



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1123889
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: _____



1123889

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> <i>(Submit ACO-4)</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	Camp 1
Doc ID	1123889

Tops

Name	Top	Datum
Anhydrite	688'	(1020)
Tarkio	2317'	(-609)
Topeka	2586'	(-878)
Heebner	2820'	(-1112)
Toronto	2839'	(-1131)
Lansing	2885'	(1177)
Base/KC	3114'	(-1406)
Arbuckle	3145'	(-1437)
L.T.D.	3210'	(-1502)

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

March 11, 2013

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

Re: ACO1
API 15-167-23850-00-00
Camp 1
NE/4 Sec.02-15S-14W
Russell 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



DRILL STEM TEST REPORT

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

PO Box 352
Russell, KS 67665

ATTN: Austin Klaus

Camp #1

2-15s-14w Russell KS

Start Date: 2013.01.15 @ 04:30:00

End Date: 2013.01.15 @ 10:03:30

Job Ticket #: 51576 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2013.01.21 @ 09:39:54



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

John O. Farmer Inc

2-15s-14w Russell KS

PO Box 352
Russell, KS 67665

Camp #1

Job Ticket: 51576

DST#: 1

ATTN: Austin Klaus

Test Start: 2013.01.15 @ 04:30:00

GENERAL INFORMATION:

Formation: **Sand - Grand Haven**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:30:30

Time Test Ended: 10:03:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Cody Bloedorn

Unit No: 59

Interval: 2249.00 ft (KB) To 2319.00 ft (KB) (TVD)

Reference Elevations: 1708.00 ft (KB)

Total Depth: 2319.00 ft (KB) (TVD)

1700.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 6753 Inside

Press @ Run Depth: 63.04 psig @ 2315.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.01.15 End Date: 2013.01.15

Last Calib.: 2013.01.15

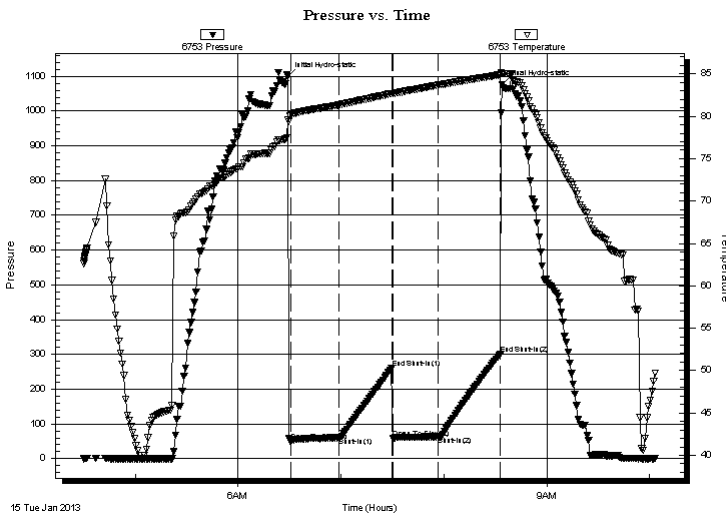
Start Time: 04:30:05 End Time: 10:03:29

Time On Btm: 2013.01.15 @ 06:29:00

Time Off Btm: 2013.01.15 @ 08:34:00

TEST COMMENT: 30 - IF- BOB instantly
30 - IS- No blow back
30 - FF- BOB instantly
30 - FS- No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1099.47	79.59	Initial Hydro-static
2	48.84	80.07	Open To Flow (1)
30	60.85	81.36	Shut-In(1)
61	261.29	82.68	End Shut-In(1)
62	57.36	82.68	Open To Flow (2)
88	63.04	83.67	Shut-In(2)
124	301.66	84.89	End Shut-In(2)
125	1076.08	85.08	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
45.00	GSOCWM, 2%W, 8%G, 10%O, 80%M	0.35
0.00	124' of G.I.P.	0.00

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

John O. Farmer Inc

2-15s-14w Russell KS

PO Box 352
Russell, KS 67665

Camp #1

Job Ticket: 51576

DST#: 1

ATTN: Austin Klaus

Test Start: 2013.01.15 @ 04:30:00

GENERAL INFORMATION:

Formation: **Sand - Grand Haven**

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Time Tool Opened: 06:30:30

Time Test Ended: 10:03:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Cody Bloedorn

Unit No: 59

Interval: 2249.00 ft (KB) To 2319.00 ft (KB) (TVD)

Reference Elevations: 1708.00 ft (KB)

Total Depth: 2319.00 ft (KB) (TVD)

1700.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8166 Outside

Press @ Run Depth: psig @ 2315.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.01.15

End Date: 2013.01.15

Last Calib.: 2013.01.15

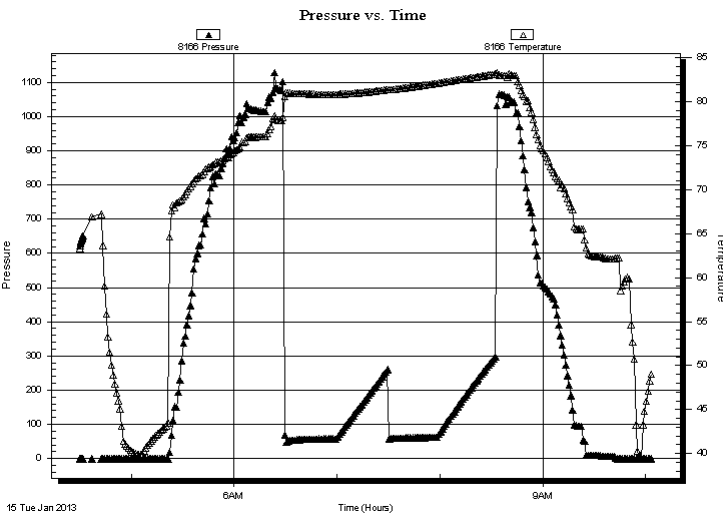
Start Time: 04:30:05

End Time: 10:03:29

Time On Btm:

Time Off Btm:

TEST COMMENT:
30 - IF- BOB instantly
30 - IS- No blow back
30 - FF- BOB instantly
30 - FS- No blow back



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
45.00	GSOCWM, 2%W, 8%G, 10%O, 80%M	0.35
0.00	124' of G.I.P.	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

John O. Farmer Inc

2-15s-14w Russell KS

PO Box 352
Russell, KS 67665

Camp #1

Job Ticket: 51576

DST#: 1

ATTN: Austin Klaus

Test Start: 2013.01.15 @ 04:30:00

Tool Information

Drill Pipe:	Length: 2225.00 ft	Diameter: 3.80 inches	Volume: 31.21 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: 30000.00 lb
Drill Collar:	Length: 31.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 46000.00 lb
			<u>Total Volume: 31.36 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	28.00 ft			String Weight: Initial 40000.00 lb
Depth to Top Packer:	2249.00 ft			Final 42000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	70.00 ft			
Tool Length:	91.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Change Over Sub	1.00			2229.00	
Shut In Tool	5.00			2234.00	
Hydraulic tool	5.00			2239.00	
Packer	5.00			2244.00	21.00 Bottom Of Top Packer
Packer	5.00			2249.00	
Stubb	1.00			2250.00	
Perforations	2.00			2252.00	
Change Over Sub	1.00			2253.00	
Drill Pipe	62.00			2315.00	
Recorder	0.00	6753	Inside	2315.00	
Recorder	0.00	8166	Outside	2315.00	
Change Over Sub	1.00			2316.00	
Bullnose	3.00			2319.00	70.00 Bottom Packers & Anchor

Total Tool Length: 91.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

John O. Farmer Inc

2-15s-14w Russell KS

PO Box 352
Russell, KS 67665

Camp #1

Job Ticket: 51576

DST#: 1

ATTN: Austin Klaus

Test Start: 2013.01.15 @ 04:30:00

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:

bbbl

Water Loss: in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
45.00	GSOCWM, 2%W, 8%G, 10%O, 80%M	0.349
0.00	124' of G.I.P.	0.000

Total Length: 45.00 ft Total Volume: 0.349 bbl

Num Fluid Samples: 0

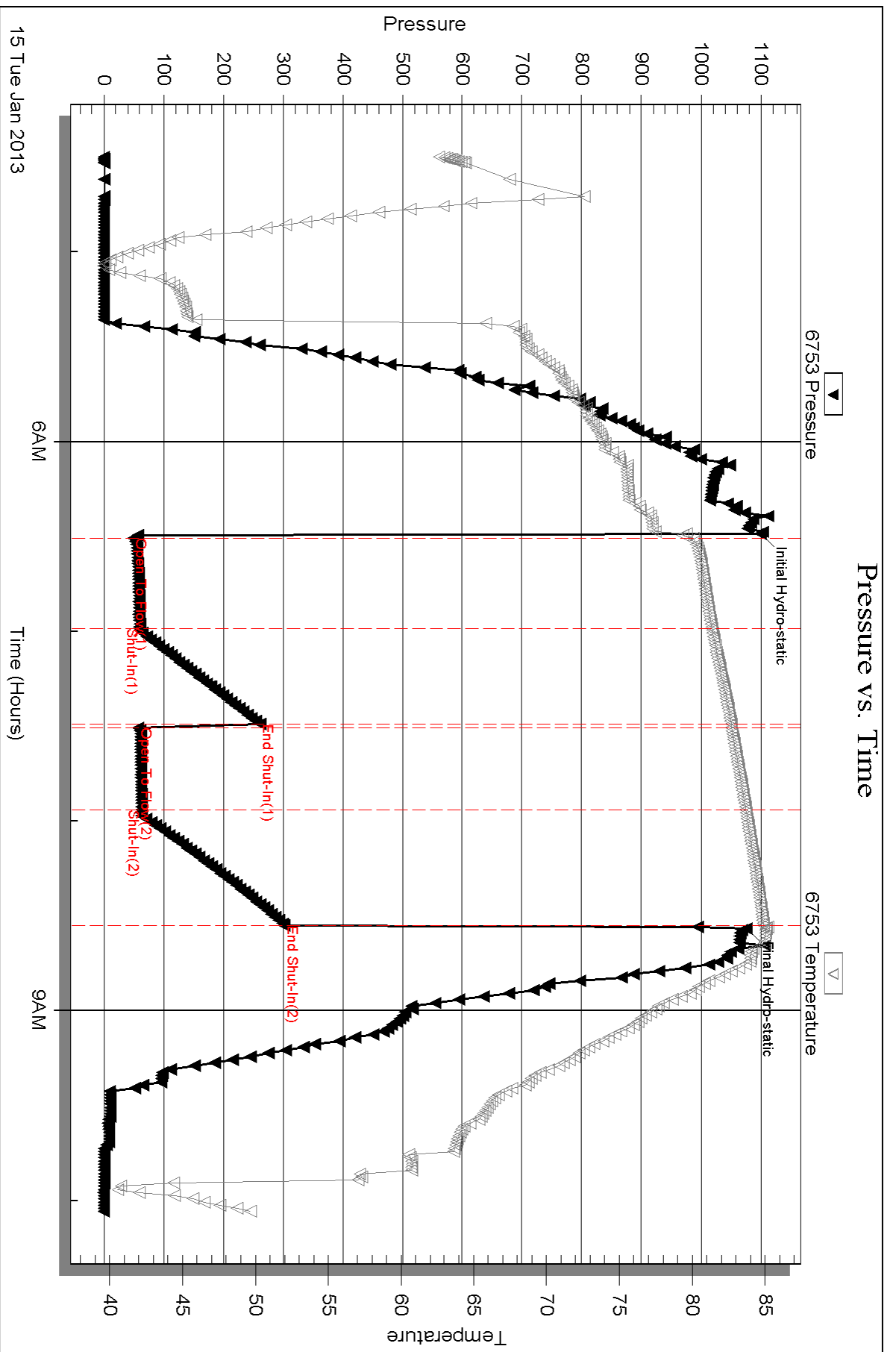
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

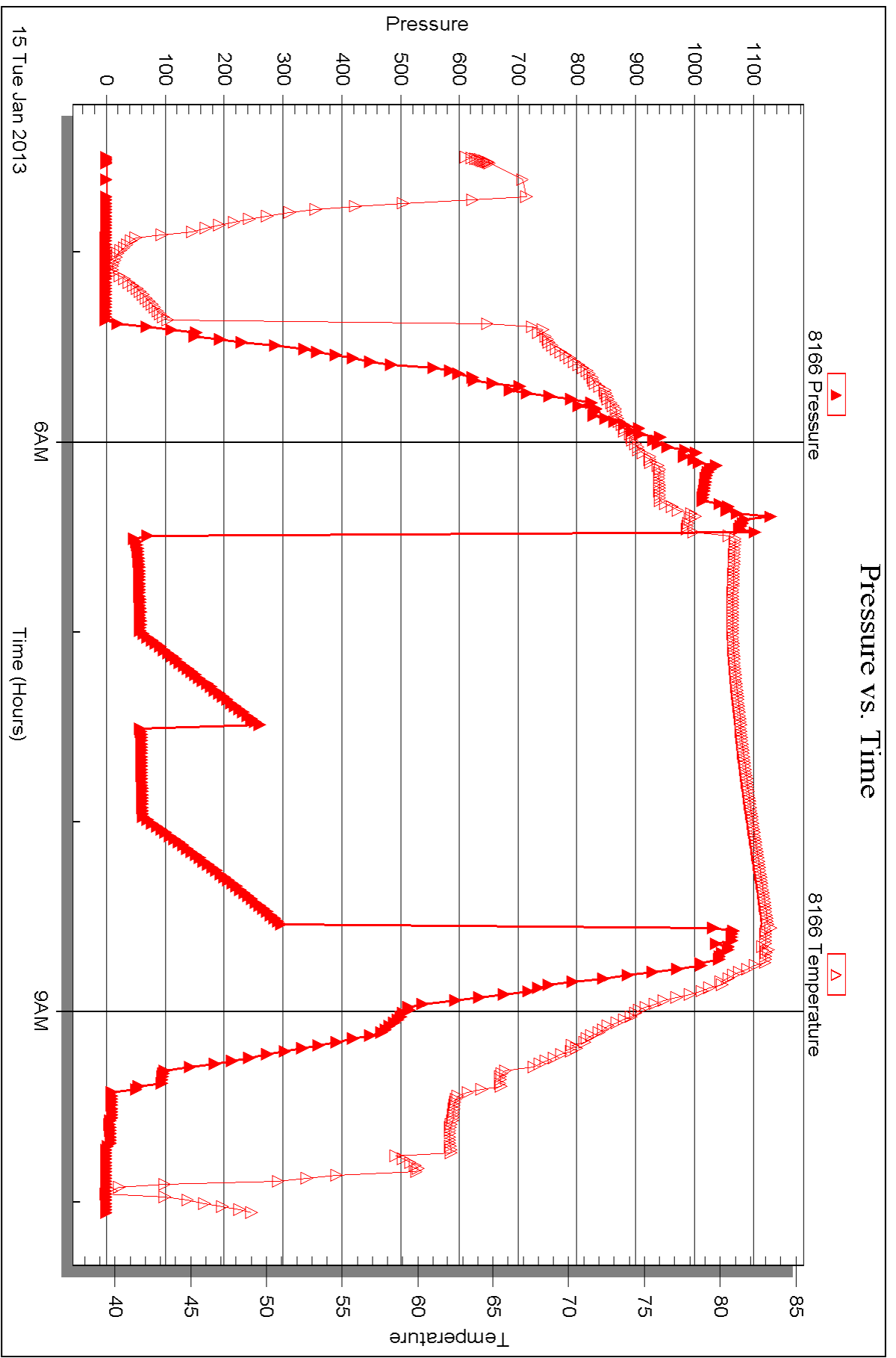


Serial #: 8166

Outside John O. Farmer Inc

Camp #1

DST Test Number: 1





DRILL STEM TEST REPORT

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

PO Box 352
Russell, KS 67665

ATTN: Austin Klaus

Camp #1

2-15s-14w Russell KS

Start Date: 2013.01.15 @ 16:00:00

End Date: 2013.01.15 @ 21:43:00

Job Ticket #: 50255 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2013.01.21 @ 09:39:09

John O. Farmer Inc
2-15s-14w Russell KS
Camp #1
DST # 2
Tankio
2013.01.15



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

John O. Farmer Inc

2-15s-14w Russell KS

PO Box 352
Russell, KS 67665

Camp #1

Job Ticket: 50255

DST#: 2

ATTN: Austin Klaus

Test Start: 2013.01.15 @ 16:00:00

GENERAL INFORMATION:

Formation: **Tarkio**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 17:13:00

Time Test Ended: 21:43:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Brett Dickinson

Unit No: 59

Interval: 2327.00 ft (KB) To 2370.00 ft (KB) (TVD)

Reference Elevations: 1708.00 ft (KB)

Total Depth: 2370.00 ft (KB) (TVD)

1700.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 6753 Inside

Press @ Run Depth: 95.25 psig @ 2363.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.01.15

End Date:

2013.01.15

Last Calib.: 2013.01.15

Start Time: 16:00:05

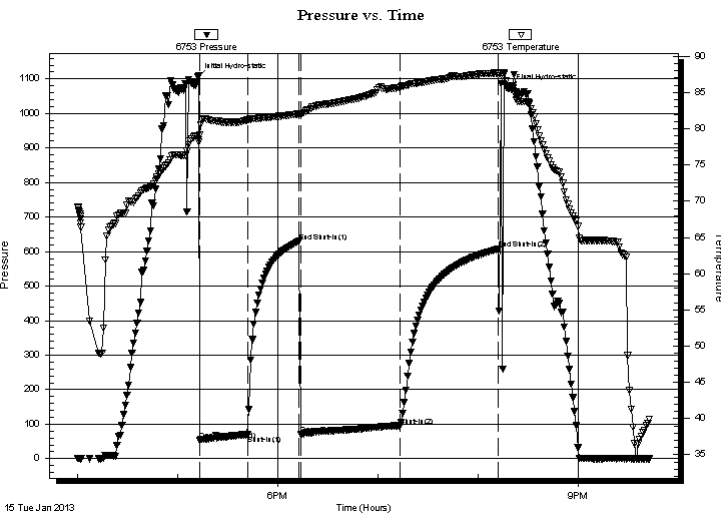
End Time:

21:42:59

Time On Btm: 2013.01.15 @ 17:12:00

Time Off Btm: 2013.01.15 @ 20:18:30

TEST COMMENT: IF-6" blow
ISI-No blow
FF-7 1/2" blow
FSI-No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1105.11	78.53	Initial Hydro-static
1	53.71	79.11	Open To Flow (1)
30	68.98	81.19	Shut-In(1)
61	628.99	82.02	End Shut-In(1)
62	71.55	81.94	Open To Flow (2)
121	95.25	85.74	Shut-In(2)
180	606.99	87.72	End Shut-In(2)
187	1072.57	85.77	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	VSOMCW 2%O 58%W 40%M	1.40
45.00	VSOWCM 2%O 10%W 88%M	0.63

* Recovery from multiple tests

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

John O. Farmer Inc

2-15s-14w Russell KS

PO Box 352
Russell, KS 67665

Camp #1

Job Ticket: 50255

DST#: 2

ATTN: Austin Klaus

Test Start: 2013.01.15 @ 16:00:00

GENERAL INFORMATION:

Formation: **Tarkio**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 17:13:00

Time Test Ended: 21:43:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Brett Dickinson

Unit No: 59

Interval: 2327.00 ft (KB) To 2370.00 ft (KB) (TVD)

Reference Elevations: 1708.00 ft (KB)

Total Depth: 2370.00 ft (KB) (TVD)

1700.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8166 Outside

Press @ Run Depth: psig @ 2363.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.01.15 End Date: 2013.01.15

Last Calib.: 2013.01.15

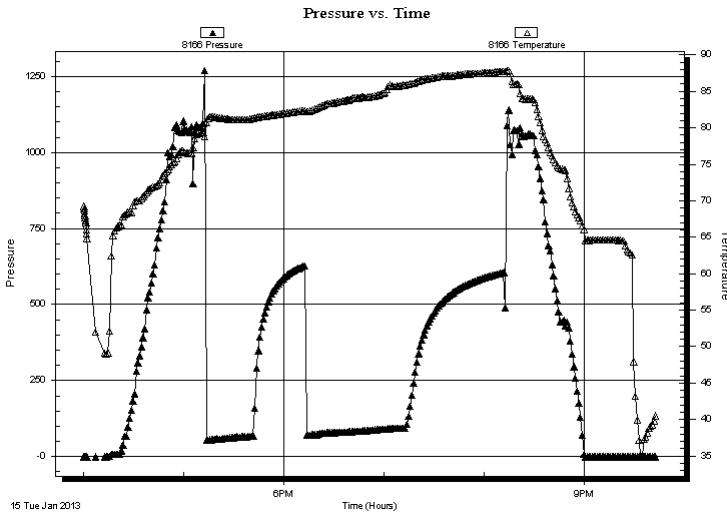
Start Time: 16:00:05 End Time: 21:42:29

Time On Btm:

Time Off Btm:

TEST COMMENT: IF-6" blow
ISI-No blow
FF-7 1/2" blow
FSI-No blow

PRESSURE SUMMARY



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

Recovery

Length (ft)	Description	Volume (bbl)
120.00	V SOMCW 2%O 58%W 40%M	1.40
45.00	V SOWCM 2%O 10%W 88%M	0.63

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

John O. Farmer Inc

2-15s-14w Russell KS

PO Box 352
Russell, KS 67665

Camp #1

Job Ticket: 50255

DST#: 2

ATTN: Austin Klaus

Test Start: 2013.01.15 @ 16:00:00

Tool Information

Drill Pipe:	Length: 2287.00 ft	Diameter: 3.80 inches	Volume: 32.08 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: 31.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 65000.00 lb
			<u>Total Volume: 32.23 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	12.00 ft			String Weight: Initial 40000.00 lb
Depth to Top Packer:	2327.00 ft			Final 41000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	43.00 ft			
Tool Length:	64.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			2307.00	
Shut In Tool	5.00			2312.00	
Hydraulic tool	5.00			2317.00	
Packer	5.00			2322.00	21.00 Bottom Of Top Packer
Packer	5.00			2327.00	
Stubb	1.00			2328.00	
Perforations	2.00			2330.00	
Change Over Sub	1.00			2331.00	
Drill Pipe	32.00			2363.00	
Recorder	0.00	6753	Inside	2363.00	
Recorder	0.00	8166	Outside	2363.00	
Change Over Sub	1.00			2364.00	
Perforations	3.00			2367.00	
Bullnose	3.00			2370.00	43.00 Bottom Packers & Anchor

Total Tool Length: 64.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

John O. Farmer Inc

2-15s-14w Russell KS

PO Box 352
Russell, KS 67665

Camp #1

Job Ticket: 50255

DST#: 2

ATTN: Austin Klaus

Test Start: 2013.01.15 @ 16:00:00

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: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.18 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2800.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
120.00	VSOMCW 2%O 58%W 40%M	1.401
45.00	VSOWCM 2%O 10%W 88%M	0.631

Total Length: 165.00 ft

Total Volume: 2.032 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

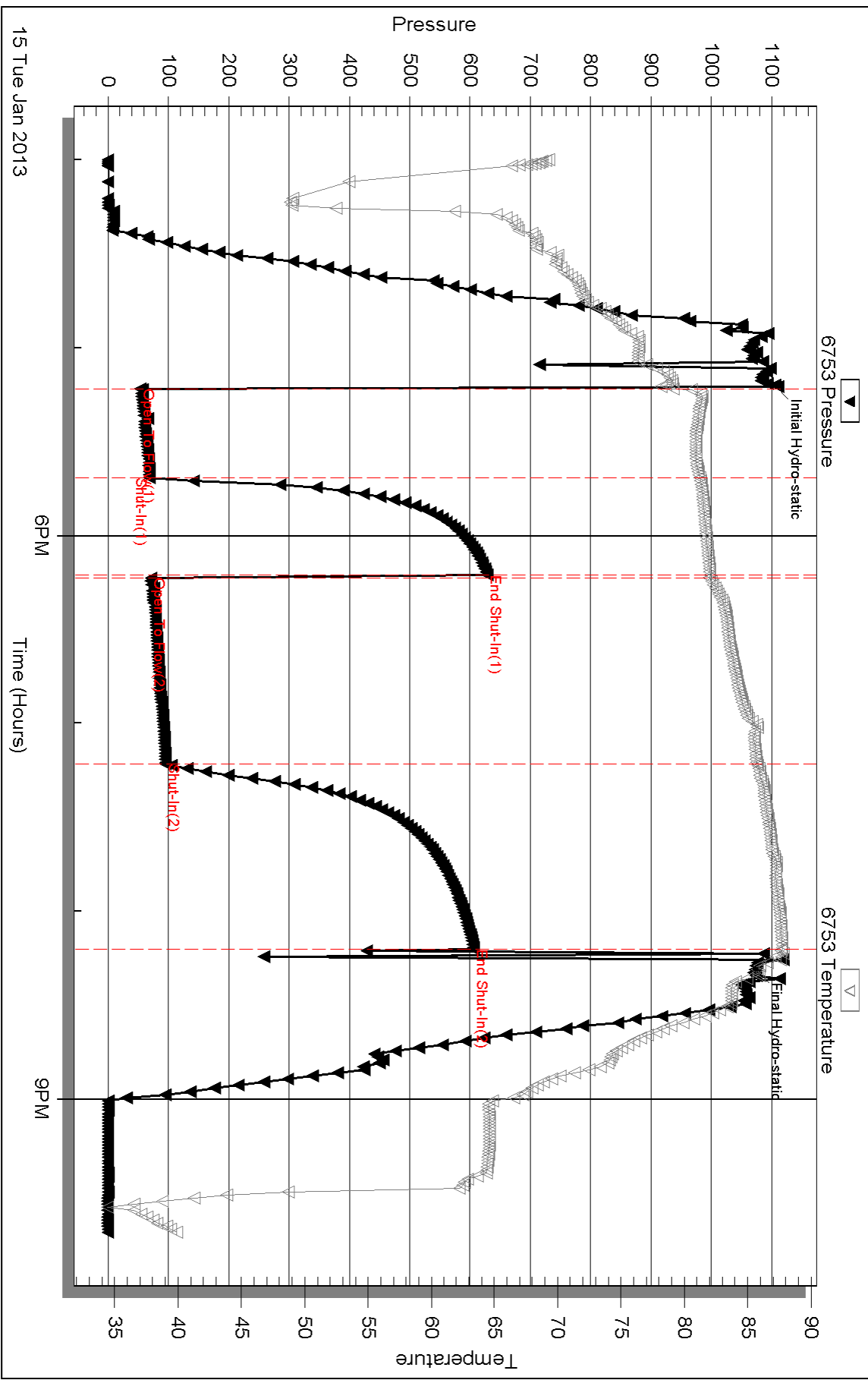
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

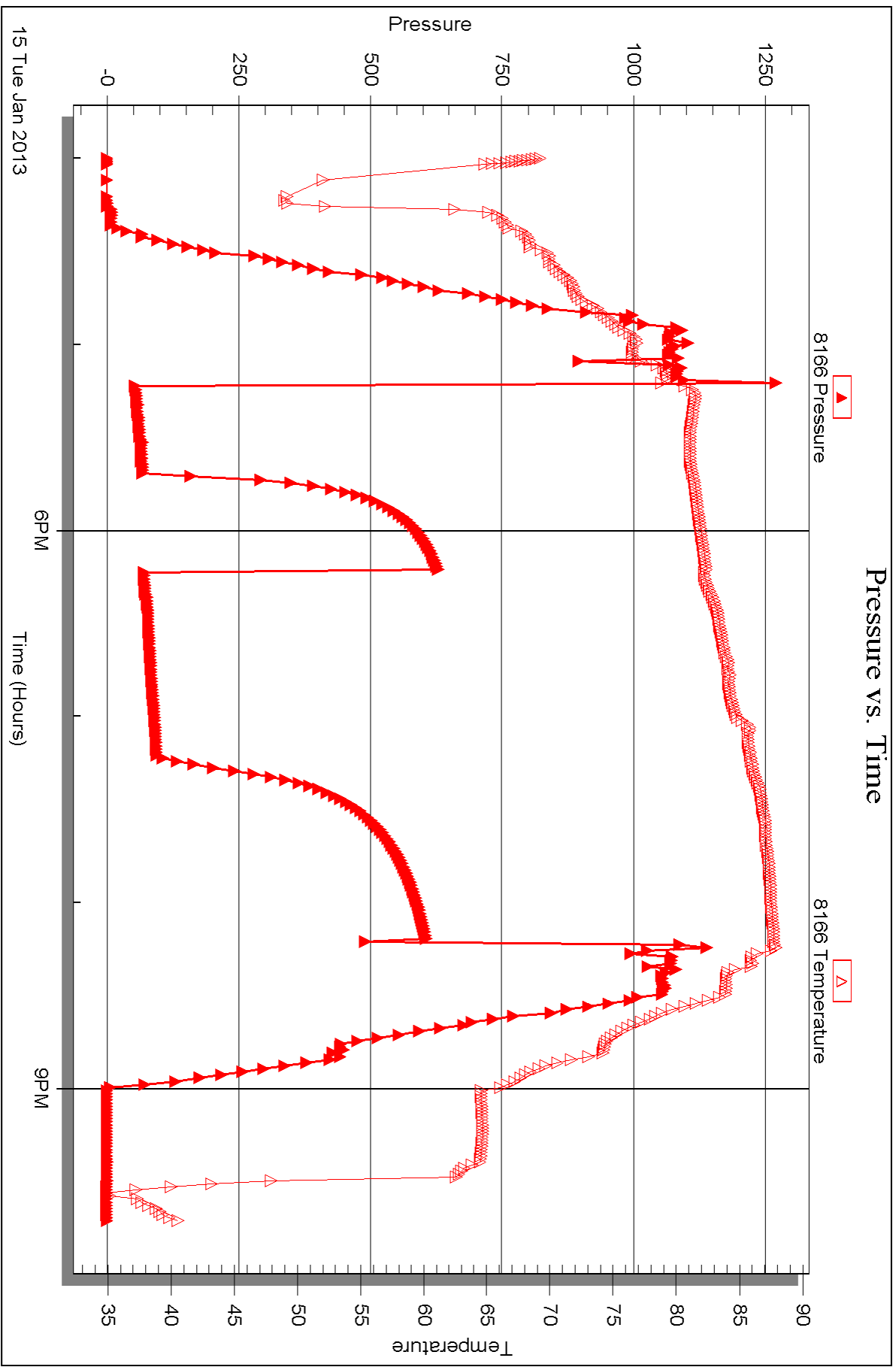


Serial #: 8166

Outside John O. Farmer Inc

Camp #1

DST Test Number: 2





DRILL STEM TEST REPORT

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

PO Box 352
Russell, KS 67665

ATTN: Austin Klaus

Camp #1

2-15s-14w Russell KS

Start Date: 2013.01.16 @ 22:40:00

End Date: 2013.01.17 @ 04:23:30

Job Ticket #: 50256 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2013.01.21 @ 09:38:33



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

John O. Farmer Inc

2-15s-14w Russell KS

PO Box 352
Russell, KS 67665

Camp #1

Job Ticket: 50256

DST#: 3

ATTN: Austin Klaus

Test Start: 2013.01.16 @ 22:40:00

GENERAL INFORMATION:

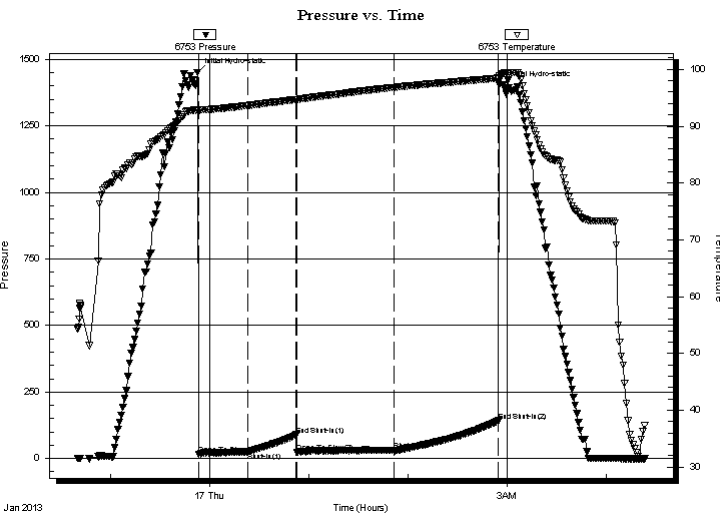
Formation: **KC "A-C"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 23:53:30
 Time Test Ended: 04:23:30
 Interval: **2886.00 ft (KB) To 2930.00 ft (KB) (TVD)**
 Total Depth: 2930.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Brett Dickinson
 Unit No: 59
 Reference Elevations: 1708.00 ft (KB)
 1700.00 ft (CF)
 KB to GR/CF: 8.00 ft

Serial #: 6753

Inside

Press @ Run Depth: 31.64 psig @ 2924.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.01.16 End Date: 2013.01.17 Last Calib.: 2013.01.17
 Start Time: 22:40:05 End Time: 04:23:29 Time On Btm: 2013.01.16 @ 23:52:30
 Time Off Btm: 2013.01.17 @ 02:57:30

TEST COMMENT: IF-5 1/2" blow
 ISI-No blow
 FF-3" blow
 FSI-No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1451.03	92.87	Initial Hydro-static
1	17.15	92.34	Open To Flow (1)
31	25.46	93.64	Shut-In(1)
60	89.24	94.70	End Shut-In(1)
61	23.84	94.70	Open To Flow (2)
120	31.64	96.85	Shut-In(2)
183	142.24	98.46	End Shut-In(2)
185	1403.31	99.30	Final Hydro-static

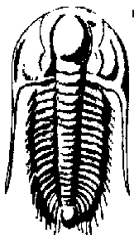
Recovery

Length (ft)	Description	Volume (bbl)
35.00	VSOCM 2%O 98%M	0.21

* Recovery from multiple tests

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

John O. Farmer Inc

2-15s-14w Russell KS

PO Box 352
Russell, KS 67665

Camp #1

Job Ticket: 50256

DST#: 3

ATTN: Austin Klaus

Test Start: 2013.01.16 @ 22:40:00

GENERAL INFORMATION:

Formation: **KC "A-C"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:53:30

Time Test Ended: 04:23:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Brett Dickinson

Unit No: 59

Interval: 2886.00 ft (KB) To 2930.00 ft (KB) (TVD)

Total Depth: 2930.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1708.00 ft (KB)

1700.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 8166 Outside

Press @RunDepth: psig @ 2924.00 ft (KB)

Start Date: 2013.01.16

End Date: 2013.01.17

Capacity: 8000.00 psig

Last Calib.: 2013.01.17

Start Time: 22:40:05

End Time: 04:23:29

Time On Btm:

Time Off Btm:

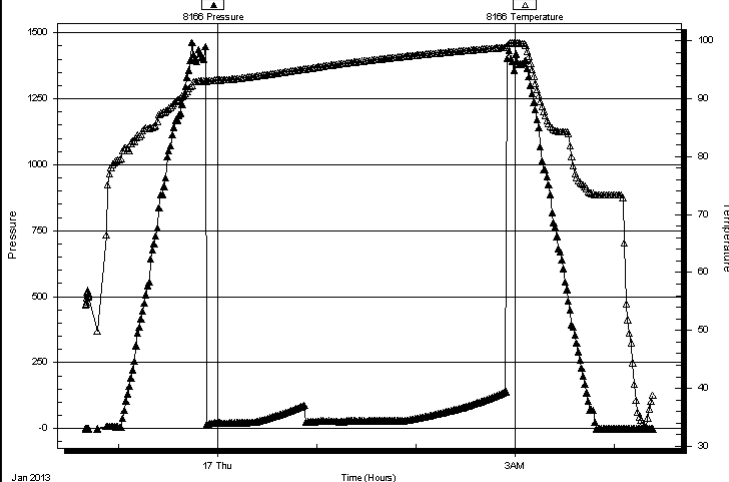
TEST COMMENT: IF-5 1/2" blow

IS- No blow

FF- 3" blow

FS- No blow

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
35.00	VSOCM 2%O 98%M	0.21

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

John O. Farmer Inc

2-15s-14w Russell KS

PO Box 352
Russell, KS 67665

Camp #1

Job Ticket: 50256

DST#: 3

ATTN: Austin Klaus

Test Start: 2013.01.16 @ 22:40:00

Tool Information

Drill Pipe:	Length: 2850.00 ft	Diameter: 3.80 inches	Volume: 39.98 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:	25000.00 lb
Drill Collar:	Length: 31.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose:	46000.00 lb
			<u>Total Volume: 40.13 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial	45000.00 lb
Depth to Top Packer:	2886.00 ft			Final	46000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	44.00 ft				
Tool Length:	65.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			
Tool Comments:					

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			2866.00	
Shut In Tool	5.00			2871.00	
Hydraulic tool	5.00			2876.00	
Packer	5.00			2881.00	21.00 Bottom Of Top Packer
Packer	5.00			2886.00	
Stubb	1.00			2887.00	
Perforations	5.00			2892.00	
Change Over Sub	1.00			2893.00	
Drill Pipe	31.00			2924.00	
Recorder	0.00	6753	Inside	2924.00	
Recorder	0.00	8166	Outside	2924.00	
Change Over Sub	1.00			2925.00	
Perforations	2.00			2927.00	
Bullnose	3.00			2930.00	44.00 Bottom Packers & Anchor

Total Tool Length: 65.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

John O. Farmer Inc

2-15s-14w Russell KS

PO Box 352
Russell, KS 67665

Camp #1

Job Ticket: 50256

DST#: 3

ATTN: Austin Klaus

Test Start: 2013.01.16 @ 22:40:00

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: 47.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.57 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
35.00	VSOCM 2%O 98%M	0.209

Total Length: 35.00 ft Total Volume: 0.209 bbl

Num Fluid Samples: 0

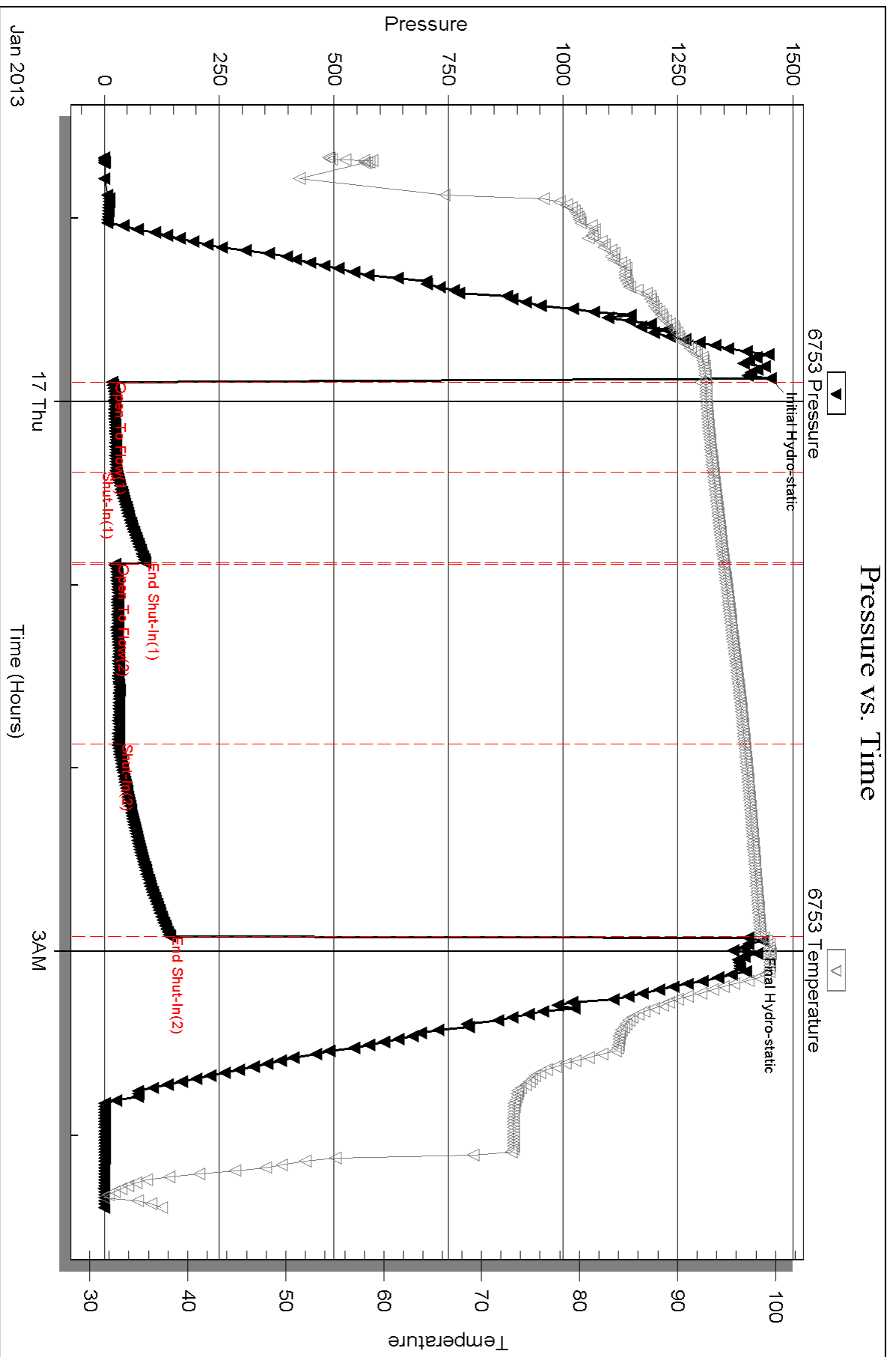
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

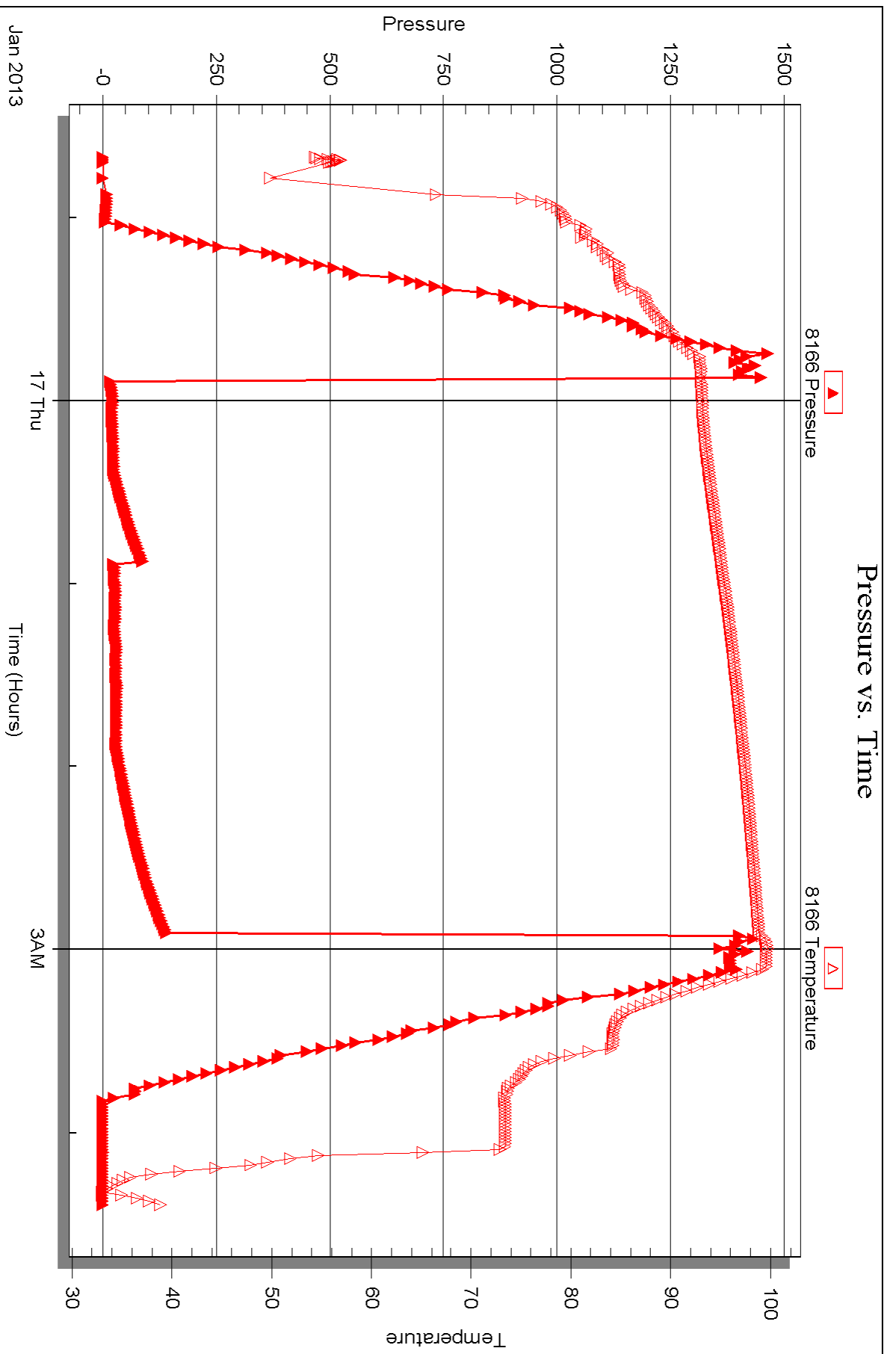


Serial #: 8166

Outside John O. Farmer Inc

Camp #1

DST Test Number: 3



Triobite Testing, Inc

Ref. No: 50256

Printed: 2013.01.21 @ 09:38:36



DRILL STEM TEST REPORT

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

PO Box 352
Russell, KS 67665

ATTN: Austin Klaus

Camp #1

2-15s-14w Russell KS

Start Date: 2013.01.17 @ 13:00:00

End Date: 2013.01.17 @ 18:52:00

Job Ticket #: 50257 DST #: 4

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2013.01.21 @ 09:37:40



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

John O. Farmer Inc

2-15s-14w Russell KS

PO Box 352
Russell, KS 67665

Camp #1

Job Ticket: 50257

DST#: 4

ATTN: Austin Klaus

Test Start: 2013.01.17 @ 13:00:00

GENERAL INFORMATION:

Formation: **KC "E-G"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:24:30

Time Test Ended: 18:52:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Brett Dickinson

Unit No: 59

Interval: 2944.00 ft (KB) To 2988.00 ft (KB) (TVD)

Reference Elevations: 1708.00 ft (KB)

Total Depth: 2988.00 ft (KB) (TVD)

1700.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 6753

Inside

Press @ Run Depth: 50.27 psig @ 2982.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.01.17

End Date:

2013.01.17

Last Calib.: 2013.01.17

Start Time: 13:00:05

End Time:

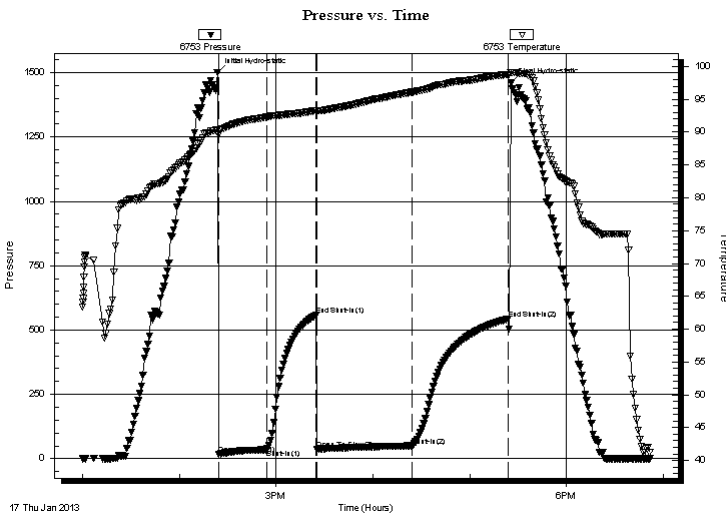
18:51:59

Time On Btm: 2013.01.17 @ 14:23:30

Time Off Btm: 2013.01.17 @ 17:25:30

TEST COMMENT: IF-4" blow
ISI-No blow
FF-2 1/2" blow
FSI-No blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1501.28	90.37	Initial Hydro-static
1	16.93	89.64	Open To Flow (1)
31	35.53	92.29	Shut-In(1)
61	557.00	93.28	End Shut-In(1)
62	37.89	93.19	Open To Flow (2)
121	50.27	96.06	Shut-In(2)
181	543.91	98.79	End Shut-In(2)
182	1459.97	99.09	Final Hydro-static

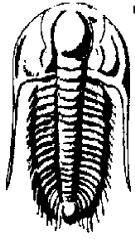
Recovery

Length (ft)	Description	Volume (bbl)
64.00	WCM 40%W 60%M	0.62
1.00	Free Oil	0.01

* Recovery from multiple tests

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
ATTN: Austin Klaus

2-15s-14w Russell KS

Camp #1

Job Ticket: 50257 **DST#: 4**

Test Start: 2013.01.17 @ 13:00:00

GENERAL INFORMATION:

Formation: **KC "E-G"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 14:24:30
Time Test Ended: 18:52:00
Interval: **2944.00 ft (KB) To 2988.00 ft (KB) (TVD)**
Total Depth: 2988.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Reference Elevations: 1708.00 ft (KB)
1700.00 ft (CF)
KB to GR/CF: 8.00 ft
Test Type: Conventional Bottom Hole (Reset)
Tester: Brett Dickinson
Unit No: 59

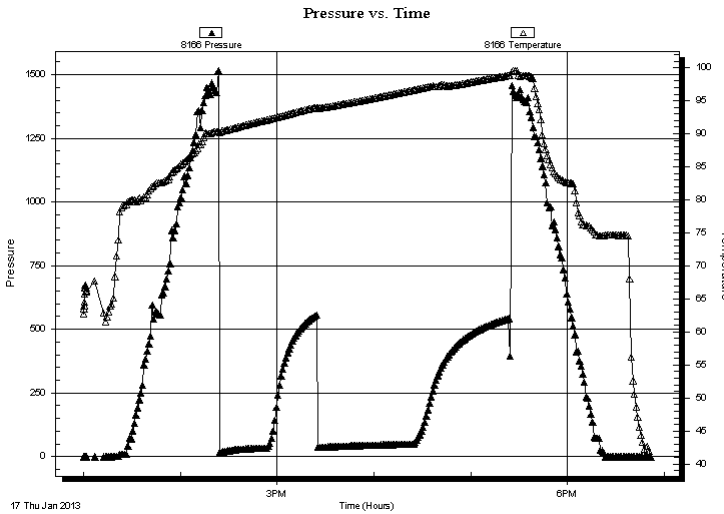
Serial #: 8166

Outside

Press @ Run Depth: psig @ 2982.00 ft (KB)
Start Date: 2013.01.17 End Date: 2013.01.17
Start Time: 13:00:05 End Time: 18:51:59
Capacity: 8000.00 psig
Last Calib.: 2013.01.17
Time On Btm:
Time Off Btm:

TEST COMMENT: IF-4" blow
IS-1No blow
FF-2 1/2" blow
FS-1No blow

PRESSURE SUMMARY



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

Recovery

Length (ft)	Description	Volume (bbl)
64.00	WCM 40%W 60%M	0.62
1.00	Free Oil	0.01

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

John O. Farmer Inc

2-15s-14w Russell KS

PO Box 352
Russell, KS 67665

Camp #1

Job Ticket: 50257

DST#: 4

ATTN: Austin Klaus

Test Start: 2013.01.17 @ 13:00:00

Tool Information

Drill Pipe:	Length: 2913.00 ft	Diameter: 3.80 inches	Volume: 40.86 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:	25000.00 lb
Drill Collar:	Length: 31.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose:	46000.00 lb
			<u>Total Volume: 41.01 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	21.00 ft			String Weight: Initial	45000.00 lb
Depth to Top Packer:	2944.00 ft			Final	46000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	44.00 ft				
Tool Length:	65.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			
Tool Comments:					

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			2924.00	
Shut In Tool	5.00			2929.00	
Hydraulic tool	5.00			2934.00	
Packer	5.00			2939.00	21.00 Bottom Of Top Packer
Packer	5.00			2944.00	
Stubb	1.00			2945.00	
Perforations	5.00			2950.00	
Change Over Sub	1.00			2951.00	
Drill Pipe	31.00			2982.00	
Recorder	0.00	6753	Inside	2982.00	
Recorder	0.00	8166	Outside	2982.00	
Change Over Sub	1.00			2983.00	
Perforations	2.00			2985.00	
Bullnose	3.00			2988.00	44.00 Bottom Packers & Anchor

Total Tool Length: 65.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

John O. Farmer Inc

2-15s-14w Russell KS

PO Box 352
Russell, KS 67665

Camp #1

Job Ticket: 50257

DST#: 4

ATTN: Austin Klaus

Test Start: 2013.01.17 @ 13:00:00

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:

42000 ppm

Viscosity: 56.00 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 bbbl
64.00	WCM 40%W 60%M	0.615
1.00	Free Oil	0.014

Total Length: 65.00 ft

Total Volume: 0.629 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6753

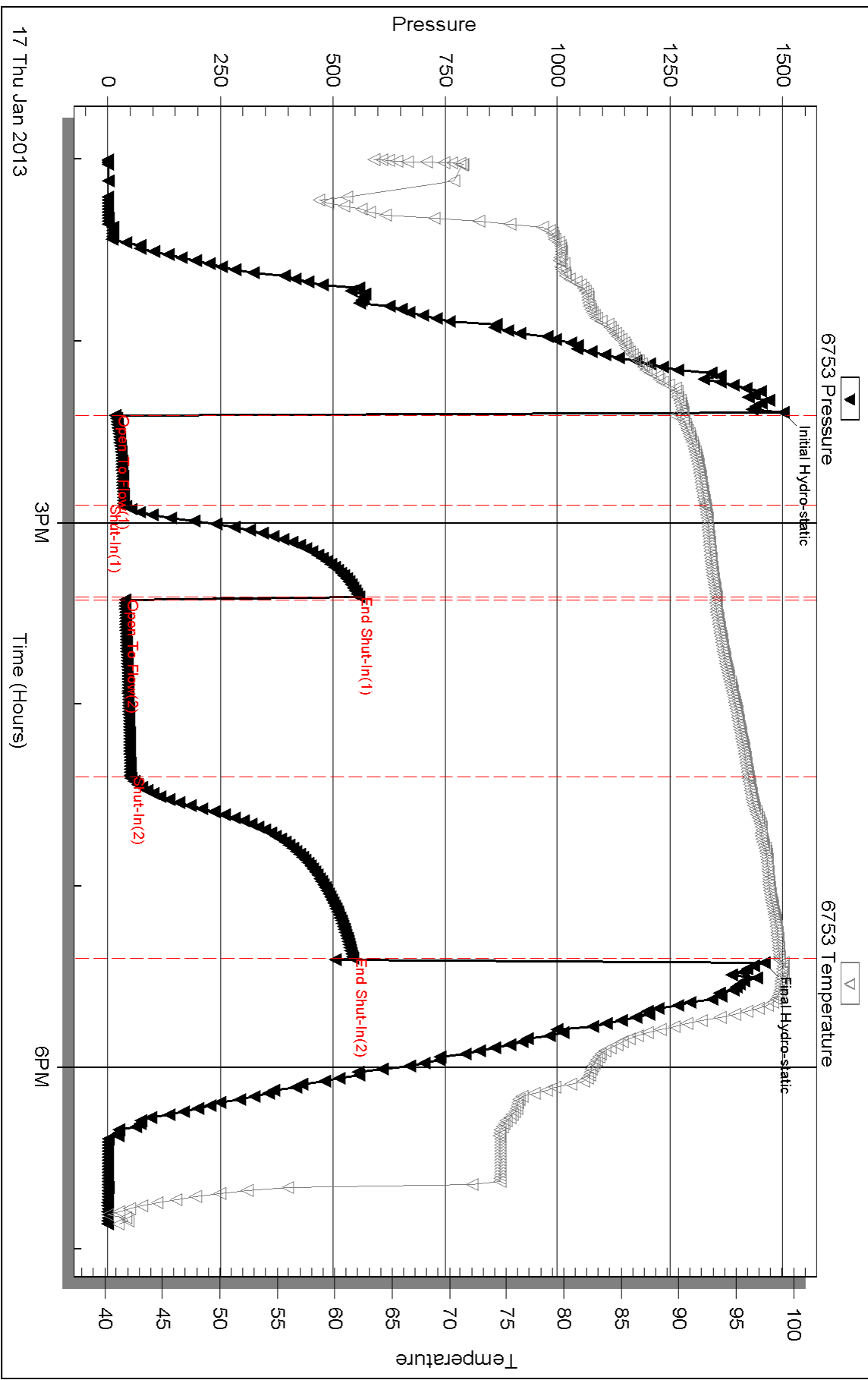
Inside

John O. Farmer Inc

Camp #1

DST Test Number: 4

Pressure vs. Time



Triobite Testing, Inc

Ref. No: 50257

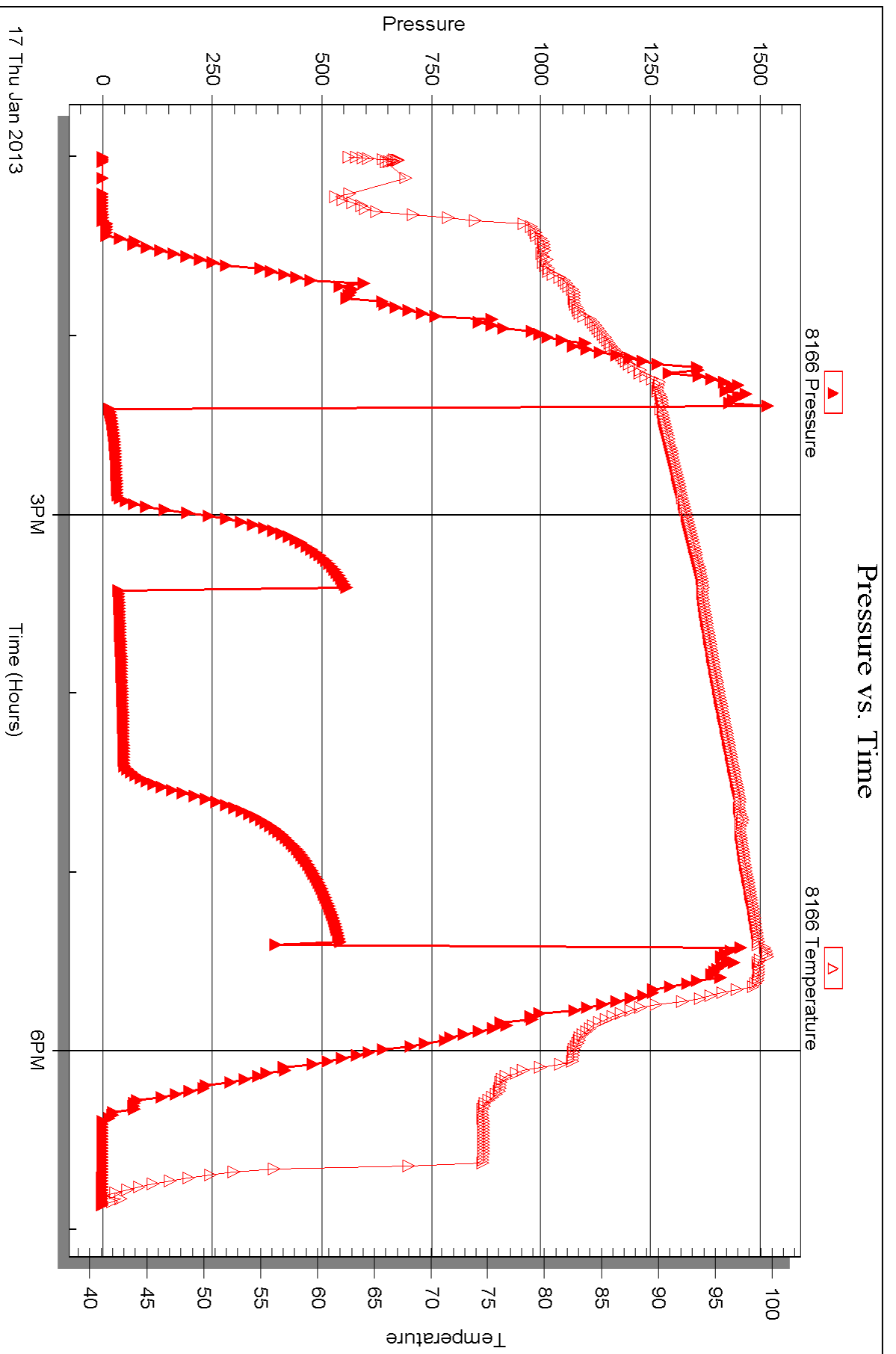
Printed: 2013.01.21 @ 09:37:42

Serial #: 8166

Outside John O. Farmer Inc

Camp #1

DST Test Number: 4





DRILL STEM TEST REPORT

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

PO Box 352
Russell, KS 67665

ATTN: Austin Klaus

Camp #1

2-15s-14w Russell KS

Start Date: 2013.01.18 @ 06:00:00

End Date: 2013.01.18 @ 11:17:00

Job Ticket #: 50258 DST #: 5

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2013.01.21 @ 09:36:50

John O. Farmer Inc 2-15s-14w Russell KS Camp #1 DST # 5 KC "J-L" 2013.01.18



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

John O. Farmer Inc

2-15s-14w Russell KS

PO Box 352
Russell, KS 67665

Camp #1

Job Ticket: 50258

DST#: 5

ATTN: Austin Klaus

Test Start: 2013.01.18 @ 06:00:00

GENERAL INFORMATION:

Formation: **KC"J-L"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:56:00

Time Test Ended: 11:17:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Brett Dickinson

Unit No: 59

Interval: 3039.00 ft (KB) To 3105.00 ft (KB) (TVD)

Total Depth: 3105.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1708.00 ft (KB)

1700.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 6753

Inside

Press @ Run Depth: 19.98 psig @ 3077.00 ft (KB)

Start Date: 2013.01.18

End Date: 2013.01.18

Start Time: 06:00:05

End Time: 11:16:59

Capacity: 8000.00 psig

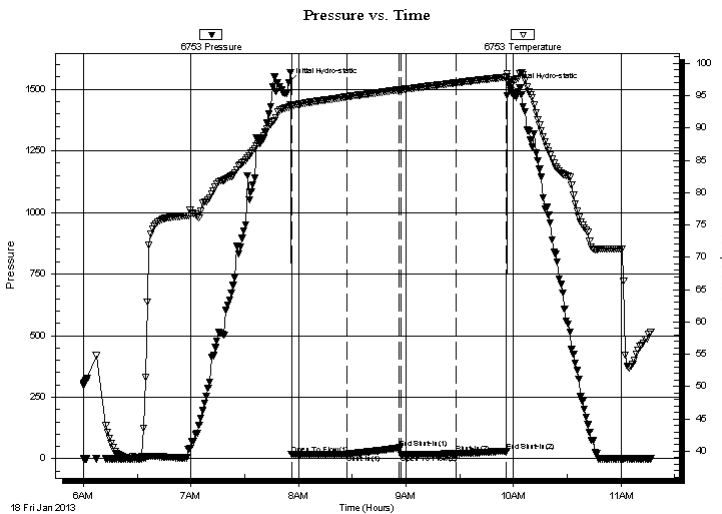
Last Calib.: 2013.01.18

Time On Btm: 2013.01.18 @ 07:54:30

Time Off Btm: 2013.01.18 @ 09:58:00

TEST COMMENT: IF-1" blow
ISI-No blow
FF-Very weak surface blow died in 15 min
FSI-No blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1528.16	93.20	Initial Hydro-static
2	17.40	93.26	Open To Flow (1)
33	18.85	94.82	Shut-In(1)
62	43.78	95.90	End Shut-In(1)
63	18.45	95.92	Open To Flow (2)
94	19.98	97.00	Shut-In(2)
122	30.49	97.87	End Shut-In(2)
124	1506.17	97.48	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud	0.02

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

John O. Farmer Inc

2-15s-14w Russell KS

PO Box 352
Russell, KS 67665

Camp #1

Job Ticket: 50258

DST#: 5

ATTN: Austin Klaus

Test Start: 2013.01.18 @ 06:00:00

Tool Information

Drill Pipe:	Length: 3007.00 ft	Diameter: 3.80 inches	Volume: 42.18 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: 25000.00 lb
Drill Collar:	Length: 31.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 47000.00 lb
			<u>Total Volume: 42.33 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 47000.00 lb
Depth to Top Packer:	3039.00 ft			Final 47000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	66.00 ft			
Tool Length:	87.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
------------------	-------------	------------	----------	------------	----------------

Change Over Sub	1.00			3019.00	
Shut In Tool	5.00			3024.00	
Hydraulic tool	5.00			3029.00	
Packer	5.00			3034.00	21.00 Bottom Of Top Packer
Packer	5.00			3039.00	
Stubb	1.00			3040.00	
Perforations	5.00			3045.00	
Change Over Sub	1.00			3046.00	
Drill Pipe	31.00			3077.00	
Recorder	0.00	6753	Inside	3077.00	
Recorder	0.00	8166	Outside	3077.00	
Change Over Sub	1.00			3078.00	
Perforations	24.00			3102.00	
Bullnose	3.00			3105.00	66.00 Bottom Packers & Anchor

Total Tool Length: 87.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

John O. Farmer Inc

2-15s-14w Russell KS

PO Box 352
Russell, KS 67665

Camp #1

Job Ticket: 50258

DST#: 5

ATTN: Austin Klaus

Test Start: 2013.01.18 @ 06:00:00

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: 56.00 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	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:

Serial #: 6753

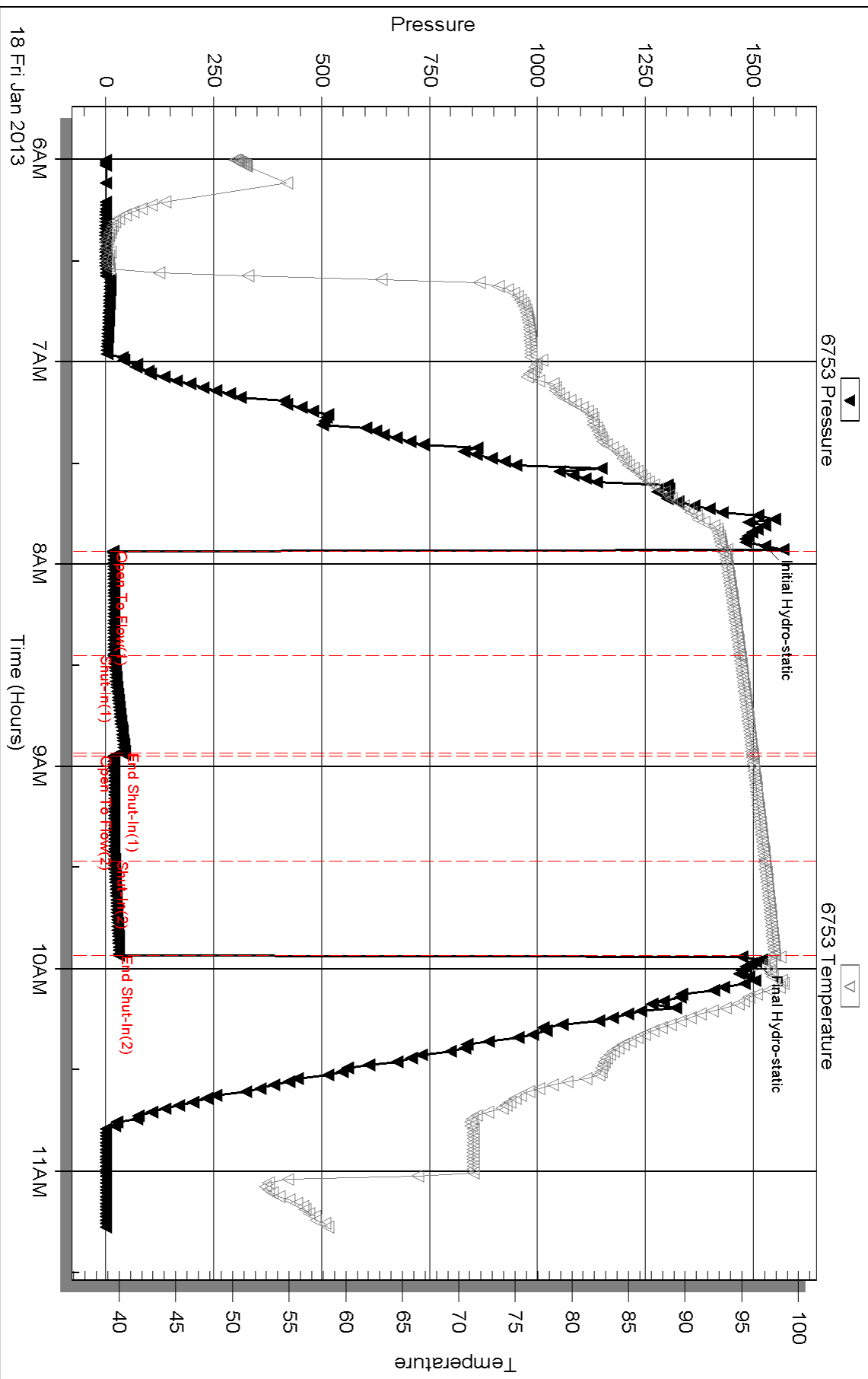
Inside

John O. Farmer Inc

Camp #1

DST Test Number: 5

Pressure vs. Time

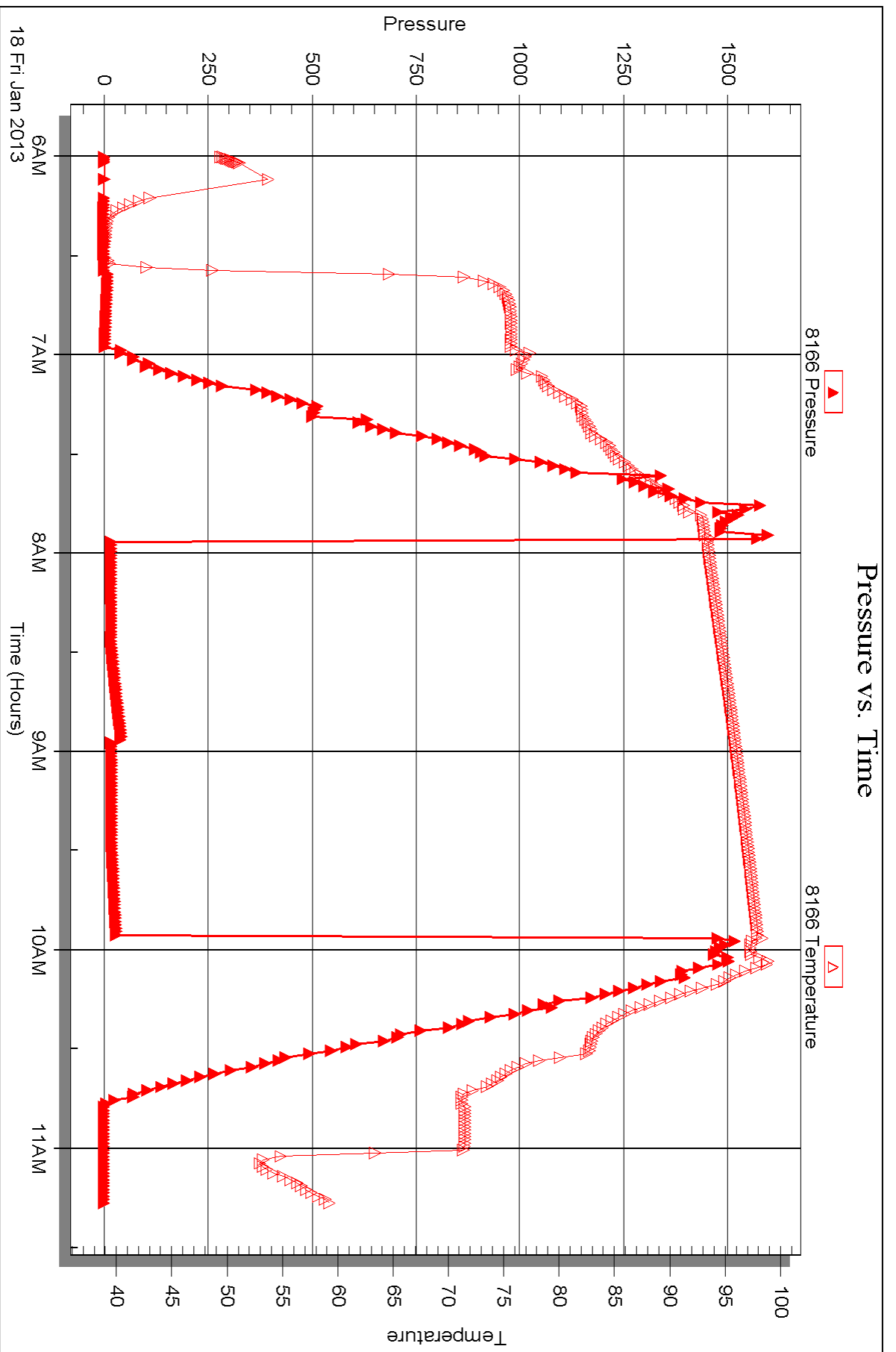


Serial #: 8166

Outside John O. Farmer Inc

Camp #1

DST Test Number: 5





DRILL STEM TEST REPORT

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

PO Box 352
Russell, KS 67665

ATTN: Austin Klaus

Camp #1

2-15s-14w Russell KS

Start Date: 2013.01.19 @ 03:00:00

End Date: 2013.01.19 @ 10:09:30

Job Ticket #: 50259 DST #: 6

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2013.01.21 @ 09:36:07



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

John O. Farmer Inc

2-15s-14w Russell KS

PO Box 352
Russell, KS 67665

Camp #1

Job Ticket: 50259

DST#: 6

ATTN: Austin Klaus

Test Start: 2013.01.19 @ 03:00:00

GENERAL INFORMATION:

Formation: **Arb**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 05:24:00
 Time Test Ended: 10:09:30
 Interval: **3104.00 ft (KB) To 3156.00 ft (KB) (TVD)**
 Total Depth: 3210.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Straddle (Reset)
 Tester: Brett Dickinson
 Unit No: 59
 Reference Elevations: 1708.00 ft (KB)
 1700.00 ft (CF)
 KB to GR/CF: 8.00 ft

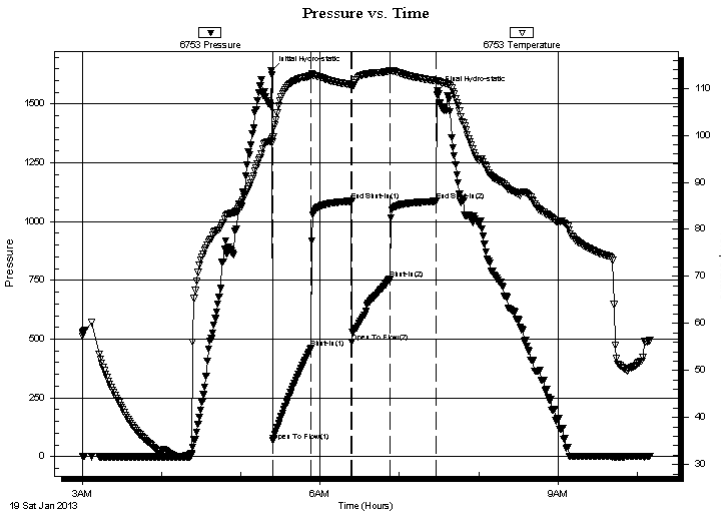
Serial #: 6753

Outside

Press @ Run Depth: 757.14 psig @ 3142.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.01.19 End Date: 2013.01.19 Last Calib.: 2013.01.19
 Start Time: 03:00:05 End Time: 10:09:29 Time On Btm: 2013.01.19 @ 05:23:00
 Time Off Btm: 2013.01.19 @ 07:29:00

TEST COMMENT: IF-BOB in 1 1/2 min
 ISI-No blow
 FF-BOB in 1 1/2 min
 FSI-No blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1643.18	98.89	Initial Hydro-static
1	66.67	98.62	Open To Flow (1)
30	461.98	112.75	Shut-In(1)
60	1087.15	110.81	End Shut-In(1)
61	485.75	110.60	Open To Flow (2)
90	757.14	113.70	Shut-In(2)
125	1086.29	111.59	End Shut-In(2)
126	1556.50	111.59	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
630.00	Water	8.55
125.00	Oil spotted SMCW 90%W 10%M	1.75
310.00	V SOMCW 2%O 88%W 10%M	4.35
335.00	V SOMCW 5%O 85%W 10%M	4.70
210.00	V SOWCM 2%O 5%W 93%M	2.95

* Recovery from multiple tests

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

John O. Farmer Inc

2-15s-14w Russell KS

PO Box 352
Russell, KS 67665

Camp #1

Job Ticket: 50259

DST#: 6

ATTN: Austin Klaus

Test Start: 2013.01.19 @ 03:00:00

GENERAL INFORMATION:

Formation: **Arb**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:24:00

Time Test Ended: 10:09:30

Test Type: Conventional Straddle (Reset)

Tester: Brett Dickinson

Unit No: 59

Interval: 3104.00 ft (KB) To 3156.00 ft (KB) (TVD)

Reference Elevations: 1708.00 ft (KB)

Total Depth: 3210.00 ft (KB) (TVD)

1700.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8319 Below (Straddle)

Press @ Run Depth: psig @ 3204.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.01.19

End Date:

2013.01.19

Last Calib.:

2013.01.19

Start Time: 03:00:05

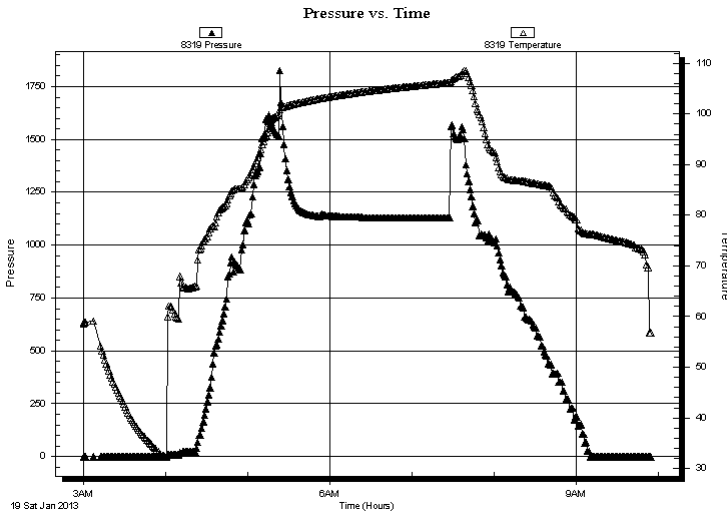
End Time:

09:54:29

Time On Btm:

Time Off Btm:

TEST COMMENT: IF-BOB in 1 1/2 min
ISI-No blow
FF-BOB in 1 1/2 min
FSI-No blow



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
630.00	Water	8.55
125.00	Oil spotted SMCW 90%W 10%M	1.75
310.00	VSOMCW 2%O 88%W 10%M	4.35
335.00	VSOMCW 5%O 85%W 10%M	4.70
210.00	VSOWCM 2%O 5%W 93%M	2.95

Gas Rates

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

* Recovery from multiple tests



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

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

2-15s-14w Russell KS
Camp #1
Job Ticket: 50259 **DST#: 6**
Test Start: 2013.01.19 @ 03:00:00

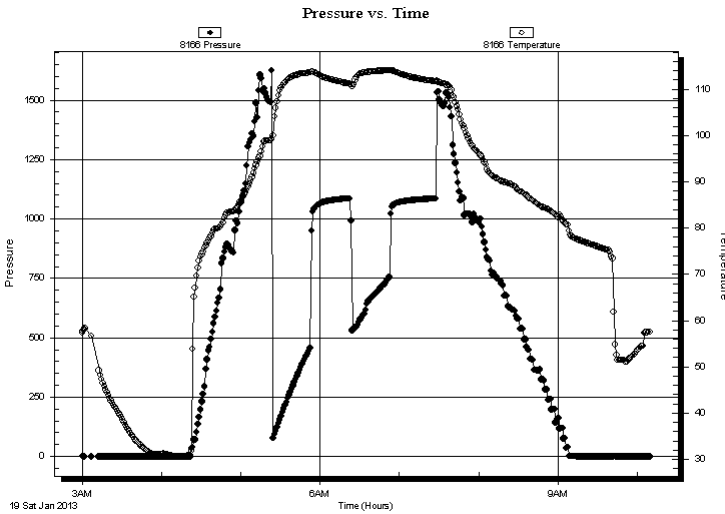
GENERAL INFORMATION:

Formation: Arb	Deviated: No Whipstock: ft (KB)	Test Type: Conventional Straddle (Reset)
Time Tool Opened: 05:24:00	Time Test Ended: 10:09:30	Tester: Brett Dickinson
Unit No: 59	Reference Elevations: 1708.00 ft (KB)	1700.00 ft (CF)
Interval: 3104.00 ft (KB) To 3156.00 ft (KB) (TVD)	Total Depth: 3210.00 ft (KB) (TVD)	KB to GR/CF: 8.00 ft
Hole Diameter: 7.88 inches	Hole Condition: Fair	

Serial #: 8166	Inside	Capacity: 8000.00 psig
Press @ Run Depth: psig @ 3142.00 ft (KB)	Start Date: 2013.01.19	End Date: 2013.01.19
Start Time: 03:00:05	End Time: 10:09:29	Last Calib.: 2013.01.19
		Time On Btm:
		Time Off Btm:

TEST COMMENT: IF-BOB in 1 1/2 min
ISI-No blow
FF-BOB in 1 1/2 min
FSI-No blow

PRESSURE SUMMARY



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

Recovery

Length (ft)	Description	Volume (bbl)
630.00	Water	8.55
125.00	Oil spotted SMCW 90%W 10%M	1.75
310.00	V SOMCW 2%O 88%W 10%M	4.35
335.00	V SOMCW 5%O 85%W 10%M	4.70
210.00	V SOWCM 2%O 5%W 93%M	2.95

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

John O. Farmer Inc

2-15s-14w Russell KS

PO Box 352
Russell, KS 67665

Camp #1

Job Ticket: 50259

DST#: 6

ATTN: Austin Klaus

Test Start: 2013.01.19 @ 03:00:00

Tool Information

Drill Pipe:	Length: 3070.00 ft	Diameter: 3.80 inches	Volume: 43.06 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: 25000.00 lb
Drill Collar:	Length: 31.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 58000.00 lb
			<u>Total Volume: 43.21 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	17.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	3104.00 ft			Final 58000.00 lb
Depth to Bottom Packer:	3156.00 ft			
Interval between Packers:	52.00 ft			
Tool Length:	129.00 ft			
Number of Packers:	3	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
------------------	-------------	------------	----------	------------	----------------

Change Over Sub	1.00			3085.00	
Shut In Tool	5.00			3090.00	
Hydraulic tool	5.00			3095.00	
Packer	4.00			3099.00	20.00 Bottom Of Top Packer
Packer	5.00			3104.00	
Stubb	1.00			3105.00	
Perforations	4.00			3109.00	
change Over Sub	1.00			3110.00	
Blank Spacing	31.00			3141.00	
change Over Sub	1.00			3142.00	
Recorder	0.00	8166	Inside	3142.00	
Recorder	0.00	6753	Outside	3142.00	
Perforations	10.00			3152.00	
Blank Off Sub	4.00			3156.00	52.00 Tool Interval
Packer	4.00			3160.00	
Stubb	1.00			3161.00	
perforations	10.00			3171.00	
Change Over Sub	1.00			3172.00	
Blank Spacing	32.00			3204.00	
Recorder	0.00	8319	Below	3204.00	
Change Over Sub	1.00			3205.00	
Perforations	5.00			3210.00	
Bullnose	3.00			3213.00	57.00 Bottom Packers & Anchor
Total Tool Length:	129.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

John O. Farmer Inc

2-15s-14w Russell KS

PO Box 352
Russell, KS 67665

Camp #1

Job Ticket: 50259

DST#: 6

ATTN: Austin Klaus

Test Start: 2013.01.19 @ 03:00:00

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: 49.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.19 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
630.00	Water	8.555
125.00	Oil spotted SMCW 90%W 10%M	1.753
310.00	VSOMCW 2%O 88%W 10%M	4.348
335.00	VSOMCW 5%O 85%W 10%M	4.699
210.00	VSOWCM 2%O 5%W 93%M	2.946

Total Length: 1610.00 ft Total Volume: 22.301 bbl

Num Fluid Samples: 0

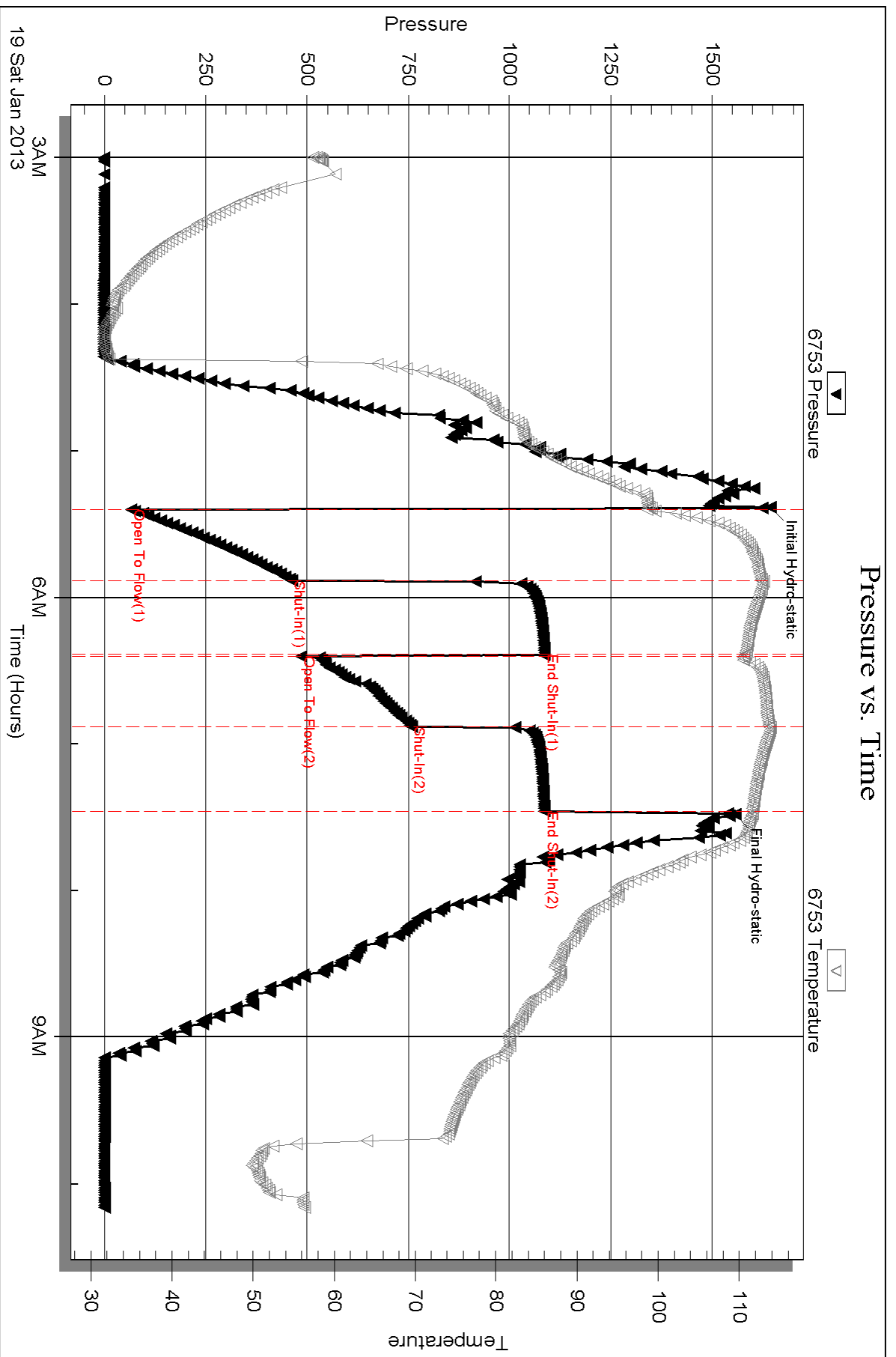
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

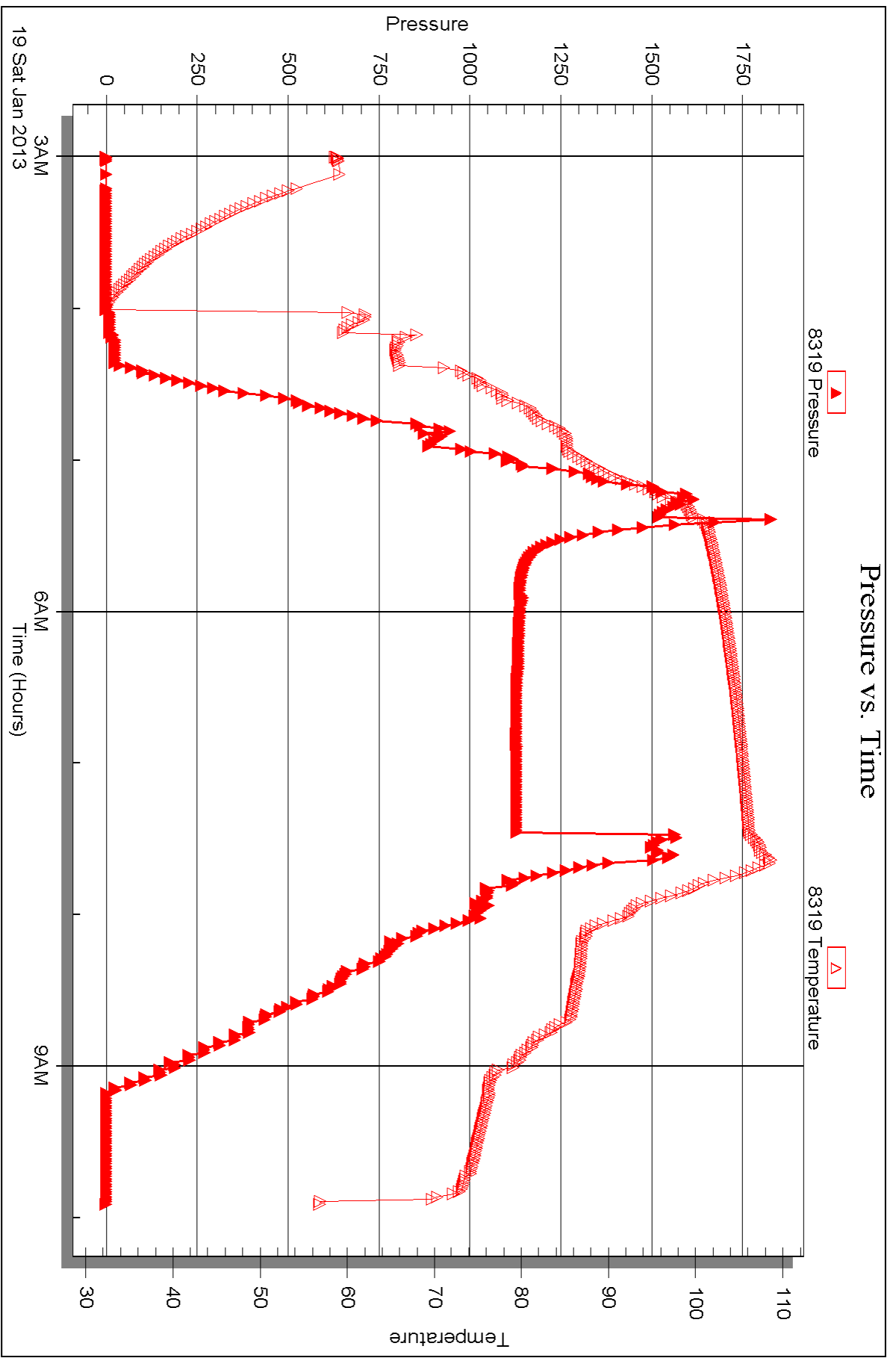


Serial #: 8319

Below (Straddled) Farmer Inc

Camp #1

DST Test Number: 6



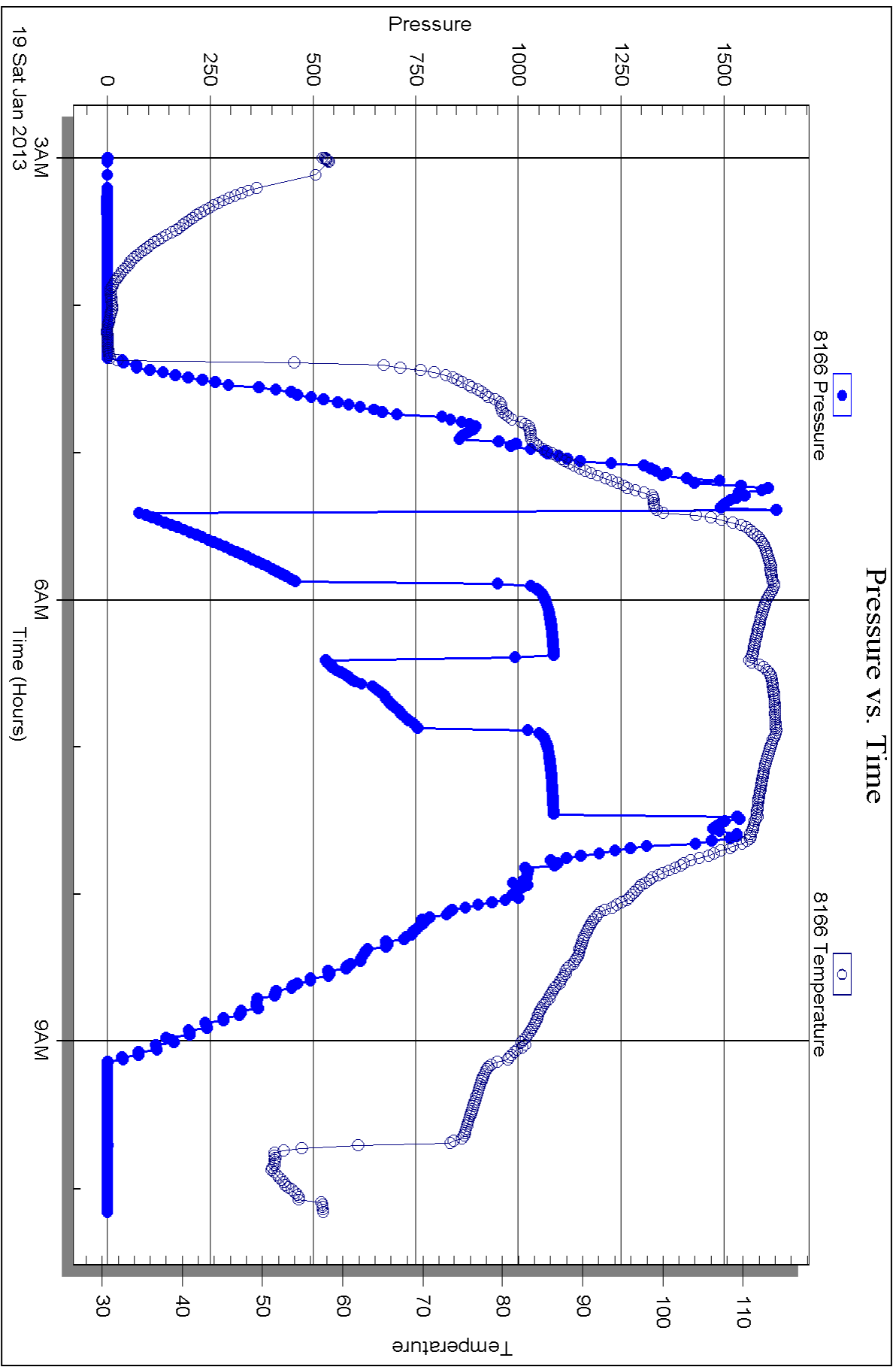
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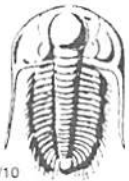
Inside

John O. Farmer Inc

Camp #1

DST Test Number: 6





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 51576

Well Name & No. Camp #1 Test No. 1 Date 1-15-13
 Company John O. Farmer Inc Elevation ~~1700~~ 1700 KB ~~1708~~ 1708 GL
 Address Po Box 352, Russell KS, 67665
 Co. Rep / Geo. Austin Klaus Rig Discovery #2
 Location: Sec. 2 Twp. 15s Rge. 14w Co. Russell State KS

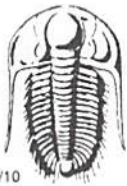
Interval Tested 2249-2319 Zone Tested ~~QD~~ Sand - Grand Haven
 Anchor Length 70' Drill Pipe Run ~~2218'~~ 2225' Mud Wt. 8-6
 Top Packer Depth 2244 Drill Collars Run ~~115'~~ 31 Vis 60
 Bottom Packer Depth 2249 Wt. Pipe Run - WL -
 Total Depth 2319 Chlorides - ppm System LCM -
 Blow Description IF - B.O.B. instantly
ISI - No blow back.
FF - B.O.B. instantly
FSI -

Rec	Feet of	%gas	%oil	%water	%mud
<u>45'</u>	<u>G.SOCWM</u>	<u>8</u>	<u>10</u>	<u>2</u>	<u>80</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of <u>124' of G.I.P</u>	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 45' BHT 84° Gravity - API RW - @ - °F Chlorides - ppm

(A) Initial Hydrostatic <u>1099</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>2:20am</u>
(B) First Initial Flow <u>48</u>	<input type="checkbox"/> Jars	T-Started <u>4:30am</u>
(C) First Final Flow <u>60</u>	<input type="checkbox"/> Safety Joint	T-Open <u>6:30am</u>
(D) Initial Shut-In <u>261</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>8:30am</u>
(E) Second Initial Flow <u>57</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>10:03am</u>
(F) Second Final Flow <u>63</u>	<input checked="" type="checkbox"/> Mileage <u>35 RT</u> 108.50	Comments
(G) Final Shut-In <u>301</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>1076</u>	<input type="checkbox"/> Straddle	<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 type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Final Flow <u>30</u>	<input type="checkbox"/> Extra Recorder	Sub Total <u>0</u>
Final Shut-In <u>30</u>	<input type="checkbox"/> Day Standby	Total <u>1258.50</u>
	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total <u>1258.50</u>	

Approved By _____ Our Representative [Signature]
 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.



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 50255

4/10

Well Name & No. Camp #1 Test No. 2 Date 1/15/13
 Company John O. Farmer Inc. Elevation 1708 KB 1700 GL
 Address PO Box 352, Russell KS, 67665
 Co. Rep / Geo. Austin Klaus Rig Discovering #2
 Location: Sec. 2 Twp. 15s Rge. 14w Co. Russell State KS

Interval Tested 2327-2370 Zone Tested Tarkio
 Anchor Length 43 Drill Pipe Run 2287 Mud Wt. 8.9
 Top Packer Depth 2322 Drill Collars Run 31 Vis 50
 Bottom Packer Depth 2327 Wt. Pipe Run - WL 7.2
 Total Depth 2370 Chlorides 2800 ppm System LCM 27
 Blow Description IF - 6in blow
ISF - No blow
FF - 7 1/2 in blow
FSI - No blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>120</u>	<u>vsomcw</u>	<u>2</u>	<u>58</u>	<u>40</u>	
<u>45</u>	<u>vsowcm</u>	<u>2</u>	<u>10</u>	<u>88</u>	

Rec Total 165 BHT 88 Gravity _____ API RW .35 @ 30 ° F Chlorides 50,000 ppm

(A) Initial Hydrostatic 1109 Test 1150 T-On Location 15:40
 (B) First Initial Flow 54 Jars _____ T-Started 16:00
 (C) First Final Flow 69 Safety Joint _____ T-Open 17:13
 (D) Initial Shut-In 629 Circ Sub _____ T-Pulled 20:13
 (E) Second Initial Flow 72 Hourly Standby _____ T-Out 21:43
 (F) Second Final Flow 95 Mileage 70 RT 108.50 Comments _____
 (G) Final Shut-In 607 Sampler _____
 (H) Final Hydrostatic 1,073 Straddle _____
 Shale Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____

Initial Open 30
 Initial Shut-In 30
 Final Flow 60
 Final Shut-In 60

Sub Total 1258.50
 Total 1258.50
 MP/DST Disc't _____

Approved By _____ Our Representative Brian D...

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.



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 50256

Well Name & No. Camp #1 Test No. 3 Date 1/16/13
 Company John O. Farmer, Inc. Elevation 1708 KB 1700 GL
 Address PO Box 352, Russell KS, 67665
 Co. Rep / Geo. Austin Klaus Rig Discovery #2
 Location: Sec. 2 Twp. 15s Rge. 14w Co. Russell State KS

Interval Tested 2886 - 2930 Zone Tested KC" A - C"
 Anchor Length 44 Drill Pipe Run _____ Mud Wt. 9.2
 Top Packer Depth 2881 Drill Collars Run 31 Vis 47
 Bottom Packer Depth 2886 Wt. Pipe Run _____ WL 9.6
 Total Depth 2930 Chlorides 5,000 ppm System LCM 1
 Blow Description IF - 5 1/2 in blow
ISI - No blow
FF - 3 in blow
FSI - No blow

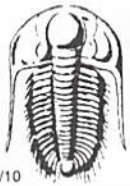
Rec	Feet of	%gas	%oil	%water	%mud
<u>35</u>	<u>VSOCM</u>	<u>2</u>		<u>98</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 35 BHT 98 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic	<u>1,451</u>	<input checked="" type="checkbox"/> Test	<u>1150</u>	T-On Location	<u>22:25</u>
(B) First Initial Flow	<u>17</u>	<input type="checkbox"/> Jars		T-Started	<u>22:40</u>
(C) First Final Flow	<u>25</u>	<input type="checkbox"/> Safety Joint		T-Open	<u>23:55</u>
(D) Initial Shut-In	<u>89</u>	<input type="checkbox"/> Circ Sub		T-Pulled	<u>2:55</u>
(E) Second Initial Flow	<u>24</u>	<input type="checkbox"/> Hourly Standby		T-Out	<u>4:25</u>
(F) Second Final Flow	<u>32</u>	<input checked="" type="checkbox"/> Mileage	<u>70 ft</u> 108.50	Comments	
(G) Final Shut-In	<u>142</u>	<input type="checkbox"/> Sampler			
(H) Final Hydrostatic	<u>1,403</u>	<input type="checkbox"/> Straddle		<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 type="checkbox"/> Extra Packer		<input type="checkbox"/> Extra Copies	
Final Flow	<u>60</u>	<input type="checkbox"/> Extra Recorder		Sub Total	<u>25</u>
Final Shut-In	<u>60</u>	<input checked="" type="checkbox"/> Day Standby	<u>24 3/4 hrs</u>	Total	<u>1283.50</u>
		<input type="checkbox"/> Accessibility		MP/DST Disc't	
		Sub Total	<u>1258.50</u>		

Approved By _____ Our Representative Burt Dine

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.



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 50257

Well Name & No. Camp #1 Test No. 4 Date 1/17/13
 Company John O. Farmer, Inc. Elevation 1708 KB 1700 GL
 Address PO Box 352, Russell KS, 67665
 Co. Rep / Geo. Austin Klaus Rig Discovery #2
 Location: Sec. 2 Twp. 15s Rge. 14w Co. Russell State KS

Interval Tested 2944 - 2988 Zone Tested KC"E-6"
 Anchor Length 44 Drill Pipe Run 2913 Mud Wt. 9.4
 Top Packer Depth 2939 Drill Collars Run 31 Vis 56
 Bottom Packer Depth 2944 Wt. Pipe Run - WL 8.8
 Total Depth 2988 Chlorides 4,000 ppm System LCM 1
 Blow Description IF - 4 in blow
ISF - No blow
EF - 2 1/2 in blow
FSI - No blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>1</u>	<u>Free Oil</u>				
<u>64</u>	<u>wcm</u>			<u>40</u>	<u>60</u>

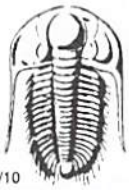
Rec Total 65 BHT 99 Gravity _____ API RW .3 @ 40 ° F Chlorides 42,000 ppm

(A) Initial Hydrostatic 1,501 Test 1150 T-On Location 12:30
 (B) First Initial Flow 17 Jars _____ T-Started 13:00
 (C) First Final Flow 36 Safety Joint _____ T-Open 14:20
 (D) Initial Shut-In 557 Circ Sub _____ T-Pulled 17:20
 (E) Second Initial Flow 38 Hourly Standby _____ T-Out 18:50
 (F) Second Final Flow 50 Mileage 70 RT 108.50 Comments _____
 (G) Final Shut-In 544 Sampler _____
 (H) Final Hydrostatic 1,460 Straddle _____
 Shale Packer _____
 Shale Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____

Initial Open 30
 Initial Shut-In 30
 Final Flow 60
 Final Shut-In 60

Sub Total 1258.50

Approved By _____ Our Representative Butt Dahn
 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.



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 50258

4/10

Well Name & No. Camp #1 Test No. 5 Date 1/18/13
 Company John O. Farmer, Inc. Elevation 1708 KB 1700 GL
 Address PO Box 352, Russell KS, 67665
 Co. Rep / Geo. Austin Klaus Rig Discovery #2
 Location: Sec. 2 Twp. 15s Rge. 14w Co. Russell State KS

Interval Tested 3039 - 3105 Zone Tested KC" J-L"
 Anchor Length 66 Drill Pipe Run 3007 Mud Wt. 9.4
 Top Packer Depth 3034 Drill Collars Run 31 Vis 56
 Bottom Packer Depth 3039 Wt. Pipe Run - WL 8.8
 Total Depth 3105 Chlorides 4,000 ppm System LCM 1[#]

Blow Description IF - 1 in blow
ISF - No blow
IF - very weak surface blow died in 15 min
FSI - No blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>5</u>	<u>Mud</u>				

Rec Total 5 BHT 98 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1,528 Test 1150 T-On Location 5:40
 (B) First Initial Flow 17 Jars _____ T-Started 6:00
 (C) First Final Flow 19 Safety Joint _____ T-Open 7:55
 (D) Initial Shut-In 44 Circ Sub _____ T-Pulled 9:55
 (E) Second Initial Flow 18 Hourly Standby _____ T-Out 11:20
 (F) Second Final Flow 20 Mileage 70.7 108.50 Comments _____
 (G) Final Shut-In 30 Sampler _____
 (H) Final Hydrostatic 1,506 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____

Initial Open 30 Extra Packer _____ Extra Copies _____
 Initial Shut-In 30 Extra Recorder _____ Sub Total 0
 Final Flow 30 Day Standby _____ Total 1258.50
 Final Shut-In 30 Accessibility _____ MP/DST Disc't _____
 Sub Total 1258.50

Approved By _____ Our Representative Butt Duden

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.



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 50259

4/10

Well Name & No. Camp #1 Test No. 6 Date 1/19/13
 Company John O. Farmer Inc. Elevation 1708 KB 1700 GL
 Address PO Box 352, Russell KS, 67665
 Co. Rep / Geo. Austin Klaus Rig Discovery #2
 Location: Sec. 2 Twp. 15s Rge. 14w Co. Russell State KS

Interval Tested 3104-3156 Zone Tested Arb
 Anchor Length 52 Drill Pipe Run 3070 Mud Wt. 9.4
 Top Packer Depth 3099, 3104 Drill Collars Run 31 Vis 49
 Bottom Packer Depth 3156 Wt. Pipe Run - WL 9.2
 Total Depth 3210 Chlorides 6,000 ppm System LCM
 Blow Description FF - BOB in 1 1/2 min
FSI - No blow
FF - BOB in 1 1/2 min
FSI -

Rec	Feet of	%gas	%oil	%water	%mud
630	water				
125	oil spotted SMCW		90	10	
310	VSOMCW	2	88	10	
335	VSOMCW	5	85	10	
210	VSOMCW	2	5	93	

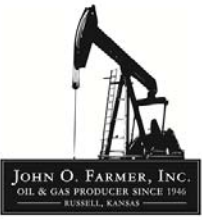
Rec Total 1610 BHT 112 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1643 Test 1150 T-On Location 2:25
 (B) First Initial Flow 67 Jars _____ T-Started 3:00
 (C) First Final Flow 462 Safety Joint _____ T-Open 5:20
 (D) Initial Shut-In 1087 Circ Sub _____ T-Pulled 7:20
 (E) Second Initial Flow 486 Hourly Standby _____ T-Out 10:05
 (F) Second Final Flow 757 Mileage 70.7 108.50 Comments _____
 (G) Final Shut-In 1086 Sampler _____
 (H) Final Hydrostatic 1557 Straddle 600 Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Extra Recorder _____ Sub Total 0
 Day Standby _____ Total 1858.50
 Accessibility _____ MP/DST Disc't _____
 Sub Total 1858.50

Initial Open 30
 Initial Shut-In 30
 Final Flow 30
 Final Shut-In 30

Approved By _____ Our Representative But

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: Camp #1
Location: Russell County
License Number: API #15-167-23,850-0000
Spud Date: 1/12/13
Surface Coordinates: Section 2 - Township 15 South - Range 14 West
2,025' FNL & 2,310' FEL
Bottom Hole Coordinates: Vertical well with minimal deviation, same as above
Ground Elevation (ft): 1,700' K.B. Elevation (ft): 1,708'
Logged Interval (ft): 2200 To: 3200 Total Depth (ft): 3210
Formation: Tarkio-Arbuckle
Type of Drilling Fluid: Chemical (Andy's)

Region: Kansas
Drilling Completed: 1/18/13

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 Camp #1 well was drilled by Discovery Drilling Rig #2 (Tool Pusher: Terry Wickham).

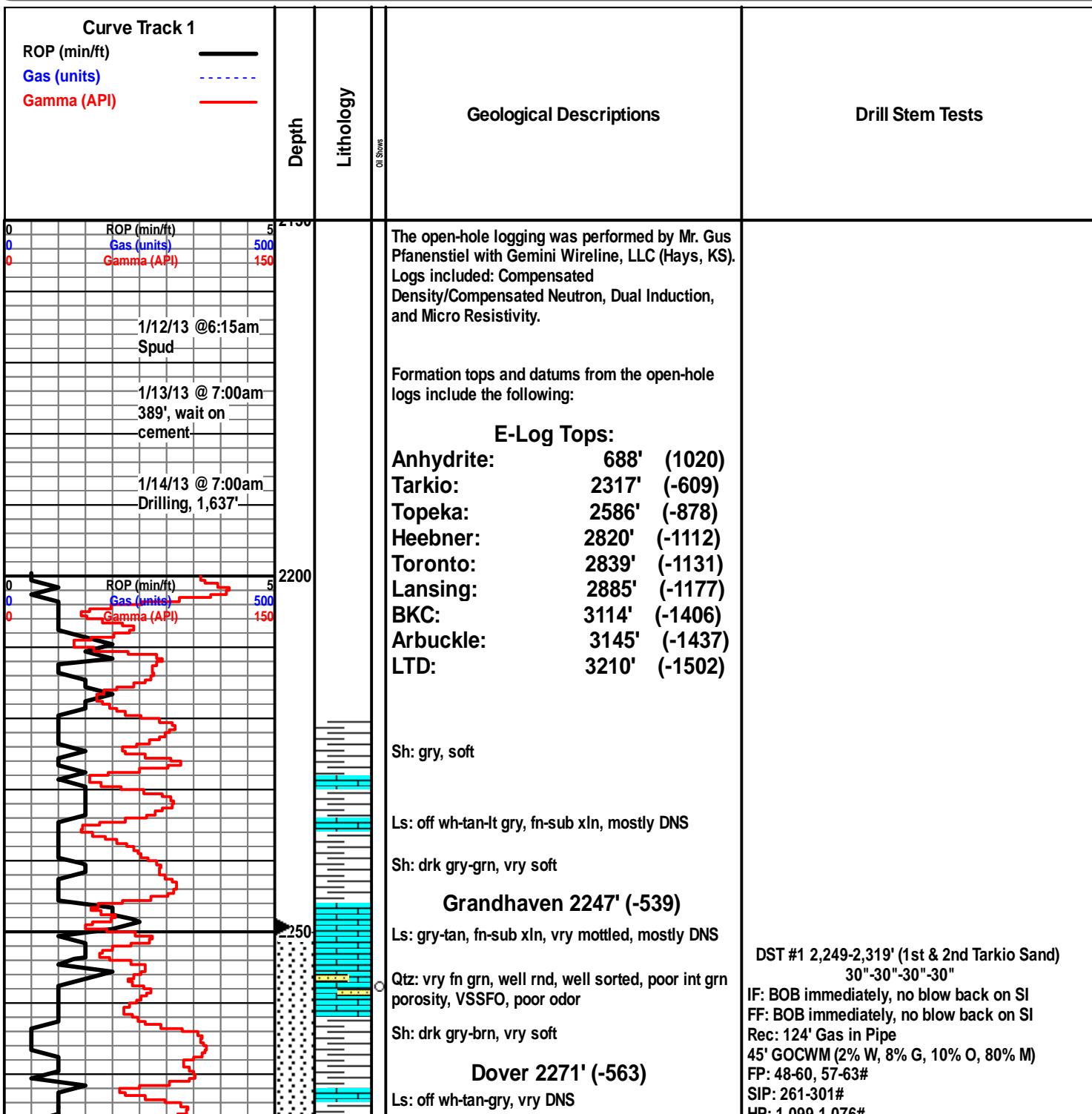
The location for the Camp #1 well was found via 3-D seismic survey. Based on the results of the drill stem tests that were conducted and samples and wireline logs that were evaluated, the decision was made to plug and abandon the Camp #1 well on 1/19/13.

ROCK TYPES

 Anhy	 Clyst	 Gyp	 Mrlst	 Shgy
 Bent	 Coal	 Igne	 Salt	 Sltst
 Brec	 Congl	 Lmst	 Shale	 Ss
 Cht	 Dol	 Meta	 Shcol	 Till

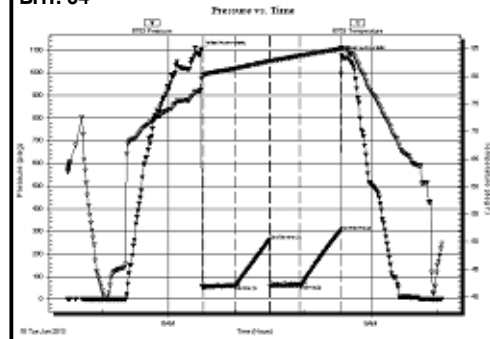
OTHER SYMBOLS

POROSITY	<input type="checkbox"/> Vuggy	ROUNDING	<input type="checkbox"/> Spotted	EVENT
<input type="checkbox"/> Earthy	SORTING	<input type="checkbox"/> Rounded	<input type="checkbox"/> Ques	<input type="checkbox"/> Rft
<input type="checkbox"/> Fenest	<input type="checkbox"/> Well	<input type="checkbox"/> Subrnd	<input type="checkbox"/> Dead	<input type="checkbox"/> Sidewall
<input type="checkbox"/> Fracture	<input type="checkbox"/> Moderate	<input type="checkbox"/> Subang	INTERVAL	
<input type="checkbox"/> Inter	<input type="checkbox"/> Poor	<input type="checkbox"/> Angular	<input type="checkbox"/> Core	
<input type="checkbox"/> Moldic		OIL SHOW	<input type="checkbox"/> Dst	
<input type="checkbox"/> Organic		<input type="checkbox"/> Even		
<input type="checkbox"/> Pinpoint				



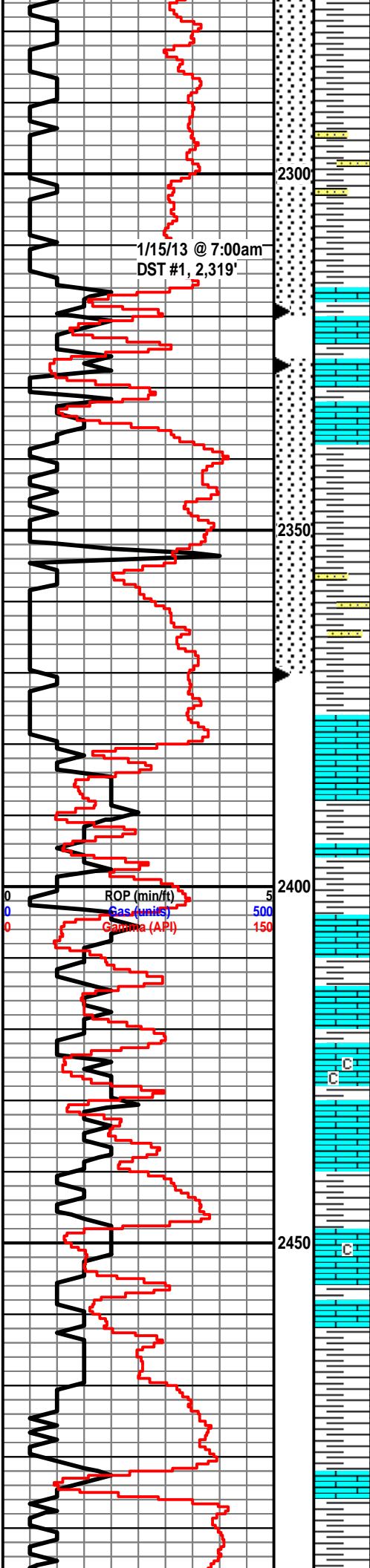
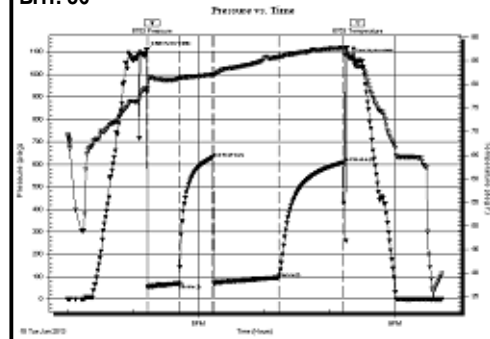
HP: 1,055-1,070#

BHT: 84



Wt: 8.9
Vis: 50

DST #2 2,327-2,370' (3rd Tarkio Sand)
30"-30"-60"-60"
IF: weak blow built to 6"
FF: weak blow built to 7.5"
Rec: 45' SOCWM (2% O, 10% W, 88% M)
120' SOCWM (2% O, 40% M, 58% W)
FP: 54-69, 72-95#
SIP: 629-607#
HP: 1,105-1,073
BHT: 86



Sh: drk gry-grn, vry soft

Sh: ala

Qtz: vry fn grn, fair-well rnd, well sorted, VSSFO, poor int grn porosity, poor-fair odor

Qtz: ala

Tarkio 2315' (-607)

Ls: tan, fn xln, fossil, DNS

Sh: drk gry, fissile

Ls: tan-lt gry, fn-sub xln, mostly DNS, sl pyrite, sl fossil

Sh: drk gry-brn, vry soft

Qtz: lt gry-clr, fn-vry fn grn, mostly well rnd, fair-well sorted, poor int grn porosity, fair-lt oil st, VSSFO, sl odor

Ls: off wh-lt gry, fn-sub xln, mostly DNS

Sh: drk gry-brn

Sh: ala

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

Sh: drk gry-brn, vry soft

Ls: off wh-lt gry, fn-sub xln, sl fossil, mostly DNS, sl chalky

Sh: drk gry, soft

Ls: tan-lt gry, fn-sub xln, mostly DNS, chalky

Ls: ala

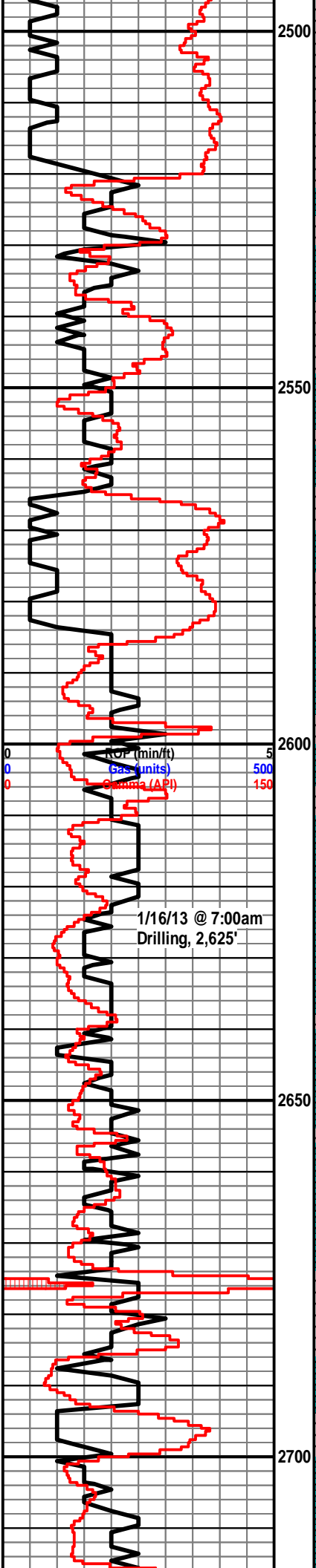
Sh: lt-drk gry, soft

Sh: ala

Sh: drk gry-grn, vry soft, mottled

1/15/13 @ 7:00am
DST #1, 2,319'

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



Sh: ala

Sh: drk gry-grn-brn, soft

Sh: gry-grn, soft

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

Ls: ala

Sh: gry

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

Topeka 2584' (-876)

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

Ls: ala

Ls: tan-lt gry, fn-sub xln, mostly DNS, sl fossil, sl chalky

Ls: ala

Ls: tan-brn, fn xln, fair pp vuggy porosity, fair oil st in porosity, VSSFO, sl odor

Ls: ala

Ls: tan-gry, fn-sub xln, chalky, mostly DNS

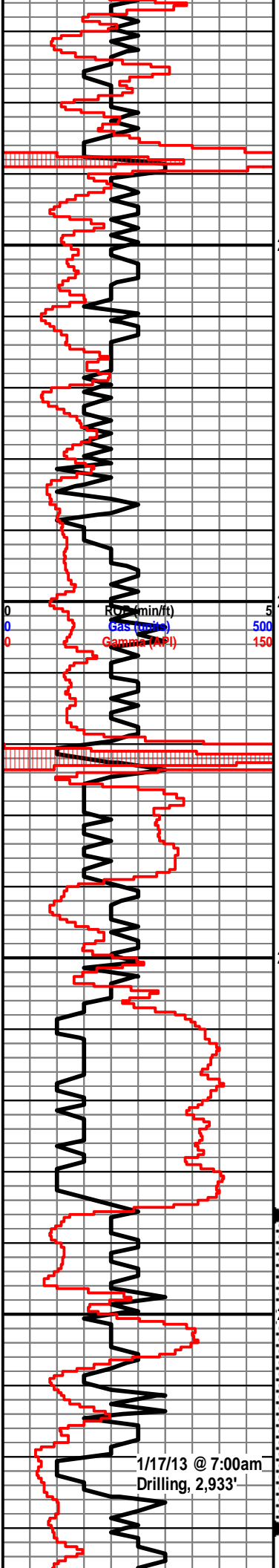
Sh: drk gry-blk

Sh: drk gry

Ls: tan-gry, fn-sub xln, poor int xln & pp vuggy porosity, lt oil st, VSSFO, sl odor, sl fossil

Ls: tan-lt gry, fn-sub xln, mostly DNS

Wt: 9.2
Vis: 47



2750

2800

2850

2900

Sh: gry

Sh: drk gry-blk

Ls: tan-lt gry-brn, fn-sub xln, mostly DNS

Ls: ala

Ls: tan-lt gry, fn xln, poor int xln porosity, sl oil st in porosity, VSSFO, sl odor, sl fossil

Ls: off wh-lt gry, fn-sub xln, mostly DNS, NSFO

Ls: ala

Heebner 2819' (-1111)

Sh: blk, carb, fissile

Sh: gry-brn

Toronto 2838' 1130

Ls: tan-brn, fn xln, scat vuggy porosity, poor-fair oil st in porosity, VSSFO, poor-fair odor

Sh: drk gry-grn

Sh: ala

Sh: gry-brn-grn

Lansing 2884' (-1176)

Ls: off wh-tan, fn xln, poor int xln porosity, vry lt oil st in porosity, NSFO, sl odor

Sh: gry-brn-drk gry

Ls: off wh-tan, fn xln, poor-fair int xln porosity, poor oil st in porosity, V-SSFO, fair odor, fossil

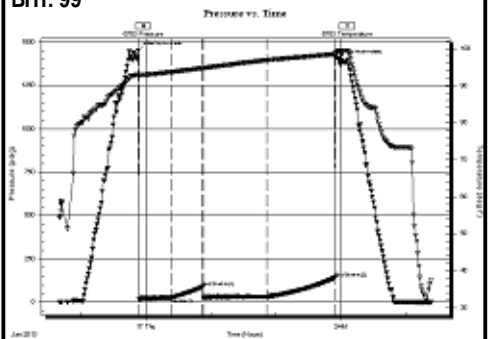
Ls: off wh, fn xln, ool, poor-fair oom porosity, poor int xln porosity, lt oil st, VSSFO, sl-fair odor

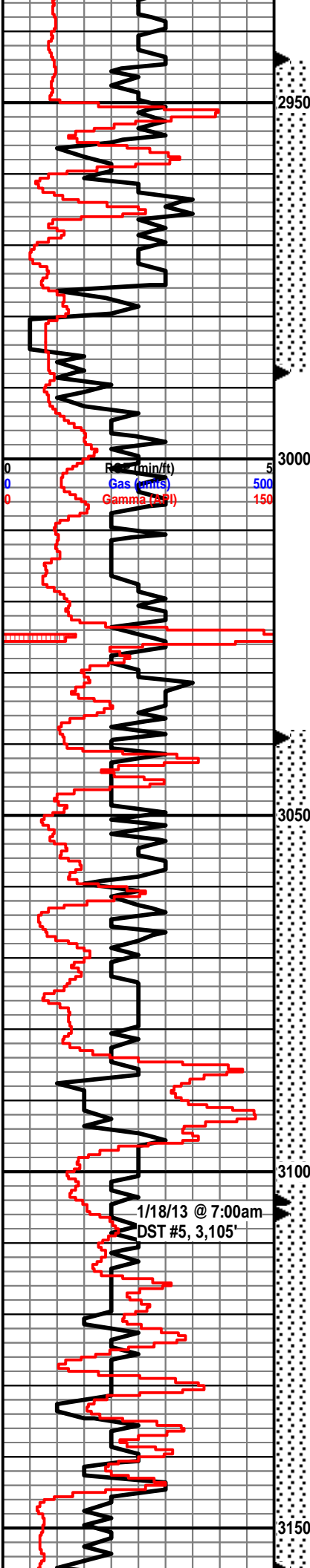
Ls: off wh-tan-lt gry, fn-sub xln, mostly DNS, sl fossil, chert-off wh

RF (min/ft) 5
 Gas (mg/L) 500
 Gamma (API) 150

1/17/13 @ 7:00am
 Drilling, 2,933'

DST #3 2,886-2,930' (LKC A-C)
 30"-30"-60"-60"
 IF: weak blow built to 5.5"
 FF: weak blow built to 3"
 Rec: 35' SOCM (2% O, 98% M)
 FP: 17-25,-24-32#
 SIP: 89-142#
 HP: 1,451-1,403#
 BHT: 99





Ls: ala

2950
Ls: off wh-tan, fn xln, poor pp vuggy porosity, fair oil st, VSSFO, sl-fair odor

Ls: off wh-tan, fn xln, poor int xln & pp vuggy porosity, fair oil st, VSSFO, sl odor, sl chert-off wh

Ls: off wh-tan, fn xln, ool, fair oom porosity, lt oil st, VSSFO, fair odor, chert-off wh

Sh: drk gry-grn-brn

3000
Ls: tan-lt gry, fn-sub xln, mostly DNS, hvy chert, fossil

Ls: drk gry-tan, fn-sub xln, vry DNS, fossil, chert

Sh: drk gry-blk

Ls: tan-lt gry, fn-sub xln, mostly DNS, sl chert-drk gry, sl chalky

Sh: drk gry

3050
Ls: off wh-tan, fn xln, poor int xln & scat pp vuggy porosity, oil st in porosity, SSFO, sl fossil, chert-off wh, sl odor

Sh: drk gry-blk

Ls: off wh-tan, fn xln, scat pp vuggy porosity, mostly barren, NSFO, chert-off wh, sl chalky

Ls: tan-lt gry, fn-sub xln, mostly DNS, Barren, hvy chert-drk gry-off wh

Sh: drk gry

3100
Ls: tan-lt gry, fn-sub xln, mostly DNS, hvy chert-off wh, chalky

Sh: drk gry-brn-grn

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

BKC 3113' (-1405)

Sh: ala

Ls: tan-gry, fn-sub xln, mostly DNS, chert-off wh

Sh: gry-grn

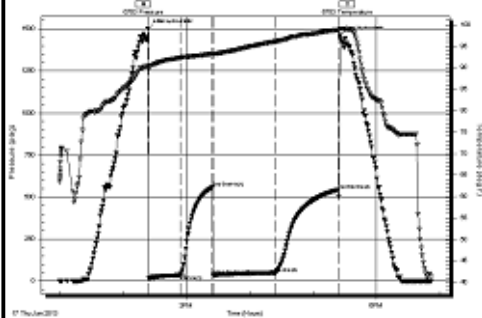
Arbuckle 3135' (-1427)

Dolo: off wh-brn, fn-md xln, poor-fair int xln porosity, fair oil st, SSFO, sl-fair odor

Dolo: brn, fn-md xln, poor-fair int xln porosity, fair-good oil st, SSFO-FSFO, fair odor

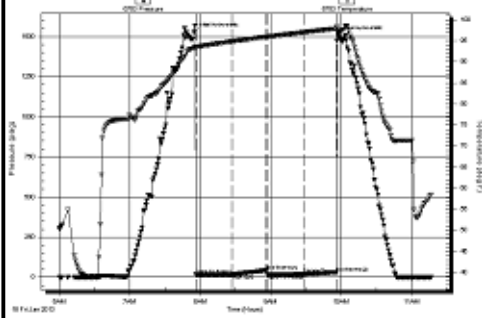
Wt: 9.4
Vis: 56

DST #4 2,944-2,988' (LKC E-G)
30"-30"-60"-60"
IF: weak blow built to 4"
FF: weak blow built to 2.5"
Rec: 1' CO, 64' HWCM (40% W, 60% M)
FP: 17-36, 38-50"
SIP: 557-544#
HP: 1,501-1,460#
BHT: 99



DST #5 3,039-3,105' (LKC I-L)
30"-30"-30"-30"

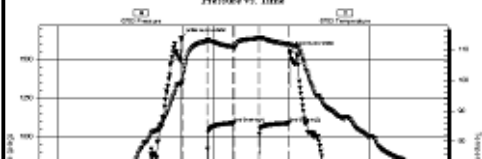
IF: weak blow built to 1"
FF: weak surface blow
Rec: 5' Mud
FP: 17-19, 18-20#
SIP: 44-30#
HP: 1,528-1,506#
BHT: 98

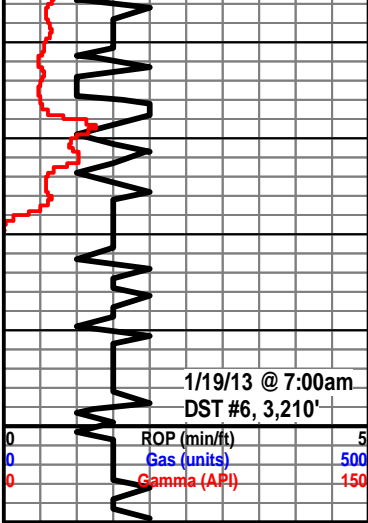


Wt: 9.4
Vis: 49

DST #6 3,104-3,156' (Top 11' of Arbuckle)
30"-30"-30"-30"

IF: BOB in 1.5 minutes, no blow back on SI
FF: BOB in 1.5 minutes, no blow back on SI
Rec: 210' SO&WCM (2% O, 5% W, 93% M)
335' SO&MCW (5% O, 10% M, 85% W)
310' SO&MCW (2% O, 10% M, 88% W)
125' MCW (10% M, 90% W)
630' Water
FP: 67-462, 486-757#
SIP: 1,087-1,086#
HP: 1,643-1,557#
BHT: 112





1/19/13 @ 7:00am
DST #6, 3,210'

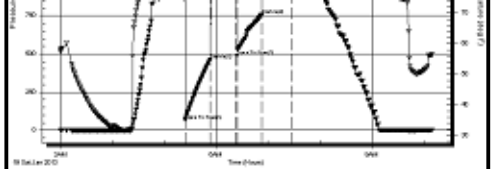
0	ROP (min/ft)	5
0	Gas (units)	500
0	Gamma (API)	150

3200

Dolo: off wh-wh, fn int xln porosity, barren, NSFO

Dolo: ala

Dolo: off wh-wh, fn-md xln, poor int xln porosity, mostly barren, NSFO, No odor





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 67665-2635 Hays, KS 67601

Lease: Camp # 1 Location: 2025 FNL - 2310 FEL
SW-SW-NE
Section 2/ 15S/ 14W
Russell County, KS

Loggers Total Depth: 3210' API#15- 167-23,850-00-00
 Rotary Total Depth: 3210' Elevation: 1700 GL / 1708 KB
 Commenced: 1/12/2013 Completed: 1/19/2013
 Casing: 8 5/8" @ 389'W/225sks Status: D & A

DEPTHS & FORMATIONS (All from KB)

Surface, Sand & Shale	<u>0'</u>	Shale	<u>725'</u>
Dakota Sand	<u>356'</u>	Shale & Lime	<u>1399'</u>
Shale	<u>330'</u>	Shale	<u>1761'</u>
Cedar Hill Sand	<u>351'</u>	Shale & Lime	<u>2189'</u>
Red Bed Shale	<u>504'</u>	Lime & Shale	<u>2884'</u>
Anhydrite	<u>694'</u>	RTD	<u>3210'</u>
Base Anhydrite	<u>725'</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.

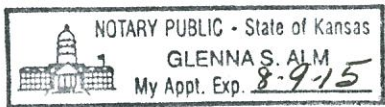
 Thomas H. Alm

Subscribed and sworn to before me on 1-21-13

My Commission expires: 8-9-15

(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. 6361

Date	1-13-13	Sec.	2	Twp.	K	Range	14	County	Russell	State	KS	On Location		Finish	6.50 AM
Lease								Camp		Well No.		1			
Contractor								Discovery 2		Owner					
Type Job								Surface		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.					
Hole Size				12 1/4		T.D.		389		Charge To		J.O. Farmer			
Csg.				8 5/8		Depth		389.40		Street					
Tbg. Size						Depth				City		State			
Tool						Depth				The above was done to satisfaction and supervision of owner agent or contractor.					
Cement Left in Csg.				20ft		Shoe Joint		20ft		Cement Amount Ordered					
Meas Line						Displace		23.5 BBL		225 3% CO 2% gel					
EQUIPMENT								Common							
Pumptrk				15		No.		Cementer		225		Poz. Mix			
Bulktrk				8		No.		Helper		4		Gel.			
Bulktrk				24		No.		Driver		1		Calcium			
JOB SERVICES & REMARKS								Hulls							
Remarks:								Salt							
Rat Hole								Flowseal							
Mouse Hole								Kol-Seal							
Centralizers								Mud CLR 48							
Baskets								CFL-117 or CD110 CAF 38							
D/V or Port Collar								Sand							
Cement								did Circulate		Handling		236			
								Mileage							
FLOAT EQUIPMENT															
								Guide Shoe							
								Centralizer							
								Baskets							
								AFU Inserts							
								Float Shoe							
								Latch Down							
								Wood Plug							
								Pumptrk Charge		Surface					
								Mileage		8					
								Tax							
								Discount							
								Total Charge							
Signature															

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. 6063

Date	1-19-13	Sec.	2	Twp.	15	Range	14	County	Russell	State	Ks	On Location		Finish	5:00 PM	
Lease	Camp							Well No.	1	Location Russell, Ks - S. to River, E into on north side of River, about 2 mile						
Contractor	Discovery		#2		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	Plug															
Hole Size	7 7/8"		T.D.	3210'		Charge To		J.O. Farmer								
Csg.			Depth			Street										
Tbg. Size	4 1/2" D.P.		Depth	3124'		City		State								
Tool			Depth			The above was done to satisfaction and supervision of owner agent or contractor.										
Cement Left in Csg.			Shoe Joint			Cement Amount Ordered		210 sx 60/40 4% Gel 1/4# F.S.								
Meas Line			Displace	H2O/mud												
EQUIPMENT													Common			126
Pumptrk	16	No.	Cementer	Travis		Poz. Mix		84								
Bulktrk	1	No.	Helper	Lonnice M.		Gel.		7								
Bulktrk	p.u.	No.	Driver	Rick		Calcium										
JOB SERVICES & REMARKS													Hulls			
Remarks:													Salt			
Rat Hole													Flowseal 50#			
Mouse Hole													Kol-Seal			
Centralizers													Mud CLR 48			
Baskets													CFL-117 or CD110 CAF 38			
D/V or Port Collar													Sand			
3124' - 50 SX													Handling 217			
700' - 25 SX													Mileage			
440' - 80 SX													FLOAT EQUIPMENT			
40' - 10 SX w/ plug													Guide Shoe			
Bathole w/ 30 SX													Centralizer			
Mousehole w 15 SX													Baskets			
Cement did Circulate													AFU Inserts			
													Float Shoe			
													Latch Down			
													1 - Dry hole plug			
													Pumptrk Charge plug			
													Mileage 8			
													Tax			
													Discount			
													Total Charge			
Signature <i>Gene Wick</i>																