Confidentiality Requested:
☐ Yes ☑ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1216649

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 # 8061
Name: Oil Producers Inc. of Kansas
Address 1: 1710 WATERFRONT PKWY
Address 2:
City: WICHITA State: KS Zip: 67206 + 6603
Contact Person: Lanny Butner
Phone: (316) 681-0231
CONTRACTOR: License # 5123
Name: Pickrell Drilling Company, Inc.
Wellsite Geologist: Kent Matson
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 #:

5/6/2014	5/16/2014	5/16/2014
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-135-25742-00-00
Spot Description:
NW SE NE SE Sec. 36 Twp. 20 S. R. 21 ☐ East ☑ West
1815 Feet from ☐ North / ☑ South Line of Section
335 Feet from ☑ East / ☐ West Line of Section

Footages Calculated from Nearest Outside Section Corner:
☐ NE ☐ NW ☑ SE ☐ SW

GPS Location: Lat: *(e.g. xx.xxxxx)* , Long: *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Ness
Lease Name: CRAIG J Well #: 1
Field Name:
Producing Formation: None
Elevation: Ground: 2243 Kelly Bushing: 2253
Total Vertical Depth: 4470 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 223 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: 15000 ppm Fluid volume: 800 bbls
Dewatering method used: Evaporated

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:** NAOMI JAMES **Date:** 08/05/2014

[redacted] 1216649

Operator Name: Oil Producers Inc. of Kansas Lease Name: CRAIG J Well #: 1

Sec. 36 Twp. 20 S. R. 21 ☐ East ☑ West County: Ness

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 ☑ Yes ☐ No
(Attach Additional Sheets)

Samples Sent to Geological Survey ☑ Yes ☐ No

Cores Taken ☐ Yes ☑ No

Electric Log Run ☑ Yes ☐ No

List All E. Logs Run:

Attached

☑ Log Formation (Top), Depth and Datum ☐ Sample

Name	Top	Datum
Heebner Shale	3744	-1491
Lansing	3773	-1520
Mississippi	4427	-2174

CASING RECORD ☑ New ☐ 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
Surface	12.25	8.625	23	223	Class A	150	2% gel,3% cc

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
___ Perforate ___ Protect Casing ___ Plug Back TD ___ 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 *(Amount and Kind of Material Used)*	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: ☐ Vented ☐ Sold ☐ Used on Lease *(If vented, Submit ACO-18.)*

METHOD OF COMPLETION: ☐ Open Hole ☐ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)* ☐ Other *(Specify)* _____

PRODUCTION INTERVAL:

Mail to: KCC - Conservation Division, 130 S. Market - Room 2078, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	Oil Producers Inc. of Kansas
Well Name	CRAIG J 1
Doc ID	1216649

All Electric Logs Run

Dual Induction Log
Compensated Denisty Neutron PE Log
Micro Log
Sonic Log

DRILL STEM TEST REPORT

Oil Producers Inc of Kansas

36-20s-21w,Pawnee,KS

Craig J #1

Job Ticket: 58954 **DST#: 1**

ATTN: Kent Matson

Test Start: 2014.05.12 @ 09:10:00

GENERAL INFORMATION:

Formation: **Miss**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 11:35:00
Time Test Ended: 16:50:15

Test Type: Conventional Bottom Hole (Initial)
Tester: Brett Dickinson
Unit No: 59

Interval: 4382.00 ft (KB) To 4390.00 ft (KB) (TVD)
Total Depth: 4390.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

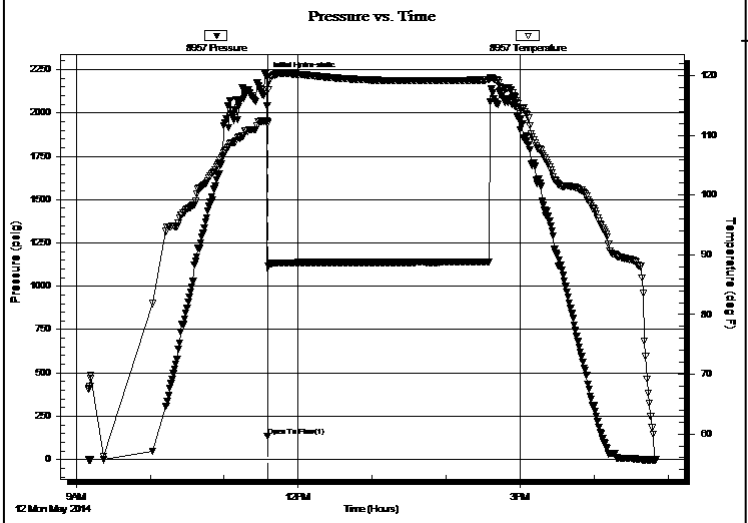
Reference Elevations: 2253.00 ft (KB)
2241.00 ft (CF)
KB to GR/CF: 12.00 ft

Serial #: 8957 **Outside**

Press@RunDepth: psig @ 4387.00 ft (KB)
Start Date: 2014.05.12 End Date: 2014.05.12
Start Time: 09:10:05 End Time: 16:50:14

Capacity: 8000.00 psig
Last Calib.: 1899.12.30
Time On Btm: 2014.05.12 @ 11:34:15
Time Off Btm:

TEST COMMENT: IF-3in blow built to 3 1/4in died back to 3in
ISI-No blow
FF-No blow
FSI-No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2211.43	112.39	Initial Hydro-static
1	135.90	112.04	Open To Flow (1)

Recovery

Length (ft)	Description	Volume (bbl)
65.00	OS Mud	0.32

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Oil Producers Inc of Kansas

36-20s-21w,Pawnee,KS

Craig J #1

Job Ticket: 58954 **DST#: 1**

ATTN: Kent Matson

Test Start: 2014.05.12 @ 09:10:00

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:	70.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	11.59 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	3500.00 ppm				
Filter Cake:	inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
65.00	OS Mud	0.320

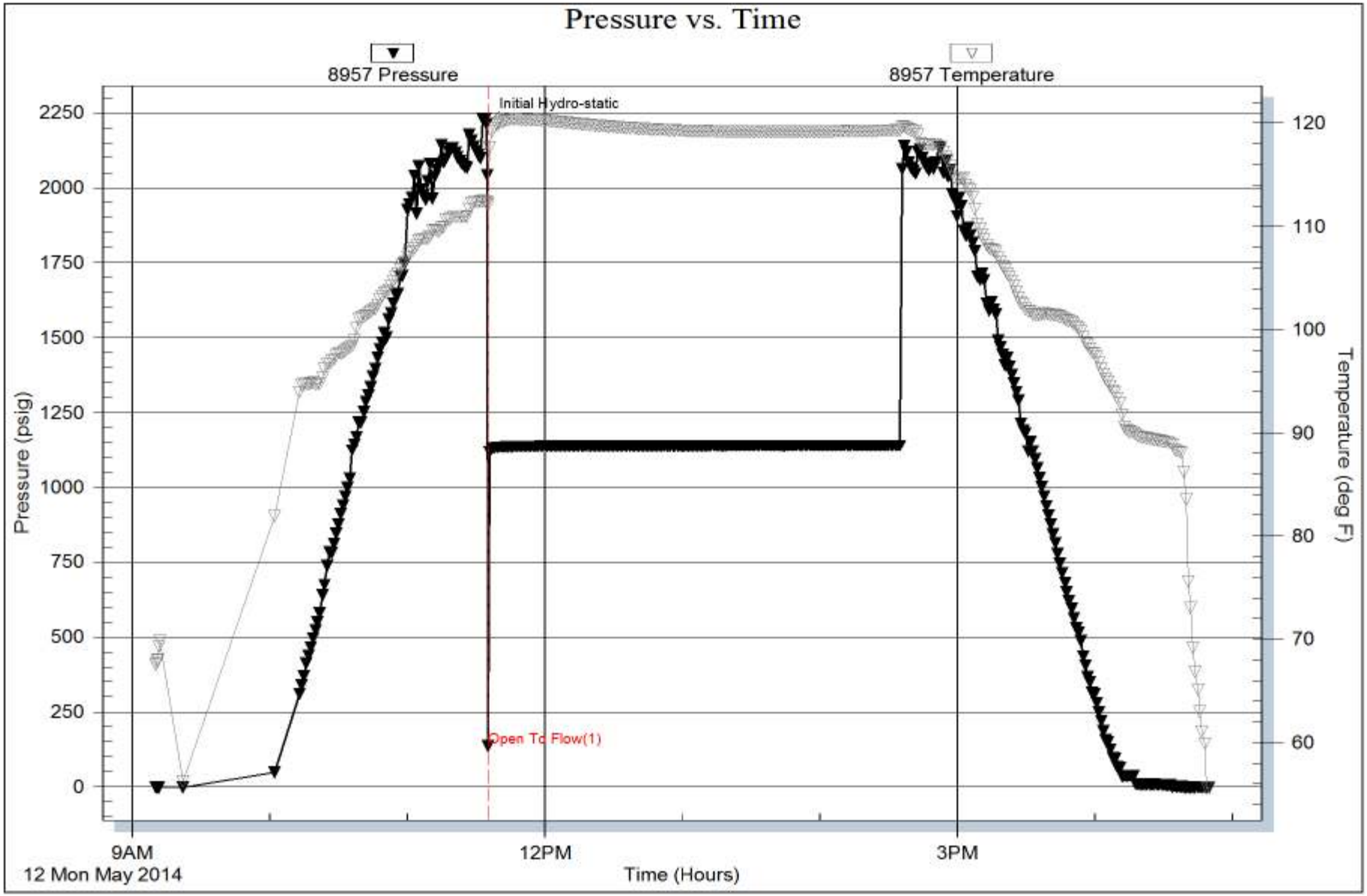
Total Length: 65.00 ft Total Volume: 0.320 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:

Serial #: 8957 **Outside** Oil Producers Inc of Kansas Craig J #1 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 58954 Printed: 2014.05.12 @ 17:21:55

DRILL STEM TEST REPORT

Oil Producers Inc of Kansas

1710 Waterfront PKWY
Wichita KS 67206

ATTN: Kent Matson

36-20s-21w,Ness,KS

Craig J #1

Job Ticket: 58955 **DST#: 2**

Test Start: 2014.05.12 @ 09:10:00

GENERAL INFORMATION:

Formation: **Miss**
Deviated: No Whipstock: ft (KB)
Time Tool Opened:
Time Test Ended:

Test Type: Conventional Bottom Hole (Reset)
Tester: Brett Dickinson
Unit No: 59

Interval: 4382.00 ft (KB) To 4390.00 ft (KB) (TVD)
Total Depth: 4390.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

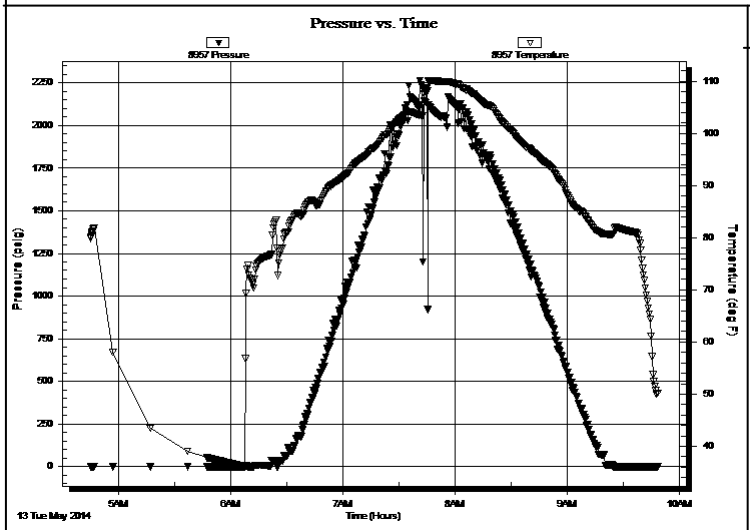
Reference Elevations: 2253.00 ft (KB)
2241.00 ft (CF)
KB to GR/CF: 12.00 ft

Serial #: 8957

Press@RunDepth: psig @ ft (KB)
Start Date: 2014.05.13 End Date: 2014.05.13
Start Time: 04:45:05 End Time: 09:48:14

Capacity: 8000.00 psig
Last Calib.: 2014.05.13
Time On Btm:
Time Off Btm:

TEST COMMENT: Packer Failure



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
240.00	Mud	1.73

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Oil Producers Inc of Kansas

1710 Waterfront PKWY
Wichita KS 67206

ATTN: Kent Matson

36-20s-21w,Ness,KS

Craig J #1

Job Ticket: 58955 **DST#: 2**

Test Start: 2014.05.12 @ 09:10:00

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:	70.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	11.58 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	3500.00 ppm				
Filter Cake:	inches				

Recovery Information

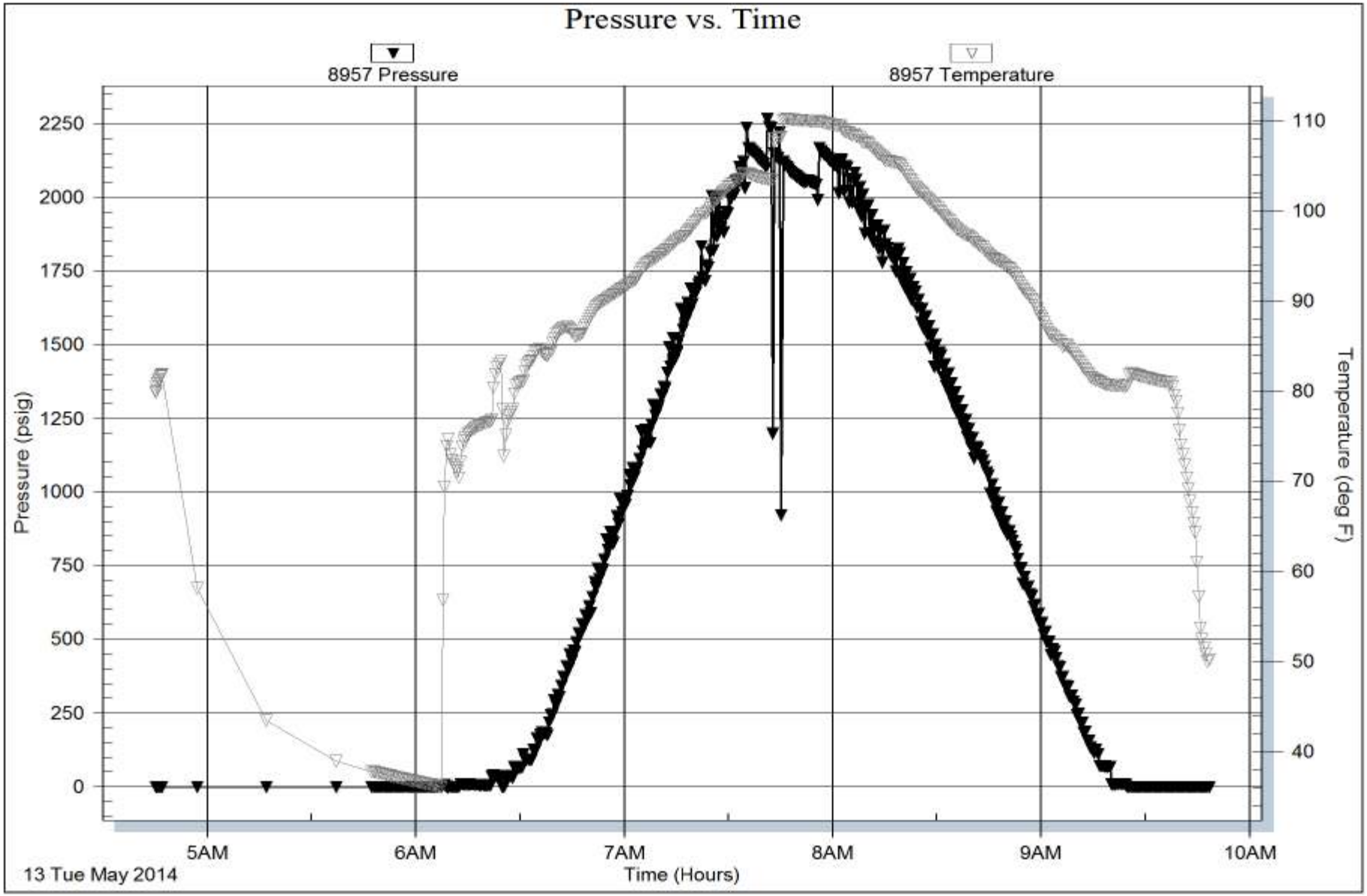
Recovery Table

Length ft	Description	Volume bbl
240.00	Mud	1.727

Total Length: 240.00 ft Total Volume: 1.727 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8957 Oil Producers Inc of Kansas Craig J #1 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 58955 Printed: 2014.05.13 @ 08:51:00

DRILL STEM TEST REPORT

Oil Producers Inc of Kansas

1710 Waterfront PKWY
Wichita KS 67206

ATTN: Kent Matson

36-20s-21w,Ness,KS

Craig J #1

Job Ticket: 58956 **DST#: 3**

Test Start: 2014.05.13 @ 08:58:00

GENERAL INFORMATION:

Formation: **Miss**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 10:39:45
Time Test Ended: 16:52:45

Test Type: Conventional Bottom Hole (Reset)
Tester: Brett Dickinson
Unit No: 59

Interval: 4355.00 ft (KB) To 4390.00 ft (KB) (TVD)
Total Depth: 4390.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

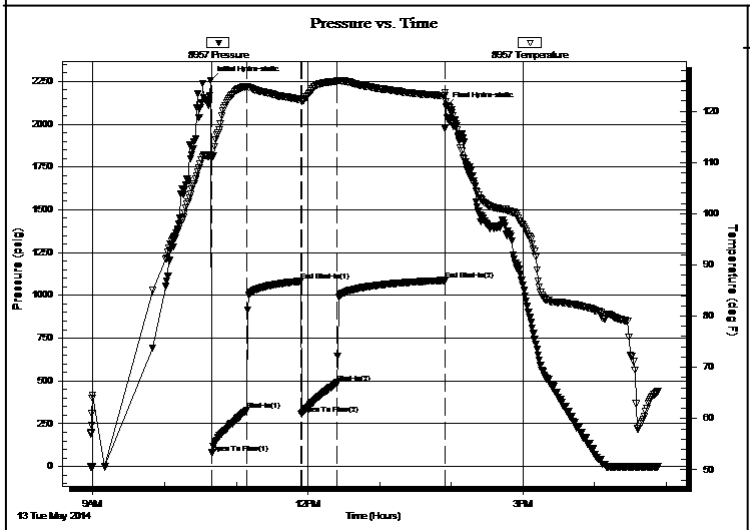
Reference Elevations: 2253.00 ft (KB)
2241.00 ft (CF)
KB to GR/CF: 12.00 ft

Serial #: 8957 **Outside**

Press@RunDepth: 489.61 psig @ 4387.00 ft (KB)
Start Date: 2014.05.13 End Date: 2014.05.13
Start Time: 08:58:05 End Time: 16:52:44

Capacity: 8000.00 psig
Last Calib.: 2014.05.13
Time On Btm: 2014.05.13 @ 10:38:45
Time Off Btm: 2014.05.13 @ 13:55:45

TEST COMMENT: IF-BOB in 5min
ISI-1/2in blow
FF-BOB in 5min
FSI-BOB in 23min



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2255.62	111.37	Initial Hydro-static
1	79.90	111.02	Open To Flow (1)
30	327.63	124.83	Shut-In(1)
75	1082.47	122.23	End Shut-In(1)
76	306.59	121.86	Open To Flow (2)
106	489.61	125.82	Shut-In(2)
196	1087.62	122.99	End Shut-In(2)
197	2103.36	121.82	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
360.00	Water	3.41
420.00	GVSOMCW 20%G 10%O 20%M 50%W	5.89
180.00	GVSOWCM 20%G 10%O 40%M 30%W	2.52
95.00	GSOWCM 15%G 20%O 40%M 25%W	1.33
0.00	420ft GIP	0.00

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Oil Producers Inc of Kansas

1710 Waterfront PKWY
Wichita KS 67206

ATTN: Kent Matson

36-20s-21w,Ness,KS

Craig J #1

Job Ticket: 58956 **DST#: 3**

Test Start: 2014.05.13 @ 08:58:00

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:	50000 ppm
Viscosity:	70.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	11.58 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	3500.00 ppm				
Filter Cake:	inches				

Recovery Information

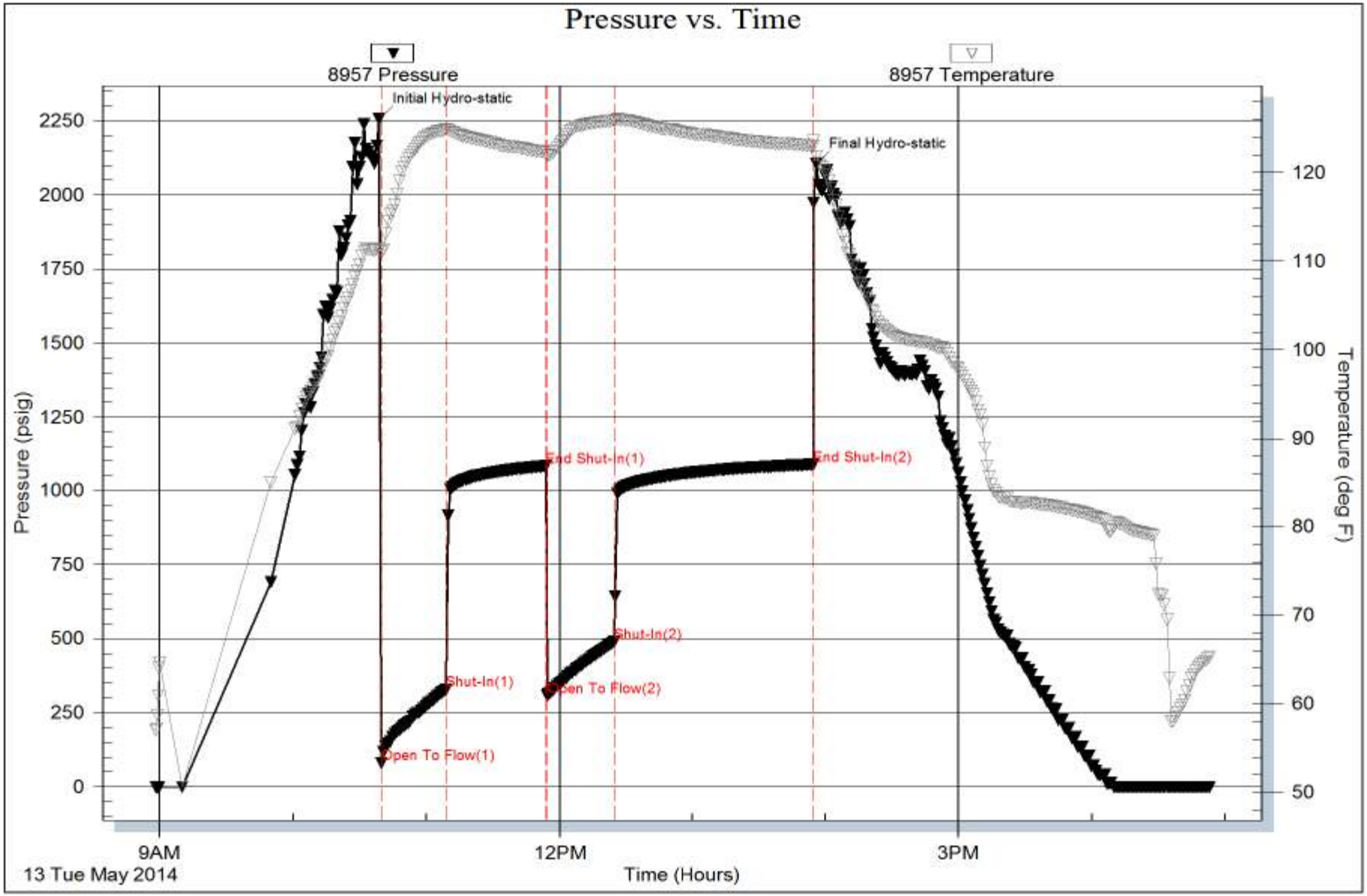
Recovery Table

Length ft	Description	Volume bbl
360.00	Water	3.410
420.00	GVSOMCW 20%G 10%O 20%M 50%W	5.891
180.00	GVSOWCM 20%G 10%O 40%M 30%W	2.525
95.00	GSOWCM 15%G 20%O 40%M 25%W	1.333
0.00	420ft GIP	0.000

Total Length: 1055.00 ft Total Volume: 13.159 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8957 **Outside** Oil Producers Inc of Kansas Craig J #1 DST Test Number: 3



Trilobite Testing, Inc Ref. No: 58956 Printed: 2014.05.13 @ 17:09:17

DRILL STEM TEST REPORT

Oil Producers Inc of Kansas

1710 Waterfront PKWY
Wichita KS 67206

ATTN: Kent Matson

36-20s-21w,Ness,KS

Craig J #1

Job Ticket: 58957 **DST#: 4**

Test Start: 2014.05.14 @ 03:50:00

GENERAL INFORMATION:

Formation: **Miss**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 06:09:00
Time Test Ended: 12:03:30

Test Type: Conventional Bottom Hole (Reset)
Tester: Brett Dickinson
Unit No: 59

Interval: 4398.00 ft (KB) To 4410.00 ft (KB) (TVD)
Total Depth: 4410.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

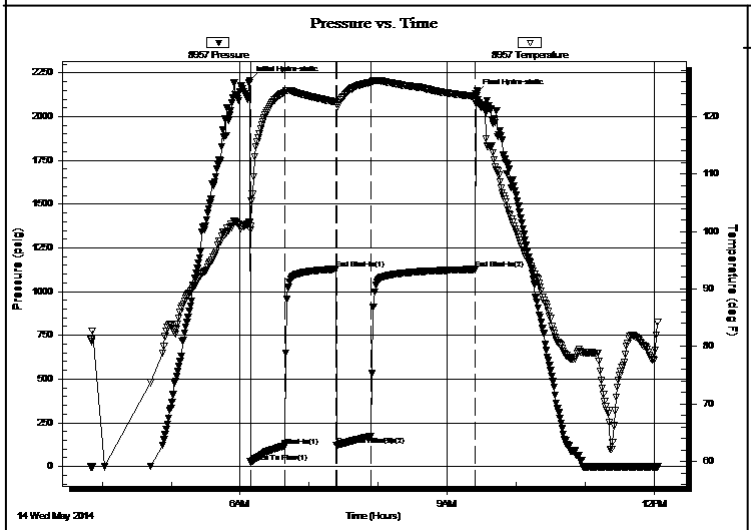
Reference Elevations: 2253.00 ft (KB)
2241.00 ft (CF)
KB to GR/CF: 12.00 ft

Serial #: 8957 **Outside**

Press@RunDepth: 173.01 psig @ 4407.00 ft (KB)
Start Date: 2014.05.14 End Date: 2014.05.14
Start Time: 03:50:05 End Time: 12:03:29

Capacity: 8000.00 psig
Last Calib.: 2014.05.14
Time On Btm: 2014.05.14 @ 06:08:15
Time Off Btm: 2014.05.14 @ 09:25:15

TEST COMMENT: IF-BOB in 10min
ISI-Very w eak surface blow
FF-BOB in 19min
FSI-Very w eak surface blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2206.96	101.50	Initial Hydro-static
1	23.27	100.86	Open To Flow (1)
31	117.75	124.14	Shut-In(1)
75	1128.71	122.48	End Shut-In(1)
76	122.11	122.00	Open To Flow (2)
106	173.01	125.88	Shut-In(2)
196	1127.16	123.49	End Shut-In(2)
197	2129.63	123.50	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
305.00	VSGMCW 5%G 5%M 90%W	2.64
44.00	VSGOWCM 10%G 2%O 20%W 68%M	0.62
1.00	Free Oil	0.01
0.00	120ft GIP	0.00

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Oil Producers Inc of Kansas

1710 Waterfront PKWY
Wichita KS 67206

ATTN: Kent Matson

36-20s-21w,Ness,KS

Craig J #1

Job Ticket: 58957 **DST#: 4**

Test Start: 2014.05.14 @ 03:50:00

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:	52000 ppm
Viscosity:	70.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	11.58 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	3500.00 ppm				
Filter Cake:	inches				

Recovery Information

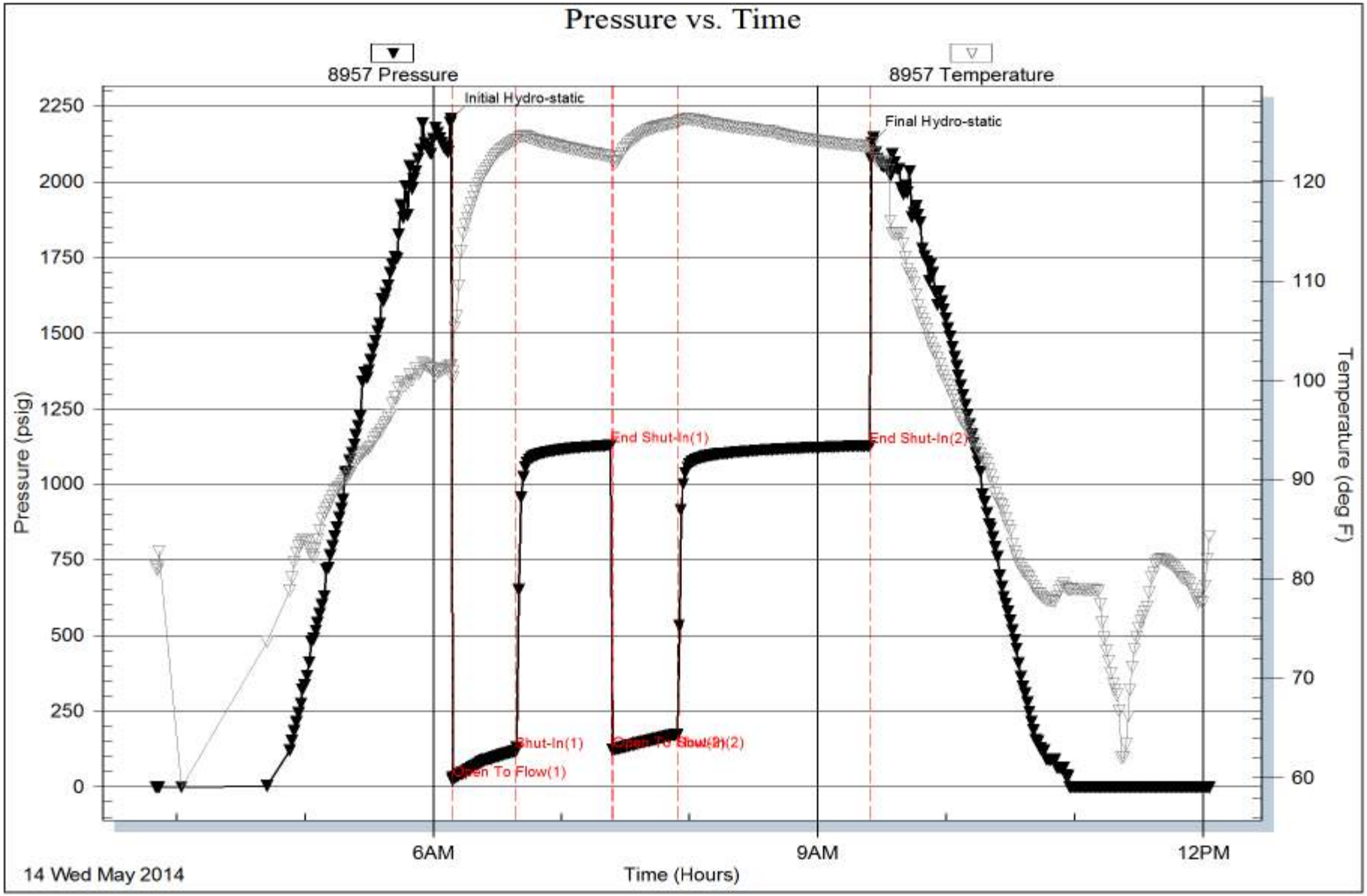
Recovery Table

Length ft	Description	Volume bbl
305.00	VSGMCW 5%G 5%M 90%W	2.639
44.00	VSGOWCM 10%G 2%O 20%W 68%M	0.617
1.00	Free Oil	0.014
0.00	120ft GIP	0.000

Total Length: 350.00 ft Total Volume: 3.270 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8957 **Outside** Oil Producers Inc of Kansas Craig J #1 DST Test Number: 4



Trilobite Testing, Inc Ref. No: 58957 Printed: 2014.05.14 @ 13:44:15

ALLIED OIL & GAS SERVICES, LLC 062927

Federal Tax I.D. # 20-8651475

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

SERVICE POINT: Great Bend

DATE 5-5-14	SEC 36	TWP 20	RANGE 21	CALLED OUT	ON LOCATION 3 pm	JOB START 12:30 Am	JOB FINISH 1 Am
LEASE Craig	WELL # 1	LOCATION Alexander 13S 2W 3/4S				COUNTY Ness	STATE KS
OLD OR NEW (Circle one)							

CONTRACTOR Pickrell
TYPE OF JOB Surface
HOLE SIZE 12¼ T.D.
CASING SIZE 8 5/8 DEPTH 223.39
TUBING SIZE DEPTH
DRILL PIPE DEPTH
TOOL DEPTH
PRES. MAX MINIMUM
MEAS. LINE SHOE JOINT
CEMENT LEFT IN CSG. 15 Ft
PERFS.
DISPLACEMENT 13.27 bbl fresh water

OWNER

EQUIPMENT

PUMP TRUCK # 398 CEMENTER Josh Greer
HELPER Ben Newell
BULK TRUCK # 40-170 DRIVER Brian Lacey
BULK TRUCK # DRIVER

REMARKS:

On location - Rig up
Run 8 5/8 Casing - Break circulation
pump 5 bbl fresh water
mix 150 sks Class A - 3% cc 2% gel
Displace 13.27 bbl fresh water
Shut in
Cement did circulate 14 bbl
Rig down

CHARGE TO: Oil producers Inc
STREET
CITY STATE ZIP

CEMENT

AMOUNT ORDERED 150 sks Class A 3% cc 2% gel

COMMON	150	@ 17.90	2.685.00
POZMIX		@	
GEL	3	@ 23.40	70.20
CHLORIDE	423	@ .80	338.40
ASC		@	
	Materials	@	3.093.60
	Disc	@ 20%	618.72
		@	
		@	
		@	
		@	
	service		
		@	
HANDLING	162.5	@ 2.48	403.00
MILEAGE	7.4 x 35 x	2.60	673.40

DEPTH OF JOB	223.39		
PUMP TRUCK CHARGE			1512.35
EXTRA FOOTAGE		@	
MILEAGE	Hum 35	@ 7.70	269.50
MANIFOLD		@	
	hum 35	@ 4.40	154.00
		@	
TOTAL			3.012.15
(20%)			602.43

PLUG & FLOAT EQUIPMENT

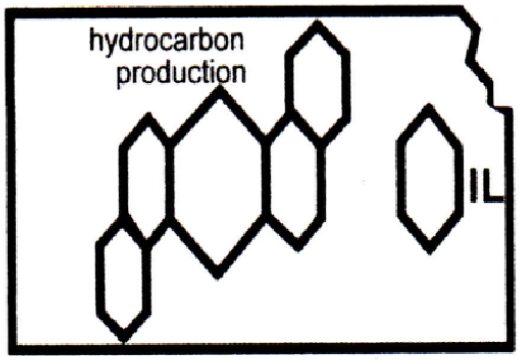
	@	
	@	
	@	
	@	
	@	
(0%) TOTAL		Ø

SALES TAX (If Any)
TOTAL CHARGES 6.105.75
DISCOUNT 1.221.15 IF PAID IN 30 DAYS
4.884.60

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.

PRINTED NAME X Mike Kern
SIGNATURE X Mike Kern

Thank you!!



OIL PRODUCERS, INC. OF KANSAS

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

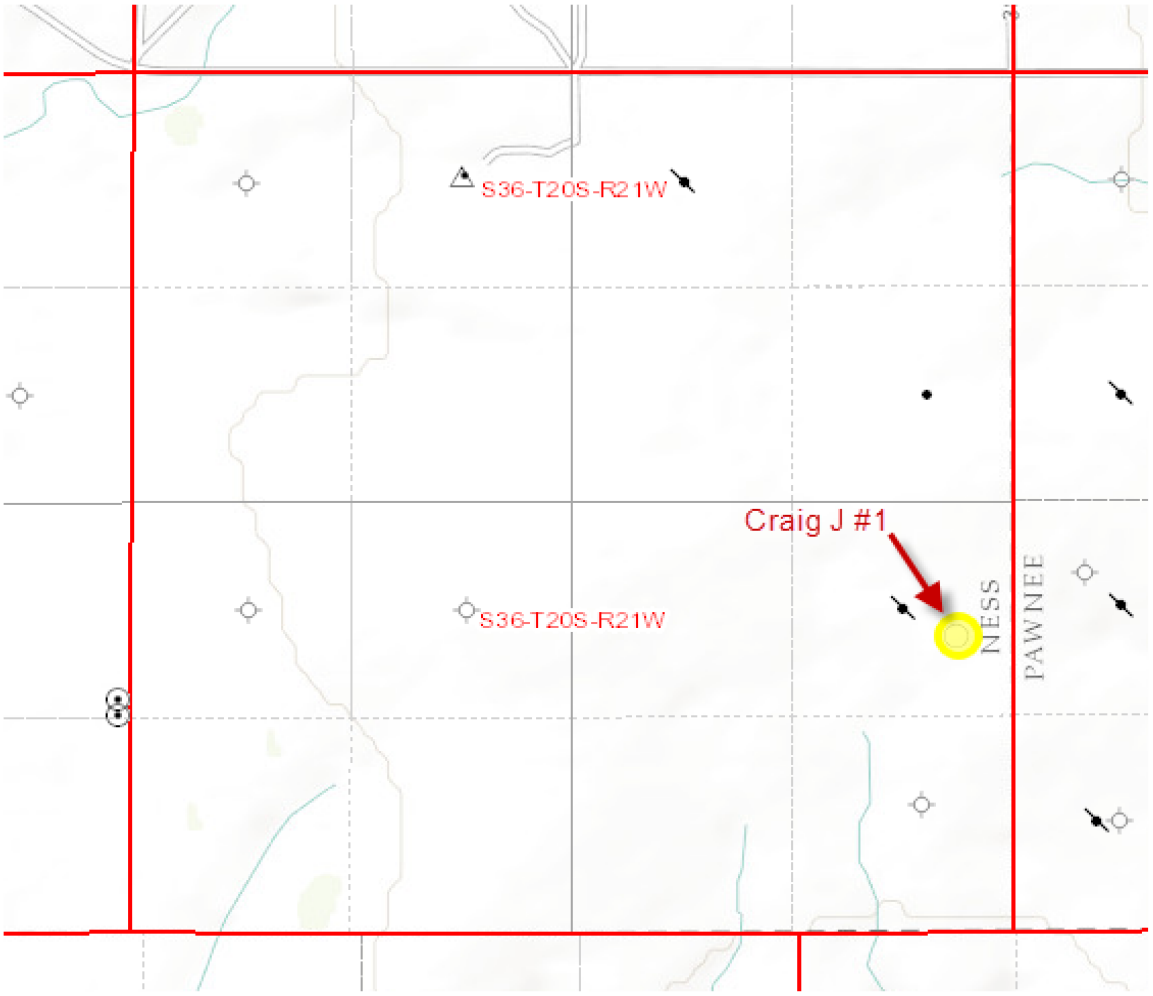
Well Name:	Craig J #1		
Well Id:			
Location:	1815' FSL, 335' FEL, 36-20S-21W, Ness County, Kansas		
License Number:	API: 15-135-25742	Region:	Ness County
Spud Date:	05/05/2014	Drilling Completed:	05/14/2014
Surface Coordinates:	Lat: 38.2670688 Long: -99.5849889		
Bottom Hole Coordinates:	Vertical hole		
Ground Elevation (ft):	2243'	K.B. Elevation (ft):	2253'
Logged Interval (ft):	3700' To: RTD	Total Depth (ft):	4470'
Formation:	Mississippian at RTD		
Type of Drilling Fluid:	Chemical		

OPERATOR

Company: Oil Producers, Inc. of Kansas (OPIK)
Address: 1710 N. Waterfront Parkway
Wichita, KS 67206-6603
316-681-0231

GEOLOGIST

Name: Kent R. Matson
Company: Matson Geological Services, LLC
Address: 33300 W. 15th Street S.
Garden Plain, Kansas 67050
316-644-1975



COMMENTS

Contractor: Pickrell Drilling Company, Rig #1.
Tool Pusher: Mike Kern.
Surface Casing: 8 5/8" set at 223' (KB) w/150sx cement.
Production Casing: Based on field observations of drill cuttings, DST results and electric log review, production casing was not installed and the hole was plugged and abandoned.
Mud by: MudCo.
DST's by: Trilobite Testing - Brett Dickinson.
Logs by: Nabors Production Service (DIL w/SP, CN-CD, ML, Sonic).
RTD= 4470'.
LTD= 4470'.

FORMATION TOPS

FORMATION	SAMPLE TOPS Depth	Datum	LOG TOPS Depth	Datum
Heebner Shale	3744'	-1491	3744'	-1491
Toronto	3764'	-1511	3764'	-1511
Lansing	3774'	-1521	3773'	-1520
Muncie Creek Shale	3958'	-1705	3958'	-1705
Stark Shale	4051'	-1798	4052'	-1799
Hushpuckney Shale	4087'	-1834	4089'	-1836
Marmaton	4164'	-1911	4164'	-1911
Little Osage Shale	4284'	-2031	4284'	-2031
Excello SH-Cherokee	4298'	-2045	4296'	-2043
Ft Scott-Verdigris	4312'	-2059	4309'	-2056
Mississippian	4427'	-2174	4427'	-2174
RTD	4470'	-2217		
LTD			4470'	-2217

ROCK TYPES

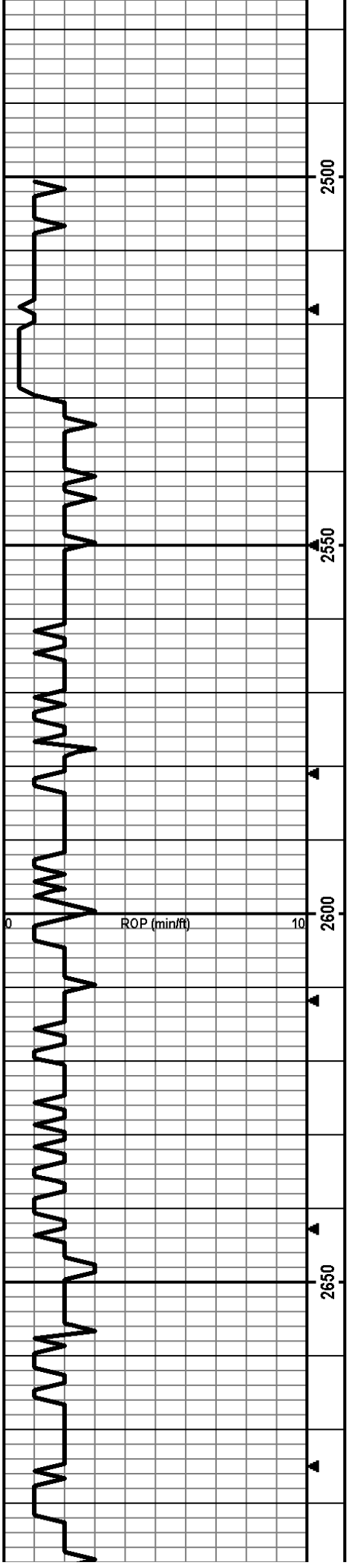
LITHOLOGY

- Anhy
- Cht
- Coal
- Congl
- Dol
- Gyp
- Lmst
- Salt
- Shale
- Shcol
- Shgy
- Sltst
- Ss
- Carb sh
- Dol
- Dtd
- Gry sh
- Sandylms
- Shale
- Sltstn
- Shlyslts
- Sltysh
- Sdy dolo
- Silty dolo
- Shy dolo
- Shaly ls

FOSSIL

- Algae
- Amph
- Belm
- Bioclst
- Brach
- Bryozoa
- Cephal
- Coral
- Crin
- Echin
- Fish
- Foram
- Fossil
- Gastro
- Oolite
- Ostra
- Pelec
- Pellet
- Pisolite
- Plant
- Strom
- Fuss
- Oomold

rop ROP (min/ft)	Depth	Lithology	CFS Point	Oil Shows	Geological Descriptions	Remarks
0 ROP (min/ft) 10	24				**Morning Report Depth/Activity** 05/06/2014, Spud. 05/07, drill @ 1440'. 05/08, drill @ 2340'. 05/09, drill @ 3060'. 05/10, drill @ 3685'. 05/11, drill @ 4080'. 05/12, DST #1 @ 4390'. 05/13, DST #2 @ 4390'	Mudco Check #1 @0' 05/04/14; predrilling recommedations. Mudco Check #2 @564' 05/06/14 01:40pm wt vis pH chl 8.6 28 7.0 1100 Filt LCM



05/13, DST #2 @ 4390'.
05/14, DST #4 @ 4410', TD @ 4470'.

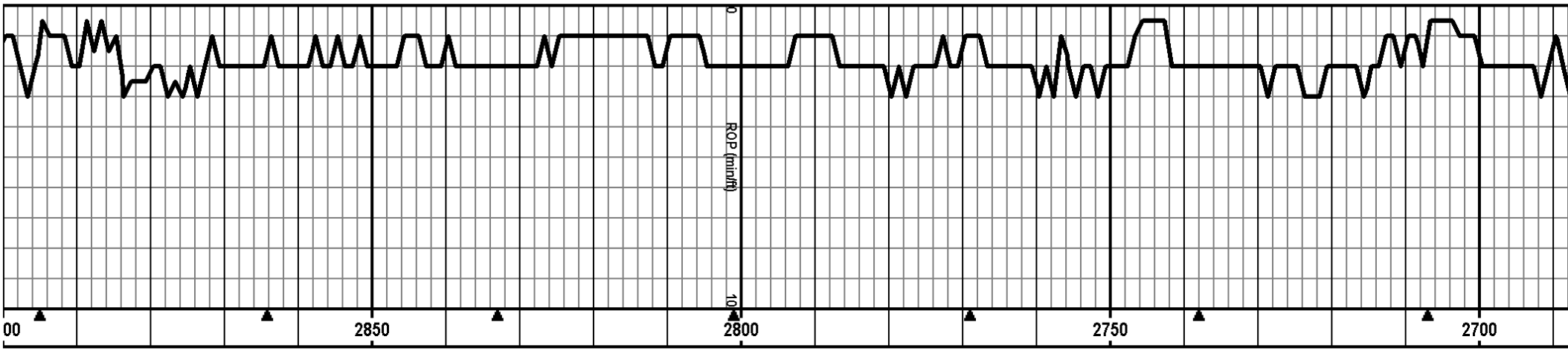
Anhydrite: Top @ 1409', Bottom @ 1435'

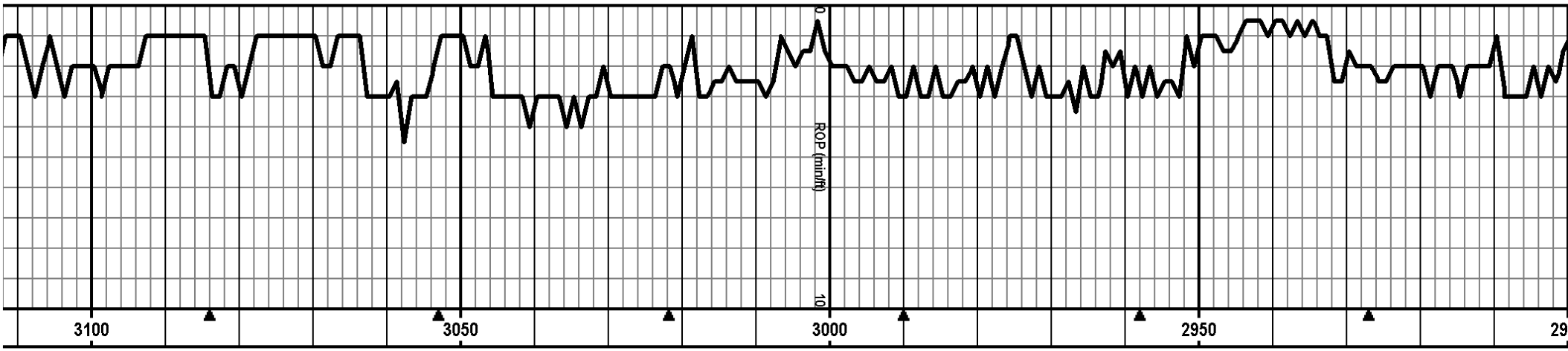
ROP Data begins @ 2500' on 05/08/2014

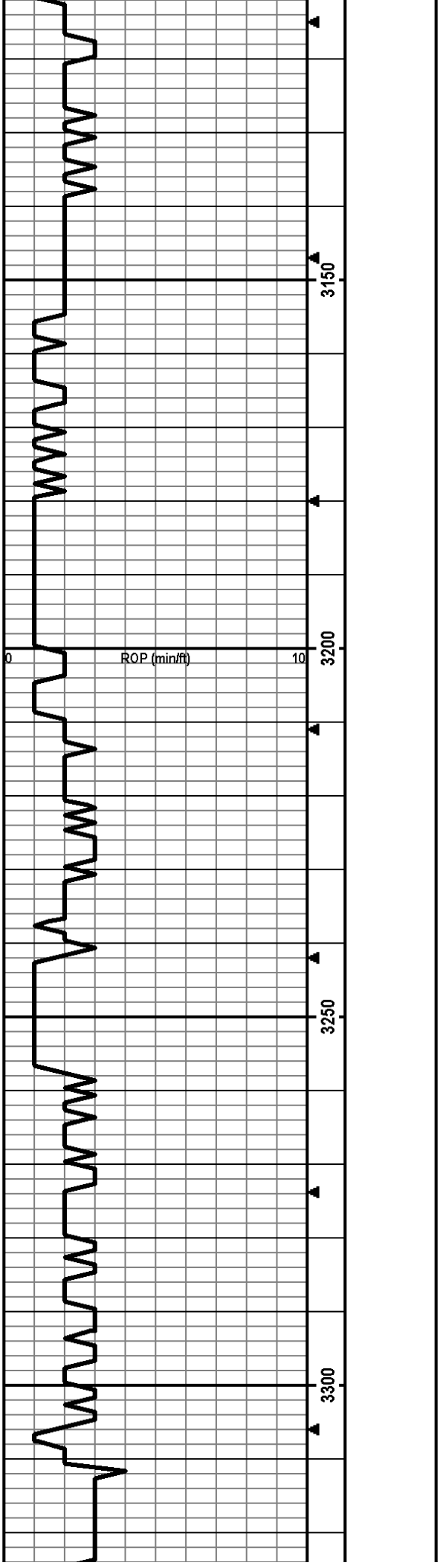
n/c 0

Mudco Check #3 @ 1768'
05/07/14 12:35pm
wt vis pH chl
9.4 29 7.0 5800
Filt LCM
n/c 0

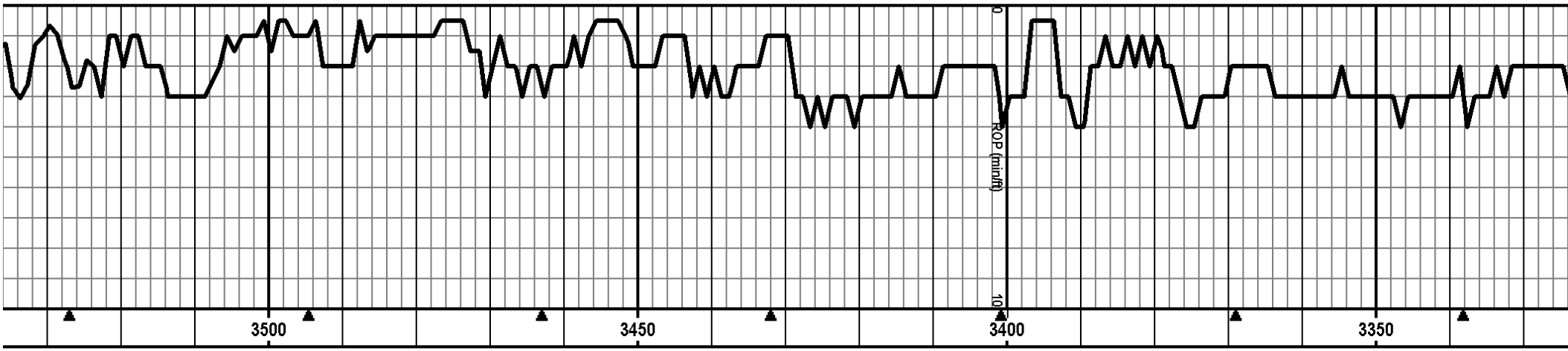
Mudco Check #4 @ 2566'
05/08/14 12:20pm
wt vis pH chl
9.9 29 7.0 76000
Filt LCM
n/c 0

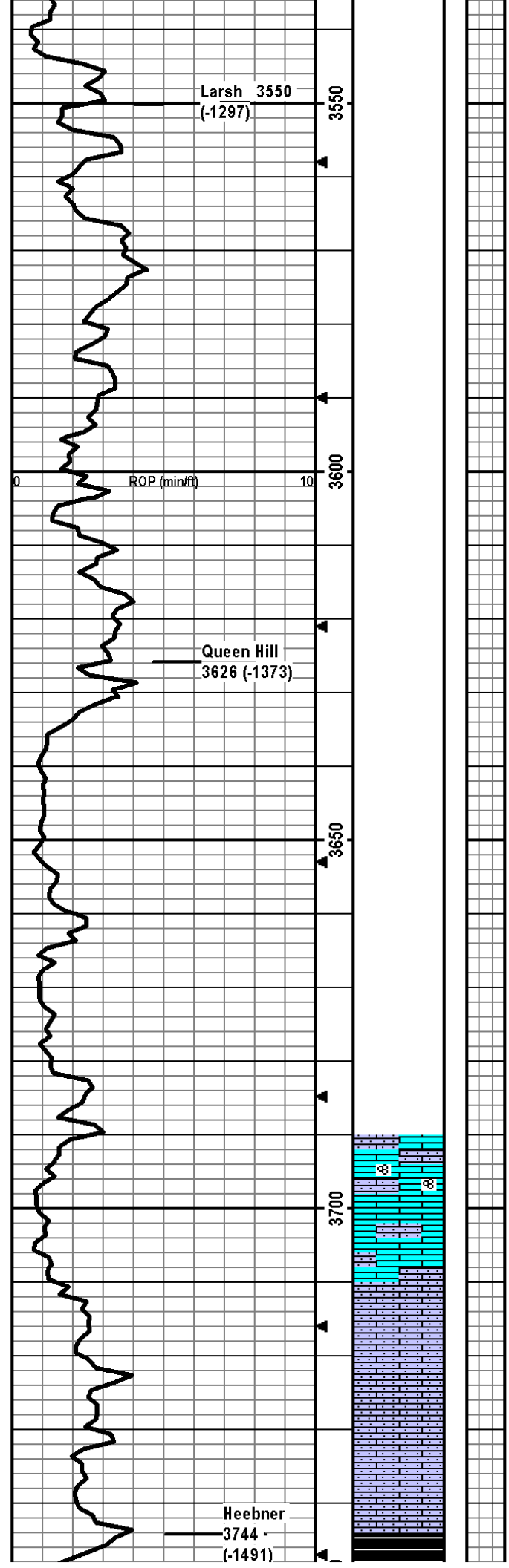

ROP (min/ft)
0
10
00
2850
2800
2750
2700


0
ROP (min/ft)
10
3100
3050
3000
2950
29



Mudco Check #5 @3242'
05/09/14 12:10pm
wt vis pH chl
9.8 29 7.0 57000
Filt LCM
n/c 0


0
ROP (min/ft)
100
3500
3450
3400
3350



Drill cutting samples at 10' intervals start at 3700'.

LS: crm/lt brn/lt gry, micro-med xtal, some foss frags/fusln, vry silty/sndy, min ppt-fn in-xtal por, no odor, ns.

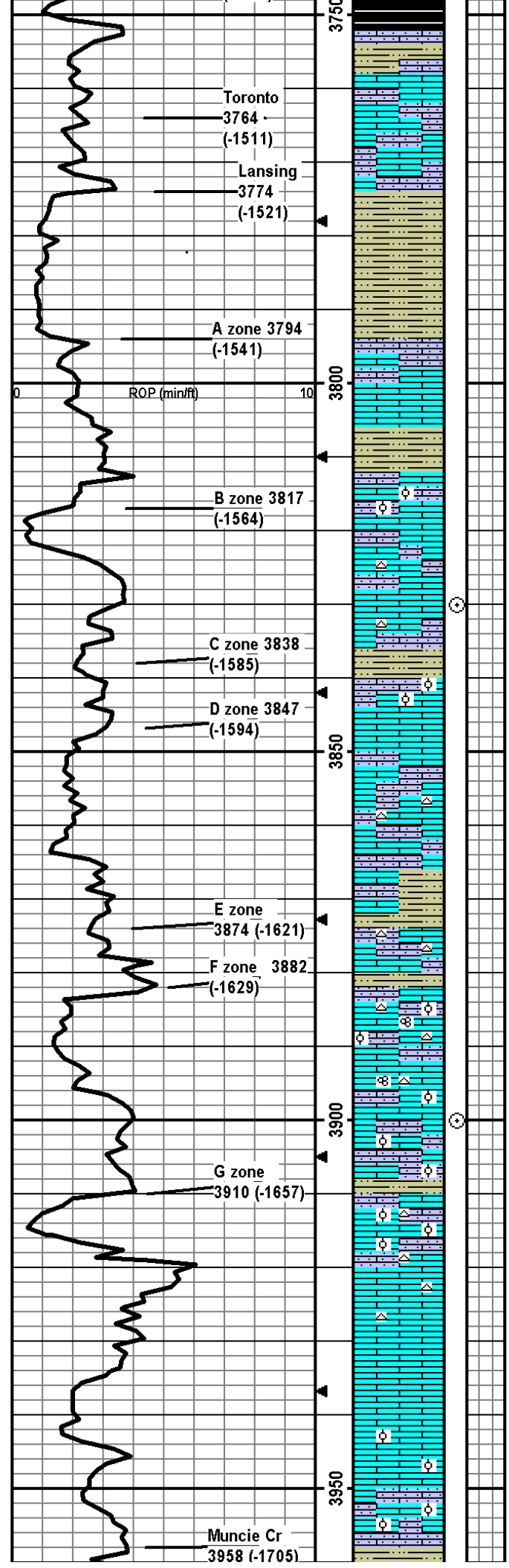
LS: crm/lt-med brn, micro-fn xtal, some foss frags, some vry silty, some ppt in-xtal por, no odor, ns.

LS: lt-med brn/lt-med gry, micro-med xtal w/min 2ndry crs xtal, some foss frags, vry silty/sndy, some ppt-fn in-xtal por, no odor, ns

LS: same as above, no odor, ns.

LS: crm/lt-med brn/lt gry, micro-fn xtal, min foss frags, vry silty/sndy, some ppt-fn in-xtal por, no odor, ns.

SH: med-dk gry/blk, some silty, carb, firm, fissile



LS: crm/lt brn/ltgry, micro-fn xtal, min foss frags, some vry silty, ppt-fn in-xtal por, no odor, ns. Some med-dk gry firm silty SH.

LS: crm/lt-med brn, micro-fn xtal, some silty, min ppt in-xtal and frac por, no odor, ns.

SH: med-dk gry/red brn, some silty, some carb, firm, fissile.

SH: med-dk gry/brn/red brn, greenish gry, some silty, some carb, firm, fissile.

LS: crm/lt gryish brn, micro-fn xtal, min foss frags, some vry silty, no vis por, no odor, ns.

LS: crm/lt brn/red brn, micro-fn xtal, min foss frags, some vry silty, min ppt-fn in-xtal por, ns.

SH: med-dk gry/brn/red brn/green gry, silty, carb, soft-firm, fissile.

LS: crm/lt brn/gry, micro-med xtal, foss frags/ool, some vry silty, ppt-fn in-xtal/oo-castic por, no odor, ns.

LS: crm/lt brn/lt gry, micro-fn xtal, min foss frags, some vry silty, min wht/lt gry chert, min ppt in-xtal por, no odor, ns.

LS: crm/lt brn, micro-med xtal, some foss frags, some silty, min lt brn chert, min ppt in-xtal por, no odor, ns.

CFS @3830'
30"/60"

SH: med-dk gry/brn/red brn, silty, carb, soft-firm, fissile.

LS: crm/lt-med brn, micro-med xtal, foss frags/ool clusters w/SH matrix, some silty, min ppt in-xtal por, no odor, ns.

Mudco Check #6 @3850'
05/10/14 01:45pm
wt vis pH chl
9.2 56 10.0 4000
Filt LCM
9.6 0

LS: crm/lt brn/lt gryish brn, micro-med xtal, foss frags, some vry silty, some wht/lt gry chert, min ppt in-xtal/frac por, no odor, ns.

LS: crm/lt brn, micro-med xtal, foss frags, some vry silty, min ppt in-xtal por, no odor, ns.

SH: med-dk gry/green gry/red brn, carb, silty, firm, fissile.

LS: crm/lt-med brn, micro-med xtal, some foss frags, some vry silty, some lt brn chert, min ppt in-xtal por, no odor, ns.

SH: gry/green gry/brn, silty, slt carb, firm, fissile.

LS: lt brn, micro-med xtal, foss frags/fusln/ool, some vry silty, some lt brn chert, min ppt in-xtal/frac por, no odor, ns.

LS: crm/lt-med brn/lt gryish brn, micro-med xtal, foss frags/fusln/ool, some silty, some wht/lt brn chert, some ppt-fn in-xtal/frac por, no odor, ns.

CFS @3900'
30"/60"

LS: crm/lt brn, micro-med xtal, foss frags/some ool, some silty, min ppt in-xtal por, no odor, ns. Some lt-med gry/brn silty SH.

LS: crm/lt brn, micro-med xtal, foss frags/abund ool, some silty, lt brn chert, ppt-fn in-xtal and fn-med oo-castic por, no odor, ns.

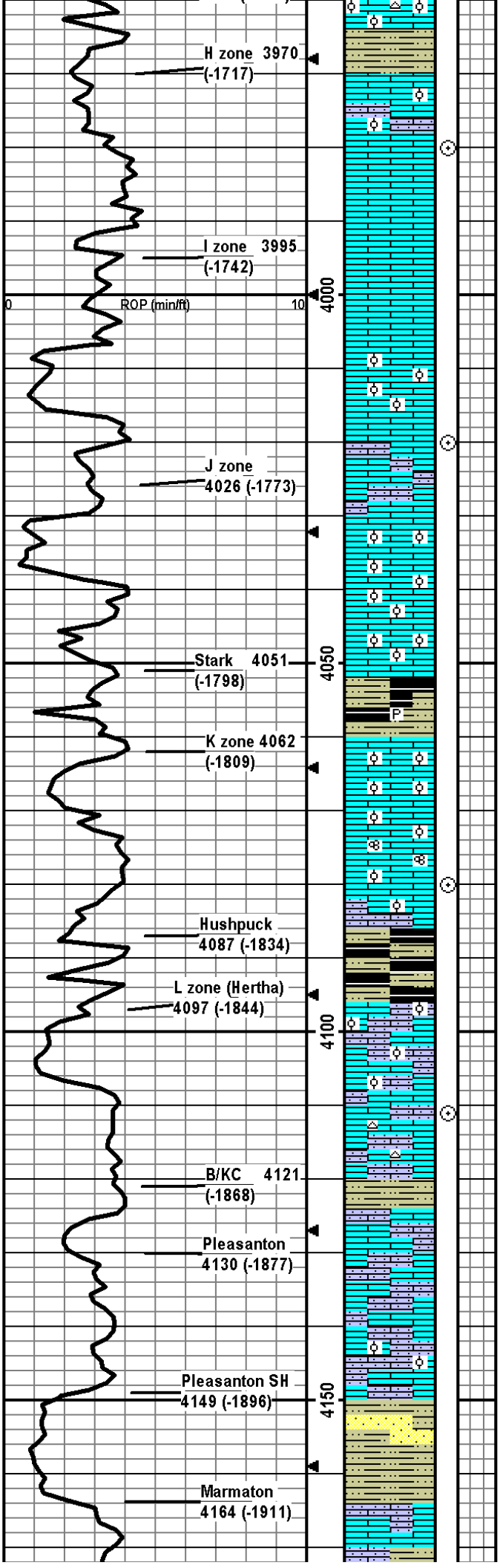
LS: crm/lt brn, micro-fn xtal, foss frags, some lt brn chert, min frac por, no odor, ns.

LS: crm, micro-fn xtal w/some med 2ndry xtal, min foss frags, some chalky, some frac por, no odor, ns.

LS: crm/lt gry, micro-fn xtal, min foss frags/some dense ool pcs, some chalky, some frac por, no odor, ns.

LS: crm/lt brn/lt gry, micro-fn xtal, foss frags w/abund ool, some silty, some chalky, ppt-med in-xtal/oo-castic por, no odor, ns.

SH: med-dk gry, silty, stly carb, soft-firm, fissile.



LS: crm/lt brn/lt gry, micro-med xtal, foss frags/abund ool, some chalky, some lt brn chert, ppt-fn in-xtal and fn-med oo-castic por, no odor, ns.

SH: med-dk gry, silty, stly carb, soft-firm, fissile.

LS: crm/lt gry, micro-fn xtal, min foss frags/dense ool pcs, some silty, some stly chalky, min ppt in-xtal/frac por, no odor, ns.

CFS @3980'
30"/60"

LS: crm/lt gryish brn, micro-fn, min foss frags, some frac por, no odor, ns.

LS: crm/lt gryish brn/lt gry, micro-fn xtal w/some med 2ndry xtal, some chalky, min foss frags, some frac por, no odor, ns.

LS: lt brn/lt gryish brn, micro-med xtal, min foss frags w/abund ool, fn-med oo-castic por, no odor, ns.

CFS @4020'
30"/60"

LS: wht/crm/lt brn, micro-fn xtal, min foss frags, some silty, min frac por, no odor, ns.

LS: crm/lt brn, micro-med xtal, foss frags/abund ool, fn-crs oo-castic por, no odor, ns.

LS: crm/lt gryish brn/lt gry, micro-med xtal, foss frags/abund ool pcs, some chalky, fn-med oo-castic por, no odor, ns.

SH: med-dk gry/blk/greenish gry, silty, pyritic, carb, firm, fissile.

LS: crm/lt-med brn/lt gry, micro-med xtal, foss frags/ool, some chalky, fn-med oo-castic por, no odor, ns.

LS: crm/lt-med brn, micro-med xtal, some chalky, foss frags/fusln/ool, fn-med oo-castic por, no odor, ns.

CFS @4080'
30"/60"

LS: crm/lt brn, micro-med xtal, foss frags/ool, grainy, silty, chalky, some ppt-fn in-xtal por, no odor, ns.

SH: med-dk gry/blk, silty, stly carb, firm, fissile.

LS: crm/lt-med brn, micro-med xtal, foss frags/ool, some vry silty, some chalky, ppt-med in-xtal/oo-castic por, no odor, ns.

LS: crm/lt brn/lt gryish brn, micro-med xtal, foss frags w/some ool, some silty, some chalky, min ppt-fn in-xtal por w/fn-med oo-castic por, no odor, ns.

CFS @4111'
30"/60"

LS: crm/lt-med brn, micro-med xtal, foss frags, some silty, some wht chert, min frac por, no odor, ns.

SH: med-dk gry/brn/maroon brn, vry silty, carb, soft-firm, fissile.

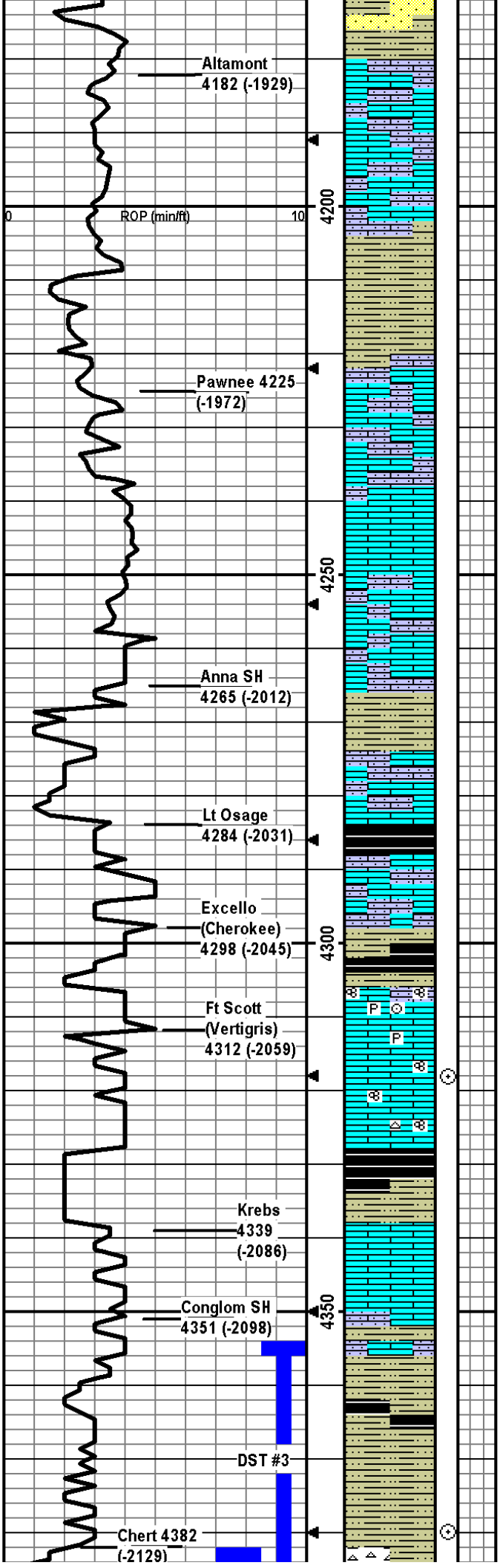
LS: crm/lt-med brn, micro-med xtal, foss frags, grainy, some silty, min frac por, no odor, ns.

LS: crm/lt brn, micro-med xtal, foss frags, some silty, min frac por, no odor, ns.

LS: crm/lt brn/lt gryish brn, micro-med xtal, foss frags/dense ool, some vry silty, some chalky, some frac por, no odor, ns.

SH: lt-dk gry/green gry/brn, some vry silty, slt carb, soft-firm, fissile; some SS: brn/gry, vf-f, sa-sr, pred qtz; no odor, ns.

LS: crm/lt gryish brn, micro-med xtal, foss frags, some silty, min frac por, no odor, ns.



SH: med-dk gry/green gry/brn, stly carb, silty, firm, soft-firm, fissile; some SS: gry, vf-f, sr-wr, pred qtz, friable; no odor, ns.

LS: crm/lt-med brn/lt gry, micro-fn xtal, foss frags, some silty, min ppt in-xtal/frac por, no odor, ns.

LS: crm/lt-med brn/lt gry, micro-fn xtal, silty, some chalky, min ppt in-xtal/frac por, no odor, ns.

SH: med-dk gry/green gry/red brn/maroon, stly carb, silty, firm, fissile.

SH: same as above.

LS: crm/lt-med brn/lt gry, micro-med xtal, min foss frags, some silty, min frac por, no odor, ns.

LS: crm/lt brn/lt gry, micro-fn xtal, some silty, min frac por, no odor, ns.

LS: crm/lt-med brn, micro-med xtal w/2ndry xtals, min foss frags, some frac por, no odor, ns.

LS: crm/lt gry, micro-fn w/some 2ndry xtal, min foss frags, some silty, min ppt in-xtal por, no odor, ns.

SH: med-dk gry/gryish brn/red brn, silty, slt carb, soft-firm, fissile.

LS: crm/lt brn-dk brn, micro-med xtal w/some 2ndry xtal, some foss frags, some silty, min ppt in-xtal/frac por, no odor, ns.

SH: dk gry/blk, slt silty, stly carb, firm, fissile.

LS: crm/lt brn-dk brn, micro-med xtal, some foss frags, some silty, min ppt in-xtal/frac por, no odor, ns.

SH: med-dk gry/green gry/red brn/blk, silty, some slt carb, firm, fissile.

LS: crm/lt brn/lt-med gry, micro-med xtal, foss frags/fusln/crin, stly pyritic, some chalky, some silty, min frac por, no odor, ns.

LS: crm/lt brn/lt-med gry, micro-fn xtal, some foss frags/fusln, some lt brn chert, some chalky, min frac por, no odor, ns.

SH: med-dk gry/green gry/blk, some silty, carb, firm, fissile.

LS: crm/lt brn, micro-fn w/med 2ndry xtals, some foss frags, min ppt in-xtal/frac por, no odor, ns.

LS: crm/lt brn/lt gry, micro-fn xtal, some foss frags, some silty, some chalky, min frac por, no odor, ns.

SH: med-dk gry/green gry/maroon, some silty, some carb, firm, fissile, no odor, ns.

SH: same as above, no odor, ns.

Mudco Check #7 @4213'
05/11/14 01:50pm
wt vis pH chl
9.3 70 10.0 3500
Filt LCM
11.6 0

DST1: 4382-4390 Mississippian (Failed Test, Plugged Tool)

30/45/45/60
1st) 3" blow built to 3 1/4" then reduced to 3", no BB.
2nd) No blow, no BB.
IFP 135# (tool plugged)
ISIP n/a
FFP n/a
FSIP n/a
IHP 2211#
Recvd: 65' OS mud.

NOTE: After DST #1, shut down due to high winds from approx 5pm to 9pm Monday 05/12/14.

DST2: 4382-4390 Mississippian (Failed Test, Packer Failure)

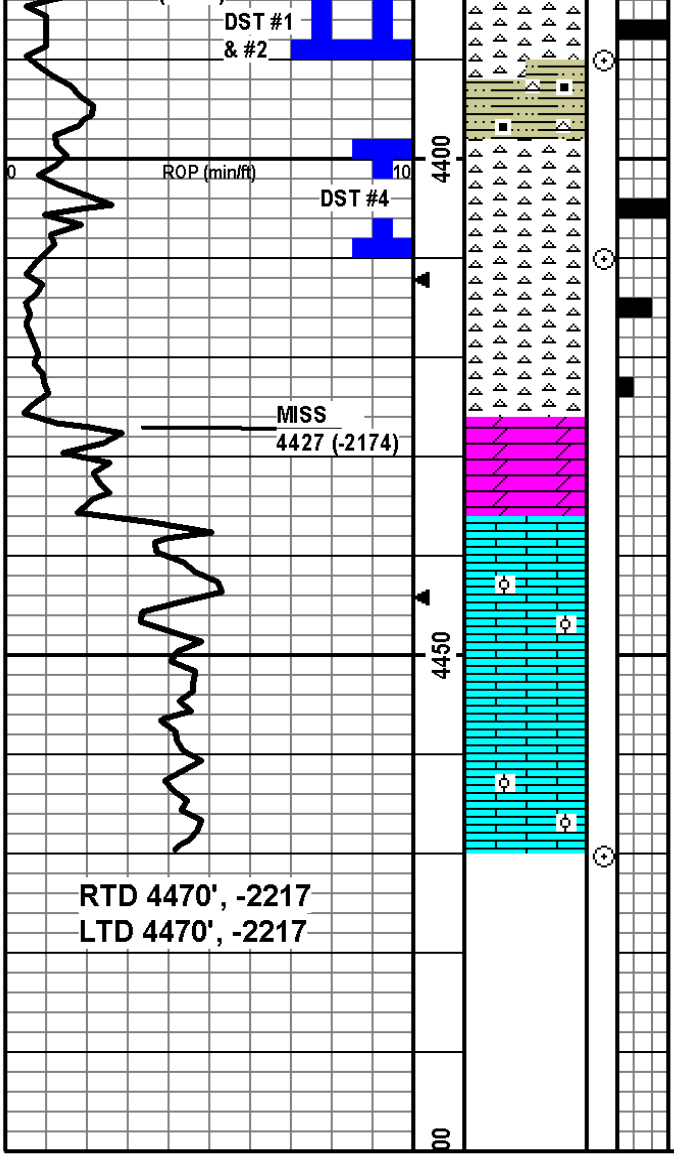
NOTE: Prior to TIH for DST #3, sample box continued to be full after 1.5 hrs of cir. Slowed pump from 60 to 45 strokes/min and cutting vol in box decreased significantly. Continued this process at all circulation points.

CFS @4318'
30"/60"

DST3: 4355-4390 Mississippian

30/45/30/90
1st) BOB in 5 min, 1/2" BB.
2nd) BOB in 5 min, BOB in 23 min BB.
IFP 80-328#
ISIP 1082#
FFP 307-490#
FSIP 1088#
HP 2256-2103#
Recvd: 420' GIP, 95' GSOWCM (15%G, 20%O), 180'GVSOWCM (20%G, 10%O), 420' GVSOMCW (20%G, 10%O), 360' Water.

CFS @4380'
30"/60"



Chert: wht/lt yel/lt brn, opaq, some ppt-fn in-xtal/frac por, oil staining and free oil, yel flor, gd cup odor, vgsfo.

SH: crm/gry/green gry/maroon/mustard yel, some vry silty, some LS nod, some chert, some carb, firm, fissile, slt odor, nsfo.

Chert: wht/crm/lt yel/lt brn, micro-fn xtal, staining, 28 pcs in 30 min and 16 pcs in 60 min smpls w/ppt-med in-xtal por w/sfo, brn oil and blk tar oil, yel flor/cut, gd cup odor, vgsfo.

Chert: same as above w/11 pcs w/fo, thick dk brn/blk, dul yel flor/yel cut, slt cup odor, gsfo.

Chert: same as above w/4 pcs w/fo.

DOLO: wht/crm, micro-fn xtal, some glau, suger tex, mostly dense w/some friable, ppt in-xtal por, no odor, ns.

LS: crm/lt-med brn, micro-med xtal, min foss frags w/some dense ool, min frac por, no odor, ns.

LS: crm/lt-med brn, micro-med xtal, foss frags, frac por, no odor, ns.

LS: crm/lt brn, micro-med xtal, min foss frags w/some dense ool pcs, frac por, no odor, ns.

TD @ 4470'.

CFS @4390'
30"/60"

Mudco Check #8 @4390'
05/12/14 12:50pm
wt vis pH chl
9.4 55 10.0 3500
Filt LCM
11.2 0

CFS @4410'
30"/60"

Mudco Check #9 @4390'
05/13/14 01:05pm
wt vis pH chl
9.4 75 9.0 4600
Filt LCM
11.6 0

DST4: 4398-4410 Mississippian

30/45/30/90
1st) BOB in 10 min, very weak surface BB.
2nd) BOB in 19 min, very weak surface BB.
IFP 23-118#
ISIP 1129#
FFP 122-173#
FSIP 1127#
HP 2206-2130#
Recvd: 120' GIP, 1' Oil, 44' VSGOWCM (10%G, 2%O), 305' VSGMCW (5%G).

Mudco Check #10 @4410'
05/14/14 01:05pm
wt vis pH chl
9.1 58 9.0 6600
Filt LCM
12.4 0

CFS @4470' 30"/60";
Cir 1.5 hrs to clean hole.