



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1235679
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: _____

1235679

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

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)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	Vincent Oil Corporation
Well Name	Reynolds 2-33
Doc ID	1235679

Tops

Name	Top	Datum
Heebner Shale	4333	(-1809)
Brown Limestone	4468	(-1944)
Lansing	4480	(-1956)
Stark Shale	4822	(-2298)
Pawnee	5036	(-2512)
Cherokee Shale	5081	(-2557)
Base Penn Limestone	5198	(-2674)
Mississippian	5458	(-2734)
RTD	5318	(-2794)
LTD	5320	(-2796)

QUALITY WELL SERVICE, INC.

6203

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	08-22-14	Sec.	33	Twp.	28s	Range	23w	County	Ford	State	KS	On Location	10:30AM	Finish	1:00PM						
Lease	Reynolds		Well No.			2-33		Location								Kingsdown KS, 2n, 4 1/2w, n/14					
Contractor	Val #2							Owner								Vincent					
Type Job	Surface							To Quality Well Service, Inc.								You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.					
Hole Size	12 1/4		T.D.			606		Charge To								Vincent					
Csg.	8 5/8		24"		Depth		603		Street												
Tbg. Size								Depth													
Tool								Depth								City		State			
Cement Left in Csg.	42'		Shoe Joint			42.05		The above was done to satisfaction and supervision of owner agent or contractor.													
Meas Line								Displace		36 Bbls Fresh		Cement Amount Ordered								125sx MDC + 1/4" FS \$ 125 ^{sy}	
EQUIPMENT								A + 2% gel + 3% cc + 1/4" Floseal													
Pumptrk	8	No.	David B					Common								125					
Bulktrk	10	No.	Mike B					Boz Mix MIX								125					
Bulktrk	5	No.	Derek B					Gel.								11					
Pickup		No.	David F					Calcium								10					
JOB SERVICES & REMARKS								Hulls													
Rat Hole								Salt													
Mouse Hole								Flowseal								606.25					
Centralizers								Kol-Seal													
Baskets								Mud CLR 48													
D/V or Port Collar								CFL-117 or CD110 CAF 38													
Pipe on B Htg Break Line, Pump Spacer								Sand													
3 Bbls Fresh mix 125sx MDC Blend, mix 125sx								Handling								271					
A 2#3 cement, Stop, Release Plug, Start								Mileage								50					
Disp. w/ Fresh H ₂ O, Washup on Plug, See								FLOAT EQUIPMENT													
Steady increase in PSI, Slow Rate,								Guide Shoe													
Bump Plug at 36 Bbls								Centralizer													
total Disp. from 200 # to 500 # PSI								Baskets													
Cement Did Circ.								AFU Inserts													
								Float Shoe								Service Supervisor					
								Latch Down								LMU 50					
								Wooden Cup Plug - 8 5/8													
								Baffle Plate 8 5/8													
								Pumptrk Charge								Surface					
								Mileage								50 x 7					
																Tax					
																Discount					
																Total Charge					
X Signature								Rick Smith													

Plug D&A



PO Box 93999
Southlake, TX 76092

Voice: (817) 546-7282
Fax: (817) 246-3361

INVOICE

Invoice Number: 145393

Invoice Date: Aug 31, 2014

Page: 1

Bill To:
Vincent Oil Corp. 155 N. Market STE #700 Wichita, KS 67202

Customer ID	Field Ticket #	Payment Terms	
Vinc	61553	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS1-03	Liberal	Aug 31, 2014	9/30/14

Quantity	Item	Description	Unit Price	Amount
1.00	WELL NAME	Reynolds #2-33		
170.00	CEMENT MATERIALS	60/40 Poz 4% Blend Class A	18.92	3,216.40
179.75	CEMENT SERVICE	Product Handling Charge	2.48	445.78
532.17	CEMENT SERVICE	Product Drayage	2.75	1,463.47
1.00	CEMENT SERVICE	Plug to Abandon	2,249.84	2,249.84
70.00	CEMENT SERVICE	Pump Truck Mileage	7.70	539.00
70.00	CEMENT SERVICE	Light Vehicle Mileage	4.40	308.00
1.00	CEMENT SUPERVISOR	Dustin Smith		
1.00	EQUIPMENT OPERATOR	James Guyton		
1.00	EQUIPMENT OPERATOR	Heriberto Valenzuela		

ALL PRICES ARE NET, PAYABLE
30 DAYS FOLLOWING DATE OF
INVOICE. 1 1/2% CHARGED
THEREAFTER. IF ACCOUNT IS
CURRENT, TAKE DISCOUNT OF

\$ 1,644.50

ONLY IF PAID ON OR BEFORE
Sep 30, 2014

Subtotal	8,222.49
Sales Tax	641.35
Total Invoice Amount	8,863.84
Payment/Credit Applied	
TOTAL	8,863.84



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Vincent Oil Corporation

33-28s-23w-Ford, Co KS

155 N. Market
Ste.# 700
Wichita,KS 67202
ATTN: Jim Hall

Reynolds #2-33

Job Ticket: 56563

DST#: 1

Test Start: 2014.08.28 @ 17:07:00

GENERAL INFORMATION:

Formation: **Lower Penn.**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:45:15

Time Test Ended: 01:27:45

Test Type: Conventional Bottom Hole (Initial)

Tester: Cornelio Landa III

Unit No: 67

Interval: 5109.00 ft (KB) To 5194.00 ft (KB) (TVD)

Reference Elevations: 2524.00 ft (KB)

Total Depth: 5194.00 ft (KB) (TVD)

2514.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition:

KB to GR/CF: 10.00 ft

Serial #: 8968 Outside

Press@RunDepth: 31.93 psig @ 5112.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.08.28

End Date:

2014.08.29

Last Calib.:

2014.08.29

Start Time: 17:07:05

End Time:

01:27:44

Time On Btm:

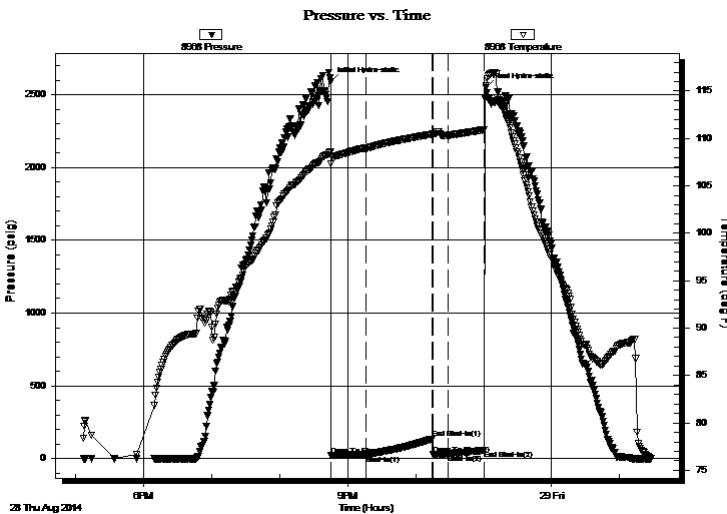
2014.08.28 @ 20:45:00

Time Off Btm:

2014.08.28 @ 23:02:15

TEST COMMENT: IF: Weak surface blow -Built to 1/2 in. blow -Died back to 1/4 in. blow
IS: No return
FF: No blow -Flushed tool @ 3 min. into open-Good surge-No blow
FS: No return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2590.24	108.60	Initial Hydro-static
1	20.88	107.35	Open To Flow (1)
31	25.03	109.00	Shut-In(1)
90	136.09	110.46	End Shut-In(1)
91	29.16	110.41	Open To Flow (2)
104	31.93	110.32	Shut-In(2)
136	55.16	110.91	End Shut-In(2)
138	2550.77	115.56	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	Mud 100m	0.42

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Vincent Oil Corporation

33-28s-23w-Ford, Co KS

155 N. Market
Ste.# 700
Wichita,KS 67202
ATTN: Jim Hall

Reynolds #2-33

Job Ticket: 56563

DST#: 1

Test Start: 2014.08.28 @ 17:07:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 52.00 sec/qt

Water Loss: 9.98 in³

Resistivity: 0.00 ohm.m

Salinity: 6900.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

Water Salinity: deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	Mud 100m	0.421

Total Length: 30.00 ft Total Volume: 0.421 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

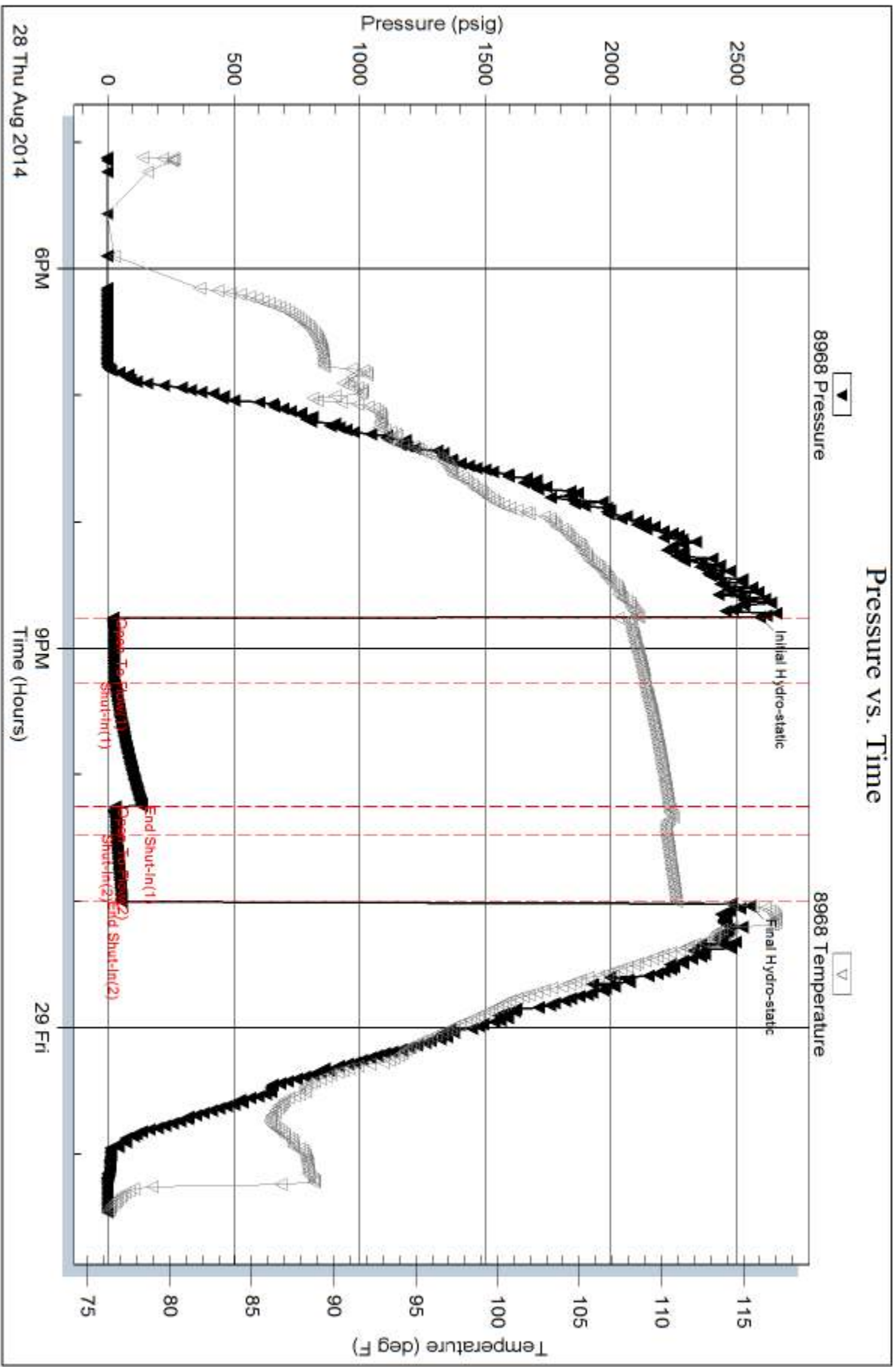
Recovery Comments:

Serial #: 8968

Outside Vincent Oil Corporation

Reynolds #2-33

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 56563

Printed: 2014.08.29 @ 06:03:49



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Vincent Oil Corporation

33-28s-23w-Ford, Co KS

155 N. Market
Ste.# 700
Wichita,KS 67202
ATTN: Jim Hall

Reynolds #2-33

Job Ticket: 56564

DST#: 2

Test Start: 2014.08.29 @ 21:47:00

GENERAL INFORMATION:

Formation: **Mississippi**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:41:30

Time Test Ended: 07:02:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Cornelio Landa III

Unit No: 67

Interval: 5154.00 ft (KB) To 5237.00 ft (KB) (TVD)

Reference Elevations: 2524.00 ft (KB)

Total Depth: 5237.00 ft (KB) (TVD)

2514.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition:

KB to GR/CF: 10.00 ft

Serial #: 8968 Outside

Press@RunDepth: 101.53 psig @ 5156.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.08.29

End Date: 2014.08.30

Last Calib.: 2014.08.30

Start Time: 21:47:05

End Time: 07:02:00

Time On Btm: 2014.08.30 @ 00:40:45

Time Off Btm: 2014.08.30 @ 04:28:15

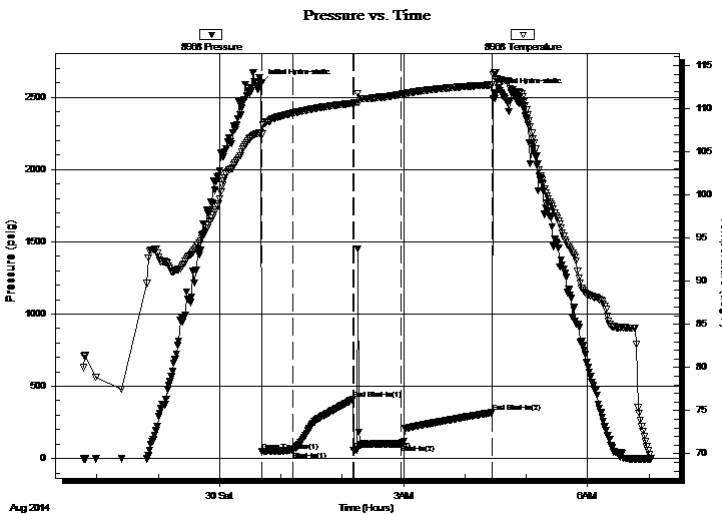
TEST COMMENT: IF: 3 in. Immediately-Built to 4 3/4 blow -Died back to 4 1/4 blow

IS: No return

FF: Two bubbles-Flushed tool @ 3 min. into open-Good surge-5 in. blow -Died back to 4 in. blow

FS: No return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2595.53	107.25	Initial Hydro-static
1	49.01	107.03	Open To Flow (1)
31	53.67	109.48	Shut-In(1)
90	409.99	110.62	End Shut-In(1)
91	57.07	110.44	Open To Flow (2)
137	101.53	111.64	Shut-In(2)
226	318.60	112.74	End Shut-In(2)
228	2532.35	114.16	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
170.00	Mud 100m	2.38

* 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

33-28s-23w-Ford, Co KS

155 N. Market
Ste.# 700
Wichita,KS 67202
ATTN: Jim Hall

Reynolds #2-33

Job Ticket: 56564

DST#: 2

Test Start: 2014.08.29 @ 21:47:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length: ft

Water Salinity: ppm

Viscosity: 60.00 sec/qt

Cushion Volume: bbl

Water Loss: 13.97 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure: psig

Salinity: 12800.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
170.00	Mud 100m	2.385

Total Length: 170.00 ft Total Volume: 2.385 bbl

Num Fluid Samples: 0

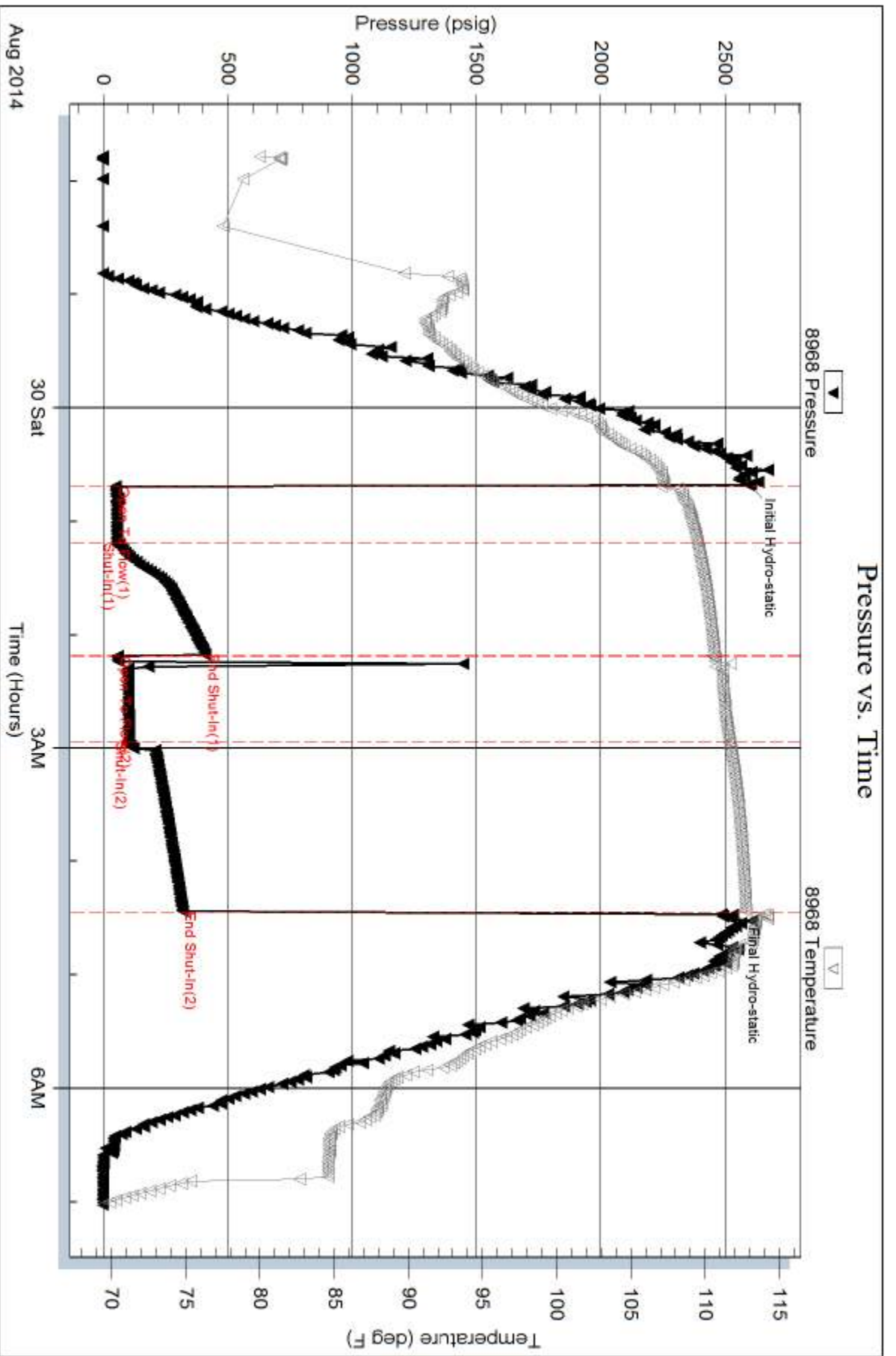
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



LITHOLOGY STRIP LOG

WellSight Systems

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

Measured Depth Log

Well Name: VINCENT OIL CORP.

Well Id: REYNOLDS #2-33

Location: NW NE SW SE SEC. 33, T 28S, R 23W, FORD CO. KANSAS

License Number: 15-057-20938-00-00

Region: Mulberry Creek

Spud Date: August 21th, 2014

Drilling Completed: August 30th, 2014

Surface Coordinates: 1,050' FSL, 1,965' FEL

Bottom Hole

Coordinates:

Ground Elevation (ft): 2,514'

K.B. Elevation (ft): 2,524'

Logged Interval (ft): 4,150' To: 5,318'

Total Depth (ft): 5,318'

Formation: Mississippi

Type of Drilling Fluid: NATIVE MUD TO 3,780'. CHEMICAL GEL TO RTD

Printed by MUD.LOG from WellSight Systems 1-800-447-1534 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, 316-217-1223

Comments

Drilling contractor: Val Energy, Rig #2, Tool Pusher: Rick Smith.

Surface Casing: 8 5/8" set at 600' w/250sx, cement.

Daily Activity:

8/21/14; Move on and spud.

8/22/14; Drilling 12 1/4" hole at 442'. Drilled 12 1/4" hole to 606' and set 8 5/8" casing at 600'.

8/23/14; Drilling 7 7/8" hole at 1,090'.

8/24/14; Drilling at 2,612'.

8/25/14; Drilling at 3,391'.

8/26/14; Drilling at 4,160'.

8/27/14; Drilling at 4,833'.

8/28/14; Drilling at 5,167', commenced DST #1 (Lower Penn.) prior to test drop survey (1/2deg.), and strap pipe (2.21') short to the board.

8/29/14; Tripping in after DST #1 (Lower Penn.) at 5,194'. Extra time taken during trip in hole due to plugged bit, extra trip out to unplug bit, prior to tripping back to bottom.

8/30/14; Tripping out with test tools, finishing DST #2 at 5,237', then drilled ahead to RTD (5,318').

8/31/14; Ran Open Hole Logs. P&A well after review of Logs and DST results.

Deviation Surveys: 0.75 deg. @ 606', 0.50 deg. @ 5,194'.

Bit Record:

#1 12 1/4" out @ 606'.

#2 7 7/8" JZ HA20Q in @ 606', out @ 5,194', made 4,588' in 112.5 hrs.

#3 7 7/8" JZ RR HA30 in @ 5,194', out @ 5,318', made 124' in 5.75 hrs.

Drilling time commenced: @ 4,150'. Maximum 10' wet and dry samples commenced: @ 4,200' to RTD. Samples delivered to Kansas Geological Sample Library at Wichita, Kansas.

Gas Detector: Blue Stem unit #0779. Digital Unit, (commenced @ 4,150').

Mud System: Mud-Co/Service Mud. Chemical Gel system @ 3,780', Mud Engineer: Justen Whitin (Dodge City Office).

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

Logging Engineer: Rupp.

DIL, CDL/CNL/PE, SONIC.

Sample tops are placed on this strip log, with the reference wells "A" Vincent Oil Corp. Frink-Reynolds #1-33, 2,660' FNL, 2,310' FEL, 33-28S-23W, and "B" Vincent Oil Corp. Swonger #1-4, 350' FNL, 1,255' FEL 4-29S-23W. With E-log tops datum differences shown.

DSTs

DST #1 (Lower Penn) 5,109' - 5,194' (85'), 30-60-13-30, IH 2590, IF 21-25 (weak surface building to 1/2inch, then back to 1/4inch), ISI 136 (no blow), FF 29-32 (dead, flush tool, dead), FSI 55 (no blow), FH 2551, Rec; 30' mud (100% mud), BHT 116F.

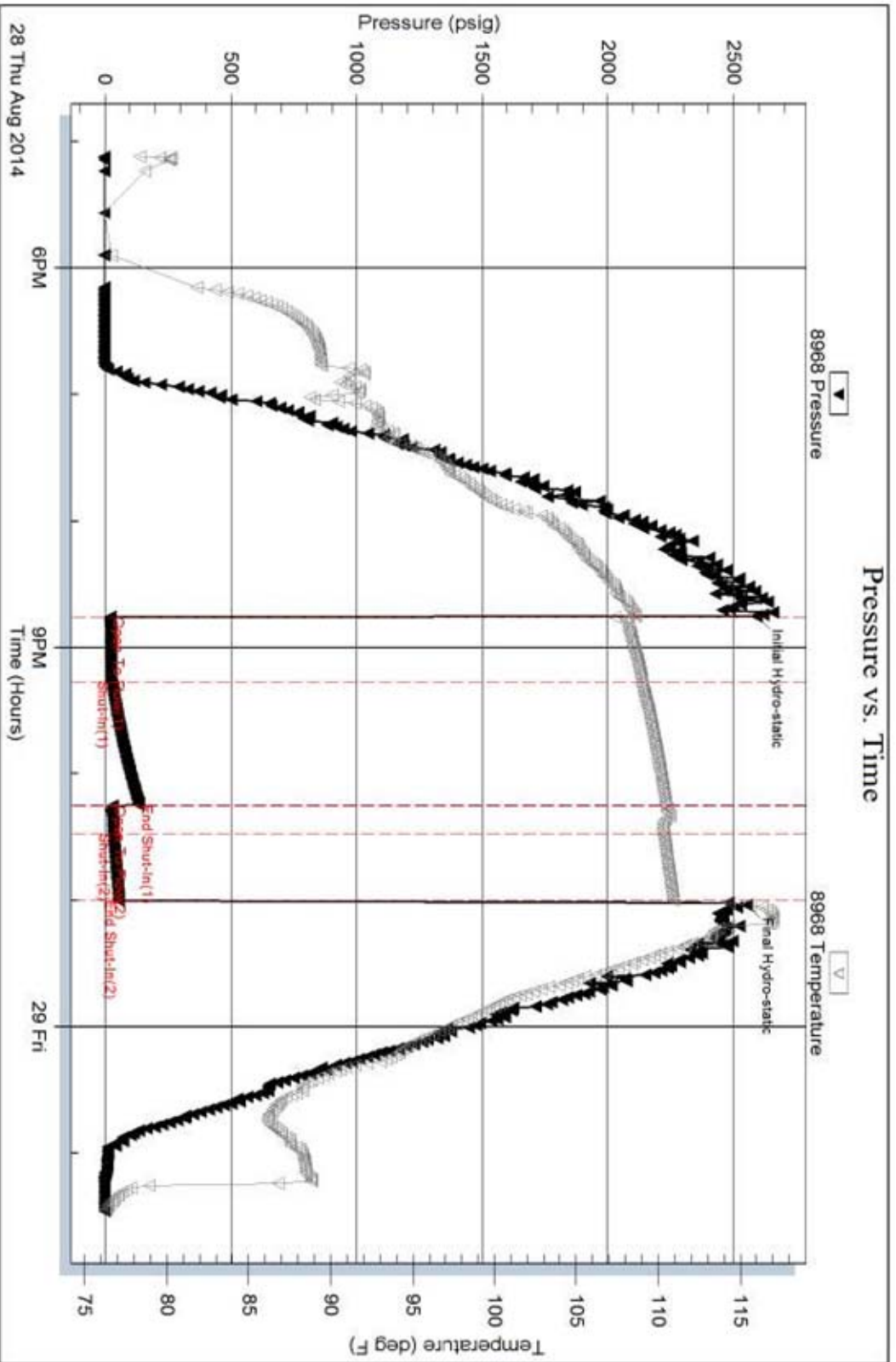
DST #2 (Miss.) 5,154' - 5,237' (83'), 30-60-45-90, IH 2596, IF 49-54 (3inch blow in lmin, then died back to 4.25inch blow), ISI 410 (no blow), FF 57-102 (dead, flush tool-good surge, 5inch blow died to 4inches by 42min), FSI 319 (no blow), FH 2532, Rec; 170' mud (slight gassy odor in tool), BHT 114F.

Serial #: 8968

Outside Vincent Oil Corporation

Reynolds #2-33

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 56563

Printed: 2014.08.29 @ 06:03:49

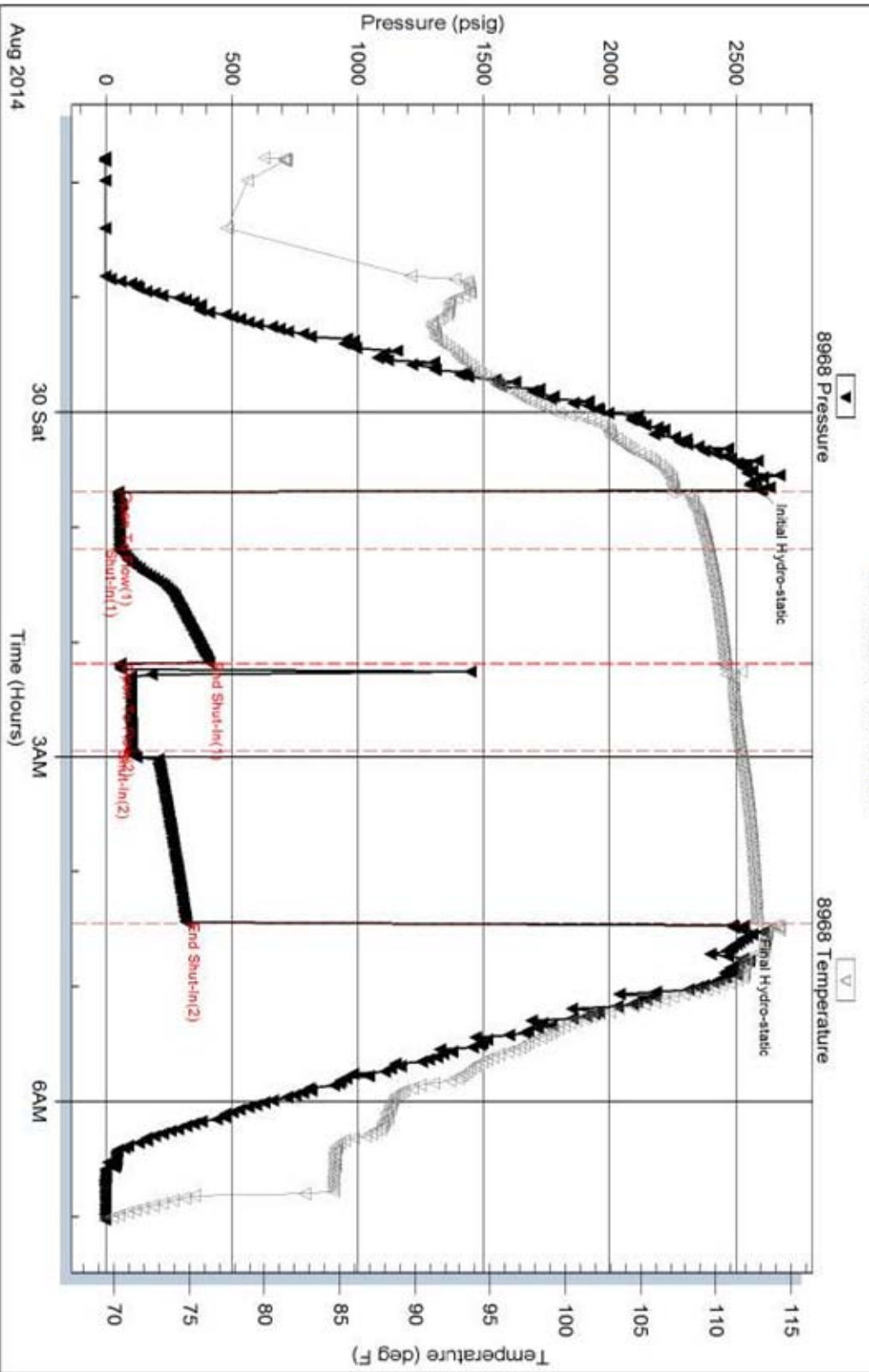
Serial #: 8968

Outside Vincent Oil Corporation

Reynolds #2-33

DST Test Number: 2

Pressure vs. Time



Triobite Testing, Inc

Ref. No: 56564

Printed: 2014.08.30 @ 12:14:47

WELL SITE OPERATIONS / JIM HALL SUPERVISOR

OPERATOR:

Vincent Oil Corp.

WELL REFERENCE SHEET

SUBJECT WELL:

Reynolds #2-33

SUBJECT WELL LOCATION:

NW NE SW SE Sec. 33' T28S, R23W, Ford Co. Ks.

SUBJECT WELL DATUM:

2,524

REF. WELL 'A' Vincent Frink-Reynolds 1-33, 33-28S-23W **DATUM:** **2,489**

REF. WELL 'B' Vincent Swonger 1-4, 4-29S-23W **DATUM:** **2,556**

E-LOG TOPS

**SUBJECT WELL:
ZONE**

WELL 'A'

WELL 'B'

	DEPTH	DATUM	DEPTH	DATUM	REF.	DEPTH	DATUM	REF.
HEEB.	4,333	-1,809	4,288	-1,799	-10	4,360	-1,804	-5
Brown Ls.	4,468	-1,944	4,423	-1,934	-10	4,495	-1,939	-5
Lansing	4,480	-1,956	4,433	-1,944	-12	4,505	-1,949	-7
Stark Sh	4,822	-2,298	4,778	-2,289	-9	4,844	-2,288	-10
Hushp. Sh	4,858	-2,334	4,815	-2,326	-8	4,878	-2,322	-12
Marmaton	4,957	-2,433	4,912	-2,423	-10	4,988	-2,432	-1
PAWNEE	5,036	-2,512	4,991	-2,502	-10	5,057	-2,501	-11
Labette	5,060	-2,536	5,016	-2,527	-9	5,081	-2,525	-11
CKE Sh	5,081	-2,557	5,039	-2,550	-7	5,102	-2,546	-11
2nd CKE	5,120	-2,596	5,068	-2,579	-17	5,142	-2,586	-10
B/Penn.	5,198	-2,674	5,136	-2,647	-27	5,210	-2,654	-20
SAND #1								
Chert Cg.								
MISS.	5,258	-2,734	5,158	-2,669	-65	5,235	-2,679	-55
1st Por.	5,260	-2,736	5,163	-2,674	-61	5,240	-2,684	-51

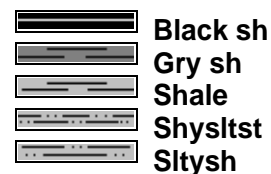
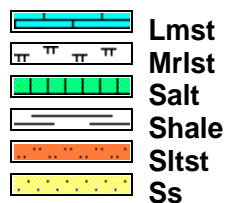
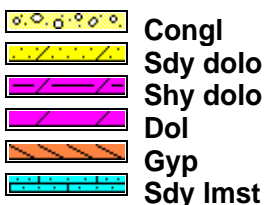
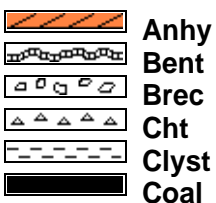
Qualifiers

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.

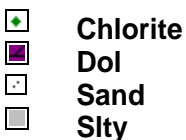
Qualifiers; (Fossils, Minerals, Shows, Porosity, etc.) rare = less than 1% of sample total, trace = less than 5% of sample total, greater than 5% an estimate of total percentage.

ROCK TYPES

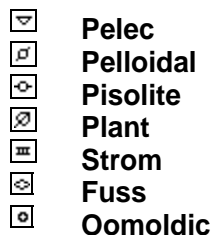
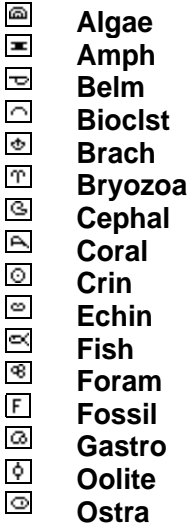


ACCESSORIES

MINERAL



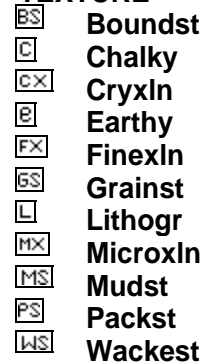
FOSSIL



STRINGER



TEXTURE



Curve Track 1

ROP (min/ft) ———
 Gamma (API) - - - -
 Caliper (API) ·····

TG, C1-C5

TG (units) ———
 C1 (units) - - - -
 C2 (units) ·····
 C3 (units) ·····
 C4 (units) ·····
 C5 (units) ·····

Depth

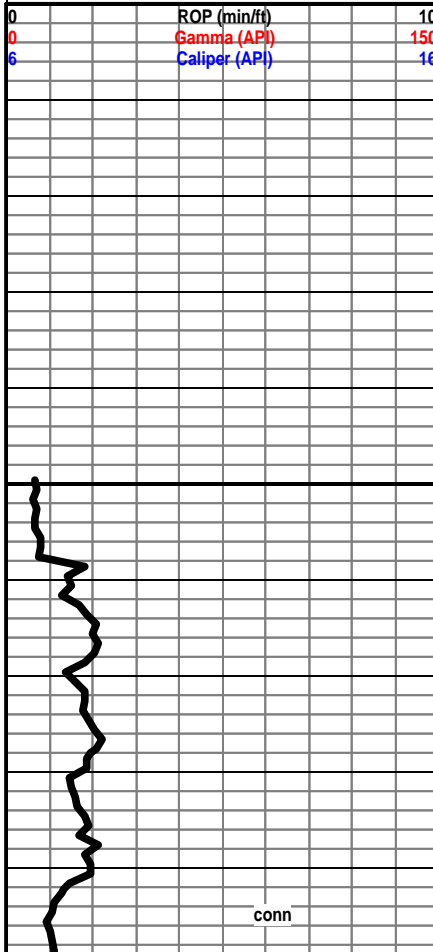
Porosity Type

Lithology

Oil Shows

Geological Descriptions

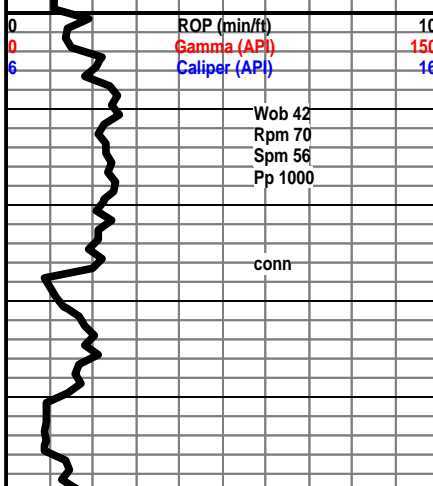
0 ROP (min/ft) 10
 0 Gamma (API) 150
 6 Caliper (API) 16



4150

Jim Hall on Location @ 11:00hrs.
 8/26/14 (4,307').

0 ROP (min/ft) 10
 0 Gamma (API) 150
 6 Caliper (API) 16



4200

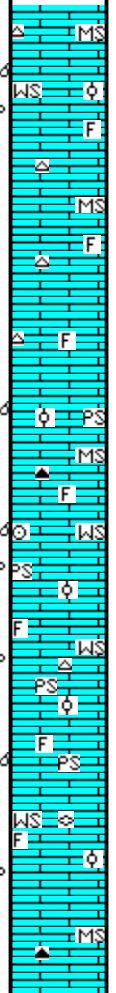
conn

Wob 42
 Rpm 70
 Spm 56
 Pp 1000

conn

conn

conn



Wackestone to Packstone; cream to tan, most brittle, micro-oolitic, rare free chert, no show, barren porosity in the dry sample.

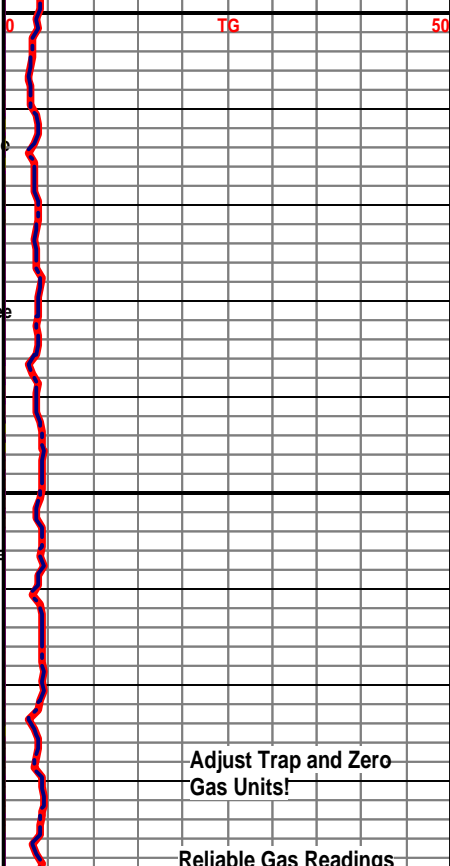
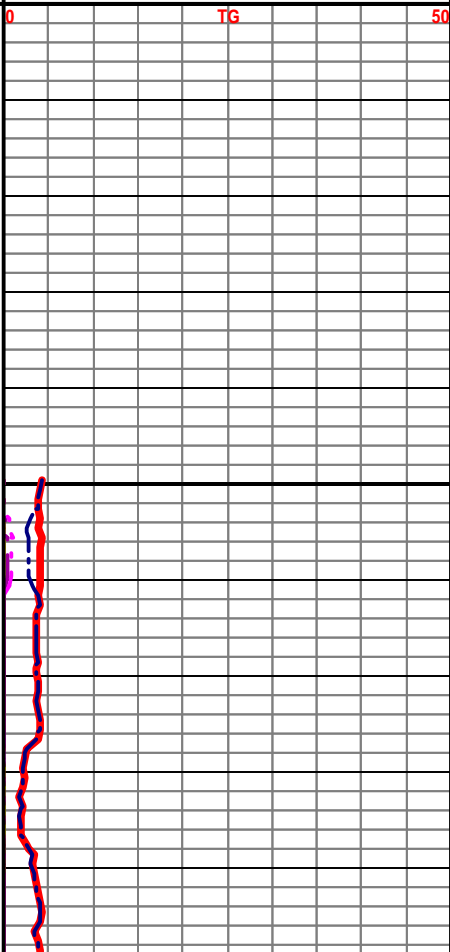
Mudstone; tan to cream, chalky, brittle to some off white soft, rare free light chert and light gray chert, some fossiliferous, no show.

Wackestone to Packstone; cream to tan, chalky, most brittle, some soft-friable, micro-oolitic, to micro-fossiliferous, rare free crinoid stem, barren porosity, trace dull yellow mineral fluorescence-no cut, no live show.

Wackestone to Packstone; cream to tan, most brittle, some soft-friable, most chalky dull matrix, micro-oolitic to micro-fossiliferous, visible barren porosity in the dry sample, barren-no stain, no live oil, no live show, mineral fluorescence only, rare free chert, rare free fusulinid.

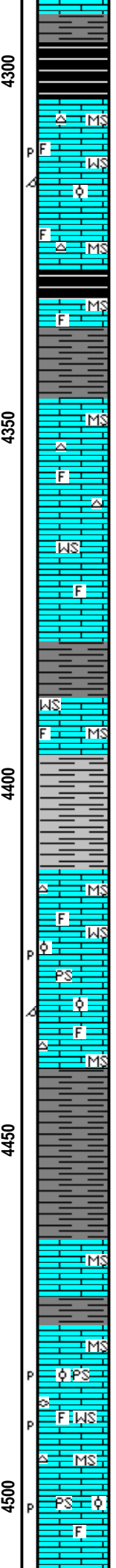
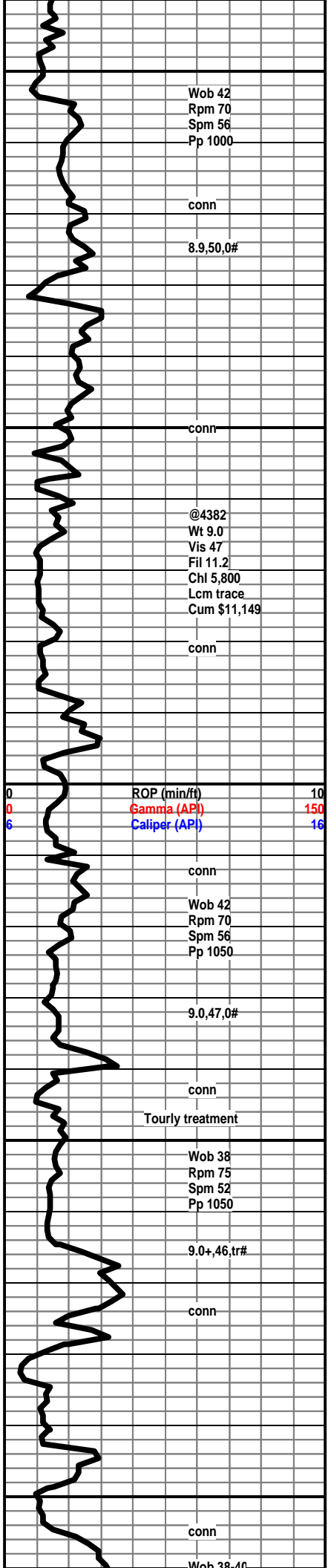
Wackestone to Packstone as above, no show.

Mudstone; cream to off white, most chalky texture, hard to soft, rare dark gray chert.



Adjust Trap and Zero Gas Units!

Reliable Gas Readings



Shale; slight increase in gray, trace red-brown.

Shale; black, carbonaceous, some mottled dark brown, rare gas when broken.

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

Wackestone; firm, no show, rare light gray chert as above, rare barren porosity, in the dry sample.

Heebner 4328 (-1804) A -5 B even

Shale; black, carbonaceous, most soft, rare gas when broken.

Mudstone; buff, hard, chalky, micro-foss.

Shale; most black as above, some gray to dark gray, most soft.

Mudstone; cream, some brown to tan, hard to brittle, most chalky, some silky texture-crystalline-dense, rare free light gray chert to bone white chert, no show.

Wackestone; cream to off white, hard to brittle, micro-fossiliferous, some with very fine crystalline texture, no show, looks dense in wet and dry samples.

Shale; gray to dark gray and black, most soft, tabular, some with carbonate looking laminations.

Mudstone to Wackestone; off white, hard to brittle, some silky crystalline looking, most chalky texture, micro-fossiliferous, yellow fluorescence-no cut, no show.

Shale; gray-green, soft, tabular, some hard.

Mudstone; off white, gray, chalky, hard, rare white free chert.

Wackestone to Packstone; off white to cream, some tan, rare fine oolitic, to micro-oolitic and micro-fossiliferous, yellow fluorescence and rare stain-no cut, no show wet, rare visible barren porosity.

Influx, Shale; gray, to dark gray, soft, earthy texture, most platy.

Brown Lime 4464 (-1940) A -6 B -1

Mudstone; most as above, rare brown-silky crystalline, dense.

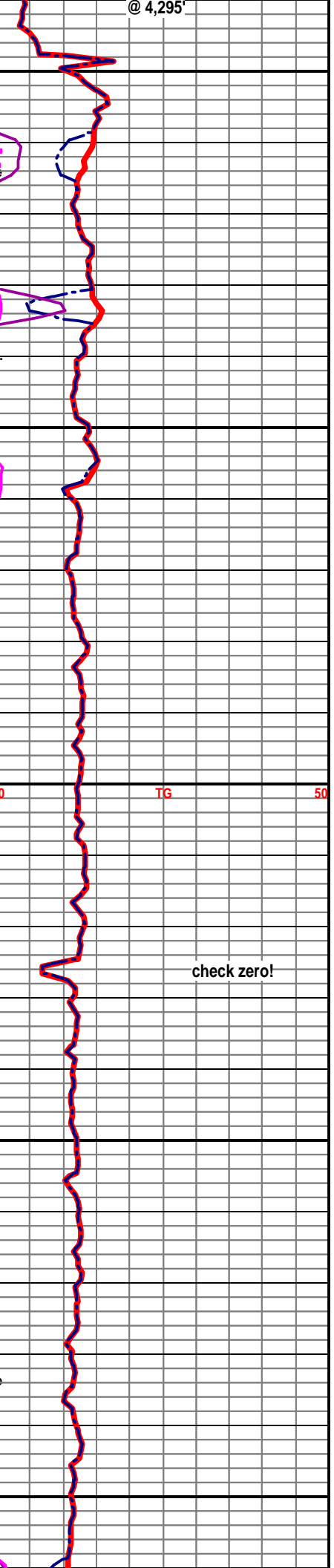
Lansing 4475 (-1951) A -7 B -2

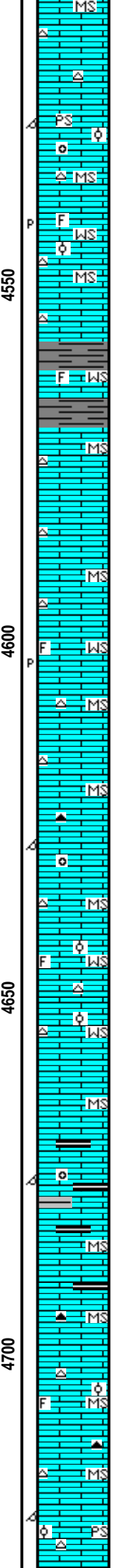
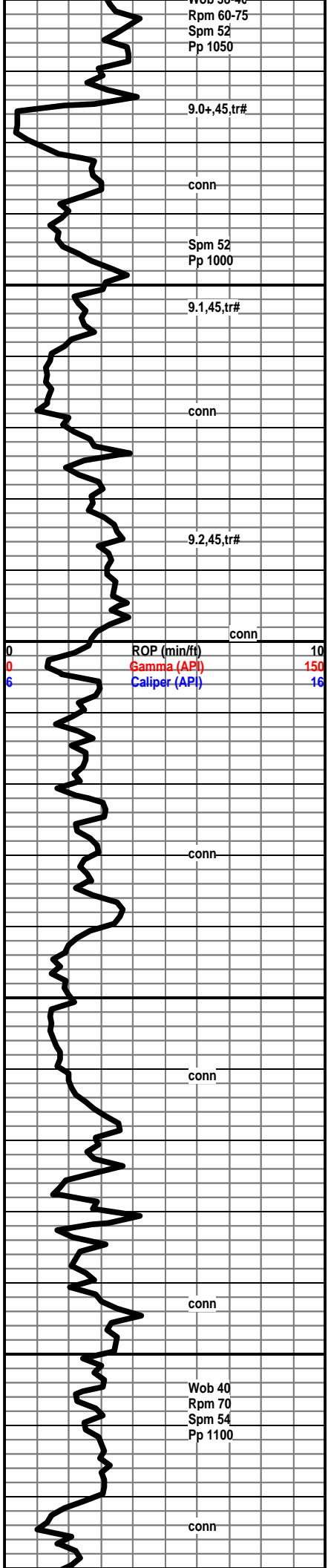
Packstone to Wackestone; cream to off white, most hard, micro-oolitic, rare very fine oolitic, micro-fossiliferous, chalky matrix, rare secondary calcite, dull blue-white fluorescence, no show, rare fusulinid.

Mudstone; cream to tan, hard, chalky, dense, rare secondary calcite, mineral fluor. as above.

Packstone; as above, no show, no real change here.

Mudstone; cream to tan, hard, chalky to crystalline, dense, rare free white free chert.





free white fresh chert

Mudstone; as above, trace free white chert here

Packstone; cream to tan, hard to brittle, chalky to highly oomoldic silky-crystalline look, micro-oolitic to micro-fossiliferous, blue white fluorescence-no cut, no show.

Wackestone to Mudstone; cream to off white, hard to brittle, micro-oolitic, trace free white chert, no show from blue-white fluorescence, aa barren porosity.

Mudstone; cream to off white, chalky, some silky-crystalline, dense, free fresh white to off white and opaque chert.

Shale; influx, gray, dark gray, trace gray-green and black, most soft, platy to tabular.

Wackestone; as above, no show.

Mudstone; cream to tan, trace brown, most chalky, some silky-crystalline, dense, trace off white, to light gray and rare blocky blue-gray free fresh cherts.

Mudstone; as above, no real change here, rare free blocky light gray chert here.

Wackestone; micro-fossiliferous, micro-oolitic, cream to tan, rare barren porosity in the dry sample, no stain, no show.

Mudstone; cream to tan, some light gray, most chalky, hard, light gray free chert aa.

Mudstone; most as above, some brown, hard to brittle, dense looking wet and dry, rare light to dark free chert.

As above; trace tan, hard, crystalline Packstone; oomoldic, no show, cave?

Mudstone; cream to brown, chalky to crystalline, rare light gray free chert.

Wackestone; cream, hard, micro-fossiliferous, to micro-oolitic dense look in wet and dry no show.

Wackestone; cream to off white, hard, chalky to rare crystalline, some chalky-soft, micro-oolitic, no show, rare barren porosity in the dry, rare free light gray to opaque chert

Mudstone; light gray, hard, dense, chalky, trace black carbonaceous looking shale here.

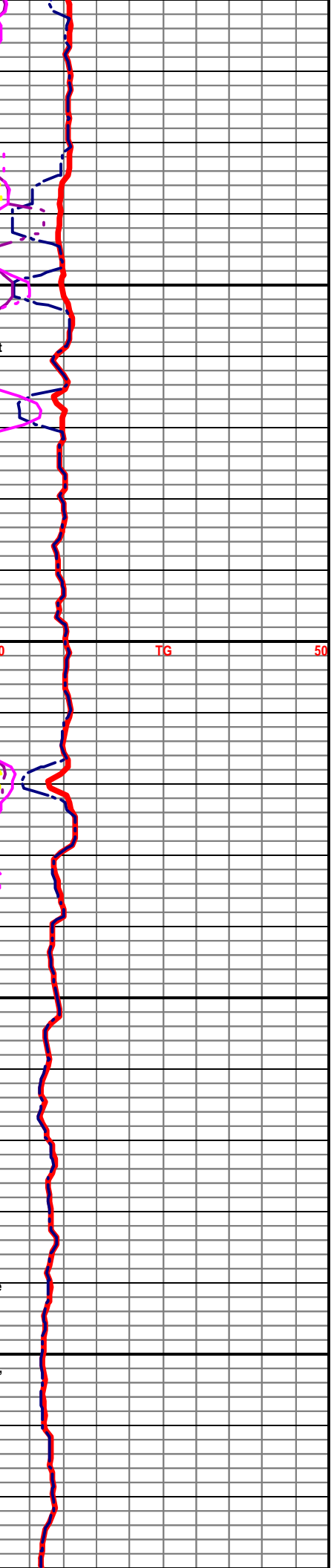
Mudstone; most as above, rare tan brittle, oomoldic Packstone, no show, cave?, 5% - 10% gray to black shales here.

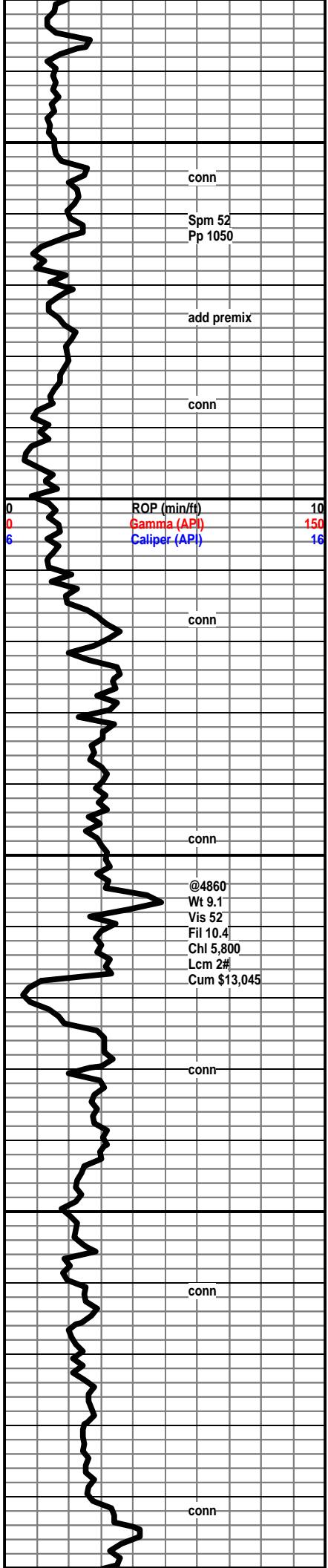
Mudstone; cream to brown, chalky, some silky-crystalline, rare dark gray blocky chert, rare black carbonaceous-gassy shale.

Mudstone; as above, Trace micro-oolitic to micro-fossiliferous, Wackestone; hard tight looking in wet, rare wormy stain-no show.

Mudstone; cream to brown, some off white, soft to hard, chalk to occasionally silky-crystalline, free light and dark chert, dull mineral fluorescence as above, no show in the wet.

Packstone to Wackestone; cream to off white, micro-oolitic to oomoldic, hard chalky to silky crystalline matrix, dull blue-white mineral fluorescence only, no show, rare orange





4750

conn

Spm 52
Pp 1050

add premix

conn

0	ROP (min/ft)	10
0	Gamma (API)	150
6	Caliper (API)	16

4800

conn

conn

@4860
Wt 9.1
Vis 52
Fil 10.4
Chl 5,800
Lcm 2#
Cum \$13,045

4850

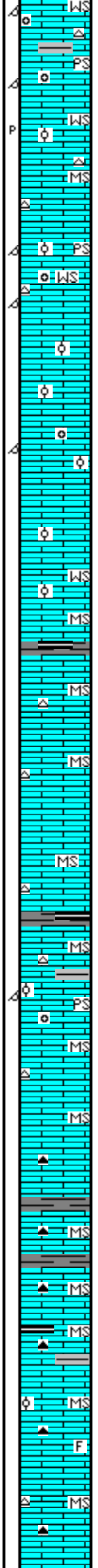
conn

4900

conn

conn

50



chert here.

Wackestone to Packstone; cream to light gray, hard to friable, micro-oolitic to micro-fossiliferous, trace oomoldic, no show, rare barren porosity in the dry sample, slight increase in gray shale.

Mudstone; cream to off white, brittle, some soft chalky, rare free chert.

Packstone to Wackestone; cream to off white, micro-oolitic, most with chalky matrix, rare free light gray chert, rare barren porosity in the dry.

As above; no show, trace dull yellow to white mineral fluorescence, no show.

Packstone to Wackestone; off white to tan-cream, micro-oolitic to vfoolitic, micro-fossiliferous, 5% oomoldic, most hard to brittle, crystalline to chalky matrix, no show in wet sample.

Wackestone; micro-oolitic, micro-fossiliferous, most hard to brittle, some with dark looking wormy stain on edges, no cut, no live show in the wet, no visible porosity in the wet.

Stark Shale; 4820 (-2296) A -7 B -8

Shale; rare soft black to gray, no visible gas bubbles.

Mudstone; brown to tan, crystalline-dense, cream to off white chalky, rare light gray free blocky chert.

Mudstone; off white to cream-brown, hard, crystalline to soft and chalky, rare free light gray and cream colored cherts, blocky to sharp.

Hushp. Shale; 4958 (-2434) A -8 B -12

Shale; rare dark gray and black in samples, no visible gas bubbles.

Packstone; cream to tan, hard, crystalline matrix, very fine oolitic to micro-oolitic, oomoldic, no visible show in wet sample, very dull mineral fluorescence only, rare fossiliferous chert.

Mudstone; cream, tan to brown, hard, chalky to silky-crystalline matrix, dense.

Mudstone; gray to brown, hard, crystalline to chalky, dense.

Mudstone; dark gray, gray, rare black free chert.

Mudstone; most as above, increase of black chert to approx. 5% of sample, increase in dark gray, to black shale, here.

Mudstone; increase in cream to brown, hard, crystalline to chalky, dense, chert and shale as above, rare black-carbonaceous gassy shale here-cave?

Mudstone; most as above, some micro-fossiliferous to micro-oolitic, chert as above, rare dark brown free sharp to blocky chert here.

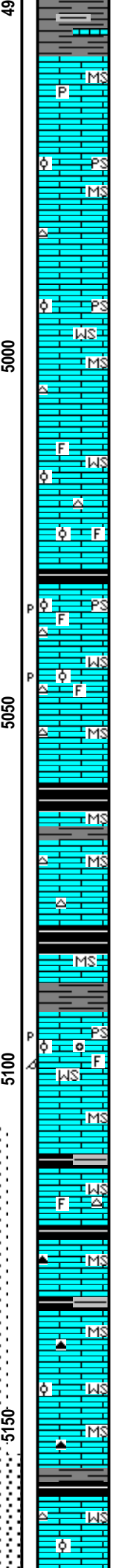
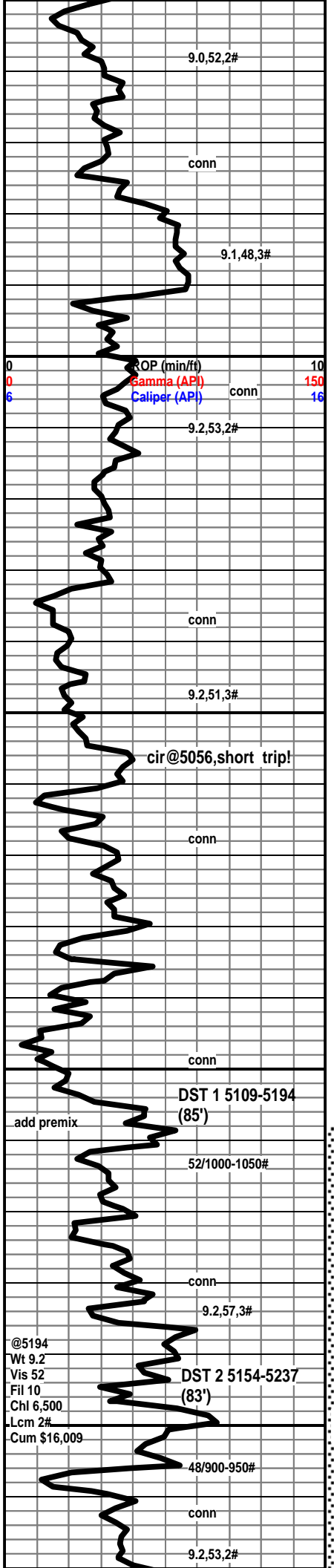
Mudstone; cream-brown, gray, hard, chalky to crystalline-silky texture, rare dark brown fossiliferous chert here.

38u Test From Gas Trap!

TG

50

39u Test From Gas Trap!



Shale; gray, dark gray, black, gray-green-clayston

Marmaton 4958 (-2434) A -11 B -2

Mudstone; cream - brown, chalky to crystalline, gray-chalky, hard to firm, less crystalline mudstone here, rare free pyrite.

Packstone; small influx, Off white, fine-oolitic to fine fossiliferous, chalky, tight looking in wet, no show.

Mudstone; cream to off white, most chalky, firm to soft, off white to light gray free chert here.

Packstone to Wackestone; trace off white, fine oolitic, chalky matrix, no cut or show on selected samples.

Mudstone; cream to off white, hard-friable, chalky, some Wackestone; micro-oolitic, off white no show.

Wackestone; off white, cream, micro-oolitic, to micro-fossiliferous, chalky, brittle to friable, no show or cut on selected samples, mineral fluorescence only.

Pawnee 5032 (-2508) A -6 B -7

Shale; rare dark gray to black, no visible gas.

30 min; Wackestone to Packstone; off white, cream, most brittle, micro-oolitic to rare very fine oolitic, most chalky matrix, no visible porosity in wet, no cut on selected samples, no show, free foss. chert.

60min; as above; rare bright fluorescence, no cut, no odor, no visible show, one sample only with bright fluorescence-residual ring cut only, aa rare barren pinpoint porosity, no show on porosity.

Labette 5060 (-2536) A -9 B -11

Shale; black, carbonaceous, non gassy.

Mudstone; cream to off white, most chalky, trace brown-crystalline, brittle to hard, 5% smoky gray chert.

CKE 5081 5081 (-2557) A -7 B -11

Shale; black carbonaceous, gassy.

Shale; gray, gray-green waxy luster.

Packstone to Wackestone; cream to light gray, chalky matrix, micro-foss to oolitic, some fine oolites in chalky matrix, trace barren porosity in the dry, no cut on selected samples, looks wet.

Mudstone; cream to gray, dull chalky, tight looking.

***CKE 5111 (-2587) A -8 B -1**

Shale; gray, black-carbonaceous

Shale; black-carb, some gassy.

Mudstone; slight increase in brown-silky-crystalline, dense, dark free chert here.

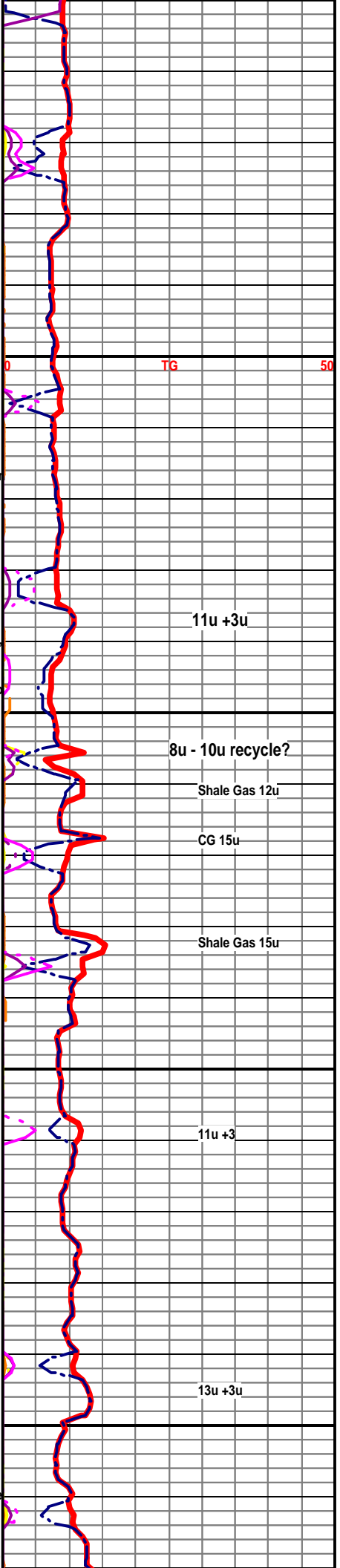
Mudstone; buff to tan, hard, chalky, yellow mineral fluorescence, no show, dense, dark tan to gray chrt.

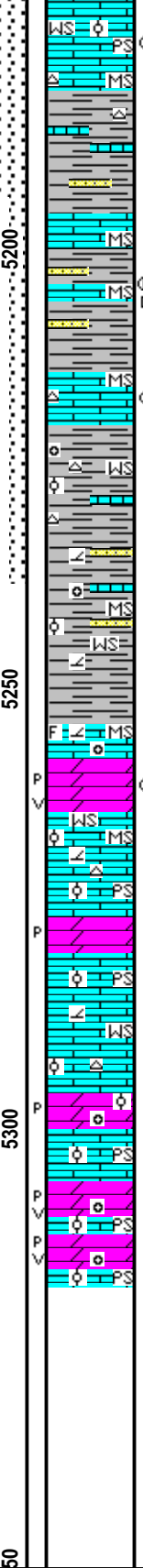
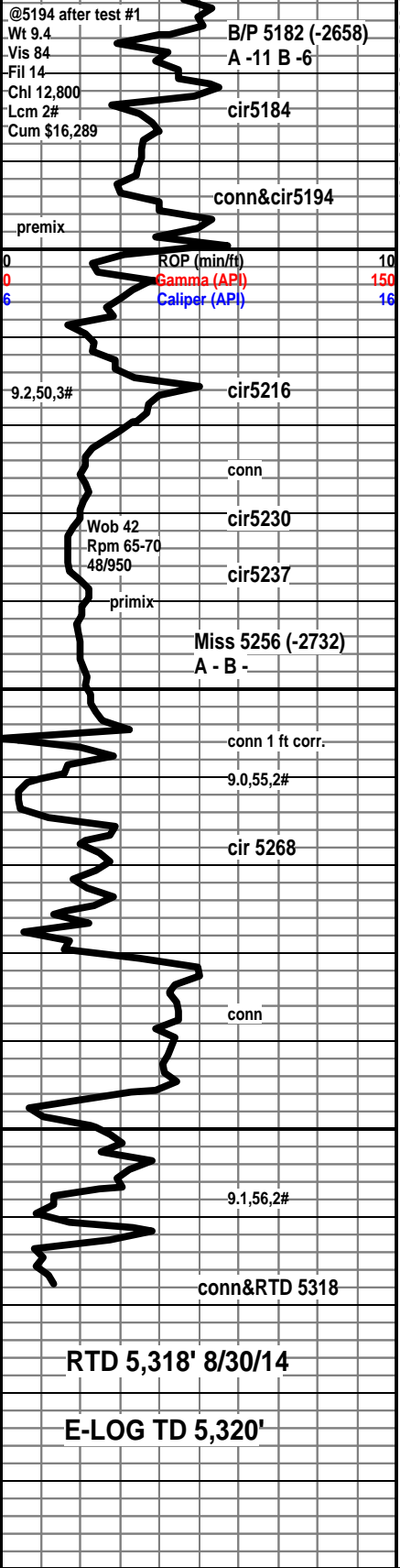
Wackestone; cream, hard to firm, micro-oolitic to very fine oolitic, dense looking matrix in wet, NS!

Shale; gray to black, no visible gas bubbles.

Wackestone; cream to off white, micro-oolitic, hard-soft, trace yellow to gold fluor, no show on selected sample, looks tight.

Mudstone; cream, brown to gray, most brittle, chalky to some





crystalline, tight

Wackestone to rare Packstone; cream tan, micro-oolitic, rare vfool, rare oomoldic-cave?, no show, no cut on selected samples.

Shale; slight increase in gray-green sub-waxy, rare gray green blocky chert.

60 min; Shale; pale green, sub waxy, rare brick red, one clust ufg quartz sandstone; wlsrtd, cons, rnd, no fluor-no cut, sample are a high % Mudstone aa.

90 min; 4 samples of a buff-cream Mudstone; with rare spotty wormy stain, instant cut, from yellow fluor, no odor, no visible oil or porosity, assumed to come from 5,175' - 5,179'??

Mudstone; cream to lt gray, chalky, hard, trace brown-tan-crystalline, rare spotty black and brown stain, 2 samples with instant cut, no odor. Shale; 40-% most pale green, rare ufg sand cluster-no show.

Mudstone; 5216-20 cream to off white, most brittle, chalky, 5% Cream to off white m-oolitic Wackestone, rare white vf ool Packstone, no show, cave?.

Cir samples 5,237'; Mudstone; 60% 40% cream to gray, trace off white, rare tan fine gritty dolomitic limestone-no show, no sample show here. Shale 60%; 40% very colored, most large cuttling-some rounded-cave? SS rare-no show, fair to poor quality samples, aa rare oomoldic Packstone in most samples-no show, cave?

Mudstone; cream to tan, some off white, trace tan gritty dolomitic limestone, no show or cut on selected fluorescence samples. Sample quality very poor, 60-80% very colored shales, most caving size.

Dolomite; 60min sample, rare light gray, very fine sucrosic, rare bright fluorescence-instant cut, rare barren samples with no cut, spotty barren looking porosity in show and non show samples, very faint odor prior to washing samples. less then 1% dolomite in 60min sample. Approx 5% dolo. in 90min sample, one sample white chert with rainbow look in wet-slow cut.

Dolomite; as above, rare in samples, no show, faint sample odor.

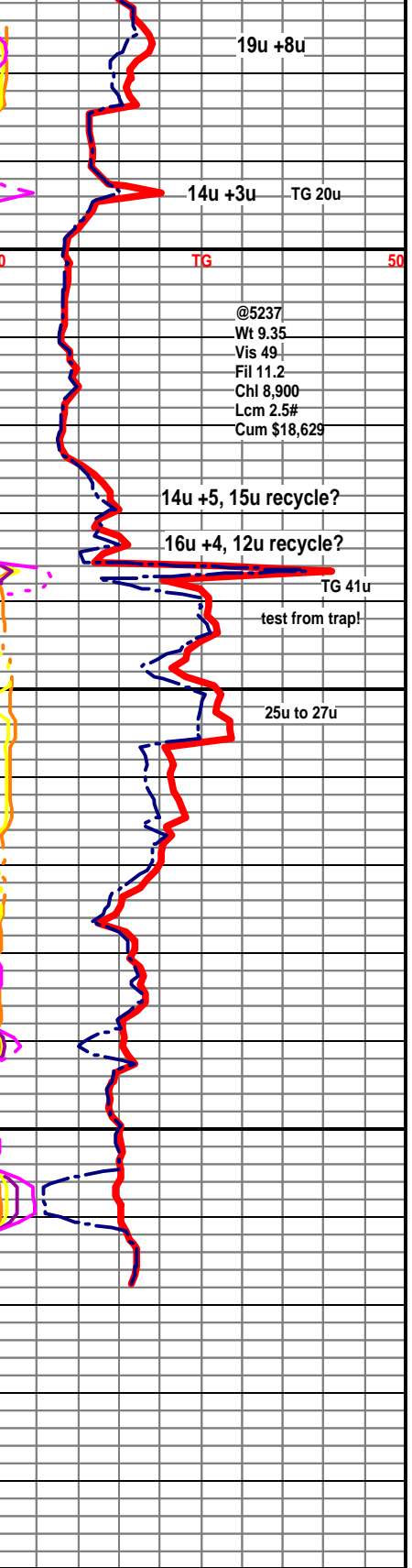
Wackestone to Packstone; micro-oolitic to very fine oolites in tight looking matrix, chalky brittle matrix, no show, no sample odor here. sample improving with depth 70% limestone;

Dolomite; rare in samples; gray fine sucrosic to tan oolitic, no show, no sample odor.

Packstone; cream to off white, micro-oolitic to fine oolites, chalky matrix, no show.

Dolomites; cream to tan, hard, very sucrosic to gritty texture, some oomoldic, rare oolitic dolomite, barren porosity in the wet was visible, no show, no sample odor.

Cir samples 5,230'; Mudstone; 70% 30%, as above, rare drk stn, instant cut, no odor, no free oil, 5% Wackestone; micro-ool, rare off white - white ool Packstone, aa; sample quality fair- poor. Shale; 30% - 50% light gray, black, gray-green, green to some mott ochr mrn, some calc-limy,



RTD 5,318' 8/30/14

E-LOG TD 5,320'