

# DRILL STEM TEST REPORT

Bird Dog Oil L.L.C  
 1801 Broadway Ste #450 Denver CO 80202  
 ATTN: Derek Patterson

14-19s-10w Rice  
 Pioneer-Masden#2-14  
 Job Ticket: 17379 DST#: 5  
 Test Start: 2013.01.19 @ 03:39:00

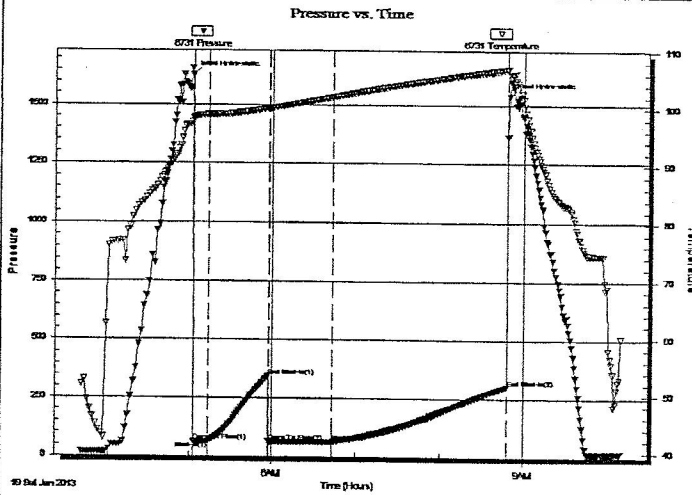
## GENERAL INFORMATION:

Formation: **Arbuckle**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 05:03:00  
 Time Test Ended: 10:11:00  
 Interval: **3214.00 ft (KB) To 3280.00 ft (KB) (TVD)**  
 Total Depth: 3280.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Jared Scheck  
 Unit No: 3320-Great Bend-45  
 Reference Elevations: 1757.00 ft (KB)  
 1749.00 ft (CF)  
 KB to GR/CF: 8.00 ft

## Serial #: 6731

Press@RunDepth: 61.54 psia @ ft (KB) Capacity: 5000.00 psia  
 Start Date: 2013.01.19 End Date: 2013.01.19 Last Calib.: 2013.01.19  
 Start Time: 03:40:00 End Time: 10:11:00 Time On Btm: 2013.01.19 @ 05:02:00  
 Time Off Btm: 2013.01.19 @ 08:49:30

TEST COMMENT: 1st Opening 10 Minutes-Weak blow built 2 inches into bucket in 10 minutes  
 1st Shut-in 45 Minutes-No blow back  
 2nd Opening 45 Minutes-Weak blow built 1 1/2 inches into bucket in 45 minutes  
 2nd Shut-in 90 Minutes-No blow back



## PRESSURE SUMMARY

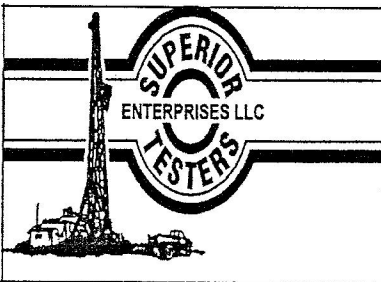
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1623.70	98.25	Initial Hydro-static
1	61.20	98.40	Open To Flow (1)
12	60.83	98.85	Shut-In(1)
55	344.20	99.99	End Shut-In(1)
56	62.02	99.98	Open To Flow (2)
102	61.54	102.07	Shut-In(2)
226	301.29	106.87	End Shut-In(2)
228	1540.00	105.92	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
3.00	muddy oil 40%oil 60%mud	0.04

## Gas Rates

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



# DRILL STEM TEST REPORT

Bird Dog Oil L.L.C **14-19s-10w Rice**  
 1801 Broadway Ste #450 Denver CO 80202 **Pioneer-Masden#2-14**  
 ATTN: Derek Patterson Job Ticket: 17379 DST#: 5  
 Test Start: 2013.01.19 @ 03:39:00

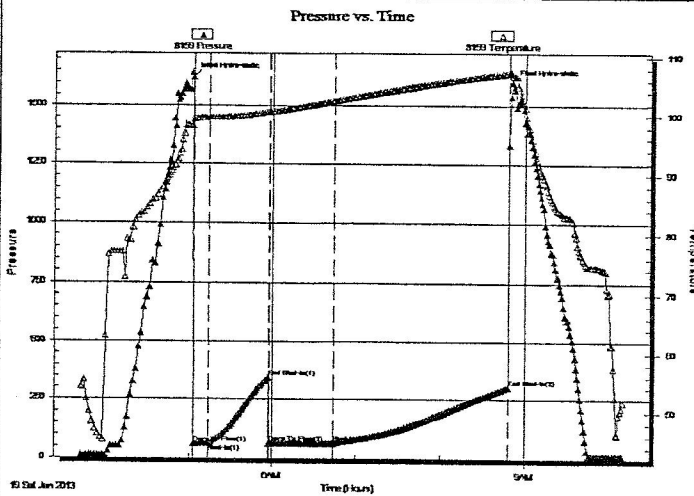
## GENERAL INFORMATION:

Formation: **Arbuckle**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 05:03:00 Tester: Jared Scheck  
 Time Test Ended: 10:11:00 Unit No: 3320-Great Bend-45  
 Interval: 3214.00 ft (KB) To 3280.00 ft (KB) (TVD) Reference Elevations: 1757.00 ft (KB)  
 Total Depth: 3280.00 ft (KB) (TVD) 1749.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GRVCF: 8.00 ft

## Serial #: 8159

Press@RunDepth: 302.82 psia @ ft (KB) Capacity: 5000.00 psia  
 Start Date: 2013.01.19 End Date: 2013.01.19 Last Calib.: 2013.01.19  
 Start Time: 03:40:00 End Time: 10:10:30 Time On Btm: 2013.01.19 @ 05:02:00  
 Time Off Btm: 2013.01.19 @ 08:50:00

TEST COMMENT: 1st Opening 10 Minutes-Weak blow built 2 inches into bucket in 10 minutes  
 1st Shut-in 45 Minutes-No blow back  
 2nd Opening 45 Minutes-Weak blow built 1 1/2 inches into bucket in 45 minutes  
 2nd Shut-in 90 Minutes-No blow back



## PRESSURE SUMMARY

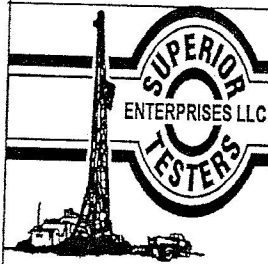
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1624.85	99.58	Initial Hydro-static
1	60.53	99.36	Open To Flow (1)
12	61.49	99.66	Shut-In(1)
55	346.11	100.66	End Shut-In(1)
56	62.36	100.61	Open To Flow (2)
102	62.93	102.59	Shut-In(2)
226	302.82	107.34	End Shut-In(2)
228	1599.96	106.97	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
3.00	muddy oil 40% oil 60% mud	0.04

## Gas Rates

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



# DRILL STEM TEST REPORT

TOOL DIAGRAM

Bird Dog Oil L.L.C

14-19s-10w Rice

1801 Broadway Ste #450 Denver CO 80202

Pioneer-Masden#2-14

ATTN: Derek Patterson

Job Ticket: 17379

DST#: 5

Test Start: 2013.01.19 @ 03:39:00

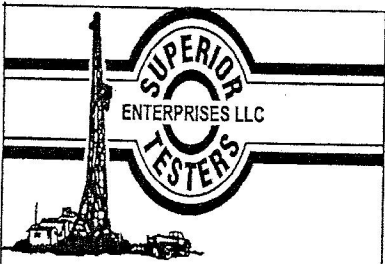
## Tool Information

Drill Pipe:	Length: 3197.00 ft	Diameter: 3.80 inches	Volume: 44.85 bbl	Tool Weight: 1000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 44.85 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	11.00 ft			String Weight: Initial 42000.00 lb
Depth to Top Packer:	3214.00 ft			Final 42000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	66.00 ft			
Tool Length:	94.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut-In Tool	5.00			3191.00	
Hydraulic Tool	5.00			3196.00	
Jars	6.00			3202.00	
Safety Joint	2.00			3204.00	
Packer	5.00			3209.00	28.00
Packer	5.00			3214.00	Bottom Of Top Packer
Anchor	0.00			3214.00	
Change Over Sub	0.75			3214.75	
Drill Pipe	31.50			3246.25	
Change Over Sub	0.75			3247.00	
Anchor	28.00			3275.00	
Recorder	1.00	6731	Inside	3276.00	
Recorder	1.00	8159	Outside	3277.00	
Bullnose	3.00			3280.00	66.00
<b>Total Tool Length:</b>	<b>94.00</b>				<b>Bottom Packers &amp; Anchor</b>



# DRILL STEM TEST REPORT

FLUID SUMMARY

Bird Dog Oil L.L.C

14-19s-10w Rice

1801 Broadway Ste #450 Denver CO 80202

Pioneer-Masden#2-14

ATTN: Derek Patterson

Job Ticket: 17379

DST#: 5

Test Start: 2013.01.19 @ 03:39:00

## 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: 68.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.78 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psia		
Salinity: 10200.00 ppm			
Filter Cake: 1.00 inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
3.00	muddy oil 40%oil 60%mud	0.042

Total Length: 3.00 ft      Total Volume: 0.042 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

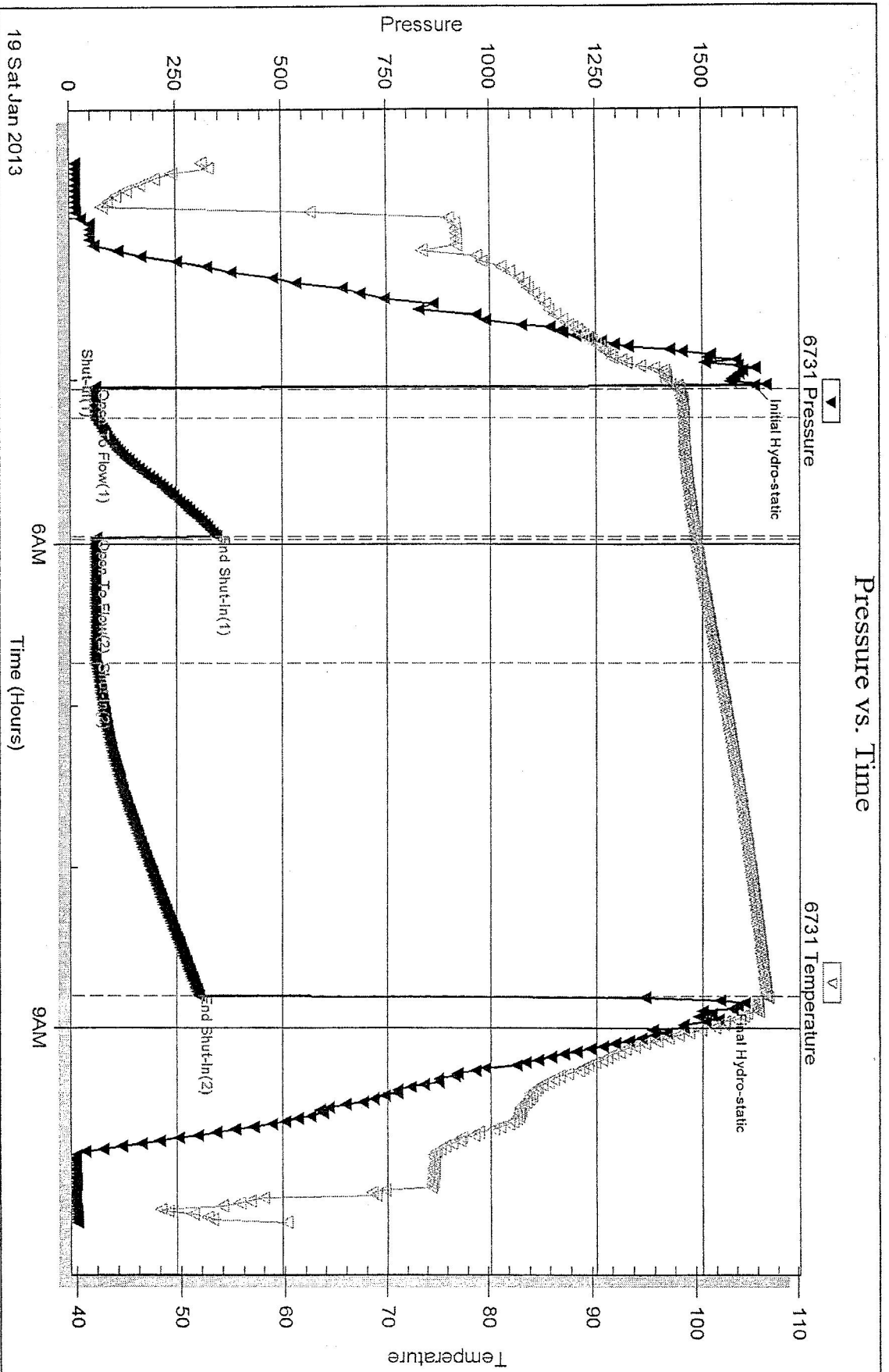


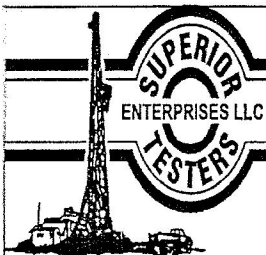
Serial #: 6731

Bird Dog Oil L.L.C

Pioneer-Masden#2-14

DST Test Number: 5





# DRILL STEM TEST REPORT

Bird Dog Oil L.L.C

14-19s-10w Rice

1801 Broadway Ste #450 Denver CO 80202

Pioneer-Masden#2-14

Job Ticket: 17380

DST#: 6

ATTN: Derek Patterson

Test Start: 2013.01.19 @ 17:51:00

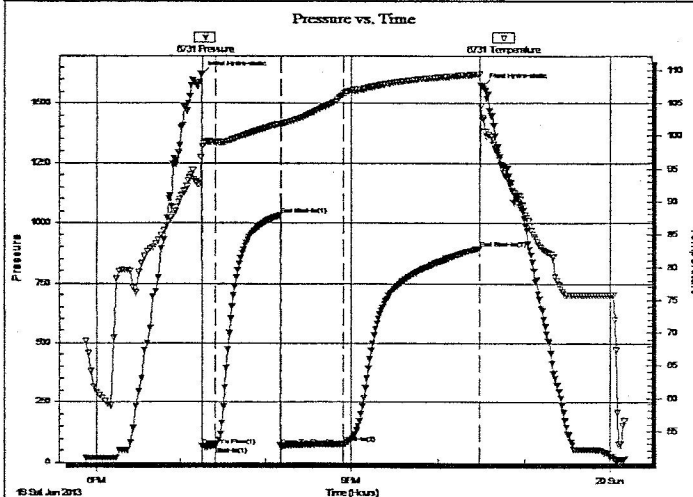
## GENERAL INFORMATION:

Formation: **Arbuckle**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 19:15:30  
 Time Test Ended: 00:11:00  
 Interval: **3216.00 ft (KB) To 3288.00 ft (KB) (TVD)**  
 Total Depth: **3288.00 ft (KB) (TVD)**  
 Hole Diameter: **7.88 inches** Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Jarefd Scheck  
 Unit No: 3320-Great Bend-45  
 Reference Elevations: 1757.00 ft (KB)  
 1749.00 ft (CF)  
 KB to GRVCF: 8.00 ft

## Serial #: 6731

Press@RunDepth: 77.66 psia @ ft (KB) Capacity: 5000.00 psia  
 Start Date: 2013.01.19 End Date: 2013.01.20 Last Calib.: 2013.01.20  
 Start Time: 17:52:00 End Time: 00:11:00 Time On Btm: 2013.01.19 @ 19:14:30  
 Time Off Btm: 2013.01.19 @ 22:30:30

TEST COMMENT: 1st Opening 10 Minutes-Weak blow built 3 inches into bucket in 10 minutes  
 1st Shut-in 45 Minutes-No blow back  
 2nd Opening 45 Minutes-Fair blow built bottom of bucket in 24 minutes  
 2nd Shut-in 90 Minutes-3 1/2 inch blow



## PRESSURE SUMMARY

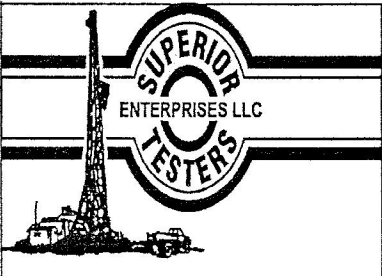
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1618.98	96.64	Initial Hydro-static
1	66.37	98.31	Open To Flow (1)
11	67.17	98.95	Shut-In(1)
56	1031.78	101.83	End Shut-In(1)
57	68.86	101.75	Open To Flow (2)
100	77.66	106.43	Shut-In(2)
194	893.44	109.44	End Shut-In(2)
196	1570.41	102.77	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
10.00	mud cut oil 40%oil 60%mud	0.14
180.00	gas in pipe	2.52

## Gas Rates

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



# DRILL STEM TEST REPORT

Bird Dog Oil L.L.C  
 1801 Broadway Ste #450 Denver CO 80202  
 ATTN: Derek Patterson

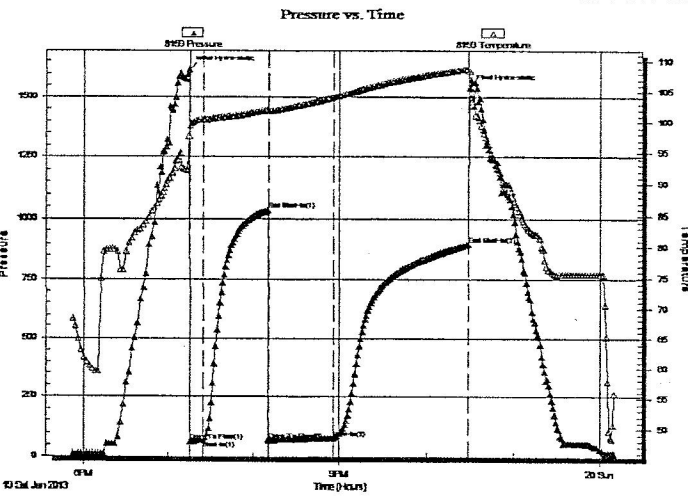
**14-19s-10w Rice**  
**Pioneer-Masden#2-14**  
 Job Ticket: 17380 DST#: 6  
 Test Start: 2013.01.19 @ 17:51:00

## GENERAL INFORMATION:

Formation: **Arbuckle**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 19:15:30  
 Time Test Ended: 00:11:00  
 Interval: **3216.00 ft (KB) To 3288.00 ft (KB) (TVD)**  
 Total Depth: **3288.00 ft (KB) (TVD)**  
 Hole Diameter: **7.88 inches** Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Jarefd Scheck  
 Unit No: 3320-Great Bend-45  
 Reference Elevations: 1757.00 ft (KB)  
 1749.00 ft (CF)  
 KB to GR/CF: 8.00 ft

Serial #: 8159  
 Press@RunDepth: 894.65 psia @ ft (KB) Capacity: 5000.00 psia  
 Start Date: 2013.01.19 End Date: 2013.01.20 Last Calib.: 2013.01.20  
 Start Time: 17:52:00 End Time: 00:11:00 Time On Btm: 2013.01.19 @ 19:14:30  
 Time Off Btm: 2013.01.19 @ 22:29:30

TEST COMMENT: 1st Opening 10 Minutes-Weak blow built 3 inches into bucket in 10 minutes  
 1st Shut-in 45 Minutes-No blow back  
 2nd Opening 45 Minutes-Fair blow built bottom of bucket in 24 minutes  
 2nd Shut-in 90 Minutes-3 1/2 inch blow



## PRESSURE SUMMARY

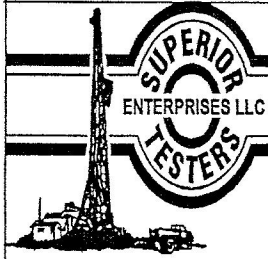
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1616.10	97.81	Initial Hydro-static
1	64.92	99.40	Open To Flow (1)
11	66.64	100.45	Shut-In(1)
56	1033.53	102.07	End Shut-In(1)
57	67.67	101.82	Open To Flow (2)
102	77.07	104.15	Shut-In(2)
194	894.65	108.84	End Shut-In(2)
195	1537.66	108.55	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
10.00	mud cut oil 40%oil 60%mud	0.14
180.00	gas in pipe	2.52

## Gas Rates

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



# DRILL STEM TEST REPORT

TOOL DIAGRAM

Bird Dog Oil L.L.C

14-19s-10w Rice

1801 Broadway Ste #450 Denver CO 80202

Pioneer-Masden#2-14

Job Ticket: 17380

DST#: 6

ATTN: Derek Patterson

Test Start: 2013.01.19 @ 17:51:00

## Tool Information

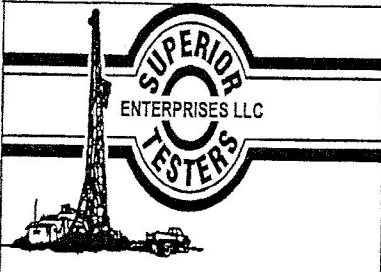
Drill Pipe:	Length: 3196.00 ft	Diameter: 3.80 inches	Volume: 44.83 bbl	Tool Weight: 1000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 55000.00 lb
			Total Volume: 44.83 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial 42000.00 lb
Depth to Top Packer:	3216.00 ft			Final 44000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	72.00 ft			
Tool Length:	100.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut-In Tool	5.00			3193.00	
Hydraulic Tool	5.00			3198.00	
Jars	6.00			3204.00	
Safety Joint	2.00			3206.00	
Packer	5.00			3211.00	28.00 Bottom Of Top Packer
Packer	5.00			3216.00	
Anchor	0.00			3216.00	
Change Over Sub	0.75			3216.75	
Drill Pipe	31.50			3248.25	
Change Over Sub	0.75			3249.00	
Anchor	34.00			3283.00	
Recorder	1.00	6731	Inside	3284.00	
Recorder	1.00	8159	Outside	3285.00	
Bullnose	3.00			3288.00	72.00 Bottom Packers & Anchor

**Total Tool Length: 100.00**



# DRILL STEM TEST REPORT

FLUID SUMMARY

Bird Dog Oil L.L.C 14-19s-10w Rice  
 1801 Broadway Ste #450 Denver CO 80202 Pioneer-Masden#2-14  
 ATTN: Derek Patterson Job Ticket: 17380 DST#: 6  
Test Start: 2013.01.19 @ 17:51:00

## 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: 68.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.78 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psia		
Salinity: 10200.00 ppm			
Filter Cake: 1.00 inches			

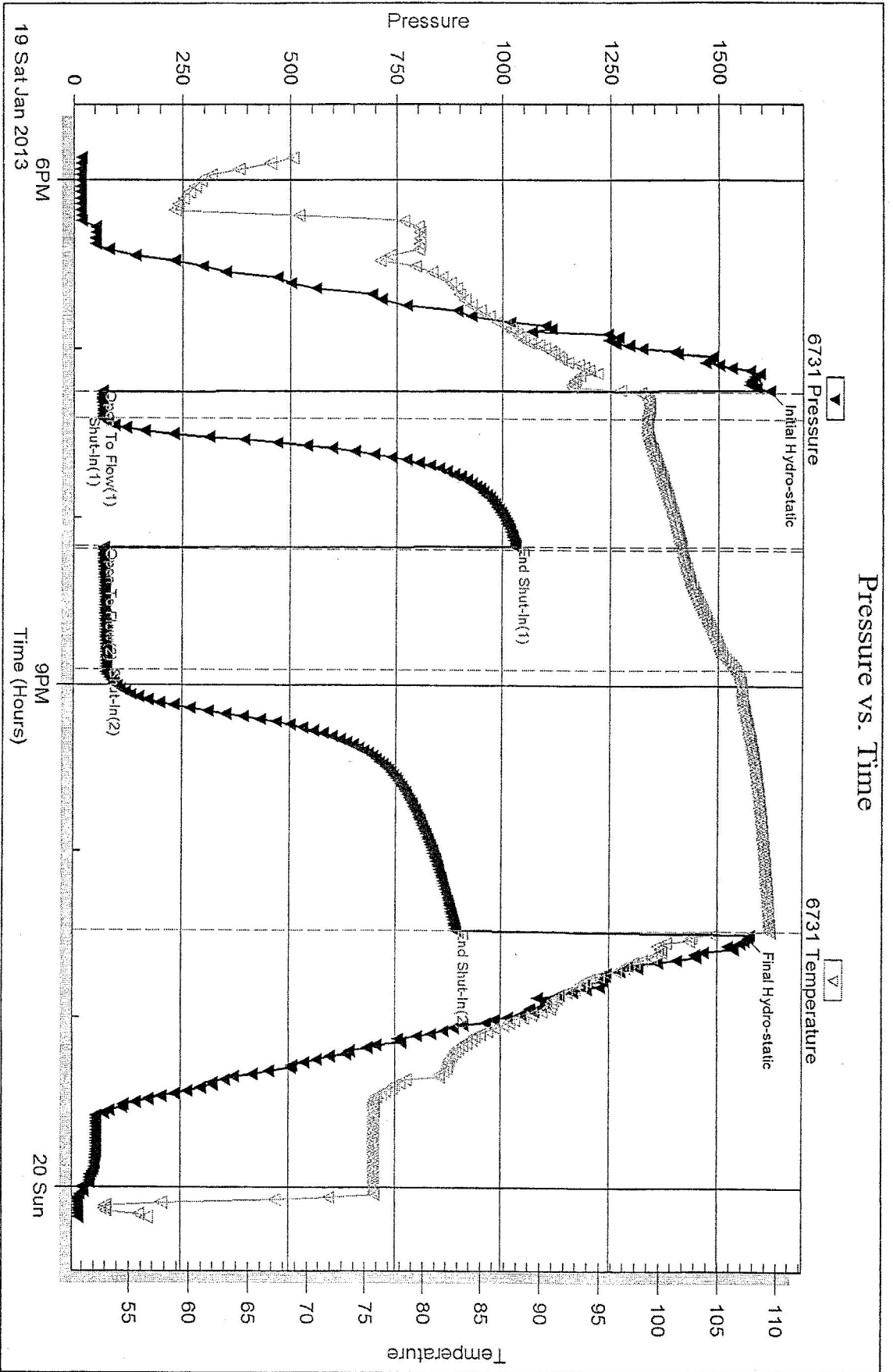
## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	mud cut oil 40%oil 60%mud	0.140
180.00	gas in pipe	2.525

Total Length: 190.00 ft      Total Volume: 2.665 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:

### Pressure vs. Time

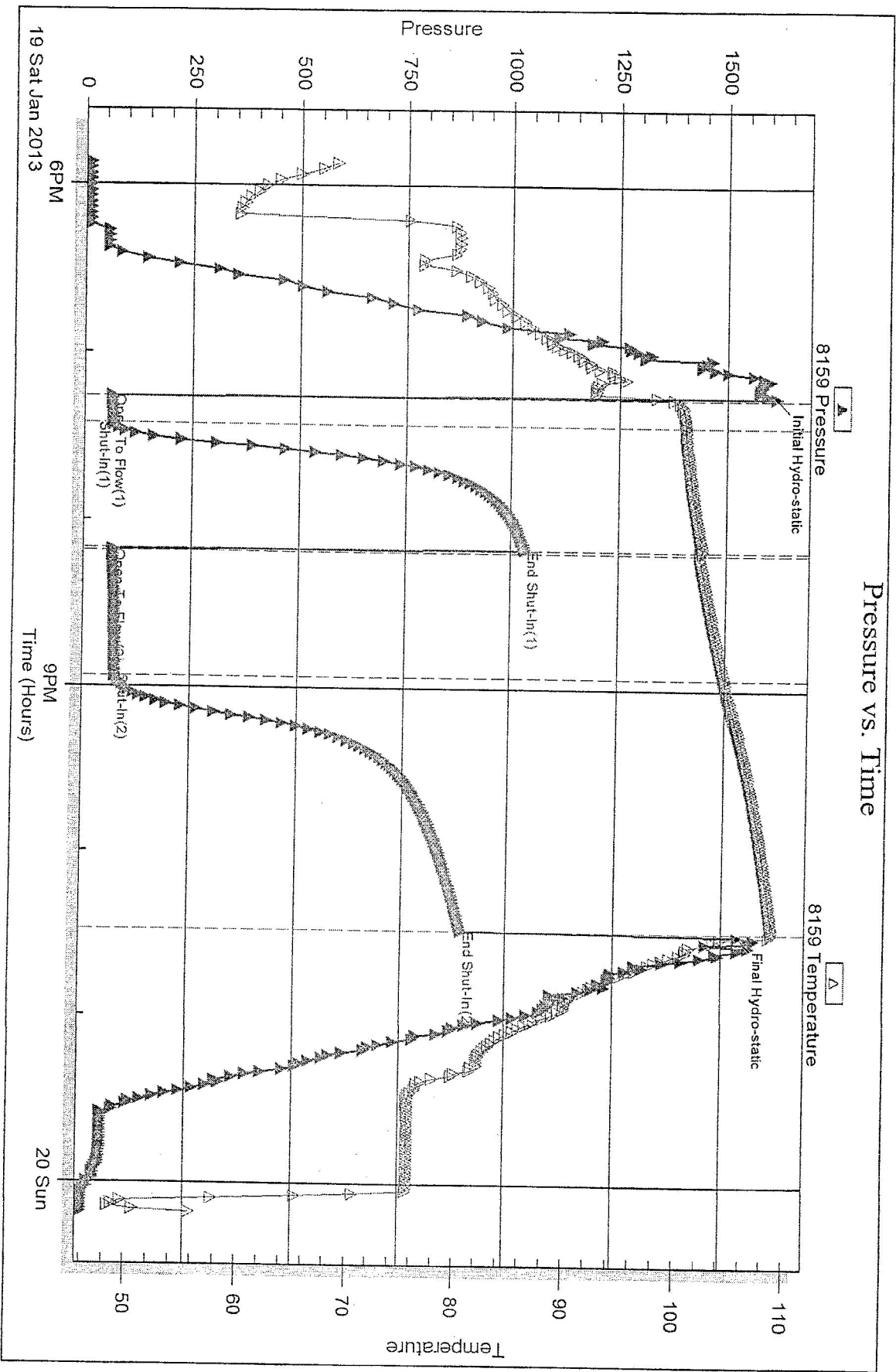


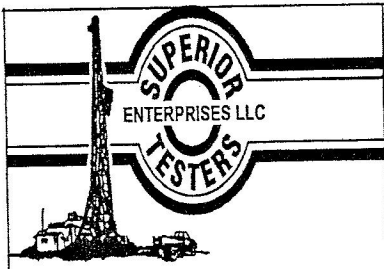
Serial #: 8159

Bird Dog Oil L.L.C

Pioneer-Masden#2-14

DST Test Number: 6





# DRILL STEM TEST REPORT

Bird Dog Oil L.L.C  
 1801 Broadway Ste #450 Denver CO 80202  
 ATTN: Derek Patterson

14-19s-10w Rice  
 Pioneer-Masden#2-14  
 Job Ticket: 17381 DST#: 7  
 Test Start: 2013.01.20 @ 06:15:00

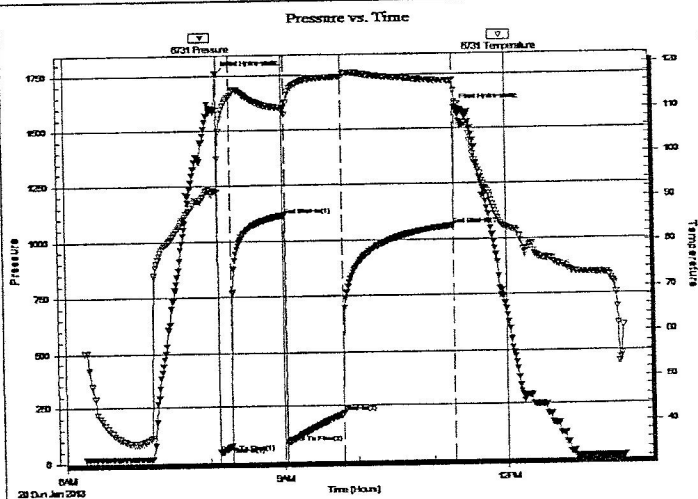
## GENERAL INFORMATION:

Formation: **Arbuckle**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 08:07:30  
 Time Test Ended: 13:34:30  
 Interval: 3288.00 ft (KB) To 3295.00 ft (KB) (TVD)  
 Total Depth: 3295.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Jared Scheck  
 Unit No: 3320-Great Bend-45  
 Reference Elevations: 1757.00 ft (KB)  
 1749.00 ft (CF)  
 KB to GR/CF: 8.00 ft

## Serial #: 6731

Press@RunDepth: 214.97 psia @ ft (KB) Capacity: 5000.00 psia  
 Start Date: 2013.01.20 End Date: 2013.01.20 Last Calib.: 2013.01.20  
 Start Time: 06:16:00 End Time: 13:34:30 Time On Btm: 2013.01.20 @ 08:06:30  
 Time Off Btm: 2013.01.20 @ 11:18:30

TEST COMMENT: 1st Opening 10 Minutes-Strong blow built bottom of bucket in 2 minutes  
 1st Shut-in 45 Minutes-3inch blow back  
 2nd Opening 45 Minutes-Strong blow built bottom of bucket in 3 minutes  
 2nd Shut-in 90 Minutes-Very weak surface blow



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1754.87	91.31	Initial Hydro-static
1	44.32	99.01	Open To Flow (1)
11	71.65	112.65	Shut-In(1)
55	1112.50	110.19	End Shut-In(1)
56	81.79	108.84	Open To Flow (2)
102	214.97	117.28	Shut-In(2)
191	1060.57	116.00	End Shut-In(2)
192	1593.59	113.79	Final Hydro-static

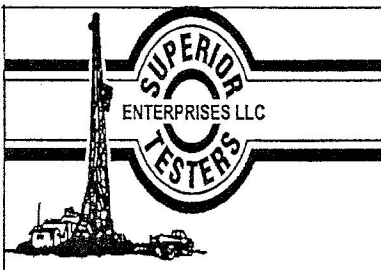
## Recovery

Length (ft)	Description	Volume (bbl)
60.00	oil cut mud 10% mud 90% oil	0.84
480.00	gassy oil 10% gas 90% oil	6.73
0.00	780 feet gas in pipe	0.00
0.00	Gravity oil 44	0.00

## Gas Rates

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





# DRILL STEM TEST REPORT

Bird Dog Oil L.L.C  
 1801 Broadway Ste #450 Denver CO 80202  
 ATTN: Derek Patterson

14-19s-10w Rice  
 Pioneer-Masden#2-14  
 Job Ticket: 17381 DST#: 7  
 Test Start: 2013.01.20 @ 06:15:00

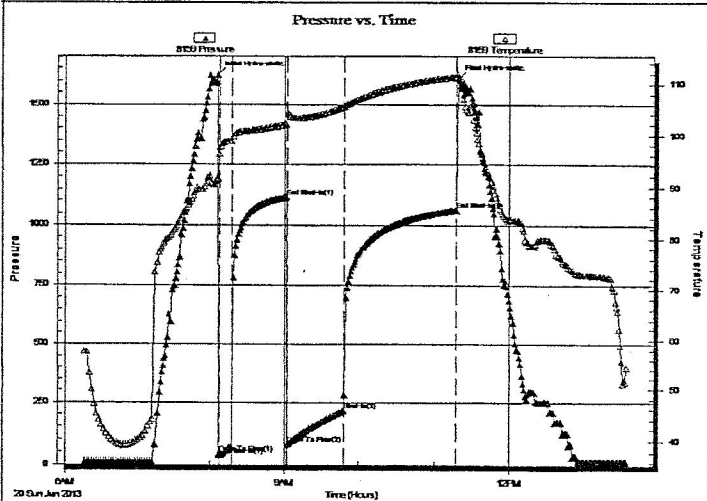
## GENERAL INFORMATION:

Formation: Arbuckle  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 08:07:30  
 Time Test Ended: 13:34:30  
 Interval: 3288.00 ft (KB) To 3295.00 ft (KB) (TVD)  
 Total Depth: 3295.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Jared Scheck  
 Unit No: 3320-Great Bend-45  
 Reference Elevations: 1757.00 ft (KB)  
 1749.00 ft (CF)  
 KB to GR/CF: 8.00 ft

## Serial #: 8159

Press@RunDepth: 1062.25 psia @ ft (KB) Capacity: 5000.00 psia  
 Start Date: 2013.01.20 End Date: 2013.01.20 Last Calib.: 2013.01.20  
 Start Time: 06:16:00 End Time: 13:34:30 Time On Btm: 2013.01.20 @ 08:06:00  
 Time Off Btm: 2013.01.20 @ 11:18:30

TEST COMMENT: 1st Opening 10 Minutes-Strong blow built bottom of bucket in 2 minutes  
 1st Shut-in 45 Minutes-3inch blow back  
 2nd Opening 45 Minutes-Strong blow built bottom of bucket in 3 minutes  
 2nd Shut-in 90 Minutes-Very weak surface blow



## PRESSURE SUMMARY

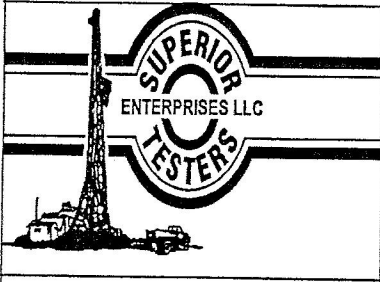
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1624.24	91.97	Initial Hydro-static
1	41.65	96.33	Open To Flow (1)
12	72.24	98.84	Shut-In(1)
56	1115.50	102.12	End Shut-In(1)
57	80.73	104.39	Open To Flow (2)
102	215.42	105.56	Shut-In(2)
192	1062.25	111.44	End Shut-In(2)
193	1606.27	112.01	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
60.00	oil cut mud 10%mud 90%oil	0.84
480.00	gassy oil 10%gas 90%oil	6.73
0.00	780 feet gas in pipe	0.00
0.00	Gravity oil 44	0.00

## Gas Rates

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



# DRILL STEM TEST REPORT

TOOL DIAGRAM

Bird Dog Oil L.L.C

14-19s-10w Rice

1801 Broadway Ste #450 Denver CO 80202

Pioneer-Masden#2-14

ATTN: Derek Patterson

Job Ticket: 17381

DST#:7

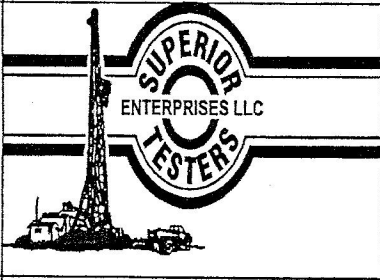
Test Start: 2013.01.20 @ 06:15:00

## Tool Information

Drill Pipe:	Length: 3291.00 ft	Diameter: 3.80 inches	Volume: 46.16 bbl	Tool Weight: 1000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 55000.00 lb
			<u>Total Volume: 46.16 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	31.00 ft			String Weight: Initial 42000.00 lb
Depth to Top Packer:	3288.00 ft			Final 44000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	7.00 ft			
Tool Length:	35.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut-In Tool	5.00			3265.00	
Hydraulic Tool	5.00			3270.00	
Jars	6.00			3276.00	
Safety Joint	2.00			3278.00	
Packer	5.00			3283.00	28.00 Bottom Of Top Packer
Packer	5.00			3288.00	
Anchor	2.00			3290.00	
Recorder	1.00	6731	Inside	3291.00	
Recorder	1.00	8159	Outside	3292.00	
Bullnose	3.00			3295.00	7.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>35.00</b>				



# DRILL STEM TEST REPORT

FLUID SUMMARY

Bird Dog Oil L.L.C

14-19s-10w Rice

1801 Broadway Ste #450 Denver CO 80202

Pioneer-Masden#2-14

Job Ticket: 17381

DST#:7

ATTN: Derek Patterson

Test Start: 2013.01.20 @ 06:15:00

## 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: 68.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.79 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psia		
Salinity: 10200.00 ppm			
Filter Cake: 1.00 inches			

## Recovery Information

Recovery Table

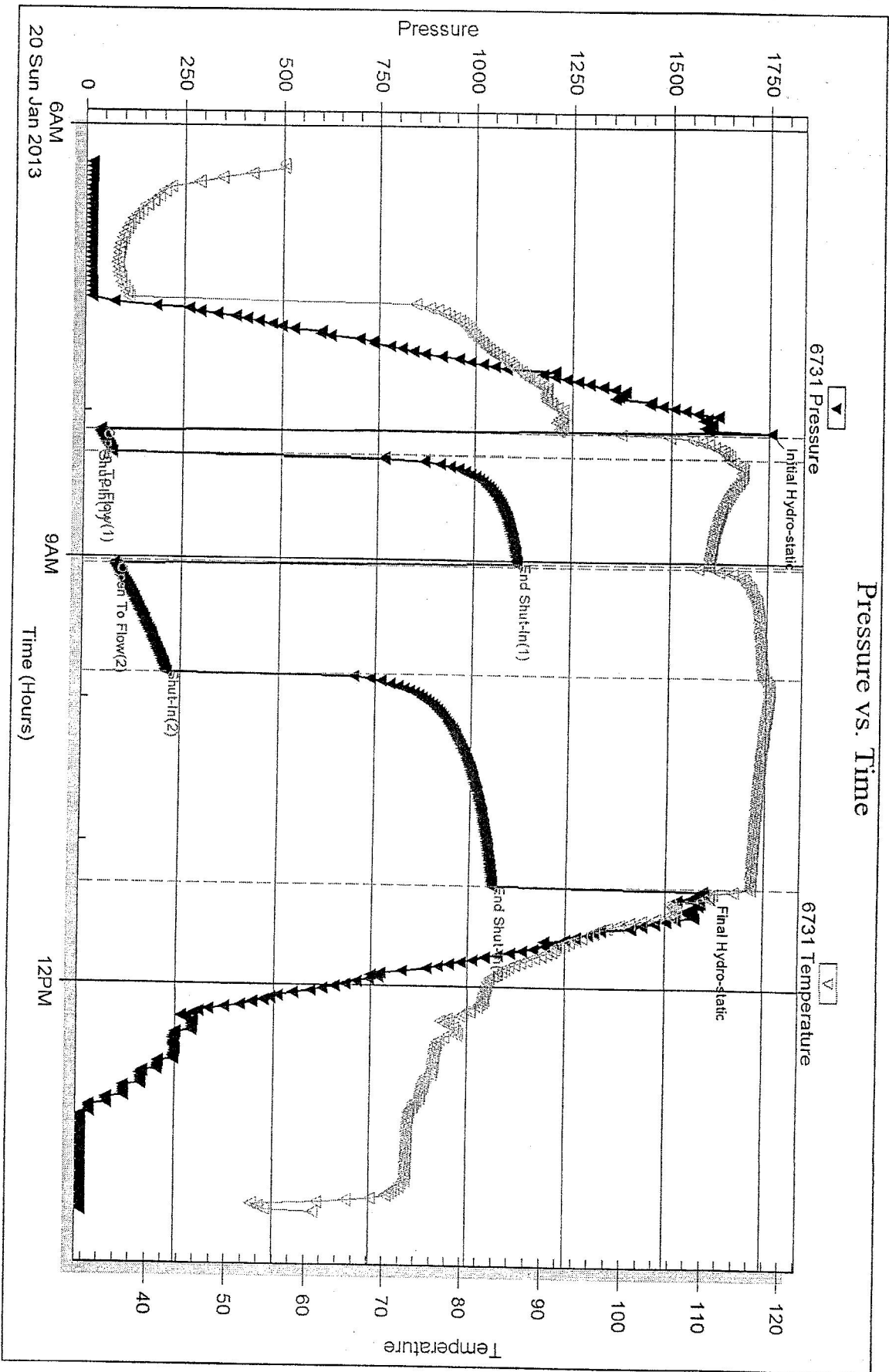
Length ft	Description	Volume bbl
60.00	oil cut mud 10%mud 90%oil	0.842
480.00	gassy oil 10%gas 90%oil	6.733
0.00	780 feet gas in pipe	0.000
0.00	Gravity oil 44	0.000

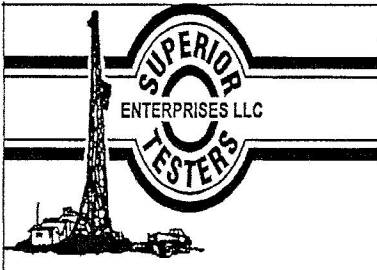
Total Length: 540.00 ft      Total Volume: 7.575 bbl

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

Laboratory Name:      Laboratory Location:

Recovery Comments: Gravity oil 44





# DRILL STEM TEST REPORT

Bird Dog Oil L.L.C

14-19s-10w Rice

1801 Broadway Ste #450 Denver CO 80202

Pioneer-Masden#2-14

ATTN: Derek Patterson

Job Ticket: 17382

DST#: 8

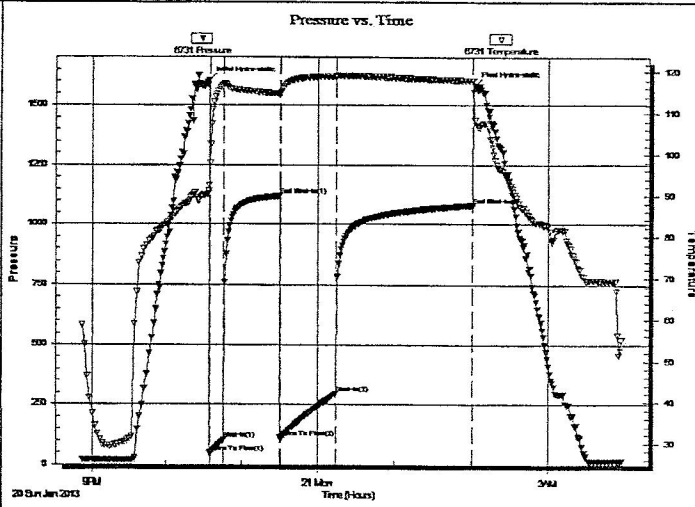
Test Start: 2013.01.20 @ 20:51:00

## GENERAL INFORMATION:

Formation: **Arbuckle**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 22:35:00  
 Time Test Ended: 03:58:30  
 Interval: **3295.00 ft (KB) To 3205.00 ft (KB) (TVD)**  
 Total Depth: **3305.00 ft (KB) (TVD)**  
 Hole Diameter: **7.88 inches** Hole Condition: **Poor**  
 Test Type: **Conventional Bottom Hole (Initial)**  
 Tester: **Jared Scheck**  
 Unit No: **3320-Great Bend -45**  
 Reference Elevations: **1757.00 ft (KB)**  
**1749.00 ft (CF)**  
 KB to GR/CF: **8.00 ft**

**Serial #: 6731** Inside  
 Press@RunDepth: **293.84 psia @ 3301.00 ft (KB)** Capacity: **5000.00 psia**  
 Start Date: **2013.01.20** End Date: **2013.01.21** Last Calib.: **2013.01.21**  
 Start Time: **20:52:00** End Time: **03:58:30** Time On Btm: **2013.01.20 @ 22:34:00**  
 Time Off Btm: **2013.01.21 @ 02:02:30**

**TEST COMMENT:** 1st Opening 10 Minutes-Strong blow built bottom of bucket in 5 minutes  
 1st Shut-in 45 Minutes 1/2 inch blow  
 2nd Opening 45 Minutes-Strong blow built bottom of bucket in 7 minutes  
 2nd Shut-in 90 Minutes-Bottom of bucket blow back



## PRESSURE SUMMARY

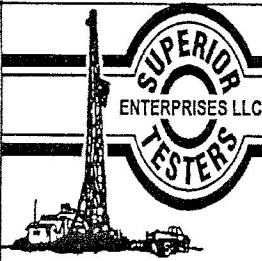
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1601.66	91.13	Initial Hydro-static
1	47.75	97.79	Open To Flow (1)
12	103.49	117.04	Shut-In(1)
56	1120.10	114.84	End Shut-In(1)
57	111.20	115.09	Open To Flow (2)
101	293.84	118.90	Shut-In(2)
207	1079.18	117.91	End Shut-In(2)
209	1581.27	108.37	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
60.00	water oil 40% water 60% oil	0.84
120.00	oil cut muddy water 40% oil 10% mud 50%	1.68
420.00	water 98% water 7% mud	5.89
0.00	300 feet gas in pipe	0.00
0.00	chlorides 13,000 resistivity .1 @ 60 deg	0.00

## Gas Rates

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



# DRILL STEM TEST REPORT

Bird Dog Oil L.L.C  
 1801 Broadway Ste #450 Denver CO 80202  
 ATTN: Derek Patterson

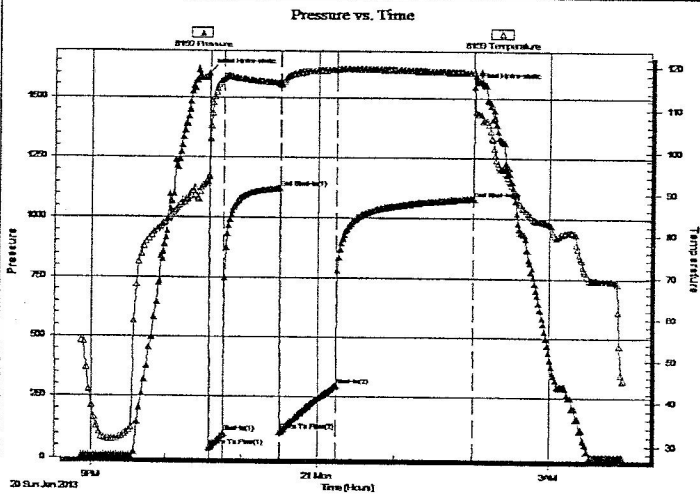
**14-19s-10w Rice**  
**Pioneer-Masden#2-14**  
 Job Ticket: 17382 DST#: 8  
 Test Start: 2013.01.20 @ 20:51:00

## GENERAL INFORMATION:

Formation: **Arbuckle**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 22:35:00  
 Time Test Ended: 03:58:30  
 Interval: 3295.00 ft (KB) To 3205.00 ft (KB) (TVD)  
 Total Depth: 3305.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Poor  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Jared Scheck  
 Unit No: 3320-Great Bend -45  
 Reference Elevations: 1757.00 ft (KB)  
 1749.00 ft (CF)  
 KB to GR/CF: 8.00 ft

Serial #: 8159 Outside  
 Press@RunDepth: 1080.97 psia @ 3302.00 ft (KB) Capacity: 5000.00 psia  
 Start Date: 2013.01.20 End Date: 2013.01.21 Last Calib.: 2013.01.21  
 Start Time: 20:52:00 End Time: 03:59:00 Time On Btm: 2013.01.20 @ 22:34:00  
 Time Off Btm: 2013.01.21 @ 02:01:30

TEST COMMENT: 1st Opening 10 Minutes-Strong blow built bottom of bucket in 5 minutes  
 1st Shut-in 45 Minutes-1/2 inch blow  
 2nd Opening 45 Minutes-Strong blow built bottom of bucket in 7 minutes  
 2nd Shut-in 90 Minutes-Bottom of bucket blow back



## PRESSURE SUMMARY

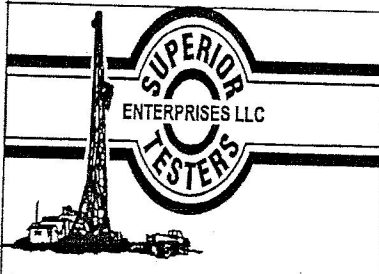
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1599.77	93.93	Initial Hydro-static
1	45.66	102.96	Open To Flow (1)
12	102.58	117.33	Shut-In(1)
56	1123.07	116.14	End Shut-In(1)
57	109.78	115.76	Open To Flow (2)
101	296.09	119.18	Shut-In(2)
207	1080.97	118.74	End Shut-In(2)
208	1547.38	118.92	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
60.00	w ater oil40%w ater 60%oil	0.84
120.00	oil cut muddy w ater 40%oil 10%mud 50%	1.68
420.00	w ater 98%w ater 7%mud	5.89
0.00	300 feet gas in pipe	0.00
0.00	chlorides 13,000 resistivity .1 @ 60 deg	0.00

## Gas Rates

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



# DRILL STEM TEST REPORT

TOOL DIAGRAM

Bird Dog Oil L.L.C

14-19s-10w Rice

1801 Broadway Ste #450 Denver CO 80202

Pioneer-Masden#2-14

ATTN: Derek Patterson

Job Ticket: 17382

DST#: 8

Test Start: 2013.01.20 @ 20:51:00

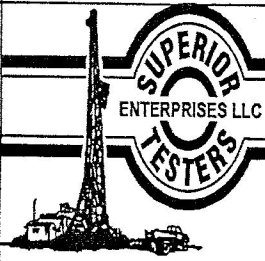
## Tool Information

Drill Pipe:	Length: 3290.00 ft	Diameter: 3.80 inches	Volume: 46.15 bbl	Tool Weight: 1000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 46.15 bbl</u>	Tool Chased 3.00 ft
Drill Pipe Above KB:	23.00 ft			String Weight: Initial 42000.00 lb
Depth to Top Packer:	3295.00 ft			Final 45000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	10.00 ft			
Tool Length:	38.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments: ruined packer

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut-In Tool	5.00			3272.00	
Hydraulic Tool	5.00			3277.00	
Jars	6.00			3283.00	
Safety Joint	2.00			3285.00	
Packer	5.00			3290.00	28.00 Bottom Of Top Packer
Packer	5.00			3295.00	
Anchor	5.00			3300.00	
Recorder	1.00	6731	Inside	3301.00	
Recorder	1.00	8159	Outside	3302.00	
Bullnose	3.00			3305.00	10.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>38.00</b>				



# DRILL STEM TEST REPORT

## FLUID SUMMARY

Bird Dog Oil L.L.C

14-19s-10w Rice

1801 Broadway Ste #450 Denver CO 80202

Pioneer-Masden#2-14

ATTN: Derek Patterson

Job Ticket: 17382

DST#: 8

Test Start: 2013.01.20 @ 20:51:00

### Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 51.00 sec/qt

Water Loss: 9.18 in<sup>3</sup>

Resistivity: ohm.m

Salinity: 10500.00 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
60.00	water oil 40% water 60% oil	0.842
120.00	oil cut muddy water 40% oil 10% mud 50% water	1.683
420.00	water 98% water 7% mud	5.891
0.00	300 feet gas in pipe	0.000
0.00	chlorides 13,000 resistivity .1 @ 60 deg	0.000

Total Length: 600.00 ft      Total Volume: 8.416 bbl

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

Laboratory Name:      Laboratory Location:

Recovery Comments: chlorides 13,000 resistivity .1 @ 60 degrees/ruined packer

Bird Dog Oil L.L.C

14-19s-10w Rice

Pioneer-Masden#2-14

DST # 1

Douglas Sand

2013.01.15



# Pressure vs. Time

