

CONFIDENTIAL

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

RECEIVED ORIGINAL
MAY 27 2011
Form ACO-1
June 2009
Form Must Be Typed
Form must be Signed
Blank must be Filled
KCC WICHITA

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

Designate Type of Completion:
 New Well Re-Entry Workover
 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 #: _____

<u>2/23/11</u>	<u>3/4/11</u>	<u>3/4/11</u>
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 063-21893-00-00
Spot Description: 30' N & 20' E
SE NW SE Sec. 19 Twp. 13 S. R. 31 East West
1,680 Feet from North / South Line of Section
163 Feet from East / West Line of Section
Footages Calculated from Nearest Outside Section Corner:
 NE NW SE SW
County: Gove
Lease Name: Phillips 19D Well #: 2
Field Name: _____
Producing Formation: _____
Elevation: Ground: 2911 Kelly Bushing: 2921
Total Depth: 4685 Plug Back Total Depth: _____
Amount of Surface Pipe Set and Cemented at: 222 Feet
Multiple Stage Cementing Collar Used? Yes No
If yes, show depth set: _____ Feet
If Alternate II completion, cement circulated from: _____
feet depth to: _____ w/ _____ sx crnt.

Drilling Fluid Management Plan
(Data must be collected from the Reserve Pit)
Chloride content: 6600 ppm Fluid volume: 820 bbls
Dewatering method used: evaporation
Location of fluid disposal if hauled offsite: _____
Operator Name: _____
Lease Name: _____ Permit #: _____
Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West
County: _____ Permit #: _____

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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: 5/26/11

KCC Office Use ONLY
 Letter of Confidentiality Received
Date: 5/26/11 - 5/26/13
 Confidential Release Date: _____
 Wireline Log Received
 Geologist Report Received
 UIC Distribution
ALT I II III Approved by: _____ Date: _____

Operator Name: Ritchie Exploration, Inc. Lease Name: Phillips 19D Well #: 2
 Sec. 19 Twp. 13 S. R. 31 East West County: Gove

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 SEE ATTACHED
---	--

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	222	common	175	3% cc, 2% gel

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 <i>(Amount and Kind of Material Used)</i>	Depth
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TUBING RECORD: Size: _____ Set At: _____ Packer At: _____		Liner Run: <input type="checkbox"/> Yes <input type="checkbox"/> No	
Date of First, Resumed Production, SWD or ENHR. _____		Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain) _____	
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 type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other (Specify) _____	PRODUCTION INTERVAL: _____ _____
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#2 Phillips 19D

1680' FSL & 163' FEL

30' N & 20' E of SE NW SE Section 19-13S-31W

Gove County, Kansas

API# 15-063-21893-0000

Elevation: GL: 2911', KB: 2921'

<u>Sample Tops</u>			<u>Ref.</u>	<u>Well</u>
Anhydrite	2405'	+516	-17	
B/Anhydrite	2423'	+498	-10	
Heebner	3916'	-995	-10	
Lansing	3960'	-1039	-10	
LKC-C	3994'	-1073	-8	
LKC-D	4012'	-1091	-10	
Muncie Shale	4115'	-1194	-14	
LKC-H	4131'	-1210	-14	
Stark Shale	4199'	-1278	-14	
BKC	4272'	-1351	-13	
Marmaton	4292'	-1371	-10	
Altamont	4308'	-1387	-6	
Myrick Station	4432'	-1511	-11	
Fort Scott	4449'	-1528	-9	
Cherokee Shale	4480'	-1559	-10	
Johnson	4525'	-1604	-13	
Base/Johnson	4546'	-1625	-14	
Morrow Sand	4550'	-1629	-14	
Mississippian	4581'	-1660	-27	
RTD	4685'	-1764		

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ALLIED CEMENTING CO., LLC. 041006

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

SERVICE POINT:
Oakley

DATE <u>2-23-11</u>	SEC <u>19</u>	TWP. <u>13S</u>	RANGE <u>31W</u>	CALLED OUT	ON LOCATION	JOB START <u>10:00am</u>	JOB FINISH <u>10:30am</u>
LEASE <u>Phillips</u>	WELL # <u>#2 190</u>	LOCATION <u>Oakley 11S 3E 4S</u>			COUNTY <u>Gove</u>	STATE <u>KS</u>	
OLD OR <u>NEW</u> (Circle one)				<u>1/4 W NINTO</u>			

CONTRACTOR Murfin Drilling Rig 14 OWNER same

TYPE OF JOB Surface

HOLE SIZE 12 1/4 T.D. 222' CEMENT AMOUNT ORDERED 175 SKS COM

CASING SIZE 8 7/8 DEPTH 222' 3/00 2/09 2L

TUBING SIZE DEPTH

DRILL PIPE DEPTH

TOOL DEPTH

PRES. MAX MINIMUM

MEAS. LINE SHOE JOINT

CEMENT LEFT IN CSG. 15'

PERFS.

DISPLACEMENT 13.18 BBL

EQUIPMENT

PUMP TRUCK CEMENTER Andrew

423-281 HELPER Larene

BULK TRUCK

394 DRIVER Wil

BULK TRUCK

DRIVER

REMARKS:

Cement in cellar

Thank you

CHARGE TO: Ritchie Exploration

STREET

CITY STATE ZIP

COMMON	<u>175 SKS</u>	@ <u>15.45</u>	<u>2703.75</u>
POZMIX		@	
GEL	<u>3 SKS</u>	@ <u>20.80</u>	<u>62.40</u>
CHLORIDE	<u>6 SKS</u>	@ <u>58.20</u>	<u>349.20</u>
ASC		@	
		@	
		@	
		@	
		@	
		@	
HANDLING	<u>184 SKS</u>	@ <u>2.40</u>	<u>441.60</u>
MILEAGE	<u>109 sk/mile</u>		<u>368.00</u>
TOTAL			<u>3924.95</u>

SERVICE

DEPTH OF JOB	<u>222'</u>		
PUMP TRUCK CHARGE			<u>1018.00</u>
EXTRA FOOTAGE		@	
MILEAGE	<u>20 miles</u>	@ <u>2.00</u>	<u>140.00</u>
MANIFOLD		@	
		@	
TOTAL			<u>1158.00</u>

PLUG & FLOAT EQUIPMENT

	@	
	@	
	@	
	@	
	@	
TOTAL		

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 Corey Church

SIGNATURE Corey Church

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

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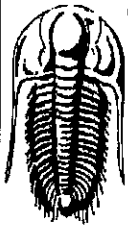
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Handwritten initials



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Ritchie Exploration

8100 E 22nd N 700
Wichita, Ks 67278

ATTN: Max Lovely

Phillips 19D#2

19-13-31w Gove, Ks

Job Ticket: 042052

DST#: 1

Test Start: 2011.02.27 @ 14:21:42

GENERAL INFORMATION:

Formation: **Lansing H**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:59:37

Time Test Ended: 19:35:06

Test Type: Conventional Bottom Hole

Tester: Brandon Turley

Unit No: 35

Interval: **4112.00 ft (KB) To 4148.00 ft (KB) (TVD)**

Total Depth: 4148.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2921.00 ft (KB)

2911.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: 8373 Inside

Press@RunDepth: 29.18 psig @ 4113.00 ft (KB)

Start Date: 2011.02.27

End Date: 2011.02.27

Start Time: 14:21:42

End Time: 19:35:06

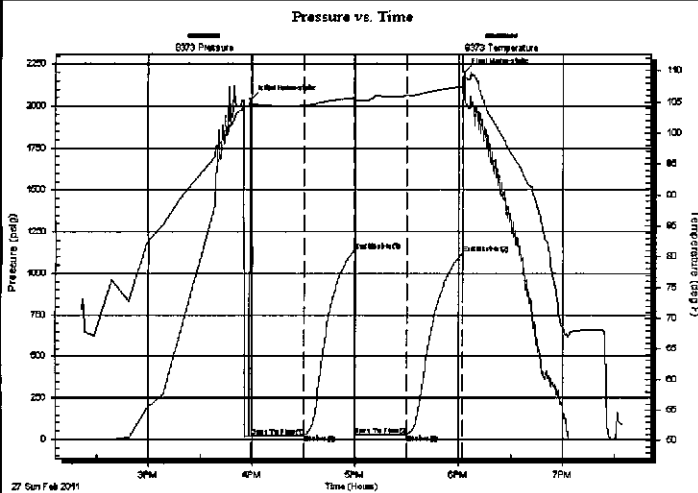
Capacity: 8000.00 psig

Last Calib.: 2011.02.27

Time On Btm: 2011.02.27 @ 15:59:22

Time Off Btm: 2011.02.27 @ 18:02:52

TEST COMMENT: IF: 1/4 blow died in 8 min.
IS: No return.
FF: No blow . Flushed tool no blow .
FS: No return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2040.35	104.94	Initial Hydro-static
1	19.20	104.04	Open To Flow (1)
32	25.03	104.48	Shut-In(1)
60	1139.23	105.68	End Shut-In(1)
61	24.57	104.94	Open To Flow (2)
91	29.18	106.00	Shut-In(2)
123	1122.41	107.51	End Shut-In(2)
124	2201.28	109.39	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	mud 100%m	0.05

Gas Rates

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

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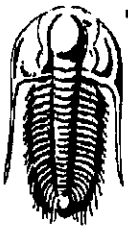
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**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration

Phillips 19D#2

8100 E 22nd N 700
Wichita, Ks 67278

19-13-31w Gove, Ks

Job Ticket: 042052

DST#: 1

ATTN: Max Lovely

Test Start: 2011.02.27 @ 14:21:42

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	0 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	0 ppm
Viscosity: 54.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.40 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 1800.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	mud 100%m	0.049

Total Length: 10.00 ft Total Volume: 0.049 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

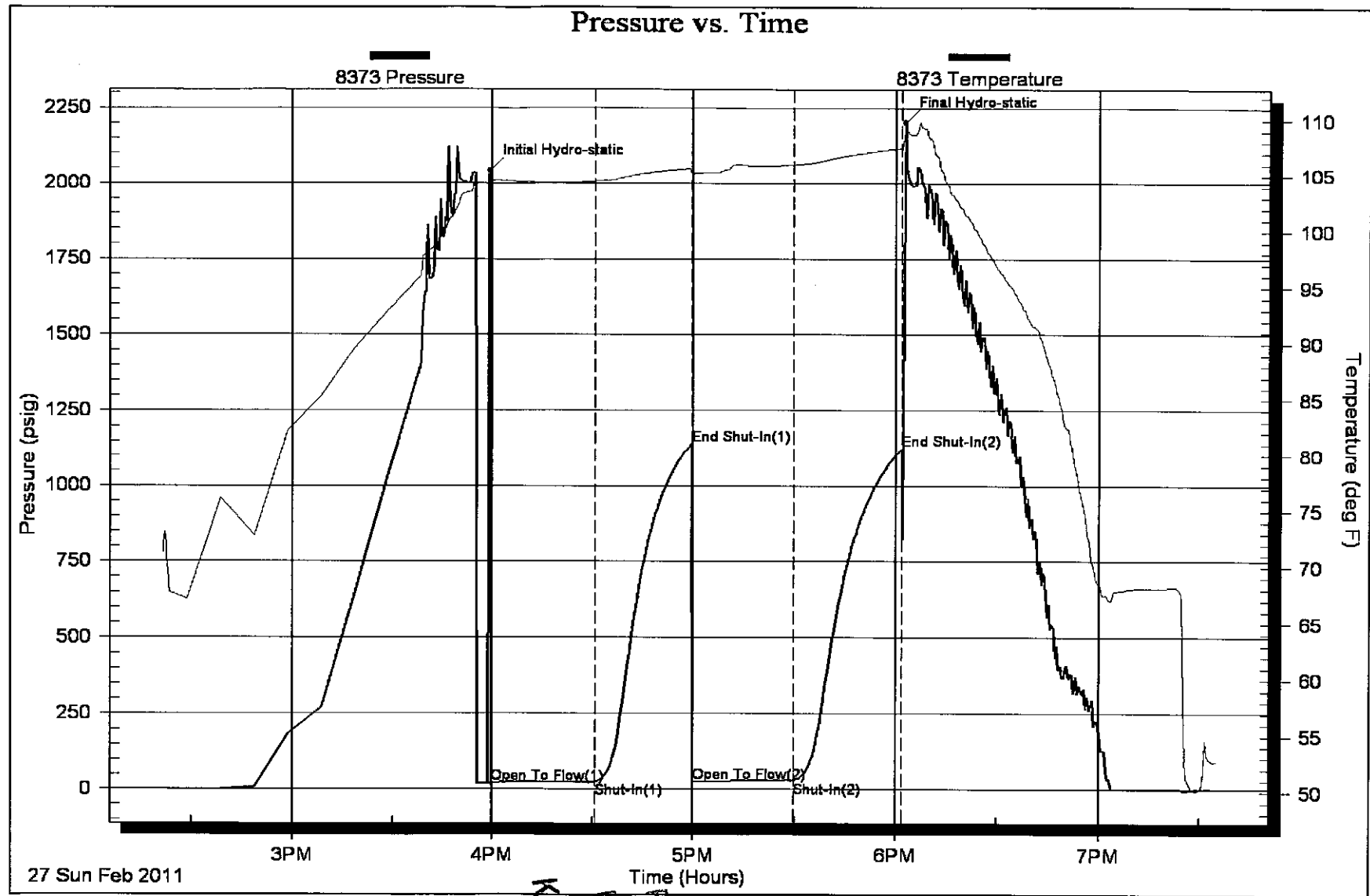
Serial #:

Laboratory Name:

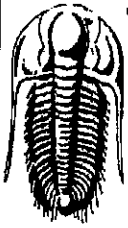
Laboratory Location:

Recovery Comments:

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DRILL STEM TEST REPORT

Ritchie Exploration

8100 E 22nd N 700
Wichita, Ks 67278

ATTN: Max Lovely

Phillips 19D#2

19-13-31w Gove, Ks

Job Ticket: 042053

DST#: 2

Test Start: 2011.02.28 @ 03:36:14

GENERAL INFORMATION:

Formation: **Lansing I**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:46:39

Time Test Ended: 11:10:38

Test Type: Conventional Bottom Hole

Tester: Brandon Turley

Unit No: 35

Interval: **4146.00 ft (KB) To 4174.00 ft (KB) (TVD)**

Total Depth: 4174.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2921.00 ft (KB)

2911.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: 8373

Inside

Press@RunDepth: 1000.35 psig @ 4147.00 ft (KB)

Start Date: 2011.02.28

End Date: 2011.02.28

Start Time: 03:36:14

End Time: 11:10:38

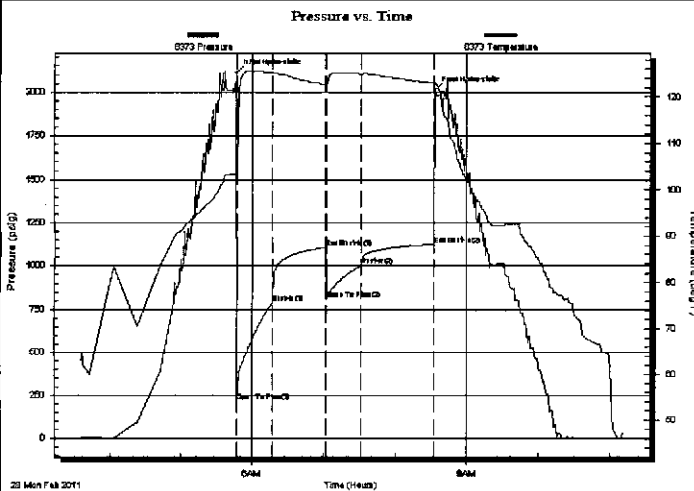
Capacity: 8000.00 psig

Last Calib.: 2011.02.28

Time On Btm: 2011.02.28 @ 05:46:09

Time Off Btm: 2011.02.28 @ 08:33:23

TEST COMMENT: IF: BOB in 1 min.
IS: No return.
FF: BOB in 2 min.
FS: No return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2109.88	103.53	Initial Hydro-static
1	216.99	102.67	Open To Flow (1)
31	790.08	125.23	Shut-In(1)
76	1107.35	122.47	End Shut-In(1)
76	810.22	122.40	Open To Flow (2)
106	1000.35	124.91	Shut-In(2)
167	1124.25	122.96	End Shut-In(2)
168	2011.13	122.52	Final Hydro-static

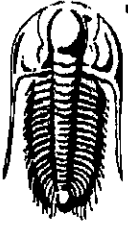
Recovery

Length (ft)	Description	Volume (bbl)
1316.00	w ater 100%w	13.54
470.00	mcw 90%w 10%m	6.59
376.00	w cm 40%w 60%m	5.27

Gas Rates

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

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DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration

Phillips 19D#2

8100 E 22nd N 700
Wichita, Ks 67278

19-13-31w Gove, Ks

Job Ticket: 042053

DST#: 2

ATTN: Max Lovely

Test Start: 2011.02.28 @ 03:36:14

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

49000 ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbf

Water Loss: 6.39 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 1800.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
1316.00	water 100%w	13.541
470.00	mcw 90%w 10%m	6.593
376.00	w cm 40%w 60%m	5.274

Total Length: 2162.00 ft Total Volume: 25.408 bbf

Num Fluid Samples: 0

Num Gas Bombs: 0

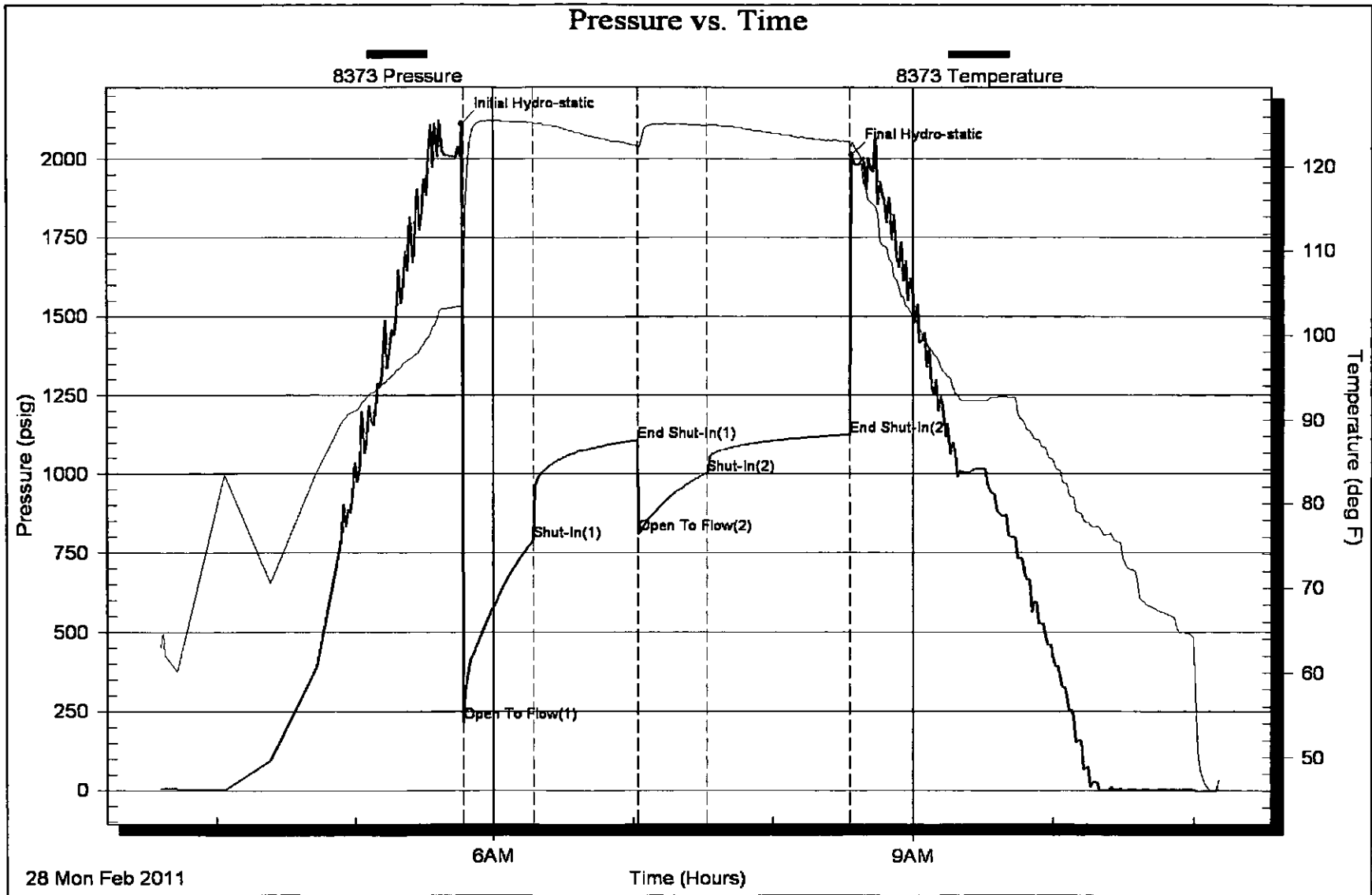
Serial #:

Laboratory Name:

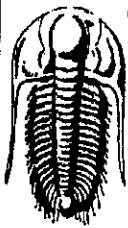
Laboratory Location:

Recovery Comments: .18@61=49000

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DRILL STEM TEST REPORT

Ritchie Exploration

8100 E 22nd N 700
Wichita, Ks 67278

ATTN: Max Lovely

Phillips 19D#2

19-13-31w Gove, Ks

Job Ticket: 042055

DST#: 4

Test Start: 2011.03.02 @ 04:55:58

GENERAL INFORMATION:

Formation: **Myric- Ft. Scott**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:22:23

Time Test Ended: 12:55:22

Test Type: Conventional Bottom Hole

Tester: Brandon Turley

Unit No: 35

Interval: **4416.00 ft (KB) To 4465.00 ft (KB) (TVD)**

Total Depth: 4465.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2921.00 ft (KB)

2911.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: 8373 Inside

Press@RunDepth: 365.36 psig @ 4417.00 ft (KB)

Start Date: 2011.03.02

End Date: 2011.03.02

Start Time: 04:55:58

End Time: 12:55:22

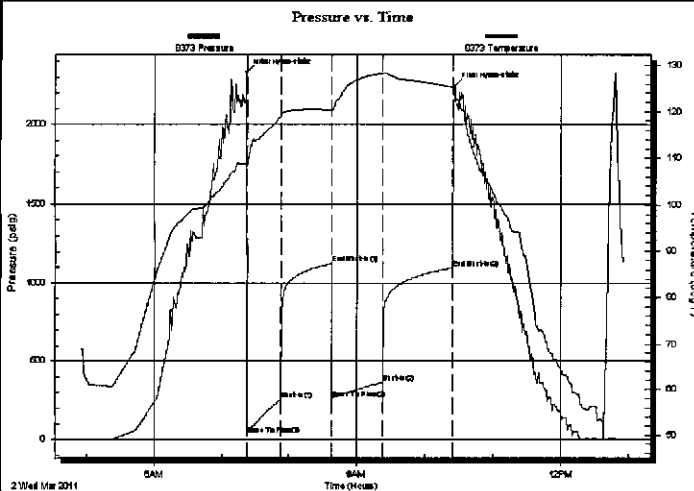
Capacity: 8000.00 psig

Last Calib.: 2011.03.02

Time On Btm: 2011.03.02 @ 07:21:38

Time Off Btm: 2011.03.02 @ 10:25:52

TEST COMMENT: IF: 1/4 blow BOB in 13 min.
IS: No return.
FF: 1/4 blow BOB in 20 min.
FS: No return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2329.13	109.08	Initial Hydro-static
1	29.86	108.25	Open To Flow (1)
32	255.11	119.04	Shut-In(1)
77	1124.30	120.39	End Shut-In(1)
77	260.12	119.90	Open To Flow (2)
121	365.36	128.21	Shut-In(2)
183	1097.93	125.29	End Shut-In(2)
185	2245.39	123.10	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
564.00	mcw 80%w 20%m	2.99
218.00	w cm 20%w 80%m	3.06

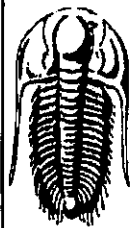
Gas Rates

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

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DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration

Phillips 19D#2

8100 E 22nd N 700
Wichita, Ks 67278

19-13-31w Gove, Ks

Job Ticket: 042055

DST#: 4

ATTN: Max Lovely

Test Start: 2011.03.02 @ 04:55:58

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

31000 ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbl

Water Loss: 9.58 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
564.00	mcw 80%w 20%m	2.992
218.00	wcm 20%w 80%m	3.058

Total Length: 782.00 ft Total Volume: 6.050 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

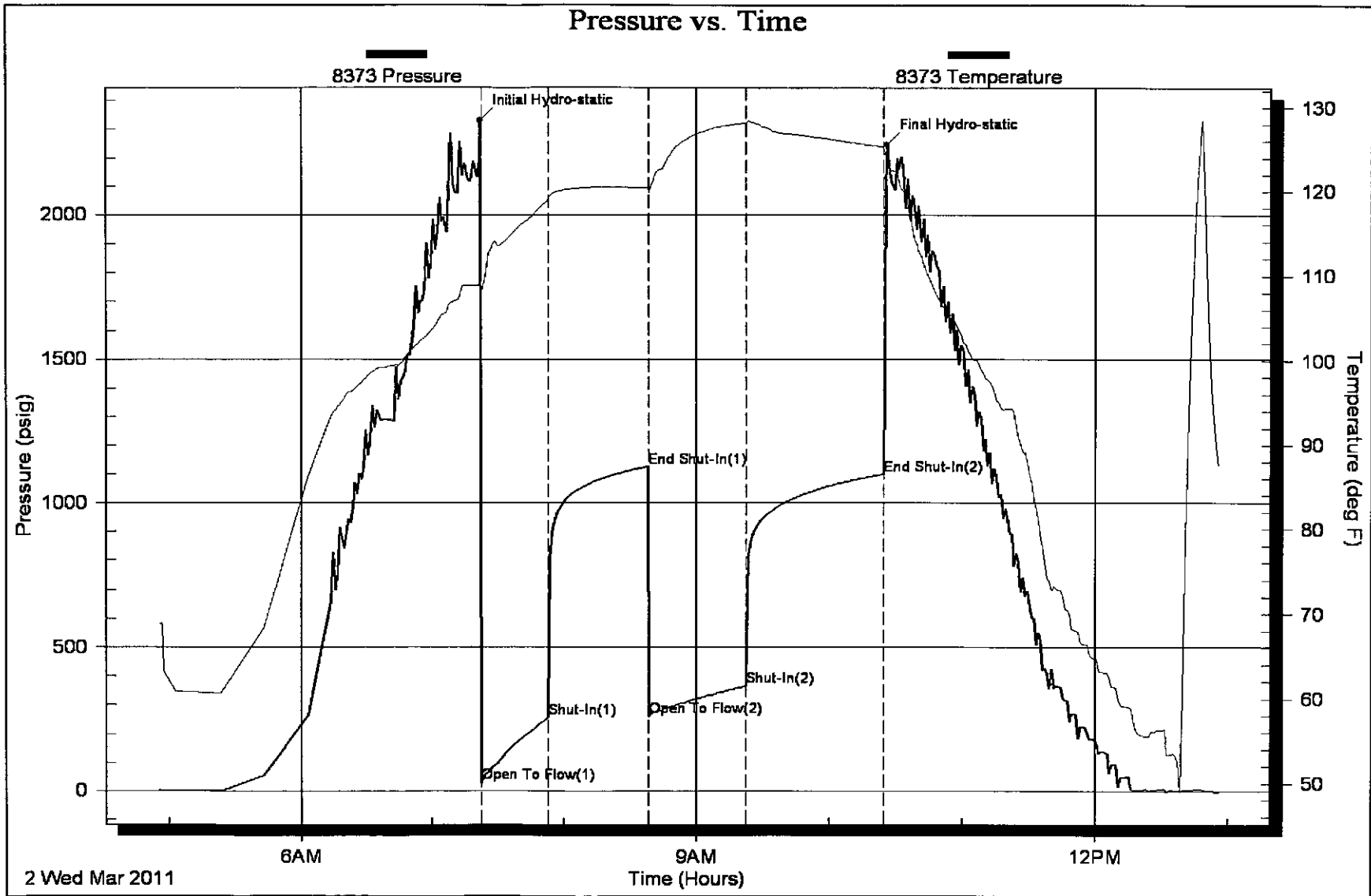
Serial #:

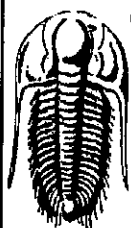
Laboratory Name:

Laboratory Location:

Recovery Comments: .26@61=31000

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TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Ritchie Exploration

Phillips 19D#2

8100 E 22nd N 700
Wichita, Ks 67278

19-13-31w Gove, Ks

Job Ticket: 042056

DST#: 5

ATTN: Max Lovely

Test Start: 2011.03.02 @ 23:34:13

GENERAL INFORMATION:

Formation: **Johnson**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 01:29:38

Time Test Ended: 05:07:37

Test Type: Conventional Bottom Hole

Tester: Brandon Turley

Unit No: 35

Interval: **4518.00 ft (KB) To 4539.00 ft (KB) (TVD)**

Reference Elevations: 2921.00 ft (KB)

Total Depth: 4539.00 ft (KB) (TVD)

2911.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 10.00 ft

Serial #: 8373

Inside

Press@RunDepth: 19.40 psig @ 4519.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2011.03.02

End Date:

2011.03.03

Last Calib.: 2011.03.03

Start Time: 23:34:13

End Time:

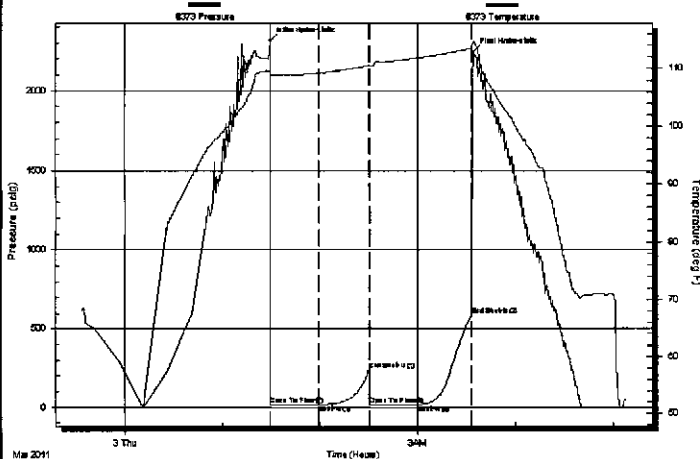
05:07:37

Time On Btm: 2011.03.03 @ 01:29:23

Time Off Btm: 2011.03.03 @ 03:33:53

TEST COMMENT: IF: Surface blow died in 8 min.
IS: No return.
FF: No blow. Flushed tool no blow.
FS: No return.

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2311.27	109.61	Initial Hydro-static
1	17.45	108.98	Open To Flow (1)
31	18.20	109.21	Shut-In(1)
61	238.66	110.51	End Shut-In(1)
62	17.68	110.40	Open To Flow (2)
91	19.40	111.85	Shut-In(2)
124	593.50	113.44	End Shut-In(2)
125	2244.54	114.56	Final Hydro-static

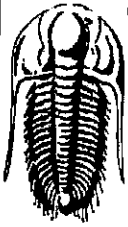
Recovery

Length (ft)	Description	Volume (bbl)
5.00	mud 100%m	0.02

Gas Rates

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

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DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration

Phillips 19D#2

8100 E 22nd N 700
Wichita, Ks 67278

19-13-31w Gove, Ks

Job Ticket: 042056

DST#: 5

ATTN: Max Lovely

Test Start: 2011.03.02 @ 23:34:13

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.20 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3400.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	mud 100% _m	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

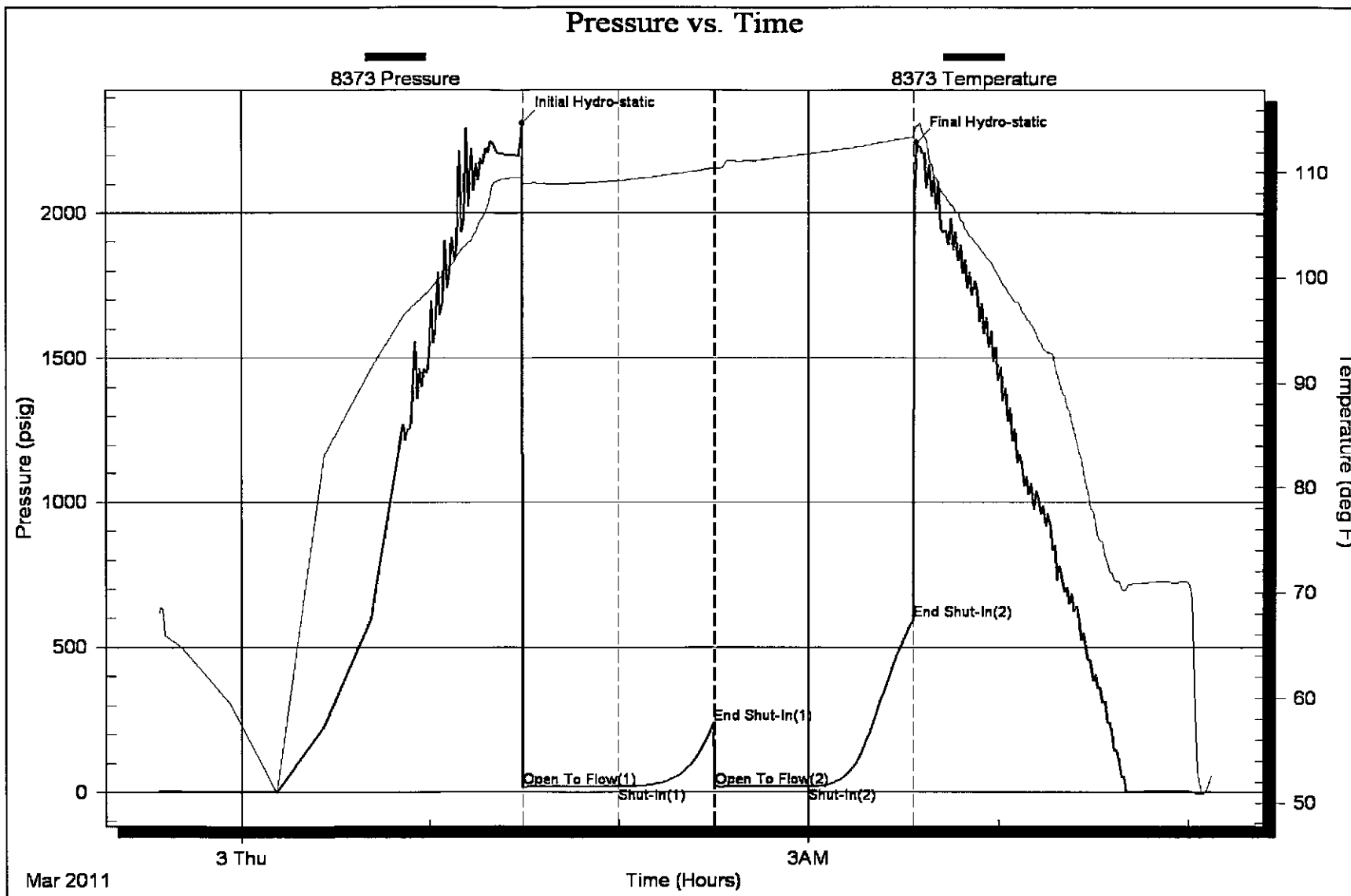
Serial #:

Laboratory Name:

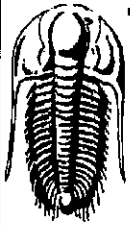
Laboratory Location:

Recovery Comments:

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DRILL STEM TEST REPORT

Ritchie Exploration

Phillips 19D#2

8100 E 22nd N 700
Wichita, Ks 67278

19-13-31w Gove, Ks

Job Ticket: 042054

DST#: 3

ATTN: Max Lovely

Test Start: 2011.02.28 @ 20:58:29

GENERAL INFORMATION:

Formation: **Lansing J&K**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:07:39

Time Test Ended: 04:22:53

Test Type: Conventional Bottom Hole

Tester: Brandon Turley

Unit No: 35

Interval: **4172.00 ft (KB) To 4222.00 ft (KB) (TVD)**

Reference Elevations: 2921.00 ft (KB)

Total Depth: 4222.00 ft (KB) (TVD)

2911.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 10.00 ft

Serial #: 8373

Inside

Press@RunDepth: 180.90 psig @ 4173.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2011.02.28

End Date: 2011.03.01

Last Calib.: 2011.03.01

Start Time: 20:58:29

End Time: 04:22:53

Time On Btm: 2011.02.28 @ 23:06:54

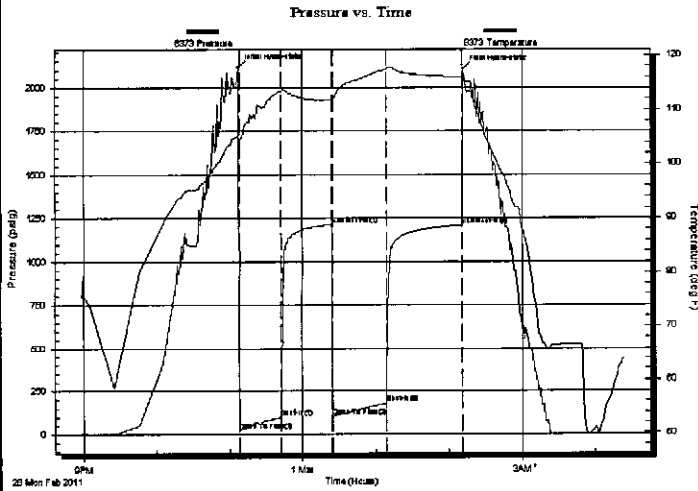
Time Off Btm: 2011.03.01 @ 02:11:53

TEST COMMENT: IF: 1/4 blow built to 6 in 30 min.

IS: No return.

FF: Surface blow built to 6 in 45 min.

FS: No return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2114.80	104.96	Initial Hydro-static
1	20.74	104.55	Open To Flow (1)
36	97.61	113.35	Shut-In(1)
78	1215.63	111.68	End Shut-In(1)
78	103.92	111.21	Open To Flow (2)
123	180.90	117.41	Shut-In(2)
185	1210.39	115.94	End Shut-In(2)
185	2104.20	115.14	Final Hydro-static

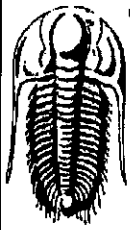
Recovery

Length (ft)	Description	Volume (bbl)
180.00	mcw 70%w 30%m	0.89
180.00	mcw 50%w 50%m	0.89

Gas Rates

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

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DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration

Phillips 19D#2

8100 E 22nd N 700
Wichita, Ks 67278

19-13-31w Gove, Ks

Job Ticket: 042054

DST#: 3

ATTN: Max Lovely

Test Start: 2011.02.28 @ 20:58:29

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 55.00 sec/qt
Water Loss: 7.20 in³
Resistivity: 0.00 ohm.m
Salinity: 2500.00 ppm
Filter Cake: 1.00 inches

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

Oil API: 0 deg API
Water Salinity: 23000 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
180.00	mcw 70%w 30%m	0.885
180.00	mcw 50%w 50%m	0.885

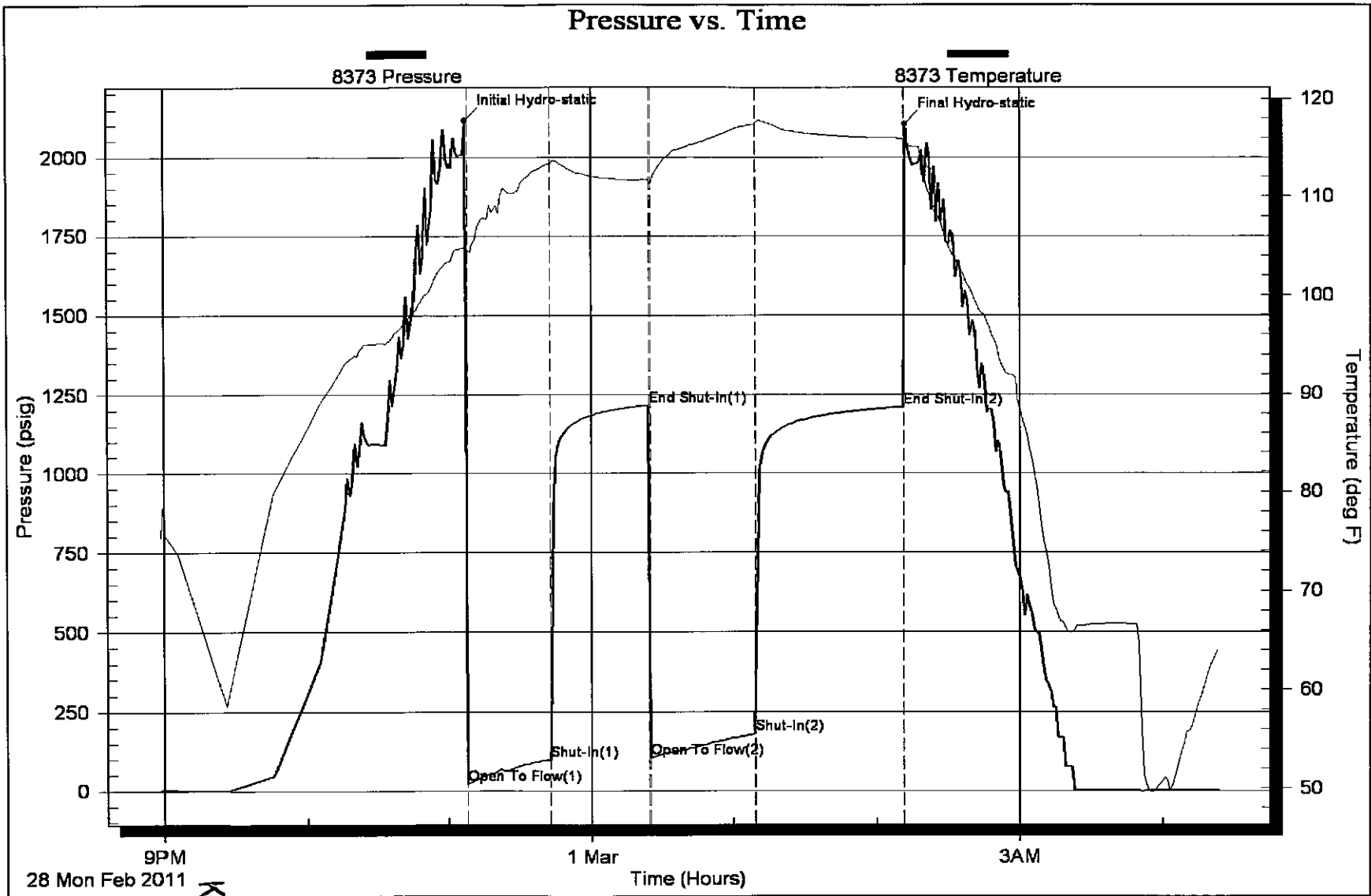
Total Length: 360.00 ft Total Volume: 1.770 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: .32@65=23000

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