

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	CONNER 1-17
Doc ID	1482254

Tops

Name	Top	Datum
Anhydrite	1593	+798
Heebner Shale	3945	(-1554)
Brown Limestone	4019	(-1628)
Lansing	4030	(-1639)
Stark Shale	4298	(-1907)
Base Kansas City	4410	(-2019)
Pawnee	4495	(-2104)
Fort Scott	4531	(-2140)
Cherokee Shale	4550	(-2159)
Mississippian	4668	(-2277)
RTD	4725	(-2334)

QUALITY WELL SERVICE, INC.

7171

Federal Tax I.D. # 481187368

Home Office 30060 N. Hwy 281, Pratt, KS 67124

Mailing Address P.O. Box 468

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
7-20-19	17	23S	24W	Hobgeman	Ks		
Lease	CORNEL		Well No.	1-17		Location	
Contractor		DUKE Delg Big #2		Owner		W into	
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.	737'	Charge To			
Csg.	35/3 234	Depth	735'	VINCENT OIL CORPORATION			
Tbg. Size		Depth		Street			
Tool		Depth		City		State	
Cement Left in Csg.	40	Shoe Joint	40	The above was done to satisfaction and supervision of owner agent or contractor.			
Meas Line		Displace	44.43	Cement Amount Ordered			
EQUIPMENT				150# Common 2 1/2" CL 3 1/2" 1/2" PS			
				150# Common 2 1/2" CL 3 1/2" 1/2" PS			
Pumptrk	8	No.		Common 150#			
Bulktrk	10	No.		Poz. Mix. 150#			
Bulktrk	11	No.		Gel. 600 lbs			
Pickup		No.		Calcium 840 lbs			
JOB SERVICES & REMARKS				Hulls			
				Salt			
Rat Hole				Flowseal 150 lbs			
Mouse Hole				Kol-Seal			
Centralizers				Mud CLR 48			
Baskets				CFL-117 or CD110 CAF 38			
D/V or Port Collar				Sand			
Run 13 #1's 8 1/2" 23" CSG SET 735'				Handling 377			
CSG ON Bottom Hook up to CSG & BREAK CIRC W/RIG				Mileage 75/10000			
START Pumping H ₂ O				8 1/2" FLOAT EQUIPMENT			
START Mix #1 Pomp 150# mml d 12 1/4" gnl				Guide Shoe BUFFLE PLATE 1 EA			
START MIX # Pomp 150# Common d 14.9 1/4" gnl				Centralizer WOODEN PLUG 1 EA			
SHOT down Release 8 1/2" WOODEN PLUG				Baskets			
START Disp				AFU Inserts			
44.5 total				Float Shoe			
CLOSE valve on CSG 450"				Latch Down			
Gaze circ thru JOBS				SERVICE Supv			
CAL CRT TO P.T				LMV 75			
				Pumptrk Charge SURFACE			
				Mileage 225			
				Tax			
				Discount			
				Total Charge			
Thank you PLEASE CALL AGAIN IDW IS JAKE							
Signature							

QUALITY WELL SERVICE, INC.

7188

Federal Tax I.D. # 481187368

Home Office 30060 N. Hwy 281, Pratt, KS 67124

Mailing Address P.O. Box 468

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

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

Date	7-29-14	Sec.	17	Twp.	23S	Range	24 W	County	Hodgeman	State	KS	On Location	8:30 A.M.	Finish	12:20 P.M.
Lease	Cement		Well No.	1-17		Location T. J. ... 1126 4W 4S W. H.									
Contractor	D. C. ... 1215 1125' 2							Owner							
Type Job	PTA							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.			Depth		Charge To Vincent O.L. Corp										
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					1500 60/4					
EQUIPMENT													41 Gel 1/4" PS		
Pumptrk	No.	8	75		Common					90					
Bulktrk	No.	15	3000		Poz. Mix					60					
Bulktrk	No.				Gel.					516 lb.					
Pickup	No.				Calcium										
JOB SERVICES & REMARKS													Hulls		
Rat Hole	30x		Salt												
Mouse Hole	Flowseal														
Centralizers	Kol-Seal														
Baskets	Mud CLR 48														
D/V or Port Collar	CFL-117 or CD110 CAF 38														
5' Plug 1620' 50x	Sand														
3' Plug 120'	Handling 155														
4 1/2' Plug 50x 60/40 4 1/2" Gel 1/4" PS	Mileage 70														
2 1/2' Plug 120'	FLOAT EQUIPMENT														
0.50 MD	Guide Shoe														
2 1/2' Plug 720 50x	Centralizer														
1 1/2' Plug 1120	Baskets														
4 1/2' Plug 50x 60/40 4 1/2" Gel 1/4" PS	AFU Inserts														
1 1/2' Plug 1120	Float Shoe														
3 1/2' Plug 60' 20'	Latch Down														
4 1/2' Plug 225 60/40 4 1/2" Gel 1/4" PS	SALINE SOL 1EA														
	Pumptrk Charge PTA														
	Mileage 150														
	Please call ...														
	Tax Discount														



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Vincent Oil Corp
 200 W Douglas Ave 725
 Wichita KS 67202
 ATTN: Tom Dudgeon

23-24-17 Hodgemn Ks
Conner 1-17
 Job Ticket: 65245 **DST#: 1**
 Test Start: 2019.07.28 @ 05:07:56

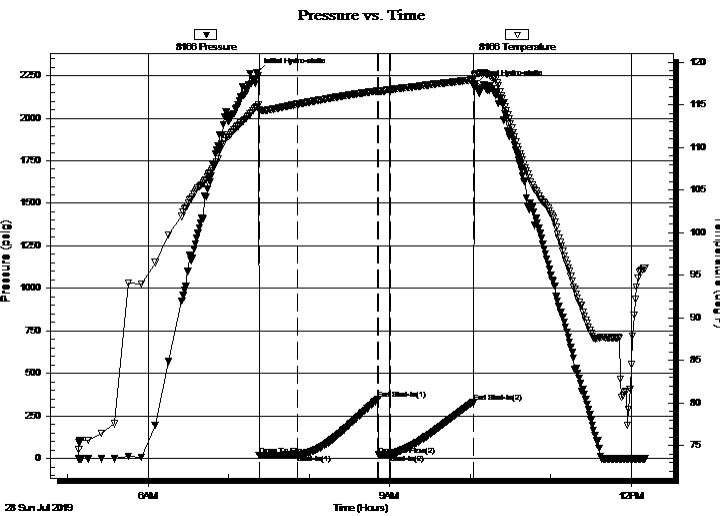
GENERAL INFORMATION:

Formation: **B/ Cherokee**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 07:22:26 Tester: Brandon Turley
 Time Test Ended: 12:09:56 Unit No: 79
 Interval: **4574.00 ft (KB) To 4663.00 ft (KB) (TVD)** Reference Elevations: 2391.00 ft (KB)
 Total Depth: 4663.00 ft (KB) (TVD) 2382.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 9.00 ft

Serial #: 8166 Outside

Press@RunDepth: 24.44 psig @ 4575.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2019.07.28 End Date: 2019.07.28 Last Calib.: 2019.07.28
 Start Time: 05:08:01 End Time: 12:09:55 Time On Btm: 2019.07.28 @ 07:20:56
 Time Off Btm: 2019.07.28 @ 10:03:26

TEST COMMENT: IF: 1/4 blow died in 10 mins.
 IS: No return.
 FF: No blow . Flushed tool no blow .
 FS: No return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2269.44	114.82	Initial Hydro-static
2	19.80	114.33	Open To Flow (1)
30	21.72	115.07	Shut-In(1)
90	347.79	116.64	End Shut-In(1)
91	21.32	116.53	Open To Flow (2)
100	24.44	116.82	Shut-In(2)
161	328.34	117.93	End Shut-In(2)
163	2200.05	118.59	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	mud 100%m	0.07

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Vincent Oil Corp
 200 W Douglas Ave 725
 Wichita KS 67202
 ATTN: Tom Dudgeon

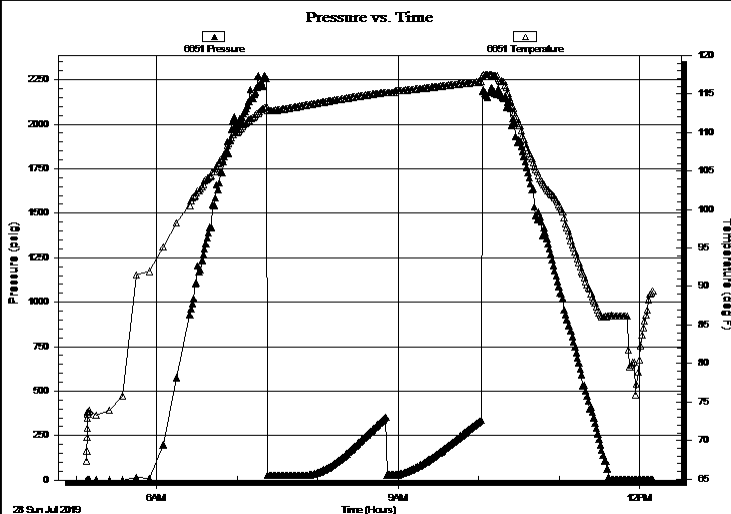
23-24-17 Hodgemn Ks
Conner 1-17
 Job Ticket: 65245 **DST#: 1**
 Test Start: 2019.07.28 @ 05:07:56

GENERAL INFORMATION:

Formation:	B/ Cherokee		
Deviated:	No	Whipstock:	ft (KB)
Time Tool Opened:	07:22:26	Test Type:	Conventional Bottom Hole (Initial)
Time Test Ended:	12:09:56	Tester:	Brandon Turley
		Unit No:	79
Interval:	4574.00 ft (KB) To 4663.00 ft (KB) (TVD)	Reference Elevations:	2391.00 ft (KB)
Total Depth:	4663.00 ft (KB) (TVD)		2382.00 ft (CF)
Hole Diameter:	7.88 inches	Hole Condition:	Good
		KB to GR/CF:	9.00 ft

Serial #: 6651	Inside			
Press@RunDepth:	psig @	4575.00 ft (KB)	Capacity:	8000.00 psig
Start Date:	2019.07.28	End Date:	2019.07.28	Last Calib.:
Start Time:	05:07:43	End Time:	12:09:37	Time On Btm:
				Time Off Btm:

TEST COMMENT: IF: 1/4 blow died in 10 mins.
 IS: No return.
 FF: No blow. Flushed tool no blow.
 FS: No return.



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
5.00	mud 100%m	0.07

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Vincent Oil Corp
200 W Douglas Ave 725
Wichita KS 67202
ATTN: Tom Dudgeon

23-24-17 Hodgemn Ks
Conner 1-17
Job Ticket: 65245 **DST#: 1**
Test Start: 2019.07.28 @ 05:07:56

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	0 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	0 ppm
Viscosity: 59.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.78 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 5800.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

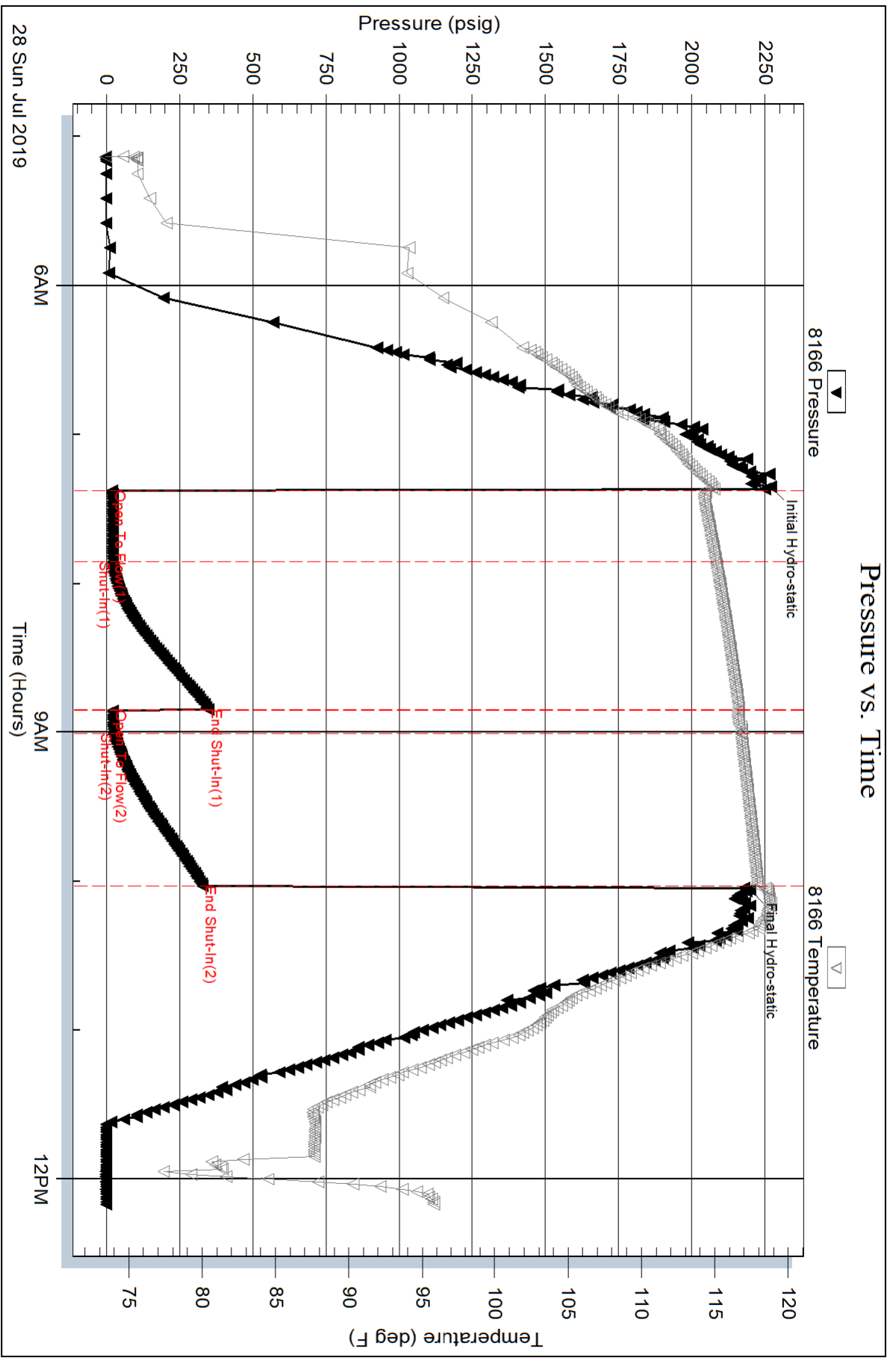
Length ft	Description	Volume bbl
5.00	mud 100%m	0.070

Total Length: 5.00 ft Total Volume: 0.070 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:



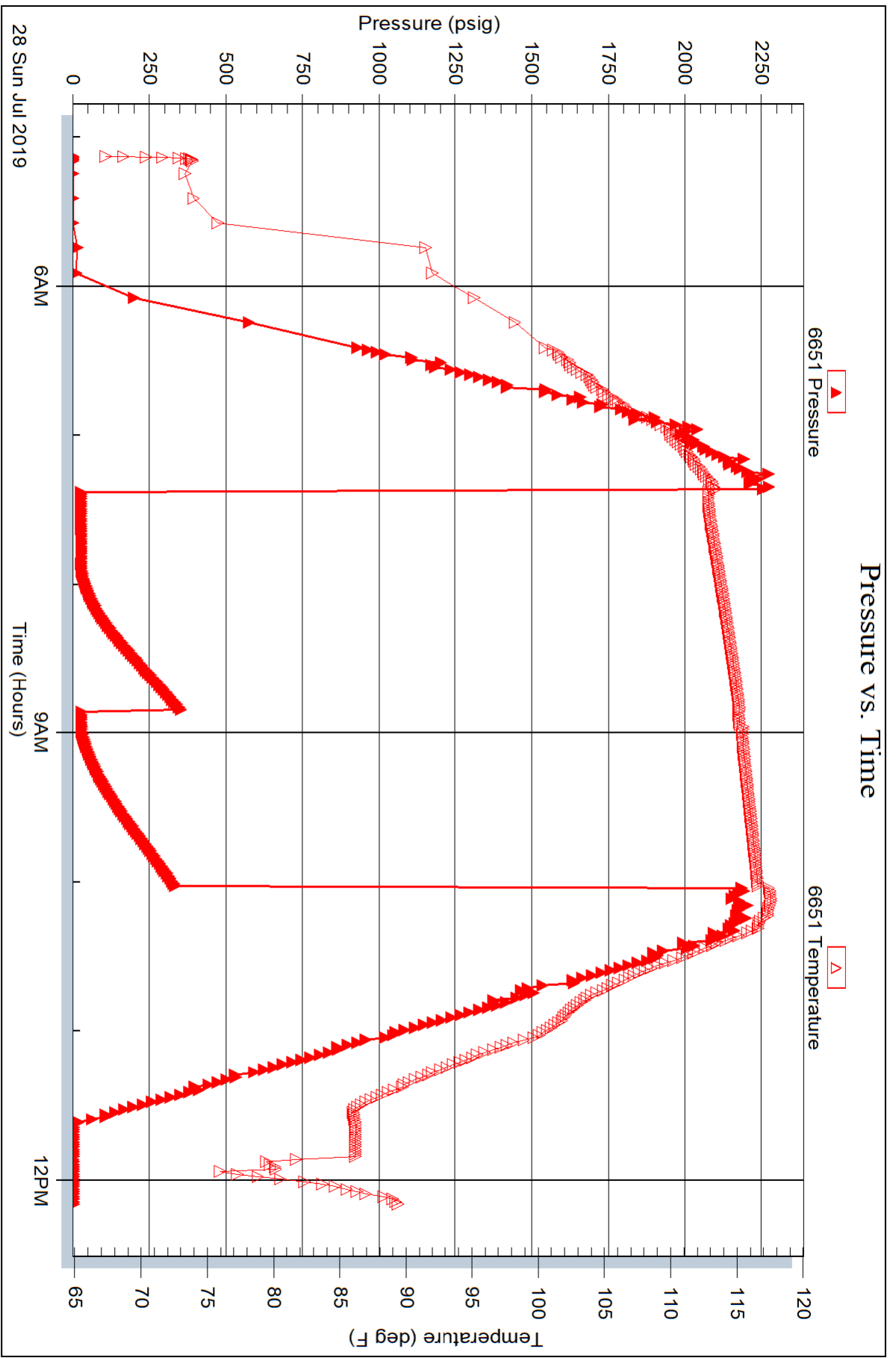
Serial #: 6651

Inside

Vincent Oil Corp

Conner 1-17

DST Test Number: 1





Scale 1:240 Imperial

Well Name: CONNER 1-17
Surface Location: NE-NE-SE-SE 17-23S-24W
Bottom Location:
API: 15-083-21971-00-00
License Number: 5004
Spud Date: 7/19/2019 Time: 6:45 PM
Region:
Drilling Completed: 7/28/2019 Time: 8:23 PM
Surface Coordinates: 1290' FSL & 185' FEL
Bottom Hole Coordinates:
Ground Elevation: 2383.00ft
K.B. Elevation: 2391.00ft
Logged Interval: 3700.00ft To: 4725.00ft
Total Depth: 4725.00ft
Formation: MISSISSIPPIAN
Drilling Fluid Type: Chemical Mud

OPERATOR

Company: Vincent Oil Corporation
Address: 200 W Douglas Ave
Ste 725
Wichita, KS 67202
Contact Geologist: Dick Jordan
Contact Phone Nbr: 316.262.3573
Well Name: CONNER 1-17
Location: NE-NE-SE-SE 17-23S-24W
API: 15-083-21971-00-00
Pool: WILDCAT
State: KANSAS
Field: WILDCAT
Country: USA

CONTRACTOR

Contractor: Duke Drilling Co., Inc.
Rig #: 2
Rig Type: Mud Rotary
Spud Date: 7/19/2019 Time: 6:45 PM
TD Date: 7/28/2019 Time: 8:23 PM
Rig Release: 7/29/2019 Time: 12:00 PM

LOGGED BY

Company: Vincent Oil Corporation
Address:
Phone Nbr:
Logged By: Geologist Name: Tom Dudgeon

SURFACE CO-ORDINATES

Well Type: Vertical

Well Type: Vertical
 Longitude: -99.9728158
 Latitude: 38.0478177
 N/S Co-ord: 1290' FSL
 E/W Co-ord: 185' FEL

ELEVATIONS

K.B. Elevation: 2391.00ft Ground Elevation: 2383.00ft
 K.B. to Ground: 8.00ft

TOTAL DEPTH

Measurement Type:	Measurement Depth:	TVD:
RTD	4725.00	4727.00
LTD	4727.00	4727.00

DRILLING FLUID SUMMARY

Type	Date	From Depth	To Depth
Chemical Mud	7/24/2019	3450.00ft	4725.00ft

OPEN HOLE LOGS

Logging Company: ELI
 Logging Engineer: Gus Pfanenstiel
 Truck #: 1523
 Logging Date: 7/29/2019 Time Spent: 2
 # Logs Run: 2 # Logs Run Successful: 2

LOGS RUN

Tool	Logged Interval	Logged Interval	Hours	Remarks	Run #
Dual Induction	0.00ft	4727.00ft	2.00		1
Den/Neu Den/PI	3700.00ft	4727.00ft	2.00		1

LOGGING OPERATION SUMMARY

Date	From	To	Description Of Operation
7/23/2019	0.00ft	47227.00ft	Logs Run Successfully

CASING SUMMARY

	Surface	Intermediate	Main		
Bit Size	12.25 in		7.88 in		
Hole Size	12.25 in		7.88 in		
	Size	Set At	Type	# of Joints	Drilled Out At
Surf Casing	8.625 in	724' ft	23#	18	7/21/2019 3:30 AM
Int Casing					
Prod Casing					

CASING SEQUENCE

Type	Hole Size	Casing Size	At
Surface Casing	12.25 in	8.63	0.00 ft

NOTES

7/19/2019 Moved in rotary tools and rigged up. Spud well in at 6:45 PM 7/19/2019. Drilling 12 1/4" surface hole
 7/20/2019 At 399' Drilling surface hole. Drilled 12 1/4" surface hole to 737', CTCH, ran wiper trip, TOH with bit, ran 18 joints new 8 5/8", 23# surface casing. Set casing at 724' and cemented with 150 sx MDC (3%CC & 1/2# Flow-seal/sx) and 150 sx Common (2% Gel, 3% CC & 1/2# Flo-seal/sx). Cement did circulate. Plug down at 5:30 PM 7/20/2019. Drilled plug at 3:30 AM 7/21/2019.
 7/21/2019 At 845', drilling ahead
 7/22/2019 At 2070', drilling ahead
 7/23/2019 At 2820', drilling ahead
 7/24/2019 At 3345', drilling ahead, displaced mud system at 3450'
 7/25/2019 At 3815', drilling ahead
 7/26/2019 At 4220', drilling ahead
 7/27/2019 At 4510', circulating following short trip, drill ahead to 4663', tripped out for DST #1, pipe strap at 4663' was 4.92' short to the board. DST #1 4574' to 4663' (Conglomerate Sand)
 7/28/2019 At 4663', DST #1 1 4574' to 4663' in progress
 DST #1 4574' to 4663' (Conglomerate Sand)

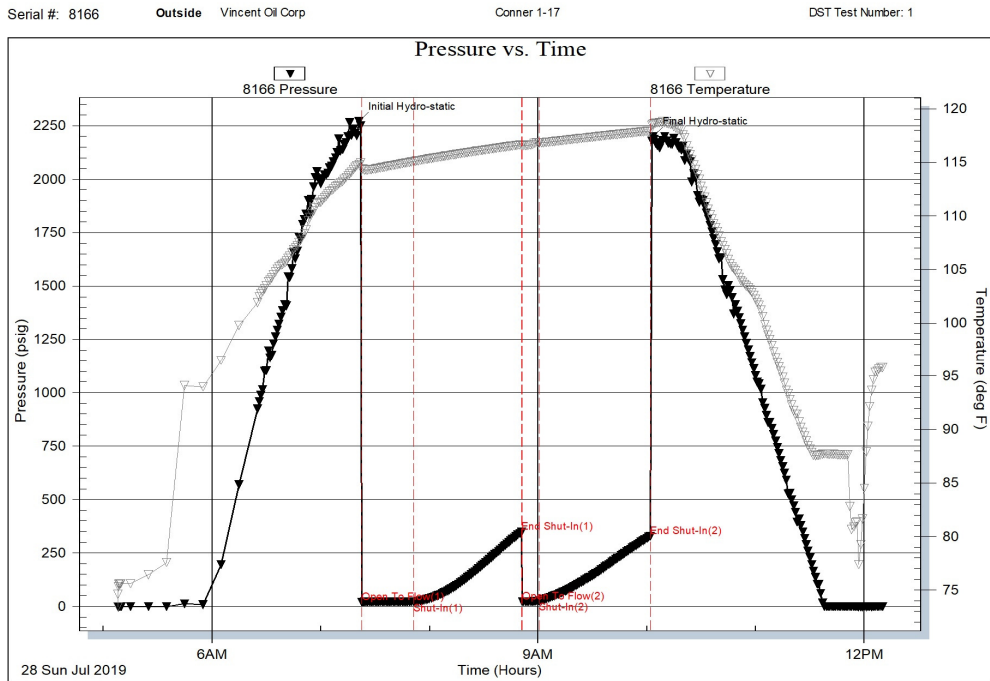
DST #1 4574 to 4663 (Conglomerate Sand)
 30"-60"-10"-60"
 1st Open: Weak Blow
 2nd Open: No Blow, Flushed tool, No Blow
 Recovered
 5' Mud
 IFP 19 -21# FFP 21 - 24#
 ISIP 347# FSIP 326#
 BHT 117° F

Drilled ahead to RTD of 4725'. TOOH for logs, Ran Dual Induction and Porosity log. Found LTD at 4727'.
 7/29/2019 At 4725', TOOH, laying down drill collars and drill pipe, loaded wellbore with heavy mud, TIH with plugging stands. Set cement plugs through drill pipe as follows: 50 sx at 1620', 50 sx at 770' and 20 sx at 60' to surface. Plugged the rathole with 30 sx. Plug down at 12:00 PM 7/29/2019. Jetted and cleaned pits. Released rig.

REFERENCE WELLS:

A	B
Malone Exploration	W.E. Carl
Clutter #1	Berger #1-17
NW-SE SW-NW	
Sec. 16-23S-24W	Sec. 17-23-24W

	SAMPLE TOP REF.		WELL ELECTRIC LOG REF. WELL	
	A	B	A	B
Anhydrite	1568 (+823) +24		1593 (+798) +2	
Heebner Shale	3941 (-1550) -7 -11	3945 (-1554) -11 -16		
Brown Limestone	4017 (-1626) -8 -15	4019 (-1628) -10 -17		
Lansing	4029 (-1638) -10 -18	4030 (-1639) -11 -19		
Stark Shale	4296 (-1905) +3 -13	4298 (-1907) +1 -15		
Base Kansas City	4412 (-2021) -3 -19	4410 (-2019) -1 -21		
Marmaton	4432 (-2041) -3 -7	4434 (-2043) -5 -9		
Pawnee	4493 (-2102) -2 -12	4495 (-2104) -4 -14		
Fort Scott	4528 (-2137) -3 -8	4531 (-2140) -6 -11		
Cherokee Shale	4547 (-2156) -2 -9	4550 (-2159) -5 -12		
Base Cherokee Lime	4636 (-2245) Flt -11	4640 (-2249) -4 -14		
Mississippian	4664 (-2273) +9 -2	4668 (-2277) +5 -6		
RTD / LTD	4725 (-2334)	4727 (-2336)		



Trilobite Testing, Inc

Ref. No: 65245

Printed: 2019.07.28 @ 13:50:44

ROCK TYPES

Coal	Lmst fw<7	Shgy	Shcol
Dolsec	Lmst fw>7	Shblk	Cht vari

ACCESSORIES

FOSSIL
 F Fossils < 20%
 φ Oolite

STRINGER
 Sandstone

OTHER SYMBOLS

POROSITY TYPE

- × Intercrystalline
- φ Interoolitic
- V Vuggy
- P Pinpoint
- ∩ Moldic
- Organic
- F Fracture
- e Earthy
- ▣ Fenestral

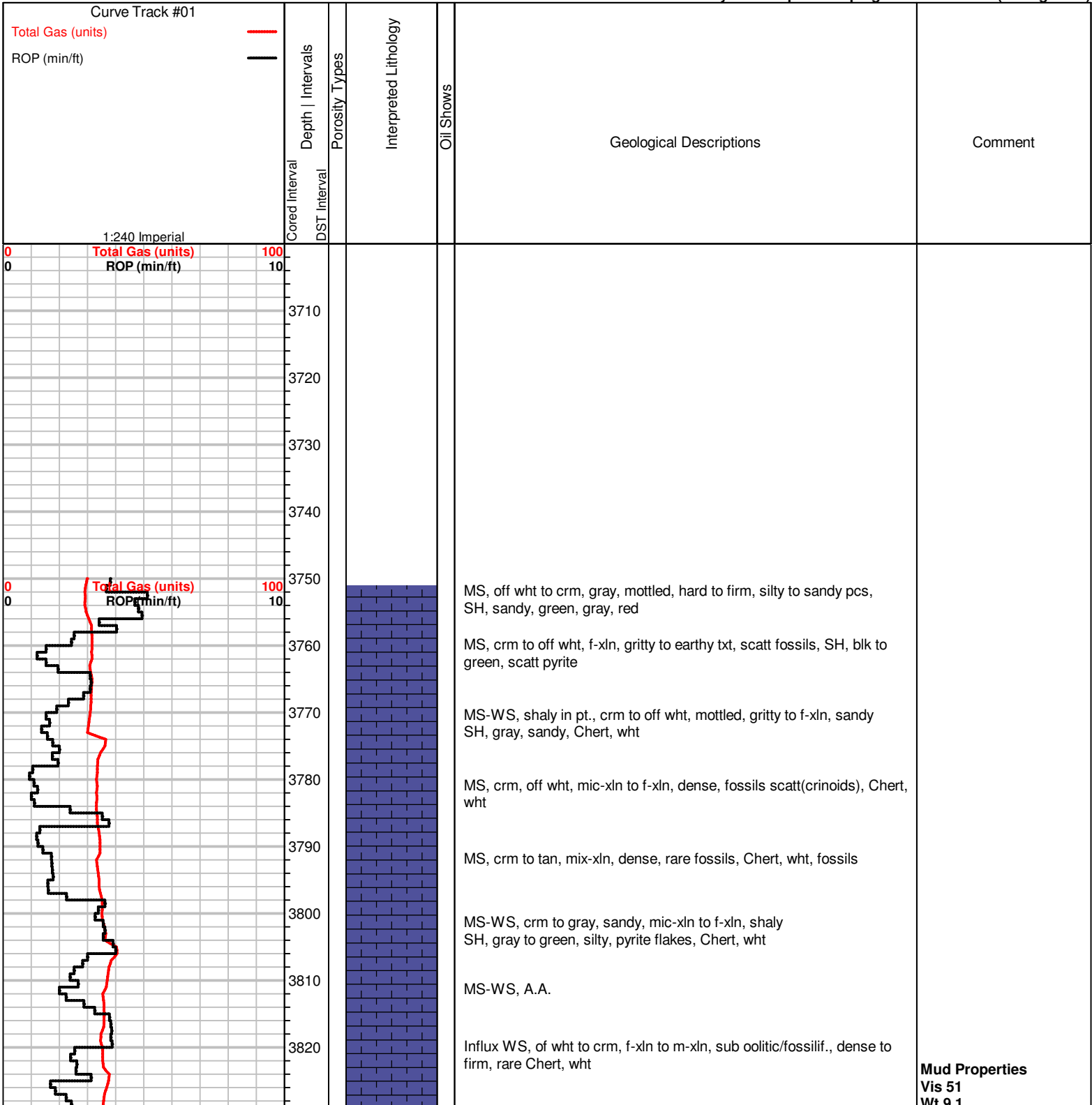
OIL SHOWS

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

INTERVALS

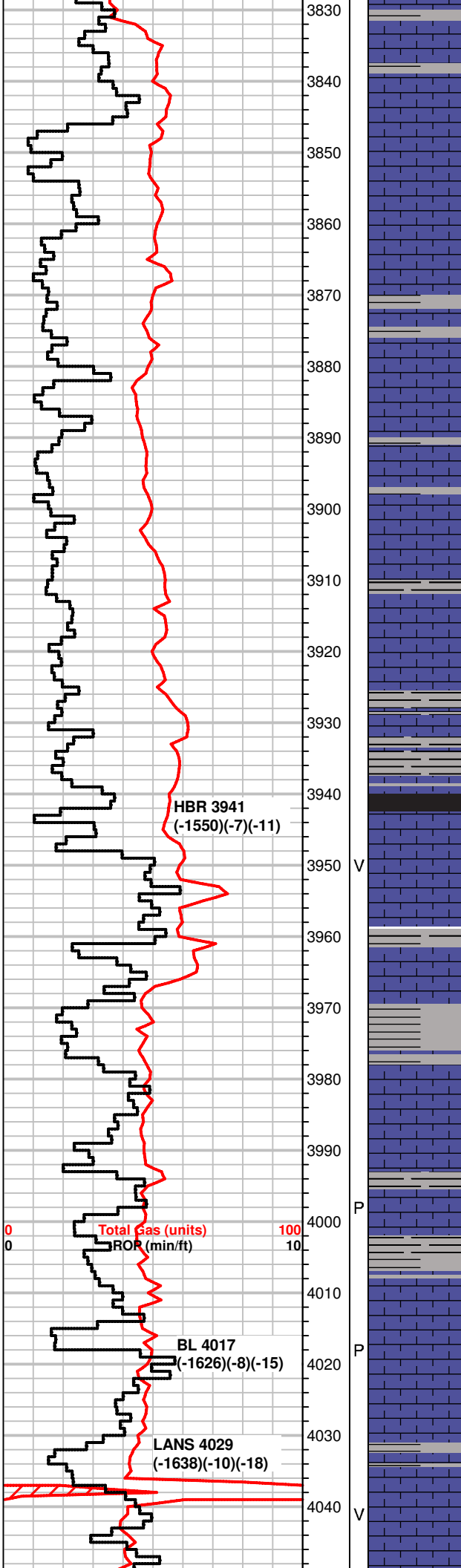
- Core
- DST

Printed by GEOstrip VC Striplog version 4.0.8.15 (www.grsi.ca)



Mud Properties
 Vis 51
 Wt 9.1

WT 9.1
LCM 1#
Filt 8.0
CI 4,000
pH 11.0



SH, blk, to gray, reds, waxy in pt., sandy pcs mostly, MS, crm to tan, f-xln, fossils, chalky in pt., firm, Chert, wht

SH, blk to gray, green, MS, A.A.

WS-MS, brn to crm, mottled, f-xln to m-xln, fossils, calcite veins, fn-oomoldic pcs rare, SH, grays

MS, crm to tan, f-xln to chalky, mic to f-xln, dense, fossils scatt, sandy in pt, SH, fresh, blk, green

SH, blk to green, MS, A.A.

MS, crm to tan, chalky to f-xln pcs, fossils scatt, sandy in pt., Chert, wht, SH, gray to green

MS-WS, crm to tan, f-xln to m-xln, gritty txt, micro oolitic, firm to friable, SH, blk to gray

SH, gray to green, waxy to silty pcs, MS, tan to crm, f-xln, scatt fossils, gritty in pt.,

SH, blk to grays, pyrite, some pcs carb.

some SH, gray, red/green, silty MS, tan to crm, f-xln, shaly to silty in pt., scatt Chert, wht, fossils

influx SH, blk, carb, A.A.

MS-WS, tan to crm, f-xln to m-xln, fossilif., chalky pcs, dense, some Chert, wht, rare vuggy por.

SH, brn to grays, MS brn to tan, crm, mottled pcs, f-gr oolitic to gritty txt, fossilif pcs, SH, gray, sandy to silty

inc in MS, tan, fossils, SH, grays

MS, crm to lt. tan, f-xln, chalky to f-xln, dense to friable pcs, Chert, wht

MS, crm to lt. gray, f-xln, fossils, dense, Cherty, SH, grays, pyrite, silty, some carb.

MS, crm to tan, brn, mic-xln to f-xln, dense, some chalky, fossils, SH, gray to gren, silty, rare pp por.

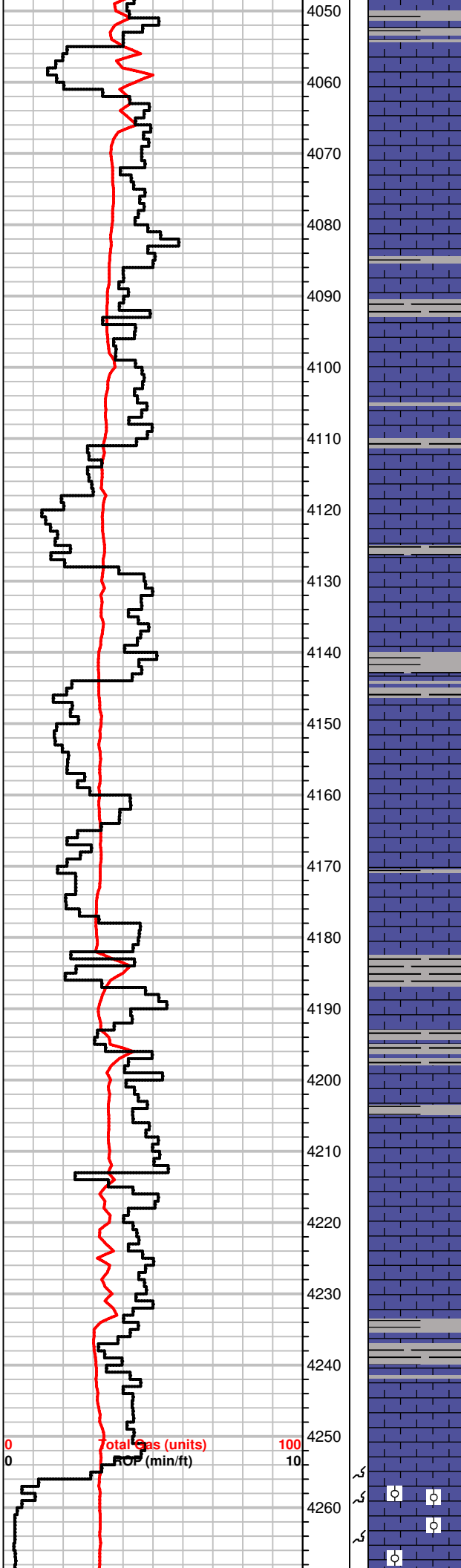
MS, tan to brn, f-xln, dense to friable, scatt fossils SH, grays, blk, green, Chert, wht

MS, crm to lt. gray, tan, shaly pcs, f-xln, fossils, rare dead stn, no cut, no odor, pp por.

MS-WS, gray to crm, mottled pcs, f to m-xln, dense, oolitic to fossilif., scatt Chert, wht, some SH, gray to green

Influx MS, off wht to crm, f-xln to sucrosic txt, gritty, dense, sub oolitic pcs, Chert, crm to off wht, dull fluor, vuggy por.

Testing Gas System



MS, A.A., Chert, wht, fossils
SH, gray to green, some fossils

MS, crm to tan, f-xln to chalky, soft, some dense, Chert, wht to gray, scatt gray SH

MS, crm, gritty to sucrosic txt, chalky in pt., firm, Chert, wht, SH, dk. gray

MS-WS, crm to tan, f-xln to mic-xln, dense, brittle, lesser SH, grays, Chert, wht, fossils

SH, blk to gray, green, silty to limey in pt., MS, crm, f-xln, hard to brittle, scatt fossils, shaly in pt., Chert, wht

MS, crm to brn, f-xln, dense, fossils scatt, hard, Chert, wht to brn, some SH, gray to green

MS, crm to tan, f-xln, f-gr oolitic pcs scatt, dense, hard, NS
SH, greens to gray, pyrite

MS, crm to lt. gray, f-xln to gritty txt, dense, Chert, wht

MS, crm to tan, f-xln, chalky, most dense, calcite, Chert, smoky, white, some SH, green, gray, scatt carb pcs.

MS, crm to tan, f-xln, some chalky, most dense A.A., scatt SH, grays to green

SH, brn to dk. gray, carb in pt., MS off wht to tan, f-xln, dense, fossilif., Chert, wht, NS

MS, crm to tan, f-xln, soft/friable, chalky in pt. NS
SH, platy pcs, gray to green

MS, crm, gritty to m-xln, chalky, firm, some dense, scatt fossils, sandy pcs scatt, Chert, wht
SH, grays, green, silty

SH, green to gray, rare blk, carb., MS, crm to tan, A.A., some lt. gray, to brn, shaly in pt., NS

SH, blk to brn, gray, sli. carb. hard
MS, crm to brn, f-xln to earthy, chalky in pt., silty, some fossil frgmts, NS, Chert, wht fossils.

MS-WS, crm to lt. brn, f-xln to mic-xln, dense, m-gr oolitic pcs, rare SH, blk, green

MS, off wht to crm, mix-xln to earthy in pt., chalky, scatt ooids, dense, Chert, wht, SH, A.A.

MS, brn to crm, mic-xln, dense, f-xln, hard, scatt fossil frgmts, dull fluor, NS

MS-WS, crm to brn, f-xln to earthy, gritty pcs, sub oolitic, Chert, opaque to wht

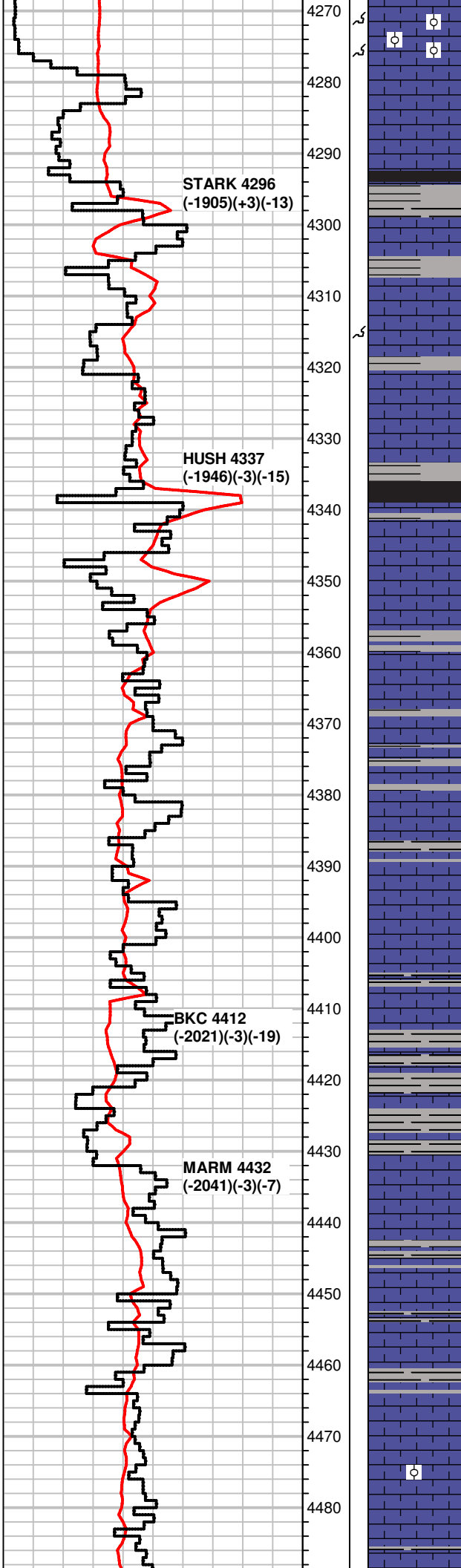
SH, dk. gray to green, MS, crm to off wht, tan, chalky to f-xln, soft to dense pcs, Chert, wht, NS

WS-MS, gray to brn, f to m-xln, m-gr oolitic to fossilif pcs, firm to brittle, faint odor in bag, Chert, wht, NS

MS-WS, A.A., crm to tan, f-xln, fossilif, oolitic/oomoldic por.

MS-WS, crm to tan, oolitic/oomoldic A.A., NS

Mud Properties
 Vis 48
 Wt 9.5
 LCM 1#
 Filt 10.0
 CI 5,000
 pH 10.0



MS-W.S, crm to tan, oolitic/oomoldic A.A., NS

SH, lt. gray to green
MS-W.S, brn to gray, m-gr oolitic

some SH, blk to green, carb., MS-W.S, A.A., inc in crm to gray pcs, f-xln, chalky, fossilif, dense, NS
SH, blk, gassy, carb

MS-W.S, crm to off wht, lt. gray, dense, scatt fossils, NS

MS, tan to crm, off wht, f-xln, dense, gritty pcs, some oomoldic pcs, NS

MS, tan to brn, f-xln to mic-xln, brittle to dense, some pcs m-gr oolitic, fossilif. in tite calc mtrx, earthy pcs scatt, some cherty, NS

SH, blk, carb.
MS, crm to tan, fossils, dense, pyrite rare, Chert, wht, NS

MS, off wht to crm, f-xln to mic-xln, dense to hard, fossils, Chert, brn, wht, SH, grays, green

MS, off wht to crm, f-xln hard to firm, scatt fossils, Chert, smoky
SH, blk to gray

MS, crm to lt. gray, f-xln to earthy pcs, dense dense, rare fossils, scatt chalky pcs, some shaly, SH, blk to gray

MS, tan to crm, f-xln, hard/dense, fossils scatt, NS

MS-W.S, lt. gray to tan/crm, f-xln, mottled pcs, Chert, wht, some SH, grays

MS, A.A., gritty to m-xln pcs, SH, grays, carb., blk, gray, pyrite

SH, gray, red, silty, MS, crm to gray, f-xln, shaly, hard, gritty pcs, NS

MS-W.S, crm to tan, gray, f-xln, some waxy looking, shaly to earthy, fossils, NS
SH, gray to green

MS, crm to lt. gray, shaly, hard, NS, SH, blk, grays, green

MS-W.S, crm to tan, f-xln, hard/dense, scat fossils, NS
scatt SH, blk to grays

MS, gray to tan/crm, f-xln, shaly in pt., hard, fossilif.
scatt SH, grays

MS, crm to tan, f-xln to chalky pcs, most dense, lesser fossils, SH, blk to green

MS, crm to tan, mic to f-xln, hard, sub oolitic in pt., fossils, chalky pcs scatt, NS, SH grays

MS, tan to crm, mic to f-xln, A.A., Chert, wht, fossilif.

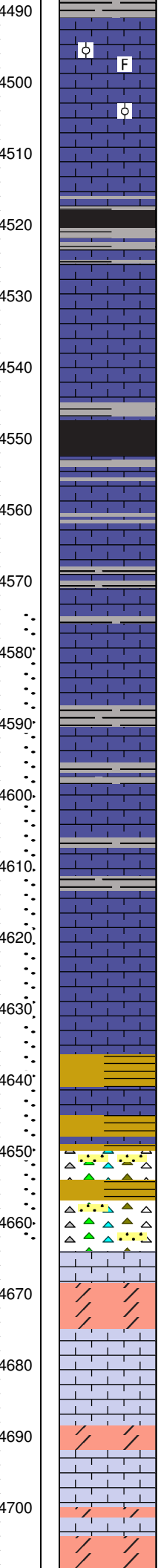
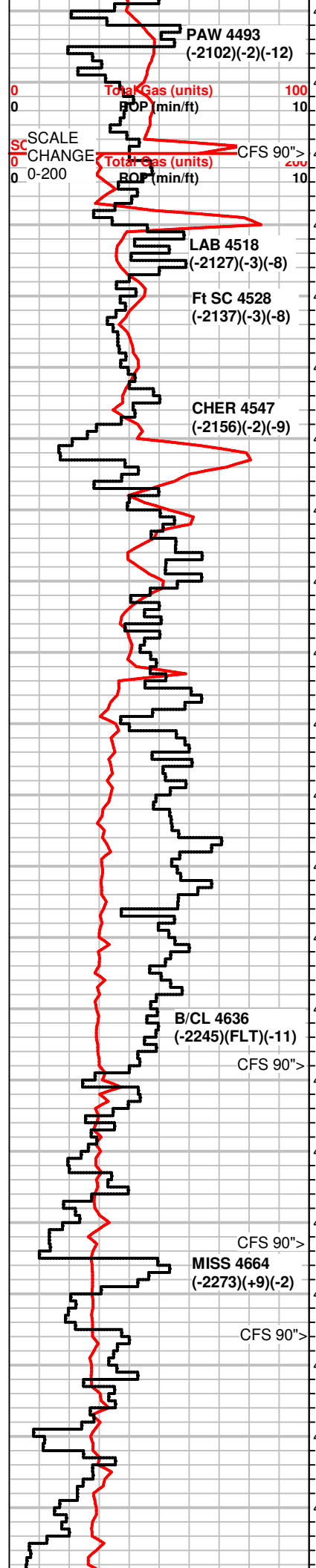
+ 20 UGK, shale gas

recycle

+35 UGK, shale gas

recycle

2 UGK, shale gas



SH, grays, green, rare blk
MS, crm to tan, f-xln, dense, fossilif., NS, Chert, white, tan, fossils

MS, crm to tan, f-xln to chalky, dense to soft pcs, gritty/sucrosic looking, micro oolitic pcs rare, dull fluor, NS

MS, crm to tan, f-xln to chalky, firm, rare f-gr oolitic pcs, dead wormy strn(1pc), no cut, no odor, dull fluor, Chert, wht

MS-WS, crm to brn, f-xln, dense to frim, some glauc, NS

SH, blk to gray, some sandy/silty, pyrite

SH, grays to green

MS, brn to crm, f-xln to mic-xln, dense, fossils, Chert, wht, tan

MS, brn to tan, f to mic-xln, dense, sub oolitic pcs, scatt chalky, dull fluor, NS, Chert, brn, to wht, fossils

MS, crm to tan, f-xln, hard, inc in chalky pcs, scatt fossils, NS

SH, blk to grays, carb, gassy pcs rare

MS, crm to tan, f-xln to mic-xln, dense to hard, scatt fossils, NS

MS, gray to brn, crm, some chalky, most f-xln, dense, shaly in pt., rare mottled pcs, calcite, SH, gray to blk

MS, crm to brn, some gray, f-xln, dense, blocky pcs, scatt fossils, calcite, Chert, wht, mineral fluor, NS

MS-WS, crm to gray, brn, f- to mic-xln, hard, oolitic pcs, mottled pcs, some chalky, Chert, wht, NS
scatt SH, blk to gray

WS-MS, brn to tan, m-xln, mottled, fossils, dense, dull fluor, NS

MS-WS, A.A., chalky to shaly pcs scatt, Chert, brn, fossils
SH, blk to gray, silty pcs

MS-WS, crm to brn, chalky to f-xln, dense to firm pcs, fossils, mineral fluor, NS

MS, crm to off wht, chalky to f-xln, soft to dense, pcs, fossilif, Chert, wht, dull fluor, NS

MS, off wht to crm, f-xl nto chalky, firm to hard pcs, faint odor in bag, partial stn, bright fluor scatt, strmg cut when broken, rare live oil droplets

SH, varicolored, silty to sandy in pt., striated

MS, crm to tan, f-xln to chalky, fossilif. to oolitic, pyrite

SH, varicolored, sandy to silty, Chert, varicolored, fossils rare SS clusters, poorly to well sorted, sub angular, glauc specs, rare loose co-gr Qtz grs, NS

influx Chert, varicolored, mostly wht in 60" spl., some wthrd, oolitic, MS, crm to tan, f-xln, oolitic, dull fluor, NS, 75" spl-influx SS clusters, f-gr, glauc specs, dead stn, no cut, no odor

MS-WS, off wht to crm, brn, mic-xln to f-xln, partly chalky pcs, sub oolitic, NS

Dolo, brn to tan, vf-xln to vf-sucrosic txt, hard, dense, some pcs suboolitic/fossilif., dull fluor, NS

WS-PS, off wht to crm, f-xln to chalky, m-gr oolitic, firm to hard, dull fluor, NS

Dolo, crm to lt. gray, vf-xln to fn-sucrosic, dense to firm, dull fluor, NS

WS-PS, off wht to crm, f-lxn to m-xln, chalky pcs scatt, m-gr oolitic, NS

Dolo, brn to crm, tan, f-xln to m-xln, partially sucrosic txt, hard, dense pcs, oolitic to fossilif., dull fluor, NS

+8 UGK, shale gas

Short trip 30 stands

+100 UGK, shale gas

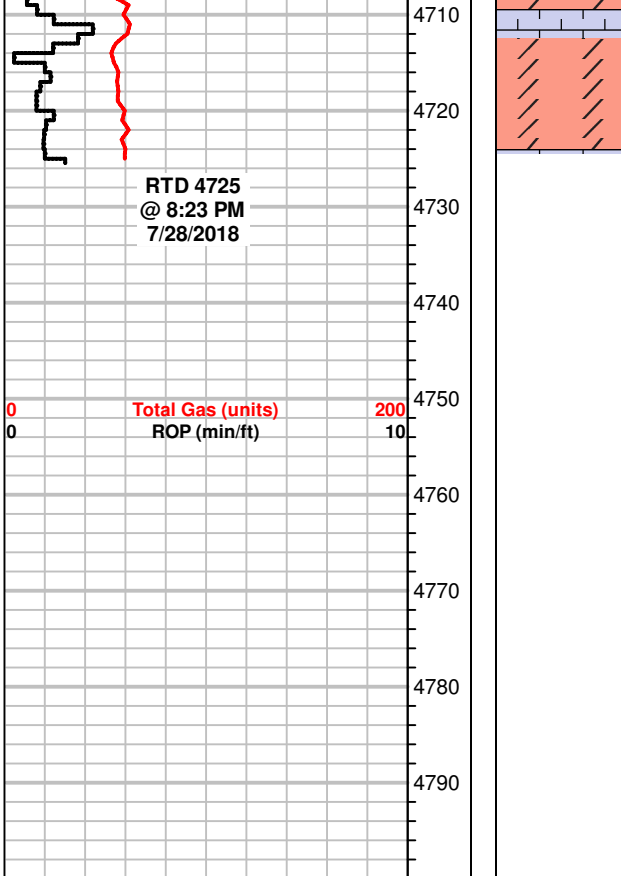
work on rotary chain(1 hr)

Mud Properties
Vis 59
Wt 9.2
LCM 1#
Filt 8.8
CI 5,800
pH 10.5

+120 UGK, shale gas

DST #1 4574-4663
30-60-10-60
WB, .25 inch, died in 10 min
NBB
NB, Flushed tool, NB
NBB
Rec: 5' Mud
IH 2269#
IF 19-21#
ISIP 347#
FF 21-24#
FSIP 328#
FH 2200#
Temp 117°F
Pipe Strap 4.92' Short

Mud Properties
Vis 48
Wt 9.2
LCM 2#
Filt 7.8
CI 3,600
pH 10.5



WS-PS, off wht to crm, chalky, f-xln, hard, oolitic

Dolo tan to brn, m-xln, oolitic/fossilif, dark specs, dense hard, vuggy por., dull fluor, NS