

1-11-14

Form ACO-1

June 2009

Form Must Be Typed

Form must be Signed

All blanks must be Filled

KANSAS CORPORATION COMMISSION, OIL & GAS CONSERVATION DIVISION

ORIGINAL

CONFIDENTIAL

WELL COMPLETION FORM, WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 4767, Name: Ritchie Exploration, Inc., Address 1: P.O. Box 783188, Address 2: Wichita, State: KS, Zip: 67278 + 3188, Contact Person: John Niernberger, Phone: (316) 691-9500, CONTRACTOR: License # 30606, Name: Murfin Drilling Company, Inc., Wellsite Geologist: Dave Williams, Purchaser:

Designate Type of Completion: [X] New Well [] Re-Entry [] Workover, [X] Oil [] WSW [] SWD [] SIOW, [] Gas [] D&A [] ENHR [] SIGW, [] OG [] GSW [] Temp. Abd., [] CM (Coal Bed Methane), [] Cathodic [] Other (Core, Expl., etc.):

If Workover/Re-entry: Old Well Info as follows: Operator: Well Name: Original Comp. Date: Original Total Depth: [] Deepening [] Re-perf. [] Conv. to ENHR [] Conv. to SWD [] Conv. to GSW, [] Plug Back: Plug Back Total Depth, [] Commingled Permit #: [] Dual Completion Permit #: [] SWD Permit #: [] ENHR Permit #: [] GSW Permit #:

9/16/11 9/26/11 9/26/11, Spud Date or Recompletion Date Date Reached TD Completion Date or Recompletion Date

API No. 15 - 057-20751-00-00, Spot Description: 110' N & 83' E, W/2 E/2 NE Sec. 6 Twp. 28 S. R. 22 [] East [X] West, 1,210 Feet from [X] North [] South Line of Section, 907 Feet from [X] East [] West Line of Section, Footages Calculated from Nearest Outside Section Corner: [X] NE [] NW [] SE [] SW, County: Ford, Lease Name: Pinkney-Rohr Well #: 1, Field Name: Producing Formation: Mississippian, Elevation: Ground: 2377 Kelly Bushing: 2388, Total Depth: 5170 Plug Back Total Depth: 5098, Amount of Surface Pipe Set and Cemented at: 375 Feet, Multiple Stage Cementing Collar Used? [X] Yes [] No, If yes, show depth set: 1347 Feet, If Alternate II completion, cement circulated from: 1347 feet depth to: surface w/ 400 sx cmt.

Drilling Fluid Management Plan (Data must be collected from the Reserve Pit), Chloride content: 23800 ppm Fluid volume: 800 bbls, Dewatering method used: evaporation, Location of fluid disposal if hauled offsite: Operator Name: Lease Name: Confidential, Quarter Sec. Twp. S. R. [] East [] West, County: Permit #: JAN 11 2014

KCC

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information of side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form (see rule 82-3-107 for confidentiality in excess of 12 months). One copy of all wireline logs and geologist well report shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Signature: Title: Production Manager Date: 1/11/12

KCC Office Use ONLY

[X] Letter of Confidentiality Received Date: 1/11/12 - 1/11/14 RECEIVED, [] Confidential Release Date: JAN 13 2014, [X] Wireline Log Received, [] Geologist Report Received, [] UIC Distribution, ALT [] I [X] II [] III Approved by: KCC WICHITA Date: 1/10/12

Operator Name: Ritchie Exploration, Inc. Lease Name: Pinkney-Rohr Well #: 1
 Sec. 6 Twp. 28 S. R. 22 East West County: Ford

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Electric Log Run <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Submitted Electronically <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>(If no, Submit Copy)</i> List All E. Logs Run: Dual Induction Log Compensated Density/Neutron Log	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input checked="" type="checkbox"/> Sample Name Top Datum <p style="text-align: center;">SEE ATTACHED</p>
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CASING RECORD <input checked="" type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Surface	12-1/4	8-5/8	23	375	Common	275	3%cc, 2% gel
Production	7-7/8	4-1/2	10.5	5161	ASC	200	10% salt, 1% gel, 5#/sx kolseal

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone				

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)	Depth
4	5022'-5026', 5027.5'-5033.5', 5036.5'-5038.5' (11/1/11)	750 gallons 15% NE	

TUBING RECORD: Size: <u>2-3/8"</u> Set At: <u>5015'</u> Packer At: _____ Liner Run: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		CONFIDENTIAL JAN 11 2014
Date of First, Resumed Production, SWD or ENHR. <u>waiting on gas market</u>		Producing Method: <input type="checkbox"/> Flowing <input checked="" type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain) <u>KCC</u>
Estimated Production Per 24 Hours	Oil Bbls. _____ Gas Mcf _____ Water Bbls. _____ Gas-Oil Ratio _____ Gravity _____	

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input checked="" type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5) (Submit ACO-4)</i> <input type="checkbox"/> Other (Specify) _____	PRODUCTION INTERVAL: _____ <p style="text-align: center; font-weight: bold; font-size: 1.2em;">RECEIVED</p>
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Mail to: KCC - Conservation Division, 130 S. Market - Room 2078, Wichita, Kansas 67202

JAN 13 2012

KCC WICHITA



#1 Pinkney-Rohr

1210' FNL & 907' FEL

110'N & 83'E of W/2 E/2 NE

Section 6-28-22W

Ford County, Kansas

API# 15-057-20751-0000

Elevation: 2377' GL: 2388' KB

Sample Tops			Ref. Well
Anhydrite	1379'	+1009	-1
B/Anhydrite	1429'	+959	-2
Heebner	4170'	-1782	-10
Lansing	4310'	-1922	-4
Muncie Shale	4496'	-2108	-14
Stark Shale	4628'	-2240	-12
BKC	4715'	-2327	-9
Marmaton	4766'	-2378	-8
Pawnee	4842'	-2454	-5
Cherokee Shale	4887'	-2499	-7
Atoka Shale	4976'	-2588	-8
Mississippian	5000'	-2612	-10
RTD	5170'	-2782	

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Customer <i>Republic Exploration</i>	Lease No.	Date <i>7-21-11</i>
Lease <i>Pinkney-Rene</i>	Well # <i>1</i>	Service Receipt <i>141401717</i>
Casing <i>4 1/2 11.5</i>	Depth <i>5111</i>	County <i>Field</i>
State <i>Ks</i>	Job Type <i>7 1/2 4 1/2 11.5</i>	Formation
Legal Description <i>1 25 22</i>		

Pipe Data		Perforating Data		Cement Data
Casing size	Tubing Size	Shots/Ft		Lead
Depth	Depth	From	To	<i>SEE</i>
Volume	Volume	From	To	<i>6911-1-1</i>
Max Press	Max Press	From	To	Tail in
Well Connection	Annulus Vol.	From	To	
Plug Depth	Packer Depth	From	To	

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
<i>05:30</i>					<i>arrived / Hold Safety Meeting</i>
<i>06:30</i>					<i>Start Pump 5111 TP 2157</i>
<i>07:00</i>					<i>Install Port Below 200 feet 5111</i>
<i>08:00</i>					<i>Run on Bottom Casing w/Port</i>
<i>1:00</i>					<i>Test Port Lines</i>
<i>1:30</i>					<i>Start Mixing</i>
<i>2:00</i>					<i>Start</i>
<i>3:00</i>			<i>8</i>	<i>2</i>	<i>Plug RT 116 w/ 100% 14.5"</i>
<i>4:00</i>			<i>5</i>	<i>2</i>	<i>Plug House w/ 100% 14.5"</i>
<i>5:00</i>					<i>Shutdown</i>
<i>1:30</i>	<i>85</i>		<i>25</i>	<i>1</i>	<i>Start Port 200 ft 14.5"</i>
<i>2:00</i>					<i>Shutdown & Wash up</i>
<i>3:00</i>					<i>Down Plug</i>
<i>4:30</i>			<i>6</i>	<i>7</i>	<i>Start Disp w/ 100% 14.5"</i>
<i>5:00</i>			<i>7.7</i>	<i>2.7</i>	<i>Slow Rate</i>
<i>6:00</i>	<i>1150</i>		<i>7.2</i>	<i>3.7</i>	<i>Change Plug</i>
<i>7:00</i>			<i>5.2</i>	<i>6</i>	<i>Release 1-1/2 11.5"</i>
<i>11:10</i>					<i>13.6</i>

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Service Units	<i>21455</i>	<i>248677589</i>	<i>3041412805</i>	
Driver Names	<i>M. Johnson</i>	<i>M. Johnson</i>	<i>K. S. Johnson</i>	KCC

Customer Representative: _____ Station Manager: *J. D. Johnson* Cementer: _____
Taylor Printing, Inc.

ALLIED CEMENTING CO., LLC. 036477

REMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT:
Liberals, KS.

DATE <u>9-17-11</u>	SEC. <u>6</u>	TWP. <u>28S</u>	RANGE <u>22W</u>	CALLED OUT	ON LOCATION	JOB START <u>6:30 Am</u>	JOB FINISH <u>7:00 Am</u>
LEASE <u>Pinkney Rohr</u>	WELL # <u>#1</u>	LOCATION <u>Vec Ford KS.</u>	COUNTY <u>Ford</u>	STATE <u>KS.</u>			
OLD OR NEW (Circle one)							

CONTRACTOR Muhtine
 TYPE OF JOB Surface
 HOLE SIZE 2 1/4 T.D. 375
 CASING SIZE 8 5/8 DEPTH 375
 TUBING SIZE DEPTH
 DRILL PIPE DEPTH
 TOOL DEPTH
 PRES. MAX MINIMUM
 MEAS. LINE SHOE JOINT 39.53
 CEMENT LEFT IN CSG.
 PERFS.
 DISPLACEMENT

OWNER
 CEMENT
 AMOUNT ORDERED 275^{sq} Class A
37.5cc 27 gal
 COMMON 275 @ 16.25 4468.75
 POZMIX @
 GEL 5 @ 21.25 106.25
 CHLORIDE 10 @ 58.20 582.00
 ASC @
 @
 @
 @
 @
 @
 @
 @
 @
 @
 HANDLING 290 @ 2.25 652.50
 MILEAGE 2711.50
 TOTAL 8821.00

EQUIPMENT
 PUMP TRUCK CEMENTER Kenny
 # 372 HELPER Jose
 BULK TRUCK
 # 470-467 DRIVER Lenny
 BULK TRUCK
 # DRIVER

REMARKS:
THANK YOU!!!

Circulated Cement to Surface

SERVICE
 DEPTH OF JOB
 PUMP TRUCK CHARGE 1125.00
 EXTRA FOOTAGE 75 @ 95 71.25
 MILEAGE 170 @ 7.00 1190.00
 MANIFOLD 1 @ 200.00 200.00
 Light VMileage 170 @ 4.00 680.00
 @

CHARGE TO: Ritchie Exploration
 STREET
 CITY STATE ZIP

TOTAL 3266.25

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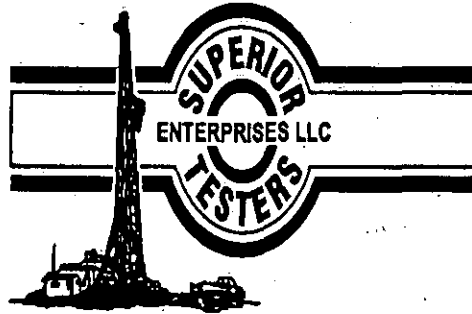
To Allied Cementing Co., LLC.
 You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PLUG & FLOAT EQUIPMENT
 Basket 1 @ 478.00 478.00
 Battle Plat 1 @ 112.00 112.00
 Centralizers 2 @ 64.00 128.00
 Rubber Plug 1 @ 112.00 112.00
 @
 TOTAL 830.00

PRINTED NAME Juan Tinoco
 SIGNATURE Juan Tinoco

SALES TAX (If Any)
 TOTAL CHARGES \$12,917.25
 DISCOUNT \$10,338.80 IF PAID IN 30 DAYS

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 KCC



DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Incorporated**

8100 East 22ND Street North #700
PO Box 783188
Wichita, Kansas 67278+3188

ATTN: Dave Williams

6/28S/22W/Ford

Pinkney-Rohr #1

Start Date: 2011.09.23 @ 10:35:00

End Date: 2011.09.23 @ 17:40:30

Job Ticket #: 15848 DST #: 1

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JAN 11 2014

KCC

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

Printed: 2011.09.26 @ 09:41:10

Ritchie Exploration Incorporated

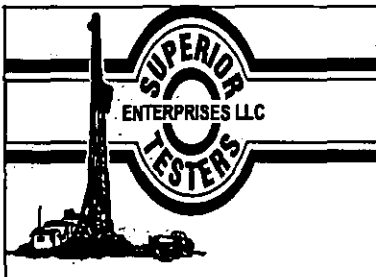
Pinkney-Rohr #1

6/28S/22W/Ford

DST # 1

Mississippi

2011.09.23



DRILL STEM TEST REPORT

Ritchie Exploration Incorporated

Pinkney-Rohr #1

8100 East 22ND Street North #700
 PO Box 783188
 Wichita, Kansas 67278+3188
 ATTN: Dave Williams

6/28S/22W/Ford

Job Ticket: 15848

DST#: 1

Test Start: 2011.09.23 @ 10:35:00

GENERAL INFORMATION:

Formation: **Mississippian**

Deviated: **No Whipstock** ft (KB)

Time Tool Opened: 12:28:30

Time Test Ended: 17:40:30

Test Type: **Conventional Bottom Hole (Initial)**

Tester: **Ken Sw inney**

Unit No: **3325 Pratt/114**

Interval: **4959.00 ft (KB) To 5028.00 ft (KB) (TVD)**

Total Depth: **5028.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Fair**

Reference Elevations: **2391.00 ft (KB)**

2381.00 ft (CF)

KB to GRVCF: **10.00 ft**

Serial #: **6748**

Outside

Press@RunDepth: **78.21 psig @ 5024.81 ft (KB)**

Start Date: **2011.09.23**

End Date: **2011.09.23**

Capacity: **5000.00 psig**

Last Calib.: **2011.09.23**

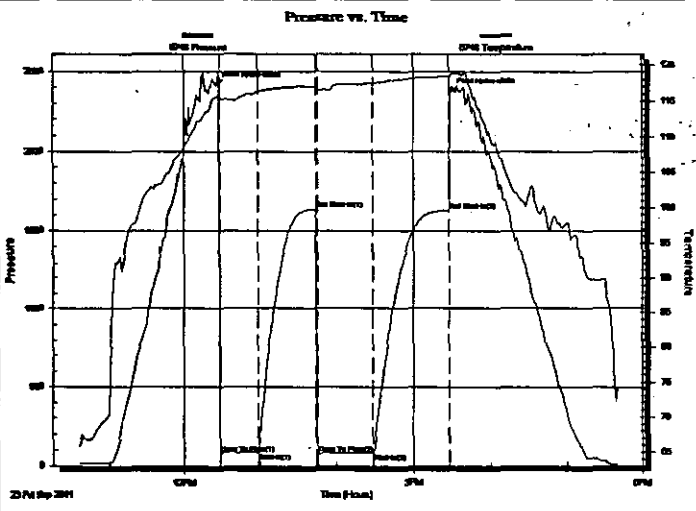
Start Time: **10:36:00**

End Time: **17:40:30**

Time On Btm: **2011.09.23 @ 12:25:30**

Time Off Btm: **2011.09.23 @ 15:29:00**

TEST COMMENT: 1ST Open 30 Minutes/Good blow/Blow to bottom of bucket in 3 minutes
 1ST Shut In 45 Minutes/No blow back
 2ND Open 45 Minutes/Strong blow/Blow to bottom of bucket at open/Gas to surface at open
 2ND Shut In 60 Minutes/No blow back



PRESSURE SUMMARY

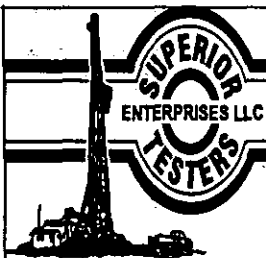
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2405.86	115.49	Initial Hydro-static
3	74.21	115.35	Open To Flow (1)
33	81.46	116.22	Shut-In(1)
79	1637.45	116.97	End Shut-In(1)
81	72.68	116.45	Open To Flow (2)
123	78.21	117.34	Shut-In(2)
182	1631.76	118.34	End Shut-In(2)
184	2367.16	118.55	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
65.00	Mud 100%	0.32

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.50	5.12	35.50
Last Gas Rate	0.50	3.37	23.70
Max. Gas Rate	0.50	5.12	35.50



DRILL STEM TEST REPORT

Ritchie Exploration Incorporated
 8100 East 22ND Street North #700
 PO Box 783188
 Wichita, Kansas 67278+3188
 ATTN: Dave Williams

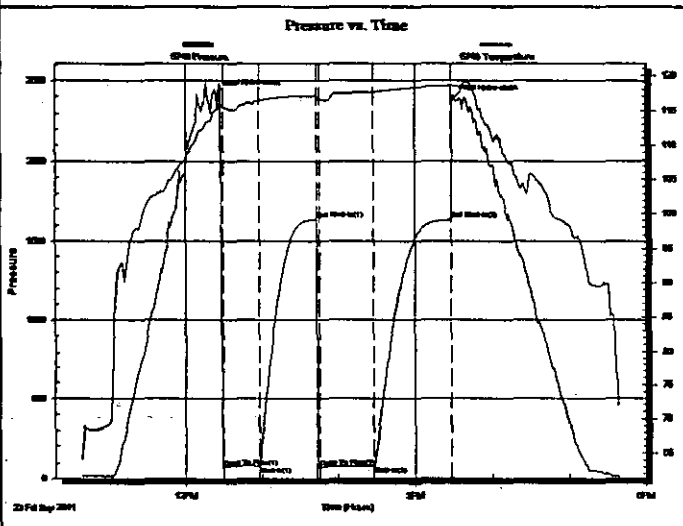
Pinkney-Rohr #1
6/28S/22W/Ford
 Job Ticket: 15848 DST#: 1
 Test Start: 2011.09.23 @ 10:35:00

GENERAL INFORMATION:

Formation: **Mississippian**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 12:28:30
 Tester: Ken Swinney
 Time Test Ended: 17:40:30
 Unit No: 3325 Pratt/114
 Interval: 4959.00 ft (KB) To 5028.00 ft (KB) (TVD)
 Reference Elevations: 2391.00 ft (KB)
 Total Depth: 5028.00 ft (KB) (TVD)
 2381.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 KB to GR/CF: 10.00 ft

Serial #: 6749 Inside
 Press@RunDepth: 1631.10 psig @ 5023.81 ft (KB) Capacity: 5000.00 psig
 Start Date: 2011.09.23 End Date: 2011.09.23 Last Calib.: 2011.09.23
 Start Time: 10:36:00 End Time: 17:39:30 Time On Btm: 2011.09.23 @ 12:24:30
 Time Off Btm: 2011.09.23 @ 15:30:00

TEST COMMENT: 1ST Open 30 Minutes/Good blow/Blow to bottom of bucket in 3 minutes
 1ST Shut In 45 Minutes/No blow back
 2ND Open 45 Minutes/Strong blow/Blow to bottom of bucket at open/Gas to surface at open
 2ND Shut In 60 Minutes/No blow back



PRESSURE SUMMARY

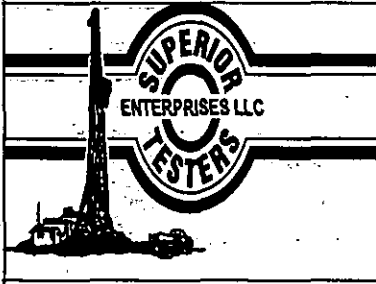
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2414.11	115.23	Initial Hydro-static
5	74.84	115.50	Open To Flow (1)
34	81.21	116.34	Shut-In(1)
80	1636.61	117.08	End Shut-In(1)
82	72.24	116.55	Open To Flow (2)
124	77.40	117.58	Shut-In(2)
183	1631.10	118.51	End Shut-In(2)
186	2386.72	118.38	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
65.00	Mud 100%	0.32

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.50	5.12	35.50
Last Gas Rate	0.50	3.37	23.70
Max. Gas Rate	0.50	5.12	35.50



DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Incorporated
 8100 East 22ND Street North #700
 PO Box 783188
 Wichita, Kansas 67278+3188
 ATTN: Dave Williams

Pinkney-Rohr #1
 6/28S/22W/Ford
 Job Ticket: 15848 DST#: 1
 Test Start: 2011.09.23 @ 10:35:00

Tool Information

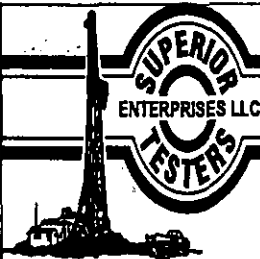
Drill Pipe:	Length: 4707.00 ft	Diameter: 3.88 inches	Volume: 68.84 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 240.00 ft	Diameter: 2.25 inches	Volume: 1.18 bbl	Weight to Pull Loose: 86000.00 lb
			<u>Total Volume: 70.02 bbl</u>	Tool Chased: 1.00 ft
Drill Pipe Above KB:	16.75 ft			String Weight: Initial 82000.00 lb
Depth to Top Packer:	4959.00 ft			Final 84000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	68.81 ft			
Tool Length:	97.56 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			4935.25	
Hydraulic tool	5.00			4940.25	
Change over sub	0.75			4941.00	
Jars	6.00			4947.00	
Safety Joint	2.00			4949.00	
Packer	5.00			4954.00	28.75 Bottom Of Top Packer
Packer	5.00			4959.00	
Anchor	5.00			4964.00	
change over sub	0.75			4964.75	
drill pipe	31.31			4996.06	
change over sub	0.75			4996.81	
anchor	26.00			5022.81	
Recorder	1.00	6749	Inside	5023.81	
Recorder	1.00	6748	Outside	5024.81	
bull plug	3.00			5027.81	68.81 Bottom Packers & Anchor

Total Tool Length: 97.56



DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Incorporated
 8100 East 22ND Street North #700
 PO Box 783188
 Wichita, Kansas 67278+3188
 ATTN: Dave Williams

Pinkney-Rohr #1
6/28S/22W/Ford
 Job Ticket: 15848 **DST#: 1**
 Test Start: 2011.09.23 @ 10:35:00

Mud and Cushion Information

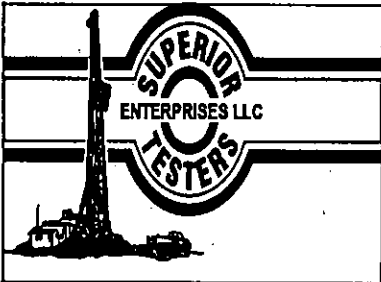
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 59.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.78 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 9100.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
65.00	Mud 100%	0.320

Total Length: 65.00 ft Total Volume: 0.320 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:



DRILL STEM TEST REPORT

GAS RATES

Ritchie Exploration Incorporated

Pinkney-Rohr #1

8100 East 22ND Street North #700

6/28S/22W/Ford

PO Box 783188

Job Ticket: 15848

DST#: 1

Wichita, Kansas 67278+3188

ATTN: Dave Williams

Test Start: 2011.09.23 @ 10:35:00

Gas Rates Information

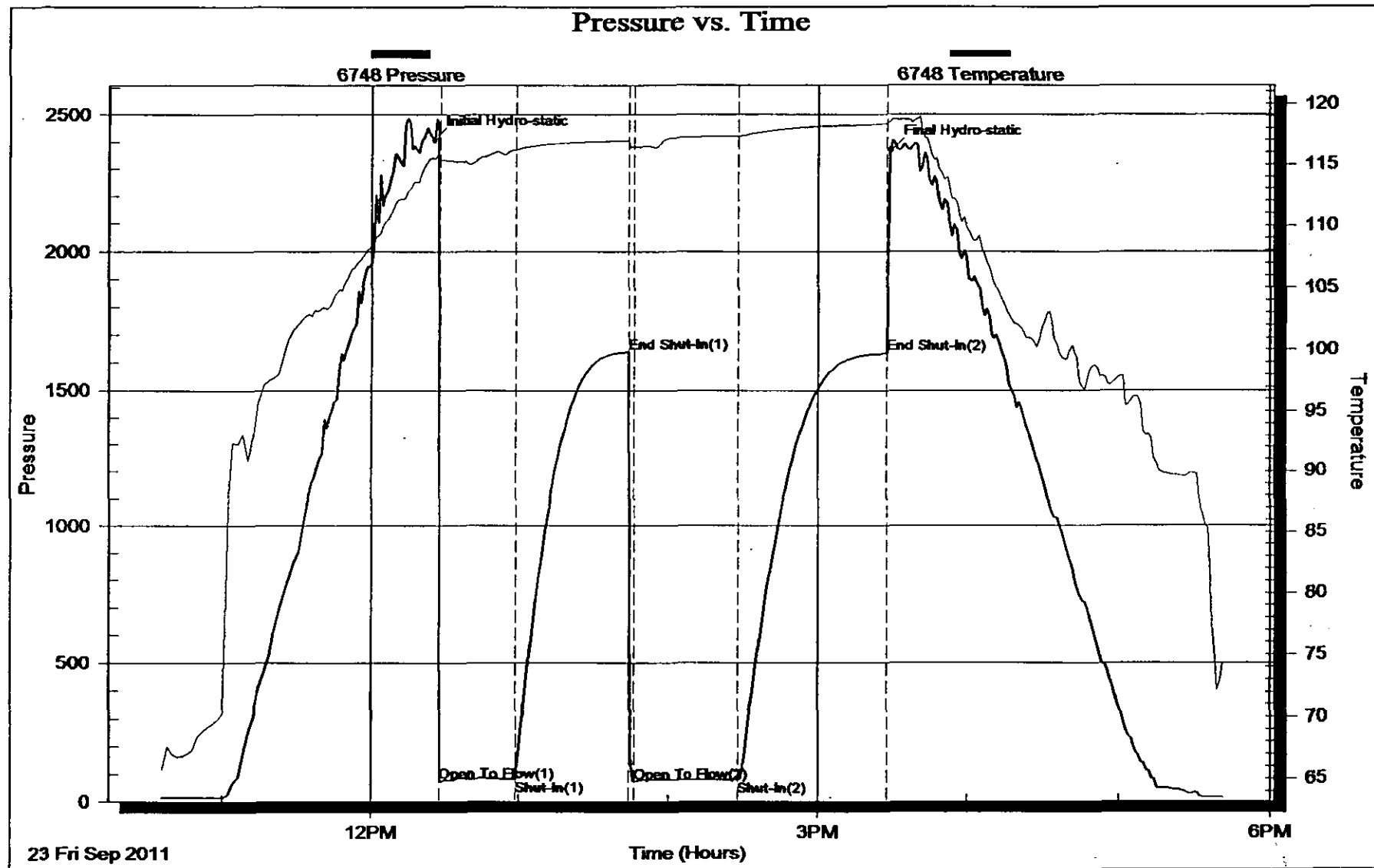
Temperature: 59 (deg F)

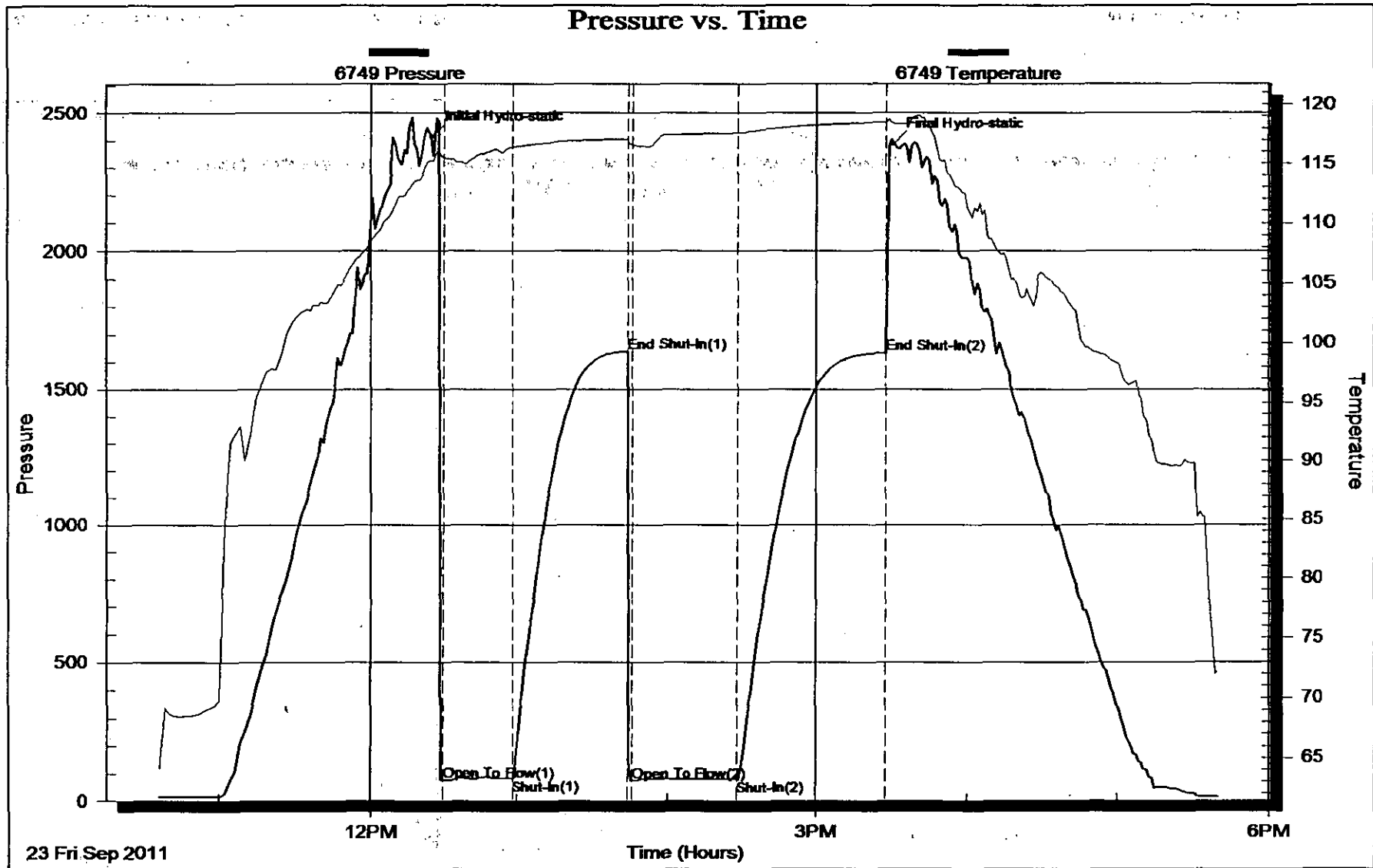
Relative Density: 0.65

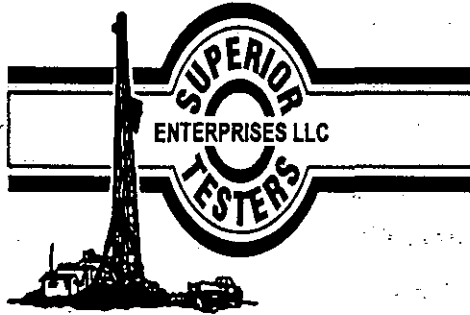
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
2	5	0.50	5.12	35.50
2	10	0.50	3.37	23.71
2	20	0.50	3.11	21.90
2	30	0.50	3.24	22.80
2	40	0.50	3.37	23.70







DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Incorporated**

8100 East 22ND Street North #700
PO Box 783188
Wichita, Kansas 67278+3188

ATTN: Dave Williams

6/28S/22W/Ford

Pinkney-Rohr #1

Start Date: 2011.09.24 @ 01:05:00

End Date: 2011.09.24 @ 10:13:30

Job Ticket #: 15849 DST #: 2

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

Printed: 2011.09.26 @ 09:41:24

Ritchie Exploration Incorporated

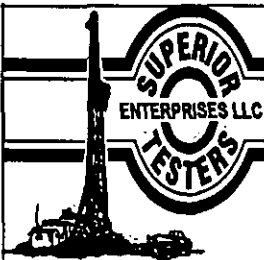
Pinkney-Rohr #1

6/28S/22W/Ford

DST # 2

Mississippian

2011.09.24



DRILL STEM TEST REPORT

Ritchie Exploration Incorporated

Pinkney-Rohr #1

8100 East 22ND Street North #700
 PO Box 783188
 Wichita, Kansas 67278+3188
 ATTN: Dave Williams

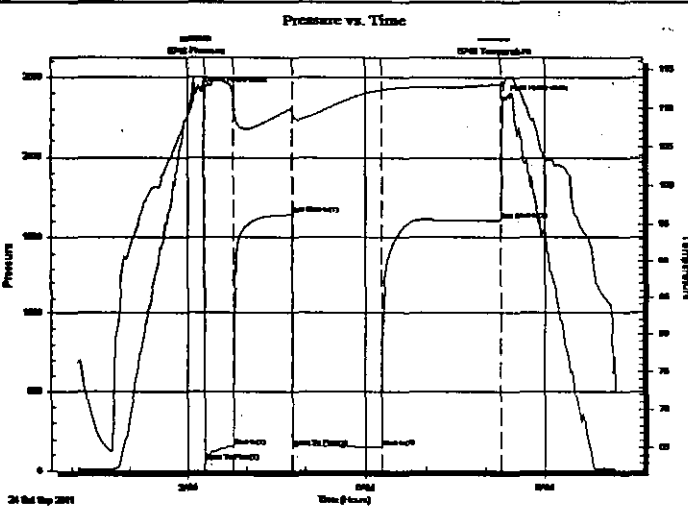
6/28S/22W/Ford
 Job Ticket: 15849 DST#: 2
 Test Start: 2011.09.24 @ 01:05:00

GENERAL INFORMATION:

Formation: **Mississippian**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 03:17:30
 Time Test Ended: 10:13:30
 Interval: 5014.00 ft (KB) To 5035.00 ft (KB) (TVD)
 Total Depth: 5035.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Ken Swinney
 Unit No: 3325 Pratt/114
 Reference Elevations: 2391.00 ft (KB)
 2381.00 ft (CF)
 KB to GR/CF: 10.00 ft

Serial #: 6748 Outside
 Press@RunDepth: 146.93 psig @ 5032.00 ft (KB) Capacity: 5000.00 psig
 Start Date: 2011.09.24 End Date: 2011.09.24 Last Calib.: 2011.09.24
 Start Time: 01:06:00 End Time: 10:13:30 Time On Btm: 2011.09.24 @ 03:14:00
 Time Off Btm: 2011.09.24 @ 08:18:30

TEST COMMENT: 1ST Open 30 Minutes/Strong blow/Blow to bottom of bucket in 1 minute/Gas to surface in 8 minutes
 1ST Shut In 60 Minutes/No blow back
 2ND Open 90 Minutes/Strong blow/Blow to bottom of bucket at open
 2ND Shut In 120 Minutes/No blow back



PRESSURE SUMMARY

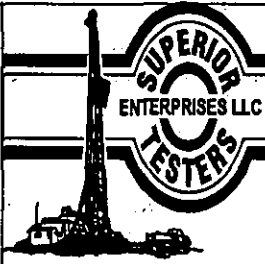
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2413.03	112.55	Initial Hydro-static
4	52.24	113.70	Open To Flow (1)
33	156.24	110.87	Shut-In(1)
93	1641.43	109.99	End Shut-In(1)
93	149.14	109.75	Open To Flow (2)
183	146.93	112.28	Shut-In(2)
302	1607.77	113.14	End Shut-In(2)
305	2360.08	112.40	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	Mud 100%	0.15

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	1.00	8.90	260.00
Last Gas Rate	1.00	22.54	652.02
Max. Gas Rate	1.00	22.54	652.02



DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Incorporated
 8100 East 22ND Street North #700
 PO Box 783188
 Wichita, Kansas 67278+3188
 ATTN: Dave Williams

Pinkney-Rohr #1
6/28S/22W/Ford
 Job Ticket: 15849 DST#: 2
 Test Start: 2011.09.24 @ 01:05:00

Tool Information

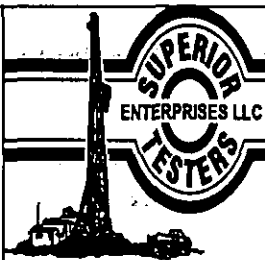
Drill Pipe:	Length: 4770.00 ft	Diameter: 3.88 inches	Volume: 69.76 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	20000.00 lb
Drill Collar:	Length: 240.00 ft	Diameter: 2.25 inches	Volume: 1.18 bbl	Weight to Pull Loose:	92000.00 lb
			Total Volume: 70.94 bbl	Tool Chased:	0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial	78000.00 lb
Depth to Top Packer:	5014.00 ft			Final	78000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	21.00 ft				
Tool Length:	50.00 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			4990.00	
Hydraulic tool	5.00			4995.00	
Change over sub	1.00			4996.00	
Jars	6.00			5002.00	
Safety Joint	2.00			5004.00	
Packer	5.00			5009.00	29.00 Bottom Of Top Packer.
Packer	5.00			5014.00	
Anchor	16.00			5030.00	
Recorder	1.00	6749	Inside	5031.00	
Recorder	1.00	6748	Outside	5032.00	
Bullnose	3.00			5035.00	21.00 Bottom Packers & Anchor

Total Tool Length: 50.00



DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Incorporated
8100 East 22ND Street North #700
PO Box 783188
Wichita, Kansas 67278+3188
ATTN: Dave Williams

Pinkney-Rohr #1
6/28S/22W/Ford
Job Ticket: 15849 DST#: 2
Test Start: 2011.09.24 @ 01:05:00

Mud and Cushion Information

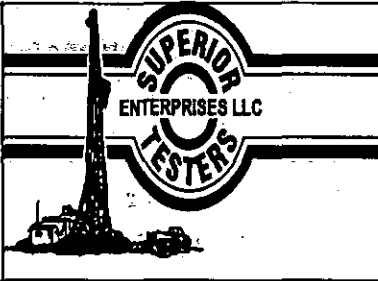
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 59.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.79 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 9100.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	Mud 100%	0.148

Total Length: 30.00 ft Total Volume: 0.148 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:



DRILL STEM TEST REPORT

GAS RATES

Ritchie Exploration Incorporated

Pinkney-Rohr #1

8100 East 22ND Street North #700
PO Box 783188
Wichita, Kansas 67278+3188
ATTN: Dave Williams

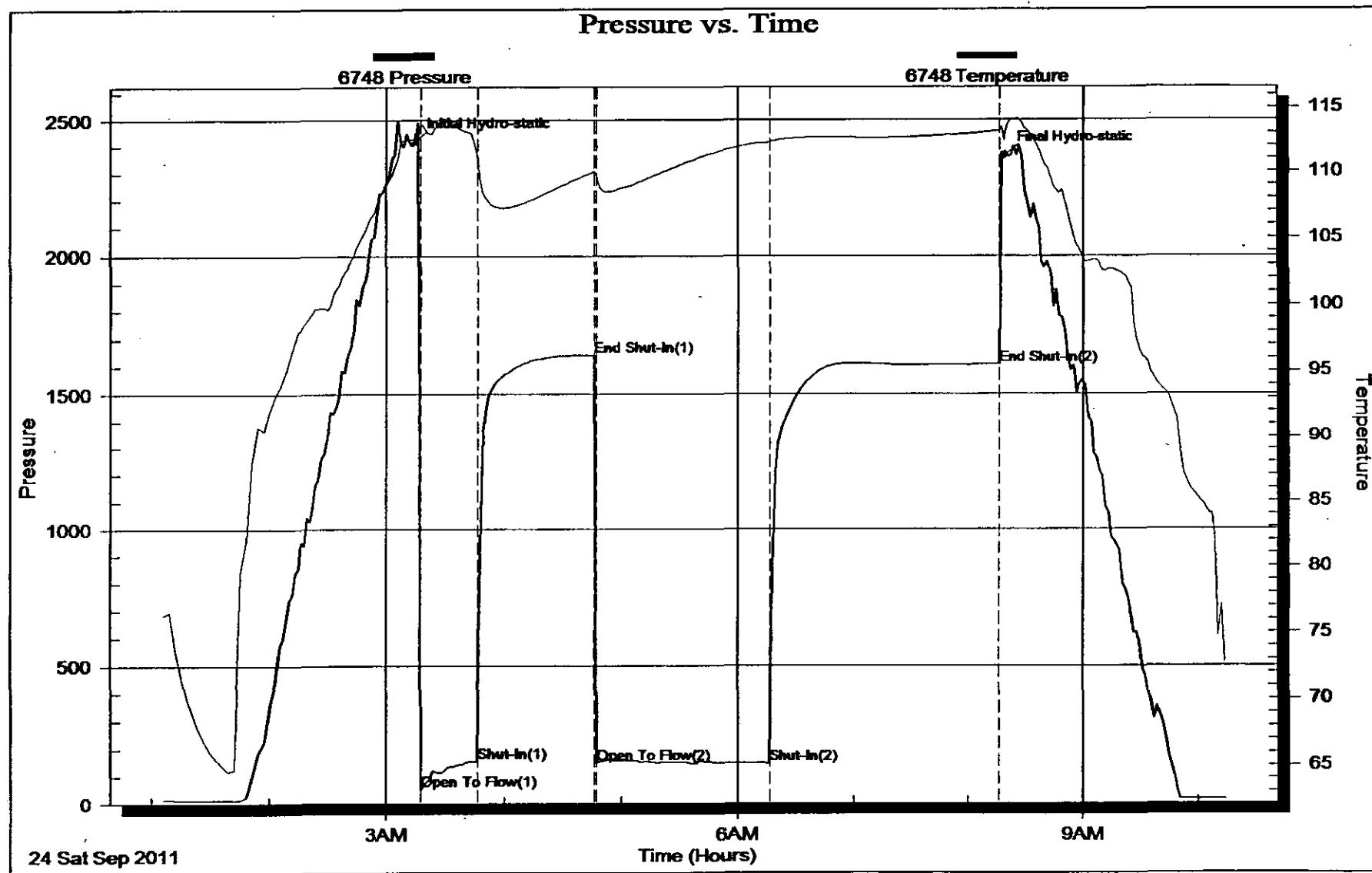
6/28S/22W/Ford
Job Ticket: 15849
DST#: 2
Test Start: 2011.09.24 @ 01:05:00

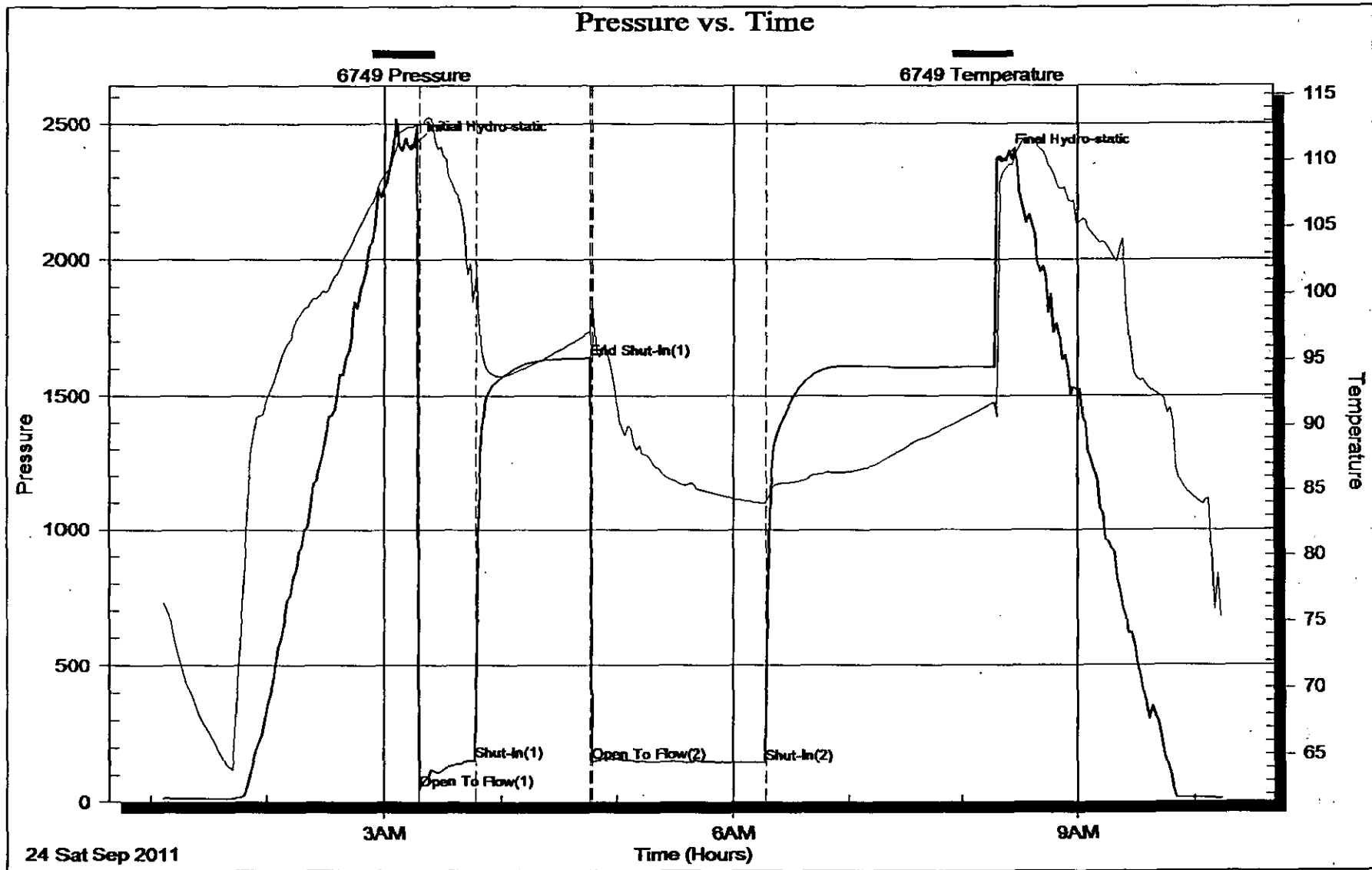
Gas Rates Information

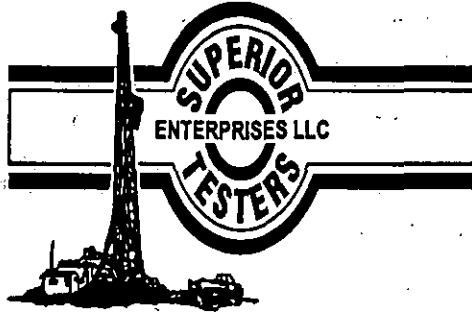
Temperature: 59 (deg F)
Relative Density: 0.65
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
1	10	1.00	8.90	260.00
1	20	1.00	14.99	435.00
1	30	1.00	18.43	534.00
2	10	1.00	21.67	627.01
2	20	1.00	22.54	652.02
2	30	1.00	22.54	652.02
2	40	1.00	22.54	652.02
2	50	1.00	22.54	652.02
2	60	1.00	22.54	652.02
2	70	1.00	22.54	652.02
2	80	1.00	22.54	652.02
2	90	1.00	22.54	652.02







DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Incorporated**

8100 East 22ND Street North #700
PO Box 783188
Wichita, Kansas 67278+3188

ATTN: Dave Williams

6/28S/22W/Ford

Pinkney-Rohr #1

Start Date: 2011.09.24 @ 23:14:00

End Date: 2011.09.25 @ 05:31:30

Job Ticket #: 15850 DST #: 3

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

Printed: 2011.09.26 @ 09:41:38

Ritchie Exploration Incorporated

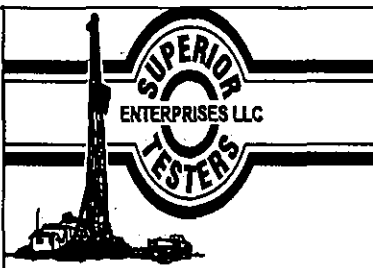
Pinkney-Rohr #1

6/28S/22W/Ford

DST # 3

Mississippian

2011.09.24



DRILL STEM TEST REPORT

Ritchie Exploration Incorporated
 8100 East 22ND Street North #700
 PO Box 783188
 Wichita, Kansas 67278+3188
 ATTN: Dave Williams

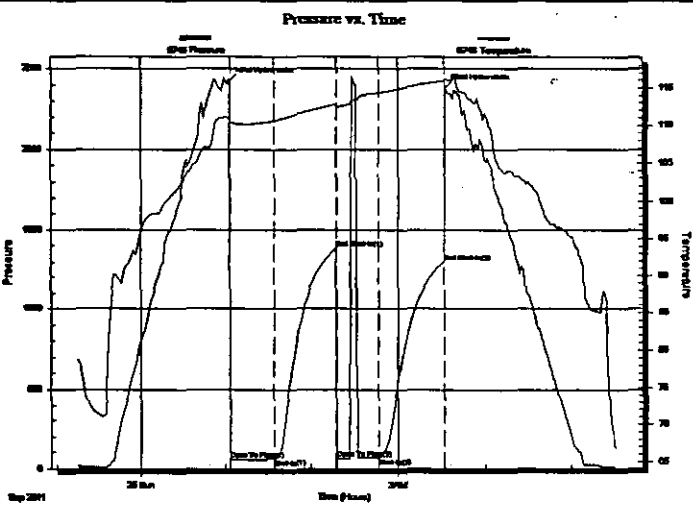
Pinkney-Rohr #1
6/28S/22W/Ford
 Job Ticket: 15850 DST#: 3
 Test Start: 2011.09.24 @ 23:14:00

GENERAL INFORMATION:

Formation: **Mississippian**
 Deviated: **No Whipstock:** ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 01:03:00 Tester: Ken Swinney
 Time Test Ended: 05:31:30 Unit No: 3325 Pratt/114
 Interval: **5041.00 ft (KB) To 5090.00 ft (KB) (TVD)**
 Reference Elevations: 2391.00 ft (KB)
 Total Depth: 5090.00 ft (KB) (TVD) 2381.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 10.00 ft

Serial #: 6748 Outside
 Press@RunDepth: 65.45 psig @ 5086.91 ft (KB) Capacity: 5000.00 psig
 Start Date: 2011.09.24 End Date: 2011.09.25 Last Calib.: 2011.09.25
 Start Time: 23:15:00 End Time: 05:31:30 Time On Btm: 2011.09.25 @ 01:02:30
 Time Off Btm: 2011.09.25 @ 03:32:30

TEST COMMENT: 1ST Open 30 Minutes/Weak surface:blow /Blow built to 1/2 inch
 1ST Shut In 45 Minutes/No blow back
 2ND Open 30 Minutes/No blow /Flush tool/Didnt help
 2ND Shut In 45 Minutes/No blow back



PRESSURE SUMMARY

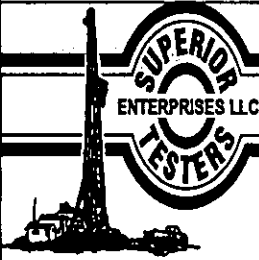
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2424.85	111.02	Initial Hydro-static
1	52.30	110.40	Open To Flow (1)
32	56.98	110.60	Shut-In(1)
75	1385.55	112.82	End Shut-In(1)
75	58.24	112.07	Open To Flow (2)
104	65.45	114.36	Shut-In(2)
149	1301.41	115.98	End Shut-In(2)
150	2381.64	116.17	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud 100%	0.02

Gas Rates

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



DRILL STEM TEST REPORT

Ritchie Exploration Incorporated

Pinkney-Rohr #1

8100 East 22ND Street North #700
 PO Box 783188
 Wichita, Kansas 67278+3188
 ATTN: Dave Williams

6/28S/22W/Ford

Job Ticket: 15850

DST#: 3

Test Start: 2011.09.24 @ 23:14:00

GENERAL INFORMATION:

Formation: **Mississippian**

Deviated: **No** Whipstock: **ft (KB)**

Time Tool Opened: 01:03:00

Time Test Ended: 05:31:30

Test Type: **Conventional Bottom Hole (Initial)**

Tester: **Ken Swinney**

Unit No: **3325 Pratt/114**

Interval: **5041.00 ft (KB) To 5090.00 ft (KB) (TVD)**

Total Depth: **5090.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Fair**

Reference Elevations: **2391.00 ft (KB)**

2381.00 .ft (CF)

KB to GR/CF: **10.00 ft.**

Serial #: 6749

Inside

Press@RunDepth: **1305.36 psig @ 5085.91 ft (KB)**

Capacity: **5000.00 psig**

Start Date: **2011.09.24**

End Date: **2011.09.25**

Last Calib.: **2011.09.25**

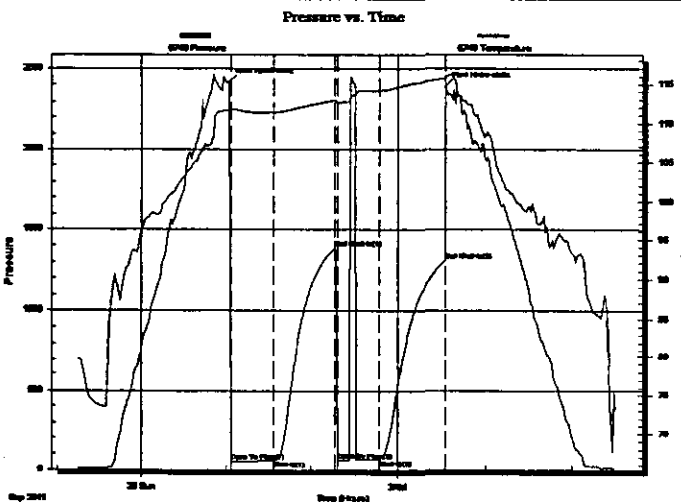
Start Time: **23:15:00**

End Time: **05:31:00**

Time On Btm: **2011.09.25 @ 01:02:30**

Time Off Btm: **2011.09.25 @ 03:32:30**

TEST COMMENT: 1ST Open 30 Minutes/Weak surface blow /Blow built to 1/2 inch
 1ST Shut In 45 Minutes/No blow back
 2ND Open 30 Minutes/No blow /Flush tool/Didnt help
 2ND Shut In 45 Minutes/No blow back



PRESSURE SUMMARY

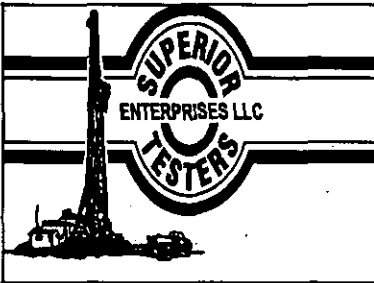
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2417.79	111.63	Initial Hydro-static
1	53.70	111.69	Open To Flow (1)
31	57.84	111.42	Shut-in(1)
75	1385.39	113.01	End Shut-In(1)
76	59.76	112.70	Open To Flow (2)
105	66.96	114.21	Shut-in(2)
150	1305.36	115.75	End Shut-In(2)
150	2389.61	116.07	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud 100%	0.02

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

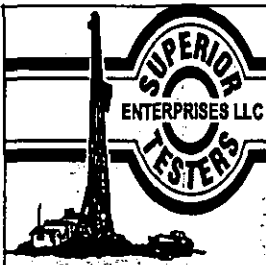
Ritchie Exploration Incorporated
 8100 East 22ND Street North #700
 PO Box 783188
 Wichita, Kansas 67278+3188
 ATTN: Dave Williams

Pinkney-Rohr #1
 6/28S/22W/Ford
 Job Ticket: 15850 DST#: 3
 Test Start: 2011.09.24 @ 23:14:00

Tool Information

Drill Pipe:	Length: 4803.00 ft	Diameter: 3.88 inches	Volume: 70.24 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: 240.00 ft	Diameter: 2.25 inches	Volume: 1.18 bbl	Weight to Pull Loose: 84000.00 lb
			Total Volume: 71.42 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	30.75 ft			String Weight: Initial 82000.00 lb
Depth to Top Packer:	5041.00 ft			Final 82000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	48.91 ft			
Tool Length:	77.66 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			5017.25	
Hydraulic tool	5.00			5022.25	
Change over sub	0.75			5023.00	
Jars	6.00			5029.00	
Safety Joint	2.00			5031.00	
Packer	5.00			5036.00	28.75 Bottom Of Top Packer
Packer	5.00			5041.00	
Anchor	0.00			5041.00	
change over sub	0.75			5041.75	
drill pipe	31.41			5073.16	
change over sub	0.75			5073.91	
anchor	11.00			5084.91	
Recorder	1.00	6749	Inside	5085.91	
Recorder	1.00	6748	Outside	5086.91	
bull plug	3.00			5089.91	48.91 Bottom Packers & Anchor
Total Tool Length:		77.66			



DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Incorporated
8100 East 22ND Street North #700
PO Box 783188
Wichita, Kansas 67278+3188
ATTN: Dave Williams

Pinkney-Rohr #1
6/28S/22W/Ford
Job Ticket: 15850 DST#: 3
Test Start: 2011.09.24 @ 23:14:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 48.00 sec/qt
Water Loss: 21.99 in³
Resistivity: ohm.m
Salinity: 15300.00 ppm
Filter Cake: 2.00 inches

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

Oil API: deg API
Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	Mud 100%	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

