

## DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Inc.**

8100 East 22nd St. North 700  
Wichita Kansas 67278

ATTN: Bob Peterson

### **Schneweis -Turley #1**

#### **19-27s-25w-Ford**

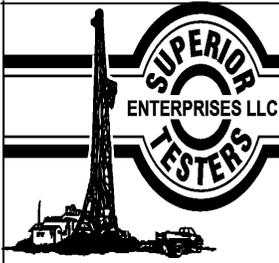
Start Date: 2012.08.25 @ 11:12:00

End Date: 2012.08.25 @ 19:06:30

Job Ticket #: 17259                      DST #: 1

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

Printed: 2012.08.26 @ 05:22:06



# DRILL STEM TEST REPORT

Ritchie Exploration Inc.

**19-27s-25w-Ford**

8100 East 22nd St. North 700  
Wichita Kansas 67278

**Schneweis -Turley #1**

Job Ticket: 17259

**DST#: 1**

ATTN: Bob Peterson

Test Start: 2012.08.25 @ 11:12:00

## GENERAL INFORMATION:

Formation: **Pawnee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:39:00

Time Test Ended: 19:06:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Dustin Ellis

Unit No: 3315-Great Bend-200

**Interval: 4881.00 ft (KB) To 4906.00 ft (KB) (TVD)**

Reference Elevations: 2589.00 ft (KB)

Total Depth: 4906.00 ft (KB) (TVD)

2578.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

## Serial #: 8405

Press @ RunDepth: 68.22 psia @ ft (KB)

Capacity: 5000.00 psia

Start Date: 2012.08.25

End Date: 2012.08.25

Last Calib.: 2012.08.26

Start Time: 11:12:00

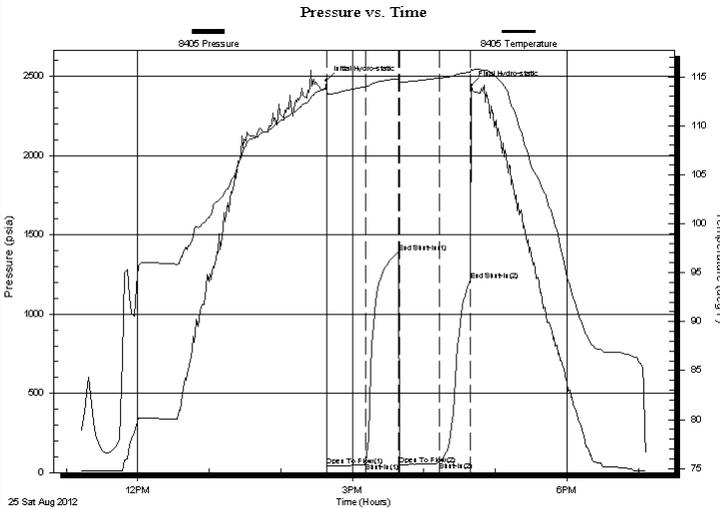
End Time: 19:06:30

Time On Btm: 2012.08.25 @ 14:38:30

Time Off Btm: 2012.08.25 @ 16:40:00

**TEST COMMENT:** 1st Open 30 minutes Weak surface blow died off after minutes.  
1st Shut in 30 minutes No blow back  
2nd Open 30 minutes Dead No blow flushed no help.  
2nd Shut in 30 minutes No blow back.

## PRESSURE SUMMARY



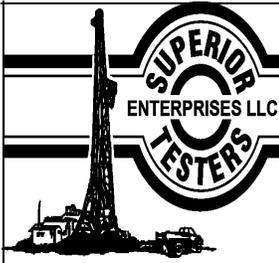
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2473.22	113.78	Initial Hydro-static
1	41.42	113.04	Open To Flow (1)
33	59.91	113.97	Shut-In(1)
61	1389.58	114.80	End Shut-In(1)
61	50.21	114.50	Open To Flow (2)
95	68.22	114.86	Shut-In(2)
121	1214.61	115.49	End Shut-In(2)
122	2442.94	115.79	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
35.00	Oil spotted mud 99% mud 1% oil	0.49

## Gas Rates

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



# DRILL STEM TEST REPORT

Ritchie Exploration Inc.

**19-27s-25w-Ford**

8100 East 22nd St. North 700  
Wichita Kansas 67278

**Schneweis -Turley #1**

Job Ticket: 17259

**DST#: 1**

ATTN: Bob Peterson

Test Start: 2012.08.25 @ 11:12:00

## GENERAL INFORMATION:

Formation: **Pawnee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:39:00

Time Test Ended: 19:06:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Dustin Ellis

Unit No: 3315-Great Bend-200

**Interval: 4881.00 ft (KB) To 4906.00 ft (KB) (TVD)**

Reference Elevations: 2589.00 ft (KB)

Total Depth: 4906.00 ft (KB) (TVD)

2578.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

## Serial #: 8400

Press @ RunDepth: 1212.57 psia @ ft (KB)

Capacity: 5000.00 psia

Start Date: 2012.08.25

End Date:

2012.08.25

Last Calib.:

2012.08.26

Start Time: 11:12:00

End Time:

19:06:30

Time On Btm:

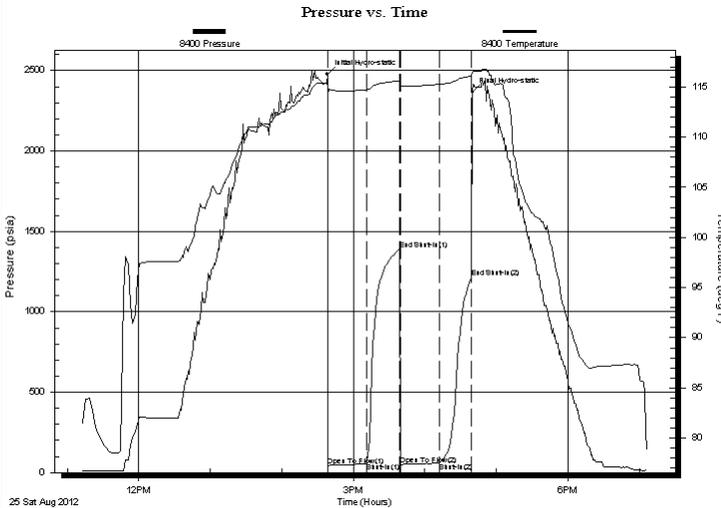
2012.08.25 @ 14:38:30

Time Off Btm:

2012.08.25 @ 16:40:00

**TEST COMMENT:** 1st Open 30 minutes Weak surface blow died off after minutes.  
1st Shut in 30 minutes No blow back  
2nd Open 30 minutes Dead No blow flushed no help.  
2nd Shut in 30 minutes No blow back.

## PRESSURE SUMMARY



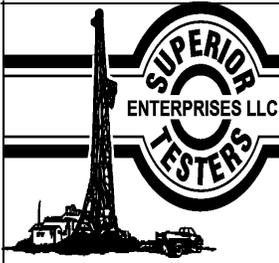
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2477.53	115.46	Initial Hydro-static
1	45.33	114.20	Open To Flow (1)
33	57.77	114.70	Shut-In(1)
61	1386.86	115.60	End Shut-In(1)
61	50.27	115.06	Open To Flow (2)
94	60.64	115.25	Shut-In(2)
121	1212.57	116.09	End Shut-In(2)
122	2364.33	116.45	Final Hydro-static

## Recovery

## Gas Rates

Length (ft)	Description	Volume (bbl)
35.00	Oil spotted mud 99% mud 1% oil	0.49

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



# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Ritchie Exploration Inc.

**19-27s-25w-Ford**

8100 East 22nd St. North 700  
Wichita Kansas 67278

**Schneweis -Turley #1**

Job Ticket: 17259

**DST#: 1**

ATTN: Bob Peterson

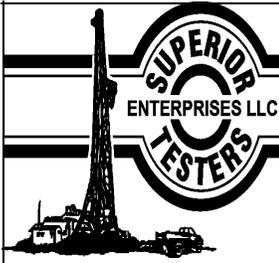
Test Start: 2012.08.25 @ 11:12:00

## Tool Information

Drill Pipe:	Length: 4883.00 ft	Diameter: 3.80 inches	Volume: 68.50 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: 78000.00 lb
			<u>Total Volume: 68.50 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 62000.00 lb
Depth to Top Packer:	4881.00 ft			Final 62000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	25.00 ft			
Tool Length:	53.00 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			4858.00	
Hydraulic Tool	5.00			4863.00	
Jars	6.00			4869.00	
Safety Joint	2.00			4871.00	
Packer	5.00			4876.00	28.00 Bottom Of Top Packer
Packer	5.00			4881.00	
Anchor	20.00			4901.00	
Recorder	1.00	8405	Inside	4902.00	
Recorder	1.00	8400	Outside	4903.00	
Bull Plug	3.00			4906.00	25.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>53.00</b>				



# DRILL STEM TEST REPORT

## FLUID SUMMARY

Ritchie Exploration Inc.

**19-27s-25w-Ford**

8100 East 22nd St. North 700  
Wichita Kansas 67278

**Schneweis -Turley #1**

Job Ticket: 17259

**DST#: 1**

ATTN: Bob Peterson

Test Start: 2012.08.25 @ 11:12:00

### Mud and Cushion Information

Mud Type: Gel Chem  
Mud Weight: 10.00 lb/gal  
Viscosity: 49.00 sec/qt  
Water Loss: 8.00 in<sup>3</sup>  
Resistivity: ohm.m  
Salinity: 5000.00 ppm  
Filter Cake: 1.00 inches

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

Oil API: deg API  
Water Salinity: ppm

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
35.00	Oil spotted mud 99% mud 1% oil	0.491

Total Length: 35.00 ft      Total Volume: 0.491 bbl

Num Fluid Samples: 0

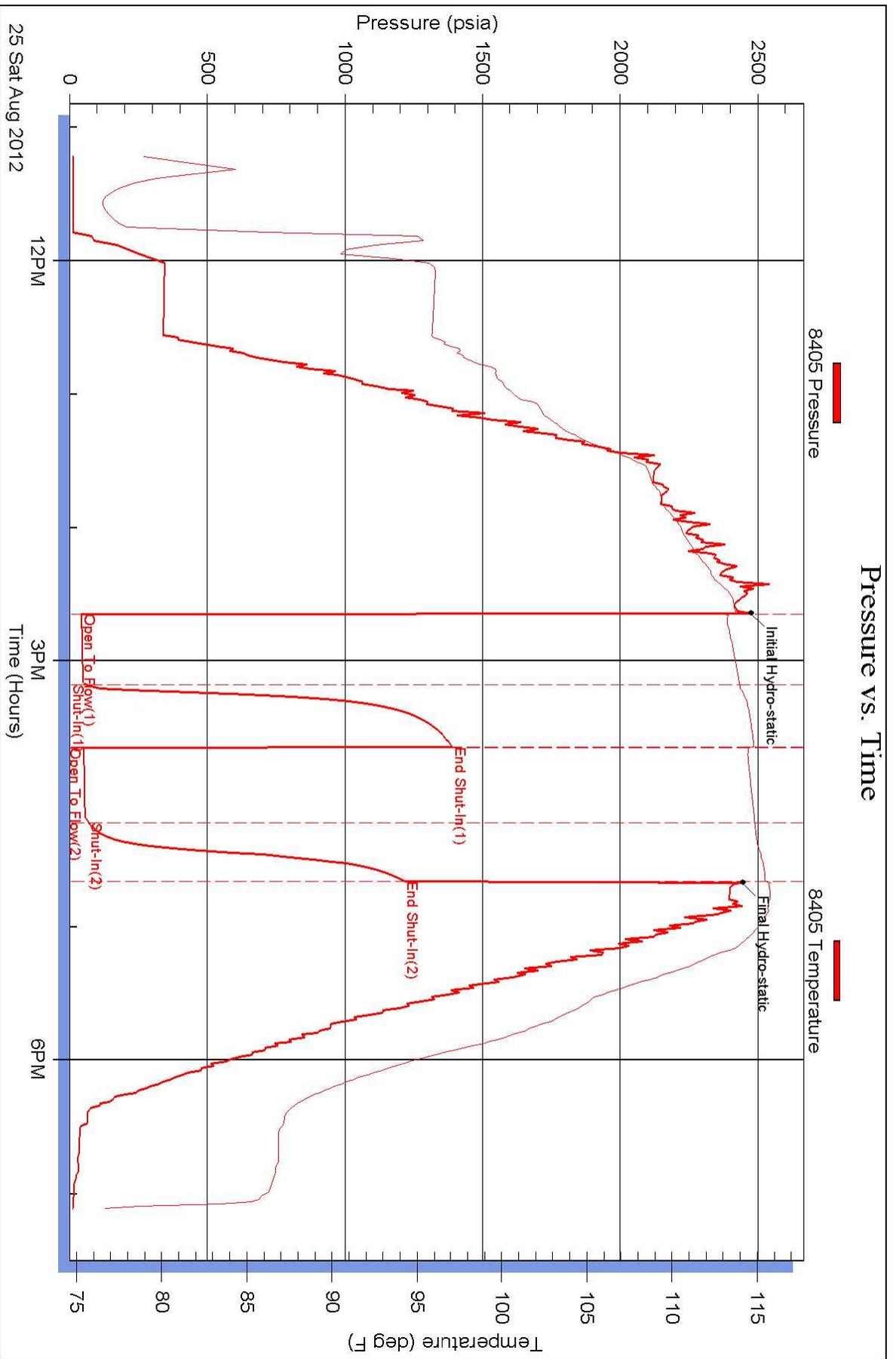
Num Gas Bombs: 0

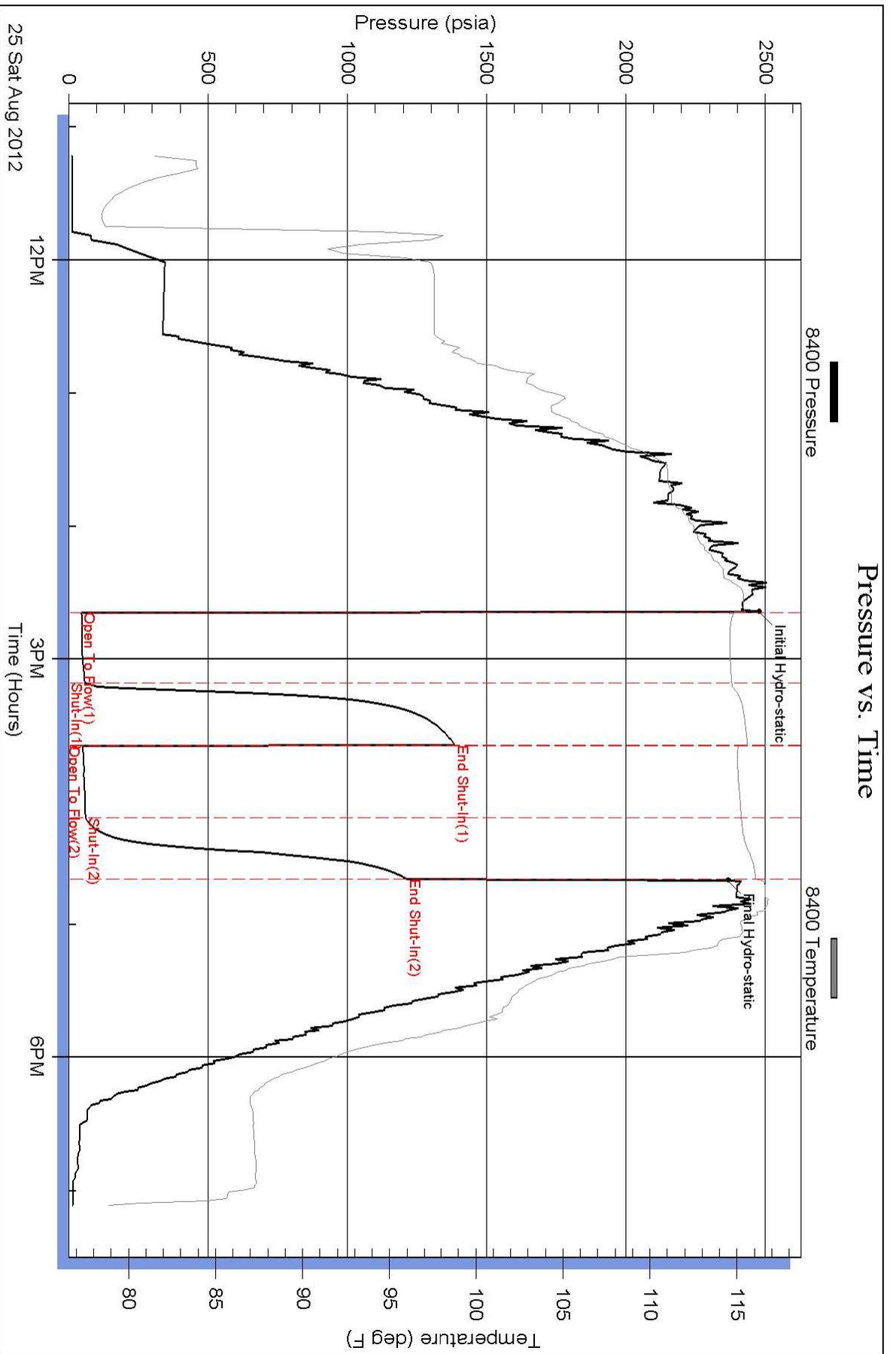
Serial #:

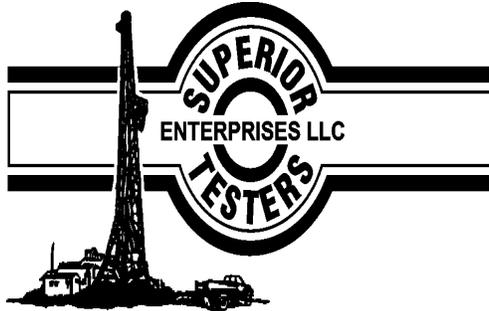
Laboratory Name:

Laboratory Location:

Recovery Comments:







## DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Inc.**

8100 East 22nd St. North 700  
Wichita Kansas 67278

ATTN: Bob Peterson

### **Schneweis -Turley #1**

#### **19-27s-25w-Ford**

Start Date: 2012.08.27 @ 02:30:00

End Date: 2012.08.27 @ 09:17:00

Job Ticket #: 17260                      DST #: 2

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

Printed: 2012.08.27 @ 07:35:13

Ritchie Exploration Inc.

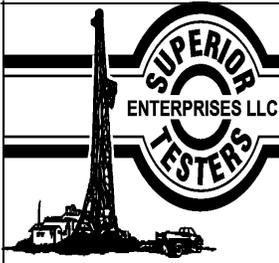
19-27s-25w-Ford

Schneweis -Turley #1

DST # 2

Cherokee-Huck

2012.08.27



# DRILL STEM TEST REPORT

Ritchie Exploration Inc.

**19-27s-25w-Ford**

8100 East 22nd St. North 700  
Wichita Kansas 67278

**Schneweis -Turley #1**

Job Ticket: 17260

**DST#: 2**

ATTN: Bob Peterson

Test Start: 2012.08.27 @ 02:30:00

## GENERAL INFORMATION:

Formation: **Cherokee-Huck**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:57:00

Time Test Ended: 09:17:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Dustin Ellis

Unit No: 3315-Great Bend-200

**Interval: 4930.00 ft (KB) To 5030.00 ft (KB) (TVD)**

Reference Elevations: 2589.00 ft (KB)

Total Depth: 5030.00 ft (KB) (TVD)

2578.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

**Serial #: 8405**

**Inside**

Press @ RunDepth: 83.24 psia @ 5026.69 ft (KB)

Capacity: 5000.00 psia

Start Date: 2012.08.27

End Date:

2012.08.27

Last Calib.:

2012.08.27

Start Time: 02:30:00

End Time:

09:17:00

Time On Btm:

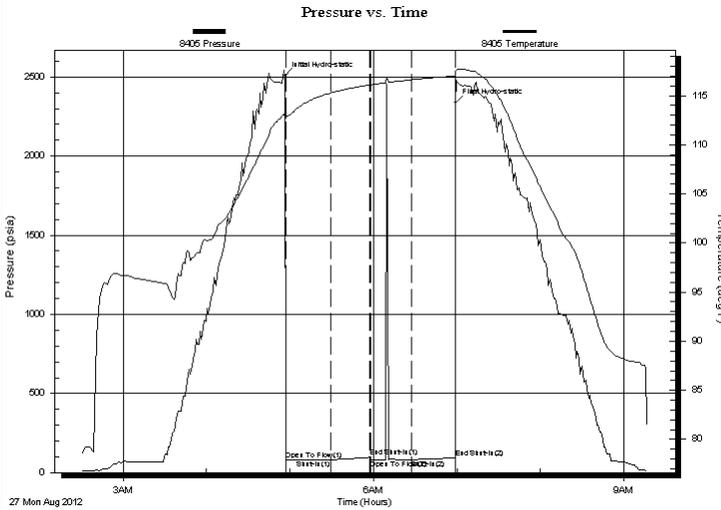
2012.08.27 @ 04:56:30

Time Off Btm:

2012.08.27 @ 06:59:00

**TEST COMMENT:** 1st Open 30 minutes Weak surface blow died off after 20 minutes.  
1st Shut in 30 minutes No blow back  
2nd Open 30 minutes No blow dead flushed after 8 minutes no help.  
2nd Open 30 minutes No blow back.

## PRESSURE SUMMARY



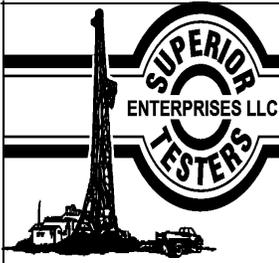
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2508.03	113.29	Initial Hydro-static
1	80.52	112.69	Open To Flow (1)
33	80.91	115.27	Shut-In(1)
61	96.72	116.08	End Shut-In(1)
62	82.70	116.10	Open To Flow (2)
91	83.24	116.63	Shut-In(2)
122	93.46	117.01	End Shut-In(2)
123	2336.09	117.51	Final Hydro-static

## Recovery

## Gas Rates

Length (ft)	Description	Volume (bbl)
7.00	Mud 100%	0.10

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



# DRILL STEM TEST REPORT

Ritchie Exploration Inc.

**19-27s-25w-Ford**

8100 East 22nd St. North 700  
Wichita Kansas 67278

**Schneweis -Turley #1**

Job Ticket: 17260

**DST#: 2**

ATTN: Bob Peterson

Test Start: 2012.08.27 @ 02:30:00

## GENERAL INFORMATION:

Formation: **Cherokee-Huck**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:57:00

Time Test Ended: 09:17:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Dustin Ellis

Unit No: 3315-Great Bend-200

**Interval: 4930.00 ft (KB) To 5030.00 ft (KB) (TVD)**

Reference Elevations: 2589.00 ft (KB)

Total Depth: 5030.00 ft (KB) (TVD)

2578.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

**Serial #: 8400 Outside**

Press @ RunDepth: 93.57 psia @ 5027.69 ft (KB)

Capacity: 5000.00 psia

Start Date: 2012.08.27

End Date: 2012.08.27

Last Calib.: 2012.08.27

Start Time: 02:30:00

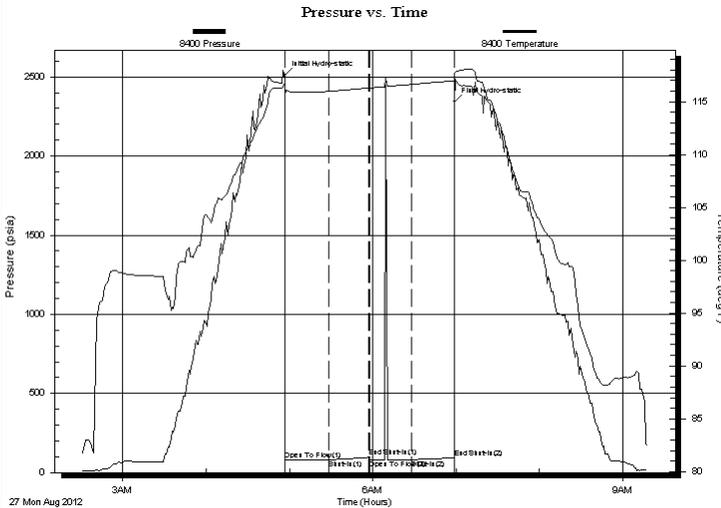
End Time: 09:18:00

Time On Btm: 2012.08.27 @ 04:56:30

Time Off Btm: 2012.08.27 @ 06:59:00

**TEST COMMENT:** 1st Open 30 minutes Weak surface blow died off after 20 minutes.  
1st Shut in 30 minutes No blow back  
2nd Open 30 minutes No blow dead flushed after 8 minutes no help.  
2nd Open 30 minutes No blow back.

## PRESSURE SUMMARY



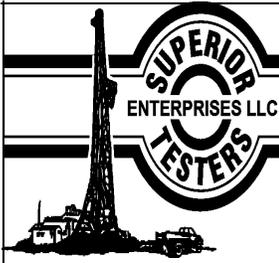
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2508.79	116.70	Initial Hydro-static
1	78.59	115.65	Open To Flow (1)
32	80.27	115.97	Shut-In(1)
61	96.83	116.28	End Shut-In(1)
62	81.51	116.28	Open To Flow (2)
92	81.98	116.62	Shut-In(2)
122	93.57	116.97	End Shut-In(2)
123	2341.03	117.65	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
7.00	Mud 100%	0.10

## Gas Rates

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



# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Ritchie Exploration Inc.

**19-27s-25w-Ford**

8100 East 22nd St. North 700  
Wichita Kansas 67278

**Schneweis -Turley #1**

Job Ticket: 17260

**DST#: 2**

ATTN: Bob Peterson

Test Start: 2012.08.27 @ 02:30:00

## Tool Information

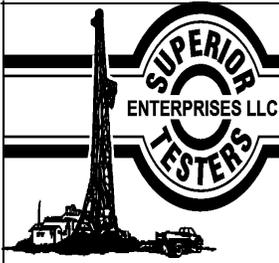
Drill Pipe:	Length: 4928.00 ft	Diameter: 3.80 inches	Volume: 69.13 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 69.13 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	18.00 ft			String Weight: Initial 66000.00 lb
Depth to Top Packer:	4930.00 ft			Final 66000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	100.69 ft			
Tool Length:	120.69 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			4915.00	
Hydraulic Tool	5.00			4920.00	
Packer	5.00			4925.00	20.00 Bottom Of Top Packer
Packer	5.00			4930.00	
Anchor	5.00			4935.00	
Change Over Sub	0.75			4935.75	
Drill Pipe	63.19			4998.94	
Change Over Sub	0.75			4999.69	
Anchor	26.00			5025.69	
Recorder	1.00	8405	Inside	5026.69	
Recorder	1.00	8400	Outside	5027.69	
Bull Plug	3.00			5030.69	100.69 Bottom Packers & Anchor

**Total Tool Length: 120.69**



# DRILL STEM TEST REPORT

## FLUID SUMMARY

Ritchie Exploration Inc.

**19-27s-25w-Ford**

8100 East 22nd St. North 700  
Wichita Kansas 67278

**Schneweis -Turley #1**

Job Ticket: 17260

**DST#: 2**

ATTN: Bob Peterson

Test Start: 2012.08.27 @ 02:30:00

### Mud and Cushion Information

Mud Type: Gel Chem  
Mud Weight: 10.00 lb/gal  
Viscosity: 57.00 sec/qt  
Water Loss: 9.99 in<sup>3</sup>  
Resistivity: ohm.m  
Salinity: 6000.00 ppm  
Filter Cake: 1.00 inches

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

Oil API: deg API  
Water Salinity: ppm

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
7.00	Mud 100%	0.098

Total Length: 7.00 ft      Total Volume: 0.098 bbl

Num Fluid Samples: 0

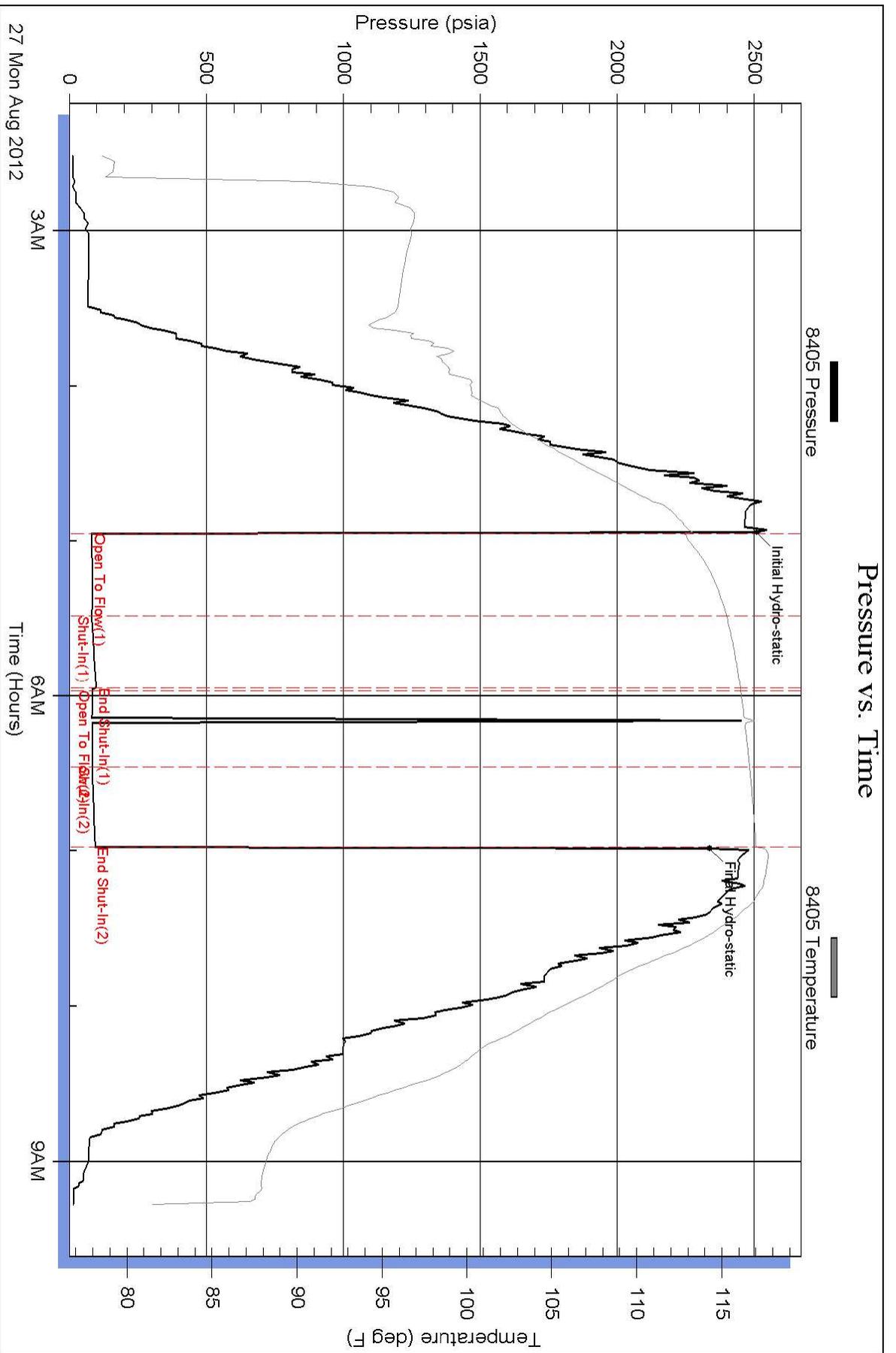
Num Gas Bombs: 0

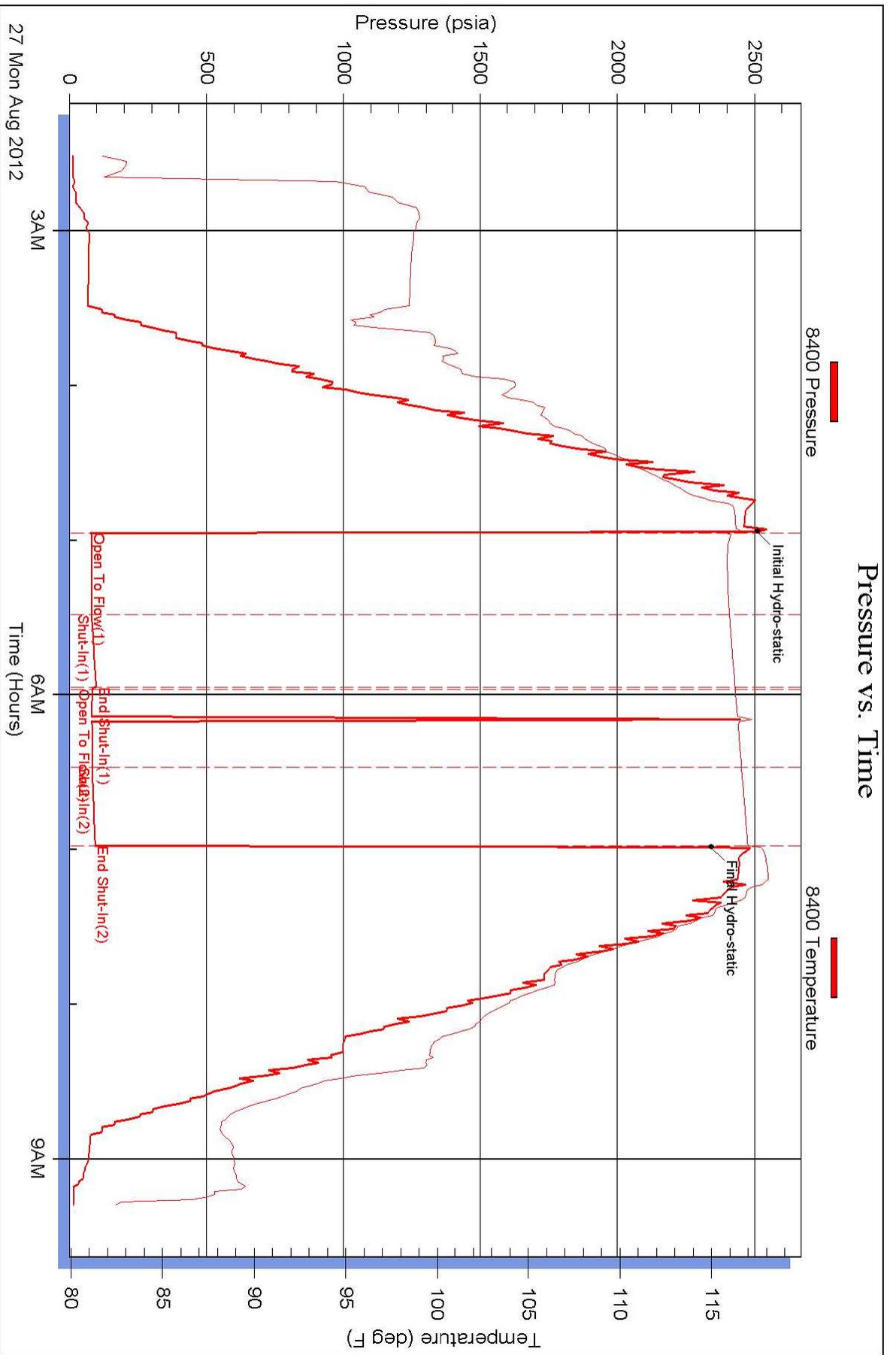
Serial #:

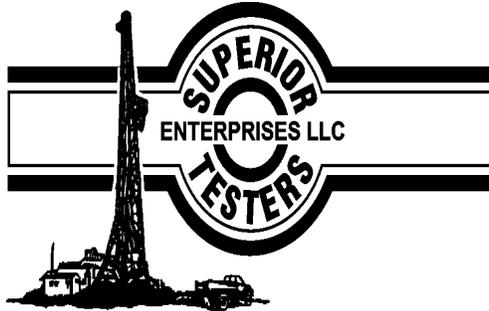
Laboratory Name:

Laboratory Location:

Recovery Comments:







## DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Inc.**

8100 East 22nd St. North 700  
Wichita Kansas 67278

ATTN: Bob Peterson

### **Schneweis -Turley #1**

#### **19-27s-25w-Ford**

Start Date: 2012.08.27 @ 10:30:00

End Date: 2012.08.27 @ 16:55:30

Job Ticket #: 17261                      DST #: 3

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

Printed: 2012.08.28 @ 03:12:07

Ritchie Exploration Inc.

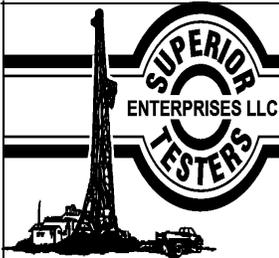
19-27s-25w-Ford

Schneweis -Turley #1

DST # 3

Mississippian

2012.08.27



# DRILL STEM TEST REPORT

Ritchie Exploration Inc.

**19-27s-25w-Ford**

8100 East 22nd St. North 700  
Wichita Kansas 67278

**Schneweis -Turley #1**

Job Ticket: 17261

**DST#: 3**

ATTN: Bob Peterson

Test Start: 2012.08.27 @ 10:30:00

## GENERAL INFORMATION:

Formation: **Mississippian**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:46:00

Time Test Ended: 16:55:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Dustin Ellis

Unit No: 3315-Great Bend-200

**Interval: 5024.00 ft (KB) To 5071.00 ft (KB) (TVD)**

Reference Elevations: 2589.00 ft (KB)

Total Depth: 5071.00 ft (KB) (TVD)

2578.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

**Serial #: 8400 Outside**

Press @ RunDepth: 54.63 psia @ 5068.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2012.08.27 End Date: 2012.08.27

Last Calib.: 2012.08.28

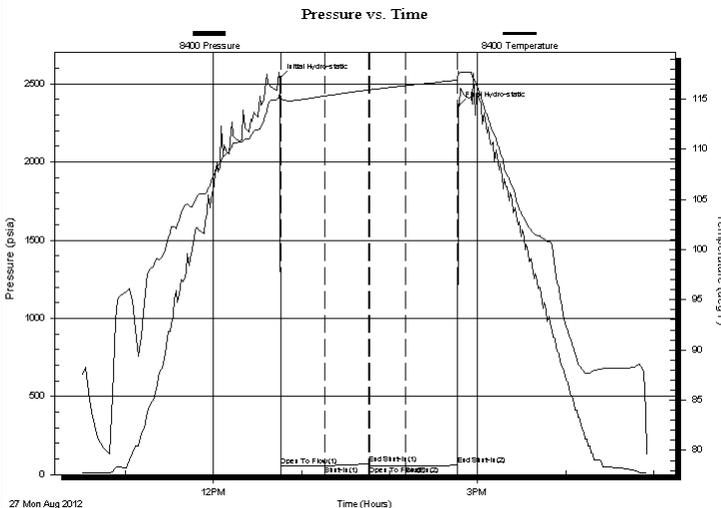
Start Time: 10:30:00 End Time: 16:55:30

Time On Btm: 2012.08.27 @ 12:45:30

Time Off Btm: 2012.08.27 @ 14:47:00

**TEST COMMENT:** 1st Open 30 minutes Weak surface blow died off after 6 minutes  
1st Shut in 30 minutes No blow back  
2nd Open 30 minutes No blow dead flushed no help  
2nd Shut in 30 minutes No blow back

## PRESSURE SUMMARY



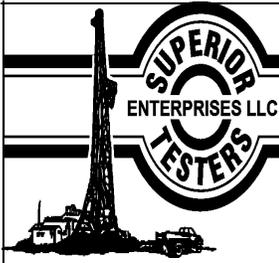
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2537.38	115.69	Initial Hydro-static
1	54.03	115.02	Open To Flow (1)
31	55.99	115.30	Shut-In(1)
60	68.01	115.89	End Shut-In(1)
61	56.97	115.91	Open To Flow (2)
86	54.63	116.33	Shut-In(2)
121	60.09	116.87	End Shut-In(2)
122	2358.19	117.79	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
4.00	Oil spotted mud 100% Mud	0.06

## Gas Rates

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



# DRILL STEM TEST REPORT

Ritchie Exploration Inc.

**19-27s-25w-Ford**

8100 East 22nd St. North 700  
Wichita Kansas 67278

**Schneweis -Turley #1**

Job Ticket: 17261

**DST#: 3**

ATTN: Bob Peterson

Test Start: 2012.08.27 @ 10:30:00

## GENERAL INFORMATION:

Formation: **Mississippian**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 12:46:00  
 Time Test Ended: 16:55:30  
 Interval: **5024.00 ft (KB) To 5071.00 ft (KB) (TVD)**  
 Total Depth: 5071.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Dustin Ellis  
 Unit No: 3315-Great Bend-200  
 Reference Elevations: 2589.00 ft (KB)  
 2578.00 ft (CF)  
 KB to GR/CF: 11.00 ft

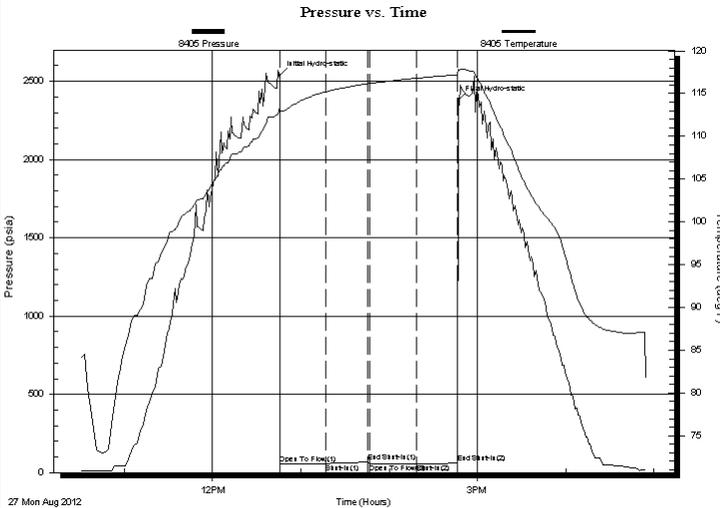
## Serial #: 8405

Inside

Press @ RunDepth: 59.79 psia @ 5067.00 ft (KB) Capacity: 5000.00 psia  
 Start Date: 2012.08.27 End Date: 2012.08.27 Last Calib.: 2012.08.28  
 Start Time: 10:30:00 End Time: 16:55:00 Time On Btm: 2012.08.27 @ 12:45:30  
 Time Off Btm: 2012.08.27 @ 14:47:00

**TEST COMMENT:** 1st Open 30 minutes Weak surface blow died off after 6 minutes  
 1st Shut in 30 minutes No blow back  
 2nd Open 30 minutes No blow dead flushed no help  
 2nd Shut in 30 minutes No blow back

## PRESSURE SUMMARY



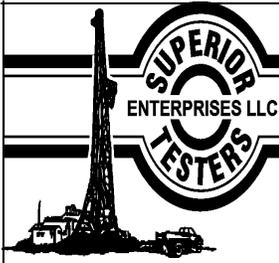
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2537.84	113.42	Initial Hydro-static
1	55.67	112.95	Open To Flow (1)
31	57.77	115.19	Shut-In(1)
60	67.90	116.15	End Shut-In(1)
61	58.90	116.17	Open To Flow (2)
93	56.41	116.80	Shut-In(2)
121	59.79	117.20	End Shut-In(2)
122	2382.11	117.84	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
4.00	Oil spotted mud 100% Mud	0.06

## Gas Rates

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



# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Ritchie Exploration Inc.

**19-27s-25w-Ford**

8100 East 22nd St. North 700  
Wichita Kansas 67278

**Schneweis -Turley #1**

Job Ticket: 17261

**DST#: 3**

ATTN: Bob Peterson

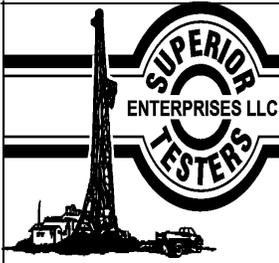
Test Start: 2012.08.27 @ 10:30:00

## Tool Information

Drill Pipe:	Length: 5012.00 ft	Diameter: 3.80 inches	Volume: 70.31 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: 85000.00 lb
			<u>Total Volume: 70.31 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial 66000.00 lb
Depth to Top Packer:	5024.00 ft			Final 66000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	47.00 ft			
Tool Length:	75.00 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			5001.00	
Hydraulic Tool	5.00			5006.00	
Jars	6.00			5012.00	
Safety Joint	2.00			5014.00	
Packer	5.00			5019.00	28.00 Bottom Of Top Packer
Packer	5.00			5024.00	
Anchor	42.00			5066.00	
Recorder	1.00	8405	Inside	5067.00	
Recorder	1.00	8400	Outside	5068.00	
Bull Plug	3.00			5071.00	47.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>75.00</b>				



# DRILL STEM TEST REPORT

## FLUID SUMMARY

Ritchie Exploration Inc.

**19-27s-25w-Ford**

8100 East 22nd St. North 700  
Wichita Kansas 67278

**Schneweis -Turley #1**

Job Ticket: 17261

**DST#: 3**

ATTN: Bob Peterson

Test Start: 2012.08.27 @ 10:30:00

### Mud and Cushion Information

Mud Type: Gel Chem  
Mud Weight: 10.00 lb/gal  
Viscosity: 48.00 sec/qt  
Water Loss: 10.00 in<sup>3</sup>  
Resistivity: ohm.m  
Salinity: 8000.00 ppm  
Filter Cake: 1.00 inches

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

Oil API: deg API  
Water Salinity: ppm

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
4.00	Oil spotted mud 100% Mud	0.056

Total Length: 4.00 ft      Total Volume: 0.056 bbl

Num Fluid Samples: 0

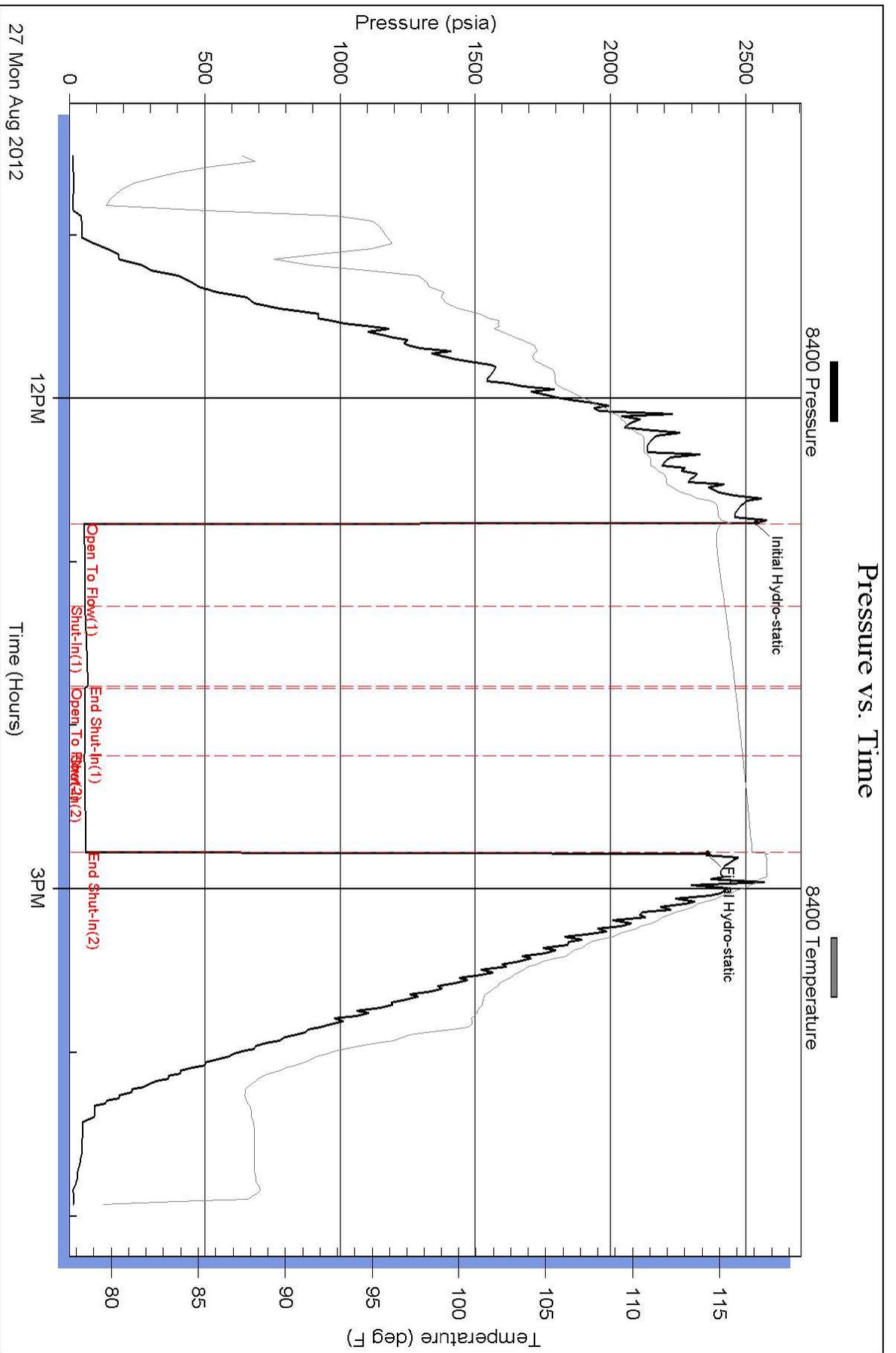
Num Gas Bombs: 0

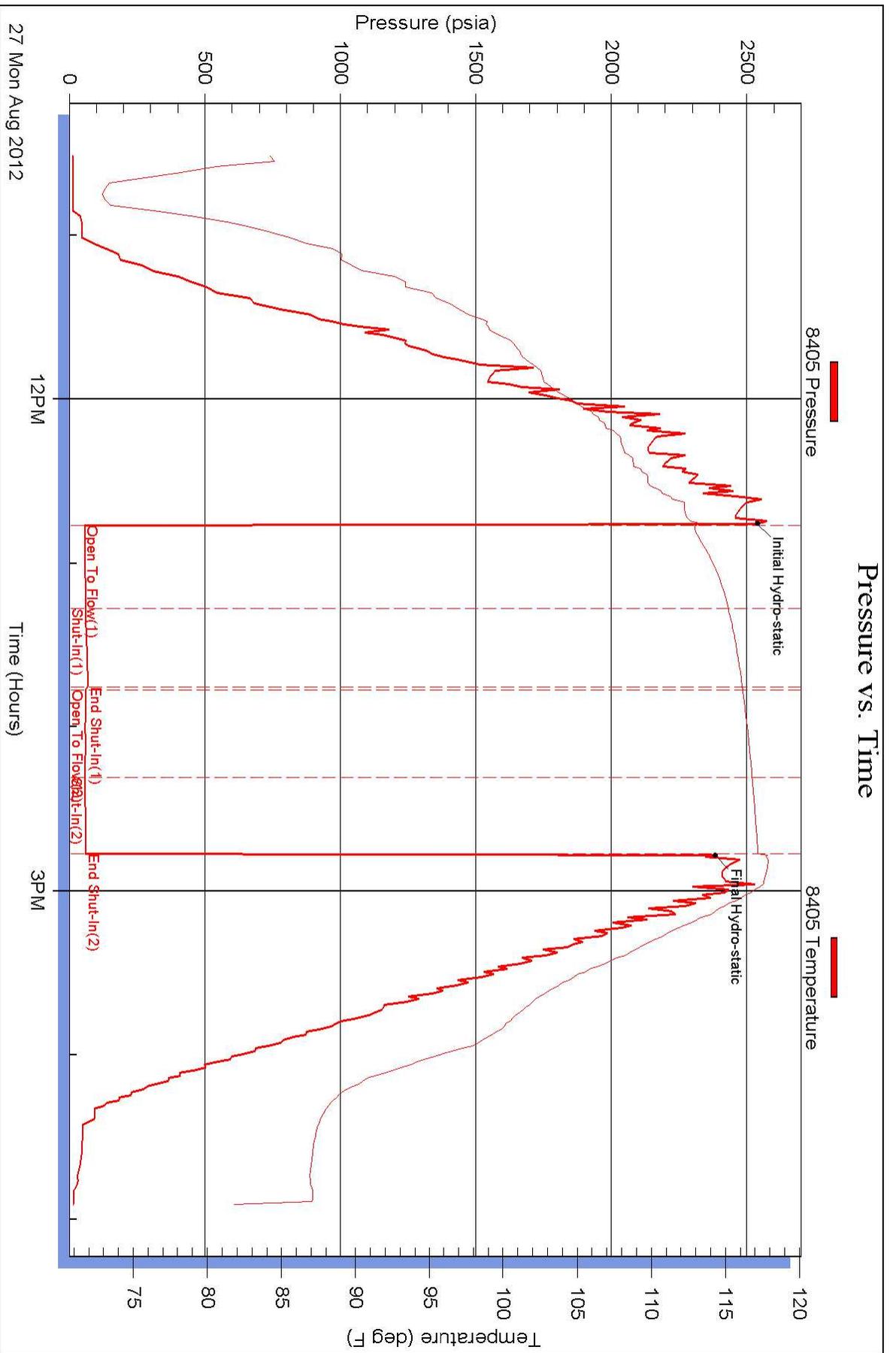
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







## DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Inc.**

8100 East 22nd St. North 700  
Wichita Kansas 67278

ATTN: Bob Peterson

### **Schneweis -Turley #1**

#### **19-27s-25w-Ford**

Start Date: 2012.08.29 @ 03:10:00

End Date: 2012.08.29 @ 09:18:30

Job Ticket #: 17262                      DST #: 4

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

Printed: 2012.08.29 @ 07:37:16

Ritchie Exploration Inc.

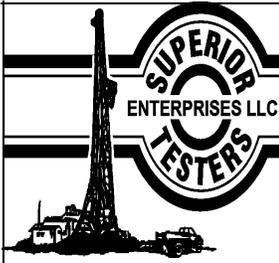
19-27s-25w-Ford

Schneweis -Turley #1

DST # 4

Mississippian

2012.08.29



# DRILL STEM TEST REPORT

Ritchie Exploration Inc.

**19-27s-25w-Ford**

8100 East 22nd St. North 700  
Wichita Kansas 67278

**Schneweis -Turley #1**

Job Ticket: 17262

**DST#: 4**

ATTN: Bob Peterson

Test Start: 2012.08.29 @ 03:10:00

## GENERAL INFORMATION:

Formation: **Mississippian**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 05:30:00 Tester: Dustin Ellis  
 Time Test Ended: 09:18:30 Unit No: 3315-Great Bend-200  
 Interval: **5078.00 ft (KB) To 5178.00 ft (KB) (TVD)** Reference Elevations: 2589.00 ft (KB)  
 Total Depth: 5178.00 ft (KB) (TVD) 2578.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 11.00 ft

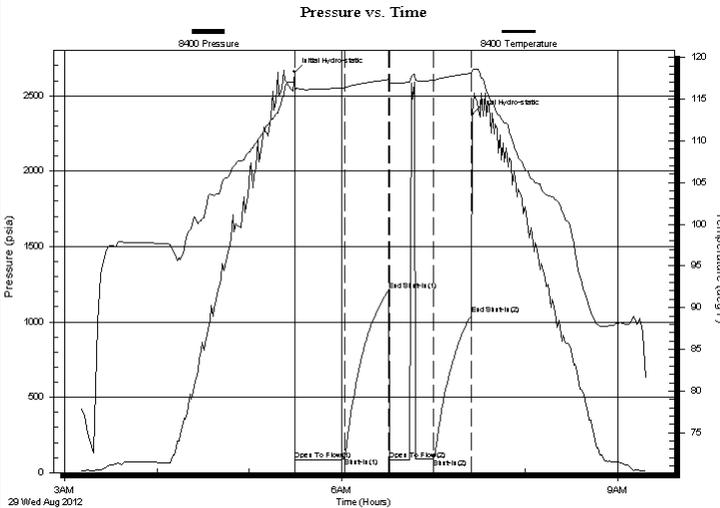
## Serial #: 8400

**Outside**

Press @ Run Depth: 91.81 psia @ 5175.19 ft (KB) Capacity: 5000.00 psia  
 Start Date: 2012.08.29 End Date: 2012.08.29 Last Calib.: 2012.08.29  
 Start Time: 03:10:00 End Time: 09:18:30 Time On Btm: 2012.08.29 @ 05:29:30  
 Time Off Btm: 2012.08.29 @ 07:25:30

**TEST COMMENT:** 1st Open 30 minutes Weak surface blow 15 minutes died off.  
 1st Shut in 30 minutes No blow back  
 2nd Open 30 minutes No blow dead flushed no help.  
 2nd Shut in 30 minutes No blow back

## PRESSURE SUMMARY



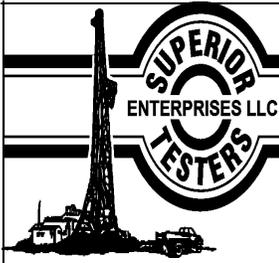
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2657.51	117.12	Initial Hydro-static
1	83.28	115.85	Open To Flow (1)
33	98.05	116.38	Shut-In(1)
62	1209.92	117.36	End Shut-In(1)
62	87.67	116.86	Open To Flow (2)
91	91.81	117.27	Shut-In(2)
116	1047.76	118.11	End Shut-In(2)
116	2377.45	118.45	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
20.00	Mud 100%	0.28

## Gas Rates

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



# DRILL STEM TEST REPORT

Ritchie Exploration Inc.

**19-27s-25w-Ford**

8100 East 22nd St. North 700  
Wichita Kansas 67278

**Schneweis -Turley #1**

Job Ticket: 17262

**DST#: 4**

ATTN: Bob Peterson

Test Start: 2012.08.29 @ 03:10:00

## GENERAL INFORMATION:

Formation: **Mississippian**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:30:00

Time Test Ended: 09:18:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Dustin Ellis

Unit No: 3315-Great Bend-200

**Interval: 5078.00 ft (KB) To 5178.00 ft (KB) (TVD)**

Reference Elevations: 2589.00 ft (KB)

Total Depth: 5178.00 ft (KB) (TVD)

2578.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

**Serial #: 8405**

**Inside**

Press @ Run Depth: 1049.77 psia @ 5174.19 ft (KB)

Capacity: 5000.00 psia

Start Date: 2012.08.29

End Date: 2012.08.29

Last Calib.: 2012.08.29

Start Time: 03:10:00

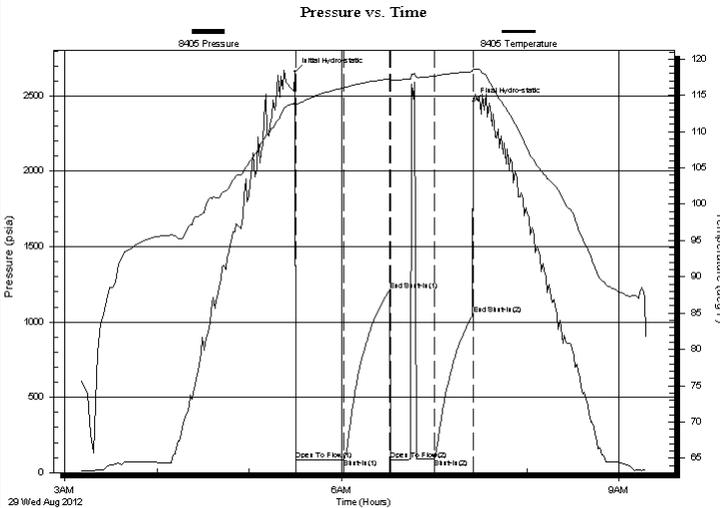
End Time: 09:18:00

Time On Btm: 2012.08.29 @ 05:29:30

Time Off Btm: 2012.08.29 @ 07:25:30

**TEST COMMENT:** 1st Open 30 minutes Weak surface blow 15 minutes died off.  
1st Shut in 30 minutes No blow back  
2nd Open 30 minutes No blow dead flushed no help.  
2nd Shut in 30 minutes No blow back

## PRESSURE SUMMARY



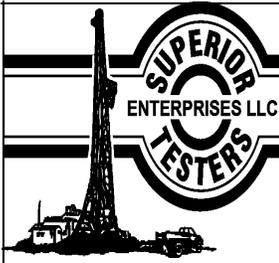
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2658.93	114.07	Initial Hydro-static
1	84.33	113.49	Open To Flow (1)
32	89.34	116.03	Shut-In(1)
62	1211.83	117.28	End Shut-In(1)
62	87.94	117.01	Open To Flow (2)
91	93.26	117.64	Shut-In(2)
116	1049.77	118.29	End Shut-In(2)
116	2462.57	118.63	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
20.00	Mud 100%	0.28

## Gas Rates

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



# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Ritchie Exploration Inc.

**19-27s-25w-Ford**

8100 East 22nd St. North 700  
Wichita Kansas 67278

**Schneweis -Turley #1**

Job Ticket: 17262

**DST#: 4**

ATTN: Bob Peterson

Test Start: 2012.08.29 @ 03:10:00

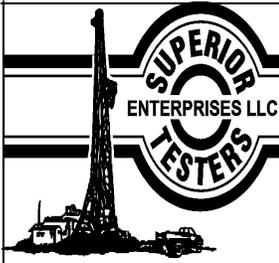
## Tool Information

Drill Pipe:	Length: 5078.00 ft	Diameter: 3.80 inches	Volume: 71.23 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:	82000.00 lb
			<u>Total Volume: 71.23 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial	62000.00 lb
Depth to Top Packer:	5078.00 ft			Final	62000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	100.19 ft				
Tool Length:	120.19 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			5063.00	
Hydraulic Tool	5.00			5068.00	
Packer	5.00			5073.00	20.00 Bottom Of Top Packer
Packer	5.00			5078.00	
Anchor	7.00			5085.00	
Change Over Sub	0.75			5085.75	
Drill Pipe	60.69			5146.44	
Change Over Sub	0.75			5147.19	
Anchor	26.00			5173.19	
Recorder	1.00	8405	Inside	5174.19	
Recorder	1.00	8400	Outside	5175.19	
Bull Plug	3.00			5178.19	100.19 Bottom Packers & Anchor

**Total Tool Length: 120.19**



# DRILL STEM TEST REPORT

## FLUID SUMMARY

Ritchie Exploration Inc.

**19-27s-25w-Ford**

8100 East 22nd St. North 700  
Wichita Kansas 67278

**Schneweis -Turley #1**

Job Ticket: 17262

**DST#: 4**

ATTN: Bob Peterson

Test Start: 2012.08.29 @ 03:10:00

### Mud and Cushion Information

Mud Type: Gel Chem  
Mud Weight: 10.00 lb/gal  
Viscosity: 65.00 sec/qt  
Water Loss: 8.80 in<sup>3</sup>  
Resistivity: ohm.m  
Salinity: 6000.00 ppm  
Filter Cake: 1.00 inches

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

Oil API: deg API  
Water Salinity: ppm

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	Mud 100%	0.281

Total Length: 20.00 ft      Total Volume: 0.281 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

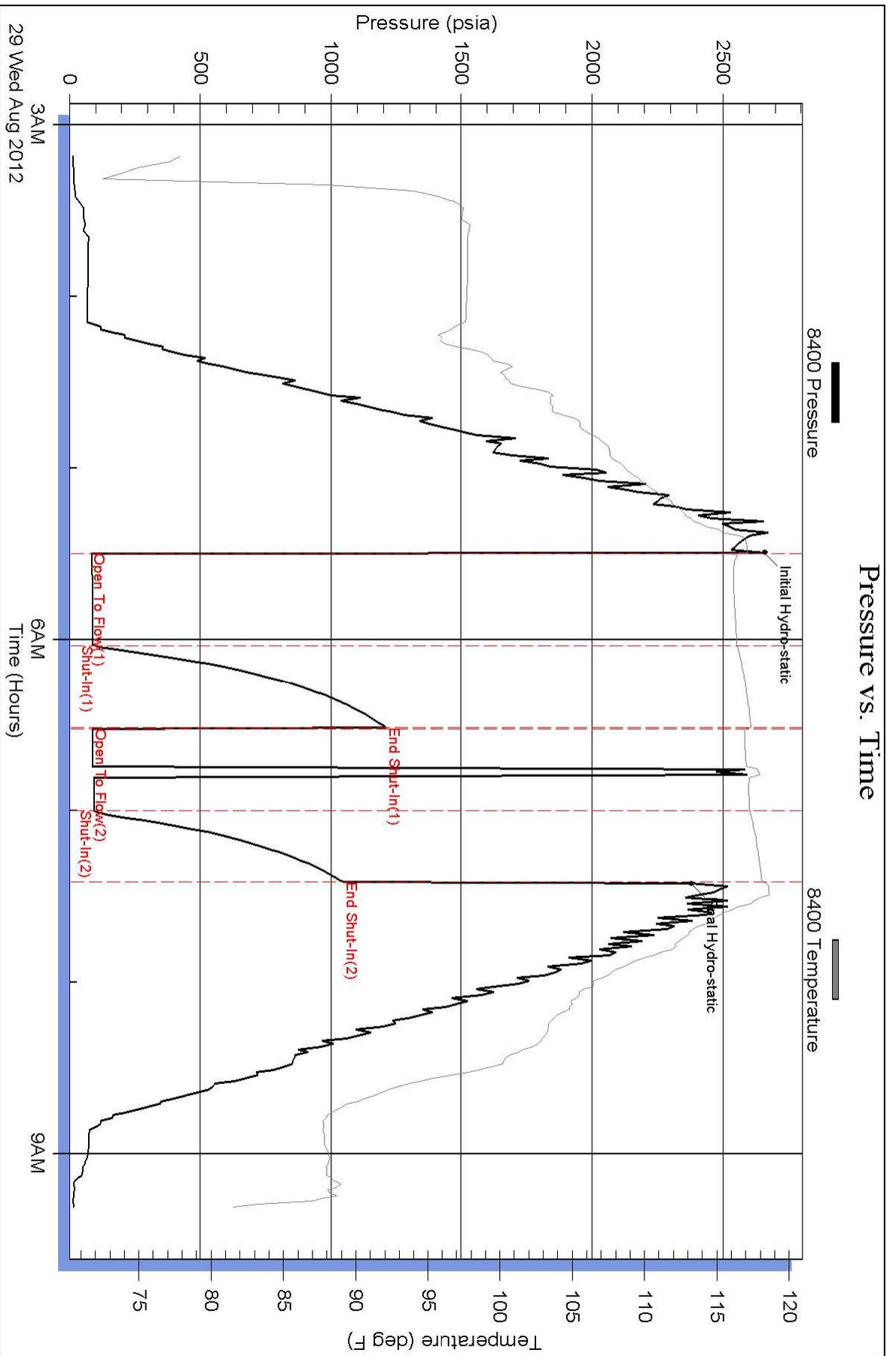
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

### Pressure vs. Time



### Pressure vs. Time

