



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1091038  
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: \_\_\_\_\_

1091038

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

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

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

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

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

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

Did you perform a hydraulic fracturing treatment on this well?  Yes  No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?  Yes  No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry?  Yes  No *(If No, fill out Page Three of the ACO-1)*

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD:	Size:	Set At:	Packer At:	Liner Run: <input type="checkbox"/> Yes <input type="checkbox"/> No
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Date of First, Resumed Production, SWD or ENHR.	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____
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Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

<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> _____	<b>PRODUCTION INTERVAL:</b> _____ _____
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Form	ACO1 - Well Completion
Operator	F. G. Holl Company L.L.C.
Well Name	OETKEN 'A' 2-32
Doc ID	1091038

All Electric Logs Run

DIL
CNL/CDL
CPI
BHCS
Resistivity
Sector Bond/Gamma Ray/CCL

Form	ACO1 - Well Completion
Operator	F. G. Holl Company L.L.C.
Well Name	OETKEN 'A' 2-32
Doc ID	1091038

Tops

Name	Top	Datum
Herrington	1997	+59
Winfield	2046	+10
Towanda	2109	-53
Ft Riley	2150	-94
B/Florence	2264	-208
Wrefold	2314	-258
Council Grove	2332	-276
Crouse	2371	-315
Neva	2512	-456
Red Eagle	2556	-500
Stotler	2854	-798
Tarkio	2911	-855
Heebner	3386	-1330
Toronto	3403	-1347
Douglas Shale	3414	-1358
Brown Lime	3458	-1402
Lansing	3470	-1414
BKC	3688	-1632
Arbuckle	3774	-1718
RTD	3950	-1894

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

Sam Brownback, Governor

August 22, 2012

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

Re: ACO1  
API 15-165-21983-00-00  
OETKEN 'A' 2-32  
SE/4 Sec.32-19S-16W  
Rush 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





**BASIC**  
ENERGY SERVICES  
PRESSURE PUMPING & WIRELINE

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

FIELD SERVICE TICKET  
1718 06507 A

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

DATE OF JOB 06-24-12 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.C. HOLL		LEASE OETKED A 2-32 WELL NO.							
ADDRESS		COUNTY Rank. STATE KS							
CITY STATE		SERVICE CREW Sullivan, M. Felt, Phye							
AUTHORIZED BY		JOB TYPE: crew 8 3/8 Sank							
EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQUIPMENT#	HRS	TRUCK CALLED	DATE	AM	TIME
27463	30						6-24-12	AM	12:00
19862-19918	30					ARRIVED AT JOB		AM	2:00
37600						START OPERATION		AM	5:00
						FINISH OPERATION		AM	6:00
						RELEASED		AM	6:30
						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: *[Signature]*  
(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUNT
CP 101	A-Cord Ble. 1 coil	SK	200		
CP 100 c	Cordless	SK	200		
CC 102	Oil Hike	lb	100		
CC 109	Calcium chloride	lb	980		
CF 105	Tel Rubber Plug 8 3/8	EA	1		
CF 1753	Constrictor	EA	3		
E 100	griping machine	EA	65		
E 101	Heav. Duty Sump	EA	130		
E 113	Bulk Delivery	TM	1222		
CE 202	Dripik dily 1001-2000	EA	1		
CE 240	Bleeding Machine	SK	400		
CE 504	plac. Chestnut Nipple	EA	1		
S003	Solution Separator	EA	1		

SUB TOTAL  
64

CHEMICAL / ACID DATA:			

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

*Thank you*

SERVICE REPRESENTATIVE <i>Robert Sullivan</i>	THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY: <i>[Signature]</i> (WELL OWNER OPERATOR CONTRACTOR OR AGENT)
FIELD SERVICE ORDER NO.	

# BASIC

energy services, L.P.

## TREATMENT REPORT

Customer <i>F. P. Hull</i>	Lease No.	Date	
Lease <i>OETKEN A</i>	Well # <i>2-32</i>	<i>06-27-12</i>	
Field Order # <i>1507</i>	Station <i>PRATT KS</i>	Casing <i>8 5/8</i>	Depth <i>1105</i>
Type Job <i>CNW 8 5/8 Surf-co</i>	Formation	County <i>Rush</i>	State <i>KS</i>
		Legal Description <i>32-19-16</i>	

PIPE DATA		PERFORATING DATA		FLUID USED		TREATMENT RESUME		
Casing Size	Tubing Size	Shots/Ft		Acid	RATE	PRESS	ISIP	
<i>8 5/8</i>								
Depth <i>1105</i>	Depth	From	To	Pre Pad	Max		5 Min.	
Volume <i>67</i>	Volume	From	To	Pad	Min		10 Min.	
Max Press <i>400</i>	Max Press	From	To	Frac	Avg		15 Min.	
Well Connection <i>PC</i>	Annulus Vol.	From	To		HHP Used		Annulus Pressure	
Plug Depth <i>1085</i>	Packer Depth	From	To	Flush	Gas Volume		Total Load	

Customer Representative	Station Manager <i>DAVE SCOTT</i>	Treater <i>Robt J. ...</i>
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Service Units	<i>37900</i>	<i>27463</i>	<i>19826</i>	<i>19918</i>					
Driver Names	<i>Jullian</i>	<i>mitche</i>	<i>Phyc</i>						

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
<i>2:15 Pm</i>					<i>on for soft mat.</i>
					<i>Run 27 TTS 8 5/8 23 csg.</i>
					<i>Cent 960' 300' - 40'</i>
<i>4:50</i>					<i>csg on bottom</i>
<i>5:00</i>					<i>Hook by circ.</i>
<i>5:05</i>	<i>300</i>		<i>5</i>	<i>4</i>	<i>st sprk</i>
			<i>5</i>	<i>5</i>	<i>mix cement 200st ACW 3% cc 1/4 cellite</i>
			<i>43</i>		<i>mix Tail end. much @ 2 1/4 cc 1/4 cellite</i>
					<i>st. down and mix</i>
					<i>Plugs Plug</i>
				<i>5</i>	<i>st Disp</i>
<i>6:00</i>	<i>500</i>		<i>68.5</i>	<i>4</i>	<i>plug down</i>
					<i>circ 20 hrs and 2 pit</i>
					<i>Job Complete</i>
					<i>Thank you</i>





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

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

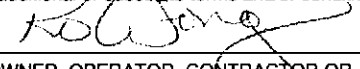
FIELD SERVICE TICKET  
1718 05935 A

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

DATE OF JOB 7-3-12		DISTRICT 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 FG HOLL CO. LLC				LEASE DETKEN A' 2-32				WELL NO.	
ADDRESS				COUNTY Rush 32-19-16 STATE					
CITY				STATE		SERVICE CREW Allen James, Rocky			
AUTHORIZED BY				JOB TYPE: 5 1/2" L.S. <span style="float: right;">CNUW</span>					
EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQUIPMENT#	HRS	TRUCK CALLED	DATE	AM	TIME
28443 Pu.	4					7-3-12	7-3-12	PM	330
19889-19843	4					ARRIVED AT JOB	7-3-12	AM	445
19826-19918	4					START OPERATION	7-3-12	AM	930
						FINISH OPERATION	7-3-12	AM	1230
						RELEASED	7-3-12	AM	130
						MILES FROM STATION TO WELL	6.5 miles		

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:   
(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUNT
CP105	AA-2 cement	SK	135		
CP103	60/40 Poz	SK	75	900	
CC102	cell FLAKE	lb	34		
CC106	C-41P	lb	32		
CC111	SALT	lb	605		
CC116	C-44	lb	127		
CC129	FIA-322	lb	127		
CC201	Gilso-wite	lb	1725		
CF607	Latch Downer Plug + Baffle 5 1/2 Blue	EA	1		
CF1251	Auto Fill Head Shoe 5 1/2 Blue	EA	1		
CF1651	Turbolizer 5 1/2 Blue	EA	8		
CF1901	5 1/2" Basket Blue	EA	1		
CF2002	Cement Scratchers Rotating Type	EA	50		
CC154	super flush	gal	500		

SUB TOTAL

DLS

CHEMICAL / ACID DATA:			

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

SERVICE REPRESENTATIVE 	THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY: 
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(WELL OWNER OPERATOR CONTRACTOR OR AGENT)

FIELD SERVICE ORDER NO.



# BASIC

energy services, L.P.

## TREATMENT REPORT

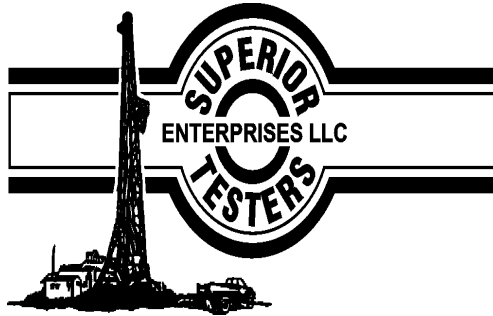
Customer FG-Holl Co. LLC	Lease No.	Date 7-3-12
Lease OETKEN A	Well # 2-32	
Field Order # 05935A	Station Pratt KS	Casing 5/2"
		Depth 3945'
Type Job 5/2 L.S.	Formation Cnw TD 3950'	County Rush
		State KS
		Legal Description 32-19-16

PIPE DATA		PERFORATING DATA		FLUID USED		TREATMENT RESUME		
Casing Size 5/2"	Tubing Size	Shots/Ft		12	Acid Super Flush	RATE	PRESS	ISIP
Depth 3945'	Depth	From	To	25	5 SKs 60/40 Poz	Max		5 Min
Volume 9.3 BBL	Volume	From	To	135	5 SKs AA-2 @ 15'	Min		10 Min.
Max Press 1500	Max Press	From	To		Rat Hole 30 SKs 60/40	Avg		15 Min.
Well Connection P.C.	Annulus Vol.	From	To		Mouse Hole 20 SKs 60/40	HHP Used		Annulus Pressure
Plug Depth 3903'	Packer Depth	From	To		Flush Disp H2O	Gas Volume		Total Load

Customer Representative Rob Long	Station Manager Scotty	Treater Allen
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Service Units	28443	19889	19843	19826	19918				
Driver Names	Allen	James	Anthony	Rocky	Pierce				

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
4:45 AM					on Loc. Discuss Safety, Setup Plan Job Laying Down Drill Pipe.
8:00					start 5/2" csg. 15.5' shoe It. 42.00 w/ float shoe, & L.D. Baffle in collar cent-1-Thru 8. Basket on top. #5
9:40					Tag Bottom Pickup 3945' + cir.
11:45	200#		5	5	Pump 5 BBL H2O spacer
			12	5	pump 12 BBL super flush
			5	5	pump 5 BBL H2O spacer
			6	5	Mix + pump 25 SKs scavenger 14'
				5	mix + pump 135 SKs AA2 @ 15'
			34		Finish mix cmt washup P.L.
12:00 AM				8	Drop L.D. Plug Start Disp.
	500#			6 1/2	caught L.D. PSI 65 BBL out
12:15	1500#		93	5	Plug down
	0#				Release PSI To TRK. "OK"
			7		Plug R.H. w/ 30 SKs 60/40 Poz
			5		Plug MH w/ 20 SKs 60/40 Poz
					washup Equip.
					Rackup Equip.
1:30					Job complete.
					Thanks Allen, James, Rocky.



## DRILL STEM TEST REPORT

Prepared For: **FG Holl Company LLC**

9431 East Central  
Suite 100  
Wichita, Kansas 67206+2563

ATTN: Renee Husted

**Oetken A #2-32**

**32/19S/16W/Rush**

Start Date: 2012.06.29 @ 20:19:00

End Date: 2012.06.30 @ 03:32:30

Job Ticket #: 17653                      DST #: 1

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

Printed: 2012.06.30 @ 04:04:56



# DRILL STEM TEST REPORT

FG Holl Company LLC

**32/19S/16W/Rush**

9431 East Central  
Suite 100  
Wichita, Kansas 67206+2563  
ATTN: Renee Husted

**Oetken A #2-32**

Job Ticket: 17653

**DST#: 1**

Test Start: 2012.06.29 @ 20:19:00

## GENERAL INFORMATION:

Formation: **Lansing KC zone K,L/**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 22:13:00

Time Test Ended: 03:32:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Great Bend/34

**Interval: 3666.00 ft (KB) To 3792.00 ft (KB) (TVD)**

Reference Elevations: 2056.00 ft (KB)

Total Depth: 3792.00 ft (KB) (TVD)

2048.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

**Serial #: 6749 Inside**

Press @ Run Depth: 1199.25 psia @ 3787.49 ft (KB)

Capacity: 5000.00 psia

Start Date: 2012.06.29

End Date: 2012.06.30

Last Calib.: 2012.06.30

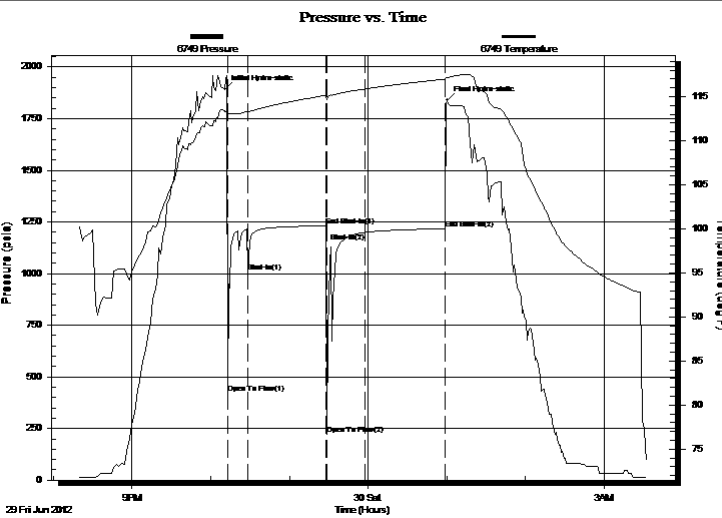
Start Time: 20:19:00

End Time: 03:32:30

Time On Btm: 2012.06.29 @ 22:11:00

Time Off Btm: 2012.06.30 @ 01:00:30

**TEST COMMENT:** 1ST Open 15 Minutes/Weak blow /Blow built to 1 inch then died to 3/4 inch  
1ST Shut In 60 Minutes/No blow back  
2ND Open 30 Minutes/Weak blow /Blow built to 2 1/2 inches then died to weak surface blow  
2ND Shut In 60 Minutes/No blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1891.89	113.33	Initial Hydro-static
2	421.78	113.01	Open To Flow (1)
18	1010.14	113.28	Shut-In(1)
77	1231.17	115.11	End Shut-In(1)
78	223.43	114.66	Open To Flow (2)
107	1199.25	115.87	Shut-In(2)
168	1217.14	116.96	End Shut-In(2)
170	1838.40	117.15	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
45.00	Oil cut Gassy Mud	0.63
0.00	Oil 2% Gas 8% Mud 90%	0.00

## Gas Rates

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



# DRILL STEM TEST REPORT

FG Holl Company LLC  
 9431 East Central  
 Suite 100  
 Wichita, Kansas 67206+2563  
 ATTN: Renee Husted

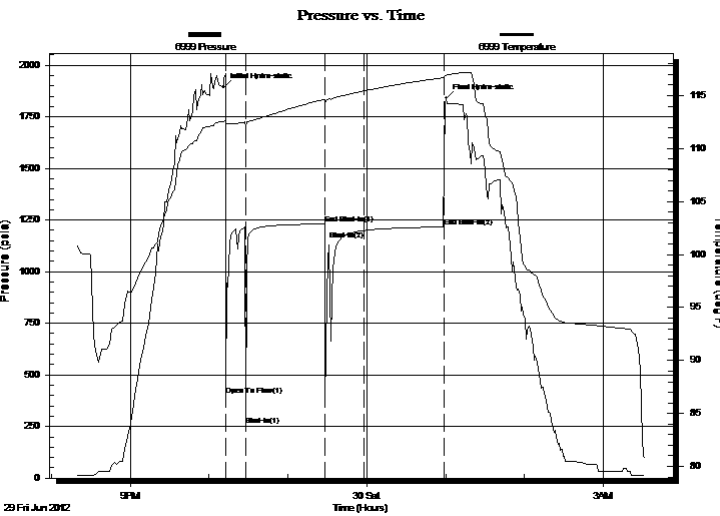
**32/19S/16W/Rush**  
**Oetken A #2-32**  
 Job Ticket: 17653 **DST#: 1**  
 Test Start: 2012.06.29 @ 20:19:00

## GENERAL INFORMATION:

Formation: **Lansing KC zone K,L/**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 22:13:00  
 Time Test Ended: 03:32:30  
 Interval: **3666.00 ft (KB) To 3792.00 ft (KB) (TVD)**  
 Total Depth: 3792.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Ken Swinney  
 Unit No: 3325 Great Bend/34  
 Reference Elevations: 2056.00 ft (KB)  
 2048.00 ft (CF)  
 KB to GR/CF: 8.00 ft

**Serial #: 6999 Outside**  
 Press @ Run Depth: 1217.06 psia @ 3788.49 ft (KB) Capacity: 5000.00 psia  
 Start Date: 2012.06.29 End Date: 2012.06.30 Last Calib.: 2012.06.30  
 Start Time: 20:19:00 End Time: 03:32:00 Time On Btm: 2012.06.29 @ 22:11:00  
 Time Off Btm: 2012.06.30 @ 01:00:30

**TEST COMMENT:** 1ST Open 15 Minutes/Weak blow /Blow built to 1 inch then died to 3/4 inch  
 1ST Shut In 60 Minutes/No blow back  
 2ND Open 30 Minutes/Weak blow /Blow built to 2 1/2 inches then died to weak surface blow  
 2ND Shut In 60 Minutes/No blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1892.04	112.55	Initial Hydro-static
2	401.93	112.23	Open To Flow (1)
17	255.34	112.11	Shut-In(1)
77	1230.76	114.65	End Shut-In(1)
107	1199.45	115.44	Shut-In(2)
168	1217.06	116.68	End Shut-In(2)
170	1838.95	116.92	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
45.00	Oil cut Gassy Mud	0.63
0.00	Oil 2% Gas 8% Mud 90%	0.00

## Gas Rates

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



# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

FG Holl Company LLC

**32/19S/16W/Rush**

9431 East Central  
Suite 100  
Wichita, Kansas 67206+2563  
ATTN: Renee Hustead

**Oetken A #2-32**

Job Ticket: 17653

**DST#: 1**

Test Start: 2012.06.29 @ 20:19:00

## Tool Information

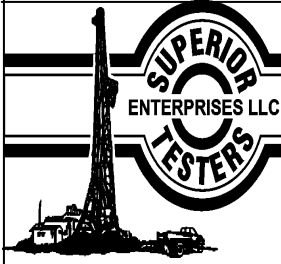
Drill Pipe:	Length: 3667.00 ft	Diameter: 3.80 inches	Volume: 51.44 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 43000.00 lb
			<u>Total Volume: 51.44 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	28.00 ft			String Weight: Initial 30000.00 lb
Depth to Top Packer:	3666.00 ft			Final 30000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	125.49 ft			
Tool Length:	152.49 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

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

Shut In Tool	5.00			3644.00	
Hydraulic Tool	5.00			3649.00	
Jars	5.00			3654.00	
Safety Joint	2.00			3656.00	
Packer	5.00			3661.00	27.00 Bottom Of Top Packer
Packer	5.00			3666.00	
Perforations	4.00			3670.00	
Change Over Sub	0.65			3670.65	
Drill Pipe	95.19			3765.84	
Change Over Sub	0.65			3766.49	
Anchor	20.00			3786.49	
Recorder	1.00	6749	Inside	3787.49	
Recorder	1.00	6999	Outside	3788.49	
Bullnose	3.00			3791.49	125.49 Bottom Packers & Anchor

**Total Tool Length: 152.49**



# DRILL STEM TEST REPORT

## FLUID SUMMARY

FG Holl Company LLC

**32/19S/16W/Rush**

9431 East Central  
Suite 100  
Wichita, Kansas 67206+2563  
ATTN: Renee Hustead

**Oetken A #2-32**

Job Ticket: 17653

**DST#: 1**

Test Start: 2012.06.29 @ 20:19:00

### Mud and Cushion Information

Mud Type: Gel Chem  
Mud Weight: 9.00 lb/gal  
Viscosity: 50.00 sec/qt  
Water Loss: 9.19 in<sup>3</sup>  
Resistivity: ohm.m  
Salinity: 5200.00 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
45.00	Oil cut Gassy Mud	0.631
0.00	Oil 2% Gas 8% Mud 90%	0.000

Total Length: 45.00 ft      Total Volume: 0.631 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

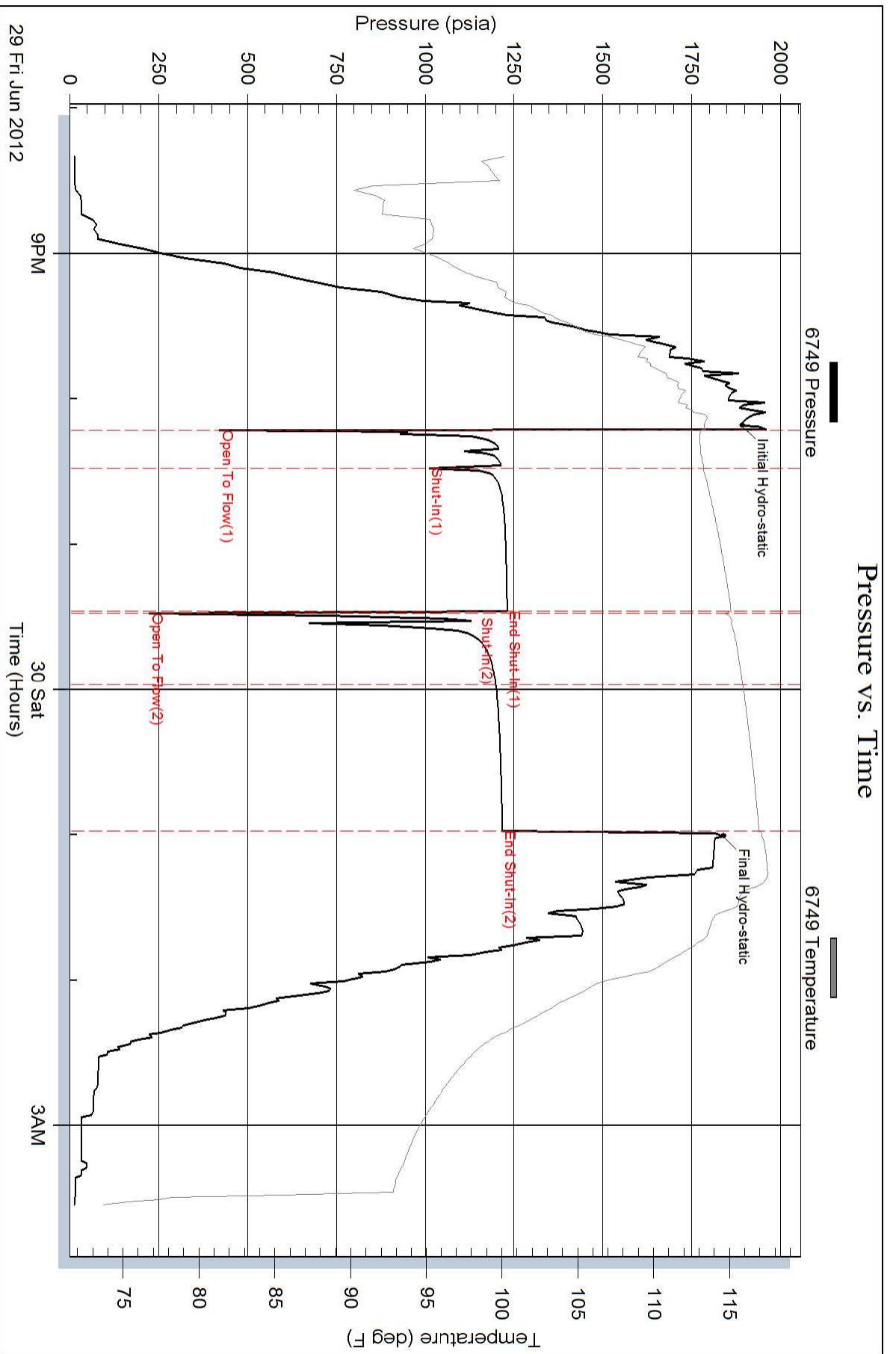
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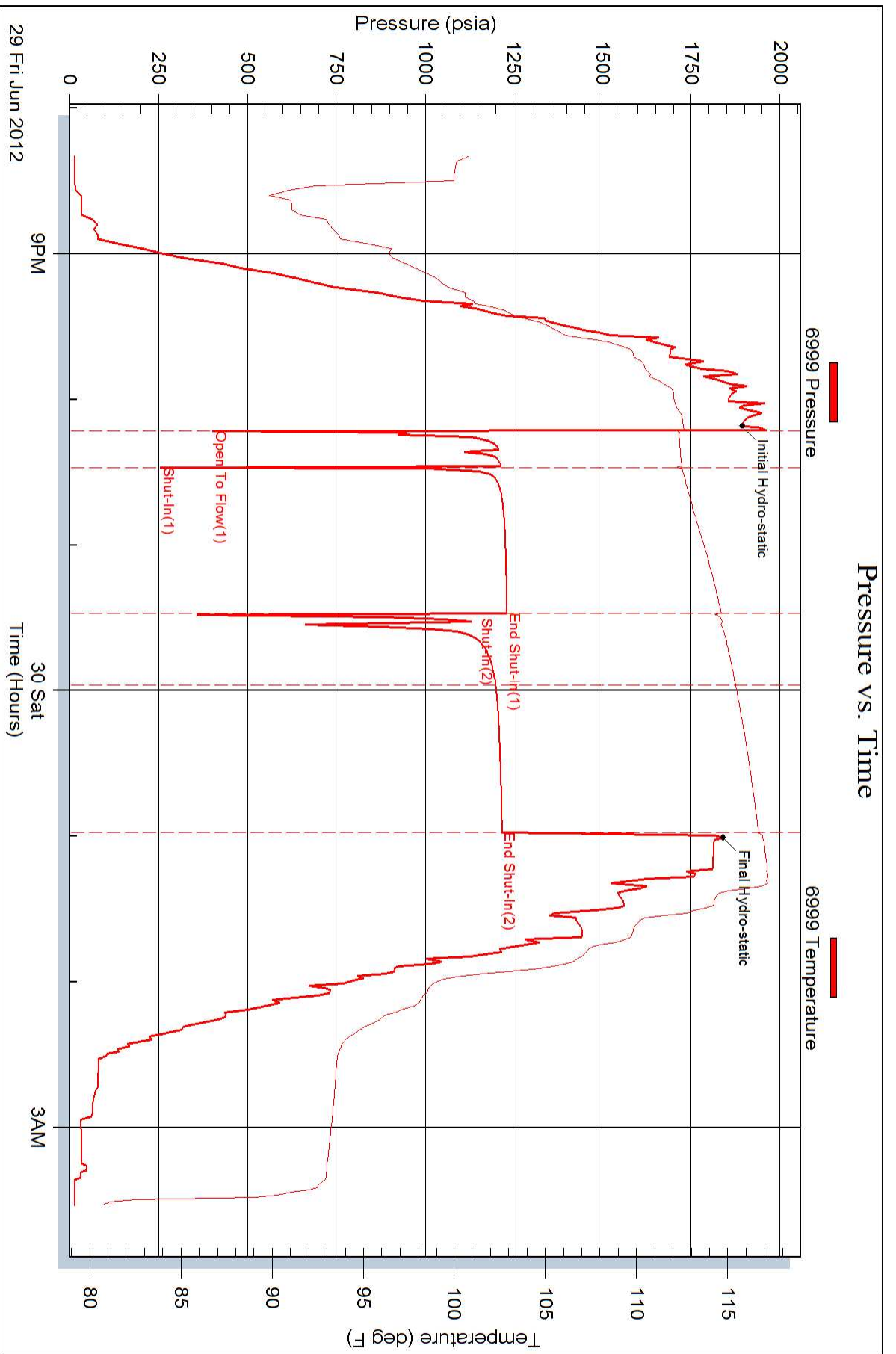
Laboratory Name:

Laboratory Location:

Recovery Comments:









## DRILL STEM TEST REPORT

Prepared For: **FG Holl Company LLC**

9431 East Central  
Suite 100  
Wichita, Kansas 67206+2563

ATTN: Renee Husted

**Oetken A #2-32**

**32/19S/16W/Rush**

Start Date: 2012.06.30 @ 04:02:00

End Date: 2012.06.30 @ 10:56:00

Job Ticket #: 17654                      DST #: 2

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

Printed: 2012.06.30 @ 11:19:55





# DRILL STEM TEST REPORT

FG Holl Company LLC  
 9431 East Central  
 Suite 100  
 Wichita, Kansas 67206+2563  
 ATTN: Renee Husted

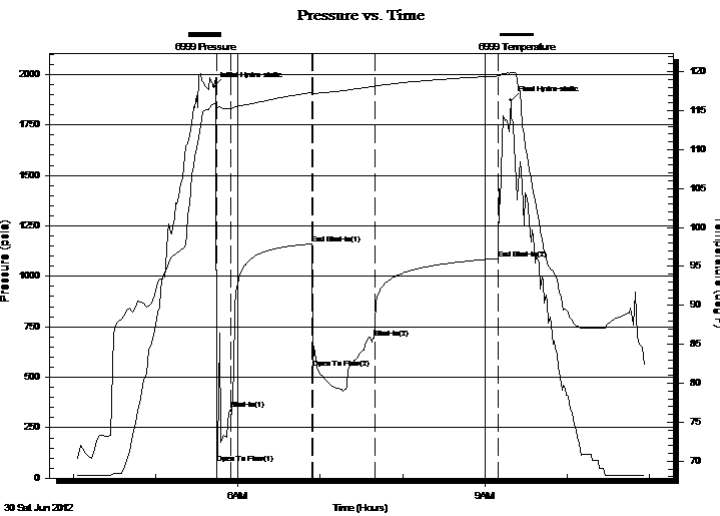
**32/19S/16W/Rush**  
**Oetken A #2-32**  
 Job Ticket: 17654 **DST#: 2**  
 Test Start: 2012.06.30 @ 04:02:00

## GENERAL INFORMATION:

Formation: **Arbuckle**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 05:44:30 Tester: Ken Swinney  
 Time Test Ended: 10:56:00 Unit No: 3325 Great Bend/34  
 Interval: **3776.00 ft (KB) To 3792.00 ft (KB) (TVD)** Reference Elevations: 2056.00 ft (KB)  
 Total Depth: 3792.00 ft (KB) (TVD) 2048.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 8.00 ft

**Serial #: 6999 Outside**  
 Press @ Run Depth: 1087.04 psia @ 3789.00 ft (KB) Capacity: 5000.00 psia  
 Start Date: 2012.06.30 End Date: 2012.06.30 Last Calib.: 2012.06.30  
 Start Time: 04:02:00 End Time: 10:56:30 Time On Btm: 2012.06.30 @ 05:42:30  
 Time Off Btm: 2012.06.30 @ 09:19:00

**TEST COMMENT:** 1ST Open 10 Minutes/Strong blow/Blow to bottom of bucket in 3 1/2 minutes  
 1ST Shut In 60 Minutes/No blow back  
 2ND Open 45 Minutes/Strong blow/Blow to bottom of bucket in 2 1/2 minutes  
 2ND Shut In 90 Minutes/Blow back to bottom of bucket in 24 minutes



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1939.90	115.88	Initial Hydro-static
3	71.44	115.11	Open To Flow (1)
12	341.06	115.31	Shut-In(1)
71	1160.53	117.33	End Shut-In(1)
72	545.78	117.23	Open To Flow (2)
118	693.60	118.11	Shut-In(2)
208	1087.04	119.45	End Shut-In(2)
217	1871.16	119.92	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	1560 feet of gas in pipe	0.00
120.00	Gassy Oil	1.68
0.00	Gas 25% Oil 75%	0.00
120.00	Gassy Oily Mud	1.68
0.00	Gas 30% Oil 30% Mud 40%	0.00
0.00	Corrected specific grav. oil 39	0.00

## Gas Rates

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



# DRILL STEM TEST REPORT

TOOL DIAGRAM

FG Holl Company LLC

32/19S/16W/Rush

9431 East Central  
Suite 100  
Wichita, Kansas 67206+2563  
ATTN: Renee Hustead

Oetken A #2-32

Job Ticket: 17654

DST#: 2

Test Start: 2012.06.30 @ 04:02:00

## Tool Information

Drill Pipe:	Length: 3766.00 ft	Diameter: 3.80 inches	Volume: 52.83 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: 45000.00 lb
			<u>Total Volume: 52.83 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	17.00 ft			String Weight: Initial 20000.00 lb
Depth to Top Packer:	3776.00 ft			Final 28000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	16.00 ft			
Tool Length:	43.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3754.00	
Hydraulic Tool	5.00			3759.00	
Jars	5.00			3764.00	
Safety Joint	2.00			3766.00	
Packer	5.00			3771.00	27.00 Bottom Of Top Packer
Packer	5.00			3776.00	
Anchor	11.00			3787.00	
Recorder	1.00	6749	Inside	3788.00	
Recorder	1.00	6999	Outside	3789.00	
Bullnose	3.00			3792.00	16.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>43.00</b>				



# DRILL STEM TEST REPORT

## FLUID SUMMARY

FG Holl Company LLC

**32/19S/16W/Rush**

9431 East Central  
Suite 100  
Wichita, Kansas 67206+2563  
ATTN: Renee Hustead

**Oetken A #2-32**

Job Ticket: 17654

**DST#: 2**

Test Start: 2012.06.30 @ 04:02:00

### Mud and Cushion Information

Mud Type: Gel Chem  
Mud Weight: 9.00 lb/gal  
Viscosity: 50.00 sec/qt  
Water Loss: 9.20 in<sup>3</sup>  
Resistivity: ohm.m  
Salinity: 5200.00 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	1560 feet of gas in pipe	0.000
120.00	Gassy Oil	1.683
0.00	Gas 25% Oil 75%	0.000
120.00	Gassy Oily Mud	1.683
0.00	Gas 30% Oil 30% Mud 40%	0.000
0.00	Corrected specific grav. oil 39	0.000

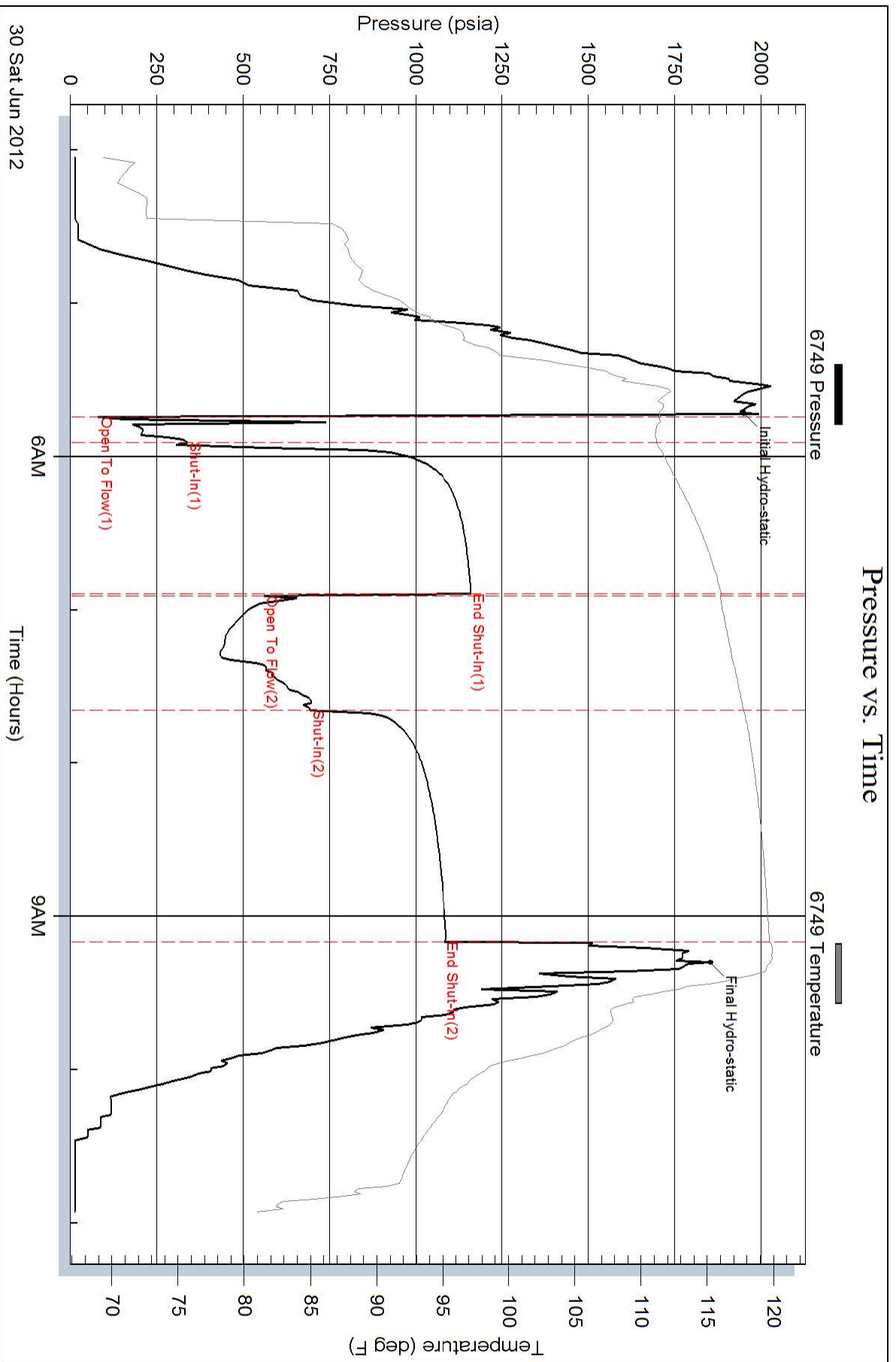
Total Length: 240.00 ft      Total Volume: 3.366 bbl

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

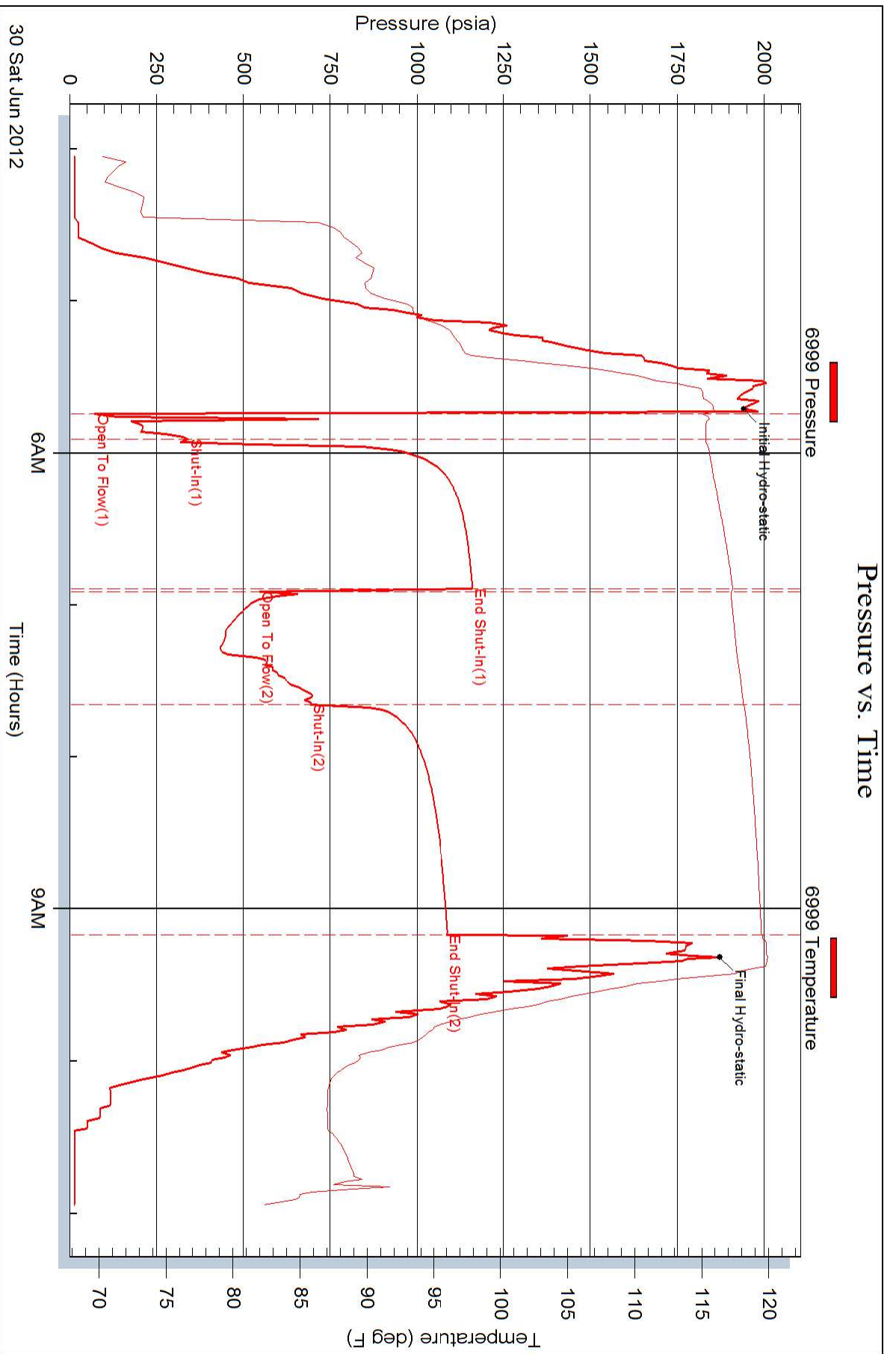
Laboratory Name:      Laboratory Location:

Recovery Comments:

### Pressure vs. Time









## DRILL STEM TEST REPORT

Prepared For: **FG Holl Company LLC**

9431 East Central  
Suite 100  
Wichita, Kansas 67206+2563

ATTN: Renee Husted

**Oetken A #2-32**

**32/19S/16W/Rush**

Start Date: 2012.06.30 @ 22:34:00

End Date: 2012.07.01 @ 06:18:30

Job Ticket #: 17655                      DST #: 3

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

Printed: 2012.07.01 @ 06:33:00



# DRILL STEM TEST REPORT

FG Holl Company LLC

**32/19S/16W/Rush**

9431 East Central  
Suite 100  
Wichita, Kansas 67206+2563  
ATTN: Renee Husted

**Oetken A #2-32**

Job Ticket: 17655

**DST#: 3**

Test Start: 2012.06.30 @ 22:34:00

## GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:57:30

Time Test Ended: 06:18:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Great Bend/34

**Interval: 3793.00 ft (KB) To 3803.00 ft (KB) (TVD)**

Reference Elevations: 2056.00 ft (KB)

Total Depth: 3803.00 ft (KB) (TVD)

2048.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

**Serial #: 6749 Inside**

Press @ Run Depth: 40.03 psia @ 3799.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2012.06.30

End Date: 2012.07.01

Last Calib.: 2012.07.01

Start Time: 22:34:00

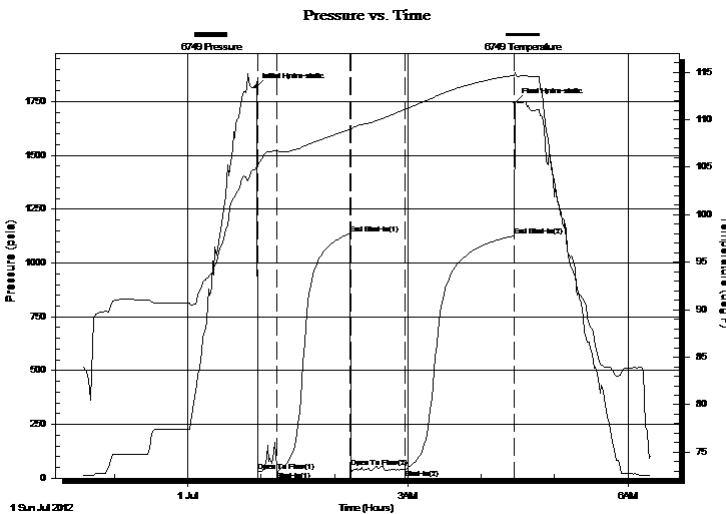
End Time: 06:18:30

Time On Btm: 2012.07.01 @ 00:55:30

Time Off Btm: 2012.07.01 @ 04:27:30

**TEST COMMENT:** 1ST Open 15 Minutes/Weak blow/Blow built to 3/4 inch  
1ST Shut In 60 Minutes/No blow back  
2ND Open 45 Minutes/Fair blow/Blow built to 5 inches  
2ND Shut In 90 Minutes/No blow back

## PRESSURE SUMMARY



Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1816.24	104.78	Initial Hydro-static
2	29.56	105.18	Open To Flow (1)
18	32.60	106.72	Shut-In(1)
77	1136.74	108.98	End Shut-In(1)
78	51.66	108.91	Open To Flow (2)
122	40.03	111.06	Shut-In(2)
212	1126.31	114.68	End Shut-In(2)
212	1744.38	114.97	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
30.00	Oily Mud	0.44
0.00	Oil 30% Mud 70%	0.00

## Gas Rates

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





# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

FG Holl Company LLC

**32/19S/16W/Rush**

9431 East Central  
Suite 100  
Wichita, Kansas 67206+2563  
ATTN: Renee Hustead

**Oetken A #2-32**

Job Ticket: 17655

**DST#: 3**

Test Start: 2012.06.30 @ 22:34:00

## Tool Information

Drill Pipe:	Length: 3796.00 ft	Diameter: 3.88 inches	Volume: 55.51 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: 38000.00 lb
			<u>Total Volume: 55.51 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 30000.00 lb
Depth to Top Packer:	3793.00 ft			Final 30000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	10.00 ft			
Tool Length:	32.00 ft			
Number of Packers:	1	Diameter: 6.75 inches		

Tool Comments:

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

Shut In Tool	5.00			3776.00	
Hydraulic Tool	5.00			3781.00	
Jars	5.00			3786.00	
Safety Joint	2.00			3788.00	
Packer	5.00			3793.00	22.00 Bottom Of Top Packer
Anchor	5.00			3798.00	
Recorder	1.00	6749	Inside	3799.00	
Recorder	1.00	6999	Outside	3800.00	
Bullnose	3.00			3803.00	10.00 Anchor Tool
<b>Total Tool Length:</b>	<b>32.00</b>				



# DRILL STEM TEST REPORT

## FLUID SUMMARY

FG Holl Company LLC

**32/19S/16W/Rush**

9431 East Central  
Suite 100  
Wichita, Kansas 67206+2563  
ATTN: Renee Hustead

**Oetken A #2-32**

Job Ticket: 17655

**DST#: 3**

Test Start: 2012.06.30 @ 22:34:00

### Mud and Cushion Information

Mud Type: Gel Chem  
Mud Weight: 9.00 lb/gal  
Viscosity: 58.00 sec/qt  
Water Loss: 8.39 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
30.00	Oily Mud	0.439
0.00	Oil 30% Mud 70%	0.000

Total Length: 30.00 ft      Total Volume: 0.439 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

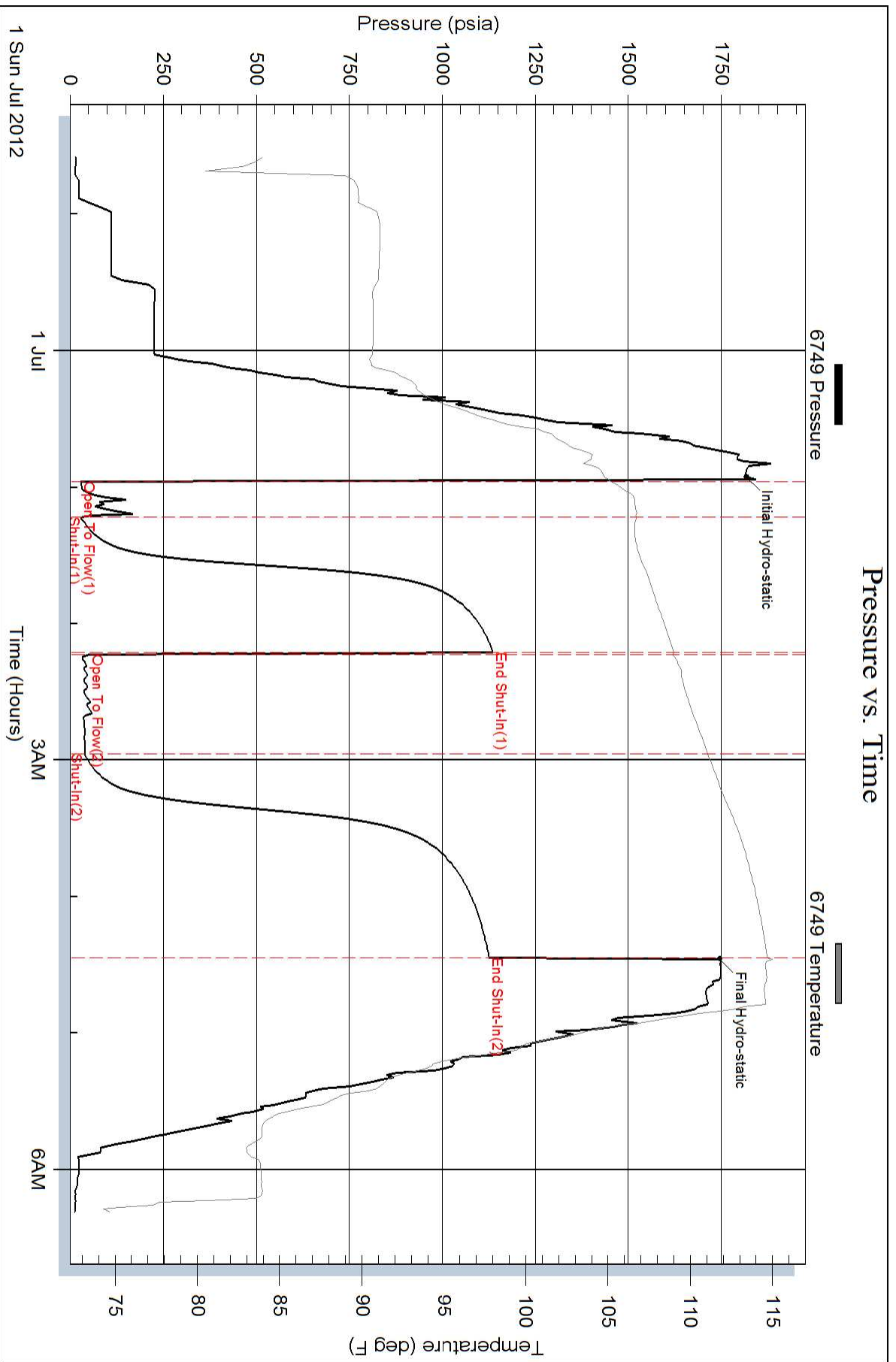
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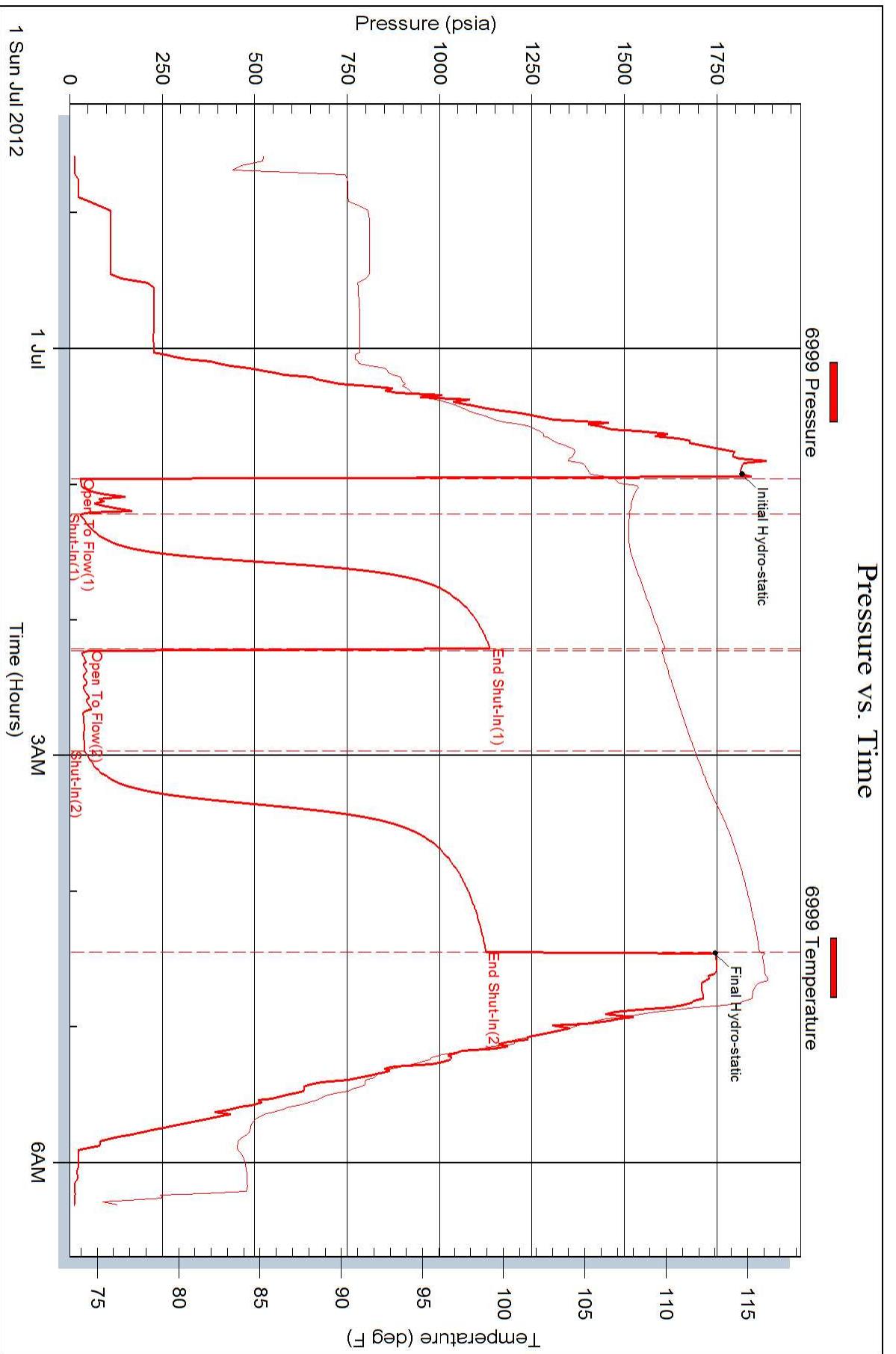
Laboratory Name:

Laboratory Location:

Recovery Comments:

### Pressure vs. Time









## DRILL STEM TEST REPORT

Prepared For: **FG Holl Company LLC**

9431 East Central  
Suite 100  
Wichita, Kansas 67206+2563

ATTN: Renee Husted

**Oetken A #2-32**

**32/19S/16W/Rush**

Start Date: 2012.07.01 @ 13:00:00

End Date: 2012.07.01 @ 19:28:00

Job Ticket #: 17656                      DST #: 4

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

Printed: 2012.07.01 @ 19:48:41

FG Holl Company LLC  
32/19S/16W/Rush  
Oetken A #2-32  
DST # 4  
Arbuckle  
2012.07.01



# DRILL STEM TEST REPORT

FG Holl Company LLC

**32/19S/16W/Rush**

9431 East Central  
Suite 100  
Wichita, Kansas 67206+2563  
ATTN: Renee Husted

**Oetken A #2-32**

Job Ticket: 17656

**DST#: 4**

Test Start: 2012.07.01 @ 13:00:00

## GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:31:30

Time Test Ended: 19:28:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Great Bend/34

**Interval: 3804.00 ft (KB) To 3814.00 ft (KB) (TVD)**

Reference Elevations: 2056.00 ft (KB)

Total Depth: 3814.00 ft (KB) (TVD)

2048.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

**Serial #: 6749 Inside**

Press @ Run Depth: 170.55 psia @ 3810.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2012.07.01

End Date:

2012.07.01

Last Calib.:

2012.07.01

Start Time: 13:00:00

End Time:

19:28:00

Time On Btm:

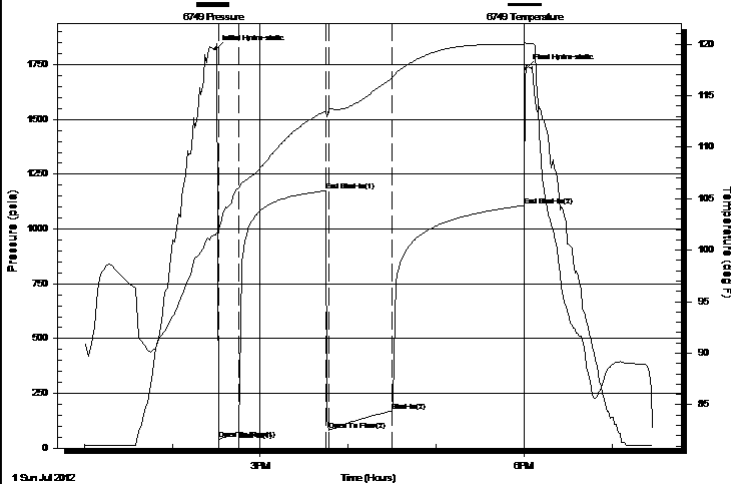
2012.07.01 @ 14:29:30

Time Off Btm:

2012.07.01 @ 18:01:00

**TEST COMMENT:** 1ST Open 15 Minutes/Good blow/Blow built to 10 inches in bucket of water  
1ST Shut In 60 Minutes/No blow back  
2ND Open 45 Minutes/Good blow/Blow built to bottom of bucket of water in 23 minutes  
2ND Shut In 90 Minutes/No blow back

Pressure vs. Time



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1819.13	101.46	Initial Hydro-static
2	38.87	101.94	Open To Flow (1)
16	74.92	106.09	Shut-In(1)
76	1174.82	113.51	End Shut-In(1)
77	81.21	113.67	Open To Flow (2)
121	170.55	116.74	Shut-In(2)
211	1107.11	119.92	End Shut-In(2)
212	1731.08	120.08	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
300.00	Muddy Water	4.21
0.00	Mud 5% Water 95%	0.00
0.00	Recovery Chlorides 32000 ppm	0.00
0.00	Recovery Resist. .19 ohms @ 92 deg.	0.00

## Gas Rates

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



# DRILL STEM TEST REPORT

FG Holl Company LLC

**32/19S/16W/Rush**

9431 East Central  
Suite 100  
Wichita, Kansas 67206+2563  
ATTN: Renee Husted

**Oetken A #2-32**

Job Ticket: 17656

**DST#: 4**

Test Start: 2012.07.01 @ 13:00:00

## GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:31:30

Time Test Ended: 19:28:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Great Bend/34

**Interval: 3804.00 ft (KB) To 3814.00 ft (KB) (TVD)**

Reference Elevations: 2056.00 ft (KB)

Total Depth: 3814.00 ft (KB) (TVD)

2048.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

**Serial #: 6999 Outside**

Press @ RunDepth: 1106.80 psia @ 3811.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2012.07.01

End Date: 2012.07.01

Last Calib.: 2012.07.01

Start Time: 13:00:00

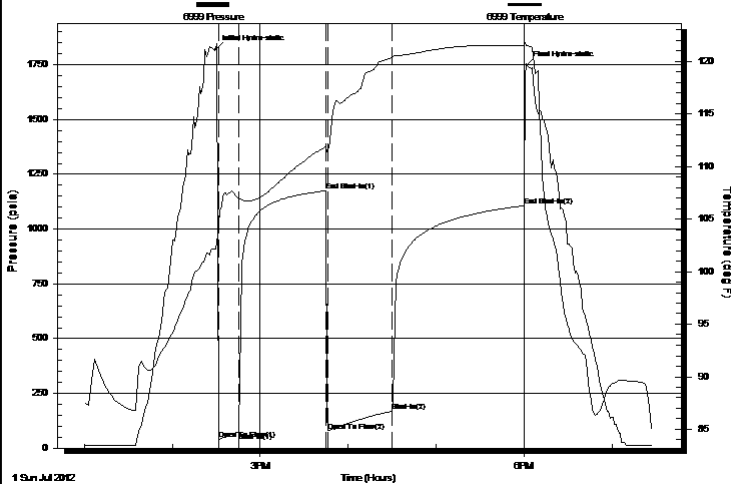
End Time: 19:28:00

Time On Btm: 2012.07.01 @ 14:29:30

Time Off Btm: 2012.07.01 @ 18:01:30

**TEST COMMENT:** 1ST Open 15 Minutes/Good blow/Blow built to 10 inches in bucket of water  
1ST Shut In 60 Minutes/No blow back  
2ND Open 45 Minutes/Good blow/Blow built to bottom of bucket of water in 23 minutes  
2ND Shut In 90 Minutes/No blow back

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1819.32	102.19	Initial Hydro-static
2	38.54	104.52	Open To Flow (1)
16	74.53	106.91	Shut-In(1)
76	1174.80	111.91	End Shut-In(1)
77	79.28	111.76	Open To Flow (2)
121	170.06	120.36	Shut-In(2)
211	1106.80	121.50	End Shut-In(2)
212	1747.25	121.54	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
300.00	Muddy Water	4.21
0.00	Mud 5% Water 95%	0.00
0.00	Recovery Chlorides 32000 ppm	0.00
0.00	Recovery Resist. .19 ohms @ 92 deg.	0.00

Gas Rates

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



# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

FG Holl Company LLC

**32/19S/16W/Rush**

9431 East Central  
Suite 100  
Wichita, Kansas 67206+2563  
ATTN: Renee Hustead

**Oetken A #2-32**

Job Ticket: 17656

**DST#: 4**

Test Start: 2012.07.01 @ 13:00:00

## Tool Information

Drill Pipe:	Length: 3796.00 ft	Diameter: 3.80 inches	Volume: 53.25 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:	45000.00 lb
			<u>Total Volume: 53.25 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	14.00 ft			String Weight: Initial	31000.00 lb
Depth to Top Packer:	3804.00 ft			Final	36000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	10.00 ft				
Tool Length:	32.00 ft				
Number of Packers:	1	Diameter: 6.75 inches			

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut In Tool	5.00			3787.00	
Hydraulic Tool	5.00			3792.00	
Jars	5.00			3797.00	
Safety Joint	2.00			3799.00	
Packer	5.00			3804.00	22.00 Bottom Of Top Packer
Anchor	5.00			3809.00	
Recorder	1.00	6749	Inside	3810.00	
Recorder	1.00	6999	Outside	3811.00	
Bullnose	3.00			3814.00	10.00 Anchor Tool
<b>Total Tool Length:</b>	<b>32.00</b>				



# DRILL STEM TEST REPORT

## FLUID SUMMARY

FG Holl Company LLC

**32/19S/16W/Rush**

9431 East Central  
Suite 100  
Wichita, Kansas 67206+2563  
ATTN: Renee Hustead

**Oetken A #2-32**

Job Ticket: 17656

**DST#: 4**

Test Start: 2012.07.01 @ 13:00:00

### Mud and Cushion Information

Mud Type: Gel Chem  
Mud Weight: 9.00 lb/gal  
Viscosity: 52.00 sec/qt  
Water Loss: 10.19 in<sup>3</sup>  
Resistivity: ohm.m  
Salinity: 9400.00 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
300.00	Muddy Water	4.208
0.00	Mud 5% Water 95%	0.000
0.00	Recovery Chlorides 32000 ppm	0.000
0.00	Recovery Resist. .19 ohms @ 92 deg.	0.000

Total Length: 300.00 ft      Total Volume: 4.208 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

### Pressure vs. Time

