

CONFIDENTIAL

KANSAS CORPORATION COMMISSION  
OIL & GAS CONSERVATION DIVISION

ORIGINAL

Form ACO-1  
October 2008  
Form Must Be Typed

9/7/12

WELL COMPLETION FORM  
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 4767  
Name: Ritchie Exploration, Inc.  
Address 1: P.O. Box 783188  
Address 2: \_\_\_\_\_  
City: Wichita State: KS Zip: 67278 + 3118  
Contact Person: John Niemberger  
Phone: ( 316 ) 691-9500  
CONTRACTOR: License # 5929  
Name: Duke Drilling Co., Inc.  
Wellsite Geologist: Mike Kidwell  
Purchaser: NCRA

Designate Type of Completion:  
 New Well \_\_\_\_\_ Re-Entry \_\_\_\_\_ Workover  
 Oil \_\_\_\_\_ SWD \_\_\_\_\_ SIOW  
\_\_\_\_\_ Gas \_\_\_\_\_ ENHR \_\_\_\_\_ SIGW  
\_\_\_\_\_ CM (Coal Bed Methane) \_\_\_\_\_ Temp. Abd.  
\_\_\_\_\_ Dry \_\_\_\_\_ Other \_\_\_\_\_  
*(Core, WSW, Expl., Cathodic, 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  
\_\_\_\_\_ Plug Back: \_\_\_\_\_ Plug Back Total Depth  
\_\_\_\_\_ Commingled \_\_\_\_\_ Docket No.: \_\_\_\_\_  
\_\_\_\_\_ Dual Completion \_\_\_\_\_ Docket No.: \_\_\_\_\_  
\_\_\_\_\_ Other (SWD or Enhr.?) \_\_\_\_\_ Docket No.: \_\_\_\_\_  
5/10/10                      5/21/10                      5/21/10  
Spud Date or                      Date Reached TD                      Completion Date or  
Recompletion Date                                                                Recompletion Date

API No. 15 - 101-22231-00-00  
Spot Description: 140' N & 70' E  
S/2 NE NE Sec. 7 Twp. 17 S. R. 30  East  West  
850 Feet from  North /  South Line of Section  
590 Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:  
 NE  NW  SE  SW  
County: Lane  
Lease Name: Cramer 7A Well #: 1  
Field Name: \_\_\_\_\_  
Producing Formation: LKC & Johnson  
Elevation: Ground: 2887 Kelly Bushing: 2896  
Total Depth: 4610 Plug Back Total Depth: 4578  
Amount of Surface Pipe Set and Cemented at: 211 Feet  
Multiple Stage Cementing Collar Used?  Yes  No  
If yes, show depth set: 2208 Feet  
If Alternate II completion, cement circulated from: 2208  
feet depth to: surface w/ 235 sx cmt.

Drilling Fluid Management Plan  
*(Data must be collected from the Reserve Pit)*  
Chloride content: 7000 ppm Fluid volume: 660 bbls  
Dewatering method used: evaporation  
Location of fluid disposal if hauled offsite:  
Operator Name: \_\_\_\_\_  
Lease Name: \_\_\_\_\_ License No.: \_\_\_\_\_  
Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West  
County: \_\_\_\_\_ Docket No.: \_\_\_\_\_

**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.

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: 9/7/10  
Subscribed and sworn to before me this 7<sup>th</sup> day of September  
20 10.  
Notary Public: Debra K Phillips  
Date Commission Expires: 5-4-11

**KCC Office Use ONLY**  
 Letter of Confidentiality Received 9/7/10 - 9/21/12  
If Denied, Yes  Date: \_\_\_\_\_  
 Wireline Log Received  
 Geologist Report Received  
\_\_\_\_\_ UIC Distribution  
**RECEIVED**  
**SEP 08 2010**

 **DEBRA K. PHILLIPS**  
Notary Public - State of Kansas  
My Appt. Expires 5-4-11

**KCC WICHITA**

Operator Name: Ritchie Exploration, Inc. Lease Name: Cramer 7A Well #: 1  
 Sec. 7 Twp. 17 S. R. 30  East  West County: Lane

**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 copy of all Electric Wireline 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 <i>(Submit Copy)</i>  List All E. Logs Run: <b>Radiation Guard Log</b>	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input checked="" type="checkbox"/> Sample Name Top Datum  SEE ATTACHED  <div style="text-align: right; font-weight: bold; font-size: 1.2em;">                     KCC                      SEP 07 2010                      CONFIDENTIAL                 </div>
--	---

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	211	common	165	3%cc, 2%gel
Production	7-7/8	4-1/2	10.5	4601	ASC	200	10% salt, 2% gel, 3/4% CD-31

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	4520' - 4524' & 4528.5 - 4531.5 (Johnson) 6/8/10	750 gallons NE	
4	4024' - 4026' (LKC-E) 6/10/10		
4	3983.5' - 3986' (LKC-D) 6/8/10		
4	3969' - 3974' (LKC-C) 6/10/10		
RECEIVED SEP 08 2010 KCC WICHITA			

TUBING RECORD: Size: <u>4554'</u> Set At: <u>2-3/8"</u> Packer At: <u> </u> Liner Run: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Date of First, Resumed Production, SWD or Enhr. <u>6/25/10</u>	Producing Method: <input type="checkbox"/> Flowing <input checked="" type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain) <u> </u>
Estimated Production Per 24 Hours	Oil Bbls. <u>21.53</u> Gas Mcf <u> </u> Water Bbls. <u>79.96</u> Gas-Oil Ratio <u> </u> Gravity <u>28.6</u>

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 type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <input type="checkbox"/> Other (Specify) <u> </u>	PRODUCTION INTERVAL: <u> </u> <u> </u>
---	---	--



**#1 Cramer 7A**

850' FNL & 590' FEL

140' N & 70' E of S/2 NE NE Section 7-17S-30W

Lane County, Kansas

API# 15-101-22231-0000

Elevation: GL: 2887', KB: 2896'

Sample Tops			Ref. Well
Anhydrite	2282'	+614	+1
B/Anhydrite	2305'	+591	-1
Heebner	3903'	-1007	+7
Toronto	3924'	-1028	+6
Lansing	3942'	-1046	+6
Lansing "C"	3971'	-1075	+7
Lansing "D"	3986'	-1090	+8
Lansing "E"	4029'	-1133	+6
Muncie Shale	4109'	-1213	+7
Lansing "H"	4122'	-1226	+6
Lansing "J"	4183'	-1287	+7
Stark Shale	4207'	-1311	+9
Lansing "L"	4262'	-1366	+4
BKC	4289'	-1393	+3
Marmaton	4316'	-1420	+9
Altamont	4331'	-1435	+11
Altamont "B"	4345'	-1449	+17
Pawnee	4403'	-1507	+9
Myric	4440'	-1544	+4
Fort Scott	4457'	-1561	+3
Cherokee Shale	4477'	-1581	+3
Johnson	4517'	-1621	+7
B/Johnson	4534'	-1638	+4
Mississippian	4550'	-1654	+4
RTD	4610'	-1714	

KCC  
SEP 07 2010  
CONFIDENTIAL

RECEIVED  
SEP 08 2010  
KCC WICHITA

# ALLIED CEMENTING CO., LLC. 038845

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

*Cramer 7A?*

SERVICE POINT: *Doddy, KS*

DATE <i>5/10/10</i>	SEC <i>17</i>	TWP <i>17</i>	RANGE <i>30</i>	CALLED OUT	ON LOCATION <i>3:00pm</i>	JOB START <i>5:30pm</i>	JOB FINISH <i>6:00pm</i>
LEASE <i>Cramer 7A</i> WELL # <i>#1</i>		LOCATION <i>Hardy SW to Arapahoe</i>			COUNTY <i>Lane</i>	STATE <i>Kansas</i>	
OLD OR NEW (Circle one)		<i>14 S Winto</i>					

CONTRACTOR *Purke 4*

TYPE OF JOB *Surface*

HOLE SIZE *2 1/4* T.D. *211*

CASING SIZE *8 1/8* DEPTH *211'*

TUBING SIZE DEPTH

DRILL PIPE DEPTH

TOOL DEPTH

PRES. MAX MINIMUM

MEAS. LINE SHOE JOINT

CEMENT LEFT IN CSG. *15*

PERFS.

DISPLACEMENT *12.48*

EQUIPMENT

OWNER *Same*

CEMENT AMOUNT ORDERED *165 SKs Lane*

*350cc 200gals*

COMMON <i>165 SK</i>	@ <i>15.45</i>	<i>2549.25</i>
POZMIX	@	
GEL <i>3</i>	@ <i>20.00</i>	<i>60.00</i>
CHLORIDE <i>6</i>	@ <i>58.00</i>	<i>348.00</i>
ASC	@	
	@	
	@	
	@	
	@	
	@	
	@	
	@	
HANDLING <i>174 SK</i>	@ <i>2.42</i>	<i>421.08</i>
MILEAGE <i>10.95K Lane</i>		<i>870.00</i>
TOTAL		<i>4248.33</i>

SEP 07 2010  
CONFIDENTIAL

PUMP TRUCK CEMENTER *Alan*

# *423-281* HELPER *Kalene*

BULK TRUCK

# *377* DRIVER *Darren*

BULK TRUCK

# DRIVER

REMARKS:

*Cement did circulate*

SERVICE

DEPTH OF JOB *211*

PUMP TRUCK CHARGE *1018*

EXTRA FOOTAGE @

MILEAGE *50* @ *7.02* *351.00*

MANIFOLD @

TOTAL *1369.00*

CHARGE TO: *Ritchie Exp*

STREET

CITY STATE ZIP

PLUG & FLOAT EQUIPMENT

*8 1/2" Wood Plug* @ *69.00*

TOTAL *69.00*

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.

PRINTED NAME *Hector M. Torres*

SIGNATURE

SALES TAX (If Any)

TOTAL CHARGES

DISCOUNT IF PAID IN 30 DAYS

RECEIVED  
SEP 08 2010  
KCC WICHITA

*TEN*

# ALLIED CEMENTING CO., LLC. 038863

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

SERVICE POINT: Ocala, KS

DATE <u>5/28/10</u>	SEC. <u>7</u>	TWP. <u>17</u>	RANGE <u>30</u>	CALLED OUT	ON LOCATION <u>4:30p</u>	JOB START <u>4:30p</u>	JOB FINISH <u>5:00pm</u>
#1 <u>Cramer</u>	WELL # <u>7A</u>	LOCATION <u>Head w to Rd</u>			<u>145</u>	COUNTY <u>Lawe</u>	STATE <u>KS</u>
OLD OR NEW (Circle one)		<u>works</u>					

CONTRACTOR Plains  
 TYPE OF JOB Part Celler  
 HOLE SIZE \_\_\_\_\_ T.D. \_\_\_\_\_  
 CASING SIZE 4 1/2 DEPTH \_\_\_\_\_  
 TUBING SIZE 2 3/8 DEPTH \_\_\_\_\_  
 DRILL PIPE \_\_\_\_\_ DEPTH \_\_\_\_\_  
 TOOL Part Celler DEPTH 2008  
 PRES. MAX \_\_\_\_\_ MINIMUM \_\_\_\_\_  
 MEAS. LINE \_\_\_\_\_ SHOE JOINT \_\_\_\_\_  
 CEMENT LEFT IN CSG. \_\_\_\_\_  
 PERFS. \_\_\_\_\_  
 DISPLACEMENT \_\_\_\_\_

OWNER Same  
 CEMENT  
 AMOUNT ORDERED 450 SK, 600/40  
690 yd 1/4 1/4 Plaster, 500 lb Hells  
needed 235 SK  
 COMMON 140 @ 15.45 2163.00  
 POZMIX 95 @ 8.00 760.00  
 GEL \_\_\_\_\_ @ \_\_\_\_\_ \_\_\_\_\_  
 CHLORIDE \_\_\_\_\_ @ \_\_\_\_\_ \_\_\_\_\_  
 ASC \_\_\_\_\_ @ \_\_\_\_\_ \_\_\_\_\_  
 Floplast 59.16 @ 2.50 147.90  
 Hells 200 lb - 4 SK @ 37.00 74.00  
 HANDLING 488 @ 2.40 1171.20  
 MILEAGE 10.5K mi @ \_\_\_\_\_ 244.00  
 TOTAL 6829.10

EQUIPMENT  
 PUMP TRUCK CEMENTER Alan  
 # 422 HELPER Terry  
 BULK TRUCK  
 # 391 DRIVER Terry  
 BULK TRUCK  
 # \_\_\_\_\_ DRIVER \_\_\_\_\_

REMARKS:  
Test tool to 1200 PSI, Well open tool,  
Est. blow by 235 SK, Collet 690 yd 1/4 1/4  
Plaster, 500 lb Hells, cement, 1/4  
celler, close tool test to 1200 Hells,  
Run 470, Reverse (Close)

DISPLACE W/ 8 BBL H<sub>2</sub>O SERVICE  
 DEPTH OF JOB \_\_\_\_\_  
 PUMP TRUCK CHARGE \_\_\_\_\_ 1285.00  
 EXTRA FOOTAGE \_\_\_\_\_ @ \_\_\_\_\_ \_\_\_\_\_  
 MILEAGE 50 miles @ 7.00 350.00  
 MANIFOLD \_\_\_\_\_ @ \_\_\_\_\_ \_\_\_\_\_  
 TOTAL 1535.00

CHARGE TO: Ritchie Exp  
 STREET \_\_\_\_\_  
 CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

Cement Did Circulate to  
PIT AA

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.

PRINTED NAME Gary Roub  
 SIGNATURE Gary Roub

PLUG & FLOAT EQUIPMENT  
 \_\_\_\_\_ @ \_\_\_\_\_ \_\_\_\_\_  
 \_\_\_\_\_ @ \_\_\_\_\_ \_\_\_\_\_  
 \_\_\_\_\_ @ \_\_\_\_\_ \_\_\_\_\_  
 \_\_\_\_\_ @ \_\_\_\_\_ \_\_\_\_\_  
 \_\_\_\_\_ @ \_\_\_\_\_ \_\_\_\_\_  
 TOTAL \_\_\_\_\_  
 SALES TAX (If Any) \_\_\_\_\_  
 TOTAL CHARGES \_\_\_\_\_  
 DISCOUNT \_\_\_\_\_ IF PAID IN 30 DAYS

KCC  
 SEP 07 2010  
 CONFIDENTIAL

RECEIVED  
 SEP 08 2010  
 KCC WICHITA

FCW

# ALLIED CEMENTING CO., LLC. 039307

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

SERVICE POINT:  
Oakley  
5-22-10

DATE <u>5-21-10</u>	SEC <u>7</u>	TWP <u>12</u>	RANGE <u>30</u>	CALLED OUT	ON LOCATION	JOB START <u>2:00AM</u>	JOB FINISH <u>3:00AM</u>
LEASE <u>Cramer 2A</u>	WELL #	LOCATION <u>Healy 3W 44S W10</u>	COUNTY <u>Lane</u>	STATE <u>KS</u>			
OLD OR NEW (Circle one)							

CONTRACTOR Duke Drilling Rig 4  
 TYPE OF JOB Production  
 HOLE SIZE 7 7/8 T.D. 4610'  
 CASING SIZE 4 1/2 DEPTH 4608'  
 TUBING SIZE DEPTH  
 DRILL PIPE DEPTH  
 TOOL Port collar DEPTH 2210'  
 PRES. MAX. MINIMUM  
 MEAS. LINE SHOE JOINT 21.55'  
 CEMENT LEFT IN CSG. 21.55'  
 PERFS.  
 DISPLACEMENT 72.81 BBL

OWNER same  
 CEMENT  
 AMOUNT ORDERED 230 SKS ASC 10050LIT  
296 gal 5" Gilsonite 340 FT  
CD-31 500 gal WFR-2  
 COMMON @  
 POZMIX @  
 GEL @  
 CHLORIDE @  
 ASC 230 SKS @ 18.60 4278.00  
 @  
 @  
GILsonite 1150# @ .89 1023.50  
 @  
WFR-2 500gal @ 1.27 635.00  
 @  
CD-31 162# @ 9.25 1514.70  
 @  
 HANDLING 278 SKS @ 2.40 667.20  
 MILEAGE 10 SK/mile 1390.00  
 TOTAL 9508.40

EQUIPMENT  
 PUMP TRUCK CEMENTER Andrew  
 # 423-281 HELPER Larene  
 BULK TRUCK  
 # 347 DRIVER Jerry  
 BULK TRUCK  
 # DRIVER

REMARKS:  
Pump 500gal WFR-2 plug rat  
hole 30 SKS mix 200 SKS ASC  
Wash pump and lines clean  
Displace plug 800# LIFT  
Pressure 1400 psi @ 1300#  
Plug landed FLOT held.

Thank you

CHARGE TO: Ritchie Exploration  
 STREET \_\_\_\_\_  
 CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

SERVICE  
 DEPTH OF JOB 4608'  
 PUMP TRUCK CHARGE 2185.00  
 EXTRA FOOTAGE @  
 MILEAGE 50 miles @ 2.00 350.00  
 MANIFOLD @  
 @  
 @  
 TOTAL 2535.00

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.

PRINTED NAME Gary Ryan  
 SIGNATURE Gary Ryan

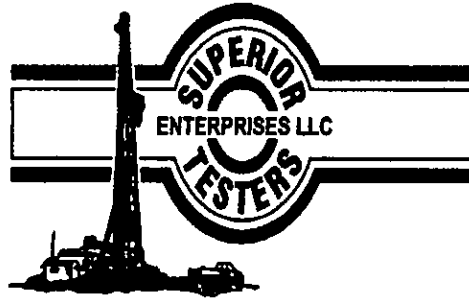
PLUG & FLOAT EQUIPMENT  
4 1/2  
1 Guide shoe @ 73.00  
1 AFU IN set @ 101.00  
4 Baskets @ 147.00 588.00  
9 TurboLizers @ 39.00 351.00  
1 Port collar @ 1673.00 1673.00  
1 Rubber plug 62.00  
 TOTAL 2848.00

SALES TAX (If Any) \_\_\_\_\_  
 TOTAL CHARGES \_\_\_\_\_  
 DISCOUNT \_\_\_\_\_ IF PAID IN 30 DAYS

KCC  
 SEP 07 2010  
 CONFIDENTIAL

RECEIVED  
 SEP 08 2010  
 KCC WICHITA

Re



## DRILL STEM TEST REPORT

Prepared For: **RITCHIE EXPORATION INC**

8100 3 22ND ST N 700  
BOX 783188  
WICHITA KS 67278

ATTN: MIKE KIDWELL

**7-17S-30W LANE**

**CRAMER 7A-1**

Start Date: 2010.05.15 @ 10:00:00

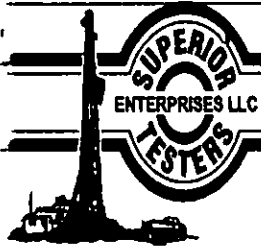
End Date: 2010.05.15 @ 16:19:30

Job Ticket #: 16361      DST #: 1

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

Printed: 2010.05.15 @ 16:02:36

RITCHIE EXPORATION INC  
CRAMER 7A-1  
7-17S-30W LANE  
DST # 1  
LKC -A-B-C-  
2010.05.15



# DRILL STEM TEST REPORT

RITCHE EXPROATION INC

CRAMER 7A-1

8100 3 22ND ST N 700  
 BOX 783188  
 WICHITA KS 67278  
 ATTN: MIKE KIDWELL

7-17S-30W LANE

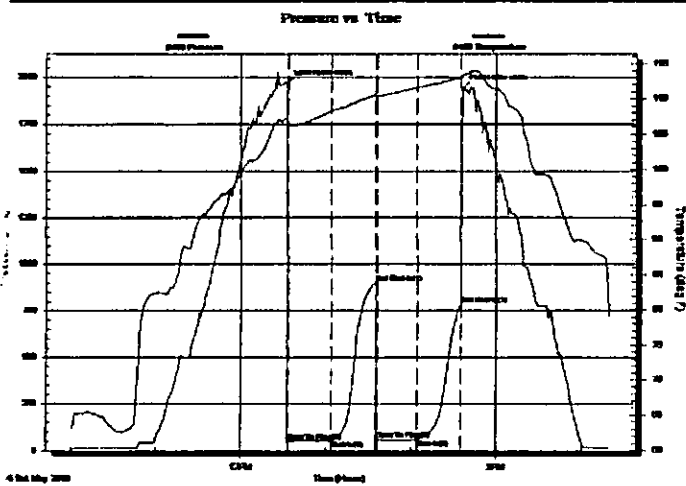
Job Ticket: 16361      DST#: 1  
 Test Start: 2010.05.15 @ 10:00:00

## GENERAL INFORMATION:

Formation: LKC -A-B-C-  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 12:33:00  
 Time Test Ended: 16:19:30  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: DAVID NICHOLS  
 Unit No: 3345  
 Interval: 3930.00 ft (KB) To 3984.00 ft (KB) (TVD)  
 Total Depth: 3984.00 ft (KB) (TVD)  
 Reference Elevations: 2894.00 ft (KB)  
 2886.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 KB to GR/CF: 8.00 ft

Serial #: 8400      Inside  
 Press@RunDepth: 60.54 psia @ 3980.00 ft (KB)      Capacity: 5000.00 psia  
 Start Date: 2010.05.15      End Date: 2010.05.15      Last Calib.: 2010.05.15  
 Start Time: 10:00:00      End Time: 16:19:30      Time On Btrr: 2010.05.15 @ 12:32:30  
 Time Off Btrr: 2010.05.15 @ 14:36:30

TEST COMMENT: 30-INITIAL OPENING WEAK SURFACE BLOW DIED AFTER 20 MINS  
 30-INITIAL SHUT IN NO BLOW BACK  
 30-FINAL OPENING VERY WEAK SURFACE BLOW DIED AFTER 10 MINS  
 30-FINAL SHUT IN NO BLOW BACK



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1964.06	107.00	Initial Hydro-static
1	51.09	106.31	Open To Flow (1)
32	55.91	108.16	Shut-in(1)
63	904.46	110.53	End Shut-in(1)
64	58.14	110.36	Open To Flow (2)
92	60.54	111.54	Shut-in(2)
123	785.10	112.94	End Shut-in(2)
124	1938.99	113.30	Final Hydro-static

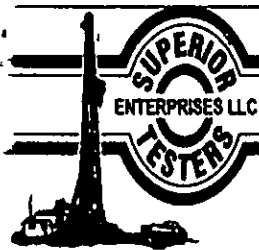
## Recovery

Length (ft)	Description	Volume (bbl)
1.00	CLEAN OIL 100%O	0.01
25.00	MUD GOOD SHOW OF OIL 95%M/5%O	0.37

## Gas Rates

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





# DRILL STEM TEST REPORT

RITCHE EXPLORATION INC

CRAMER 7A-1

8100 3 22ND ST N 700  
 BOX 783188  
 WICHITA KS 67278  
 ATTN: MIKE KIDWELL

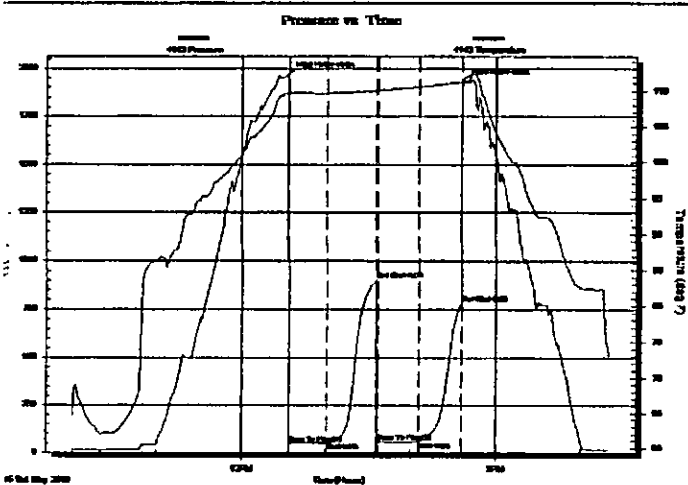
7-17S-30W LANE  
 Job Ticket: 16361      DST#: 1  
 Test Start: 2010.05.15 @ 10:00:00

## GENERAL INFORMATION:

Formation: LKC -A-B-C-  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 12:33:00  
 Time Test Ended: 16:19:30  
 Interval: 3930.00 ft (KB) To 3984.00 ft (KB) (TVD)  
 Total Depth: 3984.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: DAVID NICHOLS  
 Unit No: 3345  
 Reference Elevations: 2894.00 ft (KB)  
 2886.00 ft (CF)  
 KB to GR/CF: 8.00 ft

Serial #: 4143      Outside  
 Press@RunDepth: 784.13 psia @ 3981.00 ft (KB)      Capacity: 5000.00 psia  
 Start Date: 2010.05.15      End Date: 2010.05.15      Last Calib.: 2010.05.15  
 Start Time: 10:00:00      End Time: 16:20:16      Time On Btm: 2010.05.15 @ 12:32:46  
 Time Off Btm: 2010.05.15 @ 14:38:16

TEST COMMENT: 30-INITIAL OPENING WEAK SURFACE BLOW DIED AFTER 20 MINS  
 30-INITIAL SHUT IN NO BLOW BACK  
 30-FINAL OPENING VERY WEAK SURFACE BLOW DIED AFTER 10 MINS  
 30-FINAL SHUT IN NO BLOW BACK



## PRESSURE SUMMARY

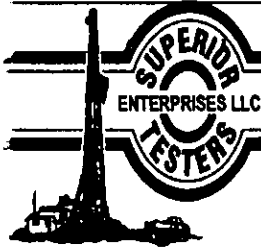
Time (Mins.)	Pressure (psia)	Temp (deg F)	Annotation
0	1963.18	109.68	Initial Hydro-static
1	49.31	109.73	Open To Flow (1)
28	54.10	109.66	Shut-In(1)
63	902.27	110.08	End Shut-In(1)
64	56.84	110.13	Open To Flow (2)
93	59.71	110.55	Shut-In(2)
123	784.13	111.16	End Shut-In(2)
126	1926.22	111.92	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
1.00	CLEAN OIL 100%O	0.01
25.00	MUD GOOD SHOW OF OIL 95%M5%O	0.37

## Gas Rates

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



# DRILL STEM TEST REPORT

TOOL DIAGRAM

RITCHE EXORATION INC  
 8100 3 22ND ST N 700  
 BOX 783188  
 WICHITA KS 67278  
 ATTN: MIKE KIDWELL

CRAMER 7A-1  
 7-17S-30W LANE  
 Job Ticket: 16361      DST#: 1  
 Test Start: 2010.05.15 @ 10:00:00

## Tool Information

Drill Pipe:	Length: 3909.00 ft	Diameter: 3.88 inches	Volume: 57.17 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: 57.17 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	2.00 ft			String Weight: Initial	50000.00 lb
Depth to Top Packer:	3930.00 ft			Final	50000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	54.00 ft				
Tool Length:	77.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3908.00	
Shut-In Tool	5.00			3913.00	
Hydroic Tool	5.00			3918.00	
Sampler	2.00			3920.00	
Packer	5.00			3925.00	23.00      Bottom Of Top Packer
Packer	5.00			3930.00	
Change Over Sub	0.75			3930.75	
Drill Pipe	31.50			3962.25	
Change Over Sub	0.75			3963.00	
Perforations	16.00			3979.00	
Recorder	1.00	8400	Inside	3980.00	
Recorder	1.00	4143	Outside	3981.00	
Buhoose	3.00			3984.00	54.00      Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>77.00</b>				



# DRILL STEM TEST REPORT

FLUID SUMMARY

RITCHE EXPLORATION INC

CRAMER 7A-1

8100 3 22ND ST N 700  
BOX 783188  
WICHITA KS 67278  
ATTN: MIKE KIDWELL

7-17S-30W LANE

Job Ticket: 16361

DST#: 1

Test Start: 2010.05.15 @ 10:00:00

## 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: 53.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.40 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psia		
Salinity: 1100.00 ppm			
Filter Cake: inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1.00	CLEAN OIL 100%O	0.015
25.00	MUD GOOD SHOW OF OIL 95%M5%O	0.366

Total Length: 26.00 ft      Total Volume: 0.381 bbl

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

Laboratory Name:      Laboratory Location:

Recovery Comments:

Serial #: 8400

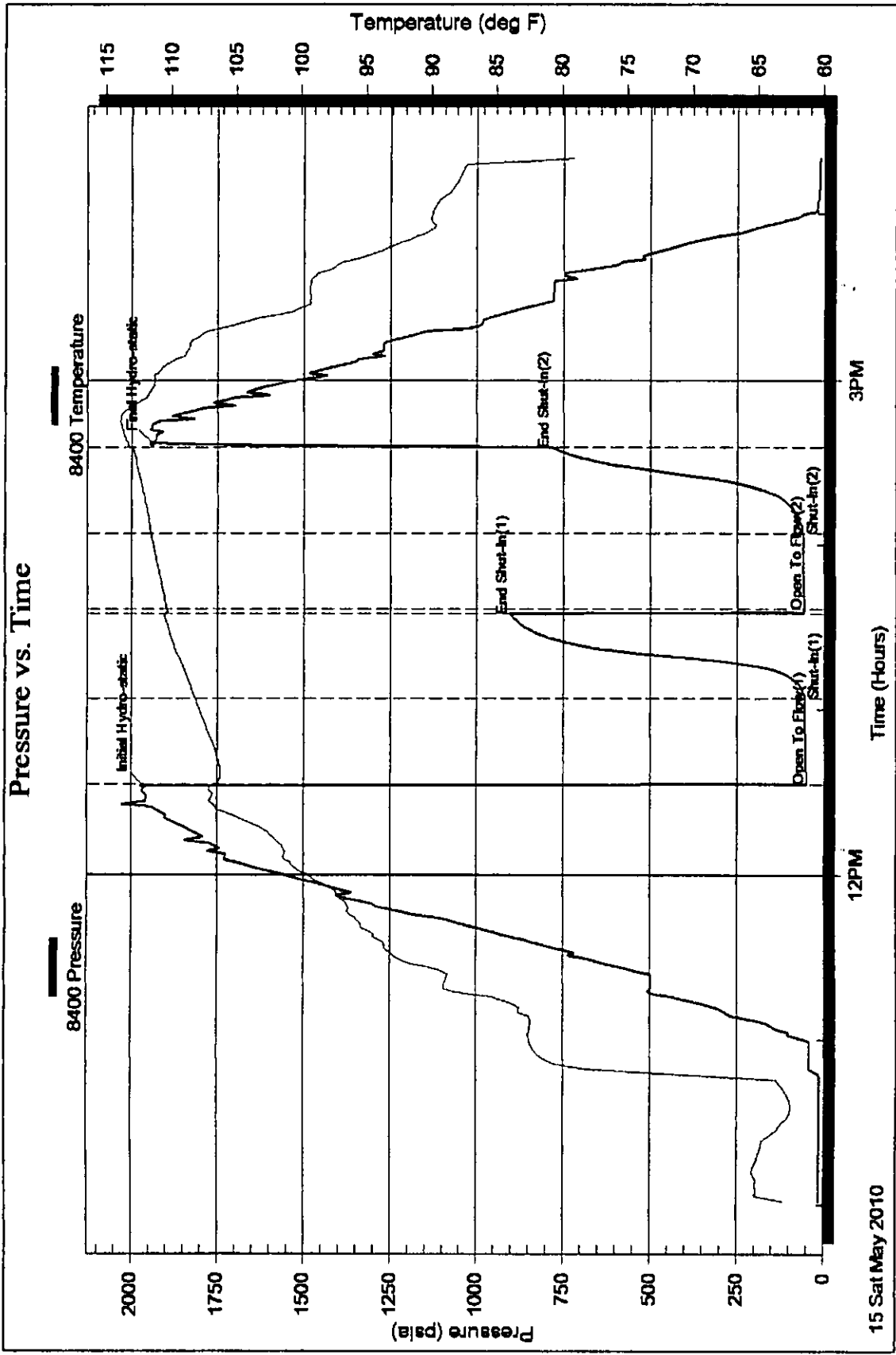
INSURE

MITCHELL ENERGY SOLUTIONS

11200 W LANE

LOS ANGELES, CA 90048

# Pressure vs. Time

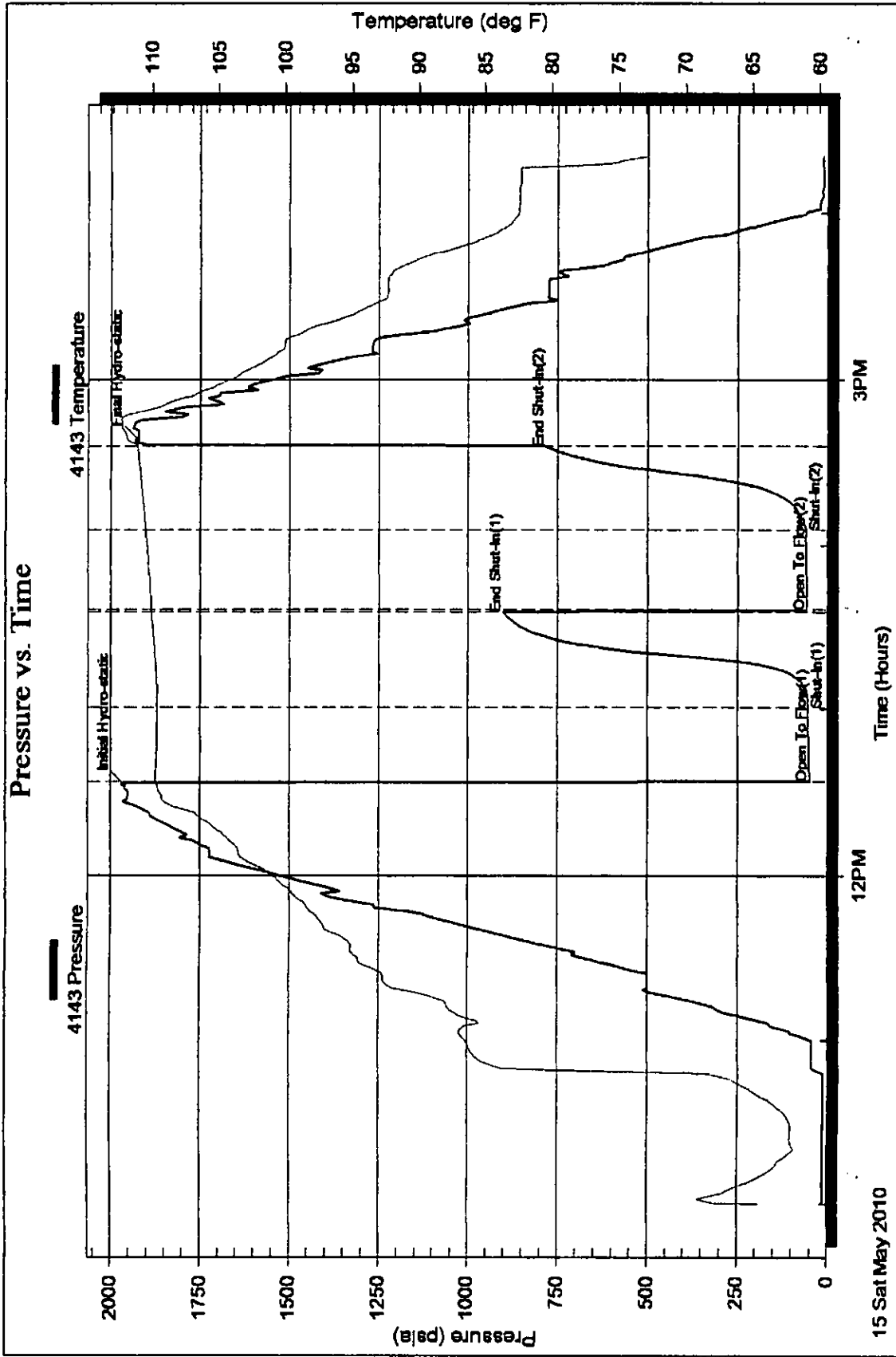


Printed: 2010.05.15 @ 16:02:38

Ref. No: 16361

Superior Testers Enterprises LLC

15 Sat May 2010





## DRILL STEM TEST REPORT

Prepared For: **RITCHIE EXPORATION INC**

8100 3 22ND ST N 700  
BOX 783188  
WICHITA KS 67278

ATTN: MIKE KIDWELL

**7-17S-30W LANE**

**CRAMER 7A-1**

Start Date: 2010.05.16 @ 01:00:00

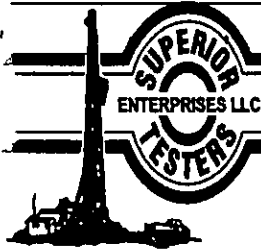
End Date: 2010.05.16 @ 09:18:00

Job Ticket #: 16362                      DST #: 2

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

Printed: 2010.05.16 @ 07:50:13

RITCHIE EXPORATION INC  
CRAMER 7A-1  
7-17S-30W LANE  
DST # 2  
LKC  
2010.05.16



# DRILL STEM TEST REPORT

RITCHE EXORATION INC

CRAMER 7A-1

8100 3 22ND ST N 700  
 BOX 783188  
 WICHITA KS 67278  
 ATTN: MIKE KIDWELL

7-17S-30W LANE

Job Ticket: 16362 DST#: 2

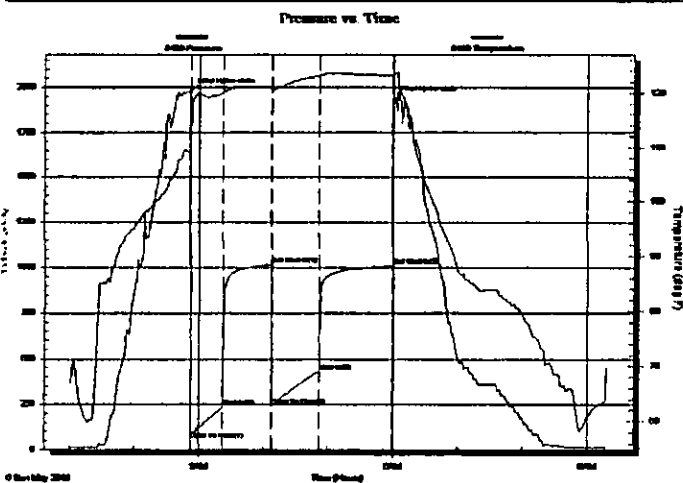
Test Start: 2010.05.16 @ 01:00:00

## GENERAL INFORMATION:

Formation: LKC  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 02:52:30  
 Time Test Ended: 09:18:00  
 Interval: 3980.00 ft (KB) To 4002.00 ft (KB) (TVD)  
 Total Depth: 4002.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: DAVID NICHOLS  
 Unit No: 3345 42M SCOTT CITY  
 Reference Elevations: 2894.00 ft (KB)  
 2886.00 ft (CF)  
 KB to GR/CF: 8.00 ft

Serial #: 8400 Inside  
 Press@RunDepth: 433.51 psia @ 3998.00 ft (KB) Capacity: 5000.00 psia  
 Start Date: 2010.05.16 End Date: 2010.05.16 Last Calib.: 2010.05.16  
 Start Time: 01:00:00 End Time: 09:18:00 Time On Btm: 2010.05.16 @ 02:51:30  
 Time Off Btm: 2010.05.16 @ 06:00:30

TEST COMMENT: 30-INITIAL OPENING GOOD BLOW BOTTOM BUCKET IN 8 MINS  
 45-INITIAL SHUT IN NO BLOW BACK  
 45-FINAL OPENING GOOD BLOW BOTTOM OF THE BUCKET IN 7 MINS  
 60-FINAL SHUT IN WEAK SURFACE BLOW BACK



## PRESSURE SUMMARY

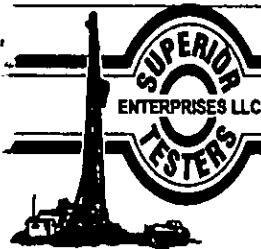
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1975.68	108.97	Initial Hydro-static
1	55.83	111.64	Open To Flow (1)
31	236.56	119.96	Shut-In (1)
76	1018.33	121.10	End Shut-In (1)
76	241.57	120.84	Open To Flow (2)
121	433.51	123.16	Shut-In (2)
188	1012.37	123.18	End Shut-In (2)
189	1934.19	123.43	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
240.00	CLEAN OIL 100%O	3.51
360.00	OIL MUD CUT WATER 30%O30%M40%	5.26
240.00	WATER TRACE OF MUD 95%W5%M	3.51

## Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mc/M)



# DRILL STEM TEST REPORT

RITCHE EXORATION INC

CRAMER 7A-1

8100 3 22ND ST N 700  
 BOX 783188  
 WICHITA KS 67278  
 ATTN: MIKE KIDWELL

7-17S-30W LANE

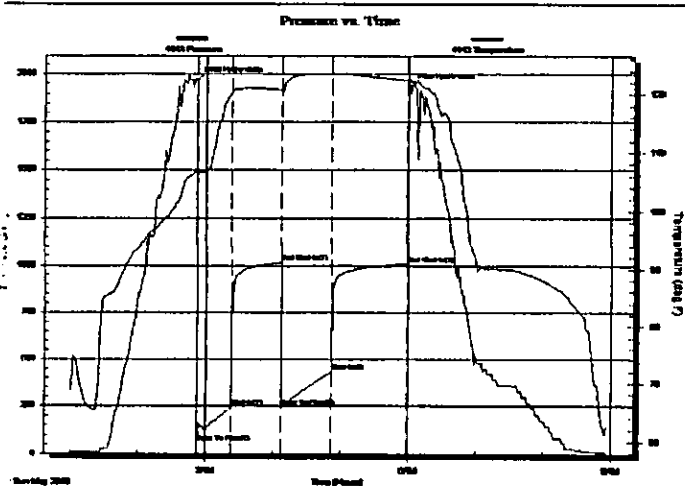
Job Ticket: 16362 DST#: 2  
 Test Start: 2010.05.16 @ 01:00:00

## GENERAL INFORMATION:

Formation: LKC  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 02:52:30  
 Time Test Ended: 09:18:00  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: DAVID NICHOLS  
 Unit No: 3345 42M SCOTT CITY  
 Interval: 3980.00 ft (KB) To 4002.00 ft (KB) (TVD)  
 Total Depth: 4002.00 ft (KB) (TVD)  
 Reference Elevations: 2894.00 ft (KB)  
 2886.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 KB to GR/CF: 8.00 ft

Serial #: 4143 Outside  
 Press@RunDepth: 1009.69 psia @ 3999.00 ft (KB) Capacity: 5000.00 psia  
 Start Date: 2010.05.16 End Date: 2010.05.16 Last Calib.: 2010.05.16  
 Start Time: 01:00:00 End Time: 08:56:16 Time On Btm: 2010.05.16 @ 02:51:46  
 Time Off Btm: 2010.05.16 @ 06:01:46

TEST COMMENT: 30-INITIAL OPENING GOOD BLOW BOTTOM BUCKET IN 8 MINS  
 45-INITIAL SHUT IN NO BLOW BACK  
 45-FINAL OPENING GOOD BLOW BOTTOM OF THE BUCKET IN 7 MINS  
 60-FINAL SHUT IN WEAK SURFACE BLOW BACK



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1968.68	106.80	Initial Hydro-static
1	57.26	106.77	Open To Flow (1)
31	244.55	120.16	Shut-In(1)
76	1015.83	120.68	End Shut-In(1)
76	243.81	120.60	Open To Flow (2)
121	432.54	123.43	Shut-In(2)
188	1009.69	122.29	End Shut-In(2)
190	1933.36	122.36	Final Hydro-static

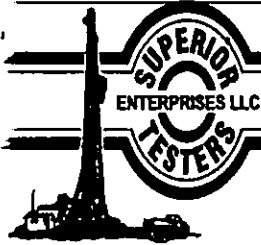
## Recovery

Length (ft)	Description	Volume (bbl)
240.00	CLEAN OIL 100%O	3.51
360.00	OIL MUD CUT WATER 30%O30%M40%	5.26
240.00	WATER TRACE OF MUD 95%W5%M	3.51

## Gas Rates

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





# DRILL STEM TEST REPORT

TOOL DIAGRAM

RITCHE EXPLORATION INC  
 8100 S 22ND ST N 700  
 BOX 783188  
 WICHITA KS 67278  
 ATTN: MIKE KIDWELL

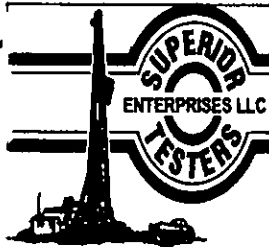
CRAMER 7A-1  
 7-17S-30W LANE  
 Job Ticket: 16362      DST#: 2  
 Test Start: 2010.05.16 @ 01:00:00

## Tool Information

Drill Pipe:	Length: 3959.00 ft	Diameter: 3.88 inches	Volume: 57.90 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: 75000.00 lb
			<u>Total Volume: 57.90 bbl</u>	Tool Chased 20.00 ft
Drill Pipe Above KB:	2.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3980.00 ft			Final 58000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	22.00 ft			
Tool Length:	45.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3958.00	
Shut-In Tool	5.00			3963.00	
Hydroic Tool	5.00			3968.00	
Safety Joint	2.00			3970.00	
Packer	5.00			3975.00	23.00      Bottom Of Top Packer
Packer	5.00			3980.00	
Perforations	17.00			3997.00	
Recorder	1.00	8400	Inside	3998.00	
Recorder	1.00	4143	Outside	3999.00	
Bullnose	3.00			4002.00	22.00      Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>45.00</b>				



# DRILL STEM TEST REPORT

FLUID SUMMARY

RITCHE EXPLORATION INC

CRAMER 7A-1

8100 S 22ND ST N 700  
BOX 783188  
WICHITA KS 67278  
ATTN: MIKE KIDWELL

7-17S-30W LANE  
Job Ticket: 16362      DST#: 2  
Test Start: 2010.05.16 @ 01:00:00

## Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	32 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	53.00 sec/qt	Cushion Volume:	bbbl		
Water Loss:	7.40 in <sup>3</sup>	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psia		
Salinity:	1100.00 ppm				
Filter Cake:	inches				

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
240.00	CLEAN OIL 100%O	3.510
360.00	OIL MUD CUT WATER 30%O30%M40%W	5.265
240.00	WATER TRACE OF MUD 95%W5%M	3.510

Total Length: 840.00 ft      Total Volume: 12.285 bbl

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

Laboratory Name:      Laboratory Location:

Recovery Comments: 73,000 CHLORIDES

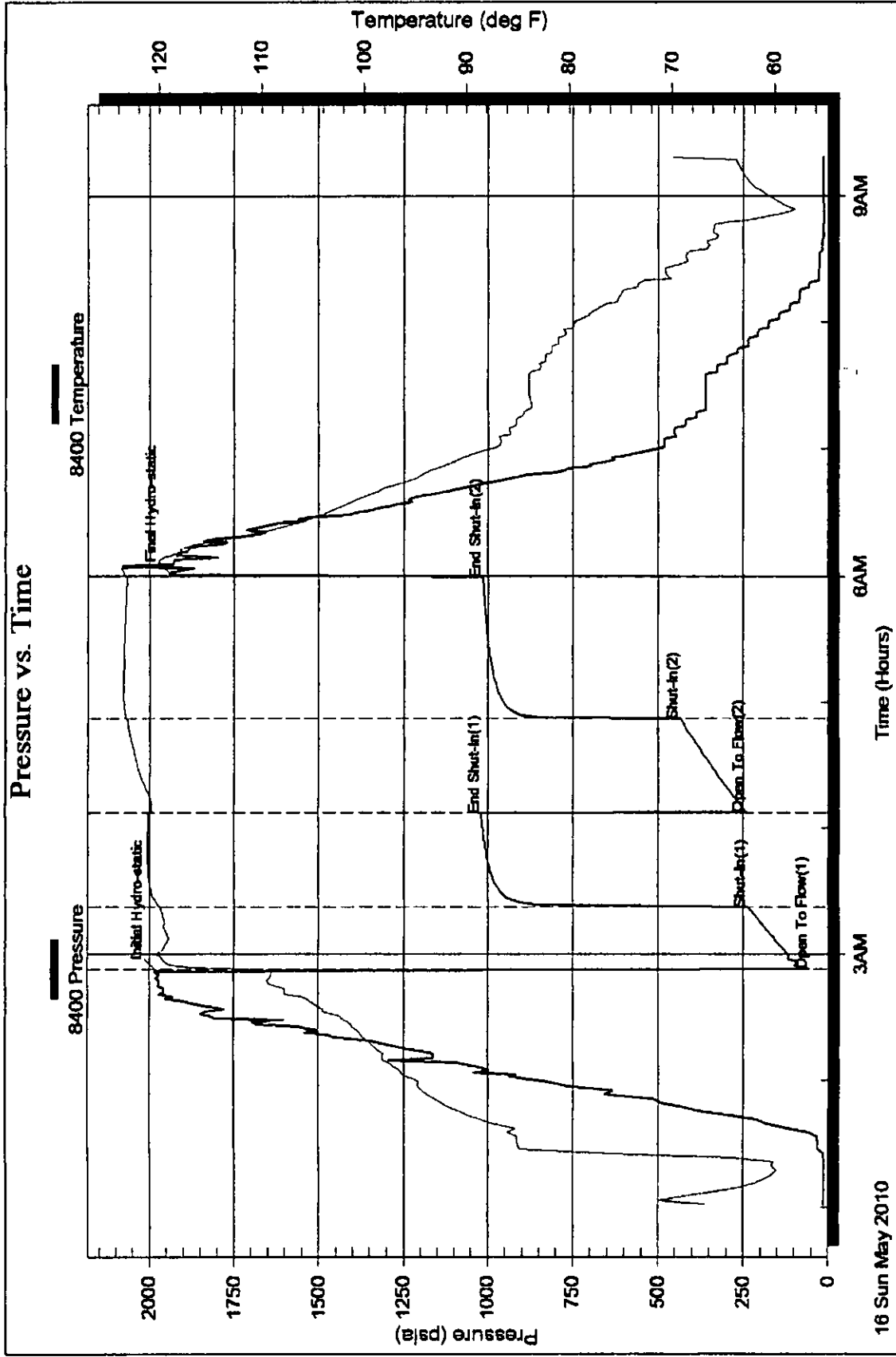
Serial #: 8400

INSIDE

7-11 SLOW LANE

NUMERIC CORPORATION INC

Lot Test Number: 2



Printed: 2010.05.16 @ 07:50:15

Ref. No: 16362

Superior Testers Enterprises LLC

16 Sun May 2010

Serial #: 4143

Outside

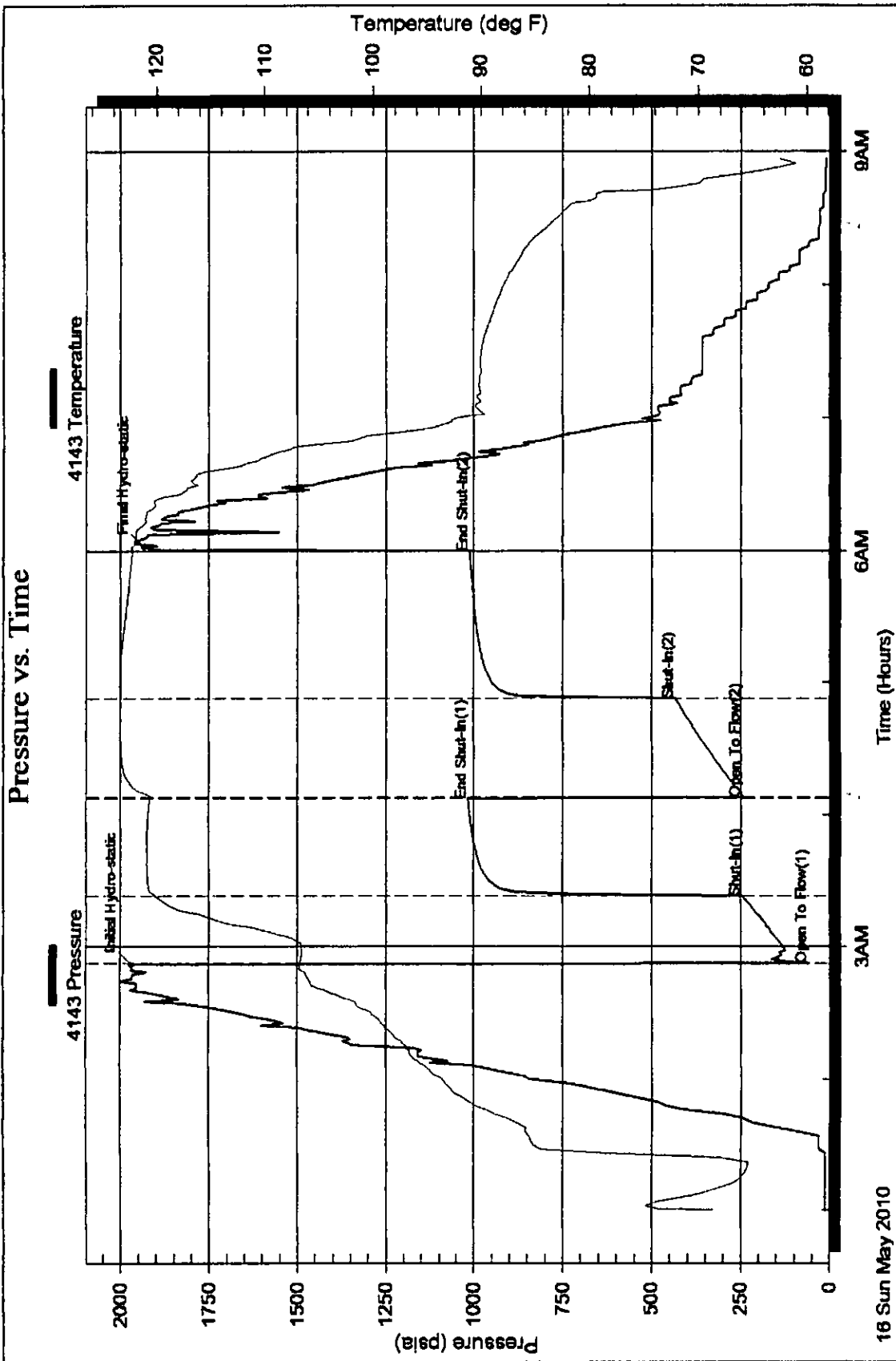
Final Hydro-Static

Final Hydro-Static

Final Hydro-Static

Final Hydro-Static

# Pressure vs. Time

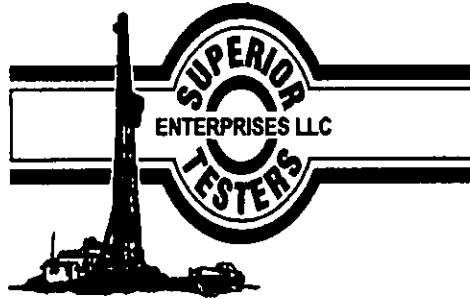


USI Test Number: Z

Printed: 2010.05.16 @ 07:50:15

Ref. No: 16362

Superior Testers Enterprises LLC



## DRILL STEM TEST REPORT

Prepared For: **RITCHIE EXPORATION INC**

8100 3 22ND ST N 700  
BOX 783188  
WICHITA KS 67278

ATTN: MIKE KIDWELL

**7-17S-30W LANE**

**CRAMER 7A-1**

Start Date: 2010.05.16 @ 14:00:00

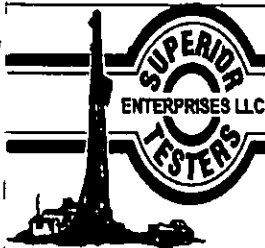
End Date: 2010.05.16 @ 19:27:00

Job Ticket #: 16363                      DST #: 3

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

Printed: 2010.05.16 @ 21:47:14

RITCHIE EXPORATION INC  
CRAMER 7A-1  
7-17S-30W LANE  
DST # 3  
LKC  
2010.05.16



# DRILL STEM TEST REPORT

RITCHE EXORATION INC

CRAMER 7A-1

8100 S 22ND ST N 700  
 BOX 783188  
 WICHITA KS 67278  
 ATTN: MIKE KIDWELL

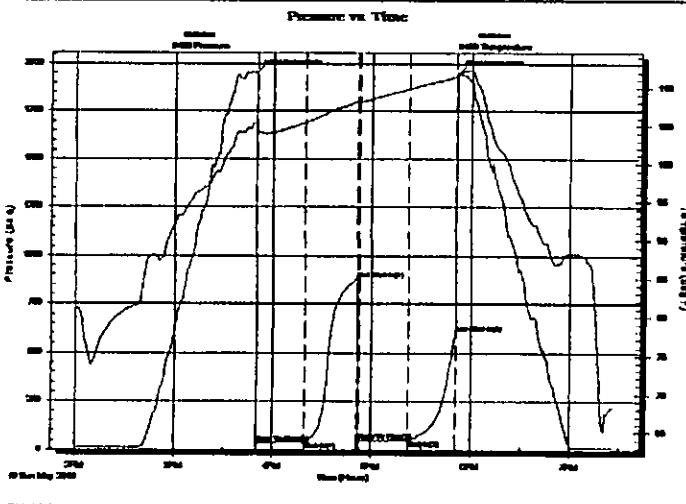
7-17S-30W LANE  
 Job Ticket: 16363 DST#: 3  
 Test Start: 2010.05.16 @ 14:00:00

## GENERAL INFORMATION:

Formation: LKC  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 15:50:00  
 Time Test Ended: 19:27:00  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: DAVID NICHOLS  
 Unit No: 3345 42 M SCOTT CITY  
 Interval: 4016.00 ft (KB) To 4036.00 ft (KB) (TVD)  
 Total Depth: 4036.00 ft (KB) (TVD)  
 Reference Elevations: 2894.00 ft (KB)  
 2886.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 KB to GR/CF: 8.00 ft

Serial #: 8400 Inside  
 Press@RunDepth: 51.77 psia @ 4032.00 ft (KB)  
 Capacity: 5000.00 psia  
 Start Date: 2010.05.16 End Date: 2010.05.16 Last Calib.: 2010.05.16  
 Start Time: 14:00:00 End Time: 19:27:00 Time On Btrm: 2010.05.16 @ 15:49:30  
 Time Off Btrm: 2010.05.16 @ 17:52:00

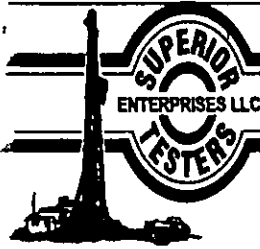
TEST COMMENT: 30-INITIAL OPENING WEAK SURFACE BLOW DIED AFTER 15 MINS  
 30-INITIAL SHUT IN NO BLOW BACK  
 30-FINAL OPENING NO BLOW  
 30-FINAL SHUT IN NO BLOW BACK



PRESSURE SUMMARY			
Time (Mn.)	Pressure (psia)	Temp (deg F)	Annotation
0	1953.65	105.30	Initial Hydro-static
1	34.69	104.51	Open To Flow (1)
30	43.97	105.42	Shut-In(1)
62	880.48	108.16	End Shut-In(1)
63	46.83	108.04	Open To Flow (2)
93	51.77	109.81	Shut-In(2)
122	601.57	111.49	End Shut-In(2)
123	1950.60	111.85	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
5.00	CLEAN OIL 100%	0.07
30.00	OIL CUT MUD 30%O 70%M	0.42

Gas Rates			
	Choke (Inches)	Pressure (psia)	Gas Rate (Mcf/d)



# DRILL STEM TEST REPORT

RITCHE EXPLORATION INC

CRAMER 7A-1

8100 3 22ND ST N 700  
 BOX 783188  
 WICHITA KS 67278  
 ATTN: MIKE KIDWELL

7-17S-30W LANE

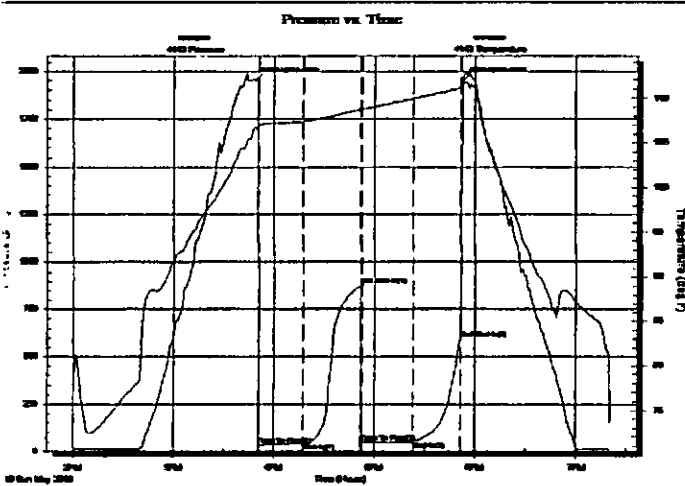
Job Ticket: 16363      DST#: 3  
 Test Start: 2010.05.16 @ 14:00:00

## GENERAL INFORMATION:

Formation: LKC  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 15:50:00  
 Time Test Ended: 19:27:00  
 Interval: 4016.00 ft (KB) To 4036.00 ft (KB) (TVD)  
 Total Depth: 4036.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: DAVID NICHOLS  
 Unit No: 3345 42 M SCOTT CITY  
 Reference Elevations: 2894.00 ft (KB)  
 2886.00 ft (CF)  
 KB to GR/CF: 8.00 ft

Serial #: 4143      Outside  
 Press@RunDepth: 595.36 psia @ 4033.00 ft (KB)  
 Start Date: 2010.05.16      End Date: 2010.05.16  
 Start Time: 14:00:00      End Time: 19:20:16  
 Capacity: 5000.00 psia  
 Last Calib.: 2010.05.16  
 Time On Btm: 2010.05.16 @ 15:48:15  
 Time Off Btm: 2010.05.16 @ 17:52:16

TEST COMMENT: 30-INITIAL OPENING WEAK SURFACE BLOW DIED AFTER 15 MINS  
 30-INITIAL SHUT IN NO BLOW BACK  
 30-FINAL OPENING NO BLOW  
 30-FINAL SHUT IN NO BLOW BACK



## PRESSURE SUMMARY

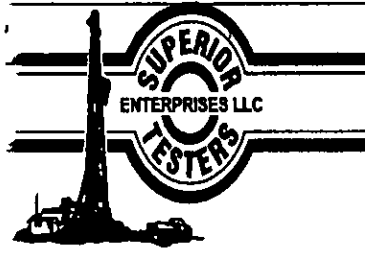
Time (Mn.)	Pressure (psia)	Temp (deg F)	Annotation
0	1951.29	106.70	Initial Hydro-static
3	33.64	107.00	Open To Flow (1)
30	41.97	107.40	Shut-in(1)
64	877.24	108.68	End Shut-in(1)
65	46.43	108.75	Open To Flow (2)
95	51.80	109.94	Shut-in(2)
123	595.36	111.09	End Shut-in(2)
125	1949.18	112.28	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
5.00	CLEAN OIL 100%	0.07
30.00	OIL CUT MUD 30%O 70%M	0.42

## Gas Rates

Choke (Inches)	Pressure (psia)	Gas Rate (Mcf/D)



# DRILL STEM TEST REPORT

TOOL DIAGRAM

RITCHE EXPLORATION INC

CRAMER 7A-1

8100 3 22ND ST N 700  
 BOX 783188  
 WICHITA KS 67278  
 ATTN: MIKE KIDWELL

7-17S-30W LANE  
 Job Ticket: 16363      DST#: 3  
 Test Start: 2010.05.16 @ 14:00:00

## Tool Information

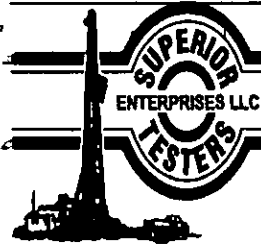
Drill Pipe:	Length: 3995.00 ft	Diameter: 3.80 inches	Volume: 56.04 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 56.04 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	2.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	4016.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	20.00 ft			
Tool Length:	43.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3994.00	
Shut-In Tool	5.00			3999.00	
Hydroic Tool	5.00			4004.00	
Safety Joint	2.00			4006.00	
Packer	5.00			4011.00	23.00      Bottom Of Top Packer
Packer	5.00			4016.00	
Perforations	15.00			4031.00	
Recorder	1.00	8400	Inside	4032.00	
Recorder	1.00	4143	Outside	4033.00	
Bullnose	3.00			4036.00	20.00      Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>43.00</b>				





# DRILL STEM TEST REPORT

## FLUID SUMMARY

RITCHE EXPLORATION INC

CRAMER 7A-1

8100 S 22ND ST N 700  
 BOX 783188  
 WICHITA KS 67278  
 ATTN: MIKE KIDWELL

7-17S-30W LANE  
 Job Ticket: 16363      DST#: 3  
 Test Start: 2010.05.16 @ 14:00:00

### 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: 60.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.20 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psia		
Salinity: 1500.00 ppm			
Filter Cake: inches			

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	CLEAN OIL 100%	0.070
30.00	OIL CUT MUD 30%O 70%M	0.421

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:

Signal #. 8400

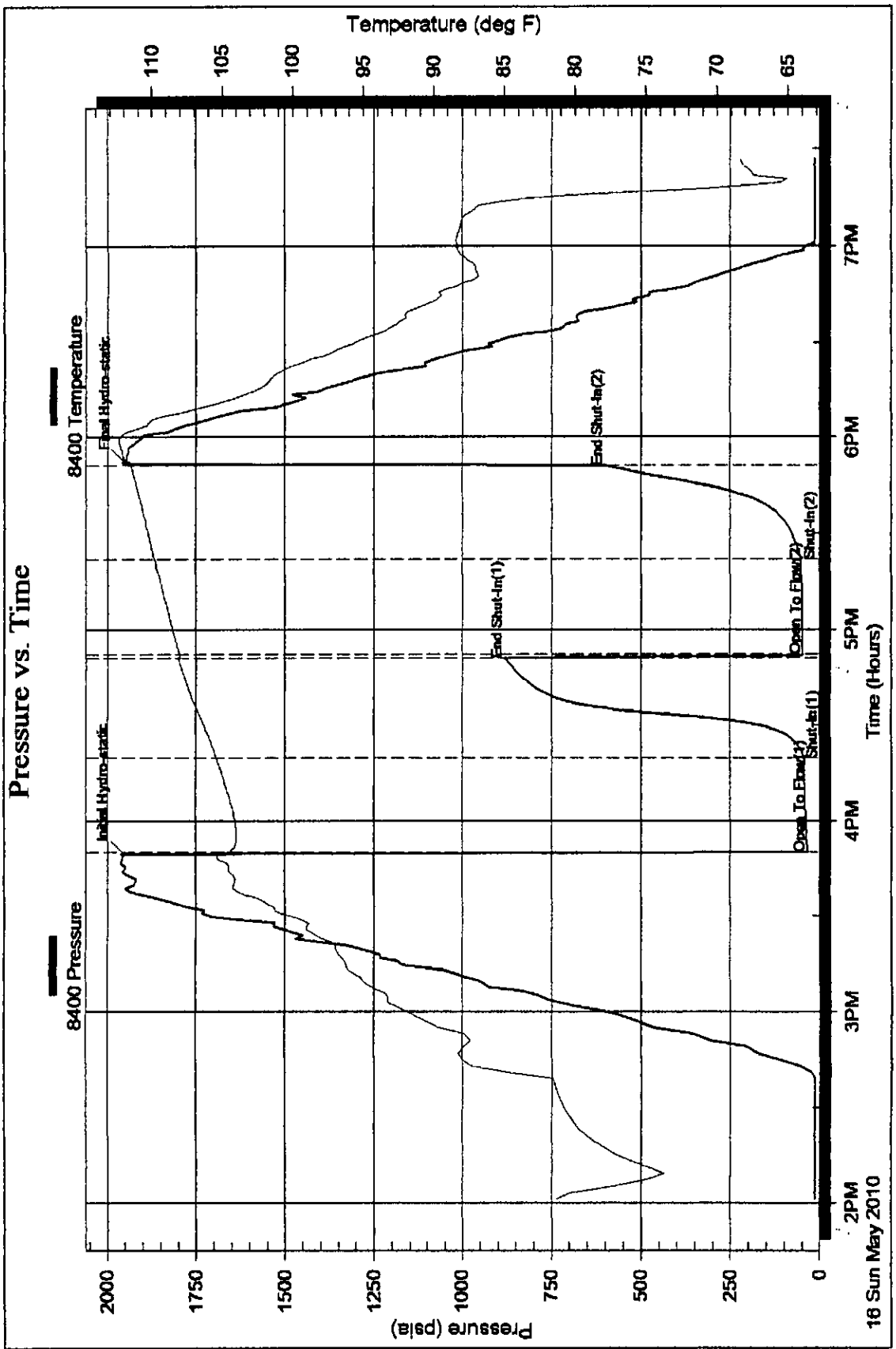
Pressure

Temperature

8400 Pressure

8400 Temperature

### Pressure vs. Time



16 Sun May 2010

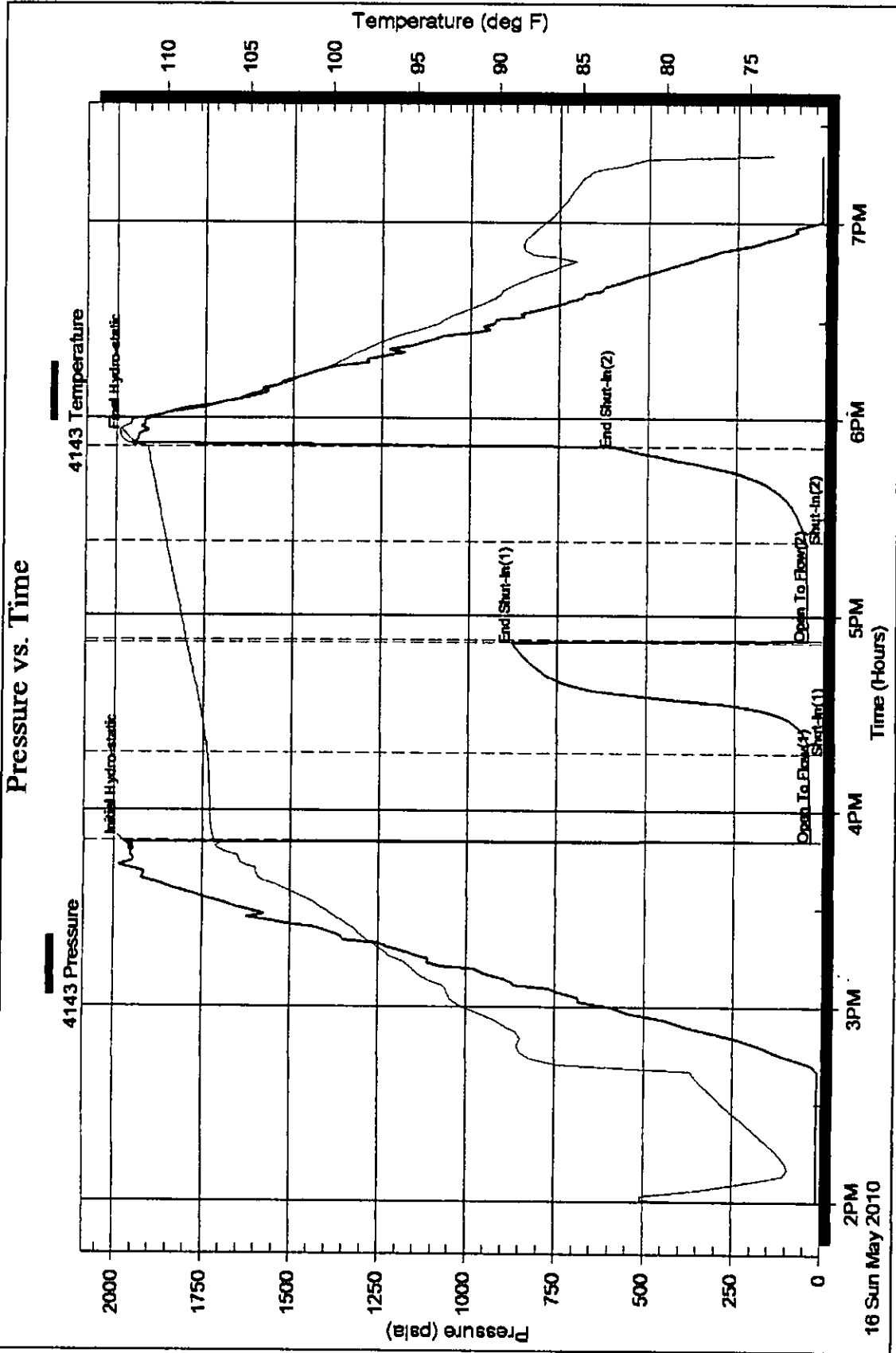
Serial #: 4143

Outside MITCHELL EXPLORATION INC

7-17S-30W LANE

DST Test Number: 3

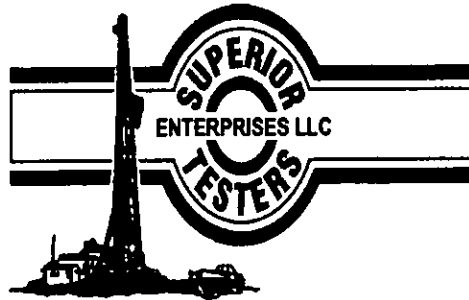
### Pressure vs. Time



Printed: 2010.05.16 @ 21:47:16

Ref. No: 16363

Superior Testers Enterprises LLC



## DRILL STEM TEST REPORT

Prepared For: **RITCHIE EXPORATION INC**

8100 3 22ND ST N 700  
BOX 783188  
WICHITA KS 67278

ATTN: MIKE KIDWELL

**7-17S-30W LANE**

**CRAMER 7A-1**

Start Date: 2010.05.17 @ 09:00:00

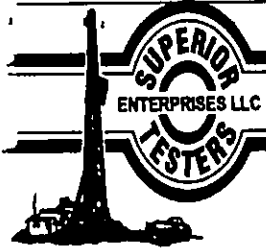
End Date: 2010.05.17 @ 13:59:30

Job Ticket #: 16364                      DST #: 4

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

Printed: 2010.05.17 @ 15:37:52

RITCHIE EXPORATION INC  
CRAMER 7A-1  
7-17S-30W LANE  
DST # 4  
LKC-H-  
2010.05.17



# DRILL STEM TEST REPORT

RITCHE EXORATION INC

CRAMER 7A-1

8100 3 22ND ST N 700  
 BOX 783188  
 WICHITA KS 67278  
 ATTN: MIKE KIDWELL

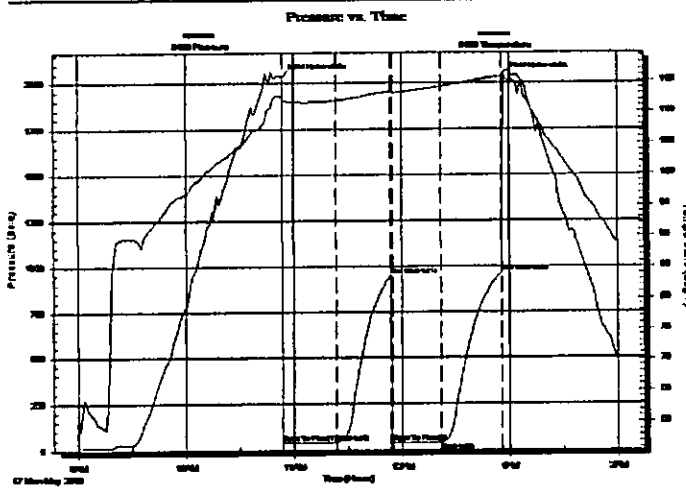
7-17S-30W LANE  
 Job Ticket: 16364      DST#: 4  
 Test Start: 2010.05.17 @ 09:00:00

**GENERAL INFORMATION:**

Formation: LKC -H  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 10:54:00 Tester: DAVID NICHOLS  
 Time Test Ended: 13:59:30 Unit No: 3345 42 M SCOTT CITY  
 Interval: 4108.00 ft (KB) To 4136.00 ft (KB) (TVD) Reference Elevations: 2894.00 ft (KB)  
 Total Depth: 4136.00 ft (KB) (TVD) 2886.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 8.00 ft

Serial #: 8400 Inside  
 Press@RunDepth: 40.11 psia @ 4132.00 ft (KB) Capacity: 5000.00 psia  
 Start Date: 2010.05.17 End Date: 2010.05.17 Last Calib.: 2010.05.17  
 Start Time: 09:00:00 End Time: 13:59:30 Time On Btmr: 2010.05.17 @ 10:53:30  
 Time Off Btmr: 2010.05.17 @ 12:57:00

TEST COMMENT: 30-INITIAL OPENING WEAK SURFACE BLOW DIED AFTER 20 MINS  
 30-INITIAL SHUT IN NO BLOW BACK  
 30-FINAL OPENING NO BLOW  
 30-FINAL SHUT IN NO BLOW BACK



**PRESSURE SUMMARY**

Time (Mn.)	Pressure (psia)	Temp (deg F)	Annotation
0	2034.47	112.38	Initial Hydro-static
1	37.83	111.67	Open To Flow (1)
31	38.68	111.86	Shut-In(1)
61	948.78	113.29	End Shut-In(1)
62	39.64	113.08	Open To Flow (2)
89	40.11	114.06	Shut-In(2)
122	965.59	115.68	End Shut-In(2)
124	2031.45	116.46	Final Hydro-static

**Recovery**

Length (ft)	Description	Volume (bbl)
5.00	MUD SHOW OF OIL	0.07

**Gas Rates**

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



# DRILL STEM TEST REPORT

RITCHE EXORATION INC  
 8100 3 22ND ST N 700  
 BOX 783188  
 WICHITA KS 67278  
 ATTN: MIKE KIDWELL

**CRAMER 7A-1**  
**7-17S-30W LANE**  
 Job Ticket: 16364      **DST#: 4**  
 Test Start: 2010.05.17 @ 09:00:00

## GENERAL INFORMATION:

Formation: LKC -H-  
 Deviated: No Whipstock:                      ft (KB)  
 Time Tool Opened: 10:54:00  
 Time Test Ended: 13:59:30

Interval: 4108.00 ft (KB) To 4136.00 ft (KB) (TVD)  
 Total Depth: 4136.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair

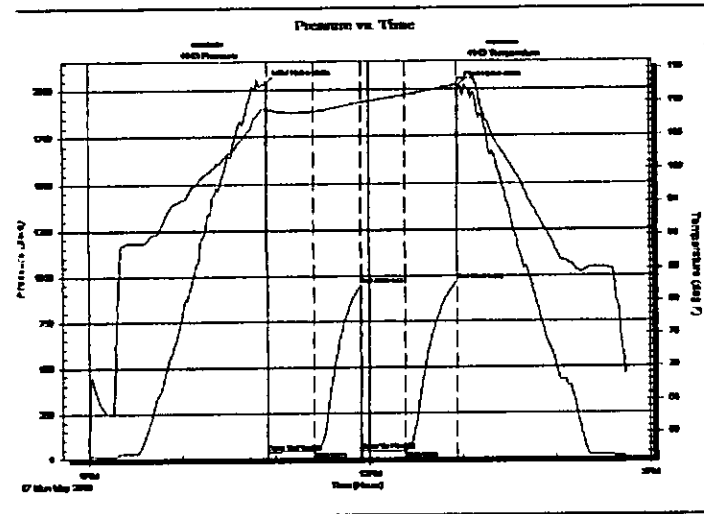
Test Type: Conventional Bottom Hole (Initial)  
 Tester: DAVID NICHOLS  
 Unit No: 3345 42 M SCOTT CITY

Reference Elevations: 2894.00 ft (KB)  
 2886.00 ft (CF)  
 KB to GR/CF: 8.00 ft

Serial #: 4143      Outside  
 Press@RunDepth: 965.65 psia @ 4133.00 ft (KB)  
 Start Date: 2010.05.17      End Date: 2010.05.17  
 Start Time: 09:00:00      End Time: 14:44:16

Capacity: 5000.00 psia  
 Last Calib.: 2010.05.17  
 Time On Btm: 2010.05.17 @ 10:54:15  
 Time Off Btm: 2010.05.17 @ 12:57:46

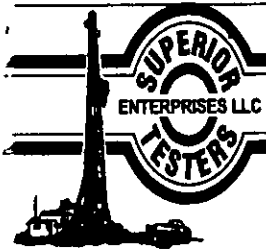
TEST COMMENT: 30-INITIAL OPENING WEAK SURFACE BLOW DIED AFTER 20 MINS  
 30-INITIAL SHUT IN NO BLOW BACK  
 30-FINAL OPENING NO BLOW  
 30-FINAL SHUT IN NO BLOW BACK



PRESSURE SUMMARY			
Time (Mn.)	Pressure (psia)	Temp (deg F)	Annotation
0	2037.78	108.93	Initial Hydro-static
1	35.91	108.99	Open To Flow (1)
31	37.03	108.65	Shut-in(1)
61	944.90	109.87	End Shut-in(1)
62	37.54	109.94	Open To Flow (2)
90	38.56	110.98	Shut-in(2)
123	965.65	112.38	End Shut-in(2)
124	2020.06	113.51	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
5.00	MUD SHOW OF OIL	0.07

Gas Rates			
	Choke (Inches)	Pressure (psia)	Gas Rate (Mcf/d)



# DRILL STEM TEST REPORT

TOOL DIAGRAM

RITCHE EXORATION INC

CRAMER 7A-1

8100 S 22ND ST N 700  
 BOX 783188  
 WICHITA KS 67278  
 ATTN: MIKE KIDWELL

7-17S-30W LANE

Job Ticket: 16364      DST#: 4  
 Test Start: 2010.05.17 @ 09:00:00

## Tool Information

Drill Pipe:	Length: 4087.00 ft	Diameter: 3.88 inches	Volume: 59.77 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: 75000.00 lb
			<u>Total Volume: 59.77 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	2.00 ft			String Weight: Initial 51000.00 lb
Depth to Top Packer:	4108.00 ft			Final 51000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	28.00 ft			
Tool Length:	51.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4086.00	
Shut-in Tool	5.00			4091.00	
Hydroic Tool	5.00			4096.00	
Safety Joint	2.00			4098.00	
Packer	5.00			4103.00	23.00      Bottom Of Top Packer
Packer	5.00			4108.00	
Perforations	23.00			4131.00	
Recorder	1.00	8400	Inside	4132.00	
Recorder	1.00	4143	Outside	4133.00	
Bullnose	3.00			4136.00	28.00      Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>51.00</b>				



# DRILL STEM TEST REPORT

FLUID SUMMARY

RITCHE EXPLORATION INC

CRAMER 7A-1

8100 3 22ND ST N 700  
 BOX 783188  
 WICHITA KS 67278  
 ATTN: MIKE KIDWELL

7-17S-30W LANE  
 Job Ticket: 16364      DST#: 4  
 Test Start: 2010.05.17 @ 09:00:00

## 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: 48.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.00 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psia		
Salinity: 1700.00 ppm			
Filter Cake: inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	MUD SHOW OF OIL	0.073

Total Length: 5.00 ft      Total Volume: 0.073 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:



Serial #: 8400

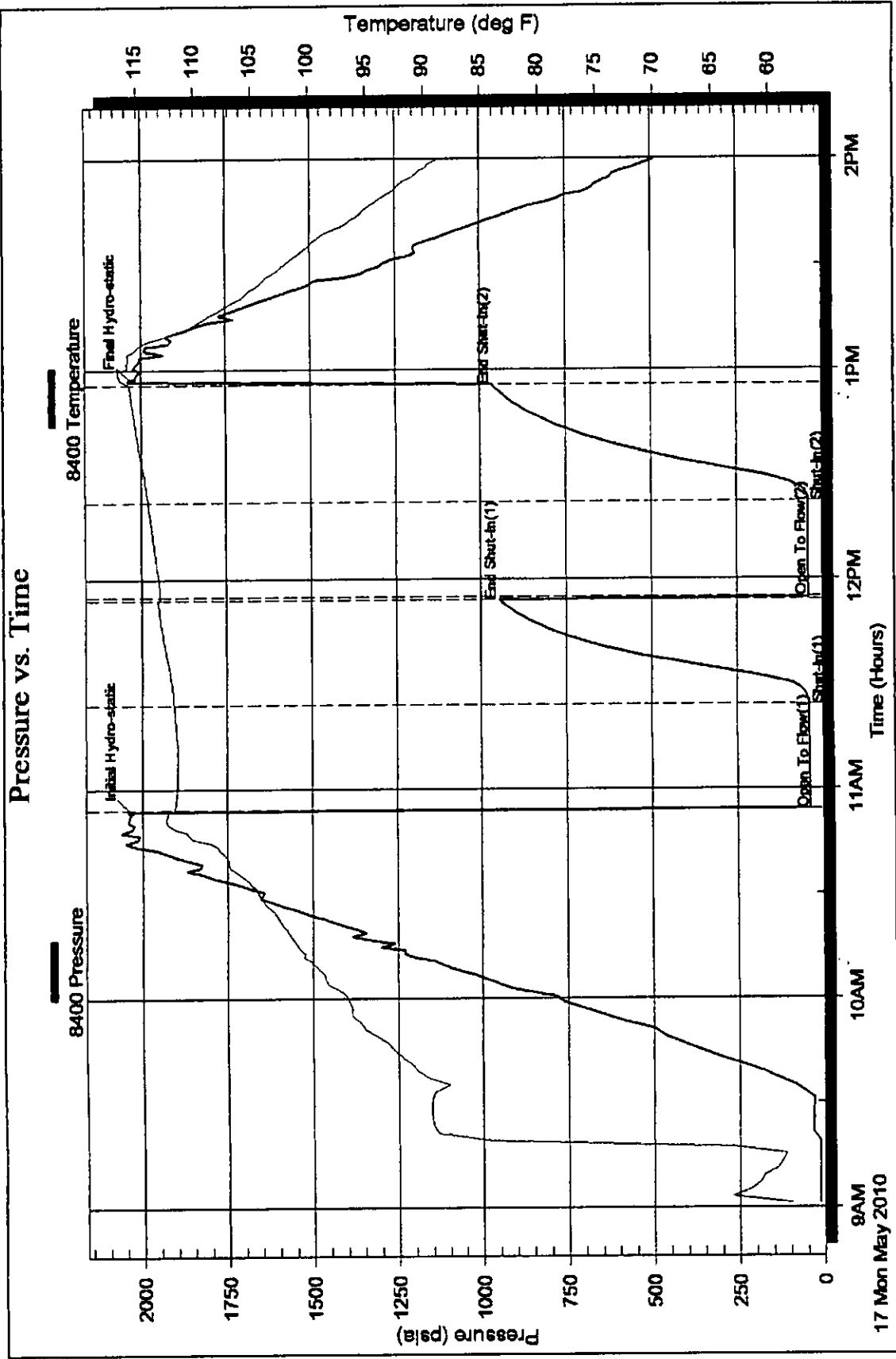
Inside

RITCHE EXPOSITION INC

7-17S-30W LANE

LSI Test Number: 4

### Pressure vs. Time



Printed: 2010.05.17 @ 15:37:56

Ref. No: 16364

Superior Testers Enterprises LLC

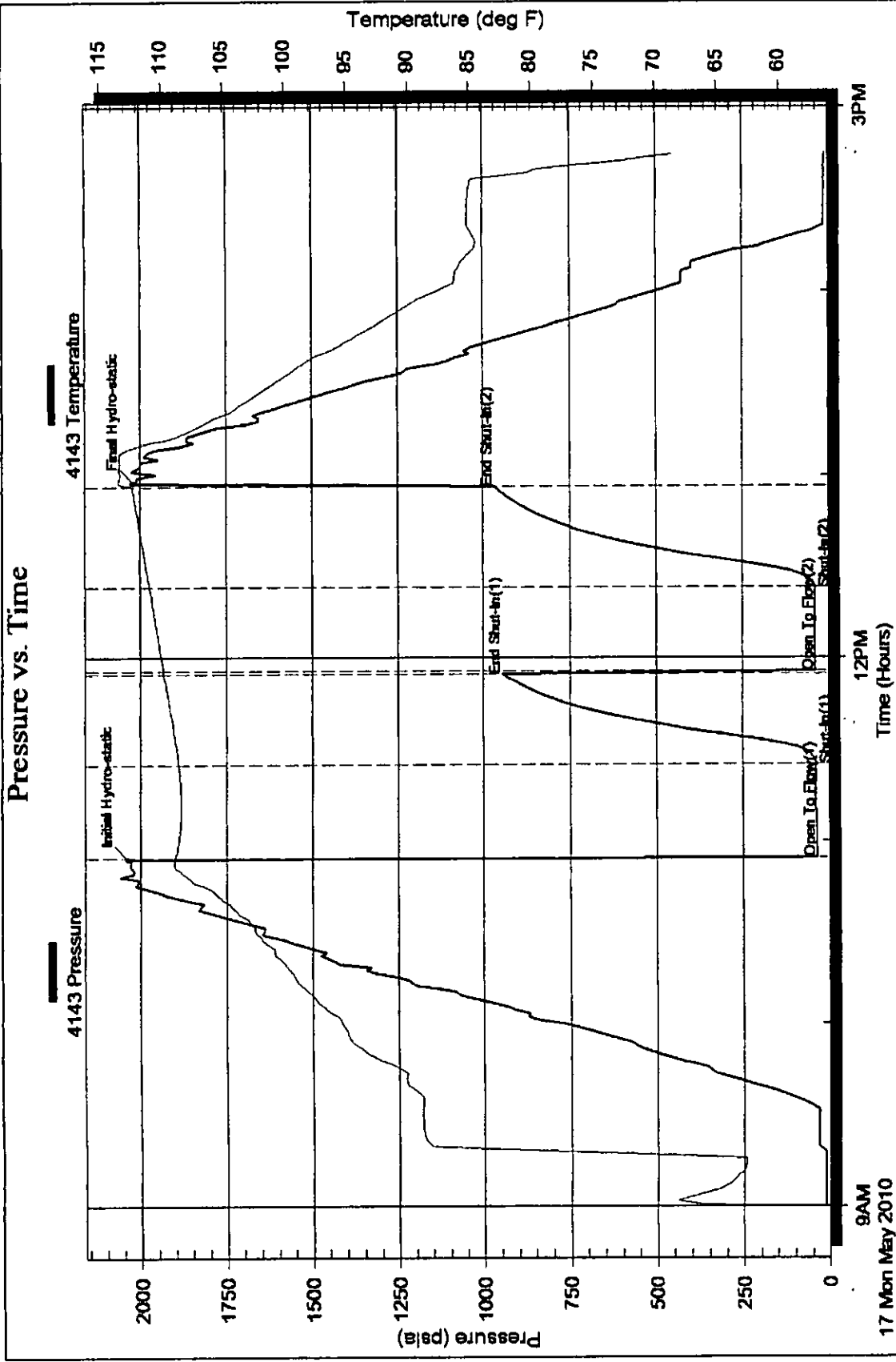
Serial #: 4143

Outside RITCHIE EXPLORATION INC

7-17S-30W LANE

Lab 1 test number: 4

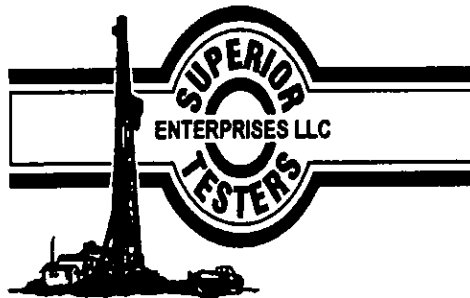
### Pressure vs. Time



Printed: 2010.05.17 @ 15:37:56

Ref. No: 16364

Superior Testers Enterprises LLC



## DRILL STEM TEST REPORT

Prepared For: **RITCHIE EXPORATION INC**

8100 3 22ND ST N 700  
BOX 783188  
WICHITA KS 67278

ATTN: MIKE KIDWELL

**7-17S-30W LANE**

**CRAMER 7A-1**

Start Date: 2010.05.18 @ 04:00:00

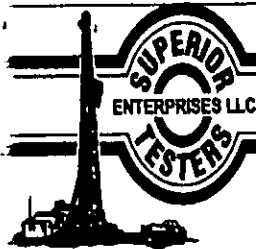
End Date: 2010.05.18 @ 10:04:30

Job Ticket #: 16365                      DST #: 5

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

Printed: 2010.05.18 @ 09:37:11

RITCHIE EXPORATION INC      CRAMER 7A-1      7-17S-30W LANE      DST # 5      LKC-J-      2010.05.18



# DRILL STEM TEST REPORT

RITCHE EXPROATION INC

CRAMER 7A-1

8100 3 22ND ST N 700  
 BOX 783188  
 WICHITA KS 67278  
 ATTN: MIKE KIDWELL

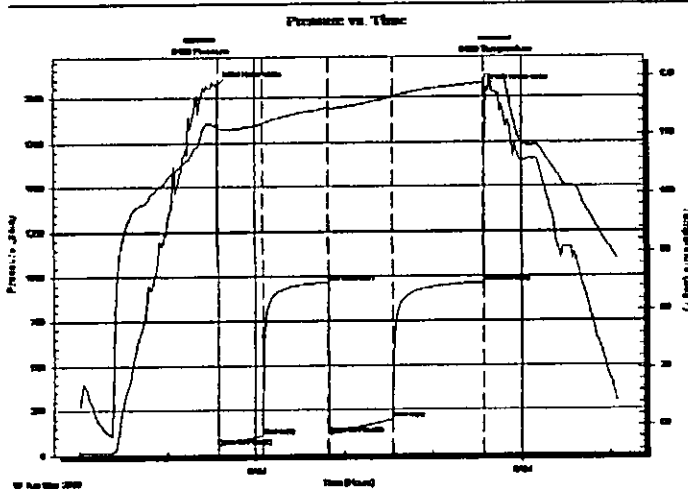
7-17S-30W LANE  
 Job Ticket: 16365 DST#: 5  
 Test Start: 2010.05.18 @ 04:00:00

## GENERAL INFORMATION:

Formation: LKC -J-  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 05:34:30  
 Time Test Ended: 10:04:30  
 Interval: 4172.00 ft (KB) To 4204.00 ft (KB) (TVD)  
 Total Depth: 4204.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: DAVID NICHOLS  
 Unit No: 3345 42 M SCOTT CITY  
 Reference Elevations: 2894.00 ft (KB)  
 2886.00 ft (CF)  
 KB to GR/CF: 8.00 ft

Serial #: 8400 inside  
 Press@RunDepth: 191.43 psia @ 4200.00 ft (KB) Capacity: 5000.00 psia  
 Start Date: 2010.05.18 End Date: 2010.05.18 Last Calib.: 2010.05.18  
 Start Time: 04:00:00 End Time: 10:04:30 Time On Btrr: 2010.05.18 @ 05:34:00  
 Time Off Btrr: 2010.05.18 @ 08:35:30

TEST COMMENT: 30-INITIAL OPENING WEAK BUILDING BLOW BUILT TO BOTTOM BUCKET IN 25 MINS  
 45-INITIAL SHUT IN NO BLOW BACK  
 45-FINAL OPENING WEAK BUILDING BLOW BUILT TO BOTTOM BUCKET IN 40 MINS  
 60-FINAL SHUT IN NO BLOW BACK



## PRESSURE SUMMARY

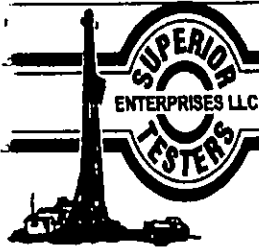
Time (Mn.)	Pressure (psia)	Temp (deg F)	Annotation
0	2068.53	111.59	Initial Hydro-static
1	45.94	111.15	Open To Flow (1)
31	105.18	111.80	Shut-in(1)
75	965.84	114.47	End Shut-in(1)
76	109.35	114.27	Open To Flow (2)
119	191.43	116.38	Shut-in(2)
181	962.79	118.71	End Shut-in(2)
182	2043.42	120.09	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
300.00	WATERY MUD 60%M40%W	4.39

## Gas Rates

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



# DRILL STEM TEST REPORT

RITCHE EXORATION INC

CRAMER 7A-1

8100 3 22ND ST N 700  
 BOX 783188  
 WICHITA KS 67278  
 ATTN: MIKE KIDWELL

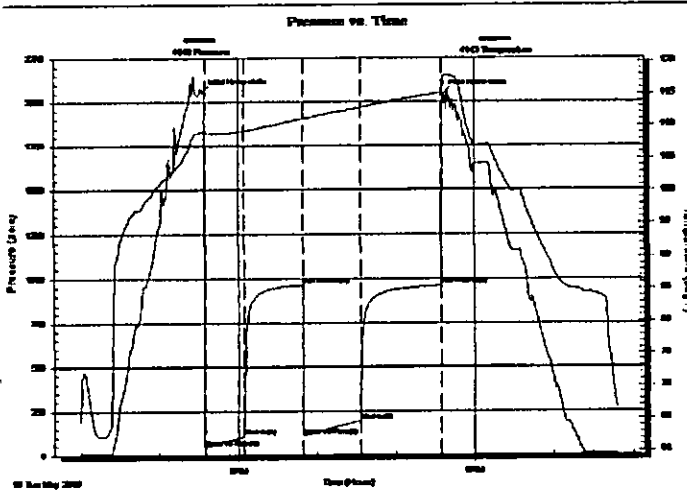
7-17S-30W LANE  
 Job Ticket: 16365 DST#: 5  
 Test Start: 2010.05.18 @ 04:00:00

## GENERAL INFORMATION:

Formation: LKC -J-  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 05:34:30 Tester: DAVID NICHOLS  
 Time Test Ended: 10:04:30 Unit No: 3345 42 M SCOTT CITY  
 Interval: 4172.00 ft (KB) To 4204.00 ft (KB) (TVD) Reference Elevations: 2894.00 ft (KB)  
 Total Depth: 4204.00 ft (KB) (TVD) 2886.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 8.00 ft

Serial #: 4143 Outside  
 Press@RunDepth: 959.32 psia @ 4201.00 ft (KB) Capacity: 5000.00 psia  
 Start Date: 2010.05.18 End Date: 2010.05.18 Last Calib.: 2010.05.18  
 Start Time: 04:00:00 End Time: 10:48:15 Time On Btrr: 2010.05.18 @ 05:33:16  
 Time Off Btrr: 2010.05.18 @ 08:35:46

TEST COMMENT: 30-INITIAL OPENING WEAK BUILDING BLOW BUILT TO BOTTOM BUCKET IN 25 MINS  
 45-INITIAL SHUT IN NO BLOW BACK  
 45-FINAL OPENING WEAK BUILDING BLOW BUILT TO BOTTOM BUCKET IN 40 MINS  
 60-FINAL SHUT IN NO BLOW BACK



## PRESSURE SUMMARY

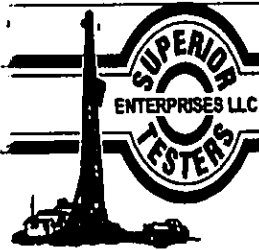
Time (Mn.)	Pressure (psia)	Temp (deg F)	Annotation
0	2057.09	109.06	Initial Hydro-static
2	43.60	109.08	Open To Flow (1)
32	104.07	109.19	Shut-In(1)
76	963.49	111.10	End Shut-In(1)
77	107.15	111.16	Open To Flow (2)
120	189.82	112.84	Shut-In(2)
182	959.32	115.16	End Shut-In(2)
183	2043.68	117.00	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
300.00	WATERY MUD 60%M40%W	4.39

## Gas Rates

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



# DRILL STEM TEST REPORT

TOOL DIAGRAM

RITCHE EXPLORATION INC

CRAMER 7A-1

8100 S 22ND ST N 700  
 BOX 783188  
 WICHITA KS 67278  
 ATTN: MIKE KIDWELL

7-17S-30W LANE

Job Ticket: 16365

DST#: 5

Test Start: 2010.05.18 @ 04:00:00

## Tool Information

Drill Pipe:	Length: 4151.00 ft	Diameter: 3.88 inches	Volume: 60.71 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: 60.71 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	2.00 ft			String Weight: Initial 51000.00 lb
Depth to Top Packer:	4172.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	32.00 ft			
Tool Length:	55.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4150.00	
Shut-In Tool	5.00			4155.00	
Hydroic Tool	5.00			4160.00	
Safety Joint	2.00			4162.00	
Packer	5.00			4167.00	23.00 Bottom Of Top Packer
Packer	5.00			4172.00	
Perforations	27.00			4199.00	
Recorder	1.00	8400	Inside	4200.00	
Recorder	1.00	4143	Outside	4201.00	
Bullnose	3.00			4204.00	32.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>55.00</b>				



# DRILL STEM TEST REPORT

FLUID SUMMARY

RITCHE EXORATION INC

CRAMER 7A-1

8100 3 22ND ST N 700  
BOX 783188  
WICHITA KS 67278  
ATTN: MIKE KIDWELL

7-17S-30W LANE  
Job Ticket: 16365      DST#: 5  
Test Start: 2010.05.18 @ 04:00:00

## 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:	48.00 sec/qt	Cushion Volume:	bbbl		
Water Loss:	8.00 in <sup>3</sup>	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psia		
Salinity:	1700.00 ppm				
Filter Cake:	inches				

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
300.00	WATERY MUD 60%M40%W	4.387

Total Length: 300.00 ft      Total Volume:      bbl  
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments:

Serial #: 8400

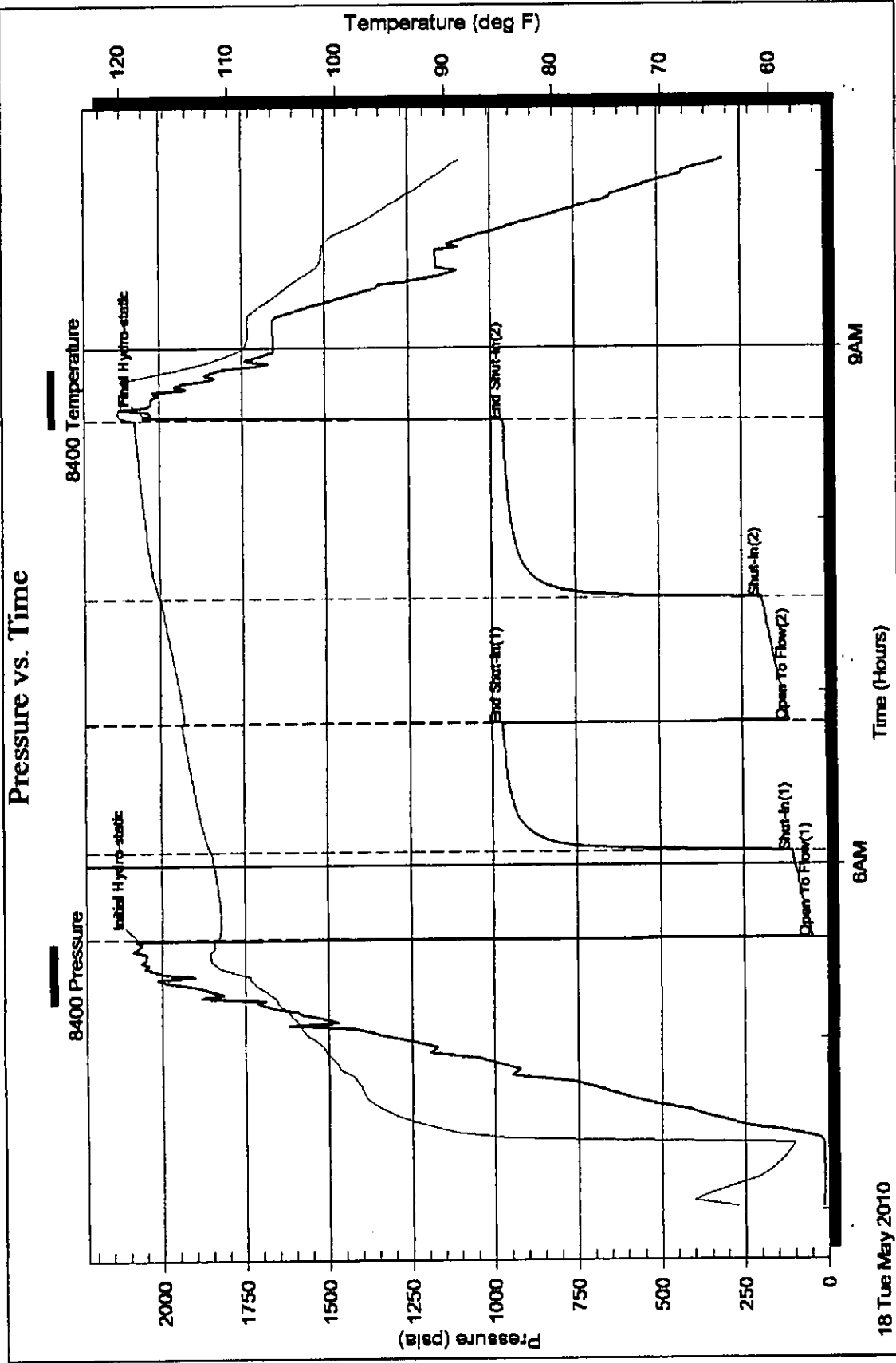
Inside

RITCHIE EXPLORATION INC

7-17S-JJW LANE

WSI Test Unit 3

### Pressure vs. Time



Printed: 2010.05.18 @ 09:37:12

Ref. No: 16365

Superior Testers Enterprises LLC



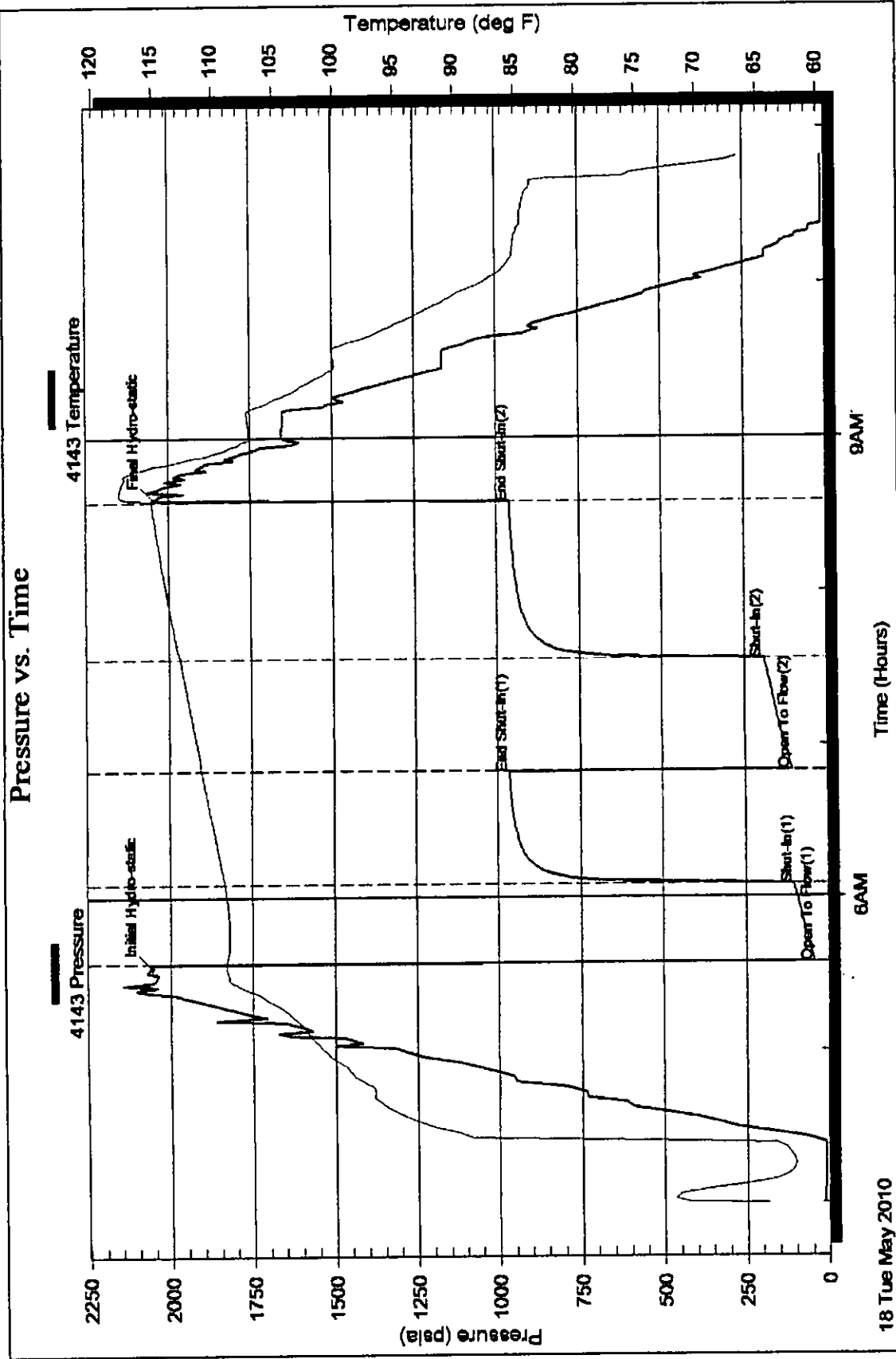
Serial #: 4143

Outside RITCHE EXPORATION INC.

7-17 S-30W LANE

Lot test: null def. 0

### Pressure vs. Time

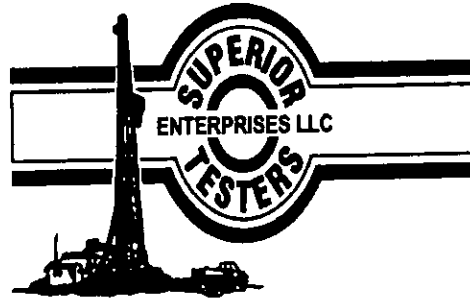


18 Tue May 2010

6AM

9AM

Time (Hours)



## DRILL STEM TEST REPORT

Prepared For: **RITCHIE EXPORATION INC**

8100 3 22ND ST N 700  
BOX 783188  
WICHITA KS 67278

ATTN: MIKE KIDWELL

**7-17S-30W LANE**

**CRAMER 7A-1**

Start Date: 2010.05.19 @ 05:00:00

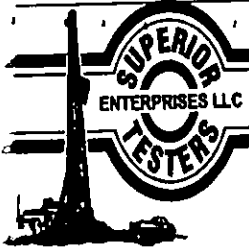
End Date: 2010.05.19 @ 10:09:00

Job Ticket #: 16366                      DST #: 6

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

Printed: 2010.05.19 @ 10:40:55

RITCHIE EXPORATION INC      CRAMER 7A-1      7-17S-30W LANE      DST # 6      ALTMONT      2010.05.19



# DRILL STEM TEST REPORT

RITCHE EXPROATION INC

8100 3 22ND ST N 700  
 BOX 783188  
 WICHITA KS 67278  
 ATTN: MIKE KIDWELL

CRAMER 7A-1

7-17S-30W LANE

Job Ticket: 16366      DST#: 6  
 Test Start: 2010.05.19 @ 05:00:00

## GENERAL INFORMATION:

Formation: **ALTMONT**  
 Deviated: No Whipstock:      ft (KB)  
 Time Tool Opened: 06:43:00  
 Time Test Ended: 10:09:00

Test Type: Conventional Bottom Hole (Initial)  
 Tester: DAVID NICHOLS  
 Unit No: 3345 42 M SCOTT CITY

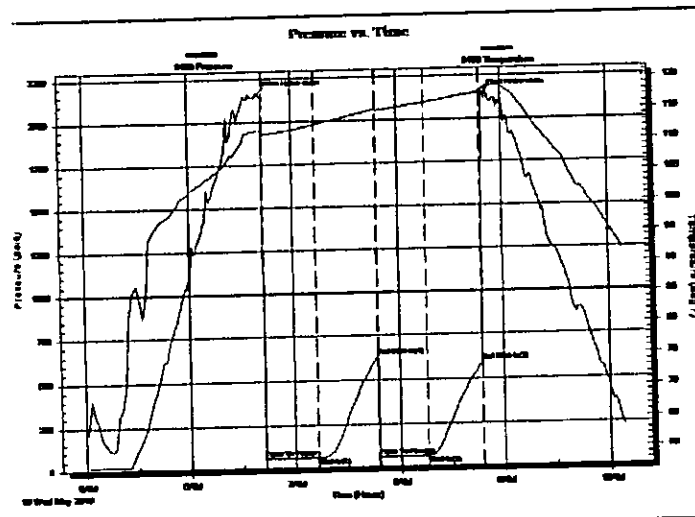
Interval: **4298.00 ft (KB) To 4360.00 ft (KB) (TVD)**  
 Total Depth: 4360.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2894.00 ft (KB)  
 2886.00 ft (CF)  
 KB to GR/CF: 8.00 ft

Serial #: **8400**      Inside  
 Pressure@RunDepth: 58.97 psia @ 4356.00 ft (KB)  
 Start Date: 2010.05.19      End Date: 2010.05.19  
 Start Time: 05:00:00      End Time: 10:09:00

Capacity: 5000.00 psia  
 Last Calib.: 2010.05.19  
 Time On Btm: 2010.05.19 @ 06:40:30  
 Time Off Btm: 2010.05.19 @ 08:49:00

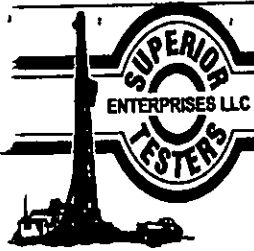
TEST COMMENT: 30-INITIAL OPENING SURFACE BLOW DIED AFTER 22 MINS  
 30-INITIAL SHUT IN NO BLOW BACK  
 30-FINAL OPENING NO BLOW  
 30-FINAL SHUT IN NO BLOW BACK



PRESSURE SUMMARY			
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2155.23	111.87	Initial Hydro-static
3	55.91	111.06	Open To Flow (1)
33	57.83	112.85	Shut-in(1)
67	632.79	115.07	End Shut-in(1)
68	58.12	114.93	Open To Flow (2)
96	58.97	116.14	Shut-in(2)
128	592.29	117.58	End Shut-in(2)
129	2142.91	118.22	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
5.00	MUD 100%M	0.07

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



# DRILL STEM TEST REPORT

RITCHE EXORATION INC

CRAMER 7A-1

8100 3 22ND ST N 700  
 BOX 783188  
 WICHITA KS 67278  
 ATTN: MIKE KIDWELL

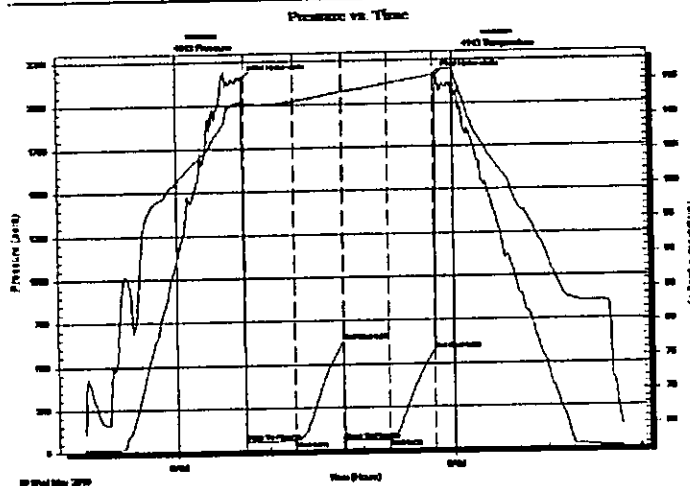
7-17S-30W LANE  
 Job Ticket: 16366 DST#: 6  
 Test Start: 2010.05.19 @ 05:00:00

## GENERAL INFORMATION:

Formation: **ALTMONT**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 06:43:00 Tester: DAVID NICHOLS  
 Time Test Ended: 10:09:00 Unit No: 3345 42 M SCOTT CITY  
 Interval: 4298.00 ft (KB) To 4360.00 ft (KB) (TVD)  
 Total Depth: 4360.00 ft (KB) (TVD) Reference Elevations: 2894.00 ft (KB)  
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 2886.00 ft (CF)  
 8.00 ft

Serial #: 4143 Outside  
 Pressure@RunDepth: 574.61 psia @ 4357.00 ft (KB) Capacity: 5000.00 psia  
 Start Date: 2010.05.19 End Date: 2010.05.19 Last Calib.: 2010.05.19  
 Start Time: 05:00:00 End Time: 10:48:15 Time On Btm: 2010.05.19 @ 06:43:16  
 Time Off Btm: 2010.05.19 @ 08:48:46

TEST COMMENT: 30-INITIAL OPENING SURFACE BLOW DIED AFTER 22 MINS  
 30-INITIAL SHUT IN NO BLOW BACK  
 30-FINAL OPENING NO BLOW  
 30-FINAL SHUT IN NO BLOW BACK



## PRESSURE SUMMARY

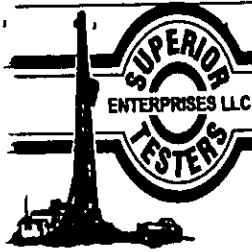
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2151.12	111.28	Initial Hydro-static
1	53.94	112.01	Open To Flow (1)
33	55.13	112.25	Shut-in(1)
65	628.17	113.50	End Shut-in(1)
65	55.53	113.54	Open To Flow (2)
94	56.53	114.60	Shut-in(2)
124	574.61	115.74	End Shut-in(2)
126	2158.79	116.30	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
5.00	MUD 100%M	0.07

## Gas Rates

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



# DRILL STEM TEST REPORT

TOOL DIAGRAM

RITCHE EXPROATION INC

CRAMER 7A-1

8100 3 22ND ST N 700  
 BOX 783188  
 WICHITA KS 67278  
 ATTN: MIKE KIDWELL

7-17S-30W LANE

Job Ticket: 16366      DST#: 6

Test Start: 2010.05.19 @ 05:00:00

**Tool Information**

Drill Pipe:	Length: 4277.00 ft	Diameter: 3.88 inches	Volume: 62.55 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: 65000.00 lb
			<u>Total Volume: 62.55 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	2.00 ft			String Weight: Initial 54000.00 lb
Depth to Top Packer:	4298.00 ft			Final 54000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	62.00 ft			
Tool Length:	85.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4276.00	
Shut-In Tool	5.00			4281.00	
Hydroic Tool	5.00			4286.00	
Safety Joint	2.00			4288.00	
Packer	5.00			4293.00	23.00      Bottom Of Top Packer
Packer	5.00			4298.00	
Change Over Sub	0.75			4298.75	
Drill Pipe	30.50			4329.25	
Change Over Sub	0.75			4330.00	
Perforations	25.00			4355.00	
Recorder	1.00	8400	Inside	4356.00	
Recorder	1.00	4143	Outside	4357.00	
Bullnose	3.00			4360.00	62.00      Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>85.00</b>				



# DRILL STEM TEST REPORT

FLUID SUMMARY

RITCHE EXPLORATION INC

CRAMER 7A-1

8100 3 22ND ST N 700  
BOX 783188  
WICHITA KS 67278  
ATTN: MIKE KIDWELL

7-17S-30W LANE  
Job Ticket: 16366      DST#: 6  
Test Start: 2010.05.19 @ 05:00:00

## Mud and Cushion Information

Mud Type: Gel Chem  
Mud Weight: 9.00 lb/gal  
Viscosity: 41.00 sec/qt  
Water Loss: 9.20 in<sup>3</sup>  
Resistivity: ohm.m  
Salinity: 2000.00 ppm  
Filter Cake: 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
5.00	MUD 100%M	0.073

Total Length: 5.00 ft      Total Volume: 0.073 bbl

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

Laboratory Name:      Laboratory Location:

Recovery Comments:

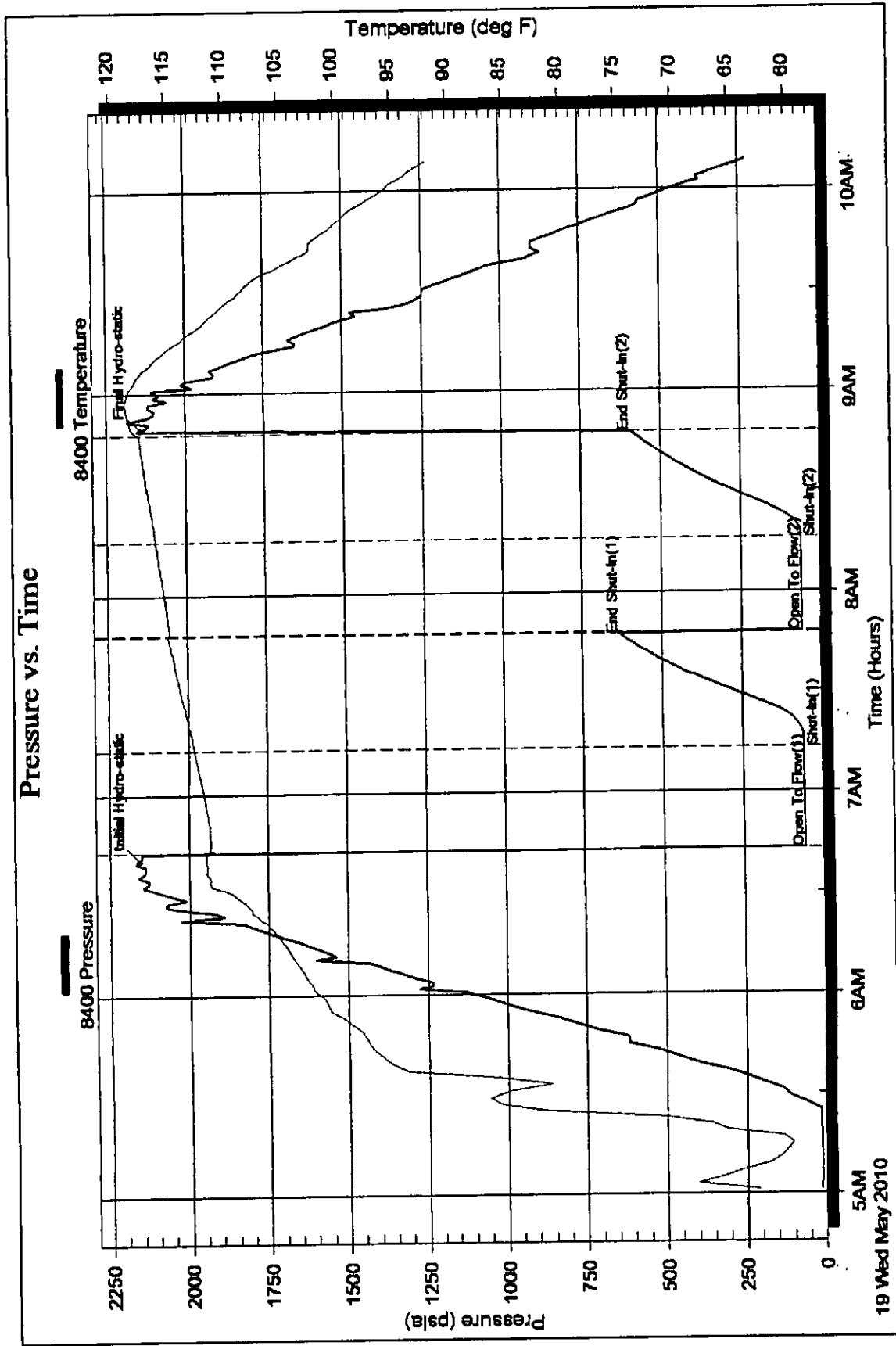
Serial #: 8400

Inside

RITCHEX EXPLORATION INC

7-1/S-30W LANE

### Pressure vs. Time



19 Wed May 2010



## DRILL STEM TEST REPORT

Prepared For: **RITCHIE EXPORATION INC**

8100 3 22ND ST N 700  
BOX 783188  
WICHITA KS 67278

ATTN: MIKE KIDWELL

**7-17S-30W LANE**

**CRAMER 7A-1**

Start Date: 2010.05.20 @ 07:00:00

End Date: 2010.05.20 @ 12:51:30

Job Ticket #: 16367                      DST #: 7

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

Printed: 2010.05.21 @ 10:52:15

RITCHIE EXPORATION INC

CRAMER 7A-1

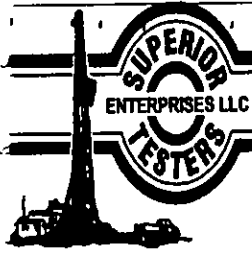
7-17S-30W LANE

DST # 7

JOHNSON

2010.05.20





# DRILL STEM TEST REPORT

RITCHE EXPROATION INC

8100 3 22ND ST N 700  
BOX 783188  
WICHITA KS 67278  
ATTN: MIKE KIDWELL

**CRAMER 7A-1**

**7-17S-30W LANE**

Job Ticket: 16367

DST#: 7

Test Start: 2010.05.20 @ 07:00:00

## GENERAL INFORMATION:

Formation: **JOHNSON**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 09:11:30  
Time Test Ended: 12:51:30

Test Type: Conventional Bottom Hole (Initial)  
Tester: DAVID NICHOLS  
Unit No: 3345 42 M SCOTT CITY

Interval: **4468.00 ft (KB) To 4524.00 ft (KB) (TVD)**  
Total Depth: **4524.00 ft (KB) (TVD)**  
Hole Diameter: **7.88 inches** Hole Condition: Fair

Reference Elevations: **2894.00 ft (KB)**  
**2886.00 ft (CF)**  
KB to GR/CF: **8.00 ft**

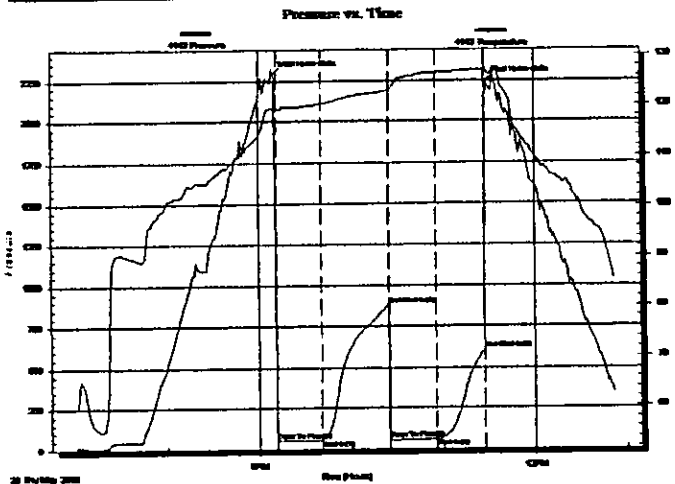
**Serial #: 4143**

Inside

Press@RunDepth: **61.45 psia @ 4520.00 ft (KB)**  
Start Date: **2010.05.20** End Date: **2010.05.20**  
Start Time: **07:01:00** End Time: **12:51:30**

Capacity: **5000.00 psia**  
Last Calib.: **2010.05.20**  
Time On Btrr: **2010.05.20 @ 09:09:00**  
Time Off Btrr: **2010.05.20 @ 11:28:30**

**TEST COMMENT: 30-INITIAL OPENING WEAK BLOW BUILT TO 1/2 INTO WATER THE DIED OFF TO A VERY WEAK SURFACE BLOW  
45-INITIAL SHUT IN NO BLOW BACK  
30-FINAL OPENING NO BLOW  
30-FINAL SHUT IN NO BLOW BACK**



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2290.29	119.30	Initial Hydro-static
3	54.21	119.00	Open To Flow (1)
32	57.93	120.37	Shut-In(1)
76	879.35	123.01	End Shut-In(1)
78	59.60	122.62	Open To Flow (2)
107	61.45	126.57	Shut-In(2)
138	608.73	127.05	End Shut-In(2)
140	2242.87	126.81	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
15.00	MUD SLIGHT SHOW OF OIL 100%M	0.22

## Gas Rates

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



# DRILL STEM TEST REPORT

RITCHE EXORATION INC

CRAMER 7A-1

8100 3 22ND ST N 700  
 BOX 783188  
 WICHITA KS 67278  
 ATTN: MIKE KIDWELL

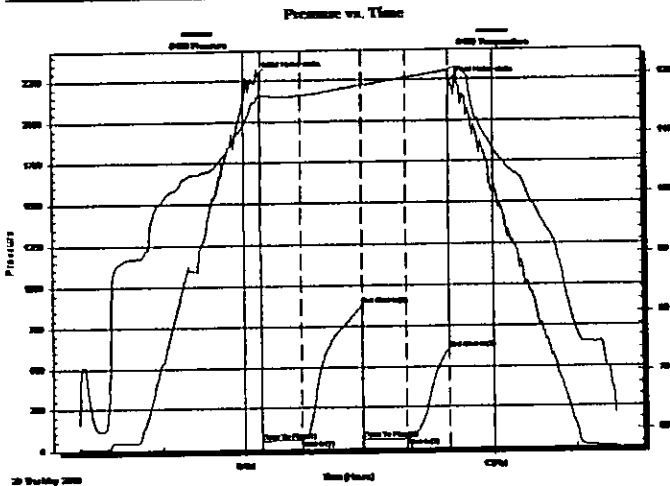
7-17S-30W LANE  
 Job Ticket: 16367 DST#: 7  
 Test Start: 2010.05.20 @ 07:00:00

### GENERAL INFORMATION:

Formation: JOHNSON  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 09:11:30  
 Time Test Ended: 12:51:30  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: DAVID NICHOLS  
 Unit No: 3345 42 M SCOTT CITY  
 Interval: 4468.00 ft (KB) To 4524.00 ft (KB) (TVD)  
 Total Depth: 4524.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Reference Elevations: 2894.00 ft (KB)  
 2886.00 ft (CF)  
 KB to GR/CF: 8.00 ft

Serial #: 8400 Outside  
 Press@RunDepth: 607.27 psia @ 4521.00 ft (KB) Capacity: 5000.00 psia  
 Start Date: 2010.05.20 End Date: 2010.05.20 Last Calib.: 2010.05.20  
 Start Time: 07:00:01 End Time: 13:28:16 Time On Btm: 2010.05.20 @ 09:09:46  
 Time Off Btm: 2010.05.20 @ 11:29:16

TEST COMMENT: 30-INITIAL OPENING WEAK BLOW BUILT TO 1/2 INTO WATER THE DIED OFF TO A VERY WEAK SURFACE BLOW  
 45-INITIAL SHUT IN NO BLOW BACK  
 30-FINAL OPENING NO BLOW  
 30-FINAL SHUT IN NO BLOW BACK



### PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2285.46	116.10	Initial Hydro-static
3	51.22	116.59	Open To Flow (1)
32	55.91	116.47	Shut-In(1)
76	877.39	118.17	End Shut-In(1)
76	57.30	118.15	Open To Flow (2)
108	59.60	119.32	Shut-In(2)
138	607.27	120.51	End Shut-In(2)
140	2238.71	120.79	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
15.00	MUD SLIGHT SHOW OF OIL 100%M	0.22

### Gas Rates

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



# DRILL STEM TEST REPORT

TOOL DIAGRAM

RITCHE EXORATION INC

CRAMER 7A-1

8100 3 22ND ST N 700  
 BOX 783188  
 WICHITA KS 67278  
 ATTN: MIKE KIDWELL

7-17S-30W LANE

Job Ticket: 16367

DST#: 7

Test Start: 2010.05.20 @ 07:00:00

## Tool Information

Drill Pipe:	Length: 4447.00 ft	Diameter: 3.88 inches	Volume: 65.03 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: 65000.00 lb
			Total Volume: 65.03 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	2.00 ft			String Weight: Initial 53000.00 lb
Depth to Top Packer:	4468.00 ft			Final 53000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	56.00 ft			
Tool Length:	79.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4446.00	
Shut-In Tool	5.00			4451.00	
Hydroic Tool	5.00			4456.00	
Safety Joint	2.00			4458.00	
Packer	5.00			4463.00	23.00 Bottom Of Top Packer
Packer	5.00			4468.00	
Change Over Sub	0.75			4468.75	
Drill Pipe	31.50			4500.25	
Change Over Sub	0.75			4501.00	
Perforations	18.00			4519.00	
Recorder	1.00	4143	Inside	4520.00	
Recorder	1.00	8400	Outside	4521.00	
Bullnose	3.00			4524.00	56.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>79.00</b>				



# DRILL STEM TEST REPORT

FLUID SUMMARY

RITCHE EXPLORATION INC  
8100 3 22ND ST N 700  
BOX 783188  
WICHITA KS 67278  
ATTN: MIKE KIDWELL

CRAMER 7A-1  
7-17S-30W LANE  
Job Ticket: 16367      DST#: 7  
Test Start: 2010.05.20 @ 07:00:00

## 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: 41.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.59 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psia		
Salinity: 2500.00 ppm			
Filter Cake: inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	MUD SLIGHT SHOW OF OIL 100%M	0.219

Total Length: 15.00 ft      Total Volume: 0.219 bbl  
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments:

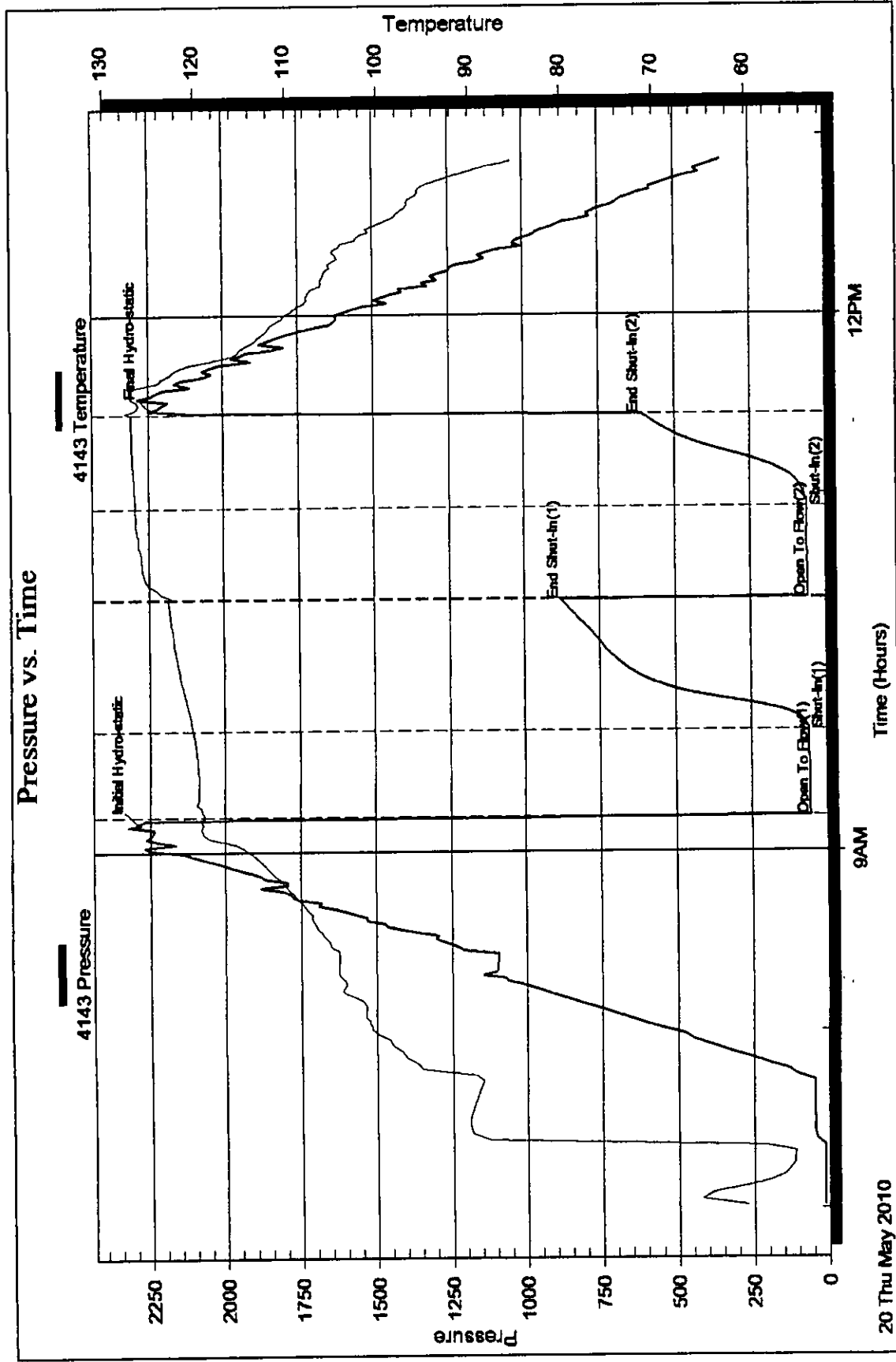
Serial #: 4143

Inside RITCHE EXPORATION INC

7-11530W LANE

Well Name Number

### Pressure vs. Time



20 Thu May 2010

9AM

Time (Hours)

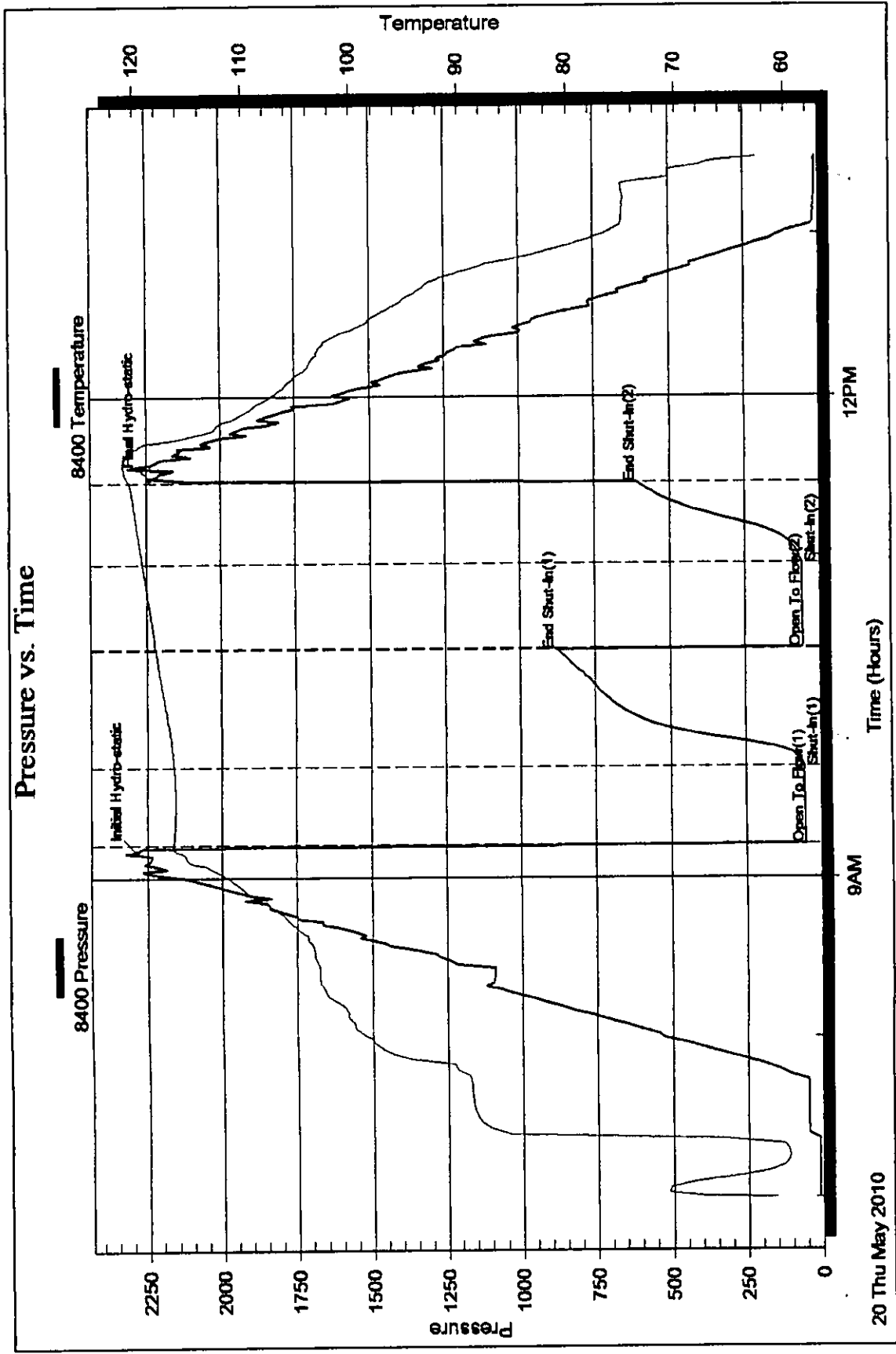
12PM

Serial #: 8400

Outside

RITCHIE EXPLORATION INC

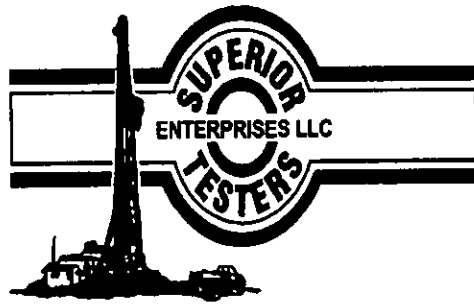
1-113300W LANE



Printed: 2010.05.21 @ 10:52:15

Ref. No: 16367

Superior Testers Enterprises LLC



## DRILL STEM TEST REPORT

Prepared For: **RITCHIE EXPORATION INC**

8100 3 22ND ST N 700  
BOX 783188  
WICHITA KS 67278

ATTN: MIKE KIDWELL

**7-17S-30W LANE**

**CRAMER 7A-1**

Start Date: 2010.05.21 @ 20:00:00

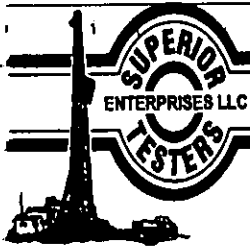
End Date: 2010.05.22 @ 01:47:30

Job Ticket #: 16368                      DST #: 8

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

Printed: 2010.05.21 @ 10:51:59

RITCHIE EXPORATION INC  
CRAMER 7A-1  
7-17S-30W LANE  
DST # 8  
JOHNSON  
2010.05.21



# DRILL STEM TEST REPORT

RITCHE EXPLORATION INC

CRAMER 7A-1

8100 3 22ND ST N 700  
 BOX 783188  
 WICHITA KS 67278  
 ATTN: MIKE KIDWELL

7-17S-30W LANE

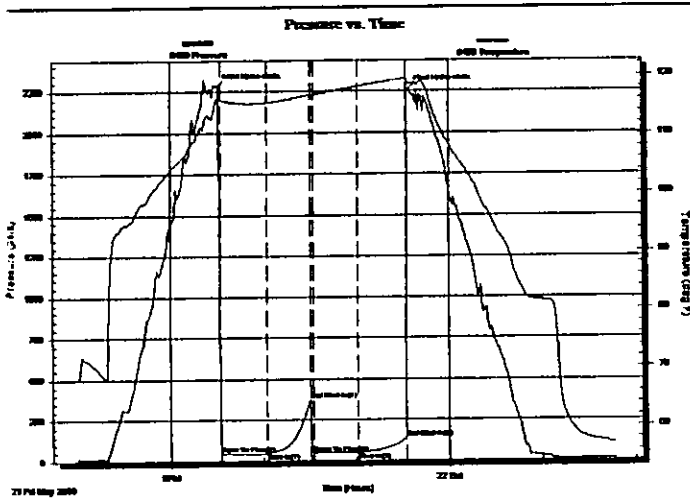
Job Ticket: 16368 DST#: 8  
 Test Start: 2010.05.21 @ 20:00:00

**GENERAL INFORMATION:**

Formation: JOHNSON  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 21:32:30 Tester: DAVID NICHOLS  
 Time Test Ended: 01:47:30 Unit No: 3345 42 M SCOTT CITY  
 Interval: 4496.00 ft (KB) To 4534.00 ft (KB) (TVD)  
 Total Depth: 4534.00 ft (KB) (TVD) Reference Elevations: 2894.00 ft (KB)  
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 2886.00 ft (CF)  
 KB to GR/CF: 8.00 ft

**Serial #: 8400** Inside  
 Press@RunDepth: 49.61 psia @ 4530.00 ft (KB) Capacity: 5000.00 psia  
 Start Date: 2010.05.21 End Date: 2010.05.22 Last Calib.: 2010.05.21  
 Start Time: 20:01:00 End Time: 01:47:30 Time On Bltr: 2010.05.21 @ 21:30:00  
 Time Off Bltr: 2010.05.21 @ 23:34:00

**TEST COMMENT:** 30-INITIAL OPENING SURFACE BLOW DIED AFTER 26 MINS  
 30-INITIAL SHUT IN NO BLOW BACK  
 30-FINAL OPENING NO BLOW  
 30-FINAL SHUT IN NO BLOW BACK



PRESSURE SUMMARY			
Time (Mn.)	Pressure (psia)	Temp (deg F)	Annotation
0	2275.51	115.85	Initial Hydro-static
3	44.51	115.81	Open To Flow (1)
33	47.83	115.49	Shut-in(1)
61	374.67	116.78	End Shut-in(1)
63	47.86	116.74	Open To Flow (2)
92	49.61	118.08	Shut-in(2)
123	138.66	119.47	End Shut-in(2)
124	2255.97	118.51	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
10.00	MUD SLIGHT SHOW OIL 100%M	0.15

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





# DRILL STEM TEST REPORT

RITCHE EXORATION INC

CRAMER 7A-1

8100 3 22ND ST N 700  
 BOX 783188  
 WICHITA KS 67278  
 ATTN: MIKE KIDWELL

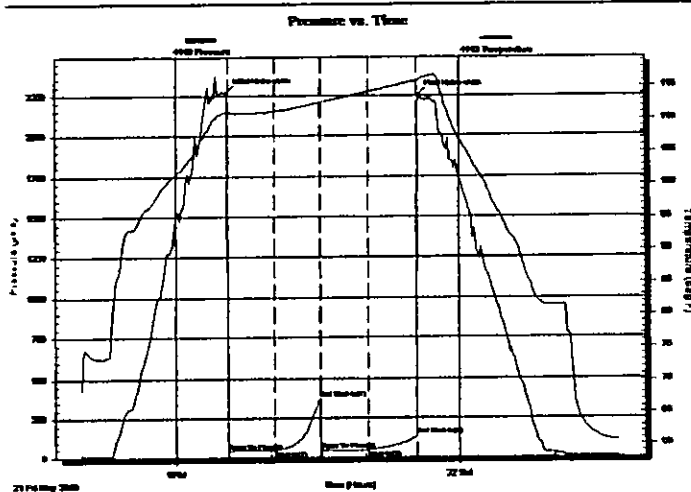
7-17S-30W LANE  
 Job Ticket: 16368 DST#: 8  
 Test Start: 2010.05.21 @ 20:00:00

## GENERAL INFORMATION:

Formation: **JOHNSON**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 21:32:30  
 Time Test Ended: 01:47:30  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: DAVID NICHOLS  
 Unit No: 3345 42 M SCOTT CITY  
 Interval: 4496.00 ft (KB) To 4534.00 ft (KB) (TVD)  
 Total Depth: 4534.00 ft (KB) (TVD)  
 Reference Elevations: 2894.00 ft (KB)  
 2886.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 KB to GR/CF: 8.00 ft

Serial #: **4143** Outside  
 Press@RunDepth: 137.30 psia @ 4531.00 ft (KB) Capacity: 5000.00 psia  
 Start Date: 2010.05.21 End Date: 2010.05.22 Last Calib.: 2010.05.21  
 Start Time: 20:00:01 End Time: 01:40:16 Time On Btm: 2010.05.21 @ 21:32:16  
 Time Off Btm: 2010.05.21 @ 23:33:46

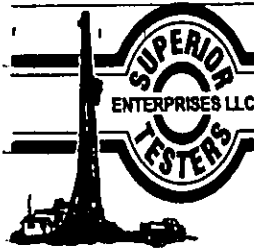
TEST COMMENT: 30-INITIAL OPENING SURFACE BLOW DIED AFTER 26 MINS  
 30-INITIAL SHUT IN NO BLOW BACK  
 30-FINAL OPENING NO BLOW  
 30-FINAL SHUT IN NO BLOW BACK



PRESSURE SUMMARY			
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2269.55	111.05	Initial Hydro-static
1	41.70	111.05	Open To Flow (1)
30	44.71	111.19	Shut-In(1)
59	372.63	112.56	End Shut-In(1)
60	46.08	112.63	Open To Flow (2)
90	47.76	114.25	Shut-In(2)
121	137.30	115.88	End Shut-In(2)
122	2254.04	116.07	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
10.00	MUD SLIGHT SHOW OIL 100%M	0.15

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



# DRILL STEM TEST REPORT

TOOL DIAGRAM

RITCHEE EXPLORATION INC

CRAMER 7A-1

8100 S 22ND ST N 700  
 BOX 783188  
 WICHITA KS 67278  
 ATTN: MIKE KIDWELL

7-17S-30W LANE

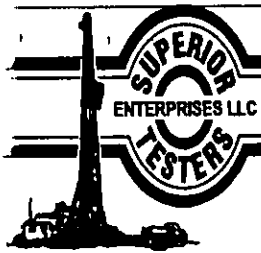
Job Ticket: 16368      DST#: 8  
 Test Start: 2010.05.21 @ 20:00:00

## Tool Information

Drill Pipe:	Length: 4475.00 ft	Diameter: 3.88 inches	Volume: 65.44 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: 65.44 bbl</u>	Tool Chased: 0.00 ft
Drill Pipe Above KB:	2.00 ft			String Weight: Initial 54000.00 lb
Depth to Top Packer:	4496.00 ft			Final 54000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	38.00 ft			
Tool Length:	61.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4474.00	
Shut-In Tool	5.00			4479.00	
Hydroic Tool	5.00			4484.00	
Safety Joint	2.00			4486.00	
Packer	5.00			4491.00	23.00      Bottom Of Top Packer
Packer	5.00			4496.00	
Perforations	33.00			4529.00	
Recorder	1.00	8400	Inside	4530.00	
Recorder	1.00	4143	Outside	4531.00	
Bullnose	3.00			4534.00	38.00      Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>61.00</b>				



# DRILL STEM TEST REPORT

FLUID SUMMARY

RITCHE EXPLORATION INC

CRAMER 7A-1

8100 3 22ND ST N 700  
BOX 783188  
WICHITA KS 67278  
ATTN: MIKE KIDWELL

7-17S-30W LANE  
Job Ticket: 16368      DST#: 8  
Test Start: 2010.05.21 @ 20:00:00

## 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: 41.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.59 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psia		
Salinity: 2500.00 ppm			
Filter Cake: inches			

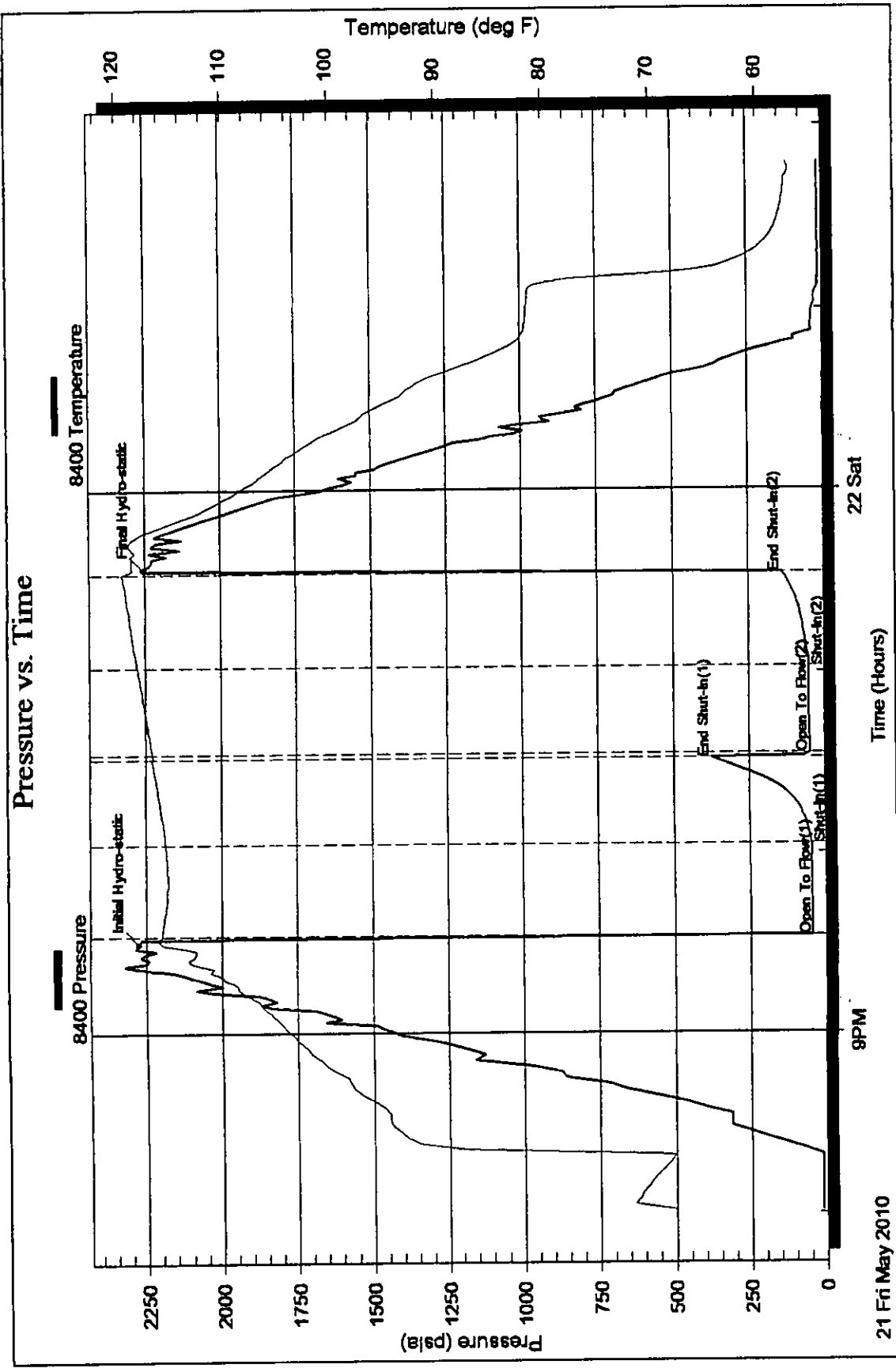
## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	MUD SLIGHT SHOW OIL 100%M	0.146

Total Length: 10.00 ft      Total Volume: 0.146 bbl  
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments:

### Pressure vs. Time



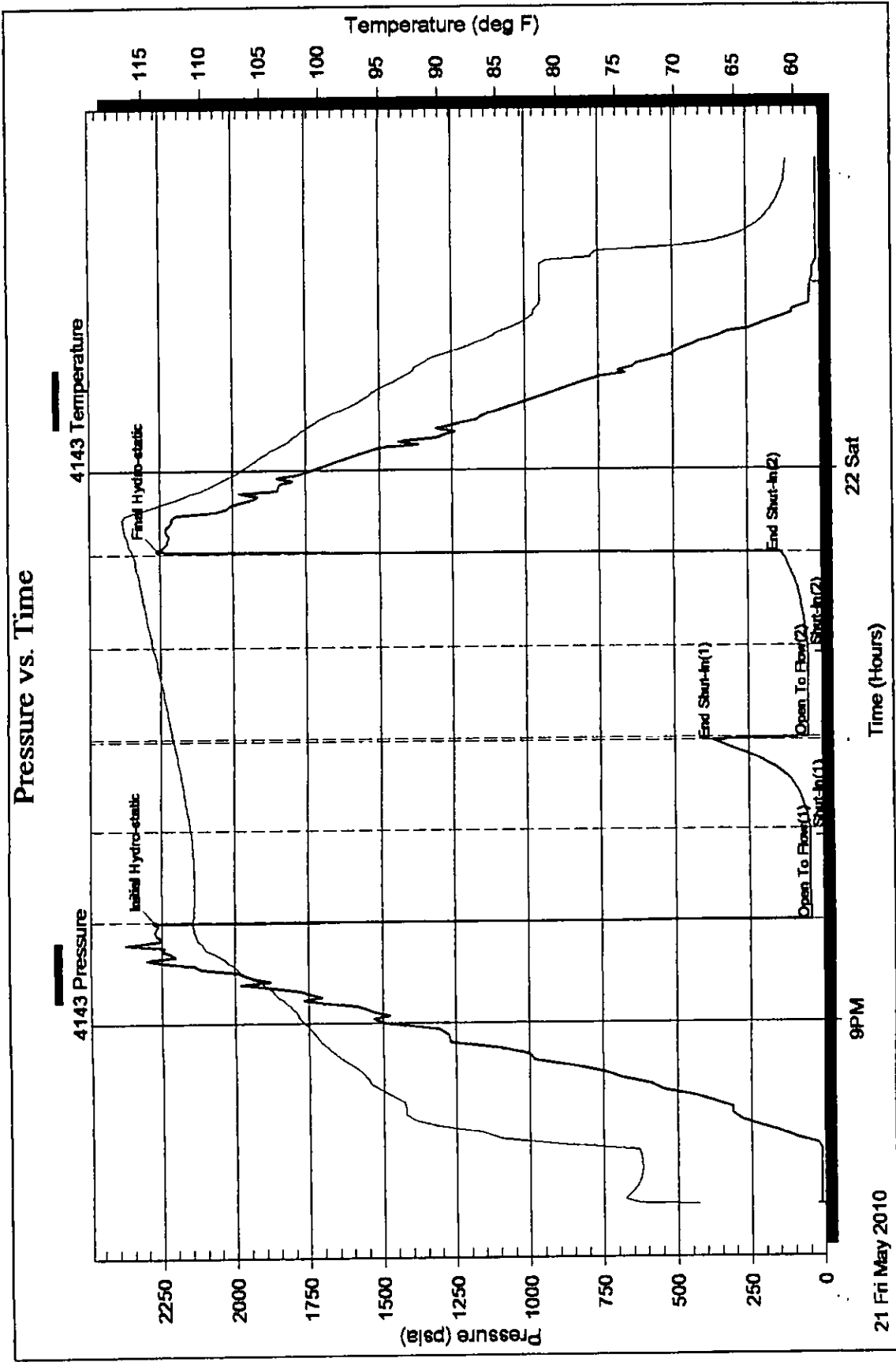
Serial #: 4143

Outside RITCHE EXPLORATION INC

7-115-JUV LA, etc

Dr. Test Number: 1

### Pressure vs. Time



Printed: 2010.05.21 @ 10:51:59

Ref. No: 16368

Superior Testers Enterprises LLC