

ORIGINAL

8/30/12

KANSAS CORPORATION COMMISSION  
OIL & GAS CONSERVATION DIVISION

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

CONFIDENTIAL

WELL COMPLETION FORM  
WELL HISTORY - DESCRIPTION OF WELL & LEASE

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: Coffeyville Resources, LLC

Designate Type of Completion:

- New Well  Re-Entry  Workover
- Oil  WSW  SWD  SLOW
- 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 #: \_\_\_\_\_

5-17-11                      5-22-11                      6-21-11  
 Spud Date or                      Date Reached TD                      Completion Date or  
Recompletion Date                                           Recompletion Date

API No. 15 - 15-147-20,644-00-00

Spot Description:  
SW NW SE Sec. 4 Twp. 5 S. R. 20  East  West  
765 Feet from  North /  South Line of Section  
2,400 Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:  
 NE  NW  SE  SW  
County: Phillips  
Lease Name: States Unit Well #: 1  
Field Name: (wildcat)

Producing Formation: Lansing/KC  
Elevation: Ground: 2022' Kelly Bushing: 2030'  
Total Depth: 3549' Plug Back Total Depth: 3518'  
Amount of Surface Pipe Set and Cemented at: 227 Feet  
Multiple Stage Cementing Collar Used?  Yes  No  
If yes, show depth set: Port Collar @ 1,569 Feet  
If Alternate II completion, cement circulated from: 1,569  
feet depth to: surface w/ 225 sx cm.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)  
Chloride content: 14,000 ppm Fluid volume: 320 bbls  
Dewatering method used: evaporation  
Location of fluid disposal if hauled offsite: RECEIVED  
Operator Name: KCC WICHITA  
Lease Name: \_\_\_\_\_ License #: \_\_\_\_\_  
Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West  
County: \_\_\_\_\_ Permit #: \_\_\_\_\_

AUG 30 2011

CONFIDENTIAL

AUG 30 2012

**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: 8-29-11

KCC Office Use ONLY

- Letter of Confidentiality Received Date: 8/30/11 - 8/30/12
- Confidential Release Date: \_\_\_\_\_
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT  I  II  III Approved by: MJ Date: 9-7-11

Operator Name: John O. Farmer, Inc. Lease Name: States Unit Well #: 1  
 Sec. 4 Twp. 5 S. R. 20  East  West County: Phillips

**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, Micro Resistivity Log, Radiation Guard Log, Cement Bond 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:70%;">Name</td> <td style="width:15%;">Top</td> <td style="width:15%;">Datum</td> </tr> <tr> <td>Anhydrite</td> <td>1558'</td> <td>(+472)</td> </tr> <tr> <td>Topeka</td> <td>2966'</td> <td>(-936)</td> </tr> <tr> <td>Heebner</td> <td>3162'</td> <td>(-1132)</td> </tr> <tr> <td>Toronto</td> <td>3188'</td> <td>(-1158)</td> </tr> <tr> <td>Lansing</td> <td>3204'</td> <td>(-1174)</td> </tr> <tr> <td>Base/KC</td> <td>3397'</td> <td>(-1367)</td> </tr> <tr> <td>Arbuckle</td> <td>3493'</td> <td>(-1463)</td> </tr> </table>	Name	Top	Datum	Anhydrite	1558'	(+472)	Topeka	2966'	(-936)	Heebner	3162'	(-1132)	Toronto	3188'	(-1158)	Lansing	3204'	(-1174)	Base/KC	3397'	(-1367)	Arbuckle	3493'	(-1463)
Name	Top	Datum																							
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Base/KC	3397'	(-1367)																							
Arbuckle	3493'	(-1463)																							

CASING RECORD <input 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" (used)	23#	227'	Common	150	3% C.C., 2% gel
Production	7-7/8"	5-1/2" (new)	14#	3548'	EA-2	130	
Port Collar				1569'	QMDC	225	

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 SPF	3269-79' (Lansing "F")	250 gals. 15% MCA acid	
4 SPF	3324-29' (Lansing "H")	(H, I, J, K zones all treated together with	
4 SPF	3346-66' (Lansing "I")	400 gals. 15% MCA acid & 1,000 gals.	
4 SPF	3360-66' (Lansing "J")	20% NE acid)	
4 SPF	3382-85' (Lansing "K")		

TUBING RECORD:	Size: <u>2-7/8"</u>	Set At: <u>3515'</u>	Packer At:	Liner Run: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
----------------	---------------------	----------------------	------------	--------------------------------------------------------------------------------

Date of First, Resumed Production, SWD or ENHR. <u>7-16-11</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>8.40</u>	Gas Mcf	Water Bbls. <u>13.00</u>	Gas-Oil Ratio <u>34.9°</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 checked="" 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: <u>3269-3385' OA</u>
-------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------



**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: States Unit # 1 Location: SW/NW/SW/SE  
Section 4/5S/20W  
Phillips Co., KS

Loggers Total Depth: 3550' API#15- 147-20,644-00-00  
 Rotary Total Depth: 3549' Elevation: 2032 ~~2017~~ GL / 2025 ~~KB~~  
 Commenced: 5/17/2011 Completed: 5/23/2011 2,030  
 Casing: 8 5/8" @ 227.24'W/150sks Status: Oilwell  
5 1/2" @ 3548'W/130sks  
Port Collar @ ~~1583'~~

**DEPTHS & FORMATIONS**  
(All from KB)

Surface, Sand & Shale	<u>0'</u>	Shale	<u>1598'</u>
Dakota Sand	<u>1003'</u>	Shale & Lime	<u>1979'</u>
Shale	<u>1023'</u>	Shale	<u>2375'</u>
Cedar Hill Sand	<u>1012'</u>	Shale & Lime	<u>2802'</u>
Red Bed Shale	<u>1286'</u>	Lime & Shale	<u>3164'</u>
Anhydrite	<u>1562'</u>	RTD	<u>3549'</u>
Base Anhydrite	<u>1598'</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

Subscribed and sworn to before me on 5-26-11

My Commission expires: 6-28-14

(Place stamp or seal below)

Notary Public

**CONFIDENTIAL**  
 AUG 30 2012

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**AUG 30 2011**  
**KCC WICHITA**



# QUALITY OILWELL CEMENTING, INC.

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

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

No. 5009

Date	5/17/11	Sec.	4	Twp.	5	Range	20	County	Phillips	State	KS	On Location		Finish	5:30 AM	
Lease	States Unit			Well No.	1		Location Logan, 1 S, W into									
Contractor	Discovery Drilling Rig #1							Owner <i>COPY</i>								
Type Job	Surface							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.								
Hole Size	12 1/4"			T.D.	227'		Charge To John O. Farmer									
Csg.	8 5/8" 23 #			Depth	227'		Street									
Tbg. Size				Depth			City									
Tool				Depth			State									
Cement Left in Csg.	15'			Shoe Joint			The above was done to satisfaction and supervision of owner agent or contractor.									
Meas Line				Displace	13 1/2 Bbls.		Cement Amount Ordered 150sx Com 3% CC 2% gel									

**EQUIPMENT**

Pumptrk	9	No.	Cementor	Paul	Common	150
			Helper			
Bulktrk	8	No.	Driver	Arcate	Poz. Mix	
			Driver			
Bulktrk	2	No.	Driver	Cory	Gel.	3
			Driver			

**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	

**FLOAT EQUIPMENT**

Guide Shoe	
Centralizer	
Baskets	AUG 30 2012
AFU Inserts	
Float Shoe	
Latch Down	

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Pumptrk Charge Surface KCC WICHITA  
Mileage 69

Tax  
Discount  
Total Charge

X Signature *Cliff Mayfield*

Thank You!

**JOB LOG**

**SWIFT Services, Inc.**

DATE 5-23-11 PAGE NO. 7

CUSTOMER John O. Farmer, Inc. WELL NO. #1 LEASE States Unit JOB TYPE Cement Logging TICKET NO. 19753

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		TD 3549' DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	1900					14 1/2"	5 1/2"	ON location w/ float equip. 26 L.O.P.
	2040							Start 5 1/2" 14" PL casing to 3548'
								Insert float shoe w/ Anti-Ball
								L.O. Baffle - 5 J - 22' @ 3527'
								Cent collars # 2951 1-3-5-7-9-29-47
								Cent Basket # in ft. Pin end 2-11 86
								PC It # 86 Run after # 47 @ 1573'
								Drop Killup Ball left out
	2200							Fix main casing
	2210							Start circulate & rotate casing
								Fix case
								Plug RH-30SKS EA-2 MH 15 SKS EA-2
		6	12				250	Pump 500 GAL Alum. H <sub>2</sub> O
		6	20				250	Pump 80 BBL KOI Flush
		4 1/2					300	Start 130 SKS EA-2 cut @ 15.5 gal
			32				200	Fix cut - wash out Pump lines
		9					275	Drop L.O. Plug - start Displ (86 BBL)
		8	65				350	Caught press in @ 45 BBL - started
		7	75				520	slow rate
		6	80				700	slow rate
	2315		86				850	Plug Down - Hebt Release & hold
	2330						1500	Wash up & Parkup - Empty Tank
	2400							Job Complete

**COPY**

Thanks  
Ray, Doug & John U.

CONVENTION

AUG 30 2012

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KCC WICHITA

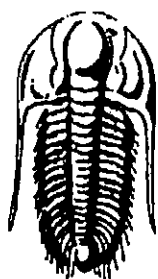
# QUALITY OILWELL CEMENTING, INC.

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

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

No. 4850

Date	6-13-11	Sec.	Twp.	Range	County	State	On Location	Finish
Lease	States Unit 4	Well No.	1		Location	Logan 1/23 W 11120	11:45 AM	
Contractor	Express	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	Port Collar	Hole Size			Charge To			
Hole Size	7 7/8	T.D.			To J. O'Farmer Inc			
Csg.	5 1/2	Depth			Street			
Tbg. Size	2 7/8	Depth			City			
Tool	Port Collar	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			
EQUIPMENT					USED WASH 225			
Pumptrk	9	No.	Cement	Helper	Common			
Bulktrk		No.	Driver	Driver	225			
Bulktrk	8	No.	Driver	Driver	Gel.			
JOB SERVICES & REMARKS					Calcium			
Remarks:					Hulls			
Rat Hole					Salt			
Mouse Hole					Flowseal 60#			
Centralizers					Kol-Seal			
Baskets					Mud CLR 48			
D/V or Port Collar					CFL-117 or CD110 CAF 38			
Test casing to 1200' Open Tool & Mix 1800' Cement Cemented Check tool & pressure to 1200' Run 5 joints & wash clean.					Sand			
Used 225 sks					Handling 250			
Cement Lin					Mileage			
					CORRECTION			
					AUG 30 2012			
					RECEIVED			
					AUG 30 2011			
					KCO WICHITA			
					Pumptrk Charge			
					Mileage 690			
					Tax			
					Discount			
					Total Charge			
Signature					Cham Weasling			



**TRILOBITE  
TESTING, INC.**

**DRILL STEM TEST REPORT**

Prepared For: **John O. Farmer Inc,**

PO Box 352  
Russell, KS 67665

ATTN: Randy Killian

**4-5s-20w Phillips,KS**

**States Unit#1**

Start Date: 2011.05.20 @ 12:21:31

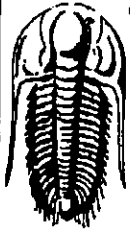
End Date: 2011.05.20 @ 18:17:31

Job Ticket #: 43851                      DST #: 1

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

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**AUG 30 2011**  
**KCC WICHITA**

John O. Farmer Inc,  
States Unit#1  
4-5s-20w Phillips,KS  
DST # 1  
Toronto  
2011.05.20



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

John O. Farmer Inc,

PO Box 352  
Russell, KS 67665

ATTN: Randy Killian

States Unit#1

4-5s-20w Phillips,KS

Job Ticket: 43851

DST#: 1

Test Start: 2011.05.20 @ 12:21:31

## GENERAL INFORMATION:

Formation: **Toronto**  
 Deviated: **No Whipstock** ft (KB)  
 Time Tool Opened: 14:56:01  
 Time Test Ended: 18:17:31

Test Type: **Conventional Bottom Hole**  
 Tester: **Cody Bloedorn**  
 Unit No: **54**

Interval: **3157.00 ft (KB) To 3195.00 ft (KB) (TVD)**  
 Total Depth: **3195.00 ft (KB) (TVD)**  
 Hole Diameter: **7.88 inches** Hole Condition: **Good**

Reference Elevations: **2030.00 ft (KB)**  
**2017.00 ft (CF)**  
 KB to GR/CF: **13.00 ft**

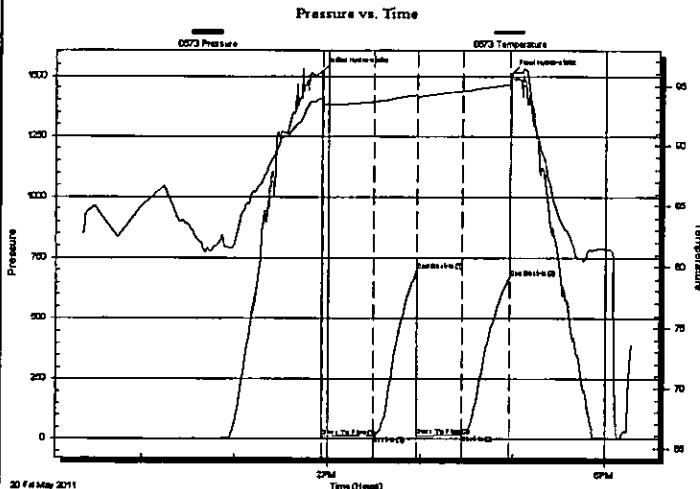
## Serial #: 8673

Inside

Press@RunDepth: **15.62 psig @ 3192.00 ft (KB)**  
 Start Date: **2011.05.20** End Date: **2011.05.20**  
 Start Time: **12:21:33** End Time: **18:17:31**

Capacity: **8000.00 psig**  
 Last Calib.: **2011.05.20**  
 Time On Btm: **2011.05.20 @ 14:55:46**  
 Time Off Btm: **2011.05.20 @ 16:58:16**

TEST COMMENT: 30 - IF- 1/4" blow , died in 7 Mn.  
 30 - IS- No blow back  
 30 - FF- No blow back  
 30 - FS- Noblow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1519.16	93.81	Initial Hydro-static
1	9.67	92.89	Open To Flow (1)
34	13.23	93.60	Shut-In(1)
62	698.68	94.17	End Shut-In(1)
62	13.88	93.77	Open To Flow(2)
91	15.62	94.51	Shut-In(2)
122	668.71	95.08	End Shut-In(2)
123	1511.07	95.75	Final Hydro-static

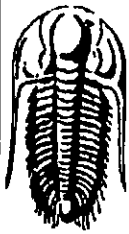
## Recovery

Length (ft)	Description	Volume (bbl)
20.00	OSM	0.10

## Gas Rates

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





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

TOOL DIAGRAM

John O. Farmer Inc,

States Unit#1

PO Box 352  
Russell, KS 67665

4-5s-20w Phillips,KS

Job Ticket: 43851

DST#: 1

ATTN: Randy Killian

Test Start: 2011.05.20 @ 12:21:31

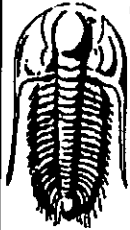
## Tool Information

Drill Pipe:	Length: 3140.00 ft	Diameter: 3.80 inches	Volume: 44.05 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 31.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 58000.00 lb
			<u>Total Volume: 44.20 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	35.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3157.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	38.00 ft			
Tool Length:	59.00 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			3137.00	
Shut In Tool	5.00			3142.00	
Hydraulic tool	5.00			3147.00	
Packer	5.00			3152.00	21.00 Bottom Of Top Packer
Packer	5.00			3157.00	
Stubb	1.00			3158.00	
Perforations	34.00			3192.00	
Recorder	0.00	8673	Inside	3192.00	
Recorder	0.00	6668	Outside	3192.00	
Bullnose	3.00			3195.00	38.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>59.00</b>				



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

John O. Farmer Inc,

**States Unit#1**

PO Box 352  
Russell, KS 67665

**4-5s-20w Phillips,KS**

Job Ticket: 43851

**DST#: 1**

ATTN: Randy Killian

Test Start: 2011.05.20 @ 12:21:31

## 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: 85.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.96 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
20.00	OSM	0.098

Total Length:

20.00 ft

Total Volume:

0.098 bbl

Num Fluid Samples: 0

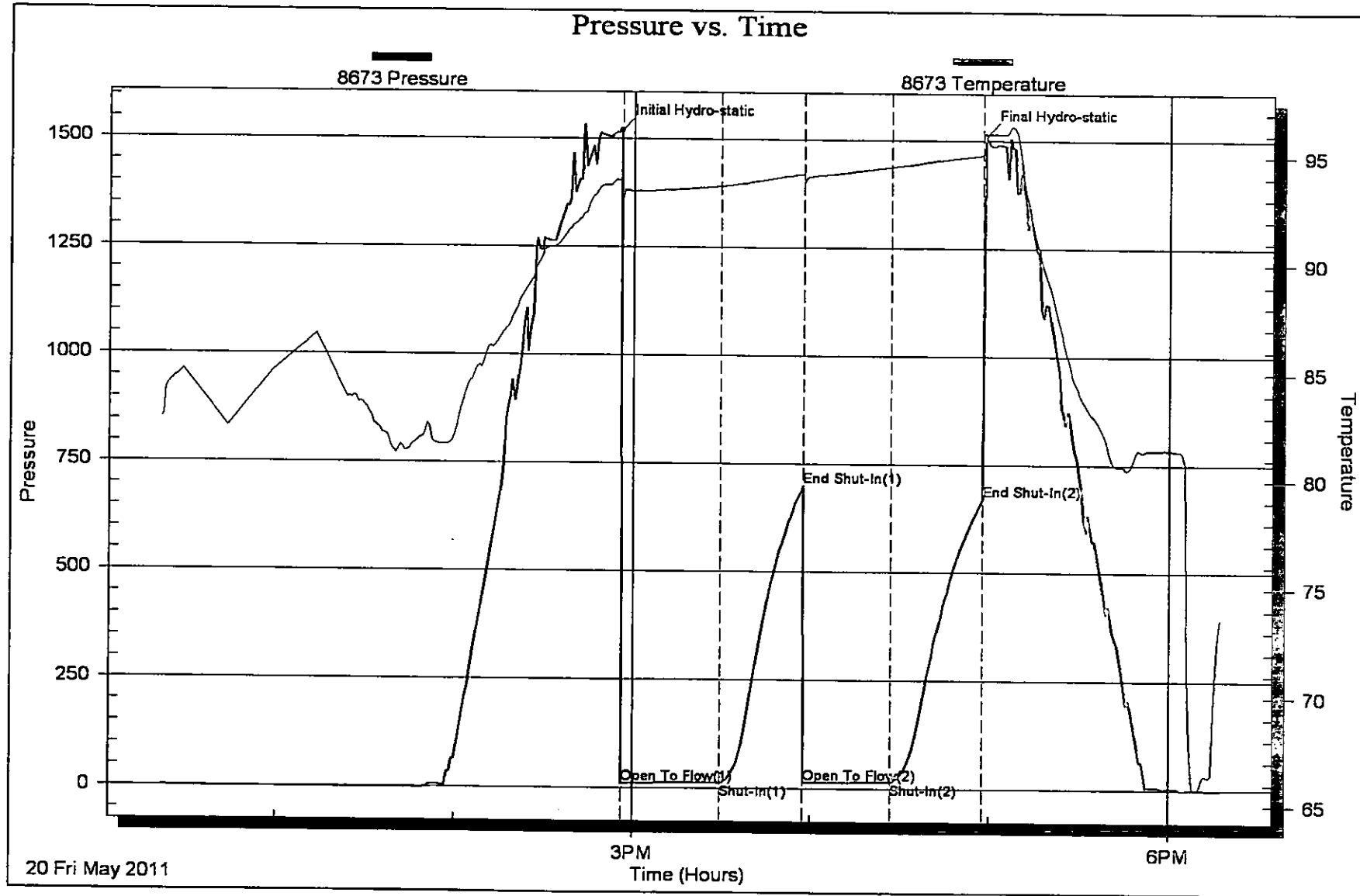
Num Gas Bombs: 0

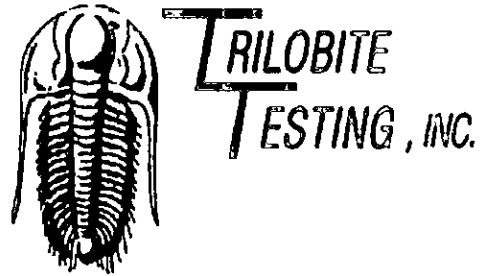
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





## DRILL STEM TEST REPORT

Prepared For: **John O. Farmer Inc,**

PO Box 352  
Russell, KS 67665

ATTN: Randy Killian

**4-5s-20w Phillips,KS**

**States Unit#1**

Start Date: 2011.05.21 @ 01:58:40

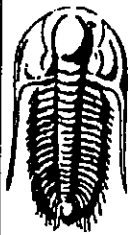
End Date: 2011.05.21 @ 06:56:10

Job Ticket #: 43852                      DST #: 2

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,

PO Box 352  
Russell, KS 67665

ATTN: Randy Killian

States Unit#1

4-5s-20w Phillips,KS

Job Ticket: 43852

DST#: 2

Test Start: 2011.05.21 @ 01:58:40

### GENERAL INFORMATION:

Formation: LKC "C"

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:21:40

Time Test Ended: 06:56:10

Test Type: Conventional Bottom Hole

Tester: Cody Bloedorn

Unit No: 54

Interval: 3219.00 ft (KB) To 3245.00 ft (KB) (TVD)

Total Depth: 3245.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2030.00 ft (KB)

2017.00 ft (CF)

KB to GR/CF: 13.00 ft

Serial #: 8673

Inside

Press@RunDepth: 32.20 psig @ 3242.00 ft (KB)

Start Date: 2011.05.21

End Date:

2011.05.21

Start Time: 01:58:42

End Time:

06:56:10

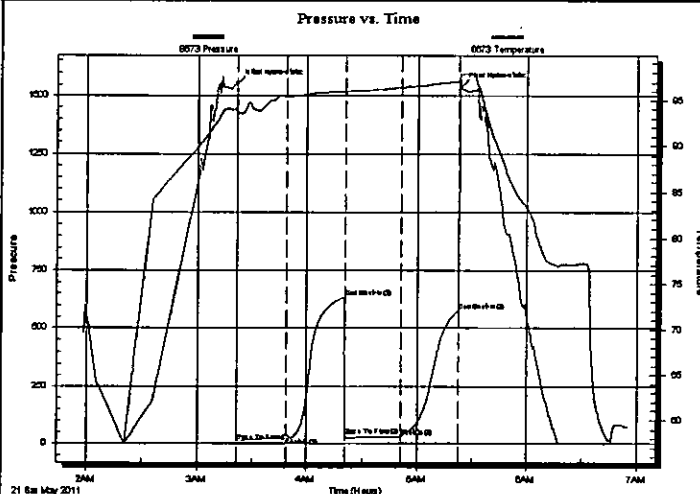
Capacity: 8000.00 psig

Last Calib.: 2011.05.21

Time On Btmr: 2011.05.21 @ 03:21:25

Time Off Btmr: 2011.05.21 @ 05:23:40

TEST COMMENT: 30 - IF- 1/4" blow  
30 - IS- No blow back  
30 - FF- Weak surface blow  
30 - FS- No blow back



### PRESSURE SUMMARY

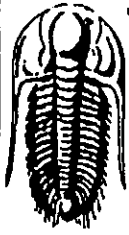
Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	1553.61	93.99	Initial Hydro-static
1	11.86	93.32	Open To Flow (1)
28	25.85	95.38	Shut-In(1)
60	634.29	95.92	End Shut-In(1)
60	33.30	95.54	Open To Flow (2)
90	32.20	96.44	Shut-In(2)
122	578.16	97.10	End Shut-In(2)
123	1539.88	97.67	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
35.00	2%O, 98%M	0.21
5.00	Free Oil	0.07

### Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

TOOL DIAGRAM

John O. Farmer Inc,

States Unit#1

PO Box 352  
Russell, KS 67665

4-5s-20w Phillips,KS

Job Ticket: 43852

DST#: 2

ATTN: Randy Killian

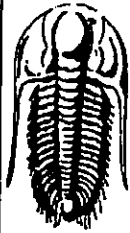
Test Start: 2011.05.21 @ 01:58:40

### Tool Information

Drill Pipe:	Length: 3196.00 ft	Diameter: 3.80 inches	Volume: 44.83 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 31.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 56000.00 lb
			<u>Total Volume: 44.98 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	29.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3219.00 ft			Final 51000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	26.00 ft			
Tool Length:	47.00 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			3199.00	
Shut In Tool	5.00			3204.00	
Hydraulic tool	5.00			3209.00	
Packer	5.00			3214.00	21.00 Bottom Of Top Packer
Packer	5.00			3219.00	
Stubb	1.00			3220.00	
Perforations	22.00			3242.00	
Recorder	0.00	8673	Inside	3242.00	
Recorder	0.00	6668	Outside	3242.00	
Bullnose	3.00			3245.00	26.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>47.00</b>				



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

John O. Farmer Inc,

**States Unit#1**

PO Box 352  
Russell, KS 67665

**4-5s-20w Phillips,KS**

Job Ticket: 43852      **DST#: 2**

ATTN: Randy Killian

Test Start: 2011.05.21 @ 01:58:40

**Mud and Cushion Information**

Mud Type: Gal Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 85.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.96 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 1000.00 ppm			
Filter Cake: inches			

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
35.00	2%O, 98%M	0.209
5.00	Free Oil	0.070

Total Length: 40.00ft      Total Volume: 0.279 bbl

Num Fluid Samples: 0

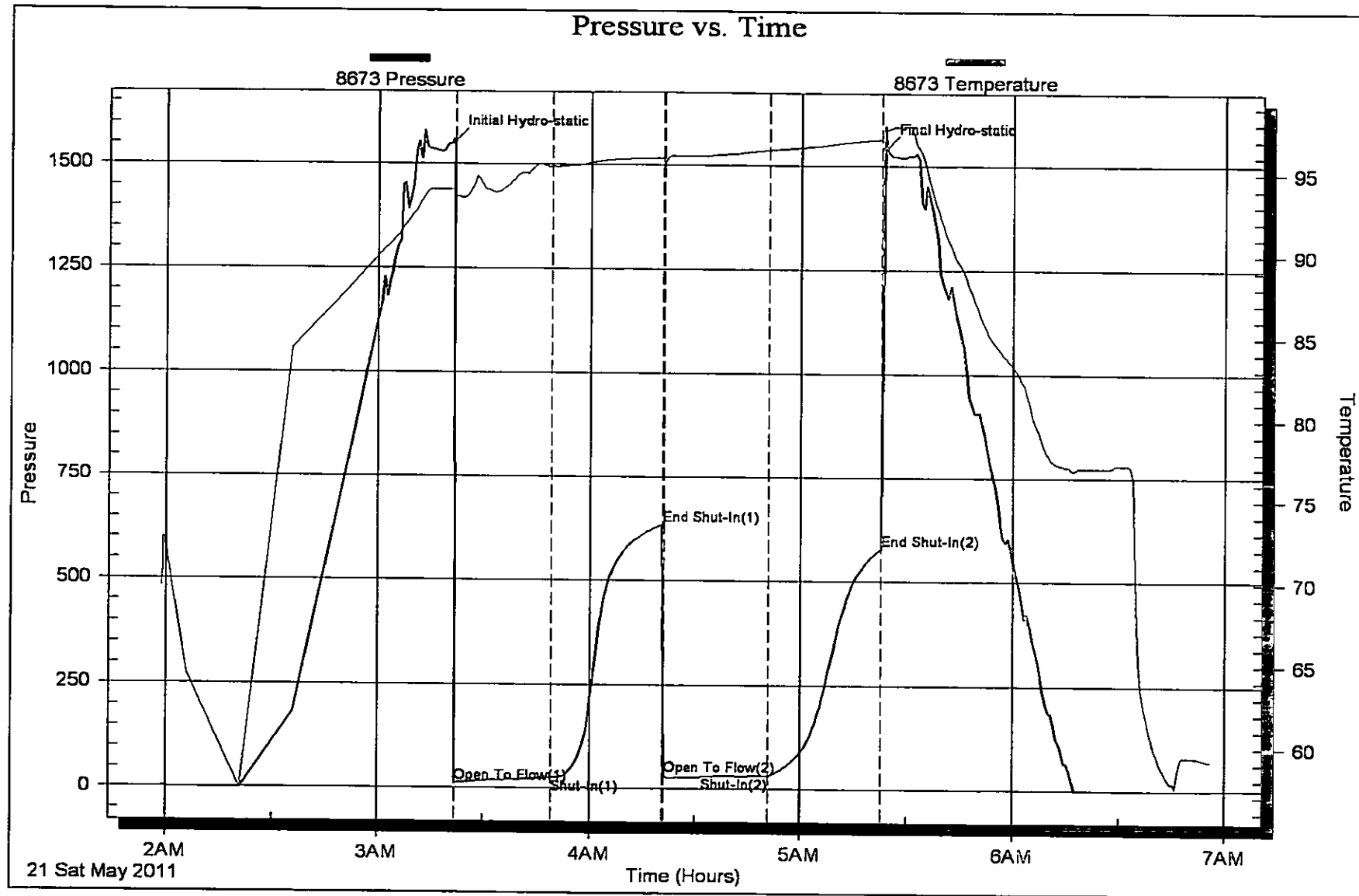
Num Gas Bombs: 0

Serial #:

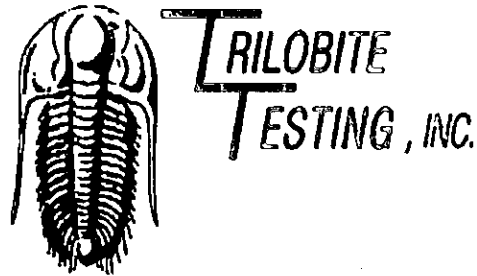
Laboratory Name:

Laboratory Location:

Recovery Comments:







## DRILL STEM TEST REPORT

Prepared For: **John O. Farmer Inc,**

PO Box 352  
Russell, KS 67665

ATTN: Randy Killian

**4-5s-20w Phillips,KS**

**States Unit#1**

Start Date: 2011.05.21 @ 11:21:50

End Date: 2011.05.21 @ 18:02:05

Job Ticket #: 43853                      DST #: 3

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

John O. Farmer Inc,

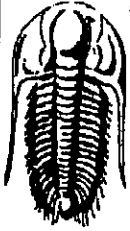
States Unit#1

4-5s-20w Phillips,KS

DST # 3

LKC "D"

2011.05.21



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

John O. Farmer Inc,

PO Box 352  
Russell, KS 67665

ATTN: Randy Killian

States Unit#1

4-5s-20w Phillips,KS

Job Ticket: 43853

DST#: 3

Test Start: 2011.05.21 @ 11:21:50

## GENERAL INFORMATION:

Formation: **LKC "D"**  
 Deviated: No Whipstock ft (KB)  
 Time Tool Opened: 13:04:35  
 Time Test Ended: 18:02:05

Test Type: Conventional Bottom Hole  
 Tester: Cody Bloedorn  
 Unit No: 54

Interval: **3244.00 ft (KB) To 3263.00 ft (KB) (TVD)**  
 Total Depth: 3263.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2030.00 ft (KB)  
 2017.00 ft (CF)  
 KB to GR/CF: 13.00 ft

Serial #: 8673

Inside

Press@RunDepth: 259.58 psig @ 3260.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2011.05.21

End Date:

2011.05.21

Last Calib.: 2011.05.21

Start Time: 11:21:52

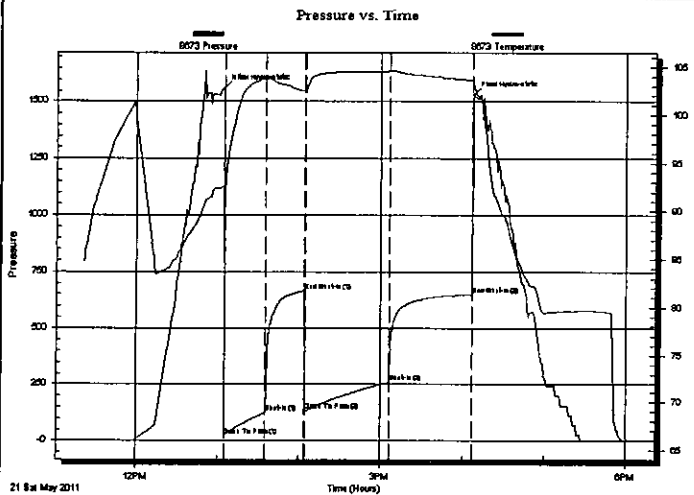
End Time:

18:02:05

Time On Btrt: 2011.05.21 @ 13:04:20

Time Off Btrt: 2011.05.21 @ 16:07:20

TEST COMMENT: 30 - IF- BOB 9 Min.  
 30 - IS- Weak Surface blow  
 60 - FF- BOB 13 Min.  
 60 - FS- Weak surface blow.



## PRESSURE SUMMARY

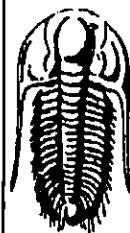
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1559.50	92.75	Initial Hydro-static
1	21.33	91.86	Open To Flow (1)
31	125.29	103.91	Shut-In(1)
60	663.82	102.51	End Shut-In(1)
61	131.72	102.45	Open To Flow(2)
122	259.58	104.56	Shut-In(2)
182	649.49	103.65	End Shut-in(2)
183	1530.09	103.23	Final Hydro-static

## Recovery

Length (ft)	Description	Volumes (bbl)
110.00	10%M,20%O,70%W	1.26
60.00	10%G, 90%O	0.84
0.00	60' GIP	0.00

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

John O. Farmer Inc,

**States Unit#1**

PO Box 352  
Russell, KS 67665

**4-5s-20w Phillips,KS**

Job Ticket: 43853

**DST#: 3**

ATTN: Randy Killian

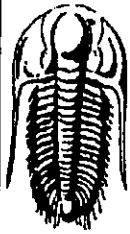
Test Start: 2011.05.21 @ 11:21:50

### Tool Information

Drill Pipe:	Length: 3227.00 ft	Diameter: 3.80 inches	Volume: 45.27 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 31.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 62000.00 lb
			<u>Total Volume: 45.42 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	35.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3244.00 ft			Final 56000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	19.00 ft			
Tool Length:	40.00 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			3224.00	
Shut In Tool	5.00			3229.00	
Hydraulic tool	5.00			3234.00	
Packer	5.00			3239.00	21.00 Bottom Of Top Packer
Packer	5.00			3244.00	
Stubb	1.00			3245.00	
Perforations	15.00			3260.00	
Recorder	0.00	8673	Inside	3260.00	
Recorder	0.00	6668	Outside	3260.00	
Bullnose	3.00			3263.00	19.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>40.00</b>				



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**FLUID SUMMARY**

John O. Farmer Inc,

**States Unit#1**

PO Box 352  
Russell, KS 67665

**4-5s-20w Phillips,KS**

Job Ticket: 43853

**DST#: 3**

ATTN: Randy Killian

Test Start: 2011.05.21 @ 11:21:50

### 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:

70000 ppm

Viscosity: 75.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.97 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
110.00	10%M,20%O,70%W	1.261
60.00	10%G, 90%O	0.842
0.00	60' GIP	0.000

Total Length: 170.00 ft      Total Volume: 2.103 bbl

Num Fluid Samples: 0

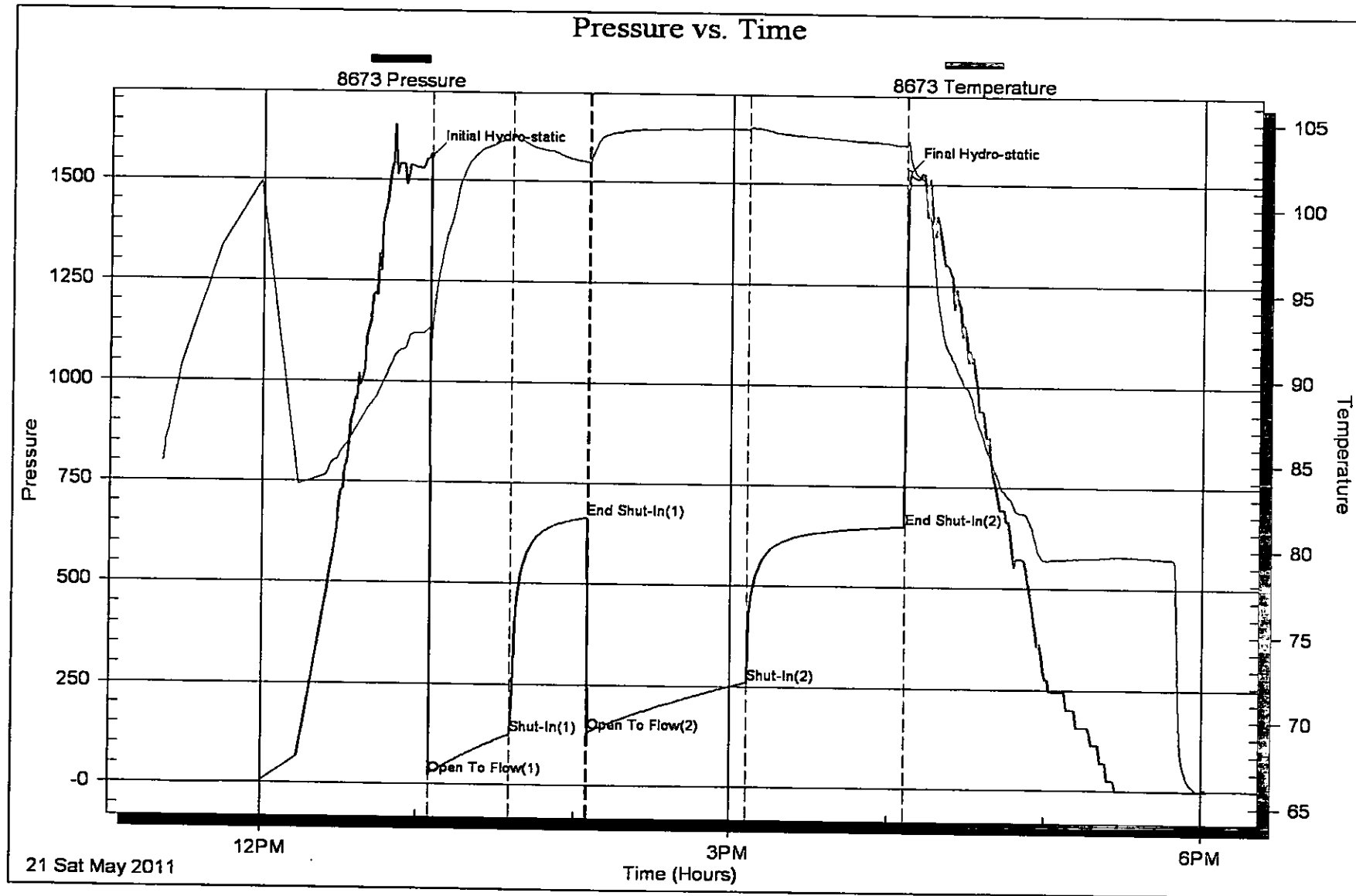
Num Gas Bombs: 0

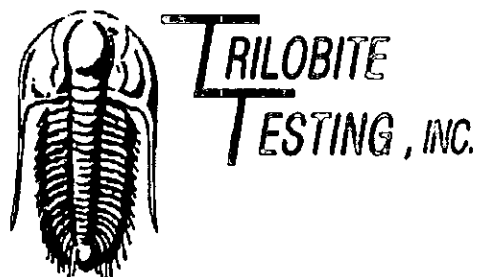
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: API: 29 @ 70 =28      Rw: .096@ 80 Degrees





## DRILL STEM TEST REPORT

Prepared For: **John O. Farmer Inc,**

PO Box 352  
Russell, KS 67665

ATTN: Randy Killian

**4-5s-20w Phillips,KS**

**States Unit#1**

Start Date: 2011.05.21 @ 23:12:24

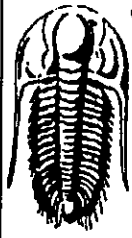
End Date: 2011.05.22 @ 05:44:39

Job Ticket #: 43854                      DST #: 4

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,  
 PO Box 352  
 Russell, KS 67665  
 ATTN: Randy Killian

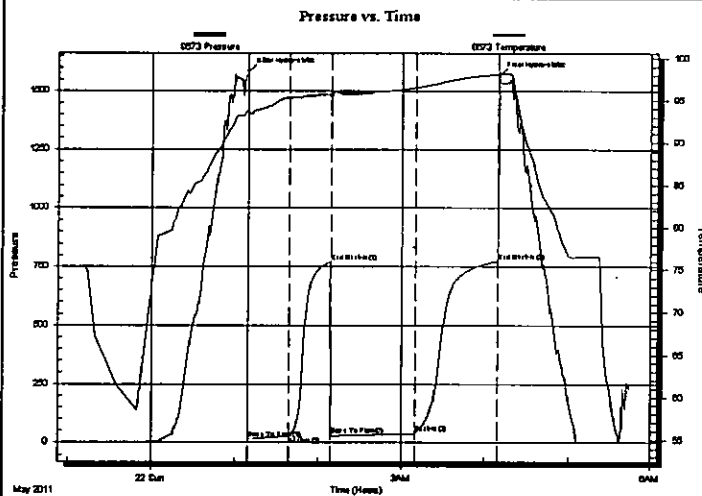
States Unit#1  
 4-5s-20w Phillips,KS  
 Job Ticket: 43854      DST#: 4  
 Test Start: 2011.05.21 @ 23:12:24

## GENERAL INFORMATION:

Formation: LKC "F"  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 01:08:39  
 Time Test Ended: 05:44:39  
 Interval: 3261.00 ft (KB) To 3285.00 ft (KB) (TVD)  
 Total Depth: 3195.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole  
 Tester: Cody Bloedorn  
 Unit No: 54  
 Reference Elevations: 2030.00 ft (KB)  
 2017.00 ft (CF)  
 KB to GR/CF: 13.00 ft

Serial #: 8673      Inside  
 Press@RunDepth: 39.54 psig @ 3282.00 ft (KB)  
 Start Date: 2011.05.21      End Date: 2011.05.22  
 Start Time: 23:12:26      End Time: 05:44:39  
 Capacity: 8000.00 psig  
 Last Calib.: 2011.05.22  
 Time On Btrm: 2011.05.22 @ 01:08:24  
 Time Off Btrm: 2011.05.22 @ 04:10:24

TEST COMMENT: 30 - IF- 1 1/2" Blow  
 30 - IS- No Blow back  
 60 - FF- 1/4" Blow  
 60 - FS- No blow back



## PRESSURE SUMMARY

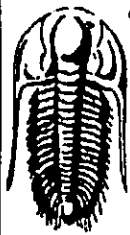
Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	1584.71	93.79	Initial Hydro-static
1	12.39	93.21	Open To Flow (1)
30	26.85	95.32	Shut-In (1)
61	771.48	95.76	End Shut-In (1)
61	32.50	95.37	Open To Flow (2)
122	39.54	96.57	Shut-In (2)
182	774.46	98.10	End Shut-In (2)
182	1566.18	98.44	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
50.00	HOCM 40%O 60%M	0.42

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

John O. Farmer Inc,

States Unit#1

PO Box 352  
Russell, KS 67665

4-5s-20w Phillips,KS

Job Ticket: 43854

DST#:4

ATTN: Randy Killian

Test Start: 2011.05.21 @ 23:12:24

## Tool Information

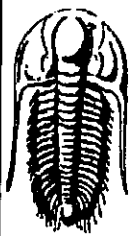
Drill Pipe:	Length: 3227.00 ft	Diameter: 3.80 inches	Volume: 45.27 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 31.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 57000.00 lb
			Total Volume: 45.42 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	18.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3261.00 ft			Final 54000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	24.00 ft			
Tool Length:	45.00 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			3241.00	
Shut In Tool	5.00			3246.00	
Hydraulic tool	5.00			3251.00	
Packer	5.00			3256.00	21.00 Bottom Of Top Packer
Packer	5.00			3261.00	
Stubb	1.00			3262.00	
Perforations	20.00			3282.00	
Recorder	0.00	8673	Inside	3282.00	
Recorder	0.00	6668	Outside	3282.00	
Bullnose	3.00			3285.00	24.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>45.00</b>				





**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

John O. Farmer Inc,

**States Unit#1**

PO Box 352  
Russell, KS 67665

**4-5s-20w Phillips,KS**

Job Ticket: 43854

**DST#: 4**

ATTN: Randy Killian

Test Start: 2011.05.21 @ 23:12:24

**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: 75.00 sec/qt

Cushion Volume:

bbf

Water Loss: 7.97 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: inches

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbf
50.00	HOCM40%O 60%M	0.419

Total Length: 50.00ft Total Volume: 0.419 bbf

Num Fluid Samples: 0

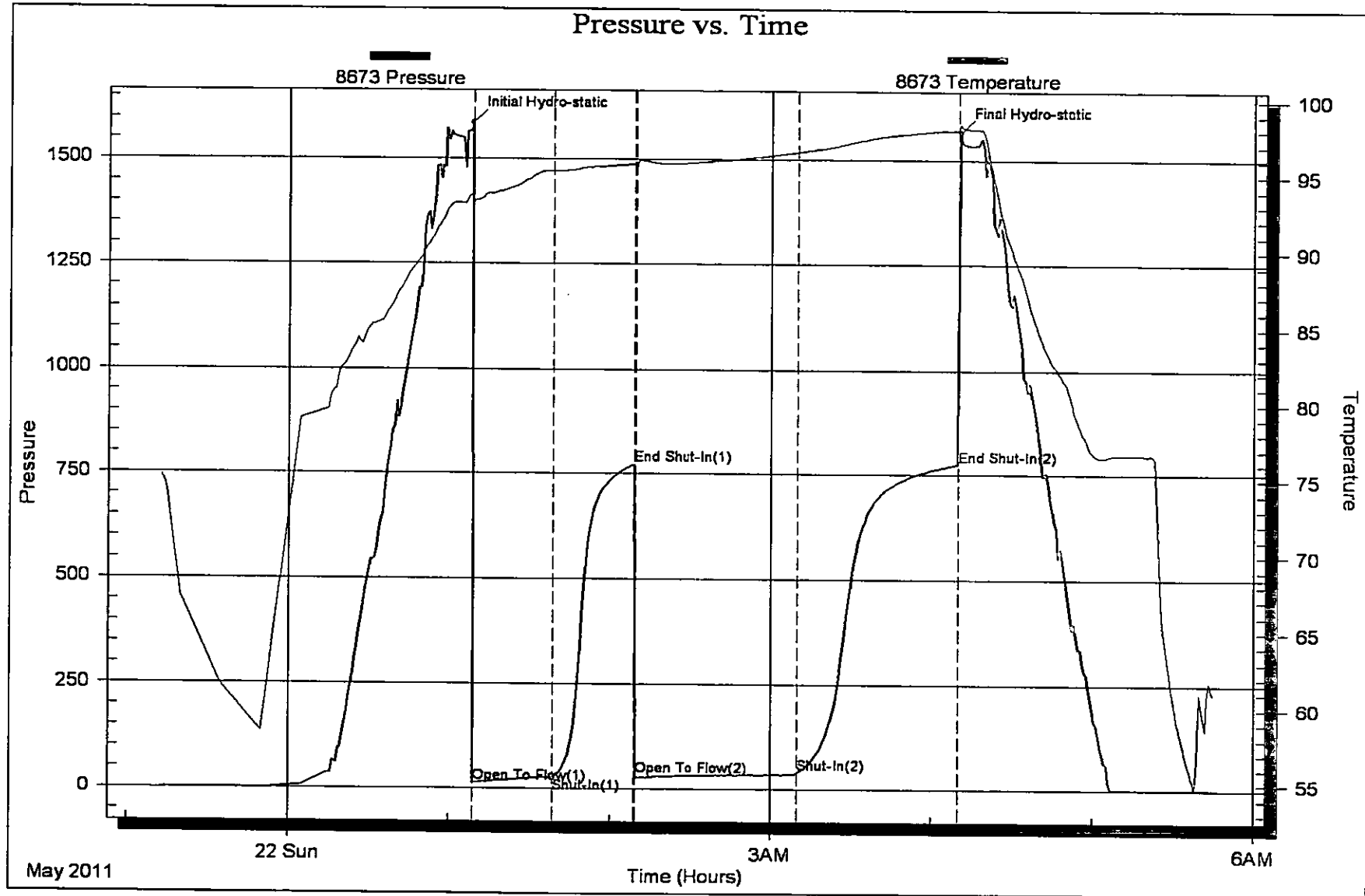
Num Gas Bombs: 0

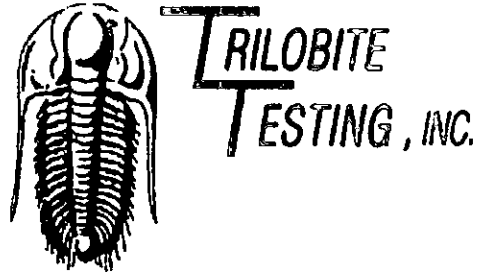
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





## DRILL STEM TEST REPORT

Prepared For: **John O. Farmer Inc,**

PO Box 352  
Russell, KS 67665

ATTN: Randy Killian

**4-5s-20w Phillips,KS**

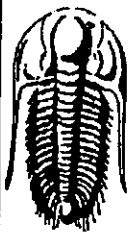
**States Unit#1**

Start Date: 2011.05.22 @ 14:30:07

End Date: 2011.05.22 @ 22:18:52

Job Ticket #: 43855                      DST #: 5

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,

PO Box 352  
Russell, KS 67665

ATTN: Randy Killian

States Unit#1

4-5s-20w Phillips,KS

Job Ticket: 43855

DST#: 5

Test Start: 2011.05.22 @ 14:30:07

### GENERAL INFORMATION:

Formation: LKC "H-K"

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 17:44:07

Time Test Ended: 22:18:52

Test Type: Conventional Bottom Hole

Tester: Cody Bloedorn

Unit No: 54

Interval: 3304.00 ft (KB) To 3390.00 ft (KB) (TVD)

Total Depth: 3390.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2030.00 ft (KB)

2017.00 ft (CF)

KB to GR/CF: 13.00 ft

Serial #: 8673

Inside

Press@RunDepth: 41.97 psig @ 3316.00 ft (KB)

Start Date: 2011.05.22

End Date:

2011.05.22

Start Time: 14:30:09

End Time:

22:18:52

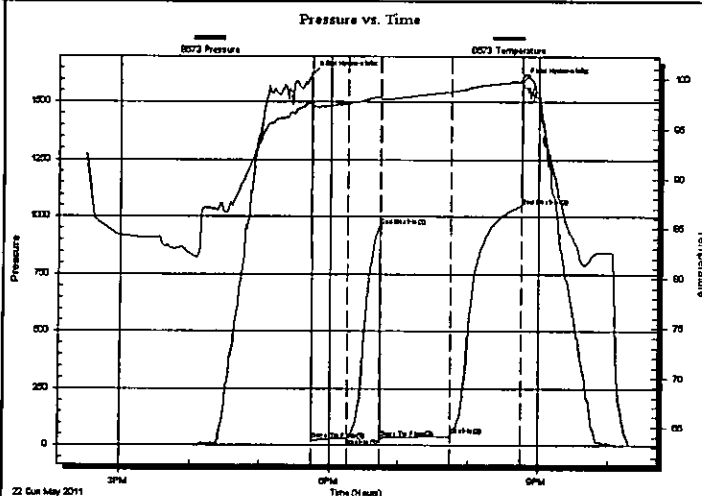
Capacity: 8000.00 psig

Last Calib.: 2011.05.22

Time On Btrm: 2011.05.22 @ 17:43:52

Time Off Btrm: 2011.05.22 @ 20:45:07

TEST COMMENT: 30 - IF- 1/2" Blow  
30 - IS- No blow back  
60 - FF - 1 1/2" blow  
60 - FSI - No Blow back



### PRESSURE SUMMARY

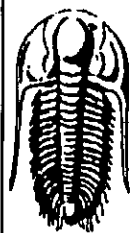
Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	1620.03	97.58	Initial Hydro-static
1	20.68	96.98	Open To Flow (1)
31	31.31	97.49	Shut-In(1)
60	961.43	98.22	End Shut-In(1)
60	30.64	97.84	Open To Flow (2)
121	41.97	98.68	Shut-In(2)
181	1047.89	99.76	End Shut-In(2)
182	1590.68	100.25	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
50.00	MCO 60%O 40%M	0.42

### Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

TOOL DIAGRAM

John O. Farmer Inc,

States Unit#1

PO Box 352  
Russell, KS 67665

4-5s-20w Phillips,KS

Job Ticket: 43855

DST#: 5

ATTN: Randy Killian

Test Start: 2011.05.22 @ 14:30:07

### Tool Information

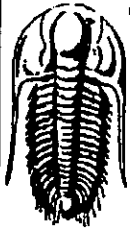
Drill Pipe:	Length: 3265.00 ft	Diameter: 3.80 inches	Volume: 45.80 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 31.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 56000.00 lb
			<u>Total Volume: 45.95 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3304.00 ft			Final 53000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	86.00 ft			
Tool Length:	107.00 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			3284.00	
Shut In Tool	5.00			3289.00	
Hydraulic tool	5.00			3294.00	
Packer	5.00			3299.00	21.00 Bottom Of Top Packer
Packer	5.00			3304.00	
Stubb	1.00			3305.00	
Perforations	10.00			3315.00	
Change Over Sub	1.00			3316.00	
Recorder	0.00	6668	Outside	3316.00	
Recorder	0.00	8673	Inside	3316.00	
Drill Pipe	62.00			3378.00	
Change Over Sub	1.00			3379.00	
Perforations	8.00			3387.00	
Bullnose	3.00			3390.00	86.00 Bottom Packers & Anchor

**Total Tool Length: 107.00**



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

John O. Farmer Inc,

**States Unit#1**

PO Box 352  
Russell, KS 67665

**4-5s-20w Phillips,KS**

Job Ticket: 43855

**DST#: 5**

ATTN: Randy Killian

Test Start: 2011.05.22 @ 14:30:07

**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:

bbf

Water Loss: 7.96 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1500.00 ppm

Filter Cake: inches

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbf
50.00	MCO 60%O 40%M	0.419

Total Length: 50.00ft Total Volume: 0.419 bbf

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

