

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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Form	ACO1 - Well Completion
Operator	Vincent Oil Corporation
Well Name	Riegel 2-3
Doc ID	1293228

All Electric Logs Run

Dual Induction
Density - Neutron
Micro log
Sonic log

Form	ACO1 - Well Completion
Operator	Vincent Oil Corporation
Well Name	Riegel 2-3
Doc ID	1293228

Tops

Name	Top	Datum
Heebner Shale	4267	(-1787)
Brown Limestone	4404	(-1924)
Lansing	4412	(-1932)
Stark Shale	4739	(-2259)
Pawnee	4941	(-2461)
Cherokee Shale	4998	(-2518)
Base Penn Limestone	5095	(-2615)
Morrow Sand	5135	(-2655)
RTD	5139	(-2659)
LTD	5141	(-2661)



# QUALITY WELL SERVICE, INC.

6437

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	11/10/15	Sec.	03	Twp.	28S	Range	23W	County	Ford	State	KS	On Location	12:00 noon	Finish	3:15 PM
Lease	Riegel	Well No.	2-3		Location		Ford KS 1/4N, 3W, 2S, 1/2W, 1/2S								
Contractor	Duke #7				Owner		Vincent								
Type Job	Surface				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	12 1/4		T.D.		650		Charge To Vincent								
Csg.	8 5/8		Depth		649		Street								
Tbg. Size			Depth				City								
Tool			Depth				State								
Cement Left in Csg.	42'		Shoe Joint		42.13		The above was done to satisfaction and supervision of owner agent or contractor.								
Meas Line			Displace		38 1/2 BBLs Fresh		Cement Amount Ordered 12.5sxx MDC + 3% gel + 1/4" Flow Seal								

**EQUIPMENT**

Pumptrk	8	No.	Mike B	Common	12S
Bulktrk	9	No.	David B	Poz. Mix	MDC 12S
Bulktrk	10	No.	David F	Gel.	11
Pickup		No.		Calcium	10

**JOB SERVICES & REMARKS**

Rat Hole	Hulls
Mouse Hole	Salt
Centralizers	Flowseal 66.25
Baskets	Kol-Seal
D/V or Port Collar	Mud CLR 48
	CFL-117 or CD110 CAF 38

Pipe on Btm, Break Circ, Pump Pres  
 H<sup>2</sup>O Spacer, Mix 12.5sxx lite weight,  
 Mix 12.5sxx tail Cement, Stop, Release  
 Plug, Start Disp w/ Fresh H<sup>2</sup>O, Wash  
 up on Plug, See steady increase in  
 PST, Slow rate,  
 Bump Plug at 38 1/2 BBLs total  
 Disp from 250" to 500" PST, shut in  
 Cement did Circulate

**FLOAT EQUIPMENT**

Sand	Handling	271
	Mileage	50
Guide Shoe		
Centralizer		
Baskets		
AFU Inserts		
Float Shoe	8 5/8 Ruffle Plate	
Latch Down	8 5/8 wood Plug	
Service spacer	LMV 50	
Pumptrk Charge	Surface	
Mileage	50x2	

Signature	Tax
	Discount
	Total Charge



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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	11 19 15	Sec.	03	Twp.	28s	Range	23w	County	Fond	State	KS	On Location	8:30 AM	Finish	12:45 PM	
Lease	Reigel			Well No.	12-3			Location	Fond 1/4 N, 3w, 1s, 1/4w N/S							
Contractor	Duke #7							Owner	Vincent							
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.												
Csg.	8 5/8			Depth	645			Charge To	Vincent							
Tbg. Size	4 1/2 DP			Depth	1500'			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	210sx 60:40: 4% gel + 1/4 CF							
<b>EQUIPMENT</b>																
Pumptrk	8	No.	D. Folio						Common	130						
Bulktrk	10	No.	m. Baker						Poz. Mix	80						
Bulktrk		No.							Gel.	7						
Pickup		No.							Calcium							
<b>JOB SERVICES &amp; REMARKS</b>																
Rat Hole							Hulls									
Mouse Hole							Salt									
Centralizers							Flowseal			52 50						
Baskets							Kol-Seal									
D/V or Port Collar							Mud CLR 48									
							CFL-117 or CD110 CAF 38									
				Drill pipe at 1500', load Hole, Pump Spec			Sand									
				Mix 50sx 60 40 cement, Disp w/ Fresh & mud to 15 BBLs			Handling			217						
							Mileage			50						
<b>FLOAT EQUIPMENT</b>																
				Drill Pipe at 690', load Hole Pump Spec			Guide Shoe			3						
				Mix 50sx, Disp w/ Fresh & mud to 8 BBLs			Centralizer									
				Drill Pipe at 240', load Hole, Mix 40sx			Baskets									
				Disp. 1 Fresh			AFU Inserts									
				Drill Pipe at 60' mix 20sx - Did Calc.			Float Shoe									
				Plug Rat & Mouse holes w/ 50sx Cement			Latch Down									
							LMV 50									
							Service Supervisor									
							Pumptrk Charge			Rotary Plug						
							Mileage			50x2						
														Tax		
														Discount		
														Total Charge		
X Signature	Aled D. Road															



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Vincent Oil Corporation

**3-28S-23W Ford,KS**

155 N Market Ste 700  
Wichita, KS 67202

**Riegel**

Job Ticket: 57922

**DST#: 1**

ATTN: Tom Dudgeon

Test Start: 2015.11.18 @ 12:38:30

## GENERAL INFORMATION:

Formation: **Morrow**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:26:15

Time Test Ended: 21:49:45

Test Type: Conventional Bottom Hole (Initial)

Tester: Leal Cason

Unit No: 74

**Interval: 5089.00 ft (KB) To 5139.00 ft (KB) (TVD)**

Reference Elevations: 2480.00 ft (KB)

Total Depth: 5139.00 ft (KB) (TVD)

2467.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 13.00 ft

**Serial #: 8525 Inside**

Press@RunDepth: 524.59 psig @ 5090.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.11.18

End Date:

2015.11.18

Last Calib.:

2015.11.18

Start Time: 12:38:31

End Time:

21:49:45

Time On Btm:

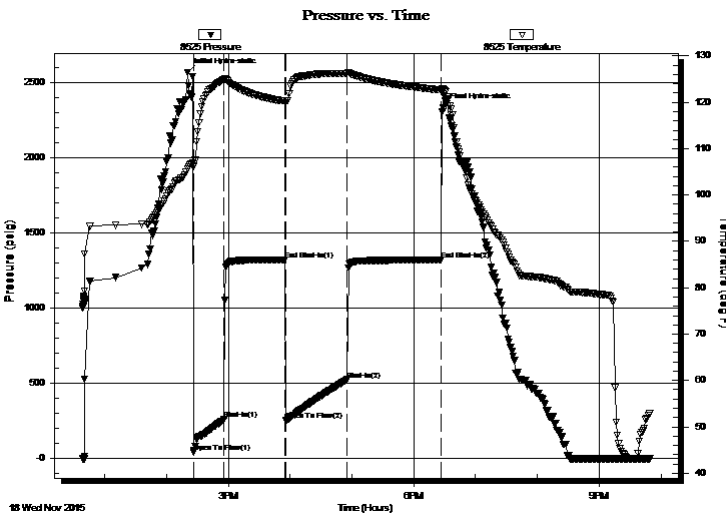
2015.11.18 @ 14:20:15

Time Off Btm:

2015.11.18 @ 18:28:15

**TEST COMMENT:** IF: Fair Blow , BOB in 12 minutes  
IS: Weak Surface Blow Back  
FF: Fair Blow , BOB in 12 minutes  
FS: Weak Surface Blow Back

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2568.65	105.64	Initial Hydro-static
6	42.03	106.18	Open To Flow (1)
36	261.73	124.83	Shut-In(1)
95	1322.15	120.29	End Shut-In(1)
96	252.16	119.88	Open To Flow (2)
155	524.59	126.27	Shut-In(2)
247	1320.93	122.66	End Shut-In(2)
248	2332.87	122.83	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	330 GIP	0.00
441.00	Water	4.53
613.00	GMOCW 20%G 10%M 12%O 58%W	8.60
45.00	MOCW 24%M 32%O 44%W	0.63

## Gas Rates

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





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Vincent Oil Corporation

**3-28S-23W Ford,KS**

155 N Market Ste 700  
Wichita, KS 67202

**Riegel**

Job Ticket: 57922

**DST#: 1**

ATTN: Tom Dudgeon

Test Start: 2015.11.18 @ 12:38:30

## 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:

58000 ppm

Viscosity: 57.00 sec/qt

Cushion Volume:

bbf

Water Loss: 8.79 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5300.00 ppm

Filter Cake: 0.02 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbf
0.00	330 GIP	0.000
441.00	Water	4.528
613.00	GMOCW 20%G 10%M 12%O 58%W	8.599
45.00	MOCW 24%M 32%O 44%W	0.631

Total Length: 1099.00 ft      Total Volume: 13.758 bbf

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW w as .18 @ 52 degrees

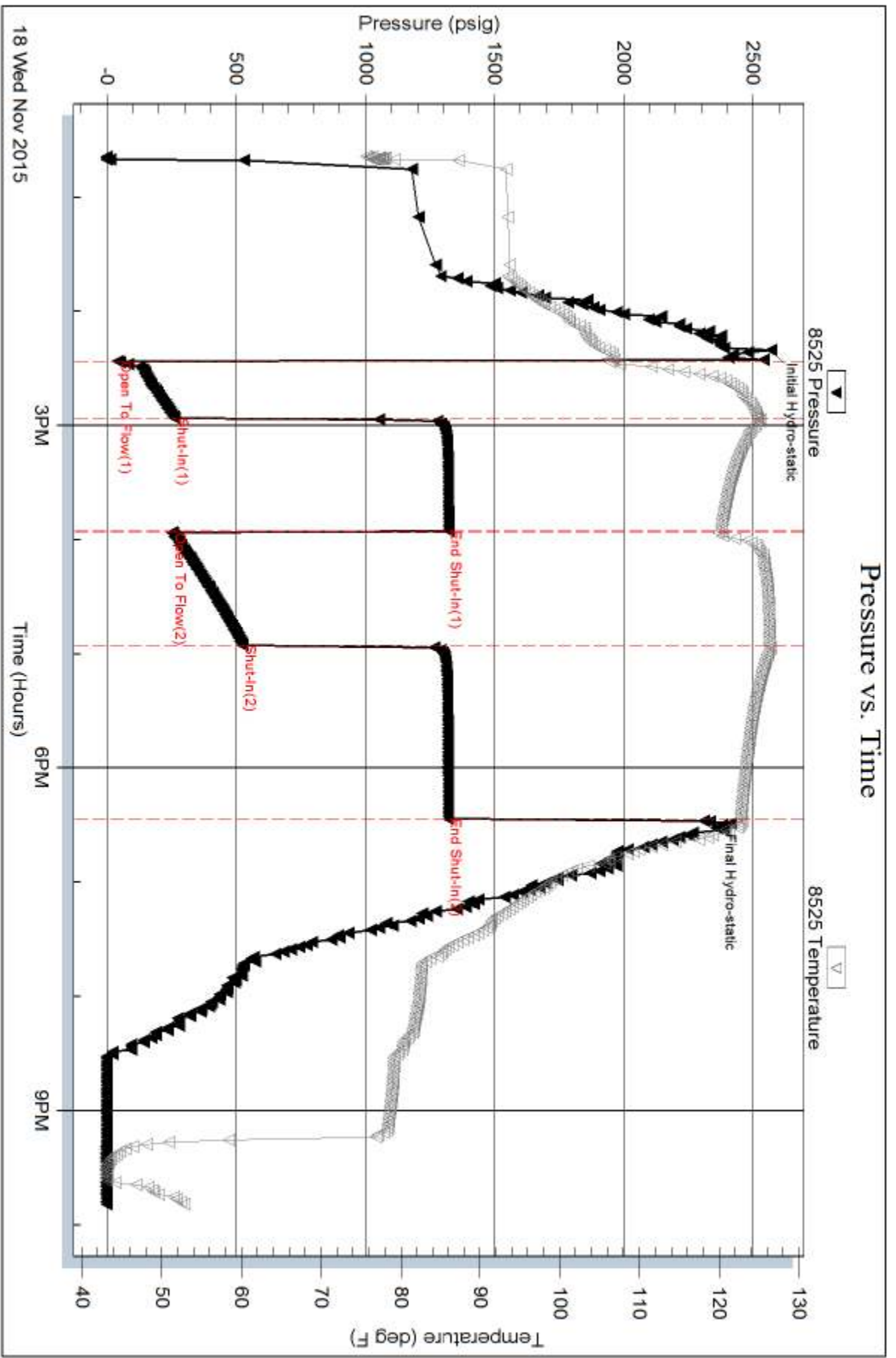
Serial #: 8525

Inside

Vincent Oil Corporation

Riegel

DST Test Number: 1



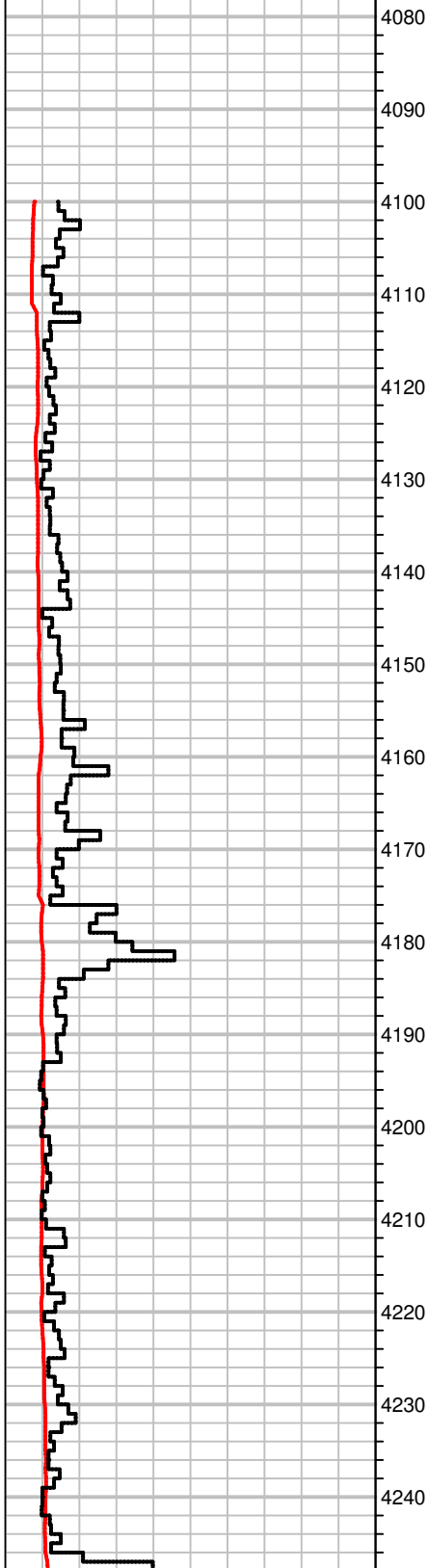
Trilobite Testing, Inc

Ref. No: 57922

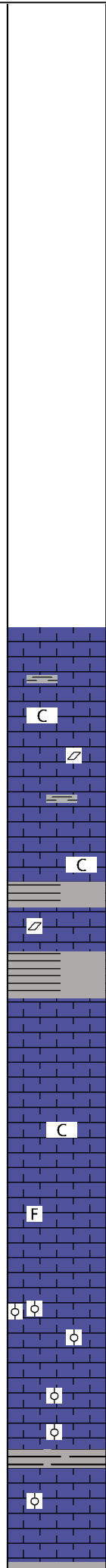
Printed: 2015.11.19 @ 07:59:18

0 Total Gas (units) 100  
 0 ROP (min/ft) 10  
 Depth: 652.0  
 Bit #: 2  
 Size: 7.875  
 Type: Hughes  
 In: 652  
 Out: 5139  
 Drilled: 4487  
 Hours: 120  
 Cond:

Geo on Location @ 6:30 PM 11/15/2015  
 Correlation well 'A' - VOC Droste 2-10



0 Total Gas (units) 100  
 0 ROP (min/ft) 10



MS, crm to brn, f-xln, dense, NS  
 SH, gray, red, some silty, samples still cleaning up

WS-MS, crm to off white, chalky, soft, some gray, f-xln, calcite xtals, SH, gray, greenish gray

MS-WS, crm to gray, f-xln, chalky, rare pcs w. coral frgmts, oolitic, fossilif.  
 some SH, gray, red

MS-WS, crm to gray, vf-xln to chalky, A.A., some hard, dense, calcite rhombs, some pcs friable, mic-xln, gritty txt, SH, sandy, gray, green, red

MS gray, crm to tan, A.A, scatt fossilif pcs, calcite rhombs, NS

MS, tan to gray, mic-xln, massive txt, dense, scatt crinoids, micro oolitic in part, some pcs chalky  
 SH, gray, silty

MS, lt. tan, crm off white, mic-xln, massive txt, dense, some fossils

MS, A.A., come calcite rhombs, sandy pcs, some micro oolitic  
 SH, green

MS-WS, crm to off white, mic-xln, micro oolitic, hard, friable, scatt fossils

MS-WS, A.A., rare mottled pcs  
 SH, blk, gray

MS, crm to gray, mottled, fossils, SH, brn, blk, gray, silty

Sh, blk, dk. gray, gassy blk pcs

SH, blk, dk. gray, gassy blk pcs

(-1787) (A+6)

4270

MS-WS, crm, gray, tan, f-xln to mic-xln, mottled pcs, fossils

4280

MS, crm to tan, brn, blk, specs, mic-xln, dense, calcite rhombs, micro oolitic

4290

SH, blk, grays  
MS, crm to tan, f-xln, dense, scatt fossils, pyrite, Chert, white

4300

MS, crm to lt. tan, f-xln, dense to chalky, some pcs fossilif, calcite, rare dark specs  
some SH, gray, green

4310

MS, crm to lt. tan, m-xln, sub oolitic in part  
Chert, white, rare gray

4320

MS-WS, crm to tan, some gray, f-xln, dense, some friable, fossilif, rare white Chert, SH, grays

4330

MS, crm, f-xln, massive txt, some pcs micro oolitic, scatt fossilif pcs, soft to hrad, scatt SH, grays

4340

WS, brn to gray, f-xln, f to m-gr oolitic, dark ooids in tite matrix, some MS, A.A., glauc, pyrite.  
SH, gray green, red

4350

MS, crm, f-xln, massive to gritty txt, some pcs friable, rare dead wormy stn, SH, green

4360

MS, A.A., sub oolitic, mineral specs.

4370

MS-WS, crm to gray, f-xln, sub oolitic, mineral specs, fossilif, hard, scatt chalky pcs

4380

SH, gray, red, brn, some silty  
MS-WS, A.A., f-gr oolitic throughout,

4390

MS-WS, A.A., f-gr oolitic pcs, mineral specs  
SH, gray, red, brn

4400

MS, brn, f-xln, to massive txt, dense, some fossil frgmts,  
SH, brn, gray

BL 4402 (-1922)(A+7)

4410

MS-WS, crm to lt. gray, f-xln, hard, gritty to sub oolitic txt, some lt gray pcs dense, NS

LANS 4411 (-1934)(A+9)

4420

MS-WS, A.A., crm to lt. gray, f-xln, hard, fossilif, m-gr oolitic pcs, some sub oolitic, dark ooids

4430

MS-WS, tan, gray, crm, f-xln, sub oolitic, dense, scatt fossils, some calcite, NS

4440

MS, crm, som elt. gray, f-xln some partially chalky, hard to firm, scatt fossils  
SH, gray,

4450

MS, crm A.A., dense, glauc, fossilif.

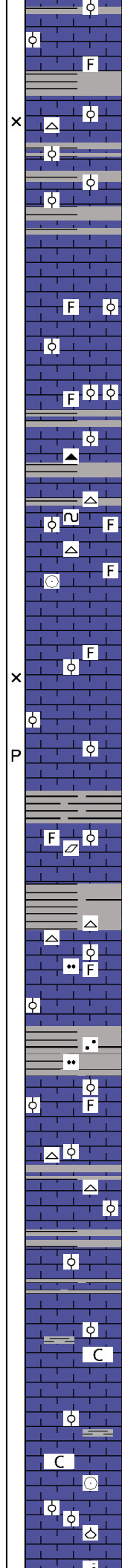
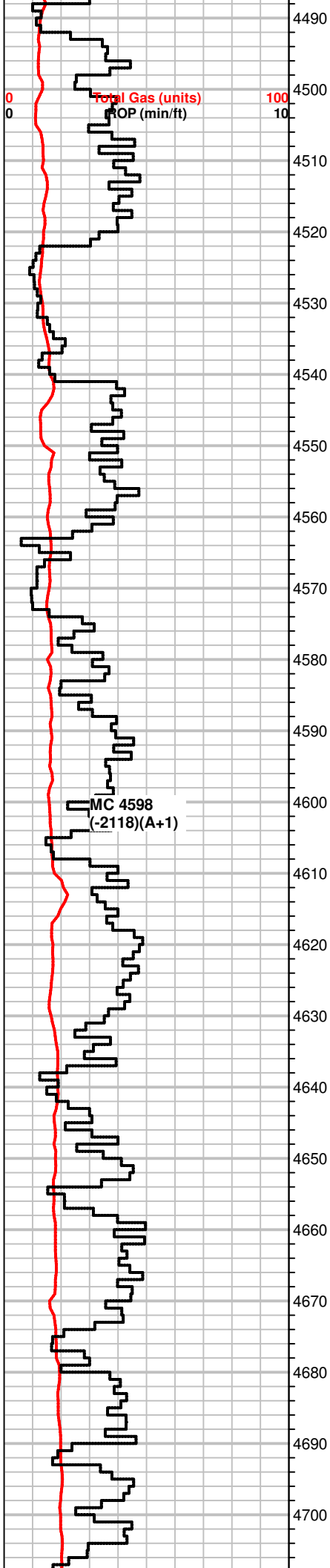
4460

MS, crm to lt. gray, f-xln, dense to friable, sub oolitic in part, rare pcs w/ dark ooids, m-gr, scatt fossils,  
SH, gray, green

4470

MS, A.A., mostly crm, crinoids, rare white Chert, NS

4480



MS, crm, vf-xln to f-xlnk, soft, some pcs dense, scatt fossils, rare sub oolitic pcs, inc in SH, red, some gray(looks like caving)

SH, grays, green, yellowish brn

MS, crm to tan, mic to f-xln, f to m-gr oolitic pcs, dark ooids, dense matrix, rare brn mottled pcs, rare Chert, white

MS, crm to gray, f-xln, hard, dense, fossilif, oolitic to sub-oolitic pcs, some gritty txt

SH, gray

some SH, gray

MS, crm to gray, some tan/brn pcs, f-xln gritty, scatt fossils,

WS-MS, gray to brn, crm, f-xln, mottled/sandy pcs, fossilif, f-gr oolitic pcs, dense to firm, NS

WS-MS, A.A., brn, crip -xln, dense, fossilif brn pcs, Chert, gray some SH, gray, brn

MS, crm, mic-xln, dense, sub oolitic, scatt glauc, lt. edge stn dry, Chert, white, fossilif.

MS-WS, A.A., crm to brn, f-xln, dense, scatt fossils, Chert, white, opaque, scatt fossils, lt. edge stn dry

MS, brn to crm, mic to f-xln, some mottled pcs, most dense, massive txt in pcs, some fossilif, NS

MS, crm to tan, some brn, dense, scatt pcs chalky, rare WS, crm, f-gr oolitic, fossilif., friable, NS

SH, gray, dk. gray, green

MS, crm to tan, some WS, f-xln, hard, fossilif, sub oolitic, scatt calcite xtals.

SH, gray, green

MS, tan, crm to gray, mic-xln, dense, some fossil frgmts, NS

Chert, white gray

MS, crm to tan, mic-xln, dense, hard, gritty txt in pcs, fossils

SH, green, gray

MS, crm to gray, f-xln, chalky, some dense, firm to hard, sub oolitic pcs

Rare SH, blk, gray, sandy silty

MS crm to gray, f-xln, firm, some gray pcs w/ dark co gr ooids, fossils, dull fluor, NS

MS, crm to off white, f-xln, barren, firm to hard, sub oolitic pcs, some chalky, Chert, white

MS, A.A, influx in gray to brn pcs, f-xln to chalky, sub oolitic, m-gr ooids in gray pcs, scatt crinoids, brach frgmts

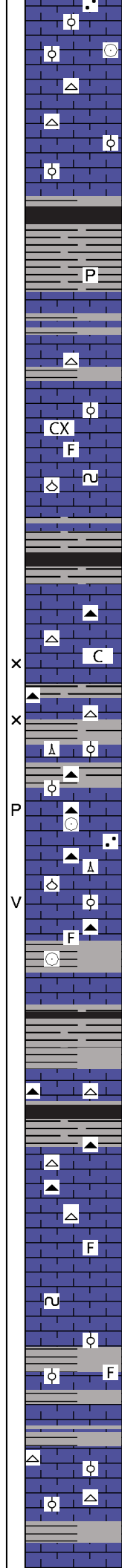
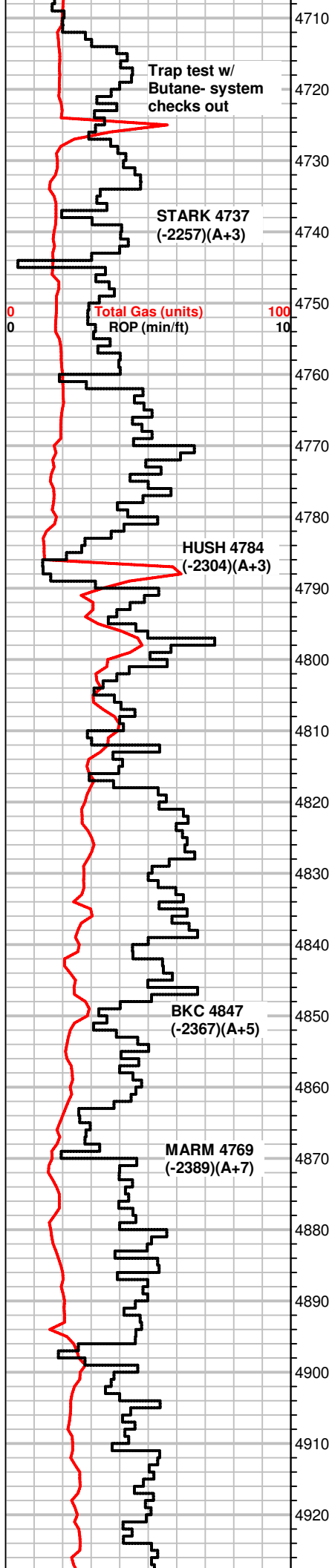
MS, lt. gray to crm, f-xln, dense to friable, some pcs w/ chalky matrix

MS, gray to crm, A.A, influx of SH, gray, (caving/washout?)

SH, A.A. rare blk, looks fresh(washout?), MS, crm, f-xln, some pcs w/ m-gr ooids in chalky matrix,

MS-WS, crm to tan, mic to f-xln, hard/dense, some sli. chalky, , sub oolitic to fossilif(crinoids, brach frgmts)

MS, crm to tan, f-xln, some pcs sandy, chalky, f-gr oolitic



MS, crm to tan, f-xln, some pcs sandy, chalky, m-gr oolitic, scatt SH, gray, green, red

MS, A.A., chalky to f-xln, hard, Chert, white

WS-MS, brn, tan, crm, f-xln, sandy, oolitic in part, f-gr, some pcs dense, mic-xln, SH, blk, brn, gray

SH, blk, carb, brn, gray, pyrite, green

MS, lt. gray, f-xln, firm to hard, massive txt, dull fluor, NS Chert, white, carrying SH, gray, blk dec. amt.

MS, lt. gray, tan, crm, f-xln, hard, most pcs dense, rare fossils scatt SH, gray

MS, crm to lt. gray, brn, A.A., some chalky, glauc, rare fossils, NS SH, blk

SH, blk, brn, gray, silty/sandy pcs

SH, A.A.  
MS, crm to tan, f-xln, chalky in crm pcs  
Chert, brn

MS, crm to tan, f-xln, dense, rare soft pcs-chalky in part, fossilif. calcite, mottled pcs, scatt SH, gray, blk  
Chert, brn, white

MS, brn to crm, f-xln to chalky, hard to soft, some sub oolitic Chert, brn, gray, spicules, lt edge stn dry  
SH, blk, gray

MS, crm, f-xln, calcite rhombs, silty, some cherty pcs, fossils (crinoids), Chert, brn, gray

MS-WS, crm, m-xln to f-xln, sandy pcs, fossilif, some pcs w/ elongated ooids, Chert, gray, fossilif.  
SH, gray, green, blk, blocky

MS, brn, to crm, f-xln, dense, massive txt in pcs, scatt fossils. carrying SH, blk, gray

SH, gray, green  
WS, crm to tan, brn, f-xln, fossilif, oolitic, dense in part, Chert frgmts, Chert, brn, blk, fossilif.

Sh, gray, dk. gray, WS-MS. A.A., Chert, blk, gray, white, fossilif.

MS-WS, crm to tan, some gray, f-xln, hard, sli chalky pcs, Chert, white, brn, spicules, NS

MS, lt. gray to crm, mic-xln, firm, scatt fossils, NS  
scatt SH, green, gray

MS, A.A., some mottled pcs, glauc inclusions, NS

MS-WS, crm to gray, f-xln, soft, rare dense pcs(gray) fossilif. suboolitic, lt edge stn dry  
SH, blk, gray

Scatt SH, gray, blk  
MS, crm to lt. gray, f-xln, sli. chky, sub oolitic, firm to hard, Chert, opaque

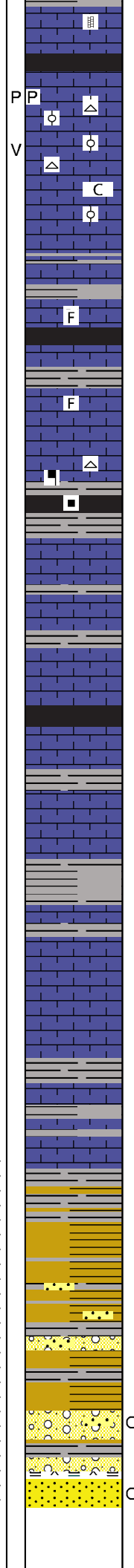
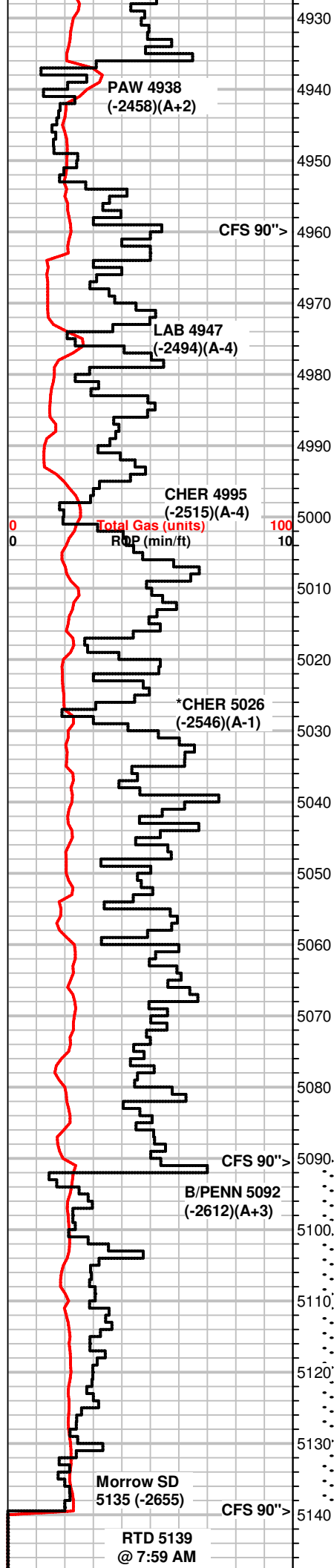
MS, crm, f-xln, hard, rare brn/gray WS, f-xln, fossilif

MS, scatt WS, brn to tan, mic-xln, dense, sub oolitic in part, rare

**+2 UGK shale gas**

**+45 UGK shale gas**

**shale gas**



MS, scatt WS, brn to tan, mic-xln, dense, sub oolitic in par, rare calcite veins

SH, blk, gray, gas bubbles

MS-WS, crm to tan/brn, f-xln, some massive txt, firm, fractured, oolitic/fossilif, scatt chalky pcs, dull fluor, no odor, NS, lt edge stn dry

Chert, opaque

MS, brn, to crm, f-xln, sub oolitic, some chalky pcs, scatt SH, gray

MS, crm to tan, f-xln, some pcs dense, most friable, scatt fossils, NS, lt edge stn dry

SH, blk, gray, gas bubbles, sea green

SH, gray, green, blk, gas bubbles

MS, Crm to lt. gray, chalky to f-xln, soft, rare fossilif. pcs, some dense, lt edge stn dry

MS, crm to gray, some brn, chalky to f-xln, mottled pcs, scatt fossils, some dark minerals, Chert, white

SH, blk, gray,

MS, crm, f-xln, sub oolitic/fossilif, gritty txt in part, hard, rare Chert, opaque

MS, crm to gray, A.A., dense, calcite veins, Chert, brn,

MS, crm to gray, f-xln, dense, scatt fossils, glauc, NS, Chert, white, some SH, gray, blk

SH, blk, gray

MS, crm to brn, mic-xln, dense, rare fossils, Chert, white

MS, crm, brn, gray, f-xln to chalky txt, firm, some pcs dense, sub oolitic, rare dark ooids, m-gr, NS

Scatt SH, blk gray

MS, brn, to gray/crm, A.A., dense, rare Chert, white, brn

MS, crm to gray, f-xln, firm, scatt pcs fractured, most dense, NS, rare Sh, blk, gray

MS, crm to gray A.A., scatt pcs sub oolitic, sli, inc in SH, blk, gray

MS, crm to tan, brn, f-xln, some chalky, scatt fossils, rare ooids in chalky matrix

SH, gray

MS, crm to tan, f-xln, most tan pcs scatt oolitic, fossil frgmts, NS

SH, gray, sea green,

SH, sea green, gray silty, blk

SH, sea green, mustard yellow, SS clusters, green to gray, f to co-gr, poorly sorted, tite cement, some pcs friable, NS

Chert, yellow, green

SS clusters, A.A, miineral inclusions

SH, varicolored, (red, yellow, green, grays), Chert, yellow, green, some fossils, gastropods

SH, varicolored A.A, Chert, white, fresh, very light spotty stn on some pcs, no cut, very faint odor in bag.

Chert white, varicolored, some oolitic, SS clusters, Co-gr poorly sorted, tite cement, spotty bright fluor, fair odor, slow cut, instant cut on break, diminishing show in 90" sample.

**+13 UGK shale gas**

**+9 UGK shale gas**

**+8 UGK shale gas**

**DST #1 5089-5139**  
**30-60-60-90**  
**FB, built to BOB/12"**  
**Weak Surf BB**  
**FB, built to BOB/12"**  
**Weak Surf BB**  
**330' GIP**  
**Rec:1099' Total**  
**45' MOCW**  
**(32o, 44w, 24m)**  
**613' GMOCW**  
**(20g,12o,58w,10m)**  
**441' Water**  
**IH 2569#**  
**IF 42-262#**  
**ISIP 1322#**  
**FF 252-525#**  
**FSIP 1321#**  
**FH 2333#**  
**Temp 122°F**  
**API Rw .18 @ 52°F**  
**CI 58000 ppm**

**+3 UGK**



11/18/2015

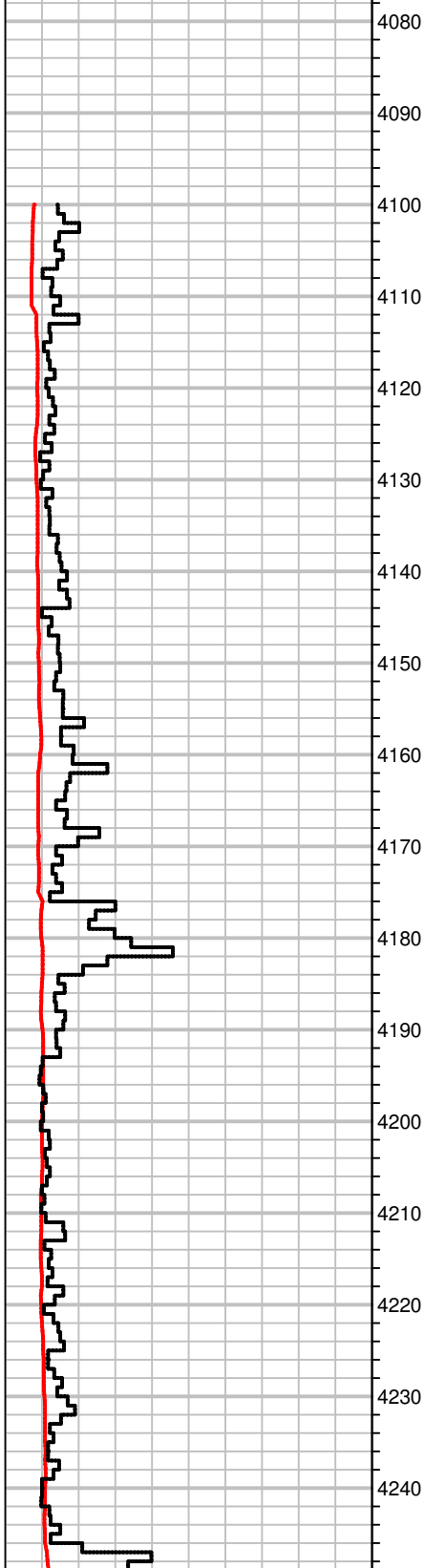
5150  
5160  
5170  
5180  
5190

0 Total Gas (units) 100  
 0 ROP (min/ft) 10  
 Depth: 652.0  
 Bit #: 2  
 Size: 7.875  
 Type: Hughes  
 In: 652  
 Out: 5139  
 Drilled: 4487  
 Hours: 120  
 Cond:

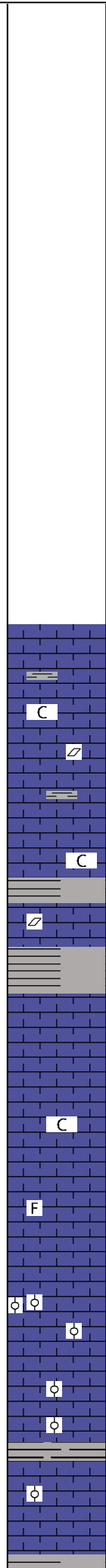
Geo on Location @ 6:30 PM 11/15/2015  
 Correlation well 'A' - VOC Droste 2-10



Geologic Report:  
 Vincent Oil Corporation  
 Riegel # 2-3  
 100' FSL & 2634' FWL  
 3-28-23W  
 Ford Co., KS  
 GL: 2467  
 KB: 2480



0 Total Gas (units) 100  
 0 ROP (min/ft) 10  
 HBR 4267



MS, crm to brn, f-xln, dense, NS  
 SH, gray, red, some silty, samples still cleaning up

WS-MS, crm to off white, chalky, soft, some gray, f-xln, calcite xtals, SH, gray, greenish gray

MS-WS, crm to gray, f-xln, chalky, rare pcs w. coral frgmts, oolitic, fossilif.  
 some SH, gray, red

MS-WS, crm to gray, vf-xln to chalky, A.A., some hard, dense, calcite rhombs, some pcs friable, mic-xln, gritty txt, SH, sandy, gray, green, red

MS gray, crm to tan, A.A, scatt fossilif pcs, calcite rhombs, NS

MS, tan to gray, mic-xln, massive txt, dense, scatt crinoids, micro oolitic in part, some pcs chalky  
 SH, gray, silty

MS, lt. tan, crm off white, mic-xln, massive txt, dense, some fossils

MS, A.A., come calcite rhombs, sandy pcs, some micro oolitic  
 SH, green

MS-WS, crm to off white, mic-xln, micro oolitic, hard, friable, scatt fossils

MS-WS, A.A., rare mottled pcs  
 SH, blk, gray

MS, crm to gray, mottled, fossils, SH, brn, blk, gray, silty

Sh, blk, dk. gray, gassy blk pcs

SH, blk, dk. gray, gassy blk pcs

(-1787) (A+6)

4270  
4280  
4290  
4300  
4310  
4320  
4330  
4340  
4350  
4360  
4370  
4380  
4390  
4400  
4410  
4420  
4430  
4440  
4450  
4460  
4470  
4480

MS-WS, crm, gray, tan, f-xln to mic-xln, mottled pcs, fossils

MS, crm to tan, brn, blk, specs, mic-xln, dense, calcite rhombs, micro oolitic

SH, blk, grays  
MS, crm to tan, f-xln, dense, scatt fossils, pyrite, Chert, white

MS, crm to lt. tan, f-xln, dense to chalky, some pcs fossilif, calcite, rare dark specs  
some SH, gray, green

MS, crm to lt. tan, m-xln, sub oolitic in part  
Chert, white, rare gray

MS-WS, crm to tan, some gray, f-xln, dense, some friable, fossilif, rare white Chert, SH, grays

MS, crm, f-xln, massive txt, some pcs micro oolitic, scatt fossilif pcs, soft to hrad, scatt SH, grays

WS, brn to gray, f-xln, f to m-gr oolitic, dark ooids in tite matrix, some MS, A.A., glauc, pyrite.  
SH, gray green, red

MS, crm, f-xln, massive to gritty txt, some pcs friable, rare dead wormy stn, SH, green

MS, A.A., sub oolitic, mineral specs.

MS-WS, crm to gray, f-xln, sub oolitic, mineral specs, fossilif, hard, scatt chalky pcs

SH, gray, red, brn, some silty  
MS-WS, A.A., f-gr oolitic throughout,

MS-WS, A.A., f-gr oolitic pcs, mineral specs  
SH, gray, red, brn

MS, brn, f-xln, to massive txt, dense, some fossil frgmts,  
SH, brn, gray

MS-WS, crm to lt. gray, f-xln, hard, gritty to sub oolitic txt, some lt gray pcs dense, NS

MS-WS, A.A., crm to lt. gray, f-xln, hard, fossilif, m-gr oolitic pcs, some sub oolitic, dark ooids

MS-WS, tan, gray, crm, f-xln, sub oolitic, dense, scatt fossils, some calcite, NS

MS, crm, som elt. gray, f-xln some partially chalky, hard to firm, scatt fossils  
SH, gray,

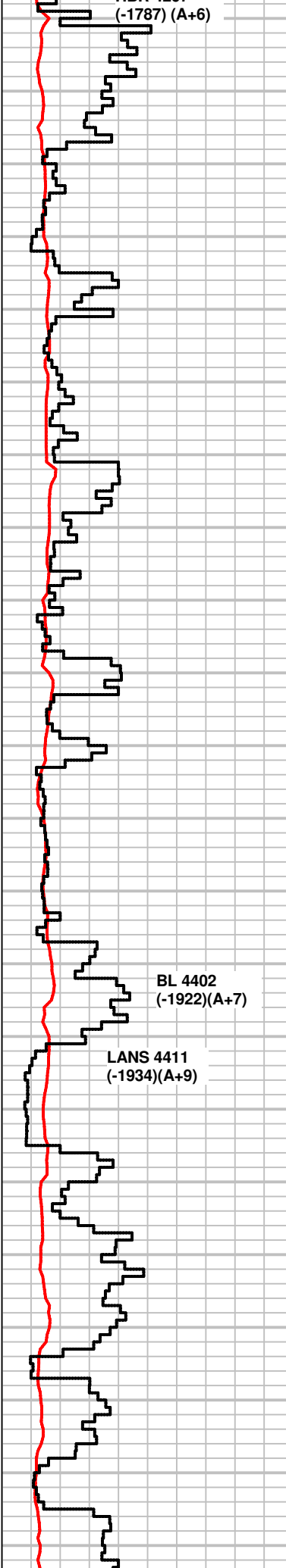
MS, crm A.A., dense, glauc, fossilif.

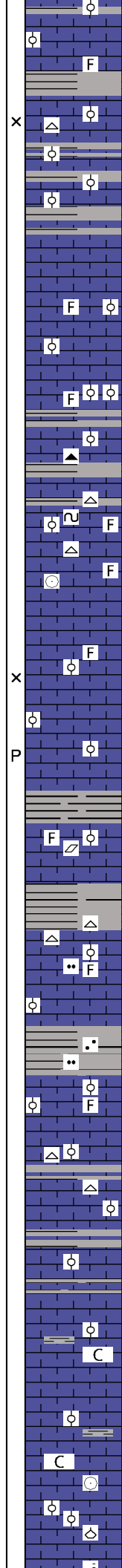
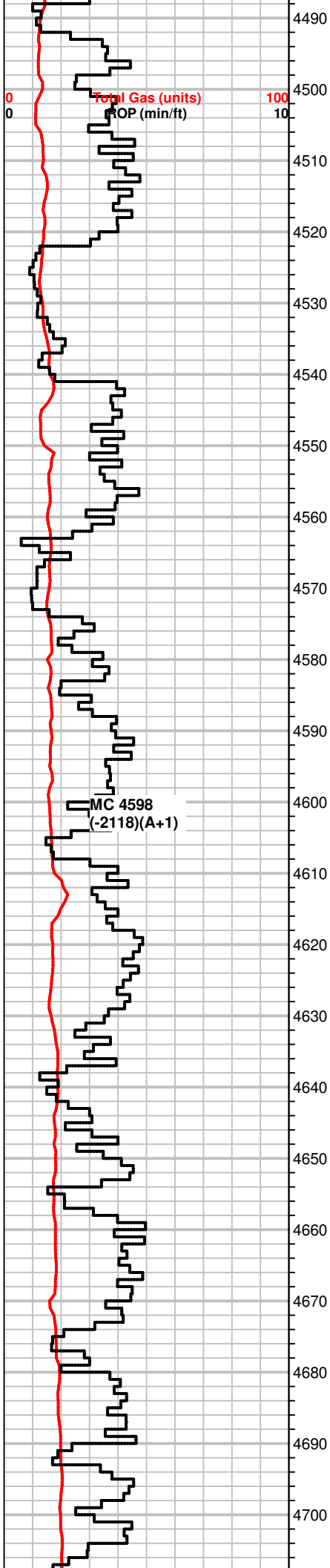
MS, crm to lt. gray, f-xln, dense to friable, sub oolitic in part, rare pcs w/ dark ooids, m-gr, scatt fossils,  
SH, gray, green

MS, A.A., mostly crm, crinoids, rare white Chert, NS

BL 4402  
(-1922)(A+7)

LANS 4411  
(-1934)(A+9)





MS, crm, vf-xln to f-xlnk, soft, some pcs dense, scatt fossils, rare sub oolitic pcs, inc in SH, red, some gray(looks like caving)

SH, grays, green, yellowish brn

MS, crm to tan, mic to f-xln, f to m-gr oolitic pcs, dark ooids, dense matrix, rare brn mottled pcs, rare Chert, white

MS, crm to gray, f-xln, hard, dense, fossilif, oolitic to sub-oolitic pcs, some gritty txt

SH, gray

some SH, gray

MS, crm to gray, some tan/brn pcs, f-xln gritty, scatt fossils,

WS-MS, gray to brn, crm, f-xln, mottled/sandy pcs, fossilif, f-gr oolitic pcs, dense to firm, NS

WS-MS, A.A., brn, crip -xln, dense, fossilif brn pcs, Chert, gray some SH, gray, brn

MS, crm, mic-xln, dense, sub oolitic, scatt glauc, lt. edge stn dry, Chert, white, fossilif.

MS-WS, A.A., crm to brn, f-xln, dense, scatt fossils, Chert, white, opaque, scatt fossils, lt. edge stn dry

MS, brn to crm, mic to f-xln, some mottled pcs, most dense, massive txt in pcs, some fossilif, NS

MS, crm to tan, some brn, dense, scatt pcs chalky, rare WS, crm, f-gr oolitic, fossilif., friable, NS

SH, gray, dk. gray, green

MS, crm to tan, some WS, f-xln, hard, fossilif, sub oolitic, scatt calcite xtals.

SH, gray, green

MS, tan, crm to gray, mic-xln, dense, some fossil frgmts, NS

Chert, white gray

MS, crm to tan, mic-xln, dense, hard, gritty txt in pcs, fossils

SH, green, gray

MS, crm to gray, f-xln, chalky, some dense, firm to hard, sub oolitic pcs

Rare SH, blk, gray, sandy silty

MS crm to gray, f-xln, firm, some gray pcs w/ dark co gr ooids, fossils, dull fluor, NS

MS, crm to off white, f-xln, barren, firm to hard, sub oolitic pcs, some chalky, Chert, white

MS, A.A, influx in gray to brn pcs, f-xln to chalky, sub oolitic, m-gr ooids in gray pcs, scatt crinoids, brach frgmts

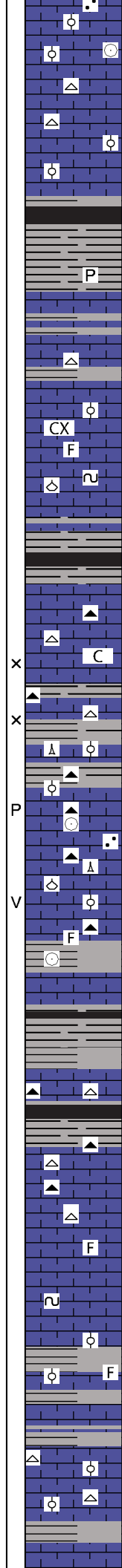
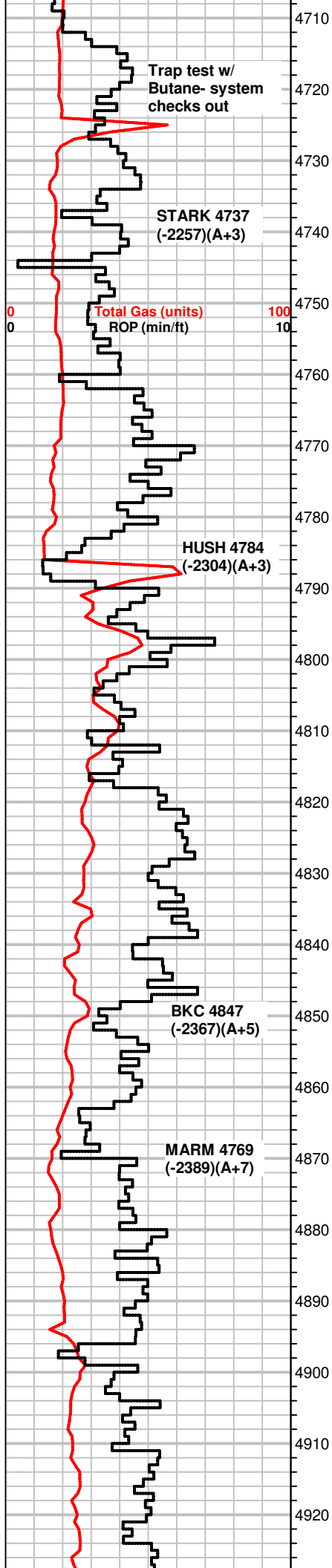
MS, lt. gray to crm, f-xln, dense to friable, some pcs w/ chalky matrix

MS, gray to crm, A.A, influx of SH, gray, (caving/washout?)

SH, A.A.rare blk, looks fresh(washout?), MS, crm, f-xln, some pcs w/ m-gr ooids in chalky matrix,

MS-WS, crm to tan, mic to f-xln, hard/dense, some sli. chalky, , sub oolitic to fossilif(crinoids, brach frgmts)

MS, crm to tan, f-xln, some pcs sandy, chalky, f-gr oolitic



MS, crm to tan, f-xln, some pcs sandy, chalky, m-gr oolitic, scatt SH, gray, green, red

MS, A.A., chalky to f-xln, hard, Chert, white

WS-MS, brn, tan, crm, f-xln, sandy, oolitic in part, f-gr, some pcs dense, mic-xln, SH, blk, brn, gray

SH, blk, carb, brn, gray, pyrite, green

MS, lt. gray, f-xln, firm to hard, massive txt, dull fluor, NS Chert, white, carrying SH, gray, blk dec. amt.

MS, lt. gray, tan, crm, f-xln, hard, most pcs dense, rare fossils scatt SH, gray

MS, crm to lt. gray, brn, A.A., some chalky, glauc, rare fossils, NS SH, blk

SH, blk, brn, gray, silty/sandy pcs

SH, A.A.  
MS, crm to tan, f-xln, chalky in crm pcs  
Chert, brn

MS, crm to tan, f-xln, dense, rare soft pcs-chalky in part, fossilif. calcite, mottled pcs, scatt SH, gray, blk  
Chert, brn, white

MS, brn to crm, f-xln to chalky, hard to soft, some sub oolitic Chert, brn, gray, spicules, lt edge stn dry  
SH, blk, gray

MS, crm, f-xln, calcite rhombs, silty, some cherty pcs, fossils (crinoids), Chert, brn, gray

MS-WS, crm, m-xln to f-xln, sandy pcs, fossilif, some pcs w/ elongated ooids, Chert, gray, fossilif.  
SH, gray, green, blk, blocky

MS, brn, to crm, f-xln, dense, massive txt in pcs, scatt fossils. carrying SH, blk, gray

SH, gray, green  
WS, crm to tan, brn, f-xln, fossilif, oolitic, dense in part, Chert frgmts, Chert, brn, blk, fossilif.

Sh, gray, dk. gray, WS-MS. A.A., Chert, blk, gray, white, fossilif.

MS-WS, crm to tan, some gray, f-xln, hard, sli chalky pcs, Chert, white, brn, spicules, NS

MS, lt. gray to crm, mic-xln, firm, scatt fossils, NS  
scatt SH, green, gray

MS, A.A., some mottled pcs, glauc inclusions, NS

MS-WS, crm to gray, f-xln, soft, rare dense pcs(gray) fossilif. suboolitic, lt edge stn dry  
SH, blk, gray

Scatt SH, gray, blk  
MS, crm to lt. gray, f-xln, sli. chky, sub oolitic, firm to hard, Chert, opaque

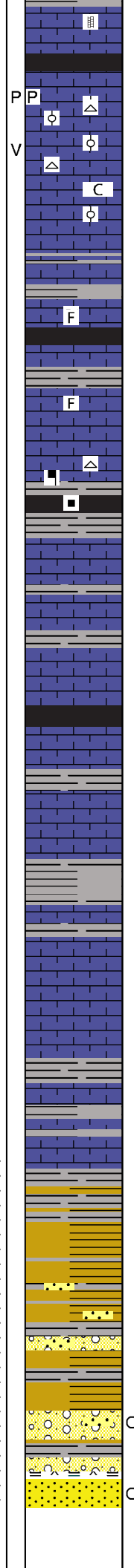
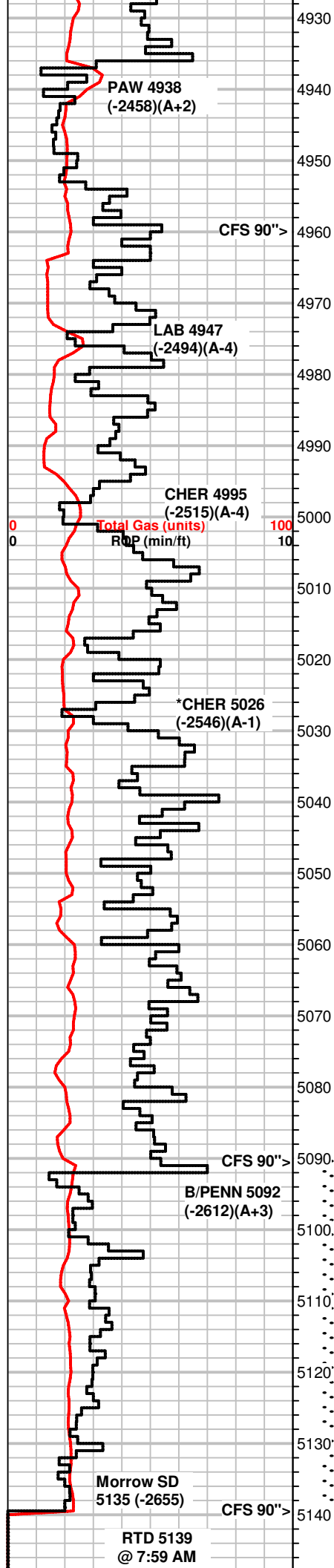
MS, crm, f-xln, hard, rare brn/gray WS, f-xln, fossilif

MS, scatt WS, brn to tan, mic-xln, dense, sub oolitic in part, rare

+2 UGK shale gas

+45 UGK shale gas

shale gas



MS, scatt WS, brn to tan, mic-xln, dense, sub oolitic in par, rare calcite veins

SH, blk, gray, gas bubbles

MS-WS, crm to tan/brn, f-xln, some massive txt, firm, fractured, oolitic/fossilif, scatt chalky pcs, dull fluor, no odor, NS, lt edge stn dry

Chert, opaque

MS, brn, to crm, f-xln, sub oolitic, some chalky pcs, scatt SH, gray

MS, crm to tan, f-xln, some pcs dense, most friable, scatt fossils, NS, lt edge stn dry

SH, blk, gray, gas bubbles, sea green

SH, gray, green, blk, gas bubbles

MS, Crm to lt. gray, chalky to f-xln, soft, rare fossilif. pcs, some dense, lt edge stn dry

MS, crm to gray, some brn, chalky to f-xln, mottled pcs, scatt fossils, some dark minerals, Chert, white

SH, blk, gray,

MS, crm, f-xln, sub oolitic/fossilif, gritty txt in part, hard, rare Chert, opaque

MS, crm to gray, A.A., dense, calcite veins, Chert, brn,

MS, crm to gray, f-xln, dense, scatt fossils, glauc, NS, Chert, white, some SH, gray, blk

SH, blk, gray

MS, crm to brn, mic-xln, dense, rare fossils, Chert, white

MS, crm, brn, gray, f-xln to chalky txt, firm, some pcs dense, sub oolitic, rare dark ooids, m-gr, NS

Scatt SH, blk gray

MS, brn, to gray/crm, A.A., dense, rare Chert, white, brn

MS, crm to gray, f-xln, firm, scatt pcs fractured, most dense, NS, rare Sh, blk, gray

MS, crm to gray A.A., scatt pcs sub oolitic, sli, inc in SH, blk, gray

MS, crm to tan, brn, f-xln, some chalky, scatt fossils, rare ooids in chalky matrix

SH, gray

MS, crm to tan, f-xln, most tan pcs scatt oolitic, fossil frgmts, NS

SH, gray, sea green,

SH, sea green, gray silty, blk

SH, sea green, mustard yellow, SS clusters, green to gray, f to co-gr, poorly sorted, tite cement, some pcs friable, NS

Chert, yellow, green

SS clusters, A.A, miineral inclusions

SH, varicolored, (red, yellow, green, grays), Chert, yellow, green, some fossils, gastropods

SH, varicolored A.A, Chert, white, fresh, very light spotty stn on some pcs, no cut, very faint odor in bag.

Chert white, varicolored, some oolitic, SS clusters, Co-gr poorly sorted, tite cement, spotty bright fluor, fair odor, slow cut, instant cut on break, diminishing show in 90" sample.

**+13 UGK shale gas**

**+9 UGK shale gas**

**+8 UGK shale gas**

**DST #1 5089-5139**  
**30-60-60-90**  
**FB, built to BOB/12"**  
**Weak Surf BB**  
**FB, built to BOB/12"**  
**Weak Surf BB**  
**330' GIP**  
**Rec:1099' Total**  
**45' MOCW**  
**(32o, 44w, 24m)**  
**613' GMOCW**  
**(20g,12o,58w,10m)**  
**441' Water**  
**IH 2569#**  
**IF 42-262#**  
**ISIP 1322#**  
**FF 252-525#**  
**FSIP 1321#**  
**FH 2333#**  
**Temp 122°F**  
**API Rw .18 @ 52°F**  
**CI 58000 ppm**

**+3 UGK**

11/18/2015

5150  
5160  
5170  
5180  
5190