



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1102813
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: _____



1102813

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

INSTRUCTIONS: Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No List All E. Logs Run: _____	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum
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CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone				

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> _____ <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	Farmer, John O., Inc.
Well Name	A. Wasinger 8
Doc ID	1102813

All Electric Logs Run

Dual Induction Log
Micro Resistivity Log
Compensated Density Neutron Log
Cement Bond Log
Computer Generated Interpretation

Form	ACO1 - Well Completion
Operator	Farmer, John O., Inc.
Well Name	A. Wasinger 8
Doc ID	1102813

Tops

Name	Top	Datum
Anhydrite	1176'	(848)
Topeka	2978'	(-954)
Heebner	3259'	(-1235)
Toronto	3280'	(-1256)
Lansing	3306'	(-1282)
Base/KC	3535'	(-1511)
Arbuckle	3596'	(-1572)
L.T.D.	3681'	(-1657)

Conservation Division
Finney State Office Building
130 S. Market, Rm. 2078
Wichita, KS 67202-3802



Phone: 316-337-6200
Fax: 316-337-6211
<http://kcc.ks.gov/>

Mark Sievers, Chairman
Thomas E. Wright, Commissioner
Shari Feist Albrecht, Commissioner

Sam Brownback, Governor

November 28, 2012

Marge Schulte
Farmer, John O., Inc.
370 W WICHITA AVE
PO BOX 352
RUSSELL, KS 67665-2635

Re: ACO1
API 15-051-26361-00-00
A. Wasinger 8
SE/4 Sec.15-15S-18W
Ellis County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,
Marge Schulte



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Farmer, John O., Inc.

15-15-18, Ellis, KS

PO Box 352
Russell KS 67665

A. Wasinger #8

Job Ticket: 47090

DST#: 1

ATTN: Austin Klans

Test Start: 2012.08.12 @ 21:35:45

GENERAL INFORMATION:

Formation: **Arb.**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:46:45

Time Test Ended: 03:16:15

Test Type: Conventional Straddle (Initial)

Tester: Brett Dickinson

Unit No: 59

Interval: 3577.00 ft (KB) To 3617.00 ft (KB) (TVD)

Reference Elevations: 2026.00 ft (KB)

Total Depth: 3681.00 ft (KB) (TVD)

2018.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8166

Inside

Press @ Run Depth: 17.25 psig @ 3613.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.08.12

End Date:

2012.08.13

Last Calib.:

2012.08.13

Start Time: 21:35:50

End Time:

03:16:14

Time On Btm:

2012.08.12 @ 23:44:45

Time Off Btm:

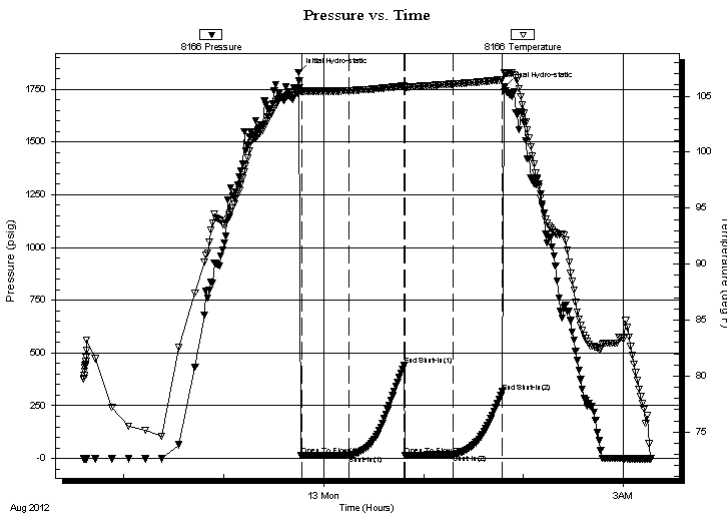
2012.08.13 @ 01:48:45

TEST COMMENT: IF-1/4in blow died in 28min

ISI-No blow

FF-No blow

FSI-No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1829.92	105.64	Initial Hydro-static
2	13.99	105.42	Open To Flow (1)
31	14.96	105.52	Shut-In(1)
64	440.55	105.92	End Shut-In(1)
64	16.09	105.78	Open To Flow (2)
93	17.25	106.10	Shut-In(2)
123	315.89	106.49	End Shut-In(2)
124	1761.97	107.13	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	oilspotted mud	0.02

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Farmer, John O., Inc.

15-15-18, Ellis, KS

PO Box 352
Russell KS 67665

A. Wasinger #8

Job Ticket: 47090

DST#: 1

ATTN: Austin Klans

Test Start: 2012.08.12 @ 21:35:45

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: 53.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	oilspotted mud	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

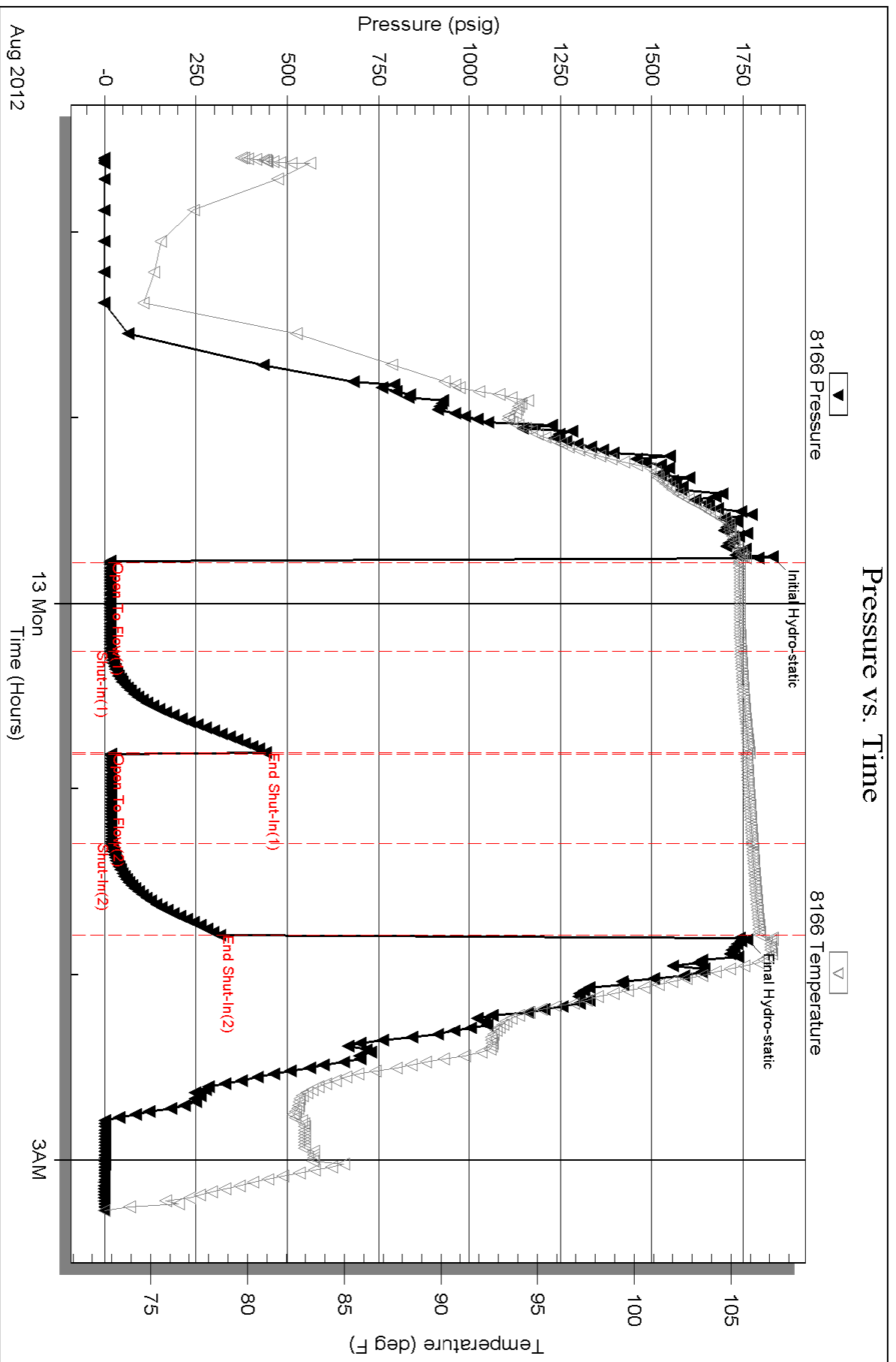
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Farmer, John O., Inc.

15-15-18, Ellis, KS

PO Box 352
Russell KS 67665

A. Wasinger #8

Job Ticket: 47091

DST#: 2

ATTN: Austin Klans

Test Start: 2012.08.13 @ 07:10:00

GENERAL INFORMATION:

Formation: **Arb.**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:27:30

Time Test Ended: 13:31:30

Test Type: Conventional Straddle (Reset)

Tester: Brett Dickinson

Unit No: 59

Interval: 3622.00 ft (KB) To 3650.00 ft (KB) (TVD)

Reference Elevations: 2026.00 ft (KB)

Total Depth: 3681.00 ft (KB) (TVD)

2018.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 6753 Outside

Press @ Run Depth: 421.03 psig @ 3646.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.08.13

End Date: 2012.08.13

Last Calib.: 2012.08.13

Start Time: 07:10:05

End Time: 13:31:29

Time On Btm: 2012.08.13 @ 09:26:30

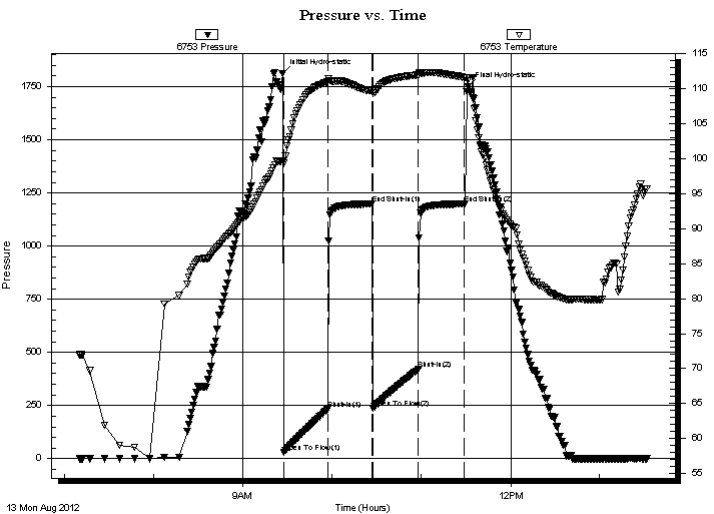
Time Off Btm: 2012.08.13 @ 11:31:30

TEST COMMENT: IF-BOB in 5.5min

ISI-No blow

FF-BOBin 6min

FSI-No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1812.82	99.71	Initial Hydro-static
1	28.80	99.34	Open To Flow (1)
31	233.54	111.00	Shut-In(1)
60	1198.07	109.66	End Shut-In(1)
61	239.11	109.37	Open To Flow (2)
92	421.03	111.96	Shut-In(2)
123	1198.01	111.61	End Shut-In(2)
125	1751.82	111.13	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
655.00	Water	8.91
240.00	MCW 85% W 15%M	3.37

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Farmer, John O., Inc.

15-15-18, Ellis, KS

PO Box 352
Russell KS 67665

A. Wasinger #8

Job Ticket: 47091

DST#: 2

ATTN: Austin Klans

Test Start: 2012.08.13 @ 07:10:00

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:

32000 ppm

Viscosity: 53.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.78 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
655.00	Water	8.915
240.00	MCW 85% W 15%M	3.367

Total Length: 895.00 ft Total Volume: 12.282 bbl

Num Fluid Samples: 0

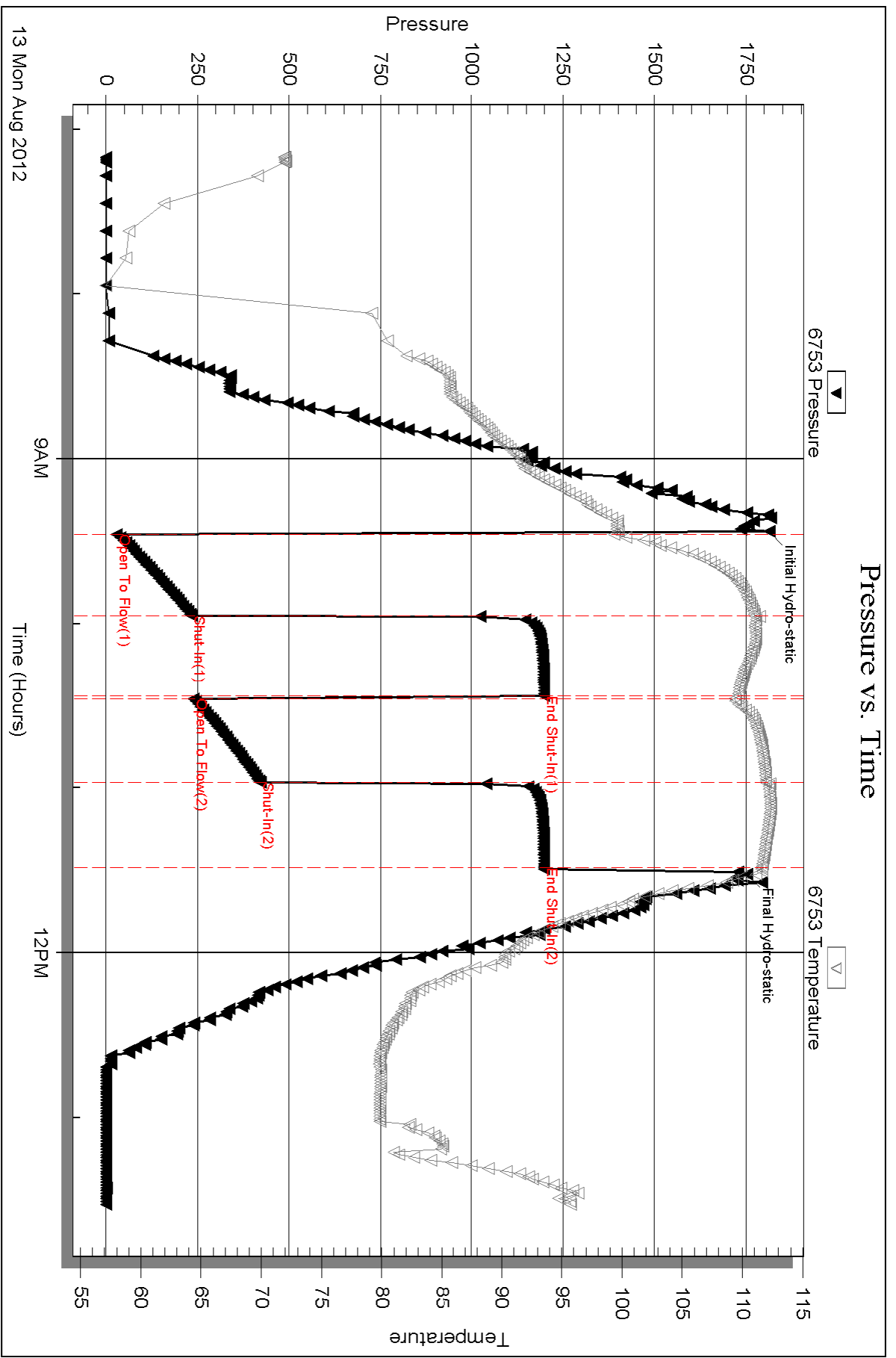
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

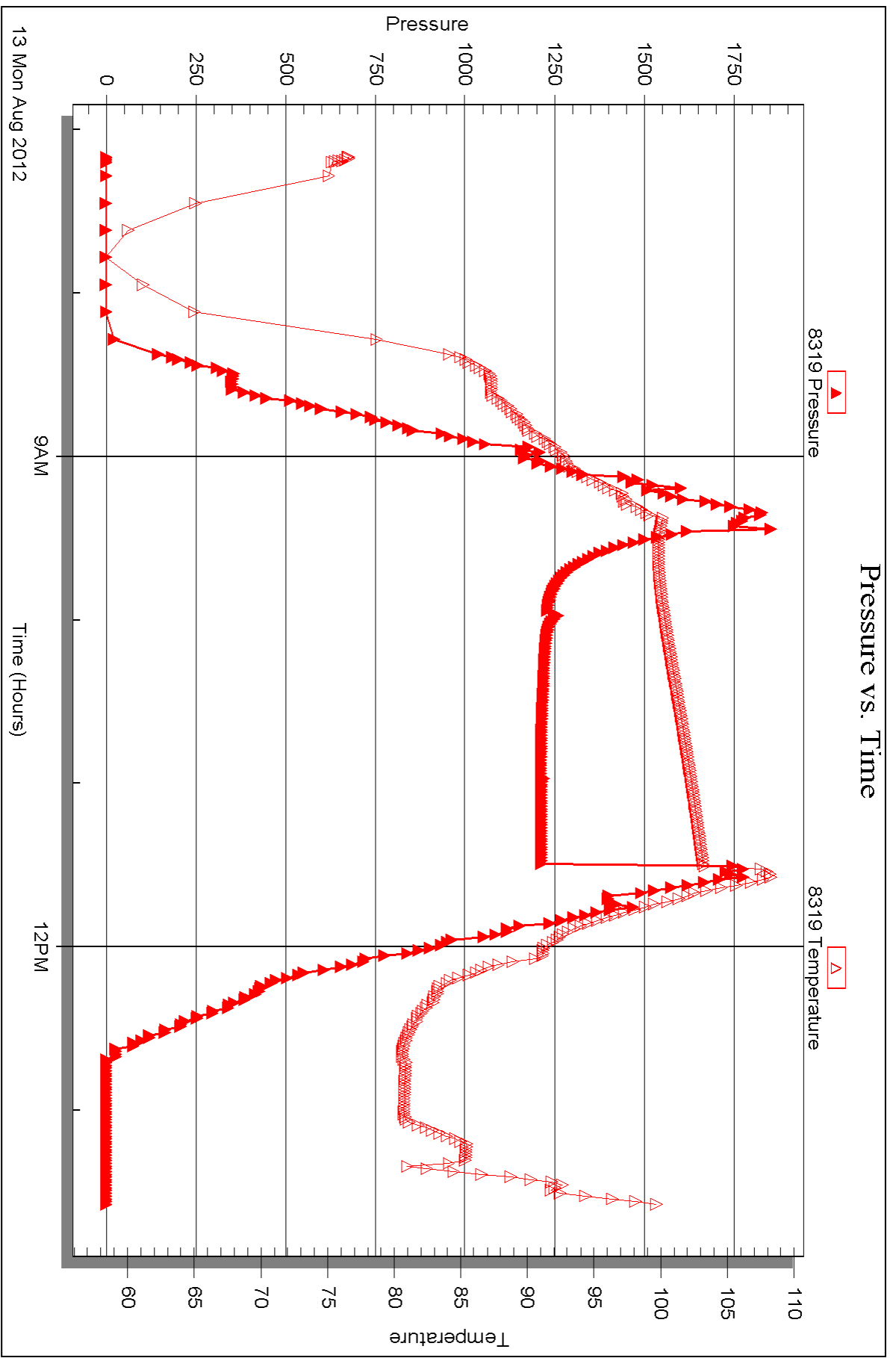


Serial #: 8319

Below (Stratified), John O., Inc.

A. Wasinger #8

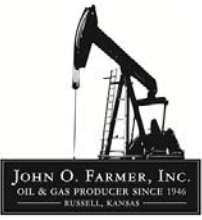
DST Test Number: 2



Triobite Testing, Inc

Ref. No: 47091

Printed: 2012.08.13 @ 14:33:39



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: A. Wasinger #8
Location: Ellis County
License Number: API #15-051-26,361-0000
Spud Date: 8/7/2012
Surface Coordinates: 780' FSL & 1915' FEL
Bottom Hole Coordinates: Section 15 - Township 15 South - Range 18 West
Vertical well with minimal deviation, same as above
Ground Elevation (ft): 2016' K.B. Elevation (ft): 2024'
Logged Interval (ft): 2950' To: RTD Total Depth (ft): RTD: 3680' LTD: 3681'
Formation: Topeka-Arbuckle
Type of Drilling Fluid: Chemical (Andy's)
Region: Kansas
Drilling Completed: 8/13/2012

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

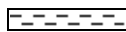



COMMENTS





The A. Wasinger #8 well was drilled by Discovery Drilling Rig #4 (Tool Pusher: Mike Gaschler).

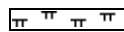

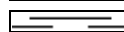
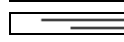
The location for the A. Wasinger #8 was found via 3-D seismic survey. Based on the evaluation of the logs run and the samples collected, the decision was made to set 5 1/2" production casing on 8/13/2012 to further evaluate the A. Wasinger #8 well.

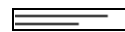



ROCK TYPES

-  Anhy
-  Bent
-  Brec
-  Cht








-  Clyst
-  Coal
-  Congl
-  Dol

-  Gyp
-  Igne
-  Lmst
-  Meta

-  Mrlst
-  Salt
-  Shale
-  Shcol





-  Shgy
-  Sltst
-  Ss
-  Till

OTHER SYMBOLS

- #### POROSITY
-  Earthy
 -  Fenest
 -  Fracture
 -  Inter
 -  Moldic
 -  Organic
 -  Pinpoint

Vuggy

- #### SORTING
-  Well
 -  Moderate
 -  Poor

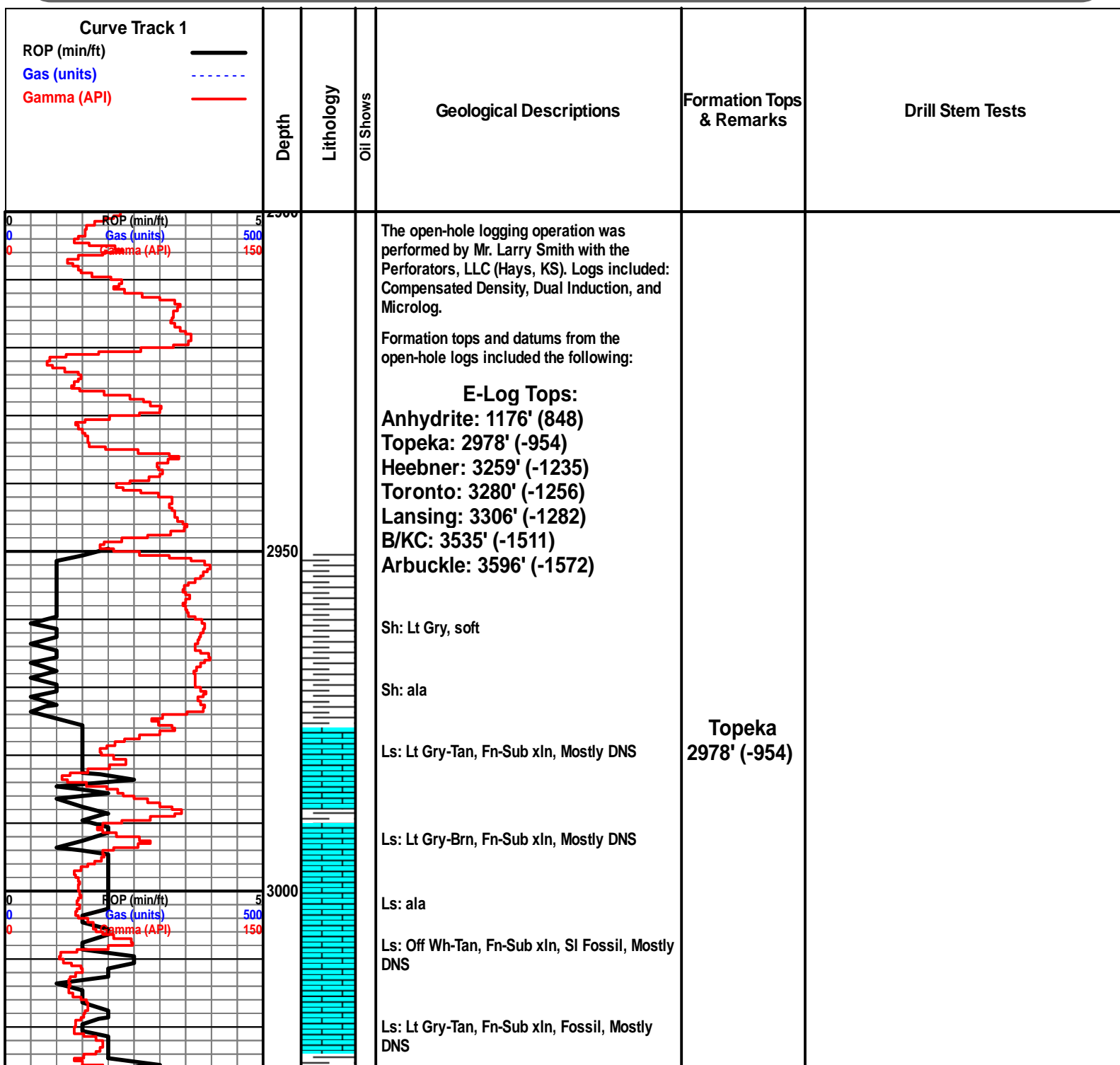
- #### ROUNDING
-  Rounded
 -  Subrnd
 -  Subang
 -  Angular

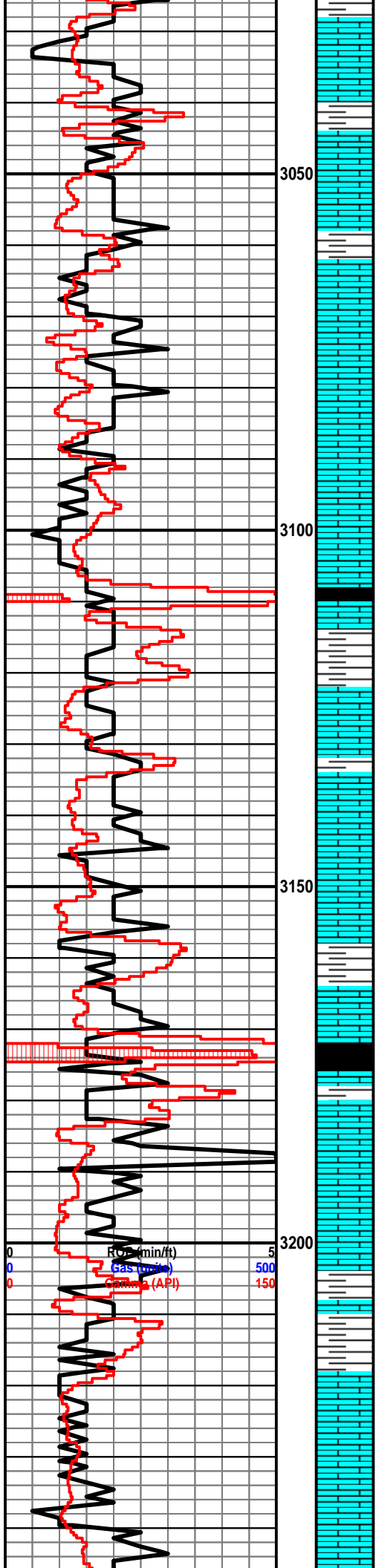
- #### OIL SHOW
-  Even

-  Spotted
-  Ques
-  Dead

- #### EVENT
-  Rft
 -  Sidewall

- #### INTERVAL
-  Core
 -  Dst





Ls: ala

3050 Ls: Tan-Lt Gry, Fn xln, Mostly DNS, Fossil

Ls: Tan-Lt Gry, Fn-Sub xln, Hvy Fossil, Hvy Chert-Off Wh, Mostly DNS

Ls: ala

3100 Ls: Brn-Tan, Fn xln, Scat Int xln porosity, NSFO, No Odor

Sh: Gry-Drk Gry

Sh: Gry

Ls: Lt Gry-Tan, Fn-Sub xln, Scat-Poor Pinpoint & Int xln porosity, NSFO, No Odor

Ls: ala

3150 Ls: Off Wh-Lt Gry, Fn xln, Mostly DNS, Chert-Off Wh

Ls: ala

Sh: Drk Gry-Blk

Ls: Gry-Tan-Brn, Fn xln, Mostly DNS, Fossil, Chert-off wh

Ls: Tan-Lt Gry, Fn-Sub xln, Mostly DNS, Fossil

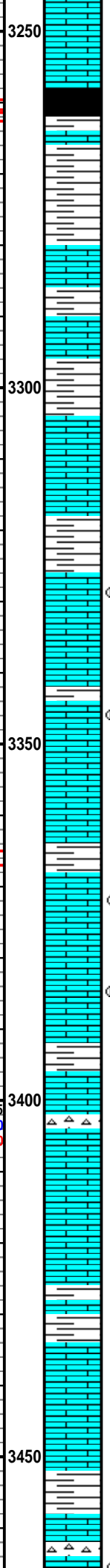
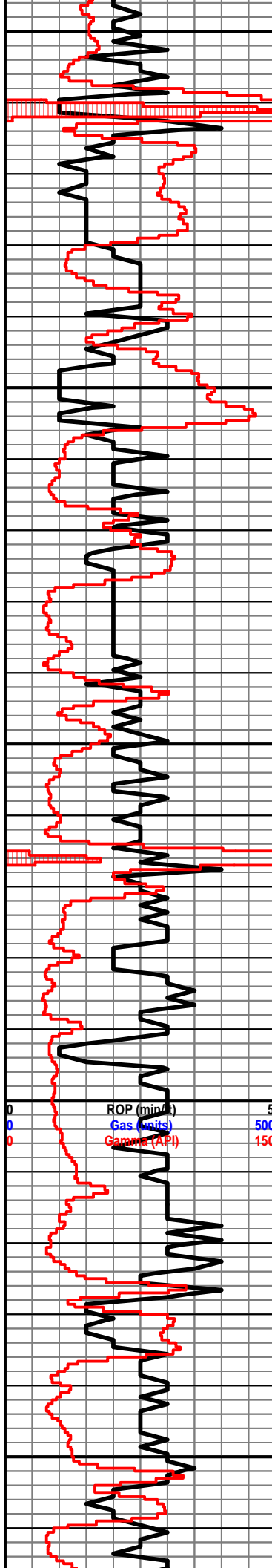
3200

Sh: Gry-Grn

Ls: Off Wh-Tan, Fn xln w/ Scat-Poor Int xln, porosity, Fossil, Chert-Off Wh, NSFO, No Odor

Ls: Off Wh-Lt Gry, Fn xln, w/ Scat Int xln & Fossil porosity, Lt oil st in porosity, NSFO, Fair Odor

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



Ls: Tan-Drk Gry, Fn-Sub xln, Mostly DNS

Sh: Blk, Carb

Sh: Drk Gry-Brn-Grn, Soft

Ls: Lt Gry-Tan, Fn xln w/ Scat PP porosity, Chalky, Lt oil st in porosity, NSFO, SI odor

Sh: Drk Gry-Brn

Ls: Off Wh-Tan, Fn xln w/ Scat PP & Poor int xln porosity, Lt oil st, NSFO, No Odor, Chalky

Sh: Gry-Brn-Grn, soft

Ls: Tan-Lt Gry, Fn xln w/ Scat PP Vuggy porosity, Lt oil st in porosity, SSFO, SI Odor

Ls: Off Wh-Tan, Fn xln w/ Scat PP Vuggy & Poor Int Fossil porosity, Lt oil st in porosity, VSSFO, Fair Odor

Ls: Tan-Off Wh, Fn xln, Fossil w/ Poor Fossil porosity, Lt Oil st scat, Hvy Chert-Off wh, Chalky, VSSFO, SI Odor, Mostly DNS, Scat PP Vuggy porosity

Ls: Off Wh-Tan, Fn xln, Few Pcs ool, Scat PP & Int xln porosity, Lt-Fr oil st in porosity, SSFO, Fair Odor

Ls: Off Wh-Tan, Fn xln, ool w/ Fair oom porosity, Lt oil st, SSFO, Fr Odor

Sh: Drk Gry-Brn

Ls: Tan-Brn, Fn-Sub xln, Mostly DNS, SI Chert-Off Wh, SI Chalky

Ls: ala

Sh: Gry-Drk Gry

Ls: Tan-Lt Gry, Fn-Sub xln, Mostly DNS, Chert-Off Wh

Sh: Drk Gry-Grn

Ls: Off Wh-Tan, Fn xln w/ Scat PP Vuggy porosity, Fair oil st Scat, SSFO, SI Odor

Heebner
3258'(-1234)

Toronto
3278'(-1254)

Lansing
3305'(-1281)

A

B

C

D

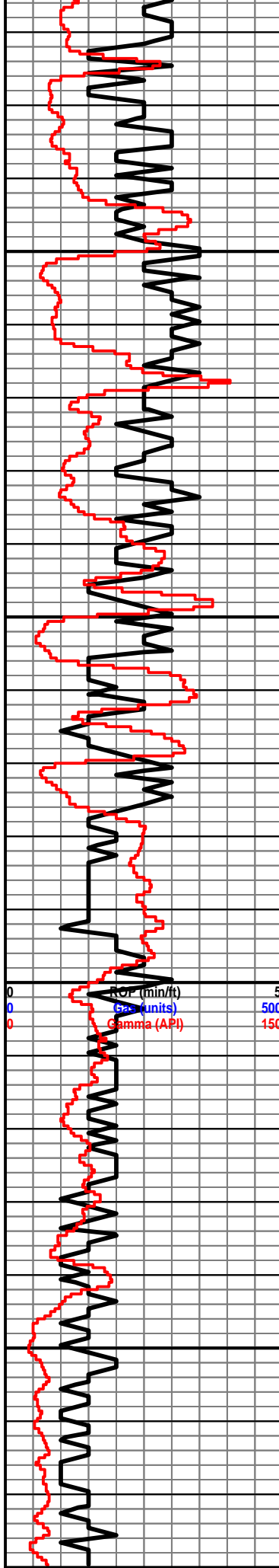
E

F

G

H

I



Hvy Chert-Off Wh

● Ls: Off Wh-Tan, Fn xln w/ Fair PP Vuggy porosity, Lt-Fr oil st in porosity, SSFO, SI Odor

○ Ls: Off Wh-Tan, Fn-Sub xln, Mostly DNS, Barren

Sh: Drk Gry

3500

Ls: Off Wh-Tan, Fn-Sub xln, Mostly DNS, Barren, Chalky, Chert-Off Wh

K

Sh: Drk Gry-Brn-Grn, soft

Ls: Off Wh-Tan, Fn-Sub xln, Mostly DNS, Barren

L

Ls: ala

Sh: Drk Gry-Brn-Grn, Mott.

B/KC
3534'(-1510)

3550

Sh: ala

Ls: Off Wh-Lt Gry, Fn-Sub xln, Mostly DNS

Congl: Maroon, DNS

Ls: Off Wh-Lt Gry, Fn-Sub xln, Mostly DNS, Chert-Off Wh

Sh: Gry-Brn-Grn, soft

3600

● Dolo: Off Wh-Brn, Fn-Md xln, Poor-Fair Int xln porosity, Fair oil st, Dull Yel Fluor, SSFO-FSFO, Fair Odor

○ Dolo: Off Wh-Tan, Fn-Md Sucr xln w/ poor int xln porosity, Lt Oil St in porosity, VSSFO, Lt Odor

● Dolo: Off Wh-Brn, Fn-Md Sucr xln w/ Fair-Good int xln porosity, Sat oil st, SSFO, Fair-Good Odor

Dolo: Off Wh, Fn-Md xln w/ poor Int xln porosity, Lt-Fr oil st, VSSFO, SI Odor

36

● Dolo: Off Wh-Tan, Fn-Md Sucr xln w/ fr int xln porosity, Lt-Fr oil st, SSFO, Fair Odor

○ Dolo: Off Wh, Fn-Md xln w/ poor int xln porosity, Lt oil st in fw pcs, VSSFO, SI Odor

Dolo: Off Wh-Wh, Fn-Md xln, Mostly DNS, Barren, Chert-Off Wh

J

K

L

B/KC
3534'(-1510)

Arbuckle
3596'(-1572)

RTD
3680'(-1656)

DST #1 3,577'-3,617' Top 20' of Arbuckle
30"-30"-30"-30"

IF: weak blow, died in 28 minutes

FF: no blow

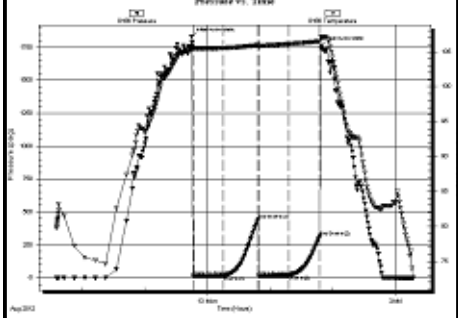
Rec: 5' Oil Spotted Mud

FP: 14-15, 16-17#

SIP: 441-316#

HP: 1,829-1,762#

BHT: 107



DST #2 3,617'-3,650' 20-53' into Arbuckle
30"-30"-30"-30"

IF: BOB in 5.5 minutes, no blow back

FF: BOB in 6 minutes, no blow back

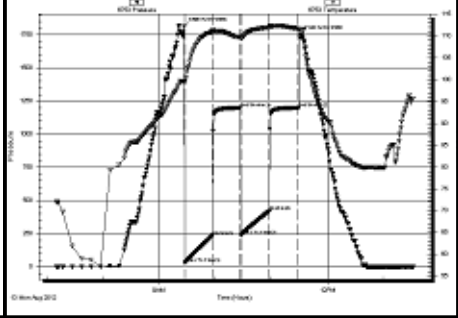
Rec: 240' Muddy Water (15% M, 85% W)
655' Water (Chl. 4K)

FP: 29-234, 239-421#

SIP: 1,198-1,198#

HP: 1,813-1,752#

BHT: 112





Discovery Drilling

P.O. Box 763 • Hays, KS 67601 • OFFICE (785) 623-2920 • CELLULAR (785) 635-1511

DRILLER'S LOG

Operator: John O. Farmer, Inc. Lic# 5135 Contractor: Discovery Drilling Co., Inc. LIC#31548
370 West Wichita Avenue - P.O. Box 352 PO Box 763
Russell, KS 67665 Hays, KS 67601

Lease: A. Wasinger # 8 Location: SW-NE-SW-SE
Section 15/ 15S/ 18W
Ellis County, KS

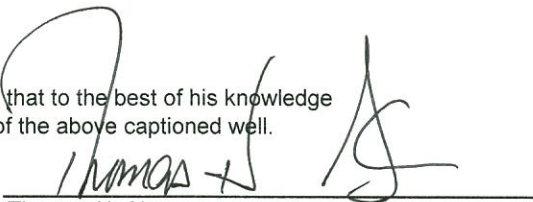
Loggers Total Depth: 3681' API#15- 051-26,361-00-00
 Rotary Total Depth: 3680' Elevation: 2016 GL / 2024 KB
 Commenced: 8/7/2012 Completed: 8/13/2012
 Casing: 8 5/8" @ 1186'W/450sks Status: Oilwell
5 1/2" @ 3677'W/130sks

DEPTHS & FORMATIONS (All from KB)

Surface, Sand & Shale	<u>0'</u>	Shale	<u>1218'</u>
Dakota Sand	<u>552'</u>	Shale & Lime	<u>1847'</u>
Shale	<u>580'</u>	Shale	<u>2161'</u>
Cedar Hill Sand	<u>626'</u>	Shale & Lime	<u>2582'</u>
Red Bed Shale	<u>824'</u>	Lime & Shale	<u>3240'</u>
Anhydrite	<u>1178'</u>	RTD	<u>3680'</u>
Base Anhydrite	<u>1218'</u>		

STATE OF KANSAS)
) ss
 COUNTY OF ELLIS)

Thomas H. Alm of Discovery Drilling states that to the best of his knowledge the above and foregoing is a true and correct log of the above captioned well.

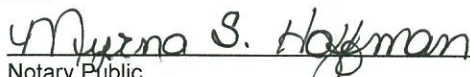


 Thomas H. Alm

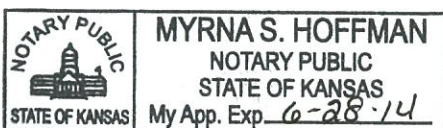
Subscribed and sworn to before me on 8-14-12

My Commission expires: 6-28-14

(Place stamp or seal below)



 Notary Public



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. 714

Date	8-8-12	Sec.	15	Twp.	15	Range	18	County	ELLIS	State	KS	On Location		Finish	7.30 pm
Lease	A. Wasinger			Well No.	8			Location	Haystack 1E 1/2 N West 1/2						

Contractor	Discoy Rig 4			Owner	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	Seiface			T.D.	11 86										
Hole Size	12 1/4			Depth	8 3/4										
Csg.	8 3/4			Depth	Charge To John O Farmer										
Tbg. Size				Depth	Street										
Tool				Depth	City State										
Cement Left in Csg.	32.16			Shoe Joint	32.15										
Meas Line				Displace	73.5 BL										
					Cement Amount Ordered 430 3% CC 4% gel										

EQUIPMENT

Pumptrk	#15	No.	Cementer	Matt	Common	430
			Helper			
Bulktrk		No.	Driver	Nick	Poz. Mix	
			Driver			
Bulktrk		No.	Driver	Layne	Gel.	9
			Driver		Calcium	1/6

JOB SERVICES & REMARKS

Remarks:	A - Wasinger # 8										
Rat Hole	0.71										
Mouse Hole											
Centralizers	2, 8 5/8										
Baskets	2, 8 5/8										
D/V or Port Collar											
	Hulls										
	Salt										
	Flowseal										
	Kol-Seal										
	Mud CLR 48										
	CFL-117 or CD110 CAF 38										
	Sand										
	Handling 475										
	Mileage										

FLOAT EQUIPMENT

	Guide Shoe										
	#17 #2 #23										
	Baskets 31 p 24										
	AFU Inserts										
	Float Shoe										
	Latch Down										
	Baffle plate										
	Pulley plug										
	Pumptrk Charge Long Surface										
	Mileage 11										

Cement did Circulate

Signature	[Signature]											Tax
												Discount
												Total Charge

JOB LOG

SWIFT Services, Inc.

DATE 8-13-12 PAGE NO. 7

CUSTOMER John D. Farmer WELL NO. #8 LEASE Wassinger JOB TYPE Cement Lining TICKET NO. 21856

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	1945							On location w/ Fract Equip
	1940							Start 14 #/ft 5 1/2" casing to 3680'
								200' Rot Wall Scrubbers
								Insert Fract Shoe w/ Anti-Ball
								LD. Pottle - 5J-18' @ 3662' = 89.4
								Cent 1-3-5-7-9-11 cut Bats #2 #12
	2110							Drop Ball - 2 Jb out
	2130							Fin Fin casing - Tag & LD JT
								St. cir / Rotate Casing
								Fin cir -
			12					Plug RH 30 SKS / MH-20 SKS cut
			20					Pump 500 gal M Flush
								Pump 20 BBI KCL Flush
			35					Start 130 SKS BH-2 cut above hole
								Fin cut - Washout pump & line
								Drop LD - Plug -
								Start Disp
		9	15				300	First 15 BBI KCL wtr
								Cont Disp H ₂ O
		9	60				400	Caught press
		6	70					Gradually slow rate to 6 BPM
		6	89				700	Lost cir press
	2245	0	89 1/2				1500	Plug Down - Hold - Release & Hold
	2330							Job Complete
								Washup & Leakup
								<i>[Signature]</i> Dan Brian & Rob
								Had some difficulty
								with rate bit - Need operator
								on location to run with bit
								<i>[Signature]</i>