



Confidentiality Requested:

Yes No

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: _____

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

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

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

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

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

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

Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*
 Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*
 Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? Yes No *(If No, fill out Page Three of the ACO-1)*

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

TUBING RECORD: Size: _____ Set At: _____ Packer At: _____ Liner Run: Yes No

Date of First, Resumed Production, SWD or ENHR. _____ Producing Method:
 Flowing Pumping Gas Lift Other *(Explain)* _____

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	F. G. Holl Company L.L.C.
Well Name	ZIMMER 1-20
Doc ID	1228267

All Electric Logs Run

CNL/CDL
CPI
BHCS
DIL
Microresistivity
Micro log

Form	ACO1 - Well Completion
Operator	F. G. Holl Company L.L.C.
Well Name	ZIMMER 1-20
Doc ID	1228267

Tops

Name	Top	Datum
Herrington	1746	+155
Winfield	1798	+103
Towanda	1862	+39
Fort Riley	1892	+9
B/Florence	1998	-97
Kinney Ls	2015	-114
Wrefold	2046	-145
Council Grove	2070	-169
Crouse	2104	-203
Neva	2244	-343
Red Eagle	2300	-399
Onaga Shale	2449	-548
Wabaunsee	2472	-571
Root Shale	2530	-629
Stotler	2587	-686
Tarkio	2652	-751
Howard	2726	-825
Severy Shale	2764	-863
Topeka	2790	-889
Heebner	3118	-1217
Toronto	3134	-1233
Douglas Shale	3150	-1249
Brown Lime	3206	-1305
LKC	3217	-1316

Form	ACO1 - Well Completion
Operator	F. G. Holl Company L.L.C.
Well Name	ZIMMER 1-20
Doc ID	1228267

Tops

Name	Top	Datum
Drum	3352	-1451
Stark Shale	3403	-1502
Swope	3408	-1507
Hushpuckney	3437	-1536
BKC	3448	-1547
Arbuckle	3546	-1645
Granite	3646	-1745
RTD	3749	-1848

Summary of Changes

Lease Name and Number: ZIMMER 1-20

API/Permit #: 15-009-25997-00-00

Doc ID: 1228267

Correction Number: 1

Approved By: NAOMI JAMES

Field Name	Previous Value	New Value
Approved By	Rene Stucky	NAOMI JAMES
Approved Date	09/16/2014	11/04/2014
Completion Or Recompletion Date	07/15/2014	10/16/2014
Completion Type - Other Text	Not yet completed	
Date of First or Resumed Production or SWD or Enhr If Alternate II		10/28/2014
Completion - Cement Circulated From If Alternate II		2380
Completion - Cement Circulated To If Alternate II		2350
Completion - Sacks of Cement Liner Run?		165
Method Of Completion - Perf	No	Yes

Summary of changes for correction 1 continued

Field Name	Previous Value	New Value
Multiple Stage Cementing Collar Depth		2350
Multiple Stage Cementing Collar Used?	No	Yes
Perf_Material_1		250 gal 10% acetic acid
Perf_Material_2		Spotted 150 gal 10% MOD 202 acid
Perf_Material_3		Spotted 250 gal 10% acid
Perf_Material_4		400 gal 10% MOD 202 acid
Perf_Record_1		3544' - 3555' Arbuckle
Perf_Shots_1		4
Producing Formation	Not yet completed	Arbuckle
Producing Method Pumping	No	Yes
Production Interval #1		3544' - 3555'
Production Interval #2		Arbuckle
Purchaser's Name		NCRA

Summary of changes for correction 1 continued

Field Name	Previous Value	New Value
Save Link	../../../../kcc/detail/operatorEditDetail.cfm?docID=1216688	../../../../kcc/detail/operatorEditDetail.cfm?docID=1228267
Tubing Record - Set At		3668
Tubing Size		2.3750
Well Type	OTHER	OIL



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1216688
OIL & GAS CONSERVATION DIVISION

Form ACO-1

August 2013

Form must be Typed

Form must be Signed

All blanks must be Filled

CONFIDENTIAL 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 #: _____
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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: _____

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 Geologist Report / Mud Logs <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
--	---

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				

1. Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*
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)*

Date of first Production/Injection or Resumed Production/Injection:	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____			
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio Gravity

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: Top Bottom
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Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i>

TUBING RECORD:	Size:	Set At:	Packer At:	
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Form	ACO1 - Well Completion
Operator	F. G. Holl Company L.L.C.
Well Name	ZIMMER 1-20
Doc ID	1216688

All Electric Logs Run

CNL/CDL
CPI
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Tops

Name	Top	Datum
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Stotler	2587	-686
Tarkio	2652	-751
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Severy Shale	2764	-863
Topeka	2790	-889
Heebner	3118	-1217
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Form	ACO1 - Well Completion
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Well Name	ZIMMER 1-20
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Tops

Name	Top	Datum
Drum	3352	-1451
Stark Shale	3403	-1502
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BKC	3448	-1547
Arbuckle	3546	-1645
Granite	3646	-1745
RTD	3749	-1848

Mud-Co / Service Mud Inc.

Operator **FG Holl** County **Barton** State **Kansas** Pump **6** X **14** X **60** SPM Casing Program **8 5/8" @ 831** ft.
 Well **Zimmer #1-20** Location _____ GPM **7.75** BPM _____ " @ _____ ft.
 Contractor **Duke #2** Sec **20** TWP **19S** RNG **14W** D.P. **4.5** in. **191** FT/MIN R.A. _____ " @ _____ ft.
 Stockpoint **Pratt, Ks.** Date **7/2/2014** Engineer **Rick Hughes** Collar **6.25** in. **450** ft. **348** FT/MIN R.A. Total Depth **3749'** ft.

DATE	DEPTH	WEIGHT	VISCOSITY			GELS	pH	FILTRATION/FILTRATION ANALYSIS					SAND	RETORT			L.C.M.	Pump Press. PSI	CUMULATIVE COST	REMARKS AND TREATMENT
			Sec API @_F	PV @_F	Yp			10 sec / 10 min.	Strip Meter	ml API	Cake 32nds	Pres. #/BBL		Cl ppm	Ca ppm	%				
7/2	0																	0	Rig up.	
7/3	521	10.0	32																Drlg. DST #1 @ 3255'	
7/4	858		W	A	T	E	R												Drlg. DST #2 @ 3280'	
7/5	1904	9.7	42	9	19	24/28	7.0	14.6	4		68m	Hvy	5.9		94.1				Drlg. DST #3 @ 3380'	
7/6	2437	9.7	36	7	12	22/24	7.0	16.8	4		47m	Hvy	7.2		92.8				Drlg. DST #4 @ 3400'	
7/7	3067	9.4	49	13	12	15/56	9.0	10.2	2		7,400	40	7.4		92.6				Drlg. 5+" rain 7/10	
7/8	3255	9.2	46	12	10	11/48	10.5	8.0	1		6,800	20	6.1		93.9				TOH w/ DST 1 DST #5 @ 3515'	
7/9	3350	9.3	47	12	10	11/36	9.0	8.8	1		4,200	20	6.9		93.1				CFS DST #6 @ 3540'	
7/10	3400	8.9	43	10	12	8/26	10.5	10.4	1		4,800	20	4.1		95.9				TOH w/ DST 4 DST #7 @ 3547'	
7/11	3515	9.1	46	13	10	9/38	10.5	9.6	1		5,100	20	5.4		94.6				DST 5 DST #8 @ 3553'	
7/12	3540	8.9	50	14	10	10/47	10.5	10.4	1		5,300	20	4.0		96.0				CTCH DST #9 @ 3553' - Misrun PF	
7/13	3553	8.9	44	11	10	8/37	10.5	10.8	1		6,800	20	3.9		96.1				TOH w/ DST 8 DST #10 @ 3560'	
7/14	3590	9.2	46	12	11	10/47	9.0	11.6	1		5,300	20	6.1		93.9				CFS DST #11 @ 3590'	
7/15	3725	9.5	47	13	10	10/51	10.0	10.4	1		5,700	40	8.2		91.8				Drlg.	
7/16	3749																		Final:	
Tripped for plugged bit approx 400'. Well started flowing. Tripped back in & killed w/mud from pits. Tripped again for plugged bit. Another minor flow developed. Minor flow w/ 10 mud wt on connections. Flow died by STD. Displaced w/starch @ 1480'. Displaced w/chemical @ 2510'.																				
Steel pits with centrifugal transfer pump Offsite reserve pit																				
Reserve Pit, Chl content ppm: 38,000 Estimated Volume: <200 bbls of free fluids																				

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	65					
CAUSTIC SODA	25					
DESCO	1					
DRILL PAK	8					
LIME	3					
PREMIUM GEL	465					
SODA ASH	27					
STARCH	63					
SUPER LIG	18					
X-CIDE 102W	1					
						Total Mud Cost
						Trucking Cost
						Trucking Surcharge
						Taxes
						TOTAL COST

LITHOLOGY STRIP LOG

WellSight Systems

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

Well Name: ZIMMER #1-20
Location: SEC 20-19S-14W
License Number: 15-165-22064
Spud Date: 7/14
Surface Coordinates: 2240' FNL, 330' FWL,
70' N of C SW SW NW

Region: BARTON, CO
Drilling Completed: 7/14

Bottom Hole Coordinates:
Ground Elevation (ft): 1893' K.B. Elevation (ft): 1901'
Logged Interval (ft): To: Total Depth (ft):
Formation:
Type of Drilling Fluid: Starch/Chemical

Printed by WellSight Log Viewer from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: F. G. Holl Company L.L.C.
Address: 9431 E. Central ST #100
Wichita, KS 67206

GEOLOGIST


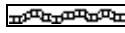
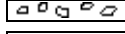
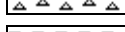
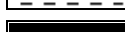

Name: Ryan Greenbaum
Company: F. G. Holl Company, L.L.C.
Address:







Cores

DSTs





Comments

ROCK TYPES

 Anhy
 Bent
 Brec
 Cht
 Clyst
 Coal

 Congl
 Dol
 Gyp
 Igne
 Lmst
 Meta

 Mrlst
 Salt
 Shale
 Shcol
 Shgy
 Slst

 Ss
 Till
 Blk shale
 Cng

ACCESSORIES

MINERAL

- Anhy
- Arggrn
- Arg
- Bent
- Bit
- Brecfrag
- Calc
- Carb
- Chtdk
- Chtlt
- Dol
- Feldspar
- Ferrpel
- Ferr
- Glau
- Gyp
- Hvymin
- Kaol
- Marl

- Minxl
- Nodule
- Phos
- Pyr
- Salt
- Sandy
- Silt
- Sil
- Sulphur
- Tuff

FOSSIL

- Algae
- Amph
- Belm
- Bioclst
- Brach
- Bryozoa
- Cephal
- Coral

- Crin
- Echin
- Fish
- Foram
- Fossil
- Gastro
- Oolite
- Ostra
- Pelec
- Pellet
- Pisolite
- Plant
- Strom

STRINGER

- Anhy
- Arg
- Bent
- Coal
- Dol

- Gyp
- Ls
- Mrst
- Sltstrg
- Ssstrg

TEXTURE

- Boundst
- Chalky
- Cryxln
- Earthy
- Finexln
- Grainst
- Lithogr
- Microxln
- Mudst
- Packst
- Wackst

OTHER SYMBOLS

POROSITY

- Earthy
- Fenest
- Fracture
- Inter
- Moldic
- Organic
- Pinpoint
- Vuggy

SORTING

- Well
- Moderate
- Poor

ROUNDING

- Rounded
- Subrnd
- Subang

- Angular

OIL SHOW

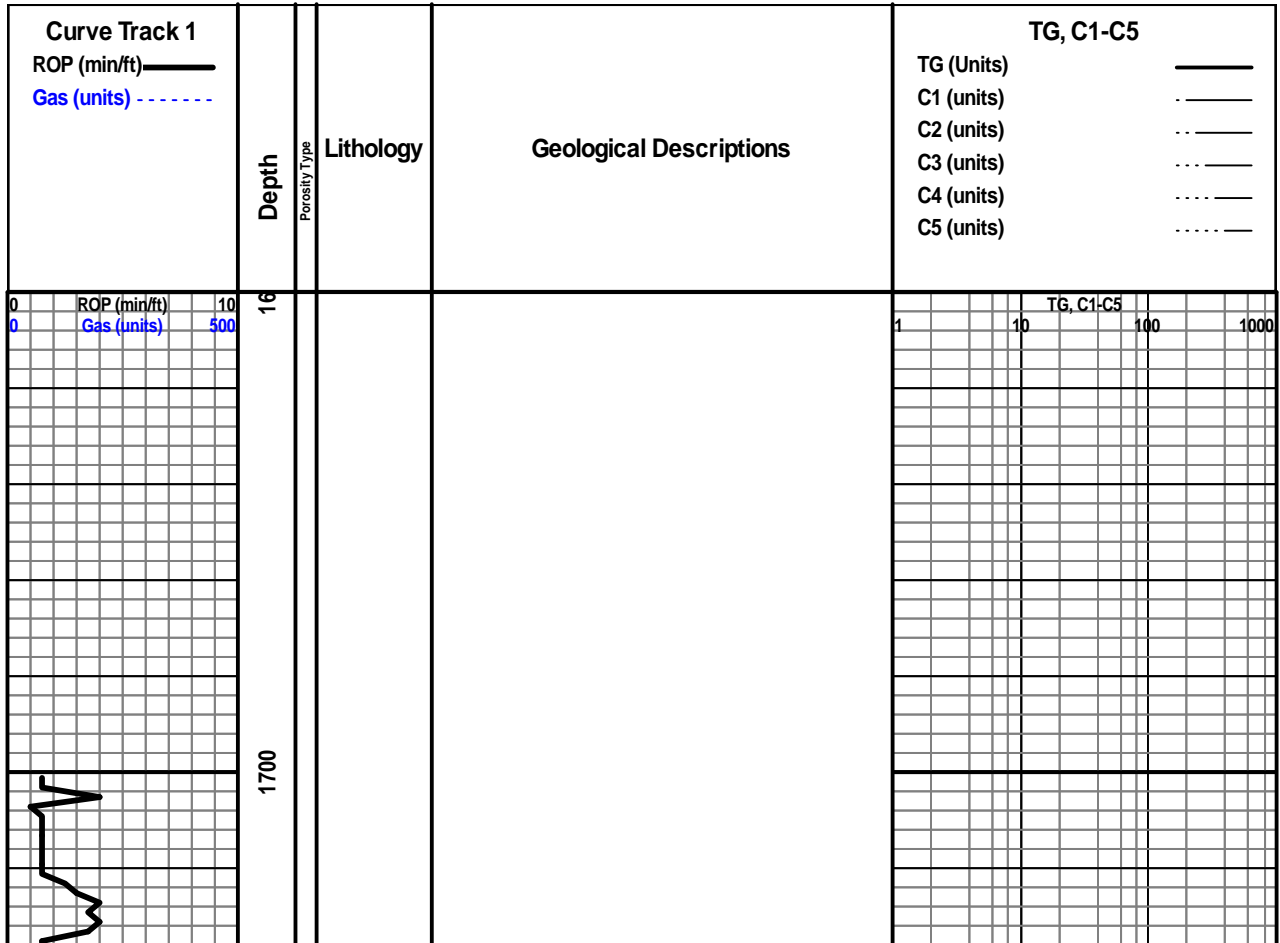
- Even
- Spotted
- Ques
- Dead

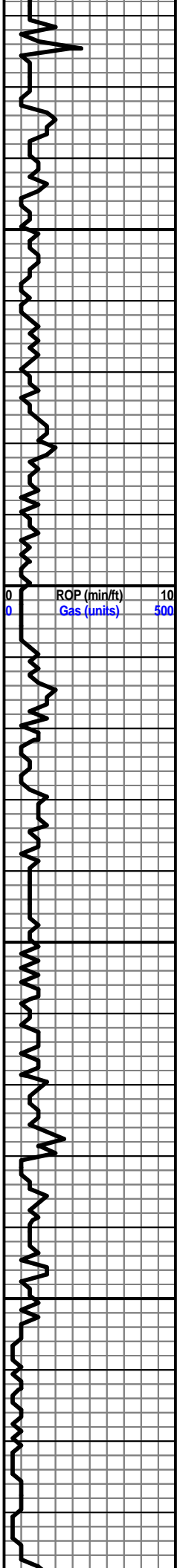
INTERVAL

- Core
- Dst

EVENT

- Rft
- Sidewall





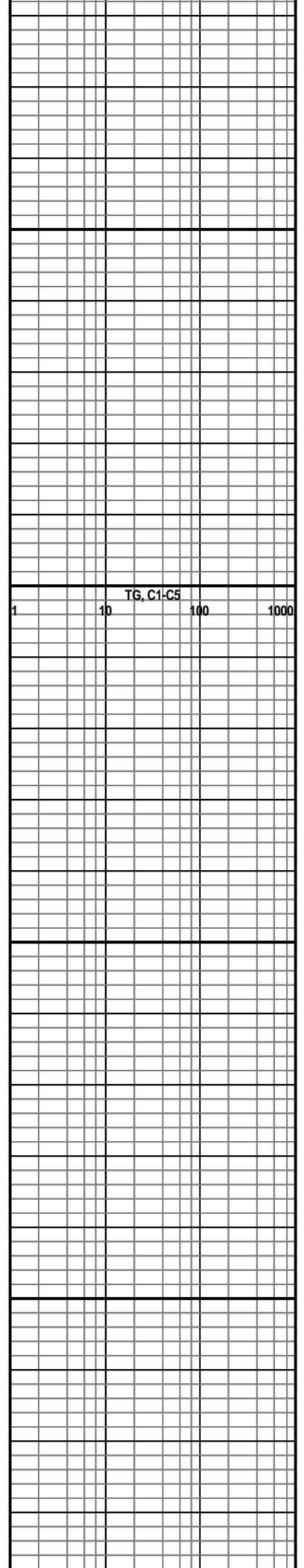
1750

1800

1850

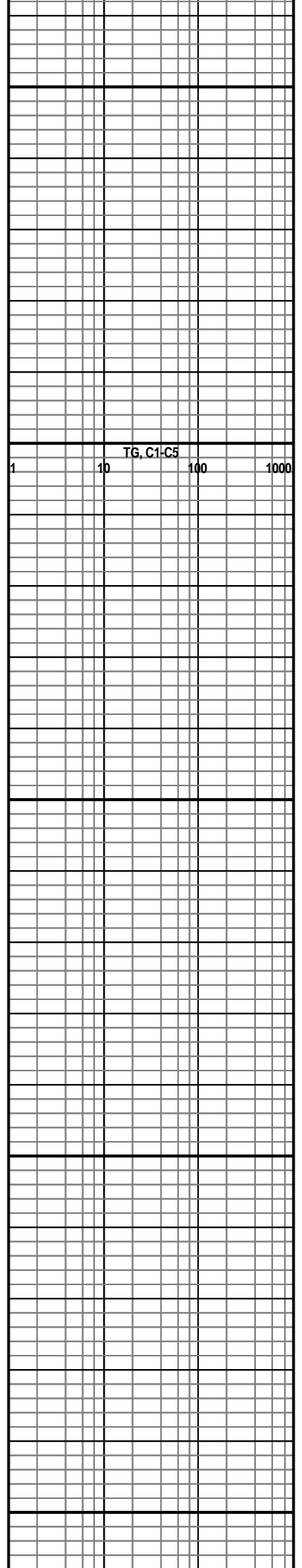
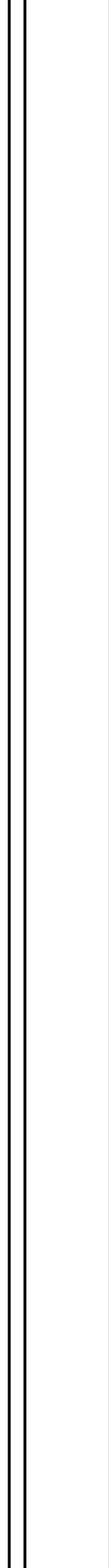
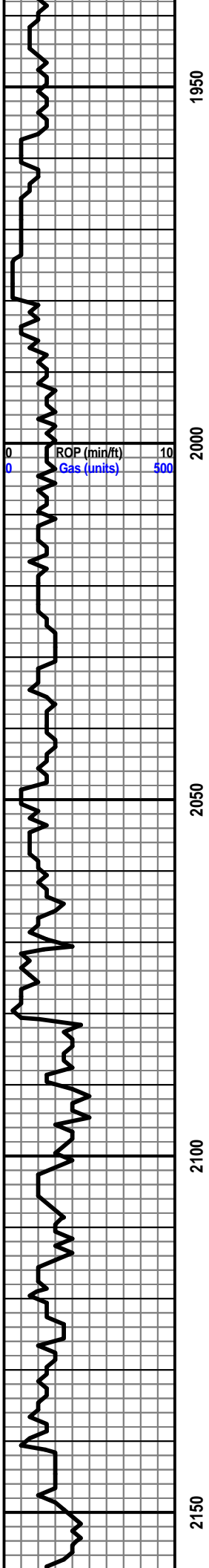
1900

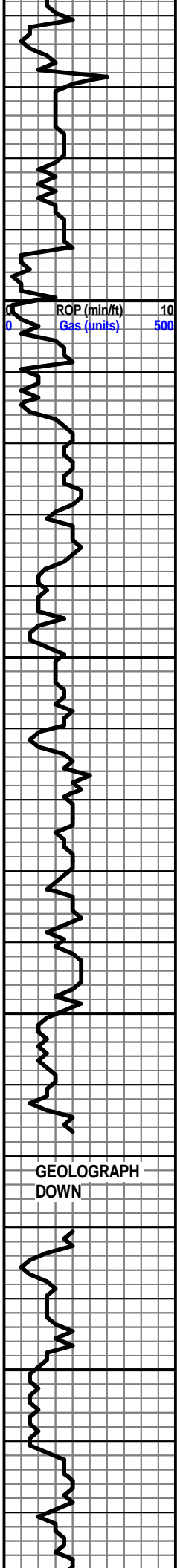
ROP (min/ft) 10
Gas (units) 500



TG, C1-C5

1 10 100 1000





2200

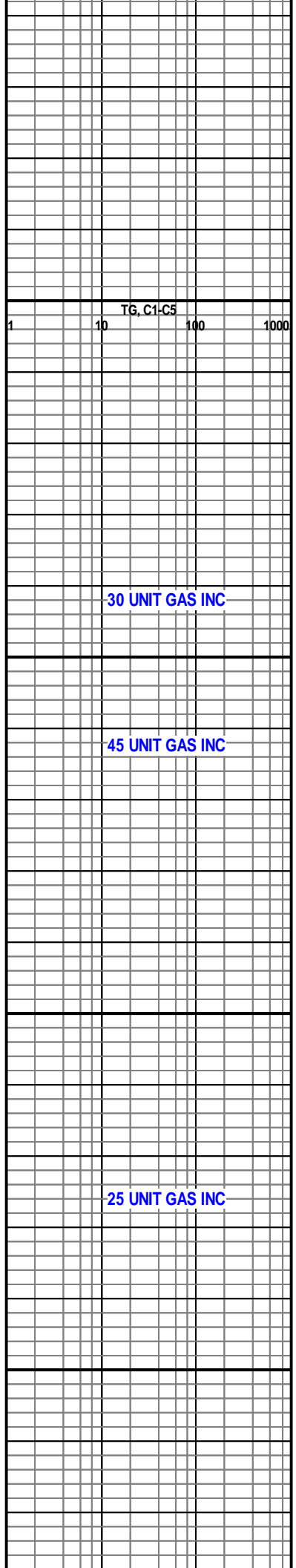
2250

2300

2350

ROP (min/ft) 10
Gas (units) 500

GEOLOGRAPH
DOWN

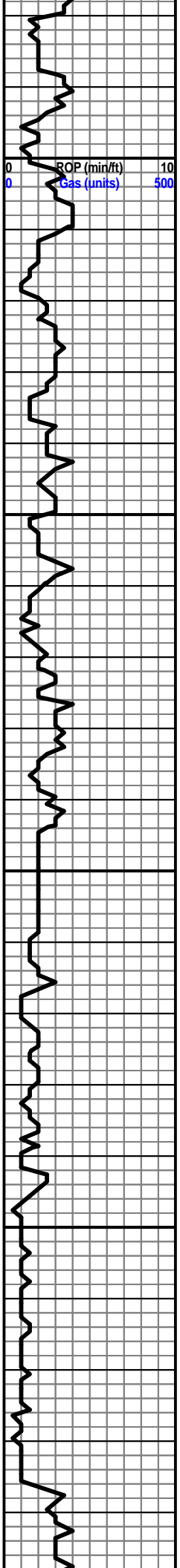


TG, C1-C5
1 10 100 1000

30 UNIT GAS INC

45 UNIT GAS INC

25 UNIT GAS INC

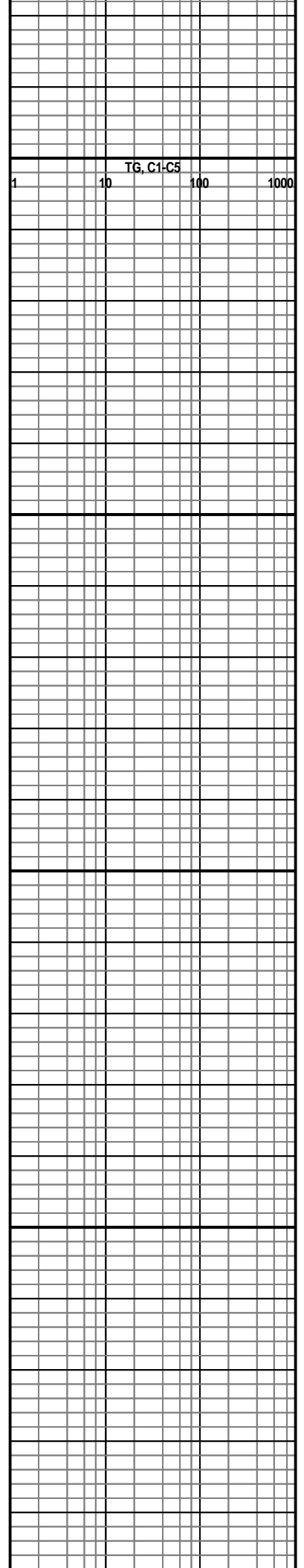


2400

2450

2500

2550



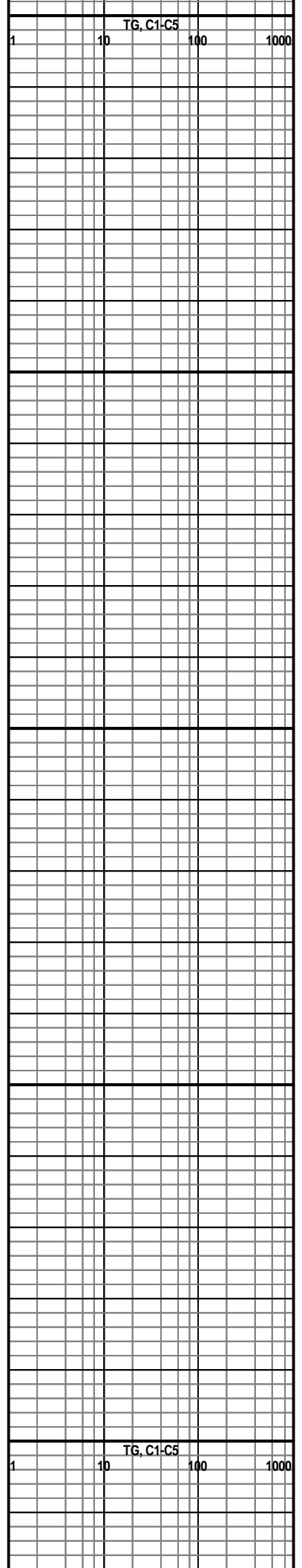
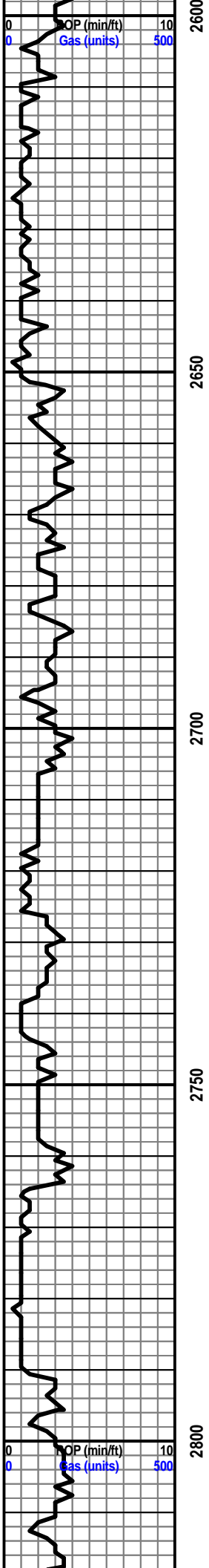
TG, C1-C5

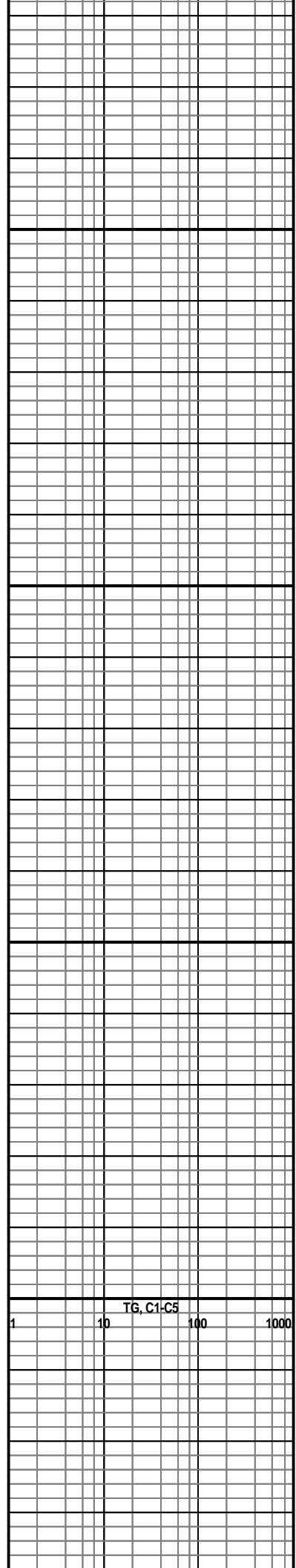
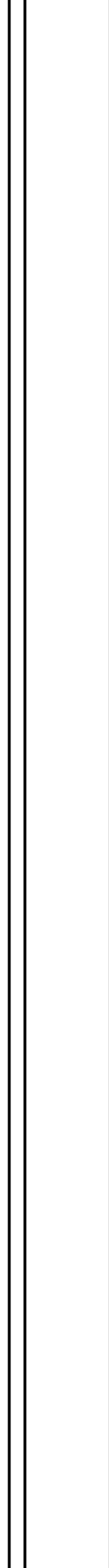
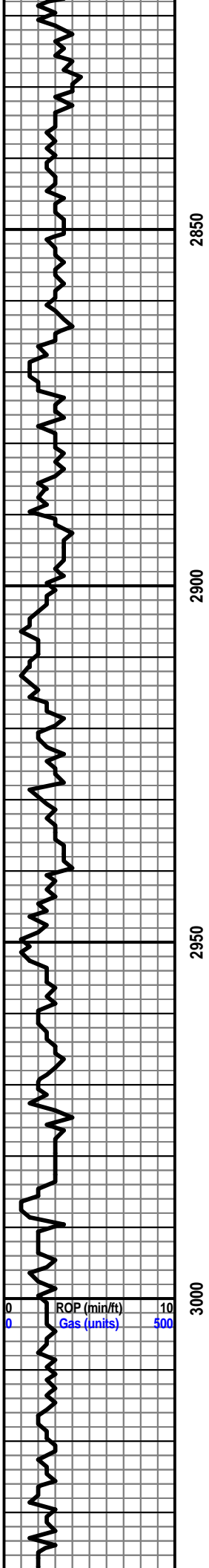
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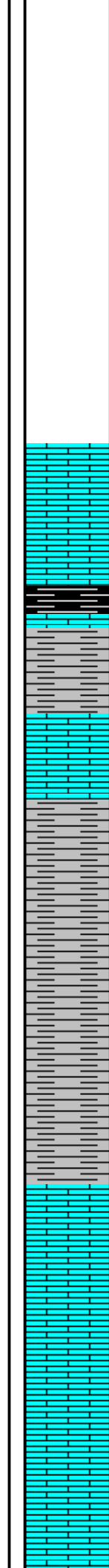
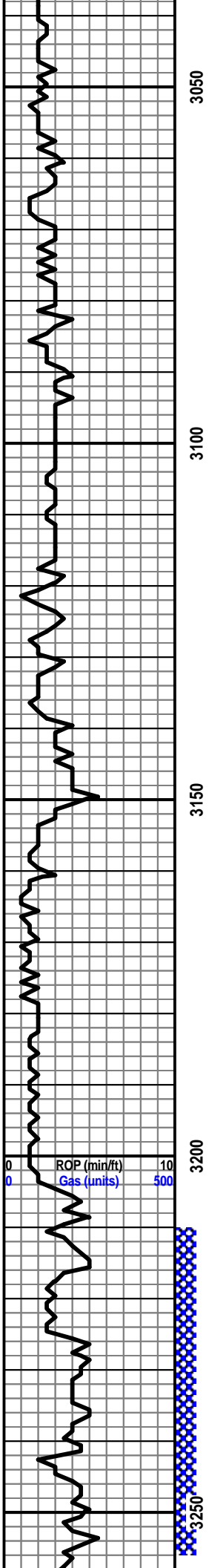
10

100

1000



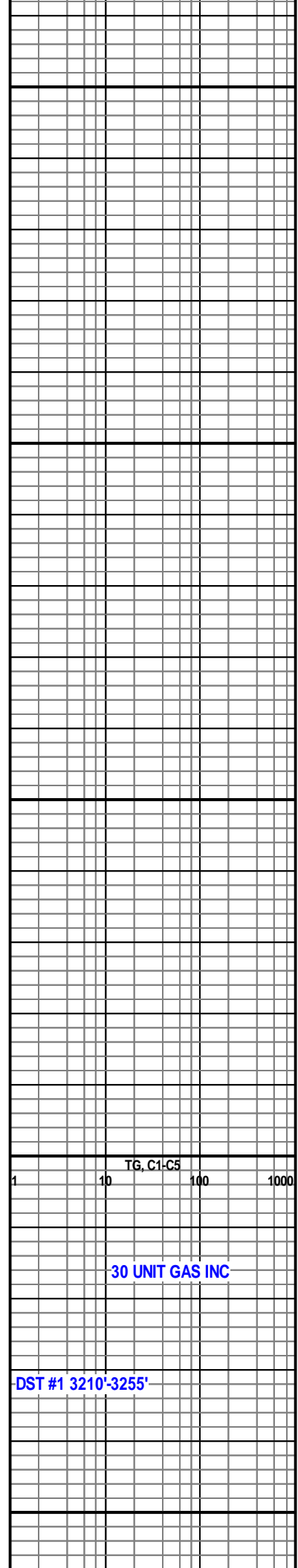




HEEBNER 3120' (-1219')
SH-BLK

SH-GRY-LT GRY, SFT-BLKY-PLTY, WXY-SLTY
BROWN LS 3204' (-1303')

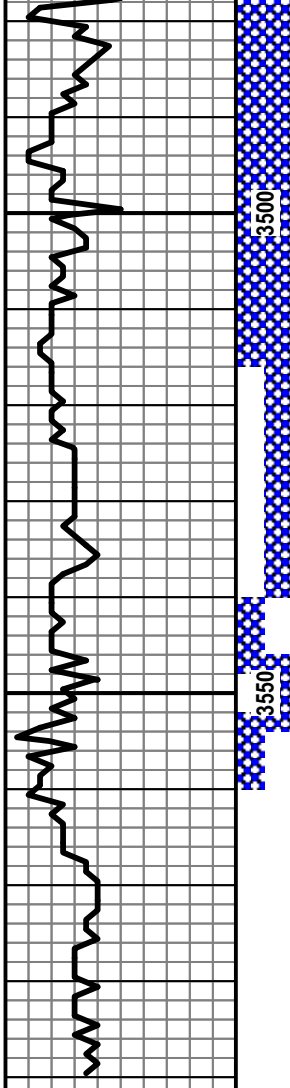
LS-BRN-GRY/TAN, F GRN, XLN, HD, DNS
LKC
LS-LT TAN-OFF WHT, F GRN, XLN, HD-BRTL,
PRTL Y DNS, TR-FR INTRXLN POR, SHW OIL,
SHW GAS, FNT ODR
LS-V LT TAN-GRY, F GRN, XLN, HD-BRTL
LS-GRY-LT TAN, F GRN, XLN, MSTLY HD
LS-LT TAN, F GRN, XLN, HD-BRTL
LS-TAN-OFF WHT, F GRN, XLN, HD-BRTL



TG, C1-C5
1 10 100 1000

30 UNIT GAS INC

DST #1 3210'-3255'



3600

ROP (min/ft) 10
Gas (units) 500

3650

SS-TRNS, VF-M GRN, SUB ANG-SUB RND, FRT
SRTD, BLK STND, SHW GAS

CNG SH-RED-PRPL-GRY, BLKY,
W/CHRT-YLW-LT TAN,

CNG SH-RED-PRPL-GRY, BLKY-SFT, SNDY,
W/CHRT-TRNS GRY

CHRT-YLW-RED-OFF WHT, PRTLY OOL

SH-RED-WHT, BLKY-SFT, SNDY, W/CHRT-TRNS
GRY/TAN, W/PYR

CNG SH-RED-GRY, BLKY-SFT, W/CHRT-OFF
WHT-RED, PRTLY OOL

SS-TRNS, F-M GRN, SUB RND, PYR CMNT, SHW
FREE LT OIL, FNT ODR

SS-GRY, F-M GRN, SUB RND, SHLY, TR SHW LT
FREE OIL

ARBUCKLE 3546' (-1645')
DOL-OFF WHT, M GRN, XLN, HD-BRTL, PR-FR
INTRXLN POR, SHW OIL, SHW GAS, W/PYR,
FNT-FR ODR

DOL-LT TAN-V LT GRY, F GRN, XLN,HD-BRTL,
PRTLY SNDY

DOL-V LT GRY, F GRN, XLN, MSTLY HD, SNDY

DOL SS-V LT TAN, F GRN, SUB RND, WL SRTD,
HD, SHW LT OIL, V FNT ODR

DOL SS-V LT TAN, F-L GRN, SUB RND, MSTLY
HD

DST #5 3440'-3515'

DST #6 3448'-3540'

DST #7 3540'-3547'

DST #8 3547'-3553'

DST #9 3541'-3553'

DST #10 3553'-3560'

11 UNIT GAS INC

TG, C1-C5
1 10 100 1000



BASICSM
ENERGY SERVICES
PRESSURE PUMPING & WIRELINE

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

FIELD SERVICE TICKET
1718 11101 A

DATE _____ TICKET NO. _____

DATE OF JOB: 7-16-14 DISTRICT		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: EG Hill Co LLC		LEASE: Zimmer		WELL NO. 120						
ADDRESS:		COUNTY: Butler		STATE: KS						
CITY: STATE:		SERVICE CREW: Paul Campbell								
AUTHORIZED BY: Rob Long		JOB TYPE: 4 1/2" long string 2 stage CML								
EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQUIPMENT#	HRS	TRUCK CALLED	DATE	AM	PM	TIME
27863	35									
19831 19862	35									
19889 1843	35									
28447	1									
						ARRIVED AT JOB	7-16-14	AM	PM	8:30
						START OPERATION	7-16-14	AM	PM	5:30
						FINISH OPERATION	7-16-14	AM	PM	9:04
						RELEASED	7-16-14	AM	PM	9:45
						MILES FROM STATION TO WELL				

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
CPK5	AA7 Cement	SK	165		
CPK5	AA7 Cement	SK	75		
CPK5	AA7 Cement	SK	50		
CC47	Coll. Plug	lb	73		
CC45	C-HP	lb	69		
CC11	S-11	lb	1305		
CC15	C-11	lb	274		
CC129	FLA-327	lb	274		
CC71	Carbonate	lb	2960		
CC460	4 1/2" Stage (3 1/2" - 4 1/2")	CG	1		
CC463	4 1/2" 1/2" Plug & assembly	CG	1		
CC465	4 1/2" 1/2" Plug Size 4 1/2"	CG	1		
CC466	Tool Joint 4 1/2"	CG	10		
CC467	4 1/2" Nut	CG	2		
CC710	Cement Spacers 1/2" x 1/2" x 1/2"	CG	983		
CC134	S-11	lb	1060		
FK0	1 1/2" 1/2" Plug	MI	53		
FKT	Heavy Equipment	MI	110		
L-11	1 1/2" 1/2" Plug	MI	754		

SUB TOTAL

CHEMICAL / ACID DATA:			

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

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

FIELD SERVICE ORDER NO. _____



energy services, L.P.

TREATMENT REPORT

Customer <i>FG Holl Co LLC</i>	Lease No.	Date <i>7-16-14</i>
Lease <i>Zimmer</i>	Well # <i>1-70</i>	
Field Order # <i>11101A</i>	Station <i>Pratt</i>	Casing <i>4 1/2</i>
Type Job <i>4 1/2 long string 2 stage</i>	Formation <i>cnw</i>	Depth
		County <i>Barton</i>
		State <i>KS</i>
		Legal Description <i>20 19 14w</i>

PIPE DATA		PERFORATING DATA		FLUID USED	TREATMENT RESUME		
Casing Size <i>4 1/2 105</i>	Tubing Size	Shots/Ft		Acid	RATE	PRESS	ISIP
Depth <i>3212</i>	Depth	From	To	Pre Pad	Max		5 Min.
Volume <i>59.61</i>	Volume	From	To	Pad	Min		10 Min.
Max Press <i>2100</i>	Max Press	From	To	Frac	Avg		15 Min.
Well Connection <i>4 1/2</i>	Annulus Vol.	From	To		HHP Used		Annulus Pressure
Plug Depth	Packer Depth	From	To	Flush	Gas Volume		Total Load

Customer Representative <i>Rob Long</i>	Station Manager <i>Kevin Goodley</i>	Treater <i>Scott, Joe</i>
--	---	------------------------------

Service Units <i>27283</i>	<i>25413</i>	<i>12831</i>	<i>19889</i>						
Driver Names <i>Scott Joe</i>	<i>Josh</i>	<i>Ecl</i>							

Time	Casing Pressure	Tubing Pressure	Bbbs. Pumped	Rate	Service Log
<i>9:30</i>					<i>on location Safety meeting Rig up</i>
<i>1:15</i>					<i>Run float equipment basket at 2, 32</i>
					<i>Turbolizers at 1, 2, 3, 4, 5, 6 31, 32, 34, 3</i>
<i>3:20</i>					<i>DV tool at Joint 33 2380'</i>
<i>5:30</i>			<i>3</i>	<i>3</i>	<i>circulate well for 2 hours</i>
<i>5:34</i>			<i>12</i>	<i>3</i>	<i>Pumped 3 bbl H2O spacer</i>
<i>5:39</i>			<i>3</i>	<i>5</i>	<i>Pump 12 bbl's Super flush</i>
<i>5:47</i>	<i>150</i>		<i>42.02</i>	<i>5.5</i>	<i>Pump 2 bbl H2O spacer</i>
<i>5:50</i>					<i>Pump 16.5 SKS AA2 cement @ 15 gpm</i>
<i>5:53</i>					<i>Drifting wash pump + line</i>
<i>5:53</i>					<i>Drop plug</i>
<i>5:53</i>					<i>Start Disp</i>
<i>5:58</i>	<i>200</i>		<i>23</i>	<i>5.5</i>	<i>pump 23 bbl's of H2O</i>
<i>5:58</i>	<i>200</i>		<i>36</i>	<i>5.5</i>	<i>pump 36 bbl's of Mad</i>
<i>6:04</i>	<i>1500</i>				<i>Plug landed and held</i>
<i>6:08</i>					<i>Drop bomb</i>
<i>6:23</i>	<i>1100</i>				<i>Pressure up open DV tool</i>
					<i>DV tool open</i>
					<i>Bottom stage complete</i>



BASICSM
ENERGY SERVICES
PRESSURE PUMPING & WIRELINE

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

FIELD SERVICE TICKET
1718 10708 A

DATE _____ TICKET NO. _____

DATE OF JOB 7-3-14	DISTRICT	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 16 1441 Co LLC		LEASE 2					WELL NO. 1-2		
ADDRESS		COUNTY Butler				STATE KS			
CITY	STATE	SERVICE CREW Phil Connor							
AUTHORIZED BY Rob Wood		JOB TYPE: 528 828 Surface CIVIL							
EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQUIPMENT#	HRS	TRUCK CALLED	DATE	AM PM	TIME
3706	5					ARRIVED AT JOB	7-3-14	AM	7:00
1526 1960	5					START OPERATION	7-3-14	AM	9:07
17-6 1965	5					FINISH OPERATION	7-3-14	AM	9:52
						RELEASED	7-3-14	AM	11:00
						MILES FROM STATION TO WELL			

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
CP101	100# 40/70 Cement	50	2000		
CP102	100# Cement	50	2000		
CP103	100# Cement	10	4000		
CP104	100# Cement	10	4000		
CP105	Top Rubber Cement Plug 5/8"	50	1		
CP106	100# Cement 2 1/2"	50	3		
CP107	100# Cement	21	25		
CP108	100# Cement	21	110		
CP109	100# Cement	21	1071		
CP110	100# Cement	40	1		
CP111	100# Cement	30	100		
CP112	100# Cement	50	1		
CP113	100# Cement	20	1		

SUB TOTAL

CHEMICAL / ACID DATA:			

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

TOTAL

SERVICE REPRESENTATIVE

THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY:

FIELD SERVICE ORDER NO.

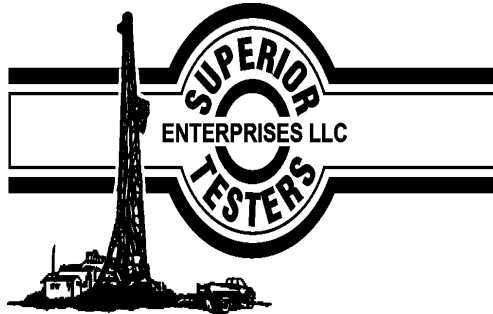
(WELL OWNER OPERATOR CONTRACTOR OR AGENT)

Customer <i>FG Hall Co LLC</i>		Lease No.	Date <i>7-3-14</i>	
Lease <i>Zimmie</i>		Well # <i>1-20</i>		
Field Order # <i>10708 A</i>	Station	Casing <i>8 5/8</i>	Depth	County <i>Barton</i> State <i>MS</i>
Type Job <i>8 5/8 Surface MNW</i>		Formation		Legal Description

PIPE DATA		PERFORATING DATA		FLUID USED	TREATMENT RESUME		
Casing Size <i>8 5/8</i>	Tubing Size	Shots/Ft		Acid	RATE	PRESS	ISIP
Depth <i>831'</i>	Depth	From	To	Pre Pad	Max <i>5.8</i>	<i>500</i>	5 Min.
Volume <i>57</i>	Volume	From	To	Pad	Min <i>4.5</i>	<i>100</i>	10 Min.
Max Press <i>500</i>	Max Press	From	To	Frac	Avg <i>5.2</i>	<i>300</i>	15 Min.
Well Connection <i>8 5/8</i>	Annulus Vol.	From	To		HHP Used		Annulus Pressure
Plug Depth	Packer Depth	From	To	Flush	Gas Volume		Total Load

Customer Representative			Station Manager <i>Kevin Goudly</i>			Treater <i>Scott Cronics</i>		
Service Units	<i>37216</i>	<i>77868</i>	<i>19826</i>					
Driver Names	<i>Scott</i>	<i>M. Re</i>	<i>Dale</i>					

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
<i>7:00</i>					<i>On location Safety Meeting Rig up</i>
<i>7:04</i>					<i>Circulate well</i>
<i>9:07</i>	<i>0</i>		<i>38</i>	<i>5.1</i>	<i>Mix 200 SKS Accon cement 12#</i>
<i>9:29</i>	<i>100</i>		<i>43</i>	<i>4.5</i>	<i>Mix 200 SKS Common Cement 15.6#</i>
<i>9:48</i>					<i>Drop Plug</i>
<i>9:48</i>	<i>500</i>		<i>49</i>	<i>5.8</i>	<i>Start Displacement</i>
<i>9:59</i>	<i>300</i>				<i>Shut down</i>
					<i>Circulated cement to pit</i>
					<i>Job Complete</i>



DRILL STEM TEST REPORT

Prepared For: **F.G Holl Company L.L.C**

9431 E Central St # 100 Wichita KS 67206

ATTN: Ryan Greenbaum

Zimmer #1-20

20-19s-14w Barton

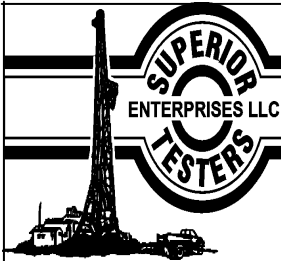
Start Date: 2014.07.08 @ 05:14:00

End Date: 2014.07.08 @ 10:57:30

Job Ticket #: 19302 DST #: 1

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

Printed: 2014.07.08 @ 12:07:50



DRILL STEM TEST REPORT

F.G Holl Company L.L.C

20-19s-14w Barton

9431 E Central St # 100 Wichita KS 67206

Zimmer #1-20

Job Ticket: 19302

DST#: 1

ATTN: Ryan Greenbaum

Test Start: 2014.07.08 @ 05:14:00

GENERAL INFORMATION:

Formation: **LKC " A-B "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:21:30

Time Test Ended: 10:57:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Jared Scheck

Unit No: 3340-Great Bend -25

Interval: 3210.00 ft (KB) To 3255.00 ft (KB) (TVD)

Reference Elevations: 1901.00 ft (KB)

Total Depth: 3255.00 ft (KB) (TVD)

1893.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8525

Press@RunDepth: 58.51 psig @ ft (KB)

Capacity: 5000.00 psig

Start Date: 2014.07.08

End Date: 2014.07.08

Last Calib.: 2014.07.08

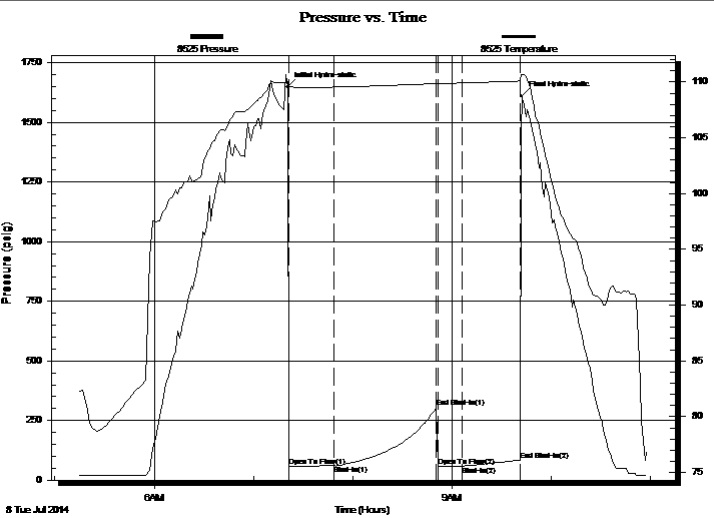
Start Time: 05:14:00

End Time: 10:57:30

Time On Btm: 2014.07.08 @ 07:20:30

Time Off Btm: 2014.07.08 @ 09:42:00

TEST COMMENT: 1st Opening 30 Minutes-Very weak surface blow built 1/2 inch into water in 30 minutes
 1st Shut-in 60 Minutes-No blow back
 2nd Opening 15 Minutes-Very weak surge did not build
 2nd Shut-in 30 Minutes-No blow back



PRESSURE SUMMARY

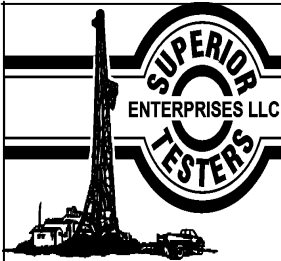
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1648.40	110.04	Initial Hydro-static
1	58.61	109.61	Open To Flow (1)
28	61.17	109.55	Shut-In(1)
90	304.64	109.86	End Shut-In(1)
91	57.57	109.86	Open To Flow (2)
106	58.51	109.91	Shut-In(2)
141	83.90	110.09	End Shut-In(2)
142	1610.94	110.66	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	spot oil mud 1%oil 99%mud	0.14

Gas Rates

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



DRILL STEM TEST REPORT

F.G Holl Company L.L.C

20-19s-14w Barton

9431 E Central St # 100 Wichita KS 67206

Zimmer #1-20

Job Ticket: 19302

DST#: 1

ATTN: Ryan Greenbaum

Test Start: 2014.07.08 @ 05:14:00

GENERAL INFORMATION:

Formation: **LKC "A-B"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:21:30

Time Test Ended: 10:57:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Jared Scheck

Unit No: 3340-Great Bend -25

Interval: 3210.00 ft (KB) To 3255.00 ft (KB) (TVD)

Reference Elevations: 1901.00 ft (KB)

Total Depth: 3255.00 ft (KB) (TVD)

1893.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8400

Press@RunDepth: 77.28 psig @ ft (KB)

Capacity: 5000.00 psig

Start Date: 2014.07.08 End Date: 2014.07.08

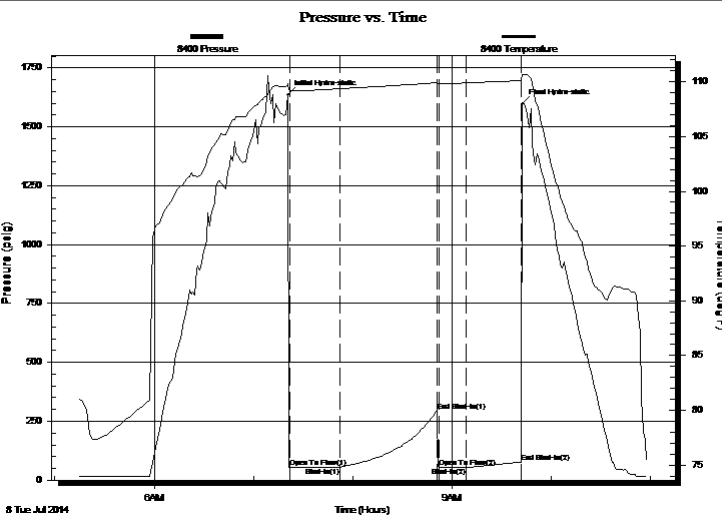
Last Calib.: 2014.07.08

Start Time: 05:14:00 End Time: 10:57:30

Time On Btm: 2014.07.08 @ 07:21:00

Time Off Btm: 2014.07.08 @ 09:42:30

TEST COMMENT: 1st Opening 30 Minutes-Very weak surface blow built 1/2 inch into water in 30 minutes
 1st Shut-in 60 Minutes-No blow back
 2nd Opening 15 Minutes-Very weak surge did not build
 2nd Shut-in 30 Minutes-No blow back



PRESSURE SUMMARY

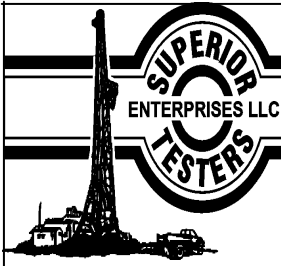
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1634.48	109.81	Initial Hydro-static
1	54.87	109.28	Open To Flow (1)
31	54.93	109.38	Shut-In(1)
90	294.86	109.94	End Shut-In(1)
91	55.45	109.83	Open To Flow (2)
108	53.86	109.91	Shut-In(2)
141	77.28	110.12	End Shut-In(2)
142	1596.92	110.64	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	spot oil mud 1%oil 99%mud	0.14

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

F.G Holl Company L.L.C

20-19s-14w Barton

9431 E Central St # 100 Wichita KS 67206

Zimmer #1-20

Job Ticket: 19302

DST#: 1

ATTN: Ryan Greenbaum

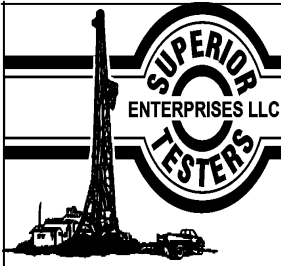
Test Start: 2014.07.08 @ 05:14:00

Tool Information

Drill Pipe:	Length: 3212.00 ft	Diameter: 3.80 inches	Volume: 45.06 bbl	Tool Weight: 1000.00 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: 45.06 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	3210.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	45.00 ft			
Tool Length:	73.00 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			3187.00	
Hydraulic tool	5.00			3192.00	
Jars	6.00			3198.00	
Safety Joint	2.00			3200.00	
Packer	5.00			3205.00	28.00 Bottom Of Top Packer
Packer	5.00			3210.00	
Anchor	40.00			3250.00	
Recorder	1.00			3251.00	
Recorder	1.00			3252.00	
Bullnose	3.00			3255.00	45.00 Bottom Packers & Anchor
Total Tool Length:	73.00				



DRILL STEM TEST REPORT

FLUID SUMMARY

F.G Holl Company L.L.C

20-19s-14w Barton

9431 E Central St # 100 Wichita KS 67206

Zimmer #1-20

Job Ticket: 19302

DST#: 1

ATTN: Ryan Greenbaum

Test Start: 2014.07.08 @ 05:14:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 49.00 sec/qt

Water Loss: 10.20 in³

Resistivity: ohm.m

Salinity: 7400.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

Water Salinity: deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	spot oil mud 1%oil 99%mud	0.140

Total Length: 10.00 ft Total Volume: 0.140 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

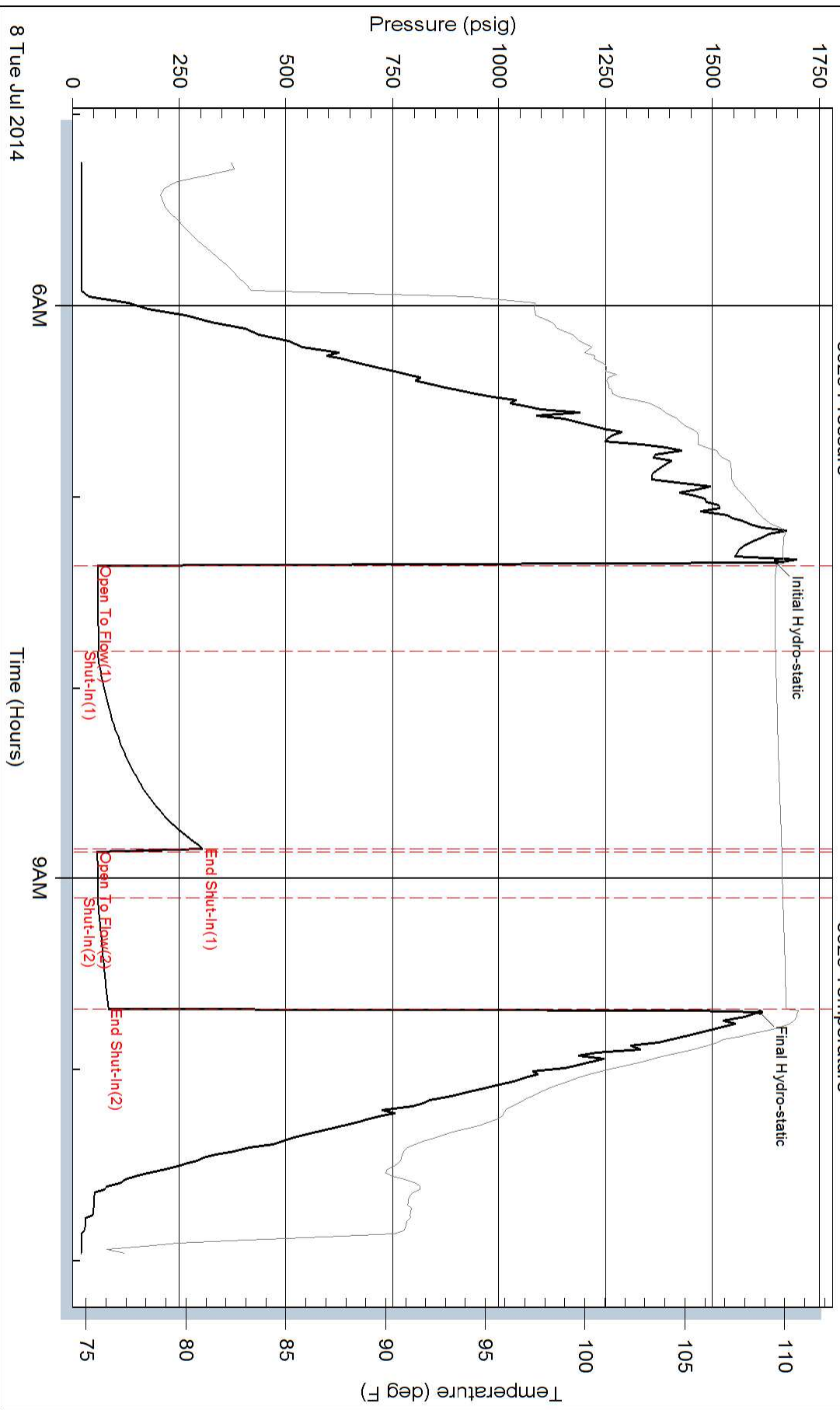
Serial #:

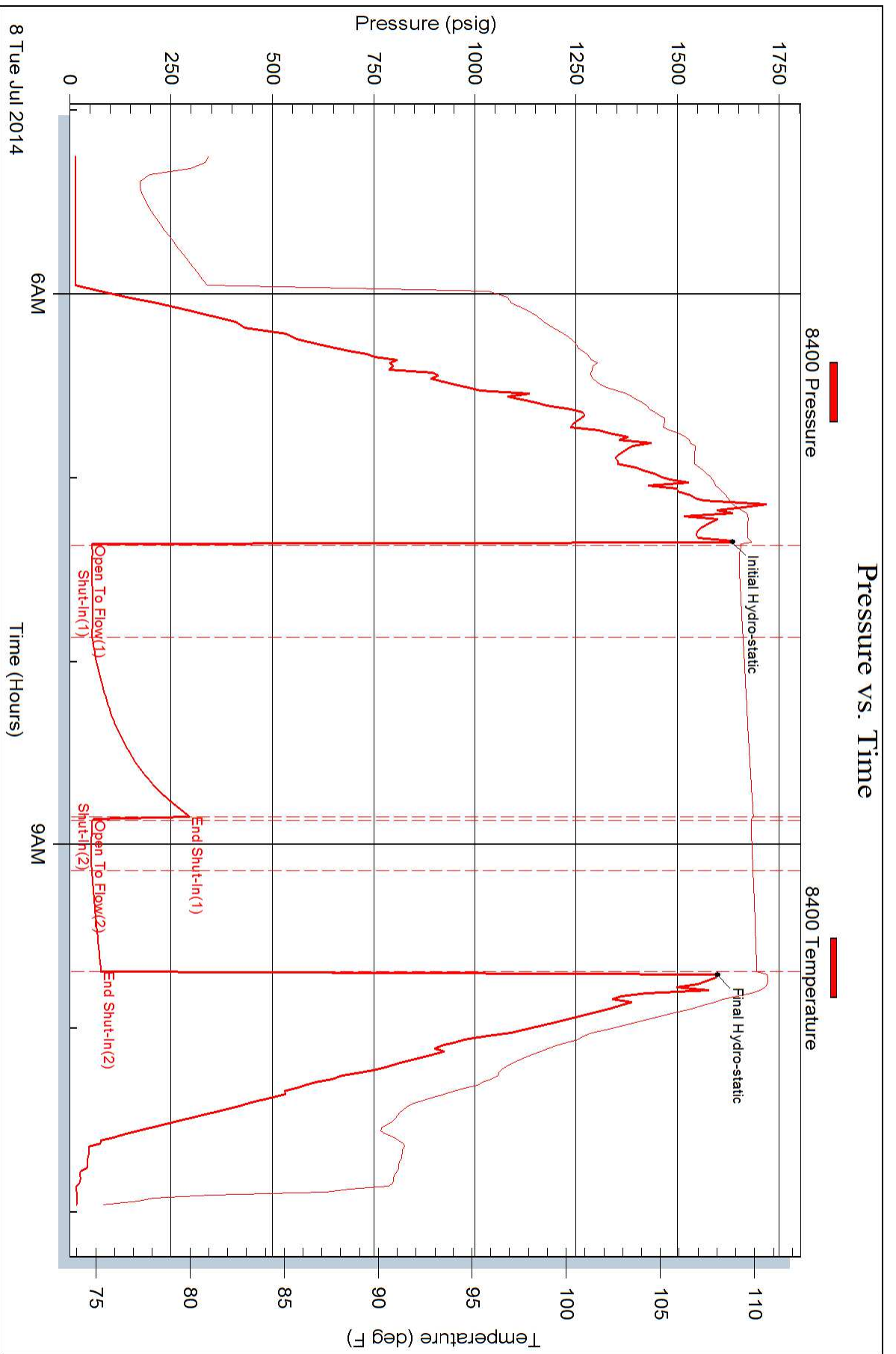
Laboratory Name:

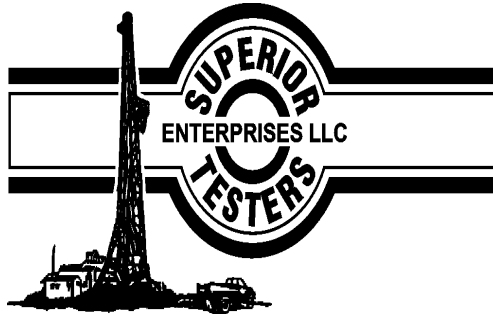
Laboratory Location:

Recovery Comments:

Pressure vs. Time







DRILL STEM TEST REPORT

Prepared For: **F.G Holl Company L.L.C**

9431 E Central St # 100 Wichita KS 67206

ATTN: Ryan Greenbaum

Zimmer #1-20

20-19s-14w Barton

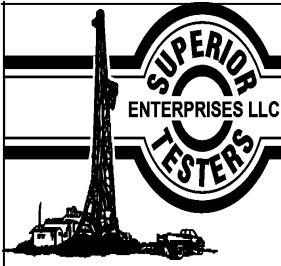
Start Date: 2014.07.08 @ 20:10:00

End Date: 2014.07.09 @ 03:09:30

Job Ticket #: 19303 DST #: 2

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

Printed: 2014.07.09 @ 04:38:07



DRILL STEM TEST REPORT

F.G Holl Company L.L.C

20-19s-14w Barton

9431 E Central St # 100 Wichita KS 67206

Zimmer #1-20

Job Ticket: 19303

DST#: 2

ATTN: Ryan Greenbaum

Test Start: 2014.07.08 @ 20:10:00

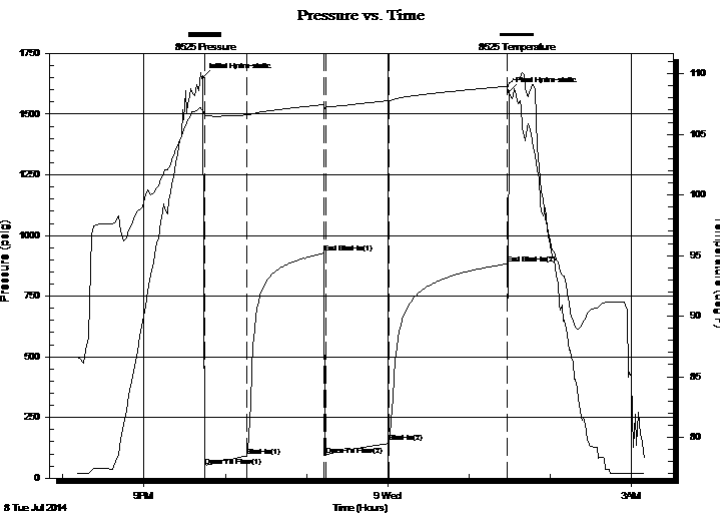
GENERAL INFORMATION:

Formation: **LKC "F" zone**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 21:44:30 Tester: Jared Scheck
 Time Test Ended: 03:09:30 Unit No: 3340 Great Bend -25
 Interval: **3260.00 ft (KB) To 3280.00 ft (KB) (TVD)** Reference Elevations: 1901.00 ft (KB)
 Total Depth: 3280.00 ft (KB) (TVD) 1893.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 8.00 ft

Serial #: 8525

Press@RunDepth: 148.10 psig @ ft (KB) Capacity: 5000.00 psig
 Start Date: 2014.07.08 End Date: 2014.07.09 Last Calib.: 2014.07.09
 Start Time: 20:10:00 End Time: 03:09:30 Time On Btm: 2014.07.08 @ 21:43:30
 Time Off Btm: 2014.07.09 @ 01:29:30

TEST COMMENT: 1st Opening 30 Minutes-Fair blow built bottom of bucket in 14 minutes
 1st Shut-in 60 Minutes-Very weak surface blow
 2nd Opening 45 Minutes-Fair blow built bottom of bucket in 19 minutes
 2nd Shut-in 90 Minutes-Very weak surface blow



PRESSURE SUMMARY

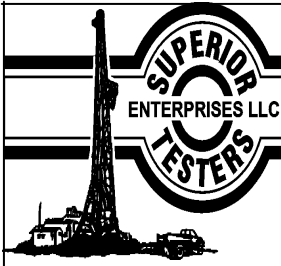
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1650.98	107.03	Initial Hydro-static
1	50.86	106.61	Open To Flow (1)
33	91.55	106.60	Shut-In(1)
90	927.06	107.47	End Shut-In(1)
91	95.31	107.31	Open To Flow (2)
138	148.10	107.79	Shut-In(2)
225	882.77	108.96	End Shut-In(2)
226	1593.38	109.26	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	gas oil w ater mud 5%g 15%o 30%w 50%	0.28
60.00	oil mud w ater 5%o 45%m 50%w	0.84
120.00	mud w ater 15%mud 85%w	1.68
0.00	180 feet gas in pipe	0.00
0.00	chlorides 100,000 resistivity .7@60deg	0.00

Gas Rates

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



DRILL STEM TEST REPORT

F.G Holl Company L.L.C

20-19s-14w Barton

9431 E Central St # 100 Wichita KS 67206

Zimmer #1-20

Job Ticket: 19303

DST#: 2

ATTN: Ryan Greenbaum

Test Start: 2014.07.08 @ 20:10:00

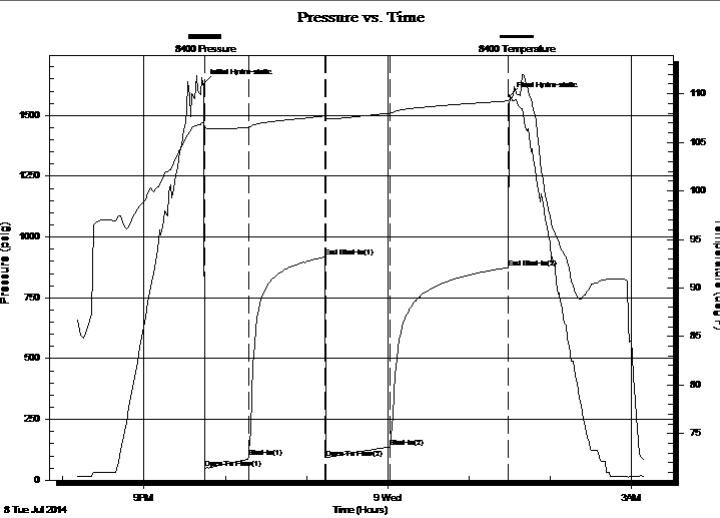
GENERAL INFORMATION:

Formation: **LKC "F" zone**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 21:44:30 Tester: Jared Scheck
 Time Test Ended: 03:09:30 Unit No: 3340 Great Bend -25
 Interval: **3260.00 ft (KB) To 3280.00 ft (KB) (TVD)** Reference Elevations: 1901.00 ft (KB)
 Total Depth: 3280.00 ft (KB) (TVD) 1893.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 8.00 ft

Serial #: 8400

Press@RunDepth: 874.16 psig @ ft (KB) Capacity: 5000.00 psig
 Start Date: 2014.07.08 End Date: 2014.07.09 Last Calib.: 2014.07.09
 Start Time: 20:10:00 End Time: 03:10:00 Time On Btm: 2014.07.08 @ 21:44:00
 Time Off Btm: 2014.07.09 @ 01:30:00

TEST COMMENT: 1st Opening 30 Minutes-Fair blow built bottom of bucket in 14 minutes
 1st Shut-in 60 Minutes-Very weak surface blow
 2nd Opening 45 Minutes-Fair blow built bottom of bucket in 19 minutes
 2nd Shut-in 90 Minutes-Very weak surface blow



PRESSURE SUMMARY

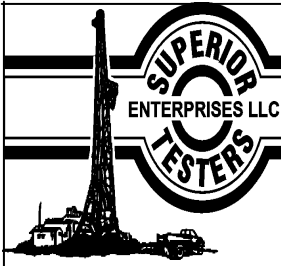
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1629.55	107.03	Initial Hydro-static
1	47.17	106.52	Open To Flow (1)
33	94.49	106.55	Shut-In(1)
90	917.90	107.71	End Shut-In(1)
91	91.68	107.41	Open To Flow (2)
138	136.55	107.99	Shut-In(2)
225	874.16	109.26	End Shut-In(2)
226	1579.82	109.47	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	gas oil w ater mud 5%g 15%o 30%w 50%	0.28
60.00	oil mud w ater 5%o 45%m 50%w	0.84
120.00	mud w ater 15%mud 85%w	1.68
0.00	180 feet gas in pipe	0.00
0.00	chlorides 100,000 resistivity .7@60deg	0.00

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

F.G Holl Company L.L.C

20-19s-14w Barton

9431 E Central St # 100 Wichita KS 67206

Zimmer #1-20

Job Ticket: 19303

DST#: 2

ATTN: Ryan Greenbaum

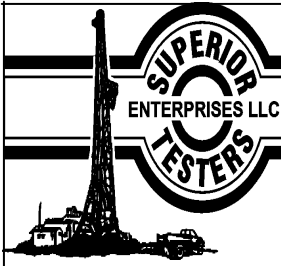
Test Start: 2014.07.08 @ 20:10:00

Tool Information

Drill Pipe:	Length: 3247.00 ft	Diameter: 3.80 inches	Volume: 45.55 bbl	Tool Weight:	1000.00 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: 45.55 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial	52000.00 lb
Depth to Top Packer:	3260.00 ft			Final	52000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	20.00 ft				
Tool Length:	48.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			
Tool Comments:					

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut In Tool	5.00			3237.00	
Hydraulic tool	5.00			3242.00	
Jars	6.00			3248.00	
Safety Joint	2.00			3250.00	
Packer	5.00			3255.00	28.00 Bottom Of Top Packer
Packer	5.00			3260.00	
Anchor	15.00			3275.00	
Recorder	1.00			3276.00	
Recorder	1.00			3277.00	
Bullnose	3.00			3280.00	20.00 Bottom Packers & Anchor
Total Tool Length:	48.00				



DRILL STEM TEST REPORT

FLUID SUMMARY

F.G Holl Company L.L.C

20-19s-14w Barton

9431 E Central St # 100 Wichita KS 67206

Zimmer #1-20

Job Ticket: 19303

DST#: 2

ATTN: Ryan Greenbaum

Test Start: 2014.07.08 @ 20:10:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 46.00 sec/qt
Water Loss: 7.99 in³
Resistivity: ohm.m
Salinity: 6800.00 ppm
Filter Cake: 1.00 inches

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

Oil API: deg API
Water Salinity: ppm

Recovery Information

Recovery Table

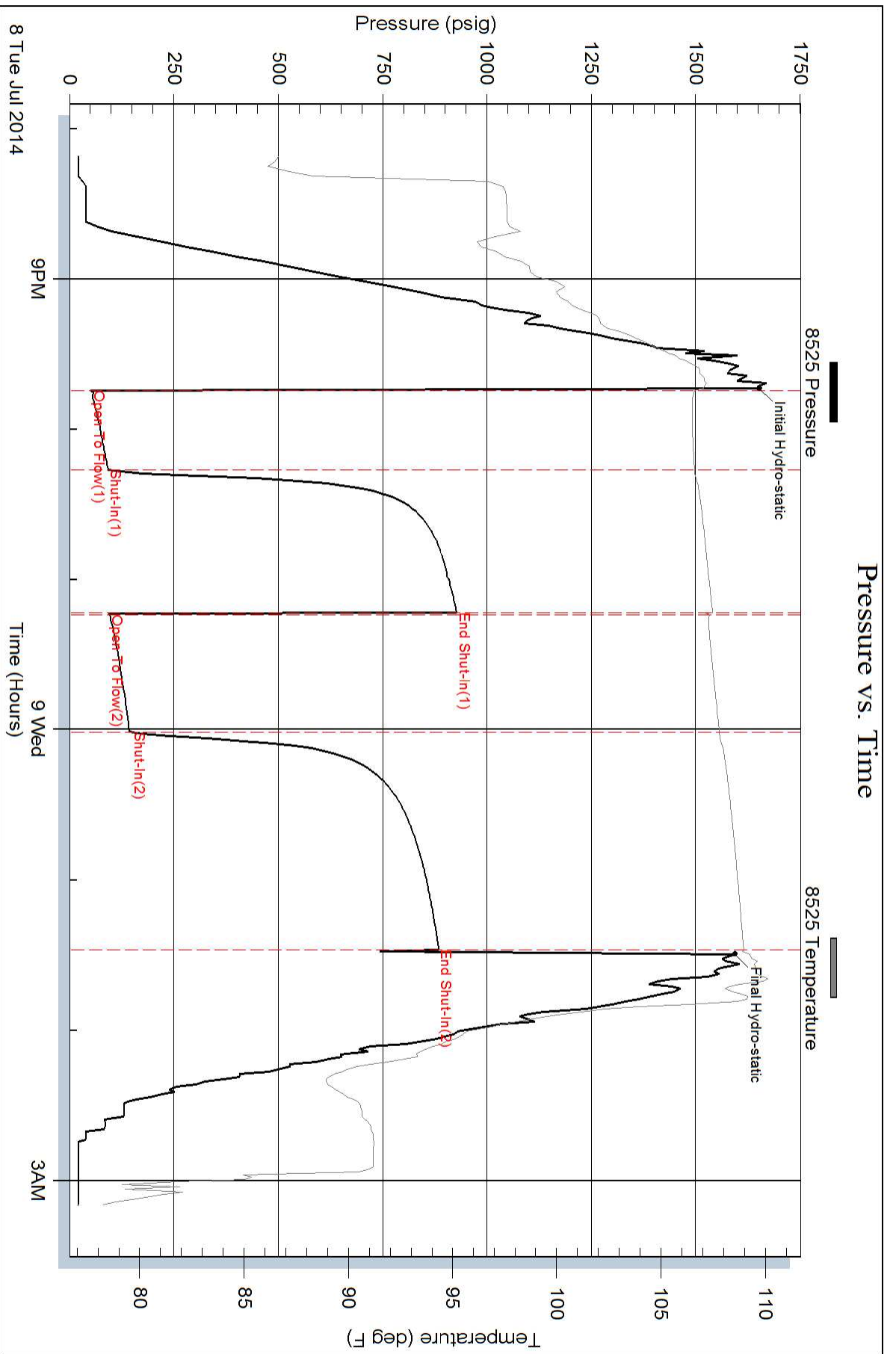
Length ft	Description	Volume bbl
20.00	gas oil water mud 5%g 15%o 30%w 50%m	0.281
60.00	oil mud water 5%o 45%m 50%w	0.842
120.00	mud water 15%mud 85%w	1.683
0.00	180 feet gas in pipe	0.000
0.00	chlorides 100,000 resistivity .7@60degre	0.000

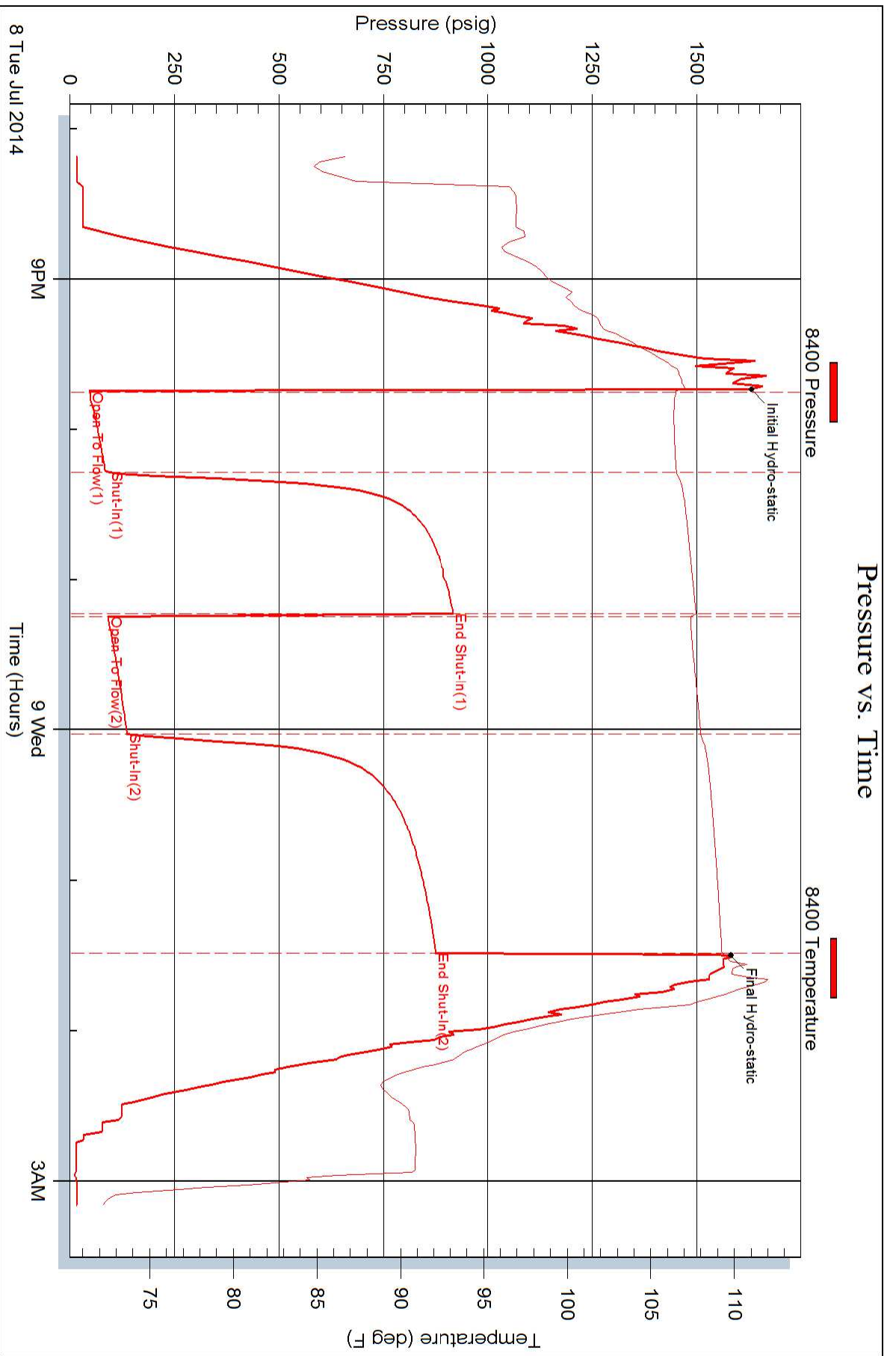
Total Length: 200.00 ft Total Volume: 2.806 bbl

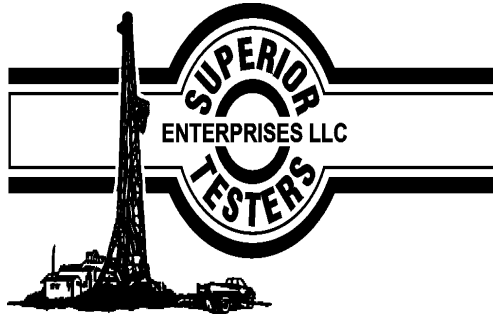
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **F.G Holl Company L.L.C**

9431 E Central St # 100 Wichita KS 67206

ATTN: Ryan Greenbaum

Zimmer #1-20

20-19s-14w Barton

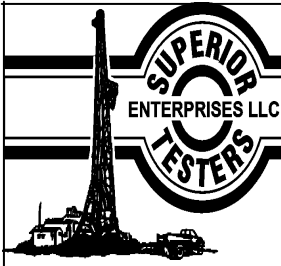
Start Date: 2014.07.09 @ 16:50:00

End Date: 2014.07.09 @ 23:20:30

Job Ticket #: 19304 DST #: 3

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

Printed: 2014.07.10 @ 00:36:16



DRILL STEM TEST REPORT

F.G Holl Company L.L.C

20-19s-14w Barton

9431 E Central St # 100 Wichita KS 67206

Zimmer #1-20

Job Ticket: 19304

DST#: 3

ATTN: Ryan Greenbaum

Test Start: 2014.07.09 @ 16:50:00

GENERAL INFORMATION:

Formation: **LKC "H-I"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:19:30

Time Test Ended: 23:20:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Jared Scheck

Unit No: 3340 Great bend -25

Interval: 3350.00 ft (KB) To 3380.00 ft (KB) (TVD)

Reference Elevations: 1901.00 ft (KB)

Total Depth: 3380.00 ft (KB) (TVD)

1893.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8525

Press@RunDepth: 66.97 psig @ ft (KB)

Capacity: 5000.00 psig

Start Date: 2014.07.09

End Date: 2014.07.09

Last Calib.: 2014.07.10

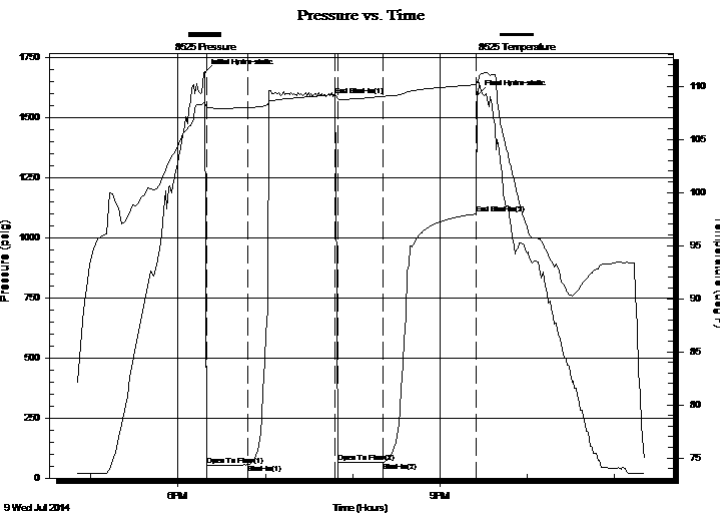
Start Time: 16:50:00

End Time: 23:20:30

Time On Btm: 2014.07.09 @ 18:18:30

Time Off Btm: 2014.07.09 @ 21:26:00

TEST COMMENT: 1st Opening 30 Minutes-Very weak surface blow built 3/4 inch into bucket in 30 minutes
 1st Shut-in 60 Minutes-No blow back
 2nd Opening 30 Minutes-Very weak blow built 2 inches into water in 30 minutes
 2nd Shut-in 60 Minutes-No blow back



PRESSURE SUMMARY

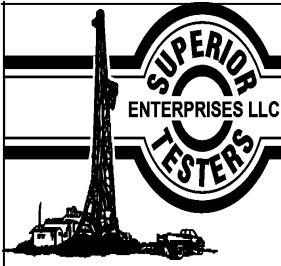
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1686.09	108.48	Initial Hydro-static
1	52.10	108.07	Open To Flow (1)
30	55.99	107.99	Shut-In(1)
90	1592.19	109.21	End Shut-In(1)
91	65.00	108.81	Open To Flow (2)
122	66.97	109.03	Shut-In(2)
187	1099.80	110.16	End Shut-In(2)
188	1596.89	110.36	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
40.00	Spot oil mud 1%oil 99%mud	0.56

Gas Rates

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



DRILL STEM TEST REPORT

F.G Holl Company L.L.C

20-19s-14w Barton

9431 E Central St # 100 Wichita KS 67206

Zimmer #1-20

Job Ticket: 19304

DST#: 3

ATTN: Ryan Greenbaum

Test Start: 2014.07.09 @ 16:50:00

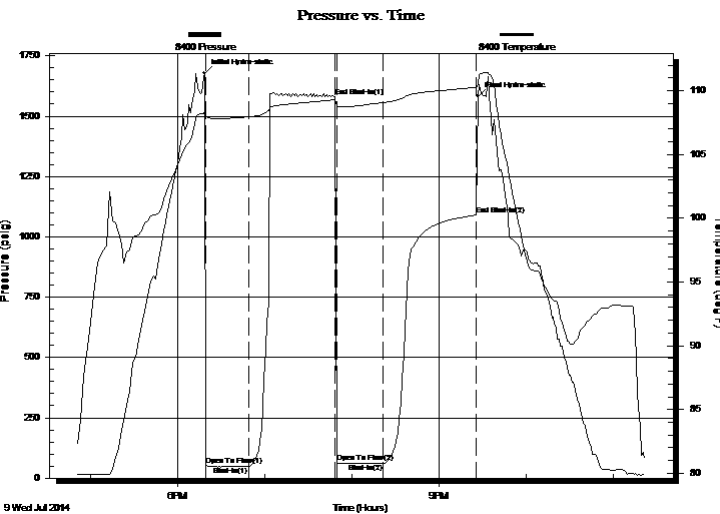
GENERAL INFORMATION:

Formation: **LKC "H-I"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 18:19:30
 Time Test Ended: 23:20:30
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Jared Scheck
 Unit No: 3340 Great bend -25
 Interval: **3350.00 ft (KB) To 3380.00 ft (KB) (TVD)**
 Reference Elevations: 1901.00 ft (KB)
 Total Depth: 3380.00 ft (KB) (TVD)
 1893.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 KB to GR/CF: 8.00 ft

Serial #: 8400

Press@RunDepth: 1089.80 psig @ ft (KB) Capacity: 5000.00 psig
 Start Date: 2014.07.09 End Date: 2014.07.09 Last Calib.: 2014.07.10
 Start Time: 16:50:00 End Time: 23:21:30 Time On Btm: 2014.07.09 @ 18:18:30
 Time Off Btm: 2014.07.09 @ 21:26:30

TEST COMMENT: 1st Opening 30 Minutes-Very weak surface blow built 3/4 inch into bucket in 30 minutes
 1st Shut-in 60 Minutes-No blow back
 2nd Opening 30 Minutes-Very weak blow built 2 inches into water in 30 minutes
 2nd Shut-in 60 Minutes-No blow back



PRESSURE SUMMARY

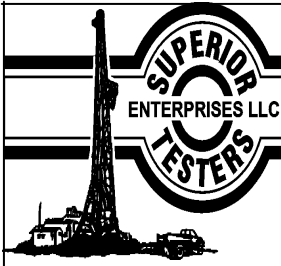
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1677.39	108.41	Initial Hydro-static
1	51.60	107.95	Open To Flow (1)
30	49.53	107.95	Shut-In(1)
90	1582.57	109.31	End Shut-In(1)
91	63.77	108.82	Open To Flow (2)
123	60.64	109.08	Shut-In(2)
187	1089.80	110.27	End Shut-In(2)
188	1582.82	110.52	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
40.00	Spot oil mud 1%oil 99% mud	0.56

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

F.G Holl Company L.L.C

20-19s-14w Barton

9431 E Central St # 100 Wichita KS 67206

Zimmer #1-20

Job Ticket: 19304

DST#: 3

ATTN: Ryan Greenbaum

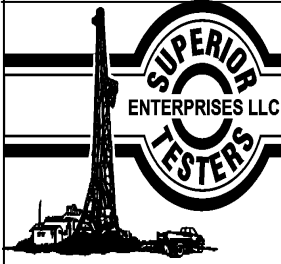
Test Start: 2014.07.09 @ 16:50:00

Tool Information

Drill Pipe:	Length: 3337.00 ft	Diameter: 3.80 inches	Volume: 46.81 bbl	Tool Weight: 1000.00 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: 46.81 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	3350.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	30.00 ft			
Tool Length:	58.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut In Tool	5.00			3327.00	
Hydraulic tool	5.00			3332.00	
Jars	6.00			3338.00	
Safety Joint	2.00			3340.00	
Packer	5.00			3345.00	28.00 Bottom Of Top Packer
Packer	5.00			3350.00	
Anchor	25.00			3375.00	
Recorder	1.00		Inside	3376.00	
Recorder	1.00			3377.00	
Bullnose	3.00			3380.00	30.00 Bottom Packers & Anchor
Total Tool Length:	58.00				



DRILL STEM TEST REPORT

FLUID SUMMARY

F.G Holl Company L.L.C

20-19s-14w Barton

9431 E Central St # 100 Wichita KS 67206

Zimmer #1-20

Job Ticket: 19304

DST#: 3

ATTN: Ryan Greenbaum

Test Start: 2014.07.09 @ 16:50:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 47.00 sec/qt
Water Loss: 8.80 in³
Resistivity: ohm.m
Salinity: 4200.00 ppm
Filter Cake: 1.00 inches

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

Oil API: deg API
Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
40.00	Spot oil mud 1%oil 99%mud	0.561

Total Length: 40.00 ft Total Volume: 0.561 bbl

Num Fluid Samples: 0

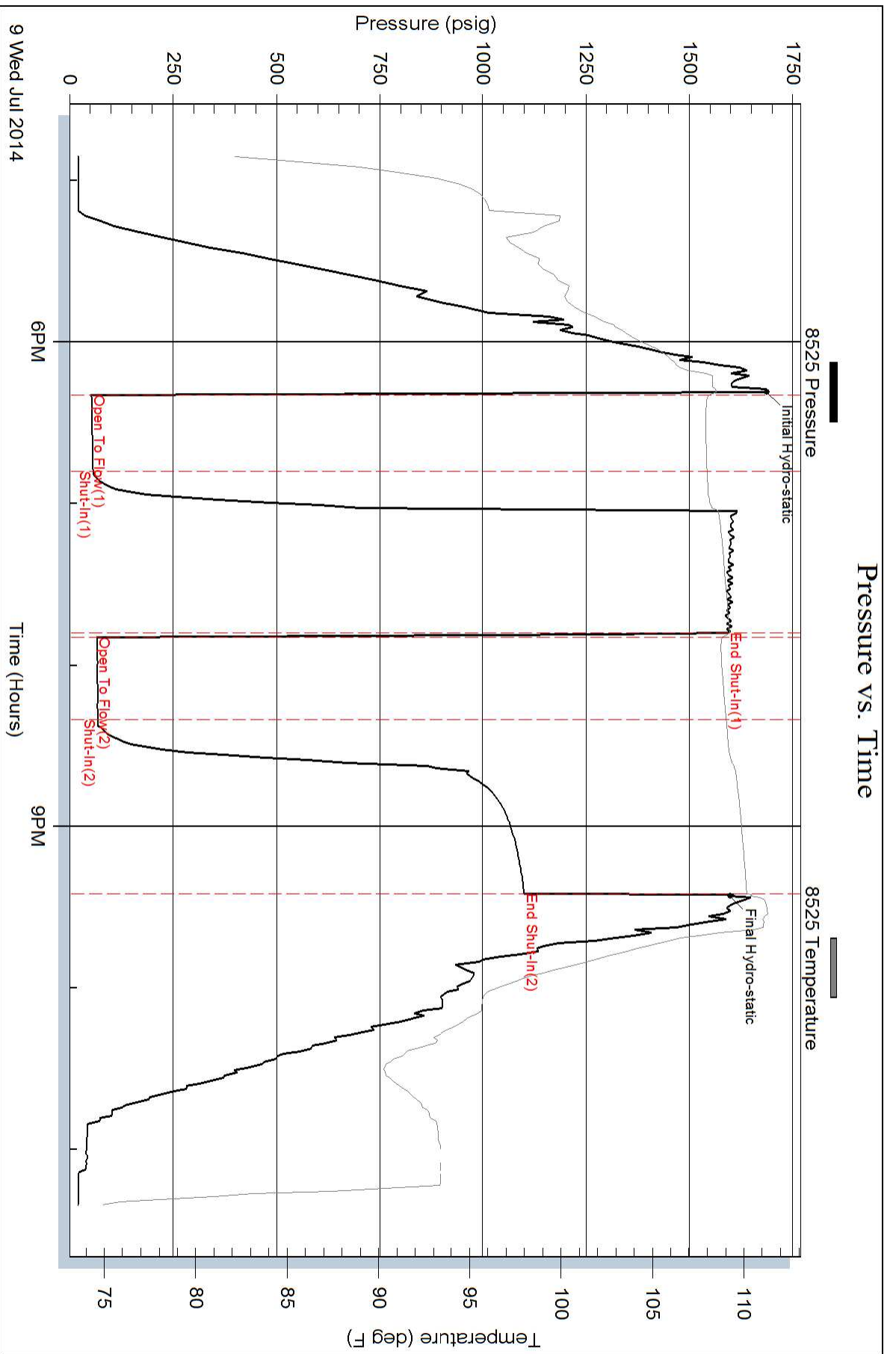
Num Gas Bombs: 0

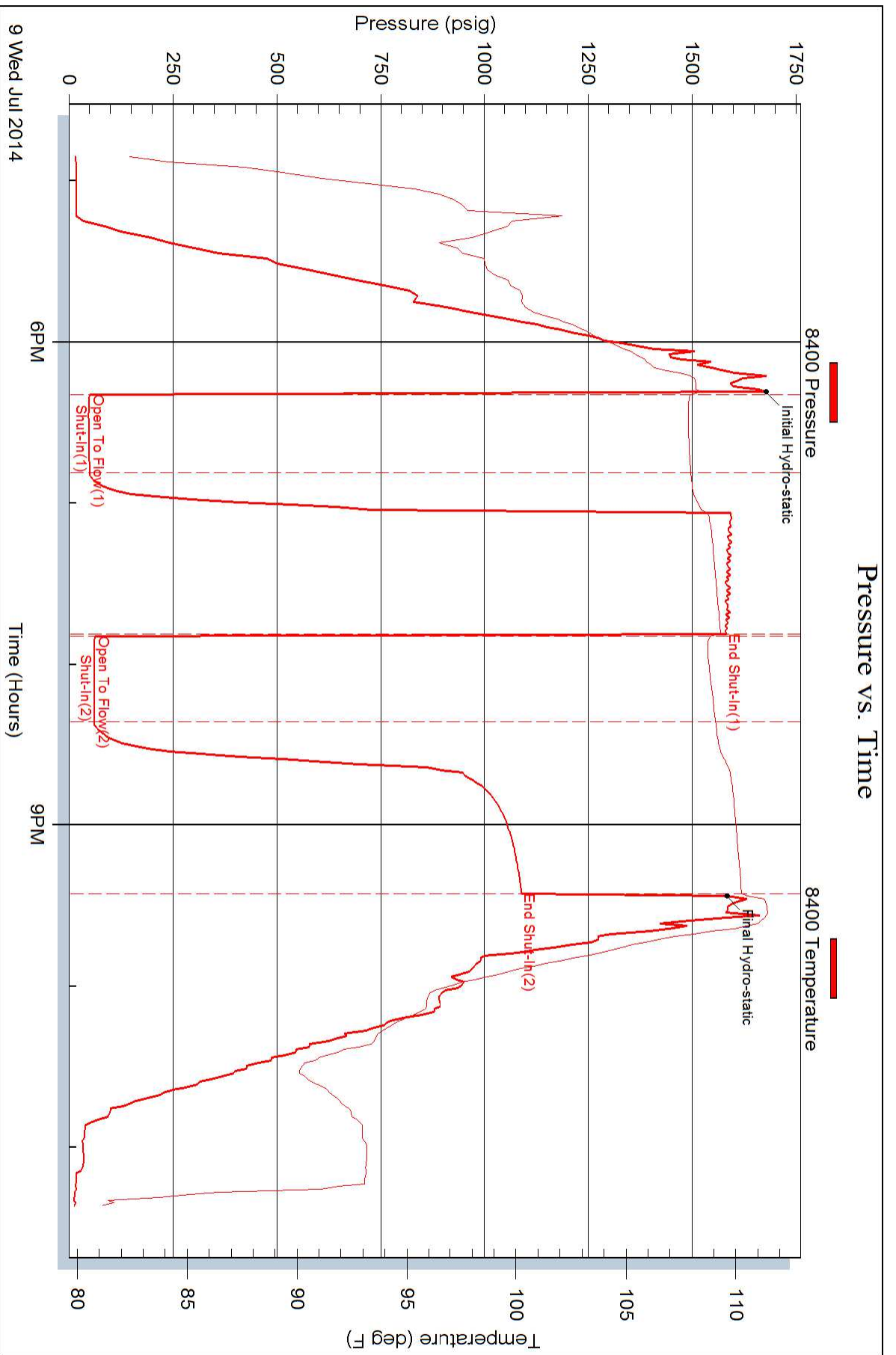
Serial #:

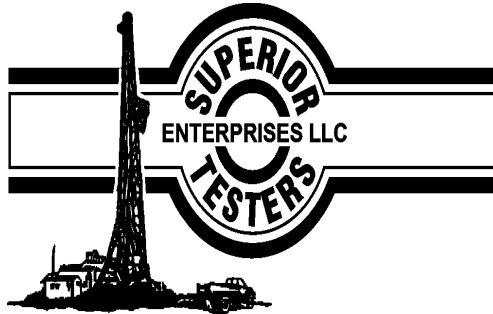
Laboratory Name:

Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **F.G Holl Company L.L.C**

9431 E Central St # 100 Wichita KS 67206

ATTN: Ryan Greenbaum

Zimmer #1-20

20-19s-14w Barton

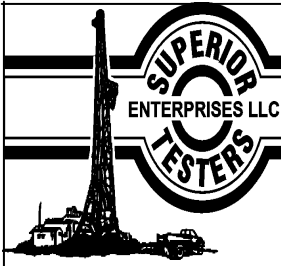
Start Date: 2014.07.10 @ 08:55:00

End Date: 2014.07.10 @ 15:42:30

Job Ticket #: 19305 DST #: 4

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

Printed: 2014.07.10 @ 16:58:25



DRILL STEM TEST REPORT

F.G Holl Company L.L.C

20-19s-14w Barton

9431 E Central St # 100 Wichita KS 67206

Zimmer #1-20

Job Ticket: 19305

DST#: 4

ATTN: Ryan Greenbaum

Test Start: 2014.07.10 @ 08:55:00

GENERAL INFORMATION:

Formation: **LKC "J" zone**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:15:00

Time Test Ended: 15:42:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Jared Scheck

Unit No: 3340-Great Bend-25

Interval: 3380.00 ft (KB) To 3400.00 ft (KB) (TVD)

Reference Elevations: 1901.00 ft (KB)

Total Depth: 3400.00 ft (KB) (TVD)

1893.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8524

Press@RunDepth: 46.65 psig @ ft (KB)

Capacity: 5000.00 psig

Start Date: 2014.07.10

End Date: 2014.07.10

Last Calib.: 2014.07.10

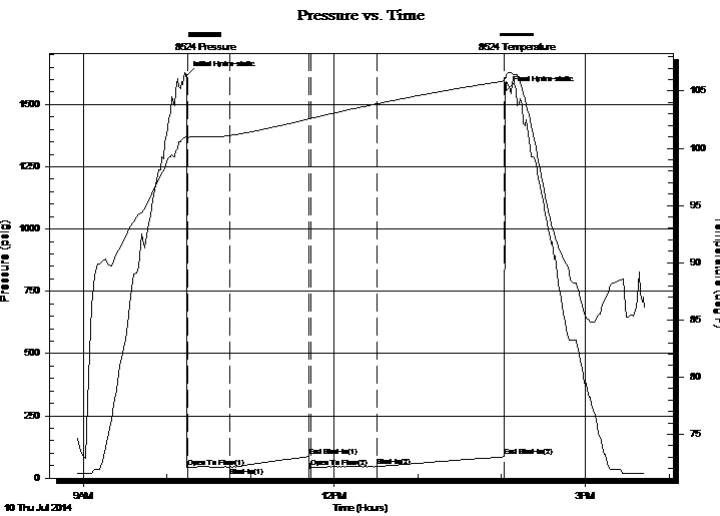
Start Time: 08:55:00

End Time: 15:42:30

Time On Btm: 2014.07.10 @ 10:14:00

Time Off Btm: 2014.07.10 @ 14:03:00

TEST COMMENT: 1st Opening 30 Minutes-Very weak blow built 2 inches into water in 30 minutes
 1st Shut-in 60 Minutes-No blow back
 2nd Opening 45 Minutes-Very weak blow built 3 inches into water in 45 minutes
 2nd Shut-in 90 Minutes-No blow back



PRESSURE SUMMARY

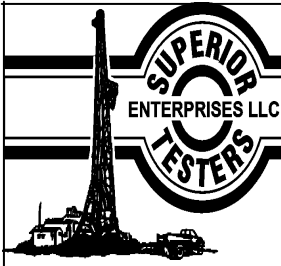
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1617.72	101.11	Initial Hydro-static
1	43.45	100.92	Open To Flow (1)
31	44.65	101.12	Shut-In(1)
88	86.93	102.57	End Shut-In(1)
89	41.59	102.61	Open To Flow (2)
137	46.65	103.88	Shut-In(2)
228	85.83	105.88	End Shut-In(2)
229	1557.06	106.19	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	oil mud 15%oil 85%mud	0.28

Gas Rates

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



DRILL STEM TEST REPORT

F.G Holl Company L.L.C

20-19s-14w Barton

9431 E Central St # 100 Wichita KS 67206

Zimmer #1-20

Job Ticket: 19305

DST#: 4

ATTN: Ryan Greenbaum

Test Start: 2014.07.10 @ 08:55:00

GENERAL INFORMATION:

Formation: **LKC "J" zone**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:15:00

Time Test Ended: 15:42:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Jared Scheck

Unit No: 3340-Great Bend-25

Interval: 3380.00 ft (KB) To 3400.00 ft (KB) (TVD)

Reference Elevations: 1901.00 ft (KB)

Total Depth: 3400.00 ft (KB) (TVD)

1893.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8400

Press@RunDepth: 80.69 psig @ ft (KB)

Capacity: 5000.00 psig

Start Date: 2014.07.10

End Date: 2014.07.10

Last Calib.: 2014.07.10

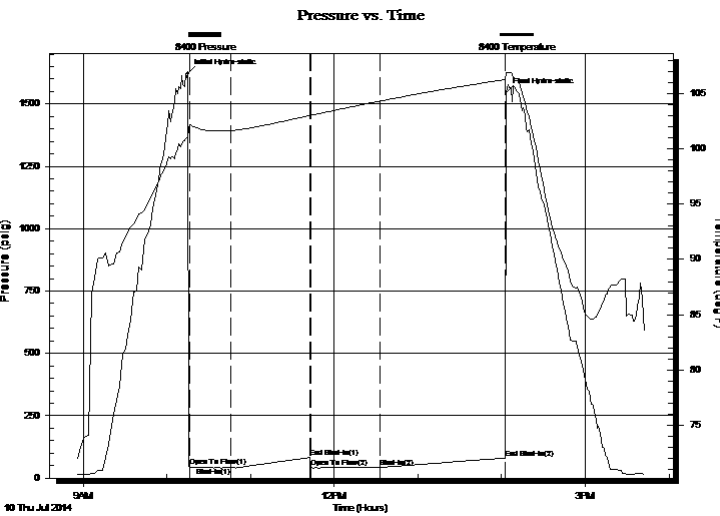
Start Time: 08:55:00

End Time: 15:43:00

Time On Btm: 2014.07.10 @ 10:15:00

Time Off Btm: 2014.07.10 @ 14:03:30

TEST COMMENT: 1st Opening 30 Minutes-Very weak blow built 2 inches into water in 30 minutes
 1st Shut-in 60 Minutes-No blow back
 2nd Opening 45 Minutes-Very weak blow built 3 inches into water in 45 minutes
 2nd Shut-in 90 Minutes-No blow back



PRESSURE SUMMARY

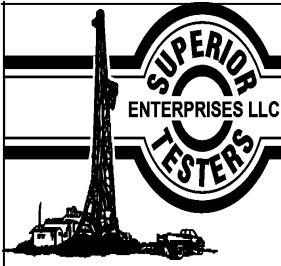
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1621.97	100.95	Initial Hydro-static
1	45.52	102.14	Open To Flow (1)
31	42.14	101.64	Shut-In(1)
88	82.14	103.01	End Shut-In(1)
89	42.43	103.02	Open To Flow (2)
138	43.14	104.31	Shut-In(2)
228	80.69	106.26	End Shut-In(2)
229	1546.60	106.86	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	oil mud 15%oil 85%mud	0.28

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

F.G Holl Company L.L.C

20-19s-14w Barton

9431 E Central St # 100 Wichita KS 67206

Zimmer #1-20

Job Ticket: 19305

DST#: 4

ATTN: Ryan Greenbaum

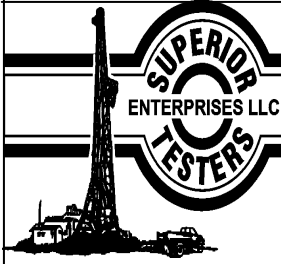
Test Start: 2014.07.10 @ 08:55:00

Tool Information

Drill Pipe:	Length: 3372.00 ft	Diameter: 3.80 inches	Volume: 47.30 bbl	Tool Weight: 1000.00 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: 80000.00 lb
			<u>Total Volume: 47.30 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	3380.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	20.00 ft			
Tool Length:	48.00 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			3357.00	
Hydraulic tool	5.00			3362.00	
Jars	6.00			3368.00	
Safety Joint	2.00			3370.00	
Packer	5.00			3375.00	28.00 Bottom Of Top Packer
Packer	5.00			3380.00	
Anchor	4.00			3384.00	
Recorder	1.00	8525		3385.00	
Recorder	1.00	8400		3386.00	
Bullnose	14.00			3400.00	20.00 Bottom Packers & Anchor
Total Tool Length:	48.00				



DRILL STEM TEST REPORT

FLUID SUMMARY

F.G Holl Company L.L.C

20-19s-14w Barton

9431 E Central St # 100 Wichita KS 67206

Zimmer #1-20

Job Ticket: 19305

DST#: 4

ATTN: Ryan Greenbaum

Test Start: 2014.07.10 @ 08:55:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 47.00 sec/qt
Water Loss: 8.80 in³
Resistivity: ohm.m
Salinity: 4200.00 ppm
Filter Cake: 1.00 inches

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

Oil API: deg API
Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	oil mud 15%oil 85%mud	0.281

Total Length: 20.00 ft Total Volume: 0.281 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

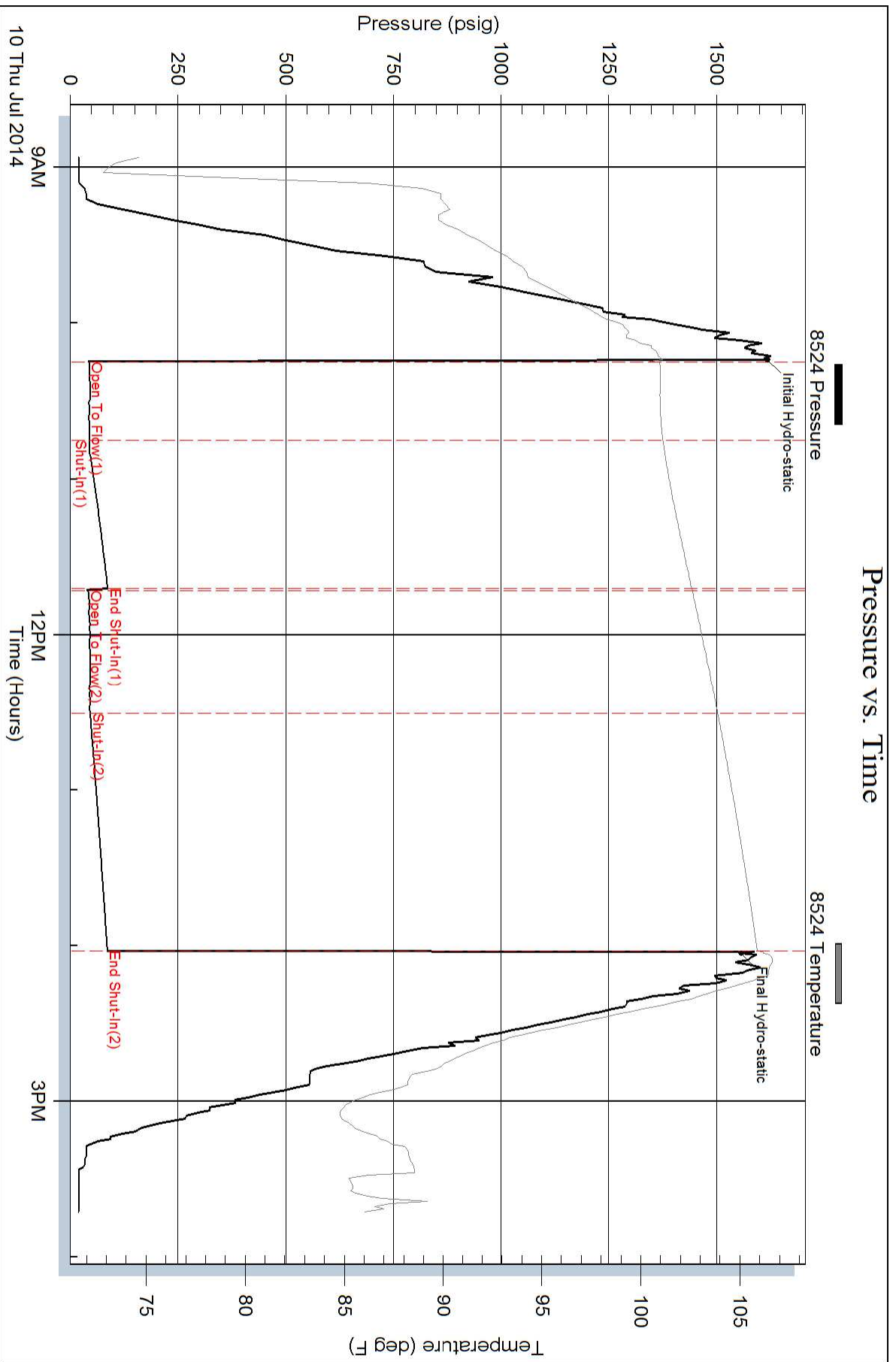
Serial #:

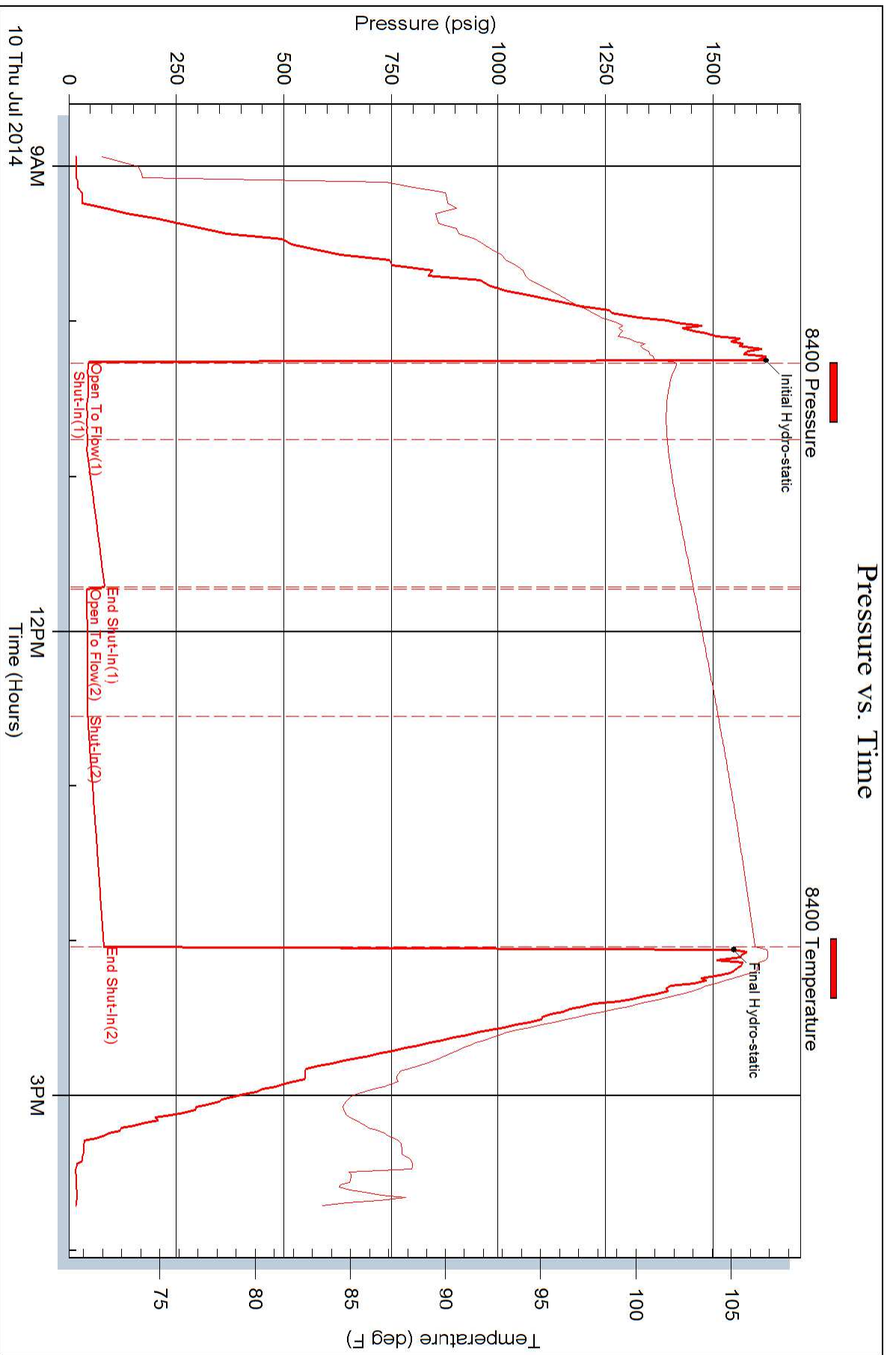
Laboratory Name:

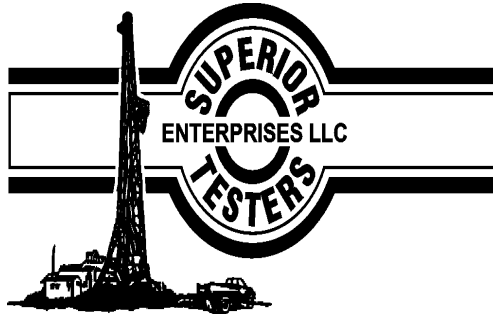
Laboratory Location:

Recovery Comments:

Pressure vs. Time







DRILL STEM TEST REPORT

Prepared For: **F.G Holl Company L.L.C**

9431 E Central St # 100 Wichita KS 67206

ATTN: Ryan Greenbaum

Zimmer #1-20

20-19s-14w Barton

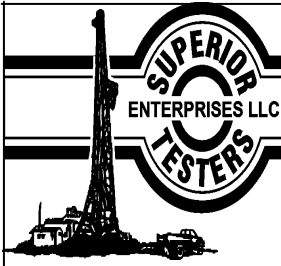
Start Date: 2014.07.11 @ 06:45:00

End Date: 2014.07.11 @ 12:23:30

Job Ticket #: 19306 DST #: 5

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

Printed: 2014.07.11 @ 13:34:35



DRILL STEM TEST REPORT

F.G Holl Company L.L.C

20-19s-14w Barton

9431 E Central St # 100 Wichita KS 67206

Zimmer #1-20

Job Ticket: 19306

DST#: 5

ATTN: Ryan Greenbaum

Test Start: 2014.07.11 @ 06:45:00

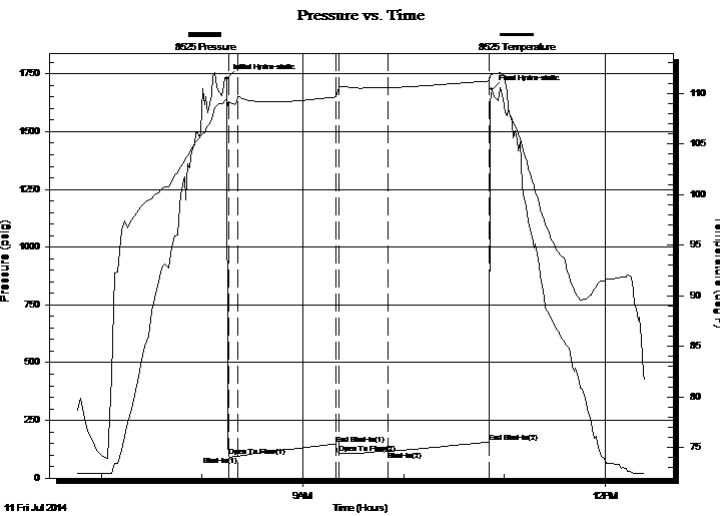
GENERAL INFORMATION:

Formation: **Conglame rate**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 08:16:00
 Time Test Ended: 12:23:30
 Interval: **3440.00 ft (KB) To 3515.00 ft (KB) (TVD)**
 Total Depth: 3515.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Jared Scheck
 Unit No: 3340-Great Bend-25
 Reference Elevations: 1901.00 ft (KB)
 1893.00 ft (CF)
 KB to GR/CF: 8.00 ft

Serial #: 8525

Press@RunDepth: 115.51 psig @ ft (KB) Capacity: 5000.00 psig
 Start Date: 2014.07.11 End Date: 2014.07.11 Last Calib.: 2014.07.11
 Start Time: 06:45:00 End Time: 12:23:30 Time On Btm: 2014.07.11 @ 08:15:00
 Time Off Btm: 2014.07.11 @ 10:52:30

TEST COMMENT: 1st Opening 5 Minutes-Fair blow built 6 inches into water in 5 minutes
 1st Shut-in 60 Minutes-No blow back
 2nd Opening 30 Minutes-Very weak blow built 1 1/2 inches stayed steady
 2nd Shut-in 60-Minutes



PRESSURE SUMMARY

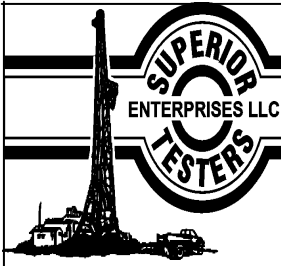
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1729.84	109.48	Initial Hydro-static
1	94.88	109.06	Open To Flow (1)
7	93.87	109.65	Shut-In(1)
65	148.35	109.65	End Shut-In(1)
67	105.32	110.58	Open To Flow (2)
96	115.51	110.56	Shut-In(2)
156	157.21	111.23	End Shut-In(2)
158	1683.01	111.88	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
70.00	mud	0.98

Gas Rates

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



DRILL STEM TEST REPORT

F.G Holl Company L.L.C

20-19s-14w Barton

9431 E Central St # 100 Wichita KS 67206

Zimmer #1-20

Job Ticket: 19306

DST#: 5

ATTN: Ryan Greenbaum

Test Start: 2014.07.11 @ 06:45:00

GENERAL INFORMATION:

Formation: **Conglamerate**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:16:00

Time Test Ended: 12:23:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Jared Scheck

Unit No: 3340-Great Bend-25

Interval: 3440.00 ft (KB) To 3515.00 ft (KB) (TVD)

Reference Elevations: 1901.00 ft (KB)

Total Depth: 3515.00 ft (KB) (TVD)

1893.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8400

Press@RunDepth: 152.44 psig @ ft (KB)

Capacity: 5000.00 psig

Start Date: 2014.07.11

End Date: 2014.07.11

Last Calib.: 2014.07.11

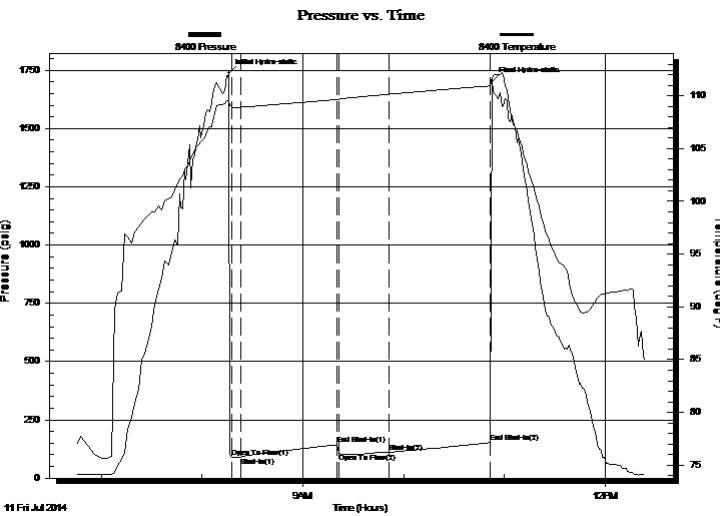
Start Time: 06:45:00

End Time: 12:24:00

Time On Btm: 2014.07.11 @ 08:16:00

Time Off Btm: 2014.07.11 @ 10:52:30

TEST COMMENT: 1st Opening 5 Minutes-Fair blow built 6 inches into water in 5 minutes
 1st Shut-in 60 Minutes-No blow back
 2nd Opening 30 Minutes-Very weak blow built 1 1/2 inches stayed steady
 2nd Shut-in 60-Minutes



PRESSURE SUMMARY

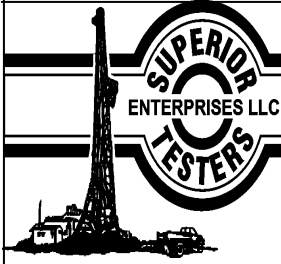
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1737.05	109.58	Initial Hydro-static
2	88.67	108.97	Open To Flow (1)
7	90.74	108.95	Shut-In(1)
65	143.81	109.66	End Shut-In(1)
66	106.73	109.68	Open To Flow (2)
96	111.10	110.16	Shut-In(2)
156	152.44	110.95	End Shut-In(2)
157	1701.97	111.59	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
70.00	mud	0.98

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

F.G Holl Company L.L.C

20-19s-14w Barton

9431 E Central St # 100 Wichita KS 67206

Zimmer #1-20

Job Ticket: 19306

DST#: 5

ATTN: Ryan Greenbaum

Test Start: 2014.07.11 @ 06:45:00

Tool Information

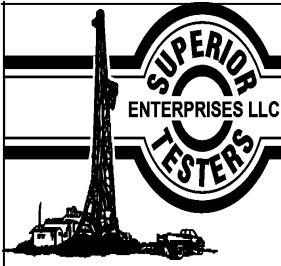
Drill Pipe:	Length: 3432.00 ft	Diameter: 3.80 inches	Volume: 48.14 bbl	Tool Weight: 1000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 48.14 bbl</u>	Tool Chased 1.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 53000.00 lb
Depth to Top Packer:	3440.00 ft			Final 53000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	75.00 ft			
Tool Length:	103.00 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			3417.00	
Hydraulic tool	5.00			3422.00	
Jars	6.00			3428.00	
Safety Joint	2.00			3430.00	
Packer	5.00			3435.00	28.00 Bottom Of Top Packer
Packer	5.00			3440.00	
Anchor	4.00			3444.00	
Change Over Sub	0.75			3444.75	
Drill Pipe	31.50			3476.25	
Change Over Sub	0.75			3477.00	
Anchor	35.00			3512.00	
Bullnose	3.00			3515.00	75.00 Bottom Packers & Anchor

Total Tool Length: 103.00



DRILL STEM TEST REPORT

FLUID SUMMARY

F.G Holl Company L.L.C

20-19s-14w Barton

9431 E Central St # 100 Wichita KS 67206

Zimmer #1-20

Job Ticket: 19306

DST#: 5

ATTN: Ryan Greenbaum

Test Start: 2014.07.11 @ 06:45:00

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: 46.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.60 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5100.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
70.00	mud	0.982

Total Length: 70.00 ft Total Volume: 0.982 bbl

Num Fluid Samples: 0

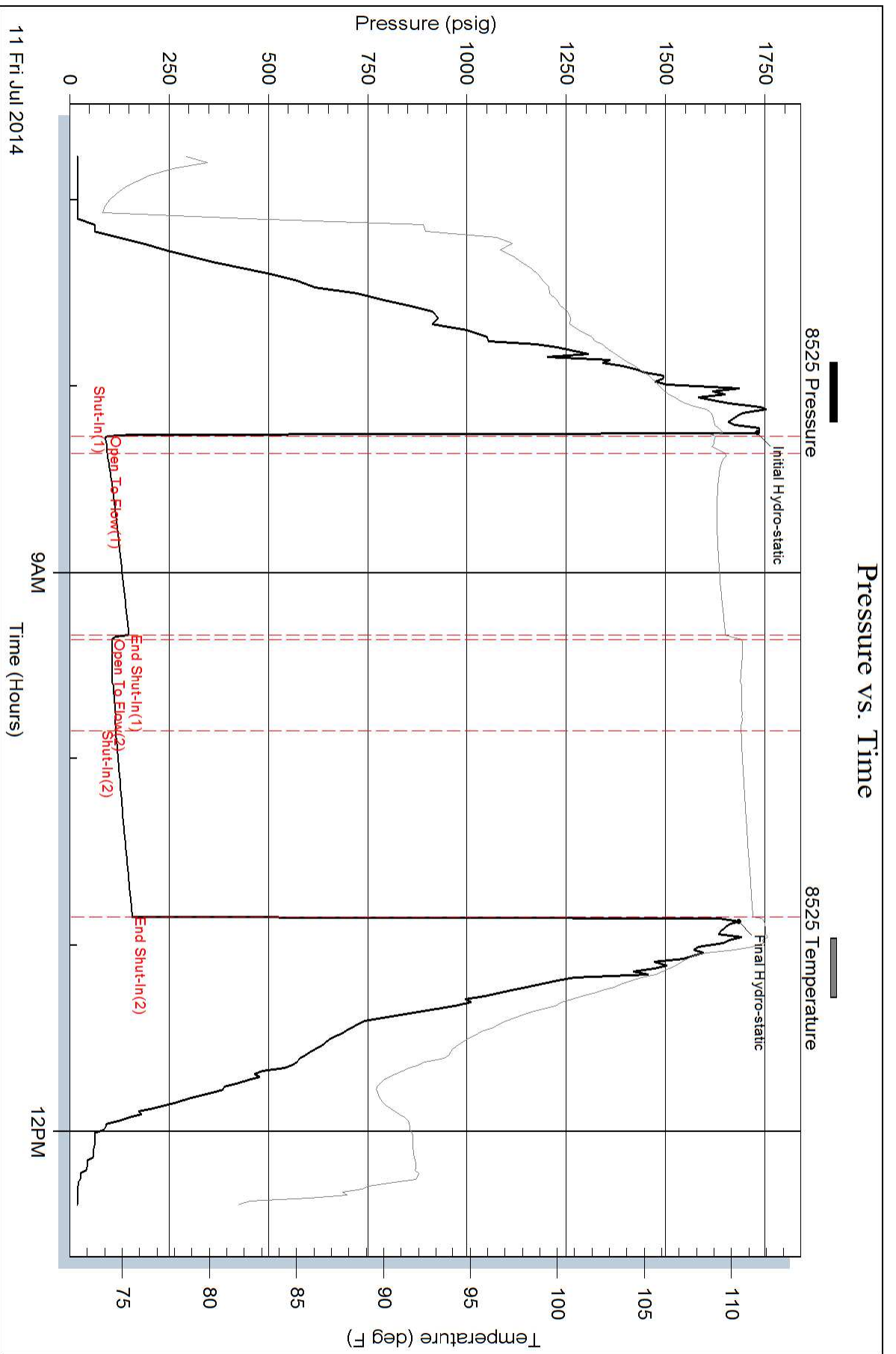
Num Gas Bombs: 0

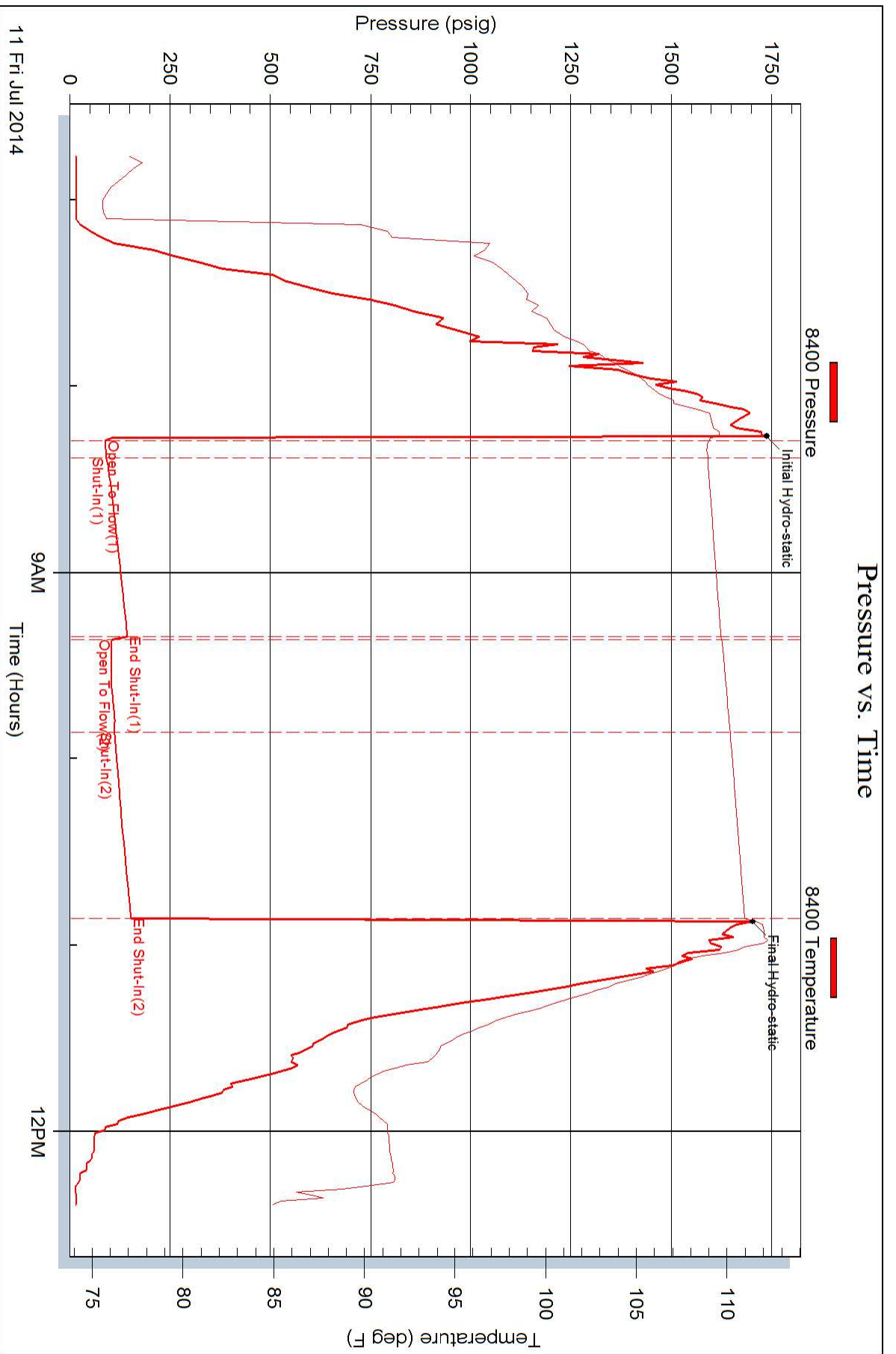
Serial #:

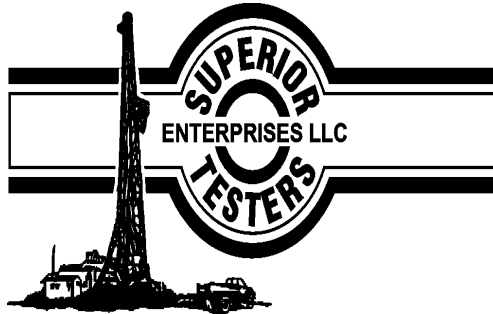
Laboratory Name:

Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **F.G Holl Company L.L.C**

9431 E Central St # 100 Wichita KS 67206

ATTN: Ryan Greenbaum

Zimmer #1-20

20-19s-14w Barton

Start Date: 2014.07.11 @ 22:10:00

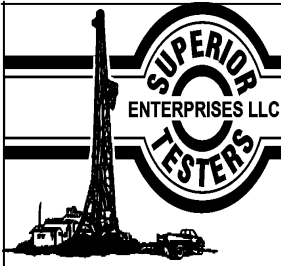
End Date: 2014.07.12 @ 05:08:30

Job Ticket #: 19307 DST #: 6

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

Printed: 2014.07.12 @ 05:59:09

F.G Holl Company L.L.C
20-19s-14w Barton
Zimmer #1-20
DST # 6
Reggan SS
2014.07.11



DRILL STEM TEST REPORT

F.G Holl Company L.L.C

20-19s-14w Barton

9431 E Central St # 100 Wichita KS 67206

Zimmer #1-20

Job Ticket: 19307

DST#: 6

ATTN: Ryan Greenbaum

Test Start: 2014.07.11 @ 22:10:00

GENERAL INFORMATION:

Formation: **Reggan SS**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:50:30

Time Test Ended: 05:08:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Jared Scheck

Unit No: 3320 -Great Bend-25

Interval: 3442.00 ft (KB) To 3540.00 ft (KB) (TVD)

Reference Elevations: 1901.00 ft (KB)

Total Depth: 3540.00 ft (KB) (TVD)

1893.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8525

Press@RunDepth: 118.04 psig @ ft (KB)

Capacity: 5000.00 psig

Start Date: 2014.07.11

End Date:

2014.07.12

Last Calib.:

2014.07.12

Start Time: 22:10:00

End Time:

05:08:30

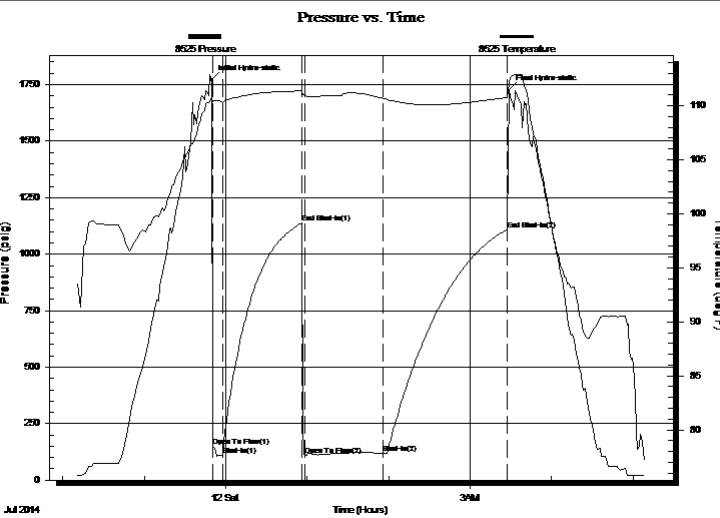
Time On Btm:

2014.07.11 @ 23:49:30

Time Off Btm:

2014.07.12 @ 03:28:30

TEST COMMENT: 1st Opening 5 Minutes- Strong blow built bottom of bucket in less than 1 minute
 1st Shut-in 60 Minutes-No blow back
 2nd Opening 60 Minutes-Strong blow built bottom of bucket in less than 1 minute gas to surface in 5 minutes see gas report



PRESSURE SUMMARY

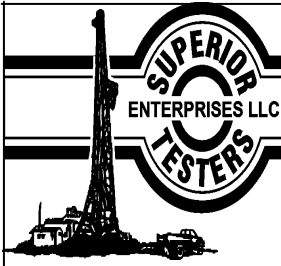
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1770.34	110.73	Initial Hydro-static
1	151.46	110.39	Open To Flow (1)
8	108.48	110.30	Shut-In(1)
67	1136.76	111.37	End Shut-In(1)
69	109.78	110.94	Open To Flow (2)
127	118.04	110.67	Shut-In(2)
218	1109.37	110.76	End Shut-In(2)
219	1727.44	112.03	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
90.00	mud	1.26
0.00	3340 gas in pipe	0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.13	100.00	42.82
Last Gas Rate	0.13	112.00	47.31
Max. Gas Rate	0.13	112.00	47.31



DRILL STEM TEST REPORT

F.G Holl Company L.L.C

20-19s-14w Barton

9431 E Central St # 100 Wichita KS 67206

Zimmer #1-20

Job Ticket: 19307

DST#: 6

ATTN: Ryan Greenbaum

Test Start: 2014.07.11 @ 22:10:00

GENERAL INFORMATION:

Formation: **Reggan SS**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:50:30

Time Test Ended: 05:08:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Jared Scheck

Unit No: 3320 -Great Bend-25

Interval: 3442.00 ft (KB) To 3540.00 ft (KB) (TVD)

Reference Elevations: 1901.00 ft (KB)

Total Depth: 3540.00 ft (KB) (TVD)

1893.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8400

Press@RunDepth: 1096.21 psig @ ft (KB)

Capacity: 5000.00 psig

Start Date: 2014.07.11

End Date:

2014.07.12

Last Calib.:

2014.07.12

Start Time: 22:10:00

End Time:

05:09:00

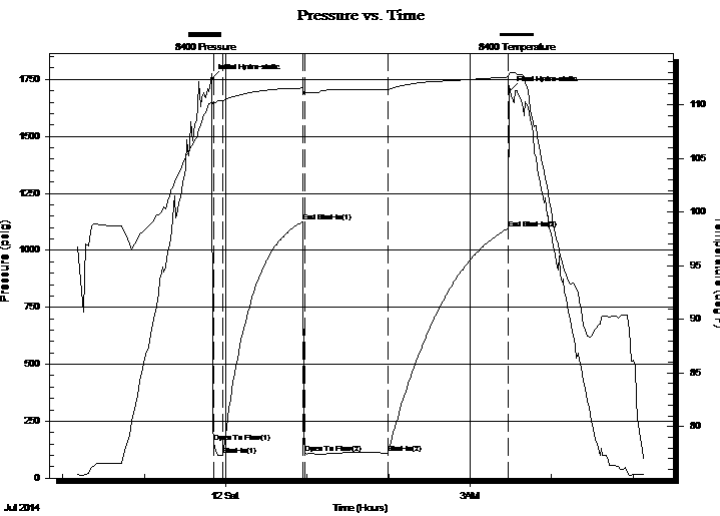
Time On Btm:

2014.07.11 @ 23:50:00

Time Off Btm:

2014.07.12 @ 03:29:30

TEST COMMENT: 1st Opening 5 Minutes- Strong blow built bottom of bucket in less than 1 minute
 1st Shut-in 60 Minutes-No blow back
 2nd Opening 60 Minutes-Strong blow built bottom of bucket in less than 1 minute gas to surface in 5 minutes see gas report



PRESSURE SUMMARY

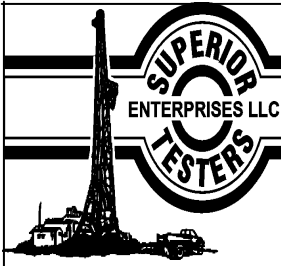
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1753.42	110.46	Initial Hydro-static
1	159.05	110.14	Open To Flow (1)
8	101.69	110.42	Shut-In(1)
67	1124.31	111.57	End Shut-In(1)
69	106.90	111.05	Open To Flow (2)
130	109.26	111.42	Shut-In(2)
218	1096.21	112.60	End Shut-In(2)
220	1700.60	113.00	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
90.00	mud	1.26
0.00	3340 gas in pipe	0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.13	100.00	42.82
Last Gas Rate	0.13	112.00	47.31
Max. Gas Rate	0.13	112.00	47.31



DRILL STEM TEST REPORT

TOOL DIAGRAM

F.G Holl Company L.L.C

20-19s-14w Barton

9431 E Central St # 100 Wichita KS 67206

Zimmer #1-20

Job Ticket: 19307

DST#: 6

ATTN: Ryan Greenbaum

Test Start: 2014.07.11 @ 22:10:00

Tool Information

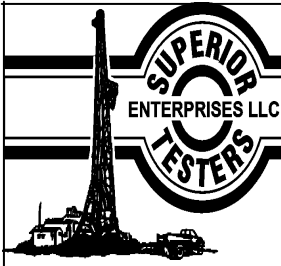
Drill Pipe:	Length: 3430.00 ft	Diameter: 3.80 inches	Volume: 48.11 bbl	Tool Weight: 1000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 48.11 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial 53000.00 lb
Depth to Top Packer:	3442.00 ft			Final 54000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	98.00 ft			
Tool Length:	126.00 ft			
Number of Packers:	2	Diameter: 6.70 inches		

Tool Comments:

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

Shut In Tool	5.00			3419.00	
Hydraulic tool	5.00			3424.00	
Jars	6.00			3430.00	
Safety Joint	2.00			3432.00	
Packer	5.00			3437.00	28.00 Bottom Of Top Packer
Packer	5.00			3442.00	
Anchor	28.00			3470.00	
Change Over Sub	0.75			3470.75	
Drill Pipe	63.50			3534.25	
Change Over Sub	0.75			3535.00	
Recorder	1.00			3536.00	
Recorder	1.00			3537.00	
Bullnose	3.00			3540.00	98.00 Bottom Packers & Anchor

Total Tool Length: 126.00



DRILL STEM TEST REPORT

FLUID SUMMARY

F.G Holl Company L.L.C

20-19s-14w Barton

9431 E Central St # 100 Wichita KS 67206

Zimmer #1-20

Job Ticket: 19307

DST#: 6

ATTN: Ryan Greenbaum

Test Start: 2014.07.11 @ 22:10:00

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: 46.00 sec/qt

Cushion Volume: bbl

Water Loss: 9.60 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure: psig

Salinity: 5100.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
90.00	mud	1.262
0.00	3340 gas in pipe	0.000

Total Length: 90.00 ft Total Volume: 1.262 bbl

Num Fluid Samples: 0

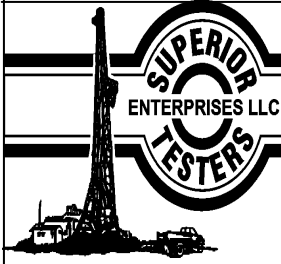
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



DRILL STEM TEST REPORT

GAS RATES

F.G Holl Company L.L.C

20-19s-14w Barton

9431 E Central St # 100 Wichita KS 67206

Zimmer #1-20

Job Ticket: 19307

DST#: 6

ATTN: Ryan Greenbaum

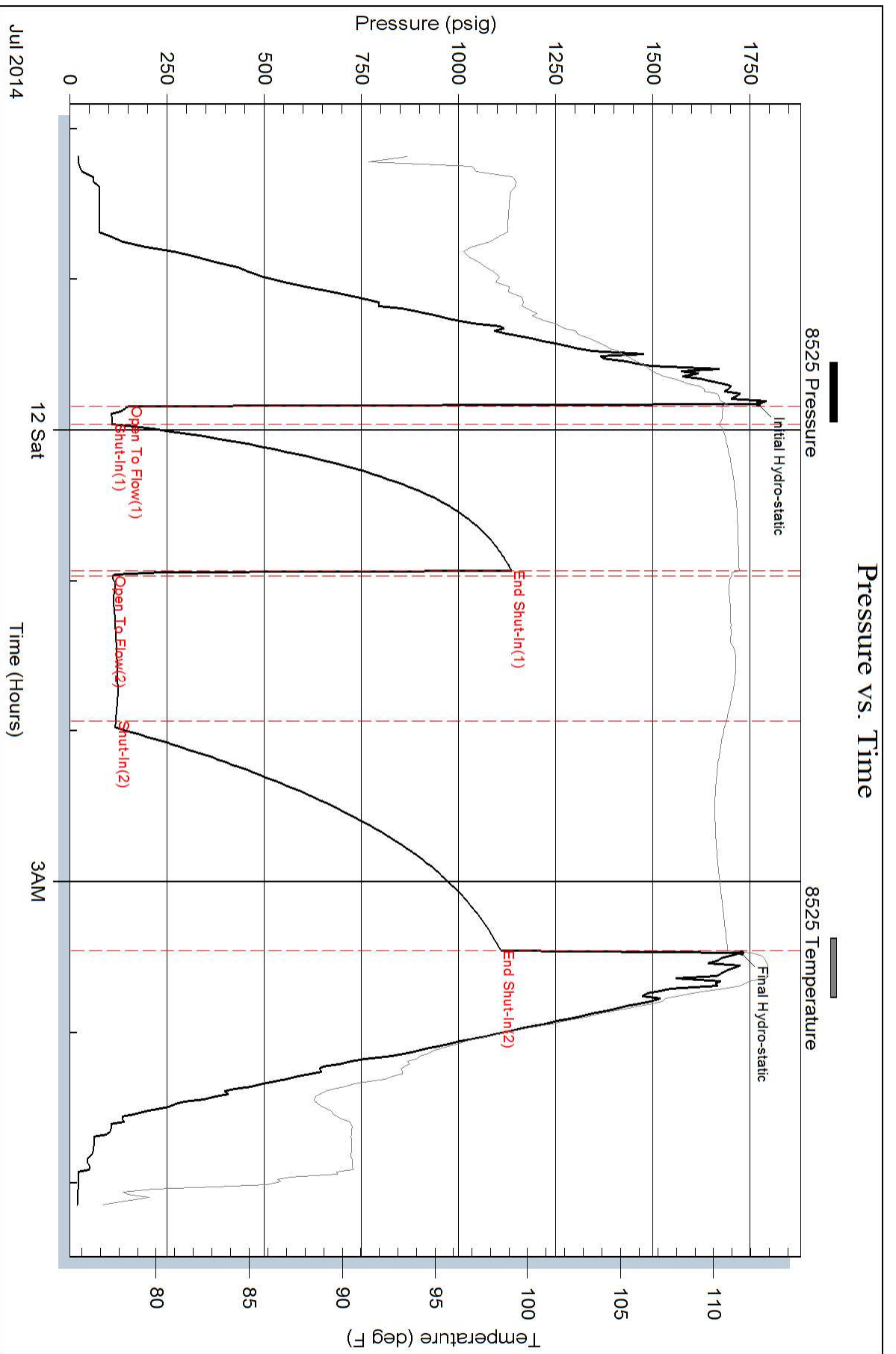
Test Start: 2014.07.11 @ 22:10:00

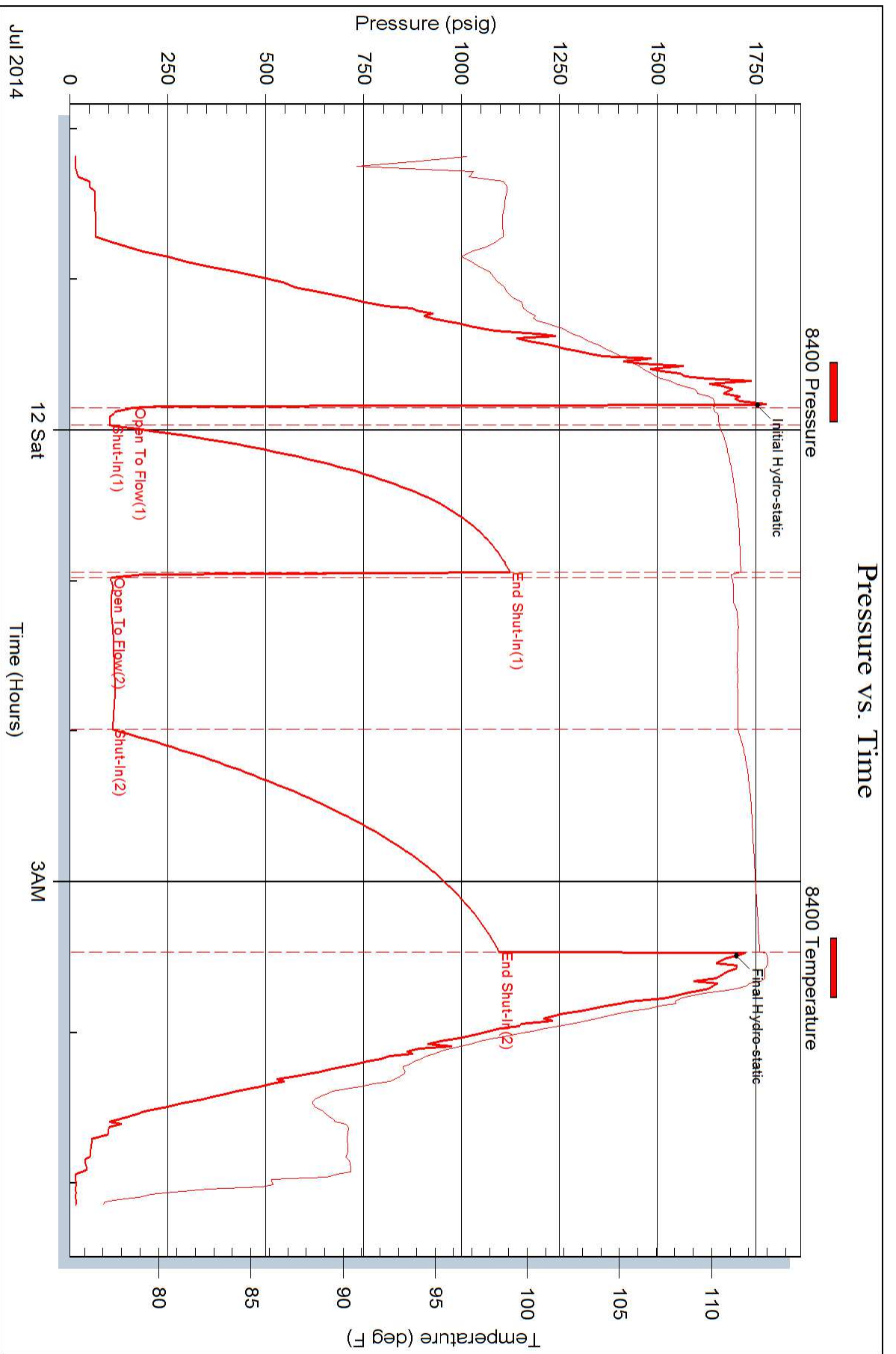
Gas Rates Information

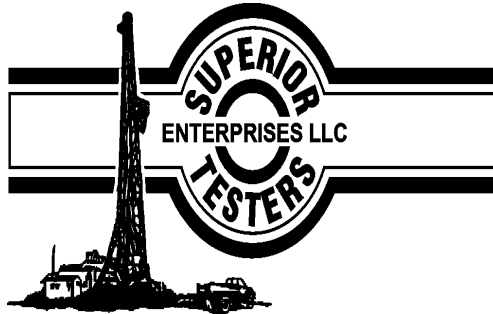
Temperature: 59 (deg F)
Relative Density: 0.65
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
2	10	0.13	100.00	42.82
2	10	0.13	100.00	42.82
2	20	0.13	106.00	45.06
2	30	0.13	112.00	47.31
2	40	0.13	112.00	47.31
2	50	0.13	112.00	47.31







DRILL STEM TEST REPORT

Prepared For: **F.G Holl Company L.L.C**

9431 E Central St # 100 Wichita KS 67206

ATTN: Ryan Greenbaum

Zimmer #1-20

20-19s-14w Barton

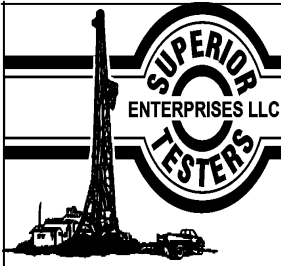
Start Date: 2014.07.12 @ 14:08:00

End Date: 2014.07.12 @ 20:37:30

Job Ticket #: 19308 DST #: 7

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

Printed: 2014.07.12 @ 21:54:34



DRILL STEM TEST REPORT

F.G Holl Company L.L.C

20-19s-14w Barton

9431 E Central St # 100 Wichita KS 67206

Zimmer #1-20

Job Ticket: 19308

DST#: 7

ATTN: Ryan Greenbaum

Test Start: 2014.07.12 @ 14:08:00

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:36:30

Time Test Ended: 20:37:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Jared Scheck

Unit No: 3320-Great Bend -25

Interval: 3540.00 ft (KB) To 3547.00 ft (KB) (TVD)

Reference Elevations: 1901.00 ft (KB)

Total Depth: 3340.00 ft (KB) (TVD)

1893.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8525

Press@RunDepth: 292.56 psig @ ft (KB)

Capacity: 5000.00 psig

Start Date: 2014.07.12

End Date: 2014.07.12

Last Calib.: 2014.07.12

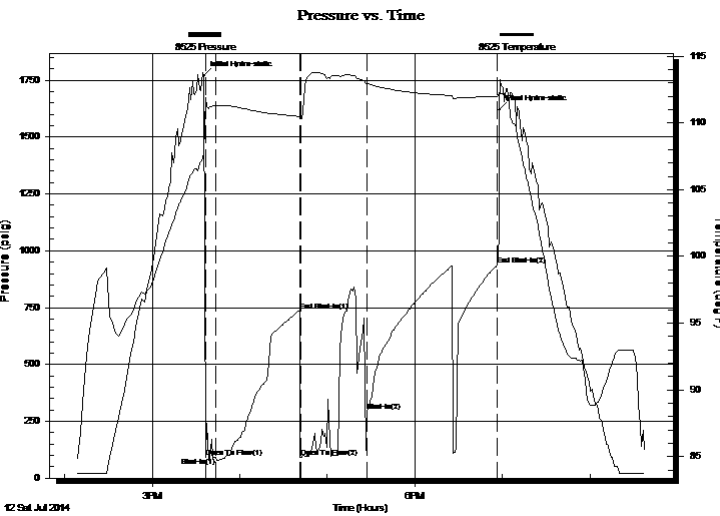
Start Time: 14:08:00

End Time: 20:37:30

Time On Btm: 2014.07.12 @ 15:35:30

Time Off Btm: 2014.07.12 @ 18:58:00

TEST COMMENT: 1st opening 5 Minutes-Fair blow built 3 inches from bottom of bucket in 5 minutes
 1st Shut-in 60 Minutes-Very weak blow
 2nd opening 45 Minutes-Weak blow built 1 1/2 inches died off flushed tool good surge did not build
 2nd Shut-in 90 Minutes-



PRESSURE SUMMARY

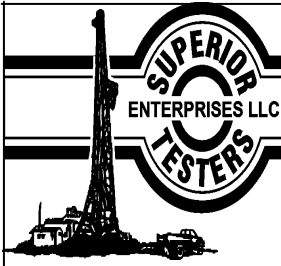
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1769.71	107.80	Initial Hydro-static
1	92.76	111.93	Open To Flow (1)
8	90.00	111.32	Shut-In(1)
66	736.89	110.48	End Shut-In(1)
67	92.25	110.34	Open To Flow (2)
112	292.56	113.01	Shut-In(2)
201	936.93	112.00	End Shut-In(2)
203	1619.82	112.24	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
115.00	mud	1.61

Gas Rates

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



DRILL STEM TEST REPORT

F.G Holl Company L.L.C

20-19s-14w Barton

9431 E Central St # 100 Wichita KS 67206

Zimmer #1-20

Job Ticket: 19308

DST#: 7

ATTN: Ryan Greenbaum

Test Start: 2014.07.12 @ 14:08:00

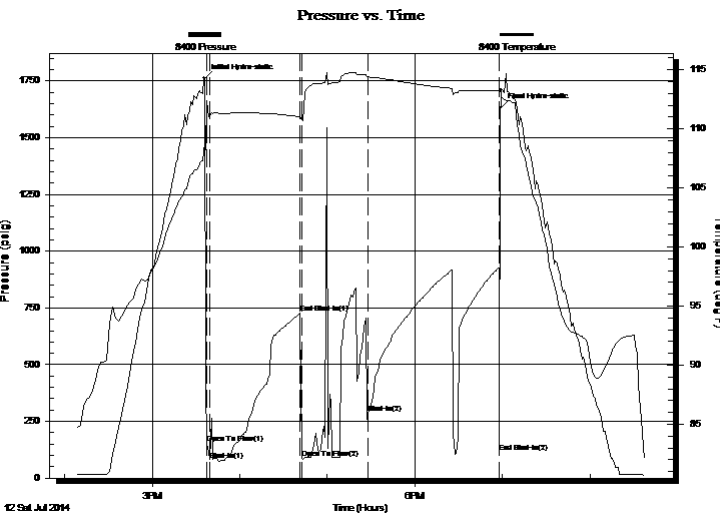
GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 15:36:30
 Time Test Ended: 20:37:30
 Interval: **3540.00 ft (KB) To 3547.00 ft (KB) (TVD)**
 Total Depth: 3340.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Jared Scheck
 Unit No: 3320-Great Bend -25
 Reference Elevations: 1901.00 ft (KB)
 1893.00 ft (CF)
 KB to GR/CF: 8.00 ft

Serial #: 8400

Press@RunDepth: 112.44 psig @ ft (KB) Capacity: 5000.00 psig
 Start Date: 2014.07.12 End Date: 2014.07.12 Last Calib.: 2014.07.12
 Start Time: 14:08:00 End Time: 20:38:00 Time On Btm: 2014.07.12 @ 15:36:00
 Time Off Btm: 2014.07.12 @ 18:59:00

TEST COMMENT: 1st opening 5 Minutes-Fair blow built 3 inches from bottom of bucket in 5 minutes
 1st Shut-in 60 Minutes-Very weak blow
 2nd opening 45 Minutes-Weak blow built 1 1/2 inches died off flushed tool good surge did not build
 2nd Shut-in 90 Minutes-



PRESSURE SUMMARY

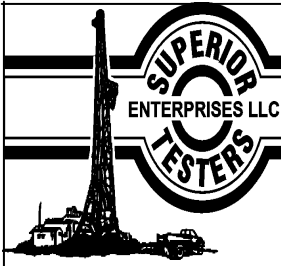
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1761.41	108.78	Initial Hydro-static
2	151.77	112.43	Open To Flow (1)
4	80.96	111.15	Shut-In(1)
66	726.48	111.03	End Shut-In(1)
67	89.55	110.76	Open To Flow (2)
112	287.08	114.41	Shut-In(2)
202	112.44	112.77	End Shut-In(2)
203	1631.24	112.91	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
115.00	mud	1.61

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

F.G Holl Company L.L.C

20-19s-14w Barton

9431 E Central St # 100 Wichita KS 67206

Zimmer #1-20

Job Ticket: 19308

DST#: 7

ATTN: Ryan Greenbaum

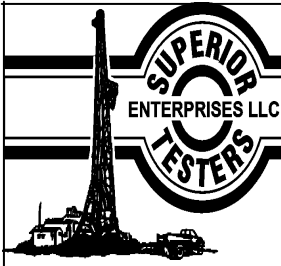
Test Start: 2014.07.12 @ 14:08:00

Tool Information

Drill Pipe:	Length: 3527.00 ft	Diameter: 3.80 inches	Volume: 49.47 bbl	Tool Weight:	1000.00 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:	70000.00 lb
			<u>Total Volume: 49.47 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial	57000.00 lb
Depth to Top Packer:	3540.00 ft			Final	57000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	7.00 ft				
Tool Length:	30.00 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			3522.00	
Hydraulic tool	5.00			3527.00	
Jars	6.00			3533.00	
Safety Joint	2.00			3535.00	
Packer	5.00			3540.00	23.00 Bottom Of Top Packer
Recorder	1.00			3541.00	
Recorder	1.00			3542.00	
Anchor	2.00			3544.00	
Bullnose	3.00			3547.00	7.00 Anchor Tool
Total Tool Length:	30.00				



DRILL STEM TEST REPORT

FLUID SUMMARY

F.G Holl Company L.L.C

20-19s-14w Barton

9431 E Central St # 100 Wichita KS 67206

Zimmer #1-20

Job Ticket: 19308

DST#: 7

ATTN: Ryan Greenbaum

Test Start: 2014.07.12 @ 14:08:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 50.00 sec/qt

Water Loss: 10.40 in³

Resistivity: ohm.m

Salinity: 5300.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

Water Salinity: deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
115.00	mud	1.613

Total Length: 115.00 ft Total Volume: 1.613 bbl

Num Fluid Samples: 0

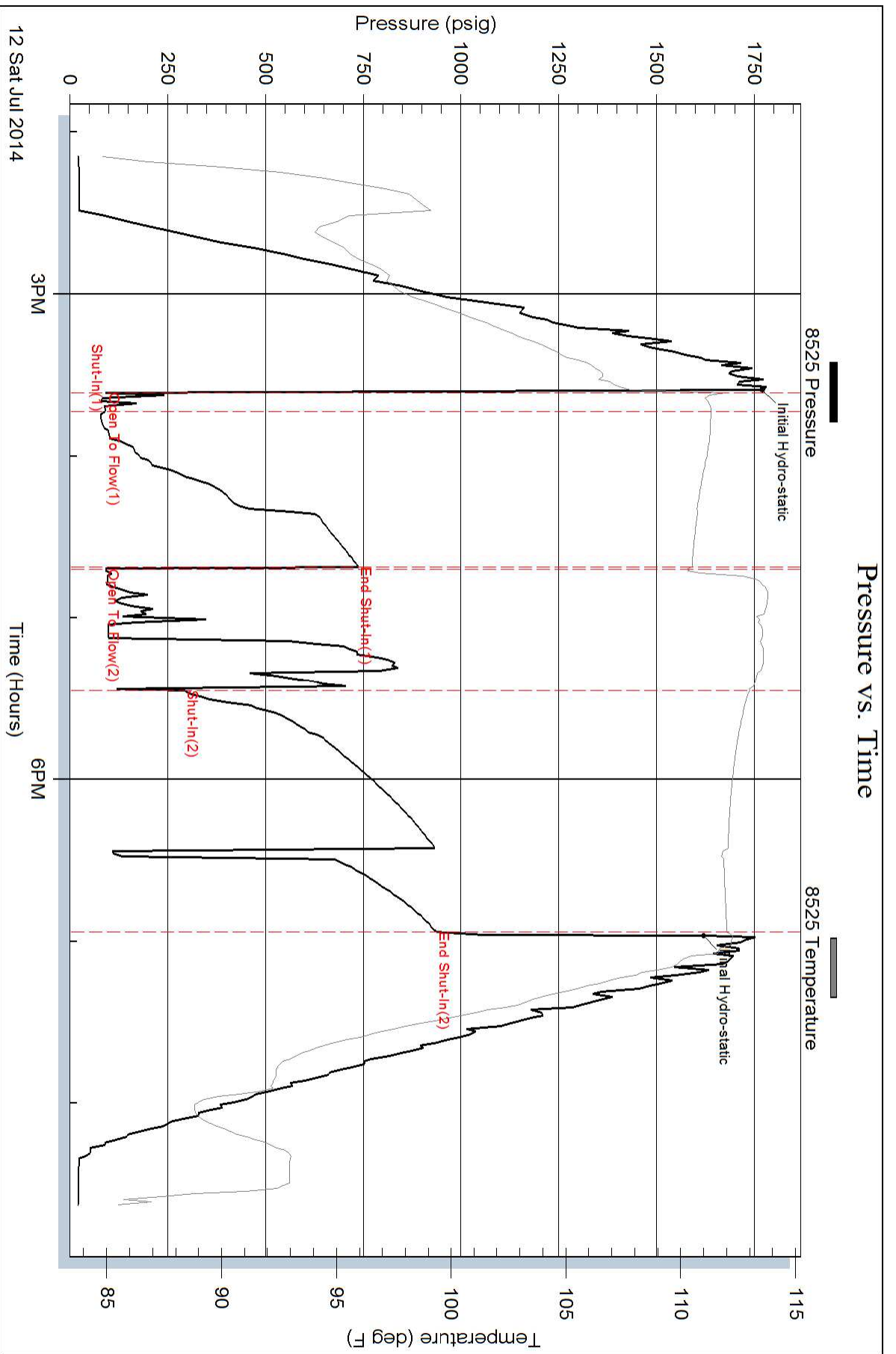
Num Gas Bombs: 0

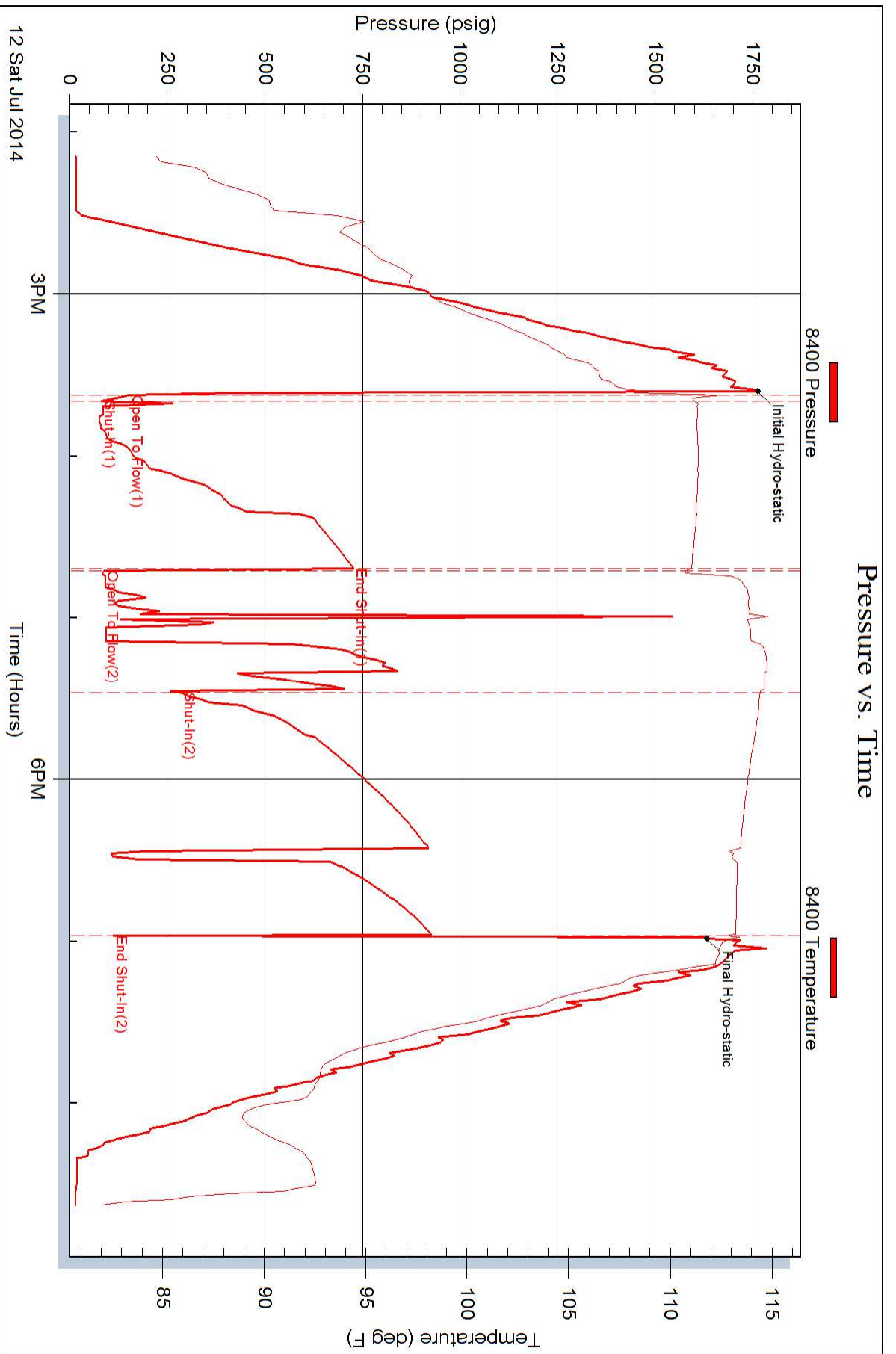
Serial #:

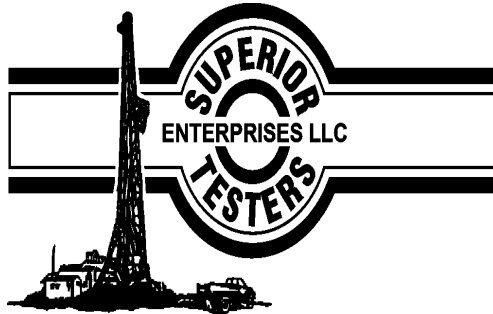
Laboratory Name:

Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **F.G Holl Company L.L.C**

9431 E Central St # 100 Wichita KS 67206

ATTN: Ryan Greenbaum

Zimmer #1-20

20-19s-14w Barton

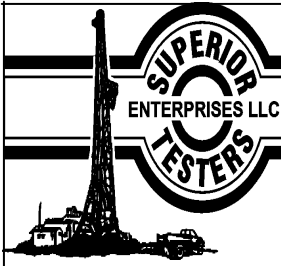
Start Date: 2014.07.13 @ 03:50:00

End Date: 2014.07.13 @ 09:05:00

Job Ticket #: 19309 DST #: 8

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

Printed: 2014.07.13 @ 12:09:16



DRILL STEM TEST REPORT

F.G Holl Company L.L.C

20-19s-14w Barton

9431 E Central St # 100 Wichita KS 67206

Zimmer #1-20

Job Ticket: 19309

DST#: 8

ATTN: Ryan Greenbaum

Test Start: 2014.07.13 @ 03:50:00

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:20:00

Time Test Ended: 09:05:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Jared Scheck

Unit No: 3340-Great Bend-25

Interval: 3547.00 ft (KB) To 3553.00 ft (KB) (TVD)

Reference Elevations: 1901.00 ft (KB)

Total Depth: 3340.00 ft (KB) (TVD)

1893.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8525

Press@RunDepth: 40.20 psig @ ft (KB)

Capacity: 5000.00 psig

Start Date: 2014.07.13

End Date: 2014.07.13

Last Calib.: 2014.07.13

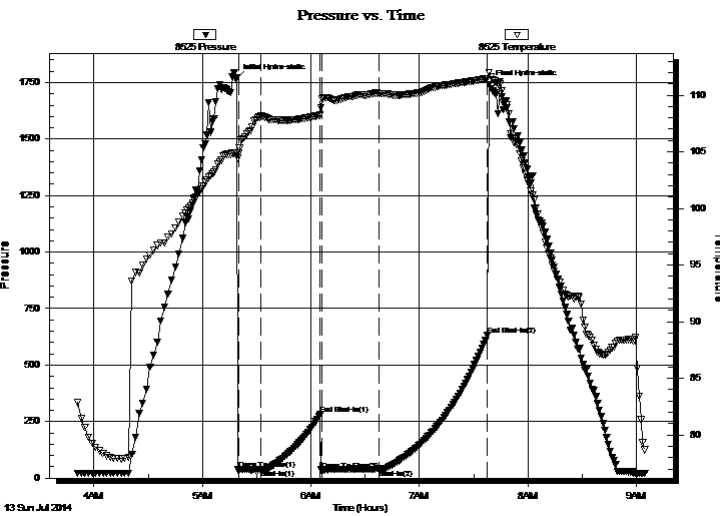
Start Time: 03:50:00

End Time: 09:05:00

Time On Btm: 2014.07.13 @ 05:19:00

Time Off Btm: 2014.07.13 @ 07:38:30

TEST COMMENT: 1st Opening 15 Minutes-Weak blow built 3 inches into water in 15 minutes
 1st Shut-in 30 Minutes-No blow back
 2nd Opening 30 Minutes-Weak blow built bottom of bucket in 22 minutes
 2nd Shut-in 60 Minutes-No blow back



PRESSURE SUMMARY

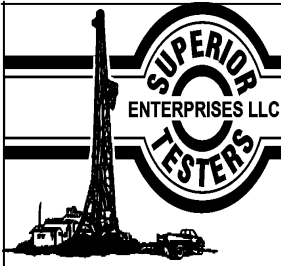
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1769.35	104.87	Initial Hydro-static
1	37.93	104.87	Open To Flow (1)
14	38.02	108.14	Shut-In(1)
46	280.88	108.23	End Shut-In(1)
47	35.27	109.68	Open To Flow (2)
79	40.20	110.16	Shut-In(2)
139	630.71	111.46	End Shut-In(2)
140	1740.90	112.01	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	oil mud 10%oil 90% mud	0.28
0.00	40 gas in pipe	0.00

Gas Rates

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



DRILL STEM TEST REPORT

F.G Holl Company L.L.C

20-19s-14w Barton

9431 E Central St # 100 Wichita KS 67206

Zimmer #1-20

Job Ticket: 19309

DST#: 8

ATTN: Ryan Greenbaum

Test Start: 2014.07.13 @ 03:50:00

GENERAL INFORMATION:

Formation: **Arbbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:20:00

Time Test Ended: 09:05:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Jared Scheck

Unit No: 3340-Great Bend-25

Interval: 3547.00 ft (KB) To 3553.00 ft (KB) (TVD)

Reference Elevations: 1901.00 ft (KB)

Total Depth: 3340.00 ft (KB) (TVD)

1893.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8400

Press@RunDepth: 612.53 psig @ ft (KB)

Capacity: 5000.00 psig

Start Date: 2014.07.13

End Date: 2014.07.13

Last Calib.: 2014.07.13

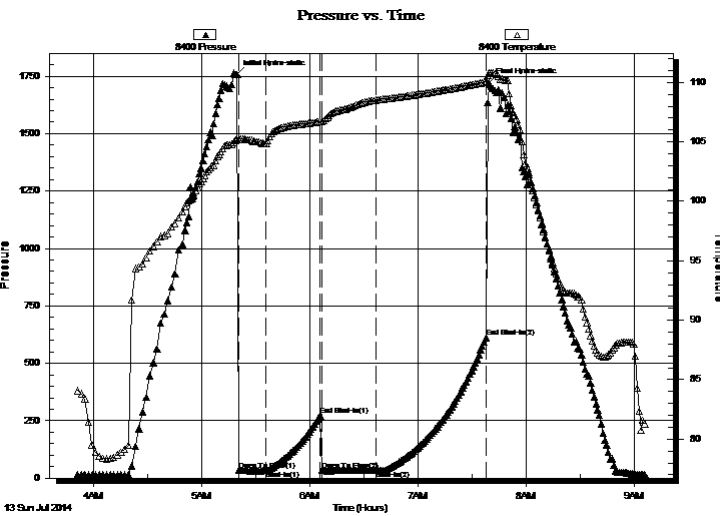
Start Time: 03:50:00

End Time: 09:05:30

Time On Btm: 2014.07.13 @ 05:19:30

Time Off Btm: 2014.07.13 @ 07:39:00

TEST COMMENT: 1st Opening 15 Minutes-Weak blow built 3 inches into water in 15 minutes
 1st Shut-in 30 Minutes-No blow back
 2nd Opening 30 Minutes-Weak blow built bottom of bucket in 22 minutes
 2nd Shut-in 60 Minutes-No blow back



PRESSURE SUMMARY

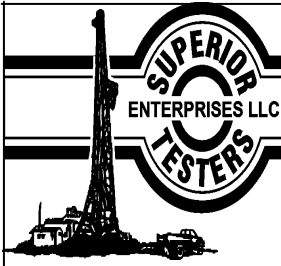
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1758.04	105.18	Initial Hydro-static
1	34.89	105.21	Open To Flow (1)
16	33.47	104.89	Shut-In(1)
46	272.25	106.69	End Shut-In(1)
47	33.13	106.67	Open To Flow (2)
77	33.45	108.51	Shut-In(2)
138	612.53	110.05	End Shut-In(2)
140	1723.25	110.77	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	oil mud 10%oil 90% mud	0.28
0.00	40 gas in pipe	0.00

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

F.G Holl Company L.L.C

20-19s-14w Barton

9431 E Central St # 100 Wichita KS 67206

Zimmer #1-20

Job Ticket: 19309

DST#: 8

ATTN: Ryan Greenbaum

Test Start: 2014.07.13 @ 03:50:00

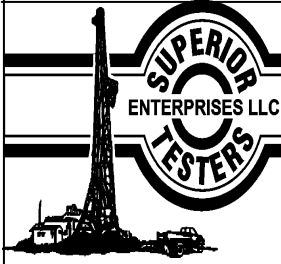
Tool Information

Drill Pipe:	Length: 3528.00 ft	Diameter: 3.80 inches	Volume: 49.49 bbl	Tool Weight: 1000.00 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: 65000.00 lb
			<u>Total Volume: 49.49 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	4.00 ft			String Weight: Initial 57000.00 lb
Depth to Top Packer:	3547.00 ft			Final 57000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	6.00 ft			
Tool Length:	29.00 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			3529.00	
Hydraulic tool	5.00			3534.00	
Jars	6.00			3540.00	
Safety Joint	2.00			3542.00	
Packer	5.00			3547.00	23.00 Bottom Of Top Packer
Recorder	1.00			3548.00	
Recorder	1.00			3549.00	
Anchor	1.00			3550.00	
Bullnose	3.00			3553.00	6.00 Anchor Tool
Total Tool Length:	29.00				



DRILL STEM TEST REPORT

FLUID SUMMARY

F.G Holl Company L.L.C

20-19s-14w Barton

9431 E Central St # 100 Wichita KS 67206

Zimmer #1-20

Job Ticket: 19309

DST#: 8

ATTN: Ryan Greenbaum

Test Start: 2014.07.13 @ 03:50:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 50.00 sec/qt

Water Loss: 10.40 in³

Resistivity: ohm.m

Salinity: 5300.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

Water Salinity: deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	oil mud 10%oil 90% mud	0.281
0.00	40 gas in pipe	0.000

Total Length: 20.00 ft Total Volume: 0.281 bbl

Num Fluid Samples: 0

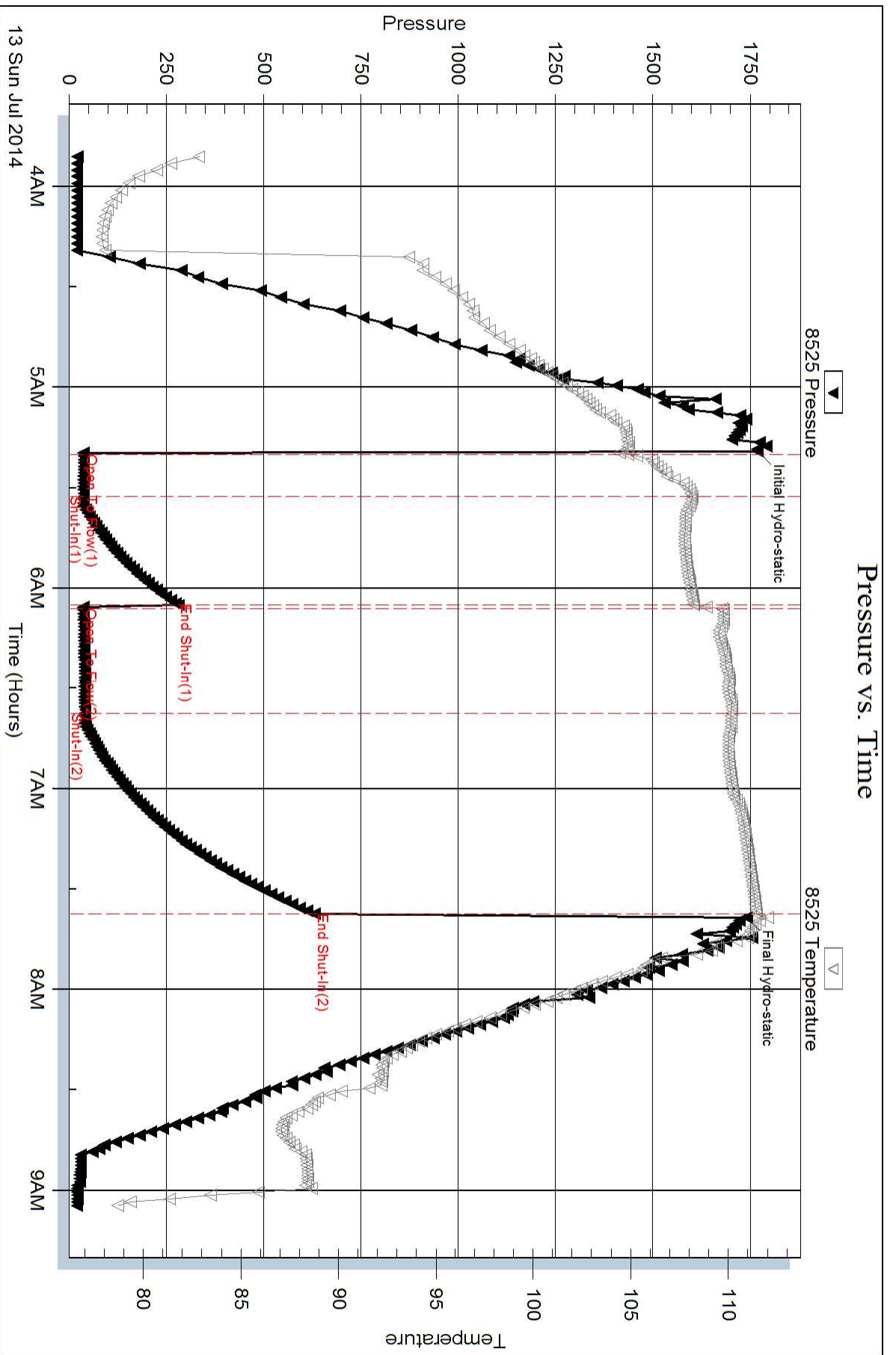
Num Gas Bombs: 0

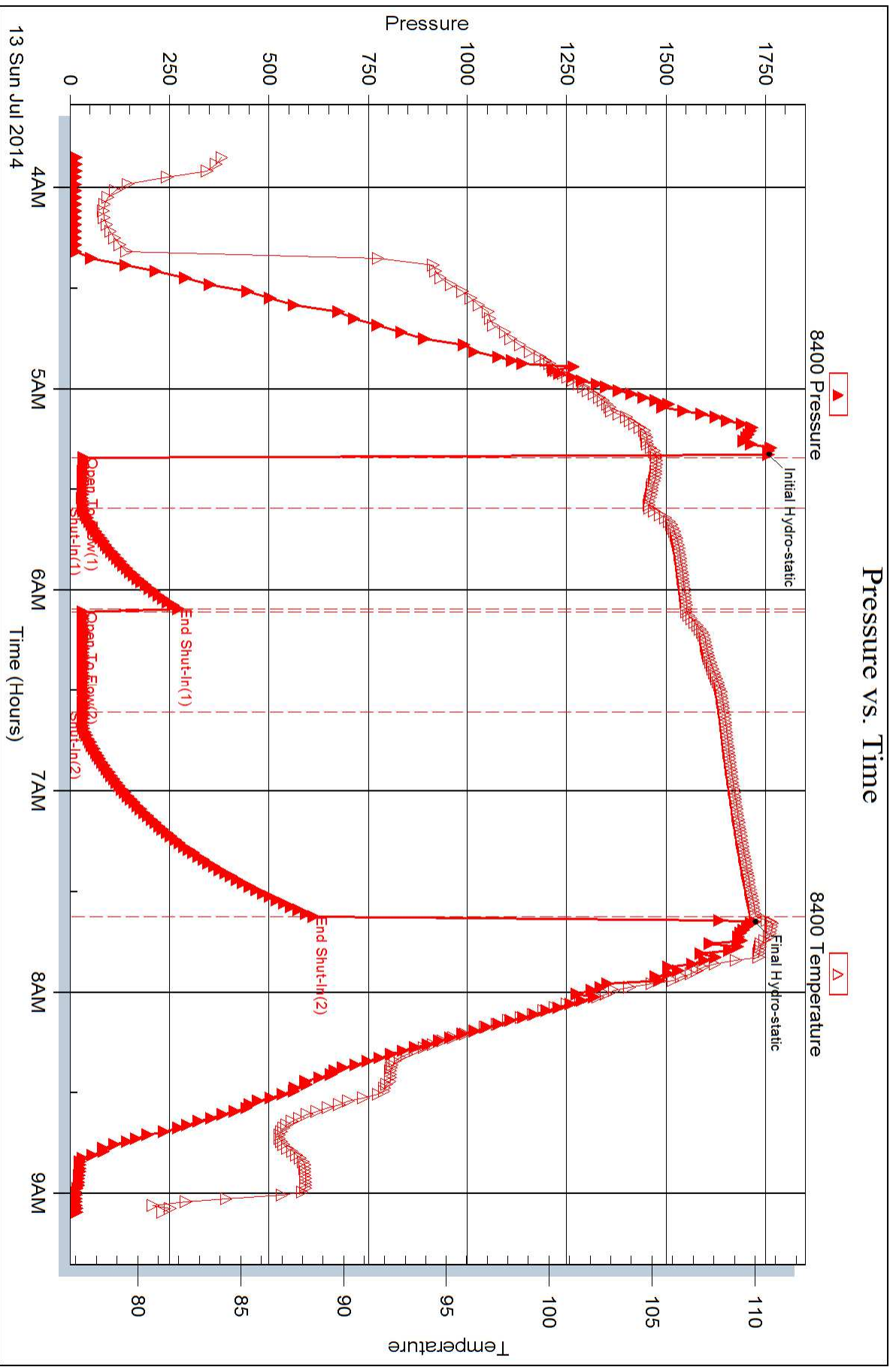
Serial #:

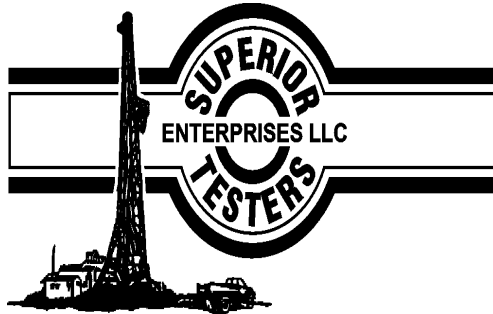
Laboratory Name:

Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **F.G Holl Company L.L.C**

9431 E Central St # 100 Wichita KS 67206

ATTN: Ryan Greenbaum

Zimmer #1-20

20-19s-14w Barton

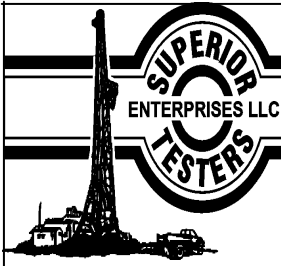
Start Date: 2014.07.13 @ 09:25:00

End Date: 2014.07.13 @ 12:15:00

Job Ticket #: 19310 DST #: 9

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

Printed: 2014.07.13 @ 13:30:47



DRILL STEM TEST REPORT

F.G Holl Company L.L.C

20-19s-14w Barton

9431 E Central St # 100 Wichita KS 67206

Zimmer #1-20

Job Ticket: 19310

DST#: 9

ATTN: Ryan Greenbaum

Test Start: 2014.07.13 @ 09:25:00

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:45:00

Time Test Ended: 12:15:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Jared Scheck

Unit No: 3340-Great Bend -25

Interval: 3541.00 ft (KB) To 3553.00 ft (KB) (TVD)

Reference Elevations: 1901.00 ft (KB)

Total Depth: 3553.00 ft (KB) (TVD)

1893.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition:

KB to GR/CF: 8.00 ft

Serial #: 8400

Press@RunDepth: psig @ ft (KB)

Capacity: psig

Start Date: 2014.07.13

End Date: 2014.07.13

Last Calib.: 1899.12.30

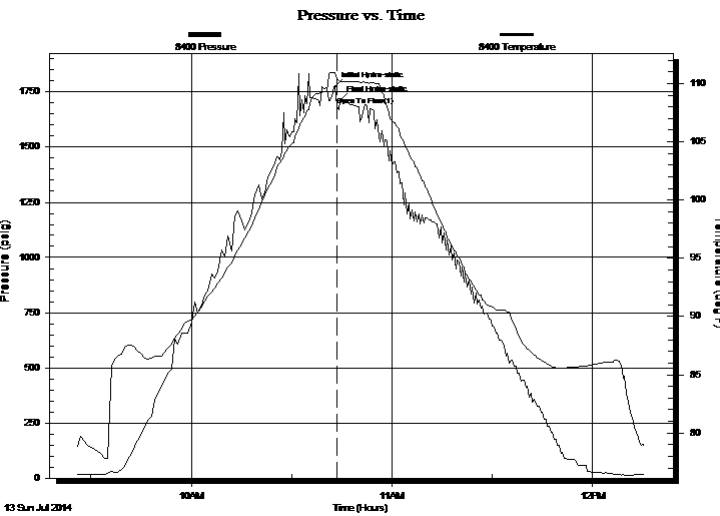
Start Time: 09:25:00

End Time: 12:15:30

Time On Btm: 2014.07.13 @ 10:43:00

Time Off Btm: 2014.07.13 @ 10:44:30

TEST COMMENT: 1st Opening packer failed pulled tool



PRESSURE SUMMARY

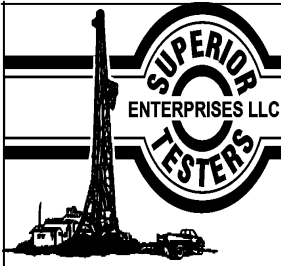
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1774.29	110.95	Initial Hydro-static
1	1687.47	110.45	Open To Flow (1)
2	1709.08	110.20	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	mud	1.68

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

F.G Holl Company L.L.C

20-19s-14w Barton

9431 E Central St # 100 Wichita KS 67206

Zimmer #1-20

Job Ticket: 19310

DST#: 9

ATTN: Ryan Greenbaum

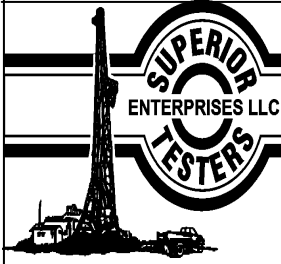
Test Start: 2014.07.13 @ 09:25:00

Tool Information

Drill Pipe:	Length: 3528.00 ft	Diameter: 3.80 inches	Volume: 49.49 bbl	Tool Weight: 1000.00 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: 49.49 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 57000.00 lb
Depth to Top Packer:	3541.00 ft			Final 57000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	12.00 ft			
Tool Length:	35.00 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			3523.00	
Hydraulic tool	5.00			3528.00	
Jars	6.00			3534.00	
Safety Joint	2.00			3536.00	
Packer	5.00			3541.00	23.00 Bottom Of Top Packer
Recorder	1.00			3542.00	
Recorder	1.00			3543.00	
Anchor	7.00			3550.00	
Bullnose	3.00			3553.00	12.00 Anchor Tool
Total Tool Length:	35.00				



DRILL STEM TEST REPORT

FLUID SUMMARY

F.G Holl Company L.L.C

20-19s-14w Barton

9431 E Central St # 100 Wichita KS 67206

Zimmer #1-20

Job Ticket: 19310

DST#: 9

ATTN: Ryan Greenbaum

Test Start: 2014.07.13 @ 09:25:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 50.00 sec/qt
Water Loss: 10.40 in³
Resistivity: ohm.m
Salinity: 5300.00 ppm
Filter Cake: 1.00 inches

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

Oil API: deg API
Water Salinity: ppm

Recovery Information

Recovery Table

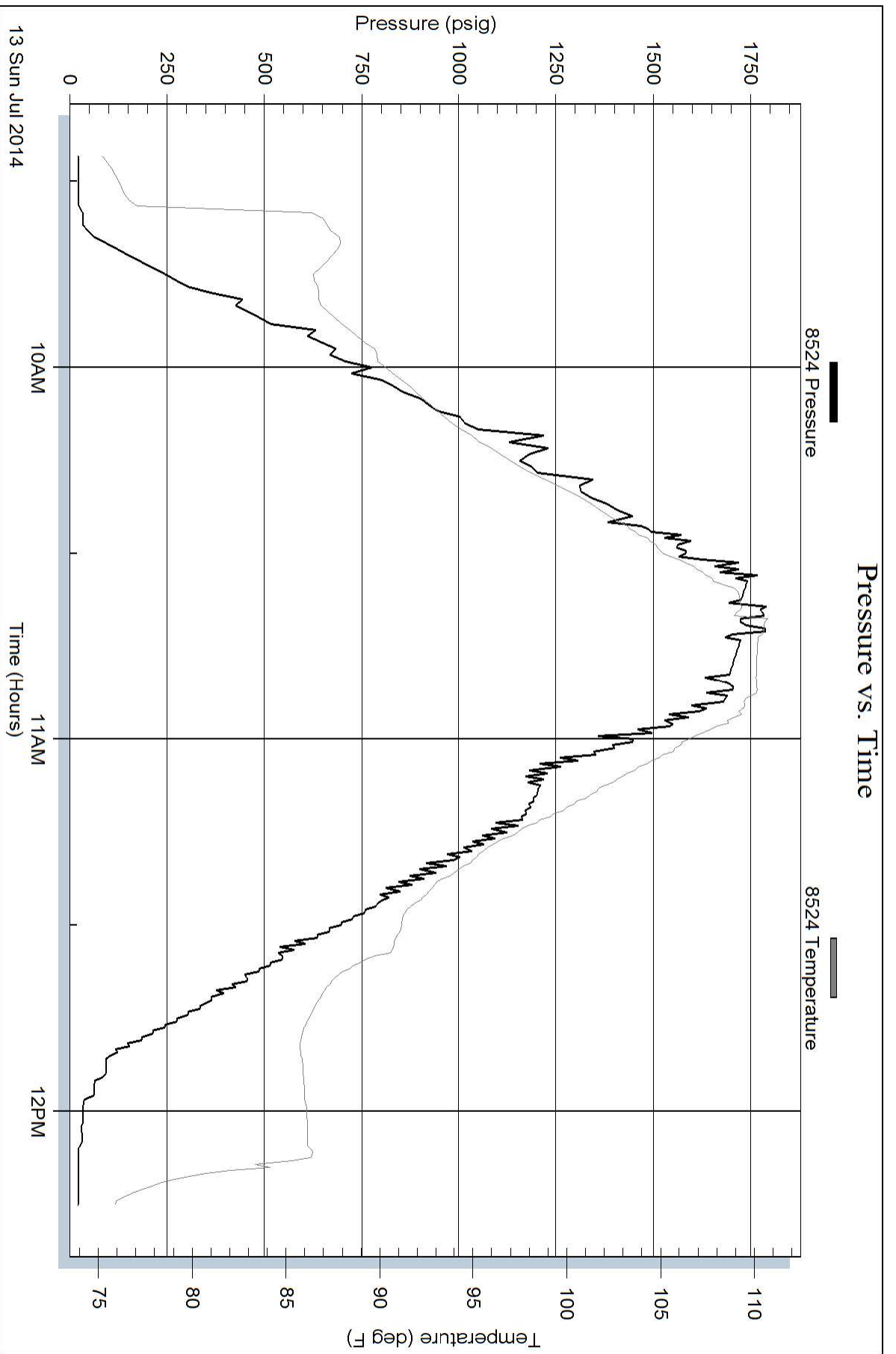
Length ft	Description	Volume bbl
120.00	mud	1.683

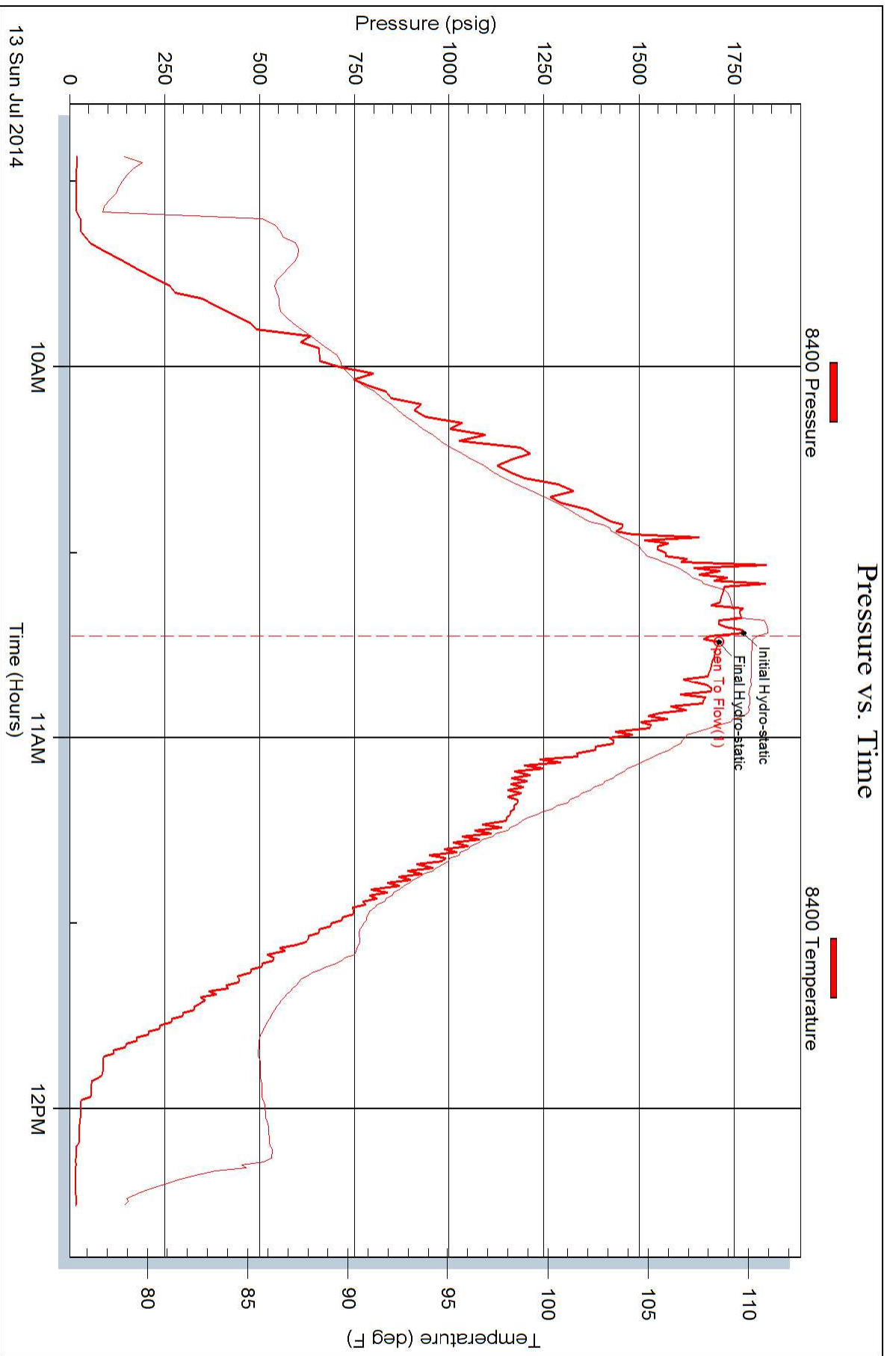
Total Length: 120.00 ft Total Volume: 1.683 bbl

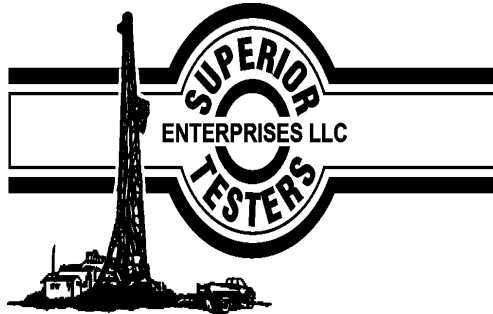
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **F.G Holl Company L.L.C**

9431 E Central St # 100 Wichita KS 67206

ATTN: Ryan Greenbaum

Zimmer #1-20

20-19s-14w Barton

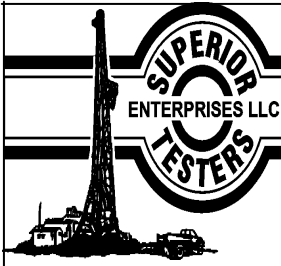
Start Date: 2014.07.13 @ 19:05:00

End Date: 2014.07.14 @ 01:45:30

Job Ticket #: 19311 DST #: 10

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

Printed: 2014.07.14 @ 03:14:52



DRILL STEM TEST REPORT

F.G Holl Company L.L.C

20-19s-14w Barton

9431 E Central St # 100 Wichita KS 67206

Zimmer #1-20

Job Ticket: 19311

DST#: 10

ATTN: Ryan Greenbaum

Test Start: 2014.07.13 @ 19:05:00

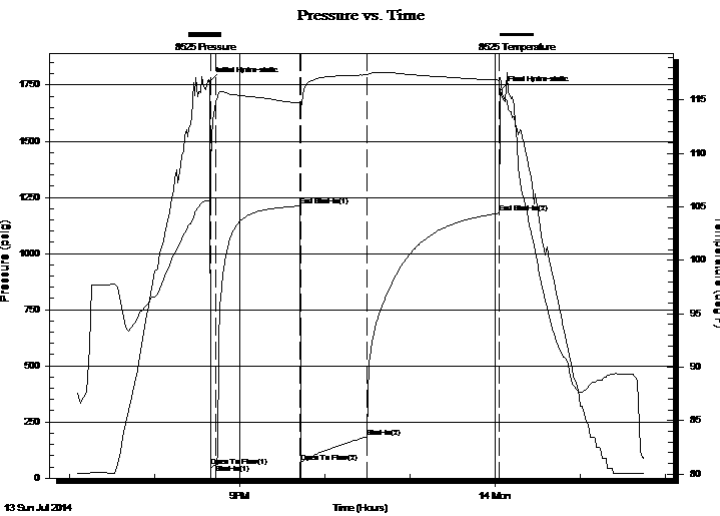
GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 20:40:00
 Time Test Ended: 01:45:30
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Jared Scheck
 Unit No: 3340-Great Bend-25
 Interval: **3553.00 ft (KB) To 3560.00 ft (KB) (TVD)**
 Reference Elevations: 1901.00 ft (KB)
 Total Depth: 3560.00 ft (KB) (TVD)
 1893.00 ft (CF)
 Hole Diameter: 7.88 inches
 Hole Condition: Fair
 KB to GR/CF: 8.00 ft

Serial #: 8525

Press@RunDepth: 183.49 psig @ ft (KB) Capacity: 5000.00 psig
 Start Date: 2014.07.13 End Date: 2014.07.14 Last Calib.: 2014.07.14
 Start Time: 19:05:00 End Time: 01:45:30 Time On Btm: 2014.07.13 @ 20:39:00
 Time Off Btm: 2014.07.14 @ 00:04:00

TEST COMMENT: 1st Opening 5 Minutes-Strong blow built bottom of bucket in 2 1/2 minutes
 1st Shut-in 60 Minutes-Weak surface blow
 2nd Opening 45 Minutes-Strong blow built bottom of bucket in 3 minutes
 2nd Shut-in 90 Minutes-2 inch blow back



PRESSURE SUMMARY

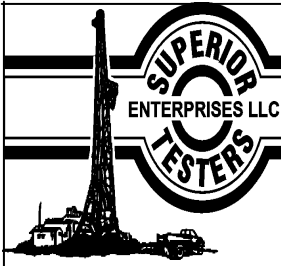
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1767.36	105.59	Initial Hydro-static
1	50.90	108.91	Open To Flow (1)
5	59.39	114.83	Shut-In(1)
64	1211.31	114.69	End Shut-In(1)
65	71.94	114.16	Open To Flow (2)
111	183.49	117.33	Shut-In(2)
204	1179.38	116.85	End Shut-In(2)
205	1725.87	117.03	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	oil mud 20%oil 80 %mud	0.28
60.00	oil w ater mud 5%oil 45%w ater 55%mud	0.84
240.00	w ater 90% w ater 10% mud	3.37
0.00	gas in pipe 300	0.00
0.00	chlorides 30,000 resistivity .2@60degree	0.00

Gas Rates

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



DRILL STEM TEST REPORT

F.G Holl Company L.L.C

20-19s-14w Barton

9431 E Central St # 100 Wichita KS 67206

Zimmer #1-20

Job Ticket: 19311

DST#: 10

ATTN: Ryan Greenbaum

Test Start: 2014.07.13 @ 19:05:00

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:40:00

Time Test Ended: 01:45:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Jared Scheck

Unit No: 3340-Great Bend-25

Interval: 3553.00 ft (KB) To 3560.00 ft (KB) (TVD)

Reference Elevations: 1901.00 ft (KB)

Total Depth: 3560.00 ft (KB) (TVD)

1893.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8400

Press@RunDepth: 1167.02 psig @ ft (KB)

Capacity: 5000.00 psig

Start Date: 2014.07.13

End Date: 2014.07.14

Last Calib.: 2014.07.14

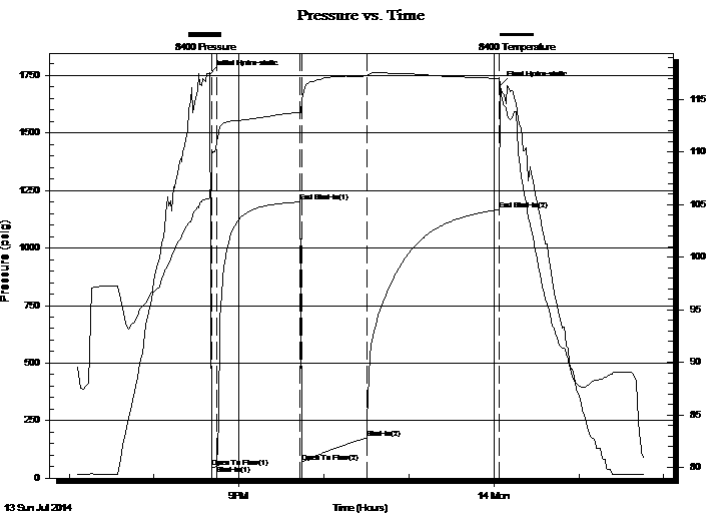
Start Time: 19:05:00

End Time: 01:46:30

Time On Btm: 2014.07.13 @ 20:39:30

Time Off Btm: 2014.07.14 @ 00:04:30

TEST COMMENT: 1st Opening 5 Minutes-Strong blow built bottom of bucket in 2 1/2 minutes
 1st Shut-in 60 Minutes-Weak surface blow
 2nd Opening 45 Minutes-Strong blow built bottom of bucket in 3 minutes
 2nd Shut-in 90 Minutes-2 inch blow back



PRESSURE SUMMARY

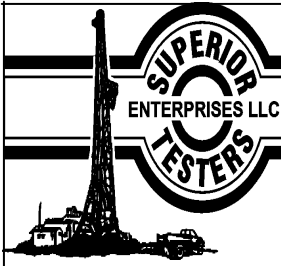
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1756.07	105.60	Initial Hydro-static
2	45.26	109.74	Open To Flow (1)
5	55.36	111.02	Shut-In(1)
64	1200.31	113.77	End Shut-In(1)
65	70.23	114.94	Open To Flow (2)
111	174.43	117.23	Shut-In(2)
204	1167.02	116.99	End Shut-In(2)
205	1707.04	116.53	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	oil mud 20%oil 80 %mud	0.28
60.00	oil w ater mud 5%oil 45%w ater 55%mud	0.84
240.00	w ater 90% w ater 10% mud	3.37
0.00	gas in pipe 300	0.00
0.00	chlorides 30,000 resistivity .2@60degree	0.00

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

F.G Holl Company L.L.C

20-19s-14w Barton

9431 E Central St # 100 Wichita KS 67206

Zimmer #1-20

Job Ticket: 19311

DST#: 10

ATTN: Ryan Greenbaum

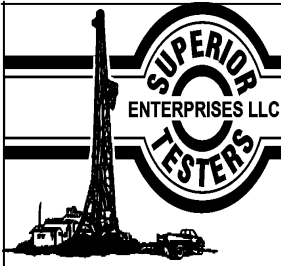
Test Start: 2014.07.13 @ 19:05:00

Tool Information

Drill Pipe:	Length: 3560.00 ft	Diameter: 3.80 inches	Volume: 49.94 bbl	Tool Weight: 1000.00 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: 63000.00 lb
			<u>Total Volume: 49.94 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 57000.00 lb
Depth to Top Packer:	3553.00 ft			Final 58000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	7.00 ft			
Tool Length:	30.00 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			3535.00	
Hydraulic tool	5.00			3540.00	
Jars	6.00			3546.00	
Safety Joint	2.00			3548.00	
Packer	5.00			3553.00	23.00 Bottom Of Top Packer
Recorder	1.00			3554.00	
Recorder	1.00			3555.00	
Anchor	2.00			3557.00	
Bullnose	3.00			3560.00	7.00 Anchor Tool
Total Tool Length:	30.00				



DRILL STEM TEST REPORT

FLUID SUMMARY

F.G Holl Company L.L.C

20-19s-14w Barton

9431 E Central St # 100 Wichita KS 67206

Zimmer #1-20

Job Ticket: 19311

DST#: 10

ATTN: Ryan Greenbaum

Test Start: 2014.07.13 @ 19:05:00

Mud and Cushion Information

Mud Type: Gel Chem
 Mud Weight: 9.00 lb/gal
 Viscosity: 44.00 sec/qt
 Water Loss: 10.80 in³
 Resistivity: ohm.m
 Salinity: 6800.00 ppm
 Filter Cake: 1.00 inches

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

Oil API: deg API
 Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	oil mud 20%oil 80 %mud	0.281
60.00	oil w ater mud 5%oil 45%w ater 55%mud	0.842
240.00	w ater 90% w ater 10% mud	3.367
0.00	gas in pipe 300	0.000
0.00	chlorides 30,000 resistivity .2@60degree	0.000

Total Length: 320.00 ft Total Volume: 4.490 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:

