



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1189739  
OIL & GAS CONSERVATION DIVISION

Form ACO-1

August 2013

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       SIOW
- Gas       D&A       ENHR       SIGW
- OG       GSW       Temp. Abd.
- 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 ENHR       Conv. to SWD
- Plug Back       Conv. to GSW       Conv. to Producer
- Commingled      Permit #: \_\_\_\_\_
- Dual Completion      Permit #: \_\_\_\_\_
- SWD      Permit #: \_\_\_\_\_
- ENHR      Permit #: \_\_\_\_\_
- GSW      Permit #: \_\_\_\_\_

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - \_\_\_\_\_

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
- Geologist Report Received
- UIC Distribution
- ALT  I  II  III Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

1189739

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 <i>(Attach Additional Sheets)</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
Cores Taken	<input type="checkbox"/> Yes <input type="checkbox"/> No			
Electric Log Run	<input type="checkbox"/> Yes <input type="checkbox"/> No			
List All E. Logs Run:				

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				

Did you perform a hydraulic fracturing treatment on this well?  Yes  No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?  Yes  No *(If No, skip question 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)*

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD:      Size: \_\_\_\_\_ Set At: \_\_\_\_\_ Packer At: \_\_\_\_\_ Liner Run:  Yes  No

Date of First, Resumed Production, SWD or ENHR: \_\_\_\_\_ Producing Method:  
 Flowing    Pumping    Gas Lift    Other *(Explain)* \_\_\_\_\_

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

<b>DISPOSITION OF GAS:</b> <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	<b>METHOD OF COMPLETION:</b> <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	<b>PRODUCTION INTERVAL:</b> _____ _____
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Form	ACO1 - Well Completion
Operator	Vincent Oil Corporation
Well Name	Dufford 2-32
Doc ID	1189739

All Electric Logs Run

Dual Induction
Density -Neutron
Micro-log
Sonic

Form	ACO1 - Well Completion
Operator	Vincent Oil Corporation
Well Name	Dufford 2-32
Doc ID	1189739

Tops

Name	Top	Datum
Heebner Shale	4398	(-1815)
Brown Limestone	4535	(-1952)
Lansing	4546	(-1963)
Stark Shale	4900	(-2317)
Pawnee	5128	(-2545)
Cherokee Shale	5176	(-2593)
Base Penn Limestone	5288	(-2705)
Mississippian	5346	(-2763)
RTD	5450	(-2867)



# ALLIED OIL & GAS SERVICES, LLC 059989

Federal Tax I.D.# 20-5975804

REMIT TO P.O. BOX 93999  
SOUTHLAKE, TEXAS 76092

SERVICE POINT:  
Medicine Lodge, KS

DATE <u>10-27-2013</u>	SEC <u>32</u>	TWP <u>29S</u>	RANGE <u>74W</u>	CALLED OUT <u>8:00 AM</u>	ON LOCATION <u>11:30 PM</u>	JOB START <u>2:00 PM</u>	JOB FINISH <u>2:45 PM</u>
LEASE <u>Dufflow</u>		WELL # <u>2-32</u>	LOCATION <u>Hwy 54 &amp; Clark Co. Line</u>		COUNTY <u>Fore</u>	STATE <u>KS</u>	
OLD OR <u>(NEW)</u> (Circle one)			<u>1 W, 1 1/2 N, 1/2 W, S. 1/4</u>				

CONTRACTOR Duke #1 OWNER Vincent Oil Co.

TYPE OF JOB Surface

HOLE SIZE 12 1/4 T.D. 653' CEMENT AMOUNT ORDERED 175 sy 60' 40' 8 1/2 Gal

CASING SIZE 8 3/4 24 # DEPTH 653' 3% cc + 1/4 # Flaser, 125 sy 1255 # + 2 #

TUBING SIZE \_\_\_\_\_ DEPTH \_\_\_\_\_ CL

DRILL PIPE \_\_\_\_\_ DEPTH \_\_\_\_\_

TOOL \_\_\_\_\_ DEPTH \_\_\_\_\_

PRES. MAX 11000 MINIMUM \_\_\_\_\_ COMMON CLASS B 125 sy @ 17.96 2,237.50

MEAS. LINE \_\_\_\_\_ SHOE JOINT 421 POZMIX \_\_\_\_\_ @ \_\_\_\_\_

CEMENT LEFT IN CSG. \_\_\_\_\_ GEL \_\_\_\_\_ @ \_\_\_\_\_

PERFS. \_\_\_\_\_ CHLORIDE 9 sy @ 64.00 576.00

DISPLACEMENT 39 1/2 bbls of freshwater ASC \_\_\_\_\_ @ \_\_\_\_\_

EQUIPMENT DLW #2 175 sy @ 15.95 2,791.25

PUMP TRUCK CEMENTER Darin Franklin Flaser 44 # @ 2.97 130.68

# 558-555 HELPER Scott Priddy \_\_\_\_\_ @ \_\_\_\_\_

BULK TRUCK \_\_\_\_\_ @ \_\_\_\_\_

# 561-553 DRIVER David Felton \_\_\_\_\_ @ \_\_\_\_\_

BULK TRUCK \_\_\_\_\_ @ \_\_\_\_\_

# \_\_\_\_\_ DRIVER \_\_\_\_\_ @ \_\_\_\_\_

HANDLING 488.30 with @ 2.48 1,211.48

MILEAGE 504.00 tanker @ 2.60 1310.40

TOTAL 8,257.31

**REMARKS:**

Pipe on bottom & break circulator, pump 3 bbls water  
shear, mix 175 sy less cement, mix 125 sy  
oil cement, shut down, release plug, start  
displacement, slow rate of 30 bbls, lump  
plug & 39 1/2 bbls, 150-700 psi  
Shut in, cement did circulate

**SERVICE**

DEPTH OF JOB 653'

PUMP TRUCK CHARGE \_\_\_\_\_ 2,058.50

EXTRA FOOTAGE \_\_\_\_\_ @ \_\_\_\_\_

MILEAGE 35 @ 7.70 269.50

MANIFOLD Hessentel @ 275.00

high veh. 35 @ 4.40 154.00

TOTAL 2,757.00

CHARGE TO: Vincent Oil Co.

STREET \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

**PLUG & FLOAT EQUIPMENT**

8 5/8

1-Rubber Plug @ 76.25

1-BG Pile Plug @ 67.50

\_\_\_\_\_ @ \_\_\_\_\_

\_\_\_\_\_ @ \_\_\_\_\_

\_\_\_\_\_ @ \_\_\_\_\_

TOTAL 143.75

To: Allied Oil & Gas Services, LLC.  
You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

SALES TAX (If Any) \_\_\_\_\_

TOTAL CHARGES 11,158.06

DISCOUNT \_\_\_\_\_ IF PAID IN 30 DAYS

PRINTED NAME Mike Godfrey

SIGNATURE Mike Godfrey

Net \$7124.30

Thank you!!!

# QUALITY WELL SERVICE, INC.

6038

Federal Tax I.D. # 481187368

Home Office 324 Simpson St., Pratt, KS 67124

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

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

Date	11-2-13	Sec.	32	Twp.	29	Range	24	County	Fore	State	Ks	On Location	6:15 P.M	Finish	12:15 A.M	
Lease	DUFFORO		Well No.	2-32		Location	Bloom Ks 3 1/2 W S into									
Contractor	DUKE Delg #1							Owner	To Quality Well Service, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.							
Type Job	4 1/2 L.S							Charge To	Vincent Oil Corp							
Hole Size	7 7/8							T.D.	5450							
Csg.	4 1/2 11.6							Depth	5427.50							
Tbg. Size								Street								
Tool								City	State							
Cement Left in Csg.								Shoe Joint	16.10							
Meas Line								Displace	83.87 Bbl							
<b>EQUIPMENT</b>								10% Salt 5 1/2" x Gilsonite								
Pumptrk	No.	3					MIKE	Gemmon 225								
Bulktrk	No.	9					CHAO	Poz. Mix								
Bulktrk	No.							Gel.								
Pickup	No.						7000	Calcium								
<b>JOB SERVICES &amp; REMARKS</b>								Hulls								
Rat Hole	305x							Salt 24								
Mouse Hole	205x							Flowseal CC-1 7gal								
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								
Run	It's 4 1/2 11.6" csg							Sand								
SET								Handling 249								
1st = 16.10	REG G SHAOE & AFU insert							Mileage 65								
csg on bottom	Deep Ball Break Circ							4 1/2 FLOAT EQUIPMENT								
wkig 1 hr								Guide Shoe 1 EA								
Pump 3 Bbl H2O	12 Bbl M Flush 3 Bbl H2O							Centralizer 6 EA								
Plug R-M holes								Baskets								
Mix & pump	175x Powl 0 15 1/4 gal							AFU Inserts 1 EA								
SHUT DOWN	RELEASE Plug							Float Plug 1 EA TOP Rubber Plug								
Wash up tick & lines								Latch Down								
Disp 83.87 Bbl	total 2% KCL															
7000 Lit + PSI 700"								LUV 65								
plug down 12:00	1500"							Pumptrk Charge Longstring								
RELEASE & FIELD								Mileage 65								
Thank you Mike CHAO																
PLEASE CALL AGAIN																
X Signature	[Signature]															
												Tax				
												Discount				
												Total Charge				



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Vincent Oil Corp  
 155 N Market STE 700  
 Wichita KS 67202  
 ATTN: Jim Hall

**32-29-24 Ford Co**  
**Dufford # 2-32**  
 Job Ticket: 52444      **DST#: 1**  
 Test Start: 2013.10.30 @ 07:56:46

## GENERAL INFORMATION:

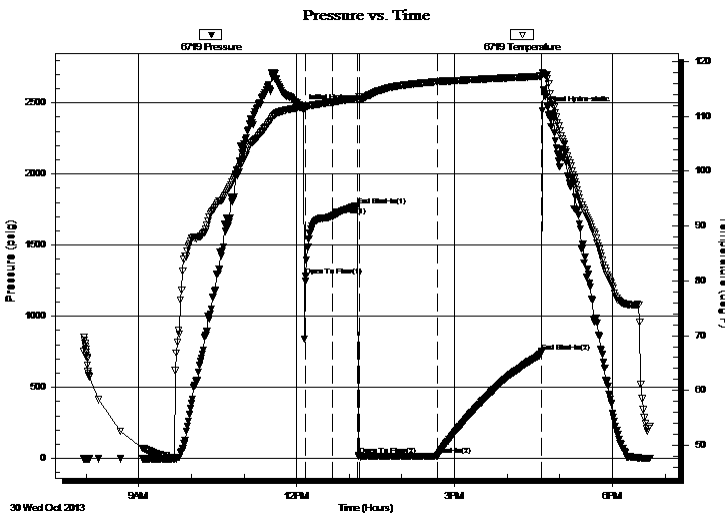
Formation: **Morrow sand**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 12:10:16  
 Time Test Ended: 18:42:46  
 Interval: **5281.00 ft (KB) To 5309.00 ft (KB) (TVD)**  
 Total Depth: 5309.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Chris Staats  
 Unit No: #47  
 Reference Elevations: 2583.00 ft (KB)  
 2571.00 ft (CF)  
 KB to GR/CF: 12.00 ft

## Serial #: 6719

Press @ Run Depth: 24.51 psig @ ft (KB) Capacity: 8000.00 psig  
 Start Date: 2013.10.30 End Date: 2013.10.30 Last Calib.: 2013.10.30  
 Start Time: 07:56:51 End Time: 18:42:46 Time On Btm: 2013.10.30 @ 12:07:01  
 Time Off Btm: 2013.10.30 @ 16:40:01

TEST COMMENT: IF: Weak blow 1/4"  
 IS: No blow back  
 FF: Strong blow BOB 26 min  
 FS: Weak surface blow back

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2460.41	111.77	Initial Hydro-static
4	1283.40	111.70	Open To Flow (1)
33	1702.82	112.60	Shut-In(1)
62	1774.95	113.27	End Shut-In(1)
64	20.40	113.63	Open To Flow (2)
154	24.51	116.35	Shut-In(2)
273	750.80	117.34	End Shut-In(2)
273	2446.14	118.02	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	560' GIP	0.00
15.00	Mud w ith oil spots	0.17

## Gas Rates

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





**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Vincent Oil Corp  
 155 N Market STE 700  
 Wichita KS 67202  
 ATTN: Jim Hall

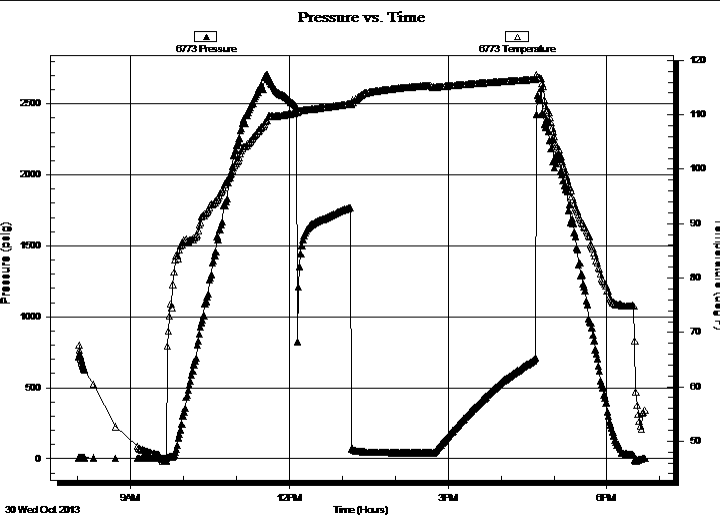
**32-29-24 Ford Co**  
**Dufford # 2-32**  
 Job Ticket: 52444      **DST#: 1**  
 Test Start: 2013.10.30 @ 07:56:46

## GENERAL INFORMATION:

Formation: **Morrow sand**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 12:10:16 Tester: Chris Staats  
 Time Test Ended: 18:42:46 Unit No: #47  
 Interval: **5281.00 ft (KB) To 5309.00 ft (KB) (TVD)** Reference Elevations: 2583.00 ft (KB)  
 Total Depth: 5309.00 ft (KB) (TVD) 2571.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 12.00 ft

**Serial #: 6773 Inside**  
 Press @ Run Depth: psig @ 5282.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2013.10.30 End Date: 2013.10.30 Last Calib.: 2013.10.30  
 Start Time: 08:00:56 End Time: 18:43:06 Time On Btm:  
 Time Off Btm:

**TEST COMMENT:** IF: Weak blow 1/4"  
 IS: No blow back  
 FF: Strong blow BOB 26 min  
 FS: Weak surface blow back



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

Recovery		
Length (ft)	Description	Volume (bbl)
0.00	560' GIP	0.00
15.00	Mud w ith oil spots	0.17

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Vincent Oil Corp

**32-29-24 Ford Co**

155 N Market STE 700  
Wichita KS 67202

**Dufford # 2-32**

Job Ticket: 52444

**DST#: 1**

ATTN: Jim Hall

Test Start: 2013.10.30 @ 07:56:46

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 10.39 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 7200.00 ppm

Filter Cake: 0.02 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	560' GIP	0.000
15.00	Mud with oil spots	0.168

Total Length: 15.00 ft      Total Volume: 0.168 bbl

Num Fluid Samples: 0

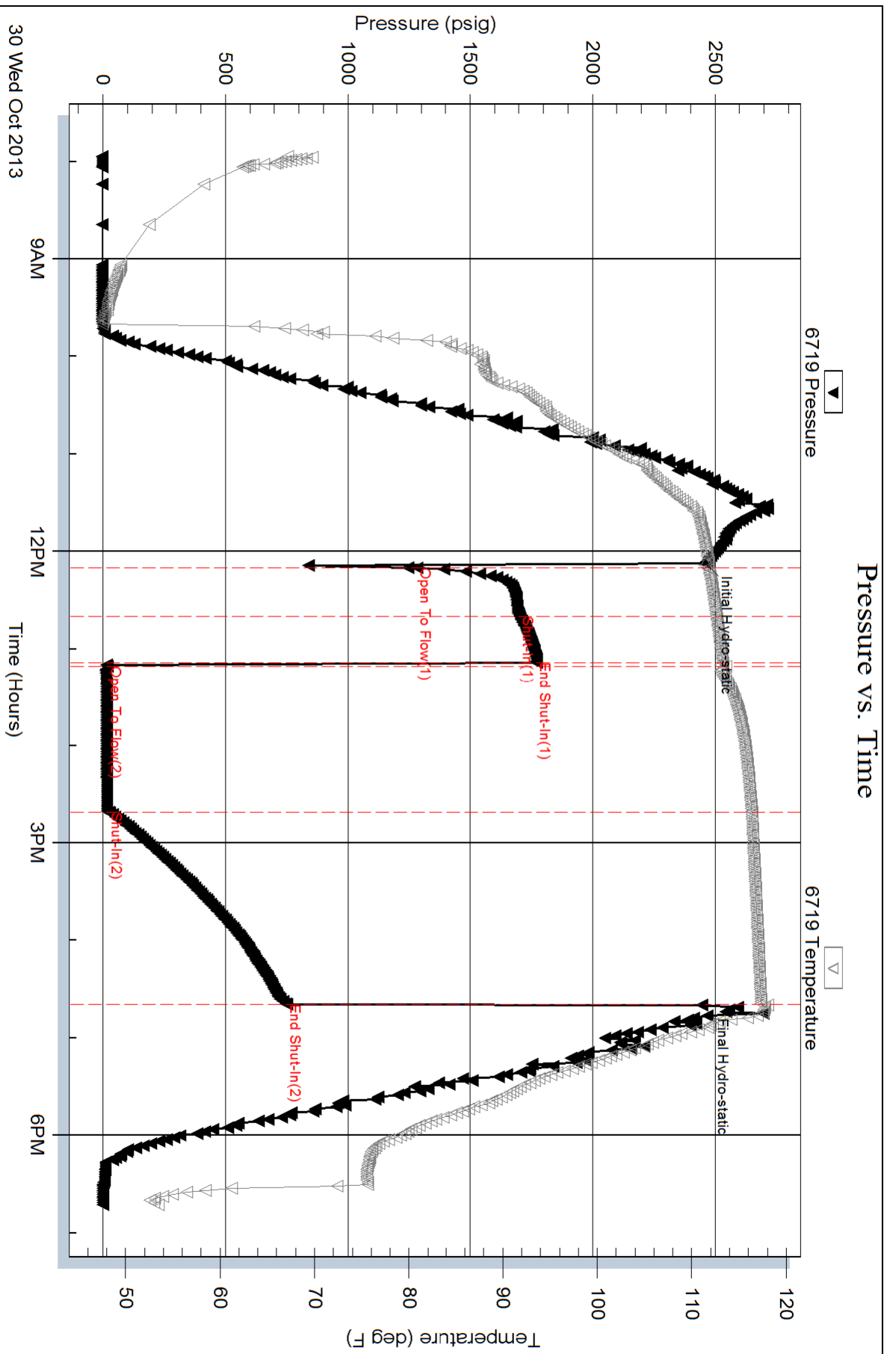
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



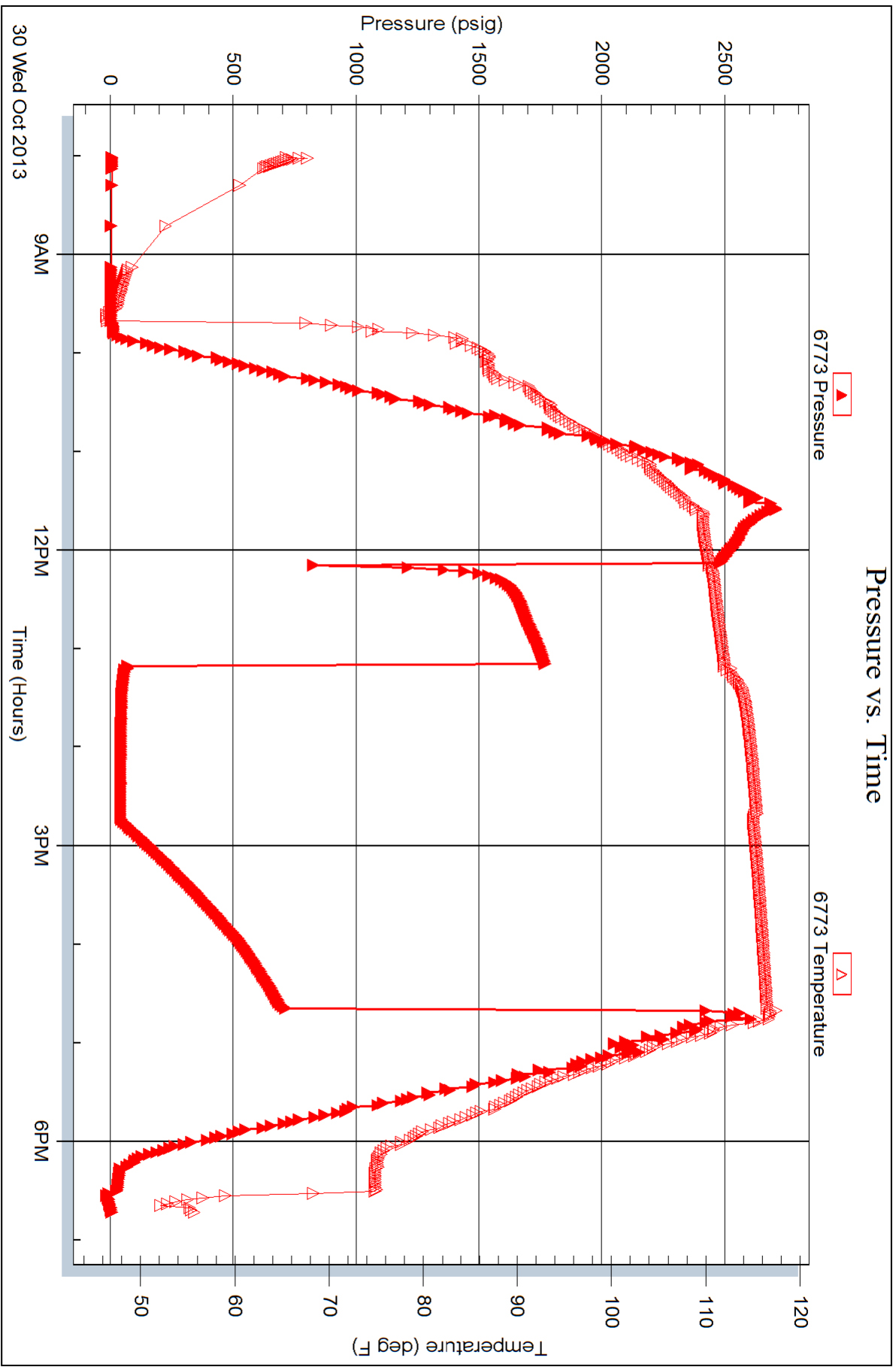
Serial #: 6773

Inside

Vincent Oil Corp

Durford # 2-32

DST Test Number: 1





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Vincent Oil Corp  
155 N Market STE 700  
Wichita KS 67202  
ATTN: Jim Hall

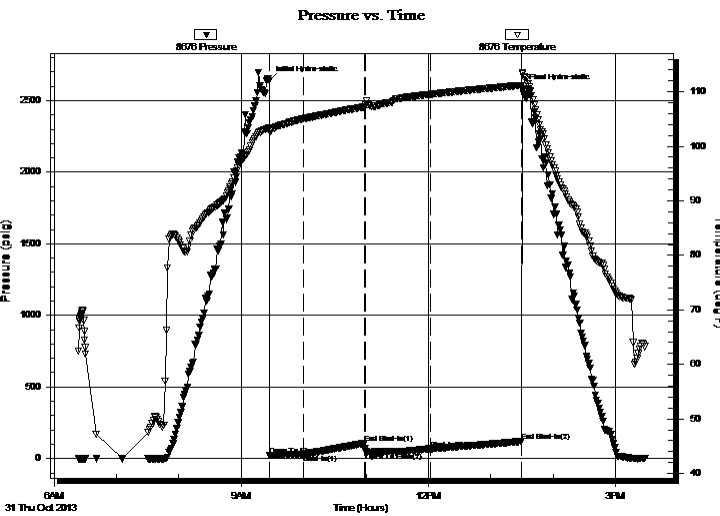
**32-29-24 Ford Co**  
**Dufford # 2-32**  
Job Ticket: 52445      **DST#: 2**  
Test Start: 2013.10.31 @ 06:23:24

## GENERAL INFORMATION:

Formation: **Morrow**  
Deviated: No Whipstock:                      ft (KB)  
Time Tool Opened: 09:27:09  
Time Test Ended: 15:28:09  
Interval: **5280.00 ft (KB) To 5349.00 ft (KB) (TVD)**  
Total Depth: 5349.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Fair  
Test Type: Conventional Bottom Hole (Reset)  
Tester: Chris Staats  
Unit No: #47  
Reference Elevations: 2583.00 ft (KB)  
2571.00 ft (CF)  
KB to GR/CF: 12.00 ft

**Serial #: 8676      Outside**  
Press @ Run Depth: 68.02 psig @ 5281.00 ft (KB)      Capacity: 8000.00 psig  
Start Date: 2013.10.31      End Date: 2013.10.31      Last Calib.: 2013.10.31  
Start Time: 06:23:29      End Time: 15:28:09      Time On Btm: 2013.10.31 @ 09:26:39  
Time Off Btm: 2013.10.31 @ 13:30:09

TEST COMMENT: IF: Weak blow 1 3/4"  
IS: No blow back  
FF: Weak blow 1"  
FS: No blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2641.42	103.38	Initial Hydro-static
1	22.54	102.75	Open To Flow (1)
34	31.84	105.08	Shut-In(1)
92	107.10	107.24	End Shut-In(1)
93	47.19	107.69	Open To Flow (2)
155	68.02	109.53	Shut-In(2)
243	119.28	111.18	End Shut-In(2)
244	2580.92	113.55	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
40.00	MUD 100%	0.45

\* 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 Corp

**32-29-24 Ford Co**

155 N Market STE 700  
Wichita KS 67202

**Dufford # 2-32**

Job Ticket: 52445

**DST#: 2**

ATTN: Jim Hall

Test Start: 2013.10.31 @ 06:23:24

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 10.79 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 6000.00 ppm

Filter Cake: 0.02 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
40.00	MUD 100%	0.449

Total Length: 40.00 ft      Total Volume: 0.449 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

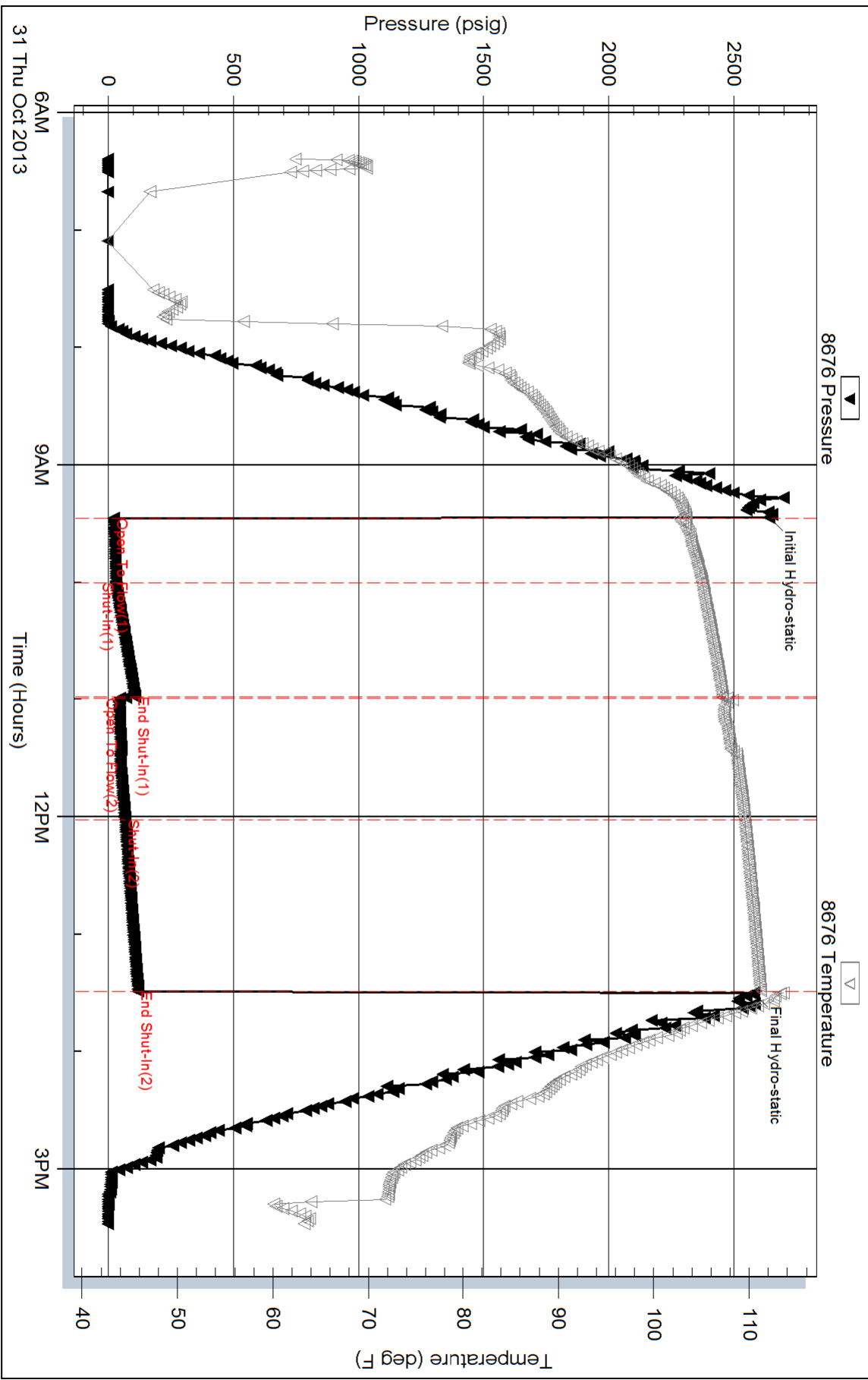
Serial #: 8676

Outside Vincent Oil Corp

Durford # 2-32

DST Test Number: 2

### Pressure vs. Time



Triobite Testing, Inc

Ref. No: 52445

Printed: 2013.10.31 @ 15:50:20



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Vincent Oil Corp  
155 N Market STE 700  
Wichita KS 67202  
ATTN: M.L. Korphage/Jim Hal

**32-29-24 Ford Co**  
**Dufford # 2-32**  
Job Ticket: 52446      **DST#: 3**  
Test Start: 2013.11.01 @ 06:02:15

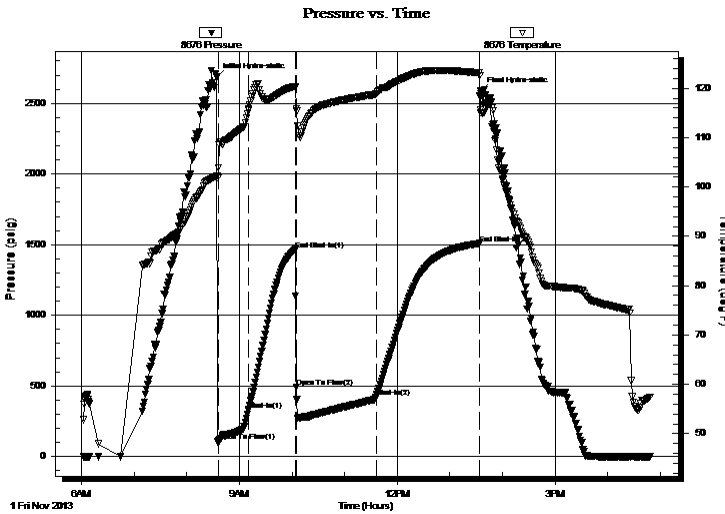
## GENERAL INFORMATION:

Formation: **Mississippi**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 08:36:00  
Time Test Ended: 16:48:30  
Interval: **5355.00 ft (KB) To 5429.00 ft (KB) (TVD)**  
Total Depth: 5429.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Fair  
Test Type: Conventional Bottom Hole (Reset)  
Tester: Chris Staats  
Unit No: #47  
Reference Elevations: 2583.00 ft (KB)  
2571.00 ft (CF)  
KB to GR/CF: 12.00 ft

**Serial #: 8676      Outside**  
Press @ Run Depth: 422.77 psig @ 5356.00 ft (KB)      Capacity: 8000.00 psig  
Start Date: 2013.11.01      End Date: 2013.11.01      Last Calib.: 2013.11.01  
Start Time: 06:02:20      End Time: 16:48:30      Time On Btm: 2013.11.01 @ 08:34:15  
Time Off Btm: 2013.11.01 @ 13:35:15

**TEST COMMENT:** IF: Strong blow BOB 3 min GTS 25 min TSTM  
IS: Weak blow back 4"  
FF: Strong blow BOB 5 sec  
FS: Strong blow back BOB 1 min

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2685.11	102.18	Initial Hydro-static
2	109.47	103.90	Open To Flow (1)
36	326.15	115.59	Shut-In(1)
90	1465.59	120.36	End Shut-In(1)
91	489.23	115.85	Open To Flow (2)
182	422.77	118.84	Shut-In(2)
300	1508.67	123.13	End Shut-In(2)
301	2585.81	115.55	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
60.00	G,M 5%gas 95%mud	0.67
558.00	G,M,O 5%gas 20% mud 75%oil Fluid did	6.27
372.00	M,G,O 5%gas 5%mud 90%oil Fluid did un	4.18
0.00	GTS	0.00

\* 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 Corp

**32-29-24 Ford Co**

155 N Market STE 700  
Wichita KS 67202

**Dufford # 2-32**

Job Ticket: 52446

**DST#: 3**

ATTN: M.L Korphage/Jim Hal

Test Start: 2013.11.01 @ 06:02:15

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

32 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 10.38 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 7200.00 ppm

Filter Cake: 0.02 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	G,M 5%gas 95%mud	0.674
558.00	G,M,O 5%gas 20% mud 75%oil Fluid did un	6.266
372.00	M,G,O 5%gas 5%mud 90%oil Fluid did unloa	4.177
0.00	GTS	0.000

Total Length: 990.00 ft

Total Volume: 11.117 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

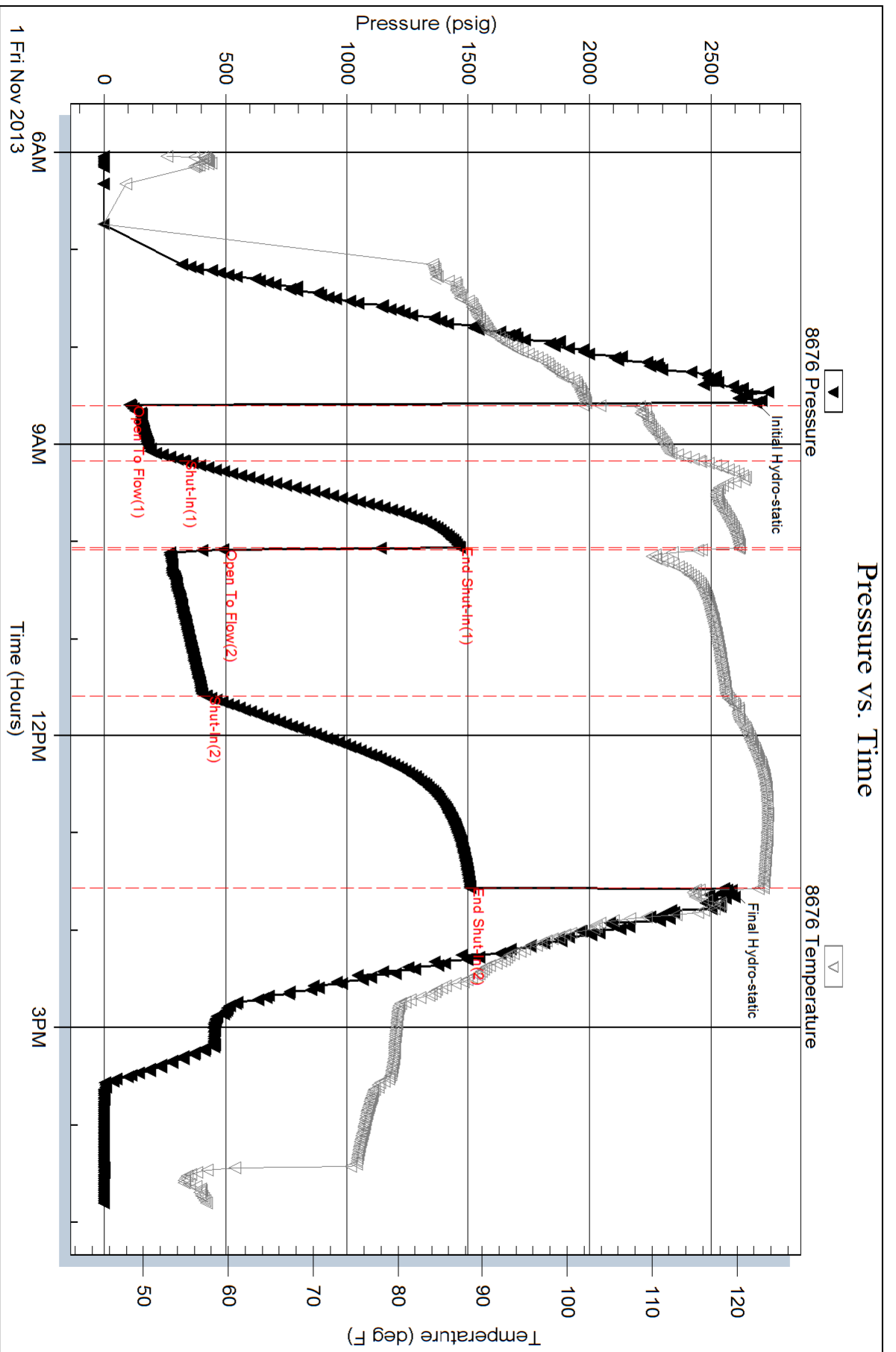
Recovery Comments:

Serial #: 8676

Outside Vincent Oil Corp

Durford # 2-32

DST Test Number: 3



# LITHOLOGY STRIP LOG

## WellSight Systems

Scale 1:240 (5"=100') Imperial  
Measured Depth Log

Well Name: VINCENT OIL CORP. DUFFORD #2-32  
Location: NW NW NW NE SEC. 32-T29S-R24W, FORD CO. KANSAS  
License Number: 15-057-20915-00-00  
Spud Date: 10/22/13  
Surface Coordinates: 110' FNL, 2,660' FEL  
Region: FAGER EAST  
Drilling Completed: 11/1/13

### Bottom Hole Coordinates:

Ground Elevation (ft): 2,571'                      K.B. Elevation (ft): 2,583'  
Logged Interval (ft): 4,250'      To: 5,450'      Total Depth (ft): 5,450'  
Formation: Mississippi  
Type of Drilling Fluid: NATIVE MUD TO 3,788'. CHEMICAL GEL TO RTD

Printed by MUD.LOG from WellSight Systems 1-800-447-1534 [www.WellSight.com](http://www.WellSight.com)

### OPERATOR

Company: VINCENT OIL CORP.  
Address: 155 N. MARKET STE 700  
WICHITA, KANSAS 67202-1821  
OFFICE; 316-262-3573

### GEOLOGIST

Name: Jame R. Hall Well Site Supervision  
Company: Black Gold Petroleum  
Address: 5530 N. Sedgwick  
Wichita, Kansas 67204-1828  
316-838-2574

## Comments

Drilling contractor: DUKE DRILLING, Rig #1, Tool Pusher: Mike Godfrey.

Surface Casing: 8 5/8" set at 650' w/300sx, cement, did circulate.

### Daily Activity:

10/21/13; Move on location.

10/22/13; Spud and drilling @ 452'.

10/23/13; 07:00 drilling @ 1,177'.

10/24/13; 07:00 drilling @ 2,420'.

10/25/13; 07:00 drilling @ 3,254'.

10/26/13; 07:00 drilling @ 3,985'.

10/27/13; 07:00 Tripping For NB#3 @ 4,526', strap 2.53' long to the board.

10/28/13; 07:00 drilling @ 4,924'.

10/29/13; 07:00 drilling @ 5,162', Circulated Pawnee @ 5,152', no show, made 30 std short trip then drilled ahead.

10/30/13; 07:00 5,309' tripping out for DST #1 5,281 - 5,309 (28' anchor) Upper Sand. @ 5,198 trip for NB #4, Circulated Base/Penn. @ 5,290' no show.

10/31/13; 07:00 5,349' tripping out for DST #2 (Lower Sand) 5,280' - 5,349' (69'). After DST #1, condition hole then drilled ahead. Circulate Lower Sand @5,334'. Circulated Lower Sand @ 5,349' (07:00 depth).

11/1/13; 07:00 5,429 running DST #3 (Miss.) 5,355' - 5,429' (74'), Circulated samples at 5,365' and 5,429'.

11/2/13; 07:00 5,450' (RTD), running open hole logs at report time. Will condition hole and run 4 1/2" casing later today.

Deviation Surveys: 1.0 @ 653', 1.0 @ 1,177', 1.0 @ 1,680', 0.5 @ 2,217', 0.75 @ 4,526', 1.0 @ 5,309', 1.0 @ 5,450'.

### Bit Record:

#1 12 1/4" out @ 653'.

#2 7 7/8" Varel HE 21 in @ 653', out @ 4,526', made 3,873' in 82hrs.

#3 7 7/8" RR Varel HE 29 in @ 4,526', out @ 5,198' made 672' in 36.5hrs.

#4 7 7/8" Varel HE 29 in @ 5,198', out @ 5,450' made 252' in 18.25hrs.

Drilling time commenced: @ 4,250'. Minimum 10' wet and dry samples commenced: @ 4,300' to RTD. Samples delivered to Kansas Geological Sample Library at Wichita, Kansas.

Gas Detector: Blue Stem Lab unit #0258. Digital IBall equipment, drilling time and gas data placed on the Plotted Geo. Report.

Mud System: Mud-Co/Service Mud. Chemical Gel system @ 3,788', Mud Engineer: Justin Whiting.

DST's; Trilobite Testing Inc. Tester: Chris Staats (Pratt office).

Open Hole Logs: Nabors Completion & Production Services Co. Hays Kansas,

Logging Engineer: Jason Cappellucci.

DIL, CDL/CNL/PE, MEL/SON.

Reference Wells; "A" Vincent Dufford #1-32 NE/4 32-T29S-24W and "B" Vincent Shelor #1-33 NW/4 33-29S-24W.

Datum differences are shown on the Geological Strip Log.

Tops show on this strip log, are e-log tops. The drilling data has been shifted 2' to match the open hole logs, for better correlation.

## DSTs

DST #1 (Upper Sand), 5,281' - 5,309' (28'), 30-60-90-120, IH 2460, IF 1283-1702 (weak 1/4" blow), ISI 1774 (no blow), FF 20-24 (BOB 26min), FSI 750 (no blow), FH 2446, Rec; 560' GIP, 15' mud with oil spots, BHT 118 F.

DST #2 (Lower Sand), 5,280' - 5,349' (69'), 30-60-60-90, IH 2641, IF 22-31 (13/4"blow), ISI 107 (no blow), FF 47-68 (1"blow), FSI 119 (no blow), FH 2580, Rec; 40' mud, BHT 111 F.

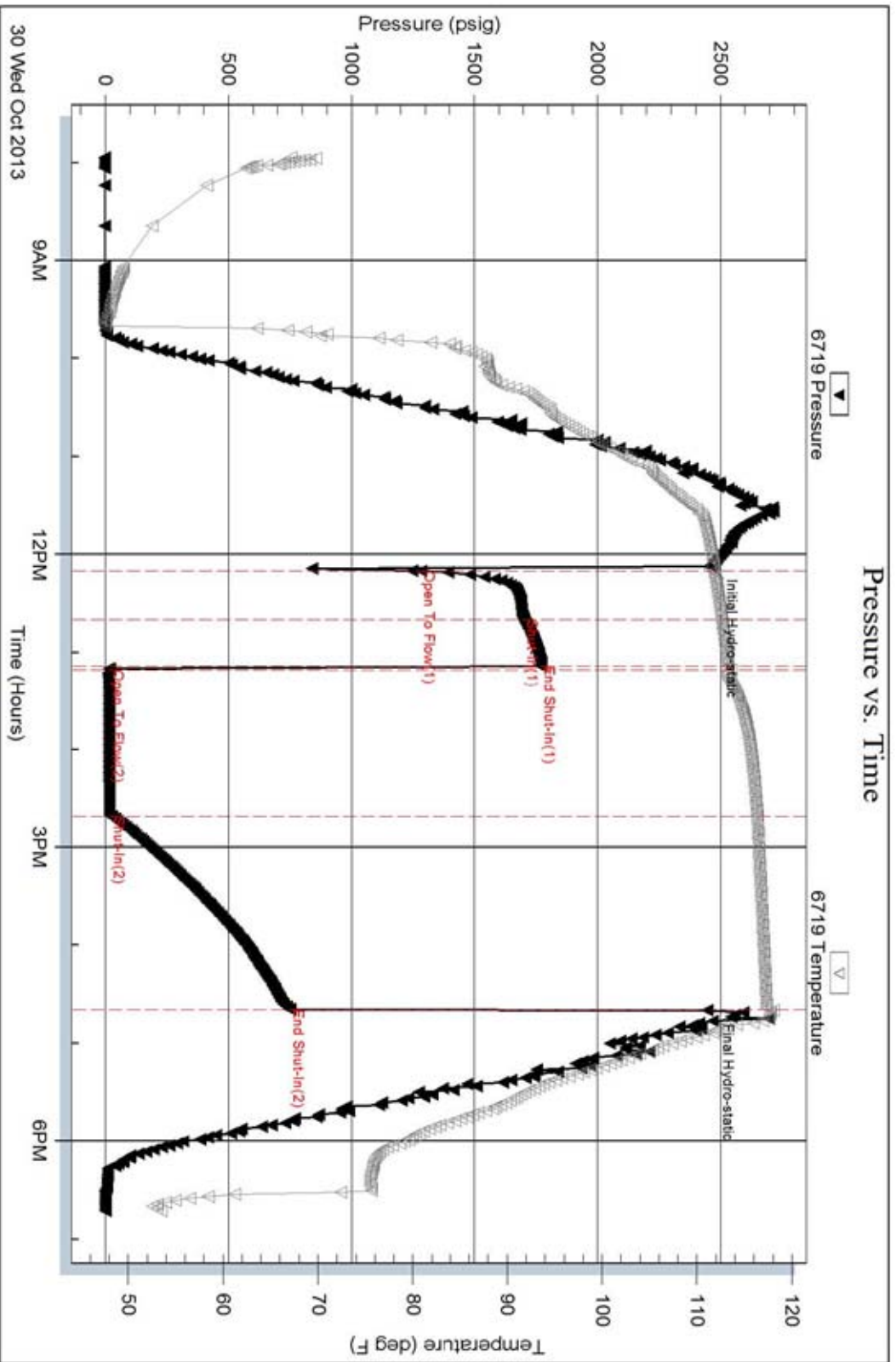
DST #3 (Miss.) 5,355' - 5,429' (74'), 30-60-90-120, IH 2685, IF 109-326 (BOB 3min,GTS 25min TSTM), ISI 1465 (4" Blow), FF 422-489 (BOB 5sec., Gas rate TSTM, took gas sample, yellow flame), FSI 1508 (BOB 1min), FH 2585, Rec; 4,366' GIP, 60' GM (5%gas,95%mud), 558' GMO (5%gas,75%oil,20%mud), 372' MGO (5%gas,90%oil,5%mud), Oil 32deg., BHT 121 F.

Serial #: 6719

Vincent Oil Corp

Dufford #2-32

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 52444

Printed: 2013.10.30 @ 19:08:40

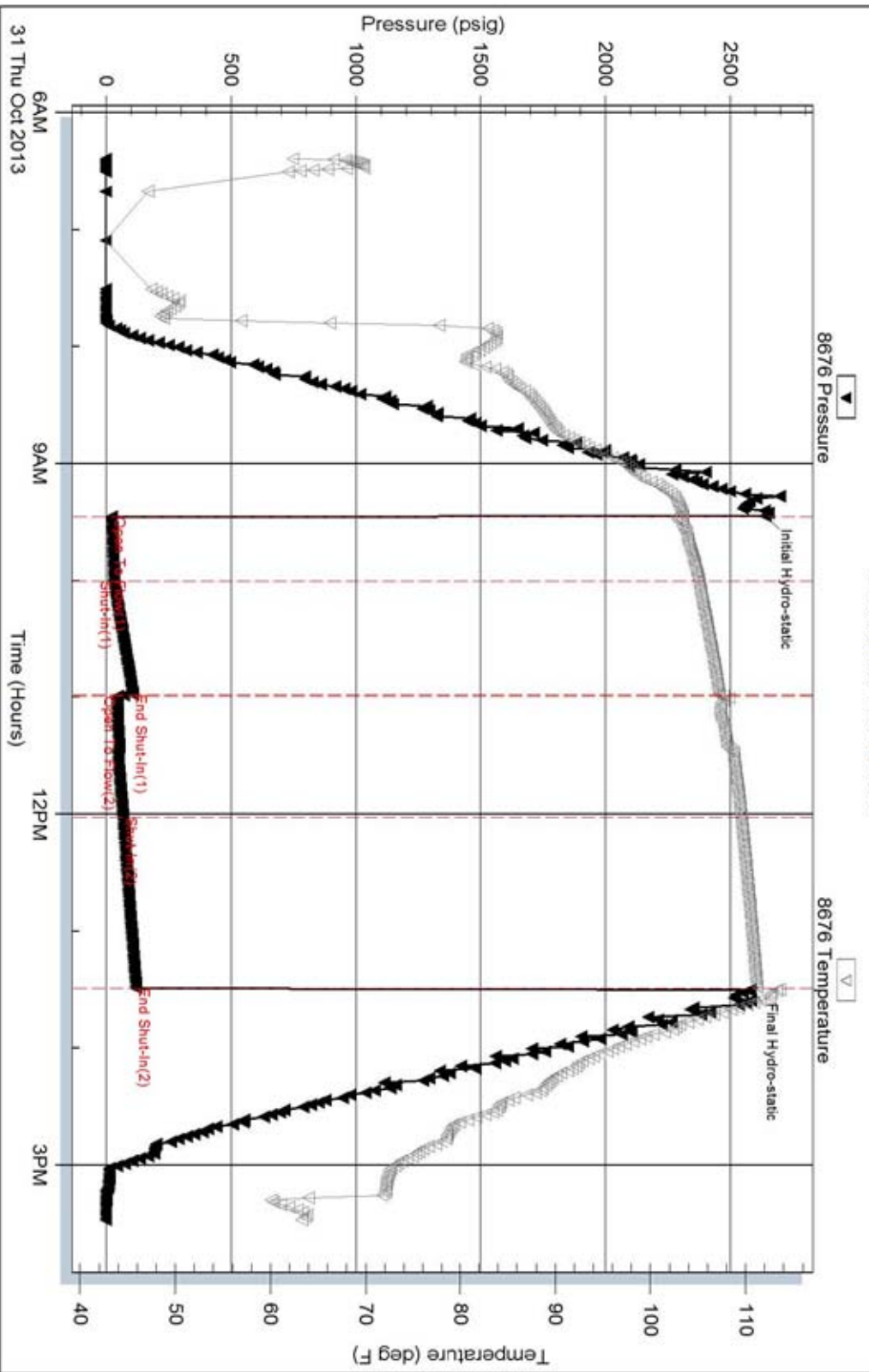
Serial #: 8676

Outside Vincent Oil Corp

Dufford #2-32

DST Test Number: 2

### Pressure vs. Time



Triobite Testing, Inc

Ref. No: 52445

Printed: 2013.10.31 @ 15:50:20

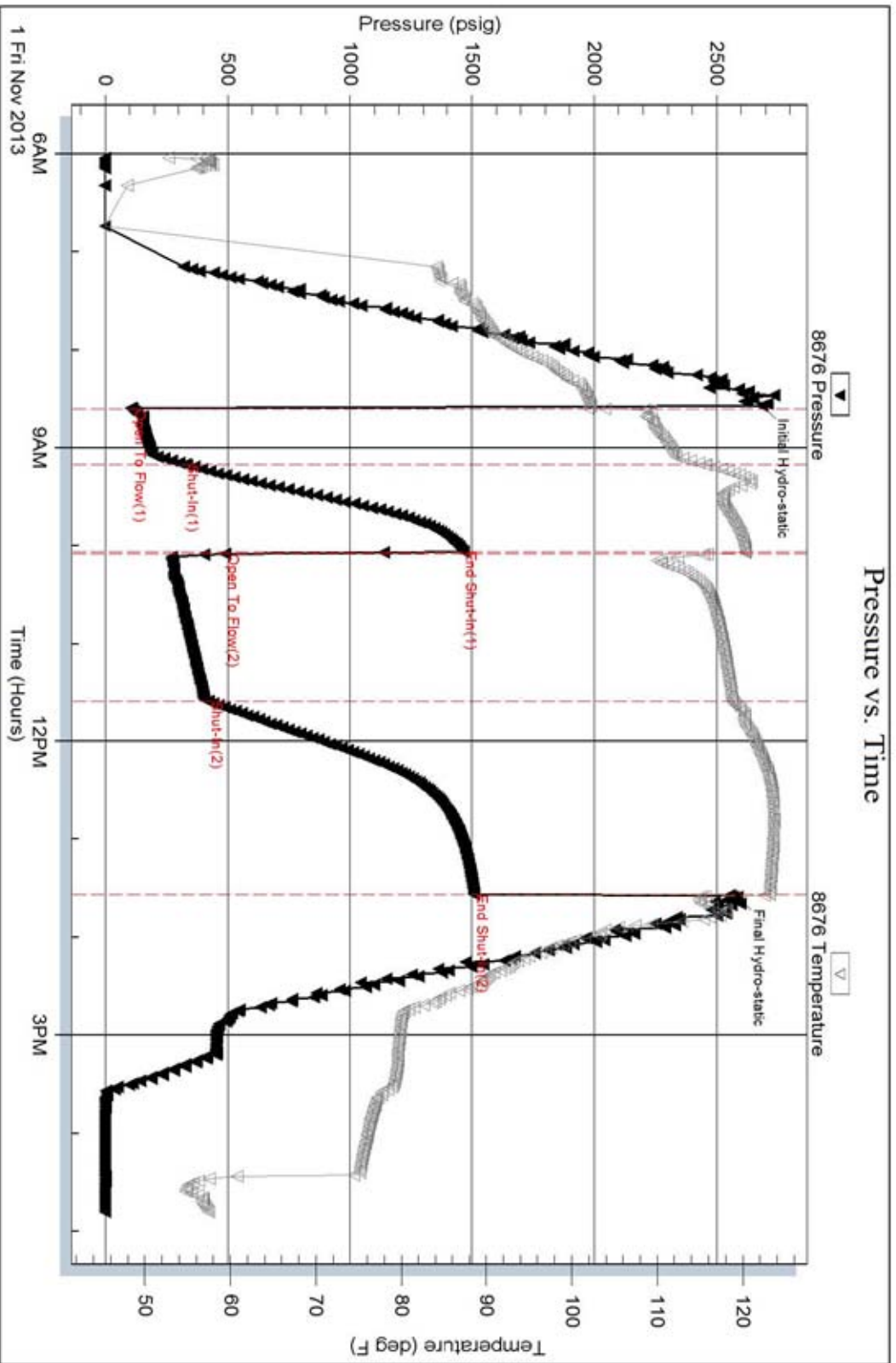
Serial #: 8676

Outside Vincent Oil Corp

Dufford #2-32

DST Test Number: 3

### Pressure vs. Time



Trilobite Testing, Inc

Ref. No: 52446

Printed: 2013.11.01 @ 17:18:06



Other

**CARBONATE CLASSIFICATION:**

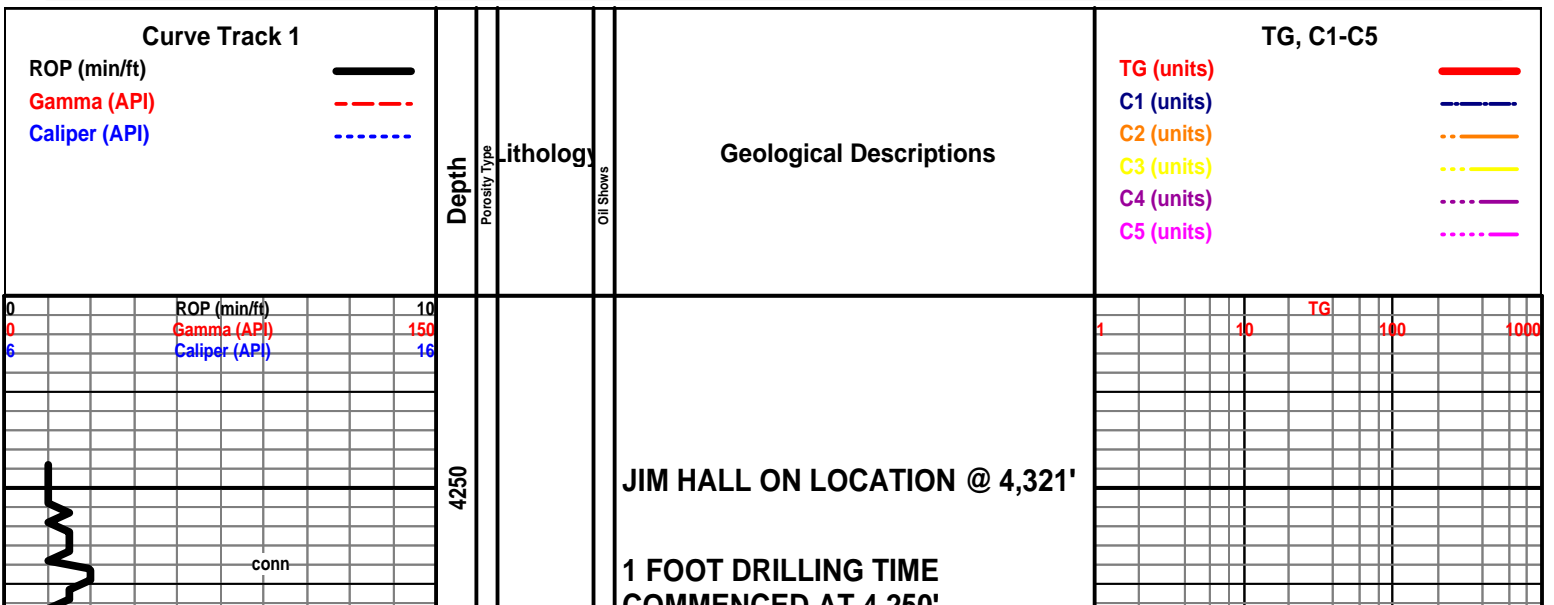
**AFTER DUNHAM:** GRAIN; any fossil, fossil fragment, sand grain, or other rock fragment within the rock. **MUDSTONE;** muddy carbonate rocks containing less than 10% grains. **WACKESTONE;** mud supported carbonate rocks with more than 10% grains. **PACKSTONE;** grain supported muddy carbonate rocks. **GRAINSTONE;** mud free carbonate rock, grain supported. **BOUNDSTONE;** carbonate rock bound together at deposition (coral, etc.). **CRYSTALLINE CARBONATE;** carbonate rock retaining to little of their depositional texture to be classified.

**ROCK TYPES**

Anhy	Congl	Lmst	Black sh
Bent	Sdy dolo	Mrlst	Gry sh
Brec	Shy dolo	Salt	Shale
Cht	Dol	Shale	Shyslts
Clyst	Gyp	Sltst	Sltys
Coal	Sdy lmst	Ss	

**ACCESSORIES**

<b>MINERAL</b>	Chlorite	Pelec	Grysh
Anhy	Dol	Pelloidal	Gryslt
Arg	Sand	Pisolite	Lms
Bent	Sltly	Plant	Sandylms
Bit	<b>FOSSIL</b>	Strom	Sh
Brecfrag	Algae	Fuss	Sltstn
Calc	Amph	<b>STRINGER</b>	<b>TEXTURE</b>
Carb	Belm	Anhy	Boundst
Chtdk	Bioclst	Arg	Chalky
Chtlt	Brach	Bent	Cryxln
Dol	Bryozoa	Coal	Earthy
Ferrpel	Cephal	Dol	Finexln
Ferr	Coral	Gyp	Grainst
Glau	Crin	Ls	Lithogr
Gyp	Echin	Mrst	Microxln
Marl	Fish	Sltstrg	Mudst
Nodule	Foram	Ssstrg	Packst
Phos	Fossil	Carbsh	Wackest
Pyr	Gastro	Clystn	
Salt	Oolite	Dol	
Sandy	Ostra		
Silt			



COMMENCED AT 4,250

### WET AND DRY SAMPLES COMMENCED AT 4,300'- 4,310' sample.

@4020  
Wt 8.8  
Vis 44  
Fil 8.0  
Chl 4,200  
Lcm 0#  
Cum \$11,286'

conn

Very poor samples quality here, vary colored shale cavings!

4302-4321 drilling time from drilling time sheet, due to depth correction!

conn

9.1-46

Wob 38K  
Rpm 75  
Spm 52  
Pp 750

conn

9.2-45

conn

ROP (min/ft) 19  
Gamma (API) 150  
Caliper (API) 16

conn

9.3-50

conn

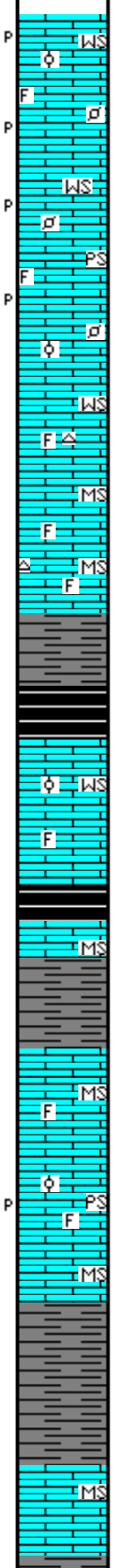
conn

4300

4350

4400

4450



Wackestone; cream to off white, some tan, firm, micro-oolitic to fossiliferous, no show, dull yellow mineral fluorescence only.

Most as above, scattered fossiliferous to micro-oolitic and pellets in chalky matrix, no live show, fluorescence as above, scattered barren porosity in the dry sample. Samples improving with depth.

Packstone; influx, tan, silky-crystalline matrix, tight look in the wet, no show in wet sample, dull yellow mineral fluorescence, barren porosity in the dry.

Wackestone; tan, cream, as above, grading to Mudstone; cream, off white to light gray, chalky to crystalline, tight looking in the wet, no show in the wet sample, rare free chert.

Shale; small increase in % gray, dark gray and black, tabular platy.

Shale; black, hard, carbonaceous, visible gas bubbles.

Wackestone; cream to off white, firm to brittle, fossiliferous to micro-oolitic, tight looking in wet, no show, yellow mineral fluorescence only.

#### Heebner 4398 (-1815) A+3 B+7

Shale; black, carbonaceous, gassy when broken.

Shale; gray, dark gray, black, scattered gray green, platy to tabular, most soft to firm.

Mudstone; brown to gray, silky-crystalline, dense, some fossils inclusions, yellow mineral fluorescence only, no show.

Packstone / Wackestone; fossiliferous to micro-oolitic, firm to friable, chalky to crystalline matrix, no show in wet, barren porosity in the dry, yellow mineral fluorescence.

Shale; gray, very soft-claystone look, dark gray to black, soft to hard, sample wash heavy gray here.

Mudstone; cream to gray, chalky to crystalline, dense, poor sample representation here.

Shale; gray, most soft, earthy, scattered cream stringers of Mudstone;

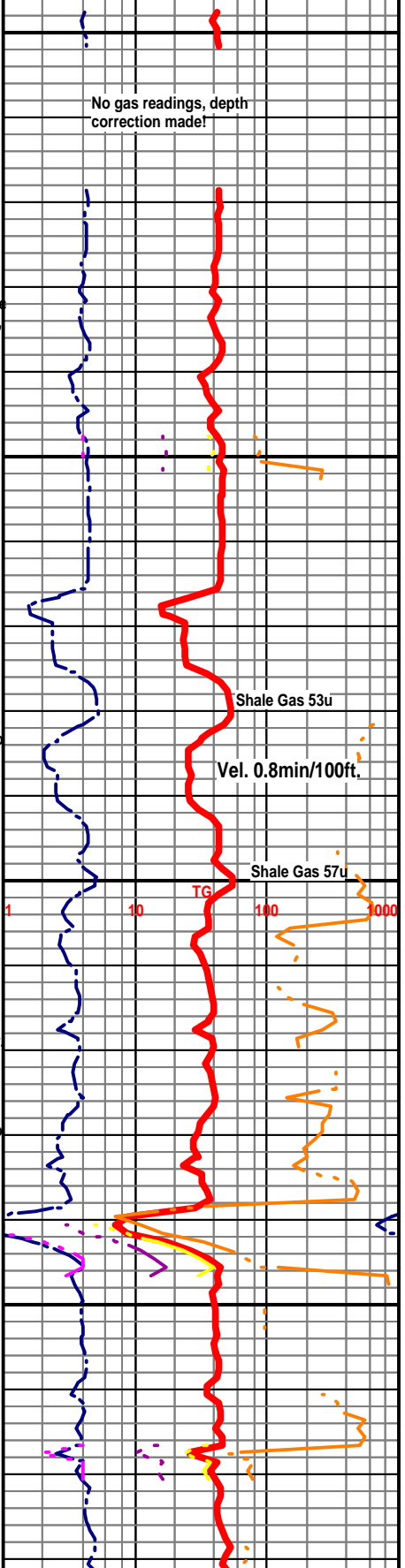
No gas readings, depth correction made!

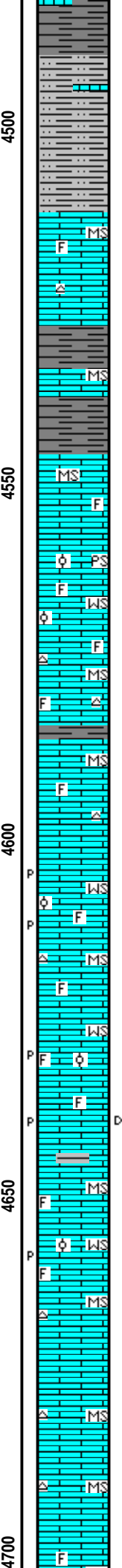
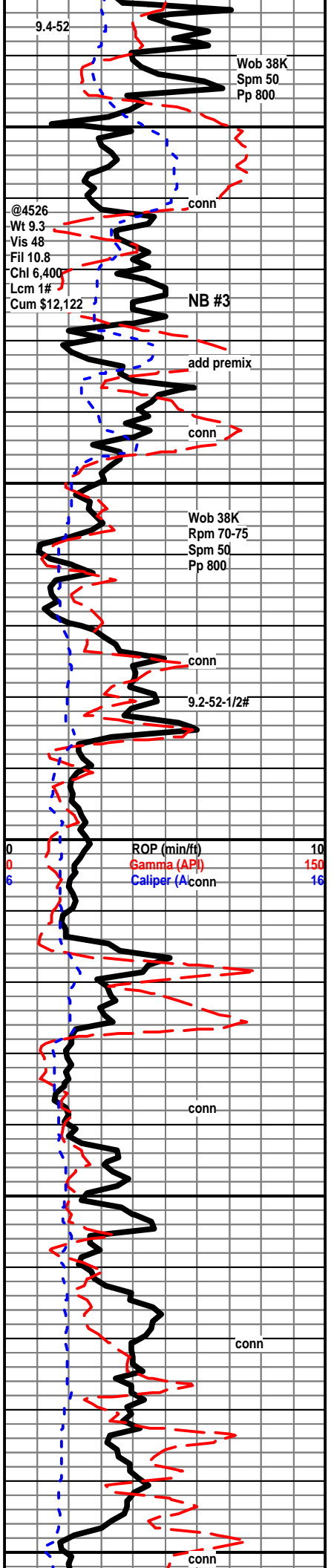
Shale Gas 53u

Vel. 0.8min/100ft.

Shale Gas 57u

TG 1 10 100 1000





Shale; as above; influx gray silty with carbonaceous inclusions, trace gray-green mottled red-brown, trace pale green, most soft with earthy texture.

Mudstone; gray to tan, fossiliferous, hard, chalky to crystalline, trace off white free chert.

Shale; gray to dark gray, some gray-green, most earthy texture, soft to firm, poor quality sample after bit trip.

**Brown Lime 4534 (-1951) A+7 B+10**

Mudstone; dark brown, dense most crystalline-silky texture.

Shale; as above, slight increase in black.

**Lansing 4546 (1963) A+13 B+9**

Mudstone; cream, tan, dense, chalky to crystalline, some fossiliferous, no show.

Packstone to Wackestone; fossiliferous to micro-oolitic, tan to gray, yellow - white fluorescence, no cut on selected samples no visible show in wet or dry, rare barren porosity in the dry sample, poor sample representation after bit trip.

Mudstone; cream to gray, hard-dense, rare free off white chert some fossiliferous.

Mudstone; cream to gray, chalky-dense, fossiliferous inprt., rare free chert, no show on dull yellow-gold fluorescence.

Wackestone; cream to light gray, fossiliferous to micro-oolitic dull yellow-gold fluorescence, no show in wet sample, rare barren porosity in the dry sample.

Mudstone; cream to gray, dense, most chalky matrix, fossiliferous inprt., rare free cream chert.

Wackestone; cream to off white, fossiliferous to micro-oolitic, chalky matrix, dull yellow mineral fluorescence, no cut on selected samples, no show wet, rare barren porosity in the dry, rare spotty dark stain in the dry-dead.

Mudstone to Wackestone inprt., cream to gray, chalky, tan to brown-silky crystalline, dense looking in wet sample, fossiliferous, no show.

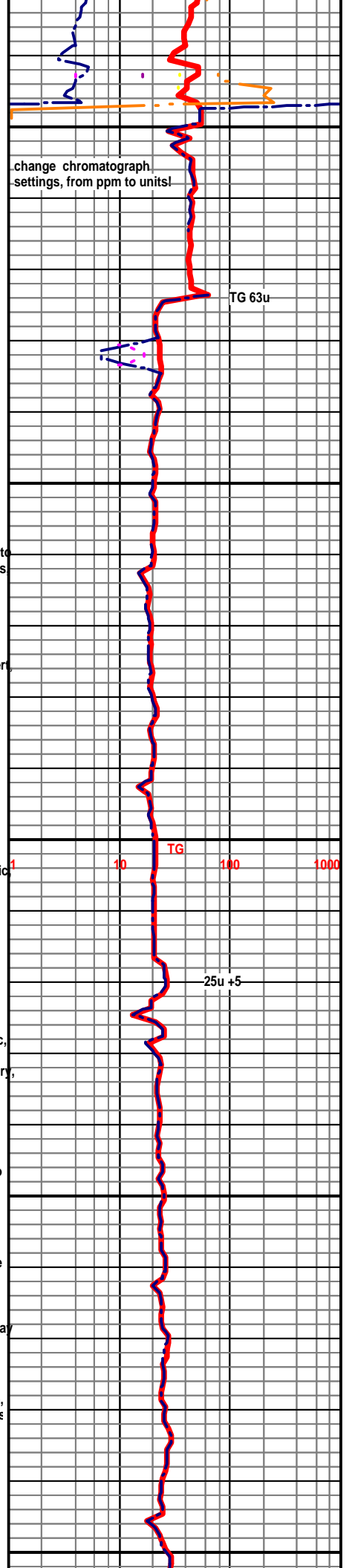
Wackestone; cream to tan, chalky to crystalline matrix, fossiliferous to micro-oolitic, no show, barren porosity in the dry.

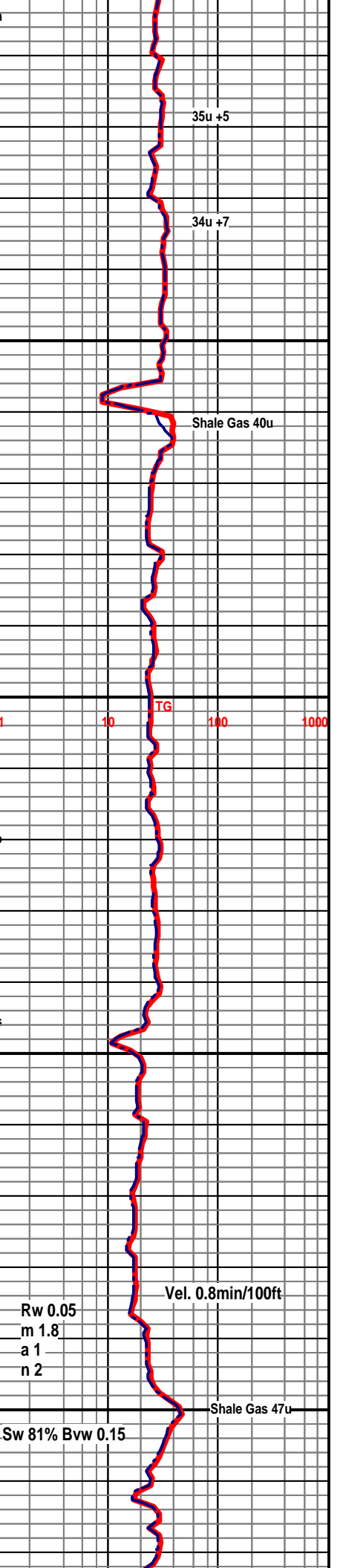
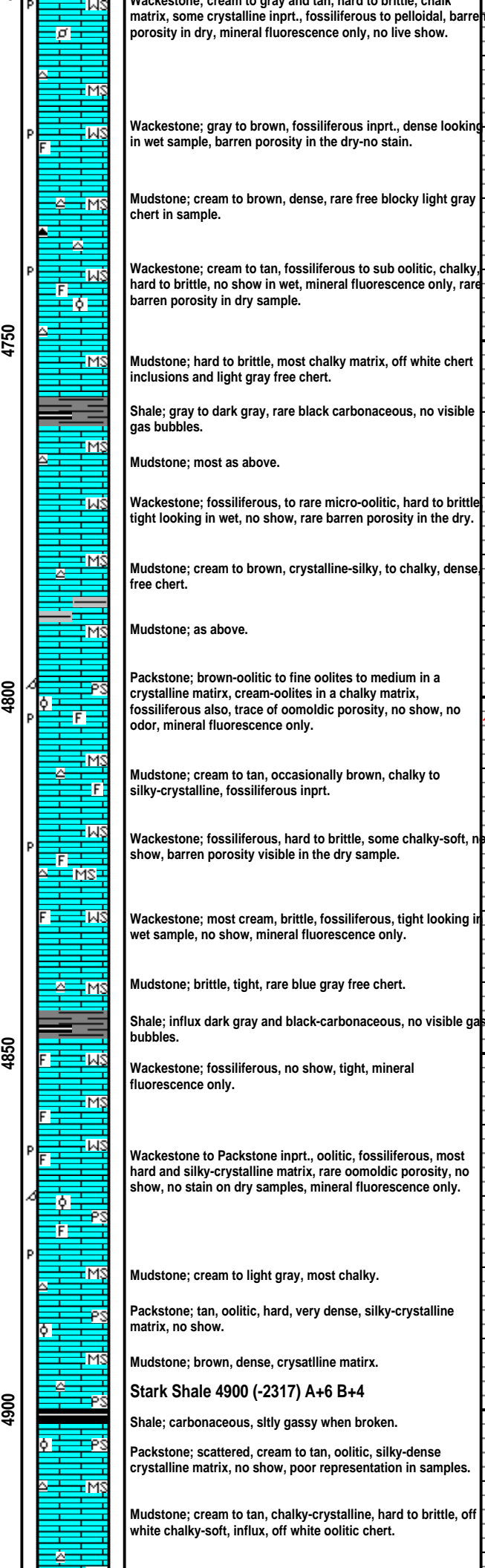
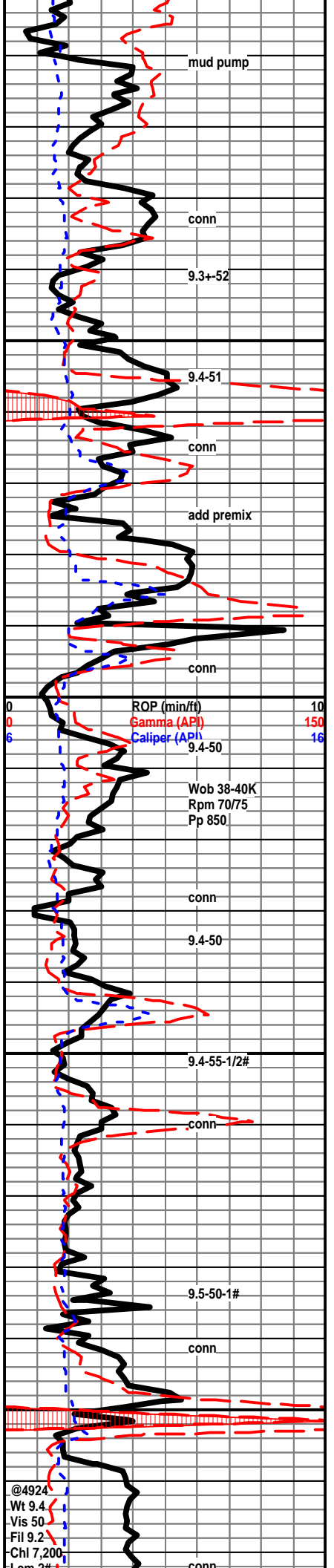
Mudstone; brown, hard, silky-crystalline, dense, rare light gray spicular chert.

Mudstone; as above, increase in cream to tan, chalky, dense, mineral fluorescence only, no visible show in wet sample, loss of light gray free chert here.

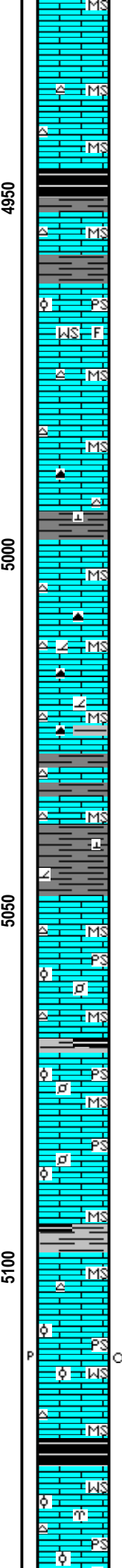
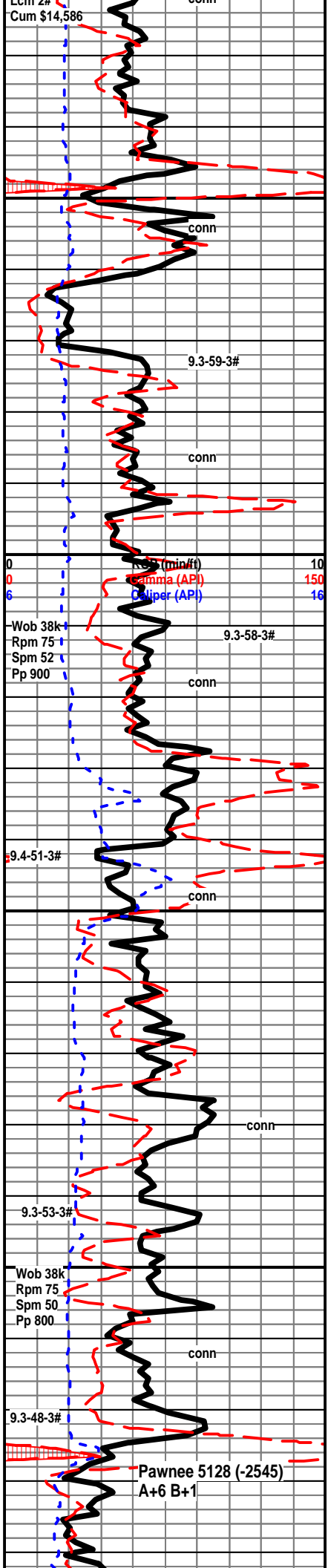
Mudstone; cream to gray and brown, chalky to occasionally crystalline-silky texture, dense, rare blocky light gray free in sample.

Wackestone; cream to gray and tan, hard to brittle, chalk





@4924  
 Wt 9.4  
 Vis 50  
 Fil 9.2  
 Chl 7,200  
 Lem 3#



Mudstone; cream to brown as above, scattered free chert, off white, some mottled blue-gray, some off white mottled cream oolitic chert.

Mudstone; cream, brown and gray, chalky to silky-crystalline, some soft off white chalky, scattered chert some fossiliferous

**Hush. Shale 4946 (-2363) A+6 B+6**

Shale; black, dark gray and gray green, no visible gas bubbles in the carbonaceous shales.

Mudstone; as above.

Shale; gray, dark gray, gray-green, hard to soft.

Wackestone to Packstone, oolitic to micro-oolitic, fossiliferous inprt., no show, very poor sample representation here.

Mudstone; cream to brown and gray, hard chalky to silky-crystalline, dense, free chert as above.

Mudstone; influx, dark gray, dense, hard, argillaceous inprt., free black and off white chert, mixed with black hard, shales, slightly calcareous.

Mudstone; cream to gray, some brown-fossiliferous, chalky to crystalline, dense, trace black chert-sharp blocky.

Mudstone; influx, dark gray, blocky, hard, dense, some dolomitic.

Mudstone; gray, brown, hard, blocky dense, some dolomitic inprt., dark gray to black shale stringers, sample quality deteriorating with depth.

Mudstone; as above, increase in black shale stringers-hard, some dark gray to gray soft-earthly.

Shale; gray, dark gray, to black, scattered gray-green, some slightly calcareous, black vry hrd.

**Marmaton 5051 (2468) Aeven B-2**

Packstone; oolitic, cream, brittle to hard, chalky to silky crystalline matrix, no show, looks tight in wet sample, big improvement in sample quality here.

Shale; influx, pale green to gray-green, sub waxy, some white black-carbonaceous inclusions.

Packstone; cream, hard to occasionally friable, oolitic, some ellipsoidal, most in tight silky crystalline matrix, scattered chalky matrix softer, no show, looks tight in the wet sample.

Shale; slight increase in gray-green sub waxy with black carbonaceous inclusions.

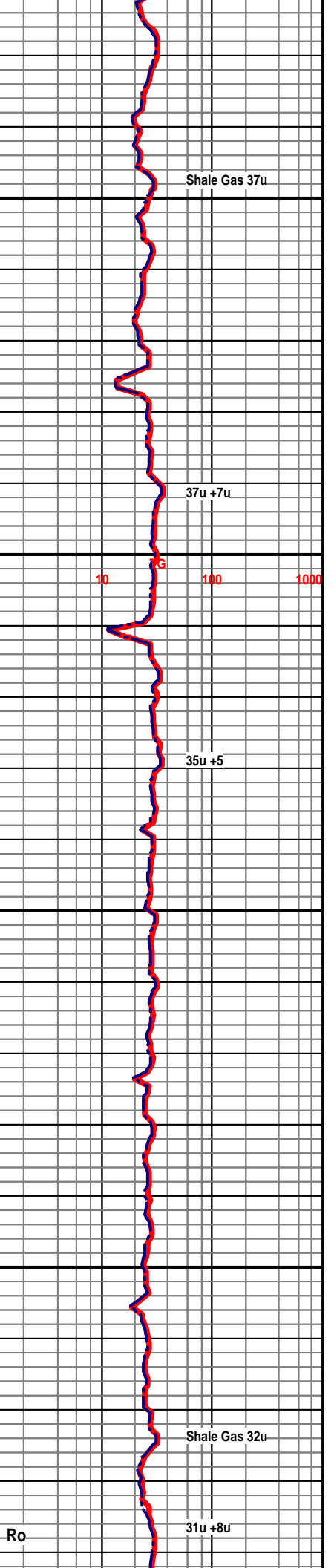
Mudstone; cream to gray, chalky to crystalline, dense looking

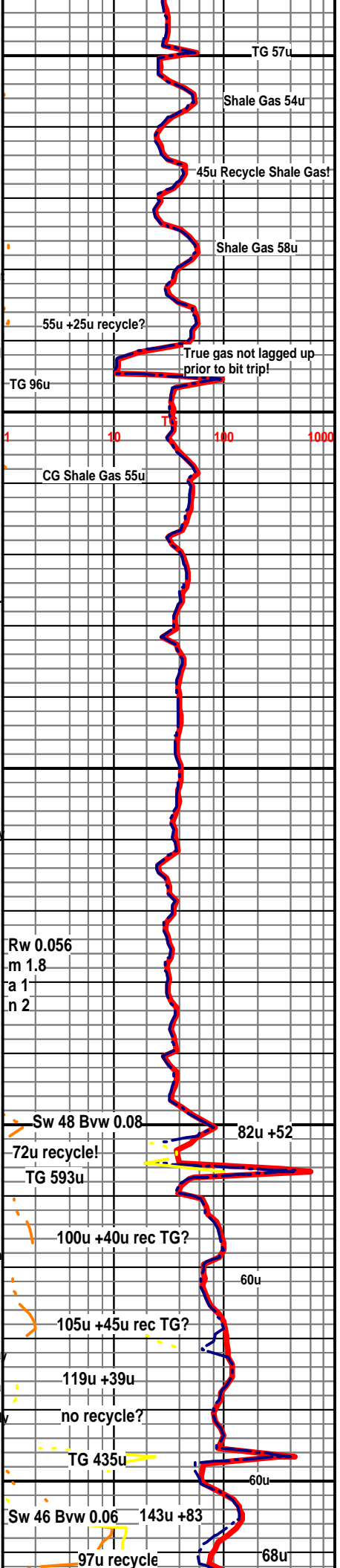
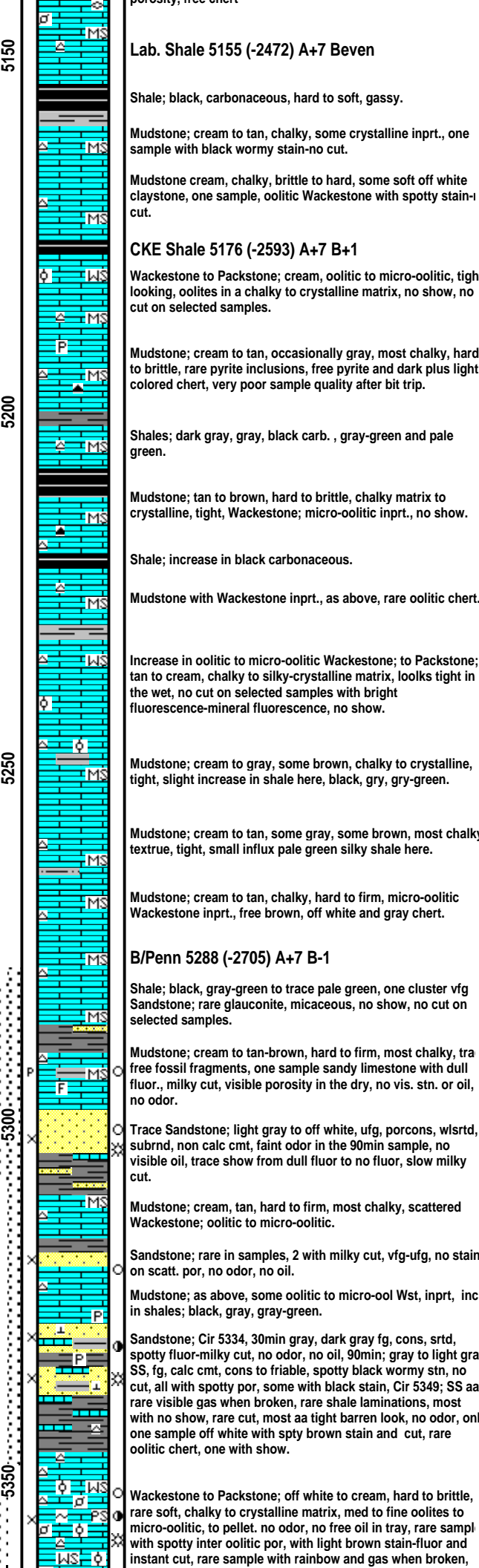
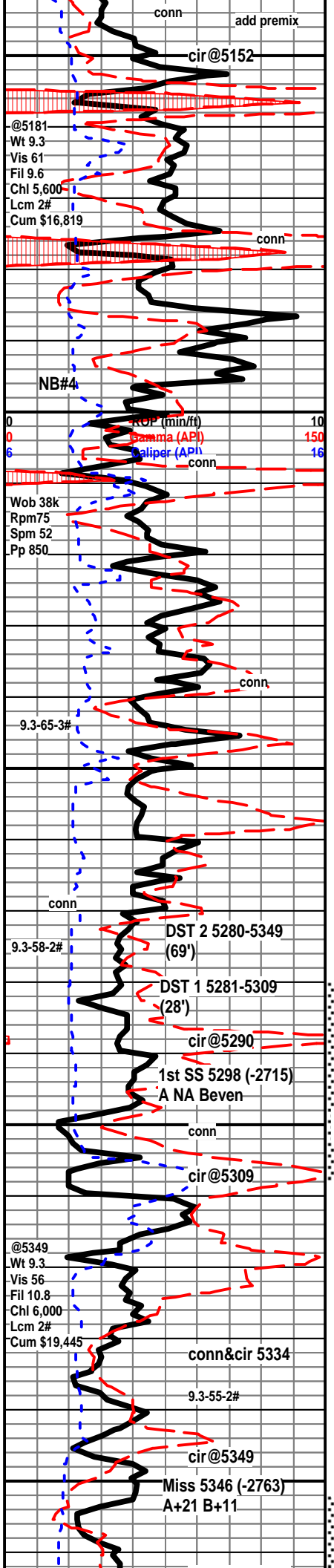
Packstone to Wackestone; cream to tan, hard, some chalky-soft, most tight with on show, one sample with bright yellow fluorescence with very slow milky cut, no odor, no visible oil, no visible stain.

Mudstone; cream to tan, chalky to crystalline, tight.

Shale; black soft, no visible gas bubbles, and gray-green.

Wackestone to occasional Packstone, micro-oolitic to fine oolites in tight chalky to crystalline matrix, rare free fusulinid, bryzoa and pellets, no odor, no visible gas bubbles or stain, no





**Lab. Shale 5155 (-2472) A+7 Beven**

Shale; black, carbonaceous, hard to soft, gassy.

Mudstone; cream to tan, chalky, some crystalline inprt., one sample with black wormy stain-no cut.

Mudstone cream, chalky, brittle to hard, some soft off white claystone, one sample, oolitic Wackestone with spotty stain-cut.

**CKE Shale 5176 (-2593) A+7 B+1**

Wackestone to Packstone; cream, oolitic to micro-oolitic, tight looking, oolites in a chalky to crystalline matrix, no show, no cut on selected samples.

Mudstone; cream to tan, occasionally gray, most chalky, hard to brittle, rare pyrite inclusions, free pyrite and dark plus light colored chert, very poor sample quality after bit trip.

Shales; dark gray, gray, black carb., gray-green and pale green.

Mudstone; tan to brown, hard to brittle, chalky matrix to crystalline, tight, Wackestone; micro-oolitic inprt., no show.

Shale; increase in black carbonaceous.

Mudstone with Wackestone inprt., as above, rare oolitic chert.

Increase in oolitic to micro-oolitic Wackestone; to Packstone; tan to cream, chalky to silky-crystalline matrix, looks tight in the wet, no cut on selected samples with bright fluorescence-mineral fluorescence, no show.

Mudstone; cream to gray, some brown, chalky to crystalline, tight, slight increase in shale here, black, gray, gray-green.

Mudstone; cream to tan, some gray, some brown, most chalky texture, tight, small influx pale green silky shale here.

Mudstone; cream to tan, chalky, hard to firm, micro-oolitic Wackestone inprt., free brown, off white and gray chert.

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Shale; black, gray-green to trace pale green, one cluster vfg Sandstone; rare glauconite, micaceous, no show, no cut on selected samples.

Mudstone; cream to tan-brown, hard to firm, most chalky, trace free fossil fragments, one sample sandy limestone with dull fluor., milky cut, visible porosity in the dry, no vis. stn. or oil, no odor.

Trace Sandstone; light gray to off white, ufg, porcons, wlsrtd, subrnd, non calc cmt, faint odor in the 90min sample, no visible oil, trace show from dull fluor to no fluor, slow milky cut.

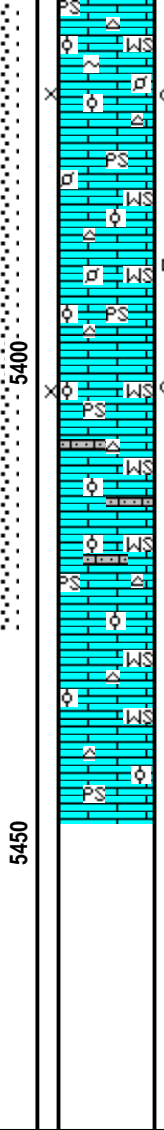
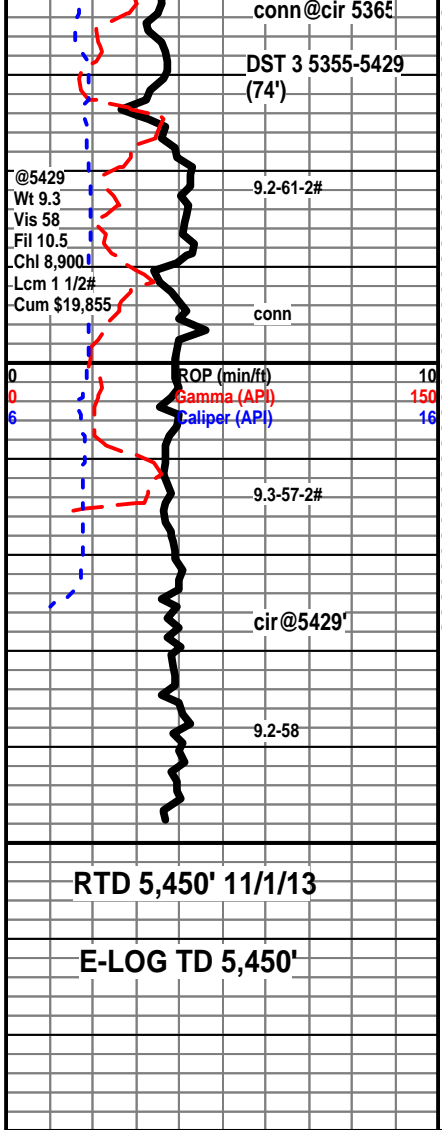
Mudstone; cream, tan, hard to firm, most chalky, scattered Wackestone; oolitic to micro-oolitic.

Sandstone; rare in samples, 2 with milky cut, vfg-ufg, no stain on scatt. por, no odor, no oil.

Mudstone; as above, some oolitic to micro-ool Wst, inprt, inc in shales; black, gray, gray-green.

Sandstone; Cir 5334, 30min gray, dark gray fg, cons, srtd, spotty fluor-milky cut, no odor, no oil, 90min; gray to light gray SS, fg, calc cmt, cons to friable, spotty black wormy stn, no cut, all with spotty por, some with black stain, Cir 5349; SS as rare visible gas when broken, rare shale laminations, most with no show, rare cut, most as tight barren look, no odor, only one sample off white with spty brown stain and cut, rare oolitic chert, one with show.

Wackestone to Packstone; off white to cream, hard to brittle, rare soft, chalky to crystalline matrix, med to fine oolites to micro-oolitic, to pellet. no odor, no free oil in tray, rare sample with spotty inter oolitic por, with light brown stain-fluor and instant cut, rare sample with rainbow and gas when broken,



most with fluor-no cut

Oolitic Wackestone to Packstone; off white, cream, hard to brittle, chalky to crystalline matrix, rare visible brown stain on spotty inter-oolitic porosity, instant cut, very slight odor, scattered white and orange fossiliferous to oolitic chert.

Wackestone to Packstone; cream to off white, hard to brittle, chalky to crystalline matrix, soft chalky-soft, micro-oolites to fine oolites, occasionally med size oolites scattered in the matrix, some are elliptical, rare dark stain-no cut, chert as above, no visible porosity, no show, influx of shale % here, most black to dark gray-cave?.

Wackestone to Packstone; oolitic, off white to cream, rare spotty stain-no cut, one sample with spotty stain and milky cut, no odor, are inter oolitic porosity, some light gray sandy Wackestone oolitic inprt and chalky, % shale as above-cave?

Sample as above no real change, no visible show in wet sample, increase in shale cavings!, free chert and pyrite in sample.

Wackestone to Packstone; cream to off white, increase in fine oolites in mostly chalky matrix, hard to brittle, no show and n visible stain or porosity in the dry sample, free orange to bone white chert, some fossiliferous, to oolitic.

Packstone; increase in medium oolites here in a chalky to crystalline matrix, no visible show or porosity in the wet sample, free chert as above.

