

CONFIDENTIAL

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION
WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

ORIGINAL

9/8/13

Form ACO-1
June 2009
Form Must Be Typed
Form must be Signed
All blanks must be Filled

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: Ted Jochems
Purchaser: NCRA

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 #: _____

5/9/11 5/19/11 5/19/11
Spud Date or Date Reached TD Completion Date or
Recompletion Date Recompletion Date

API No. 15 - 063-21909-00-00
Spot Description: 105' S & 90' E
W/2 NE Sec. 10 Twp. 12 S. R. 31 East West
1,425 Feet from North / South Line of Section
1,890 Feet from East / West Line of Section
Footages Calculated from Nearest Outside Section Corner:
 NE NW SE SW
County: Gove
Lease Name: Wilson 10A Well #: 1
Field Name: _____
Producing Formation: Johnson
Elevation: Ground: 2955 Kelly Bushing: 2965
Total Depth: 4710 Plug Back Total Depth: 4678
Amount of Surface Pipe Set and Cemented at: 219 Feet
Multiple Stage Cementing Collar Used? Yes No
If yes, show depth set: 2450 Feet
If Alternate II completion, cement circulated from: surface
feet depth to: 2450 w/ 325 sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: 11000 ppm Fluid volume: 900 bbls
Dewatering method used: evaporation
Location of fluid disposal if hauled offsite: _____
Operator Name: _____
Lease Name: _____ License #: _____
Quarter _____ Sec. _____ Twp. _____ S. R. RECEIVED 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: 9/8/11

KCC Office Use ONLY

Letter of Confidentiality Received
Date: 9/8/11 - 9/8/13
 Confidential Release Date: _____
 Wireline Log Received
 Geologist Report Received
 UIC Distribution
ALT I II III Approved by: NJ Date: 9-20-11

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Operator Name: Ritchie Exploration, Inc. Lease Name: Wilson 10A Well #: 1
 Sec. 10 Twp. 12 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 checked="" type="checkbox"/> Yes <input 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
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CASING RECORD <input checked="" type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Surface	12-1/4	8-5/8	23	219	common	175	3% cc, 2% gel
Production	7-7/8	4-1/2	10.5	4702	ASC	220	10% salt, 2% gel & 5#/mz gilsonite

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
4	4568.5' - 4578' (Johnson) 6/23/11	500 gallons 15% NE (5/11/11)	

TUBING RECORD: Size: <u>2-3/8"</u> Set At: <u>4673</u> Packer At: _____		Liner Run: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	KCC WICHITA
Date of First, Resumed Production, SWD or ENHR. <u>6/28/11</u>		Producing Method: <input type="checkbox"/> Flowing <input checked="" type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain) _____	
Estimated Production Per 24 Hours	Oil Bbls. <u>41.88</u>	Gas Mcf	Water Bbls. <u>0</u> Gravity <u>35.2</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 <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other (Specify) _____	PRODUCTION INTERVAL: _____ _____
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#1 Wilson 10A
 1425' FNL & 1890' FEL
 105' S & 90' E of W/2 NE Section 10-12S-31W
 Gove County, Kansas
 2010 Drilling Program
 Rico Prospect
 API# 15-063-21909-0000
 Elevation: 2955' GL: 2965' KB

Sample Tops		Ref.	Well
Anhydrite	2466'	+499	-11
B/Anhydrite	2481'	+484	flat
Heebner	3980'	-1015	-1
Toronto	4003'	-1038	flat
Lansing	4022'	-1057	-1
Muncie Shale	4164'	-1199	-1
LKC-H	4180'	-1215	-9
Stark Shale	4249'	-1284	-11
Hush. Shale	4285'	-1320	-10
BKC	4314'	-1348	-12
Marmaton	4339'	-1374	-7
Altamont	4373'	-1408	-8
Pawnee	4434'	-1469	-9
Myrick	4477'	-1512	-10
Fort Scott	4498'	-1533	-8
Cherokee Shale	4526'	-1561	-10
Johnson	4568'	-1603	-3
Mississippian	4590'	-1625	-5
RTD	4710'	-1745	

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ALLIED CEMENTING CO., LLC. 039941

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

SERVICE POINT:

DeKlyke

DATE <u>5/19/11</u>	SEC. <u>10</u>	TWP. <u>12</u>	RANGE <u>31</u>	CALLED OUT	ON LOCATION <u>10:00am</u>	JOB START <u>4:30</u>	JOB FINISH <u>5:30p</u>
LEASE <u>Wilson 100</u> WELL # <u>1</u>	LOCATION <u>AgriCampus S to Rd X</u>			COUNTY <u>KS</u>	STATE <u>Govc</u>		
OLD OR NEW (Circle one) <u>NEW</u>				<u>1/2 W S into</u>			

CONTRACTOR Major Fin 14

TYPE OF JOB Production

HOLE SIZE 7 1/8 T.D. 4710'

CASING SIZE 4 1/2 10 1/2 DEPTH 4703

TUBING SIZE DEPTH

DRILL PIPE DEPTH

TOOL Port Collar DEPTH 24.51' - RB

PRES. MAX MINIMUM

MEAS. LINE SHOE JOINT 22'

CEMENT LEFT IN CSG. 22'

PERFS.

DISPLACEMENT

OWNER Same

CEMENT

AMOUNT ORDERED 275 SK ASC 1090 Salt

290 gal 5# Gilsomite 3/4 - 170 CD 31

500 gal WFR II

COMMON	@		
POZMIX	@		
GEL <u>5</u>	@	<u>21.25</u>	<u>106.25</u>
CHLORIDE	@		
ASC <u>275 SK</u>	@	<u>19.00</u>	<u>5225.00</u>
	@		
<u>Gilsomite 1325 lb</u>	@	<u>.89</u>	<u>1223.75</u>
	@		
<u>Salt - 26 SK</u>	@	<u>23.95</u>	<u>622.70</u>
	@		
<u>CD 31 - 193 lb</u>	@	<u>9.35</u>	<u>1804.55</u>
	@		
<u>WFR II - 500 gal</u>	@	<u>1.27</u>	<u>635.00</u>
HANDLING <u>338 SK</u>	@	<u>2.25</u>	<u>760.50</u>
MILEAGE <u>11.5 SK/mile</u>	@		<u>483.34</u>
			<u>10861.09</u>

EQUIPMENT

PUMP TRUCK CEMENTER Alan

422 HELPER Wayne

BULK TRUCK

396 DRIVER Mike

BULK TRUCK

DRIVER

REMARKS:

Ran 4 1/2" Cas. Circulate mix 500 gal WFR II,
mix 15 SK DPH 30 SK R.H. mix 230 SK ASC
Down 4 1/2" Wash Tank Lines, Displace
Plug w/ 7 1/8" BBL H.O w/ 750 PSE CPT.
Land Plug @ 1500 BSL. Float Lid Hold

SERVICE

DEPTH OF JOB 4703

PUMP TRUCK CHARGE 2425.00

EXTRA FOOTAGE @

MILEAGE 13 x 2 @ 7.00 182.00

MANIFOLD - Head @ 2.00 2.00.00

Lite Vehicle @ 4.00 184.00

Waiting on Location - hrs @ 4.00.00 400.00

Thank You
Alan, Wayne, Mike

CHARGE TO: Ritchie Exploration

STREET

CITY STATE ZIP

TOTAL 3291.00

PLUG & FLOAT EQUIPMENT

<u>Rubber Plug</u>		<u>71.00</u>	<u>71.00</u>
<u>Port Collar</u>	@	<u>2485.00</u>	<u>2485.00</u>
<u>Baskets - 3</u>	@	<u>270.00</u>	<u>810.00</u>
<u>Basket - 1</u>	@	<u>270.00</u>	<u>270.00</u>
<u>Turbocorer</u>	@	<u>77.00</u>	<u>539.00</u>
<u>AFU Insert</u>	@	<u>249.00</u>	<u>249.00</u>
<u>Guide Shoe</u>		<u>192.00</u>	<u>192.00</u>
			<u>4616.00</u>

SALES TAX (If Any)

TOTAL CHARGES

PRINTED NAME DISCOUNT IF PAID IN 30 DAYS

SIGNATURE Thomas A. [Signature]

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DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Inc.**

8100 East 22nd Street North #
700 Wichita Kansas 67278+3188

ATTN: Ted Jochems

10/12S/31W Gove Co

#1 Wilson 10A

Start Date: 2011.05.13 @ 08:09:00

End Date: 2011.05.13 @ 00:00:00

Job Ticket #: 16533 DST #: 1

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

Printed: 2011.05.23 @ 16:02:12

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Ritchie Exploration Inc.

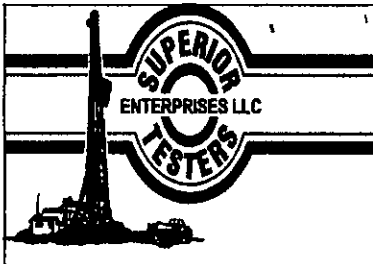
#1 Wilson 10A

10/12S/31W Gove Co

DST # 1

Toronto-Lansing " A

2011.05.13



DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Inc.
 8100 East 22nd Street North #
 700 Wichita Kansas 67278+3188
 ATTN: Ted Jochems

#1 Wilson 10A
 10/12S/31W Gove Co
 Job Ticket: 16533 DST#: 1
 Test Start: 2011.05.13 @ 08:09:00

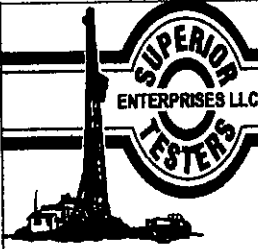
Tool Information

Drill Pipe:	Length: 3428.00 ft	Diameter: 3.80 inches	Volume: 48.09 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: 533.78 ft	Diameter: 2.25 inches	Volume: 2.63 bbl	Weight to Pull Loose: 28000.00 lb
			<u>Total Volume: 50.72 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	11.78 ft			String Weight: Initial 80000.00 lb
Depth to Top Packer:	3978.00 ft			Final 90000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	59.23 ft			
Tool Length:	87.23 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut-In Tool	5.00			3955.00	
Hydraulic Tool	5.00			3960.00	
Jars	6.00			3966.00	
Safety Joint	2.00			3968.00	
Packer	5.00			3973.00	28.00 Bottom Of Top Packer
Packer	5.00			3978.00	
Perforations	5.00			3983.00	
Change Over Sub	0.75			3983.75	
Drill Pipe	31.73			4015.48	
Change Over Sub	0.75			4016.23	
Perforations	16.00			4032.23	
Recorder	1.00	8405	Inside	4033.23	
Recorder	1.00	8400	Outside	4034.23	
Bull Plug	3.00			4037.23	59.23 Bottom Packers & Anchor

Total Tool Length: 87.23



DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Inc.
8100 East 22nd Street North #
700 Wichita Kansas 67278+3188
ATTN: Ted Jochems

#1 Wilson 10A
10/12S/31W Gove Co
Job Ticket: 16533 DST#: 1
Test Start: 2011.05.13 @ 08:09:00

Mud and Cushion Information

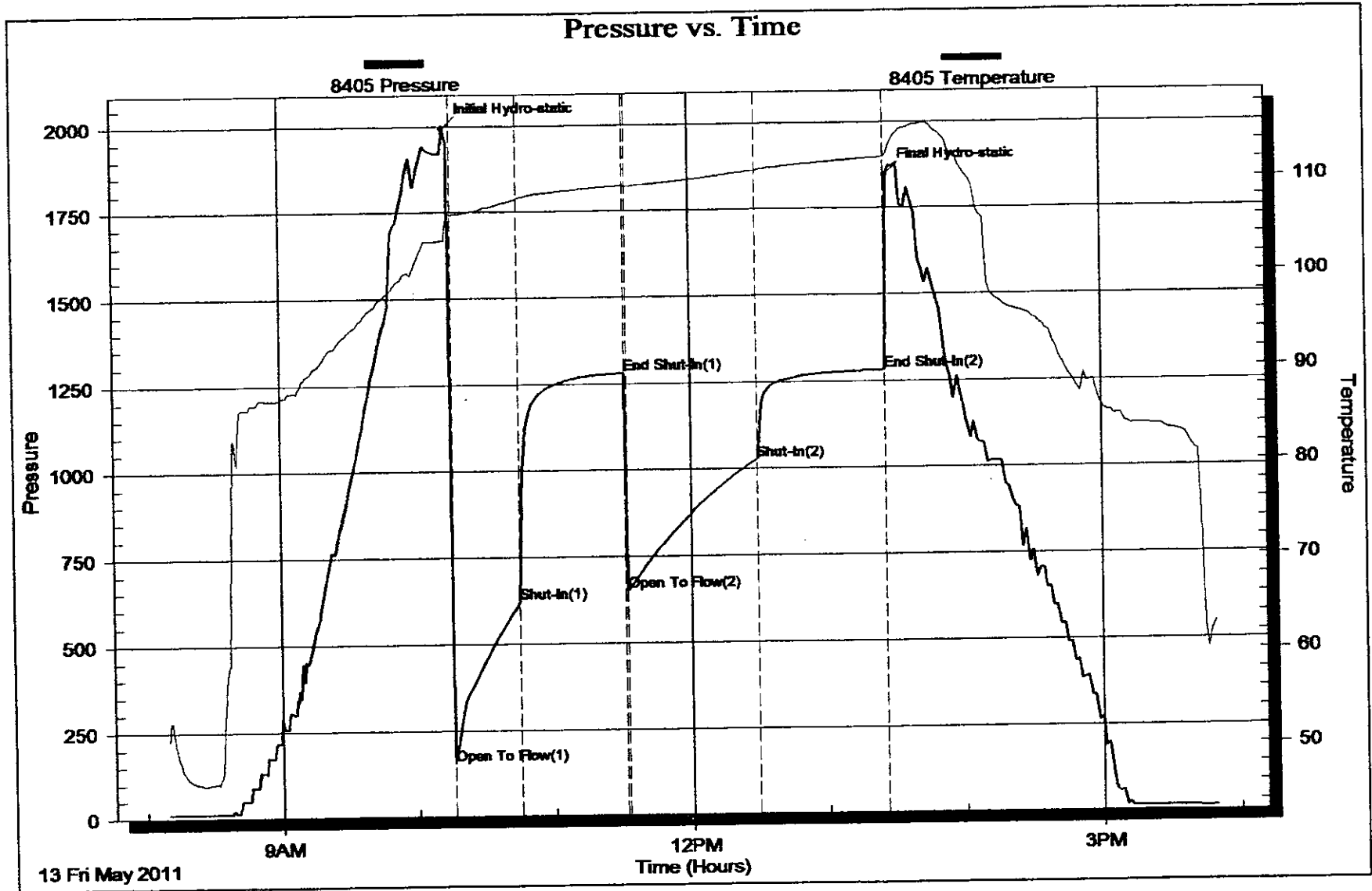
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 67.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.39 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psia		
Salinity: 2000.00 ppm			
Filter Cake: 1.00 inches			

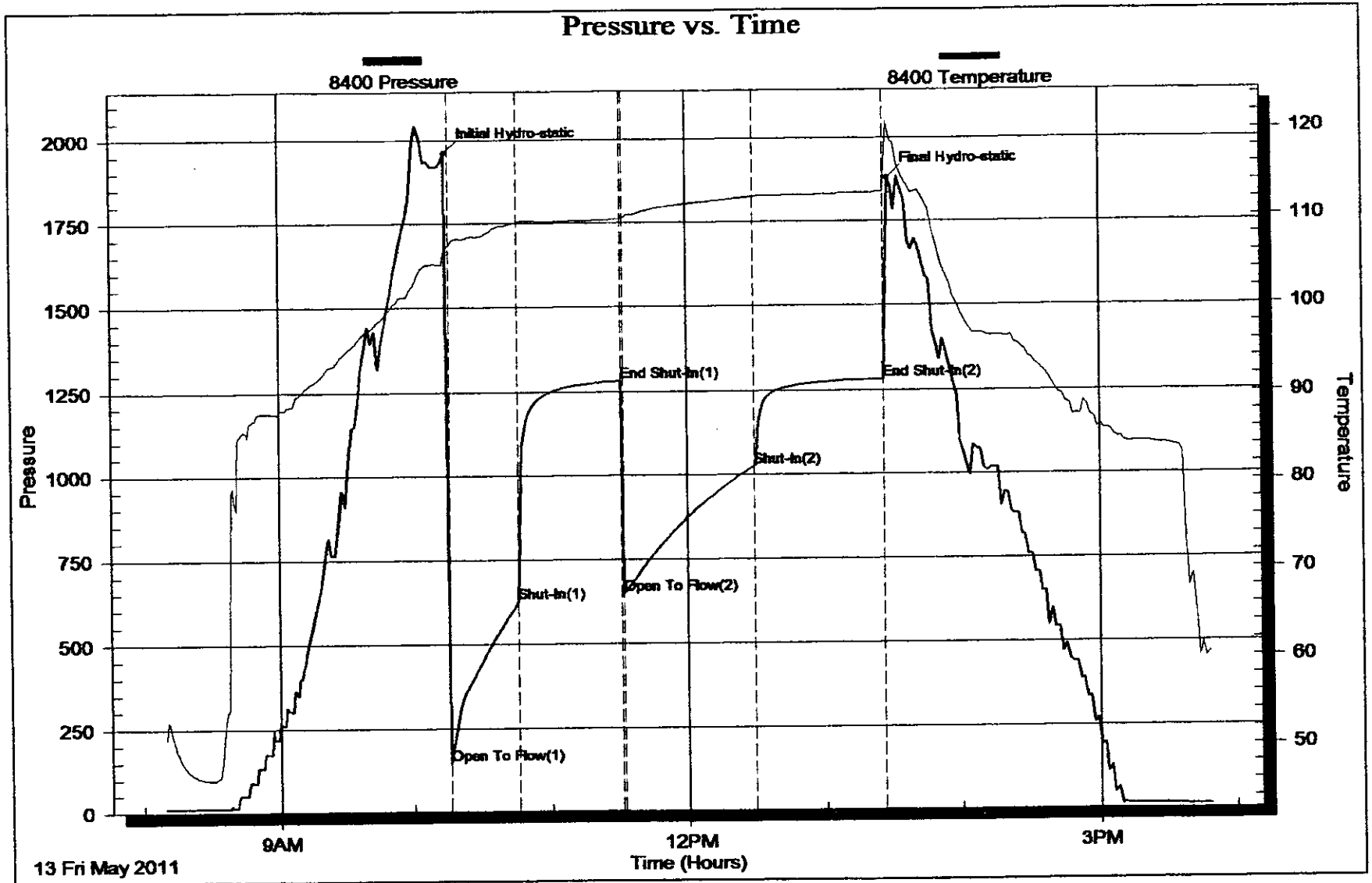
Recovery Information

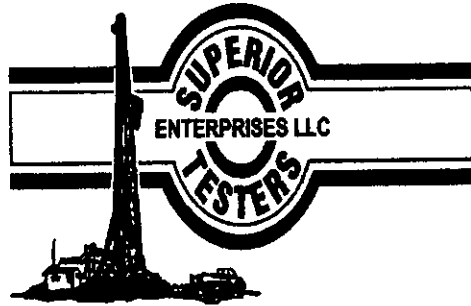
Recovery Table

Length ft	Description	Volume bbl
1965.00	Slightly Muddy Water	22.701
0.00	Mud 20% Water 80%	0.000
0.00	Chlorides were 42,000	0.000
0.00	Resistivity was .26 @ 44 degrees	0.000

Total Length: 1965.00 ft Total Volume: 22.701 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Inc.**

8100 East 22nd Street North #
700 Wichita Kansas 67278+3188

ATTN: Ted Jochems

10/12S/31W Gove Co

#1 Wilson 10A

Start Date: 2011.05.14 @ 09:42:00

End Date: 2011.05.14 @ 17:09:00

Job Ticket #: 16534 DST #: 2

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

Printed: 2011.05.23 @ 16:01:40

Ritchie Exploration Inc.

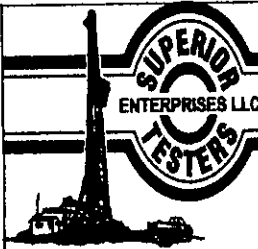
#1 Wilson 10A

10/12S/31W Gove Co

DST # 2

Lansing "H & I" Zo

2011.05.14



DRILL STEM TEST REPORT

Ritchie Exploration Inc.
 8100 East 22nd Street North #
 700 Wichita Kansas 67278+3188
 ATTN: Ted Jocherns

#1 Wilson 10A
10/12S/31W Gove Co
 Job Ticket: 16534 **DST#: 2**
 Test Start: 2011.05.14 @ 09:42:00

GENERAL INFORMATION:

Formation: **Lansing "H & I" Zo**
 Deviated: **No Whipstock:** ft (KB)
 Time Tool Opened: 11:47:00
 Time Test Ended: 17:09:00

Test Type: **Conventional Bottom Hole (Initial)**
 Tester: **Dylan E Ellis**
 Unit No: **3345/Scott City/104**

Interval: **4162.00 ft (KB) To 4220.00 ft (KB) (TVD)**
 Total Depth: **4220.00 ft (KB) (TVD)**
 Hole Diameter: **7.88 inches** Hole Condition: **Fair**

Reference Elevations: **2965.00 ft (KB)**
2955.00 ft (CF)
 KB to GR/CF: **10.00 ft**

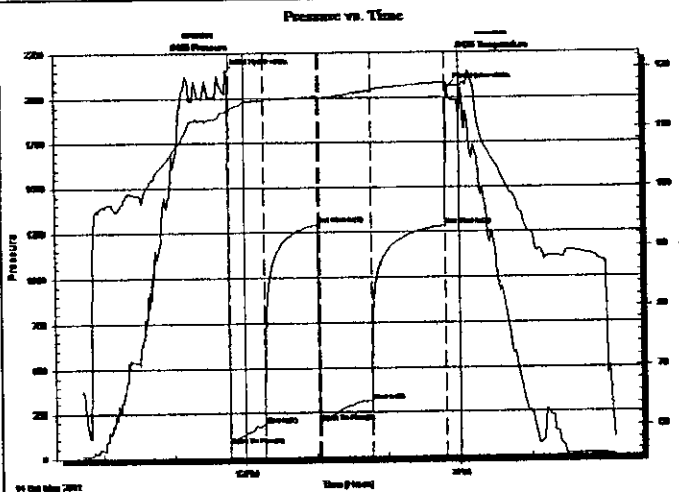
Serial #: 8405

Inside

Press@RunDepth: **319.37 psia @ 4215.22 ft (KB)**
 Start Date: **2011.05.14** End Date: **2011.05.14**
 Start Time: **09:42:01** End Time: **17:09:00**

Capacity: **5000.00 psia**
 Last Calib.: **2011.05.15**
 Time On Strm: **2011.05.14 @ 11:44:30**
 Time Off Btm: **2011.05.14 @ 14:50:00**

TEST COMMENT: 1ST Opening 30 Minutes weak but building blow /blow built to 10 inches into bucket of water
 1ST Shut-In 45 Minutes no blow back
 2ND Opening 45 Minutes weak but building blow /blow blew to bottom of bucket in 41 minutes
 2ND Shut-In 60 Minutes no blow back



PRESSURE SUMMARY

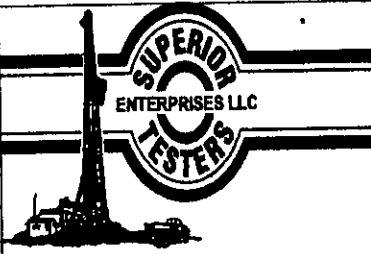
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2147.12	112.78	Initial Hydro-static
3	69.47	112.88	Open To Flow (1)
32	186.06	114.69	Shut-In(1)
77	1288.41	115.42	End Shut-In(1)
79	195.59	115.19	Open To Flow (2)
122	319.37	116.28	Shut-In(2)
183	1279.85	117.54	End Shut-In(2)
186	2056.42	116.84	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
620.00	Mud cut Water	3.83
0.00	Mud 30% Water 70%	0.00
0.00	Chlorides were 39,000	0.00
0.00	Resistivity was .40 @ 51 degrees	0.00

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Inc.
 8100 East 22nd Street North #
 700 Wichita Kansas 67278+3188
 ATTN: Ted Jochems

#1 Wilson 10A
10/12S/31W Gove Co
 Job Ticket: 16534 DST#: 2
 Test Start: 2011.05.14 @ 09:42:00

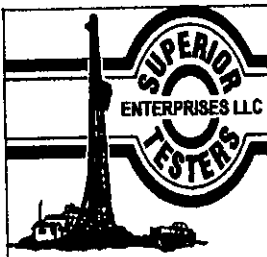
Tool Information

Drill Pipe:	Length: 3615.00 ft	Diameter: 3.80 inches	Volume: 50.71 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: 533.78 ft	Diameter: 2.25 inches	Volume: 2.63 bbl	Weight to Pull Loose: 27000.00 lb
			Total Volume: 53.34 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	14.78 ft			String Weight: Initial 80000.00 lb
Depth to Top Packer:	4162.00 ft			Final 80000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	57.22 ft			
Tool Length:	85.22 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut-In Tool	5.00			4139.00	
Hydraulic Tool	5.00			4144.00	
Jars	6.00			4150.00	
Safety Joint	2.00			4152.00	
Packer	5.00			4157.00	28.00 Bottom Of Top Packer
Packer	5.00			4162.00	
Perforations	5.00			4167.00	
Change Over Sub	0.75			4167.75	
Drill Pipe	31.72			4199.47	
Change Over Sub	0.75			4200.22	
Perforations	14.00			4214.22	
Recorder	1.00	8405	Inside	4215.22	
Recorder	1.00	8400	Outside	4216.22	
Bull Plug	3.00			4219.22	57.22 Bottom Packers & Anchor

Total Tool Length: 85.22



DRILL STEM TEST REPORT

FLUID SUMMARY

Fitchie Exploration Inc.
8100 East 22nd Street North #
700 Wichita Kansas 67278+3188

ATTN: Ted Jochens

#1 Wilson 10A
10/12S/31W Gove Co
Job Ticket: 16534 DST#: 2
Test Start: 2011.05.14 @ 09:42:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 57.00 sec/qt
Water Loss: 7.98 in³
Resistivity: ohm.m
Salinity: 2600.00 ppm
Filter Cake: 1.00 inches

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

Oil API: deg API
Water Salinity: ppm

Recovery Information

Recovery Table

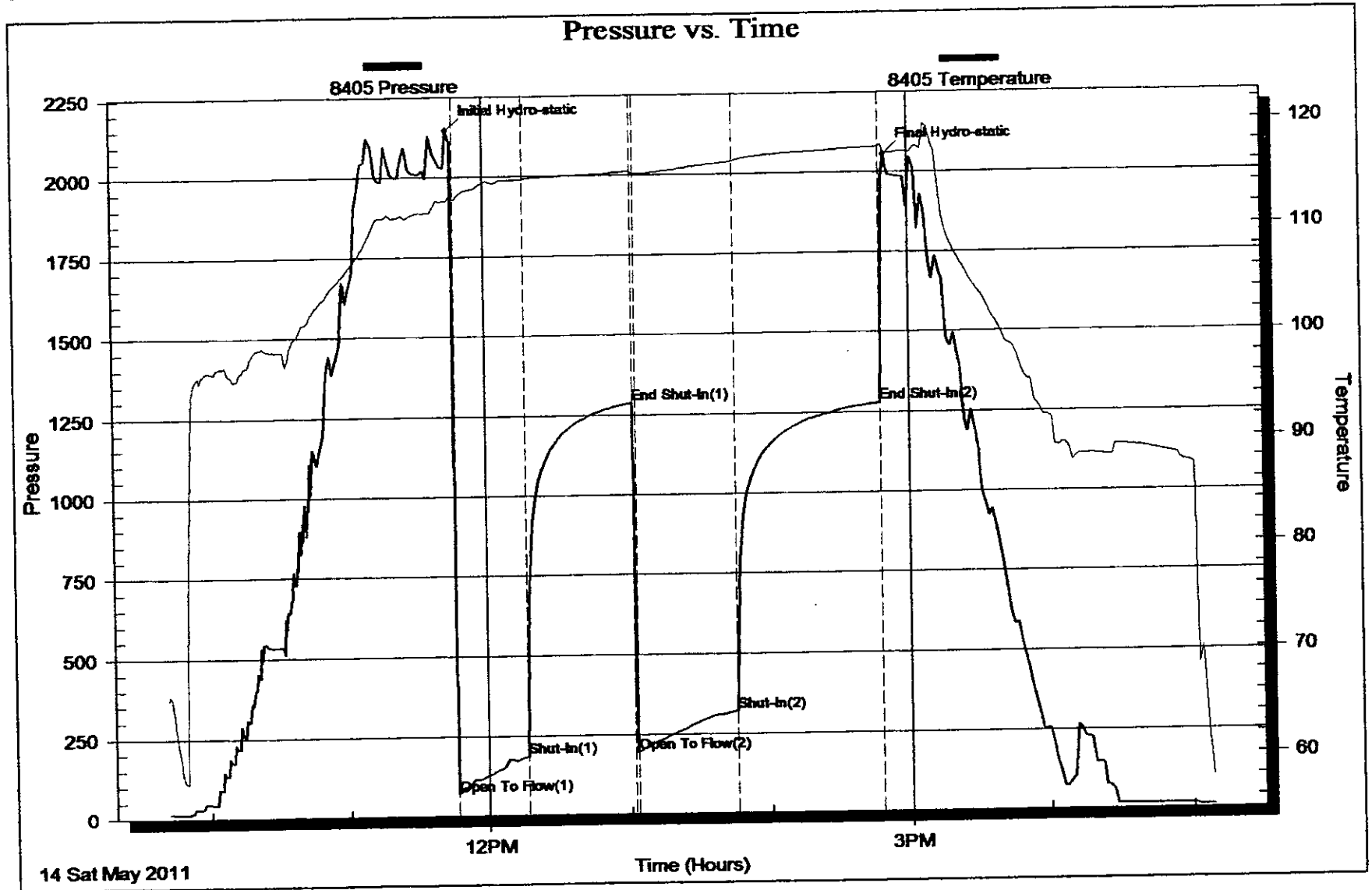
Length ft	Description	Volume bbl
620.00	Mud cut Water	3.834
0.00	Mud 30% Water 70%	0.000
0.00	Chlorides were 39,000	0.000
0.00	Resistivity was .40 @ 51 degrees	0.000

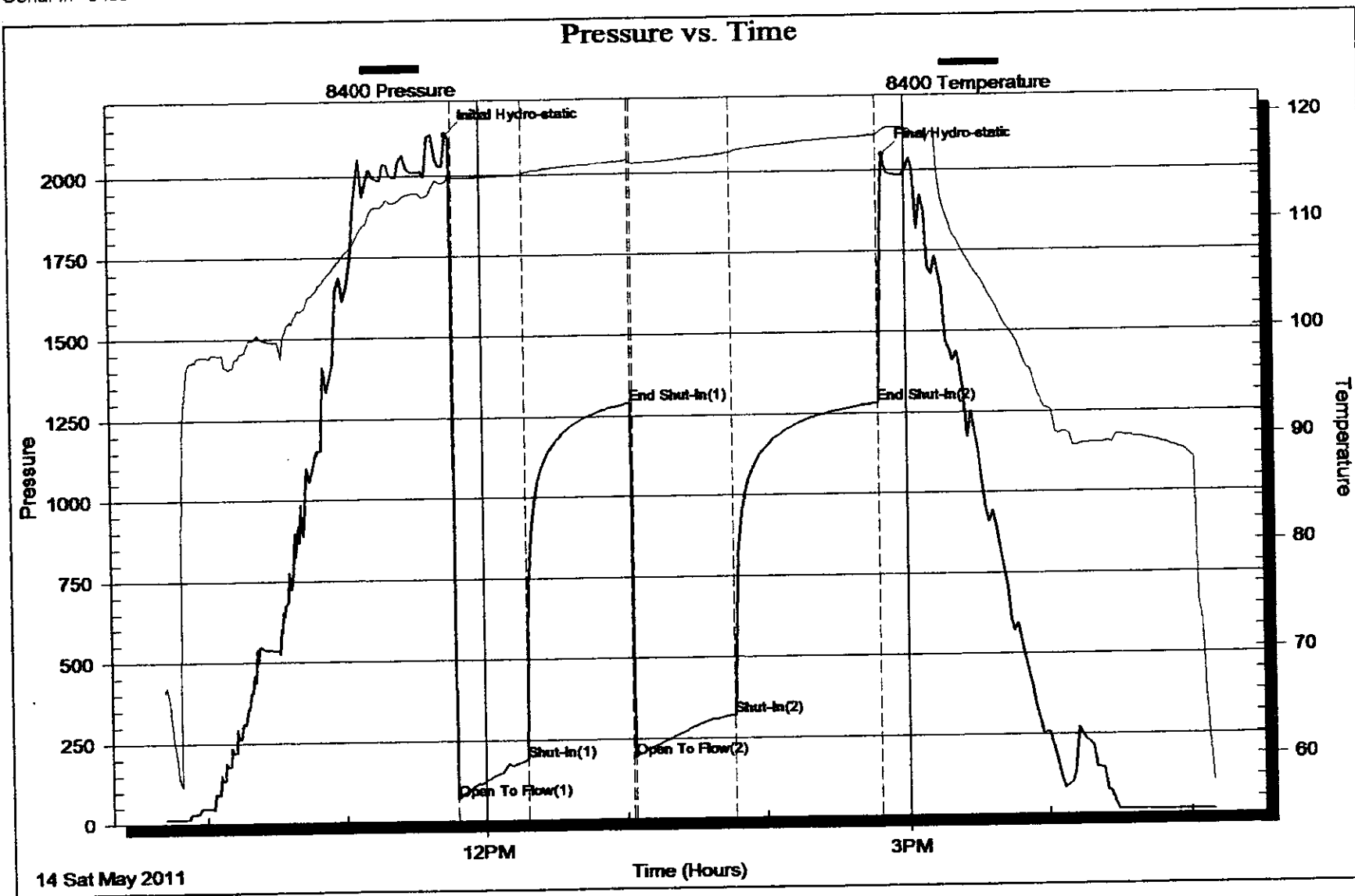
Total Length: 620.00 ft Total Volume: 3.834 bbl

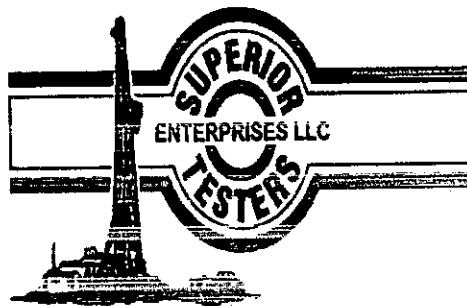
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Inc.**

8100 East 22nd Street North #
700 Wichita Kansas 67278+3188

ATTN: Ted Jochems

10/12S/31W Gove Co

#1 Wilson 10A

Start Date: 2011.05.15 @ 01:23:00

End Date: 2011.05.15 @ 08:00:00

Job Ticket #: 16535 DST #: 3

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

Printed: 2011.05.23 @ 15:45:34

Ritchie Exploration Inc.

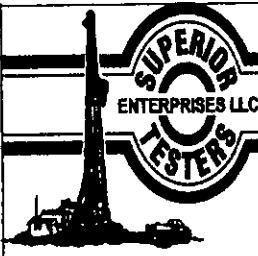
#1 Wilson 10A

10/12S/31W Gove Co

DST # 3

Lansing "J" Zone

2011.05.15



DRILL STEM TEST REPORT

Ritchie Exploration Inc.
 8100 East 22nd Street North #
 700 Wichita Kansas 67278+3188
 ATTN: Ted Jochems

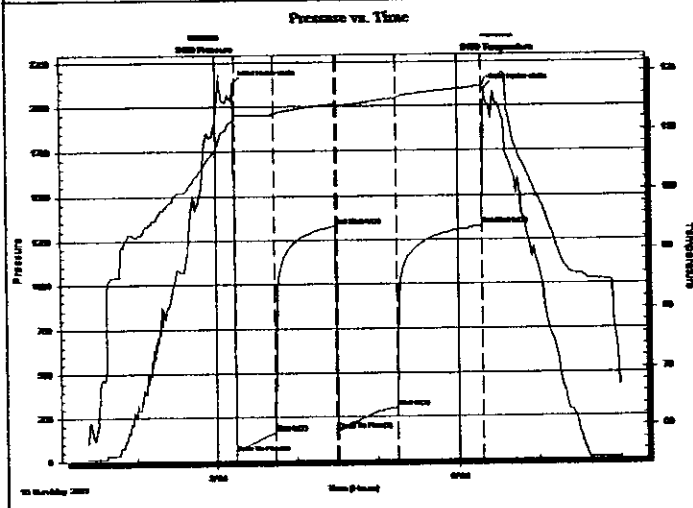
#1 Wilson 10A
10/12S/31W Gove Co
 Job Ticket: 16535 **DST#: 3**
 Test Start: 2011.05.15 @ 01:23:00

GENERAL INFORMATION:

Formation: **Lansing "J" Zone**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 03:14:30
 Time Test Ended: 08:00:00
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Dylan E Ellis
 Unit No: 3345/ Scott City/104
 Interval: **4217.00 ft (KB) To 4245.00 ft (KB) (TVD)**
 Total Depth: **4245.00 ft (KB) (TVD)**
 Hole Diameter: **7.88 inches** Hole Condition: Fair
 Reference Elevations: **2965.00 ft (KB)**
2955.00 ft (CF)
 KB to GR/CF: **10.00 ft**

Serial #: 8400 Outside
 Press@RunDepth: **1328.45 psia @ 4242.00 ft (KB)** Capacity: **5000.00 psia**
 Start Date: **2011.05.15** End Date: **2011.05.15** Last Calib.: **2011.05.15**
 Start Time: **01:23:10** End Time: **08:00:03** Time On Btrm: **2011.05.15 @ 03:13:03**
 Time Off Btrm: **2011.05.15 @ 06:20:03**

TEST COMMENT: 1 ST Opening 30 Minutes weak but building blow / blow blew to 11 inches into bucket of water
 1ST Shut-in 45 Minutes no blow back
 2ND Opening 45 Minutes weak but building blow / blow blew to 11 into bucket of water
 2ND Shut-in 60 Minutes no blow back



PRESSURE SUMMARY

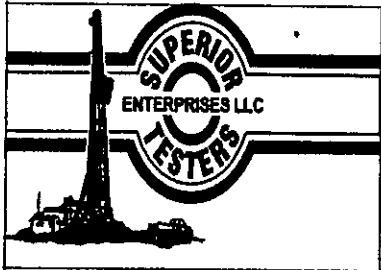
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2128.17	111.47	Initial Hydro-static
1	47.14	111.91	Open To Flow (1)
31	162.82	112.61	Shut-in(1)
77	1329.67	114.39	End Shut-in(1)
78	170.54	114.10	Open To Flow (2)
122	305.82	115.33	Shut-in(2)
185	1328.45	117.25	End Shut-in(2)
187	2097.71	118.30	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	Muddy Water with a Oil Skim on top	0.15
0.00	50% Mud 50%Oil	0.00
533.00	Muddy Water with Slight Odor	2.89
0.00	70% Water 30% Mud	0.00
0.00	Chlorides were 59,000	0.00
0.00	Resistivity was .28 @ 54 degrees	0.00

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Inc.
 8100 East 22nd Street North #
 700 Wichita Kansas 67278+3188
 ATTN: Ted Jochems

#1 Wilson 10A
 10/12S/31W Gove Co
 Job Ticket: 16535 DST#: 3
 Test Start: 2011.05.15 @ 01:23:00

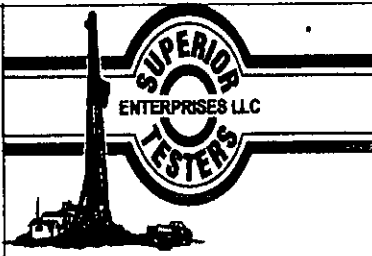
Tool Information

Drill Pipe:	Length: 3683.00 ft	Diameter: 3.80 inches	Volume: 51.66 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: 533.78 ft	Diameter: 2.25 inches	Volume: 2.63 bbl	Weight to Pull Loose: 32000.00 lb
			Total Volume: 54.29 bbl	Tool Chased 1.50 ft
Drill Pipe Above KB:	21.78 ft			String Weight: Initial 80000.00 lb
Depth to Top Packer:	4217.00 ft			Final 82000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	28.00 ft			
Tool Length:	50.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut-In Tool	5.00			4200.00	
Hydraulic Tool	5.00			4205.00	
Safety Joint	2.00			4207.00	
Packer	5.00			4212.00	22.00 Bottom Of Top Packer
Packer	5.00			4217.00	
Perforations	23.00			4240.00	
Recorder	1.00	8405	Inside	4241.00	
Recorder	1.00	8400	Outside	4242.00	
Bull Plug	3.00			4245.00	28.00 Bottom Packers & Anchor
Total Tool Length:	50.00				



DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Inc.
 8100 East 22nd Street North #
 700 Wichita Kansas 67278+3188
 ATTN: Ted Jochems

#1 Wilson 10A
10/12S/31W Gove Co
 Job Ticket: 16535 **DST#: 3**
 Test Start: 2011.05.15 @ 01:23:00

Mud and Cushion Information

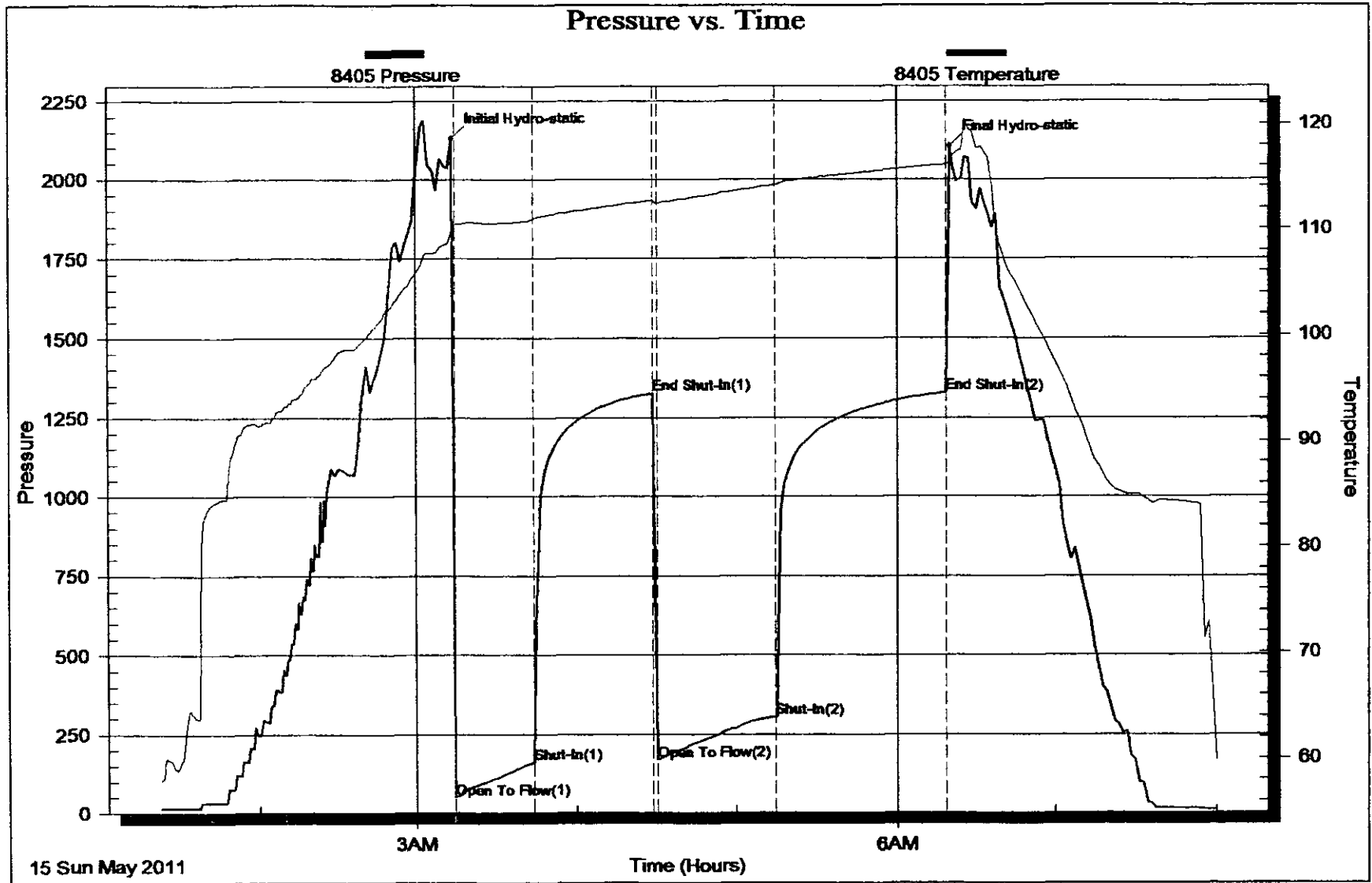
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 66.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.79 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psia		
Salinity: 2500.00 ppm			
Filter Cake: 1.00 inches			

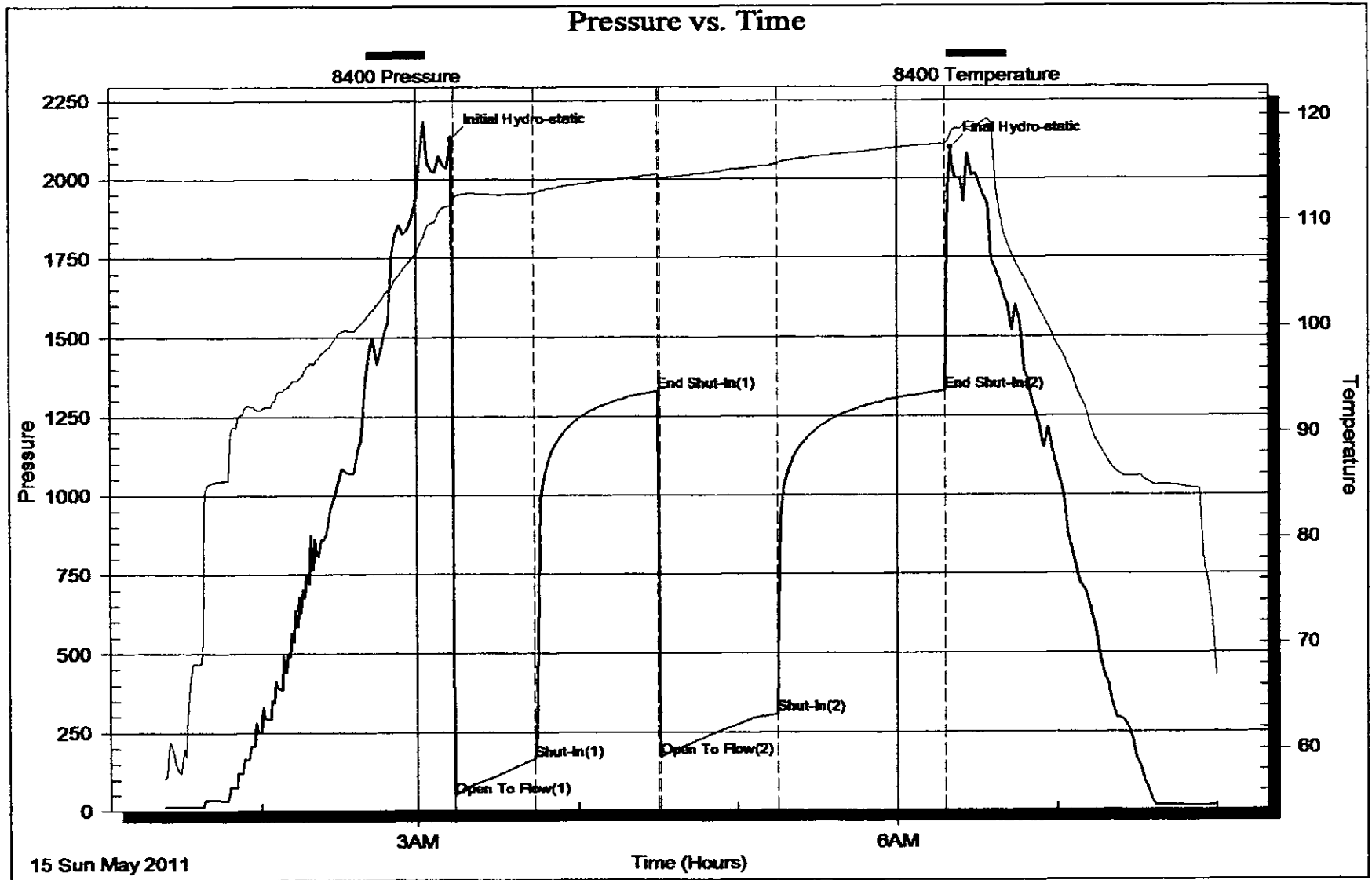
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	Muddy Water with a Oil Skim on top	0.148
0.00	50% Mud 50% Oil	0.000
533.00	Muddy Water with Slight Odor	2.887
0.00	70% Water 30% Mud	0.000
0.00	Chlorides were 59,000	0.000
0.00	Resistivity was .28 @ 54 degrees	0.000

Total Length: 563.00 ft Total Volume: 3.035 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Inc.**

8100 East 22nd Street North #
700 Wichita Kansas 67278+3188

ATTN: Ted Jochems

10/12S/31W Gove Co

#1 Wilson 10A

Start Date: 2011.05.17 @ 08:00:00

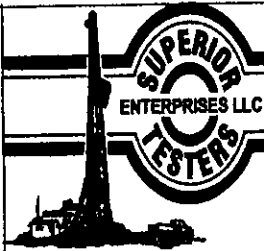
End Date: 2011.05.17 @ 14:30:00

Job Ticket #: 16536 DST #: 4

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

Printed: 2011.05.23 @ 15:45:17

Ritchie Exploration Inc. #1 Wilson 10A 10/12S/31W Gove Co DST # 4 Ft. Scott-Cherokee LI 2011.05.17



DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Inc.
 8100 East 22nd Street North #
 700 Wichita Kansas 67278+3188
 ATTN: Ted Jocherns

#1 Wilson 10A
 10/12S/31W Gove Co
 Job Ticket: 16536 DST#: 4
 Test Start: 2011.05.17 @ 08:00:00

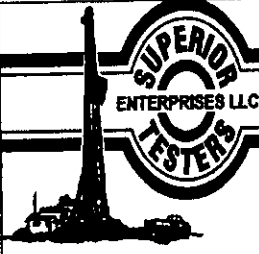
Tool Information

Drill Pipe:	Length: 3953.00 ft	Diameter: 3.80 inches	Volume: 55.45 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: 533.78 ft	Diameter: 2.25 inches	Volume: 2.63 bbl	Weight to Pull Loose: 35000.00 lb
			<u>Total Volume: 58.08 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	15.78 ft			String Weight: Initial 80000.00 lb
Depth to Top Packer:	4493.00 ft			Final 82000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	52.20 ft			
Tool Length:	74.20 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments: Chnged out top packer.

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut-in Tool	5.00			4476.00	
Hydraulic Tool	5.00			4481.00	
Safety Joint	2.00			4483.00	
Packer	5.00			4488.00	22.00 Bottom Of Top Packer
Packer	5.00			4493.00	
Perforations	5.00			4498.00	
Change Over Sub	0.75			4498.75	
Drill Pipe	31.70			4530.45	
Change Over Sub	0.75			4531.20	
Perforations	9.00			4540.20	
Recorder	1.00	8405	Inside	4541.20	
Recorder	1.00	8400	Outside	4542.20	
Bull Plug	3.00			4545.20	52.20 Bottom Packers & Anchor

Total Tool Length: 74.20



DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Inc.
8100 East 22nd Street North #
700 Wichita Kansas 67278+3188
ATTN: Ted Jochems

#1 Wilson 10A
10/12S/31W Gove Co
Job Ticket: 16536 DST#: 4
Test Start: 2011.05.17 @ 08:00:00

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: 59.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.39 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psia		
Salinity: 2700.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	Lightly Oil cut Mud	0.049
0.00	15% Oil 85% Mud	0.000

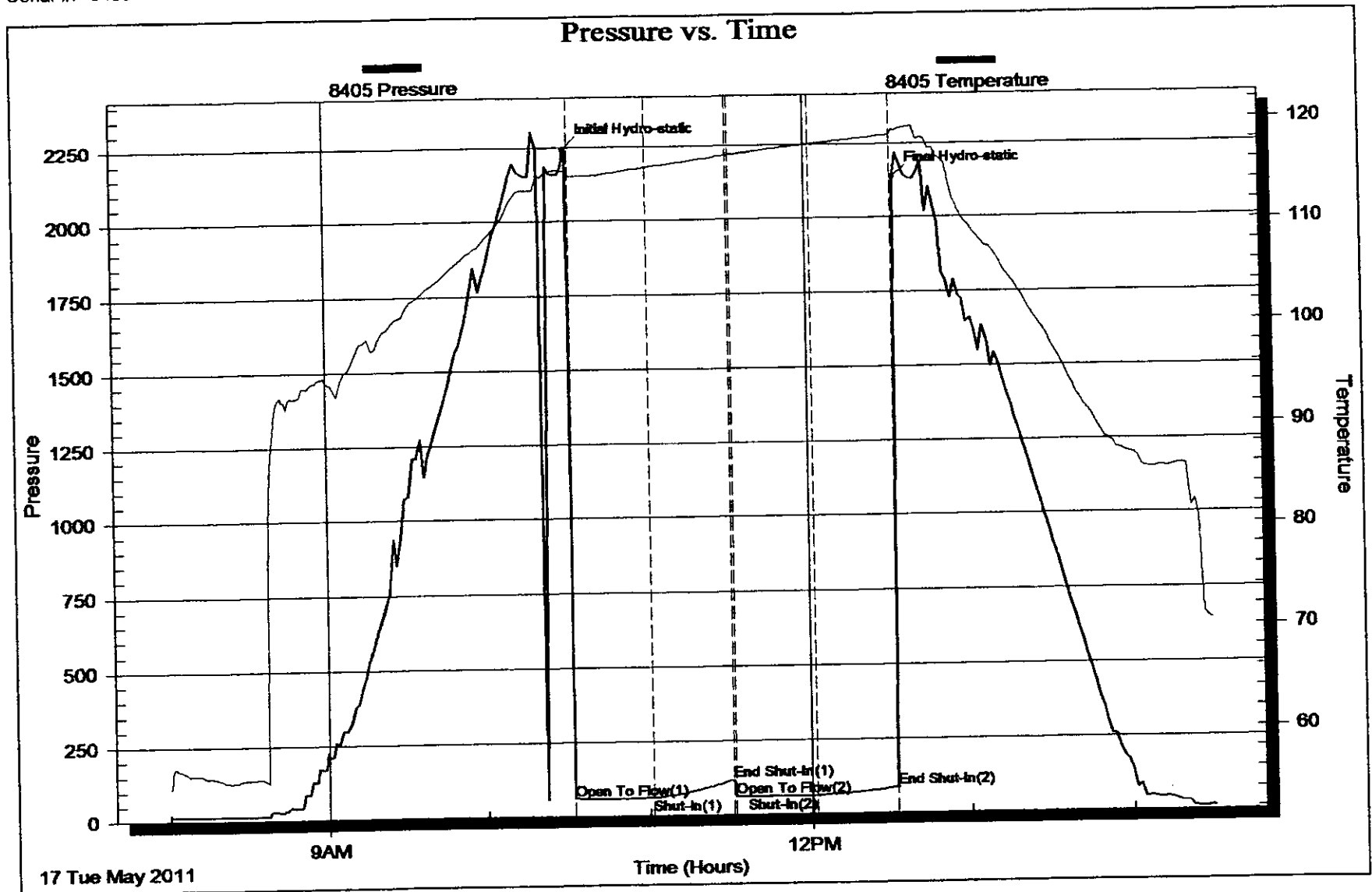
Total Length: 10.00 ft Total Volume: 0.049 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8405

Inside Ritchie Exploration Inc.

10/12S31W Gove Co

DST Test Number: 4

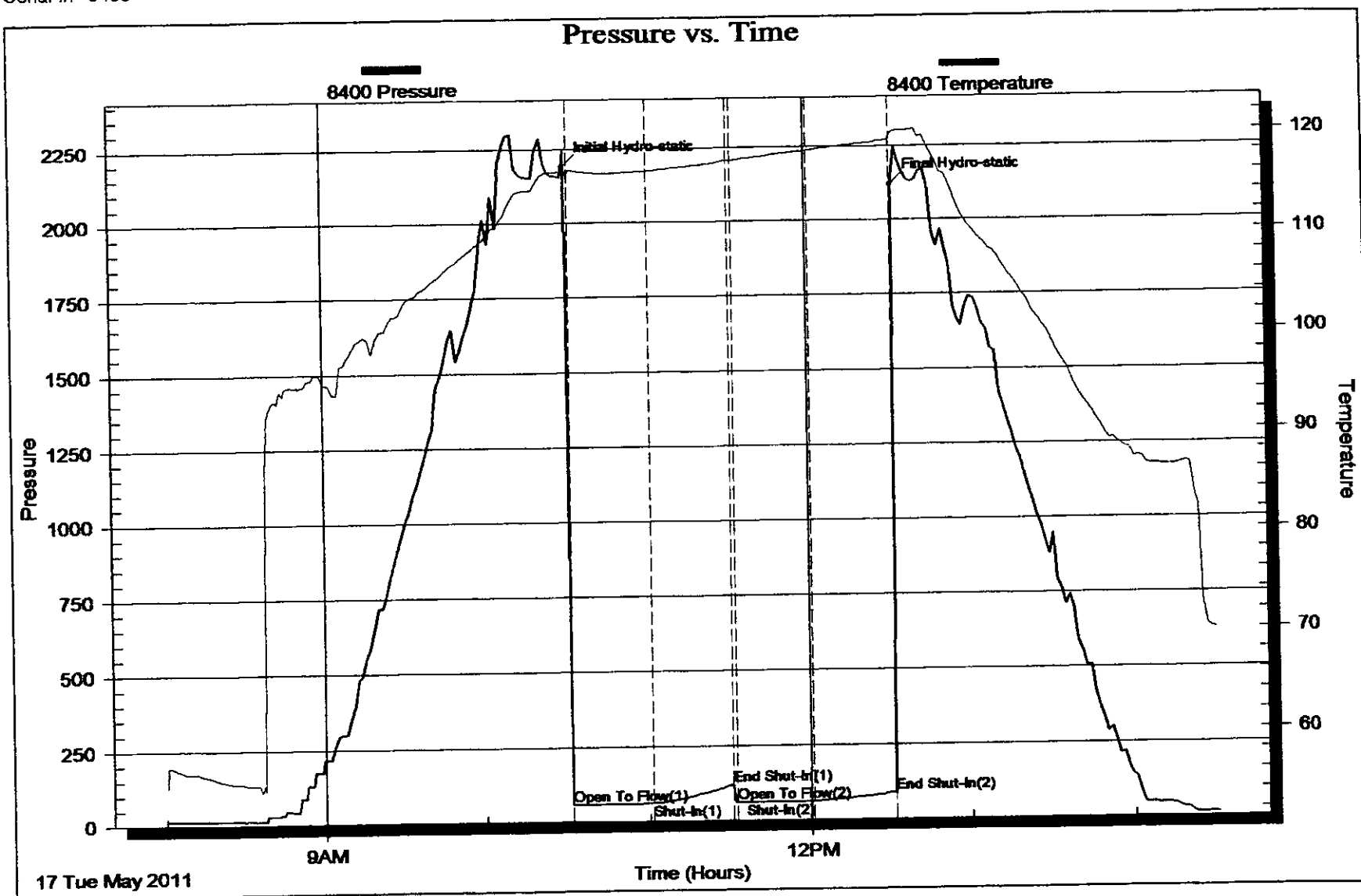


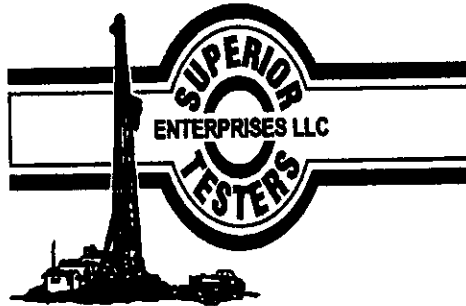
Serial #: 8400

Outside Ritchie Exploration Inc.

10/12S31W Gove Co

DST Test Number: 4





DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Inc.**

8100 East 22nd Street North #
700 Wichita Kansas 67278+3188

ATTN: Ted Jochems

10/12S/31W Gove Co

#1 Wilson 10A

Start Date: 2011.05.17 @ 11:51:00

End Date: 2011.05.17 @ 18:54:30

Job Ticket #: 16537 DST #: 5

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

Printed: 2011.05.23 @ 15:44:15

Ritchie Exploration Inc.

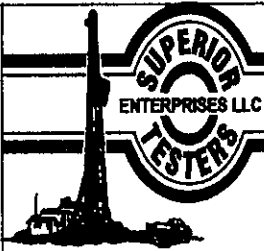
#1 Wilson 10A

10/12S/31W Gove Co

DST # 5

Johnson Zone

2011.05.17



DRILL STEM TEST REPORT

Ritchie Exploration Inc.
 8100 East 22nd Street North #
 700 Wichita Kansas 67278+3188
 ATTN: Ted Jochems

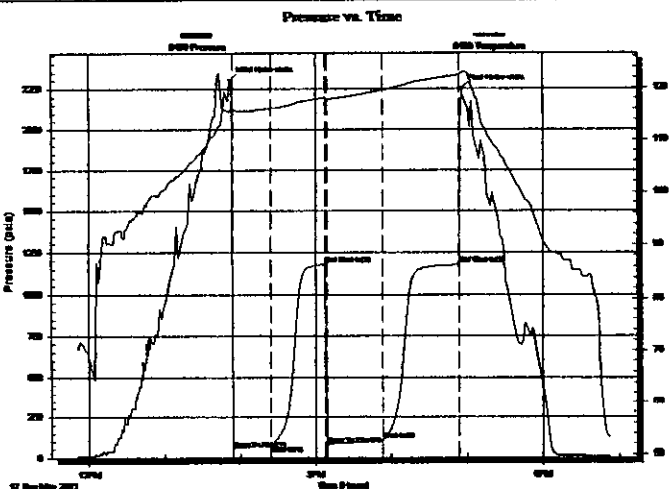
#1 Wilson 10A
10/12S/31W Gove Co
 Job Ticket: 16537 **DST#: 5**
 Test Start: 2011.05.17 @ 11:51:00

GENERAL INFORMATION:

Formation: **Johnson Zone**
 Deviated: **No Whipstock:** **ft (KB)**
 Time Tool Opened: 13:53:30
 Time Test Ended: 18:54:30
 Interval: **4540.00 ft (KB) To 4580.00 ft (KB) (TVD)**
 Total Depth: **4580.00 ft (KB) (TVD)**
 Hole Diameter: **7.88 inches** Hole Condition: **Fair**
 Test Type: **Conventional Bottom Hole (Initial)**
 Tester: **Dylan E Ellis**
 Unit No: **3345/Scott City/104**
 Reference Elevations: **2965.00 ft (KB)**
 2955.00 ft (CF)
 KB to GR/CF: 10.00 ft

Serial #: 8400 Outside
 Press@RunDepth: **1177.78 psia @ 4577.00 ft (KB)** Capacity: **5000.00 psia**
 Start Date: **2011.05.17** End Date: **2011.05.17** Last Calib.: **2011.05.18**
 Start Time: **11:51:10** End Time: **18:54:00** Time On Btrr: **2011.05.17 @ 13:51:30**
 Time Off Btrr: 2011.05.17 @ 16:55:30

TEST COMMENT: 1ST Opening 30 Minutes very weak blow/blow built to 6 inches into bucket of water
 1ST Shut-In 45 Minutes no blow back
 2ND Opening 45 Minutes fair blow/blow blew to bottom of bucket in 15 minutes
 2ND Shut-In 60 Minutes no blow back



PRESSURE SUMMARY

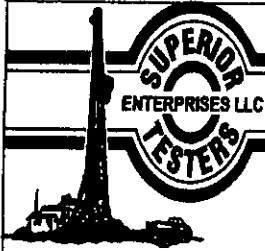
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2303.38	115.47	Initial Hydro-static
3	50.80	115.80	Open To Flow (1)
33	71.87	116.11	Shut-In(1)
77	1178.75	118.17	End Shut-In(1)
78	79.70	117.89	Open To Flow (2)
122	107.98	119.64	Shut-In(2)
182	1177.78	122.55	End Shut-In(2)
184	2250.68	122.94	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	Clean Free Oil	0.07
80.00	Gassy Oil cut Mud	0.39
0.00	Gas 33.3% Oil 33.3% Mud 33.3%	0.00
95.00	Oil cut Mud/ Oil 25% Mud 75%	0.47
0.00	190 feet of Gas in the pipe	0.00
0.00	Gravity of Oil corrected was 39	0.00

Gas Rates

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



DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Inc.
 8100 East 22nd Street North #
 700 Wichita Kansas 67278+3188
 ATTN: Ted Jochems

#1 Wilson 10A
 10/12S/31W Gove Co
 Job Ticket: 16537 DST#: 5
 Test Start: 2011.05.17 @ 11:51:00

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 59.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.40 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psia		
Salinity: 2700.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	Clean Free Oil	0.074
80.00	Gassy Oil cut Mud	0.393
0.00	Gas 33.3% Oil 33.3% Mud 33.3%	0.000
95.00	Oil cut Mud/ Oil 25% Mud 75%	0.467
0.00	190 feet of Gas in the pipe	0.000
0.00	Gravity of Oil corrected w as 39	0.000

Total Length: 190.00 ft Total Volume: 0.934 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:

