Confidentiality Requested:
☐ Yes ☑ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1151471

Form ACO-1
August 2013
Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 3134
Name: Morris, Terry E. dba G L M Company
Address 1: PO BOX 193
Address 2:
City: RUSSELL State: KS Zip: 67665 + 0193
Contact Person: Terry Morris
Phone: (785) 483-1307
CONTRACTOR: License # 33905
Name: Royal Drilling Inc
Wellsite Geologist: Jeff Lawler
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 #:

6/28/2013	7/4/2013	08/17/2013
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-167-23888-00-00
Spot Description:
SW NE NE NE Sec. 4 Twp. 15 S. R. 12 ☐ East ☑ West
360 Feet from ☑ North / ☐ South Line of Section
368 Feet from ☑ East / ☐ West Line of Section
Footages Calculated from Nearest Outside Section Corner:
☑ NE ☐ NW ☐ SE ☐ SW
GPS Location: Lat: *(e.g. xx.xxxxx)* , Long: *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Russell
Lease Name: Major Well #: 5
Field Name: Hall-Gurney
Producing Formation: Lansing/Kansas City
Elevation: Ground: 1745 Kelly Bushing: 1752
Total Vertical Depth: 3260 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 305 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: 76000 ppm Fluid volume: 600 bbls
Dewatering method used: Evaporated
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:** Deanna Garrison **Date:** 01/31/2014

[redacted] 1151471

Operator Name: Morris, Terry E. dba G L M Company Lease Name: Major Well #: 5

Sec. 4 Twp. 15 S. R. 12 ☐ East ☑ West County: Russell

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 ☑ Yes ☐ No
(Attach Additional Sheets)

Samples Sent to Geological Survey ☐ Yes ☑ No

Cores Taken ☐ Yes ☑ No

Electric Log Run ☐ Yes ☑ No

List All E. Logs Run:

☑ Log Formation (Top), Depth and Datum ☐ Sample

Name	Top	Datum
Anhrdrite	658	1095
Topeka	2537	-784
Heebner Shale	2810	-1057
Toronto	2828	-1075
LKC	2897	-1144
Gorham Sand	3209	-1456

CASING RECORD ☑ New ☐ 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
Surface	12.25	8.625	20	305	Common	180	3% CC, 2% Gel
Production	7.875	4.500	11.60	3255	Common	200	

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
___ Perforate ___ Protect Casing ___ Plug Back TD ___ Plug Off Zone	-			
	-			

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 *(Amount and Kind of Material Used)*	Depth
Attached	Attached	Attached	Attached

TUBING RECORD: Size: 2..375 Set At: Packer At: Liner Run: ☐ Yes ☐ No

Date of First, Resumed Production, SWD or ENHR. 08/20/2013

Producing Method: ☐ Flowing ☑ Pumping ☐ Gas Lift ☐ Other *(Explain)* _____

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	18		60		

DISPOSITION OF GAS:
☐ Vented ☐ Sold ☐ Used on Lease
(If vented, Submit ACO-18.)

METHOD OF COMPLETION:
☐ Open Hole ☑ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*
☐ Other *(Specify)* _____

PRODUCTION INTERVAL:

Mail to: KCC - Conservation Division, 130 S. Market - Room 2078, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	Morris, Terry E. dba G L M Company
Well Name	Major 5
Doc ID	1151471

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
4	3212 to 3214		
4	3117 to 3120		
4	3080 to 3084		
4	2978 to 2981		
4	2938 to 2942		
4	2933 to 2936		
4	2910 to 2914		

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 7253

Date	Sec.	Twp.	Range	County	State	On Location	Finish
6-28-13	29	15	12	Russell	KS		9:45 PM

Location Bunker Hill S to DE 3E ½ S w/S into

Lease Major Well No. #5

Owner

Contractor Royal #2

To Quality Oilwell Cementing, Inc.
You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.

Type Job Surface

Hole Size 12¼ T.D. 305 ½

Csg. 8 5/8 Depth 305

Charge To GLM

Tbg. Size Depth

Street

Tool Depth

City State

The above was done to satisfaction and supervision of owner agent or contractor.

Cement Left in Csg. 20 ft Shoe Joint 18 bbl

Cement Amount Ordered 180 3+2

Meas Line Displace

EQUIPMENT

Pumptrk 5	No.	Cementer	Matt
		Helper	
Bulktrk 1	No.	Driver	Chad
		Driver	
Bulktrk PU	No.	Driver	Brett
		Driver	

JOB SERVICES & REMARKS

Remarks:

Rat Hole

Mouse Hole

Centralizers

Baskets

D/V or Port Collar

Common	
Poz. Mix	
Gel.	
Calcium	
Hulls	
Salt	
Flowseal	
Kol-Seal	
Mud CLR 48	
CFL-117 or CD110 CAF 38	
Sand	
Handling	
Mileage	

FLOAT EQUIPMENT

Guide Shoe	
Centralizer	
Baskets	
AFU Inserts	
Float Shoe	
Latch Down	
Pumptrk Charge	
Mileage	
Tax	
Discount	
Total Charge	

X Signature

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025 Home Office P.O. Box 32 Russell, KS 67665 No. 6710

Cell 785-324-1041

Date	Sec.	Twp.	Range	County	State	On Location	Finish
7-4-13	4	15	12	Russell	KS	6:00AM	9:15

Location Bunker hill S to Dead End E to

Lease Major Well No. 5 Owner 196 1/2 S W into

Contractor Royal 1

Type Job RPC 5½

To Quality Oilwell Cementing, Inc.
You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.

Hole Size	7 7/8	T.D. 3260
Csg.	4½	Depth 3255
Tbg. Size		Depth
Tool		Depth
Cement Left in Csg.	34.63	Shoe Joint 34.63
Meas Line	10.5 ft	Displace 51.5 Bbl

Charge To

Street

City State

The above was done to satisfaction and supervision of owner agent or contractor.

Cement Amount Ordered 200 Com 10% Salt 5%

EQUIPMENT

Pumptrk 16	No. Cementer / Helper	Matt
Bulktrk 3	No. Driver / Driver	Lonnie
Bulktrk 26	No. Driver / Driver	Dave

JOB SERVICES & REMARKS

Remarks:

Rat Hole 30 Sks

Mouse Hole 15 Sks

Centralizers 1, 2, 4, 6, 8, 10, 61

Baskets 3

D/V or Port Collar

Common	
Poz. Mix	
Gel.	
Calcium	
Hulls	
Salt	
Flowseal	
Kol-Seal	
Mud CLR 48	500g
CFL-117 or CD110 CAF 38	
Sand	
Handling	
Mileage	
116	**FLOAT EQUIPMENT**
Guide Shoe	
~~Centralizer~~	7 turbos
Baskets	1
AFU Inserts	
Float Shoe	1
Latch Down	1
Pumptrk Charge	
Mileage	
Tax	
Discount	
Total Charge	

X Signature

DRILL STEM TEST REPORT

Prepared For: **GLM Company**

PO Box 193
Russell, Kansas 67665-0193

ATTN: Jeff Lawler

Major #5

4/15s/12w/Russell

Start Date: 2013.07.02 @ 19:30:00
End Date: 2013.07.03 @ 01:36:30
Job Ticket #: 18405 DST #: 1

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

Printed: 2013.07.02 @ 01:52:36

DRILL STEM TEST REPORT

GLM Company

PO Box 193
Russell, Kansas 67665-0193

ATTN: Jeff Lawler

4/15s/12w/Russell

Major #5

Job Ticket: 18405 **DST#: 1**

Test Start: 2013.07.02 @ 19:30:00

GENERAL INFORMATION:

Formation: **LKC A-G**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 21:05:30
Time Test Ended: 01:36:30

Test Type: Conventional Bottom Hole (Initial)
Tester: Shane Konzem
Unit No: 3330/70/Great Bend

Interval: 2906.00 ft (KB) To 3012.00 ft (KB) (TVD)
Total Depth: 3012.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

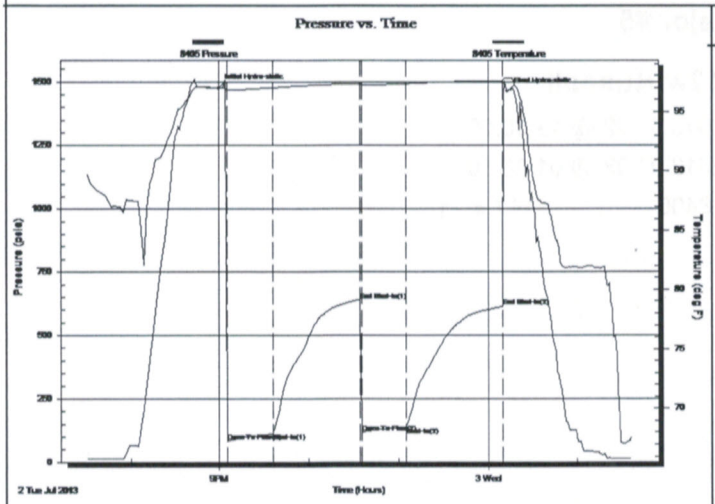
Reference Elevations: 1753.00 ft (KB)
1745.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8405 **Inside**

Press@RunDepth: 139.29 psia @ 3006.50 ft (KB)
Start Date: 2013.07.02 End Date: 2013.07.03
Start Time: 19:30:00 End Time: 01:36:30

Capacity: 5000.00 psia
Last Calib.: 2013.07.02
Time On Btm: 2013.07.02 @ 20:59:30
Time Off Btm: 2013.07.03 @ 00:13:00

TEST COMMENT: 1st Open/ 30 Minutes. Fair blow built to bottom of 5 gallon bucket in 12 Minutes.
1st Shut In/ 60 Minutes. No blow back.
2nd Open/ 30 Minutes. Fair blow built to bottom of 5 gallon bucket in 20 minutes.
2nd Shut In/ 60 Minutes. No blow back.



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1475.63	96.98	Initial Hydro-static
6	82.18	96.85	Open To Flow (1)
37	113.48	96.97	Shut-In(1)
95	636.13	97.31	End Shut-In(1)
96	115.81	97.22	Open To Flow (2)
126	139.29	97.31	Shut-In(2)
191	613.52	97.56	End Shut-In(2)
194	1462.38	97.77	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	250 feet gas	0.00
83.00	5% oil, 95% mud.	1.16
126.00	60% mud, 10% water, 10% oil, 20% gas.	1.77

Gas Rates

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

DRILL STEM TEST REPORT

GLM Company

PO Box 193
Russell, Kansas 67665-0193

ATTN: Jeff Lawler

4/15s/12w/Russell

Major #5

Job Ticket: 18405 **DST#: 1**

Test Start: 2013.07.02 @ 19:30:00

GENERAL INFORMATION:

Formation: **LKC A-G**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 21:05:30
Time Test Ended: 01:36:30

Test Type: Conventional Bottom Hole (Initial)
Tester: Shane Konzem
Unit No: 3330/70/Great Bend

Interval: 2906.00 ft (KB) To 3012.00 ft (KB) (TVD)
Total Depth: 3012.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

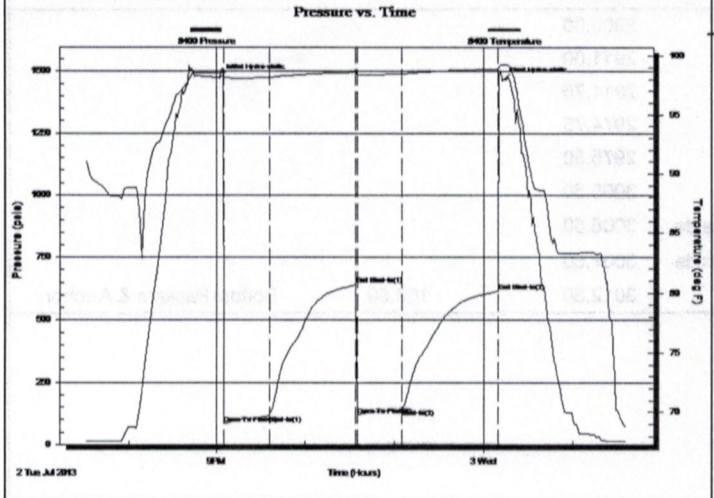
Reference Elevations: 1753.00 ft (KB)
1745.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8400 **Outside**

Press@RunDepth: 615.32 psia @ 3007.50 ft (KB)
Start Date: 2013.07.02 End Date: 2013.07.03
Start Time: 19:30:00 End Time: 01:37:00

Capacity: 5000.00 psia
Last Calib.: 2013.07.02
Time On Btm: 2013.07.02 @ 21:02:30
Time Off Btm: 2013.07.03 @ 00:13:00

TEST COMMENT: 1st Open/ 30 Minutes. Fair blow built to bottom of 5 gallon bucket in 12 Minutes.
1st Shut In/ 60 Minutes. No blow back.
2nd Open/ 30 Minutes. Fair blow built to bottom of 5 gallon bucket in 20 minutes.
2nd Shut In/ 60 Minutes. No blow back.



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1474.81	98.52	Initial Hydro-static
3	84.09	98.11	Open To Flow (1)
34	116.15	98.12	Shut-In(1)
92	640.51	98.57	End Shut-In(1)
93	117.91	98.38	Open To Flow (2)
123	141.70	98.44	Shut-In(2)
188	615.32	98.84	End Shut-In(2)
191	1464.80	99.20	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	250 feet gas	0.00
83.00	5% oil, 95% mud.	1.16
126.00	60% mud, 10% water, 10% oil, 20% gas.	1.77

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

GLM Company

PO Box 193
Russell, Kansas 67665-0193

ATTN: Jeff Lawler

4/15s/12w/Russell

Major #5

Job Ticket: 18405 **DST#: 1**

Test Start: 2013.07.02 @ 19:30:00

Tool Information

Drill Pipe:	Length:	2905.00 ft	Diameter:	3.80 inches	Volume:	40.75 bbl	Tool Weight:		2000.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:		20000.00 lb
Drill Collar:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight to Pull Loose:		54000.00 lb
					Total Volume:	40.75 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		20.00 ft					String Weight:	Initial	40000.00 lb
Depth to Top Packer:		2906.00 ft						Final	40000.00 lb
Depth to Bottom Packer:		ft							
Interval between Packers:		106.50 ft							
Tool Length:		127.50 ft							
Number of Packers:		2	Diameter:	6.75 inches					

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			2886.00		
Shut-In Tool	5.00			2891.00		
Hydroic Tool	5.00			2896.00		
Packer	5.00			2901.00	21.00	Bottom Of Top Packer
Packer	5.00			2906.00		
Perforations	5.00			2911.00		
Change Over Sub	0.75			2911.75		
Drill Pipe	63.00			2974.75		
Change Over Sub	0.75			2975.50		
Perforations	30.00			3005.50		
Recorder	1.00	8405	Inside	3006.50		
Recorder	1.00	8400	Outside	3007.50		
Bullnose	5.00			3012.50	106.50	Bottom Packers & Anchor
Total Tool Length:	**127.50**					

DRILL STEM TEST REPORT

FLUID SUMMARY

GLM Company

PO Box 193
Russell, Kansas 67665-0193

ATTN: Jeff Lawler

4/15s/12w/Russell

Major #5

Job Ticket: 18405 **DST#: 1**

Test Start: 2013.07.02 @ 19:30:00

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	54.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	8.79 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psia		
Salinity:	3800.00 ppm				
Filter Cake:	inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	250 feet gas	0.000
83.00	5% oil, 95% mud.	1.164
126.00	60% mud, 10% water, 10% oil, 20% gas.	1.767

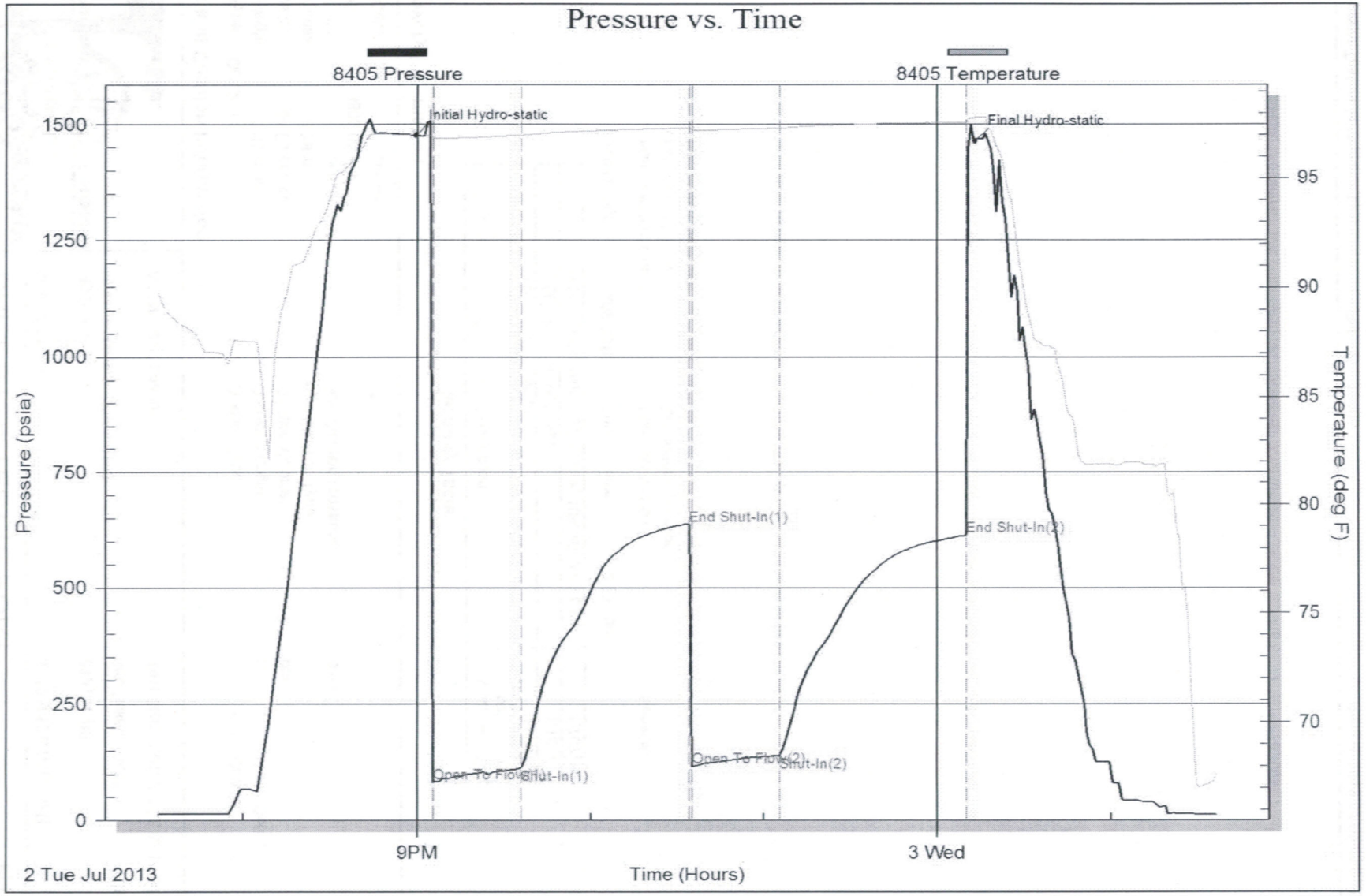
Total Length: 209.00 ft Total Volume: 2.931 bbl

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

Laboratory Name: Laboratory Location:

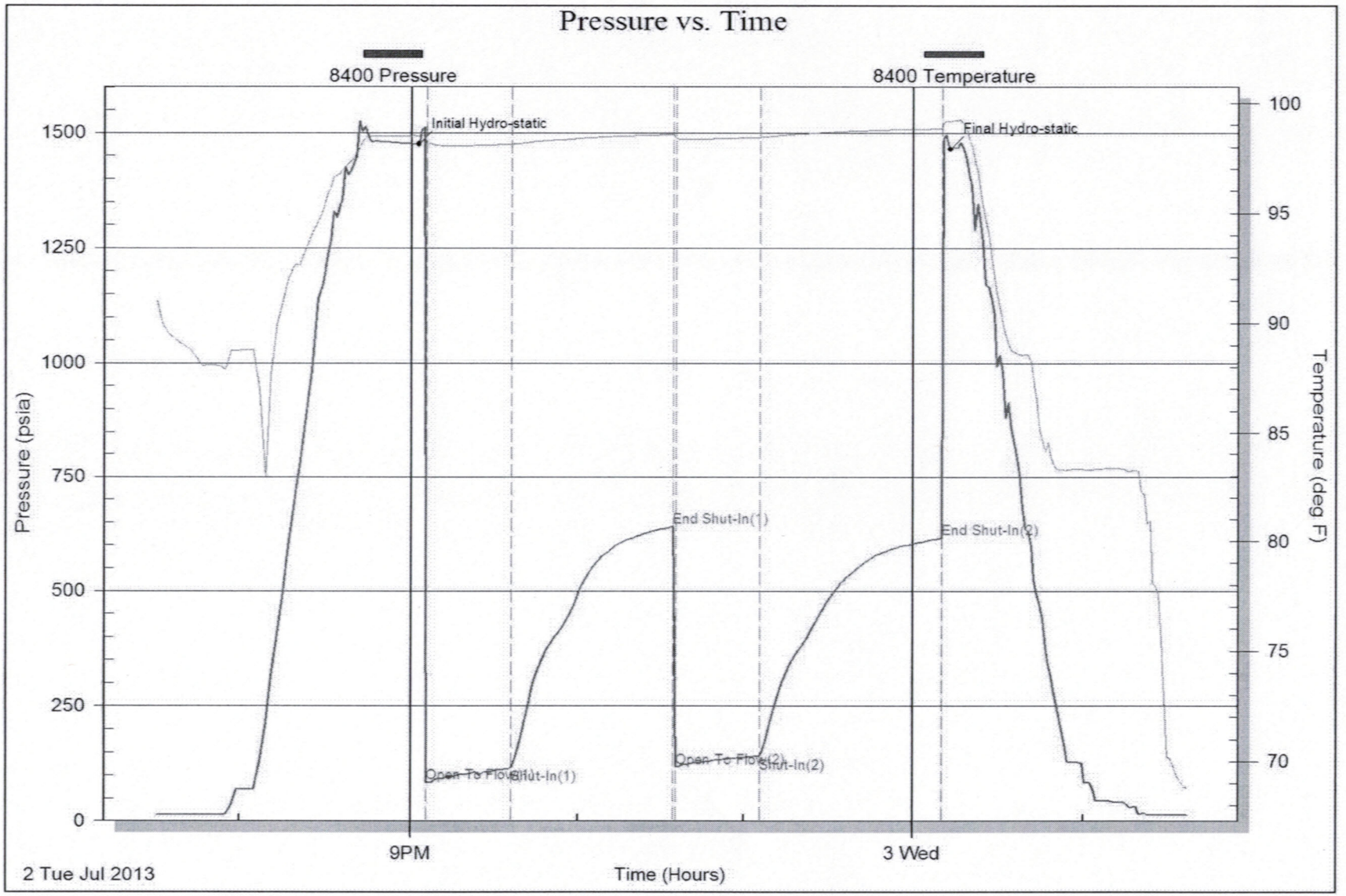
Recovery Comments:

Serial #: 8405 **Inside** GLM Company Major #5 DST Test Number: 1



Superior Testers Enterprises LLC Ref. No: 18405 Printed: 2013.07.02 @ 01:52:37

Serial #: 8400 **Outside** GLM Company Major #5 DST Test Number: 1



Superior Testers Enterprises LLC Ref. No: 18405 Printed: 2013.07.02 @ 01:52:37

DRILL STEM TEST REPORT

Prepared For: **GLM Company**

PO Box 193
Russell, Kansas 67665-0193

ATTN: Jeff Lawler

Major #5

4/15s/12w/Russell

Start Date: 2013.07.02 @ 05:15:00
End Date: 2013.07.02 @ 10:37:00
Job Ticket #: 18406 DST #: 2

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

Printed: 2013.07.02 @ 21:38:36

GLM Company 4/15s/12w/Russell Major #5 DST # 2 LKC I-L 2013.07.02

DRILL STEM TEST REPORT

GLM Company

PO Box 193
Russell, Kansas 67665-0193

ATTN: Jeff Lawler

4/15s/12w/Russell

Major #5

Job Ticket: 18406 **DST#: 2**

Test Start: 2013.07.02 @ 05:15:00

GENERAL INFORMATION:

Formation: **LKC I-L**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 06:28:30
Time Test Ended: 10:37:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Dustin Ellis
Unit No: 3330/70/Great Bend

Interval: 3059.00 ft (KB) To 3160.00 ft (KB) (TVD)
Total Depth: 3160.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

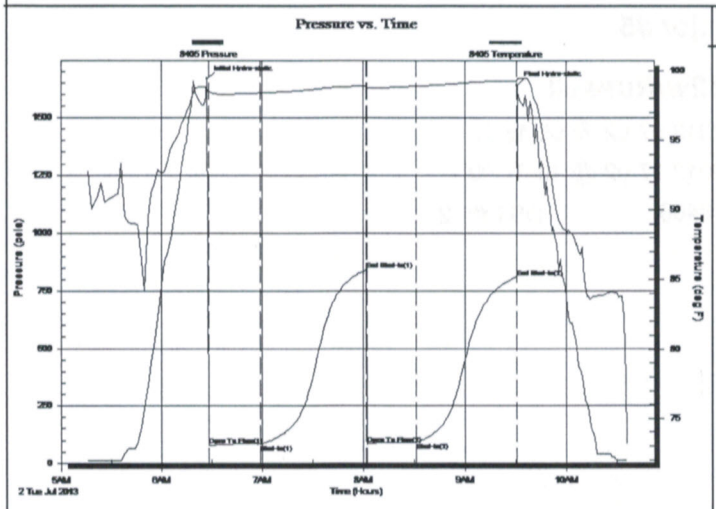
Reference Elevations: 1753.00 ft (KB)
1745.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8405 **Inside**

Press@RunDepth: 91.62 psia @ 3154.73 ft (KB)
Start Date: 2013.07.02 End Date: 2013.07.02
Start Time: 05:15:00 End Time: 10:37:00

Capacity: 5000.00 psia
Last Calib.: 2013.07.02
Time On Btm: 2013.07.02 @ 06:27:30
Time Off Btm: 2013.07.02 @ 09:31:00

TEST COMMENT: 1st Open/ 30 Minutes. Weak blow built to 1.5 inches in 5 gallon bucket.
1st Shut In/ 60 Minutes. No blow back
2nd Open/ 30 minutes. Weak blow built to 5 inches into a 5 gallon bucket.
2nd Shut In/ 60 minutes. No blow back.



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1666.59	98.79	Initial Hydro-static
1	77.97	98.46	Open To Flow (1)
32	82.89	98.38	Shut-In(1)
94	839.91	98.90	End Shut-In(1)
95	81.80	98.77	Open To Flow (2)
124	91.62	98.88	Shut-In(2)
183	809.28	99.27	End Shut-In(2)
184	1640.14	99.40	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
40.00	Oil cut mud 1%Oil 99%Mud	0.56

Gas Rates

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

DRILL STEM TEST REPORT

GLM Company

PO Box 193
Russell, Kansas 67665-0193

ATTN: Jeff Lawler

4/15s/12w/Russell

Major #5

Job Ticket: 18406 **DST#: 2**

Test Start: 2013.07.02 @ 05:15:00

GENERAL INFORMATION:

Formation: **LKC I-L**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 06:28:30
Time Test Ended: 10:37:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Dustin Ellis
Unit No: 3330/70/Great Bend

Interval: 3059.00 ft (KB) To 3160.00 ft (KB) (TVD)
Total Depth: 3160.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

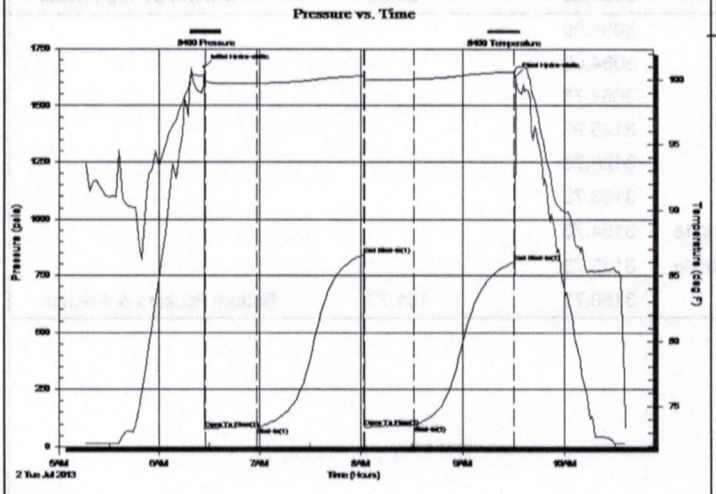
Reference Elevations: 1753.00 ft (KB)
1745.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8400 **Outside**

Press@RunDepth: 809.58 psia @ 3155.73 ft (KB)
Start Date: 2013.07.02 End Date: 2013.07.02
Start Time: 05:15:00 End Time: 10:37:00

Capacity: 5000.00 psia
Last Calib.: 2013.07.02
Time On Btm: 2013.07.02 @ 06:27:00
Time Off Btm: 2013.07.02 @ 09:31:00

TEST COMMENT: 1st Open/ 30 Minutes. Weak blow built to 1.5 inches in 5 gallon bucket.
1st Shut In/ 60 Minutes. No blow back
2nd Open/ 30 minutes. Weak blow built to 5 inches into a 5 gallon bucket.
2nd Shut In/ 60 minutes. No blow back.



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1669.05	100.33	Initial Hydro-static
1	79.35	99.67	Open To Flow (1)
32	84.15	99.69	Shut-In(1)
95	841.79	100.24	End Shut-In(1)
96	84.45	99.97	Open To Flow (2)
124	94.33	100.00	Shut-In(2)
183	809.58	100.56	End Shut-In(2)
184	1629.84	100.84	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
40.00	Oil cut mud 1%Oil 99%Mud	0.56

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

GLM Company

PO Box 193
Russell, Kansas 67665-0193

ATTN: Jeff Lawler

4/15s/12w/Russell

Major #5

Job Ticket: 18406 **DST#: 2**

Test Start: 2013.07.02 @ 05:15:00

Tool Information

Drill Pipe:	Length:	3070.00 ft	Diameter:	3.80 inches	Volume:	43.06 bbl	Tool Weight:		2000.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:		20000.00 lb
Drill Collar:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight to Pull Loose:		50000.00 lb
					Total Volume:	43.06 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		32.00 ft					String Weight:	Initial	43000.00 lb
Depth to Top Packer:		3059.00 ft						Final	43000.00 lb
Depth to Bottom Packer:		ft							
Interval between Packers:		101.73 ft							
Tool Length:		122.73 ft							
Number of Packers:		2	Diameter:	6.75 inches					

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			3039.00		
Shut-In Tool	5.00			3044.00		
Hydroic Tool	5.00			3049.00		
Packer	5.00			3054.00	21.00	Bottom Of Top Packer
Packer	5.00			3059.00		
Perforations	5.00			3064.00		
Change Over Sub	0.75			3064.75		
Drill Pipe	61.23			3125.98		
Change Over Sub	0.75			3126.73		
Perforations	27.00			3153.73		
Recorder	1.00	8405	Inside	3154.73		
Recorder	1.00	8400	Outside	3155.73		
Bullnose	5.00			3160.73	101.73	Bottom Packers & Anchor
Total Tool Length:	**122.73**					

DRILL STEM TEST REPORT

FLUID SUMMARY

GLM Company

PO Box 193
Russell, Kansas 67665-0193

ATTN: Jeff Lawler

4/15s/12w/Russell

Major #5

Job Ticket: 18406 **DST#: 2**

Test Start: 2013.07.02 @ 05:15:00

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:	54.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	8.80 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psia		
Salinity:	5000.00 ppm				
Filter Cake:	inches				

Recovery Information

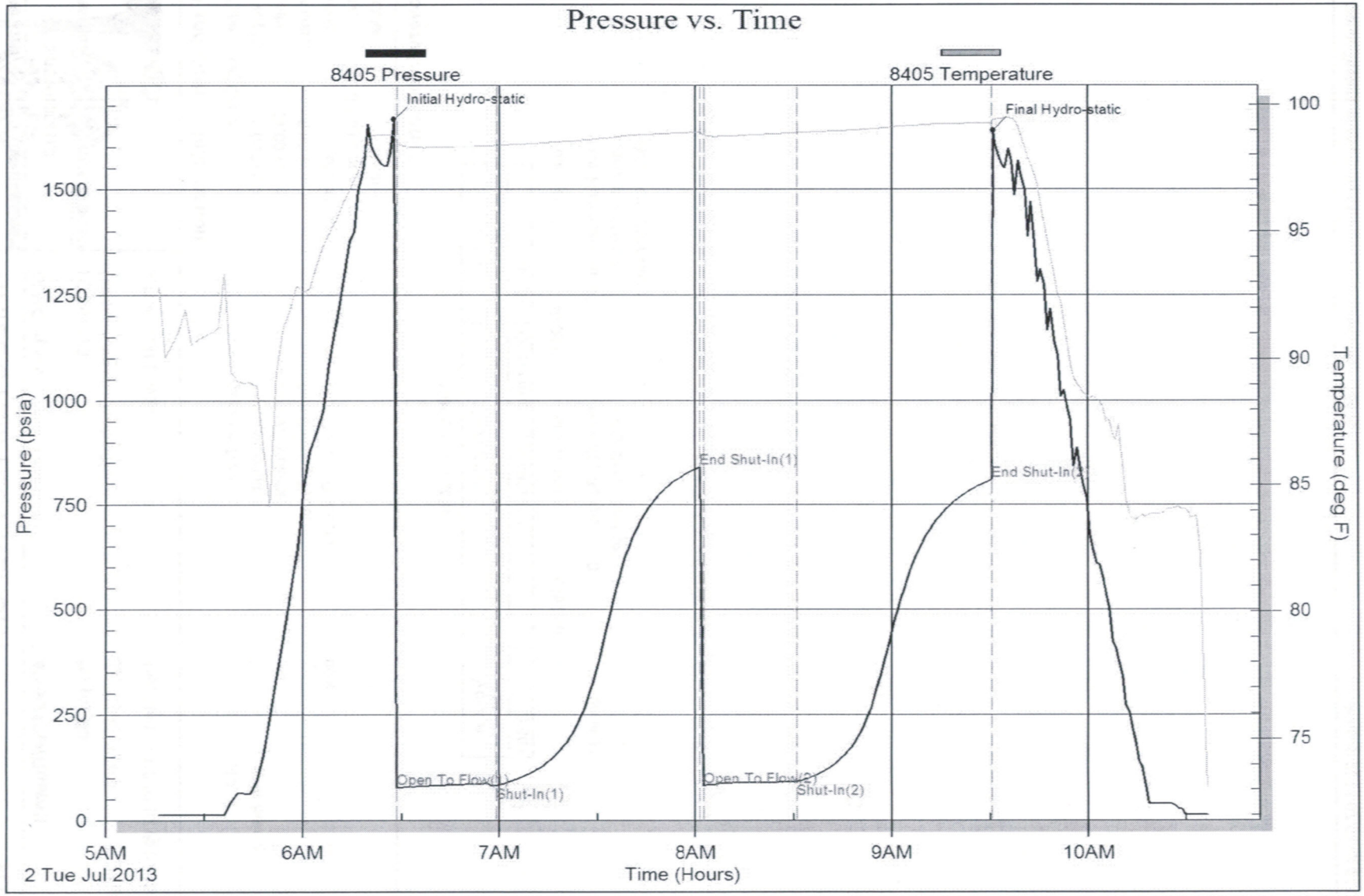
Recovery Table

Length ft	Description	Volume bbl
40.00	Oil cut mud 1%Oil 99%Mud	0.561

Total Length: 40.00 ft Total Volume: 0.561 bbl

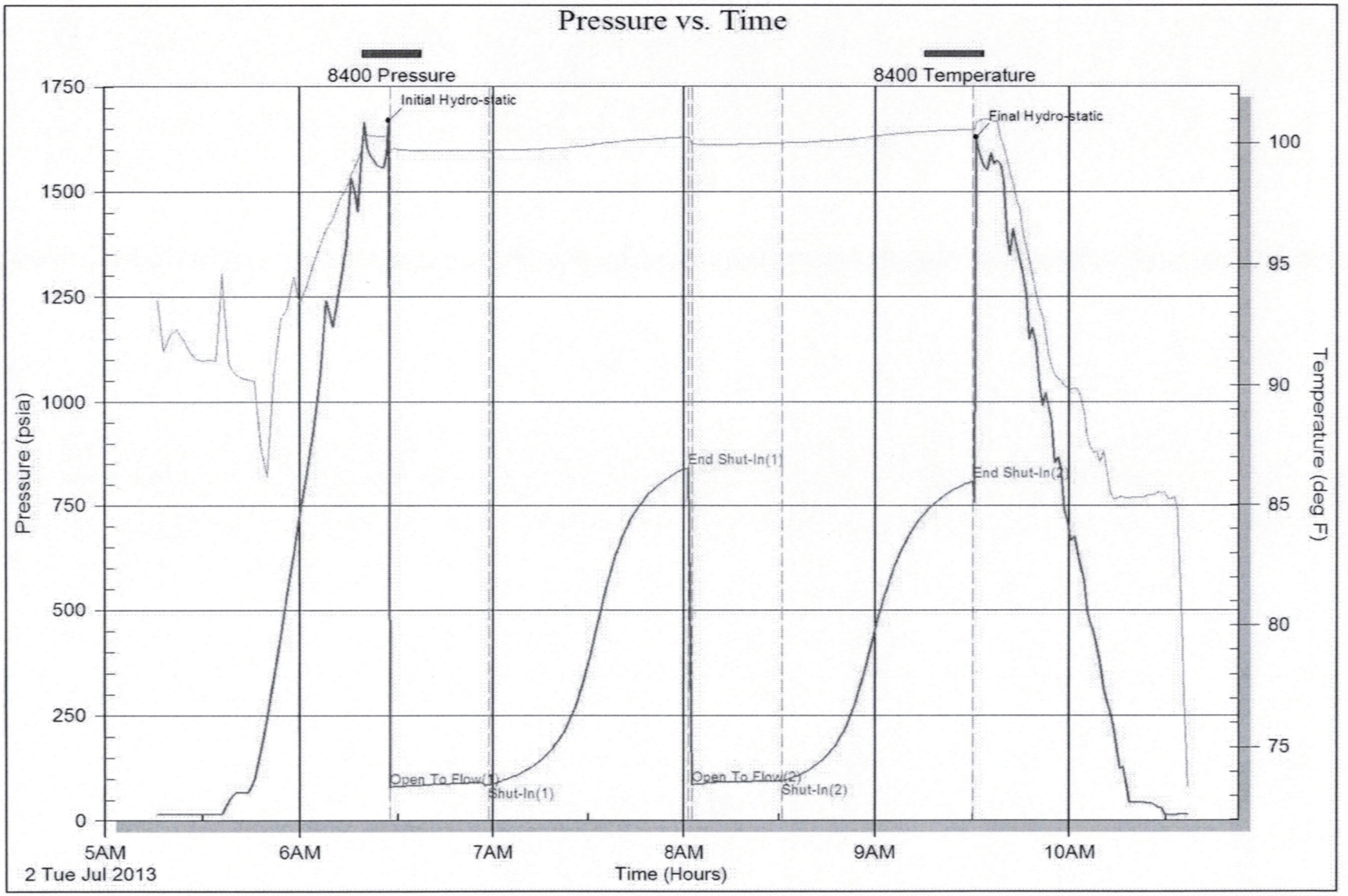
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8405 **Inside** GLM Company Major #5 DST Test Number: 2



Superior Testers Enterprises LLC Ref. No: 18406 Printed: 2013.07.02 @ 21:38:37

Serial #: 8400 **Outside** GLM Company Major #5 DST Test Number: 2



Superior Testers Enterprises LLC Ref. No: 18406 Printed: 2013.07.02 @ 21:38:37

DRILL STEM TEST REPORT

Prepared For: **GLM Company**

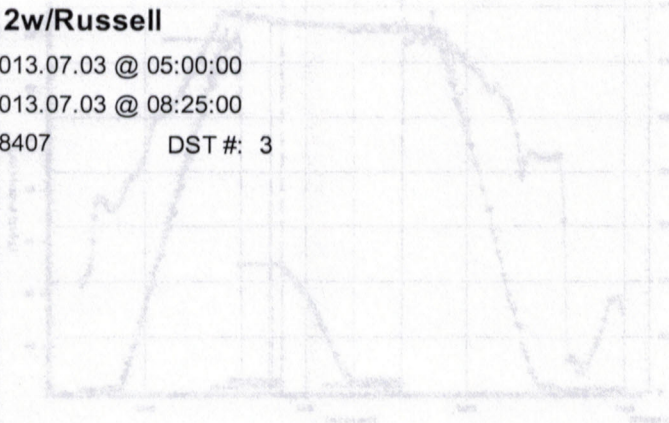
PO Box 193
Russell, Kansas 67665-0193

ATTN: Jeff Lawler

Major #5

4/15s/12w/Russell

Start Date: 2013.07.03 @ 05:00:00
End Date: 2013.07.03 @ 08:25:00
Job Ticket #: 18407 DST #: 3



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

Printed: 2013.07.03 @ 08:38:02

GLM Company 4/15s/12w/Russell Major #5 DST # 3 Gorham Sand 2013.07.03

DRILL STEM TEST REPORT

GLM Company

PO Box 193
Russell, Kansas 67665-0193

ATTN: Jeff Lawler

4/15s/12w/Russell

Major #5

Job Ticket: 18407 **DST#: 3**

Test Start: 2013.07.03 @ 05:00:00

GENERAL INFORMATION:

Formation: **Gorham Sand**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 06:24:00
Time Test Ended: 08:25:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Shane Konzem
Unit No: 3330/70/Great Bend

Interval: 3190.00 ft (KB) To 3218.00 ft (KB) (TVD)
Total Depth: 3218.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

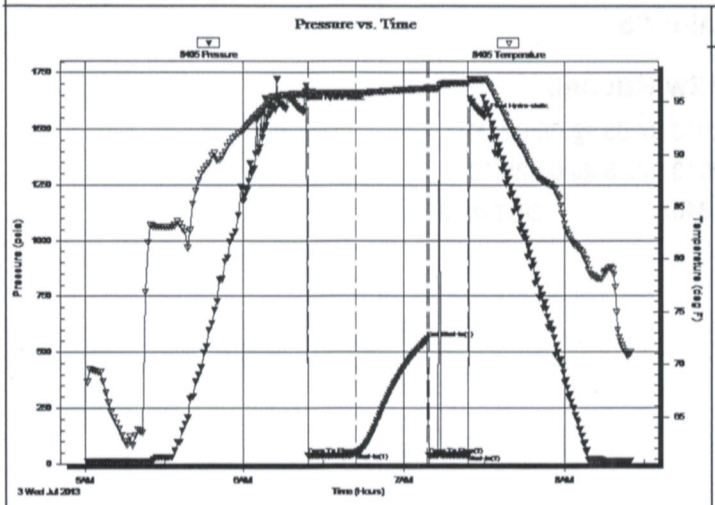
Reference Elevations: 1753.00 ft (KB)
1745.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8405 **Inside**

Press@RunDepth: 48.62 psia @ 3214.00 ft (KB)
Start Date: 2013.07.03 End Date: 2013.07.03
Start Time: 05:00:00 End Time: 08:25:00

Capacity: 5000.00 psia
Last Calib.: 2013.07.03
Time On Btm: 2013.07.03 @ 06:21:00
Time Off Btm: 2013.07.03 @ 07:30:00

TEST COMMENT: 1st Open/ 15 Minutes. Weak surface blow.
1st Shut In/ 30 Minutes. No blow back.
2nd Open/ 15 Minutes. No blow flushed tool and gained no blow. Pulled tool per Jeff Lawler.
2nd Shut In/ N/A.



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1590.00	95.71	Initial Hydro-static
3	37.29	95.89	Open To Flow (1)
21	48.62	95.82	Shut-In(1)
48	558.38	96.23	End Shut-In(1)
48	38.30	96.13	Open To Flow (2)
63	39.93	96.74	Shut-In(2)
69	1555.70	97.11	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	62 foot. gas	0.00
2.00	100% mud spot of oil.	0.03

Gas Rates

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

DRILL STEM TEST REPORT

GLM Company

PO Box 193
Russell, Kansas 67665-0193

ATTN: Jeff Lawler

4/15s/12w/Russell

Major #5

Job Ticket: 18407 **DST#: 3**

Test Start: 2013.07.03 @ 05:00:00

GENERAL INFORMATION:

Formation: **Gorham Sand**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 06:24:00
Time Test Ended: 08:25:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Shane Konzem
Unit No: 3330/70/Great Bend

Interval: 3190.00 ft (KB) To 3218.00 ft (KB) (TVD)
Total Depth: 3218.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

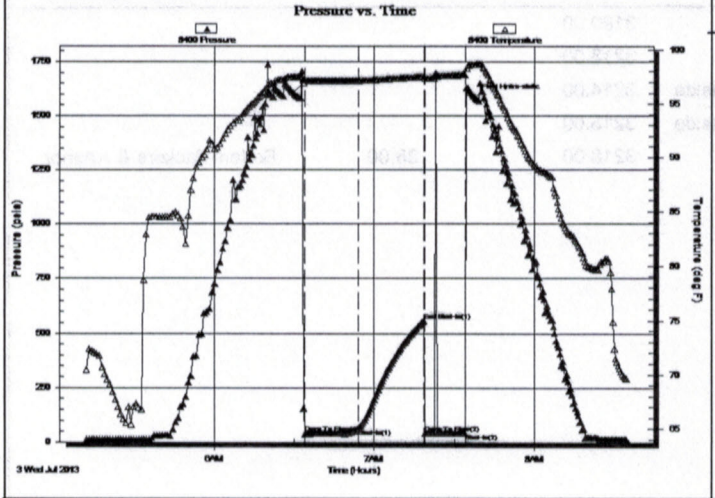
Reference Elevations: 1753.00 ft (KB)
1745.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8400 **Outside**

Press@RunDepth: 560.58 psia @ 3215.00 ft (KB)
Start Date: 2013.07.03 End Date: 2013.07.03
Start Time: 05:10:00 End Time: 08:34:30

Capacity: 5000.00 psia
Last Calib.: 2013.07.03
Time On Btm: 2013.07.03 @ 06:29:30
Time Off Btm: 2013.07.03 @ 07:37:30

TEST COMMENT: 1st Open/ 15 Minutes. Weak surface blow.
1st Shut In/ 30 Minutes. No blow back.
2nd Open/ 15 Minutes. No blow flushed tool and gained no blow. Pulled tool per Jeff Lawler.
2nd Shut In/ N/A.



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1608.09	97.47	Initial Hydro-static
5	40.01	97.18	Open To Flow (1)
25	65.31	97.14	Shut-In(1)
49	560.58	97.52	End Shut-In(1)
50	41.50	97.33	Open To Flow (2)
65	42.98	97.69	Shut-In(2)
68	1584.50	98.67	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	62 foot. gas	0.00
2.00	100% mud spot of oil.	0.03

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

GLM Company

PO Box 193
Russell, Kansas 67665-0193

ATTN: Jeff Lawler

4/15s/12w/Russell

Major #5

Job Ticket: 18407 **DST#: 3**

Test Start: 2013.07.03 @ 05:00:00

Tool Information

Drill Pipe:	Length:	3193.00 ft	Diameter:	3.80 inches	Volume:	44.79 bbl	Tool Weight:		2000.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:		20000.00 lb
Drill Collar:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight to Pull Loose:		45000.00 lb
					Total Volume:	44.79 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		24.00 ft					String Weight:	Initial	38000.00 lb
Depth to Top Packer:		3190.00 ft						Final	38000.00 lb
Depth to Bottom Packer:		ft							
Interval between Packers:		28.00 ft							
Tool Length:		49.00 ft							
Number of Packers:		2	Diameter:	6.75 inches					

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			3170.00		
Shut-In Tool	5.00			3175.00		
Hydroic Tool	5.00			3180.00		
Packer	5.00			3185.00	21.00	Bottom Of Top Packer
Packer	5.00			3190.00		
Perforations	23.00			3213.00		
Recorder	1.00	8405	Inside	3214.00		
Recorder	1.00	8400	Outside	3215.00		
Bullnose	3.00			3218.00	28.00	Bottom Packers & Anchor
Total Tool Length:	**49.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

GLM Company

PO Box 193
Russell, Kansas 67665-0193

ATTN: Jeff Lawler

4/15s/12w/Russell

Major #5

Job Ticket: 18407 **DST#: 3**

Test Start: 2013.07.03 @ 05:00:00

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	54.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	8.80 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psia		
Salinity:	5000.00 ppm				
Filter Cake:	inches				

Recovery Information

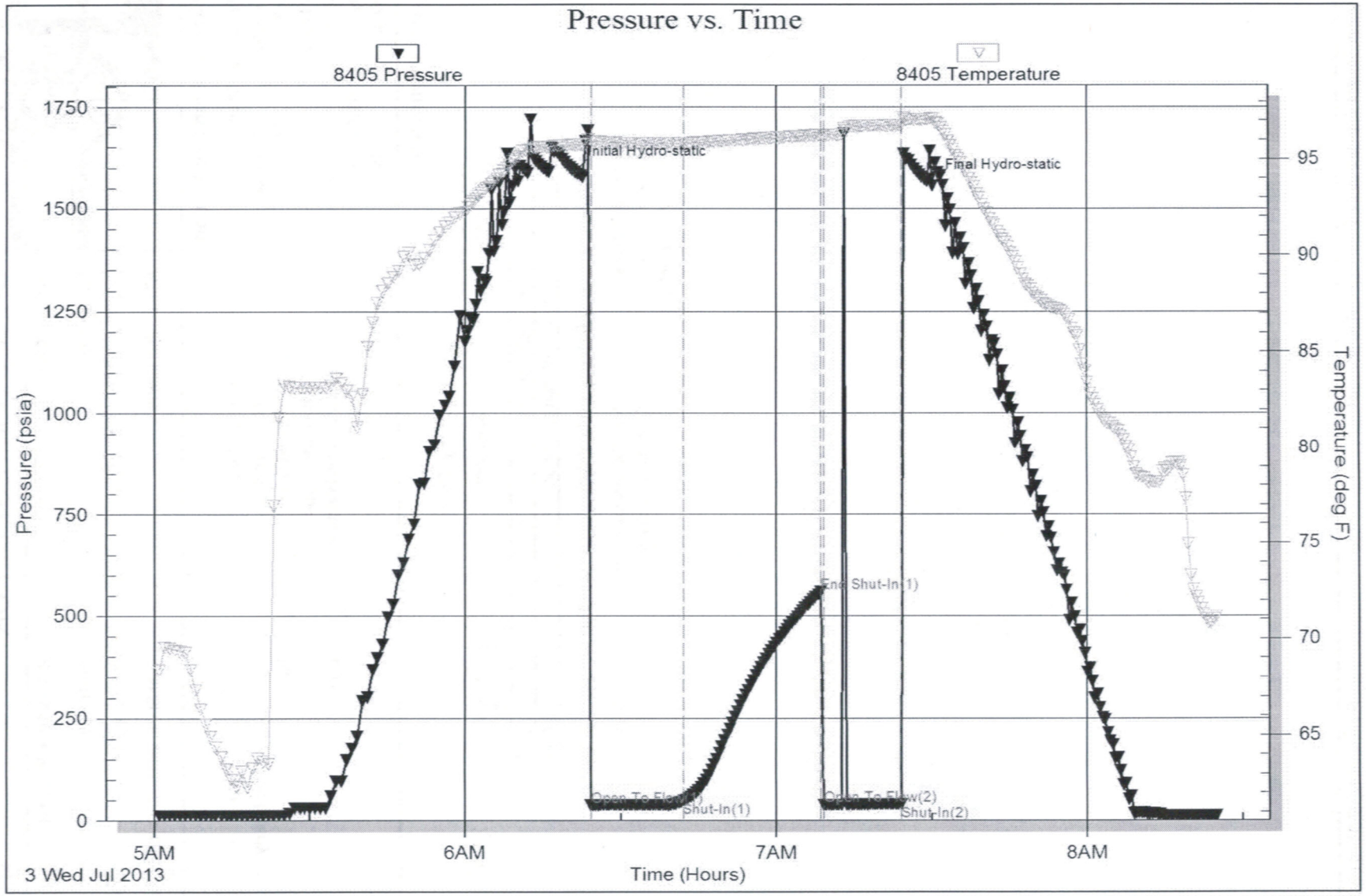
Recovery Table

Length ft	Description	Volume bbl
0.00	62 foot. gas	0.000
2.00	100% mud spot of oil.	0.028

Total Length: 2.00 ft Total Volume: 0.028 bbl

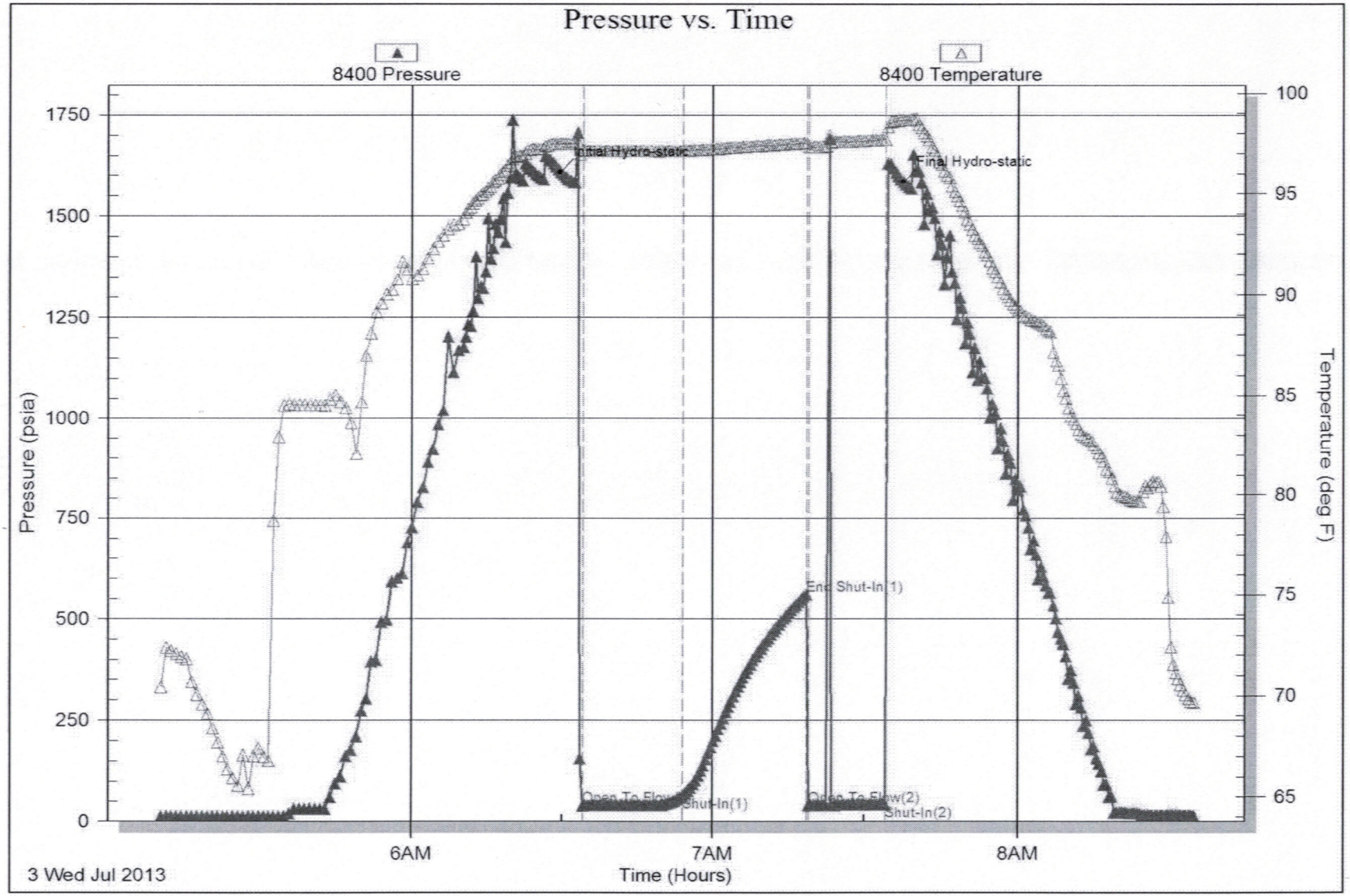
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8405 **Inside** GLM Company Major #5 DST Test Number: 3



Superior Testers Enterprises LLC Ref. No: 18407 Printed: 2013.07.03 @ 08:38:03

Serial #: 8400 **Outside** GLM Company Major #5 DST Test Number: 3



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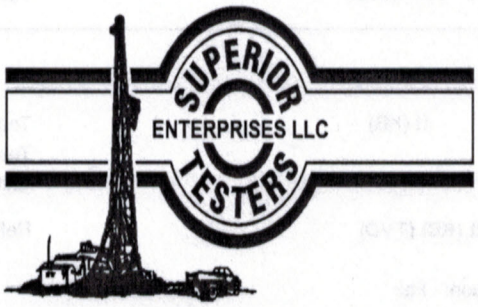


DRILL STEM TEST REPORT

Prepared For: **GLM Company**

PO Box 193
Russell, Kansas 67665-0193

ATTN: Jeff Lawler

Major #5

4/15s/12w/Russell

Start Date: 2013.07.03 @ 19:07:00
End Date: 2013.07.03 @ 23:26:30
Job Ticket #: 18408 DST #: 4

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

Printed: 2013.07.03 @ 23:52:49

DRILL STEM TEST REPORT

GLM Company

PO Box 193
Russell, Kansas 67665-0193

ATTN: Jeff Lawler

4/15s/12w/Russell

Major #5

Job Ticket: 18408 **DST#: 4**

Test Start: 2013.07.03 @ 19:07:00

GENERAL INFORMATION:

Formation: **Gorham Sand**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 20:24:30
Time Test Ended: 23:26:30

Test Type: Conventional Straddle (Initial)
Tester: Shane Konzem
Unit No: 3330/70/Great Bend

Interval: 3150.00 ft (KB) To 3230.00 ft (KB) (TVD)
Total Depth: 3256.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

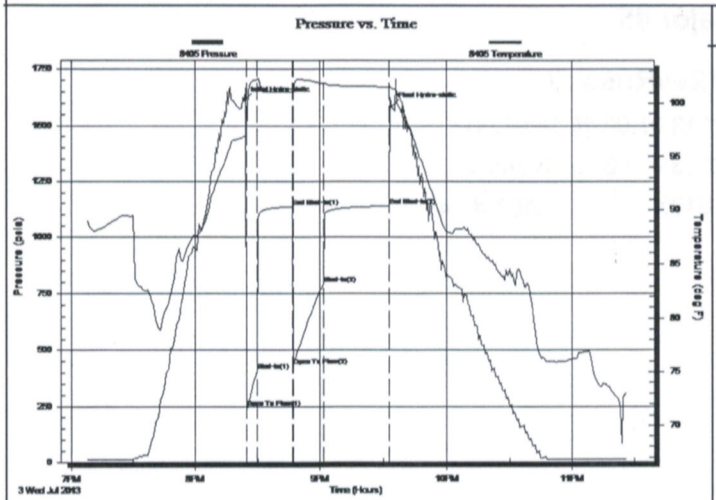
Reference Elevations: 1753.00 ft (KB)
1745.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8405

Press@RunDepth: 794.48 psia @ 3227.50 ft (KB)
Start Date: 2013.07.03 End Date: 2013.07.03
Start Time: 19:07:00 End Time: 23:26:30

Capacity: 5000.00 psia
Last Calib.: 2013.07.03
Time On Btm: 2013.07.03 @ 20:23:30
Time Off Btm: 2013.07.03 @ 21:34:00

TEST COMMENT: 1st Open/ 5 Minutes. Strong blow built to bottom of 5 gallon bucket in 50 seconds.
1st Shut In/ 15 Minutes. No blow back.
2nd Open/ 15 Minutes. Strong blow built to bottom of 5 gallon bucket in 40 seconds.
2nd Shut In/ 30 Minutes. No blow back.



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1612.74	96.88	Initial Hydro-static
1	245.58	97.27	Open To Flow (1)
6	406.62	102.16	Shut-In(1)
23	1136.48	101.02	End Shut-In(1)
24	430.31	100.89	Open To Flow (2)
38	794.48	101.84	Shut-In(2)
69	1138.86	101.50	End Shut-In(2)
71	1585.91	101.38	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	0 feet gas	0.00
62.00	100% mud	0.87
189.00	55% Mud, 45% water, trace oil.	2.65
315.00	40% Mud, 60% water.	4.42
567.00	25% mud, 75% water.	7.95
442.00	5% mud, 95% water.	6.20

Gas Rates

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

DRILL STEM TEST REPORT

GLM Company

PO Box 193
Russell, Kansas 67665-0193

ATTN: Jeff Lawler

4/15s/12w/Russell

Major #5

Job Ticket: 18408 **DST#: 4**

Test Start: 2013.07.03 @ 19:07:00

GENERAL INFORMATION:

Formation: **Gorham Sand**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 20:24:30
Time Test Ended: 23:26:30

Test Type: Conventional Straddle (Initial)
Tester: Shane Konzem
Unit No: 3330/70/Great Bend

Interval: 3150.00 ft (KB) To 3230.00 ft (KB) (TVD)
Total Depth: 3256.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

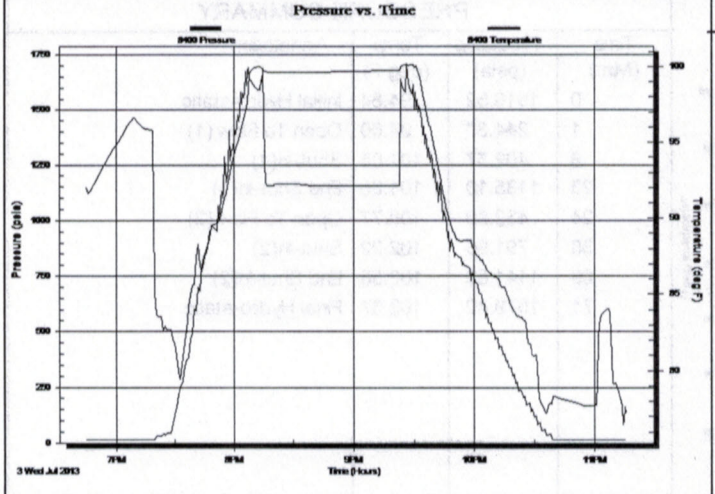
Reference Elevations: 1753.00 ft (KB)
1745.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8400 **Outside**

Press@RunDepth: psia @ 3256.25 ft (KB)
Start Date: 2013.07.03 End Date: 2013.07.03
Start Time: 18:44:00 End Time: 23:16:00

Capacity: 5000.00 psia
Last Calib.: 2013.07.03
Time On Btm:
Time Off Btm:

TEST COMMENT: 1st Open/ 5 Minutes. Strong blow built to bottom of 5 gallon bucket in 50 seconds.
1st Shut In/ 15 Minutes. No blow back.
2nd Open/ 15 Minutes. Strong blow built to bottom of 5 gallon bucket in 40 seconds.
2nd Shut In/ 30 Minutes. No blow back.



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
0.00	0 feet gas	0.00
62.00	100% mud	0.87
189.00	55% Mud, 45% water, trace oil.	2.65
315.00	40% Mud, 60% water.	4.42
567.00	25% mud, 75% water.	7.95
442.00	5% mud, 95% water.	6.20

Gas Rates

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

DRILL STEM TEST REPORT

GLM Company

PO Box 193
Russell, Kansas 67665-0193

ATTN: Jeff Lawler

4/15s/12w/Russell

Major #5

Job Ticket: 18408 **DST#: 4**

Test Start: 2013.07.03 @ 19:07:00

GENERAL INFORMATION:

Formation: **Gorham Sand**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 20:24:30
Time Test Ended: 23:26:30

Test Type: Conventional Straddle (Initial)
Tester: Shane Konzem
Unit No: 3330/70/Great Bend

Interval: 3150.00 ft (KB) To 3230.00 ft (KB) (TVD)
Total Depth: 3256.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

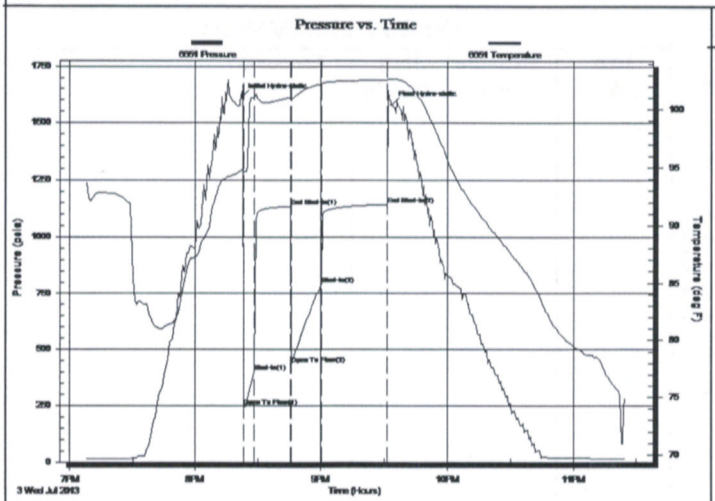
Reference Elevations: 1753.00 ft (KB)
1745.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 6651

Press@RunDepth: 1141.89 psia @ 3228.50 ft (KB)
Start Date: 2013.07.03 End Date: 2013.07.03
Start Time: 19:07:00 End Time: 23:25:00

Capacity: 5000.00 psia
Last Calib.: 2013.07.03
Time On Btm: 2013.07.03 @ 20:22:30
Time Off Btm: 2013.07.03 @ 21:33:30

TEST COMMENT: 1st Open/ 5 Minutes. Strong blow built to bottom of 5 gallon bucket in 50 seconds.
1st Shut In/ 15 Minutes. No blow back.
2nd Open/ 15 Minutes. Strong blow built to bottom of 5 gallon bucket in 40 seconds.
2nd Shut In/ 30 Minutes. No blow back.



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1613.52	94.84	Initial Hydro-static
1	244.33	94.60	Open To Flow (1)
6	402.57	101.05	Shut-In(1)
23	1135.10	101.05	End Shut-In(1)
24	432.60	100.77	Open To Flow (2)
38	791.96	102.22	Shut-In(2)
69	1141.89	102.56	End Shut-In(2)
71	1579.42	102.67	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	0 feet gas	0.00
62.00	100% mud	0.87
189.00	55% Mud, 45% water, trace oil.	2.65
315.00	40% Mud, 60% water.	4.42
567.00	25% mud, 75% water.	7.95
442.00	5% mud, 95% water.	6.20

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

GLM Company

PO Box 193
Russell, Kansas 67665-0193

ATTN: Jeff Lawler

4/15s/12w/Russell

Major #5

Job Ticket: 18408 **DST#: 4**

Test Start: 2013.07.03 @ 19:07:00

Tool Information

Drill Pipe:	Length:	3152.00 ft	Diameter:	3.80 inches	Volume:	44.21 bbl	Tool Weight:	2000.00 lb	
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:	20000.00 lb	
Drill Collar:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight to Pull Loose:	54000.00 lb	
					Total Volume:	44.21 bbl	Tool Chased	0.00 ft	
Drill Pipe Above KB:		23.00 ft					String Weight: Initial	40000.00 lb	
Depth to Top Packer:		3150.00 ft					Final	47000.00 lb	
Depth to Bottom Packer:		3229.25 ft							
Interval betw een Packers:		79.25 ft							
Tool Length:		132.25 ft							
Number of Packers:		3	Diameter:	6.75 inches					

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			3130.00		
Shut-In Tool	5.00			3135.00		
Hydroic Tool	5.00			3140.00		
Packer	5.00			3145.00	21.00	Bottom Of Top Packer
Packer	5.00			3150.00		
C.O. Sub	0.75			3150.75		
Drill Pipe	62.00			3212.75		
C.O. Sub	0.75			3213.50		
Perforations	13.00			3226.50		
Recorder	1.00	8405		3227.50		
Recorder	1.00	6651		3228.50		
Blank Off Sub	0.75			3229.25	79.25	Tool Interval
Packer	5.00			3234.25		
Perforations	21.00			3255.25		
Recorder	1.00	8400	Outside	3256.25		
Bullnose	5.00			3261.25	32.00	Bottom Packers & Anchor
Total Tool Length:	**132.25**					

DRILL STEM TEST REPORT

FLUID SUMMARY

GLM Company

PO Box 193
Russell, Kansas 67665-0193

ATTN: Jeff Lawler

4/15s/12w/Russell

Major #5

Job Ticket: 18408 **DST#: 4**

Test Start: 2013.07.03 @ 19:07:00

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	deg API
Mud Weight:	10.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	55.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	10.40 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psia		
Salinity:	9000.00 ppm				
Filter Cake:	inches				

Recovery Information

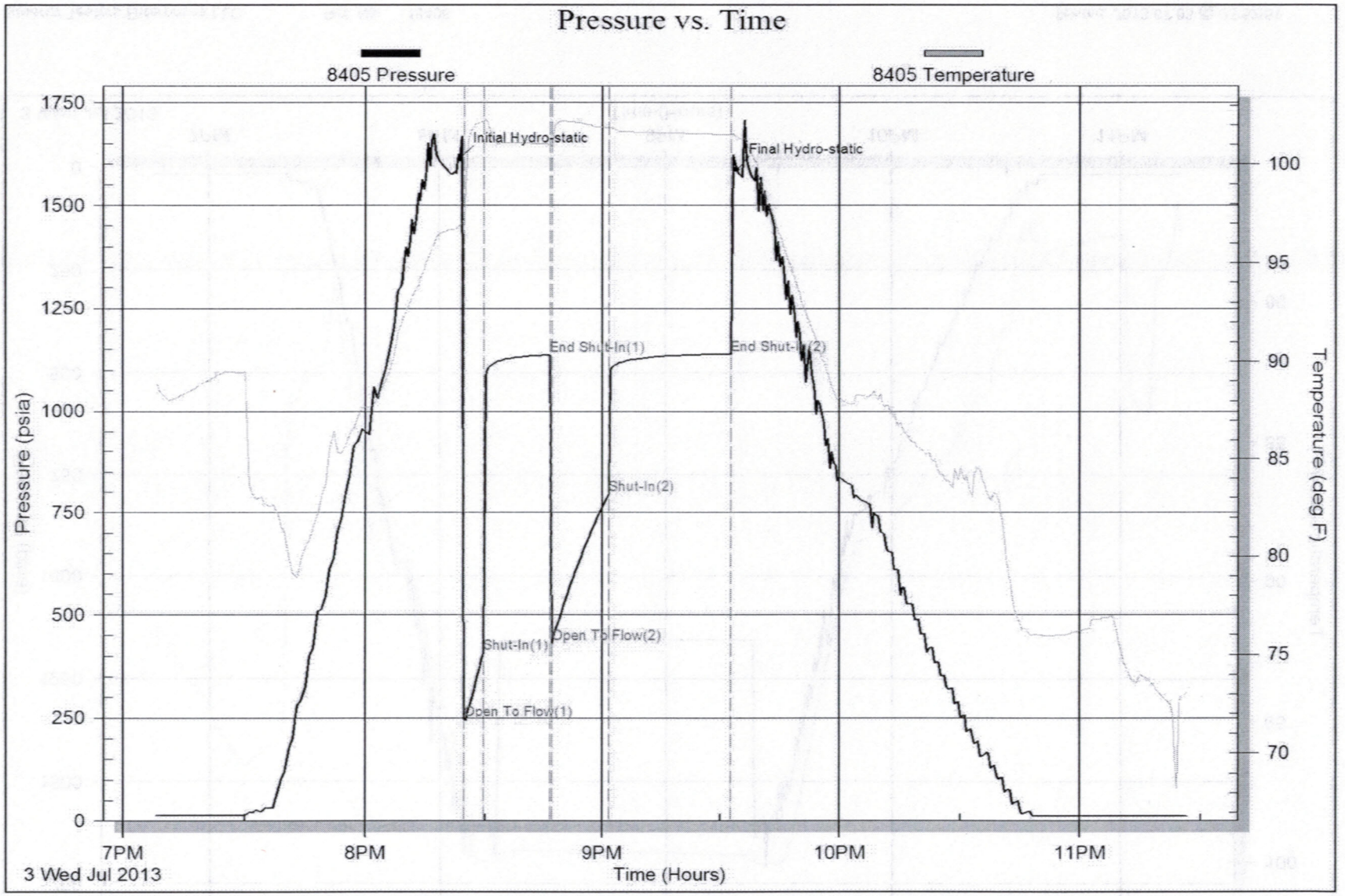
Recovery Table

Length ft	Description	Volume bbl
0.00	0 feet gas	0.000
62.00	100% mud	0.870
189.00	55% Mud, 45% water, trace oil.	2.651
315.00	40% Mud, 60% water.	4.419
567.00	25% mud, 75% water.	7.954
442.00	5% mud, 95% water.	6.200
0.00	Chloride recov. 26000 ppm.	0.000
0.00	resist recov. .21 ohms at 50 degrees.	0.000

Total Length: 1575.00 ft Total Volume: 22.094 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8405 GLM Company Major #5 DST Test Number: 4



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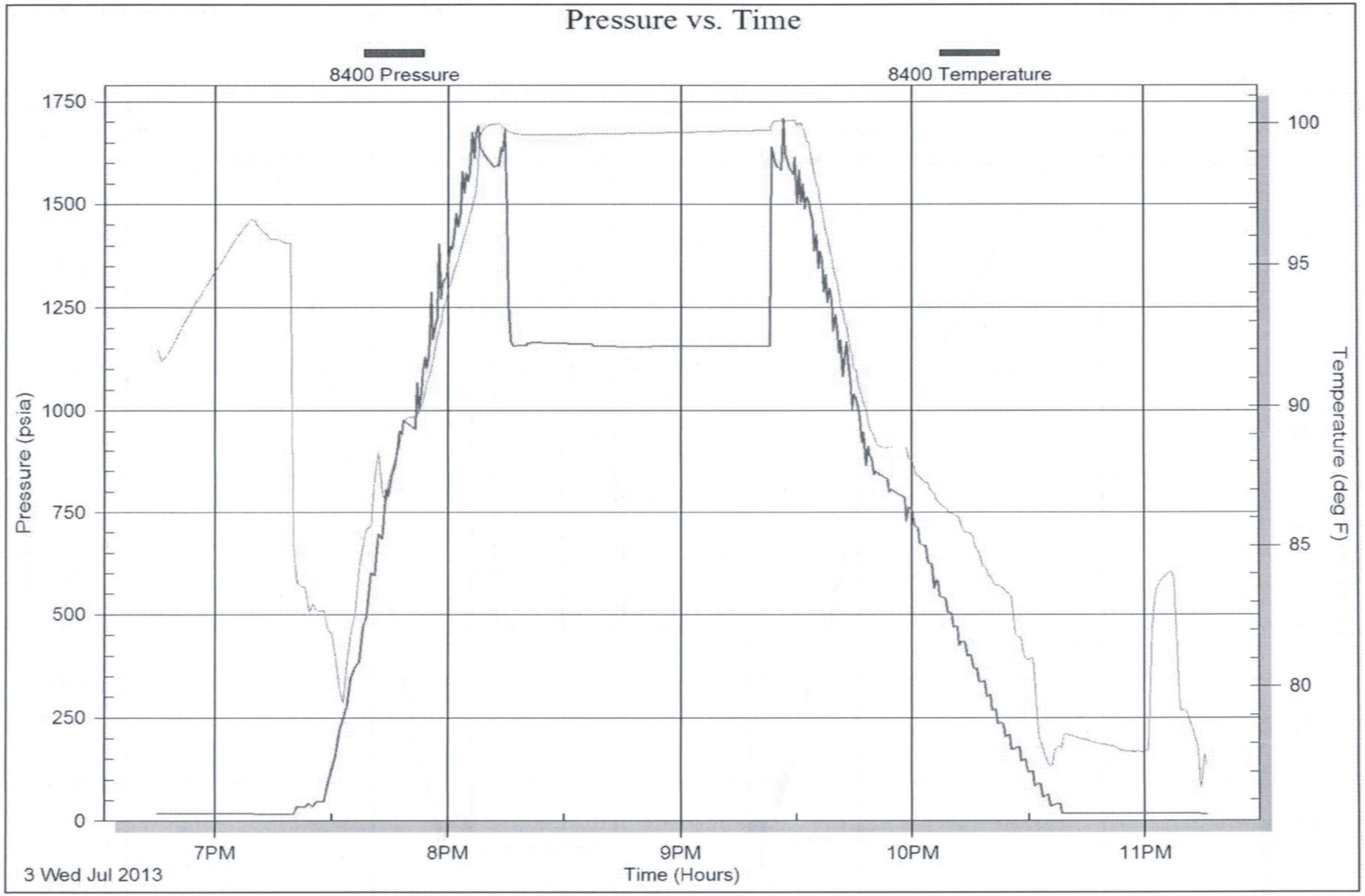
Serial #: 8400 **Outside** GLM Company Major #5 DST Test Number: 4



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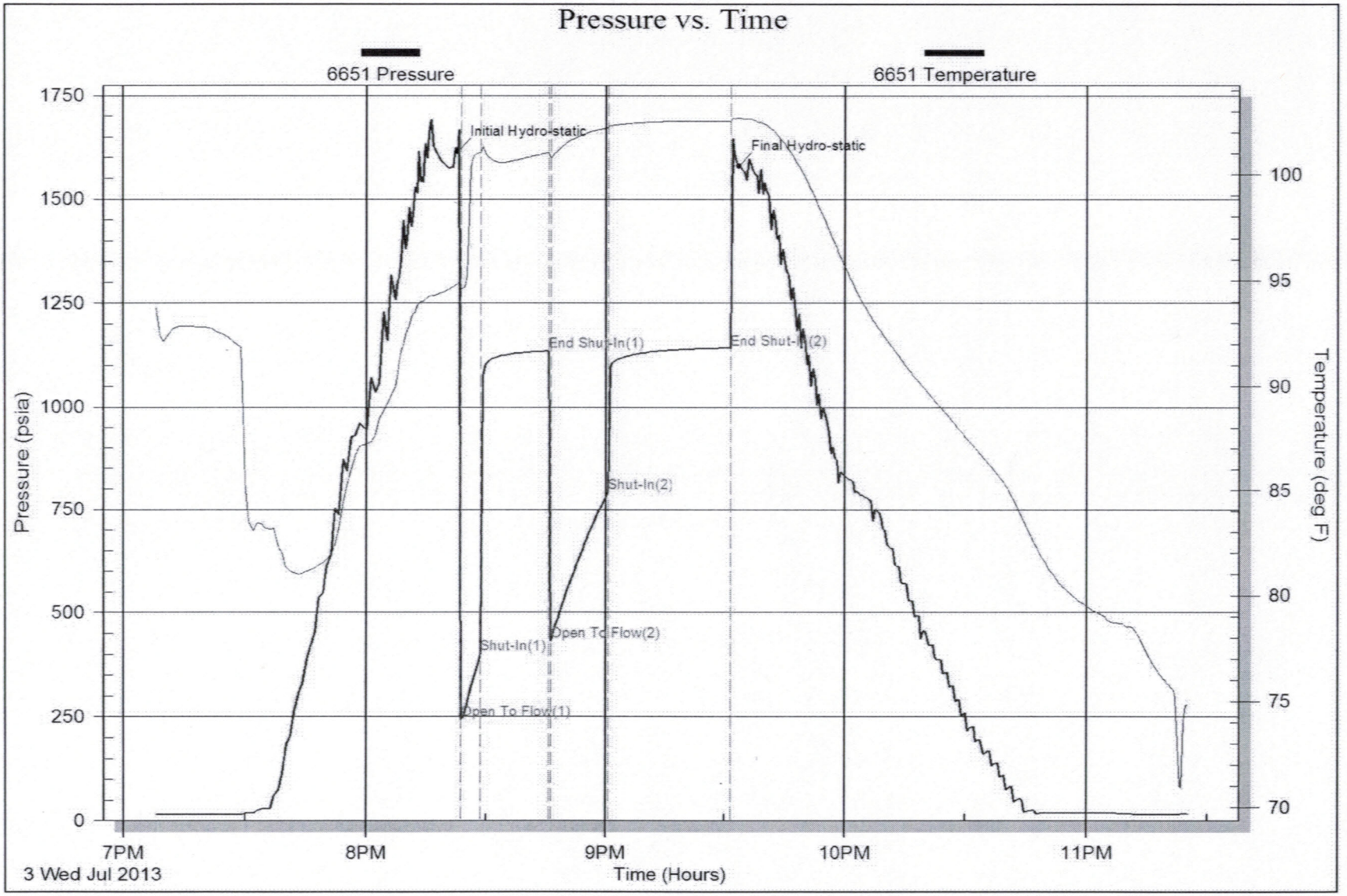
Serial #: 6651 GLM Company Major #5 DST Test Number: 4



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