

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	KEOUGH 7-34
Doc ID	1378566

All Electric Logs Run

Dual Induction
Density - Neutron
Micro-log
Sonic

Form	ACO1 - Well Completion
Operator	Vincent Oil Corporation
Well Name	KEOUGH 7-34
Doc ID	1378566

Tops

Name	Top	Datum
Heebner Shale	4361	(-1814)
Brown Limestone	4496	(-1949)
Lansing	4506	(-1959)
Stark Shale	4844	(-2297)
Pawnee	5052	(-2507)
Cherokee Shale	5099	(-2552)
Base Penn Limestone	5198	(-2651)
Mississippian	5216	(-2669)
RTD	5370	(-2823)



# QUALITY WELL SERVICE, INC.

Federal Tax I.D. # 481187368

6716

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	9-12-17	Sec.	34	Twp.	28	Range	23	County	Ford	State	Ks	On Location	10:00 AM	Finish	10:15	
Lease	Keough	Well No.	7-34			Location										
Contractor	Duke 1								Owner							
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.		693		Charge To									
Csg.	8 5/8		Depth		674.87		Vincent									
Tbg. Size			Depth		Street											
Tool			Depth		City											
Cement Left in Csg.	20'		Shoe Joint		15'		State									
Meas Line			Displace		42.6		The above was done to satisfaction and supervision of owner agent or contractor.									
<b>EQUIPMENT</b>								Cement Amount Ordered								
								125 MDC 3% CC 2% Gel 1/4 CF								
Pumptrk	8	No.					150 SK Common 3% CC 2% Gel 1/4 CF									
Bulktrk	9	No.					Common 150									
Bulktrk	10	No.					Poz-Mix 125 MDC									
Pickup		No.					Gel. 11									
								Calcium 10								
<b>JOB SERVICES &amp; REMARKS</b>								Hulls								
Rat Hole								Salt								
Mouse Hole								Flowseal 66.25								
Centralizers								Kol-Seal								
Baskets								Mud CLR 48								
D/V or Port Collar								CFL-117 or CD110 CAF 38								
Ran 8 5/8 csg broke circulation with big mixed and pumped 125sx MDC 3% CC 2% Gel 1/4 CF 150sx Common 3% CC 2% Gel 1/4 CF Released plug displaced with 42.6 4 2/8 shut in cement did circulate to surface								Sand								
								Handling 296								
								Mileage 50								
								<b>FLOAT EQUIPMENT</b>								
								Guide Shoe								
								Centralizer								
								Baskets								
								AFU Inserts								
								Float-Shoe								
								Latch-Down								
								E 7/8 inductor plug								
								LNV 50								
								Pumptrk Charge Surface								
								Mileage 107								
											Tax					
											Discount					
											Total Charge					
Signature																

# QUALITY WELL SERVICE, INC.

Federal Tax I.D. # 481187368

6719

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	9-24-17	Sec.	34	Twp.	28	Range	23	County	Ford	State	Ks	On Location	12:70	Finish	3:00
Lease	Keough	Well No.	7-34		Location										
Contractor	Duke 1				Owner										
Type Job	Long string				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.	5370												
Csg.	4.5	Depth	5369												
Tbg. Size		Depth													
Tool		Depth													
Cement Left in Csg.	22	Shoe Joint	22.25												
Meas Line		Displace	83.5												
<b>EQUIPMENT</b>											5# Kel Seal				
Pumptrk	8	No.	1125												
Bulktrk	10	No.	7001												
Bulktrk		No.													
Pickup		No.													
<b>JOB SERVICES &amp; REMARKS</b>											Common 22.55x P10 C				
Rat Hole	305				Hulls										
Mouse Hole	205				Salt 24										
Centralizers					Flowseal										
Baskets					Kol-Seal 1125#										
D/V or Port Collar					Mud CLR 48 500 Gal Mud Flush										
Ran 11.5 # 4.5 csg. to 5369											CFL-117 or CD110 CAF 38 CC-1 8 gals.				
Broke circulation with Rig 1bc.											Sand				
Pumped mud flush plugged bit +											Handling 253				
Mud hole Pumped 175x P10 C											Mileage 50				
R2 seal 5# Kel Seal shut in washed											<b>FLOAT EQUIPMENT</b>				
up track, released plug, displaced											Guide Shoe 1 4.5				
with 83.5 lbs of KCl water plugged											Centralizer 6 4.5				
back to 1200 psi. Left pressure											Baskets				
2000 psi.											AFU Inserts 1 4.5				
											Float Shoe				
											Latch Down Rubber Plug 4.5				
											LMV 50				
											Service separator				
											Pumptrk Charge Long string				
											Mileage 100				
											Tax				
											Discount				
											Total Charge				
X Signature															



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

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

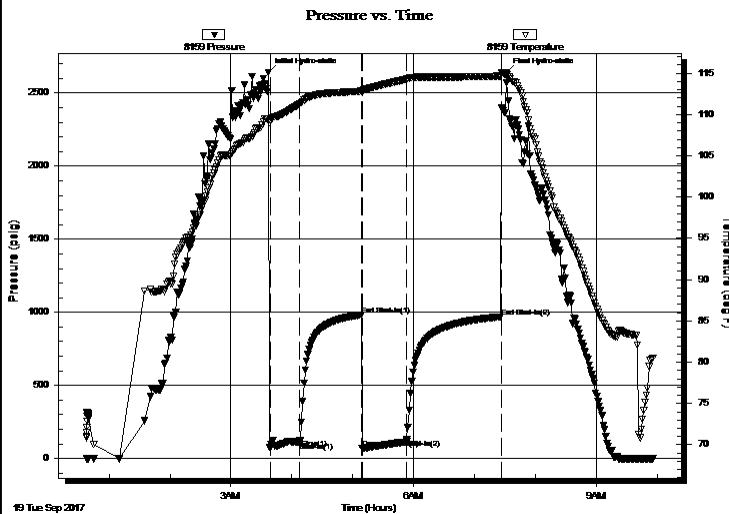
**34-28S-23W Ford**  
**Keough 7-34**  
Job Ticket: 57828      **DST#: 1**  
Test Start: 2017.09.19 @ 00:37:49

## GENERAL INFORMATION:

Formation: **Pawnee**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 03:38:49  
Time Test Ended: 09:56:49  
Interval: **5045.00 ft (KB) To 5072.00 ft (KB) (TVD)**  
Total Depth: 5072.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Good  
Test Type: Conventional Bottom Hole (Initial)  
Tester: Leal Cason  
Unit No: 74  
Reference Elevations: 2547.00 ft (KB)  
2535.00 ft (CF)  
KB to GR/CF: 12.00 ft

**Serial #: 8159**      **Inside**  
Press@RunDepth: 130.52 psig @ 5046.00 ft (KB)      Capacity: 8000.00 psig  
Start Date: 2017.09.19      End Date: 2017.09.19      Last Calib.: 2017.09.19  
Start Time: 00:37:50      End Time: 09:56:49      Time On Btm: 2017.09.19 @ 03:37:04  
Time Off Btm: 2017.09.19 @ 07:31:49

**TEST COMMENT:** IF: Strong Blow , BOB in 2 minutes  
IS: No Blow Back  
FF: Strong Blow , BOB in 3 minutes  
FS: Weak Surface Blow Back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2641.06	109.54	Initial Hydro-static
2	70.42	109.25	Open To Flow (1)
31	113.21	111.28	Shut-In(1)
92	981.83	112.82	End Shut-In(1)
93	69.42	112.72	Open To Flow (2)
137	130.52	114.30	Shut-In(2)
230	969.58	114.65	End Shut-In(2)
235	2640.68	114.98	Final Hydro-static

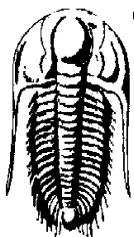
## Recovery

Length (ft)	Description	Volume (bbl)
0.00	640 GIP	0.00
62.00	MCW 5%M 95%W	0.87
226.00	GOWCM 30%G 10%O 20%W 40%M	3.17

## 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  
ATTN: Tom Dudgeon

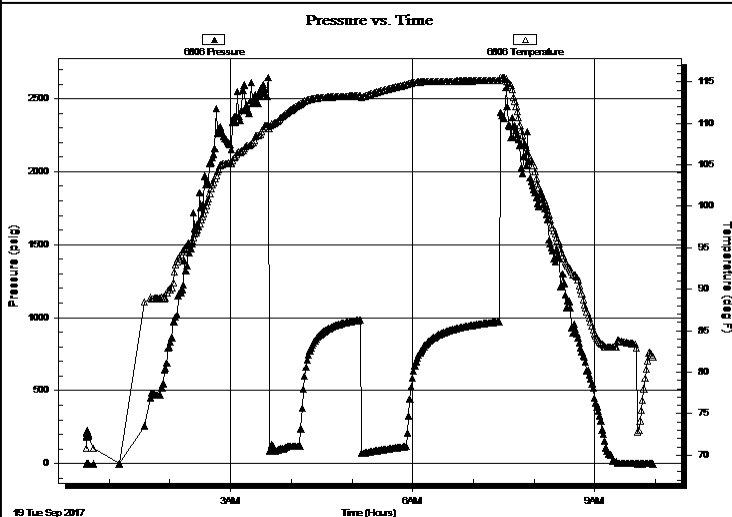
**34-28S-23W Ford**  
**Keough 7-34**  
Job Ticket: 57828      **DST#: 1**  
Test Start: 2017.09.19 @ 00:37:49

## GENERAL INFORMATION:

Formation:	<b>Pawnee</b>				
Deviated:	No Whipstock:	ft (KB)	Test Type:	Conventional Bottom Hole (Initial)	
Time Tool Opened:	03:38:49		Tester:	Leal Cason	
Time Test Ended:	09:56:49		Unit No:	74	
Interval:	<b>5045.00 ft (KB) To 5072.00 ft (KB) (TVD)</b>		Reference Elevations:	2547.00 ft (KB)	
Total Depth:	5072.00 ft (KB) (TVD)			2535.00 ft (CF)	
Hole Diameter:	7.88 inches	Hole Condition: Good	KB to GR/CF:	12.00 ft	

<b>Serial #: 6806</b>	<b>Outside</b>				
Press@RunDepth:	psig @ 5046.00 ft (KB)	Capacity:	8000.00 psig		
Start Date:	2017.09.19	End Date:	2017.09.19	Last Calib.:	2017.09.19
Start Time:	00:37:50	End Time:	09:57:04	Time On Btm:	
				Time Off Btm:	

TEST COMMENT: IF: Strong Blow , BOB in 2 minutes  
IS: No Blow Back  
FF: Strong Blow , BOB in 3 minutes  
FS: Weak Surface Blow Back



## PRESSURE SUMMARY

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

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	640 GIP	0.00
62.00	MCW 5%M 95%W	0.87
226.00	GOWCM 30%G 10%O 20%W 40%M	3.17

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Vincent Oil Corporation

**34-28S-23W Ford**

200 W Douglas Ave #725  
Wichita, KS 67202

**Keough 7-34**

Job Ticket: 57828

**DST#: 1**

ATTN: Tom Dudgeon

Test Start: 2017.09.19 @ 00:37:49

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

58000 ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 11.59 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 7700.00 ppm

Filter Cake: 0.02 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	640 GIP	0.000
62.00	MCW 5%M 95%W	0.870
226.00	GOWCM 30%G 10%O 20%W 40%M	3.170

Total Length: 288.00 ft      Total Volume: 4.040 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW w as .12 @ 83 degrees

Serial #: 8159

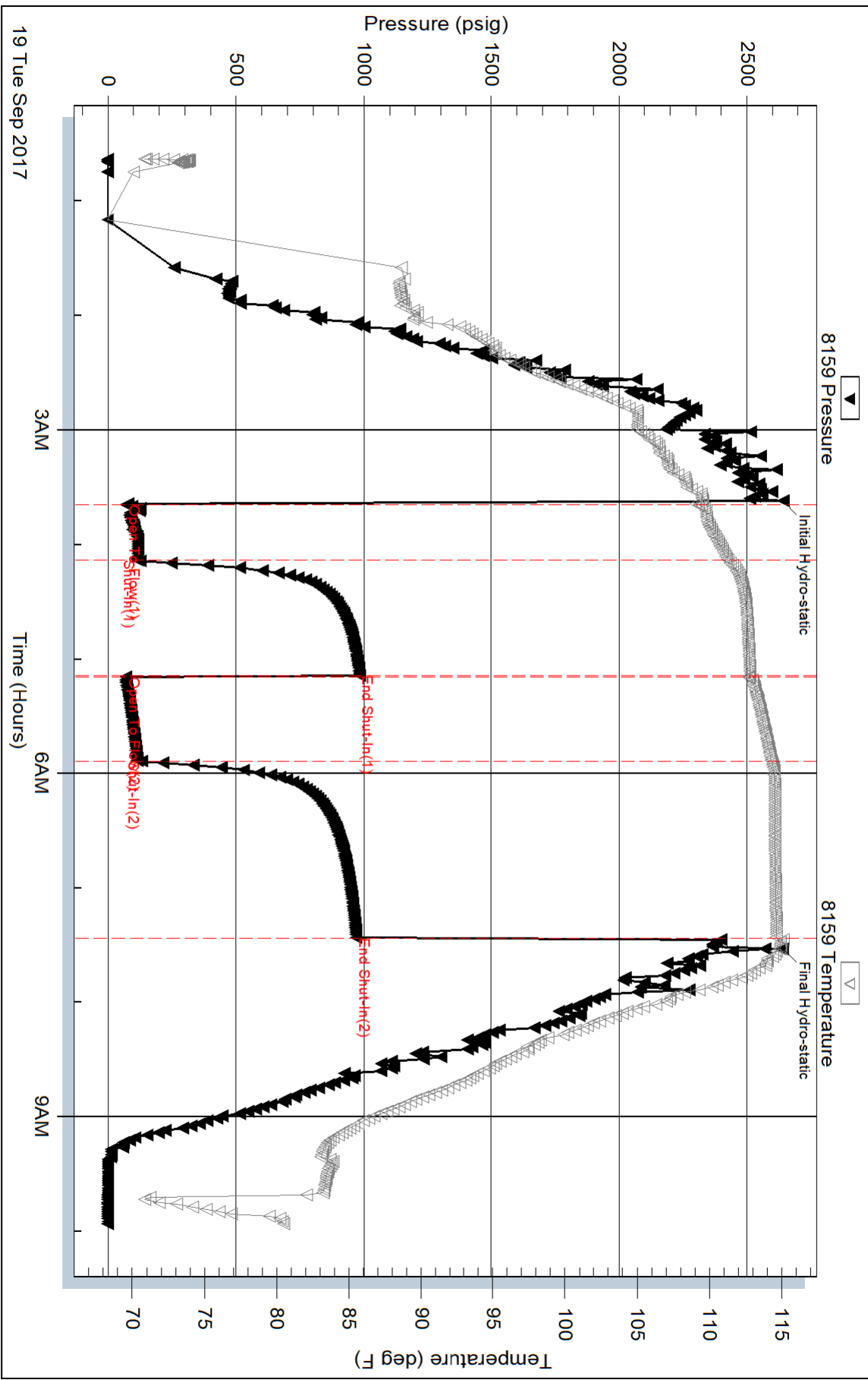
Inside

Vincent Oil Corporation

Keough 7-34

DST Test Number: 1

# Pressure vs. Time



Triobite Testing, Inc

Ref. No: 57828

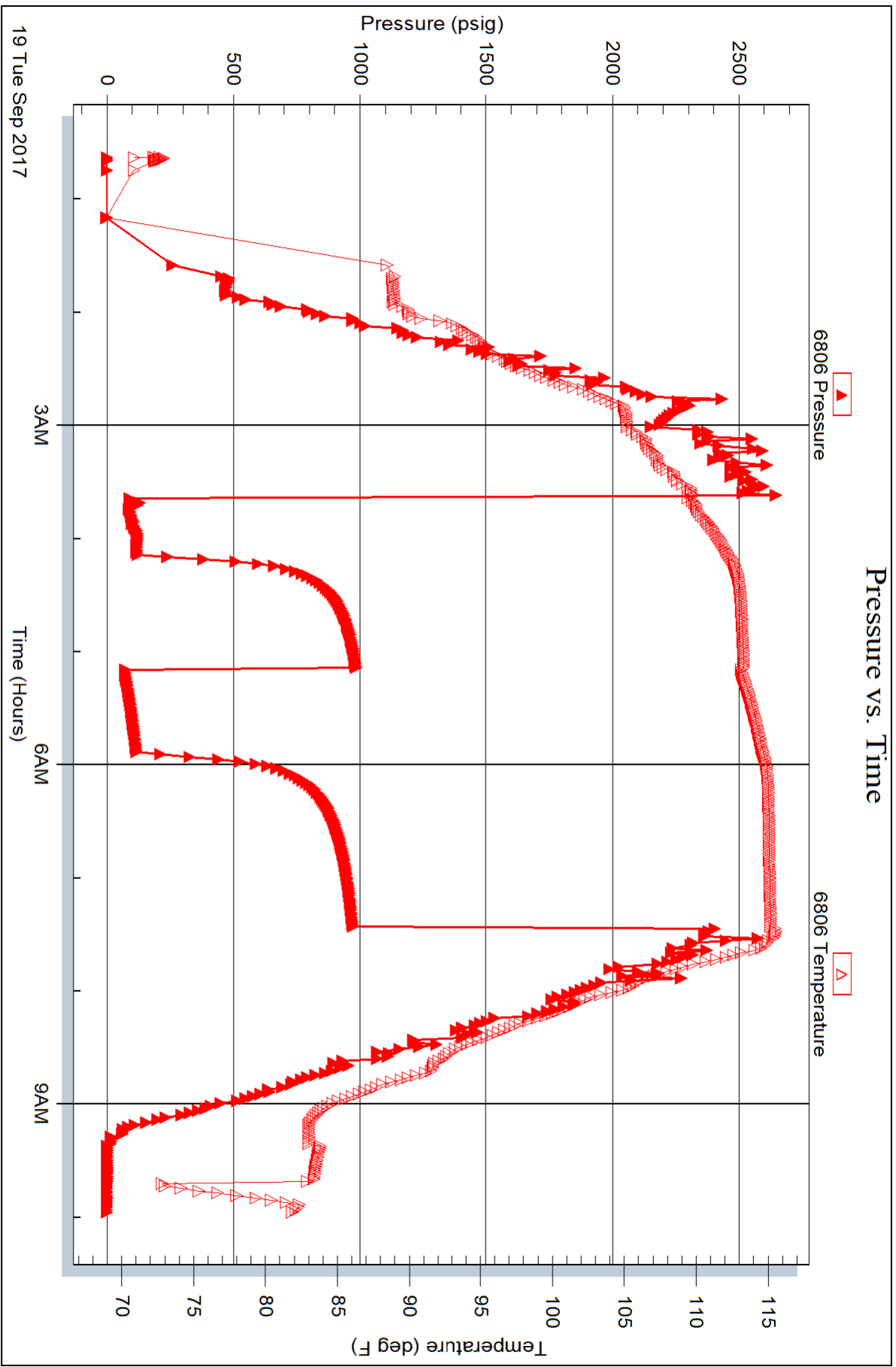
Printed: 2017.09.19 @ 10:06:54

Serial #: 6806

Outside Vincent Oil Corporation

Keough 7-34

DST Test Number: 1





**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

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

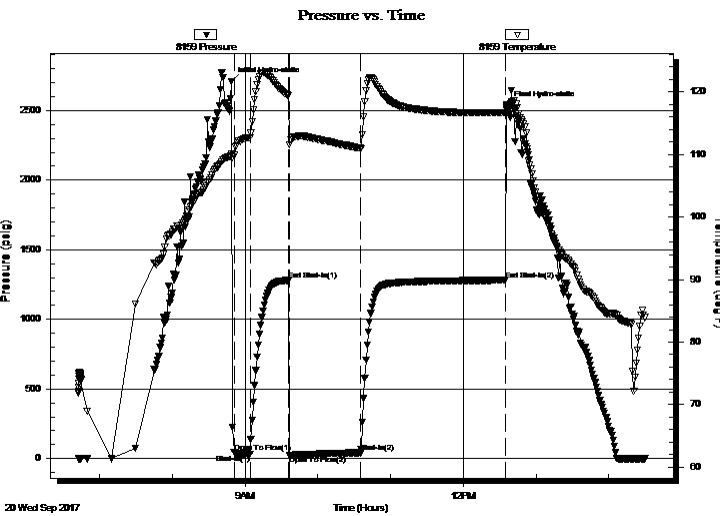
**34-28S-23W Ford**  
**Keough 7-34**  
 Job Ticket: 57829 **DST#: 2**  
 Test Start: 2017.09.20 @ 06:42:33

## GENERAL INFORMATION:

Formation: **Penn/Morrow**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 08:50:48  
 Time Test Ended: 14:30:03  
 Interval: **5172.00 ft (KB) To 5217.00 ft (KB) (TVD)**  
 Total Depth: 5217.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Leal Cason  
 Unit No: 74  
 Reference Elevations: 2547.00 ft (KB)  
 2535.00 ft (CF)  
 KB to GR/CF: 12.00 ft

**Serial #: 8159** **Inside**  
 Press@RunDepth: 41.89 psig @ 5173.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2017.09.20 End Date: 2017.09.20 Last Calib.: 2017.09.20  
 Start Time: 06:42:34 End Time: 14:30:03 Time On Btm: 2017.09.20 @ 08:48:48  
 Time Off Btm: 2017.09.20 @ 12:36:03

**TEST COMMENT:** IF: Strong Blow , BOB in 1 minute  
 IS: No Blow Back  
 FF: Strong Blow , BOB immediate, GTS in 30 seconds, Gauged & Caught Sample  
 FS: No Blow Back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2708.52	110.06	Initial Hydro-static
2	45.50	109.90	Open To Flow (1)
16	32.97	112.68	Shut-In(1)
47	1280.02	119.42	End Shut-In(1)
48	21.32	111.54	Open To Flow (2)
107	41.89	110.98	Shut-In(2)
227	1281.26	116.67	End Shut-In(2)
228	2537.73	117.55	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	GTS	0.00
20.00	SGCM 2%G 98%M	0.28

## Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.25	10.00	38.71
Last Gas Rate	0.25	25.00	62.50
Max. Gas Rate	0.25	25.00	62.50

\* Recovery from multiple tests



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

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

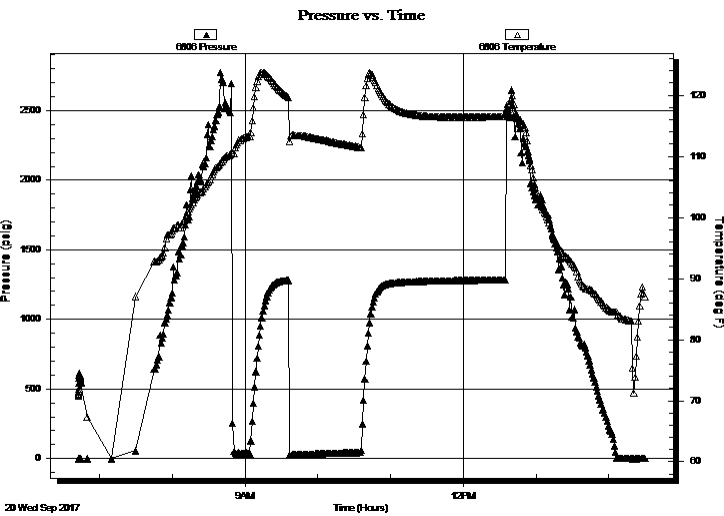
**34-28S-23W Ford**  
**Keough 7-34**  
 Job Ticket: 57829 **DST#: 2**  
 Test Start: 2017.09.20 @ 06:42:33

### GENERAL INFORMATION:

Formation: **Penn/Morrow**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 08:50:48  
 Time Test Ended: 14:30:03  
 Interval: **5172.00 ft (KB) To 5217.00 ft (KB) (TVD)**  
 Total Depth: 5217.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Leal Cason  
 Unit No: 74  
 Reference Elevations: 2547.00 ft (KB)  
 2535.00 ft (CF)  
 KB to GR/CF: 12.00 ft

**Serial #: 6806** Outside  
 Press@RunDepth: psig @ 5173.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2017.09.20 End Date: 2017.09.20 Last Calib.: 2017.09.20  
 Start Time: 06:42:34 End Time: 14:30:03 Time On Btm:  
 Time Off Btm:

**TEST COMMENT:** IF: Strong Blow , BOB in 1 minute  
 IS: No Blow Back  
 FF: Strong Blow , BOB immediate, GTS in 30 seconds, Gauged & Caught Sample  
 FS: No Blow Back



### PRESSURE SUMMARY

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

### Recovery

Length (ft)	Description	Volume (bbl)
0.00	GTS	0.00
20.00	SGCM 2%G 98%M	0.28

### Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.25	10.00	38.71
Last Gas Rate	0.25	25.00	62.50
Max. Gas Rate	0.25	25.00	62.50

\* Recovery from multiple tests



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Vincent Oil Corporation

**34-28S-23W Ford**

200 W Douglas Ave #725  
Wichita, KS 67202

**Keough 7-34**

Job Ticket: 57829

**DST#: 2**

ATTN: Tom Dudgeon

Test Start: 2017.09.20 @ 06:42:33

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 11.58 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 7700.00 ppm

Filter Cake: 0.02 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	GTS	0.000
20.00	SGCM 2%G 98%M	0.281

Total Length: 20.00 ft      Total Volume: 0.281 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**GAS RATES**

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

**34-28S-23W Ford**  
**Keough 7-34**  
Job Ticket: 57829      **DST#: 2**  
Test Start: 2017.09.20 @ 06:42:33

### Gas Rates Information

Temperature: 59 (deg F)  
Relative Density: 0.65  
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
2	10	0.25	10.00	38.71
2	10	0.25	10.00	38.71
2	20	0.25	17.00	49.81
2	30	0.25	20.00	54.57
2	40	0.25	23.00	59.33
2	50	0.25	25.00	62.50



Serial #: 8159

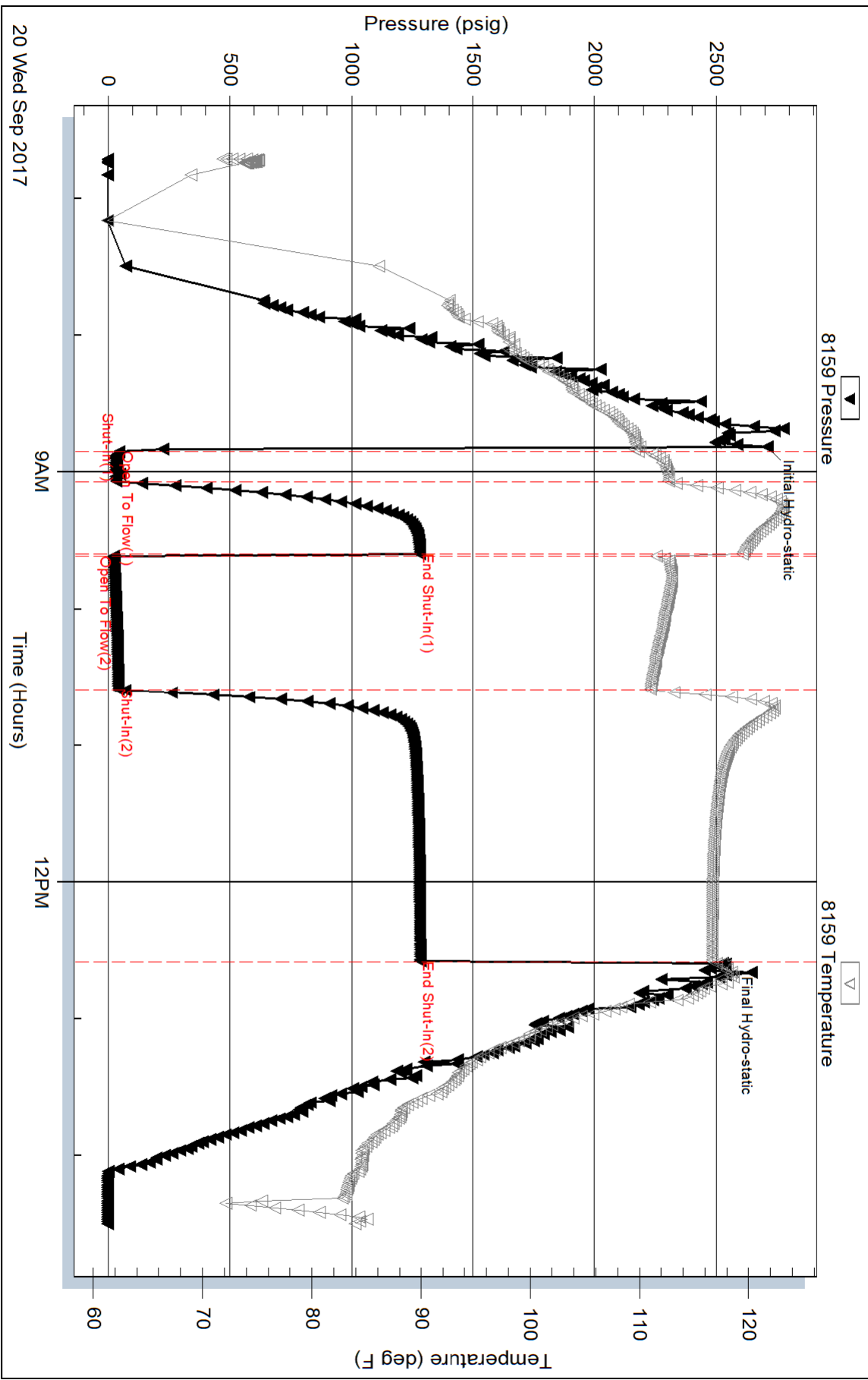
Inside

Vincent Oil Corporation

Keough 7-34

DST Test Number: 2

# Pressure vs. Time



Triobite Testing, Inc

Ref. No: 57829

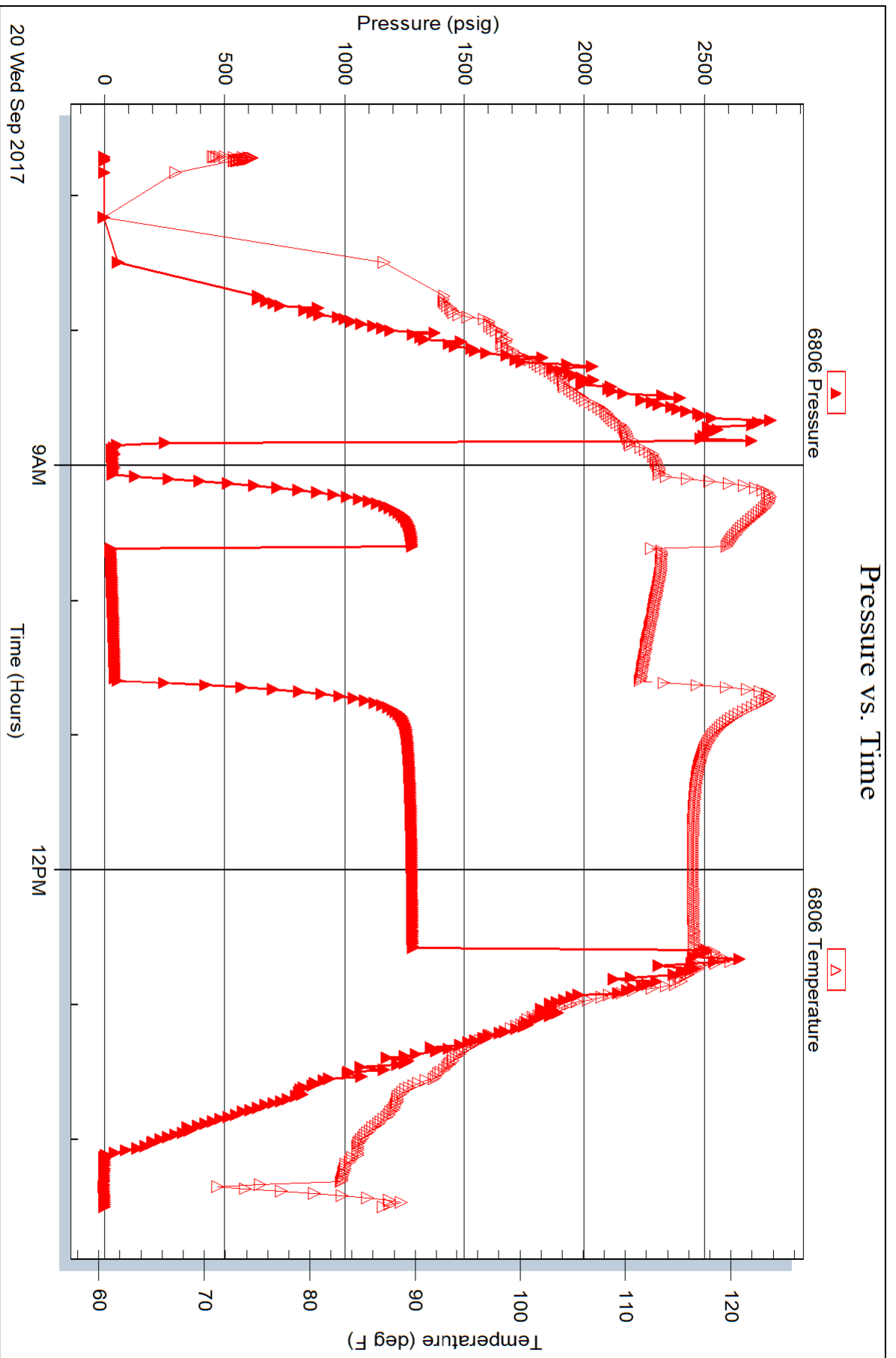
Printed: 2017.09.20 @ 14:41:45

Serial #: 6806

Outside Vincent Oil Corporation

Keough 7-34

DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 57829

Printed: 2017.09.20 @ 14:41:45



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

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

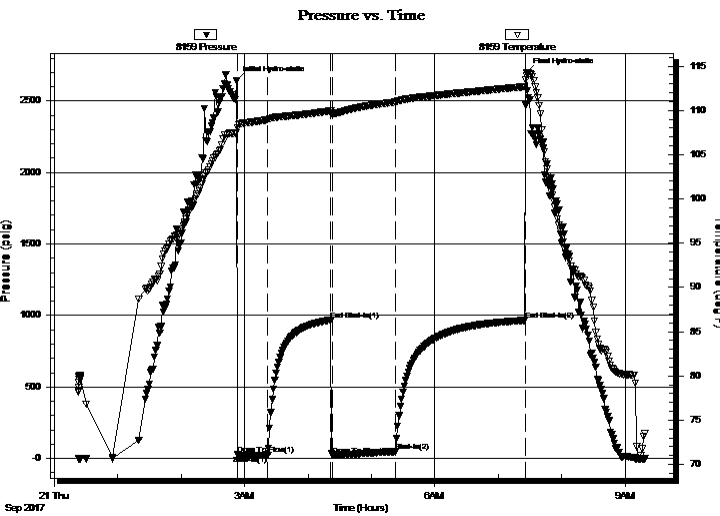
**34-28S-23W Ford**  
**Keough 7-34**  
Job Ticket: 57830      **DST#: 3**  
Test Start: 2017.09.21 @ 00:22:53

## GENERAL INFORMATION:

Formation: **Mississippi**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 02:53:38  
Time Test Ended: 09:18:53  
Test Type: Conventional Bottom Hole (Reset)  
Tester: Leal Cason  
Unit No: 74  
Interval: **5227.00 ft (KB) To 5250.00 ft (KB) (TVD)**  
Reference Elevations: 2547.00 ft (KB)  
Total Depth: 5250.00 ft (KB) (TVD)      2535.00 ft (CF)  
Hole Diameter: 7.88 inches Hole Condition: Good      KB to GR/CF: 12.00 ft

**Serial #: 8159      Inside**  
Press@RunDepth: 47.22 psig @ 5228.00 ft (KB)      Capacity: 8000.00 psig  
Start Date: 2017.09.21      End Date: 2017.09.21      Last Calib.: 2017.09.21  
Start Time: 00:22:54      End Time: 09:18:53      Time On Btm: 2017.09.21 @ 02:52:23  
Time Off Btm: 2017.09.21 @ 07:26:38

**TEST COMMENT:** IF: Strong Blow , BOB in 10 seconds  
IS: No Blow Back  
FF: Strong Blow , BOB immediate, GTS in 1 minute, Caught Sample & Gauged  
FS: No Blow Back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2639.99	107.48	Initial Hydro-static
2	26.29	108.03	Open To Flow (1)
30	23.25	108.93	Shut-In(1)
90	968.47	109.93	End Shut-In(1)
91	22.68	109.65	Open To Flow (2)
150	47.22	110.93	Shut-In(2)
273	965.27	112.68	End Shut-In(2)
275	2699.72	113.87	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	5233 GIP	0.00
80.00	OCM 20%O 80%M	1.12

\* Recovery from multiple tests

## Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.13	3.00	6.51
Last Gas Rate	0.13	10.00	9.13
Max. Gas Rate	0.13	10.00	9.13



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

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

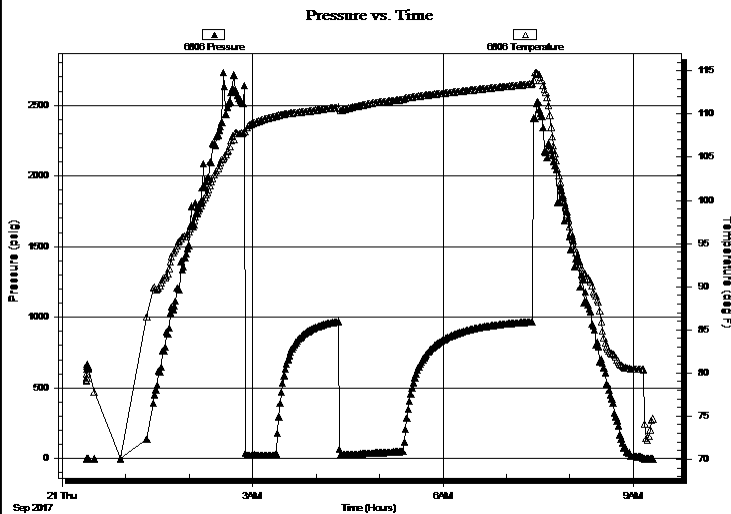
**34-28S-23W Ford**  
**Keough 7-34**  
 Job Ticket: 57830 **DST#: 3**  
 Test Start: 2017.09.21 @ 00:22:53

## GENERAL INFORMATION:

Formation: **Mississippi**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 02:53:38  
 Time Test Ended: 09:18:53  
 Interval: **5227.00 ft (KB) To 5250.00 ft (KB) (TVD)**  
 Total Depth: 5250.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Leal Cason  
 Unit No: 74  
 Reference Elevations: 2547.00 ft (KB)  
 2535.00 ft (CF)  
 KB to GR/CF: 12.00 ft

**Serial #: 6806 Outside**  
 Press@RunDepth: psig @ 5228.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2017.09.21 End Date: 2017.09.21 Last Calib.: 2017.09.21  
 Start Time: 00:22:54 End Time: 09:18:53 Time On Btm:  
 Time Off Btm:

**TEST COMMENT:** IF: Strong Blow , BOB in 10 seconds  
 IS: No Blow Back  
 FF: Strong Blow , BOB immediate, GTS in 1 minute, Caught Sample & Gauged  
 FS: No Blow Back



## PRESSURE SUMMARY

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

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	5233 GIP	0.00
80.00	OCM 20%O 80%M	1.12

\* Recovery from multiple tests

## Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.13	3.00	6.51
Last Gas Rate	0.13	10.00	9.13
Max. Gas Rate	0.13	10.00	9.13



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Vincent Oil Corporation

**34-28S-23W Ford**

200 W Douglas Ave #725  
Wichita, KS 67202

**Keough 7-34**

Job Ticket: 57830

**DST#: 3**

ATTN: Tom Dudgeon

Test Start: 2017.09.21 @ 00:22:53

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 11.58 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 7700.00 ppm

Filter Cake: 0.02 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	5233 GIP	0.000
80.00	OCM 20%O 80%M	1.122

Total Length: 80.00 ft      Total Volume: 1.122 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8159

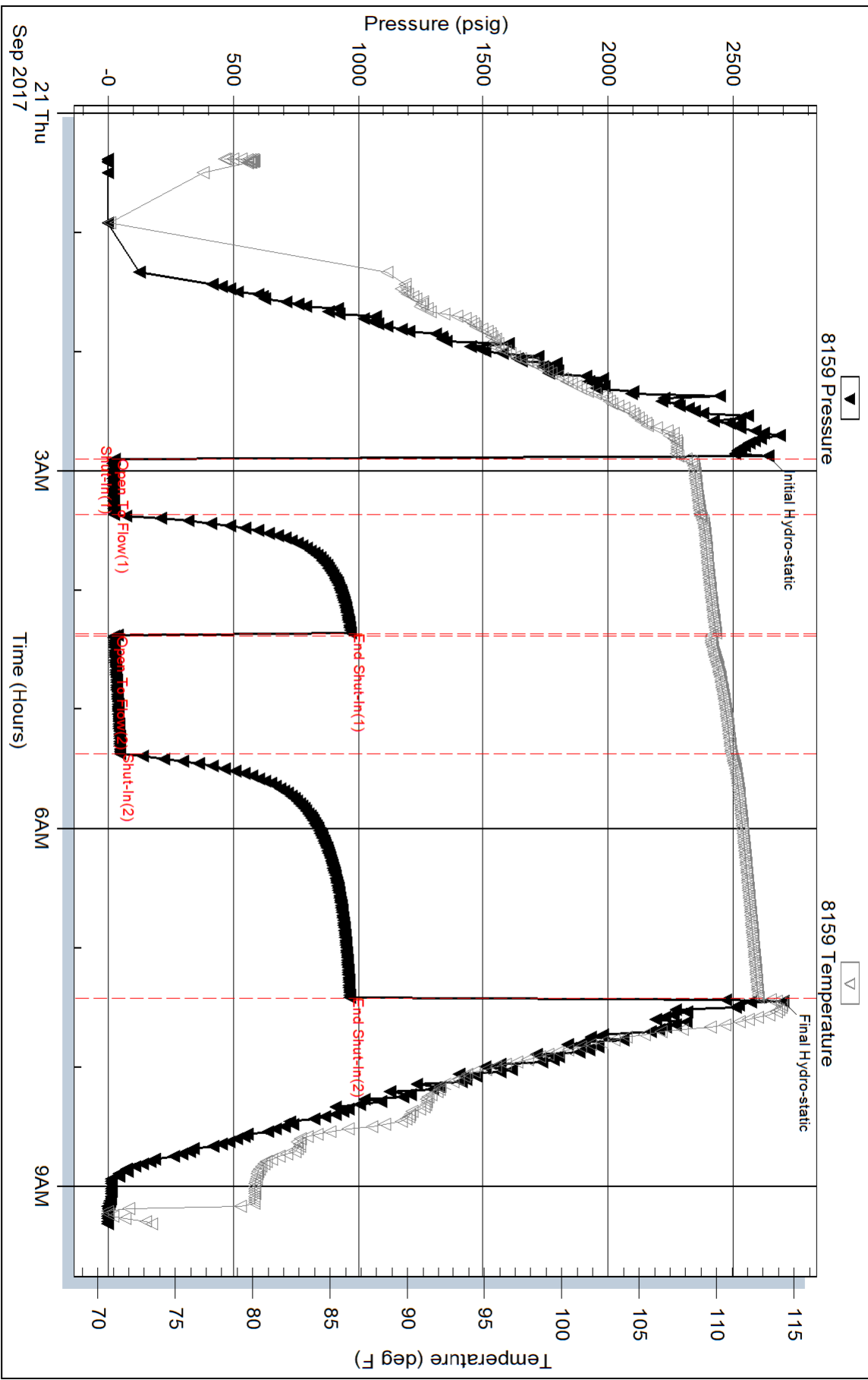
Inside

Vincent Oil Corporation

Keough 7-34

DST Test Number: 3

### Pressure vs. Time



Triobite Testing, Inc

Ref. No: 57830

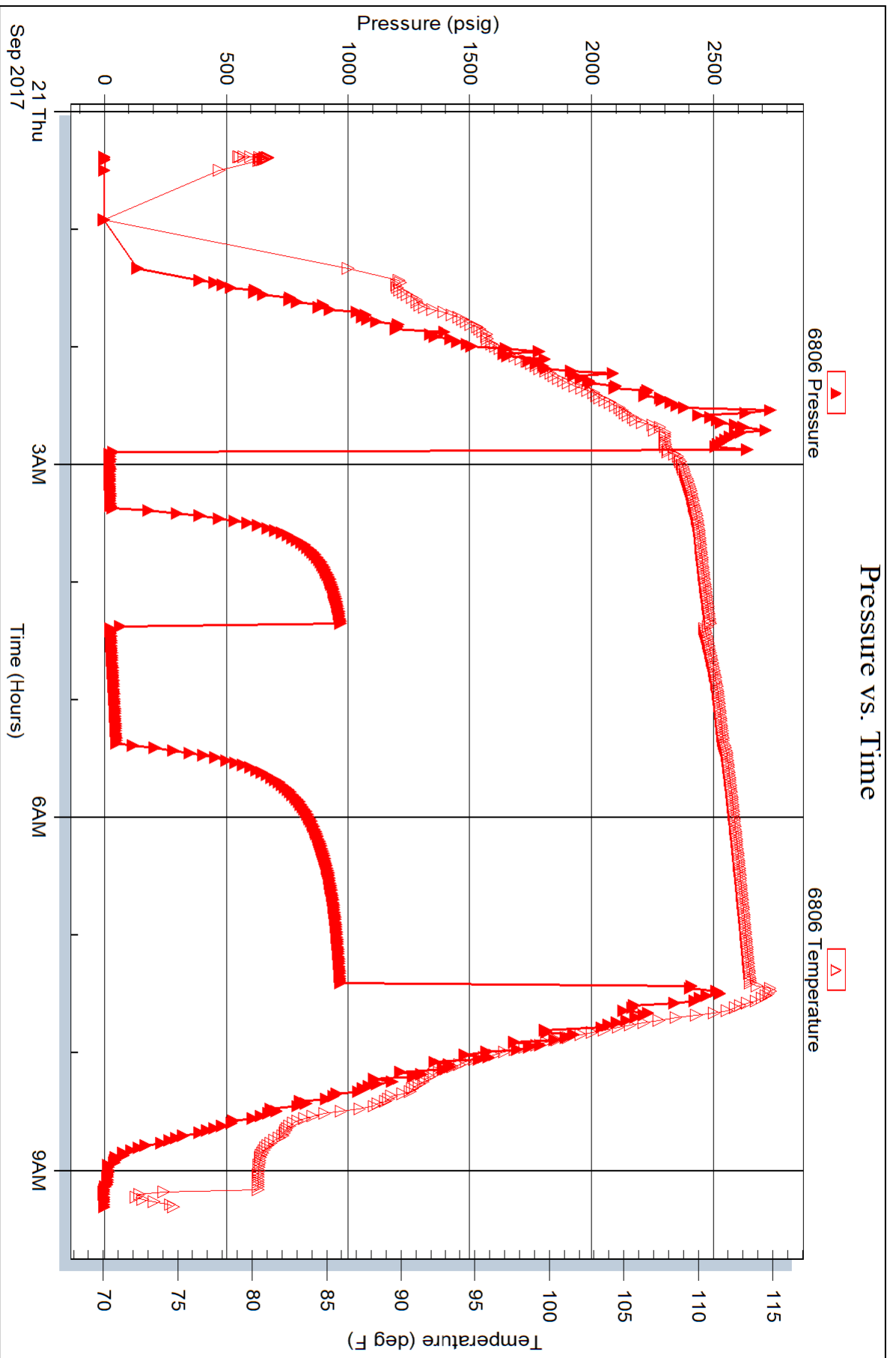
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Serial #: 6806

Outside Vincent Oil Corporation

Keough 7-34

DST Test Number: 3



Trilobite Testing, Inc

Ref. No: 57830

Printed: 2017.09.21 @ 09:29:02



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

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

**34-28S-23W Ford**  
**Keough 7-34**  
 Job Ticket: 57831 **DST#: 4**  
 Test Start: 2017.09.21 @ 23:27:14

## GENERAL INFORMATION:

Formation: **Mississippi**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 02:47:44  
 Time Test Ended: 09:23:59  
 Interval: **5258.00 ft (KB) To 5284.00 ft (KB) (TVD)**  
 Total Depth: 5284.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Leal Cason  
 Unit No: 74  
 Reference Elevations: 2547.00 ft (KB)  
 2535.00 ft (CF)  
 KB to GR/CF: 12.00 ft

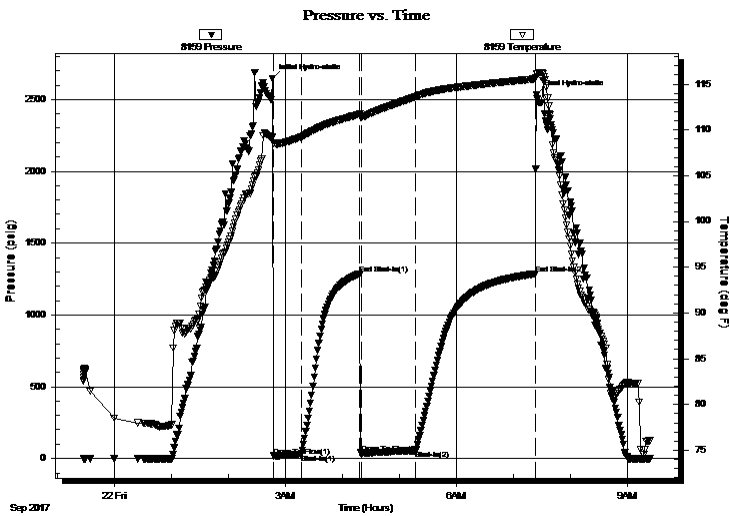
## Serial #: 8159

Inside

Press@RunDepth: 54.84 psig @ 5259.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2017.09.21 End Date: 2017.09.22 Last Calib.: 2017.09.22  
 Start Time: 23:27:15 End Time: 09:23:59 Time On Btm: 2017.09.22 @ 02:46:29  
 Time Off Btm: 2017.09.22 @ 07:24:44

TEST COMMENT: IF: Fair Blow , BOB in 8 minutes  
 IS: No Blow Back  
 FF: Strong Blow , BOB in 1 minute  
 FS: No Blow Back

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2647.43	109.20	Initial Hydro-static
2	19.06	108.55	Open To Flow (1)
31	29.29	109.23	Shut-In(1)
92	1285.27	111.71	End Shut-In(1)
94	32.70	111.40	Open To Flow (2)
151	54.84	113.62	Shut-In(2)
278	1286.03	115.57	End Shut-In(2)
279	2530.87	116.10	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	3934 GIP	0.00
90.00	GOCM 20%G 20%O 60%M	1.26

\* Recovery from multiple tests

## 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  
 ATTN: Tom Dudgeon

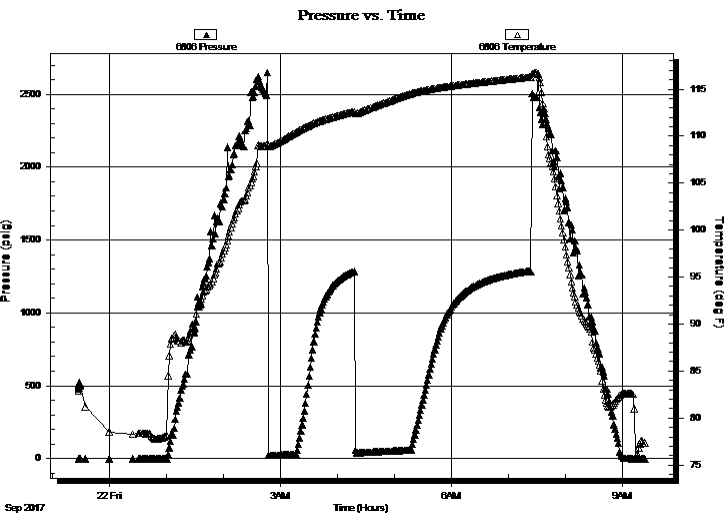
**34-28S-23W Ford**  
**Keough 7-34**  
 Job Ticket: 57831 **DST#: 4**  
 Test Start: 2017.09.21 @ 23:27:14

## GENERAL INFORMATION:

Formation: **Mississippi**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 02:47:44  
 Time Test Ended: 09:23:59  
 Interval: **5258.00 ft (KB) To 5284.00 ft (KB) (TVD)**  
 Total Depth: 5284.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Leal Cason  
 Unit No: 74  
 Reference Elevations: 2547.00 ft (KB)  
 2535.00 ft (CF)  
 KB to GR/CF: 12.00 ft

**Serial #: 6806 Outside**  
 Press@RunDepth: psig @ 5259.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2017.09.21 End Date: 2017.09.22 Last Calib.: 2017.09.22  
 Start Time: 23:27:15 End Time: 09:24:14 Time On Btm:  
 Time Off Btm:

**TEST COMMENT:** IF: Fair Blow , BOB in 8 minutes  
 IS: No Blow Back  
 FF: Strong Blow , BOB in 1 minute  
 FS: No Blow Back



## PRESSURE SUMMARY

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

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	3934 GIP	0.00
90.00	GOCM 20%G 20%O 60%M	1.26

## Gas Rates

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

\* Recovery from multiple tests



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Vincent Oil Corporation

**34-28S-23W Ford**

200 W Douglas Ave #725  
Wichita, KS 67202

**Keough 7-34**

Job Ticket: 57831

**DST#: 4**

ATTN: Tom Dudgeon

Test Start: 2017.09.21 @ 23:27:14

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 11.57 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 7700.00 ppm

Filter Cake: 0.02 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	3934 GIP	0.000
90.00	GOCM 20%G 20%O 60%M	1.262

Total Length: 90.00 ft      Total Volume: 1.262 bbl

Num Fluid Samples: 0

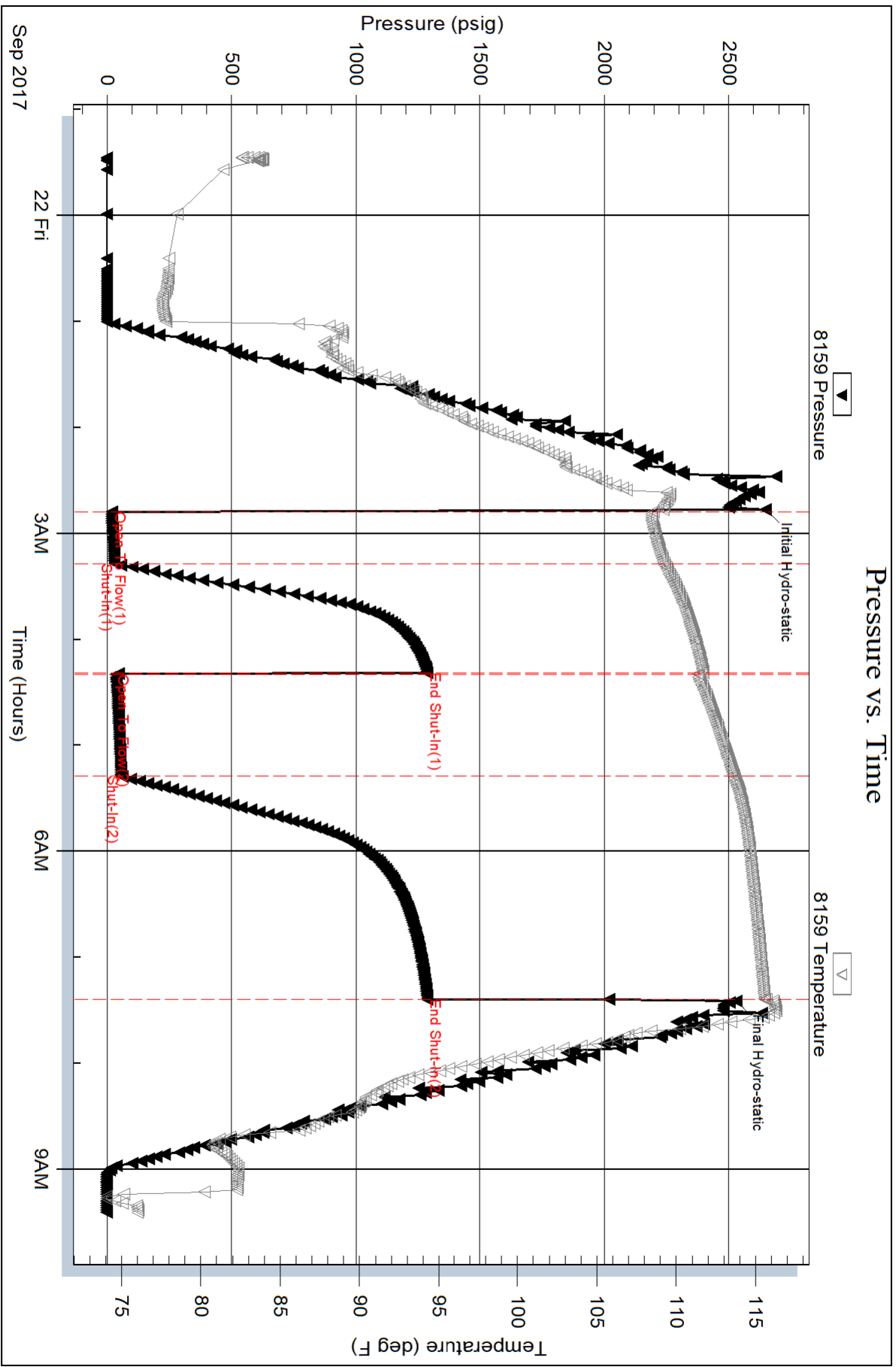
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

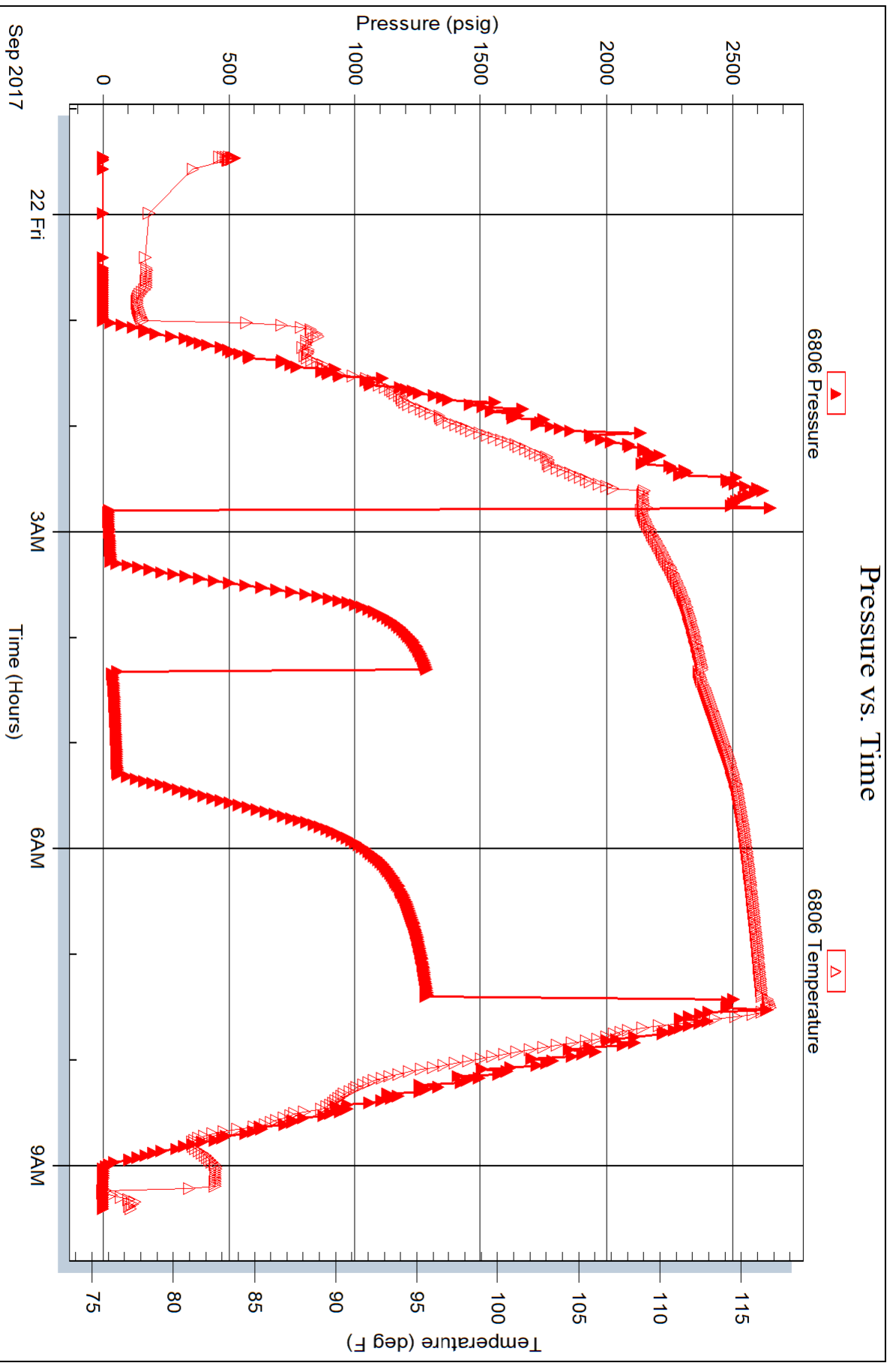


Serial #: 6806

Outside Vincent Oil Corporation

Keough 7-34

DST Test Number: 4





**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

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

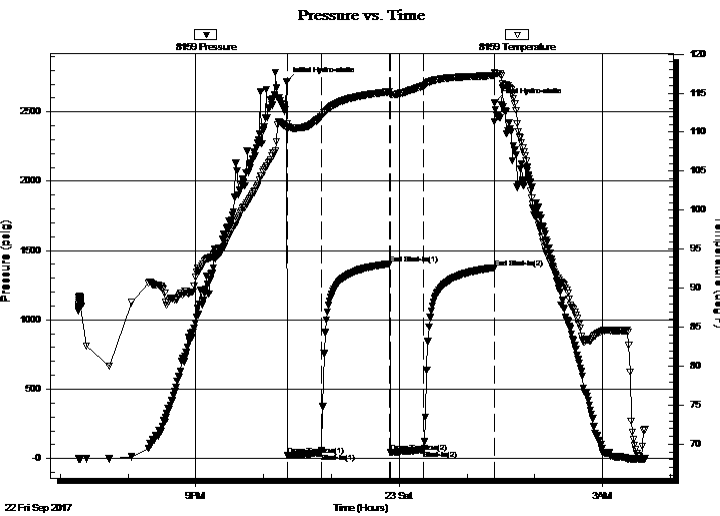
**34-28S-23W Ford**  
**Keough 7-34**  
 Job Ticket: 57832      **DST#: 5**  
 Test Start: 2017.09.22 @ 19:16:08

## GENERAL INFORMATION:

Formation: **Mississippi**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 22:21:08  
 Time Test Ended: 03:37:53  
 Interval: **5294.00 ft (KB) To 5320.00 ft (KB) (TVD)**  
 Total Depth: 5320.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Leal Cason  
 Unit No: 74  
 Reference Elevations: 2547.00 ft (KB)  
 2535.00 ft (CF)  
 KB to GR/CF: 12.00 ft

**Serial #: 8159      Inside**  
 Press@RunDepth: 61.94 psig @ 5295.00 ft (KB)      Capacity: 8000.00 psig  
 Start Date: 2017.09.22      End Date: 2017.09.23      Last Calib.: 2017.09.23  
 Start Time: 19:16:09      End Time: 03:37:53      Time On Btm: 2017.09.22 @ 22:20:23  
 Time Off Btm: 2017.09.23 @ 01:24:38

**TEST COMMENT:** IF: Weak Blow , Built to 1 1/2 inches  
 IS: No Blow Back  
 FF: Weak 1 inch Blow  
 FS: No Blow Back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2719.78	111.02	Initial Hydro-static
1	20.52	110.32	Open To Flow (1)
31	40.91	111.95	Shut-In(1)
91	1404.11	115.18	End Shut-In(1)
92	42.97	114.84	Open To Flow (2)
121	61.94	115.91	Shut-In(2)
184	1376.09	117.25	End Shut-In(2)
185	2565.80	117.63	Final Hydro-static

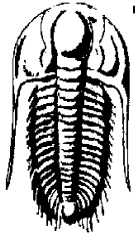
## Recovery

Length (ft)	Description	Volume (bbl)
80.00	WCM 30%W 70%M	1.12

\* Recovery from multiple tests

## 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  
ATTN: Tom Dudgeon

**34-28S-23W Ford**  
**Keough 7-34**  
Job Ticket: 57832 **DST#: 5**  
Test Start: 2017.09.22 @ 19:16:08

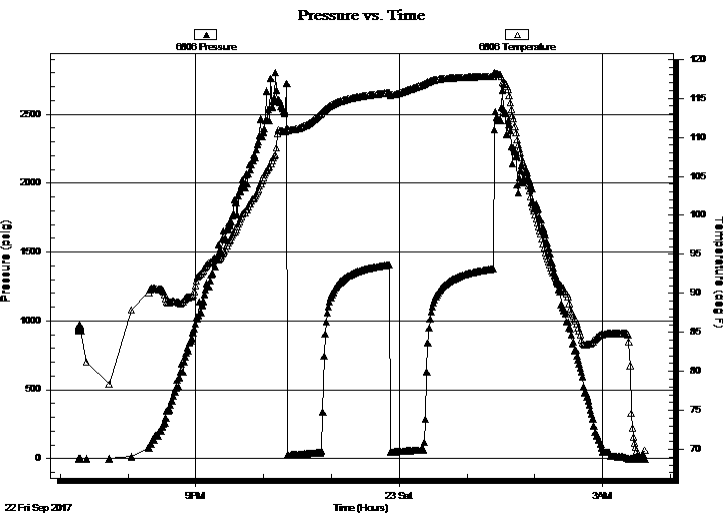
## GENERAL INFORMATION:

Formation: **Mississippi**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 22:21:08  
Time Test Ended: 03:37:53  
Interval: **5294.00 ft (KB) To 5320.00 ft (KB) (TVD)**  
Total Depth: 5320.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Good  
Reference Elevations: 2547.00 ft (KB)  
2535.00 ft (CF)  
KB to GR/CF: 12.00 ft  
Test Type: Conventional Bottom Hole (Reset)  
Tester: Leal Cason  
Unit No: 74

## Serial #: 6806 Outside

Press@RunDepth: psig @ 5295.00 ft (KB) Capacity: 8000.00 psig  
Start Date: 2017.09.22 End Date: 2017.09.23 Last Calib.: 2017.09.23  
Start Time: 19:16:09 End Time: 03:37:53 Time On Btm:  
Time Off Btm:

TEST COMMENT: IF: Weak Blow , Built to 1 1/2 inches  
IS: No Blow Back  
FF: Weak 1 inch Blow  
FS: No Blow Back



## PRESSURE SUMMARY

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

## Recovery

Length (ft)	Description	Volume (bbl)
80.00	WCM 30%W 70%M	1.12

\* Recovery from multiple tests

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Vincent Oil Corporation

**34-28S-23W Ford**

200 W Douglas Ave #725  
Wichita, KS 67202

**Keough 7-34**

Job Ticket: 57832

**DST#: 5**

ATTN: Tom Dudgeon

Test Start: 2017.09.22 @ 19:16:08

**Mud and Cushion Information**

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

58000 ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 11.57 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 7700.00 ppm

Filter Cake: 0.02 inches

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
80.00	WCM 30%W 70%M	1.122

Total Length: 80.00 ft      Total Volume: 1.122 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW w as .15 @ 63 degrees

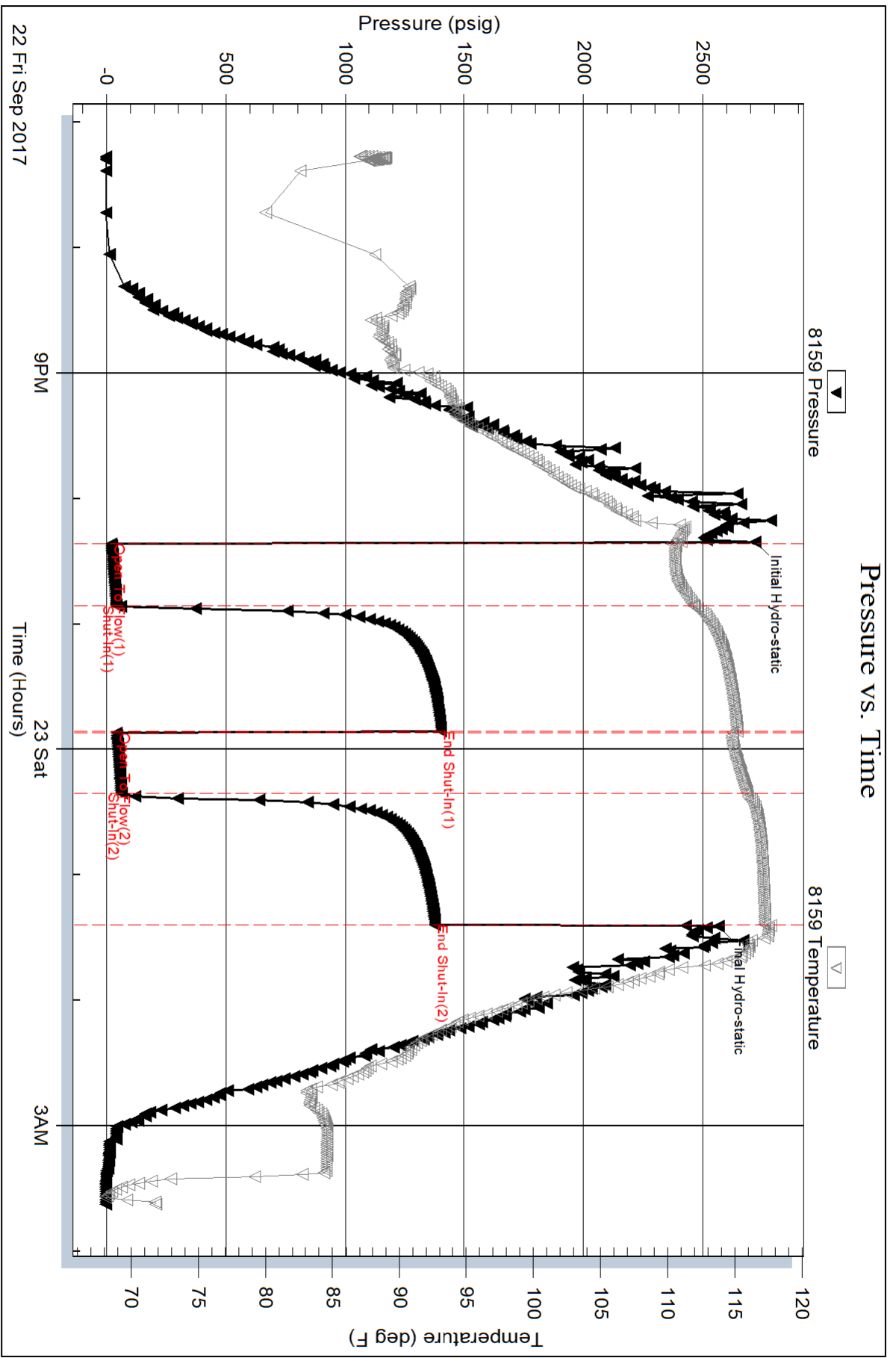
Serial #: 8159

Inside

Vincent Oil Corporation

Keough 7-34

DST Test Number: 5



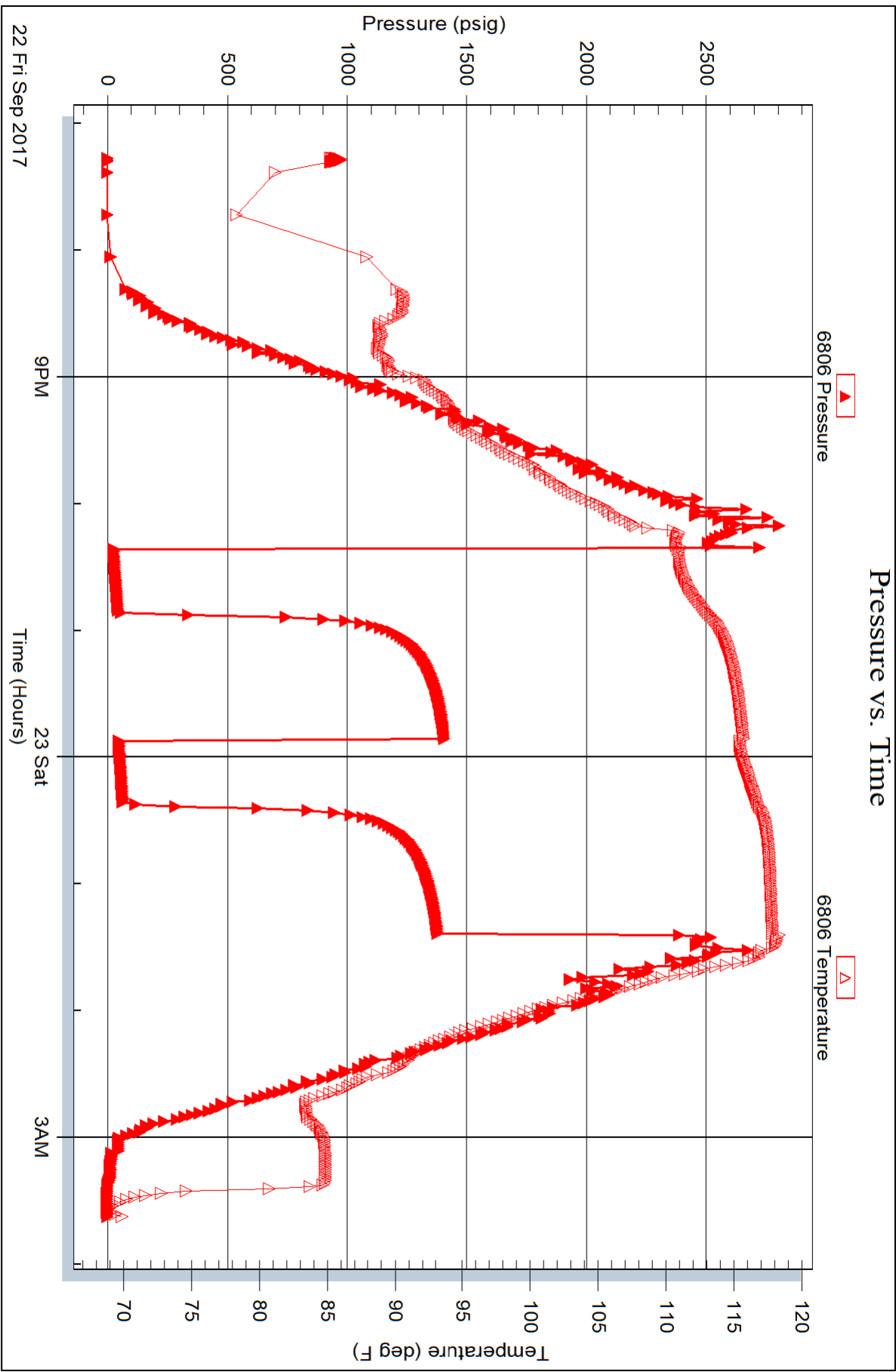


Serial #: 6806

Outside Vincent Oil Corporation

Keough 7-34

DST Test Number: 5





Scale 1:240 Imperial

Well Name: Keough 7-34  
Surface Location: NE NE NE SW 34-28s-23w  
Bottom Location:  
API: 15-057-20985-00-00  
License Number: 5004  
Spud Date: 9/11/2017 Time: 8:00 PM  
Region:  
Drilling Completed: 9/23/2017 Time: 2:09 PM  
Surface Coordinates: 2585 FSL & 2409 FWL  
Bottom Hole Coordinates:  
Ground Elevation: 2535.00ft  
K.B. Elevation: 2547.00ft  
Logged Interval: 4250.00ft To: 5370.00ft  
Total Depth: 5370.00ft  
Formation: Mississippian  
Drilling Fluid Type:

#### 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 7-34  
Location: NE NE NE SW 34-28s-23w API: 15-057-20985-00-00  
Pool: Development-Pool Extension Field: Mulberry Creek  
State: Kansas Country: USA

#### CONTRACTOR

Contractor: Duke Drilling Co., Inc.  
Rig #: 1  
Rig Type: Rotary  
Spud Date: 9/11/2017 Time: 8:00 PM  
TD Date: 9/23/2017 Time: 2:09 PM  
Rig Release: 9/24/2017 Time: 5:00 PM

#### LOGGED BY

Company: Vincent Oil Corporation  
Address:  
Phone Nbr: 316.262.3573  
Logged By: Geologist Name: Tom Dudgeon

#### SURFACE CO-ORDINATES

Well Type: Vertical  
Longitude: 99.8225446  
Latitude: 37.5644042

Longitude: -99.8235448  
 N/S Co-ord: 2585 FSL  
 E/W Co-ord: 2409 FWL

Latitude: 37.5044043

### ELEVATIONS

K.B. Elevation: 2547.00ft      Ground Elevation: 2535.00ft  
 K.B. to Ground: 12.00ft

### TOTAL DEPTH

Measurement Type:	Measurement Depth:	TVD:
RTD	5370.00	5372.00
LTD	5372.00	5372.00

### DRILLING FLUID SUMMARY

Type	Date	From Depth	To Depth
	9/23/2017	0.00ft	0.00ft

### CASING SUMMARY

	Surface	Intermediate	Main		
Bit Size	12.25 in		12.25 in		
Hole Size	7.88 in		7.88 in		
	Size	Set At	Type	# of Joints	Drilled Out At
Surf Casing	8.625 in	689 ft	23#	16	9/12/2017 8:00 PM
Int Casing					
Prod Casing	4.5 in	5369 ft	11.6#	119	

### CASING SEQUENCE

Type	Hole Size	Casing Size	At
Surface	12.25 in	8.63	689.00 ft
Production	7.88 in	4.50	5369.00 ft

### OPEN HOLE LOGS

Logging Company: ELI Wireline  
 Logging Engineer: Jeff Luebbers  
 Truck #: 922339  
 Logging Date: 9/23/2017      Time Spent: 6  
 # Logs Run: 4      # Logs Run Successful: 4

### LOGS RUN

Tool	Logged Interval	Logged Interval	Hours	Remarks	Run #
DI	0.00ft	5370.00ft	2.00		1
CNEU/DEN/PE	4250.00ft	5370.00ft	2.00		1
MICRO	4250.00ft	5370.00ft	4.00		2
SONIC	0.00ft	5370.00ft	4.00		2

### LOGGING OPERATION SUMMARY

Date	From	To	Description Of Operation
9/23/2017	0.00ft	0.00ft	Logs Ran Successfully

### NOTES

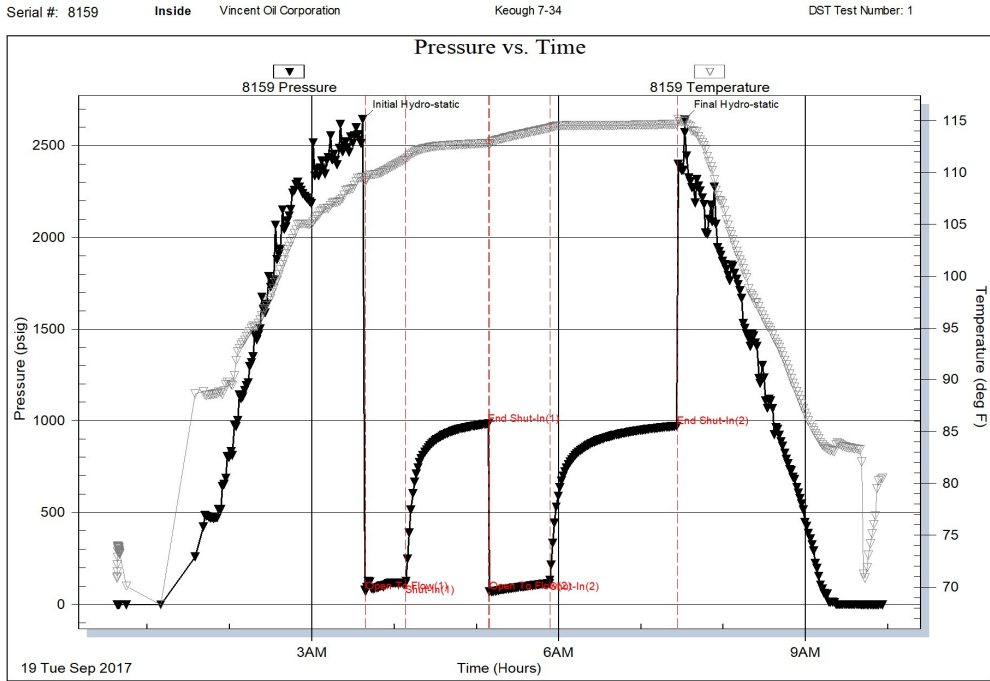
Mud pump clutch failure at 5338', down 4 hrs, replaced, circulated 1 hour to clean hole, drilled ahead.

TOP	Depth	Datum	Struct.
HBR	4360	-1813	-5
BL	4497	-1950	-5
LKC	4508	-1961	-6
MC	4699	-2152	-9
STARK	4843	-2296	-5
HUSH	4885	-2338	-5
BKC	4963	-2416	-8
MARM	4984	-2437	-9

PAW	5052	-2505	-7
LAB	5078	-2531	-8
CHER	5098	-2551	-5
B/PENN	5197	-2650	-4
MISS	5215	-2668	-5

Keying off the Keough 6-34, in the SW NW NE SW of the same section.

### DST #1

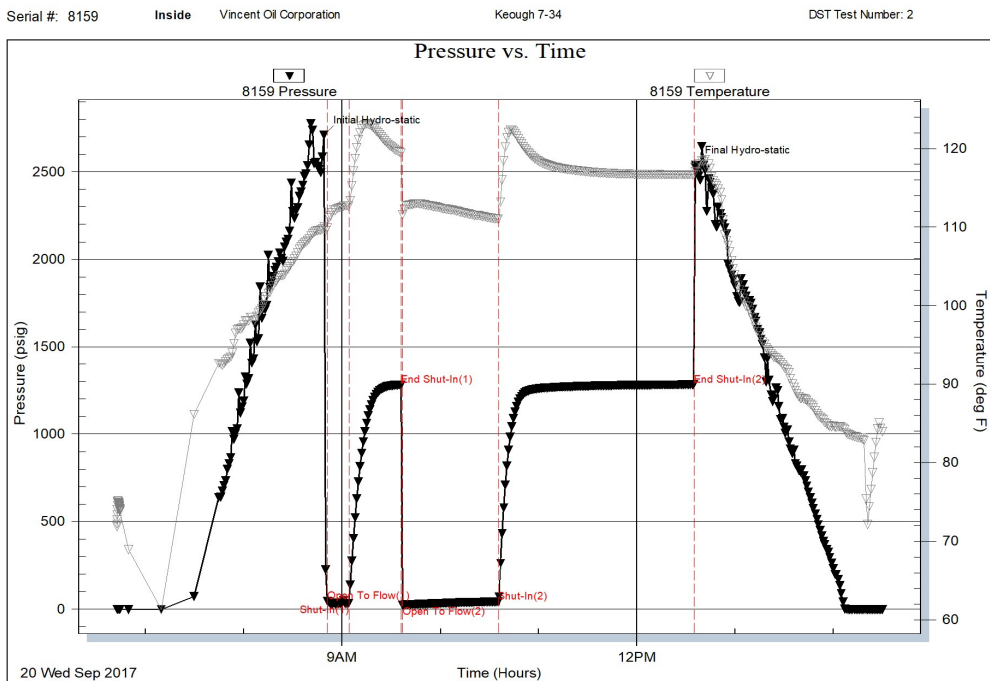


Trilobite Testing, Inc

Ref. No: 57828

Printed: 2017.09.19 @ 10:06:54

### DST #2



Trilobite Testing, Inc

Ref. No: 57829

Printed: 2017.09.20 @ 14:41:45

### DST #3

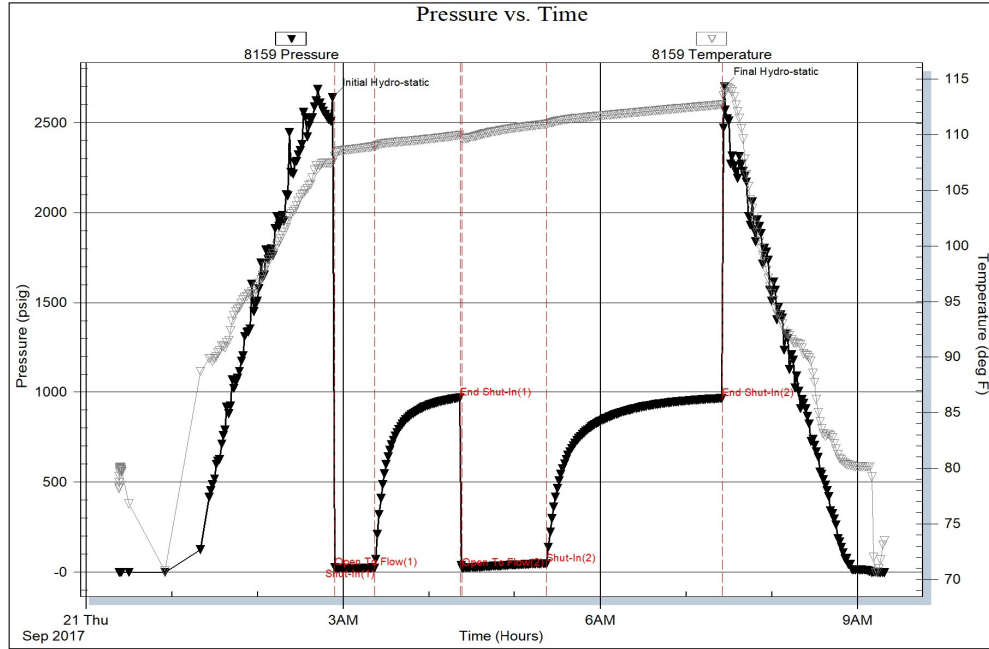
Serial #: 8159

Inside

Vincent Oil Corporation

Keough 7-34

DST Test Number: 3



Trilobite Testing, Inc

Ref. No: 57830

Printed: 2017.09.21 @ 09:29:01

### DST #4

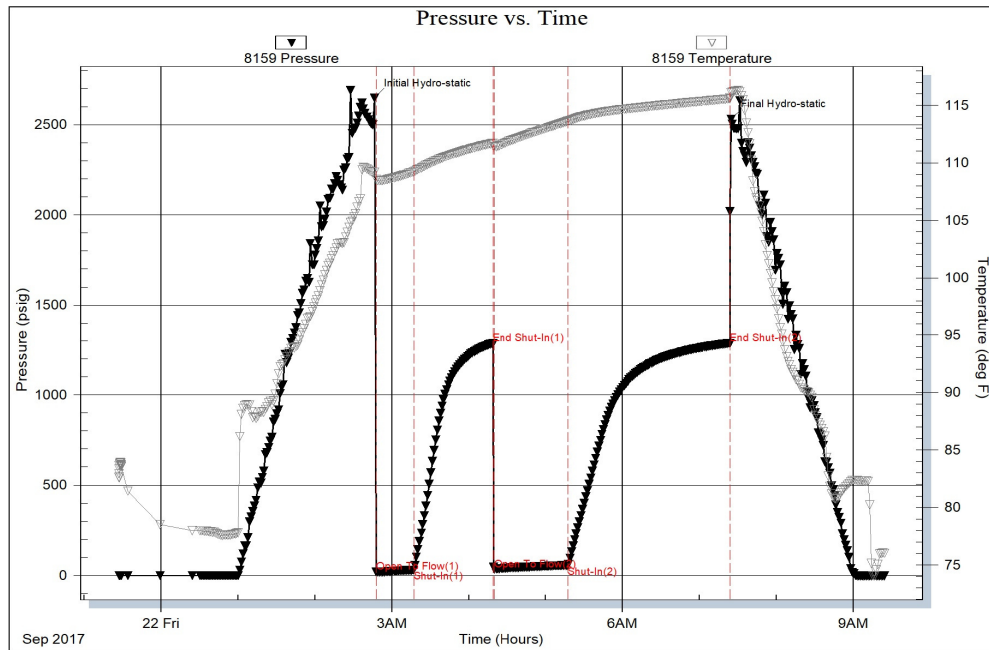
Serial #: 8159

Inside

Vincent Oil Corporation

Keough 7-34

DST Test Number: 4



Trilobite Testing, Inc

Ref. No: 57831

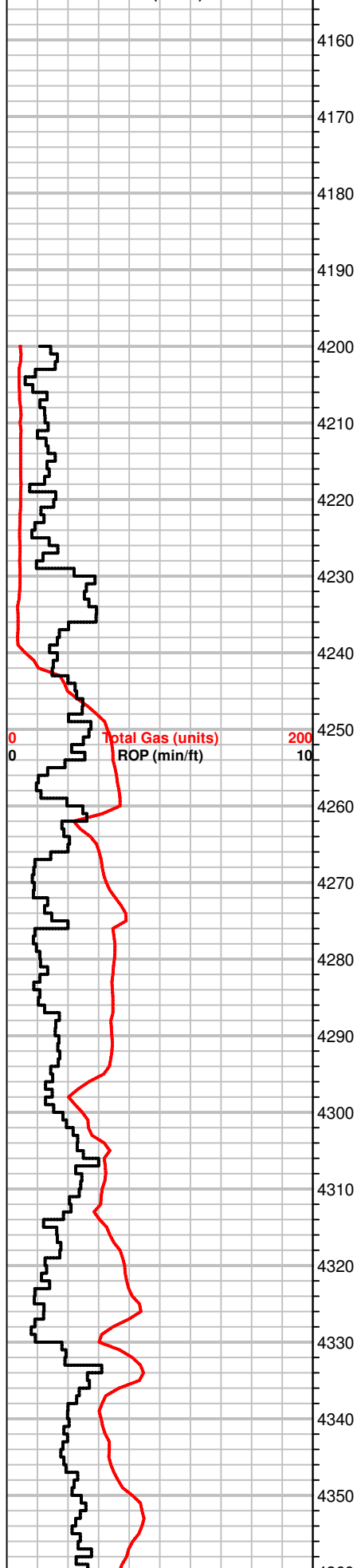
Printed: 2017.09.22 @ 09:53:32

### DST #5



1:240 Imperial

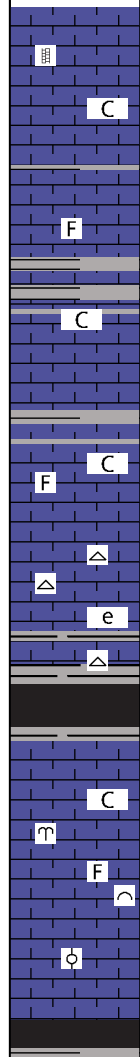
Total Gas (units)  
ROP (min/ft)



HBR 4360  
(-1819)(-5)

GEO ON LOCATION @ 3:00 PM 9/16/2017

Gas detection  
equipment: Bloodhound  
Unit 5258  
provided by Bluestem  
Labs



WS-PS, crm to tan, f-xln, sugary/gritty txt in pard, fossils, firm, some pcs chalky, calcite veins, NS

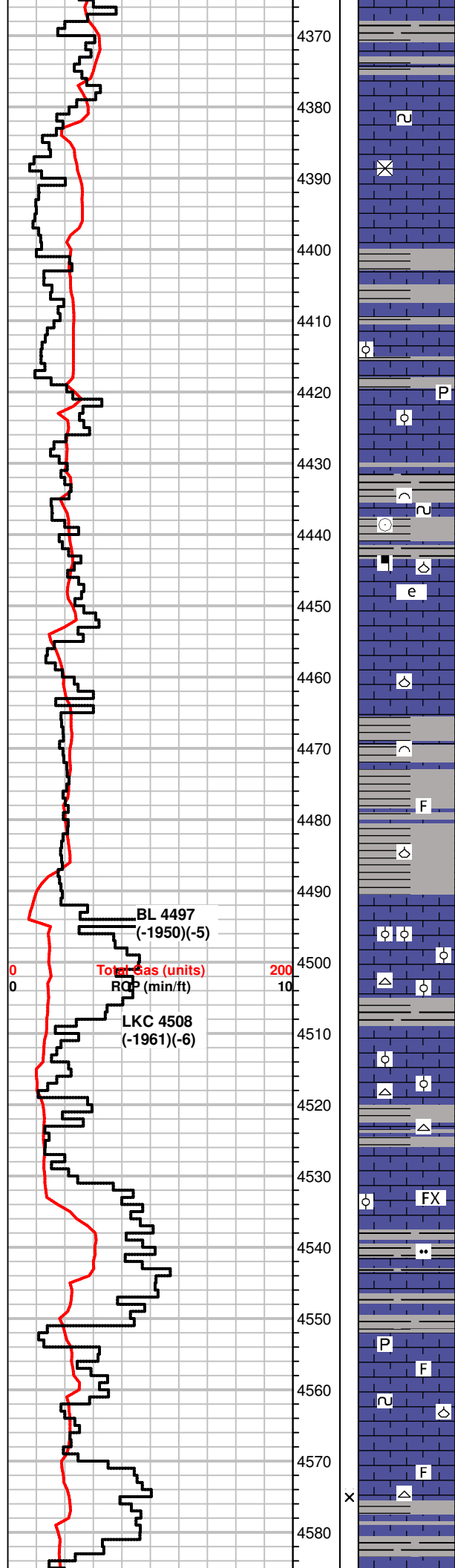
WS-PS, crm to tan, f-xln, MS, crm to brn, f-xln, chalky to shaly, pcs fossilif., SH, gray, green

MS-WS, crm to scatt dk. gray, f to m-xln, chalky, some pcs dense, scatt fossils, SH, rare dk. gray, grays

MS-WS, crm to tan, f-xln, firm, gritty to earthy txt, rare fossils, Chert, wht, fossils rare, NS  
SH, grays

SH's, dk. gray to gray, silty, carbonaceous in part, rare blk pcs  
MS-WS, crm to gry, f-xln, fossils, fulsilinids(whole and frgmts), sli. chalky in part, NS

SH, dk gray, blk, rare gas bubbles



MS-WS, crm to tan, f-xln, some m-xln, gritty txt, glauc, fossils, soft chalky to dense pcs, rare Chert, white, NS

MS-WS, gray to crm, f-xln to mic-xln, dense, glauc specs, most pcs firm, friable, NS

MS, crm to off white, f-xln, earthy to chalky, some pcs shaly, dense to friable/soft, scatt mineral specs, some pcs gray SH scatt

WS-PS, off white to crm, m-xln, m-gr oolitic txt, firm to hard, fossils, rare SH, green, pyrite

SH, blk, gray, striated, sli carb pcs  
MS-WS, crm to gray, f-xln, firm/friable to dense, tite fossilif pcs (brachs, crinoids), glauc/mineral specs, NS, dull fluor

MS, crm to tan, f-xln, earthy, gritty txt in some pcs, hard, scatt fossils, Chert frgmts, wht scatt SH, gray

MS-WS, gray to crm, f-xln, chalky matrix, dark m-gr rinded ooids, soft to firm, fossils,

SH, gray, green

MS-WS, gray to crm, firm to hard, m to f-gr oolitic pcs, some w/ dark concentric rings, fossils  
SH, gray, green, scatt dk. gray

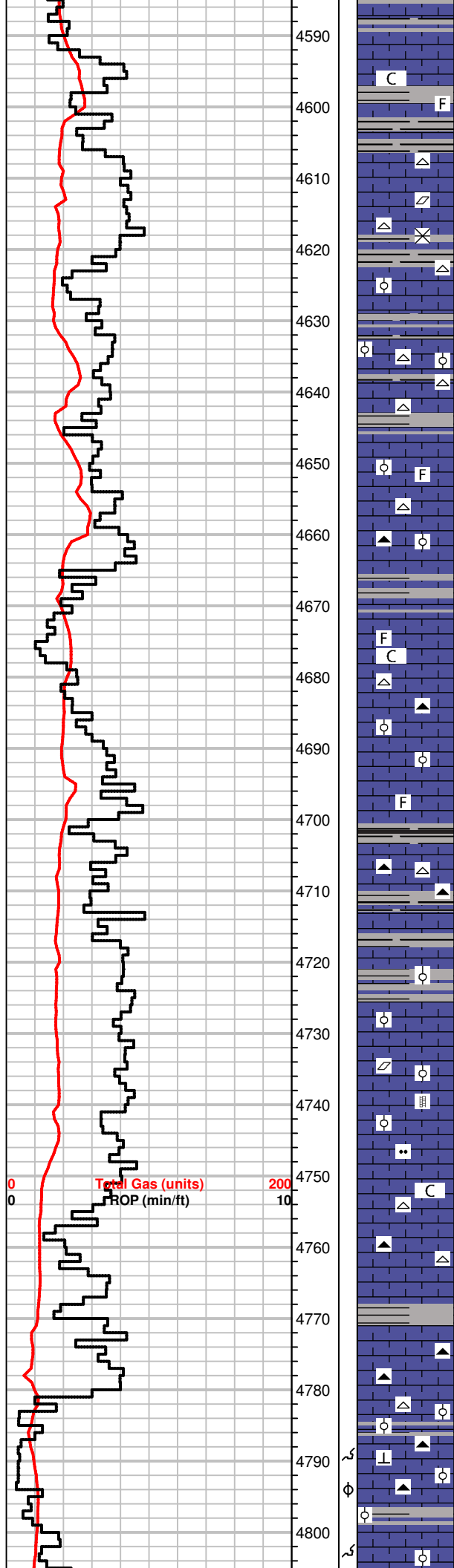
MS-WS, crm to tan, f-xln to earthy/massive txt, dense, scatt candy pcs, rare fossils, Chert, wht  
Scatt SH, gray

influx, MS, crm, f-xln, dense, chert/fossil frgmts, scatt oolitic pcs, f-gr ooids in dense calcite matrix, NS  
scatt SH gray, silty in part

SH, grays, pyrite, silty  
MS, crm to tan, vf-xln, dense, pyrite/gluac specs, scatt fossils, NS

MS-WS, crm to off white, f to m-xln, gritty txt, dense, hard, fossils (fusilinids), some mic-xln, massive brn pcs, rare Chert, wht, scatt SH, gray, green





SH, sea green, gray  
 MS, crm to lt. gray, f-xln, gritty/sugary txt, dense to chalky pcs, fossils, Chert frgmts, wht, rare co. qtz gr's. angular

MS, crm, f-xln, chalky, A.A., influx MS, gray, mic to f-xln, firm to dense, mineral inclusions, silty in part, calcite, Chert, wht. rare SH, blk

SH, blk, gray, red  
 MS-WS, crm to gray, f-xln, girty/earthy txt, some pcs massive, dense, oolitic, fossils, some in a chalky matrix, Chert, wht

MS, crm to tan, f-xln, massice, dense to chalky matrix, fossils, some fossils, Chert, brn  
 rare SH, gray, green

MS, crm to tan, f-xln, lesser tan, friable, chalky, firm  
 Chert, gray, brn, blocky, white fossils

rare SH, blk, green, rare gas bubbles  
 MS, crm to gray, vf-xln, sugary txt, firm to hard, scatt fossils, sli. chalky, Chert, brn, wht, fossils

MS, A.A., influx, gray, m-xln, m-gr oolitic pcs, soft, fossils, sub oolitic in part, silty  
 SH, gray, pyrite

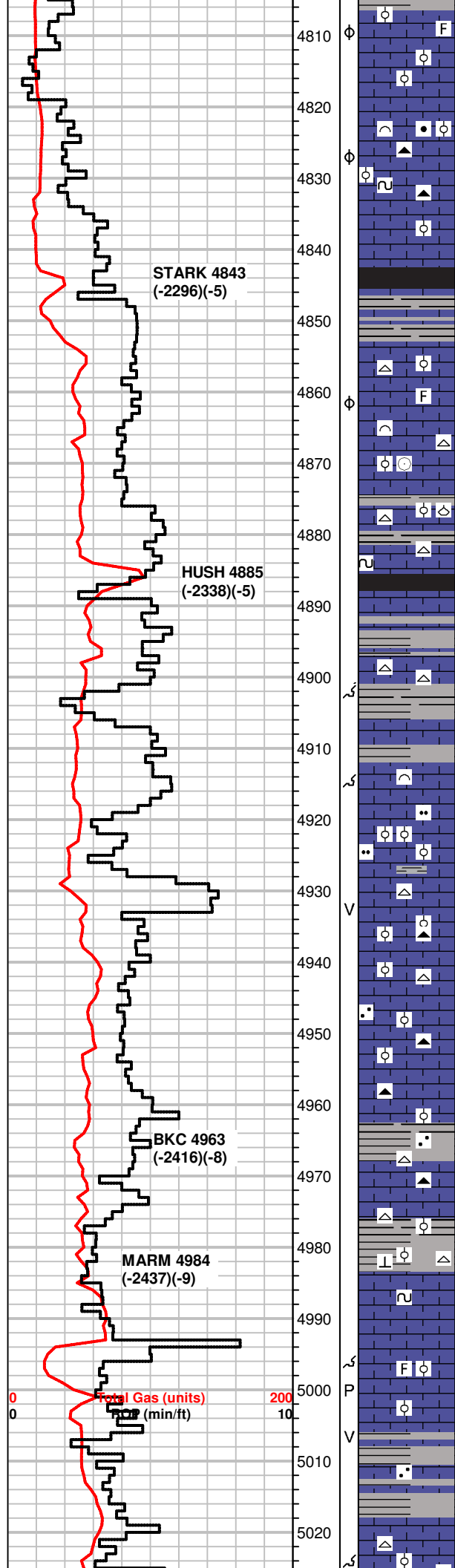
MS, lt. tan to crm, mic-xln, massive, dense, rare fossils, calcite veins, scatt SH, blk, gray, green, silty

MS, crm to lt. tan, f-xln, some chalky, friable pcs, scatt fossils, Chert, gray, milky wht  
 SH, gray, brn, silty

rare SH, gray  
 MS, lt. gray to crm, vf-xln, sli chalky in part, fossils, some pcs mic-xln, dense, scatt minerals, Chert, opaque to brn, fossilif., NS

WS-PS, crm to off white, f-xln, firm to hard, oolitic, m-gr to f-gr ooids in lite calcite mtrx, some pcs friable, calcite rhombs, scatt MS, A.A., Chert, brn, opaque, fossils

SH's, gray



MS-WS, crm to gray, f to m-xln, some chalky pcs, most moldic/oolitic, f to co-gr ooids, firm, fossils, NS

MS-WS, crm to brn, some mic-xln, dense, massive, fossilif pcs, carrying oolitic WS w/ dark ringed and fr-gr ooids in chalky to tite matrix, glauc/minerals, scatt Chert, brn

SH, blk, gray, green

MS, crm to brn, f-xln to massive, dense, sub oolitic pcs, scatt fossils, NS, rare Chert, wht, fossils

MS-WS, crm to tan, f-xln, some brn, mic-xln, chalky to dense, fossils (crinoids, brachs, ooids), some pcs oolitic, m-gr, firm, dull fluor, NS, Chert, opaque, fossils, glauc

SH, blk, gray

Scatt SH, gray, silty

MS, crm to tan, f-xln, some dense, fossils, scatt oolitic pcs in tite calcite matrix, Chert, white

MS, tan to crm, f-xln, dense, hard, sub oolitic to massive (featureless), some gray gritty pcs

MS, off white to crm, rare gray, silty MS, some pcs chalky, most dense, sub oolitic pcs scatt, hard, dull fluor, NS, Chert, tan

MS-WS, crm to tan, lt. gray, f to m-xln, gritty txt in part, some pcs oolitic, fossils, Chert, brn  
SH, dk. gray to grat, sandy

SH, gray, WS, crm to gray, gritty, f-xln, firm to hard, scatt fossils, NS

MS, gray to crm, f-xln to chalky, suboolitic, dull fluor, NS, Chert, wht, brn, fossilif., SH, gray, limey

MS, gray to crm, mic-xln, dense, gritty looking, rare oolites in tite calcite mtrx, Chert, wht,  
SH, gray, gritty/silty

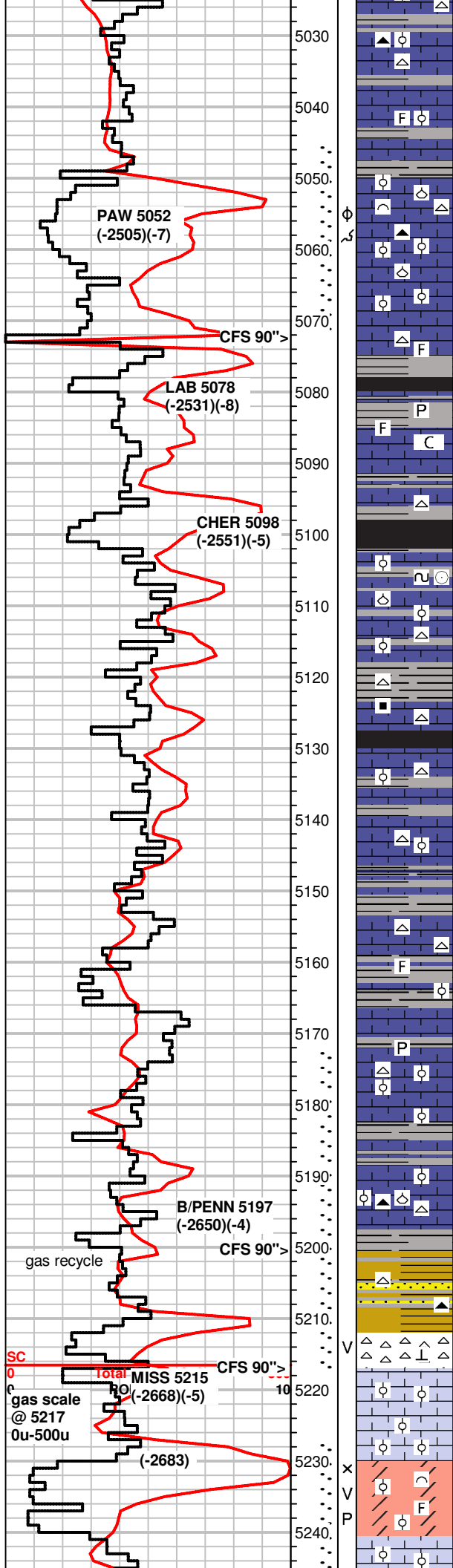
MS, crm to tan, scatt gray pcs, chalky to silty txt, soft, friable pcs, rare dense fossilif pcs, rare glauc  
scatt SH, grays

SH, dk. gray, MS, crm to brn, mic to f-xln, denes to friable, scatt fossils, sub oolitic pcs scatt, NS

MS-WS, tan to brn, crm, f-xln, dense, pcs A.A., some gray, m-xln, gritty txt, hard, dull fluor, NS, scatt SH, gray

SH, grays, some pcs limey, silty  
MS-WS, crm to brn, f-xln, sub oolitic, fossilif., scatt glauc/minerals,

**DST #1 5045-5072**  
**Pawnee**  
 30-60-45-90  
 SB BOB/2min  
 NBB  
 SB BOB/3min  
 WBB surf blow  
 640' GIP  
 Rec:288' Fluid-  
 226' GOWCM  
 (30g,10o,20w,40m)  
 62' MCW (5m,95w)  
 IH 2641#  
 IF 70-113#



NS, Chert, opaque, tan, fossils

MS-WS, crm to tan, f- to mic-xln, dense to firm, sli. chalky pcs, sub oolitic in part, some pcs w/fossil frgmts, Chert, opaque rare SH, gray

MS, off white to crm, some lt. tan, chalky to f-xln, sub oolitic, mostly friable, some pcs dense, fossils scatt, SH, green, rare blk, gray, pyrite

MS-WS, crm to off wht, chalky to f-xln, suboolitic, fossils/bioclastic in part, some pcs dense, **rare very spty bright fluor, 1 pc inst. cut, good odor in bag, rare spotty stn in dry**, chert, wht, tan

WS-PS, tan to crm, f to mic-xln, dense oolitic in tite calcite mtrx, **fair odor in bag, rare very spty bright fluor, no cut**

SH, rare blk, gray, green, pyrite, some washed red?

MS-WS, crm to brn, mic to f-xln, some pcs chalky, scatt fossilif. pcs, sub oolitic in part, dense, some friable, pyrite, dull fluor, NS

MS-WS, vf-xln,gritty txt, fossil frgmts, sub oolitic, m-gr ooids, dense, NS, Chert, opaque, tan, fossils

SH, blk, gas bubbles, gray, scatt green

MS-WS, crm to gray, f-xln to earthy, some massive, dense, fossils (crinoids,brachs,ooids), calcite/glauc, Chert, bone wht to opaque, brn

MS, tan to crm, f-xln to massive, dense, fossil/oolitic in part, m-gr ooids in tite mtrx, Chert, wht

SH's, dk.gry to blk, carb

MS, crm to gray, f-xln, firm to hard, semopcs dense, fossils, dull fluor, NS, scatt Chert, wht, fossils

SH, blk, gray

WS-MS, crm to brn, f-xln, firm to hard, mottled, brn oolitic pcs, some suboolitic/fossilif., most pcs dense, cherty in part, scatt

SH, blk, gray, MS, crm to tan, f-xln to massive, rare fossils, firm to friable, mineral fluor, NS, Chert, wht fossils

SH, blk, gray, carb. flakes, pyrite

MS, crm to brn, some gray, mottled, f-xln, chalky to dense, fossils, Chert frgmts, sub oolitic, shaly in part

Inc, SH, gray, blk, limey pcs, fossils

MS-WS, crm to gray, f-xln, dense, scatt fossils, tite, some pcs sucrosic, dolomitic

SH, blk, green

MS-WS, crm to gray, f-xln, hard/dense, sub oolitic, fossils, pyrite, Chert, wht, opaque

MS, crm to tan, f- to mic-xln, massive to sli. chalky txt, some firm, most pcs dense, scatt fossils, **v. rare spotty bright fluor, 1 pc w/ milky cut**

SH, gray, blk, green, sandy in part

MS, crm to brn, f-xln, dense, friable, fossilif. gritty txt, scatt mineral specs, **scatt bright fluor, inst. cut(10/12pcs), faint odor**, Chert, wht, gray, brn

SH, sea green, mustard yellow, blk, gray

SH, varicolored, striated, sandy pcs

scatt Chert, wht, blk, opaque, rare SS clusters, green, f-gr

Chert, bone wht, grn, brn, blk, fossils, calcareous pcs, **faint odor in bag, dull mineral fluor, 1 pc w/ streaming cut, rare stn dry**

MS-WS, off white to crm, f-xln, dense, oolitic/fossilif, dull fluor, NS

MS-WS, off wht to crm, f-xln, dense, oolitic(m-gr) to sub oolitic, tite, rare Dolo, gray, vf-xln, hard, dull fluor, NS

Dolo, gray to crm, f-xln, massive to sugary txt, soft to firm, scatt f-gr oolitic pcs, dark ooids, **good odor in bag, min. to bright fluor, streaming cut from sel. pcs, some w/ resid. ring cut, spty to even stn, bleeding oil, rare live oil in tray**

ISIP 982#  
 FF 69-130#  
 FSIP 970#  
 FH 2641#  
 Temp 115°F  
 API RW .12 @ 83°F  
 CI 58,000ppm

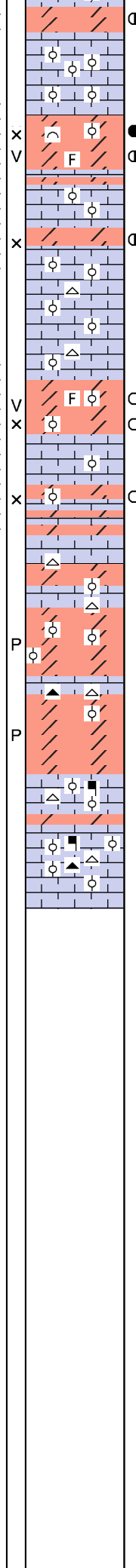
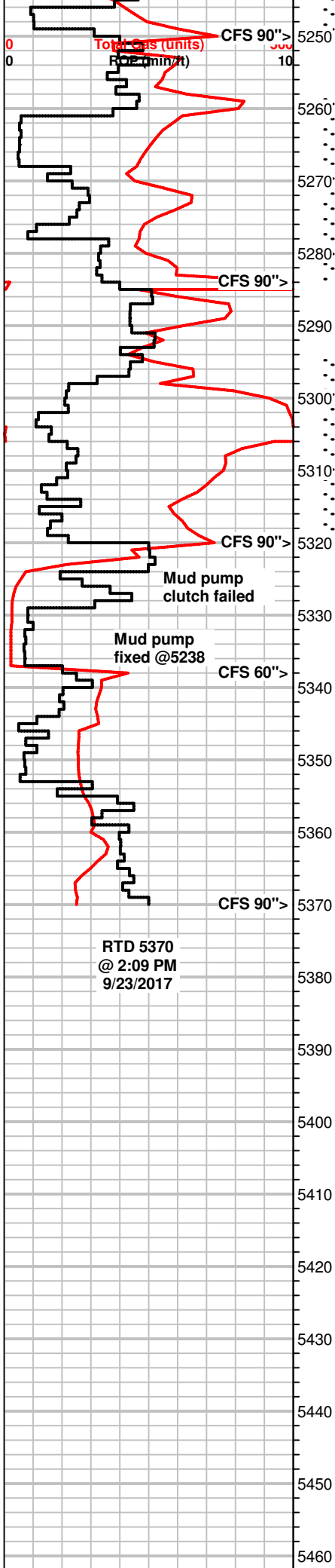
+120 UGK, +90 UGK recycle

DST #2 5172-5217  
 B/Penn Morrow  
 SB BOB/1min  
 NBB  
 SB BOB/immed,  
 GTS/30sec GA 1/4in Ch.  
 38.708 MCF/10min  
 49.813 MCF/20min  
 54.572 MCF/30min  
 59.331 MCF/40min  
 62.504 MCF/50min  
 65.677 MCF/60min  
 NBB  
 5149' GIP  
 Rec: 20' SGCM(2g,98m)  
 IH 2708#  
 IF 45-33#  
 ISIP 1280#  
 FF 21-42#  
 FSIP 1281#  
 FH 2538#  
 Temp 117°F

+50 UGK, +30 UGK recycle

+90 UGK, +30 UGK recycle

+350 UGK, + 215 UGK recycle



5250' Dolo, crm to gray, f-xln, gritty to sugary txt, scatt fossils(carrying?), **fair odor, bleeding oil, inst cut few pcs**

5260' WS-PS, crm to off wht, f-xln, m-gr oolitic, scatt fossils, hard to dense, some pcs brittle, dull fluor, NS

5270' Dolo, crm to brn, f to m-xln, scatt sucrosic pcs, fossilif. to oolitic pcs, firm to friable, **fair odor, bleeding oil/gas bubbles, live oil in tray, partial to sat. stn, stream to milky cut**, int. xln to vuggy por.

5280' WS-PS, crm to off wht, f-xln, tite, oolitic, NS

5290' Dolo, crm to brn, f-xln, vf sucrosic to fn gr-gritty txt, **spotty to even stn, live oil, fair odor, inst. cut**, int-xln por.

5300' MS-PS, off wht to crm, mic-xln, massive to earthy pcs, m-gr oolitic, fossils lesser towards base glauc specs, dull fluor, NS

5310' Dolo, tan to brn, f-xln, earthy to oolitic, m-gr pcs, limey in part, **rare bright fluor, slow milky cut, rare inst. cut, spotty stn, no odor, sat. dry**,

5320' MS-WS, crm to tan, f-xln, sub oolitic to earthy, dull fluor, NS

5330' Scatt Dolo, tan to brn, f-xln, oolitic, firm to brittle, **rare bright fluor, no odor, no stn, resid. ring cut**, limey in part

5340' MS-WS, crm to brn, f-xln, suboolitic, firm to hard

5350' Dolo, brn to gray, f-xln, f-sucrosic txt, firm to hard, some pcs scatt oolitic-dec. amt, some mineral specs, NS

5360' Dolo, lt. gray to f-xln, gritty to vf-sucrosic txt, tite, dull fluor, NS, PP por.

5370' MS-WS, gray to brn, f-xln to m-xln, mottled, some mineral specs, oolitic in part, some pcs dolomitic, NS, Chert, wht

5380' Dolo, gray to lt. tan, f-xln, gritty txt, vf-sucrosic, firm to hard, dull fluor, NS, PP por.

5390' MS-WS, gray to tan, mottled, f-xln, oolitic to fossilif., Chert, wht

5400' Dolo, gray to lt. tan, f-xln to vf-sucrosic, tite, dull fluor, NS

5410' MS-WS, scatt PS, crm to tan, some brn, f-xln to mic-xln, dense, massive to fossilif/oolitic pcs, dark minerals/ooids, dull fluor, NS

+215 UGK, +100 UGK recycle

DST #3 5227-5250  
MISS  
30-60-60-120  
SB BOB/10sec  
NBB  
SB BOB/immed GTS/1min  
GA 1/8in Ch  
6.513 MCF/10min  
6.887 MCF/20min  
7.635 MCF/30min  
8.010 MCF/40min  
8.758 MCF/50min  
9.133 MCF/60min  
5153' GIP  
Rec: 80' OCM(20o,80m)  
IH 2640#  
IF 26-23#  
ISIP 968#  
FF 23-47#  
FSIP 965#  
FH 2699#  
Temp 114°F

DST #4 5258-5284  
MISS  
30-60-60-120  
FB BOB/min  
NBB  
SB BOB/1min  
NBB  
3934' GIP  
Rec: 90' GOCM (20g,20o,80m)  
IH 2674#  
IF 19-29#  
ISIP 1285#  
FF 33-55#  
FSIP 1286#  
FH 2531#  
Temp 116°F

DST #5 5294-5320  
MISS  
30-60-60-120  
WB/blt to 1.5 in  
NBB  
WB/1 in  
NBB  
Rec: 80' WCM (30w,70m)  
IH 2720#  
IF 20-41#  
ISIP 1404#  
FF 43-62#  
FSIP 1376#  
FH 2566#  
Temp 117°F  
API Rw .15 @ 63°F  
CI 58,000ppm

