

ORIGINAL 6/29/13

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

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

OPERATOR: License # 5135
Name: John O. Farmer, Inc.
Address 1: P.O. Box 352
Address 2:
City: Russell State: KS Zip: 67665 + 0 3 5 2
Contact Person: Marge Schulte
Phone: (785) 483-3145, Ext. 214
CONTRACTOR: License # 31548
Name: Discovery Drilling Company, Inc.
Wellsite Geologist: Randall Kilian
Purchaser:

API No. 15 - 137-20,558-00-00
Spot Description:
SW SE SW NE Sec. 1 Twp. 4 S. R. 21 East West
2,450 Feet from North / South Line of Section
1,880 Feet from East / West Line of Section
Footages Calculated from Nearest Outside Section Corner:
 NE NW SE SW
County: Norton
Lease Name: Archer "A" Well #: 1
Field Name: (wildcat)
Producing Formation: None
Elevation: Ground: 2198' Kelly Bushing: 2206'
Total Depth: 3766' Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 232.68 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 cmt.

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 #: _____

5-2-11 5-6-11 5-7-11
Spud Date or Date Reached TD Completion Date or Recompletion Date

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Drilling Fluid Management Plan
(Data must be collected from the Reserve Pit)
Chloride content: 16,000 ppm Fluid volume: 320 bbls
Dewatering method used: evaporation
Location of fluid disposal if hauled offsite:
Operator Name:
Lease Name: License #:
Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West
County: _____ Permit #: 29 2013

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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: John O. Farmer III
Title: John O. Farmer III, President Date: 6-29-11

KCC Office Use ONLY
 Letter of Confidentiality Received Date: 6/29/11 - 6/29/13
 Confidential Release Date:
 Wireline Log Received
 Geologist Report Received
 UIC Distribution
ALT I II III Approved by: _____ Date: _____

Operator Name: John O. Farmer, Inc. Lease Name: Archer "A" Well #: 1
 Sec. 1 Twp. 4 S. R. 21 East West County: Norton

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: Compensated Density Neutron Log, Dual Induction Log, Micro Resistivity Log, Radiation Guard Log	<input checked="" type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:60%;">Name</td> <td style="width:20%;">Top</td> <td style="width:20%;">Datum</td> </tr> <tr> <td>Anhydrite</td> <td>1846'</td> <td>(+360)</td> </tr> <tr> <td>Topeka</td> <td>3219'</td> <td>(-1013)</td> </tr> <tr> <td>Heebner Shale</td> <td>3416'</td> <td>(-1210)</td> </tr> <tr> <td>Toronto</td> <td>3442'</td> <td>(-1236)</td> </tr> <tr> <td>Lansing</td> <td>3460'</td> <td>(-1254)</td> </tr> <tr> <td>Base/KC</td> <td>3649'</td> <td>(-1443)</td> </tr> <tr> <td>Arbuckle</td> <td>3718'</td> <td>(-1512)</td> </tr> </table>	Name	Top	Datum	Anhydrite	1846'	(+360)	Topeka	3219'	(-1013)	Heebner Shale	3416'	(-1210)	Toronto	3442'	(-1236)	Lansing	3460'	(-1254)	Base/KC	3649'	(-1443)	Arbuckle	3718'	(-1512)
Name	Top	Datum																							
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Base/KC	3649'	(-1443)																							
Arbuckle	3718'	(-1512)																							

CASING RECORD <input type="checkbox"/> New <input checked="" 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#	232.68'	Common	150	3% C.C., 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

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) (Submit ACO-4)</i> <input type="checkbox"/> Other (Specify) _____	PRODUCTION INTERVAL: _____ _____
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Discovery Drilling

P.O. Box 763 • Hays, KS 67601 • OFFICE (785) 623-2920 • CELLULAR (785) 635-1511

DRILLER'S LOG

Operator: John O. Farmer, Inc. Lic# 5135 Contractor: Discovery Drilling Co., Inc. LIC#31548
P.O. Box 352 PO Box 763
Russell, KS 67665 Hays, KS 67601

Lease: Archer "A" # 1 Location: SW/SE/SW/SE
Section 1/4S/21W
Norton Co., KS

Loggers Total Depth: 3760' API#15- 137-20,558-00-00
Rotary Total Depth: 3766' Elevation: 2198 GL / 2206 KB
Commenced: 5/2/2011 Completed: 5/7/2011
Casing: 8 5/8" @ 232.68"W/150sks Status: D & A

DEPTHS & FORMATIONS (All from KB)

Surface, Sand & Shale	<u>0'</u>	Shale	<u>1873'</u>
Dakota Sand	<u>1077'</u>	Shale & Lime	<u>2437'</u>
Shale	<u>1158'</u>	Shale	<u>2757'</u>
Cedar Hill Sand	<u>1366'</u>	Shale & Lime	<u>3077'</u>
Red Bed Shale	<u>1575'</u>	Lime & Shale	<u>3382'</u>
Anhydrite	<u>1847'</u>	RTD	<u>5766'</u>
Base Anhydrite	<u>1873'</u>		

STATE OF KANSAS)
) ss
COUNTY OF ELLIS)

Thomas H. Alm of Discovery Drilling states that to the best of his knowledge the above and foregoing is a true and correct log of the above captioned well.

Thomas H. Alm
Thomas H. Alm

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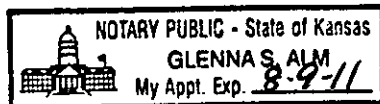
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Subscribed and sworn to before me on 5-13-11

My Commission expires: 8-9-11

(Place stamp or seal below)

Glenna S. Alm
Notary Public



QUALITY OILWELL CEMENTING, INC.

Phone 785-483-2025
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 5002

COPY

Date	5/2/11	Sec.	1	Twp.	4	Range	21	County	Norton	State	KS	On Location		Finish	6:45 PM
Lease	Archer A			Well No.	1			Location	Logan, 4 1/2 N, 4 1/2 W, 1/2 N, E into						
Contractor	Discovery Drilling Rig #1							Owner	To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.						
Type Job	Surface							Charge To	John O. Farmer, Inc.						
Hole Size	12 1/4"			T.D.	233'			Street							
Csg.	8 5/8" 23#			Depth	232'			City							
Tbg. Size				Depth				State							
Tool				Depth				The above was done to satisfaction and supervision of owner agent or contractor.							
Cement Left in Csg.	15'			Shoe Joint				Cement Amount Ordered	150 Com 3% C 2% gel						
Meas Line				Displace	13 3/4 Bbls.										

EQUIPMENT

Pumptrk	9	No.	Cement Helper	Paul	Common	150
Bulktrk	8	No.	Driver	Neale	Poz. Mix	
Bulktrk	PV	No.	Driver	Rocky	Gel	3

JOB SERVICES & REMARKS

Remarks:	Hulls
Rat Hole	Salt
Mouse Hole	Flowseal
Centralizers	Kol-Seal
Baskets	Mud CLR 48
D/V or Port Collar	CFL-117 or CD110 CAF 38
Est. Circ.	Sand
Mix 150SX	Handling 158
Displace	Mileage
Cement Circulated	

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FLOAT EQUIPMENT

Guide Shoe
Centralizer
Baskets
AFU Inserts
Float Shoe
Latch Down

Thank You!!

Quality Oilwell Cementing

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Pumptrk Charge	Surface	Tax
Mileage	70	Discount
		Total Charge

X Signature *[Signature]*

QUALITY OILWELL CEMENTING, INC.

Phone 785-483-2025
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 4329

COPY

Date	Sec.	Twp.	Range	County	State	On Location	Finish
5-2-11	1	4	21	Marion	KS		5:15 P.M.
Lease	Well No.		Location				
Hicher A	1		Logan 4121 410 1/20 F110				
Contractor				Owner			
Discovery #1				To Quality Oilwell Cementing, Inc.			
Type Job				You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.			
Rotary Plug							
Hole Size		T.D.		Charge To			
7 7/8		3766		JD Farmer			
Csg.		Depth		Street			
Tbg. Size		Depth		City			
Tool		Depth		State			
Cement Left in Csg.		Shoe Joint		The above was done to satisfaction and supervision of owner agent or contractor.			
Meas Line		Displace		Cement Amount Ordered			
				245 60/10 41661 117710			
EQUIPMENT							
Pumptrk	No.	Cement Helper	Common				
1		Craig					
Bulktrk	No.	Driver	Poz. Mix				
		Rak					
Bulktrk	No.	Driver	Gel.				
10		Matt					
JOB SERVICES & REMARKS							
Remarks:				Calcium			
Rat Hole				Hulls			
30				Salt			
Mouse Hole				Flowseal			
15				Kol-Seal			
Centralizers				Mud CLR 48			
Baskets				CFL-117 or CD110 CAF 38			
D/V or Port Collar				Sand			
1st 3695 255K				Handling			
2nd 1860 155K				Mileage			
3rd 1170 105K				FLOAT EQUIPMENT			
4th 780 41K							
5th 40' 105K							
				Guide Shoe			
				Centralizer			
				Baskets			
				8 5/8 wooden Plug			
				AFU Inserts			
				Float Shoe			
				Latch Down			
				CONFIDENTIAL JUN 29 2013 KCC			
				Pumptrk Charge			
				Mileage			
				Tax			
				Discount			
				Total Charge			
Signature							
Chris Mappell							

DEFINITIONS: In these terms and conditions, "Quality" shall mean Quality Oilwell Cementing, Inc., and "Customer" shall refer to the party identified by that term on the front of this contract. As applicable, "Job" relates to the services described on the front side of this contract, "merchandise" refers to the material described on the front of this contract and to any other materials, products, or supplies used, sold, or furnished under the requirements of this contract.

- **TERMS:** Unless satisfactory credit has been established, "CUSTOMER" must tender full cash payment to "QUALITY" before the job is undertaken or merchandise is delivered. If satisfactory credit has been established, the terms of payment for the job and/or merchandise, including bulk cement, are net cash, payable in 30 days from the completion of the job and/or delivery of the merchandise. For all past due invoices, "CUSTOMER" agrees to pay interest on amounts invoiced at a rate of 18 percent per annum until paid. Notwithstanding the foregoing in no event shall this Contract provide for interest exceeding the maximum rate of interest that "CUSTOMER" may agree to pay under applicable law. If any such interest should be provided for, it shall be and hereby is deemed to be a mistake, and this contract shall be automatically reformed to lower the rate of interest to the maximum legal contract rate, any amounts previously paid as excess interest shall be deducted from the amounts owing from the "CUSTOMER" or at the option of "QUALITY," refunded directly to "CUSTOMER." For purposes of this paragraph, QUALITY and CUSTOMER agree that KANSAS law shall apply. Any discounts granted with this contract are null and void if the charges are not paid when due.

- **ATTORNEY FEES:** In any legal action or proceeding between the parties to enforce any of the terms of this Service Contract, or in any way pertaining to the term of this Contract, the prevailing party shall be entitled to recover all expenses, including, but not limit to, a reasonable sum as and attorney's fees.

- **PRICES AND TAXES:** All merchandise listed in "QUALITY'S" current price shall schedule are F.O.B. QUALITY'S local station and are subject to change without notice. All prices are exclusive of any federal, state, local, or special taxes for the sale or use of the merchandise or services listed. The amount of taxes required to be paid by QUALITY shall be added to the quoted prices charged to CUSTOMER.

- **TOWING CHARGES:** QUALITY will make a reasonable attempt to get to and from each job site using its own equipment. Should QUALITY be unable to do so because of poor or inadequate road conditions, and should it become necessary to employ a tractor or other pulling equipment to get to or from the job site, the tractor or pulling equipment will be supplied by CUSTOMER or, if furnished by QUALITY, will be charged to and paid by CUSTOMER.

- **PREPARATION CHARGES:** If a job and/or merchandise is ordered and CUSTOMER cancels the order after preparation of a chemical solution or other material, CUSTOMER will pay QUALITY for the expenses incurred by QUALITY as a result of the cancellation.

- **DEADHAUL, CHARGES:** Unless otherwise specified on the front of this Contract, a deadhaul charges as set forth in QUALITY'S current price book will be charged each way for each service unit which is ordered by CUSTOMER but not used.

- **SERVICE CONDITIONS AND LIABILITIES:** 1. QUALITY carries public liability and property damage insurance, but since there are so many uncertain and unknown conditions beyond QUALITY'S control, QUALITY shall not be liable for injuries to property or persons or for loss or damage arising from the performance of the job or delivery of the merchandise. Customer shall be responsible for and indemnify, defend, and hold harmless QUALITY, its officers, agents and employees, from and against any and all claims or suits for:

(A) Damage to property or for bodily injury, sickness, disease, or death, brought by any person, including CUSTOMER and/or the well owner; and:

(B) Oil spills, pollution, surface or sub-surface damage, injury to the well, reservoir loss, or damage arising from a well blowout arising out of or in connection with QUALITY'S performance of the job or furnishing of merchandise in accordance with this contract, unless such loss or damage is caused by the willful misconduct or gross negligence of QUALITY or its employees.

2. With respect to any of QUALITY'S tools, equipment, or instruments which are lost in the well or damaged when performing or attempting to perform the job or, in the case of marine operations, are lost or damaged at any time after delivery to the landing for CUSTOMER and before return to QUALITY at the landing, CUSTOMER shall either recover the lost item without cost to QUALITY or reimburse QUALITY the current replacement cost of the item unless the loss or damage results from the sole negligence of QUALITY or its employees.

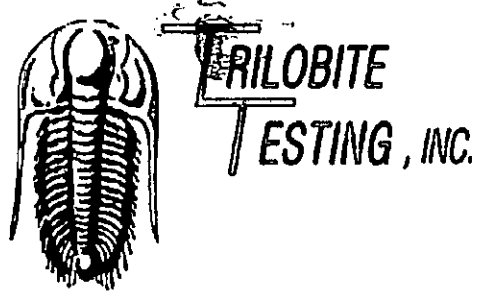
3. QUALITY does not assume any liability or responsibility for damages or conditions resulting from chemical action in cements caused by contamination of water or other fluids.

WARRANTIES: 1. QUALITY warrants all merchandise manufactured or furnished by it to be free from defects in material and workmanship under normal use and service when installed, and used, and/or serviced in the manner provided and intended. QUALITY'S obligation under this warranty is expressly limited to repair replacement, or allowance for credit, at its option, for any merchandise which is determined by QUALITY to be defective. THIS IS THE SOLE WARRANTY OF QUALITY AND NO OTHER WARRANTY IS APPLICABLE, EITHER EXPRESS OR OTHERWISE IMPLIED, IN FACT OR IN LAW, INCLUDING ANY WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE, CUSTOMER'S sole and only remedy with regard to any defective merchandise shall be the repair or replacement thereof or allowance for credit as herein provided, and QUALITY shall not be liable for any consequential, special, incidental, or punitive damages resulting from or caused by defective materials, products or supplies.

2. More specifically:

(A) Nothing in this contract shall be construed as a warranty by QUALITY of the success or the effectiveness of the result of any work done or merchandise used, sold, or furnished under this contract.

(B) Nothing in this contract shall be construed as a warranty of the accuracy or correctness of any facts, information, or data furnished by QUALITY or any interpretation of test, meter readings, chart information, analysis or research, or recommendations made by QUALITY, unless the inaccuracy or incorrectness is caused by the willful misconduct or gross negligence of QUALITY or its employees in the preparation or furnishing of such facts, information or data. (C) Work done by QUALITY shall be under the direct supervision and control of the CUSTOMER or his agent and QUALITY will accomplish the job as an independent contractor and not as an employee or agent of the CUSTOMER.



DRILL STEM TEST REPORT

Prepared For: **John O Farmer Inc**

PO Box 352
Russell, KS 67665

ATTN: Randy Killian

1-4s-21w Norton,KS

Archer A - 1

Start Date: 2011.05.05 @ 18:15:00

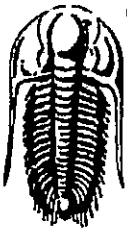
End Date: 2011.05.06 @ 00:40:30

Job Ticket #: 042002 DST #: 1

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Trilobite Testing, Inc
PO Box 1733 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

John O Farmer Inc

Archer A - 1

PO Box 352
Russell, KS 67665

1-4s-21w Norton, KS

Job Ticket: 042002

DST#: 1

ATTN: Randy Killian

Test Start: 2011.05.05 @ 18:15:00

GENERAL INFORMATION:

Formation: Toronto - LKC "D"

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:04:30

Time Test Ended: 00:40:30

Test Type: Conventional Bottom Hole

Tester: James Winder

Unit No: 46

Interval: 3408.00 ft (KB) To 3515.00 ft (KB) (TVD)

Reference Elevations: 2206.00 ft (KB)

Total Depth: 3515.00 ft (KB) (TVD)

2198.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8366

Inside

Press@RunDepth: 48.45 psig @ 3409.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2011.05.05

End Date:

2011.05.06

Last Calib.:

2011.05.06

Start Time: 18:15:05

End Time:

00:40:29

Time On Btmr

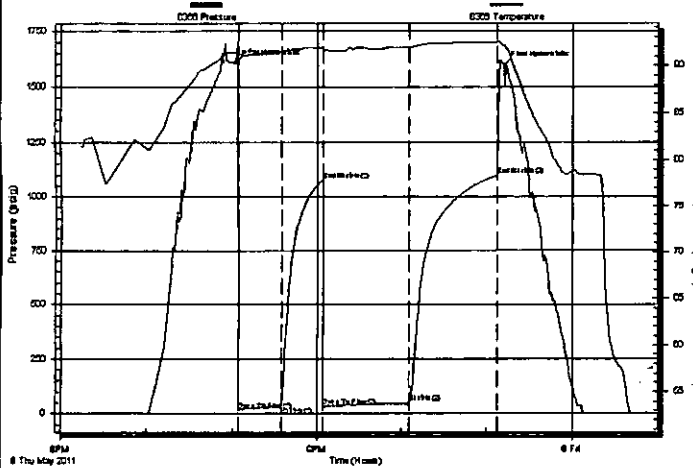
2011.05.05 @ 20:01:30

Time Off Btmr

2011.05.05 @ 23:12:00

TEST COMMENT: IF: Blow built to 2 1/2"
IS: No blow back
FF: Blow built to 2 1/2"
FS: No blow back

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1607.67	91.34	Initial Hydro-static
3	15.69	91.09	Open To Flow (1)
33	33.04	91.43	Shut-In(1)
63	1077.97	91.91	End Shut-In(1)
63	33.89	91.63	Open To Flow (2)
124	48.45	91.91	Shut-In(2)
186	1097.29	92.45	End Shut-In(2)
191	1596.22	92.11	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
75.00	Mud 100%	0.77

Gas Rates

Choke (Inches)	Pressure (psig)	Gas Rate (Mc/d)



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

John O Farmer Inc

Archer A - 1

PO Box 352
Russell, KS 67665

1-4s-21w Norton,KS

Job Ticket: 042002

DST#: 1

ATTN: Randy Killian

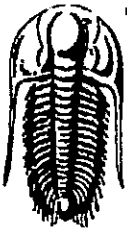
Test Start: 2011.05.05 @ 18:15:00

Tool Information

Drill Pipe:	Length: 3391.00 ft	Diameter: 3.80 inches	Volume: 47.57 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	30000.00 lb
Drill Collar:	Length: 31.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose:	70000.00 lb
			<u>Total Volume: 47.72 bbl</u>	Tool Chased	5.00 ft
Drill Pipe Above KB:	34.00 ft			String Weight: Initial	54000.00 lb
Depth to Top Packer:	3408.00 ft			Final	55000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	107.00 ft				
Tool Length:	127.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		
Tool Comments:					
Tool slid 5' to bottom before opening - No mud loss					

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
------------------	-------------	------------	----------	------------	----------------

Shut In Tool	5.00			3393.00	
Hydraulic tool	5.00			3398.00	
Packer	5.00			3403.00	20.00 Bottom Of Top Packer
Packer	5.00			3408.00	
Stubb	1.00			3409.00	
Recorder	0.00	8366	Inside	3409.00	
Recorder	0.00	8320	Outside	3409.00	
Perforations	8.00			3417.00	
Blank Spacing	95.00			3512.00	
Bullnose	3.00			3515.00	107.00 Bottom Packers & Anchor
Total Tool Length:	127.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

John O Farmer Inc

Archer A - 1

PO Box 352
Russell, KS 67665

1-4s-21w Norton,KS

Job Ticket: 042002

DST#: 1

ATTN: Randy Killian

Test Start: 2011.05.05 @ 18:15:00

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: 77.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.58 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
75.00	Mud 100%	0.770

Total Length: 75.00 ft Total Volume: 0.770 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

