



## DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Incorporated**

8400 East 22ND Street North #700  
PO Box 783188  
Wichita, Kansas 67278+3188

ATTN: Terry Mcleod

**Derstein 17A #1**

**17/28S/22W/Ford**

Start Date: 2012.05.20 @ 04:19:00

End Date: 2012.05.20 @ 12:05:00

Job Ticket #: 17639                      DST #: 1

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

Printed: 2012.05.20 @ 12:23:29



# DRILL STEM TEST REPORT

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17/28S/22W/Ford

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Derstein 17A #1

Job Ticket: 17639

DST#: 1

Test Start: 2012.05.20 @ 04:19:00

## GENERAL INFORMATION:

Formation: **Mississippi**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:27:30

Time Test Ended: 12:05:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Great Bend/172

Interval: **5058.00 ft (KB) To 5120.00 ft (KB) (TVD)**

Reference Elevations: 2443.00 ft (KB)

Total Depth: 5120.00 ft (KB) (TVD)

2432.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 6749

Inside

Press @ RunDepth: 64.14 psia @ 5115.86 ft (KB)

Capacity: 5000.00 psia

Start Date: 2012.05.20

End Date: 2012.05.20

Last Calib.: 2012.05.20

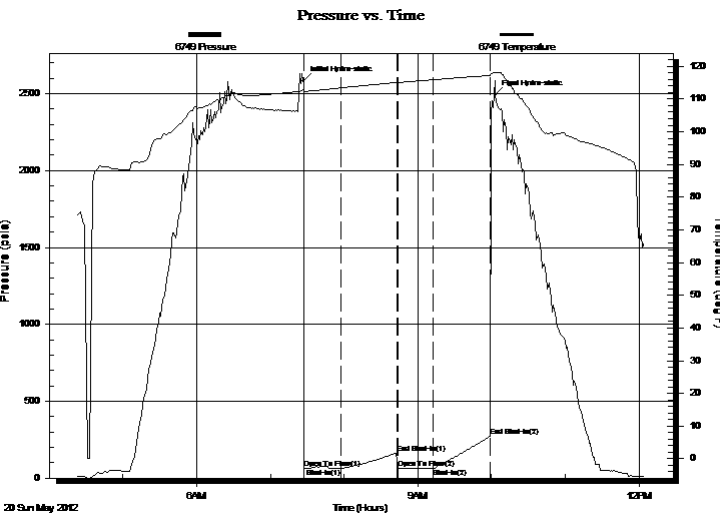
Start Time: 04:19:00

End Time: 12:05:00

Time On Btm: 2012.05.20 @ 07:27:00

Time Off Btm: 2012.05.20 @ 10:03:00

TEST COMMENT: 1ST Open 30 Minutes/Weak blow/Blow built to 3 inches in bucket of water  
 1ST Shut In 45 Minutes/No blow back  
 2ND Open 30 Minutes/Fair blow/Blow built to 9 inches in bucket of water  
 2ND Shut In 45 Minutes/No blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2583.22	112.94	Initial Hydro-static
1	65.09	112.11	Open To Flow (1)
30	64.27	113.37	Shut-In(1)
76	164.64	115.03	End Shut-In(1)
77	62.88	115.03	Open To Flow (2)
105	64.14	115.88	Shut-In(2)
152	271.21	117.15	End Shut-In(2)
156	2494.28	118.07	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
25.00	Mud 100%	0.37

## Gas Rates

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



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 ATTN: Terry Mcleod

Derstein 17A #1

Job Ticket: 17639

DST#: 1

Test Start: 2012.05.20 @ 04:19:00

## GENERAL INFORMATION:

Formation: **Mississippi**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:27:30

Time Test Ended: 12:05:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Great Bend/172

Interval: **5058.00 ft (KB) To 5120.00 ft (KB) (TVD)**

Reference Elevations: 2443.00 ft (KB)

Total Depth: 5120.00 ft (KB) (TVD)

2432.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: **6999** Outside

Press @ RunDepth: 271.04 psia @ 5116.86 ft (KB)

Capacity: 5000.00 psia

Start Date: 2012.05.20

End Date: 2012.05.20

Last Calib.: 2012.05.20

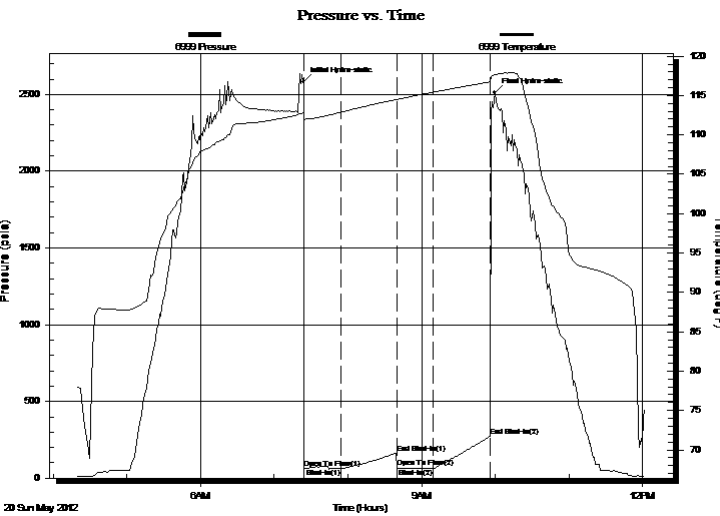
Start Time: 04:19:00

End Time: 12:02:00

Time On Btm: 2012.05.20 @ 07:24:00

Time Off Btm: 2012.05.20 @ 09:59:30

TEST COMMENT: 1ST Open 30 Minutes/Weak blow/Blow built to 3 inches in bucket of water  
 1ST Shut In 45 Minutes/No blow back  
 2ND Open 30 Minutes/Fair blow/Blow built to 9 inches in bucket of water  
 2ND Shut In 45 Minutes/No blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2583.55	112.79	Initial Hydro-static
1	65.03	111.84	Open To Flow (1)
30	64.14	112.88	Shut-In(1)
76	164.77	114.53	End Shut-In(1)
76	67.59	114.50	Open To Flow (2)
105	64.07	115.41	Shut-In(2)
152	271.04	116.72	End Shut-In(2)
156	2512.22	117.71	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
25.00	Mud 100%	0.37

## Gas Rates

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



# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Ritchie Exploration Incorporated

**17/28S/22W/Ford**

8400 East 22ND Street North #700  
 PO Box 783188  
 Wichita, Kansas 67278+3188  
 ATTN: Terry Mcleod

**Derstein 17A #1**

Job Ticket: 17639

**DST#: 1**

Test Start: 2012.05.20 @ 04:19:00

**Tool Information**

Drill Pipe:	Length: 5043.00 ft	Diameter: 3.88 inches	Volume: 73.75 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: 84000.00 lb
			<u>Total Volume: 73.75 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial 72000.00 lb
Depth to Top Packer:	5058.00 ft			Final 72000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	61.86 ft			
Tool Length:	83.86 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			5041.00	
Hydraulic Tool	5.00			5046.00	
Safety Joint	2.00			5048.00	
Packer	5.00			5053.00	22.00 Bottom Of Top Packer
Packer	5.00			5058.00	
Change Over Sub	0.75			5058.75	
Drill Pipe	31.36			5090.11	
Change Over Sub	0.75			5090.86	
Anchor	24.00			5114.86	
Recorder	1.00	6749	Inside	5115.86	
Recorder	1.00	6999	Outside	5116.86	
Bullnose	3.00			5119.86	61.86 Bottom Packers & Anchor

**Total Tool Length: 83.86**



# DRILL STEM TEST REPORT

## FLUID SUMMARY

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**17/28S/22W/Ford**

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**Derstein 17A #1**

Job Ticket: 17639

**DST#: 1**

Test Start: 2012.05.20 @ 04:19:00

### Mud and Cushion Information

Mud Type: Gel Chem  
Mud Weight: 9.00 lb/gal  
Viscosity: 52.00 sec/qt  
Water Loss: 11.59 in<sup>3</sup>  
Resistivity: ohm.m  
Salinity: 8700.00 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
25.00	Mud 100%	0.366

Total Length: 25.00 ft      Total Volume: 0.366 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6749

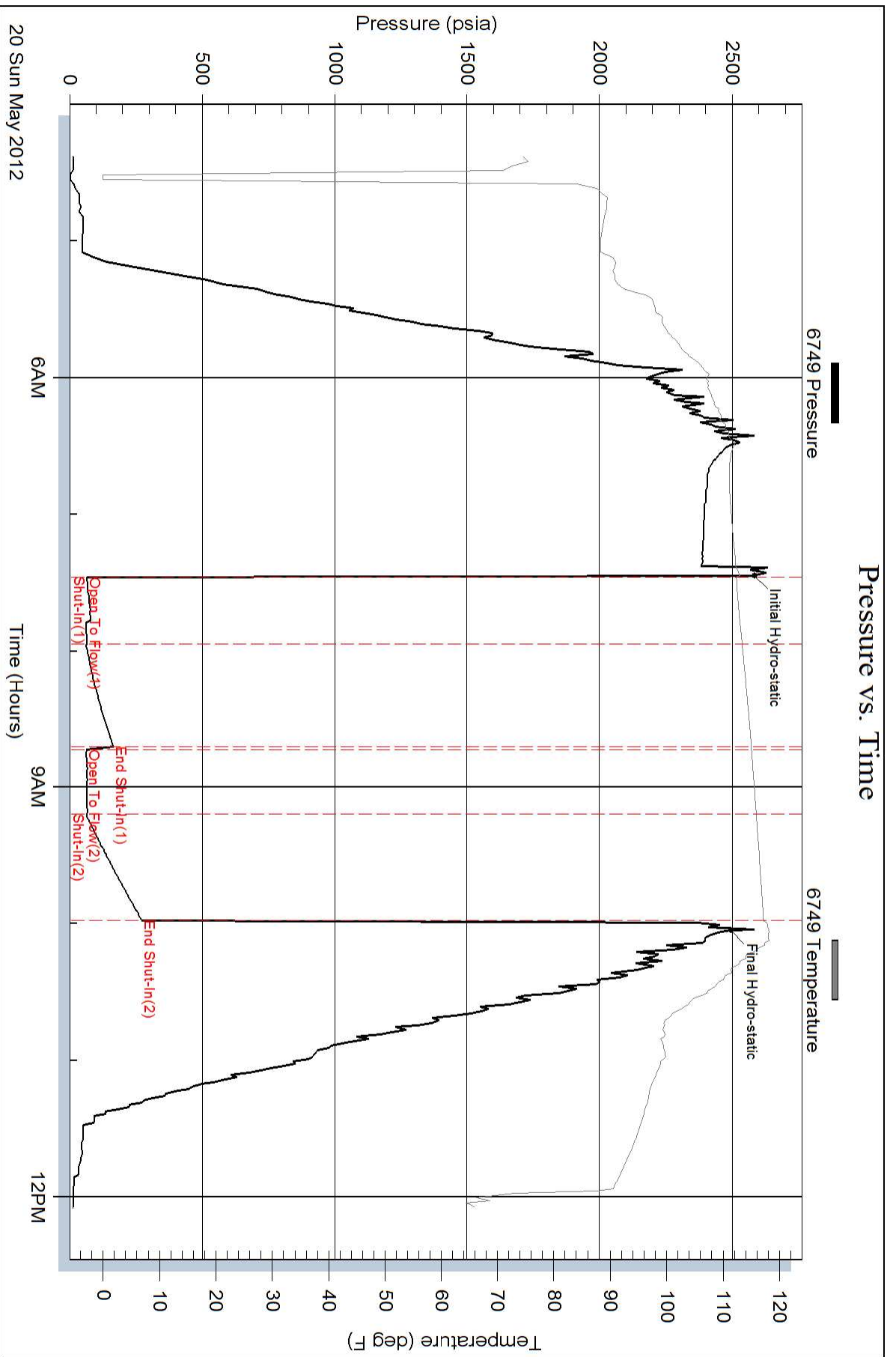
Inside

Ritchie Exploration Incorporated

Dersten 17A #1

DST Test Number: 1

### Pressure vs. Time



Superior Testers Enterprises LLC

Ref. No: 17639

Printed: 2012.05.20 @ 12:23:30

Serial #: 6999

Outside Ritchie Exploration Incorporated

Dersten 17A #1

DST Test Number: 1

