



**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
- Conv. to GSW
- Plug Back: \_\_\_\_\_ Plug Back Total Depth \_\_\_\_\_
- Commingled      Permit #: \_\_\_\_\_
- Dual Completion      Permit #: \_\_\_\_\_
- SWD      Permit #: \_\_\_\_\_
- ENHR      Permit #: \_\_\_\_\_
- GSW      Permit #: \_\_\_\_\_

Spud Date or Recompletion Date      Date Reached TD      Completion Date or Recompletion Date

API No. 15 - \_\_\_\_\_

Spot Description: \_\_\_\_\_

\_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

\_\_\_\_\_ Feet from  North /  South Line of Section

\_\_\_\_\_ Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE       NW       SE       SW

County: \_\_\_\_\_

Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Field Name: \_\_\_\_\_

Producing Formation: \_\_\_\_\_

Elevation: Ground: \_\_\_\_\_ Kelly Bushing: \_\_\_\_\_

Total 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**

- Letter of Confidentiality Received  
Date: \_\_\_\_\_
- Confidential Release Date: \_\_\_\_\_
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT  I  II  III Approved by: \_\_\_\_\_ Date: \_\_\_\_\_



Operator Name: \_\_\_\_\_ Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West County: \_\_\_\_\_

**INSTRUCTIONS:** Show important tops and base 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. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

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 Electric Log Submitted Electronically <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(If no, Submit Copy)</i>  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
_____ Perforate _____ Protect Casing _____ Plug Back TD _____ Plug Off Zone				

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
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<b>DISPOSITION OF GAS:</b> <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	<b>METHOD OF COMPLETION:</b> <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> _____ <i>(Submit ACO-4)</i>	<b>PRODUCTION INTERVAL:</b> _____ _____
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Form	ACO1 - Well Completion
Operator	F. G. Holl Company L.L.C.
Well Name	BINFORD/CAMPBELL 1-31
Doc ID	1152647

All Electric Logs Run

DIL
Frac finder
Microresistivity
Sonic Cement Bond
CNL/CDL
Computer Processes Interpretation

Form	ACO1 - Well Completion
Operator	F. G. Holl Company L.L.C.
Well Name	BINFORD/CAMPBELL 1-31
Doc ID	1152647

Tops

Name	Top	Datum
Herrington	1945	+70
Winfield	1996	+19
Towanda	2066	-51
Ft Riley	2110	-95
B/Florence	2203	-188
Kinney Ls	2220	-205
Wrefold	2252	-237
Council Grove	2272	-257
Crouse	2312	-297
Neva	2450	-435
Red Eagle	2511	-496
Onaga Shale	2662	-647
Wabaunsee	2682	-667
Root Shale	2739	-724
Stotler	2804	-789
Tarkio	2863	-848
Howard	3006	-991
Topeka	3084	-1069
Heebner	3346	-1331
Toronto	3362	-1347
Douglas Shale	3376	-1361
Brown Lime	3437	-1422
Lansing	3448	-1433
BKC	3684	-1669

Form	ACO1 - Well Completion
Operator	F. G. Holl Company L.L.C.
Well Name	BINFORD/CAMPBELL 1-31
Doc ID	1152647

Tops

Name	Top	Datum
Conglomerate	3698	-1683
Arbuckle	3774	-1759
RTD	3950	-1935

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

July 23, 2013

Franklin R. Greenbaum  
F. G. Holl Company L.L.C.  
9431 E CENTRAL STE 100  
WICHITA, KS 67206-2563

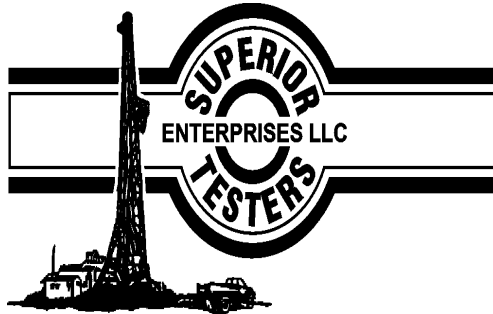
Re: ACO1  
API 15-009-25831-00-00  
BINFORD/CAMPBELL 1-31  
NW/4 Sec.31-20S-15W  
Barton County, Kansas

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,  
Franklin R. Greenbaum



## DRILL STEM TEST REPORT

Prepared For: **FG Holl Company LLC**

9431 E. Central STE. 100 Wichita Kansas  
67208-2563

ATTN: Frank Greenbaum

**Binford/Campbell #1**

**31/20s/15w/Barton**

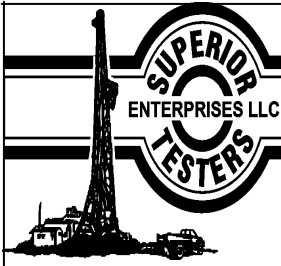
Start Date: 2013.05.02 @ 16:25:00

End Date: 2013.05.02 @ 22:53:00

Job Ticket #: 17577                      DST #: 1

Superior Testers Enterprises LLC  
PO Box 138 Great Bend KS 67530  
1-800-792-6902

Printed: 2013.05.02 @ 23:11:52



# DRILL STEM TEST REPORT

FG Holl Company LLC

**31/20s/15w/Barton**

9431 E. Central STE. 100 Wichita Kansas 67208-2563

**Binford/Campbell #1**

ATTN: Frank Greenbaum

Job Ticket: 17577

**DST#: 1**

Test Start: 2013.05.02 @ 16:25:00

## GENERAL INFORMATION:

Formation: **Viola**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:26:30

Time Test Ended: 22:53:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Shane Konzem

Unit No: 3330/50/Great Bend

**Interval: 3682.00 ft (KB) To 3750.00 ft (KB) (TVD)**

Reference Elevations: 2022.00 ft (KB)

Total Depth: 3750.00 ft (KB) (TVD)

2014.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 8.00 ft

**Serial #: 8405 Inside**

Press @ Run Depth: 74.63 psia @ 3746.50 ft (KB)

Capacity: 5000.00 psia

Start Date: 2013.05.02

End Date: 2013.05.02

Last Calib.: 2013.05.02

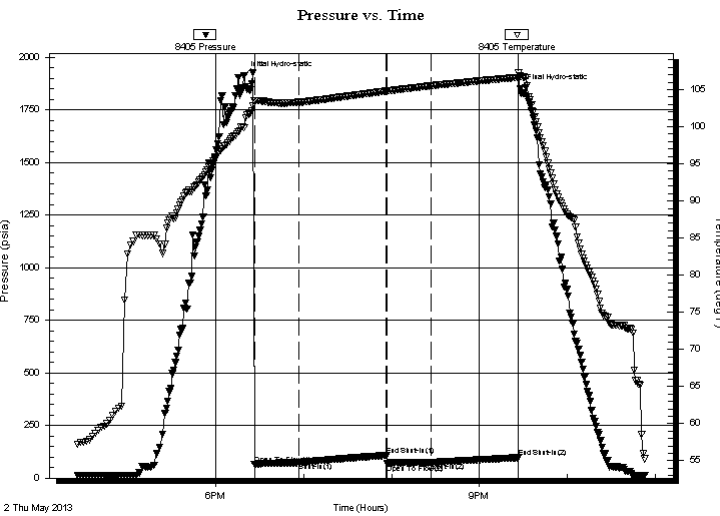
Start Time: 16:26:00

End Time: 22:53:00

Time On Btm: 2013.05.02 @ 18:19:30

Time Off Btm: 2013.05.02 @ 21:27:30

**TEST COMMENT:** 1st Open/ 30 Minutes. Weak blow built to 2 inches in 5 gallon bucket.  
 1st Shut In/ 60 Minutes. No blow back.  
 2nd Open/ 30 Minutes. Weak surface blow that died after 25 minutes.  
 2nd Shut In/ 60 Minutes. No blow back.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1913.35	99.85	Initial Hydro-static
7	66.59	103.44	Open To Flow (1)
37	74.09	103.28	Shut-In(1)
97	107.82	104.79	End Shut-In(1)
98	67.88	104.80	Open To Flow (2)
128	74.63	105.50	Shut-In(2)
187	97.07	106.63	End Shut-In(2)
188	1849.25	106.81	Final Hydro-static

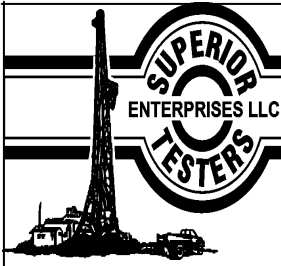
## Recovery

Length (ft)	Description	Volume (bbl)
0.00	620 feet of gas	0.00
25.00	100% mud	0.35

## Gas Rates

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





# DRILL STEM TEST REPORT

FG Holl Company LLC

31/20s/15w/Barton

9431 E. Central STE. 100 Wichita Kansas 67208-2563

**Binford/Campbell #1**

Job Ticket: 17577

**DST#: 1**

ATTN: Frank Greenbaum

Test Start: 2013.05.02 @ 16:25:00

## GENERAL INFORMATION:

Formation: **Viola**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:26:30

Time Test Ended: 22:53:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Shane Konzem

Unit No: 3330/50/Great Bend

**Interval: 3682.00 ft (KB) To 3750.00 ft (KB) (TVD)**

Reference Elevations: 2022.00 ft (KB)

Total Depth: 3750.00 ft (KB) (TVD)

2014.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 8.00 ft

**Serial #: 8400 Outside**

Press @ Run Depth: 97.81 psia @ 3747.50 ft (KB)

Capacity: 5000.00 psia

Start Date: 2013.05.02

End Date: 2013.05.02

Last Calib.: 2013.05.02

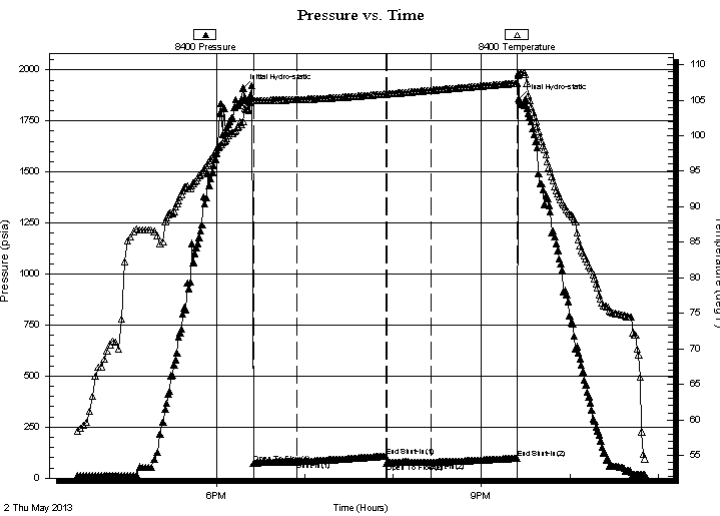
Start Time: 16:25:23

End Time: 22:51:23

Time On Btm: 2013.05.02 @ 18:17:53

Time Off Btm: 2013.05.02 @ 21:25:23

**TEST COMMENT:** 1st Open/ 30 Minutes. Weak blow built to 2 inches in 5 gallon bucket.  
 1st Shut In/ 60 Minutes. No blow back.  
 2nd Open/ 30 Minutes. Weak surface blow that died after 25 minutes.  
 2nd Shut In/ 60 Minutes. No blow back.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1910.50	101.98	Initial Hydro-static
7	72.39	104.97	Open To Flow (1)
37	80.32	105.07	Shut-In(1)
97	108.00	105.86	End Shut-In(1)
98	74.88	105.85	Open To Flow (2)
128	78.43	106.37	Shut-In(2)
187	97.81	107.38	End Shut-In(2)
188	1859.60	108.58	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	620 feet of gas	0.00
25.00	100% mud	0.35

## Gas Rates

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



# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

FG Holl Company LLC

**31/20s/15w/Barton**

9431 E. Central STE. 100 Wichita Kansas 67208-2563

**Binford/Campbell #1**

Job Ticket: 17577

**DST#: 1**

ATTN: Frank Greenbaum

Test Start: 2013.05.02 @ 16:25:00

## Tool Information

Drill Pipe:	Length: 3674.00 ft	Diameter: 3.80 inches	Volume: 51.54 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 51.54 bbl</u>	Tool Chased 1.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 38000.00 lb
Depth to Top Packer:	3682.00 ft			Final 38000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	68.50 ft			
Tool Length:	96.50 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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SHut-InTool	5.00		Inside	3659.00	
Hydraulic Tool	5.00			3664.00	
Jars	6.00			3670.00	
Safety Joint	2.00			3672.00	
Packer	5.00			3677.00	28.00 Bottom Of Top Packer
Packer	5.00			3682.00	
Anchor	5.00			3687.00	
Change Over Sub	0.75			3687.75	
Drill Pipe	31.00		Outside	3718.75	
Change Over Sub	0.75		Outside	3719.50	
Anchor	26.00			3745.50	
Recorder	1.00	8405	Inside	3746.50	
Recorder	1.00	8400	Outside	3747.50	
Bullnose	3.00			3750.50	68.50 Bottom Packers & Anchor

**Total Tool Length: 96.50**



# DRILL STEM TEST REPORT

## FLUID SUMMARY

FG Holl Company LLC

31/20s/15w/Barton

9431 E. Central STE. 100 Wichita Kansas 67208-2563

Binford/Campbell #1

Job Ticket: 17577

DST#: 1

ATTN: Frank Greenbaum

Test Start: 2013.05.02 @ 16:25:00

### Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 52.00 sec/qt

Water Loss: 7.20 in<sup>3</sup>

Resistivity: ohm.m

Salinity: 4800.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psia

Oil API:

Water Salinity: ppm

deg API

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	620 feet of gas	0.000
25.00	100% mud	0.351

Total Length: 25.00 ft      Total Volume: 0.351 bbl

Num Fluid Samples: 0

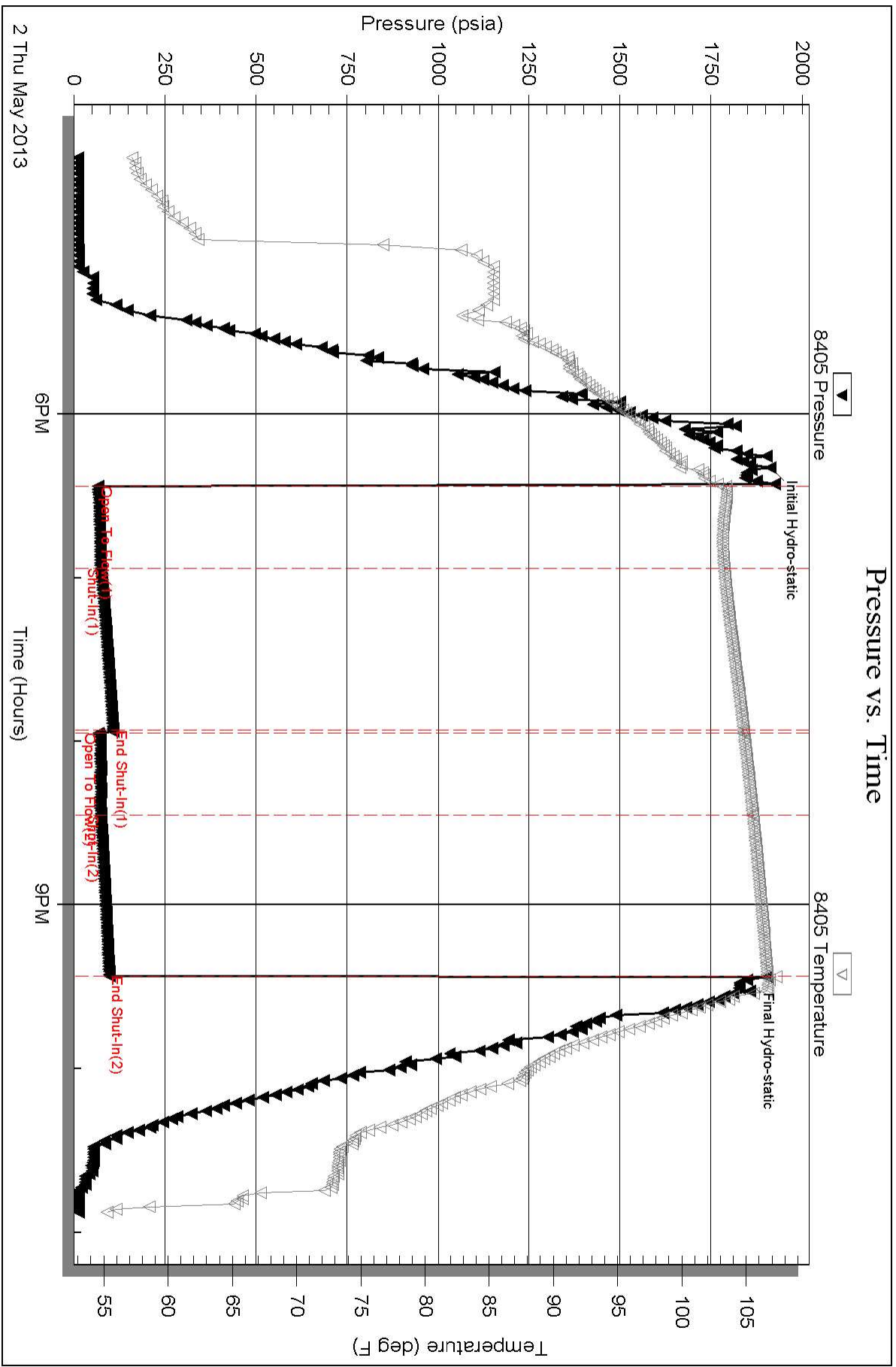
Num Gas Bombs: 0

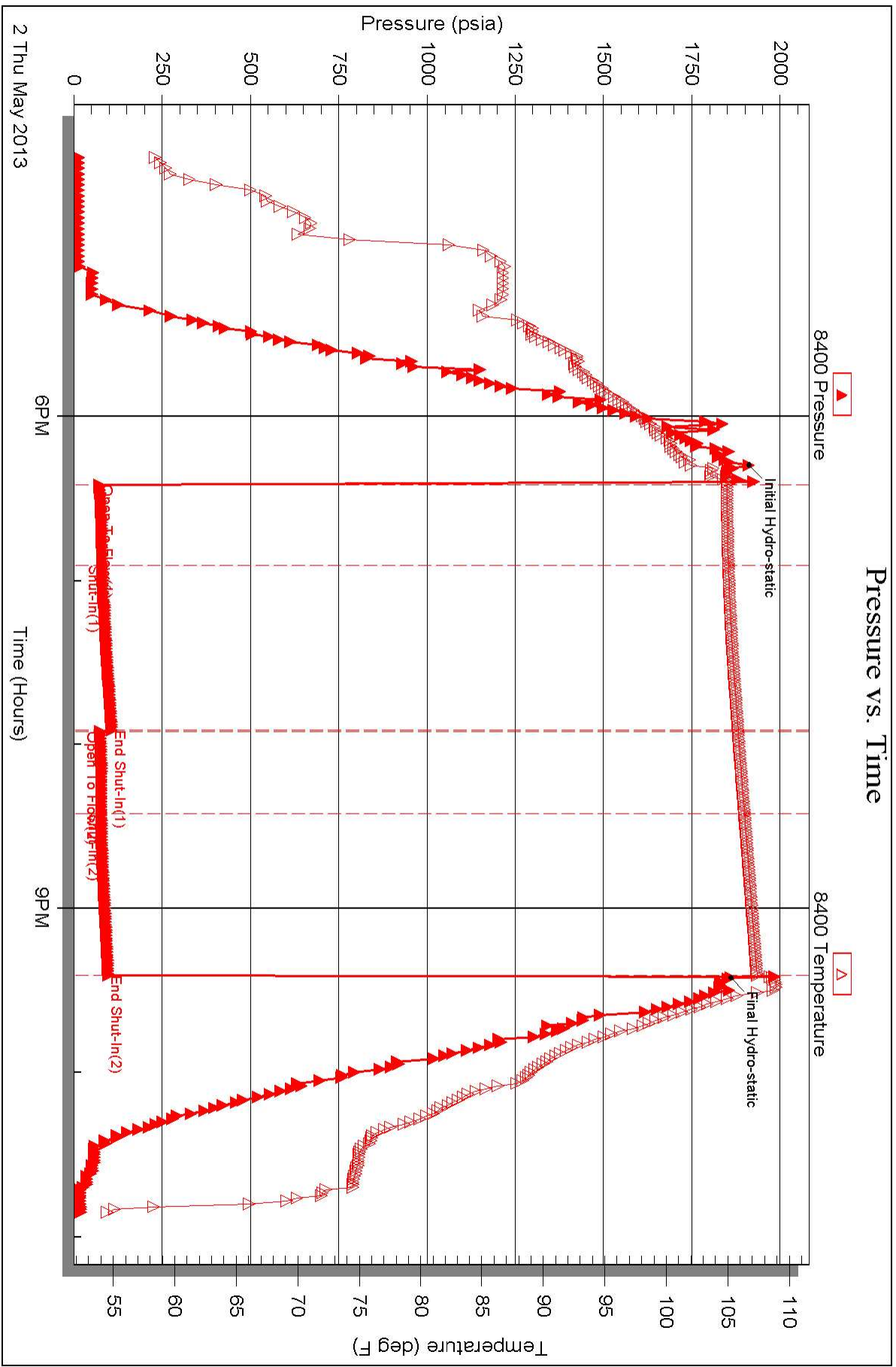
Serial #:

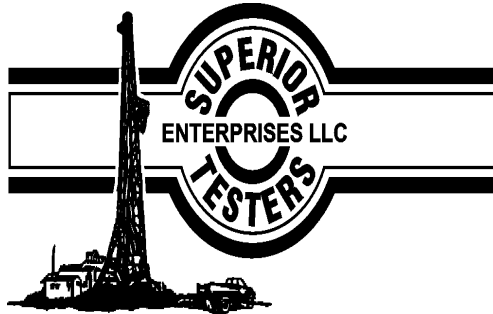
Laboratory Name:

Laboratory Location:

Recovery Comments:







## DRILL STEM TEST REPORT

Prepared For: **FG Holl Company LLC**

9431 E. Central STE. 100 Wichita Kansas  
67208-2563

ATTN: Frank Greenbaum

**Binford/Campbell #1**

**31/20s/15w/Barton**

Start Date: 2013.05.03 @ 08:15:00

End Date: 2013.05.03 @ 16:07:53

Job Ticket #: 17578                      DST #: 2

Superior Testers Enterprises LLC  
PO Box 138 Great Bend KS 67530  
1-800-792-6902

Printed: 2013.05.03 @ 16:26:20



# DRILL STEM TEST REPORT

FG Holl Company LLC

**31/20s/15w/Barton**

9431 E. Central STE. 100 Wichita Kansas 67208-2563

**Binford/Campbell #1**

ATTN: Frank Greenbaum

Job Ticket: 17578

**DST#: 2**

Test Start: 2013.05.03 @ 08:15:00

## GENERAL INFORMATION:

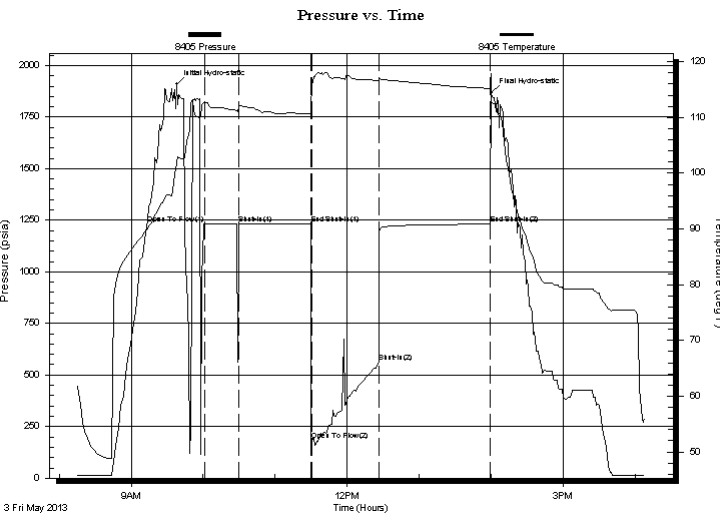
Formation: **Arbuckle**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 10:00:53  
 Time Test Ended: 16:07:53  
 Interval: **3764.00 ft (KB) To 3775.00 ft (KB) (TVD)**  
 Total Depth: 3775.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Poor  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Shane Konzem  
 Unit No: 3330/50/Great Bend  
 Reference Elevations: 2022.00 ft (KB)  
 2014.00 ft (CF)  
 KB to GR/CF: 8.00 ft

## Serial #: 8405

Inside

Press @ Run Depth: 560.38 psia @ 3771.00 ft (KB) Capacity: 5000.00 psia  
 Start Date: 2013.05.03 End Date: 2013.05.03 Last Calib.: 2013.05.03  
 Start Time: 08:15:00 End Time: 16:07:53 Time On Btm: 2013.05.03 @ 09:37:53  
 Time Off Btm: 2013.05.03 @ 14:00:23

**TEST COMMENT:** 1st Open/ 30 Minutes. Fair blow built to 6 inches and died to 4 inches in 30 minutes, in 5 gallon bucket.  
 1st Shut In/ 60 Minutes. No blow back.  
 2nd Open/ 45 Minute. Good blow built to bottom of 5 gallon bucket in 2 minutes. No gas to surface.  
 2nd Shut In/ 90 Minutes. Gas to surface in 5 minutes. Strong blow to bottom of bucket in 2 minutes. Gas died out



## PRESSURE SUMMARY

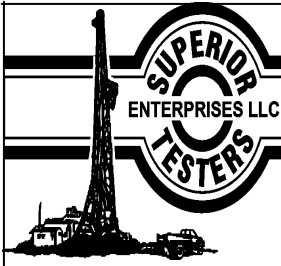
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1907.75	101.92	Initial Hydro-static
23	1230.71	112.58	Open To Flow (1)
52	1231.70	111.68	Shut-In(1)
112	1233.74	110.66	End Shut-In(1)
113	182.43	115.76	Open To Flow (2)
169	560.38	116.65	Shut-In(2)
261	1230.93	115.18	End Shut-In(2)
263	1866.50	112.88	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	Gas w as at surface.	0.00
62.00	100% mud	0.87
248.00	40% w ater, 60% mud	3.48
806.00	100% w ater	11.31
0.00	Chloride recovery: 30000 ppm	0.00
0.00	resist recovery: .21 ohms at 50 degrees	0.00

## Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
First Gas Rate	0.25	3.71	5.89
Last Gas Rate	0.25	3.35	5.32
Max. Gas Rate	0.25	3.71	5.89



# DRILL STEM TEST REPORT

FG Holl Company LLC

31/20s/15w/Barton

9431 E. Central STE. 100 Wichita Kansas 67208-2563

**Binford/Campbell #1**

ATTN: Frank Greenbaum

Job Ticket: 17578

**DST#: 2**

Test Start: 2013.05.03 @ 08:15:00

## GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:00:53

Time Test Ended: 16:07:53

Test Type: Conventional Bottom Hole (Initial)

Tester: Shane Konzem

Unit No: 3330/50/Great Bend

**Interval: 3764.00 ft (KB) To 3775.00 ft (KB) (TVD)**

Reference Elevations: 2022.00 ft (KB)

Total Depth: 3775.00 ft (KB) (TVD)

2014.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 8.00 ft

**Serial #: 8400 Outside**

Press @ Run Depth: 1222.51 psia @ 3772.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2013.05.03

End Date: 2013.05.03

Last Calib.: 2013.05.03

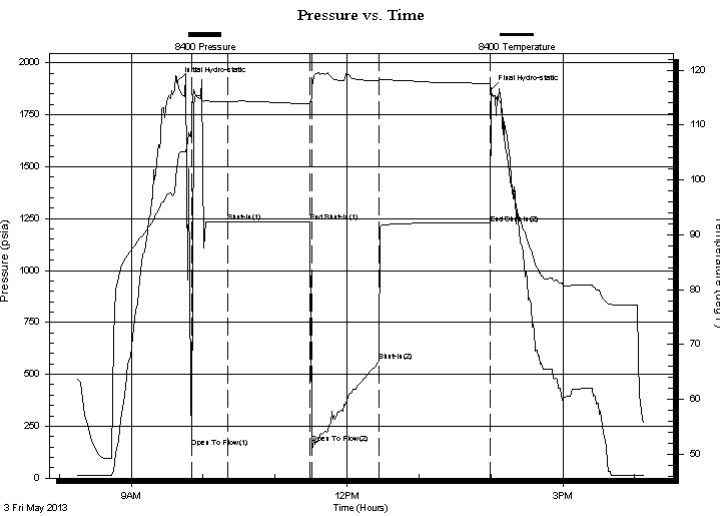
Start Time: 08:15:00

End Time: 16:08:16

Time On Btm: 2013.05.03 @ 09:38:23

Time Off Btm: 2013.05.03 @ 14:00:16

**TEST COMMENT:** 1st Open/ 30 Minutes. Fair blow built to 6 inches and died to 4 inches in 30 minutes, in 5 gallon bucket.  
 1st Shut In/ 60 Minutes. No blow back.  
 2nd Open/ 45 Minute. Good blow built to bottom of 5 gallon bucket in 2 minutes. No gas to surface.  
 2nd Shut In/ 90 Minutes. Gas to surface in 5 minutes. Strong blow to bottom of bucket in 2 minutes. Gas died out



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1909.46	102.36	Initial Hydro-static
12	149.49	109.94	Open To Flow (1)
42	1234.37	114.22	Shut-In(1)
111	1234.85	113.83	End Shut-In(1)
113	168.38	117.04	Open To Flow (2)
169	562.92	118.06	Shut-In(2)
261	1222.51	117.53	End Shut-In(2)
262	1873.08	115.57	Final Hydro-static

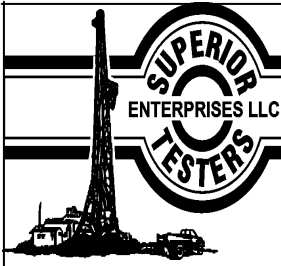
## Recovery

Length (ft)	Description	Volume (bbl)
0.00	Gas w as at surface.	0.00
62.00	100% mud	0.87
248.00	40% w ater, 60% mud	3.48
806.00	100% w ater	11.31
0.00	Chloride recovery: 30000 ppm	0.00
0.00	resist recovery: .21 ohms at 50 degrees	0.00

## Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
First Gas Rate	0.25	3.71	5.89
Last Gas Rate	0.25	3.35	5.32
Max. Gas Rate	0.25	3.71	5.89





# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

FG Holl Company LLC

**31/20s/15w/Barton**

9431 E. Central STE. 100 Wichita Kansas 67208-2563

**Binford/Campbell #1**

Job Ticket: 17578

**DST#: 2**

ATTN: Frank Greenbaum

Test Start: 2013.05.03 @ 08:15:00

## Tool Information

Drill Pipe:	Length: 3767.00 ft	Diameter: 3.80 inches	Volume: 52.84 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 52.84 bbl</u>	Tool Chased 4.00 ft
Drill Pipe Above KB:	31.00 ft			String Weight: Initial 44000.00 lb
Depth to Top Packer:	3764.00 ft			Final 48000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	11.00 ft			
Tool Length:	39.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
SHut-InTool	5.00		Inside	3741.00	
Hydraulic Tool	5.00			3746.00	
Jars	6.00			3752.00	
Safety Joint	2.00			3754.00	
Packer	5.00			3759.00	28.00 Bottom Of Top Packer
Packer	5.00			3764.00	
Anchor	6.00			3770.00	
Recorder	1.00	8405	Inside	3771.00	
Recorder	1.00	8400	Outside	3772.00	
Bullnose	3.00			3775.00	11.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>39.00</b>				



# DRILL STEM TEST REPORT

**FLUID SUMMARY**

FG Holl Company LLC

**31/20s/15w/Barton**

9431 E. Central STE. 100 Wichita Kansas 67208-2563

**Binford/Campbell #1**

Job Ticket: 17578

**DST#: 2**

ATTN: Frank Greenbaum

Test Start: 2013.05.03 @ 08:15:00

## Mud and Cushion Information

Mud Type: Gel Chem  
 Mud Weight: 9.00 lb/gal  
 Viscosity: 52.00 sec/qt  
 Water Loss: 7.20 in<sup>3</sup>  
 Resistivity: ohm.m  
 Salinity: 4800.00 ppm  
 Filter Cake: 1.00 inches

Cushion Type:  
 Cushion Length: ft  
 Cushion Volume: bbl  
 Gas Cushion Type:  
 Gas Cushion Pressure: psia

Oil API: deg API  
 Water Salinity: ppm

## Recovery Information

Recovery Table

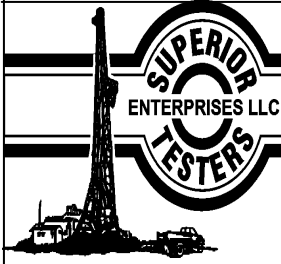
Length ft	Description	Volume bbl
0.00	Gas was at surface.	0.000
62.00	100% mud	0.870
248.00	40% water, 60% mud	3.479
806.00	100% water	11.306
0.00	Chloride recovery: 30000 ppm	0.000
0.00	resist recovery: .21 ohms at 50 degrees	0.000

Total Length: 1116.00 ft      Total Volume: 15.655 bbl

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

Laboratory Name:      Laboratory Location:

Recovery Comments: Dropped bar and reversed out to reserve pit. Per Ryan Greenbaum.



# DRILL STEM TEST REPORT

**GAS RATES**

FG Holl Company LLC

**31/20s/15w/Barton**

9431 E. Central STE. 100 Wichita Kansas 67208-2563

**Binford/Campbell #1**

Job Ticket: 17578

**DST#: 2**

ATTN: Frank Greenbaum

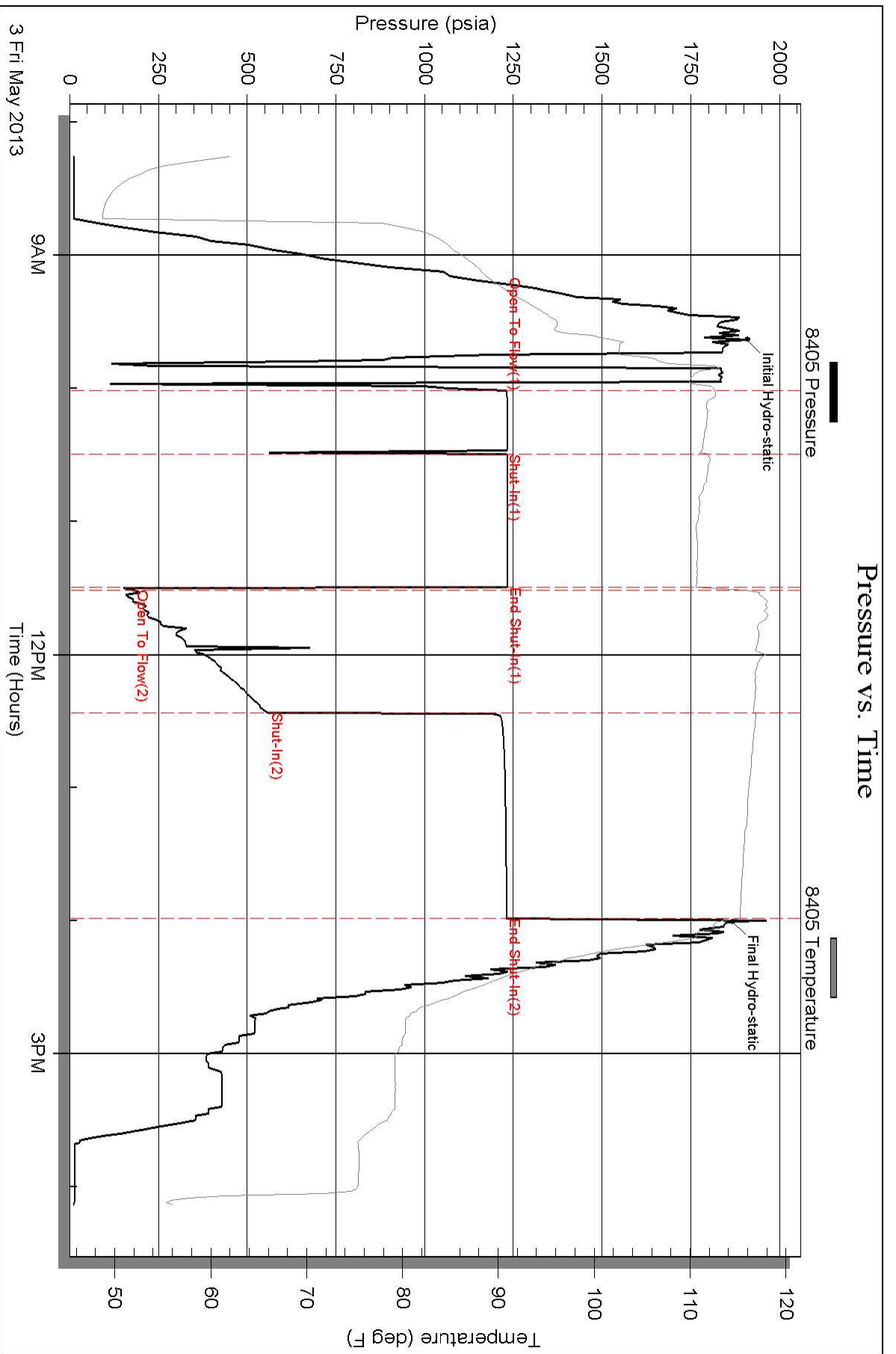
Test Start: 2013.05.03 @ 08:15:00

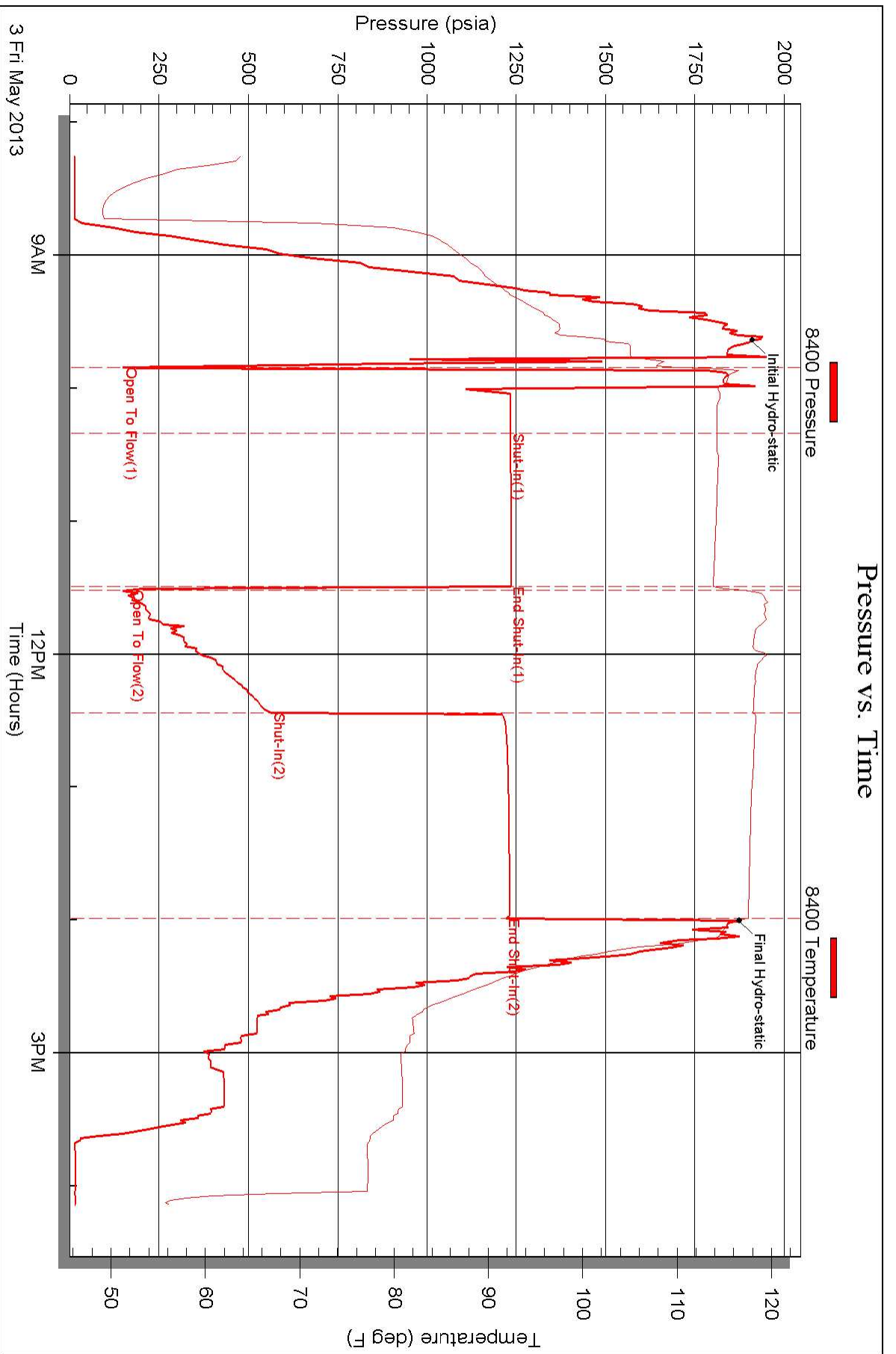
## Gas Rates Information

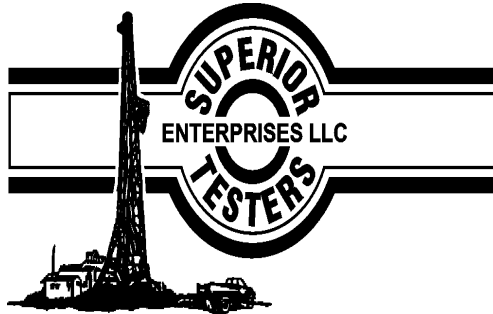
Temperature: 59 (deg F)  
Relative Density: 0.65  
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
4	15	0.25	3.71	5.89
4	15	0.25	3.71	5.89
4	25	0.25	3.35	5.32







## DRILL STEM TEST REPORT

Prepared For: **FG Holl Company LLC**

9431 E. Central STE. 100 Wichita Kansas  
67208-2563

ATTN: Frank Greenbaum

**Binford/Campbell #1**

**31/20s/15w/Barton**

Start Date: 2013.05.04 @ 23:40:00

End Date: 2013.05.05 @ 09:07:30

Job Ticket #: 17579                      DST #: 3

Superior Testers Enterprises LLC  
PO Box 138 Great Bend KS 67530  
1-800-792-6902

Printed: 2013.05.04 @ 09:21:18



# DRILL STEM TEST REPORT

FG Holl Company LLC

31/20s/15w/Barton

9431 E. Central STE. 100 Wichita Kansas 67208-2563

**Binford/Campbell #1**

Job Ticket: 17579

**DST#: 3**

ATTN: Frank Greenbaum

Test Start: 2013.05.04 @ 23:40:00

## GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 02:59:30

Time Test Ended: 09:07:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Shane Konzem

Unit No: 3330/50/Great Bend

**Interval: 3775.00 ft (KB) To 3790.00 ft (KB) (TVD)**

Reference Elevations: 2022.00 ft (KB)

Total Depth: 3790.00 ft (KB) (TVD)

2014.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 8.00 ft

## Serial #: 8405

Press @ RunDepth: 1094.64 psia @ ft (KB)

Capacity: 5000.00 psia

Start Date: 2013.05.04

End Date: 2013.05.05

Last Calib.: 2013.05.04

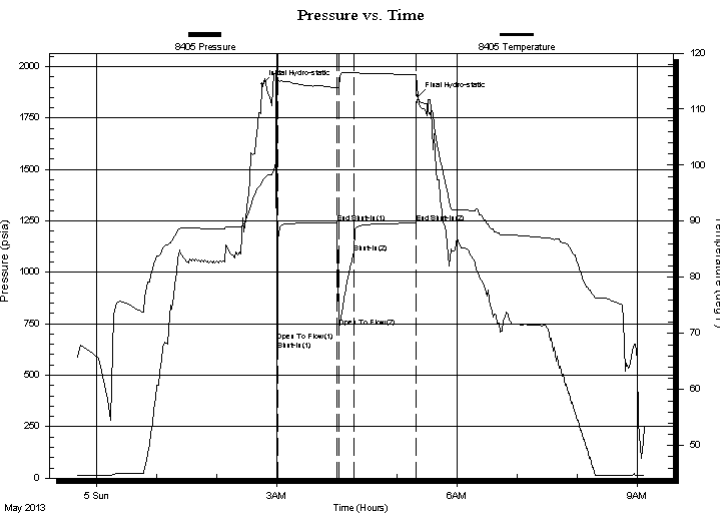
Start Time: 23:40:00

End Time: 09:07:30

Time On Btm: 2013.05.05 @ 02:45:00

Time Off Btm: 2013.05.05 @ 05:21:00

**TEST COMMENT:** 1st Open/ 2 Minutes. Strong blow to bottom of 5 gallon bucket in 30 seconds.  
 1st Shut In/ 60 Minutes. slight surface blow that died 10 minutes.  
 2nd Open/ 15 Minutes. Strong blow built to bottom of bucket in 30 seconds. No gas to surface.  
 2nd Shut In/ 60 Minutes. Slight surface blow .



## PRESSURE SUMMARY

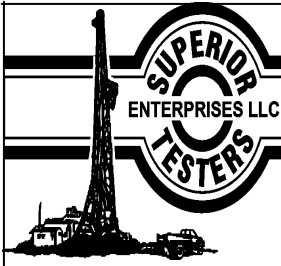
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1914.00	96.94	Initial Hydro-static
15	664.49	110.57	Open To Flow (1)
16	668.32	114.75	Shut-In(1)
75	1240.25	113.93	End Shut-In(1)
77	733.03	113.88	Open To Flow (2)
92	1094.64	116.45	Shut-In(2)
154	1242.35	116.08	End Shut-In(2)
156	1854.72	112.30	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	no gas	0.00
186.00	50% mud, 50% w ater	2.61
372.00	5% mud, 95% w ater	5.22
1672.00	100% w ater	23.45
0.00	chloride recovery 30000 ppm	0.00
0.00	resist recov .22 ohms @ 40 degrees.	0.00

## Gas Rates

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



# DRILL STEM TEST REPORT

FG Holl Company LLC

31/20s/15w/Barton

9431 E. Central STE. 100 Wichita Kansas 67208-2563

**Binford/Campbell #1**

Job Ticket: 17579

**DST#: 3**

ATTN: Frank Greenbaum

Test Start: 2013.05.04 @ 23:40:00

## GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 02:59:30

Time Test Ended: 09:07:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Shane Konzem

Unit No: 3330/50/Great Bend

**Interval: 3775.00 ft (KB) To 3790.00 ft (KB) (TVD)**

Reference Elevations: 2022.00 ft (KB)

Total Depth: 3790.00 ft (KB) (TVD)

2014.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 8.00 ft

## Serial #: 8400

Press @ RunDepth: 1239.79 psia @ ft (KB)

Capacity: 5000.00 psia

Start Date: 2013.05.04

End Date: 2013.05.05

Last Calib.: 2013.05.04

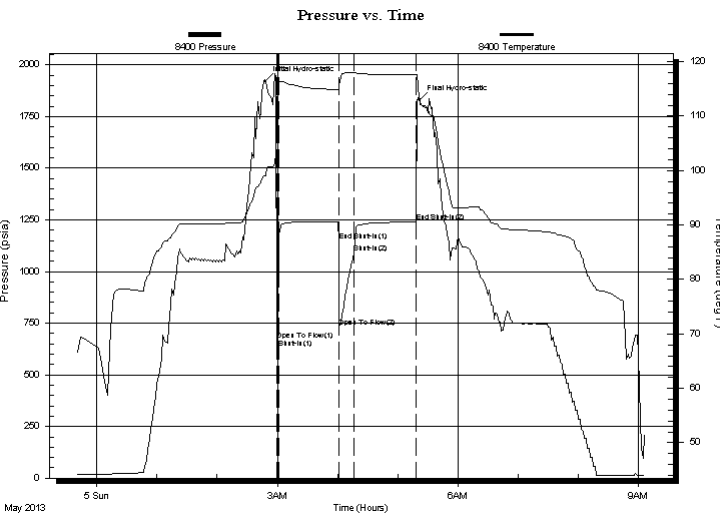
Start Time: 23:40:00

End Time: 09:07:00

Time On Btm: 2013.05.05 @ 02:48:00

Time Off Btm: 2013.05.05 @ 05:22:00

**TEST COMMENT:** 1st Open/ 2 Minutes. Strong blow to bottom of 5 gallon bucket in 30 seconds.  
 1st Shut In/ 60 Minutes. slight surface blow that died 10 minutes.  
 2nd Open/ 15 Minutes. Strong blow built to bottom of bucket in 30 seconds. No gas to surface.  
 2nd Shut In/ 60 Minutes. Slight surface blow .



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1923.40	98.98	Initial Hydro-static
12	667.18	112.87	Open To Flow (1)
13	672.35	115.61	Shut-In(1)
73	1146.32	114.81	End Shut-In(1)
74	730.04	115.67	Open To Flow (2)
89	1087.89	117.91	Shut-In(2)
151	1239.79	117.56	End Shut-In(2)
154	1830.18	112.36	Final Hydro-static

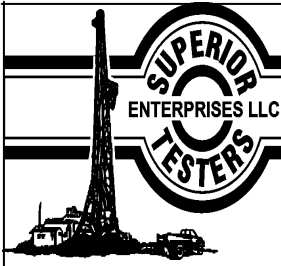
## Recovery

Length (ft)	Description	Volume (bbl)
0.00	no gas	0.00
186.00	50% mud, 50% w ater	2.61
372.00	5% mud, 95% w ater	5.22
1672.00	100% w ater	23.45
0.00	chloride recovery 30000 ppm	0.00
0.00	resist recov .22 ohms @ 40 degrees.	0.00

## Gas Rates

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





# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

FG Holl Company LLC

**31/20s/15w/Barton**

9431 E. Central STE. 100 Wichita Kansas 67208-2563

**Binford/Campbell #1**

Job Ticket: 17579

**DST#: 3**

ATTN: Frank Greenbaum

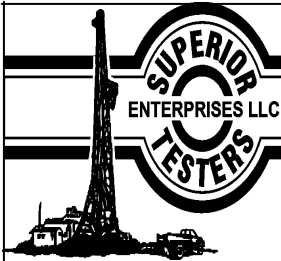
Test Start: 2013.05.04 @ 23:40:00

## Tool Information

Drill Pipe:	Length: 3771.00 ft	Diameter: 3.80 inches	Volume: 52.90 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: lb
			<u>Total Volume: 52.90 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	19.00 ft			String Weight: Initial lb
Depth to Top Packer:	3775.00 ft			Final lb
Depth to Bottom Packer:	ft			
Interval between Packers:	15.00 ft			
Tool Length:	38.00 ft			
Number of Packers:	1	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
SHut-InTool	5.00		Inside	3757.00	
Hydraulic Tool	5.00			3762.00	
Jars	6.00			3768.00	
Safety Joint	2.00			3770.00	
Packer	5.00			3775.00	23.00 Bottom Of Top Packer
Anchor	10.00			3785.00	
Recorder	1.00	8405	Inside	3786.00	
Recorder	1.00	8400	Outside	3787.00	
Bullnose	3.00			3790.00	15.00 Anchor Tool
<b>Total Tool Length:</b>	<b>38.00</b>				



# DRILL STEM TEST REPORT

## FLUID SUMMARY

FG Holl Company LLC

**31/20s/15w/Barton**

9431 E. Central STE. 100 Wichita Kansas 67208-2563

**Binford/Campbell #1**

Job Ticket: 17579

**DST#: 3**

ATTN: Frank Greenbaum

Test Start: 2013.05.04 @ 23:40:00

### Mud and Cushion Information

Mud Type: Gel Chem  
 Mud Weight: 9.00 lb/gal  
 Viscosity: 63.00 sec/qt  
 Water Loss: 8.00 in<sup>3</sup>  
 Resistivity: ohm.m  
 Salinity: 5500.00 ppm  
 Filter Cake: 1.00 inches

Cushion Type:  
 Cushion Length: ft  
 Cushion Volume: bbl  
 Gas Cushion Type:  
 Gas Cushion Pressure: psia

Oil API: deg API  
 Water Salinity: ppm

### Recovery Information

Recovery Table

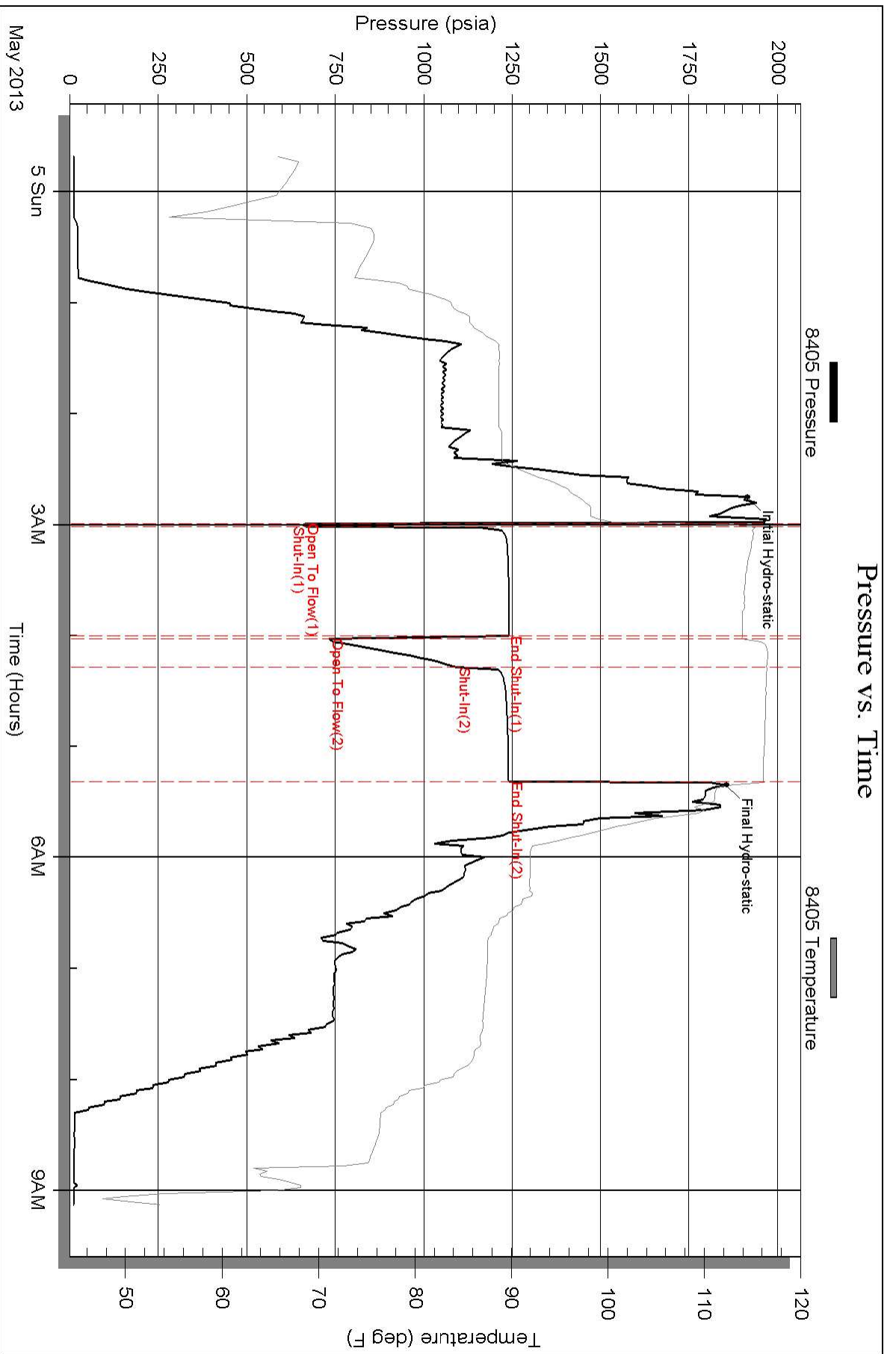
Length ft	Description	Volume bbl
0.00	no gas	0.000
186.00	50% mud, 50% w ater	2.609
372.00	5% mud, 95% w ater	5.218
1672.00	100% w ater	23.454
0.00	chloride recovery 30000 ppm	0.000
0.00	resist recov .22 ohms @ 40 degrees.	0.000

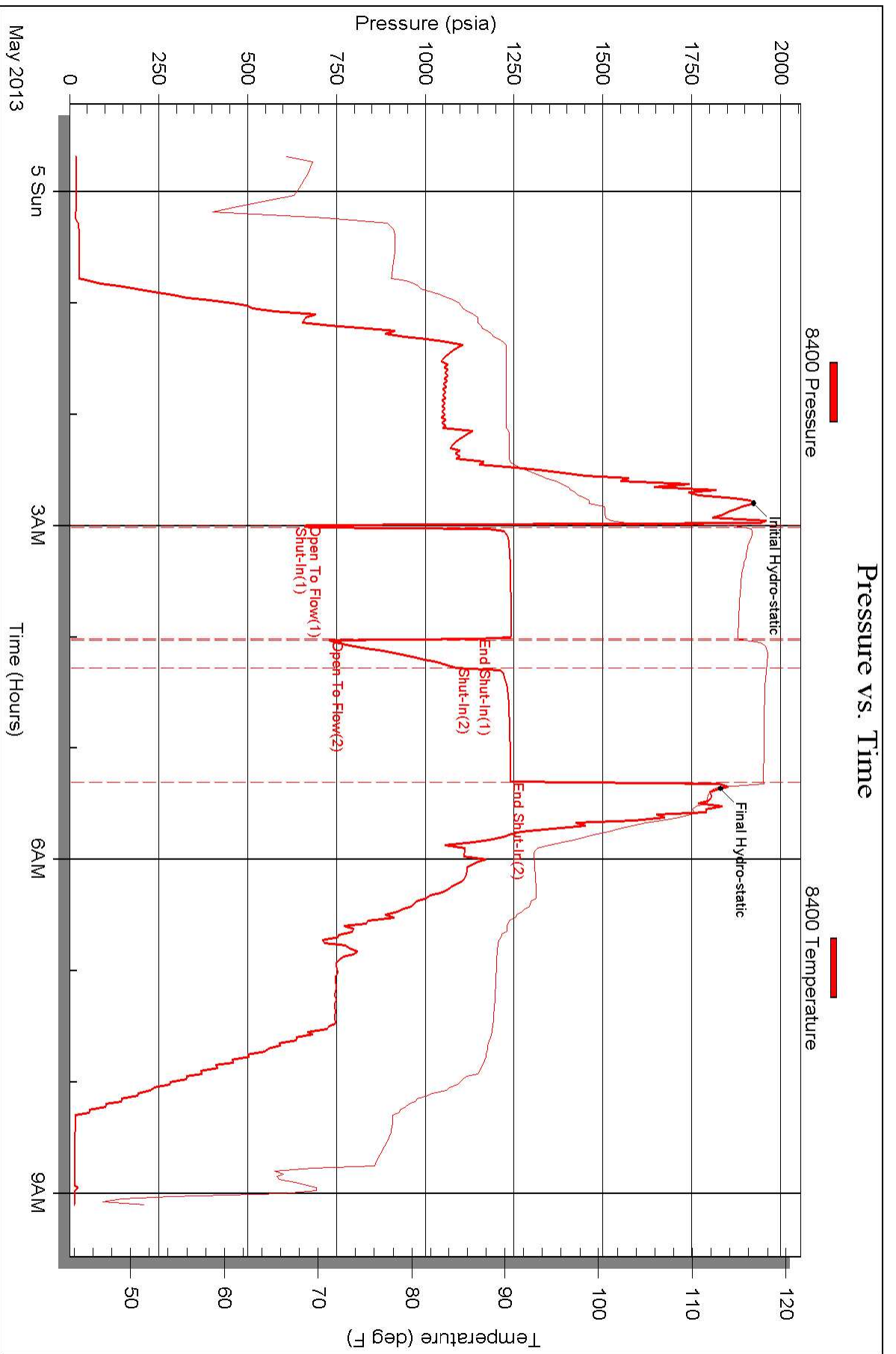
Total Length: 2230.00 ft      Total Volume: 31.281 bbl

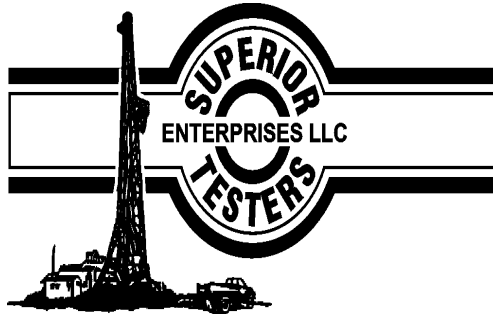
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:

Laboratory Name:      Laboratory Location:

Recovery Comments:







## DRILL STEM TEST REPORT

Prepared For: **FG Holl Company LLC**

9431 E. Central STE. 100 Wichita Kansas  
67208-2563

ATTN: Frank Greenbaum

**Binford/Campbell #1**

**31/20s/15w/Barton**

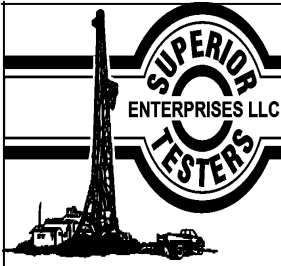
Start Date: 2013.05.04 @ 17:10:00

End Date: 2013.05.04 @ 23:26:30

Job Ticket #: 17580                      DST #: 4

Superior Testers Enterprises LLC  
PO Box 138 Great Bend KS 67530  
1-800-792-6902

Printed: 2013.05.04 @ 23:45:23



# DRILL STEM TEST REPORT

FG Holl Company LLC

31/20s/15w/Barton

9431 E. Central STE. 100 Wichita Kansas 67208-2563

**Binford/Campbell #1**

ATTN: Frank Greenbaum

Job Ticket: 17580

**DST#: 4**

Test Start: 2013.05.04 @ 17:10:00

## GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:03:00

Time Test Ended: 23:26:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Shane Konzem

Unit No: 3330/50/Great Bend

**Interval: 3790.00 ft (KB) To 3805.00 ft (KB) (TVD)**

Reference Elevations: 2022.00 ft (KB)

Total Depth: 3805.00 ft (KB) (TVD)

2014.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 8.00 ft

**Serial #: 8405 Inside**

Press @ RunDepth: 1761.99 psia @ 3801.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2013.05.04

End Date: 2013.05.04

Last Calib.: 2013.05.04

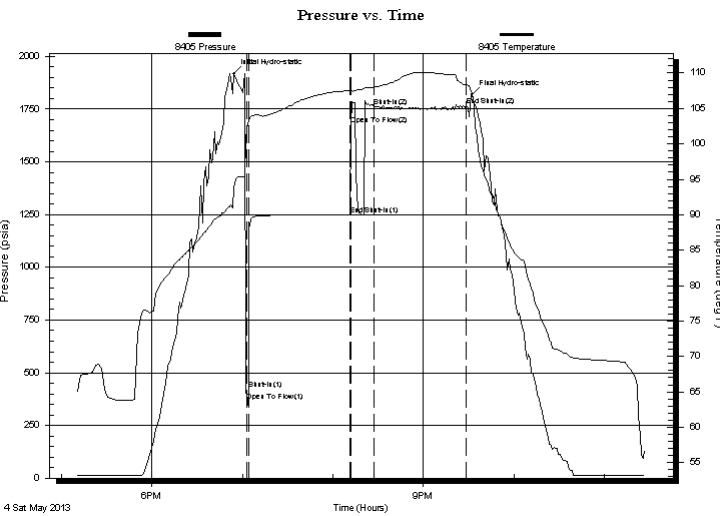
Start Time: 17:10:00

End Time: 23:26:30

Time On Btm: 2013.05.04 @ 18:54:30

Time Off Btm: 2013.05.04 @ 21:32:30

**TEST COMMENT:** 1st Open/ 2 minutes. Strong blow built to bottom of 5 gallon bucket in 20 seconds.  
 1st Shut In/ 60 Minutes. Blow back built to 2 inches in 5 gallon bucket.  
 2nd Open/ 15 minutes. No blow flushed tool and still no blow.  
 2nd Shut In/ 60 Minutes. No blow back.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1918.05	93.92	Initial Hydro-static
9	367.08	102.05	Open To Flow (1)
10	421.83	103.13	Shut-In(1)
77	1247.60	107.55	End Shut-In(1)
78	1675.52	107.78	Open To Flow (2)
93	1761.99	108.01	Shut-In(2)
154	1767.22	108.31	End Shut-In(2)
158	1819.21	107.17	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	No gas	0.00
45.00	100% mud	0.63
372.00	100% water	5.22
0.00	chloride recov. 28000 ppm	0.00
0.00	resist recov .21 ohms @ 40 degrees.	0.00

## Gas Rates

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



# DRILL STEM TEST REPORT

FG Holl Company LLC

31/20s/15w/Barton

9431 E. Central STE. 100 Wichita Kansas 67208-2563

**Binford/Campbell #1**

Job Ticket: 17580

**DST#: 4**

ATTN: Frank Greenbaum

Test Start: 2013.05.04 @ 17:10:00

## GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:03:00

Time Test Ended: 23:26:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Shane Konzem

Unit No: 3330/50/Great Bend

**Interval: 3790.00 ft (KB) To 3805.00 ft (KB) (TVD)**

Reference Elevations: 2022.00 ft (KB)

Total Depth: 3805.00 ft (KB) (TVD)

2014.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 8.00 ft

**Serial #: 8400 Outside**

Press @ RunDepth: 1759.65 psia @ 3802.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2013.05.04

End Date: 2013.05.04

Last Calib.: 2013.05.04

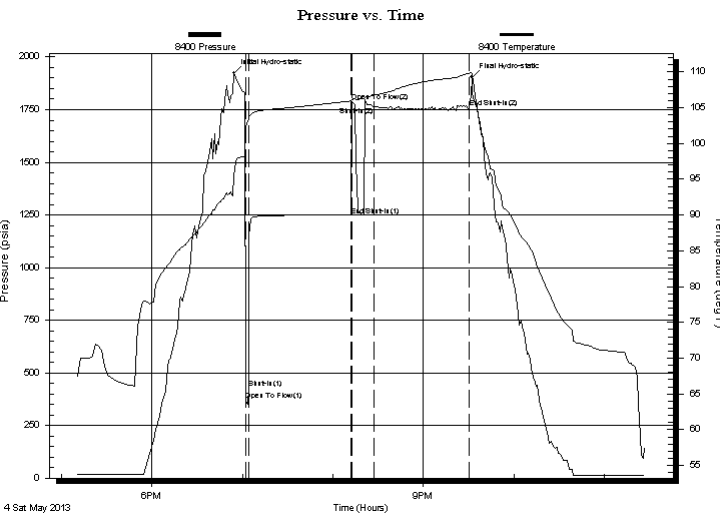
Start Time: 17:10:00

End Time: 23:27:00

Time On Btm: 2013.05.04 @ 18:54:30

Time Off Btm: 2013.05.04 @ 21:32:00

**TEST COMMENT:** 1st Open/ 2 minutes. Strong blow built to bottom of 5 gallon bucket in 20 seconds.  
 1st Shut In/ 60 Minutes. Blow back built to 2 inches in 5 gallon bucket.  
 2nd Open/ 15 minutes. No blow flushed tool and still no blow.  
 2nd Shut In/ 60 Minutes. No blow back.



## PRESSURE SUMMARY

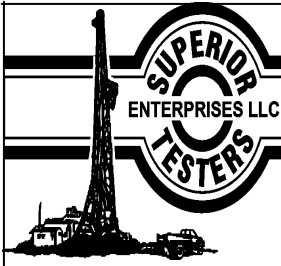
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1923.17	95.50	Initial Hydro-static
8	370.36	102.36	Open To Flow (1)
10	427.00	103.33	Shut-In(1)
78	1248.31	105.95	End Shut-In(1)
78	1788.03	106.09	Open To Flow (2)
93	1764.79	106.70	Shut-In(2)
157	1759.65	109.80	End Shut-In(2)
158	1904.23	109.74	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	No gas	0.00
45.00	100% mud	0.63
372.00	100% water	5.22
0.00	chloride recov. 28000 ppm	0.00
0.00	resist recov .21 ohms @ 40 degrees.	0.00

## Gas Rates

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



# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

FG Holl Company LLC

**31/20s/15w/Barton**

9431 E. Central STE. 100 Wichita Kansas 67208-2563

**Binford/Campbell #1**

Job Ticket: 17580

**DST#: 4**

ATTN: Frank Greenbaum

Test Start: 2013.05.04 @ 17:10:00

## Tool Information

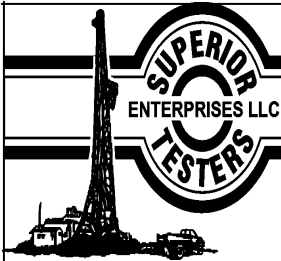
Drill Pipe:	Length: 3802.00 ft	Diameter: 3.80 inches	Volume: 53.33 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 52000.00 lb
			<u>Total Volume: 53.33 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	35.00 ft			String Weight: Initial 40000.00 lb
Depth to Top Packer:	3790.00 ft			Final 44000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	15.00 ft			
Tool Length:	38.00 ft			
Number of Packers:	1	Diameter: 6.75 inches		

Tool Comments:

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

SHut-InTool	5.00		Inside	3772.00	
Hydraulic Tool	5.00			3777.00	
Jars	6.00			3783.00	
Safety Joint	2.00			3785.00	
Packer	5.00			3790.00	23.00 Bottom Of Top Packer
Anchor	10.00			3800.00	
Recorder	1.00	8405	Inside	3801.00	
Recorder	1.00	8400	Outside	3802.00	
Bullnose	3.00			3805.00	15.00 Anchor Tool
<b>Total Tool Length:</b>	<b>38.00</b>				





# DRILL STEM TEST REPORT

## FLUID SUMMARY

FG Holl Company LLC

31/20s/15w/Barton

9431 E. Central STE. 100 Wichita Kansas 67208-2563

Binford/Campbell #1

Job Ticket: 17580

DST#: 4

ATTN: Frank Greenbaum

Test Start: 2013.05.04 @ 17:10:00

### Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.40 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psia

Salinity: 5800.00 ppm

Filter Cake: 1.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	No gas	0.000
45.00	100% mud	0.631
372.00	100% water	5.218
0.00	chloride recov. 28000 ppm	0.000
0.00	resist recov .21 ohms @ 40 degrees.	0.000

Total Length: 417.00 ft      Total Volume: 5.849 bbl

Num Fluid Samples: 0

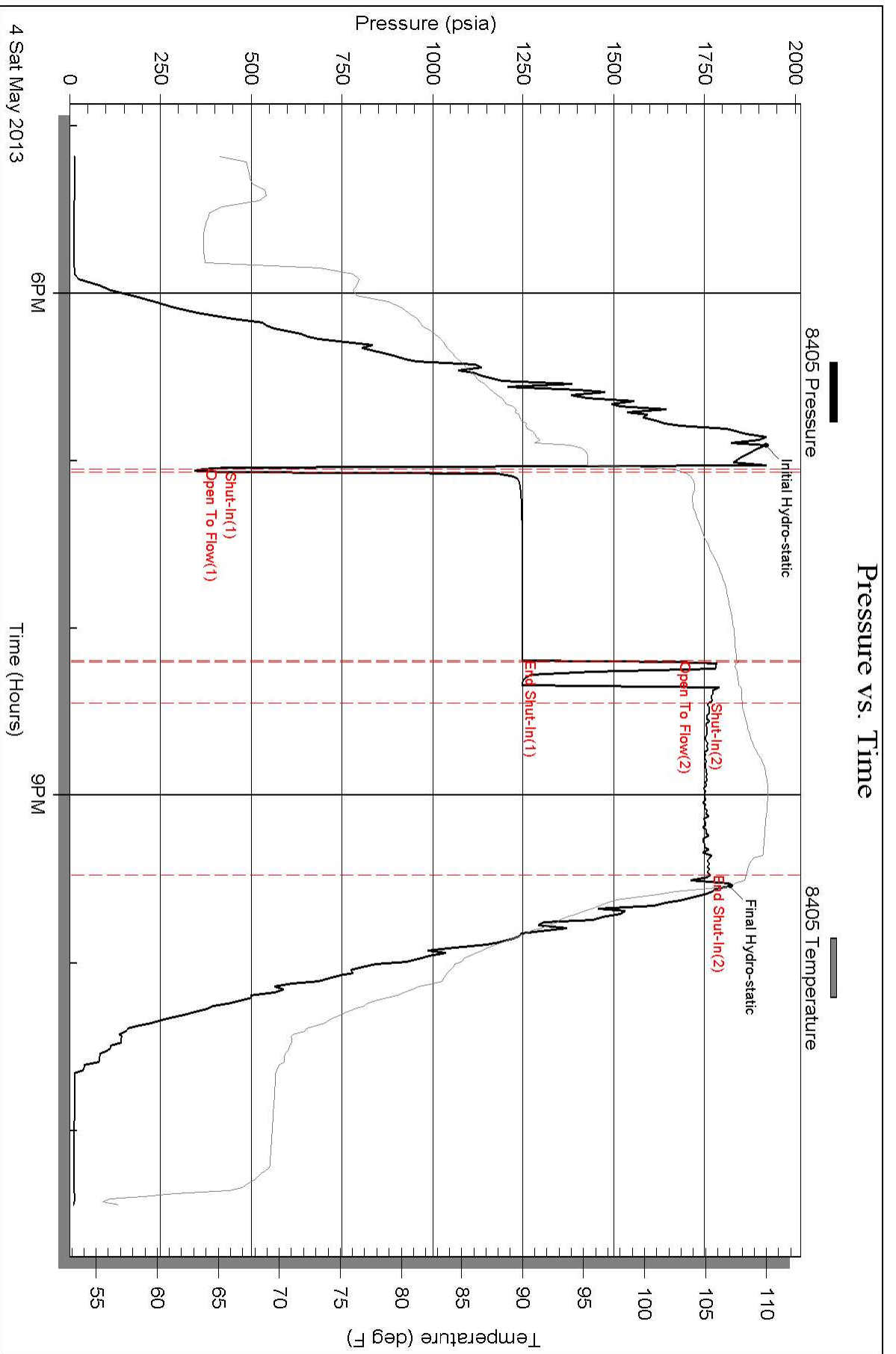
Num Gas Bombs: 0

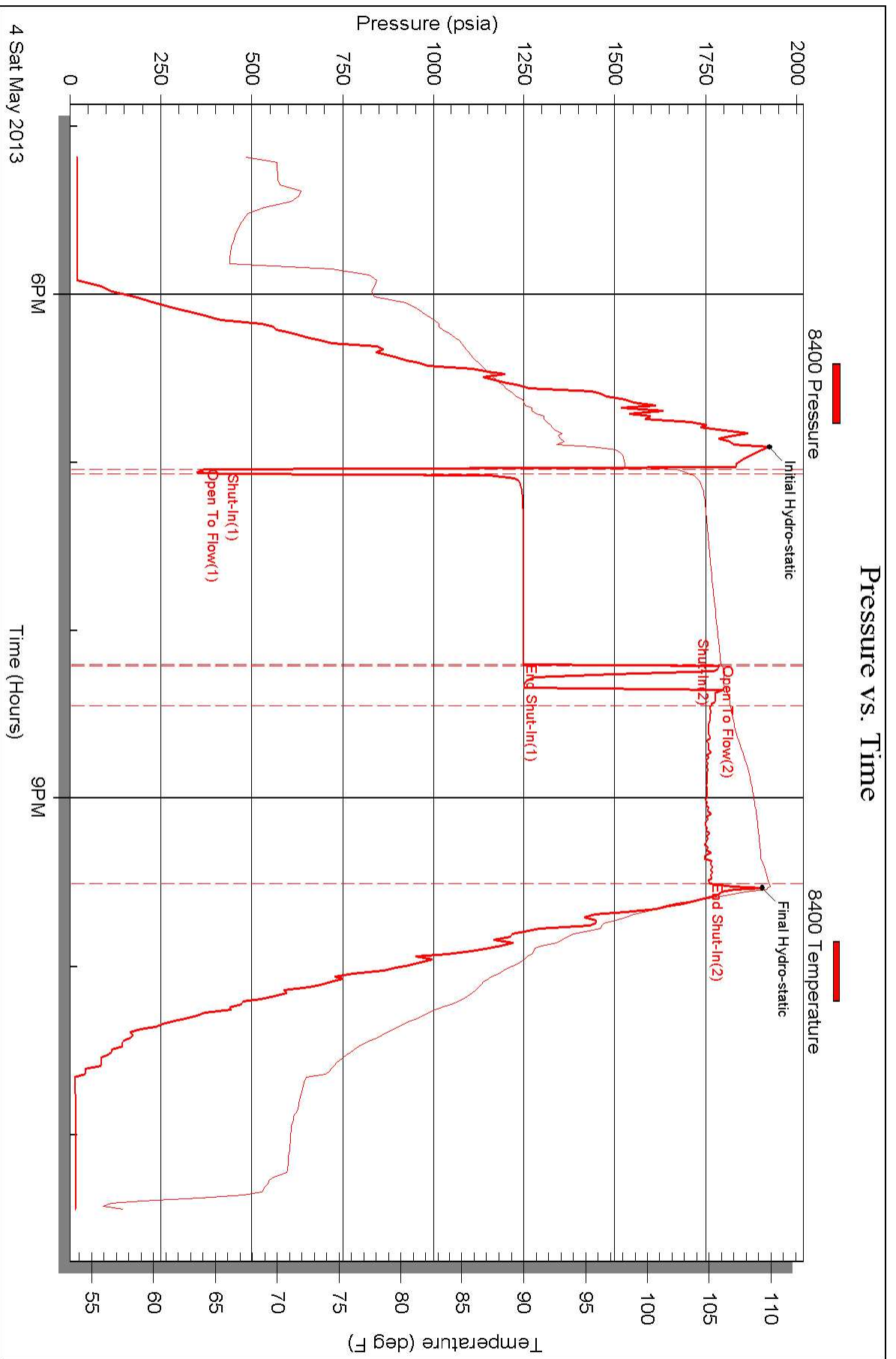
Serial #:

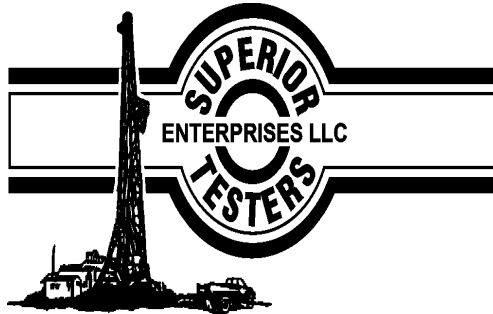
Laboratory Name:

Laboratory Location:

Recovery Comments: Tool plugged off at 2nd open.







## DRILL STEM TEST REPORT

Prepared For: **FG Holl Company LLC**

9431 E. Central STE. 100 Wichita Kansas  
67208-2563

ATTN: Frank Greenbaum

**Binford/Campbell #1**

**31/20s/15w/Barton**

Start Date: 2013.05.05 @ 08:20:00

End Date: 2013.05.05 @ 16:56:00

Job Ticket #: 17581                      DST #: 5

Superior Testers Enterprises LLC  
PO Box 138 Great Bend KS 67530  
1-800-792-6902

Printed: 2013.05.05 @ 17:43:41



# DRILL STEM TEST REPORT

FG Holl Company LLC

**31/20s/15w/Barton**

9431 E. Central STE. 100 Wichita Kansas 67208-2563

**Binford/Campbell #1**

ATTN: Frank Greenbaum

Job Ticket: 17581

**DST#: 5**

Test Start: 2013.05.05 @ 08:20:00

## GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:55:30

Time Test Ended: 16:56:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Shane Konzem

Unit No: 3330/50/Great Bend

**Interval: 3810.00 ft (KB) To 3820.00 ft (KB) (TVD)**

Reference Elevations: 2022.00 ft (KB)

Total Depth: 3820.00 ft (KB) (TVD)

2014.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 8.00 ft

**Serial #: 8405 Inside**

Press @ Run Depth: 1204.57 psia @ 3816.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2013.05.05

End Date:

2013.05.05

Last Calib.:

2013.05.05

Start Time:

08:20:00

End Time:

16:56:00

Time On Btm:

2013.05.05 @ 09:49:00

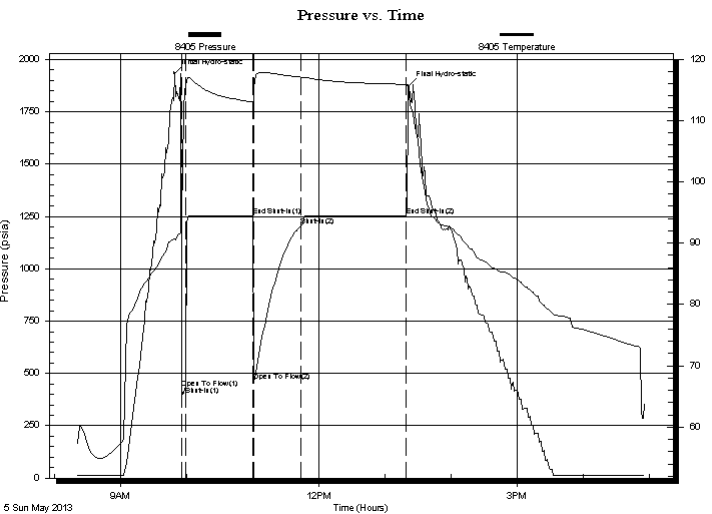
Time Off Btm:

2013.05.05 @ 13:21:30

**TEST COMMENT:** 1st Open/ 4 Minutes. Strong Blow built to bottom of bucket in 30 seconds.

1st Shut In/ 60 Minutes. Strong blow back built to bottom of bucket 45 seconds after 4 minute bleed off. Gas to surface in 5 Minutes.

2nd Open/ 45 Minutes. After a three minute bled off strong blow built to bottom of bucket in 4 seconds. gas at



## PRESSURE SUMMARY

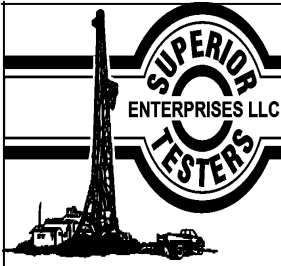
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1934.39	90.71	Initial Hydro-static
7	430.77	94.90	Open To Flow (1)
10	437.53	115.65	Shut-In(1)
71	1254.88	112.99	End Shut-In(1)
72	464.12	115.12	Open To Flow (2)
115	1204.57	117.06	Shut-In(2)
210	1254.35	115.87	End Shut-In(2)
213	1874.60	113.80	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	Gas at surface	0.00
217.00	2.5% gas, 17.5% oil, 30% mud, 50% water	3.04
186.00	10% oil, 90% water	2.61
2170.00	100% water.	30.44
0.00	chloride recov 31000 ppm	0.00
0.00	resist recov. .21 ohms at 50 degrees.	0.00

## Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
First Gas Rate	0.13	8.70	3.26
Last Gas Rate	0.13	0.00	0.00
Max. Gas Rate	0.13	9.15	3.43



# DRILL STEM TEST REPORT

FG Holl Company LLC

31/20s/15w/Barton

9431 E. Central STE. 100 Wichita Kansas 67208-2563

**Binford/Campbell #1**

ATTN: Frank Greenbaum

Job Ticket: 17581

**DST#: 5**

Test Start: 2013.05.05 @ 08:20:00

## GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:55:30

Time Test Ended: 16:56:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Shane Konzem

Unit No: 3330/50/Great Bend

**Interval: 3810.00 ft (KB) To 3820.00 ft (KB) (TVD)**

Reference Elevations: 2022.00 ft (KB)

Total Depth: 3820.00 ft (KB) (TVD)

2014.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 8.00 ft

**Serial #: 8400 Outside**

Press @ Run Depth: 1254.61 psia @ 3817.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2013.05.05

End Date:

2013.05.05

Last Calib.:

2013.05.05

Start Time: 08:20:00

End Time:

16:57:00

Time On Btm:

2013.05.05 @ 09:50:00

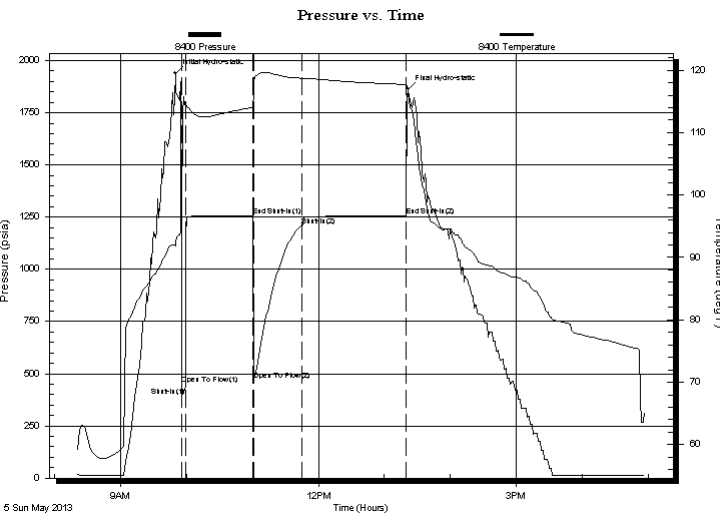
Time Off Btm:

2013.05.05 @ 13:21:30

**TEST COMMENT:** 1st Open/ 4 Minutes. Strong Blow built to bottom of bucket in 30 seconds.

1st Shut In/ 60 Minutes. Strong blow back built to bottom of bucket 45 seconds after 4 minute bleed off. Gas to surface in 5 Minutes.

2nd Open/ 45 Minutes. After a three minute bled off strong blow built to bottom of bucket in 4 seconds. gas at



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1939.69	91.88	Initial Hydro-static
6	451.25	96.11	Open To Flow (1)
9	436.23	114.60	Shut-In(1)
71	1255.22	114.03	End Shut-In(1)
71	467.19	116.18	Open To Flow (2)
115	1208.37	118.71	Shut-In(2)
210	1254.61	117.71	End Shut-In(2)
212	1861.33	116.44	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	Gas at surface	0.00
217.00	2.5% gas, 17.5% oil, 30% mud, 50% water	3.04
186.00	10% oil, 90% water	2.61
2170.00	100% water.	30.44
0.00	chloride recov 31000 ppm	0.00
0.00	resist recov. .21 ohms at 50 degrees.	0.00

## Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
First Gas Rate	0.13	8.70	3.26
Last Gas Rate	0.13	0.00	0.00
Max. Gas Rate	0.13	9.15	3.43



# DRILL STEM TEST REPORT

TOOL DIAGRAM

FG Holl Company LLC

31/20s/15w/Barton

9431 E. Central STE. 100 Wichita Kansas 67208-2563

Binford/Campbell #1

Job Ticket: 17581

DST#: 5

ATTN: Frank Greenbaum

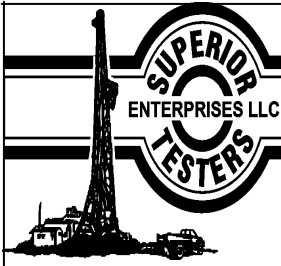
Test Start: 2013.05.05 @ 08:20:00

## Tool Information

Drill Pipe:	Length: 3805.00 ft	Diameter: 3.80 inches	Volume: 53.37 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 62000.00 lb
			<u>Total Volume: 53.37 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	18.00 ft			String Weight: Initial 42000.00 lb
Depth to Top Packer:	3810.00 ft			Final 54000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	10.00 ft			
Tool Length:	33.00 ft			
Number of Packers:	1	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
SHut-InTool	5.00		Inside	3792.00	
Hydraulic Tool	5.00			3797.00	
Jars	6.00			3803.00	
Safety Joint	2.00			3805.00	
Packer	5.00			3810.00	23.00 Bottom Of Top Packer
Anchor	5.00			3815.00	
Recorder	1.00	8405	Inside	3816.00	
Recorder	1.00	8400	Outside	3817.00	
Bullnose	3.00			3820.00	10.00 Anchor Tool
<b>Total Tool Length:</b>	<b>33.00</b>				



# DRILL STEM TEST REPORT

## FLUID SUMMARY

FG Holl Company LLC

**31/20s/15w/Barton**

9431 E. Central STE. 100 Wichita Kansas 67208-2563

**Binford/Campbell #1**

Job Ticket: 17581

**DST#: 5**

ATTN: Frank Greenbaum

Test Start: 2013.05.05 @ 08:20:00

### Mud and Cushion Information

Mud Type: Gel Chem  
 Mud Weight: 9.00 lb/gal  
 Viscosity: 50.00 sec/qt  
 Water Loss: 8.40 in<sup>3</sup>  
 Resistivity: ohm.m  
 Salinity: 5800.00 ppm  
 Filter Cake: 1.00 inches

Cushion Type:  
 Cushion Length: ft  
 Cushion Volume: bbl  
 Gas Cushion Type:  
 Gas Cushion Pressure: psia

Oil API: deg API  
 Water Salinity: ppm

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	Gas at surface	0.000
217.00	2.5% gas, 17.5% oil, 30% mud, 50% w ater	3.044
186.00	10% oil, 90% w ater	2.609
2170.00	100% w ater.	30.439
0.00	chloride recov 31000 ppm	0.000
0.00	resist recov. .21 ohms at 50 degrees.	0.000

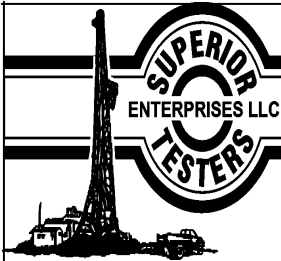
Total Length: 2573.00 ft      Total Volume: 36.092 bbl

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

Laboratory Name:      Laboratory Location:

Recovery Comments:





# DRILL STEM TEST REPORT

**GAS RATES**

FG Holl Company LLC

**31/20s/15w/Barton**

9431 E. Central STE. 100 Wichita Kansas 67208-2563

**Binford/Campbell #1**

Job Ticket: 17581

**DST#: 5**

ATTN: Frank Greenbaum

Test Start: 2013.05.05 @ 08:20:00

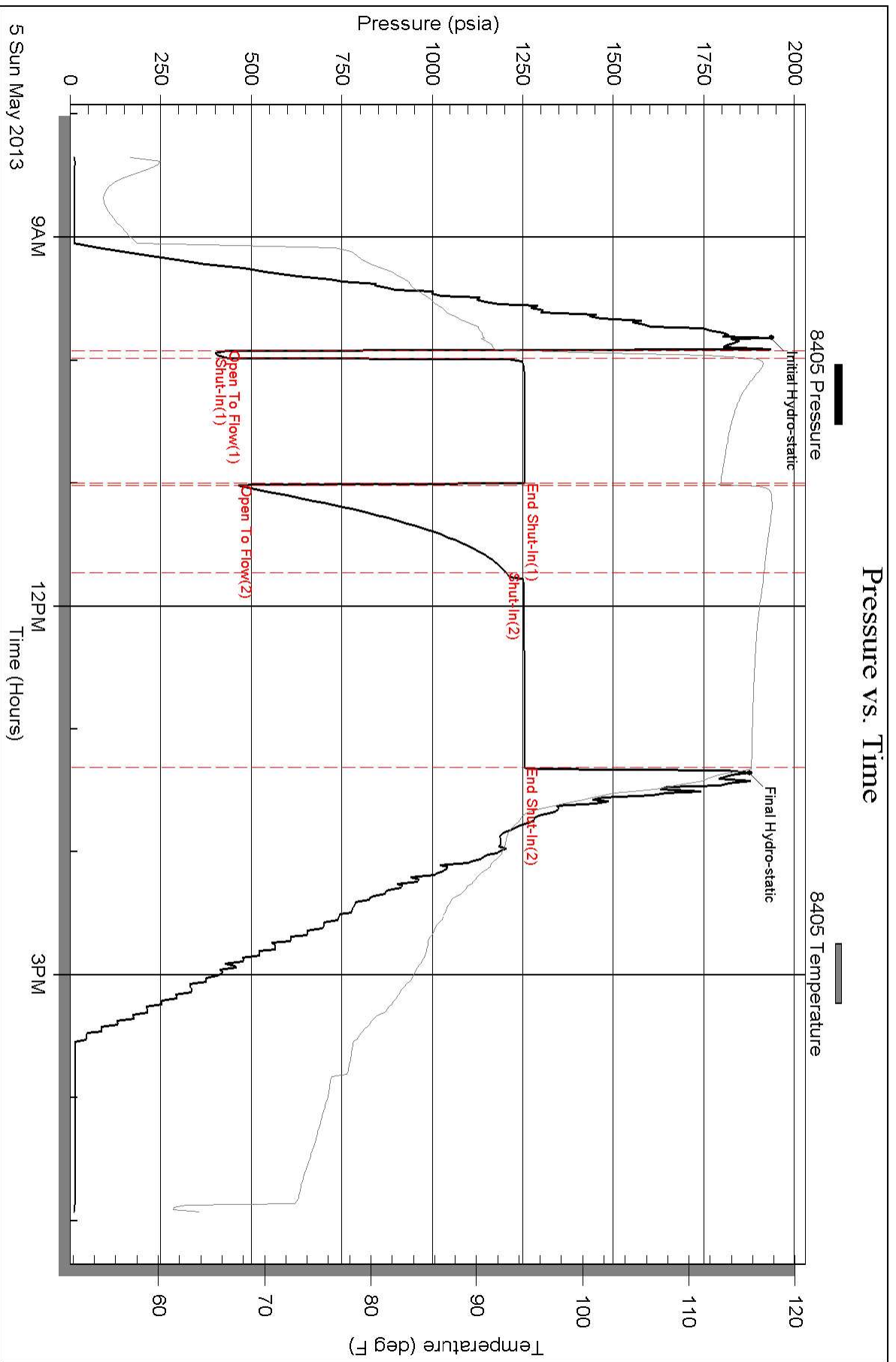
## Gas Rates Information

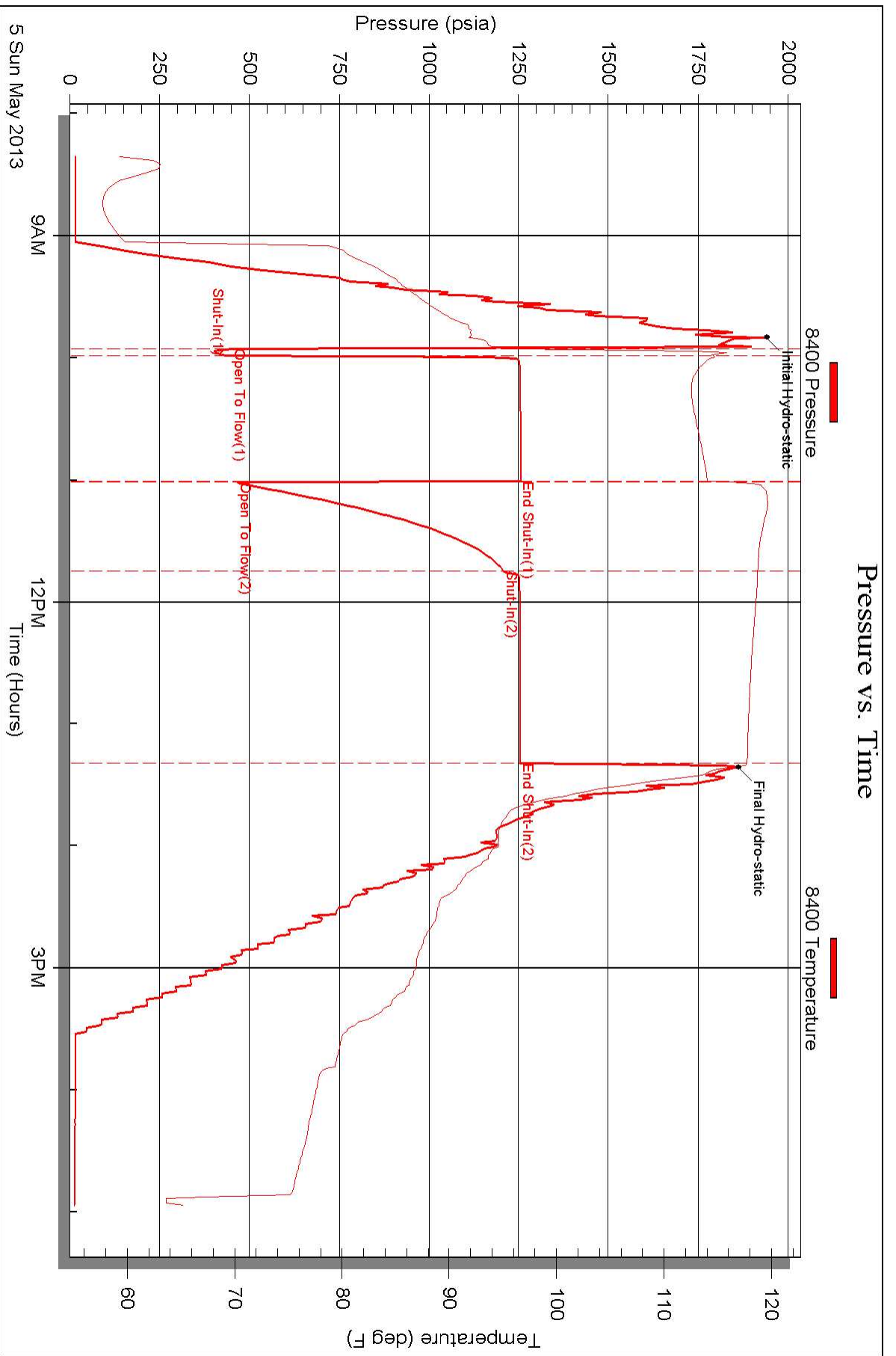
Temperature: 59 (deg F)  
 Relative Density: 0.65  
 Z Factor: 0.8

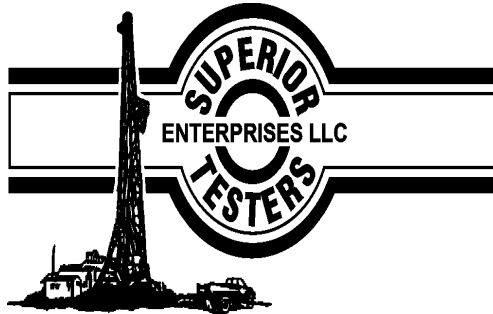
Gas Rates Table

Flow Period	Elapsed Time	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
2	5	0.13	8.70	3.26
2	10	0.13	9.15	3.43
2	20	0.13	8.70	3.26
2	30	0.13	6.10	2.28
2	40	0.13	4.50	1.68
2	45	0.13	0.00	0.00
3	5	0.75	2.85	44.52
3	10	0.75	2.85	44.52
3	15	0.75	2.85	44.52
3	20	0.75	2.85	44.52
3	25	0.75	2.85	44.52
3	30	0.75	2.85	44.52
3	35	0.75	2.85	44.52
3	40	0.75	2.85	44.52
3	45	0.75	2.85	44.52
4	5	0.50	3.95	26.64
4	10	0.50	3.95	26.64
4	15	0.50	3.95	26.64
4	20	0.50	3.95	26.64
4	25	0.50	3.50	23.61
4	30	0.50	3.50	23.61
4	35	0.50	3.50	23.61
4	40	0.50	3.50	23.61
4	45	0.50	2.95	19.90
4	50	0.13	6.36	2.38
4	55	0.13	6.55	2.45
4	60	0.13	6.55	2.45
4	65	0.13	6.55	2.45
4	70	0.13	0.00	0.00

### Pressure vs. Time







## DRILL STEM TEST REPORT

Prepared For: **FG Holl Company LLC**

9431 E. Central STE. 100 Wichita Kansas  
67208-2563

ATTN: Frank Greenbaum

**Binford/Campbell #1**

**31/20s/15w/Barton**

Start Date: 2013.05.06 @ 00:40:00

End Date: 2013.05.06 @ 09:47:30

Job Ticket #: 17582                      DST #: 6

Superior Testers Enterprises LLC  
PO Box 138 Great Bend KS 67530  
1-800-792-6902

Printed: 2013.05.06 @ 10:30:24



# DRILL STEM TEST REPORT

FG Holl Company LLC

31/20s/15w/Barton

9431 E. Central STE. 100 Wichita Kansas 67208-2563

Binford/Campbell #1

Job Ticket: 17582

DST#: 6

ATTN: Frank Greenbaum

Test Start: 2013.05.06 @ 00:40:00

## GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:15:00

Time Test Ended: 09:47:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Shane Konzem

Unit No: 3330/50/Great Bend

Interval: **3820.00 ft (KB) To 3828.00 ft (KB) (TVD)**

Reference Elevations: 2022.00 ft (KB)

Total Depth: 3828.00 ft (KB) (TVD)

2014.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 8.00 ft

**Serial #: 8405 Inside**

Press @ Run Depth: 857.98 psia @ 3824.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2013.05.06

End Date: 2013.05.06

Last Calib.: 2013.05.06

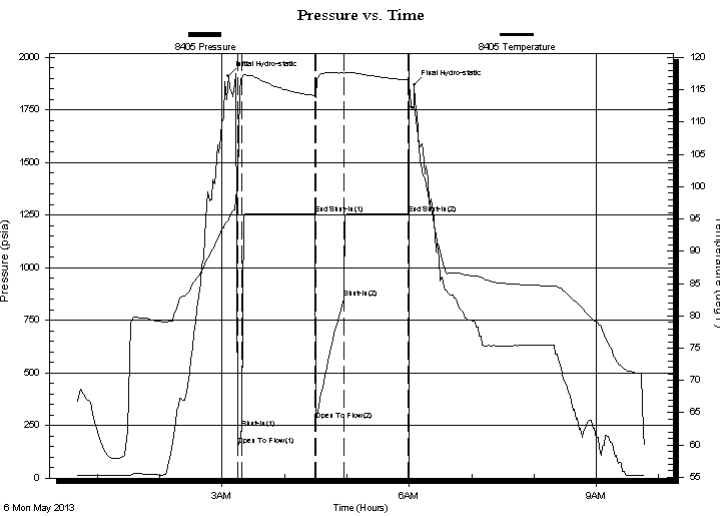
Start Time: 00:40:00

End Time: 09:47:30

Time On Btm: 2013.05.06 @ 03:06:00

Time Off Btm: 2013.05.06 @ 06:05:00

**TEST COMMENT:** 1st Open/ 4 Minutes. Strong blow built to bottom of bucket in 40 seconds.  
 1st Shut In/ 60 Minutes. Good blow back to bottom of 5 gallon bucket in 2 minutes died of to 6 inches.  
 2nd Open/ 30 Minutes. Good blow to bottom of 5 gallon bucket in 1 minute and 30 seconds. No gas to surface  
 2nd Shut In/ 60 Minutes. Good blow back built to bottom of 5 gallon bucket.



## PRESSURE SUMMARY

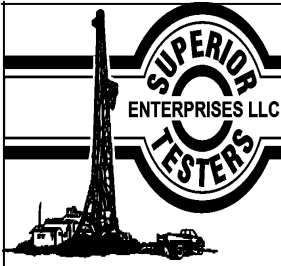
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1912.77	94.79	Initial Hydro-static
9	155.31	101.22	Open To Flow (1)
13	236.03	116.83	Shut-In(1)
84	1258.34	114.06	End Shut-In(1)
84	277.80	113.78	Open To Flow (2)
112	857.98	117.53	Shut-In(2)
173	1257.25	116.55	End Shut-In(2)
179	1868.96	112.23	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	No gas	0.00
248.00	trace oil, 38% mud, 62% w ater	3.48
186.00	40% w ater, 60% mud	2.61
1302.00	100% w ater	18.26
0.00	chloride recov 28000 ppm	0.00
0.00	resist recov .20 ohms at 40 degrees.	0.00

## Gas Rates

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



# DRILL STEM TEST REPORT

FG Holl Company LLC

31/20s/15w/Barton

9431 E. Central STE. 100 Wichita Kansas 67208-2563

Binford/Campbell #1

Job Ticket: 17582

DST#: 6

ATTN: Frank Greenbaum

Test Start: 2013.05.06 @ 00:40:00

## GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:15:00

Time Test Ended: 09:47:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Shane Konzem

Unit No: 3330/50/Great Bend

Interval: **3820.00 ft (KB) To 3828.00 ft (KB) (TVD)**

Reference Elevations: 2022.00 ft (KB)

Total Depth: 3828.00 ft (KB) (TVD)

2014.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 8.00 ft

Serial #: **8400** Outside

Press @ Run Depth: 1258.15 psia @ 3825.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2013.05.06

End Date: 2013.05.06

Last Calib.: 2013.05.06

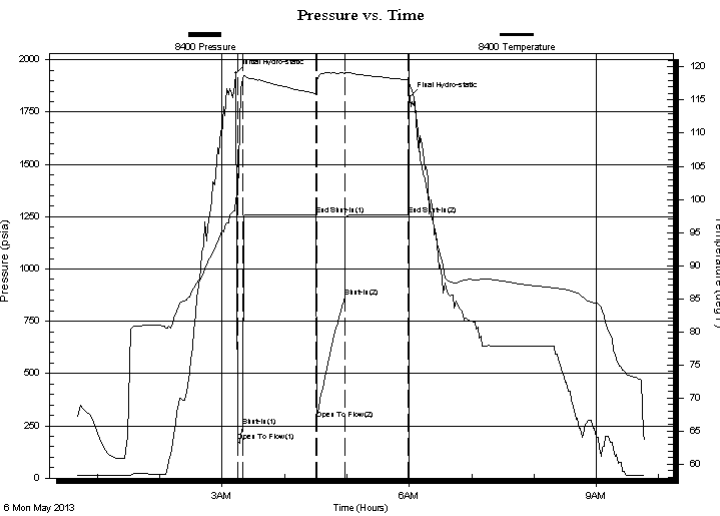
Start Time: 00:40:00

End Time: 09:47:00

Time On Btm: 2013.05.06 @ 03:13:30

Time Off Btm: 2013.05.06 @ 06:00:30

**TEST COMMENT:** 1st Open/ 4 Minutes. Strong blow built to bottom of bucket in 40 seconds.  
 1st Shut In/ 60 Minutes. Good blow back to bottom of 5 gallon bucket in 2 minutes died of to 6 inches.  
 2nd Open/ 30 Minutes. Good blow to bottom of 5 gallon bucket in 1 minute and 30 seconds. No gas to surface  
 2nd Shut In/ 60 Minutes. Good blow back built to bottom of 5 gallon bucket.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1935.76	100.30	Initial Hydro-static
2	175.64	100.63	Open To Flow (1)
6	246.82	118.31	Shut-In(1)
77	1258.59	116.00	End Shut-In(1)
78	284.08	117.62	Open To Flow (2)
105	864.90	119.01	Shut-In(2)
166	1258.15	118.07	End Shut-In(2)
167	1825.04	117.14	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	No gas	0.00
248.00	trace oil, 38% mud, 62% w ater	3.48
186.00	40% w ater, 60% mud	2.61
1302.00	100% w ater	18.26
0.00	chloride recov 28000 ppm	0.00
0.00	resist recov .20 ohms at 40 degrees.	0.00

## Gas Rates

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



# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

FG Holl Company LLC

**31/20s/15w/Barton**

9431 E. Central STE. 100 Wichita Kansas 67208-2563

**Binford/Campbell #1**

Job Ticket: 17582

**DST#: 6**

ATTN: Frank Greenbaum

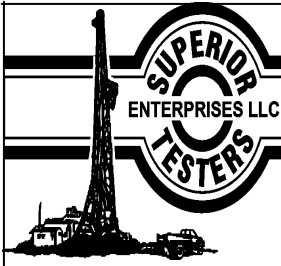
Test Start: 2013.05.06 @ 00:40:00

## Tool Information

Drill Pipe:	Length: 3808.00 ft	Diameter: 3.80 inches	Volume: 53.42 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 58000.00 lb
			<u>Total Volume: 53.42 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	11.00 ft			String Weight: Initial 42000.00 lb
Depth to Top Packer:	3820.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	8.00 ft			
Tool Length:	31.00 ft			
Number of Packers:	1	Diameter: 6.75 inches		
Tool Comments:				

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

SHut-InTool	5.00		Inside	3802.00	
Hydraulic Tool	5.00			3807.00	
Jars	6.00			3813.00	
Safety Joint	2.00			3815.00	
Packer	5.00			3820.00	23.00 Bottom Of Top Packer
Anchor	3.00			3823.00	
Recorder	1.00	8405	Inside	3824.00	
Recorder	1.00	8400	Outside	3825.00	
Bullnose	3.00			3828.00	8.00 Anchor Tool
<b>Total Tool Length:</b>	<b>31.00</b>				



# DRILL STEM TEST REPORT

## FLUID SUMMARY

FG Holl Company LLC

**31/20s/15w/Barton**

9431 E. Central STE. 100 Wichita Kansas 67208-2563

**Binford/Campbell #1**

Job Ticket: 17582

**DST#: 6**

ATTN: Frank Greenbaum

Test Start: 2013.05.06 @ 00:40:00

### Mud and Cushion Information

Mud Type: Gel Chem  
 Mud Weight: 9.00 lb/gal  
 Viscosity: 48.00 sec/qt  
 Water Loss: 9.20 in<sup>3</sup>  
 Resistivity: ohm.m  
 Salinity: 6200.00 ppm  
 Filter Cake: 1.00 inches

Cushion Type:  
 Cushion Length: ft  
 Cushion Volume: bbl  
 Gas Cushion Type:  
 Gas Cushion Pressure: psia

Oil API: deg API  
 Water Salinity: ppm

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	No gas	0.000
248.00	trace oil, 38% mud, 62% w ater	3.479
186.00	40% w ater, 60% mud	2.609
1302.00	100% w ater	18.264
0.00	chloride recov 28000 ppm	0.000
0.00	resist recov .20 ohms at 40 degrees.	0.000

Total Length: 1736.00 ft      Total Volume: 24.352 bbl

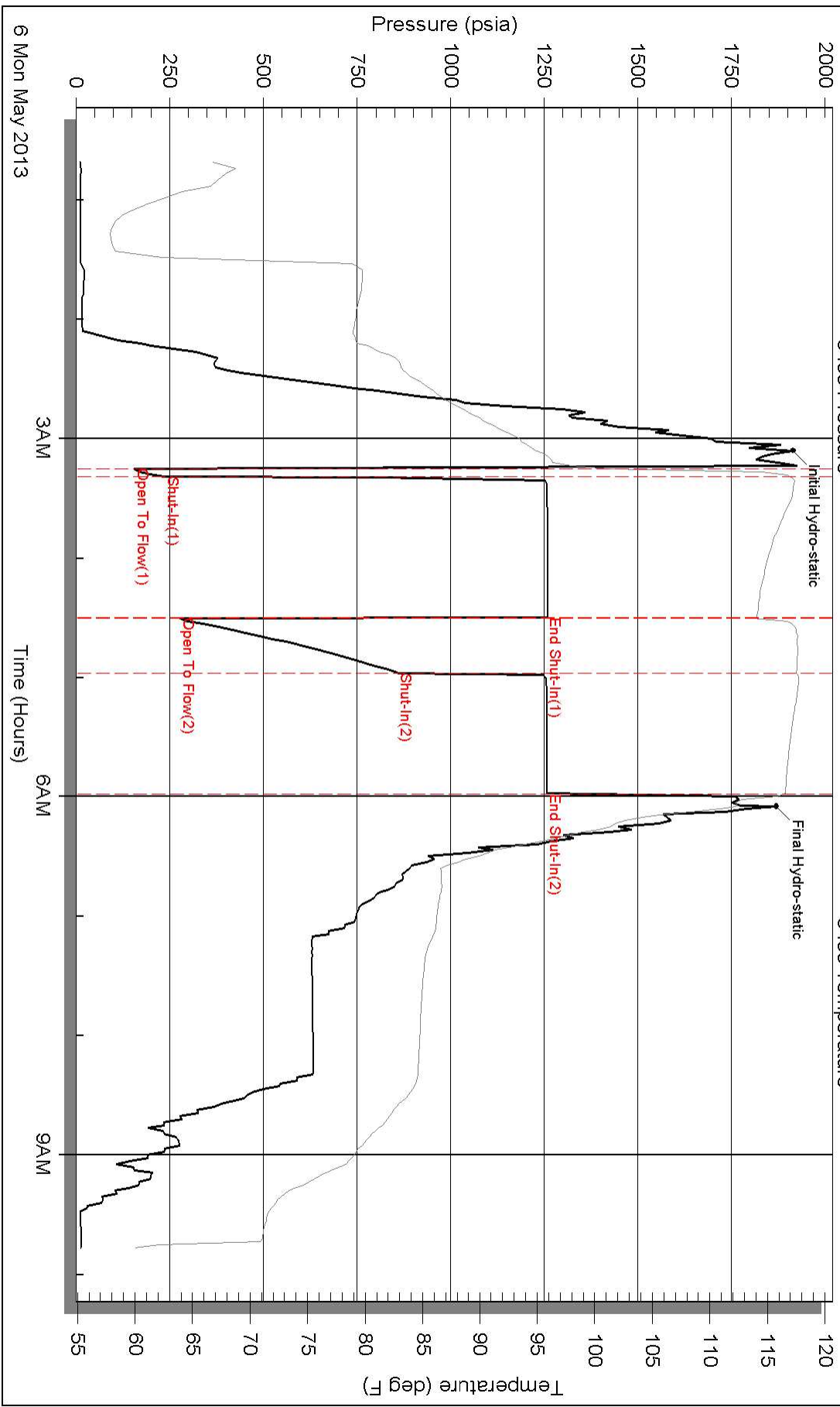
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:

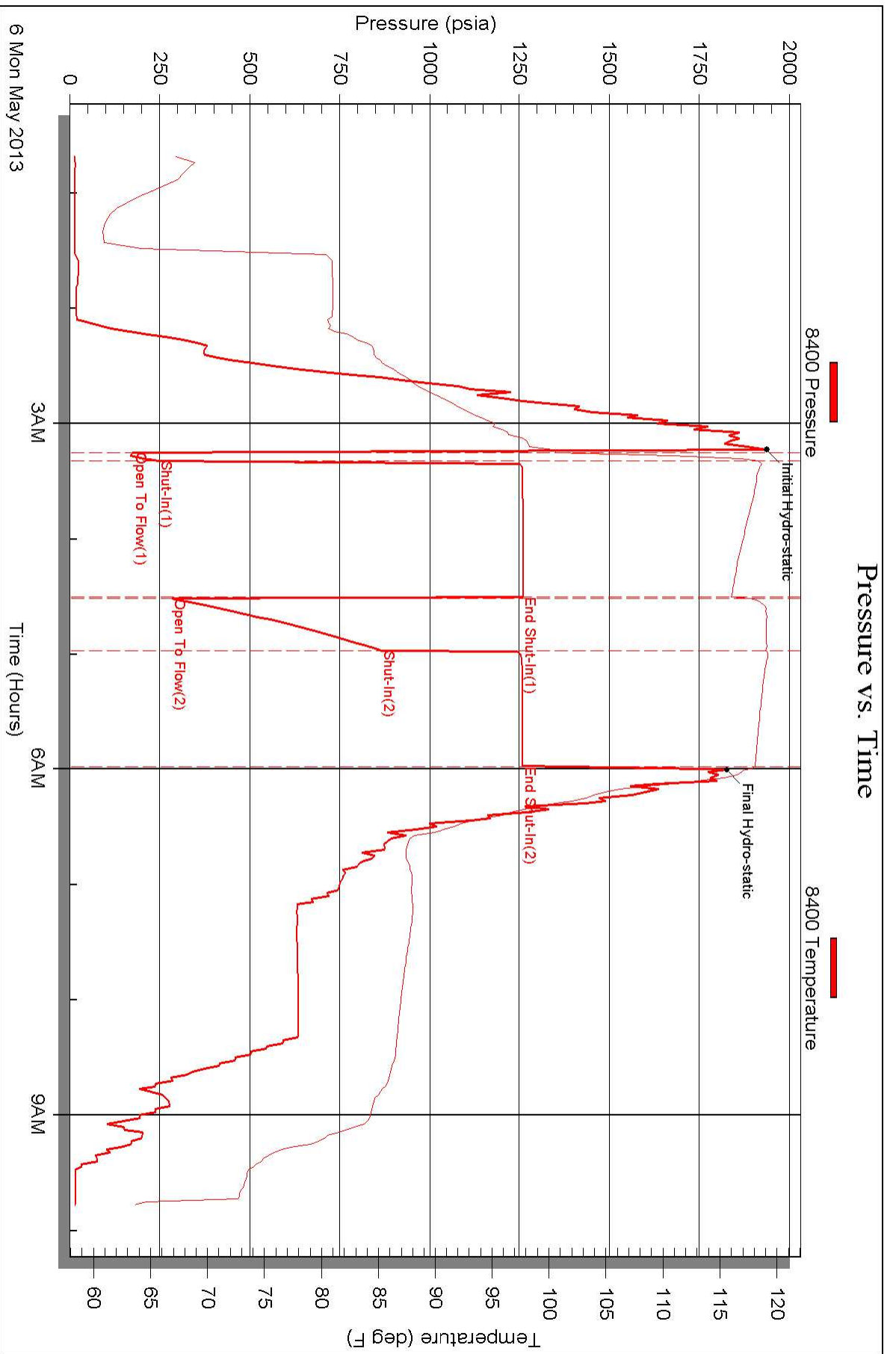
Laboratory Name:      Laboratory Location:

Recovery Comments:



### Pressure vs. Time





Customer E.G. Holl Company, LLC	Lease No.	Date 6-19-13
Lease Binford/Campbell	Well # 1-31	
Field Order # 8475	Station Pratt, Kansas	Casing 5/2 14 1/2
Type Job C NW - Squeeze Arbuttle Perforations	Depth 3891 Feet	County Barton
	Formation Arbuttle	State Kansas
		Legal Description 31-20S-15W

PIPE DATA		PERFORATING DATA		FLUID USED		TREATMENT RESUME		
Casing Size	Tubing Size	Shots/Ft		Acid	RATE	PRESS	ISIP	
5/2 14 1/2	2 7/8			350 Gallons				
Depth 3891 Feet	Depth 3715 FT	From 3812	To 3815	158 Regular	Max		5 Min.	
Volume 95 Bbl	Volume 21.5 Bbl	From	To	15 sacks	Min		10 Min.	
Max Press	Max Press	From	To	Fine-Pore Space cement	Avg		15 Min.	
Well Connection 8" DP	Annulus Vol. 615 Bbl	From	To		HHP Used		Annulus Pressure	
Plug Depth NA	Packer Depth 3715 FT	From	To	Flush 24 Bbl Fresh Water	Gas Volume		Total Load	

Customer Representative Rob Long	Station Manager Kevin Gordley	Treater Clarence R. Messick
Service Units 37,216	27,463	33703
Driver Names Messick	McGraw	Rocky

Time AM	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
7:45					Truckson location and hold safety meeting.
					Arbuttle Perforations 3812 FT to 3815 FT Packer set at 3715 Feet upon arrival.
8:46	100			3	Start to fill Annulus with salt water.
	500		4		Annulus full Pressure it up and shut it in.
8:51		100		3	start to fill tubing.
		1200	2	1	Tubing full Pumping steady.
					Stop pumping. Order Acid.
	500				Acid on location. Open by pass on packer.
10:49	-0-	300		2.5	Start to spott Acid to packer.
10:55					Acid on spott Set packer.
	500		21		Repressure Annulus and shut it in.
10:58		1700		1	Start pumping steady.
		950	25	3	Acid on perforations.
		Vac	33		stop pumping. Start mixing 15 sacks Fine-Pore-Space cement.
11:20		100		3	Start pumping cement.
		100	4	3	Start Freshwater Displacement.
11:30		2,000	25		Well holding pressure.
11:35	500				Release pressure No returns.
	300			3	Release packer and start to reverse out.
			30		Well clean Pulls Joints and wash up pump truck.
12:03		500			Pressure up tubing and shut it in.



**BASIC**<sup>SM</sup>  
ENERGY SERVICES  
PRESSURE PUMPING & WIRELINE

10244 NE Hwy. 61  
P.O. Box 8613  
Pratt, Kansas 67124  
Phone 620-672-1201

FIELD SERVICE TICKET

1718 08475 A

DATE \_\_\_\_\_ TICKET NO. \_\_\_\_\_

31-205-15W

DATE OF JOB 6-11-13	DISTRICT Pratt, Kansas	NEW WELL <input checked="" type="checkbox"/>	OLD WELL <input type="checkbox"/>	PROD <input type="checkbox"/>	INJ <input type="checkbox"/>	WDW <input type="checkbox"/>	CUSTOMER ORDER NO.:		
CUSTOMER E.G. Hall Company, LLC	LEASE Binford/Campbell	WELL NO. 1-31							
ADDRESS	COUNTY Barton	STATE Kansas							
CITY	STATE	SERVICE CREW C. Messich, M. McGraw, R. Pierce							
AUTHORIZED BY	JOB TYPE: C.U.V. - Squeeze Fracture Perforations								
EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQUIPMENT#	HRS	TRUCK CALLED	DATE	AM/PM	TIME
27216	4						6/11/13	5:00	
						ARRIVED AT JOB	6/11/13	8:15	
27463	4					START OPERATION		8:45	
						FINISH OPERATION		12:45	
33703	1					RELEASED	6/11/13	1:00	
						MILES FROM STATION TO WELL			65

CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered).

The undersigned is authorized to execute this contract as an agent of the customer. As such, the undersigned agrees and acknowledges that this contract for services, materials, products, and/or supplies includes all of and only those terms and conditions appearing on the front and back of this document. No additional or substitute terms and/or conditions shall become a part of this contract without the written consent of an officer of Basic Energy Services LP.

SIGNED: R. L. Sney  
(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUNT
CP 108	Fine-Pore Spare Cement	sk	15		\$ 3,000.00
AK 325	15% HCL Acid	Gal	350		\$ 700.00
C 204	CTP-100 Inhibitor	Gal	1		\$ 75.00
E 100	Perfor Mileage	mi	65		\$ 276.25
E 101	Heavy Equipment Mileage	mi	195		\$ 1,365.00
E 102	Both Perfor				
CE 204	Cement Pump 3000 Feet To 4000 Feet	hrs	4		\$ 2,160.00
CE 240	Blending and Mixing Service	sk	15		\$ 210.00
S 003	Service Supervisor	hrs	8		\$ 175.00
CE 500	Squeeze Material	sk	1		\$ 430.00

CHEMICAL / ACID DATA:			

SUB TOTAL		16	\$ 5,741.98
SERVICE & EQUIPMENT	%TAX ON \$		
MATERIALS	%TAX ON \$		
TOTAL			



Customer <b>F.G. HOLL</b>	Lease No.	Date <b>06-25-13</b>	
Lease <b>Bidford/Campbell</b>	Well # <b>1-31</b>		
Field Order # <b>8380</b>	Station <b>PRH #</b>	Casing <b>5 1/2"</b>	Depth
Type Job <b>cmw square</b>	Formation	County <b>BARTON</b>	State <b>KS</b>
		Legal Description <b>31.80-15</b>	

PIPE DATA		PERFORATING DATA		FLUID USED		TREATMENT RESUME		
Casing Size	Tubing Size	Screen Ft	Acid	RATE	PRESS	ISIP		
<b>3 1/2"</b>	<b>2 7/8"</b>	<b>15 sk Fine Pore cmf</b>	<b>Pre Pad</b>	Max		5 Min.		
Depth <b>104</b>	Depth <b>3715</b>	From <b>3819</b>	To <b>3822</b>	Min		10 Min.		
Volume <b>2.4</b>	Volume <b>21.5</b>	From	To	Avg		15 Min.		
Max Press	Max Press	From	To	HHP Used		Annulus Pressure		
Well Connection	Annulus Vol.	From	To	Gas Volume		Total Load		
Plug Depth	Packer Depth <b>3715</b>	From	To					

Customer Representative	Station Manager <b>DAVE SECK</b>	Treater <b>Robert J. ...</b>
Service Units <b>37900</b>	<b>33708</b>	<b>20920</b>
Driver Names <b>Sullivan</b>	<b>Edmalle</b>	

Time	Casing Pressure	Tubing Pressure	Bbbs. Pumped	Rate	Service Log
<b>3:20</b>					<b>on the soft, met y</b>
<b>3:50</b>		<b>0</b>		<b>3'</b>	<b>2' load hole</b>
			<b>35</b>		<b>Hole Loaded</b>
		<b>200</b>		<b>4</b>	<b>St fluid</b>
			<b>18</b>		<b>St flush</b>
<b>4:10</b>			<b>27</b>		<b>Acid spotted</b>
	<b>500</b>		<b>10</b>		<b>Pressure up Annulus</b>
		<b>0</b>		<b>2.5</b>	<b>Block down</b>
			<b>0</b>	<b>4</b>	<b>INCREASE RATE</b>
		<b>350</b>	<b>9</b>	<b>3 1/2</b>	<b>load</b>
		<b>400</b>		<b>3</b>	
<b>4:30</b>		<b>0</b>	<b>28</b>		<b>Shut down over flush Fd</b>
					<b>mix of cmf 3 1/2 BBL 15sk Fine Pore cmf</b>
<b>4:45</b>			<b>4</b>	<b>2</b>	<b>St Sodium Silicate</b>
			<b>2</b>		<b>St flush</b>
				<b>3 1/2</b>	<b>St cmf</b>
<b>4:55</b>				<b>2</b>	<b>St Disin</b>
			<b>14</b>		<b>Pressure increase</b>
	<b>500</b>		<b>20</b>		<b>cut and ports</b>
<b>5:15</b>		<b>950</b>	<b>23 1/2</b>		<b>Shut down</b>
<b>5:25</b>		<b>0</b>	<b>23 3/4</b>		<b>move 1/4 BBL</b>



energy services, L.P.

Page 2 of 2

TREATMENT REPORT

Customer <b>F. G. HOLL</b>		Lease No.		Date	
Lease <b>Burford/Campbell</b>		Well # <b>1-31</b>		Date <b>06-25-13</b>	
Field Order # <b>8380</b>	Station <b>PR44</b>	Casing	Depth	County <b>BARTON</b>	State <b>MO</b>
Type Job <b>CNW</b>			Formation	Legal Description <b>7-20-15</b>	

PIPE DATA		PERFORATING DATA		FLUID USED	TREATMENT RESUME		
Casing Size	Tubing Size	Shots/Ft		Acid	RATE	PRESS	ISIP
Depth	Depth	From	To	Pre Pad	Max		5 Min.
Volume	Volume	From	To	Pad	Min		10 Min.
Max Press	Max Press	From	To	Frac	Avg		15 Min.
Well Connection	Annulus Vol.	From	To		HHP Used		Annulus Pressure
Plug Depth	Packer Depth	From	To	Flush	Gas Volume		Total Load

Customer Representative	Station Manager <b>DAVE SCOTT</b>	Treater <b>Robert Sullivan</b>
-------------------------	-----------------------------------	--------------------------------

Service Units									
Driver Names									

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
0:06	200			2	Release Ann Revide out
0:15			30		shut down
0:25		500			Put 10 JTS
					Plancon Tube
					shut in
					Job Complete
					Thank you

# Mud-Co / Service Mud Inc.

Operator FG Holl County Barton State Kansas Pump 6 X 14 X 60 SPM Casing Program 8 5/8" @ 1015 ft.  
 Well Binford Campbell #1-31 Location \_\_\_\_\_ GPM \_\_\_\_\_ 7.75 BPM \_\_\_\_\_ " @ \_\_\_\_\_ ft.  
 Contractor Duke #8 Sec 31 TWP 20S RNG 15W D.P. 4.5 in. \_\_\_\_\_ 191 FT/MIN R.A. \_\_\_\_\_ " @ \_\_\_\_\_ ft.  
 Stockpoint Pratt, Ks. Date 4/26/2013 Engineer Rick Hughes Collar 6.25 in. 495 ft. \_\_\_\_\_ 348 FT/MIN R.A. \_\_\_\_\_ Total Depth 3950 ft.

DATE	DEPTH feet	WEIGHT lb/gal	VISCOSITY			GELS 10 sec / 10 min.	pH Strip _ Meter _	FILTRATION/FILTRATION ANALYSIS					SAND %	RETORT			L.C.M.	Pump Press. PSI	CUMULATIVE COST	REMARKS AND TREATMENT		
			Sec API @ ___F	PV @ ___F	Yp			ml API	Cake 32nds	Pres. #BBL	Cl ppm	Ca ppm		Solids %	Oil %	Water %						
4/26	0																				RURT	
4/27	1015																				Cement SP	
4/28	1436	8.8	30	4	3	1/2	11.0	N/C	-		2,000	N/C		3.5		96.5					Drig. Displace w/starch @ 1706	
4/29	2183	9.5	46	8	22	23/38	7.0	14.6	4		66m	Hvy		4.6		95.4					Drig. Displaced w/Chem @ 2677	
4/30	2747	8.7	56	15	17	17/42	11.5	6.8	1		2,700	20		2.3		97.7					Drig.	
5/1	3346	9.3	54	20	13	15/43	11.0	6.8	1		4,800	20		6.8		93.2					Drig.	
5/2	3715	9.4	52	15	17	17/42	10.5	7.2	1		4,800	20		7.5		92.5					CFS DST #1 @ 3750	
5/3	3775	9.3	63	18	13	13/34	9.5	8.0	1		5,500	80		6.8		93.2					DST #2 DST #2 @ 3775	
5/4	3790	9.2	50	13	11	31/48	11.5	8.4	1		5,800	20		6.1		93.9					Brk Circ @ Collars DST #3 @ 3790	
5/5	3820	9.1	48	11	10	25/46	10.5	9.2	1		6,200	60		5.4		94.6					DST #5 DST #4 @ ?	
5/6	3828	8.9	57	15	15	24/68	10.5	9.2	1		8,600	80		3.7		96.3					TI w/Bit after DST 6	
5/7	3950	8.8	66	20	18	30/72	11.0	8.0	1		7,100	20		3.3		96.7					Final: LTD - 3954'. 6 DST's. Run Casing.	
																						Unable to use displacement ditch after displacing due to a full reserve pit. Had to mix xtra mud to replace volume from jetting DST recovery
																						Reserve Pit, Chl content ppm: 36,000 Estimated Volume: 800 bbls

**MUD-CO / SERVICE MUD INC.**

100 S. Main Suite #310  
Wichita, Ks. 67202  
316/264-2814 Fax: 316/264-5024

**DRILLING MUD RECAP**

Materials	Sacks	Amount	Materials	Sacks	Amount	Amount
C/S HULLS	50					
CAUSTIC SODA	24					
DESCO	3					
DRILL PAK	9					
LIME	6					
MIL-GUARD	1					
PREMIUM GEL	409					
SODA ASH	29					
STARCH	62					
SUPER LIG	13					
						Total Mud Cost
						Trucking Cost
						Trucking Surcharge
						Taxes
						<b>TOTAL COST</b>







## TREATMENT REPORT

Lease No. G. Hall		Date 5-7-13	
Well # 1-31		County Baldwin State MS	
Order # 3942	Station P. Hall	Casing 5 1/2	Depth 3942
Type Job CNW - 5 1/2 L.S.		Formation	Legal Description 31-20-15

PIPE DATA		PERFORATING DATA		FLUID USED		TREATMENT RESUME		
Casing Size	Tubing Size	Shots/Ft		Acid	RATE	PRESS	ISIP	
5 1/2		2000	5	Pre Pad	Max		5 Min.	
Depth 3942	Depth	From	To 1250	AAJ @ 15#/gal	Min		10 Min.	
Volume 96	Volume	From	To	Pad	Avg		15 Min.	
Max Press 1200	Max Press	From	To 500	Frac 60/100 R/H/W	HHP Used		Annulus Pressure	
Well Connection P.C.	Annulus Vol.	From	To	Flush 95.1	Gas Volume		Total Load	
Plug Depth 3900	Packer Depth	From	To					

Customer Representative Robinson	Station Manager Dase Scott	Treater Steve Orlando
----------------------------------	----------------------------	-----------------------

Service Units 2722 2743 19831/19862	Driver Names O'Leary, Mottel, P. Hall
-------------------------------------	---------------------------------------

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
11:00					On location Safety Meeting
					Ran 90 strokes 5 1/2 14E casing
					Conductivity 1-2-3-4-5-6-7-8
					Basket # 5 collar GP
					Casing on bottom Break Circ w/d
	350		5	5	1120 Ahead
	350		12	5	12 bbl super flush
	350		5	5	1120 spacer
	350		6	5	net 25 strokes @ 14E/gal
	350		31.8	5	net 125 strokes AAJ @ 15#/gal
					Clear Annulus Release plug
	0		0	6	Start 1120 Displacement
	400		25	5	1120 pressure
	600		85	4	Slow Rate
8:30 PM	1500		95%	4	Plug Down - Hold
			4/4		Plug R/H/W w/5000 60/100 per



10244 NE Hwy. 61  
 P.O. Box 8613  
 Pratt, Kansas 67124  
 Phone 620-672-1201

FIELD SERVICE TICKET  
 1718 08597 A

DATE \_\_\_\_\_ TICKET NO. \_\_\_\_\_

DATE OF JOB 06-14-13	DISTRICT P107	NEW WELL <input type="checkbox"/>	OLD WELL <input type="checkbox"/>	PROD <input type="checkbox"/>	INJ <input type="checkbox"/>	WDW <input type="checkbox"/>	CUSTOMER ORDER NO.:			
CUSTOMER F. J. HOLL	LEASE						WELL NO.			
ADDRESS		COUNTY			STATE					
CITY		SERVICE CREW Sull, [unclear], [unclear], Kuemin								
AUTHORIZED BY		JOB TYPE: CNW Spool								
EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQUIPMENT#	HRS	TRUCK CALLED	DATE	AM	PM	TIME
27463	1						6-14-13			11:00
19831-1180	1									11:00
37900										2:30
										2:50
										4:30
						MILES FROM STATION TO WELL				65

CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered).

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SIGNED: [Signature]  
 (WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUNT
CP 1001	Common	SH	25		400.00
AK 325	154 HLL	HL	25		500.00
AK 341	AK Common	HL	25		30.00
AK 342	AK Common	HL	25		62.50
C 204	Tubing	HL	1		75.00
2100	154 HLL	HL	60		776.25
E 101	Moisture Egg	HL	130		910.00
E 112	Ball Valve	HL	78		134.70
CE 204	154 HLL	HL	1		2100.00
CE 240	154 HLL	HL	25		35.00
S 003	Service	HL	1		175.90

SUB TOTAL

CHEMICAL / ACID DATA:			

SERVICE & EQUIPMENT	%TAX ON \$	
MATERIALS	%TAX ON \$	
TOTAL		

SERVICE \_\_\_\_\_ THE ABOVE MATERIAL AND SERVICE \_\_\_\_\_

**TREATMENT REPORT**

Customer <b>7-9-4066</b>		Lease No.		Date	
Lease <b>Burford/Campbell</b>		Well # <b>1-31</b>		<b>06-14-13</b>	
Field Order # <b>8597</b>	Station	Casing <b>3 1/2"</b>	Depth	County <b>BARTON</b>	State <b>KS</b>
Type Job <b>CMW Squeeze Pads</b>			Formation	Legal Description <b>31-20-15</b>	

PIPE DATA		PERFORATING DATA		FLUID USED		TREATMENT RESUME		
Casing Size	Tubing Size	Shots/Ft		Acid	RATE	PRESS	ISIP	
<b>3 1/2"</b>	<b>2 7/8"</b>			Pre Pad	Max		5 Min.	
Depth	Depth	From <b>3811'</b>	To <b>3813'</b>	Pad	Min		10 Min.	
Volume	Volume	From	To	Frac	Avg		15 Min.	
Max Press	Max Press <b>3,400</b>	From	To		HHP Used		Annulus Pressure	
Well Connection	Annulus Vol.	From	To	Flush	Gas Volume		Total Load	
Plug Depth	Packer Depth <b>3715</b>	From	To					

Customer Representative	Station Manager <b>DAVE SATH</b>	Treater <b>Robert J. [Signature]</b>
-------------------------	----------------------------------	--------------------------------------

Service Units	<b>37900</b>	<b>27463</b>	<b>19831</b>	<b>19867</b>					
Driver Names	<b>Sullivan</b>	<b>MCCRAE</b>	<b>KUONIG</b>						

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
<b>2:15</b>					on for soft medley
<b>2:30</b>			<b>6</b>	<b>2</b>	50 acid 14 flush
			<b>22</b>		Acid on Pad - shut down Pull 3 sts
<b>2:45</b>				<b>2</b>	Set Padover Break down set injection rate Acid Pumped Away
		<b>500</b>	<b>45</b>		mix out 20 st com com mix. D ST Acid
		<b>0</b>	<b>10</b>		
		<b>500</b>	<b>175</b>		PSI INCREASE
<b>3:20</b>		<b>2000</b>	<b>19</b>		back up. 3/4 in. out pads
<b>3:25</b>		<b>0</b>			Reduce PSI
				<b>2</b>	Reverse out
<b>3:45</b>			<b>30</b>		shut down pull 5 sts
<b>3:55</b>	<b>500</b>	<b>500</b>			PSI UP shut in JOB complete

*Thank you*



**BASIC**<sup>SM</sup>  
ENERGY SERVICES  
PRESSURE PUMPING & WIRELINE

10244 NE Hwy. 61  
P.O. Box 8613  
Pratt, Kansas 67124  
Phone 620-672-1201

**FIELD SERVICE TICKET**

1718 08172 A

DATE \_\_\_\_\_ TICKET NO. \_\_\_\_\_

DATE OF JOB: 4-27-13		DISTRICT: Pratt		NEW WELL <input checked="" type="checkbox"/> OLD WELL <input type="checkbox"/>		PROD <input type="checkbox"/> INJ <input type="checkbox"/> WDW <input type="checkbox"/>		CUSTOMER ORDER NO.:		
CUSTOMER: F. G. Hall				LEASE: Birtwell/Campbell				WELL NO.:		13
ADDRESS:				COUNTY: Barton		STATE: KS				
CITY:		STATE:		SERVICE CREW: Ord, Jo, Young, McLean						
AUTHORIZED BY:				JOB TYPE: C New - 8 5/8" Surface						
EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQUIPMENT#	HRS	TRUCK CALLED	DATE	AM	PM	TIME
27283	1						4-27-13			10:30
15875-15875	1									1:00
15876-15876	1									3:30
										4:30
										5:30
						MILES FROM STATION TO WELL: 65				

CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered).

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SIGNED: [Signature]  
(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUNT
CP101	A-Cor 5100	SK	200		3600.00
CP100C	Commercial cement	SK	200		3200.00
CC102	Collar link	Lb	100		320.00
CC107	Calcium Chloride	Lb	940		987.00
CE105	TOP Rubber Plug 8 5/8"	Pa	1		225.00
CE175	Centralizer 8 5/8"	Pa	3		270.00
E100	Pickup Mileage	Mi	65		276.25
E101	Heavy Compaction Mat	Mi	150		910.00
E113	Bull Dog Drill Bit	Pa	1333		1759.21
CE201	8-2 1/2" Chem 995 901-1010	Pa	1		1200.00
CE240	Blind Tool Joint	Pa	1400		560.00
CE501	Plus Cement	Pa	1		250.00
S003	Service Supervisor	Pa	1		175.00

SUB TOTAL: 10473.84

CHEMICAL / ACID DATA:			

SERVICE & EQUIPMENT	%TAX ON \$	
MATERIALS	%TAX ON \$	
TOTAL		

Customer <b>F. G. Hull</b>		Lease No.		Date <b>4-27-13</b>	
Lease <b>B. S. W. / Campbell</b>		Well # <b>1-31</b>			
Field Order # <b>8172</b>	Station <b>Pratt</b>	Casing <b>8 5/8</b>	Depth <b>1015</b>	County <b>Barton</b>	State <b>Ks</b>
Type Job <b>CNW - 8 5/8 Surface</b>			Formation	Legal Description <b>31-20-15</b>	

PIPE DATA		PERFORATING DATA		FLUID USED		TREATMENT RESUME		
Casing Size	Tubing Size	Shots/Ft				RATE	PRESS	ISIP
8 5/8				Acid				
Depth <b>1015</b>	Depth	From	To	Pre Pad <b>2.17</b>	Max			5 Min.
Volume <b>6.15</b>	Volume	From	To	Pad <b>2.00</b>	Min			10 Min.
Max Press <b>1000</b>	Max Press	From	To	Frac <b>1.00</b>	Avg			15 Min.
Well Connection <b>1.00</b>	Annulus Vol.	From	To		HHP Used			Annulus Pressure
Plug Depth <b>998</b>	Packer Depth	From	To	Flush <b>6 3/4</b>	Gas Volume			Total Load

Customer Representative **Steve St. Angelo** Station Manager **Dave Scott** Treater **Steve Orlando**

Service Units	<b>07283</b>	<b>19885</b>	<b>19843</b>	<b>19811</b>	<b>19860</b>				
Driver Names	<b>W. L. W.</b>	<b>M. Brown</b>	<b>Y. W. W.</b>						

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
1:00 PM					On location - Safety Meeting
					Run 24 3/4 8 5/8 casing
					Cardinals 1000-450-40
					Casing on bottom - Breakdown
3:30	300		88	5 1/2	Mix 2000 gal Acid Blend @ 12# / gal
	200		40.7	5 1/2	Mix 2000 gal cement @ 15 lb / gal
					SHUT DOWN - R-Block plug
	0		0	6	Start H2O Displacement
	300		40	5	Cement to surface
	300		<del>6</del>	4	Plug Down
4:30 PM	300		6 3/4	4	Circulation thru job
					Circulated 23 bbl Top

Job Complete  
Thanks, Steve

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

September 25, 2013

Franklin R. Greenbaum  
F. G. Holl Company L.L.C.  
9431 E CENTRAL STE 100  
WICHITA, KS 67206-2563

Re: ACO-1  
API 15-009-25831-00-00  
BINFORD/CAMPBELL 1-31  
NW/4 Sec.31-20S-15W  
Barton County, Kansas

Dear Franklin R. Greenbaum:

K.A.R. 82-3-107 provides for all completion information to be filed within 120 days of the spud date. Subsection(e)(2) of that regulation states "All rights to confidentiality shall be lost if the filings are not timely."

The above referenced well was spudded on 04/26/2013 and the ACO-1 was received on September 19, 2013 (not within the 120 days timely requirement).

Therefore, your request for confidential treatment of data contained within the ACO-1 filing cannot be granted at this time.

If you should have any questions, please do not hesitate to contact me at (316)337-6200.

Sincerely,

Production Department