

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 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	KEOUGH 12-34
Doc ID	1540005

All Electric Logs Run

Dual Induction
Density - Neutron
Micro-log
Sonic

Form	ACO1 - Well Completion
Operator	Vincent Oil Corporation
Well Name	KEOUGH 12-34
Doc ID	1540005

Tops

Name	Top	Datum
Heebner Shale	4378	(-1813)
Brown Limestone	4520	(-1955)
Lansing -Kansas City	4530	(-1965)
Stark Shale	4870	(-2305)
Base Kansas City	4986	(-2421)
Pawnee	5080	(-2515)
Cherokee Shale	5129	(-2564)
Base Penn Limestone	5228	(-2663)
Mississippian	5251	(-2686)
LTD	5350	(-2785)

Form	ACO1 - Well Completion
Operator	Vincent Oil Corporation
Well Name	KEOUGH 12-34
Doc ID	1540005

Perforations

Shots Per Foot	Perforation Top	Perforation Bottom	BridgePlugType	BridgePlugSet At	Material Record
2	5268	5272			
2	5276	5282			Ran tubing & packer and swabbed well down. Swab 1 hr and SDFN
					SITP 250#, Fld at 2800' (90% Oil), BHP 987#, Swabbed down & Acidized with 750 gal 15% MCA
					Swabbed 6 hrs with final rate 31 bbl/ hr (99% Oil), SDFN
					Swabbed 3hrs (39 bbl/hr, 99% Oil), pulled tubing and packer ,

Form	ACO1 - Well Completion
Operator	Vincent Oil Corporation
Well Name	KEOUGH 12-34
Doc ID	1540005

Perforations

Shots Per Foot	Perforation Top	Perforation Bottom	BridgePlugType	BridgePlugSet At	Material Record
					Ran production tubing, rods and BHP, set surface equipment & turned to production



# QUALITY WELL SERVICE, INC.

7489

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				
9-1-20	34	23S	23W	FORO	Ks						
Lease	KEOUGH		Well No.	12-34				Location	KINGSDOWN R. N to WILLOW RD		
Contractor	DOKE DELG RIG #1			Owner	3 1/2 W N' E 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.	695'							
Csg.	85/8 23		Depth	694'							
Tbg. Size			Depth	Charge To							
Tool			Depth	VINCENT OIL CORP							
Cement Left in Csg.	42.72		Shoe Joint	42.72							
Meas Line			Displace	41.68							
<b>EQUIPMENT</b>				The above was done to satisfaction and supervision of owner agent or contractor.							
Pumptrk	3	No.		Cement Amount Ordered							
Bulktrk	7	No.		150 g MOL 2 1/2" LL 1/2" PS							
Bulktrk	10	No.		150 g Common 2 1/2" REL 3 1/2" LL 1/2" PS							
Pickup		No.		Common 150 g							
<b>JOB SERVICES &amp; REMARKS</b>				Poz. Mix 150 g							
Rat Hole				Gel. 564"							
Mouse Hole				Calcium 846"							
Centralizers	Baffle Plate 1#			Hulls							
Baskets				Salt							
D/V or Port Collar				Flowseal 150#							
	Ran 16 H's 85/8 23" CSG GET D 694'			Kol-Seal							
	START CSG CSG ON Bottom			Mud CLR 48							
	Hook up to CSG & BREAK CIRCULAR			CFL-117 or CD110 CAF 38							
	START Pumping 10 Bbls H <sub>2</sub> O			Sand							
	START mix Pump 150 g LEAD 12 1/4" C/L			Handling 323							
	START mix Pump 150 g TRIL 14.3 1/4" C/L			Mileage 60 / 9690							
	SHUT DOWN RELEASE BATE W PLUG			85/8 <b>FLOAT EQUIPMENT</b>							
	START DISP			Guide Shoe 85/8 WOODEN P/B 1 EA							
	PLUG DOWN 42 out 350#			Centralizer 85/8 Baffle Plate 1 EA							
	Close Valve on CSG			Baskets							
	Good Cir thru 503			AFU Inserts							
	Circ out to PIT			Float Shoe							
	THANK YOU			Latch Down							
	PLEASE CALL AGAIN			SERVICE SUP 1 EA							
	TOM MIKE MATT COREY			LMV 60							
	MLB [Signature]			Pumptrk Charge SURFACE							
				Mileage 180							
				Tax							
				Discount							
				Total Charge							



# QUALITY WELL SERVICE, INC.

7493

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			
9-11-20	34	28S	23W	Ford	Ks					
Lease	KEOUGH		Well No.	12-34				Location	Kingsdown, Ks 1/2 to Wilbourn Rd	
Contractor	DUKE D&G RIG #1			Owner	3 1/2 W NINTO					
Type Job	4 1/2 L.S.			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.	5350'						
Csg.	4 1/2 11.6"		Depth	5348						
Tbg. Size			Depth							
Tool			Depth							
Cement Left in Csg.	10.53		Shoe Joint	10.53						
Meas Line			Displace	82.72						
<b>EQUIPMENT</b>				The above was done to satisfaction and supervision of owner agent or contractor.						
				Cement Amount Ordered 225 sx PROC 2% GEL 10/15/11						
				5 1/2 KOLSEAL .7% CIBA 25% C41P 25% PS						
Pumptrk	8 No.				Common		225 sx			
Bulktrk	15 No.				Poz. Mix					
Bulktrk	No.				Gel.		4 sx			
Pickup	No.				Calcium					
<b>JOB SERVICES &amp; REMARKS</b>				Hulls						
Rat Hole 30 sx				Salt 1239#						
Mouse Hole 20 sx				Flowseal 56.25#						
Centralizers 1-3-5-7-9-11				Kol-Seal 1125#						
Baskets				Mud CLR 48 500 GAL						
D/V or Port Collar				CFL-117 or CD110 CAF 38 CIBA 127#						
RUN 4 1/2 11.6" CSG SET @ 5348				Sand C41P 53# CC-1 7 GAL						
START CSG CSG ON BOTTOM & TAG				Handling 253						
Hookup to CSG & BREAK CIR W/ RIG				Mileage 60/ 8500						
DROP BALL & CIR				4 1/2 <b>FLOAT EQUIPMENT</b>						
START PUMPING 100W H2O 120W MIF 100W H2O				Guide Shoe 1 EA						
START MIX PUMP 50 SX FUG R-M HOLES				Centralizer 6 EA						
START MIX PUMP 175 SX 1/4 CSG @ 140' GAL				Baskets 1 EA 4 1/2 TOP Ribbed Plus						
SHUT DOWN WASH UP & RELEASE 4 1/2 TR P				AFU Inserts 1 EA						
START DISP W/ 2% KCL				Float Shoe 1 EA H:M						
LIFT PG TO @ 600'				Latch Down						
PLUG DOWN 83 1/2 @ 1100#				BEWICE SPV 1 EA						
PUMP CSG 1600#				LMV 60						
RELEASE! HELD 1/2 Bbl BACK				Pumptrk Charge L.S.						
GOOD CIR THRU JOB				Mileage 120						
THANK YOU TOM				Tax						
PLEASE CALL AGAIN MIKE MART				Discount						
Signature <i>[Signature]</i>				Total Charge						



## DRILL STEM TEST REPORT

Prepared For: **Vincent Oil Corporation**

200 W Douglas Ave #725  
Wichita, KS 67202+3023

ATTN: Tom Dudgeon

**Keough #12-34**

**34-26S-23 Ford,KS**

Start Date: 2020.09.07 @ 16:55:00

End Date: 2020.09.08 @ 01:01:02

Job Ticket #: 61754                      DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2020.09.11 @ 13:34:06



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Vincent Oil Corporation  
 200 W Douglas Ave #725  
 Wichita, KS 67202+3023  
 ATTN: Tom Dudgeon

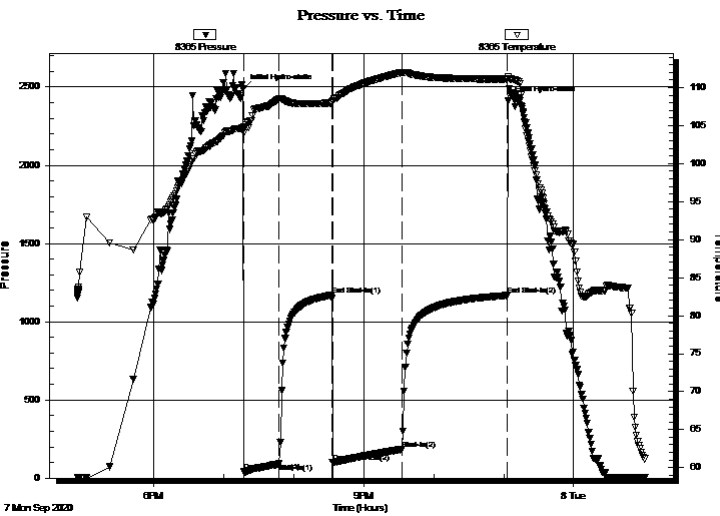
**34-26S-23 Ford,KS**  
**Keough #12-34**  
 Job Ticket: 61754 **DST#: 1**  
 Test Start: 2020.09.07 @ 16:55:00

## GENERAL INFORMATION:

Formation: **Pawnee**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 19:17:17  
 Time Test Ended: 01:01:02  
 Interval: **5030.00 ft (KB) To 5098.00 ft (KB) (TVD)**  
 Total Depth: 5098.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Ken Swinney  
 Unit No: 72  
 Reference Elevations: 2565.00 ft (KB)  
 2553.00 ft (CF)  
 KB to GR/CF: 12.00 ft

**Serial #: 8365 Inside**  
 Press@RunDepth: 185.30 psig @ 5031.00 ft (KB) Capacity: psig  
 Start Date: 2020.09.07 End Date: 2020.09.08 Last Calib.: 2020.09.08  
 Start Time: 16:55:01 End Time: 01:01:02 Time On Btm: 2020.09.07 @ 19:17:02  
 Time Off Btm: 2020.09.07 @ 23:03:47

**TEST COMMENT:** IF 30 Minutes/ Blow built to 10 1/2"  
 ISI 45 Minutes/ No blow back  
 FF 60 Minutes/ Blow to BOB in 53 minutes/ Total build 12 1/4"  
 FSI 90 Minutes/ No blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2490.21	104.64	Initial Hydro-static
1	40.65	104.02	Open To Flow (1)
31	91.78	108.51	Shut-In(1)
76	1169.04	107.97	End Shut-In(1)
77	99.40	108.12	Open To Flow (2)
136	185.30	111.97	Shut-In(2)
226	1167.74	111.11	End Shut-In(2)
227	2410.32	111.39	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
186.00	MW / M 10% W 90%	2.61
155.00	OSMW / O 1% M 40% W 59%	2.17
0.00	31' GIP	0.00

## Gas Rates

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





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Vincent Oil Corporation

**34-26S-23 Ford,KS**

200 W Douglas Ave #725  
Wichita, KS 67202+3023

**Keough #12-34**

Job Ticket: 61754

**DST#: 1**

ATTN: Tom Dudgeon

Test Start: 2020.09.07 @ 16:55:00

## Tool Information

Drill Pipe:	Length: 5037.00 ft	Diameter: 3.80 inches	Volume: 70.66 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose:	65000.00 lb
			<u>Total Volume: 70.66 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	35.00 ft			String Weight: Initial	58000.00 lb
Depth to Top Packer:	5030.00 ft			Final	59000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	67.78 ft				
Tool Length:	95.78 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
------------------	-------------	------------	----------	------------	----------------

Shut-In Tool	5.00			5007.00	
Hydraulic tool	5.00			5012.00	
Jars	6.00			5018.00	
Safety Joint	2.00			5020.00	
Top Packer	5.00			5025.00	
Packer	5.00			5030.00	28.00 Bottom Of Top Packer
Recorder	1.00	8365	Inside	5031.00	
Recorder	1.00	6755	Outside	5032.00	
Anchor	30.00			5062.00	
Change Over Sub	1.00			5063.00	
Drill Pipe	30.78			5093.78	
Change Over Sub	1.00			5094.78	
Bullnose	3.00			5097.78	67.78 Anchor Tool

**Total Tool Length: 95.78**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Vincent Oil Corporation

**34-26S-23 Ford,KS**

200 W Douglas Ave #725  
Wichita, KS 67202+3023

**Keough #12-34**

Job Ticket: 61754

**DST#: 1**

ATTN: Tom Dudgeon

Test Start: 2020.09.07 @ 16:55:00

## 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:

19000 ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.78 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 9000.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
186.00	MW / M 10% W 90%	2.609
155.00	OSMW / O 1% M 40% W 59%	2.174
0.00	31' GIP	0.000

Total Length: 341.00 ft      Total Volume: 4.783 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Recovery Resistivity .375 ohms @ 64 deg.

Serial #: 8365

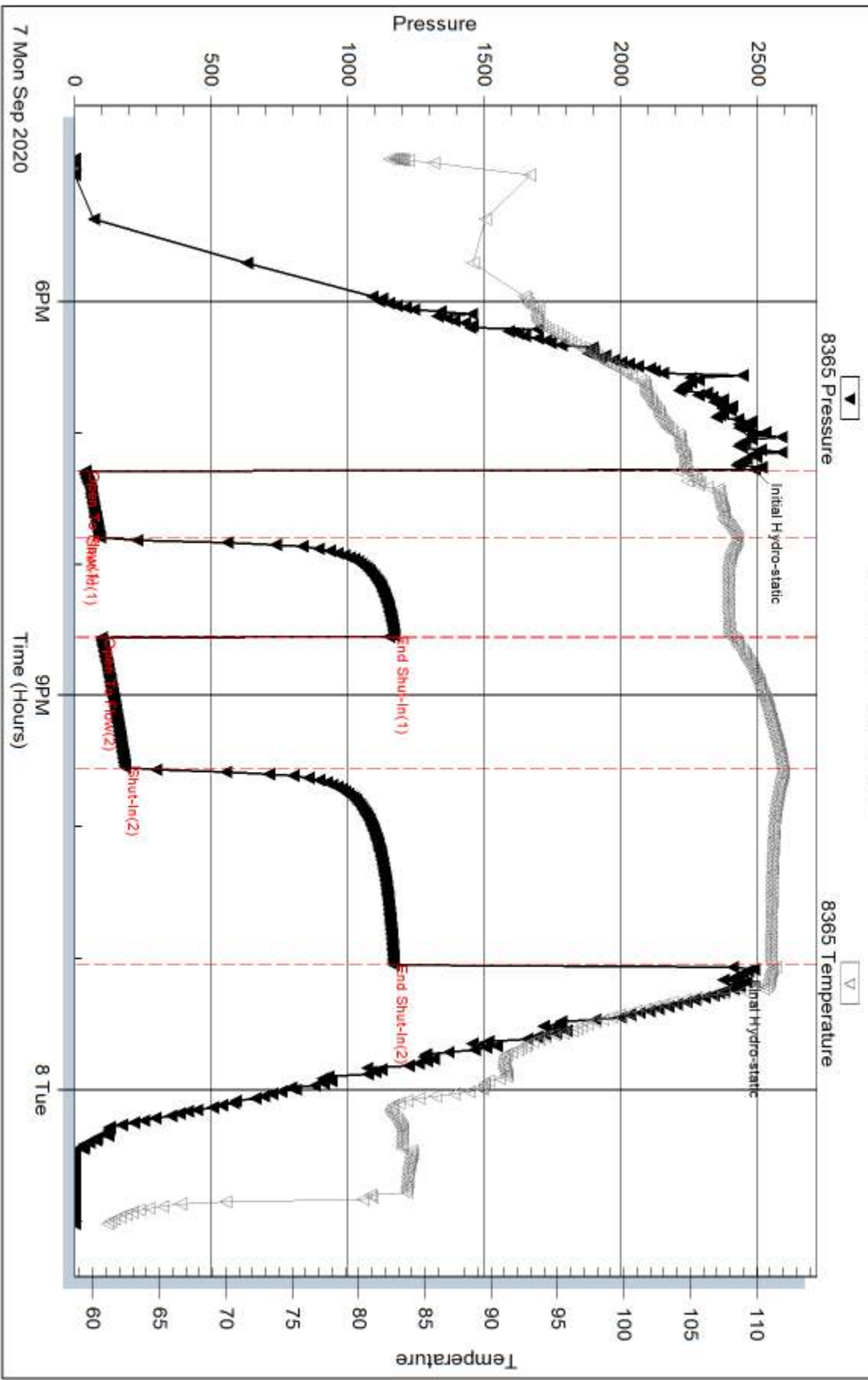
Inside

Vincent Oil Corporation

Keough #12-34

DST Test Number: 1

### Pressure vs. Time



Tribble Testing, Inc

Ref. No: 61754

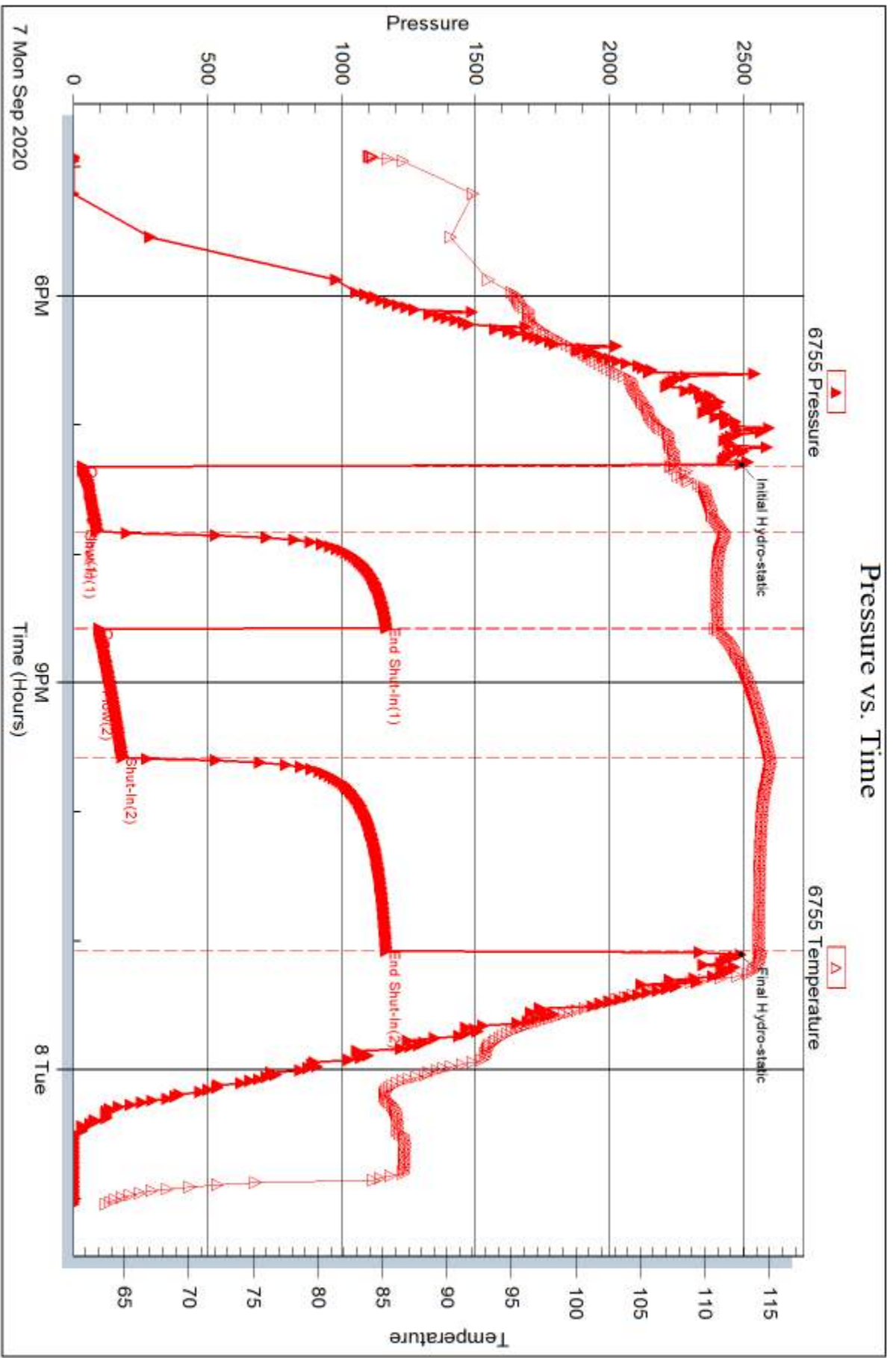
Printed: 2020.09.11 @ 13:34:07

Serial #: 6755

Outside Vincent Oil Corporation

Keough #12-34

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 61754

Printed: 2020.09.11 @ 13:34:07





## DRILL STEM TEST REPORT

Prepared For: **Vincent Oil Corporation**

200 W Douglas Ave #725  
Wichita, KS 67202+3023

ATTN: Tom Dudgeon

**Keough #12-34**

**34-26S-23 Ford,KS**

Start Date: 2020.09.08 @ 21:31:00

End Date: 2020.09.09 @ 06:27:02

Job Ticket #: 61755                      DST #: 2

Trilobite Testing, Inc  
PO Box 362 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2020.09.11 @ 13:33:40



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Vincent Oil Corporation  
 200 W Douglas Ave #725  
 Wichita, KS 67202+3023  
 ATTN: Tom Dudgeon

**34-26S-23 Ford,KS**  
**Keough #12-34**  
 Job Ticket: 61755 **DST#: 2**  
 Test Start: 2020.09.08 @ 21:31:00

## GENERAL INFORMATION:

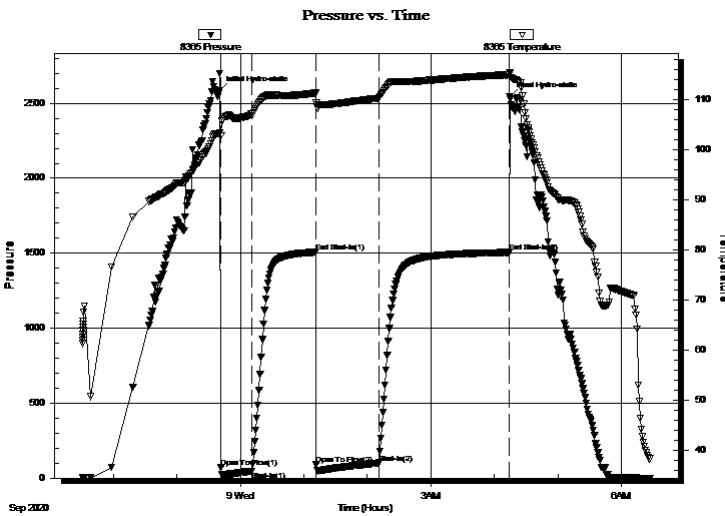
Formation: **Mississippi**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 23:41:47  
 Time Test Ended: 06:27:02  
 Interval: **5258.00 ft (KB) To 5273.00 ft (KB) (TVD)**  
 Total Depth: 5273.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Ken Swinney  
 Unit No: 72  
 Reference Elevations: 2565.00 ft (KB)  
 2553.00 ft (CF)  
 KB to GR/CF: 12.00 ft

## Serial #: 8365

Inside

Press@RunDepth: 101.36 psig @ 5259.00 ft (KB) Capacity: psig  
 Start Date: 2020.09.08 End Date: 2020.09.09 Last Calib.: 2020.09.09  
 Start Time: 21:31:01 End Time: 06:27:02 Time On Btm: 2020.09.08 @ 23:40:17  
 Time Off Btm: 2020.09.09 @ 04:14:32

TEST COMMENT: IF 30 Minutes/ Blow to BOB in 2 minutes / Total build 189"  
 ISI 60 Minutes/ No blow back  
 FF 60 Minutes/ Blow to BOB in 15 seconds/ Total build 411" w with 1/8" choke  
 FSI 120 Minutes/ Gas to surface bleeding off flow pressure/ 4 3/4" blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2582.78	103.12	Initial Hydro-static
2	71.78	102.72	Open To Flow (1)
31	47.24	107.13	Shut-In(1)
91	1506.89	111.24	End Shut-In(1)
92	91.20	109.39	Open To Flow (2)
151	101.36	110.29	Shut-In(2)
274	1505.74	114.96	End Shut-In(2)
275	2544.48	115.41	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
155.00	GWCMO / O 40% G 40% M 15% W 5%	2.17
62.00	GO / O 95% G 5%	0.87

## Gas Rates

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



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Vincent Oil Corporation  
 200 W Douglas Ave #725  
 Wichita, KS 67202+3023  
 ATTN: Tom Dudgeon

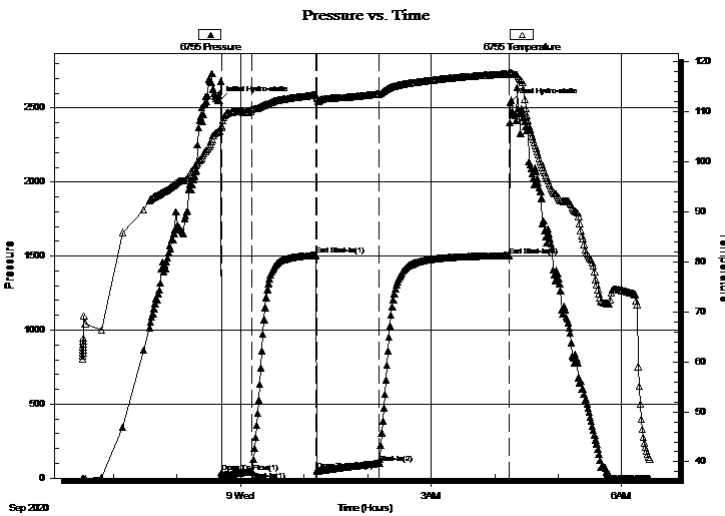
**34-26S-23 Ford,KS**  
**Keough #12-34**  
 Job Ticket: 61755 **DST#: 2**  
 Test Start: 2020.09.08 @ 21:31:00

## GENERAL INFORMATION:

Formation: **Mississippi**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 23:41:47  
 Time Test Ended: 06:27:02  
 Interval: **5258.00 ft (KB) To 5273.00 ft (KB) (TVD)**  
 Total Depth: 5273.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Ken Swinney  
 Unit No: 72  
 Reference Elevations: 2565.00 ft (KB)  
 2553.00 ft (CF)  
 KB to GR/CF: 12.00 ft

**Serial #: 6755 Outside**  
 Press@RunDepth: 1504.72 psig @ 5260.00 ft (KB) Capacity: psig  
 Start Date: 2020.09.08 End Date: 2020.09.09 Last Calib.: 2020.09.09  
 Start Time: 21:31:01 End Time: 06:27:02 Time On Btm: 2020.09.08 @ 23:40:17  
 Time Off Btm: 2020.09.09 @ 04:14:47

**TEST COMMENT:** IF 30 Minutes/ Blow to BOB in 2 minutes / Total build 189"  
 ISI 60 Minutes/ No blow back  
 FF 60 Minutes/ Blow to BOB in 15 seconds/ Total build 411" w with 1/8" choke  
 FSI 120 Minutes/ Gas to surface bleeding off flow pressure/ 4 3/4" blow back



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2552.33	106.11	Initial Hydro-static
2	40.96	106.89	Open To Flow (1)
31	46.18	110.65	Shut-In(1)
91	1505.61	113.34	End Shut-In(1)
92	52.57	112.79	Open To Flow (2)
151	100.86	113.54	Shut-In(2)
274	1504.72	117.60	End Shut-In(2)
275	2535.18	117.83	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
155.00	GWCMO / O 40% G 40% M 15% W 5%	2.17
62.00	GO / O 95% G 5%	0.87

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Vincent Oil Corporation

**34-26S-23 Ford,KS**

200 W Douglas Ave #725  
Wichita, KS 67202+3023

**Keough #12-34**

Job Ticket: 61755

**DST#: 2**

ATTN: Tom Dudgeon

Test Start: 2020.09.08 @ 21:31:00

## Tool Information

Drill Pipe:	Length: 5255.00 ft	Diameter: 3.80 inches	Volume: 73.71 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 65000.00 lb
			<u>Total Volume: 73.71 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	24.00 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	5258.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	15.00 ft			
Tool Length:	42.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut-In Tool	5.00			5236.00	
Hydraulic tool	5.00			5241.00	
Jars	5.00			5246.00	
Safety Joint	2.00			5248.00	
Top Packer	5.00			5253.00	
Packer	5.00			5258.00	27.00 Bottom Of Top Packer
Recorder	1.00	8365	Inside	5259.00	
Recorder	1.00	6755	Outside	5260.00	
Anchor	10.00			5270.00	
Bullnose	3.00			5273.00	15.00 Anchor Tool
<b>Total Tool Length:</b>	<b>42.00</b>				



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Vincent Oil Corporation

**34-26S-23 Ford,KS**

200 W Douglas Ave #725  
Wichita, KS 67202+3023

**Keough #12-34**

Job Ticket: 61755

**DST#: 2**

ATTN: Tom Dudgeon

Test Start: 2020.09.08 @ 21:31:00

### Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

39 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.97 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 9300.00 ppm

Filter Cake: 1.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
155.00	GWCMO / O 40% G 40% M 15% W 5%	2.174
62.00	GO / O 95% G 5%	0.870

Total Length: 217.00 ft

Total Volume: 3.044 bbl

Num Fluid Samples: 0

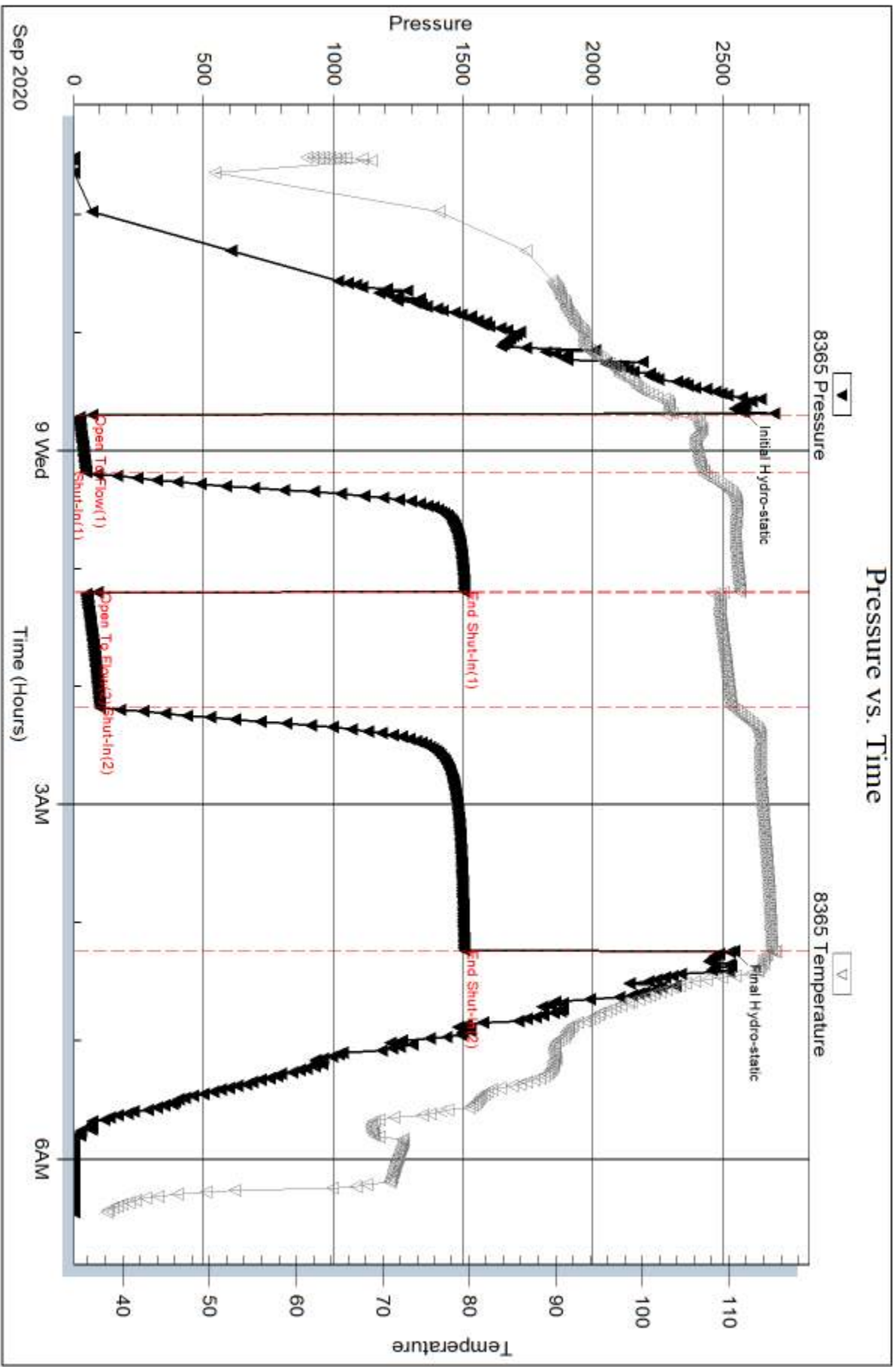
Num Gas Bombs: 0

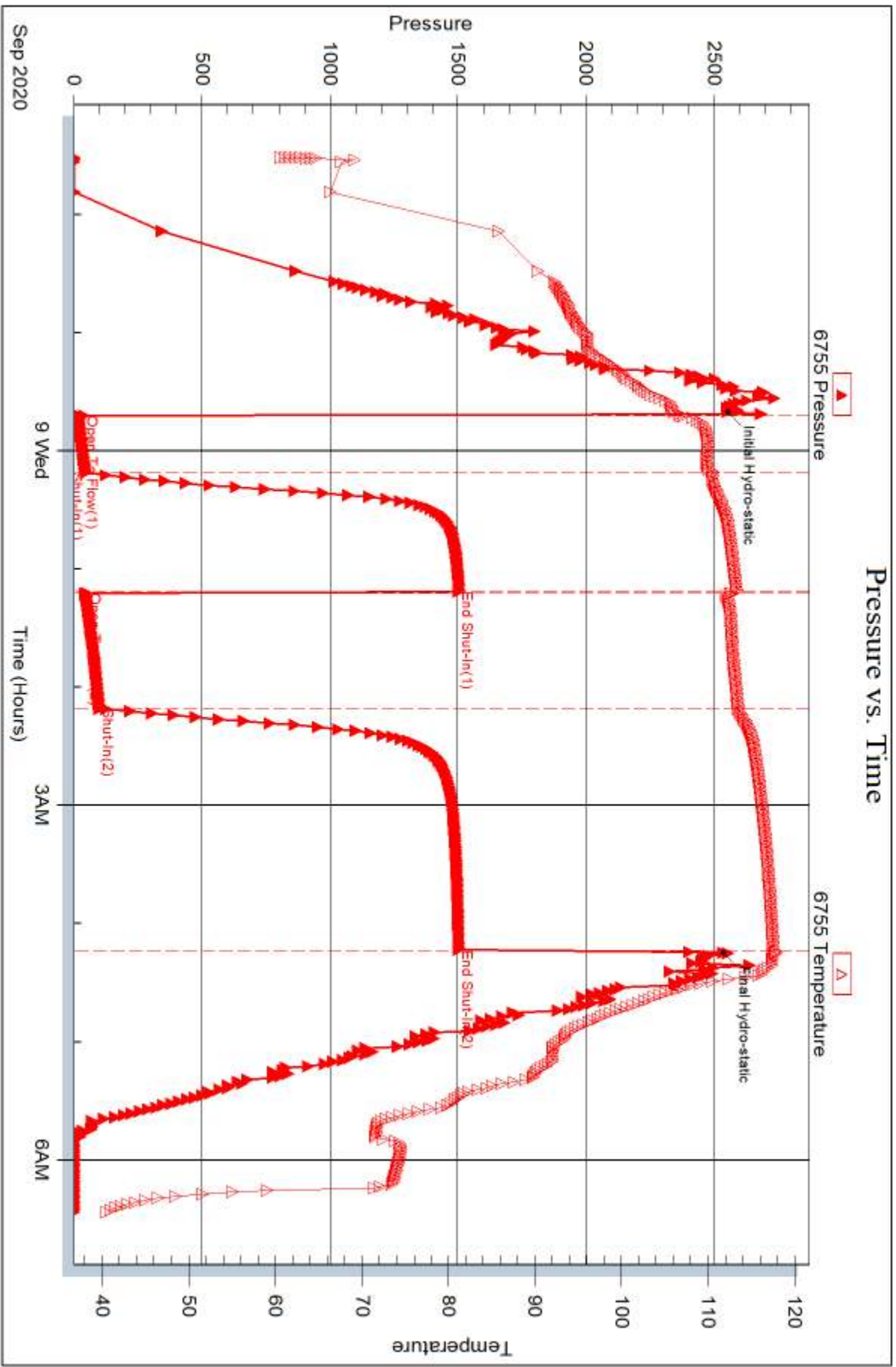
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







## DRILL STEM TEST REPORT

Prepared For: **Vincent Oil Corporation**

200 W Douglas Ave #725  
Wichita, KS 67202+3023

ATTN: Tom Dudgeon

**Keough #12-34**

**34-26S-23 Ford,KS**

Start Date: 2020.09.09 @ 16:31:01

End Date: 2020.09.10 @ 01:35:02

Job Ticket #: 61756                      DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2020.09.11 @ 13:32:51





**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Vincent Oil Corporation  
 200 W Douglas Ave #725  
 Wichita, KS 67202+3023  
 ATTN: Tom Dudgeon

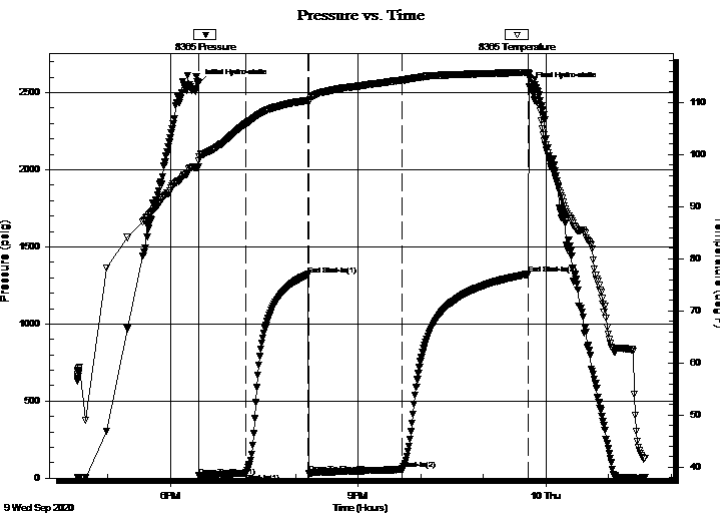
**34-26S-23 Ford,KS**  
**Keough #12-34**  
 Job Ticket: 61756 **DST#: 3**  
 Test Start: 2020.09.09 @ 16:31:01

## GENERAL INFORMATION:

Formation: **Mississippi**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 18:27:17  
 Time Test Ended: 01:35:02  
 Interval: **5284.00 ft (KB) To 5294.00 ft (KB) (TVD)**  
 Total Depth: 5294.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Ken Swinney  
 Unit No: 72  
 Reference Elevations: 2565.00 ft (KB)  
 2553.00 ft (CF)  
 KB to GR/CF: 12.00 ft

**Serial #: 8365 Inside**  
 Press@RunDepth: 56.83 psig @ 5285.00 ft (KB) Capacity: psig  
 Start Date: 2020.09.09 End Date: 2020.09.10 Last Calib.: 2020.09.10  
 Start Time: 16:31:01 End Time: 01:35:02 Time On Btm: 2020.09.09 @ 18:26:32  
 Time Off Btm: 2020.09.09 @ 23:44:17

TEST COMMENT: IF 45 Minutes/ Blow built to 9"  
 ISI 60 Minutes/ No blow back  
 FF 90 Minutes/ Blow to BOB in 45 minutes/ Total build 19"  
 FSI 120 Minutes/ No blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2560.63	97.58	Initial Hydro-static
1	14.39	98.81	Open To Flow (1)
46	32.68	105.83	Shut-In(1)
106	1320.54	110.38	End Shut-In(1)
106	29.48	109.92	Open To Flow (2)
196	56.83	114.25	Shut-In(2)
317	1322.92	115.75	End Shut-In(2)
318	2538.18	114.77	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
93.00	SOCMW / O 5% M30% W 65%	1.30
0.00	93 feet GIP	0.00

## Gas Rates

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



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Vincent Oil Corporation  
 200 W Douglas Ave #725  
 Wichita, KS 67202+3023  
 ATTN: Tom Dudgeon

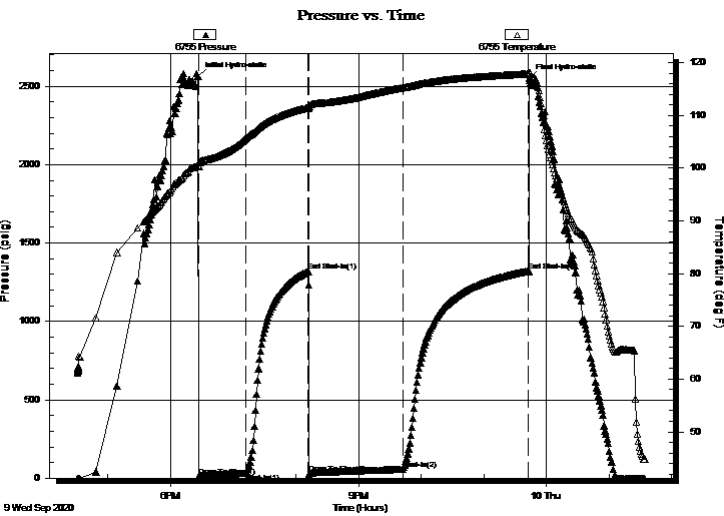
**34-26S-23 Ford,KS**  
**Keough #12-34**  
 Job Ticket: 61756 **DST#: 3**  
 Test Start: 2020.09.09 @ 16:31:01

## GENERAL INFORMATION:

Formation: **Mississippi**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 18:27:17  
 Time Test Ended: 01:35:02  
 Interval: **5284.00 ft (KB) To 5294.00 ft (KB) (TVD)**  
 Total Depth: 5294.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Ken Swinney  
 Unit No: 72  
 Reference Elevations: 2565.00 ft (KB)  
 2553.00 ft (CF)  
 KB to GR/CF: 12.00 ft

**Serial #: 6755 Outside**  
 Press@RunDepth: 1322.01 psig @ 5286.00 ft (KB) Capacity: psig  
 Start Date: 2020.09.09 End Date: 2020.09.10 Last Calib.: 2020.09.10  
 Start Time: 16:31:01 End Time: 01:35:02 Time On Btm: 2020.09.09 @ 18:26:32  
 Time Off Btm: 2020.09.09 @ 23:44:02

**TEST COMMENT:** IF 45 Minutes/ Blow built to 9"  
 ISI 60 Minutes/ No blow back  
 FF 90 Minutes/ Blow to BOB in 45 minutes/ Total build 19"  
 FSI 120 Minutes/ No blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2559.80	100.47	Initial Hydro-static
1	12.76	100.25	Open To Flow (1)
46	30.72	105.57	Shut-In(1)
106	1319.47	111.50	End Shut-In(1)
106	27.92	111.24	Open To Flow (2)
196	56.12	115.28	Shut-In(2)
317	1322.01	117.94	End Shut-In(2)
318	2549.13	118.18	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
93.00	SOCMW / O 5% M30% W 65%	1.30
0.00	93 feet GIP	0.00

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Vincent Oil Corporation

**34-26S-23 Ford,KS**

200 W Douglas Ave #725  
Wichita, KS 67202+3023

**Keough #12-34**

Job Ticket: 61756

**DST#: 3**

ATTN: Tom Dudgeon

Test Start: 2020.09.09 @ 16:31:01

## Tool Information

Drill Pipe:	Length: 5287.00 ft	Diameter: 3.80 inches	Volume: 74.16 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose:	74000.00 lb
			<u>Total Volume: 74.16 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial	63000.00 lb
Depth to Top Packer:	5284.00 ft			Final	63000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	10.00 ft				
Tool Length:	37.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut-In Tool	5.00			5262.00	
Hydraulic tool	5.00			5267.00	
Jars	5.00			5272.00	
Safety Joint	2.00			5274.00	
Top Packer	5.00			5279.00	
Packer	5.00			5284.00	27.00 Bottom Of Top Packer
Recorder	1.00	8365	Inside	5285.00	
Recorder	1.00	6755	Outside	5286.00	
Anchor	5.00			5291.00	
Bullnose	3.00			5294.00	10.00 Anchor Tool
<b>Total Tool Length:</b>	<b>37.00</b>				



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Vincent Oil Corporation

**34-26S-23 Ford,KS**

200 W Douglas Ave #725  
Wichita, KS 67202+3023

**Keough #12-34**

Job Ticket: 61756

**DST#: 3**

ATTN: Tom Dudgeon

Test Start: 2020.09.09 @ 16:31:01

### 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:

27000 ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbf

Water Loss: 9.99 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 10600.00 ppm

Filter Cake: 1.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbf
93.00	SOCMW / O 5% M 30% W 65%	1.305
0.00	93 feet GIP	0.000

Total Length: 93.00 ft      Total Volume: 1.305 bbf

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Recovery Resistivity .312 ohms @ 53 deg.

Serial #: 8365

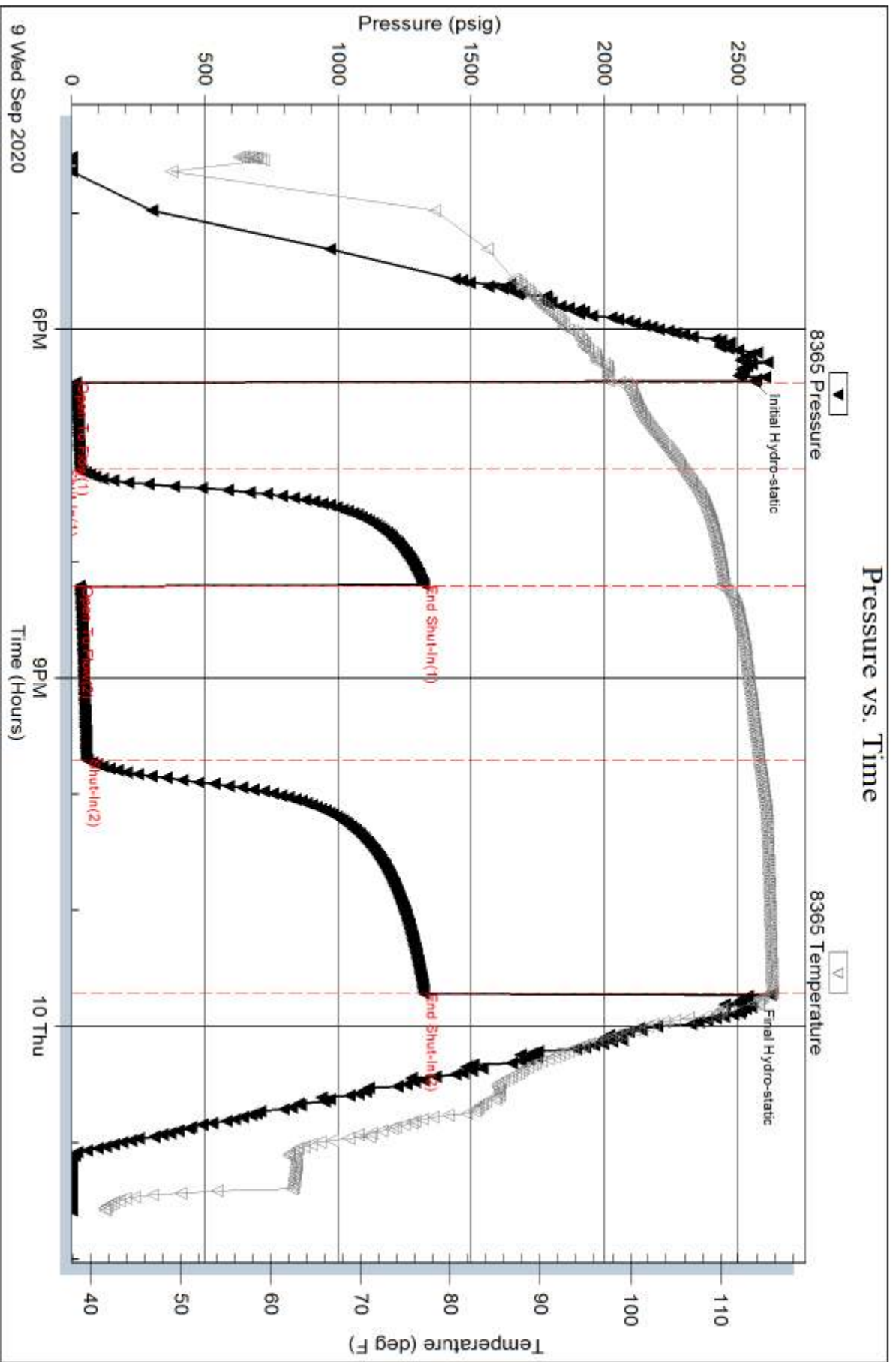
Inside

Vincent Oil Corporation

Keough #12-34

DST Test Number: 3

### Pressure vs. Time



Triobite Testing, Inc

Ref. No: 61756

Printed: 2020.09.11 @ 13:32:52

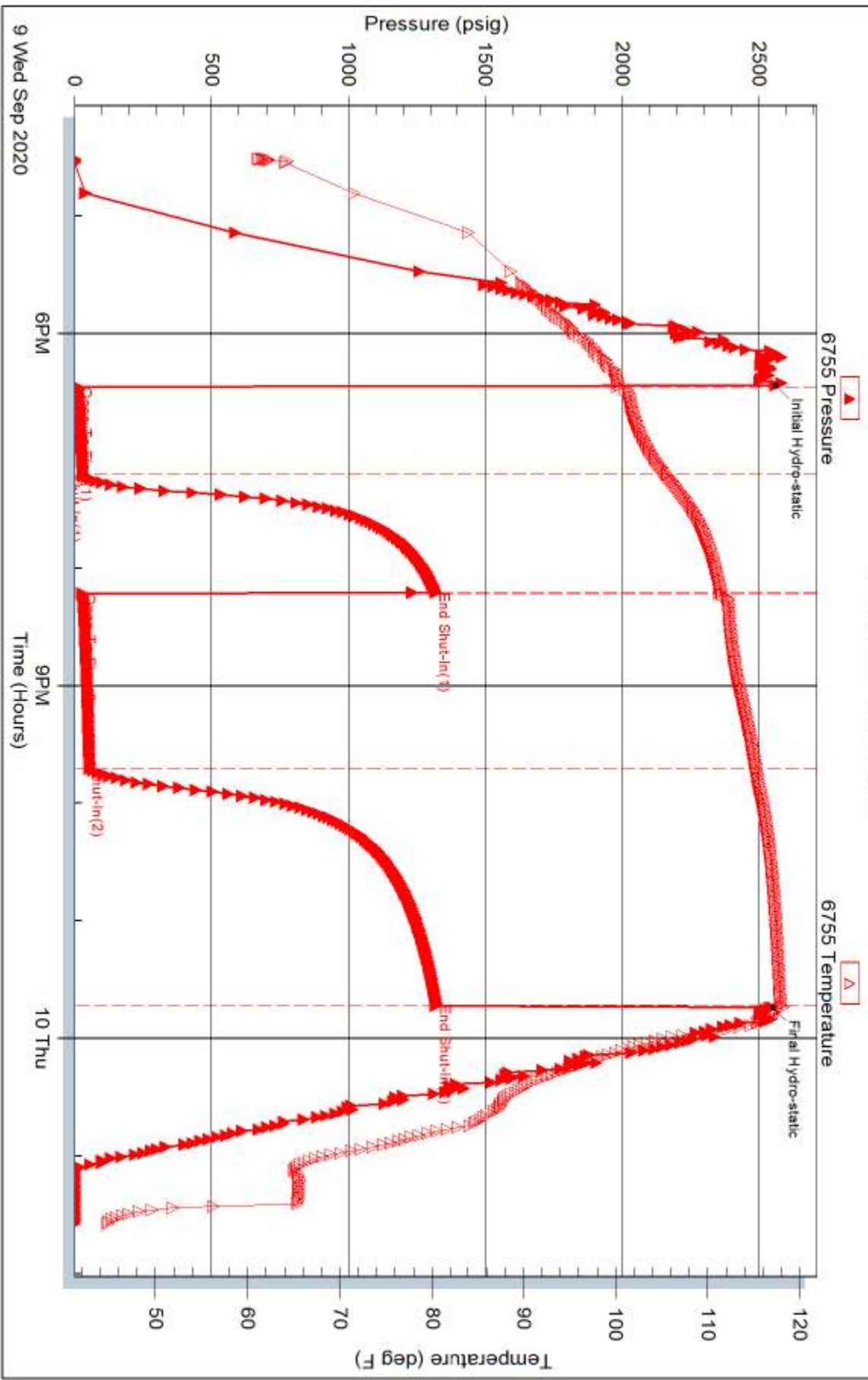
Serial #: 6755

Outside Vincent Oil Corporation

Keough #12-34

DST Test Number: 3

### Pressure vs. Time



Tribble Testing, Inc

Ref. No: 61756

Printed: 2020.09.11 @ 13:32:52



# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 61754

Well Name & No. Keough 12-34 Test No. 1 Date 7 Sept 2020  
 Company Vincent Oil Corp. ~~FOUW~~ Elevation 2565 KB 2553 GL  
 Address 200 W Douglas Ave #725 Wichita Kansas 67202+3023  
 Co. Rep / Geo. Tom Dudgeon Rig Duke Rig 1  
 Location: Sec. 34 Twp. 26S Rge. 23W Co. Ford State KS

Interval Tested 5030-5098 Zone Tested Pawnee  
 Anchor Length 68 Drill Pipe Run 5037 Mud Wt. 9.35  
 Top Packer Depth 5025 Drill Collars Run - Vis 51  
 Bottom Packer Depth 5030 Wt. Pipe Run - WL 8.8  
 Total Depth 5098 Chlorides 9000 ppm System LCM 1 1/2 #

Blow Description IF Blow built to 10 1/2 inches  
FSI No blow back  
FF Blow to BOB in 53 minutes / Total build 12 1/4 inches  
FSI No blow back

Rec	Feet of	%gas	%oil	%water	%mud
<u>186</u>	<u>mw</u>			<u>90%</u>	<u>10%</u>
<u>155</u>	<u>OSMW</u>		<u>1</u>	<u>59%</u>	<u>40%</u>
<u>31</u>	<u>GIP</u>	<u>100</u>			

Rec Total \_\_\_\_\_ BHT 112 Gravity \_\_\_\_\_ API RW .375 @ 64° F Chlorides 19,000 ppm  
 (A) Initial Hydrostatic 2490  Test 1400 T-On Location 2:30 pm  
 (B) First Initial Flow 40  Jars 250 T-Started 4:55 pm  
 (C) First Final Flow 91  Safety Joint 75 T-Open 7:18 pm  
 (D) Initial Shut-In 1169  Circ Sub \_\_\_\_\_ T-Pulled 11:03 pm  
 (E) Second Initial Flow 99  Hourly Standby \_\_\_\_\_ T-Out 102 am  
 (F) Second Final Flow 185  Mileage 134 134 Comments \_\_\_\_\_  
 (G) Final Shut-In 1167  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 2410  Straddle \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_  
 Day Standby \_\_\_\_\_  
 Accessibility \_\_\_\_\_  
 Sub Total 1859  
 Initial Open 30  
 Initial Shut-In 45  
 Final Flow 60  
 Final Shut-In 90  
 Sub Total 1859  
 MP/DST Disc't \_\_\_\_\_

Approved By [Signature] Our Representative [Signature]

TriLOBITE Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 61755

Well Name & No. Keough 12-34 Test No. 2 Date 8 Sep 2020  
 Company Vincent Oil Corp Elevation 2565 KB 2553 GL  
 Address 200 W Douglas Ave # 725 Wichita Kansas 67202-3023  
 Co. Rep / Geo. Tom Dudgeon Rig Duke Rig 1  
 Location: Sec. 34 Twp. 26S Rge. 23W Co. Ford State KS

Interval Tested 5258-5273 Zone Tested Mississippi  
 Anchor Length 15 Drill Pipe Run 5255 Mud Wt. 9.25  
 Top Packer Depth 5253 Drill Collars Run - Vis 50  
 Bottom Packer Depth 5258 Wt. Pipe Run - WL 8.0  
 Total Depth 5273 Chlorides 9300 ppm System LCM 2#

Blow Description IF Blow to BOB in 2 minutes / Total build 189 inches  
ISI No Blow back

FF Blow to BOB 15 seconds / Total build 411 inches with 1/8 inch choke

FSI Gas to surface bleeding off flow pressure / 4 3/4 inch blow back

Rec	Feet of	%gas	%oil	%water	%mud
<u>155</u>	<u>6WCMO</u>	<u>40</u>	<u>40</u>	<u>5</u>	<u>15</u>
<u>62</u>	<u>60</u>	<u>5</u>	<u>95</u>		

Rec Total 217 BHT 115 Gravity 39 API RW @ °F Chlorides ppm

- (A) Initial Hydrostatic 2582
- (B) First Initial Flow 71
- (C) First Final Flow 47
- (D) Initial Shut-In 1506
- (E) Second Initial Flow 91
- (F) Second Final Flow 101
- (G) Final Shut-In 1505
- (H) Final Hydrostatic 2544

- Test 1400
- Jars 250
- Safety Joint 75
- Circ Sub
- Hourly Standby
- Mileage 134 134
- Sampler
- Straddle
- Shale Packer
- Extra Packer
- Extra Recorder
- Day Standby
- Accessibility
- Sub Total 1859

T-On Location 8:20 pm  
 T-Started 9:31 pm  
 T-Open 11:42 pm  
 T-Pulled 4:12 am  
 T-Out 6:27 am

Comments \_\_\_\_\_  
 Ruined Shale Packer  
 Ruined Packer  
 Extra Copies  
 Sub Total 0  
 Total 1859  
 MP/DST Disc't \_\_\_\_\_

Initial Open 30  
 Initial Shut-In 60  
 Final Flow 60  
 Final Shut-In 120

Approved By [Signature] Our Representative [Signature]

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# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 61756

Well Name & No. Keough 12-34 Test No. 3 Date 9 Sept 2020  
 Company Vincent Oil Corp Elevation 2565 KB 2553 GL  
 Address 200 W Douglas Ave # 725 Wichita Kansas 67202+3023  
 Co. Rep / Geo. Tom Dudgeon Rig Duke Rig 1  
 Location: Sec. 34 Twp. 26S Rge. 23W Co. Ford State KS

Interval Tested 5284-5294 Zone Tested Mississippi  
 Anchor Length 10 Drill Pipe Run 5287 Mud Wt. 9.15  
 Top Packer Depth 5279 Drill Collars Run — Vis 50  
 Bottom Packer Depth 5284 Wt. Pipe Run — WL 10.0  
 Total Depth 5294 Chlorides 10,600 ppm System LCM 2#

Blow Description FF Blow built to 9 inches  
FSI No blow back  
FF Blow to BOB in 45 minutes / Total build 19 inches  
FSI No blow back

Rec	Feet of	%gas	%oil	%water	%mud
<u>93</u>	<u>6 IIP</u>	<u>100</u>			
<u>93</u>	<u>50 CMW</u>		<u>5</u>	<u>65</u>	<u>30</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total BHT 115 Gravity API RW .312 @ 53 °F Chlorides 27000 ppm  
 (A) Initial Hydrostatic 2560  Test 1400 T-On Location 3:47 pm  
 (B) First Initial Flow 14  Jars 250 T-Started 4:31 pm  
 (C) First Final Flow 32  Safety Joint 75 T-Open 6:27 pm  
 (D) Initial Shut-In 1320  Circ Sub \_\_\_\_\_ T-Pulled 11:42 am  
 (E) Second Initial Flow 29  Hourly Standby \_\_\_\_\_ T-Out 1:34 am  
 (F) Second Final Flow 56  Mileage 134 134 Comments \_\_\_\_\_  
 (G) Final Shut-In 1322  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 2538  Straddle \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_  
 Day Standby \_\_\_\_\_  
 Accessibility \_\_\_\_\_

Initial Open 45  
 Initial Shut-In 60  
 Final Flow 90  
 Final Shut-In 120  
 Sub Total 1859  
 Sub Total 1859

Approved By [Signature] Our Representative [Signature]

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



Scale 1:240 Imperial

Well Name: Keough 12-34  
Surface Location: 330' FSL 2475' FWL 34-28S-23W  
Bottom Location:  
API: 15-057-21043-00-00  
License Number: 5004  
Spud Date: 8/31/2020 Time: 5:30 PM  
Region: Mid Cont.  
Drilling Completed: 9/3/2020 Time: 8:54 AM  
Surface Coordinates: 330' FSL & 2475' FWL  
Bottom Hole Coordinates:  
Ground Elevation: 2553.00ft  
K.B. Elevation: 2565.00ft  
Logged Interval: 4250.00ft To: 5345.00ft  
Total Depth: 5345.00ft  
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: Keough 12-34  
Location: 330' FSL 2475' FWL 34-28S-23W  
API: 15-057-21043-00-00  
Pool: Development  
State: KS  
Field: Mulberry Creek  
Country: Ford

#### LOGGED BY

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

#### CONTRACTOR

Contractor: Duke Drilling Co., Inc.  
Rig #: 1  
Rig Type: Mud Rotary  
Spud Date: 8/31/2020 Time: 5:30 PM  
TD Date: 9/3/2020 Time: 8:54 AM  
Rig Release: 9/11/2020 Time: 7:50 AM

#### TOTAL DEPTH

Measurement Type: Measurement Depth: TVD:

Measurement Type:	Measurement Depth:	TVD:
RTD	5345.00	5350.00
LTD	5350.00	5350.00

**SURFACE CO-ORDINATES**

Well Type: Vertical  
Longitude: -99.823241  
Latitude: 37.558211  
N/S Co-ord: 330' FSL  
E/W Co-ord: 2475' FWL

**DRILLING FLUID SUMMARY**

Type	Date	From Depth	To Depth
Chemical Mud	9/5/2020	3807.00ft	5350.00ft

**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	694 ft	23#	16	9/1/2020 12:00 PM
Int Casing					
Prod Casing	4.5 in	5349 ft	11.6#	126	

**CASING SEQUENCE**

Type	Hole Size	Casing Size	At
Surface	12.25 in	8.63	694.00 ft
Production	7.88 in	4.50	5349.00 ft

**OPEN HOLE LOGS**

Logging Company: ELI  
Logging Engineer: Jason Cappellucci  
Truck #: 3802  
Logging Date: 9/10/2020  
# Logs Run: 4  
Time Spent: 5  
# Logs Run Successful: 4

**LOGS RUN**

Tool	Logged Interval	Logged Interval	Hours	Remarks	Run #
DI	0.00ft	5350.00ft	2.00		1
NDE/NEU/PE	4250.00ft	5350.00ft	2.00		1
Micro	4250.00ft	5350.00ft	3.00		2
Sonic	650.00ft	5350.00ft	3.00		2

**LOGGING OPERATION SUMMARY**

Date	From	To	Description Of Operation
9/5/2020	0.00ft	5350.00ft	Log Run Successfully

**NOTES**

**ROCKS DESCRIBED ON DUNHAMS CLASSIFICATION SYSTEM**

**STRAIGHT HOLE SURVEY**

**Degree Depth**

3/4° 695'  
3/4° 1192'  
1° 1690'  
3/4° 2232'  
1° 2705'  
1° 3209'  
1° 3807'  
1° 4312'  
1° 5098'

**REFERENCE WELLS**

A	B
Vincent Oil Corp. Perkins #2-3	Vincent Oil Corp. Keough #6-34
540' FNL & 2520' FEL 3-29-23W	2140' FSL & 1458" FWL 34-28-23W

**SAMPLE TOPS REF. WELL**

A B

**ELECTRIC LOG REF. WELL**

A B

Heebner Shale	4377 (-1812)	-3 -4	4378 (-1813)	-4 -5
Brown Limestone	4515 (-1950)	-2 -5	4520 (-1955)	-7 -10
Lansing-Kansas City	4526 (-1961)	-3 -5	4530 (-1965)	-7 -9
Stark Shale	4868 (-2303)	-7 -12	4870 (-2305)	-9 -14
Hushpuckney Shale	4909 (-2344)	-8 -11	4912 (-2347)	-11 -14
Base Lansing-K.C.	4985 (-2420)	-2 -12	4986 (-2421)	-3 -13
Marmaton	5001 (-2436)	Flt -8	5005 (-2440)	-4 -12
Pawnee	5077 (-2512)	-3 -14	5080 (-2515)	-6 -17
Cherokee Shale	5127 (-2562)	-2 -16	5129 (-2564)	-4 -18
Mississippian	5246 (-2681)	-1 -18	5251 (-2686)	-6 -23
RTD / LTD	5345 (-2780)		5350 (-2785)	

8/31/2020 Spud well in at 5:15 PM, drilled 12 1/4" surface hole to 695'. CTCH, Ran wiper trip, CTCH. Ran 16 joints, new 8 5/8", 23# surface casing. Set at 694' and cemented with 150 sx MDC (3% CC & 1/4# Flo-seal/sx) and 150 sx Common (2% Gel, 3% CC & 1/4# Flo-seal/sx). Cement did circulate. Plug down at 6:00 AM 9/1/2020.

9/1/2020 At 695', Waiting on cement. Tested BOP.

9/2/2020 At 1658', drilling ahead

9/3/2020 At 2785', drilling ahead

9/4/2020 At 3500', drilling ahead, displaced mud system at 3807'

9/5/2020 At 4230', drilling ahead

9/6/2020 At 4732', drilling ahead

9/7/2020 At 5060', drilling ahead. Drilled to 5098', Preparing for DST #1

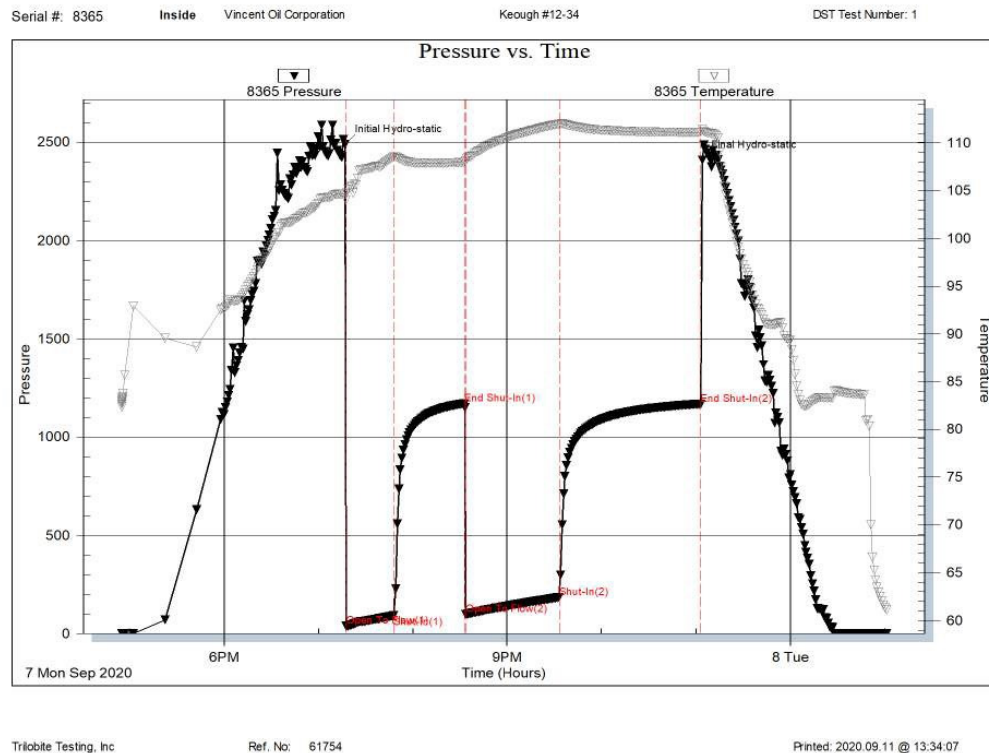
9/8/2020 At 5128', drilling ahead. Drilled to 5273', preparing for DST #2

9/9/2020 At 5273', preparing to drill ahead following completion of DST #2. Drilled ahead to 5294'.

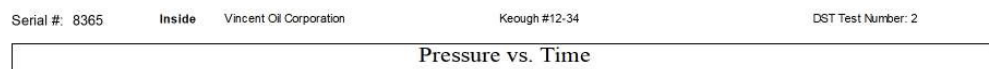
9/10/2020 At 5333', drilling ahead. Reached RTD (5345') at 8:54 AM 9/10/2020, CTCH for logging. TOO H for logs. Ran electric logs (DIL, Density-Neutron, Micro-log and Sonic) Found LTD at 5350'. TIH, CTCH, TOO H laying down drillpipe & drill collars, nipped down BOP.

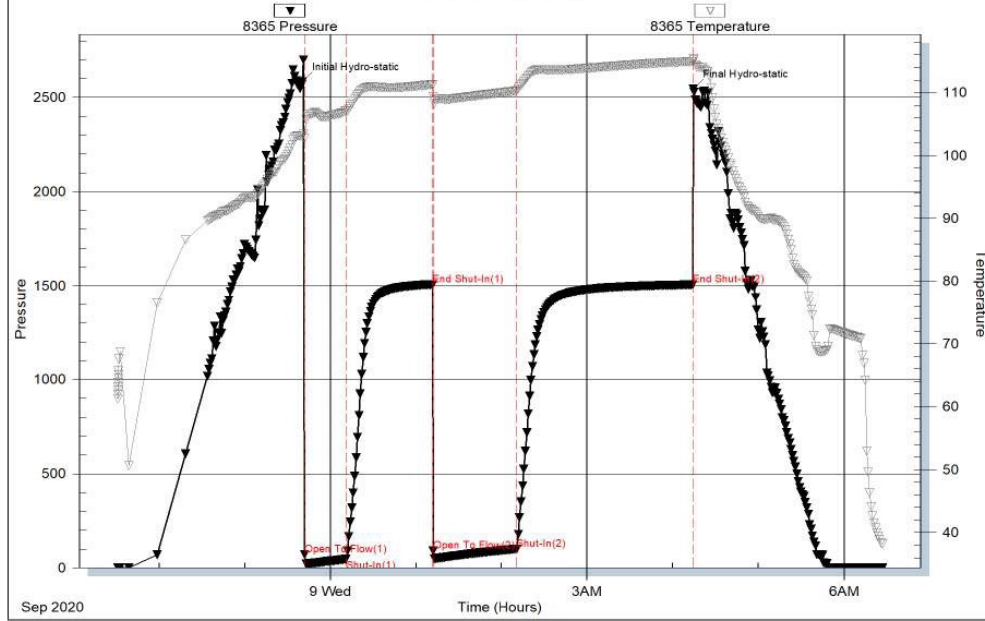
9/11/2020 At 5345'. Rigged up casing crew to run casing. Ran 126 joints of 4.5", 11.6# production casing. Tagged bottom at 5350', picked up casing 1' to 5349' and CTCH. Rigged up cementers and cemented production string with 175 sx Pro-C cement. Plugged the rathole with 30 sx and plugged the mousehole with 20 sx. Plug was down at 7:30 Am 9/11/2020. Cleared the pits and released the rig.

### DST #1



### DST #2





Trilobite Testing, Inc

Ref. No: 61755

Printed: 2020.09.11 @ 13:33:41

### DST #3

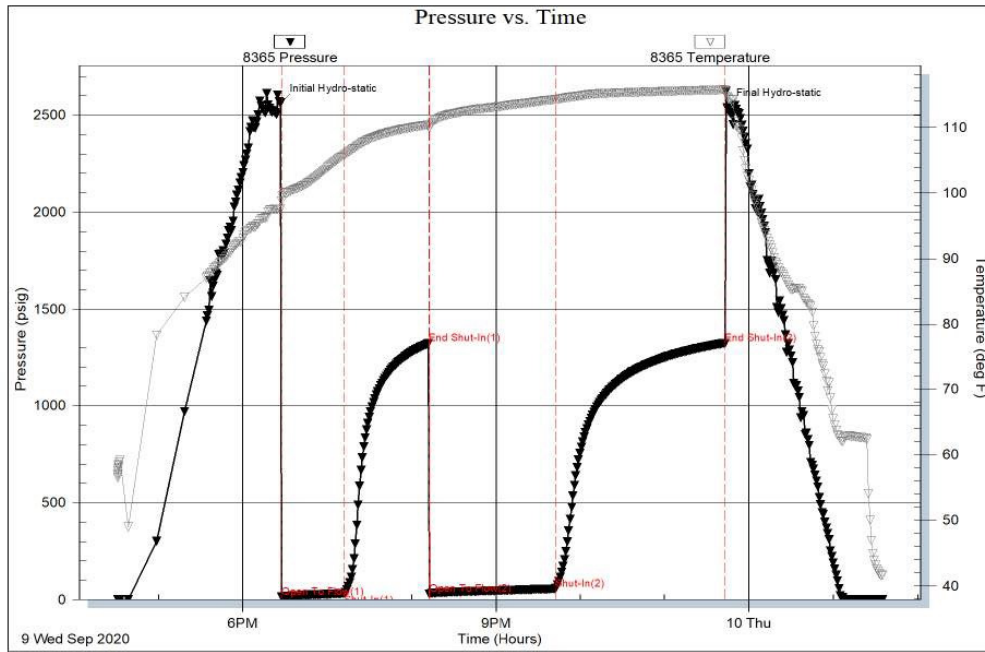
Serial #: 8365

Inside

Vincent Oil Corporation

Keough #12-34

DST Test Number: 3











Trilobite Testing, Inc

Ref. No: 61756

Printed: 2020.09.11 @ 13:32:52

### ROCK TYPES

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

### ACCESSORIES

#### MINERAL

- Argillaceous
- ⊥ Calcareous
- Carbonaceous Flakes
- ▲ Chert, dark

#### FOSSIL

- ∩ Bioclastic or Fragmental
- ∩ Bryozoa
- Crinoids
- F Fossils < 20%

#### STRINGER

- Sandstone

#### TEXTURE

- C Chalky
- e Earthy
- FX Finexln
- MX Microxln

- ⊗ Chert Pebble, white
- P Pyrite
- Sandy
- Silty
- ▧ Euhed rhombs of dolomite
- △ Chert White

⊕ Oolite

### OTHER SYMBOLS

#### POROSITY TYPE

- × Inter-crystalline
- ⊕ Inter-oolitic
- V Vuggy
- P Pinpoint
- ∩ Moldic
- O Organic
- F Fracture
- e Earthy
- ▣ Fenestral

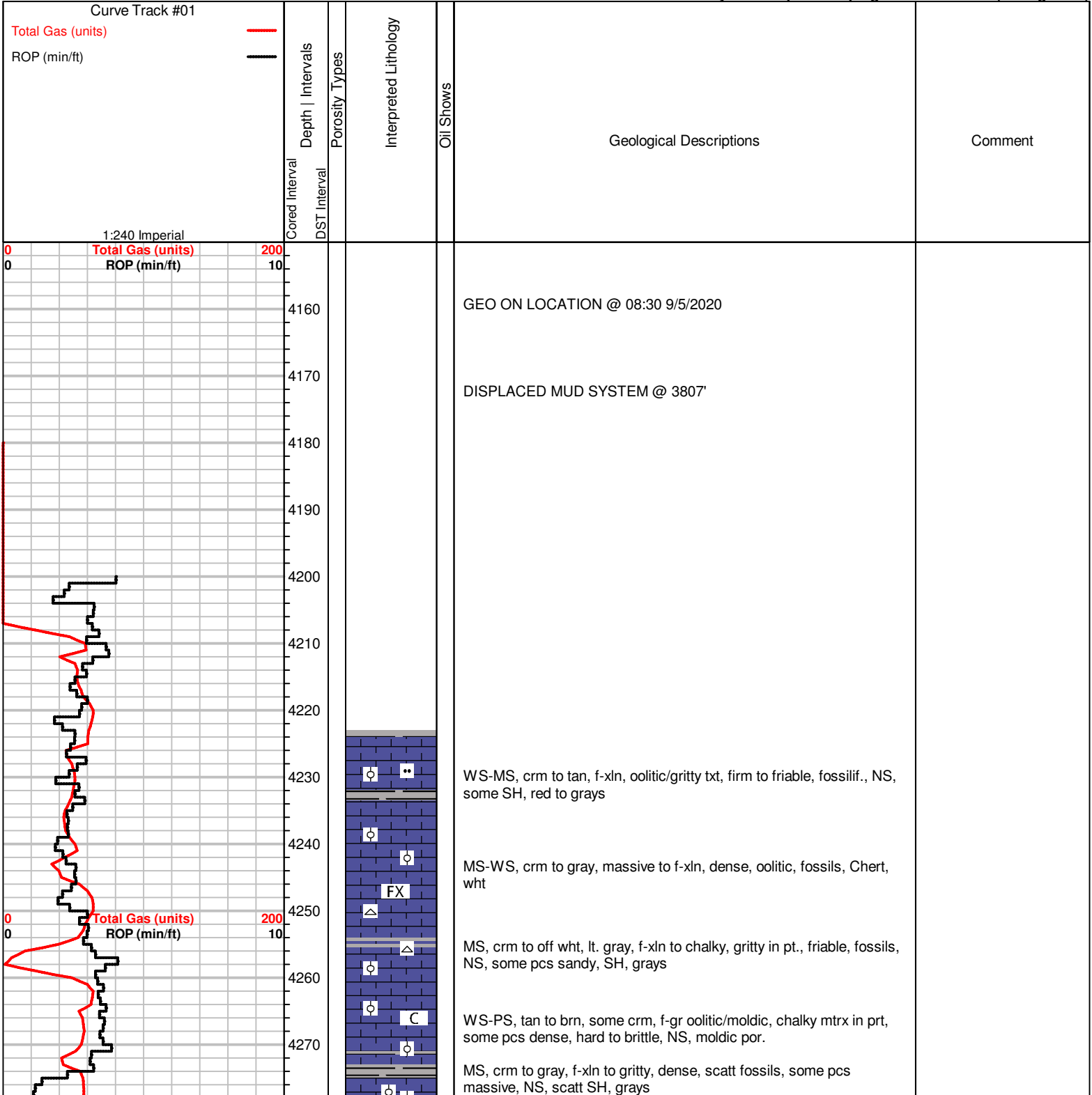
#### OIL SHOWS

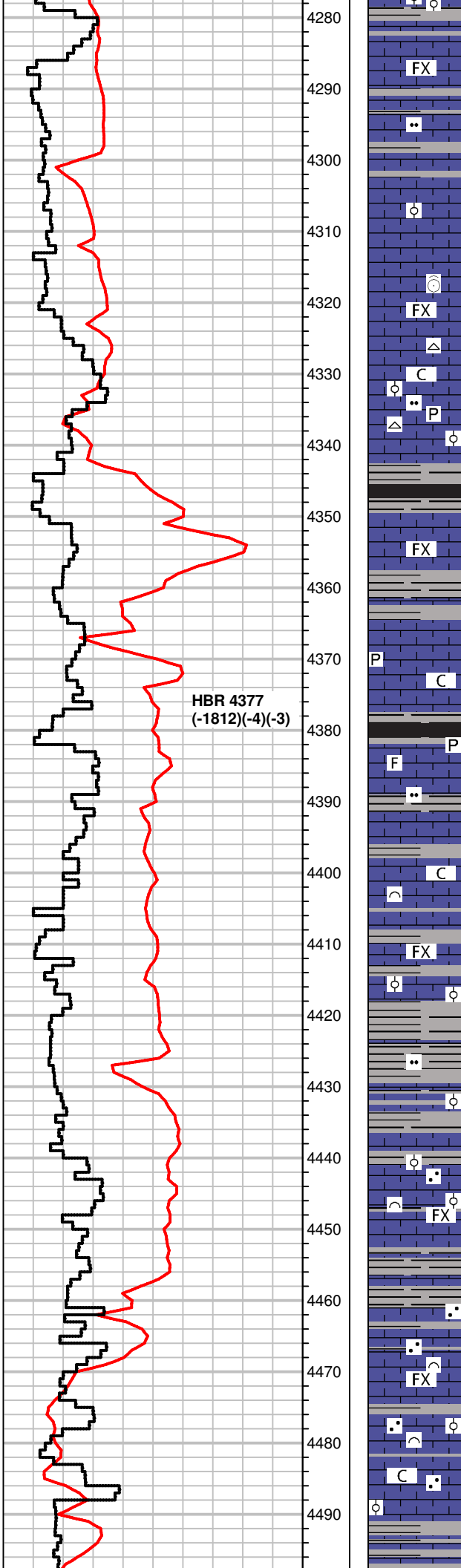
- Even Stn
- Spotted Stn 50 - 75 %
- Spotted Stn 25 - 50 %
- Spotted Stn 1 - 25 %
- Questionable Stn
- D Dead Oil Stn
- Fluorescence

#### INTERVALS

- Core
- DST

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MS, tan to brn, some gray, A.A., mic-xln to massive, some fossils, scatt SH, grays

SH, grays, limey, MS-WS, crm to brn, f-xln to m-xln, some pcs massive, hard/dense, gritty txt in pt., fossils, NS

MS, gray to tan, brn, f-xln to gritty, massive pcs rare, dense, some SH, dk. gray

MS-WS, crm to tan, f-xln, chalky, firm to dense, fossils, scatt sub oolitic to fossilif pcs, crinoids, NS

MS, crm to tan, A.A., massive pcs, dense, Chert, wht

MS-WS, crm to tan, f-xln to gritty, scatt massive pcs, dense, rare chalky, f-gr oolitic/fossilif., cherty pcs, pyrite, NS

SH, gray to blk, carb.

SH, blk to dk. gray, MS-crm to tan, f-xln to m-xln, gritty, fossilif., dense, some pcs chalky/friable, NS

Scatt SH, blk to grays, MS, tan to off wht, gray, chalky to f-xln, gritty to fossilif., pyrite, NS

SH, blk to dk. gray, sil carb., pyrite flakes, sli. gassy

MS, crm to off wht, f-xln, dense, silty pcs, scatt chalky, some fossils, NS

scatt SH, blk to gray, MS, crm to tan, some gray, f-xln, firm to friable, fossils, chalky in pt., NS

MS-WS, crm to lt. gray, gritty/shaly in pt., f-xln pcs, firm, chalky to micro oolitic pcs, scatt SH, grays

SH, gray to blk, MS-WS, crm to tan, lt. gray, f-xln, m-gr oolitic, ringed ooids w/ dark nucleus, hard to dense pcs, shaly in pt., mineral fluor, NS

Influx MS, crm, vf-xln to chalky pcs, some massive, friable to soft., scatt fossils, Chert, wht, mineral fluor  
SH, grays to red

SH, dk. gray to green, sandy, MS, off wht to crm, f-xln to massive, chalky, dense, some sandy, oolitic/fossilif., min. fluor, NS

MS-WS, brn to crm, f-xln, dense, some pcs sandy, scatt mottled pcs, fossils, SH, blk to gray, greenish gray

WS-MS, gray to crm, f-xln, dense, fossilif/oolitic, sandy pcs, HS, grays, green, silty to sandy

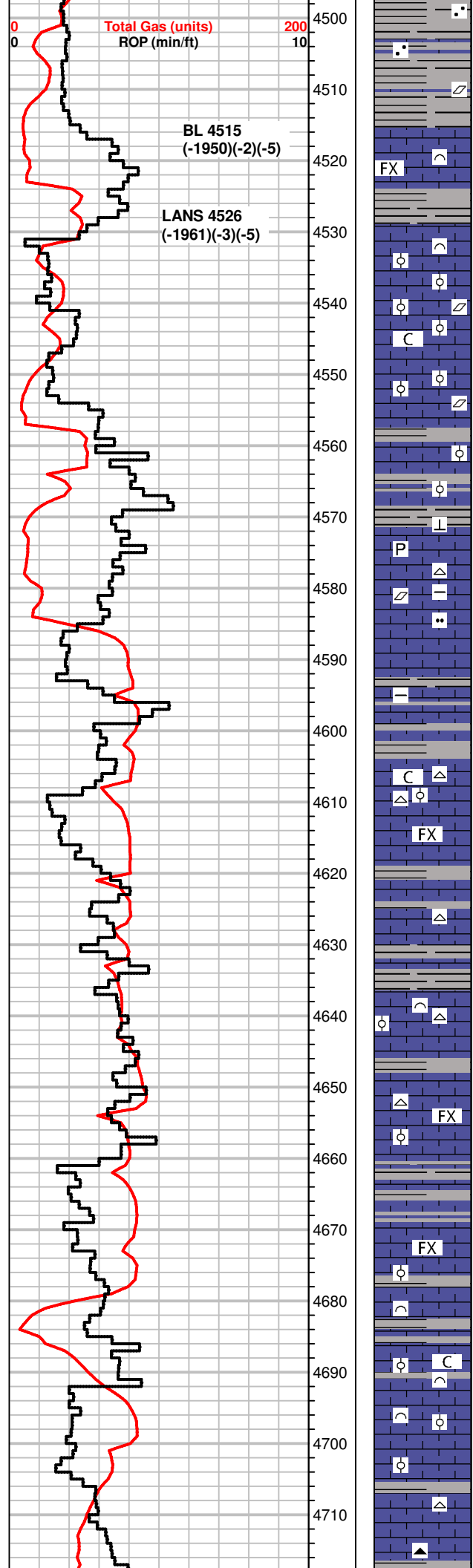
SH, gray, silty, pyrite, MS-WS, crm to brn/gray, f-xln, shaly, some mottle pcs, oolitic in pt., scatt fossils, NS

lesser SH, blk to grays, MS-WS, crm to gray, f-xln, gritty, oolitic to fossilif., some pcs chalky, most dense/hard, NS

WS-MS, crm to tan, brn, f to m-gr oolitic/fossilif., firm, friable, some

**+85 UGK, shale gas**

**+10 UGK, shale gas**



pcs dense, chalky mtrx, mottled pcs, sandy, Chert, tan SH, blk to gray

SH, gray to green, sandy, MS-WS, crm to tan, sub oolitic, calcite, min flour, NS

influx SH, gray to blk MS-WS, crm to tan, brn, f-xln/massive, dense, fossilif., some barren, scatt mottled pcs, NS

SH, blk, gray, green, red, MS-WS, gray to brn, crm, f-xln, dense, some m-gr oolitic/bioclasic, calcite, shaly pcs,

MS-WS, brn to crm, f-gr oolitic, fossilif., some chalky, dense to friable, dull fluor, NS

MS-WS, crm to lt. tan, f-xln/gritty pcs, oolitic to fossilif. firm, chalky matrix, calcite, NS

MS-WS, crm to lt. tan, lt. gray, chalky, sli. fossilif. pcs, some sandy, massive/dense, NS, SH, grays, brn

SH, blk to gray, MS, crm to tan, lt. gray, massive/f-xln, chalky in pt. rare fossils, pyrite, calcite, Chert, opaque

MS, crm, A.A., some fossils, most massive, hard, shaly in pt. SH, green, gray, red, striated pcs, some silty

some SH, green, gray, red, MS, crm to gray, chalky to massive, firm to dense, sub oolitic/fossilif pcs scatt, calcite, NS

WS-MS, crm to off wht, chalky mtrx, gritty in pt., sub oolitic, dense/massive pcs, Chert, wht, some SH, gray, limey

SH, gray to brn, MS, crm to gray, some crm, f-xln, dense, rare fossils, chalky to shaly pcs

MS, A.A., in in crm pcs, gritty to massive, dense, Chert, wht some SH, grays

SH, gray, MS, brn to crm, f-xln/massive txt to chalky, most pcs hard/brittle, some soft, rare fossils, scatt Chert, wht, gray, fossils

SH, grays, brn, MS-WS, crm to brn, f-xln to gritty, mottled pcs, most dense, some soft/friable pcs, fossilif pcs scatt, NS

MS, gray to tan, mic-xln to massive txt, hard/dense, barren, scatt fossils, NS, Chert, opaque, fossils

MS, crm to gray, f-xln, dense, A.A., some pcs chalky, soft, scatt fossils, SH, gray, green

MS, gray to crm, f-xln to massive, most dense, some soft, chalky, scatt fossils, SH, blk to gray, silty

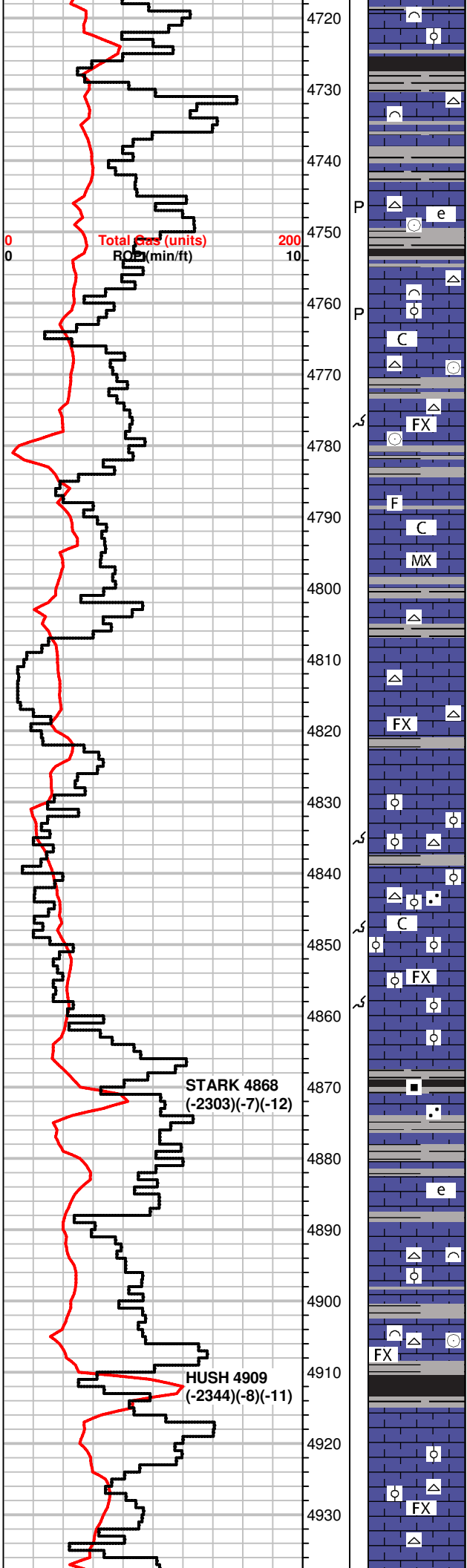
SH, gray, red, green, MS-WS, lt. gray to crm, chalky/fossilif., massive pcs, dense, NS, lesser fossils

MS, crm to tan, f-xln to earthy, hard/dense, scatt sub oolitic pcs, NS, some SH, gray

MS, A.A., some lt. gray, f-xln, gritty, fossilif. pcs, Chert, wht, fossils, scatt SH, gray, red

MS, crm to off wht, tan, chalky to f-xln, friable/soft, scatt fossils, Chert, brn, rare SH, grays





MS, brn to crm, f-xln/massive, dense, chalky in pt., some sandy pcs/gritty, glauc, fossilif pcs scsatt, NS, Chert, wht, fossils  
SH, blk, green

SH, blk, gray, MS, brn to crm, off wht, A.A., hard, brittle, lesser fossils, PP por., shaly in pt.

MS-WS, crm to gray, f-xln to earthy, some pcs massive/dense, sandy to silty, rare fossils, NS, rare Chert, wht, SH, grays

MS, crm to brn, earthy/chalky, some pcs massive/dense, friable, fossils, PP por., SH, gray, green, rare blk

MS-WS, crm to rare brn, A.A., most friable, soft, fossils, crinoids, Chert, wht, fossils, SH, gray to green

MS-WS, off wht to crm, f-xln to chalky txt, firm to soft, sub oolitic/fossilif pcs scatt, NS, moldic por.

SH, gray to green, MS, brn to crm, massive to f-xln, dense, chalky pcs scatt, pyrite, NS

influx SH, gray, red, gree, MS, crm, chalky, friable, some f-xln, dense (rare), scatt fossil frgmts, NS

some SH, A.A., MS, crm to tan, f-xln, dense, massive, some chalky, Chert, wht, fossils

Inc. in SH pcs, grays, silty, some green, MS-WS, crm to tan, massive to dense, some fossilif. pcs, friable, Chert, wht, tan, fossils

WS-MS, brn to crm, massive/mic-xln, dense, m-gr oolitic in hard calc. mtrx, some pcs chalky, soft, Sh, green, gray, silty to limey pcs.

WS-PS, crm to tan, f-xln, friable to some dense, m-gr oolitic/moldic, dk. ooids in partly chalky mtrx, some Chert, tan, SH, grays, some pcs sandy

WS-PS, crm to brn, f-xln to m-gr oolitic/moldic pcs, dense to friable, A.A., some w/ tite calc. mtrx, mineral fluor, NS, SH, grays

MS-WS, brn to tan, f-xln to earty, some sub oolitic/micro oolitic, dense to firm, gritty in pt., NS

WS-PS, brn to tan, f-xln to m-gr oolitic/fossilif, moldic, chalky, some friable, most hard/dense, NS rare SH, blk, gray,

SH, blk gray, sli. carb.  
MS-WS, crm to tan, brn, earthy to f-xln, some mic-xln, dense, A.A., lesser oolitic pcs, dull fluor, NS, Chert, gray

MS-WS, crm to brn, mic-xln/massive, some chalky, firm to dense, fossilif, Chert, tan, gray  
scatt SH, gray, brn, sandy,  
MS, crm, f-xln, massive, waxy looking, some chalky, dense to firm, lesser fossils, Chert, wht, tan

MS, crm to gray, shaly in pt., f-xln to gritty, dense, some fossils, Chert, opaque, fossils  
SH, blk, gray, carb.

MS-WS, crm tn tan, brn, f-xln to massive, sub oolitic, gritty txt, hard to brittle, some chaly pcs, scatt fossils, Chert, tan, wht

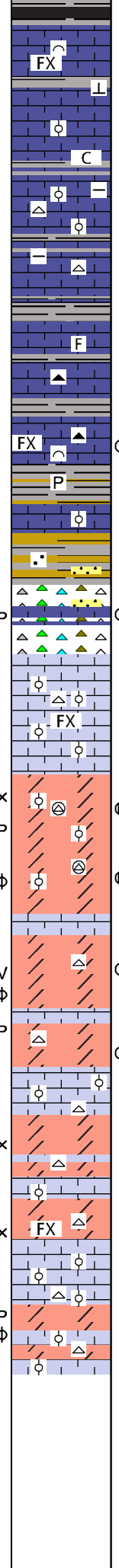
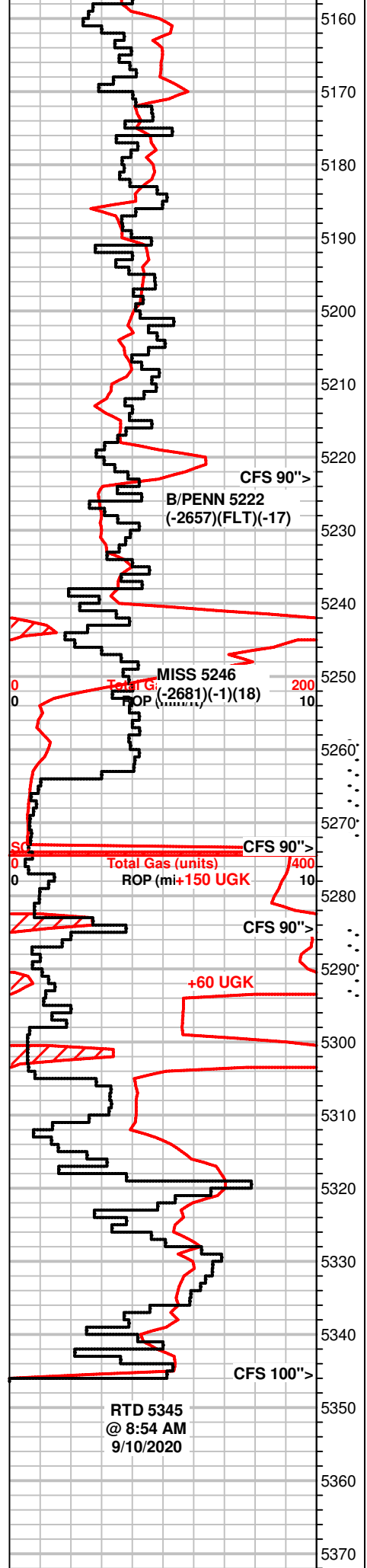
MS, gray to crm, f-xln to earthy, some pcs chalky, brittle, friable, fossilif., shaly in pt., Chert, wht, carrying SH, gray brn, sandy

MS-WS, crm to tan, some gray, f-xln to m-xln, scatt massive pcs.

**+50 UGK, shale gas**

**+75 UGK, shale gas**





SH, blk to green

SH, gray to blk  
MS, crm to tan, chalky to earthy, some f-xln, hard/brittle, fossils scatt, pyrite flakes, some calcite veins, NS

MS-WS, brn to tan, f-xln to massive, some pcs chalky/shaly in pt., dense, fossils, NS, Chert, tan, SH, gray to blk, limey in pt.

MS-WS, tan to brn, massive, some f-xln, A.A., most dense, some fossils, mottled pcs, sandy, NS, Chert, tan, wht, fossilif., SH gray, sandy

SH, blk to sea green, varying grays, MS, gray to crm, f-xln to earthy, shaly in pt., fossils scatt, NS

SH, blk to grays  
MS-WS, crm to brn, some gray, massive to f-xln, hard to brittle, fossilif., dense, dull fluor, NS, rare Chert, brn

MS, brn to crm, f-xln, dense, fossils, hard to brittle, bri fluor(5% tray), sply to even stn in wet, inst strmg cut, free oil in tray, no odor, PP por. to no vis por., rare 50% sat in dry

SH, gray to blk, green, rare SS clusters, f-gr, well srtd, sub rnd, firm to hard, ft. odor in bag

SH, mustard yellow, red, greens, striated, waxy, some pcs sandy, MS, tan to brn, f-xln, dense, fossils, NS

Chert, varicolored, most fresh, some w/ wthrd edges, fossilif., good odor in bag, live oil, tarry dk stn in vugs and por., isnt cut, carrying SH, varicolored

WS-PS, off wht to tan, f-xln, sub oolitic to fossilif., dense pcs, hard to friable, some partly chalky, NS

Dolo, tan, f to m-xln, friable, some pcs firm, sugary txt in pt to fossilif. pcs, chert frmnts, good odor, bright fluor, even stn, live and bleeding oil, inst cut, even stn dry, PP to int-xln por. rare cherty frmnts

Dolo, crm to tan, f-xln sugary txt to m-gr oolitic/fossilif, cherty pcs scatt, hard to firm, gd odor, sply to even stn wet, live oil, some pcs bleeding oil, bright fluor, PP, oolitic, int-xln por., even to sply stn dry

Dolo, tan to crm, f-xln to m-xln, sugary txt, some pcs w/ cherty and oolitic frmnts, some sply to rare even stn, fair odor, inst to slow milky cut

Dolo, crm to tan, f-xn to m-xln, fossilif to cherty frmnts, hard to firm pcs, dull mineral to v. sply bright fluor, fair odor in bag, no cut to strmg cut when broken, no vis stn wet, light sply stn dry, PP to vuggy por.

WS-PS, off wht, f-xln to mic-xln, dense, oolitic, hard to friable, scatt sli. chalky pcs, NS

Dolo, crm to tan, f-xln to sugary m-xln txt, dull mineral fluor, no odor, no stn wet

WS-PS, off wht to crm, oolitic, dense, NS

scatt Dolo, crm to tan, vf-sucrosic txt, firm to hard, scatt pcs w/ m-gr chert frmnts, NS

WS-PS, crm to off wht, f-xln, m-gr oolitic, chalky mtrx in scatt pcs, hard to firm, NS

Scatt Dolo, crm to brn, vf-suc txt, firm, some pcs w/chrt frmnts, A.A., NS WS-PS, crm to off wht, m-gr oolitic, chalky mtrx in pt., NS

**+55 UGK**

**+164 UGK, 15 UGK recycle**

**DST #2 5258-5273**  
**30-60-60-120**  
**BOB 2 min**  
**NBB**  
**BOB 15 sec**  
**GTS on bleed off, 4.75 inch BB**  
**Rec: 217' Fluid Total**  
**62' GO (5g,95o)**  
**155' GWCMO**  
**(40g,40o,15m,5w)**  
**IH 2582#**  
**IF 41-47#**  
**ISIP 1506#**  
**FF 91-101#**  
**FSIP 1505#**  
**FH 2544#**  
**Temp 115°F**  
**Gravity 39°API**

**DST #3 5284-5294**  
**45-60-90-120**  
**GB blt to 9 inches**  
**NBB**  
**BOB 45 min, blt to 19 inches**  
**NBB**  
**93' GIP**  
**Rec: 93' SOCMW**  
**(5o,30m,65w)**  
**IH 2560#**  
**IF 14-32#**  
**ISIP 1320#**  
**FF 29-56**  
**FSIP 1322#**  
**FH 2538#**  
**Temp 115°F**  
**Rw .312 @ 53°F**  
**CI 27,000 ppm**

RTD 5345  
@ 8:54 AM  
9/10/2020

5380

Dolomite Zone-

5390

The cuttings manifested as a brown to cream, medium to fine crystalline, sometimes fine sucrosic dolomite. Within the dolomite, chert fragments were present throughout the zone. The chert fragments were observed from very fine to coarse in size. In some instances, cuttings were large chert pieces with dolomite on edge. Letting some of the cuttings sit in acid left no traces of dolomite, left behind were the undissolved fragments of chert/silica

5400

5410

The dolomite zone displayed shows ranging from strong odor, total saturation and stain, bleeding oil and gas all the way down to partial staining with no visible stain. The latter pieces, while not displaying stain, were bright under UV light, with oil cut only when broken. The chert present in the rock dictates porosity. A large portion of the dolomite is very hard, with some pieces being friable.

5420

The larger percentage of chert present in some cuttings made select pieces more difficult to crush or break apart, indicating tite rock, which is shown on the drill stem test charts.

5430

5440