



DRILL STEM TEST REPORT

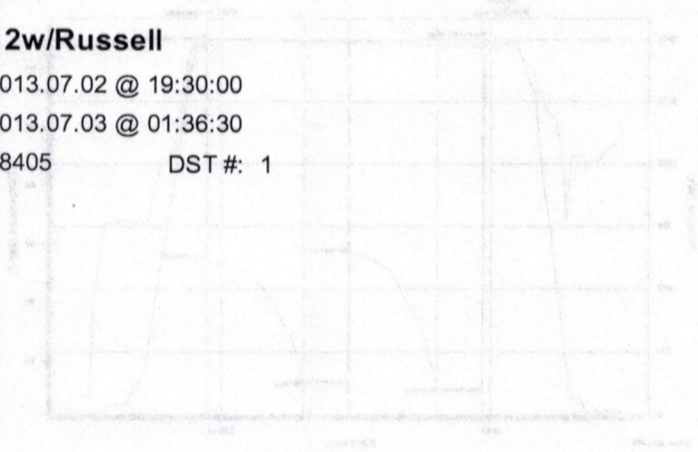
Prepared For: **GLM Company**
 PO Box 193
 Russell, Kansas 67665-0193

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

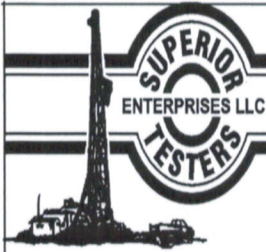


Pressure Summary

Time	Pressure
07:55	100.00
07:56	100.00
07:57	100.00
07:58	100.00
07:59	100.00
08:00	100.00
08:01	100.00
08:02	100.00
08:03	100.00
08:04	100.00
08:05	100.00
08:06	100.00
08:07	100.00
08:08	100.00
08:09	100.00
08:10	100.00
08:11	100.00
08:12	100.00
08:13	100.00
08:14	100.00
08:15	100.00
08:16	100.00
08:17	100.00
08:18	100.00
08:19	100.00
08:20	100.00
08:21	100.00
08:22	100.00
08:23	100.00
08:24	100.00
08:25	100.00
08:26	100.00
08:27	100.00
08:28	100.00
08:29	100.00
08:30	100.00
08:31	100.00
08:32	100.00
08:33	100.00
08:34	100.00
08:35	100.00
08:36	100.00
08:37	100.00
08:38	100.00
08:39	100.00
08:40	100.00
08:41	100.00
08:42	100.00
08:43	100.00
08:44	100.00
08:45	100.00
08:46	100.00
08:47	100.00
08:48	100.00
08:49	100.00
08:50	100.00
08:51	100.00
08:52	100.00
08:53	100.00
08:54	100.00
08:55	100.00
08:56	100.00
08:57	100.00
08:58	100.00
08:59	100.00
09:00	100.00

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

GLM Company 4/15s/12w/Russell Major #5 DST # 1 LKC A-G 2013.07.02



DRILL STEM TEST REPORT

GLM Company
 PO Box 193
 Russell, Kansas 67665-0193
 ATTN: Jeff Lawler

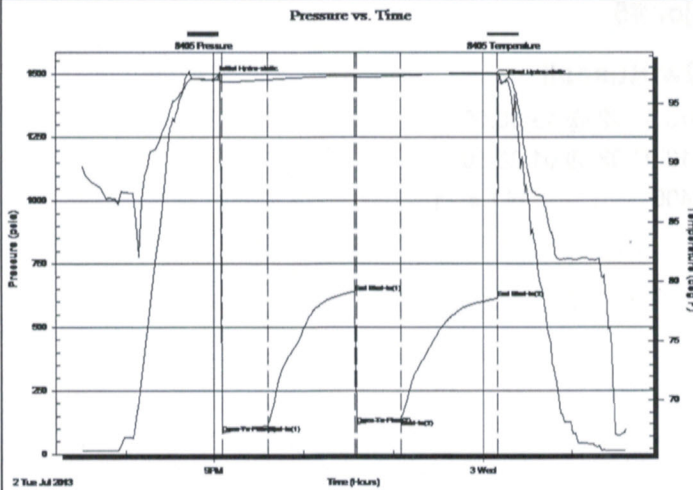
4/15s/12w/Russell
Major #5
 Job Ticket: 18405 **DST#: 1**
 Test Start: 2013.07.02 @ 19:30:00

GENERAL INFORMATION:

Formation: **LKC A-G**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 21:05:30
 Tester: Shane Konzern
 Time Test Ended: 01:36:30
 Unit No: 3330/70/Great Bend
 Interval: **2906.00 ft (KB) To 3012.00 ft (KB) (TVD)**
 Reference Elevations: 1753.00 ft (KB)
 Total Depth: 3012.00 ft (KB) (TVD) 1745.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 8.00 ft

Serial #: 8405 Inside
 Press@RunDepth: 139.29 psia @ 3006.50 ft (KB) Capacity: 5000.00 psia
 Start Date: 2013.07.02 End Date: 2013.07.03 Last Calib.: 2013.07.02
 Start Time: 19:30:00 End Time: 01:36:30 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

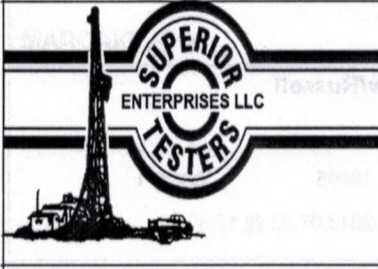
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1475.63	96.98	Initial Hydro-static
6	82.18	96.85	Open To Flow (1)
37	113.48	96.97	Shut-In(1)
95	636.13	97.31	End Shut-In(1)
96	115.81	97.22	Open To Flow (2)
126	139.29	97.31	Shut-In(2)
191	613.52	97.56	End Shut-In(2)
194	1462.38	97.77	Final Hydro-static

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
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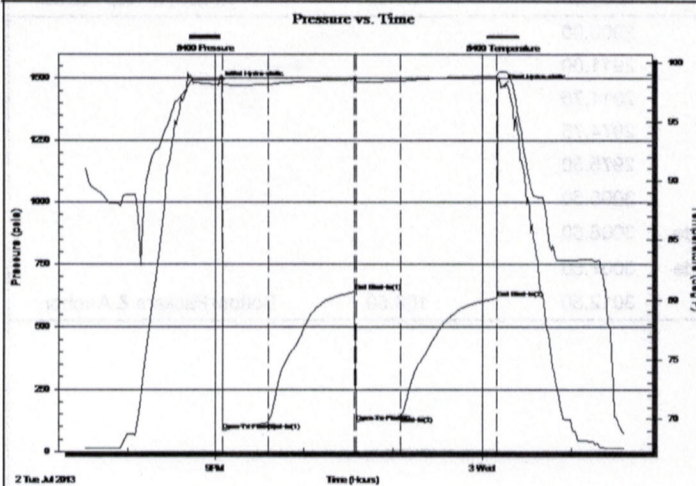
4/15s/12w/Russell
Major #5
 Job Ticket: 18405 **DST#: 1**
 Test Start: 2013.07.02 @ 19:30:00

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 Konzern
 Unit No: 3330/70/Great Bend
 Interval: **2906.00 ft (KB) To 3012.00 ft (KB) (TVD)**
 Total Depth: 3012.00 ft (KB) (TVD)
 Reference Elevations: 1753.00 ft (KB)
 1745.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 KB to GR/CF: 8.00 ft

Serial #: 8400 **Outside**
 Press@RunDepth: 615.32 psia @ 3007.50 ft (KB) Capacity: 5000.00 psia
 Start Date: 2013.07.02 End Date: 2013.07.03 Last Calib.: 2013.07.02
 Start Time: 19:30:00 End Time: 01:37:00 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

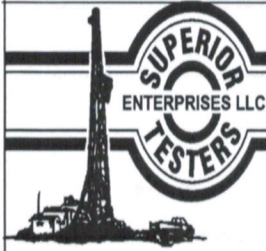
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1474.81	98.52	Initial Hydro-static
3	84.09	98.11	Open To Flow (1)
34	116.15	98.12	Shut-In(1)
92	640.51	98.57	End Shut-In(1)
93	117.91	98.38	Open To Flow (2)
123	141.70	98.44	Shut-In(2)
188	615.32	98.84	End Shut-In(2)
191	1464.80	99.20	Final Hydro-static

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

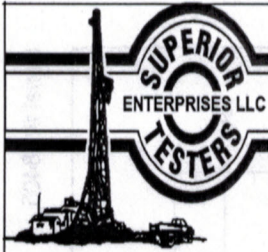
Tool Information

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
			<u>Total Volume: 40.75 bbl</u>	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

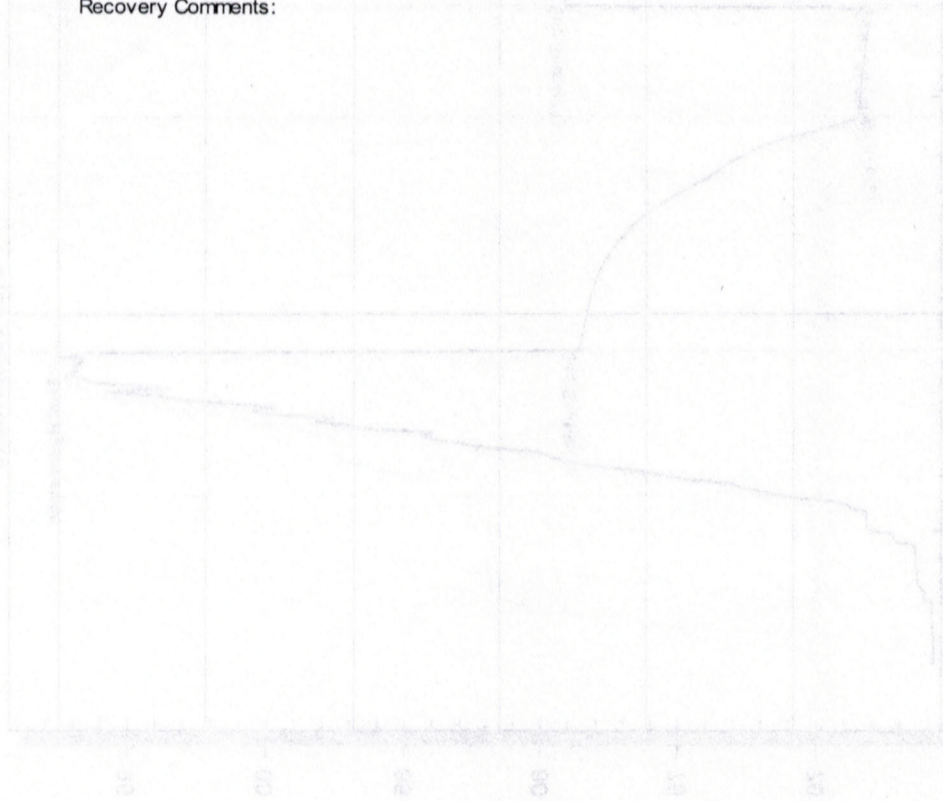
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 54.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.79 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psia		
Salinity: 3800.00 ppm			
Filter Cake: inches			

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

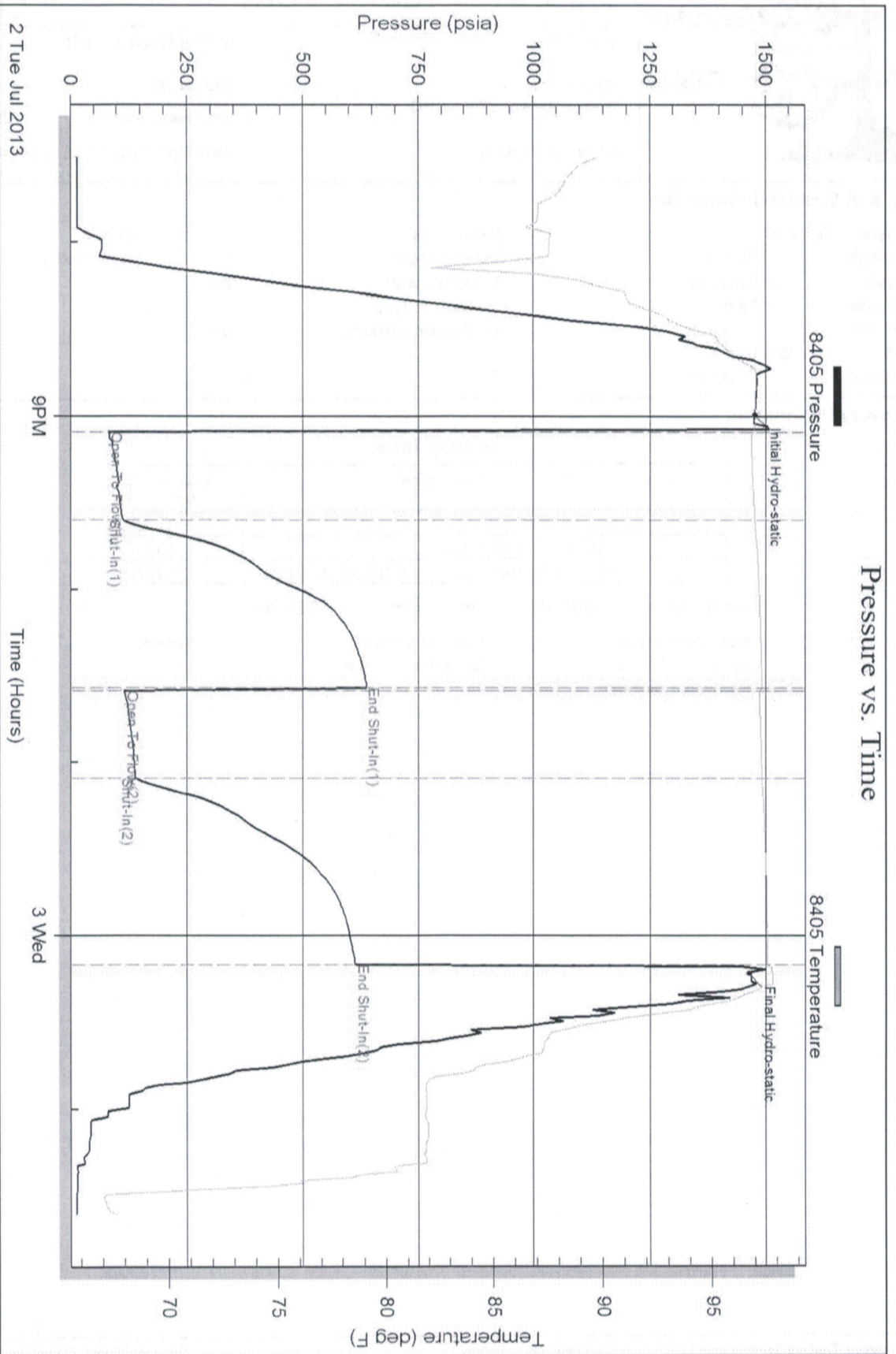
Inside

GLM Company

Major #5

DST Test Number: 1

Pressure vs. Time



Superior Testers Enterprises LLC

Ref. No: 18405

Printed: 2013.07.02 @ 01:52:37

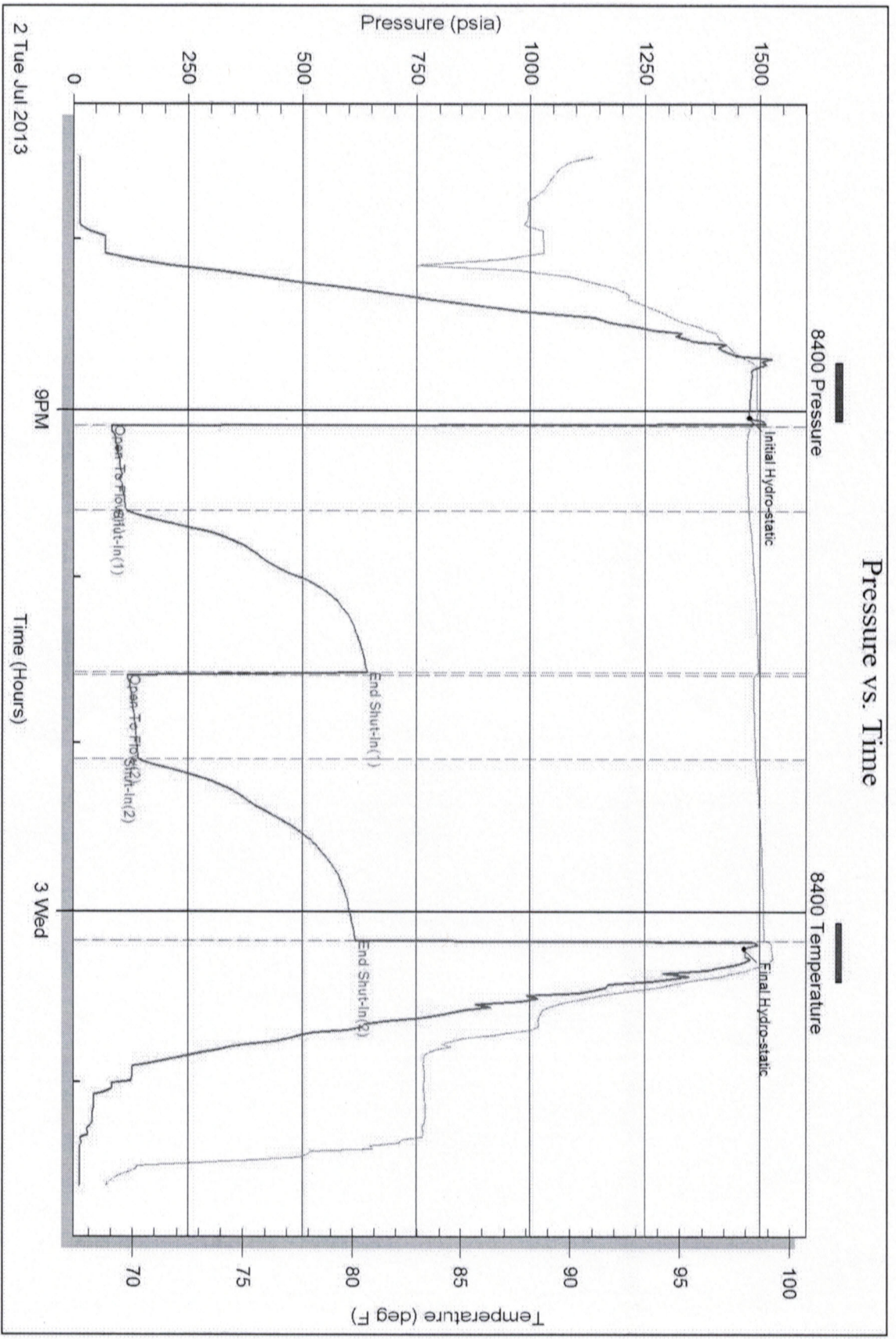
Serial #: 8400

Outside GLM Company

Major #5

DST Test Number: 1

Pressure vs. Time



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

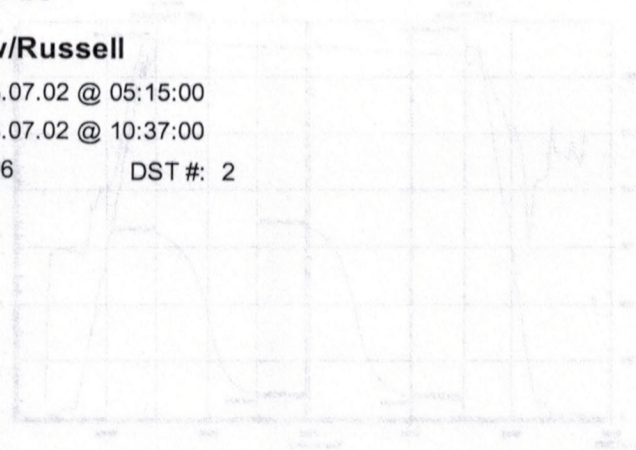
Major #5

4/15s/12w/Russell

Start Date: 2013.07.02 @ 05:15:00

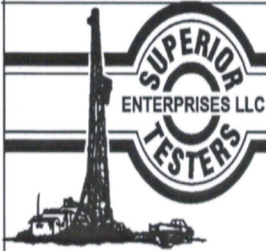
End Date: 2013.07.02 @ 10:37:00

Job Ticket #: 18406 DST #: 2



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

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



DRILL STEM TEST REPORT

GLM Company
 PO Box 193
 Russell, Kansas 67665-0193
 ATTN: Jeff Lawler

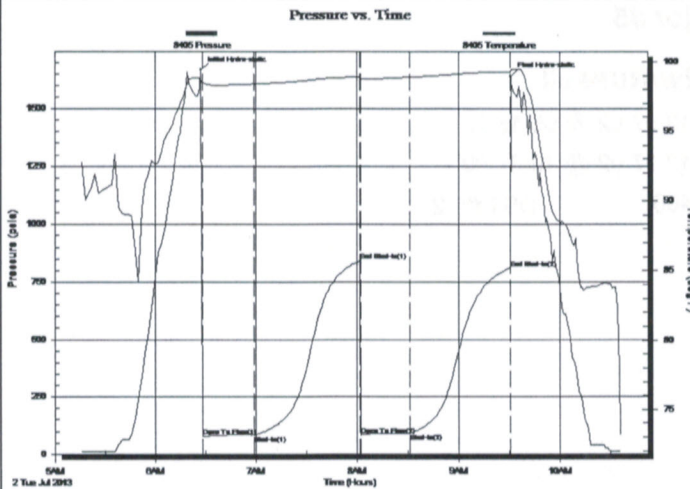
4/15s/12w/Russell
Major #5
 Job Ticket: 18406 **DST#: 2**
 Test Start: 2013.07.02 @ 05:15:00

GENERAL INFORMATION:

Formation: **LKC I-L**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 06:28:30
 Time Test Ended: 10:37:00
 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
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Dustin Ellis
 Unit No: 3330/70/Great Bend
 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) Capacity: 5000.00 psia
 Start Date: 2013.07.02 End Date: 2013.07.02 Last Calib.: 2013.07.02
 Start Time: 05:15:00 End Time: 10:37:00 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

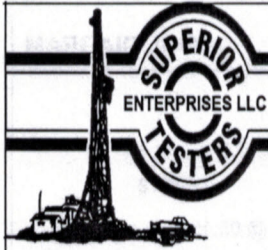
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1666.59	98.79	Initial Hydro-static
1	77.97	98.46	Open To Flow (1)
32	82.89	98.38	Shut-In(1)
94	839.91	98.90	End Shut-In(1)
95	81.80	98.77	Open To Flow (2)
124	91.62	98.88	Shut-In(2)
183	809.28	99.27	End Shut-In(2)
184	1640.14	99.40	Final Hydro-static

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
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 ATTN: Jeff Lawler

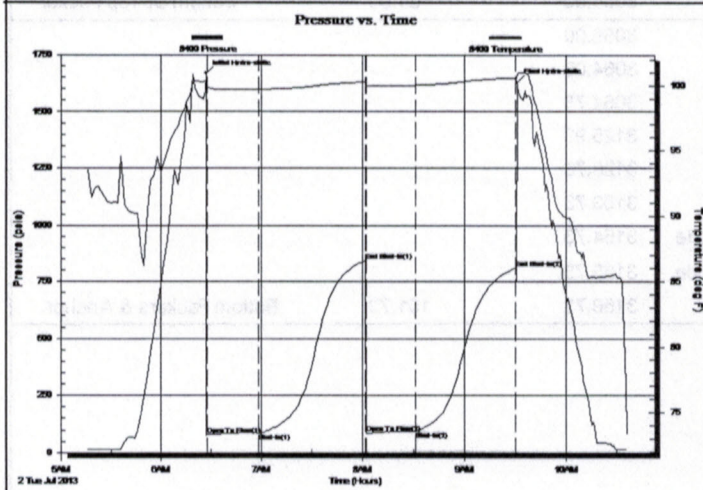
4/15s/12w/Russell
Major #5
 Job Ticket: 18406 **DST#: 2**
 Test Start: 2013.07.02 @ 05:15:00

GENERAL INFORMATION:

Formation: **LKC I-L**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 06:28:30
 Time Test Ended: 10:37:00
 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
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Dustin Ellis
 Unit No: 3330/70/Great Bend
 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) Capacity: 5000.00 psia
 Start Date: 2013.07.02 End Date: 2013.07.02 Last Calib.: 2013.07.02
 Start Time: 05:15:00 End Time: 10:37:00 Time On Btm: 2013.07.02 @ 06:27:00
 Time Off Btm: 2013.07.02 @ 09:31:00

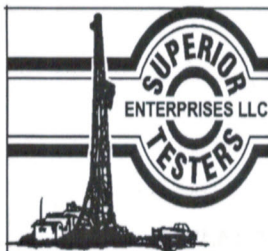
TEST COMMENT: 1st Open/ 30 Minutes. Weak blow built to 1.5 inches in 5 gallon bucket.
 1st Shut In/ 60 Minutes. No blow back
 2nd Open/ 30 minutes. Weak blow built to 5 inches into a 5 gallon bucket.
 2nd Shut In/ 60 minutes. No blow back.



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

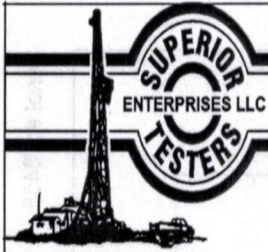
Tool Information

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
			<u>Total Volume: 43.06 bbl</u>	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

4/15s/12w/Russell

PO Box 193
Russell, Kansas 67665-0193

Major #5

Job Ticket: 18406

DST#: 2

ATTN: Jeff Lawler

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 in ³	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

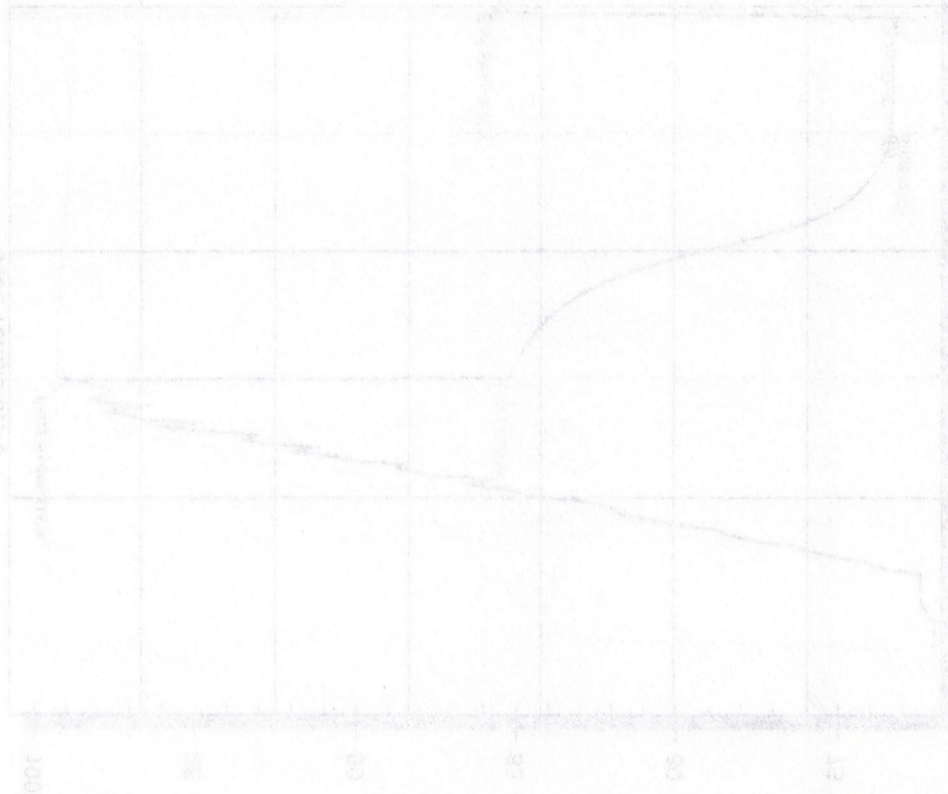
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



Serial #: 8405

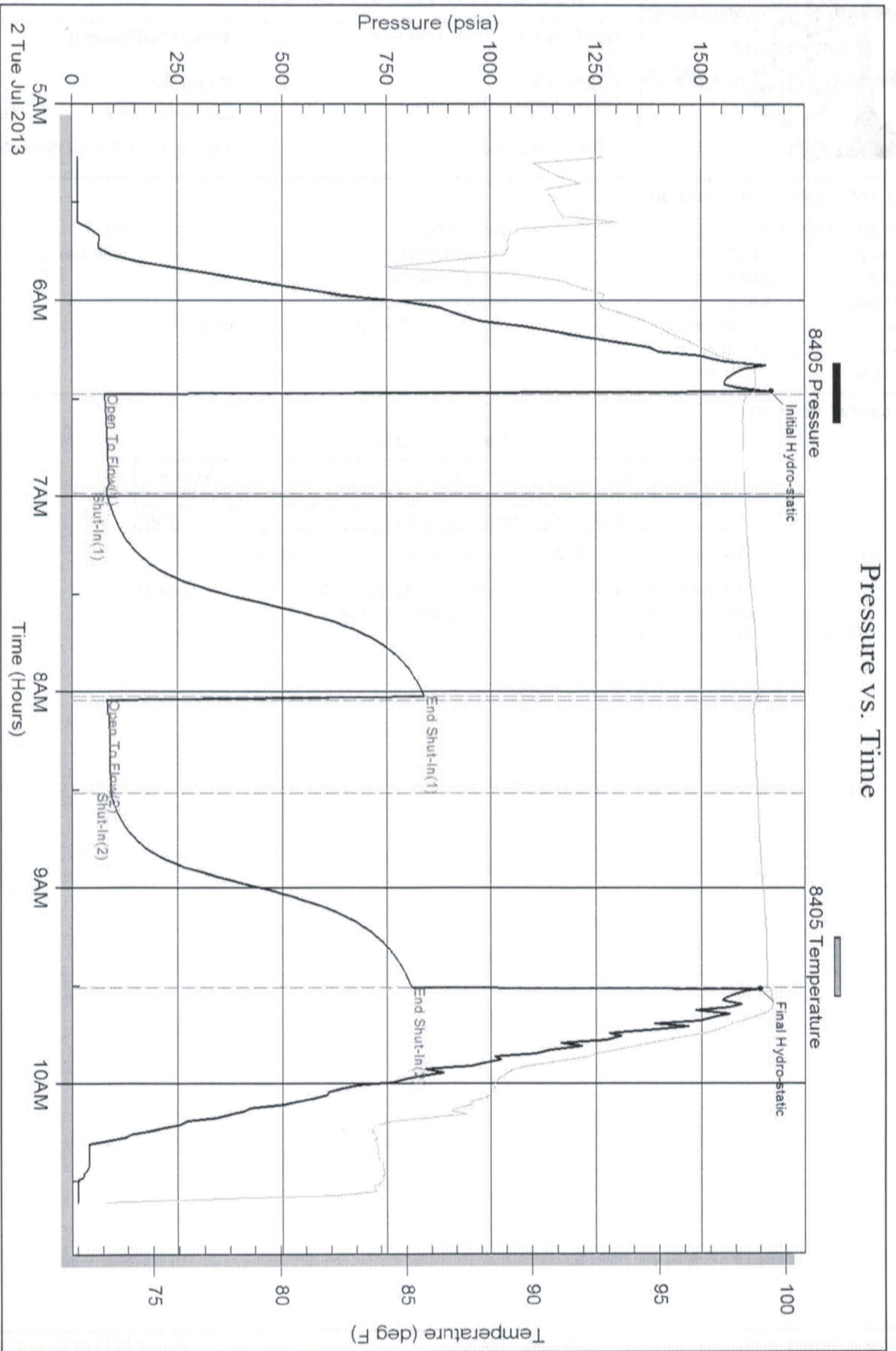
Inside

GLM Company

Major #5

DST Test Number: 2

Pressure vs. Time

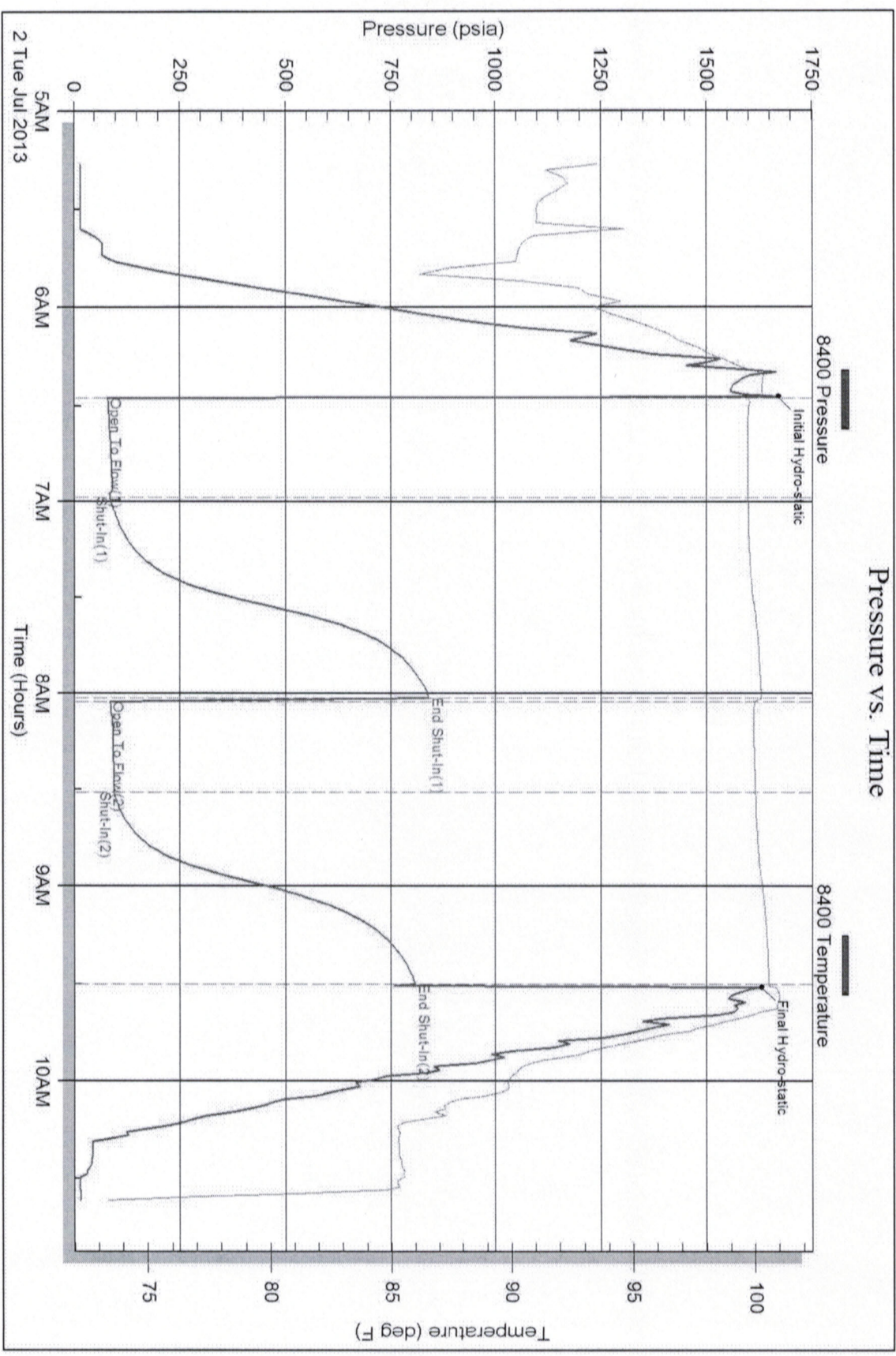


Serial #: 8400

Outside GLM Company

Major #5

DST Test Number: 2





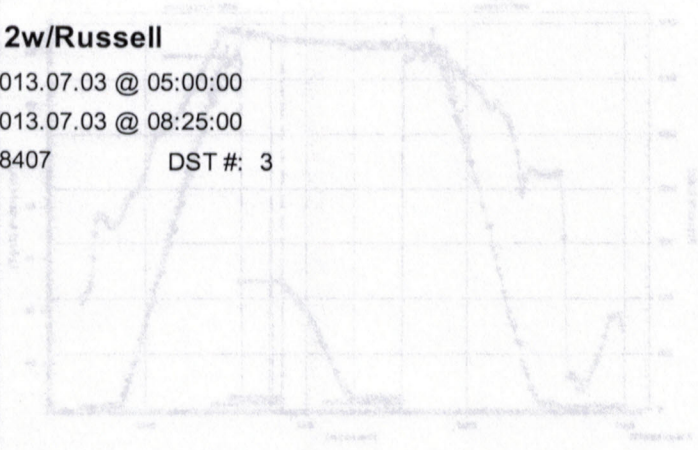
DRILL STEM TEST REPORT

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

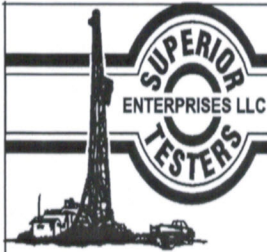


PRESSURE SUMMARY

Time (min)	Pressure (psi)
00:00	0
00:05	100
00:10	200
00:15	300
00:20	400
00:25	500
00:30	600
00:35	700
00:40	800
00:45	900
00:50	1000
00:55	1100
01:00	1200
01:05	1300
01:10	1400
01:15	1500
01:20	1600
01:25	1700
01:30	1800
01:35	1900
01:40	2000
01:45	2100
01:50	2200
01:55	2300
02:00	2400
02:05	2500
02:10	2600
02:15	2700
02:20	2800
02:25	2900
02:30	3000
02:35	3100
02:40	3200
02:45	3300
02:50	3400
02:55	3500
03:00	3600
03:05	3700
03:10	3800
03:15	3900
03:20	4000
03:25	4100
03:30	4200
03:35	4300
03:40	4400
03:45	4500
03:50	4600
03:55	4700
04:00	4800
04:05	4900
04:10	5000
04:15	5100
04:20	5200
04:25	5300
04:30	5400
04:35	5500
04:40	5600
04:45	5700
04:50	5800
04:55	5900
05:00	6000
05:05	6100
05:10	6200
05:15	6300
05:20	6400
05:25	6500
05:30	6600
05:35	6700
05:40	6800
05:45	6900
05:50	7000
05:55	7100
06:00	7200
06:05	7300
06:10	7400
06:15	7500
06:20	7600
06:25	7700
06:30	7800
06:35	7900
06:40	8000
06:45	8100
06:50	8200
06:55	8300
07:00	8400
07:05	8500
07:10	8600
07:15	8700
07:20	8800
07:25	8900
07:30	9000
07:35	9100
07:40	9200
07:45	9300
07:50	9400
07:55	9500
08:00	9600
08:05	9700
08:10	9800
08:15	9900
08:20	10000
08:25	10100
08:30	10200
08:35	10300
08:40	10400
08:45	10500
08:50	10600
08:55	10700
09:00	10800
09:05	10900
09:10	11000
09:15	11100
09:20	11200
09:25	11300
09:30	11400
09:35	11500
09:40	11600
09:45	11700
09:50	11800
09:55	11900
10:00	12000

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

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

4/15s/12w/Russell

Major #5

Job Ticket: 18407

DST#: 3

ATTN: Jeff Lawler

Test Start: 2013.07.03 @ 05:00:00

GENERAL INFORMATION:

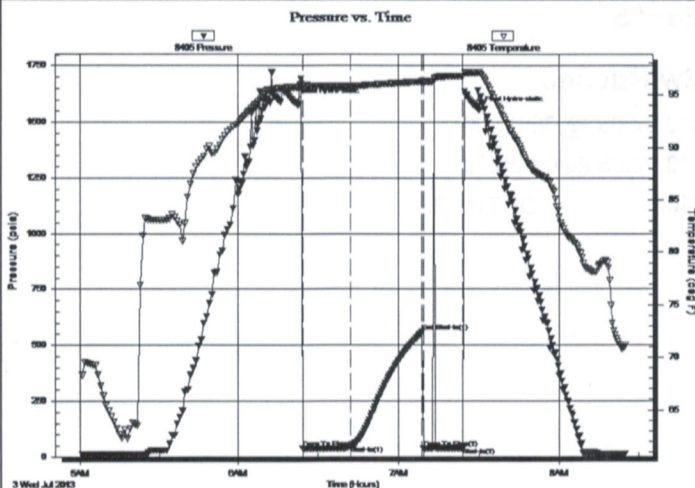
Formation: **Gorham Sand**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 06:24:00
 Time Test Ended: 08:25:00
 Interval: **3190.00 ft (KB) To 3218.00 ft (KB) (TVD)**
 Total Depth: 3218.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Shane Konzern
 Unit No: 3330/70/Great Bend
 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) Capacity: 5000.00 psia
 Start Date: 2013.07.03 End Date: 2013.07.03 Last Calib.: 2013.07.03
 Start Time: 05:00:00 End Time: 08:25:00 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

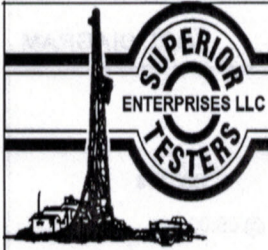
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1590.00	95.71	Initial Hydro-static
3	37.29	95.89	Open To Flow (1)
21	48.62	95.82	Shut-In(1)
48	558.38	96.23	End Shut-In(1)
48	38.30	96.13	Open To Flow (2)
63	39.93	96.74	Shut-In(2)
69	1555.70	97.11	Final Hydro-static

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

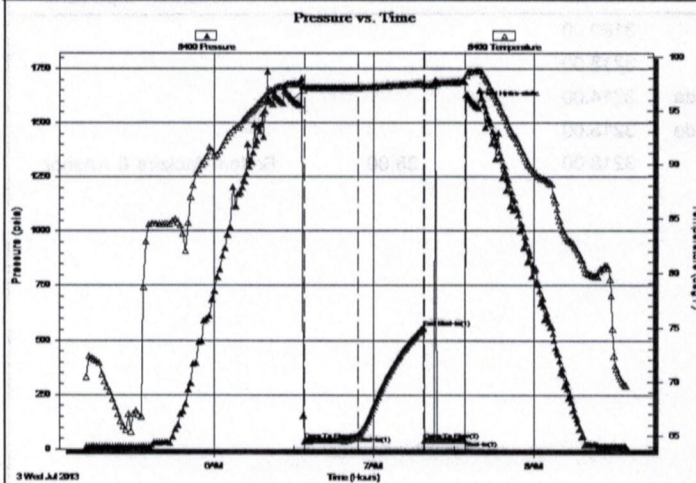
4/15s/12w/Russell
Major #5
 Job Ticket: 18407 **DST#: 3**
 Test Start: 2013.07.03 @ 05:00:00

GENERAL INFORMATION:

Formation: **Gorham Sand**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 06:24:00
 Time Test Ended: 08:25:00
 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
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Shane Konzern
 Unit No: 3330/70/Great Bend
 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) Capacity: 5000.00 psia
 Start Date: 2013.07.03 End Date: 2013.07.03 Last Calib.: 2013.07.03
 Start Time: 05:10:00 End Time: 08:34:30 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

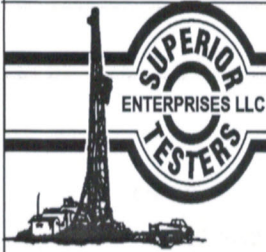
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1608.09	97.47	Initial Hydro-static
5	40.01	97.18	Open To Flow (1)
25	65.31	97.14	Shut-In(1)
49	560.58	97.52	End Shut-In(1)
50	41.50	97.33	Open To Flow (2)
65	42.98	97.69	Shut-In(2)
68	1584.50	98.67	Final Hydro-static

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
			<u>Total Volume: 44.79 bbl</u>	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

4/15s/12w/Russell

PO Box 193
Russell, Kansas 67665-0193

Major #5

Job Ticket: 18407

DST#: 3

ATTN: Jeff Lawler

Test Start: 2013.07.03 @ 05:00:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 54.00 sec/qt
Water Loss: 8.80 in³
Resistivity: ohm.m
Salinity: 5000.00 ppm
Filter Cake: inches

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

Oil API: deg API
Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	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:

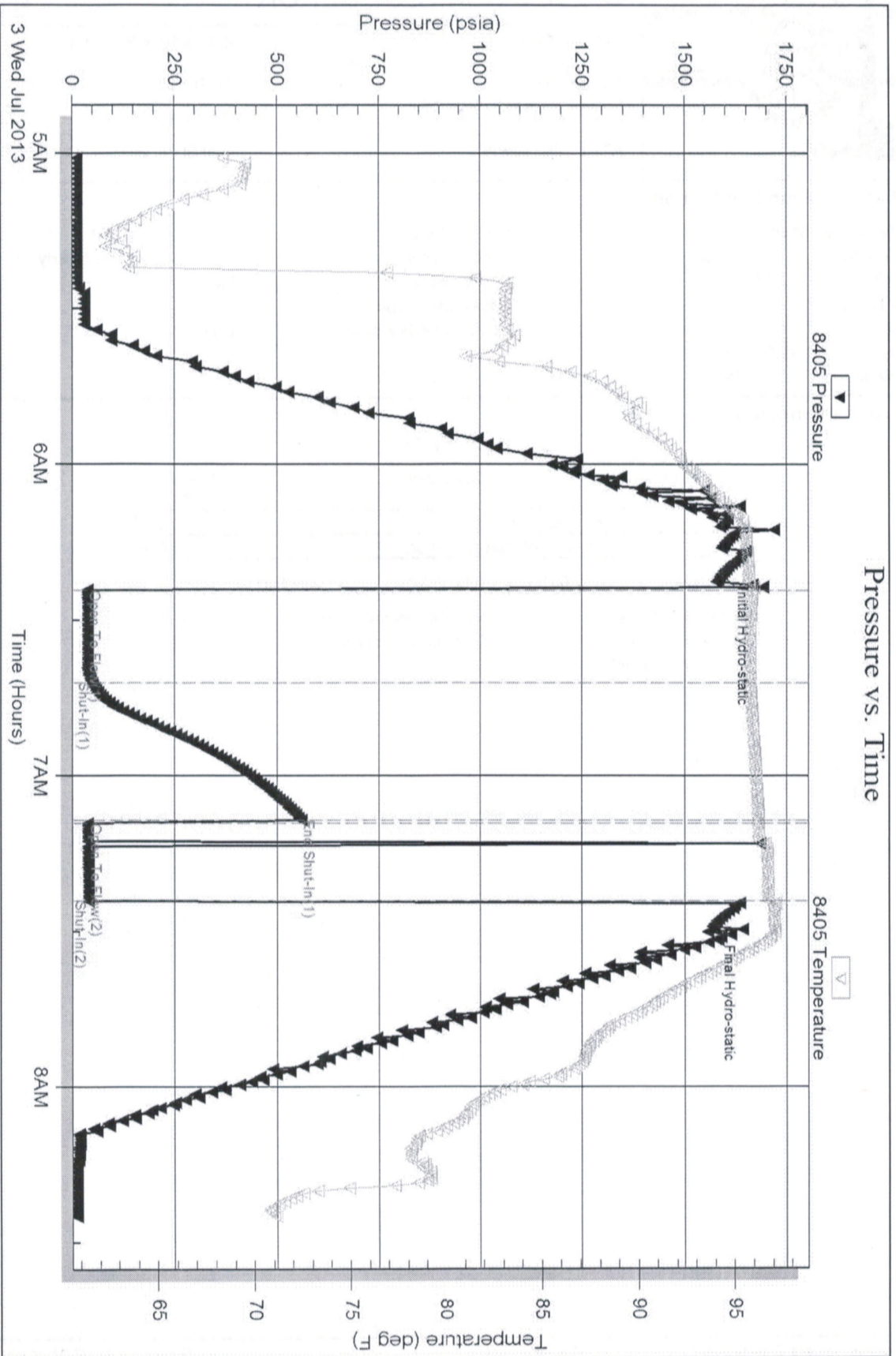
Serial #: 8405

Inside

GLM Company

Major #5

DST Test Number: 3



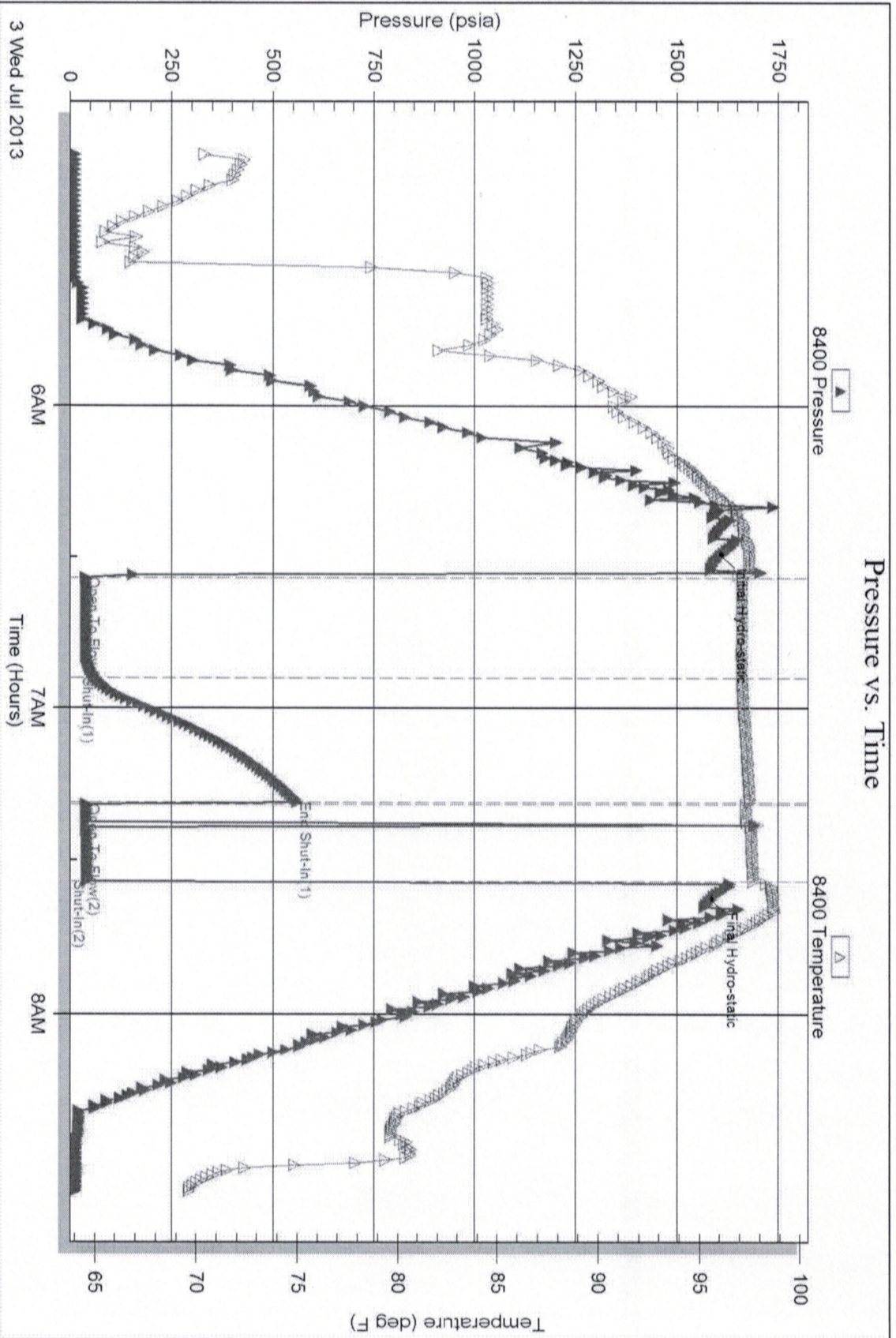
Serial #: 8400

Outside GLM Company

Major #5

DST Test Number: 3

Pressure vs. Time



Superior Testers Enterprises LLC

Ref. No: 18407

Printed: 2013.07.03 @ 08:38:04



DRILL STEM TEST REPORT

Prepared For: **GLM Company**
 PO Box 193
 Russell, Kansas 67665-0193

ATTN: Jeff Lawler

Major #5

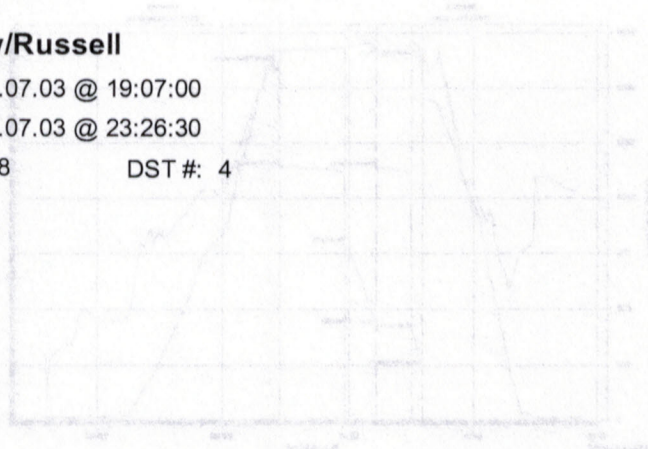
4/15s/12w/Russell

Start Date: 2013.07.03 @ 19:07:00

End Date: 2013.07.03 @ 23:26:30

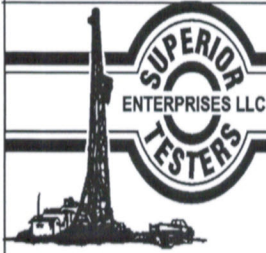
Job Ticket #: 18408

DST #: 4



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

GLM Company 4/15s/12w/Russell Major #5 DST # 4 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: 18408 **DST#: 4**
 Test Start: 2013.07.03 @ 19:07:00

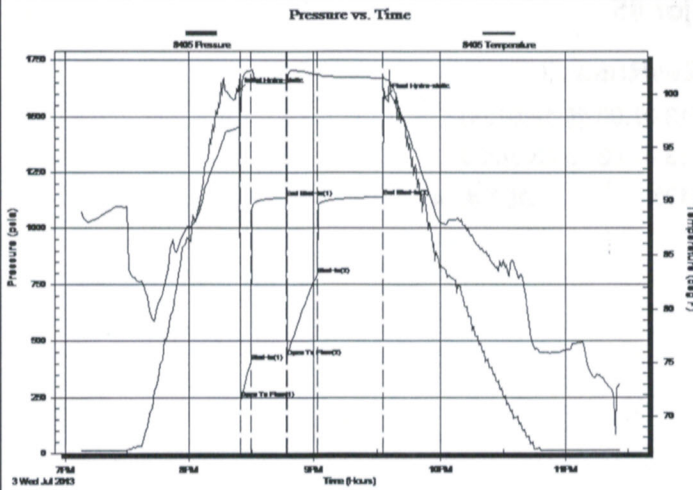
GENERAL INFORMATION:

Formation: **Gorham Sand**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 20:24:30
 Time Test Ended: 23:26:30
 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
 Test Type: Conventional Straddle (Initial)
 Tester: Shane Konzern
 Unit No: 3330/70/Great Bend
 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) Capacity: 5000.00 psia
 Start Date: 2013.07.03 End Date: 2013.07.03 Last Calib.: 2013.07.03
 Start Time: 19:07:00 End Time: 23:26:30 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

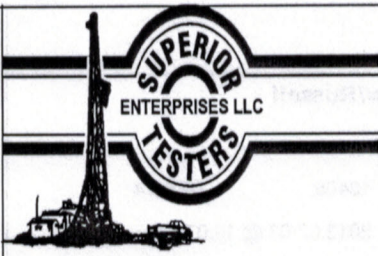
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1612.74	96.88	Initial Hydro-static
1	245.58	97.27	Open To Flow (1)
6	406.62	102.16	Shut-In(1)
23	1136.48	101.02	End Shut-In(1)
24	430.31	100.89	Open To Flow (2)
38	794.48	101.84	Shut-In(2)
69	1138.86	101.50	End Shut-In(2)
71	1585.91	101.38	Final Hydro-static

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

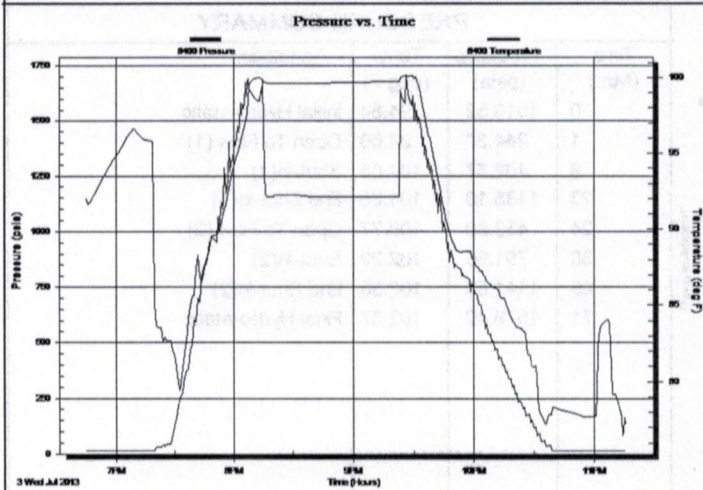
4/15s/12w/Russell
Major #5
 Job Ticket: 18408 **DST#: 4**
 Test Start: 2013.07.03 @ 19:07:00

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)
 Reference Elevations: 1753.00 ft (KB)
 1745.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 KB to GR/CF: 8.00 ft

Serial #: 8400 Outside
 Press@RunDepth: psia @ 3256.25 ft (KB) Capacity: 5000.00 psia
 Start Date: 2013.07.03 End Date: 2013.07.03 Last Calib.: 2013.07.03
 Start Time: 18:44:00 End Time: 23:16:00 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

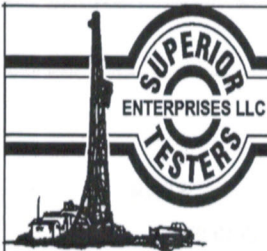
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation

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:

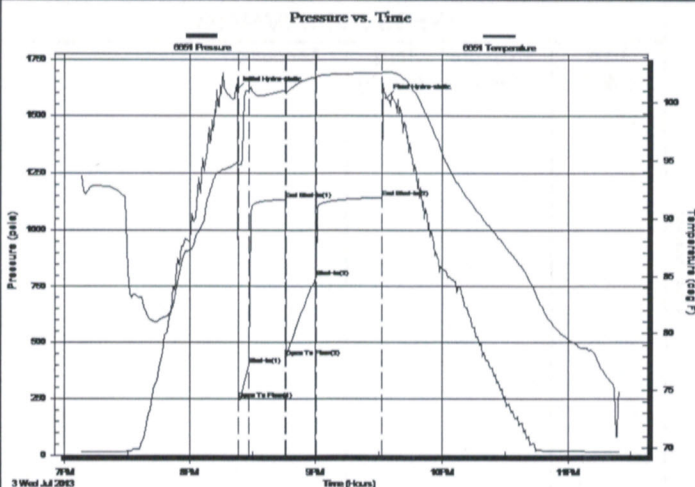
Formation: **Gorham Sand**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 20:24:30
 Time Test Ended: 23:26:30
 Interval: **3150.00 ft (KB) To 3230.00 ft (KB) (TVD)**
 Total Depth: 3256.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair

Test Type: Conventional Straddle (Initial)
 Tester: Shane Konzem
 Unit No: 3330/70/Great Bend
 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) Capacity: 5000.00 psia
 Start Date: 2013.07.03 End Date: 2013.07.03 Last Calib.: 2013.07.03
 Start Time: 19:07:00 End Time: 23:25:00 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

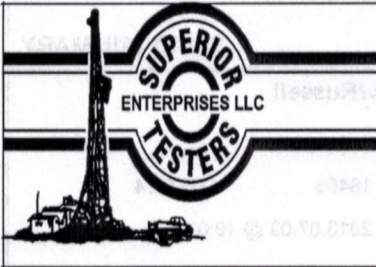
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1613.52	94.84	Initial Hydro-static
1	244.33	94.60	Open To Flow (1)
6	402.57	101.05	Shut-In(1)
23	1135.10	101.05	End Shut-In(1)
24	432.60	100.77	Open To Flow (2)
38	791.96	102.22	Shut-In(2)
69	1141.89	102.56	End Shut-In(2)
71	1579.42	102.67	Final Hydro-static

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

4/15s/12w/Russell

PO Box 193
Russell, Kansas 67665-0193

Major #5

Job Ticket: 18408

DST#: 4

ATTN: Jeff Lawler

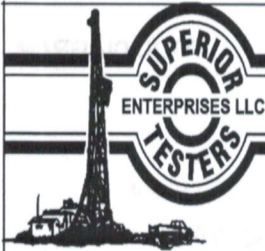
Test Start: 2013.07.03 @ 19:07:00

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 between 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 in ³	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

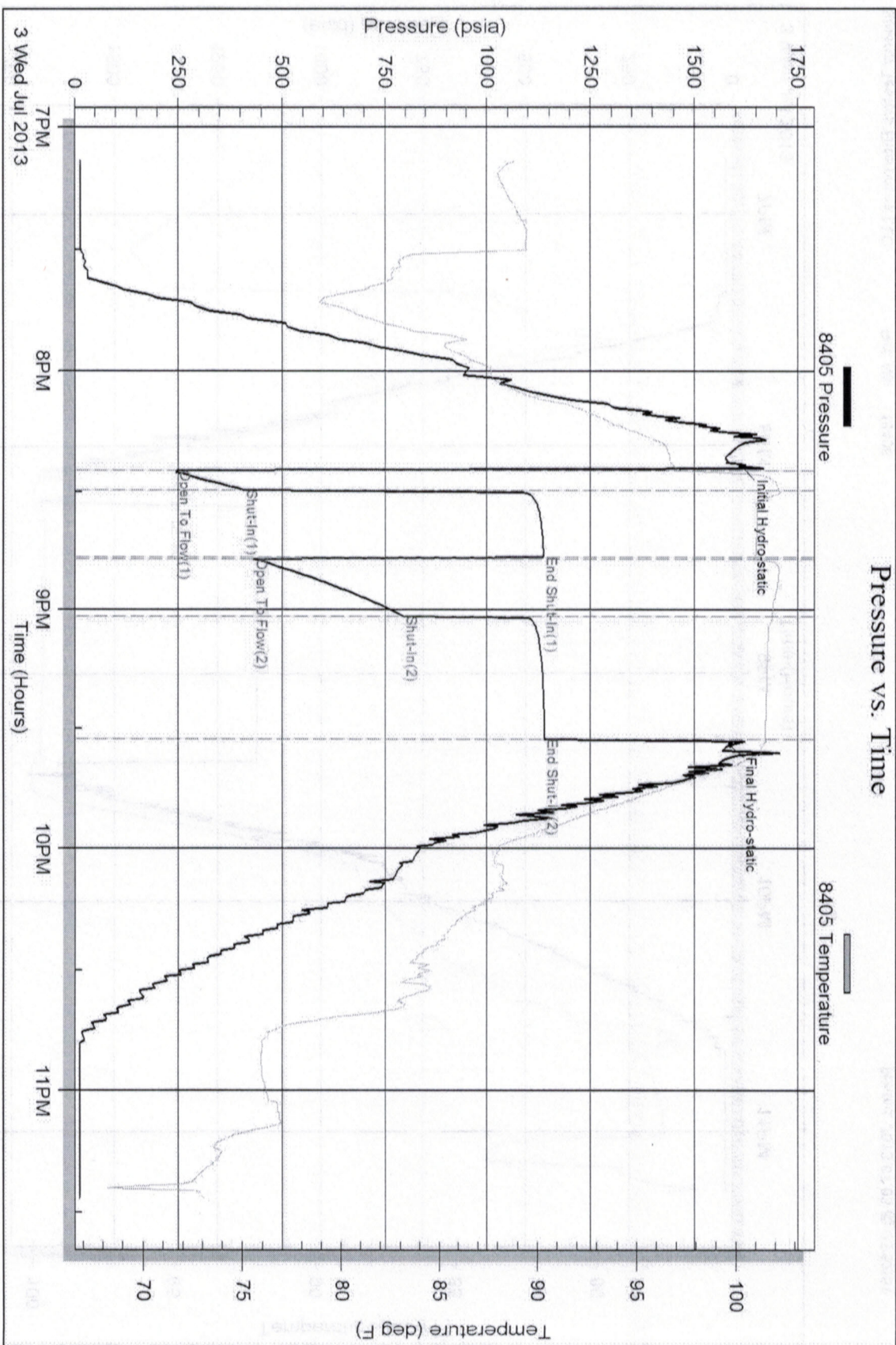
Total Length: 1575.00 ft Total Volume: 22.094 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:

Serial #: 8405

GLM Company

Major #5

DST Test Number: 4



Superior Testers Enterprises LLC

Ref. No: 18408

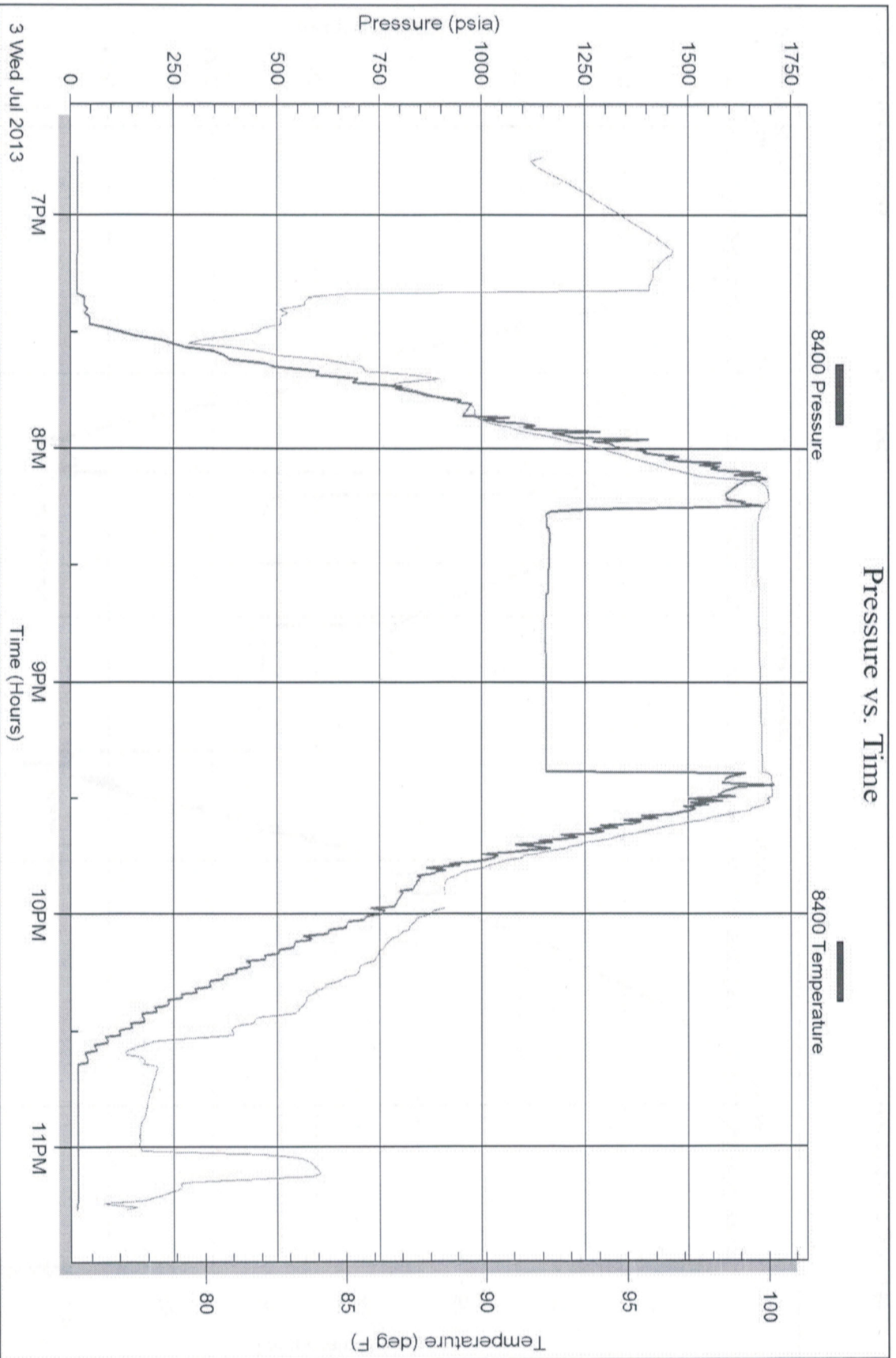
Printed: 2013.07.03 @ 23:52:50

Serial #: 8400

Outside GLM Company

Major #5

DST Test Number: 4



Superior Testers Enterprises LLC

Ref. No: 18408

Printed: 2013.07.03 @ 23:52:51

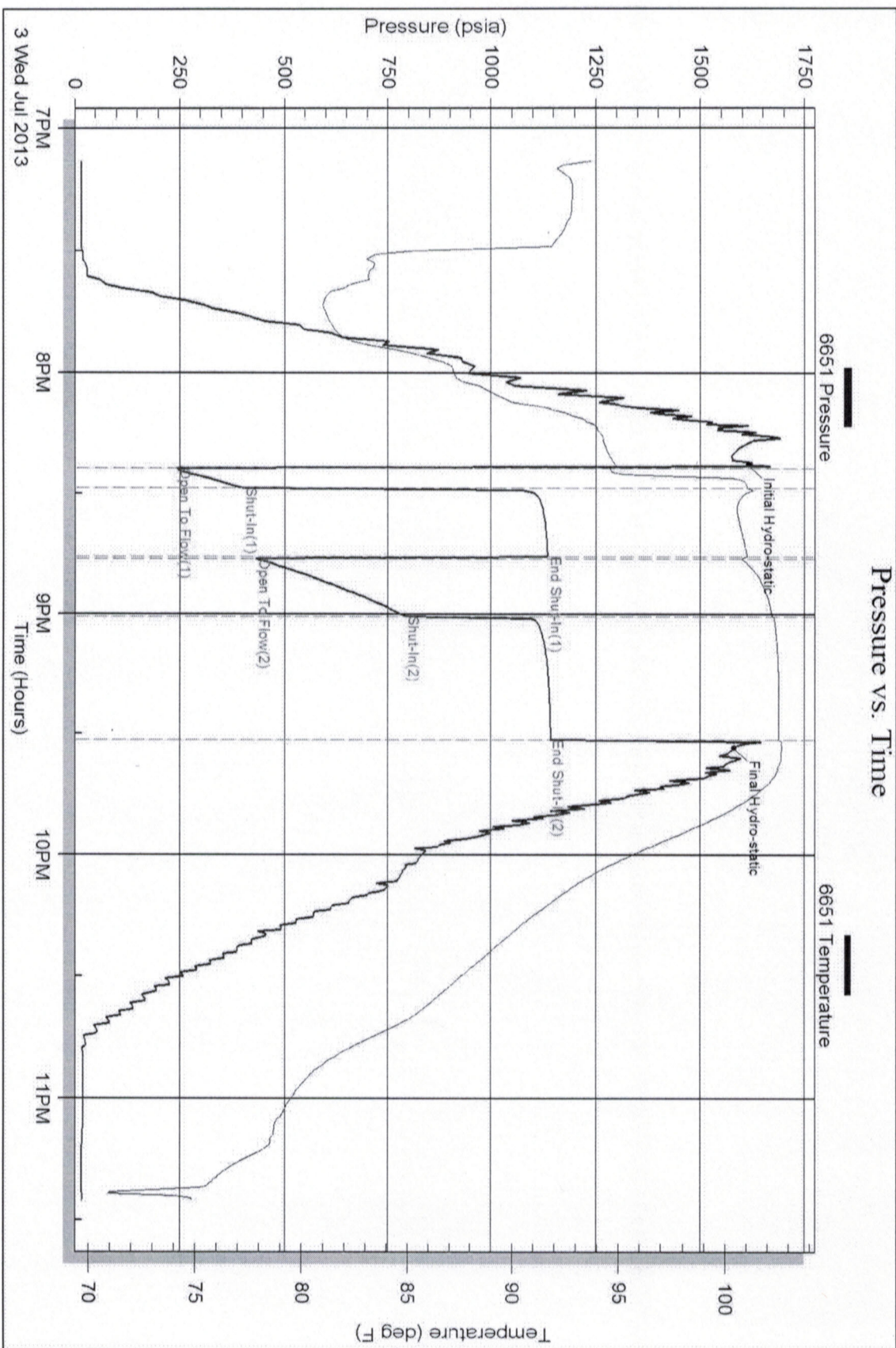
Serial #: 6651

GLM Company

Major #5

DST Test Number: 4

Pressure vs. Time



Superior Testers Enterprises LLC

Ref. No: 18408

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