



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1233883
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 Date Reached TD Completion Date or Recompletion Date
Recompletion Date

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: _____

1233883

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. <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	Farmer, John O., Inc.
Well Name	Hagerman 1
Doc ID	1233883

Tops

Name	Top	Datum
Anhydrite	1191'	(+948)
Topeka	3228'	(-1089)
Heebner	3494'	(-1355)
Lansing	3564'	(-1425)
Stark	3780'	(-1641)
Base/KC	3838'	(-1699)
Arbuckle	3945'	(-1806)
L.T.D.	3985'	(-1846)

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 779

Date	10-26-14	Sec.	12	Twp.	20	Range	17	County	Pawnee	State	KS	On Location	4:30 pm	Finish	7:30 pm
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Location Timken S to CL S to XRD

Lease Hughman Well No. A Owner 2 E 1/2 N Winto

Contractor Val 6 To Quality Oilwell Cementing, 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 Surface Charge To J.O Farmer Inc

Hole Size 1 1/4 T.D. 1196 Street J.O Farmer Inc

Csg. 8 5/8 Depth 1196 City J.O Farmer Inc State KS

Tbg. Size 8 5/8 Depth 1196 The above was done to satisfaction and supervision of owner agent or contractor.

Tool 1196 Depth 1196 Cement Amount Ordered 450 80/20

Cement Left in Csg. 42.15 ft Shoe Joint 42.15 ft Cement Amount Ordered 450 80/20

Meas Line 73 BBL Displace 3900 2% gel 1 1/4 flow

EQUIPMENT Common 360

Pumptrk 17 No. 17 Cementer Arnie Poz. Mix 90

Bulktrk 4 No. 4 Driver Lonnie Gel. 9

Bulktrk 04 No. 04 Driver Heath Calcium 16

JOB SERVICES & REMARKS Hulls

Remarks: Salt

Rat Hole Flowseal

Mouse Hole Kol-Seal

Centralizers 1,3,5 Mud CLR 48

Baskets CFL-117 or CD110 CAF 38

D/V or Port Collar Sand

Handling 475 Mileage

Cement did **FLOAT EQUIPMENT**

Circulate Guide Shoe

Centralizer 3

Baskets

AFU Inserts

Float Shoe

Latch Down Baffle plate

Rubber plug

Pumptrk Charge Long Surface

Mileage 26

Signature Randy D. Martin Tax

Discount

Total Charge

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 872

Date	Sec.	Twp.	Range	County	State	On Location	Finish
10-31-14	12	20	17	Pawnee	KS		11:00 PM

Location Timpkin St to County Line 2 St Rd & Pawnee Co.
NE IN E into

Lease <u>Hagerman</u>	Well No. <u>1</u>	Owner
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Contractor <u>VAL</u>	<u>6</u>	Owner
Type Job <u>Plus</u>		To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cement and helper to assist owner or contractor to do work as listed.

Hole Size <u>7 7/8</u>	T.D. <u>3990</u>	Charge To <u>JO. Farmer</u>
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Csg.	Depth	Street
Tbg. Size <u>DP 4 1/2</u>	Depth	City State

Tool	Depth	The above was done to satisfaction and supervision of owner agent or contractor.
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Cement Left in Csg.	Shoe Joint	Cement Amount Ordered <u>230 sk 100/40 4% gel 1/4 flow seal</u>
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Meas Line	Displace <u>H2O/mud</u>	
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EQUIPMENT			
Pumptrk <u>17</u>	No.	Cementer Helper <u>Billy</u>	Common <u>138</u>
Bulktrk <u>3</u>	No.	Driver <u>Lomiew</u>	Poz. Mix <u>92</u>
Bulktrk <u>Pu</u>	No.	Driver <u>Rick</u>	Gel. <u>8</u>
			Calcium

JOB SERVICES & REMARKS	
Remarks:	Hulls

Rat Hole <u>30 sk</u>	Salt
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Mouse Hole <u>10 sk</u>	Flowseal <u>57#</u>
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Centralizers	Kol-Seal
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Baskets	Mud CLR 48
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D/V or Port Collar	CFL-117 or CD110 CAF 38
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<u>1st 3930' 50 sk</u>	Sand
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<u>2nd 1230' 60 sk</u>	Handling <u>238</u>
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<u>3rd 420' 50 sk</u>	Mileage
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<u>4th 60' 20 sk</u>	FLOAT EQUIPMENT
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	Guide Shoe
--	------------

	Centralizer
--	-------------

	Baskets
--	---------

	AFU Inserts
--	-------------

	Float Shoe
--	------------

	Latch Down
--	------------

	Pumptrk Charge <u>plug</u>
--	----------------------------

	Mileage <u>26</u>
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X Signature <u>Randy W. M...</u>	Tax
	Discount
	Total Charge



DRILL STEM TEST REPORT

Prepared For: **John O Farmer Inc.**

PO Box 352
Russell KS 67665-2635

ATTN: Austin Klaus

Hagerman #1

12-20s-17w Pawnee,KS

Start Date: 2014.10.31 @ 08:25:00

End Date: 2014.10.31 @ 15:29:00

Job Ticket #: 60473 DST #: 1

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.11.03 @ 08:51:06



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

John O Farmer Inc.
PO Box 352
Russell KS 67665-2635
ATTN: Austin Klaus

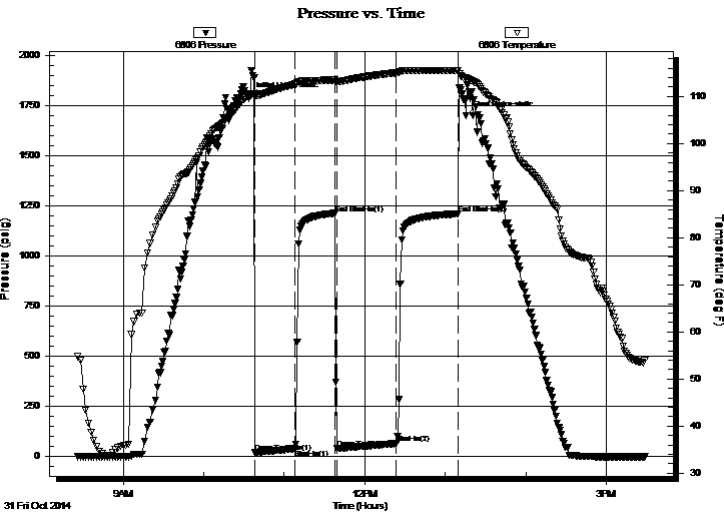
12-20s-17w Pawnee, KS
Hagerman #1
Job Ticket: 60473 **DST#: 1**
Test Start: 2014.10.31 @ 08:25:00

GENERAL INFORMATION:

Formation: **LKC "H"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 10:38:00
Time Test Ended: 15:29:00
Interval: **3702.00 ft (KB) To 3728.00 ft (KB) (TVD)**
Total Depth: 3987.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Poor
Test Type: Conventional Bottom Hole (Initial)
Tester: Shane Konzem
Unit No: S3
Reference Elevations: 2139.00 ft (KB)
2129.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 6806 Inside
Press@RunDepth: 65.59 psig @ 3723.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2014.10.31 End Date: 2014.10.31 Last Calib.: 2014.10.31
Start Time: 08:26:00 End Time: 15:29:00 Time On Btm: 2014.10.31 @ 10:34:30
Time Off Btm: 2014.10.31 @ 13:15:30

TEST COMMENT: IFP 30 Weak blow built to 2 1/2"
ISI 30 No blow back.
FFP 45 Weak blow built to 2"
FSI 45 No blow back.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1795.65	110.24	Initial Hydro-static
4	21.45	110.21	Open To Flow (1)
34	38.32	112.61	Shut-In(1)
63	1212.20	113.50	End Shut-In(1)
65	40.82	113.22	Open To Flow (2)
109	65.59	115.02	Shut-In(2)
155	1209.37	115.50	End Shut-In(2)
161	1699.65	113.87	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
70.00	MW 40% mud, 60% water	0.98

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

John O Farmer Inc.
PO Box 352
Russell KS 67665-2635
ATTN: Austin Klaus

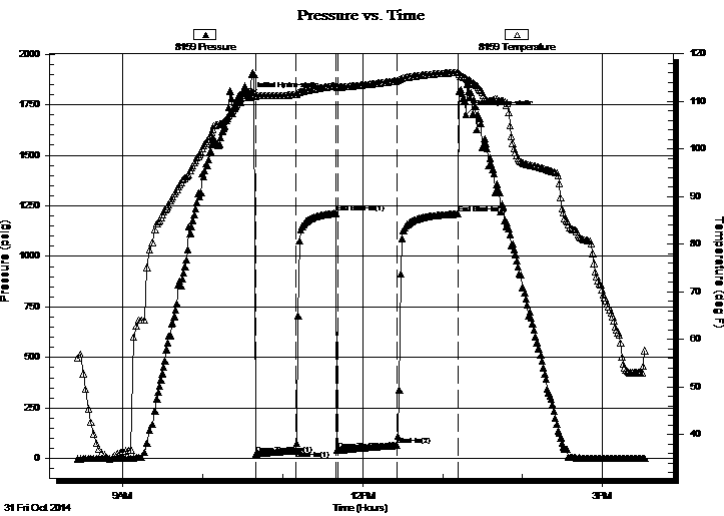
12-20s-17w Pawnee, KS
Hagerman #1
Job Ticket: 60473 **DST#: 1**
Test Start: 2014.10.31 @ 08:25:00

GENERAL INFORMATION:

Formation: **LKC "H"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 10:38:00
Time Test Ended: 15:29:00
Interval: **3702.00 ft (KB) To 3728.00 ft (KB) (TVD)**
Total Depth: 3987.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Poor
Test Type: Conventional Bottom Hole (Initial)
Tester: Shane Konzem
Unit No: S3
Reference Elevations: 2139.00 ft (KB)
2129.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 8159 Outside
Press@RunDepth: 1210.42 psig @ 3724.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2014.10.31 End Date: 2014.10.31 Last Calib.: 2014.10.31
Start Time: 08:26:00 End Time: 15:31:30 Time On Btm: 2014.10.31 @ 10:35:30
Time Off Btm: 2014.10.31 @ 13:17:30

TEST COMMENT: IFP 30 Weak blow built to 2 1/2"
ISI 30 No blow back.
FFP 45 Weak blow built to 2"
FSI 45 No blow back.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1787.91	112.04	Initial Hydro-static
4	23.84	111.11	Open To Flow (1)
35	40.42	111.48	Shut-In(1)
64	1213.47	113.32	End Shut-In(1)
66	42.52	112.99	Open To Flow (2)
110	65.90	114.32	Shut-In(2)
156	1210.42	116.09	End Shut-In(2)
162	1702.58	114.79	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
70.00	MW 40% mud, 60% water	0.98

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

John O Farmer Inc.

12-20s-17w Pawnee,KS

PO Box 352
Russell KS 67665-2635

Hagerman #1

Job Ticket: 60473

DST#: 1

ATTN: Austin Klaus

Test Start: 2014.10.31 @ 08:25:00

Tool Information

Drill Pipe:	Length: 3702.00 ft	Diameter: 3.80 inches	Volume: 51.93 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 72000.00 lb
			<u>Total Volume: 51.93 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	3702.00 ft			Final 58000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	284.50 ft			
Tool Length:	304.50 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut-In Tool	5.00			3687.00	
Hydraulic tool	5.00			3692.00	
Top Packer	5.00			3697.00	
Packer	5.00			3702.00	20.00 Bottom Of Top Packer
Anchor	20.00			3722.00	
Recorder	1.00	6806	Inside	3723.00	
Recorder	1.00	8159	Outside	3724.00	
Blank Off Sub	0.75			3724.75	284.50 Tool Interval
Packer	5.00			3729.75	
Change Over Sub	0.75			3730.50	
Drill Pipe	252.00			3982.50	
Change Over Sub	0.75			3983.25	
Recorder	0.25	8524	Below	3983.50	
Bull Plug	3.00			3986.50	1000303.50 Bottom Packers & Anchor

Total Tool Length: 304.50



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

John O Farmer Inc.

12-20s-17w Pawnee,KS

PO Box 352
Russell KS 67665-2635

Hagerman #1

Job Ticket: 60473

DST#: 1

ATTN: Austin Klaus

Test Start: 2014.10.31 @ 08:25:00

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:

26000 ppm

Viscosity: 53.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 10.38 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 9300.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
70.00	MW 40% mud, 60% water	0.982

Total Length: 70.00 ft Total Volume: 0.982 bbl

Num Fluid Samples: 0

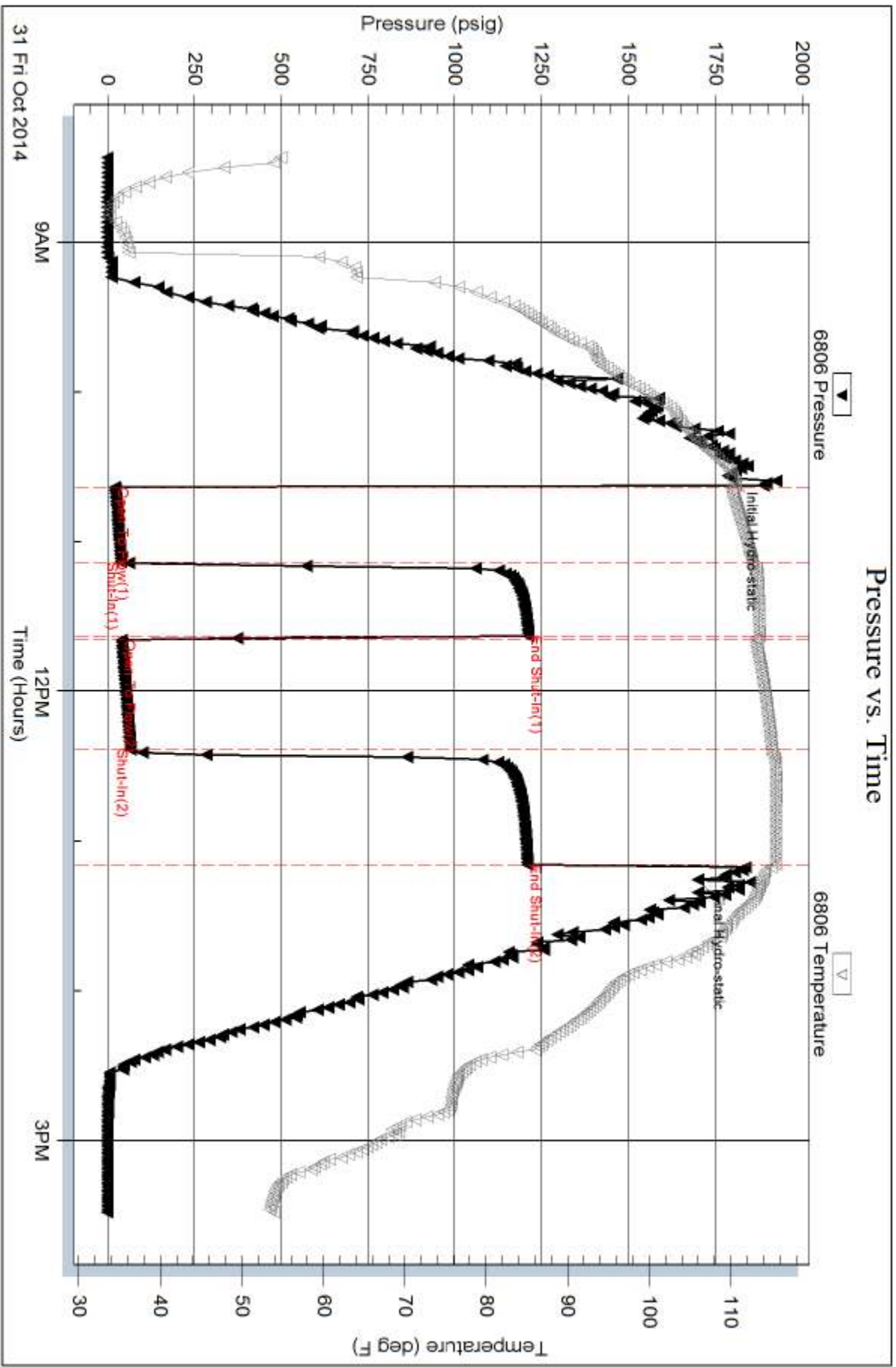
Num Gas Bombs: 0

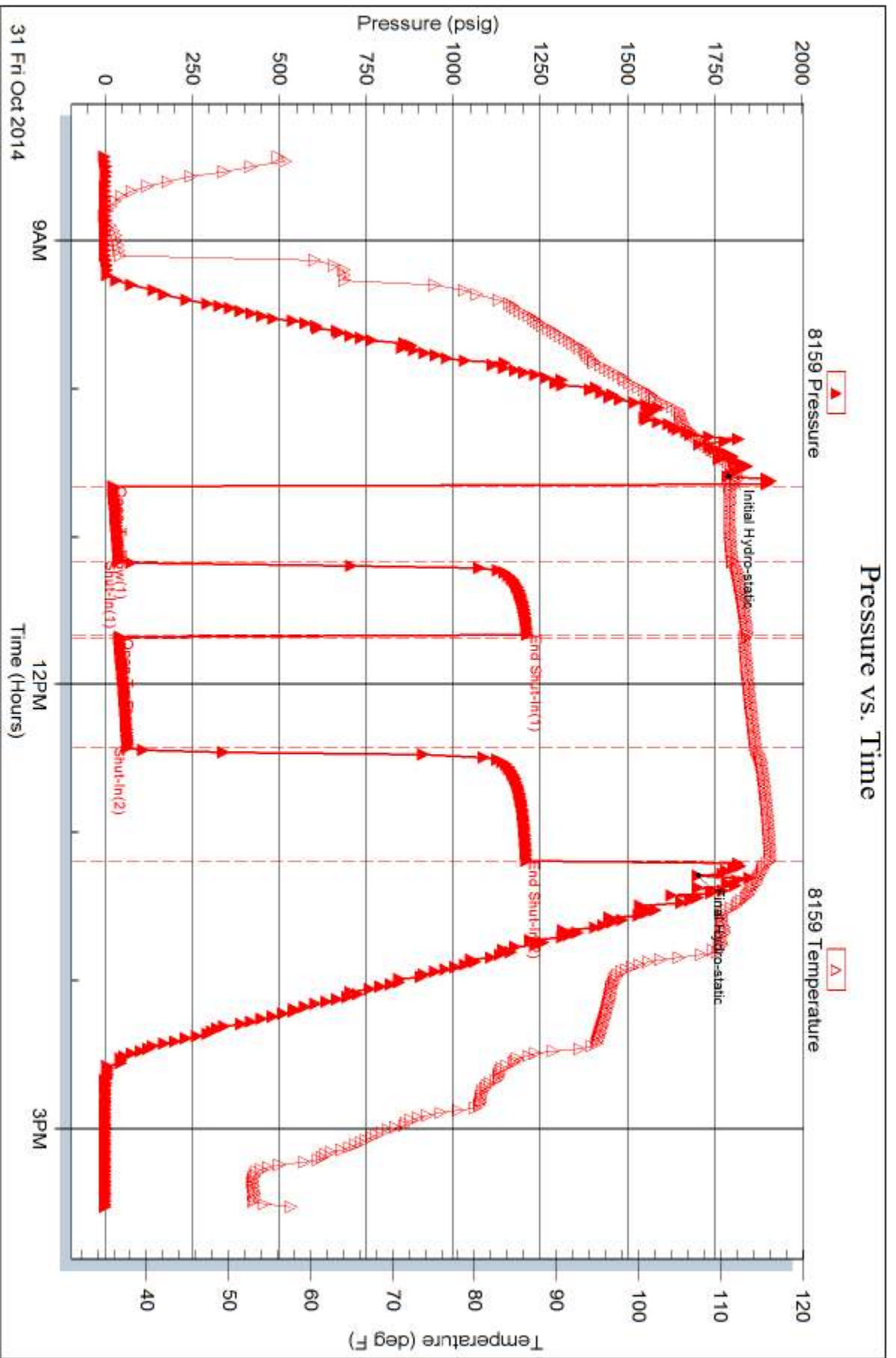
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: resist recov. .22 at 50 degrees







TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **60473**

4/10

Well Name & No. <u>Hagerman #1</u>	Test No. <u>1</u>	Date <u>10-31-14</u>
Company <u>John O Farmer, Inc</u>	Elevation <u>2139</u>	KB <u>2129</u> GL
Address <u>320 W Wichita Ave. P.O. Box 352 Russell KS, 67665-2635</u>		
Co. Rep / Geo. <u>Austin Klaus</u>	Rig <u>Val # 6</u>	
Location: Sec. <u>12</u>	Twp. <u>20 S</u>	Rge. <u>17 W</u> Co. <u>Pawnee</u> State <u>KS</u>

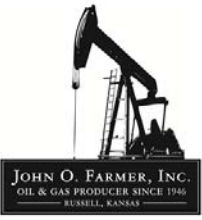
Interval Tested <u>3697 - 3702</u>	Zone Tested <u>Lansing "H"</u>
Anchor Length <u>26'</u>	Drill Pipe Run <u>3702</u> Mud Wt. <u>9.3</u>
Top Packer Depth <u>3692 3697 3702</u>	Drill Collars Run <u>0</u> Vis <u>49 53</u>
Bottom Packer Depth <u>3697 3702 3728</u>	Wt. Pipe Run <u>0</u> WL <u>10.4</u>
Total Depth <u>3987</u>	Chlorides <u>9,300</u> ppm System LCM <u>TR</u>
Blow Description <u>1st Open - Weak blow built to 2 1/2 inches into water. 1st Shut In - No blow back. 2nd Open - Weak blow built to 2 inches into water. 2nd Shut In - No blow back.</u>	

Rec	Feet of	%gas	%oil	%water	%mud
<u>78</u>	<u>muddy water</u>		<u>60</u>	<u>40</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total <u>70</u>	BHT	Gravity <u>1</u>	API RW <u>-22 @ 50</u> °F	Chlorides <u>26000</u> ppm
(A) Initial Hydrostatic <u>1795</u>	<input checked="" type="checkbox"/> Test	<u>1150</u>	T-On Location <u>0800</u>	
(B) First Initial Flow <u>21</u>	<input type="checkbox"/> Jars		T-Started <u>0845</u>	
(C) First Final Flow <u>38</u>	<input type="checkbox"/> Safety Joint		T-Open <u>10:45</u>	
(D) Initial Shut-In <u>1212</u>	<input type="checkbox"/> Circ Sub		T-Pulled <u>13:15</u>	
(E) Second Initial Flow <u>40</u>	<input type="checkbox"/> Hourly Standby		T-Out <u>1515</u>	
(F) Second Final Flow <u>65</u>	<input checked="" type="checkbox"/> Mileage <u>80</u> 124		Comments	
(G) Final Shut-In <u>1209</u>	<input type="checkbox"/> Sampler			
(H) Final Hydrostatic <u>1699</u>	<input checked="" type="checkbox"/> Straddle <u>600</u>		<input type="checkbox"/> Ruined Shale Packer	
Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer		<input type="checkbox"/> Ruined Packer	
Initial Shut-In <u>30</u>	<input checked="" type="checkbox"/> Extra Packer <u>Straddle</u>		<input type="checkbox"/> Extra Copies	
Final Flow <u>45</u>	<input checked="" type="checkbox"/> Extra Recorder <u>Straddle</u>		Sub Total <u>0</u>	
Final Shut-In <u>45</u>	<input type="checkbox"/> Day Standby		Total <u>1874</u>	
	<input type="checkbox"/> Accessibility		MP/DST Disc't	
	Sub Total <u>1874</u>			

Approved By _____ Our Representative Shan Kuper

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



AUSTIN B. KLAUS



Cell 785.650.3629
Work 785.483.3145
Ext 225

PO BOX 352
Russell, KS 67665
austin.klaus@johnofarmer.com

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

Well Name: Hagerman #1
Location: Pawnee County
License Number: API #15-145-21,778-0000
Spud Date: 10/26/14
Surface Coordinates: Section 12 - Township 10 South - Range 17 West
Region: Kansas
Drilling Completed: 10/31/14

Bottom Hole Vertical well with minimal deviation, same as above
Coordinates:
Ground Elevation (ft): 2,129' **K.B. Elevation (ft):** 2,139'
Logged Interval (ft): 3,150 **To:** RTD **Total Depth (ft):** 3,990'
Formation: LKC, Arbuckle
Type of Drilling Fluid: Chemical (Mud Co.)

Printed by STRIP.LOG from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: John O. Farmer, Inc.
Address: P.O. Box 352
Russell, KS 67665-0352

Comments

The Hagerman #1 well was drilled by Val Energy Rig #6 (Tool Pusher: Randy Martin).

The location for the Hagerman #1 well was found via 3-D seismic survey. Geologic samples were collected and evaluated from 3,150'-3,990'. Structurally, the Hagerman #1 ran 8' high to our correlation well, Hagerman #1-12, at the Lansing. One straddle test was conducted in the Lansing H zone, yielding negative results. The Arbuckle horizon was 8' low to the comparison well. Upon completion of the logging operation and straddle test, the decision was made to plug and abandon the Hagerman #1 well on 10/31/14.

Topeka 3234' (-1095)

Ls: tan-lt gry, fn-md xln, mostly DNS, no visible porosity, NSFO

Sh: drk gry

Sh: tan-buff, fn xln, scat int xln porosity, NSFO

Ls: tan-buff, fn xln, no visible porosity, NSFO

Ls: ala

Sh: drk gry

Ls: tan-lt gry, fn-sub xln, no visible porosity, scat fossil, NSFO

Sh: lt gry-drk gry

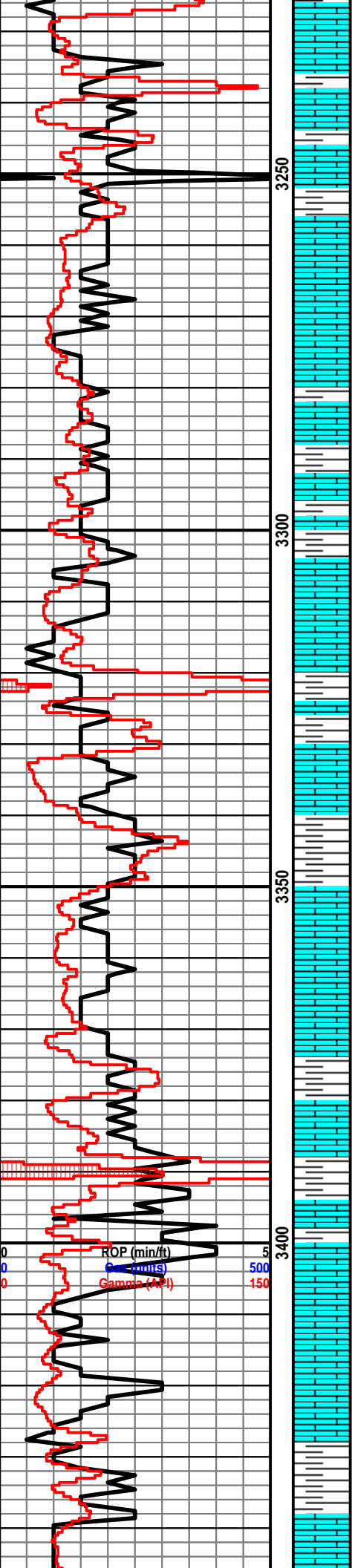
Ls: tan-buff, fn-md xln, scat int xln porosity, scat dead oil st, NSFO, chalky

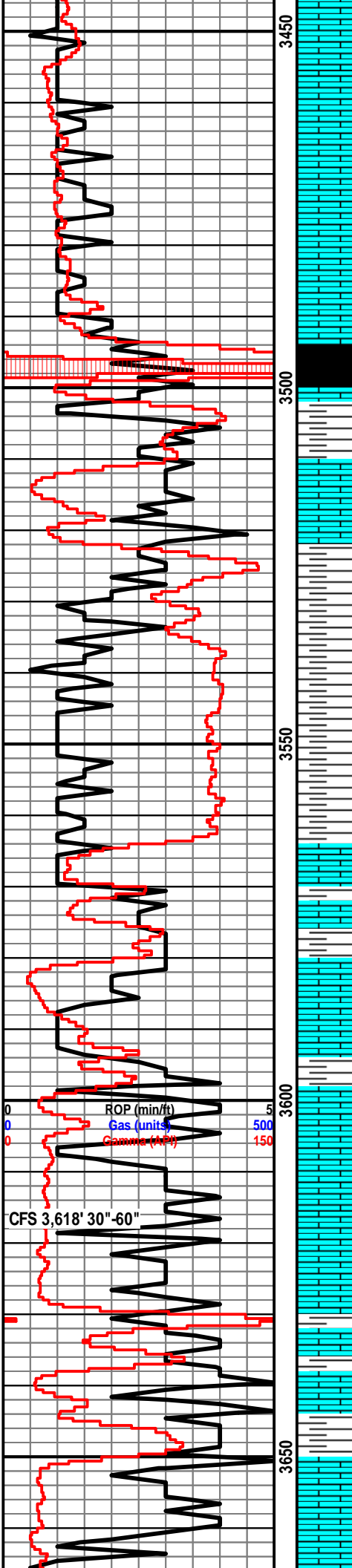
Ls: off wh-tan, fn xln, scat pp vuggy porosity, NSFO, scat fossil

Sh: drk gry-brn

Ls: off wh-tan, fn xln, scat int xln porosity, scat oil st, NSFO, sl chalky

Ls: tan-gry, fn-sub xln, mostly DNS, NSFO, fossil





Ls: ala

Sh: drk gry

Ls: off wh-tan, fn-md xln, scat int xln & pp vuggy porosity, NSFO

Heebner 3501' (-1362)

Sh: blk, carb, fissile

Sh: drk gry-brn-grn, soft

Toronto 3520' (-1381)

Ls: off wh-tan, fn xln, vry poor int xln porosity, scat oil st, NSFO

Sh: drk gry-brn

Sh: gry-brn-grn, soft

Sh: ala

Lansing 3571' (-1432)

Ls: off wh-tan, fn-md xln, mostly DNS, no visible porosity, scat chalky

Sh: gry

Ls: off wh-tan, fn xln, ool, fair ool porosity, mostly barren, NSFO, chalky

Sh: drk gry

Ls: off wh-tan, fn xln, scat ool, poor int xln & ool porosity, barren, NSFO, chalky

Ls: off wh-tan, fn-sub xln, mostly DNS, NSFO, scat chalky, chert-off wh

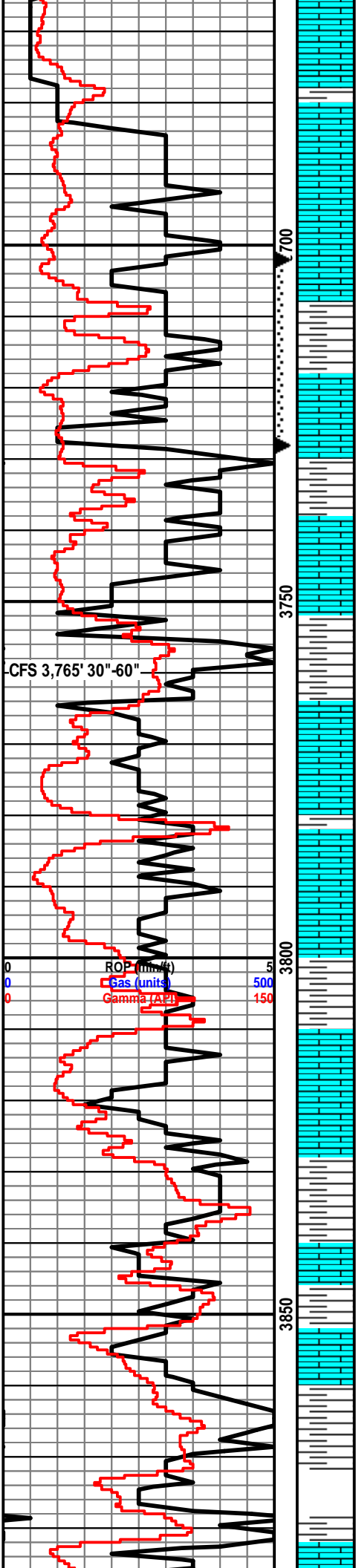
Sh: lt gry-drk gry

Ls: off wh-tan, fn-md xln, scat int xln porosity, fossil, NSFO

Ls: off wh-tan, fn xln, scat int xln porosity, barren, NSFO, chert-off wh

ROP (min/ft) 5
Gas (units) 500
Gamma (API) 150

CFS 3,618' 30"-60"



Ls: off wh-tan, fn xln, ool, fair oom porosity, mostly barren, NSFO, scat chalky

Ls: off wh-lt gry, fn-md xln, vry DNS, no visible porosity, NSFO

Ls: tan-lt gry, fn-md xln, vry DNS, NSFO, chalky, scat chert-off wh

Ls: ala

Sh: drk gry

Ls: tan-lt gry, fn xln, poor int xln porosiy, VSSFO, chert-off wh

Sh: lt gry-drk gry

Ls: off wh-tan, fn xln, fossil, scat int xln & int fossil porosity, mostly barren, NSFO, scat chert-off wh

Sh: drk gry-brn-grn

Ls: off wh-tan, fn xln, scat int xln porosity, mostly barren, NSFO, scat fossil, chalky

Sh: gry

Ls: off wh-tan, fn xln, ool, poor oom porosity, mostly barren, scat chert-off wh, sl chalky

Sh: drk gry

Ls: tan-lt gry, fn-md xln, vry DNS, no visible porosity, chert-off wh

BKC 3834' (-1695)

Sh: drk gry-brn-grn, soft

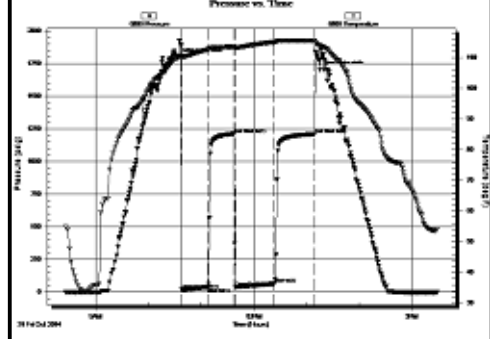
Sh: drk gry, vry soft

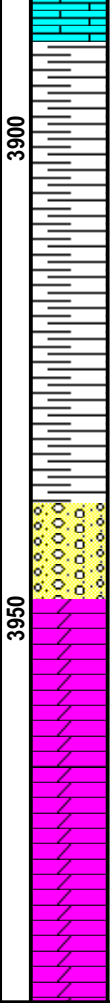
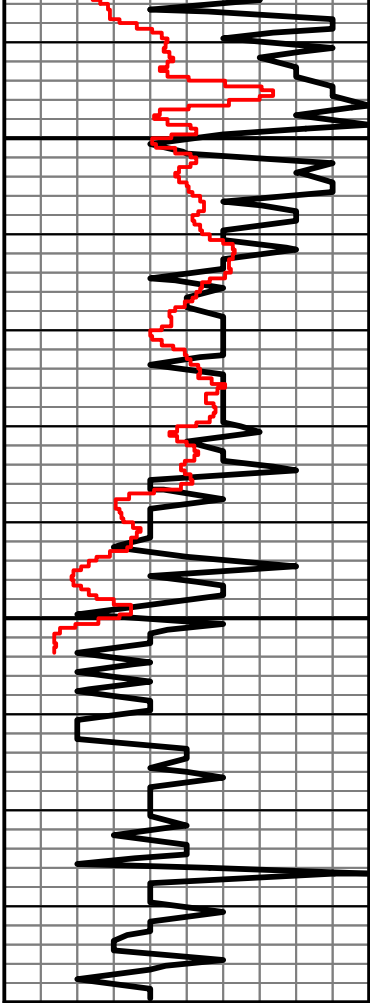
Ls: tan-brn, fn-md xln, vry DNS, no visible porosity, hvy chert-off wh

Ls: ala, scat sh: drk gry-brn, soft

Sh: drk gry-brn-rd, soft

DST #1 3,702-3,728' (Lansing H Zone)
 30"-30"-45"-45"
 IF: Surface built to 2 1/2", no blow back
 FF: Surface built to 2", no blow back
 Rec: 70' MW (40% M, 60% Water) - CL 26k
 FP: 21-28-41-66#
 SIP: 1,212-1,209#
 HP: 1,796-1,700#
 BHT: 116





Ls: tan-lt gry, fn-md xln, vry DNS, NSFO, chert-off wh

Sh: drk gry-brn-rd

Sh: drk gry-brn-rd, soft

Sh: ala

Cong: off wh-tan, fn xln, mostly DNS, scat chert-off wh

Arbuckle 3948' (-1809)

Dolo: off wh-tan, fn-md xln, poor int xln porosity, mostly barren, NSFO, scat chert-off wh, chalky

Dolo: ala