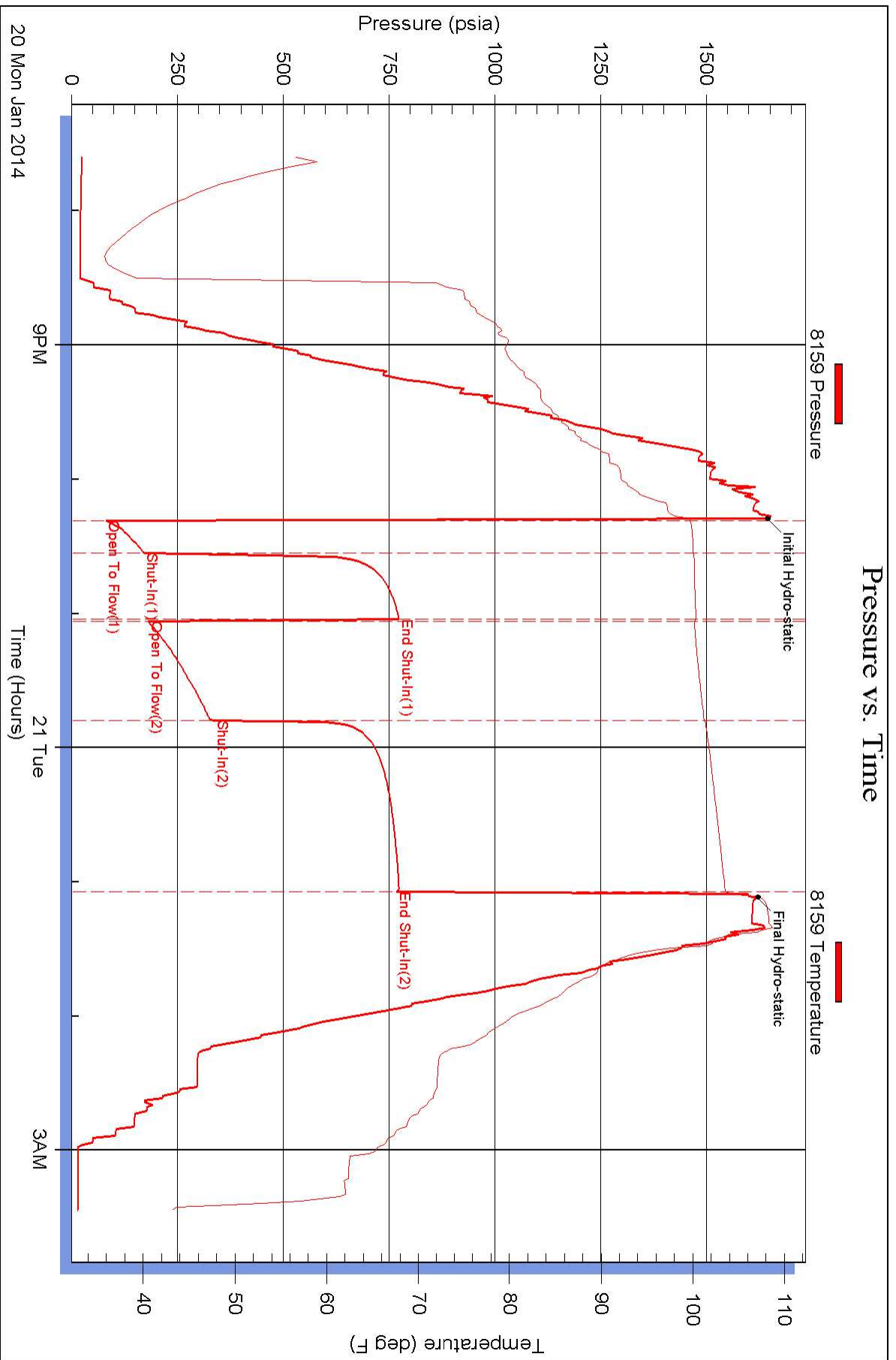
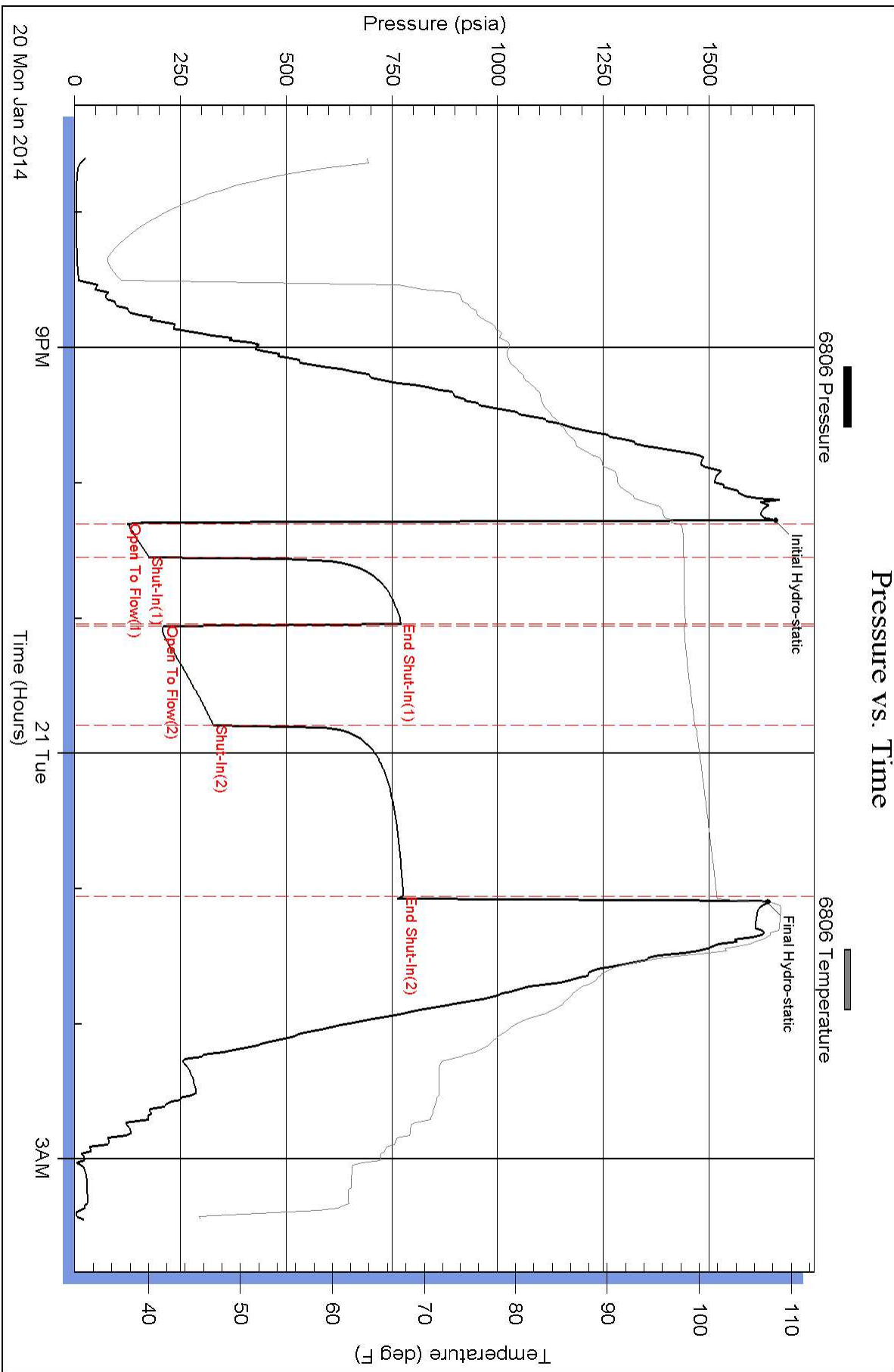
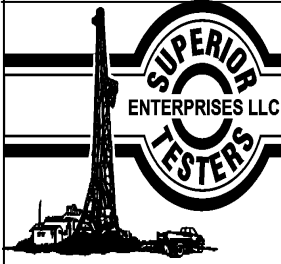


### Pressure vs. Time



# Pressure vs. Time





# DRILL STEM TEST REPORT

## FLUID SUMMARY

Werth Exploration Trust  
 1308 Schwaller Avenue  
 Hays, Kansas 67601  
 ATTN: Herb Deines

**7/11S/20W/Ellis**  
**Walz-Mustang SOL #11**  
 Job Ticket: 19191      **DST#: 1**  
 Test Start: 2014.01.20 @ 19:35:00

### 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: 51.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.60 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psia		
Salinity: 3000.00 ppm			
Filter Cake: 1.00 inches			

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	77 feet of gas in pipe	0.000
434.00	Mud cut Water/Mud 5% Water 95%	4.721
155.00	Gas and Oil cut Muddy Water	2.174
0.00	Gas 5% Oil 5% Mud 30% Water 60%	0.000
15.00	Clean Gassy Oil/Gas 5% Oil 95%	0.210
0.00	Recov. Chlorides 90,000 ppm	0.000
0.00	Recov. Resist. .28 ohms @ 50 deg	0.000

Total Length: 604.00 ft      Total Volume: 7.105 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:



# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Werth Exploration Trust  
 1308 Schwaller Avenue  
 Hays, Kansas 67601  
 ATTN: Herb Deines

**7/11S/20W/Ellis**  
**Walz-Mustang SOL #11**  
 Job Ticket: 19191 **DST#: 1**  
 Test Start: 2014.01.20 @ 19:35:00

**Tool Information**

Drill Pipe:	Length: 3208.00 ft	Diameter: 3.80 inches	Volume: 45.00 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: 150.00 ft	Diameter: 2.25 inches	Volume: 0.74 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 45.74 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	3368.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	42.00 ft			
Tool Length:	62.00 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			3353.00	
Hydraulic Tool	5.00			3358.00	
Packer	5.00			3363.00	20.00 Bottom Of Top Packer
Packer	5.00			3368.00	
Perforations	37.00			3405.00	
Recorder	1.00	6806	Inside	3406.00	
Recorder	1.00	8159	Outside	3407.00	
Bullnose	3.00			3410.00	42.00 Bottom Packers & Anchor

**Total Tool Length: 62.00**



# DRILL STEM TEST REPORT

Werth Exploration Trust  
 1308 Schwaller Avenue  
 Hays, Kansas 67601  
 ATTN: Herb Deines

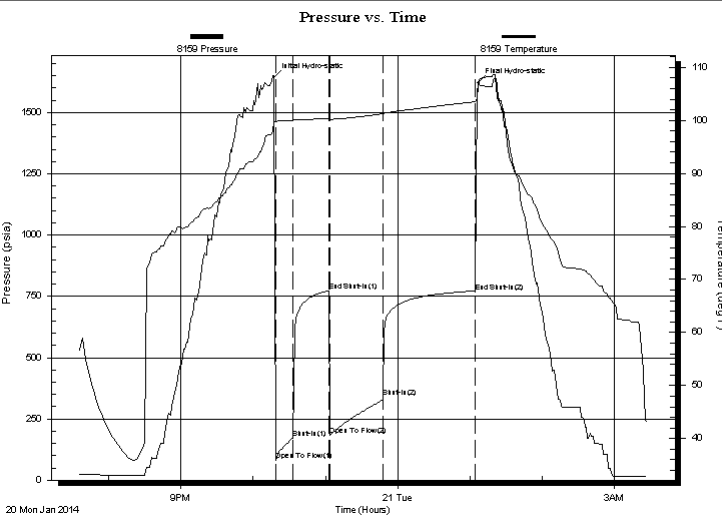
**7/11S/20W/Ellis**  
**Walz-Mustang SOL #11**  
 Job Ticket: 19191 **DST#: 1**  
 Test Start: 2014.01.20 @ 19:35:00

## GENERAL INFORMATION:

Formation: **Lansing/Kansas City**  
 Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 22:18:00 Tester: Ken Swinney  
 Time Test Ended: 03:27:00 Unit No: 3330 Hays/50  
 Interval: **3368.00 ft (KB) To 3410.00 ft (KB) (TVD)** Reference Elevations: 2062.00 ft (KB)  
 Total Depth: 3410.00 ft (KB) (TVD) 2055.00 ft (CF)  
 Hole Diameter: 7.80 inches Hole Condition: Poor KB to GR/CF: 7.00 ft

**Serial #: 8159 Outside**  
 Press @ Run Depth: 767.86 psia @ 3407.00 ft (KB) Capacity: 5000.00 psia  
 Start Date: 2014.01.20 End Date: 2014.01.21 Last Calib.: 2014.01.20  
 Start Time: 19:35:00 End Time: 03:27:00 Time On Btm: 2014.01.20 @ 22:17:30  
 Time Off Btm: 2014.01.21 @ 01:07:00

**TEST COMMENT:** 1ST Open 15 Minutes/Good blow/Blow built to bottom of bucket of diesel in 4 minutes 30 seconds  
 1ST Shut In 30 Minutes/Weak surface blow back  
 2ND Open 45 Minutes/Good Blow/Blow built to bottom of bucket of diesel in 7 minutes 30 seconds  
 2ND Shut In 75 Minutes/Blow back built to 1 inch



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1643.86	99.66	Initial Hydro-static
1	81.58	99.71	Open To Flow (1)
16	171.39	100.00	Shut-In(1)
45	772.42	100.38	End Shut-In(1)
46	181.12	100.21	Open To Flow (2)
91	337.13	101.26	Shut-In(2)
167	767.86	103.54	End Shut-In(2)
170	1620.22	107.26	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	77 feet of gas in pipe	0.00
434.00	Mud cut Water/Mud 5% Water 95%	4.72
155.00	Gas and Oil cut Muddy Water	2.17
0.00	Gas 5% Oil 5% Mud 30% Water 60%	0.00
15.00	Clean Gassy Oil/Gas 5% Oil 95%	0.21
0.00	Recov. Chlorides 90,000 ppm	0.00

## Gas Rates

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



# DRILL STEM TEST REPORT

Werth Exploration Trust  
 1308 Schwaller Avenue  
 Hays, Kansas 67601  
 ATTN: Herb Deines

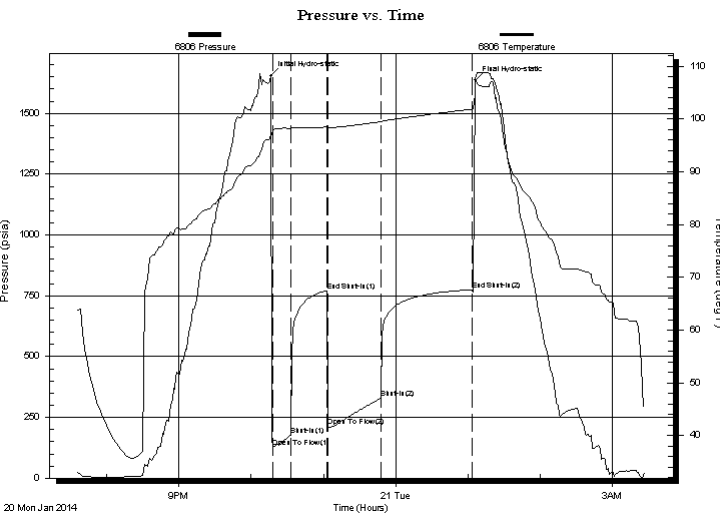
**7/11S/20W/Ellis**  
**Walz-Mustang SOL #11**  
 Job Ticket: 19191 **DST#: 1**  
 Test Start: 2014.01.20 @ 19:35:00

## GENERAL INFORMATION:

Formation: **Lansing/Kansas City**  
 Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 22:18:00 Tester: Ken Swinney  
 Time Test Ended: 03:27:00 Unit No: 3330 Hays/50  
**Interval: 3368.00 ft (KB) To 3410.00 ft (KB) (TVD)** Reference Elevations: 2062.00 ft (KB)  
 Total Depth: 3410.00 ft (KB) (TVD) 2055.00 ft (CF)  
 Hole Diameter: 7.80 inches Hole Condition: Poor KB to GR/CF: 7.00 ft

**Serial #: 6806 Inside**  
 Press @ Run Depth: 328.29 psia @ 3406.00 ft (KB) Capacity: 5000.00 psia  
 Start Date: 2014.01.20 End Date: 2014.01.21 Last Calib.: 2014.01.20  
 Start Time: 19:35:00 End Time: 03:27:00 Time On Btm: 2014.01.20 @ 22:16:30  
 Time Off Btm: 2014.01.21 @ 01:06:00

**TEST COMMENT:** 1ST Open 15 Minutes/Good blow/Blow built to bottom of bucket of diesel in 4 minutes 30 seconds  
 1ST Shut In 30 Minutes/Weak surface blow back  
 2ND Open 45 Minutes/Good Blow/Blow built to bottom of bucket of diesel in 7 minutes 30 seconds  
 2ND Shut In 75 Minutes/Blow back built to 1 inch



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1655.07	97.08	Initial Hydro-static
2	125.11	97.79	Open To Flow (1)
17	176.32	98.25	Shut-In(1)
46	770.78	98.50	End Shut-In(1)
47	211.47	98.38	Open To Flow (2)
91	328.29	99.51	Shut-In(2)
167	775.38	101.90	End Shut-In(2)
170	1635.96	107.71	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	77 feet of gas in pipe	0.00
434.00	Mud cut Water/Mud 5% Water 95%	4.72
155.00	Gas and Oil cut Muddy Water	2.17
0.00	Gas 5% Oil 5% Mud 30% Water 60%	0.00
15.00	Clean Gassy Oil/Gas 5% Oil 95%	0.21
0.00	Recov. Chlorides 90,000 ppm	0.00

## Gas Rates

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



## DRILL STEM TEST REPORT

Prepared For: **Werth Exploration Trust**

1308 Schwaller Avenue  
Hays, Kansas 67601

ATTN: Herb Deines

### **Walz-Mustang SOL #11**

#### **7/11S/20W/Ellis**

Start Date: 2014.01.20 @ 19:35:00

End Date: 2014.01.21 @ 03:27:00

Job Ticket #: 19191                      DST #: 1

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

Printed: 2014.01.20 @ 03:50:55

Werth Exploration Trust

7/11S/20W/Ellis

Walz-Mustang SOL #11

DST # 1

Lansing/Kansas City

2014.01.20