.049 bbl

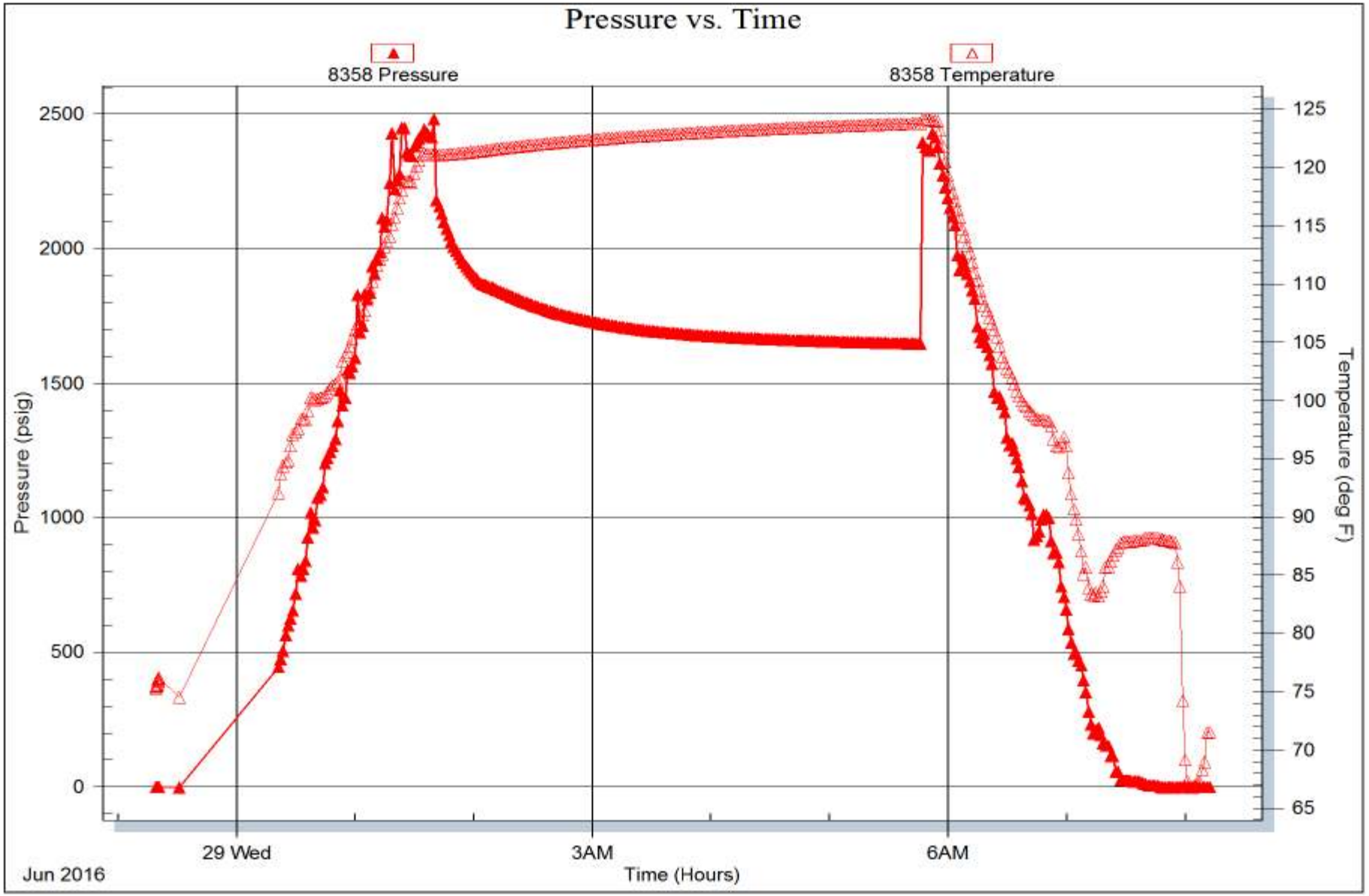
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8525 **Inside** Vincent Oil Corporation Fischer 1-4 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 57996 Printed: 2016.06.29 @ 08:27:13

Serial #: 8358 Below (Straddle) Oil Corporation Fischer 1-4 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 57996 Printed: 2016.06.29 @ 08:27:13

Scale 1:240 Imperial

Well Name:	Fischer 1-4		
Surface Location:	4-28S-24W 330' FNL 2385 FEL		
Bottom Location:			
API:	15-057-20972-0000		
License Number:	5004		
Spud Date:	6/21/2016	Time:	7:00 PM
Region:			
Drilling Completed:	6/28/2016	Time:	8:31 AM
Surface Coordinates:	330' FNL & 2385' FEL		
Bottom Hole Coordinates:			
Ground Elevation:	2546.00ft		
K.B. Elevation:	2559.00ft		
Logged Interval:	2500.00ft	To:	5230.00ft
Total Depth:	5230.00ft		
Formation:	Pawnee		
Drilling Fluid Type:	Chemical Mud		

OPERATOR

Company:	VIncent Oil Corporation		
Address:	200 W Douglas Ste. 725 Wichita, KS 67202		
Contact Geologist:	Dick Jordan		
Contact Phone Nbr:	316.262.3573		
Well Name:	Fischer 1-4		
Location:	4-28S-24W 330' FNL 2385 FEL	API:	15-057-20972-0000
Pool:	WILDCAT	Field:	WILDCAT
State:	KS	Country:	USA

CONTRACTOR

Contractor:	Duke Drilling Co. Inc.		
Rig #:	9		
Rig Type:	Rotary		
Spud Date:	6/21/2016	Time:	7:00 PM
TD Date:	6/28/2016	Time:	8:31 AM
Rig Release:	6/29/2016	Time:	6:30 PM

LOGGED BY

Company:	Vincent Oil Corporation		
Address:	200 W Douglas Ste 725 Wichita, KS 67202		
Phone Nbr:	316.262.3573		
Logged By:	Geologist	Name:	Tom Dudgeon

ELEVATIONS

K.B. Elevation:	2559.00ft	Ground Elevation:	2546.00ft
K.B. to Ground:	13.00ft		

K.B. to Ground: 13.00ft

TOTAL DEPTH

Measurement Type:	Measurement Depth:	TVD:
RTD	5230.00	5236.00
LTD	5236.00	5236.00

SURFACE CO-ORDINATES

Well Type:	Vertical		
Longitude:	-99.9507779	Latitude:	37.6472056
N/S Co-ord:	330' FNL		
E/W Co-ord:	2385' FEL		

DRILLING FLUID SUMMARY

Type	Date	From Depth	To Depth
Chemical Mud	6/21/2016	3828.00ft	5230.00ft

OPEN HOLE LOGS

Logging Company:	ELI		
Logging Engineer:	Jason Cappellucci		
Truck #:	3802		
Logging Date:	6/29/2016	Time Spent:	6
# Logs Run:	4	# Logs Run Successful:	4

LOGS RUN

Tool	Logged Interval	Logged Interval	Hours	Remarks	Run #
Dual Induction	0.00ft	5236.00ft	3.00		1
Comp Density/P	2600.00ft	5236.00ft	3.00		1
Micro	2600.00ft	5236.00ft	3.00		2
Sonic	0.00ft	5236.00ft	3.00		2

LOGGING OPERATION SUMMARY

Date	From	To	Description Of Operation
6/21/2016	0.00ft	5236.00ft	Logs ran successfully

CASING SUMMARY

	Surface	Intermediate	Main
Bit Size	12.25 in		
Hole Size	12.25 in		

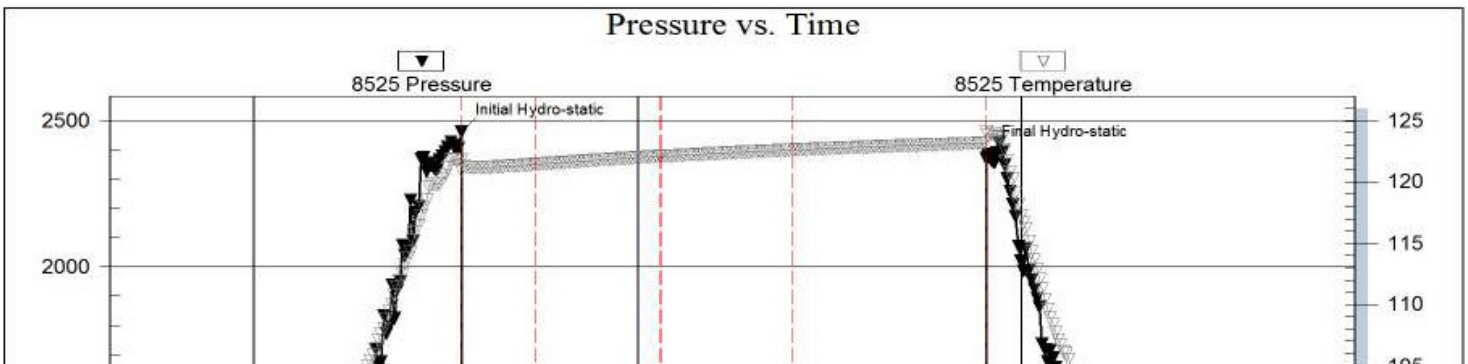
	Size	Set At	Type	# of Joints	Drilled Out At
Surf Casing	8.625 in	437 ft	23#	10	6/22/2016 11:00 AM
Int Casing					
Prod Casing					

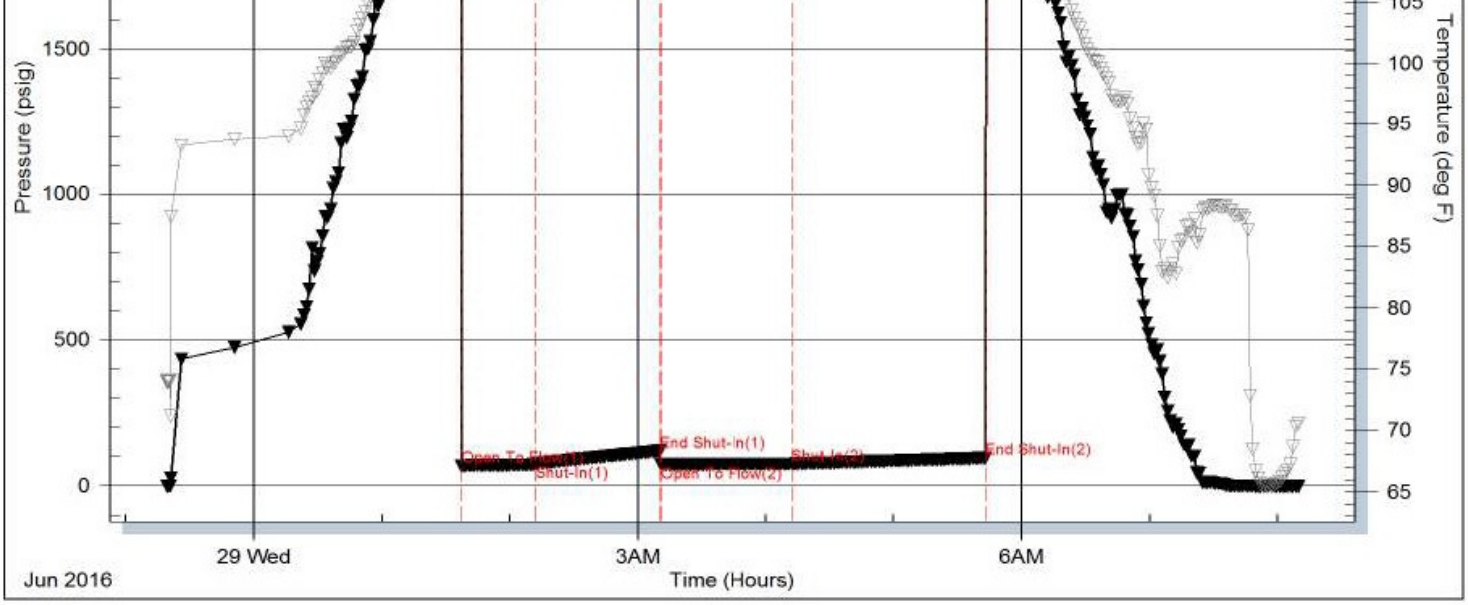
CASING SEQUENCE

Type	Hole Size	Casing Size	At
Surface	12.25 in	8.63	437.00 ft

DST #1

Serial #: 8525 **Inside** Vincent Oil Corporation Fischer 1-4 DST Test Number: 1





Trilobite Testing, Inc Ref. No: 57996 Printed: 2016.06.29 @ 08:27:13

ROCK TYPES

Cht	Dolsec	Ss	Shblck
Coal	Lmst fw<7	Shgy	Shcol

ACCESSORIES

MINERAL
- Calcareous
- Chert, dark
- Chert Pebble black
- Glauconite
- Heavy, dark minerals
- P Pyrite
- Sandy
- Silty
- Euhed rhombs of dol or
- Chert White

FOSSIL
- Crinoids
- F Fossils < 20%
- Oolite

STRINGER
- Dolomite
- Sandstone

TEXTURE
- C Chalky

OTHER SYMBOLS

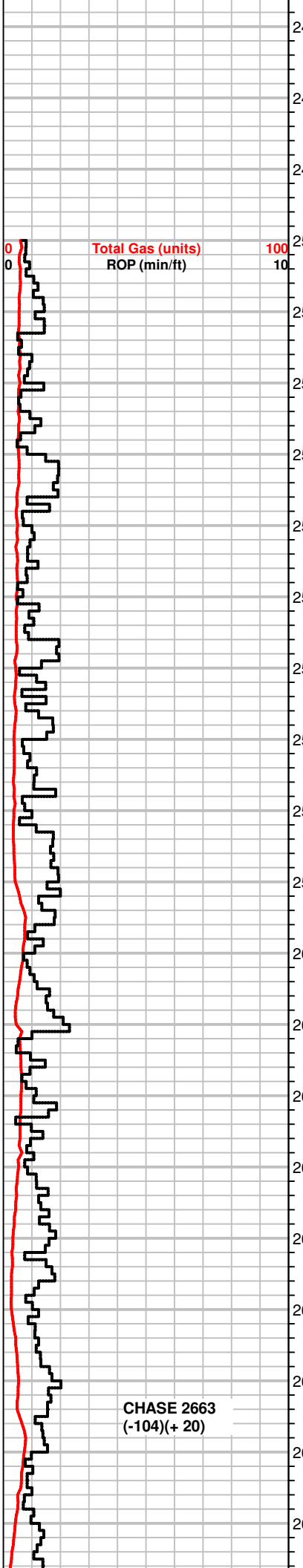
POROSITY TYPE
- × Intercrystalline
- Interoolitic
- V Vuggy
- P Pinpoint
- Moldic
- O Organic
- F Fracture
- e Earthy
- Fenestral

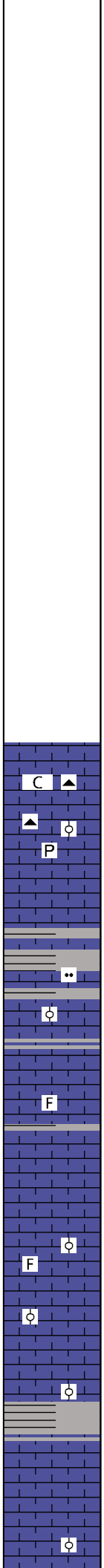
OIL SHOWS
- Even Stn
- Spotted Stn 50 - 75 %
- Spotted Stn 25 - 50 %
- Spotted Stn 1 - 25 %
- O Questionable Stn
- D Dead Oil Stn
- Fluorescence

INTERVALS
- Core
- DST

Printed by GEOstrip VC Striplog version 4.0.7.0 (www.grsi.ca)

Curve Track #01 Total Gas (units) ROP (min/ft) 1:240 Imperial	Depth | Intervals Cored Interval / DST Interval	Porosity Types	Interpreted Lithology	Oil Shows	Geological Descriptions	Comment
0 Total Gas (units) 100 0 ROP (min/ft) 10	2450 2460					





MS, crm to lt. gray, rare tan, , hard to soft pcs, chalky matrix in part, some pcs shaly, fossils, scatt oolitic pcs, some Chert, brn/gray, micro oolitic, NS
SH, gray, red, sandy, pyrite

SH, gray, dk. gray, silty
MS, crm, f-xln, firm, some dense, fractured, brn/gray f-gr oolites in crm chalky matrix, NS, rare edge stn in dry

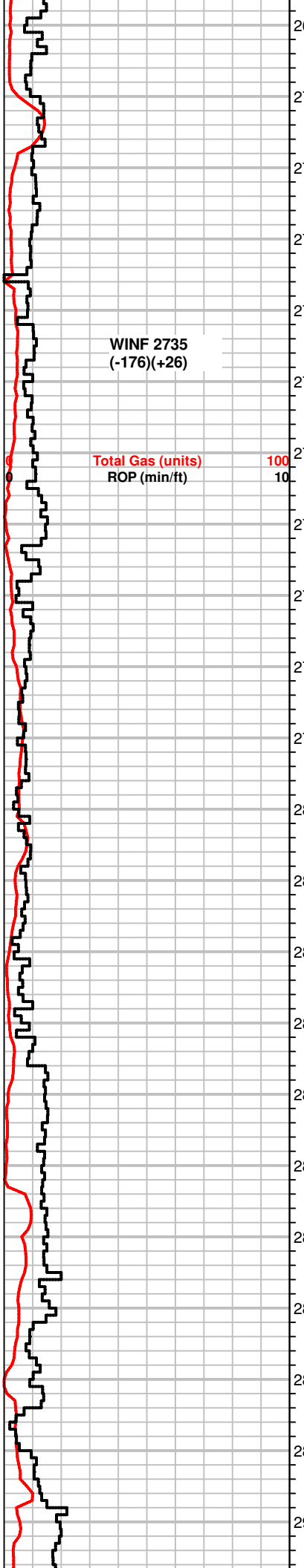
MS, crm to gray, f-xlnm, friable, scatt fossil frgmts, NS

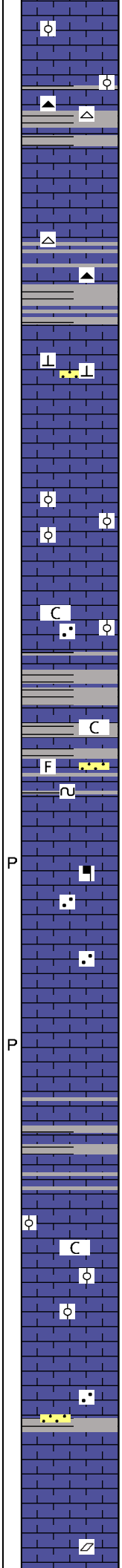
MS, gray, vf oolitic/gritty txt, firm to hard, scatt fossils, rare SS clusters, clear, sub angular to sub rounded, well sorted, NS
SH gray, lt. green, red, pyrite

MS, gray to lt. brn, f-xln to gritty pcs, hard to dense, fn oolitic pcs, rare dull fluor, NS
SH, gray, red, sandy

MS, gray, shalky f-xln to massive txt, soft, friable pcs, f to m-gr oolitic in chalky matrix, rare dull fluor, NS

20' samples from 2600' to 3000'





MS, gray to crm, off white, chalky to f-xln, hard, some pcs w/ gray f-gr oolites, silty, fossilif., rare Chert, white, gray, fossilif. scatt SH, gray

MS, gray to crm, chalky to f-xln, rare dull fluor, 1 free oil droplet in tray, poss. gas bubbles(sample oer 24 hrs old), Chert, white, gray, fossils,

MS, crm to lt. gray, some tan, f-xln to sandy txt, fossils, friable, SS clusters, gray, calcareous in part, well sorted, sub angular, NS

MS, crm to gray, f-xln, massive txt in part, scatt oolitic pcs, f to m-gr ooids, fossillif., soft pcs, shaly in part,
SH, red, gray

MS, gray to tan, f-xln, rare co gr calcite inclusions, scatt oolites in soft chalky to sandy matrix, friable
SH, influx, sea green, gray, red

MS, gray to crm, tan, massive to chalky, txt, rare ooliticpcs, f-gr(tan) pcs, scatt fossilif. pcs, calcite crystal inclusions, dull fluor, rainbow show in tray, SS clusters, gray, glauc, dk. minerals

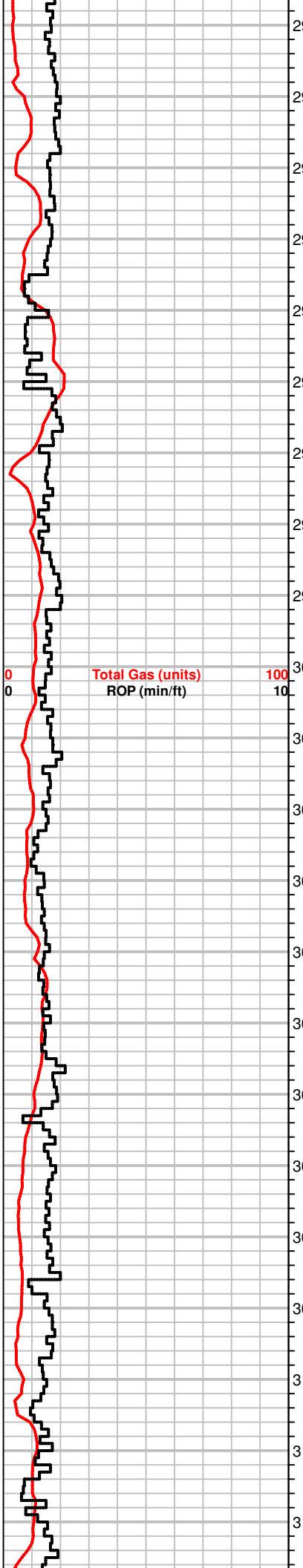
MS, crm, f-xln, dense, some dk. mineral inclusions, some lt. gray, soft, some firm, inter x-ln por., dull flour, NS, pp por.
SH, red, gray, sandy pcs throughout

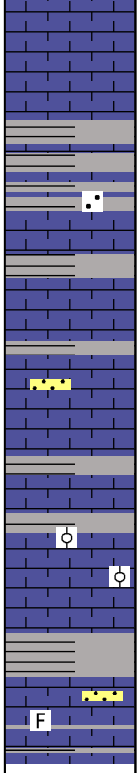
MS, gray, f-xln, girtty txt, dense to hard, some sandy pcs, NS, pp por.

MS, crm to gray, f-xln, gritty to sandy txt, firm, calcite, some fossils, oolitic pcs in chalky matrix, rare pcs w/ mineral fluor,
SH, green, gray, dk. gray, pyrite

MS. lt gray, f-xln, gritty, peloids, SS clusters, red, brn, gray, friable, soft, well sorted, rounded, NS

MS, gray to lt. gray, f-xln, gritty pcs, tight, Co. gr calcite frgmts scatt fluor, oil droplets in tray, rainbow show



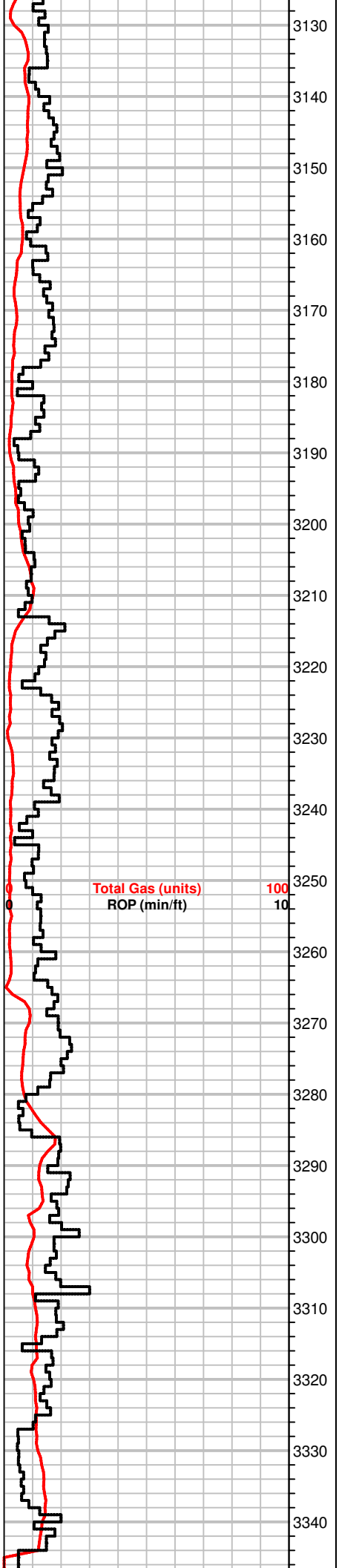


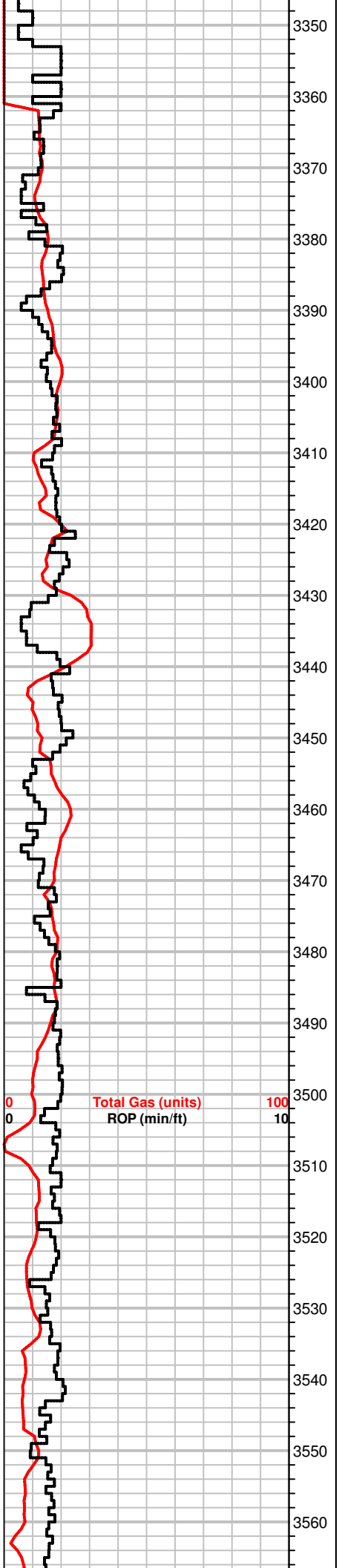
SH, red, green, gray, sandy
MS, gray, f-xln, firm, dense, NS

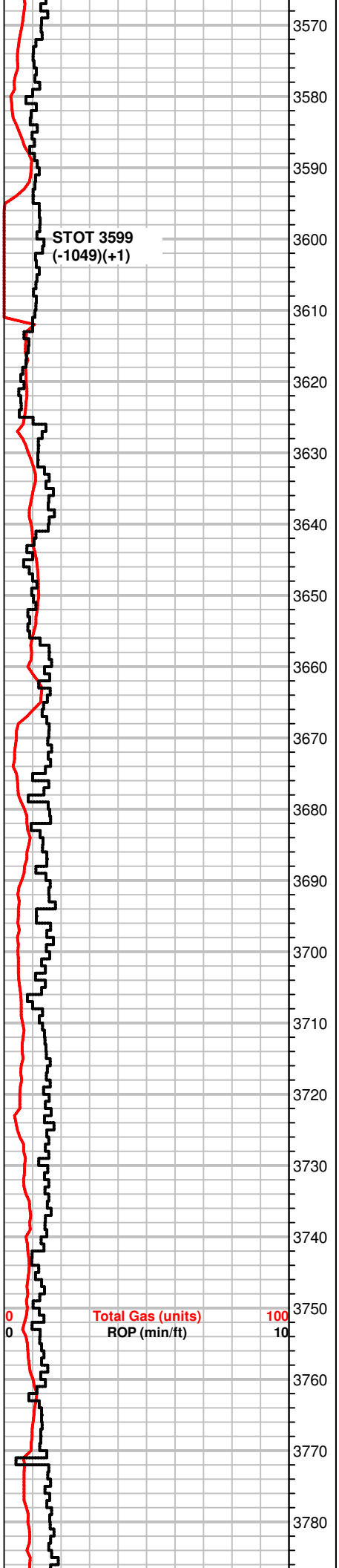
SH, red, gray, brn, SS clusters, tan, angular, sorted, friable, NS

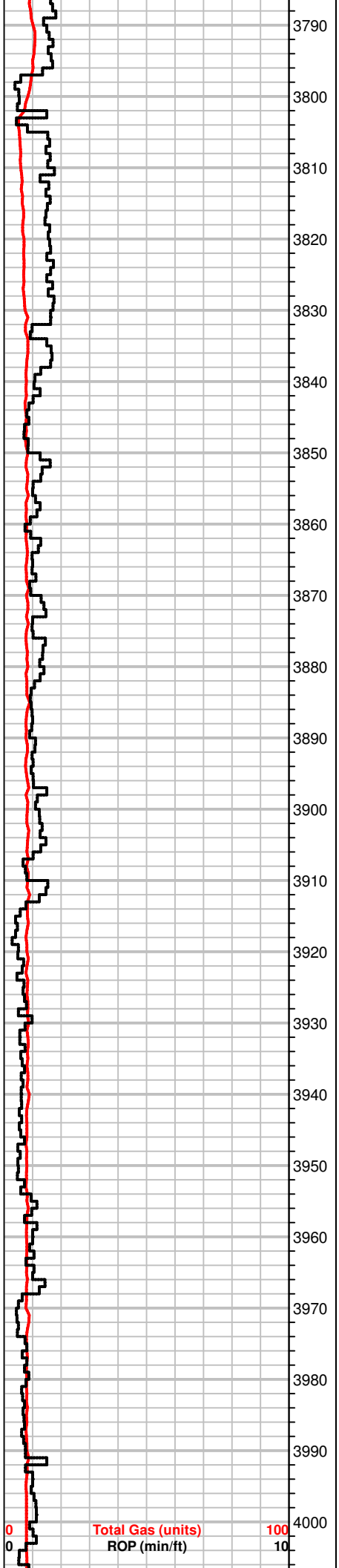
MS, gray, lt. gray, crm, f-xln, hard, f-gr, oolitic pcs w/ chalky matrix, pyrite
SH, red, gray

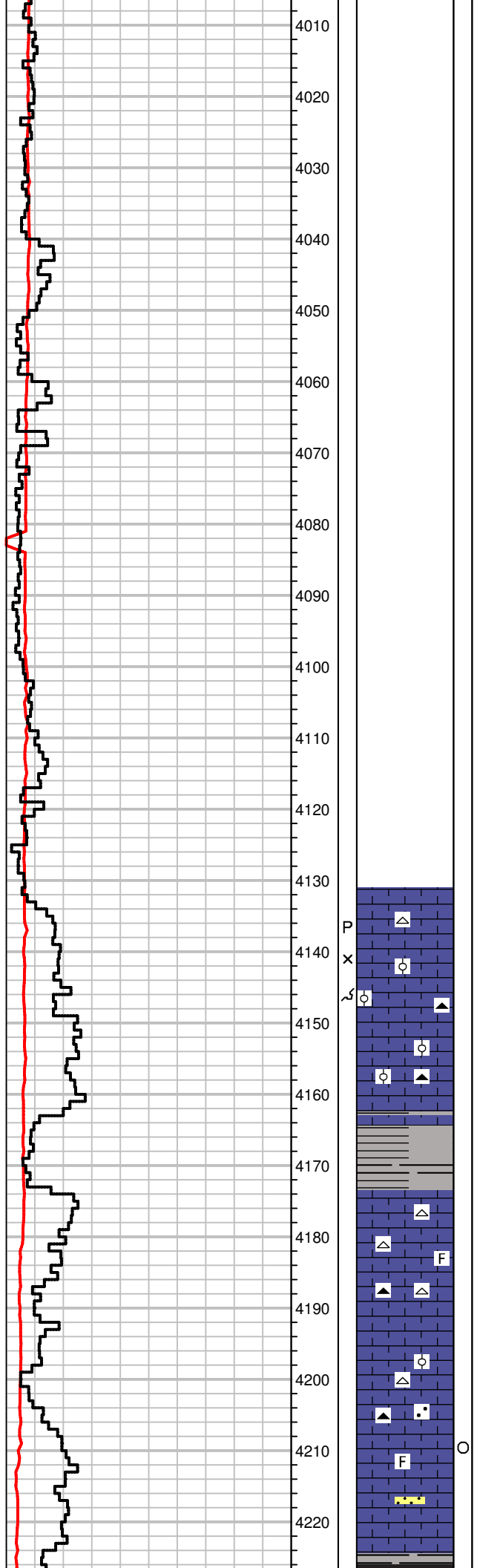
Decrease in MS, crm, gray, rare tan pcs, f-xln, sandy, fossilif.
Influx SH, gray, lt. gray, sandy pcs.


3130
3140
3150
3160
3170
3180
3190
3200
3210
3220
3230
3240
3250
3260
3270
3280
3290
3300
3310
3320
3330
3340
0
Total Gas (units)
100
0
ROP (min/ft)
10


3350
3360
3370
3380
3390
3400
3410
3420
3430
3440
3450
3460
3470
3480
3490
3500
3510
3520
3530
3540
3550
3560
0
Total Gas (units)
100
0
ROP (min/ft)
10


STOT 3599
(-1049)(+1)
3570
3580
3590
3600
3610
3620
3630
3640
3650
3660
3670
3680
3690
3700
3710
3720
3730
3740
3750
3760
3770
3780
0
Total Gas (units)
100
0
ROP (min/ft)
10


3790
3800
3810
3820
3830
3840
3850
3860
3870
3880
3890
3900
3910
3920
3930
3940
3950
3960
3970
3980
3990
4000
0
Total Gas (units)
100
0
ROP (min/ft)
10



MS, crm to lt. brn, f-xln, hard, fossilif, some sandy pcs, pp por.
Chert, white, some SH, green

MS, tan to lt. brn, f-xln gritty txt, hard, dull fluor, NS, pp, int-xln, moldic por.
SH, gray, green

MS-WS, crm to gray, vfx-ln, f-gr oolitic, fusilinids, scatt mineral fluor, Chert, gray, scatt gray SH

MS, crm to tan, f-xln, gritty txt, micro oolitic pcs, fossilif., Chert, white, brn, scatt SH, green, gray

MS, gray to lt. brn, mic-xln, firm, friable gritty pcs, fossilif, NS

SH, gray, MS, gray to crm, scatt off white, soft, chalky to sandy txt, firm, scatt fossils, rare Chert, white, gray, fossilif.

MS, crm to lt. tan, lt. gray pcs scatt, f-xln, sandy pcs, hard, scatt fossil frgmts, some fusilinids, SH, grays, some silty, rare Chert, gray to white, fossilif.

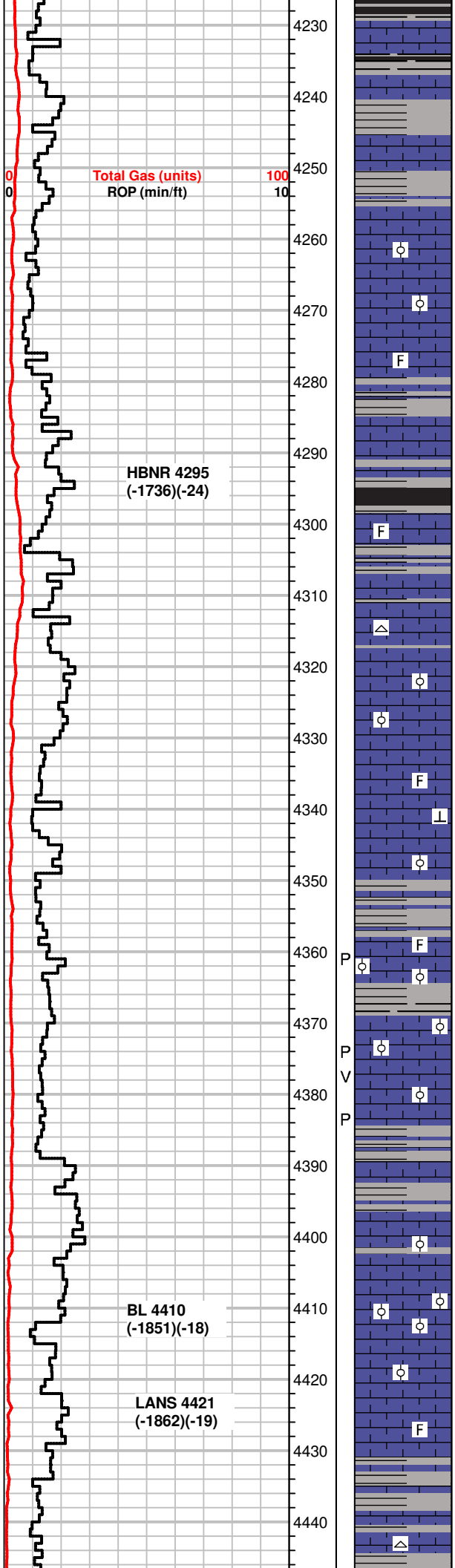
GEOLOGIST ON LOCATION @ 8:45 AM-4190'
6/26/2016

MS, gray to crm, f-xln, hard, crm pcs sandy/silty, soft, Chert, white to gray, fossils, rare SH, gray

MS, gray to crm and tan, f-xln, gritty silty txt, some pcs tite, dense, scatt fossil frgmts, lt. edge stn in dry, Inc, in SH, grays, green

MS, crm to gray, silty, some dense, scatt fossils, SS clusters, tite, well sorted

SH, blk, dk, gray



MS, crm to brn, f-xln, dense to firm pcs, NS

SH, dk. gray, silty
MS, crm to gray, f-xln, gritty txt, hard

SH, dk. gray, silty
MS, crm, f-xln, gritty txt, hard, sandy in part, NS

MS, crm to lt. gray, f-xln to chalky, firm to hard, scatt mottled pcs, dec. in SH, dk. gray

MS, crm to lt. gray, f-xln, chalky pcs, some sub oolitic, scatt fossil frgmts, scatt SH, brn, striated, dk. gray

MS, white to crm, chalky to gritty txt, firm to soft, fossil frgmts, NS

MS, crm to off white, chalky in part, f-xln, firm, some lt. gray, f-xln massive txt, hard, NS
SH, grays, dk. gray

MS, crm to off white, f-xln, to gritty txt, hard to firm, fossils, scatt Chert, brn, fossils, scatt SH, dk. gray, blk

Decr. in SH, blk, MS, crm to lt. gray, m to f-xln, fossils, NS, Chert frgmts, white

MS-WS, lt. gray to crm, gritty to silty txt, oolitic to sub oolitic, dark ooids in a crm matrix, hard to firm, NS, SH, lt. gray

SH, lt. grays, MS, crm to brn, mottled pcs scatt, f-xln, firm to hard, some gritty, fossils, tite cement

MS, crm to lt. gray, vf-xln, gritty txt, fossil frgmts in a tite calcite matrix, some mineral inclusions, NS

MS, white to crm, vf- to mic-xln, scatt chalky pcs, most hard, suboolitic, fossilif.

Scatt SH, dk. gray, brn
MS, brn, mic-xln to massive, dense, fossils

MS-WS, crm to off white, f-xln, suboolitic to oolitic, f-gr, scatt fossils, hard, mineral fluor, NS, pp por.
SH, blk, grays

MS, crm to tan, f-xln, hard, dense, some gritty, pp & vuggy por. scatt SH gray

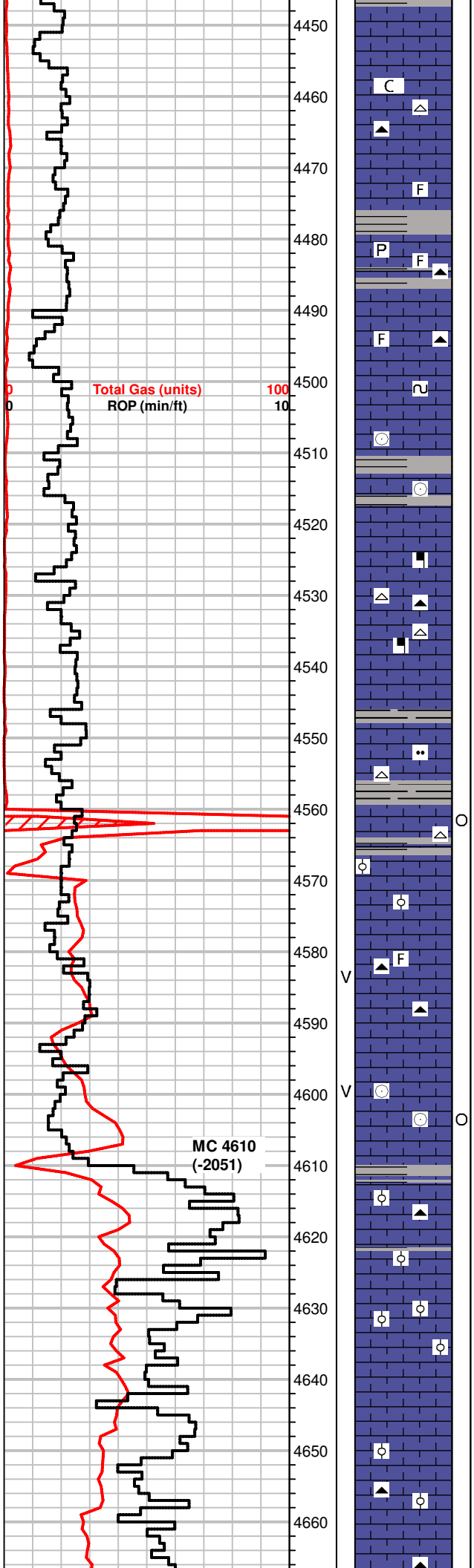
MS, gray to brn, tan, f-xln, fritty txt, some chalky pcs, fossils, firm to hard pcs, silty in part, SH, rare blk, green, gray

MS, crm to off white, f-xln to mic-xln, sub oolitic, dense, mineral fluor, NS

MS-WS, crm to tan, f-xln, oolitic, m-gr ringed ooids some elongated, firm, sli. chalky matrix, NS, scatt SH, gray, blk, pyrite, striated

MS-WS, crm to brn, scatt mottled pcs, ooids, fossilif., dense to hard pcs, scatt mineral fluor, NS

SH, blk, gray, green
MS, crm to brn, f-xln, dense, fossil frgmts, Chert, white, gray



MS, crm to off white, mic-xln, dense
SH, gray, green

MS, tan to crm, gritty to massive txt, dense, some chalky pcs, fossils, friable, Chert, tan, gray
SH, gray, brn

MS, gray to crm, f-xln, dense, hard, scatt fossils, Chert, crm, gray, fossils
SH, dk. gray, green

SH, blk, gray, pyrite, MS, crm, f-xln, gritty txt, fossilif., Chert, blk, fossil frgmts

MS, gray to crm, f-xln, hard, dense, gritty txt, Chert, gray, fossilif.
SH, grays

MS, A.A., dec, in gray pcs, scatt glauc, some pcs sli. chalky, NS, dull fluor

MS, crm to tan, f-xln, firm, friable, scatt fossils(crinoids), SH, red, green

MS, crm, mic-xln to f-xln, hard to dense, fossils, mineral specs, NS

MS, brn to tan, f to m-xln, chalky in part, mineral specs, Chert, white, brn, fossilif., rainbow show in tray, barren in dry

MS-WS, gran to crm, mottled, gritty txt, hard, mineral inclusions, scatt fossils, barren dry samples, NS
SH, blk to dk. gray

MS, crm to tan, f-xln, some gray, sub oolitic fossils, hard, some shaly/silty in part, NS Chert, white, crm, fossils

SH, gray, green, blk
MS, crm to tan, gray, silty, hard, fossils, Chert, white, opaque, fossils, lt. edge stn in dry

Lighter gas test

MS, gray to tan, f-xln, hard, some scatt mottled pcs, fossilif, gritty sub oolitic pcs, Chert, blk, gray, fossilif.

Re-wired agitator-wind disconnected the power supply to the agitator

MS, crm to tan, gray, f-xln, hard, dense pcs throughout, some pcs sli. chalky, scatt fossils, buggy por.dec in Chert, blk, gray, fossilif.
SH, red, gray

MS, crm to gray, f-xln, chalky, dense so soft, fossils(crinoids), vuggy por. rare edge stn in dry
SH, dk. green, gray

Inc in SH, gray, green
MS, crm to tan, mic- to f-xln, dense, sub oolitic pcs, mineral fluor, NS, Chert, gray

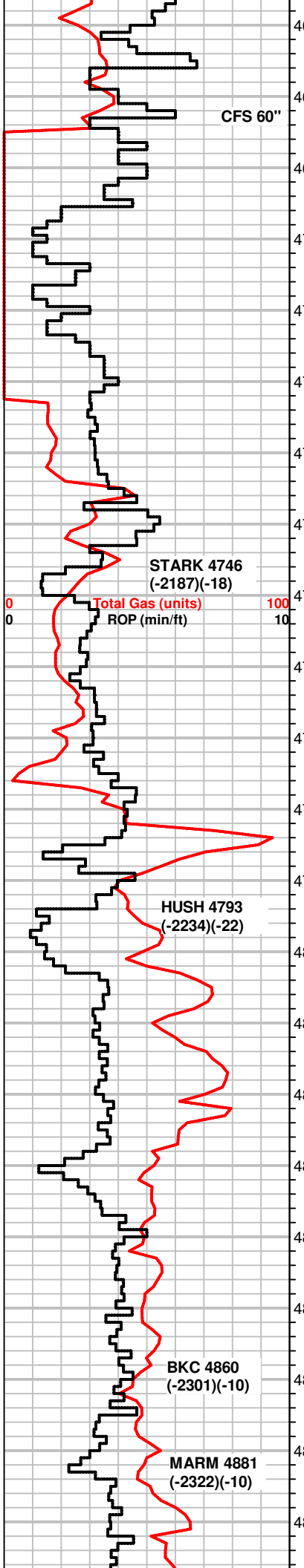
MS, gray to brn, f-xln, gritty to silty txt, scatt pcs sub oolitic, NS
SH, blk, gray, green, red

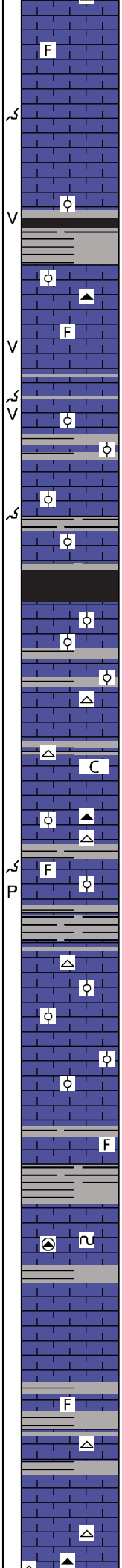
MS-WS, crm to tan, f-xln, sub oolitic to micro oolitic pcs, firm to hard, some SH, gray to green, scatt blk

MS, crm to gray, f to mic-xln, some pcs chalky, rare fossils
SH, gray, dk.gray, green

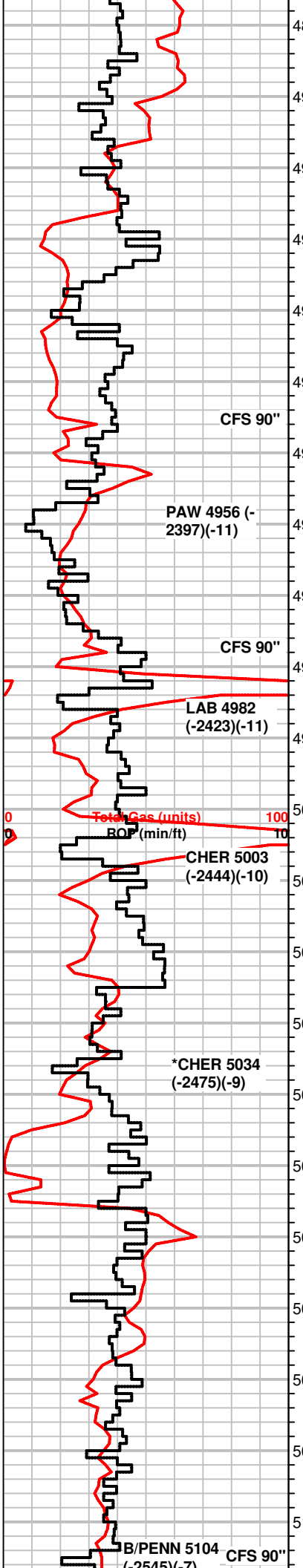
MS, crm to tan, gray pcs, f-xln, suboolitic, fossils, mineral, some chalky pcs, Chert, gray, fossilif., Scatt SH, gray

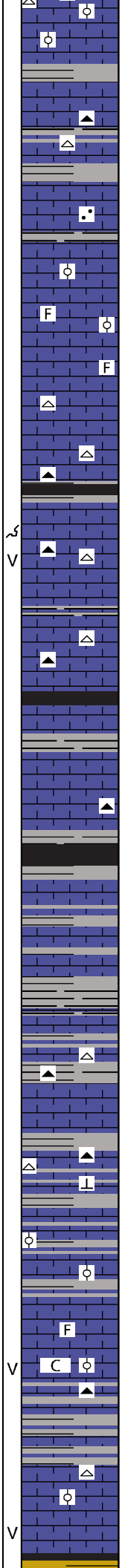
MS, crm to lt. gray, mottled in part, mic to f-xln, earthy txt in part, hard, dull fluor, NS, Chert, brn, crm, fossilf





MS, crm, mic-xln to massive txt, dense, hard, scatt fossils SH, gray, green	
MS, crm to tan, f-xln to chalky pcs, gritty pcs scatt, firm to hard, rare gray pcs, hard, pyrite, mineral inclusions, NS, moldic por. some SH gray, green	**Bit Trip A 4683'** **Pipe Strap: .11 Short to board**
MS, crm to tan, f to m-xln, chalky, friable to firm, scatt fossils, sub oolitic pcs scatt., rare SH, blk, sli. gassy	
WS-MS, crm to grn some gray, mottled, f-xln to chalky, some pcs dense, sub oolitic, rare vuggy por. SH, blk, gassy, carbonaceous	**4683-4723 Gas detector not lagging due to faulty geolograph electrical connections-raw gas data was available**
MS-WS, crm to tan, some f-xln, gritty txt, hard, dense, fossilif. some silty, gray pcs, dull fluor, NS Chert, gray, fossilif., blocky	
MS-WS, crm to tan, f-xln, firm to hard, fossils, dull fluor, NS, vuggy por.	**+4 UGK, shale gas**
WS-MS, crm to lt. gray, f-xln, sub oolitic fossilif., chalky pcs scatt., hard, most dense, vuggy to moldic por., Scatt SH, gray, green, striated	
Some SH, blk, gray, sli. carb MS-WS, crm to gray, f-xln to earty, dense pcs, most firm, rare m-gr oolitic pcs, moldic por., lt edge stn dry	**+27 UGK**
SH, blk, gray, green	**+ 22 UGK**
MS, crm to lt. tan, sassive to mic-xln, dense, scatt fossil frgmts, rare brn gritty pcs, oolitic to fossilif., lt. edge stn dry, Chert, tan, off white	
SH, gray, green MS, crm to gray, f-xln, sli. gritty txt, fractured, some pcs chalky, dull fluor, NS, rare Chert, white	
MS, crm to brn/gray, f-xln, gritty txt, mineral specs, soft, NS Chert, blk, white, fossils(crinoids) frgmts	**+52 UGK, shale gas**
MS-WS, crm to tan, massive to f-xln, vf-gr oolitic pcs, sof to dense, fossils, pp and moldic por., NS some SH, blk, carb., gray	
SH, blk, carb. MS, crm to brn, f-xln to earthy, soft to firm, fossil frgmts, calcite veins, NS, Chert, white	
MS, crm, mic to f-xln, dense, fossil/ooids in tite matrix, NS carrying SH, blk, green	
Some SH, gray, green MS, crm, f-xln, A.A., some pcs sli. chalky, NS	
SH, gray, green, dk. gray MS, crm to lt. gray, f-xln, gritty txt, fossil frgmts, scatt minerals, silty in part, pyrite, NS	
MS crm to gray, shaly, f-xln ,soft to firm, rare glauc specss, NS, Chert frgmts, white, brn Dec. SH, gray, dk, gray, green	
MS, gray, brn, crm, f-xln, earthy, shaly, hard, dull fluor, NS	
MS, gray to crm, f-xln, earthy txt, some shaly pcs, dull fluor, NS	
MS-Ws, crm to gray, f-xln, dense, some pcs sandy, scatt fossils, NS, Chert frgmts, tan SH, dk. gray, green, brn	
MS, crm, f-xln, chalky in part, firm, Chert, white, brn, scatt fossil frgmts SH, dec. amt., gray, green	





SH, blk, gray, green, rare sandy pcs
MS-WS, crm to brn, f-xln, scatt oolitic/sub oolitic pcs, hard, scatt fossils, NS

MS, crm to gray, f-xln and dense to gritty and firm, chalky pcs, mineral fluor, NS, Chert, brn, tan, fossils
SH, green, gray, rare blk

MS, rare WS, crm to brn, f-xln, hard/dense, fossils, NS, SH, grays, sandy in part

MS, crm to gray, f-xln, sandy in part, hard to dense, some oolitic(m-gr) brn and crm pcs, some fossilif., firm to friable
SH rare blk, grays, greenish in part

MS, crm, f-xln to chalky, firm to friable, fossils/oolitic(f to m-gr), mineral fluor, no odor, no stn, no cut

MS, crm to tan, mic-f-xln pcs, some chalky, scatt dense, most firm, fossilif., fritty to silty in part, NS

MS,crm to tan, f-xln to chalky, fossilif./oolitic, mineral fluor, NS, rare Chert, white

MS-WS, crm to tan, f-xln, dense, sub oolitic, scatt fossils, mineral fluor, NS some Chert, white, gray, fossils, scatt SH gray

SH, blk, carb., gray
WS-MS, crm to tan, f-xln to chalky txt, oolitic to sub oolitic(m-gr ooids in chalky matrix), sandy pcs, tite, no odor, spotty bright flour (25% of tray), light edge stn in dry, no cut, Chert, blk, white

MS-WS, crm to off white, m-gr oolitic, chalky txt,

MS, tan to crm, f-xln, firm to hard, some pcs dense, gritty txt in part, some pcs sub oolitic, Chert, white, blk

SH, blk, carb, gassy, dk. gray

MS, brn to crm, mic-xln to f-xln, soft to firm, dense looking, NS

MS, crm to tan, chalky to f-xln, some mic-xln, firm to dense, NS
Chert, brn

SH, blk, gray, gassy

MS, crm, chalky, soft, f-xln, firm, NS
SH, grays

MS, tan to brn, f-xln, hard, dense, some mineral specs, Chert, brn, scatt SH, gray, brn

MS, crm to brn, f-xln, mic-xln, dense looking, firm to hard, scatt fossils, Chert, opaque,
SH, gray green, silty

SH, blk, gray, brn
MS, crm to brn, mic to f-xln, dense to hard, scatt fossil frgmts (crinoids), NS, Chert, brn, white

MS, crm to tan, f-xln, soft to friable pcs, some oolitic, m-gr, deformed ooids in tite calcite matrix,
SH, blk, gray

MS, crm to brn, f-xln to sli. chalky/shaly, firm to hard pcs, sub oolitic in part, rare fossils
SH, blk, gray, silty

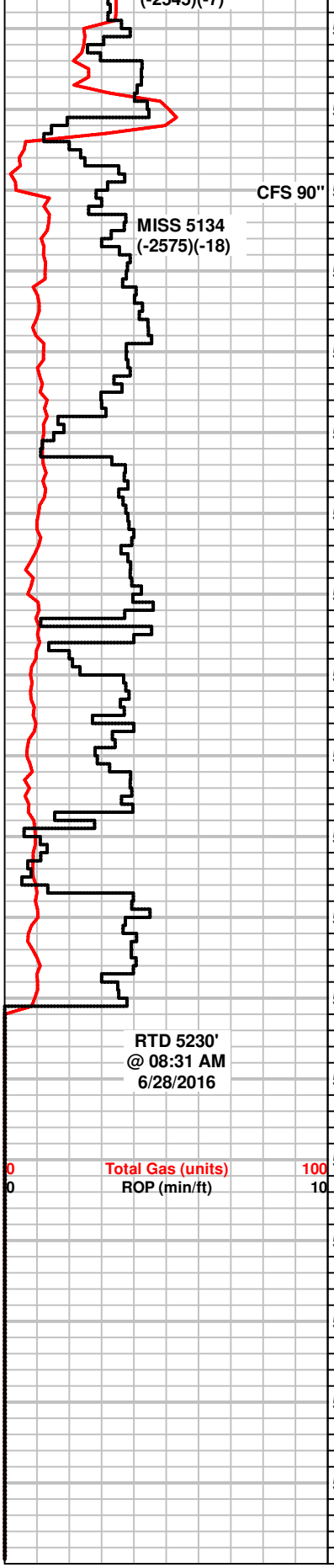
MS crm, mic-xln to earthy pcs, chalky to dense, hard, fossils, some calcite, rare bright fluor, lt. stn in dry(1 pc)

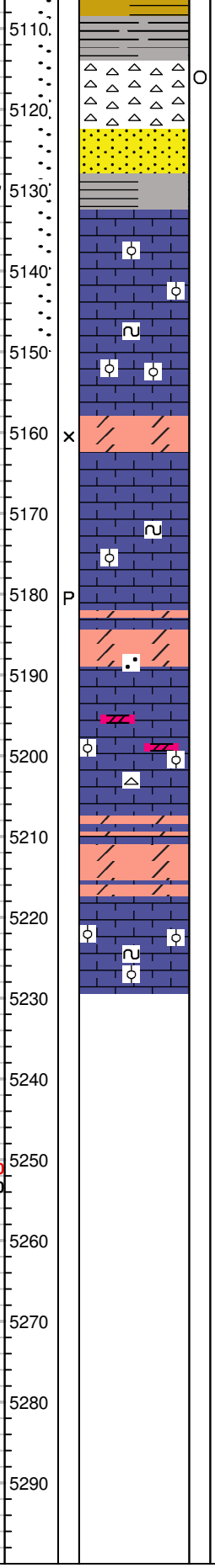
MS, cmr to tan, f-xln, some dense pcs, chalky pcs scatt, fossils, sub oolitic, rare mineral fluor, Chert, brn
SH, gray, pyrite(total replacement)

MS, crm to brn, mic to f-xln, dense, firm to hard pcs, rare chalky, fossils, scatt calcite, Chert, white, fossils,
SH, gray, green

MS-WS, crm to brn, scatt off white, f-xln to chalky pcs, rare sub oolitic, fossils, calcite, few pcs w/ spotty bright fluor, spotty stn(10 pcs), slow milky cut(5 pcs),spotty stn in dry, no odor in bag

DST #1 5037-5150
STRADDLE
30-60-60-90
WB BLT TO 1"
NBB
NB
NBB
REC: 10' SGCM
(5%G, 95%M)
IH 2462#
IF 68-75#
ISIP 119#
FF 73-75#
FSIP 95#
FH 2387#
TEMP 124*F





SH, sea green, blk, gray, maroon, yellow, varicolored

Chert, white, orange, fresh to weathered, blocky, fossils, rare spotty stn, no cut, no stn

SS clusters, white to green, well sorted, friable, no vis. show, Co. Qtz grns loose in tray

+30 UGK

MS, crm to tan, f-xln, firm to hard, sub oolitic, dense, NS

MS, off white, f-xln, chalky pcs, soft to firm, sub oolitic in part, scatt fossils, NS

MS, off white to crm, vf-xln, massive txt(featureless) to sub oolitic pcs, m-gr ooids rare, glauc specs, NS

MS, off white, vf-xln, chalky pcs scatt, rare fossils, barren dry samples
Dolo, Limy, lt. brn, vf-sucrosic, tite-some soft pcs,s mineral fluor, no odor, NS, int-xln por.

MS-rare WS, crm to off white, f-xln, firm to chalky, soft pcs, rare fossils, glauc specs, NS

MS, rare WS, crm to off white, f-xln, frim to soft, chalky pcs common, rare fossils, glauc specs, rare pp por.

Dolo, gray, vf-sucrosic txt, tite/firm pcs, sandy in appearance, mineral fluor, NS
MS, crm to brn, f-xln, hard, scatt fossils, NS

MS, off white, f-xln to massive txt, hard to brittle, sub oolitic pcs, some pcs gray, vf-xln, dolomitic, rare lt. edge stn in dry
rare Chert, white fresh

Dolo, lt gray to lt. brn, vf-sucrosic, friable to firm, sugary txt, mineral fluor, NS

MS-WS, brn to crm, f to m-xln, oolitic to sub oolitic pcs, fossils, brittle, rare glauc specs, rare lt. edge stn in dry