

**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Shakespeare Oil Co**

202 W. Main St.  
Salem, IL 62881

ATTN: Brad Rine

**8-13-32 Logan,KS**

**Campbell 2-8**

Start Date: 2010.09.30 @ 04:34:20

End Date: 2010.09.30 @ 11:38:44

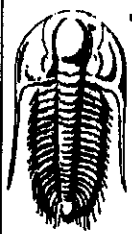
Job Ticket #: 39973                      DST #: 1

**KCC  
OCT 25 2010  
CONFIDENTIAL**

**RECEIVED  
OCT 27 2010**

**KCC WICHITA**

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

Shakespeare Oil Co  
202 W. Main St.  
Salem, IL 62881  
ATTN: Brad Rine

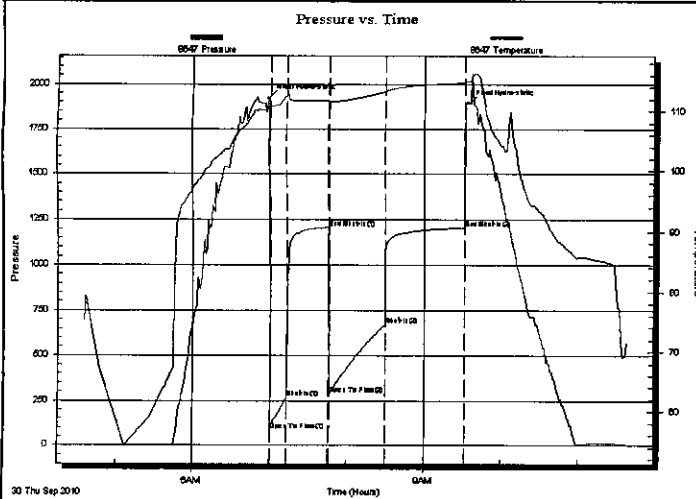
**Campbell 2-8**  
**8-13-32 Logan, KS**  
Job Ticket: 39973      **DST#: 1**  
Test Start: 2010.09.30 @ 04:34:20

### GENERAL INFORMATION:

Formation: **Toronto - LKC "A"**  
 Deviated: No      Whipstock:      ft (KB)  
 Time Tool Opened: 07:00:15  
 Time Test Ended: 11:38:44  
 Interval: **3927.00 ft (KB) To 3995.00 ft (KB) (TVD)**  
 Total Depth: **3995.00 ft (KB) (TVD)**  
 Hole Diameter: **7.88 inches** Hole Condition: **Good**  
 Test Type: **Conventional Bottom Hole**  
 Tester: **Brian Fairbank**  
 Unit No: **41**  
 Reference Elevations: **2964.00 ft (KB)**  
**2959.00 ft (CF)**  
 KB to GR/CF: **5.00 ft**

**Serial #: 8647**      Inside  
 Press@RunDepth: **671.46 psig @ 3935.00 ft (KB)**      Capacity: **8000.00 psig**  
 Start Date: **2010.09.30**      End Date: **2010.09.30**      Last Calib.: **2010.09.30**  
 Start Time: **04:34:20**      End Time: **11:38:44**      Time On Btm: **2010.09.30 @ 06:58:45**  
 Time Off Btm: **2010.09.30 @ 09:33:44**

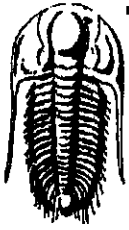
**TEST COMMENT:** IFP - BOB 3 min  
 ISI - no blow back  
 FFP - BOB 3 min  
 FSI - no blow back



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1922.99	110.31	Initial Hydro-static
2	83.74	110.56	Open To Flow (1)
15	263.70	112.68	Shut-In(1)
47	1205.19	111.80	End Shut-In(1)
47	284.17	111.63	Open To Flow (2)
91	671.46	113.30	Shut-In(2)
153	1202.39	114.82	End Shut-In(2)
155	1894.04	114.95	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
1055.00	MW 95%W, 5%M	13.68
315.00	WM 50%W, 50%M	4.42

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



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

Shakespeare Oil Co

**Campbell 2-8**

202 W. Main St.  
Salem, IL 62881

**8-13-32 Logan, KS**

Job Ticket: 39973

**DST#: 1**

ATTN: Brad Rine

Test Start: 2010.09.30 @ 04:34:20

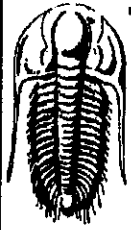
**Tool Information**

Drill Pipe:	Length: 3815.00 ft	Diameter: 3.80 inches	Volume: 53.51 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: 25000.00 lb
Drill Collar:	Length: 123.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 54.11 bbl</u>	Tool Chased 10.00 ft
Drill Pipe Above KB:	31.00 ft			String Weight: Initial 62000.00 lb
Depth to Top Packer:	3927.00 ft			Final 70000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	68.00 ft			
Tool Length:	88.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:  
Tool slid 10' to bottom

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3912.00	
Hydraulic tool	5.00			3917.00	
Packer	5.00			3922.00	20.00 Bottom Of Top Packer
Packer	5.00			3927.00	
Stubb	1.00			3928.00	
Perforations	6.00			3934.00	
Change Over Sub	1.00			3935.00	
Recorder	0.00	8647	Inside	3935.00	
Recorder	0.00	8365	Outside	3935.00	
Blank Spacing	31.00			3966.00	
Change Over Sub	1.00			3967.00	
Perforations	25.00			3992.00	
Bullnose	3.00			3995.00	68.00 Bottom Packers & Anchor

**Total Tool Length: 88.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Shakespeare Oil Co

**Campbell 2-8**

202 W. Main St.  
Salem, IL 62881

**8-13-32 Logan, KS**

Job Ticket: 39973

**DST#: 1**

ATTN: Brad Rine

Test Start: 2010.09.30 @ 04:34:20

## 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:

18500 ppm

Viscosity: 49.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.74 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2200.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1055.00	MMW 95%W, 5%M	13.678
315.00	WM 50%W, 50%M	4.419

Total Length: 1370.00 ft

Total Volume: 18.097 bbl

Num Fluid Samples: 0

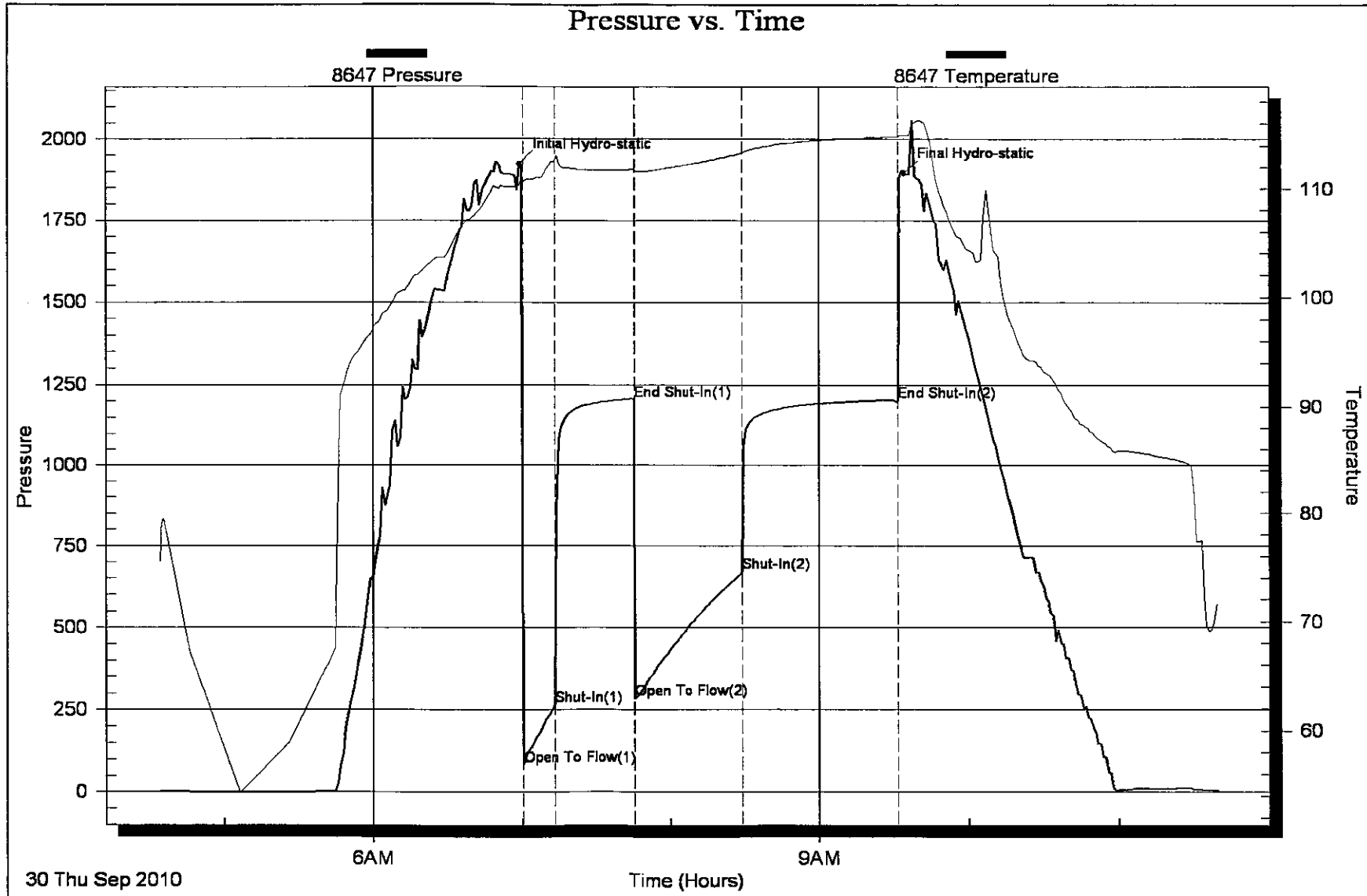
Num Gas Bombs: 0

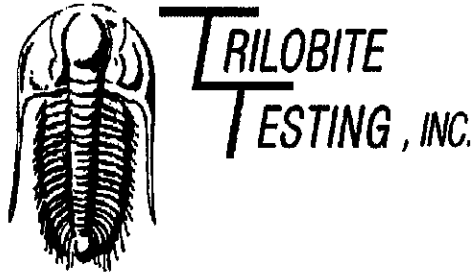
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





## DRILL STEM TEST REPORT

Prepared For: **Shakespeare Oil Co**

202 W. Main St.  
Salem, IL 62881

ATTN: Brad Rine

**8-13-32 Logan,KS**

**Campbell 2-8**

Start Date: 2010.09.30 @ 20:13:02

End Date: 2010.10.01 @ 02:18:26

Job Ticket #: 39974                      DST #: 2

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Shakespeare Oil Co

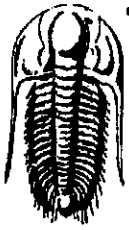
Campbell 2-8

8-13-32 Logan,KS

DST # 2

LKC "C"

2010.09.30



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Shakespeare Oil Co

**Campbell 2-8**

202 W. Main St.  
Salem, IL 62881

**8-13-32 Logan,KS**

Job Ticket: 39974

**DST#: 2**

ATTN: Brad Rine

Test Start: 2010.09.30 @ 20:13:02

## GENERAL INFORMATION:

Formation: **LKC "C"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:52:57

Time Test Ended: 02:18:26

Test Type: Conventional Bottom Hole

Tester: Brian Fairbank

Unit No: 41

Interval: **4016.00 ft (KB) To 4042.00 ft (KB) (TVD)**

Total Depth: **4042.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: Good

Reference Elevations: **2964.00 ft (KB)**

**2959.00 ft (CF)**

KB to GR/CF: **5.00 ft**

**Serial #: 8647**

Inside

Press@RunDepth: **216.14 psig @ 4019.00 ft (KB)**

Start Date: **2010.09.30**

End Date:

**2010.10.01**

Capacity: **8000.00 psig**

Last Calib.: **2010.10.01**

Start Time: **20:13:02**

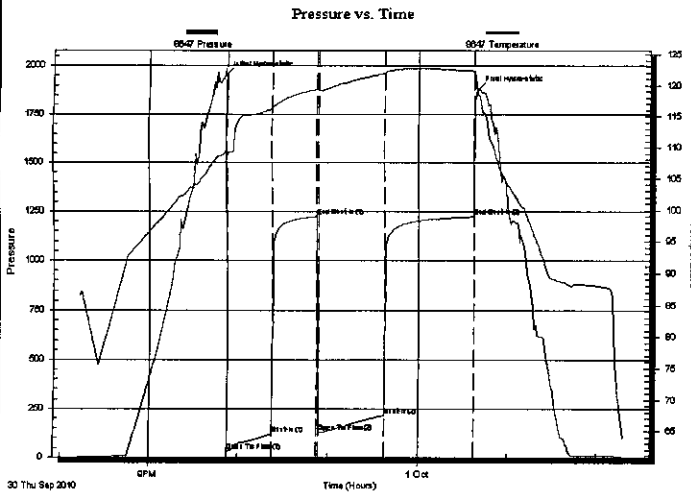
End Time:

**02:18:26**

Time On Btm: **2010.09.30 @ 21:51:57**

Time Off Btm: **2010.10.01 @ 00:39:56**

**TEST COMMENT:** IFF - BOB 17 min  
ISI - no blow back  
FFP - BOB 21 min  
FSI - no blow back



## PRESSURE SUMMARY

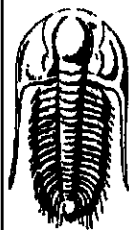
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1953.04	109.35	Initial Hydro-static
1	33.14	108.48	Open To Flow (1)
31	119.52	116.30	Shut-In(1)
61	1223.94	119.34	End Shut-In(1)
62	130.21	119.27	Open To Flow (2)
106	216.14	121.96	Shut-In(2)
166	1224.08	122.33	End Shut-In(2)
168	1880.01	118.62	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
440.00	MW w/ scum O on top 95%W, 5%M	5.05

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Shakespeare Oil Co

**Campbell 2-8**

202 W. Main St.  
Salem, IL 62881

**8-13-32 Logan, KS**

Job Ticket: 39974

DST#: 2

ATTN: Brad Rine

Test Start: 2010.09.30 @ 20:13:02

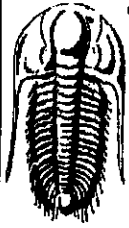
### Tool Information

Drill Pipe:	Length: 3878.00 ft	Diameter: 3.80 inches	Volume: 54.40 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: 25000.00 lb
Drill Collar:	Length: 123.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 85000.00 lb
			<u>Total Volume: 55.00 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial 62000.00 lb
Depth to Top Packer:	4016.00 ft			Final 64000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	26.00 ft			
Tool Length:	46.00 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			4001.00	
Hydraulic tool	5.00			4006.00	
Packer	5.00			4011.00	20.00 Bottom Of Top Packer
Packer	5.00			4016.00	
Stubb	1.00			4017.00	
Perforations	2.00			4019.00	
Recorder	0.00	8647	Inside	4019.00	
Recorder	0.00	8365	Outside	4019.00	
Perforations	20.00			4039.00	
Bullnose	3.00			4042.00	26.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>46.00</b>				



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## DRILL STEM TEST REPORT

**FLUID SUMMARY**

Shakespeare Oil Co

**Campbell 2-8**

202 W. Main St.  
Salem, IL 62881

**8-13-32 Logan, KS**

Job Ticket: 39974

**DST#: 2**

ATTN: Brad Rine

Test Start: 2010.09.30 @ 20:13:02

### 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:

20000 ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbf

Water Loss: 7.14 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2100.00 ppm

Filter Cake: inches

### Recovery Information

#### Recovery Table

Length ft	Description	Volume bbf
440.00	MW w / scum O on top 95%W, 5%M	5.052

Total Length: 440.00 ft

Total Volume: 5.052 bbf

Num Fluid Samples: 0

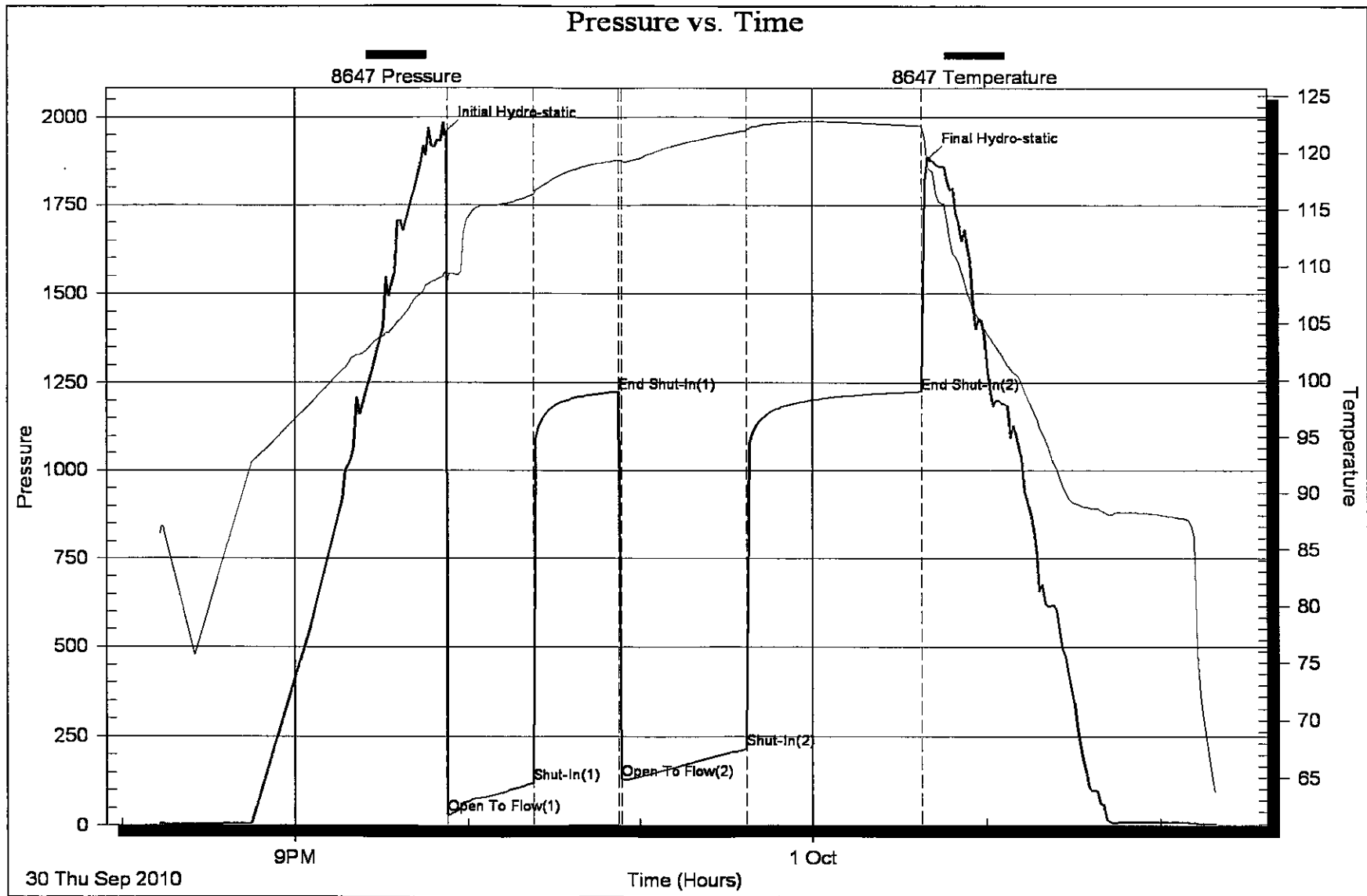
Num Gas Bombs: 0

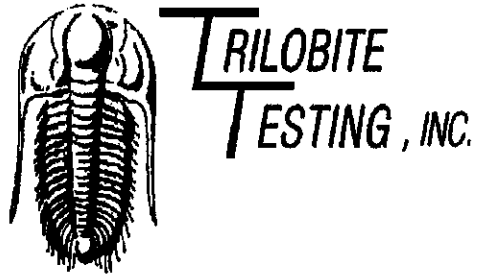
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





## DRILL STEM TEST REPORT

Prepared For: **Shakespeare Oil Co**

202 W. Main St.  
Salem, IL 62881

ATTN: Brad Rine

**8-13-32 Logan,KS**

**Campbell 2-8**

Start Date: 2010.10.01 @ 08:58:23

End Date: 2010.10.01 @ 16:00:17

Job Ticket #: 39975                      DST #: 3

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Shakespeare Oil Co

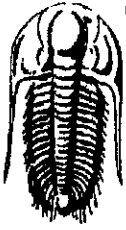
Campbell 2-8

8-13-32 Logan,KS

DST # 3

LKC "D"

2010.10.01



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Shakespeare Oil Co

**Campbell 2-8**

202 W. Main St.  
Salem, IL 62881

**8-13-32 Logan,KS**

ATTN: Brad Rine

Job Ticket: 39975

DST#: 3

Test Start: 2010.10.01 @ 08:58:23

## GENERAL INFORMATION:

Formation: **LKC "D"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:51:48

Time Test Ended: 16:00:17

Test Type: Conventional Bottom Hole

Tester: Brian Fairbank

Unit No: 41

Interval: **4043.00 ft (KB) To 4064.00 ft (KB) (TVD)**

Total Depth: 4064.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2964.00 ft (KB)

2959.00 ft (CF)

KB to GR/CF: 5.00 ft

**Serial #: 8647**

Inside

Press@RunDepth: 85.21 psig @ 4046.00 ft (KB)

Start Date: 2010.10.01

End Date:

2010.10.01

Capacity: 8000.00 psig

Last Calib.: 2010.10.01

Start Time: 08:58:23

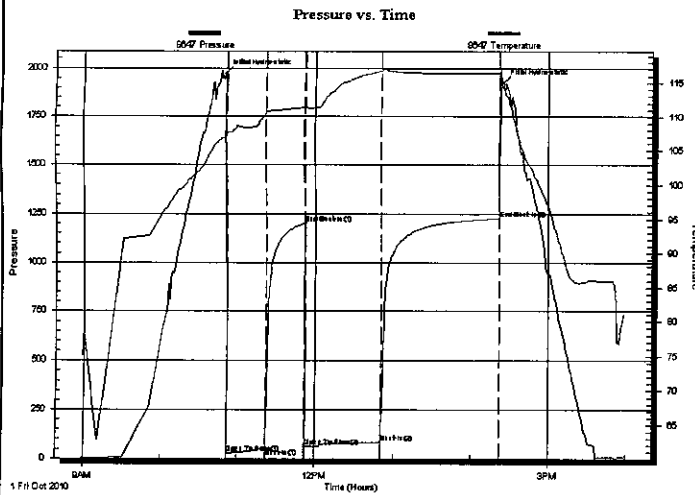
End Time:

16:00:17

Time On Btm: 2010.10.01 @ 10:50:18

Time Off Btm: 2010.10.01 @ 14:24:17

TEST COMMENT: IFP - weak blow throughout 1/4" - 2 1/2"  
ISI - no blow back  
FFP - weak blow throughout sur - 3"  
FSI - no blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1973.08	107.61	Initial Hydro-static
2	30.66	107.65	Open To Flow (1)
32	54.57	110.53	Shut-In(1)
62	1199.92	111.38	End Shut-In(1)
62	65.77	111.19	Open To Flow (2)
120	85.21	116.73	Shut-In(2)
212	1226.02	116.50	End Shut-In(2)
214	1926.23	114.34	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
150.00	MW 85%W, 15%M	0.98

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Shakespeare Oil Co

**Campbell 2-8**

202 W. Main St.  
Salem, IL 62881

**8-13-32 Logan, KS**

Job Ticket: 39975

**DST#: 3**

ATTN: Brad Rine

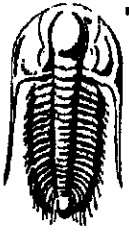
Test Start: 2010.10.01 @ 08:58:23

### Tool Information

Drill Pipe:	Length: 3909.00 ft	Diameter: 3.80 inches	Volume: 54.83 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: 25000.00 lb
Drill Collar:	Length: 123.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 85000.00 lb
			<u>Total Volume: 55.43 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	9.00 ft			String Weight: Initial 62000.00 lb
Depth to Top Packer:	4043.00 ft			Final 62000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	21.00 ft			
Tool Length:	41.00 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			4028.00	
Hydraulic tool	5.00			4033.00	
Packer	5.00			4038.00	20.00 Bottom Of Top Packer
Packer	5.00			4043.00	
Stubb	1.00			4044.00	
Perforations	2.00			4046.00	
Recorder	0.00	8647	Inside	4046.00	
Recorder	0.00	8365	Outside	4046.00	
Perforations	15.00			4061.00	
Bullnose	3.00			4064.00	21.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>41.00</b>				



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**FLUID SUMMARY**

Shakespeare Oil Co

**Campbell 2-8**

202 W. Main St.  
Salem, IL 62881

**8-13-32 Logan, KS**

Job Ticket: 39975

**DST#: 3**

ATTN: Brad Rine

Test Start: 2010.10.01 @ 08:58:23

### 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:

17000 ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.15 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2100.00 ppm

Filter Cake: inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
150.00	MW 85%W, 15%M	0.984

Total Length: 150.00 ft      Total Volume: 0.984 bbl

Num Fluid Samples: 0

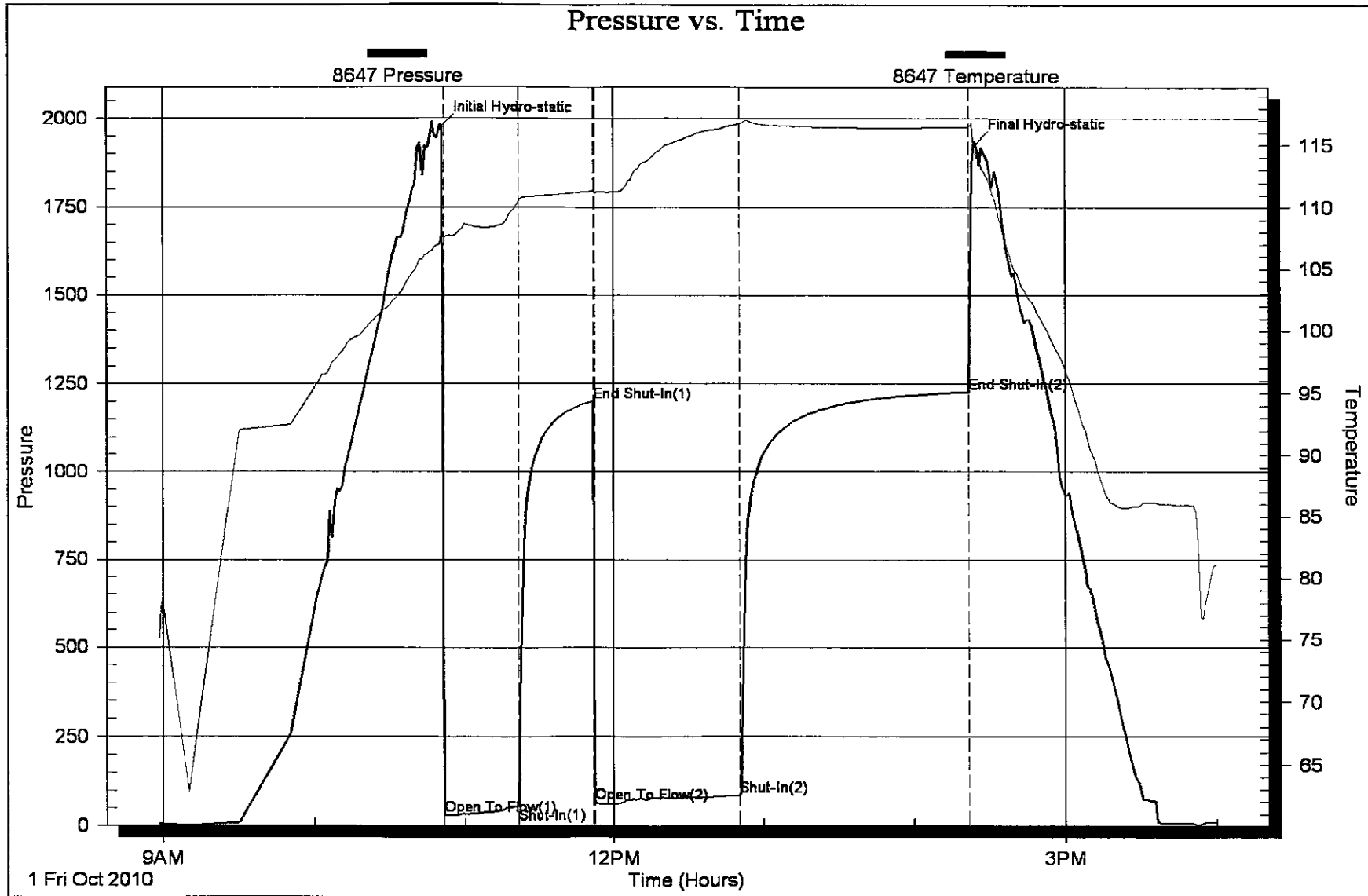
Num Gas Bombs: 0

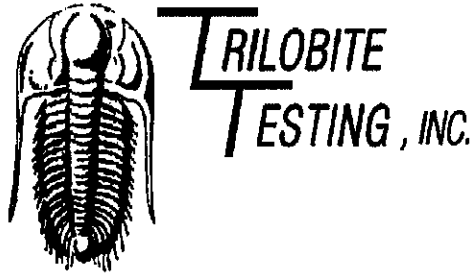
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





## DRILL STEM TEST REPORT

Prepared For: **Shakespeare Oil Co**

202 W. Main St.  
Salem, IL 62881

ATTN: Brad Rine

**8-13-32 Logan,KS**

**Campbell 2-8**

Start Date: 2010.10.02 @ 02:15:16

End Date: 2010.10.02 @ 08:41:40

Job Ticket #: 40301                      DST #: 4

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Shakespeare Oil Co

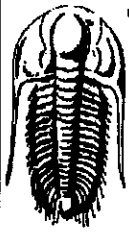
Campbell 2-8

8-13-32 Logan,KS

DST # 4

LKC "H"

2010.10.02



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Shakespeare Oil Co  
202 W. Main St.  
Salem, IL 62881  
ATTN: Brad Rine

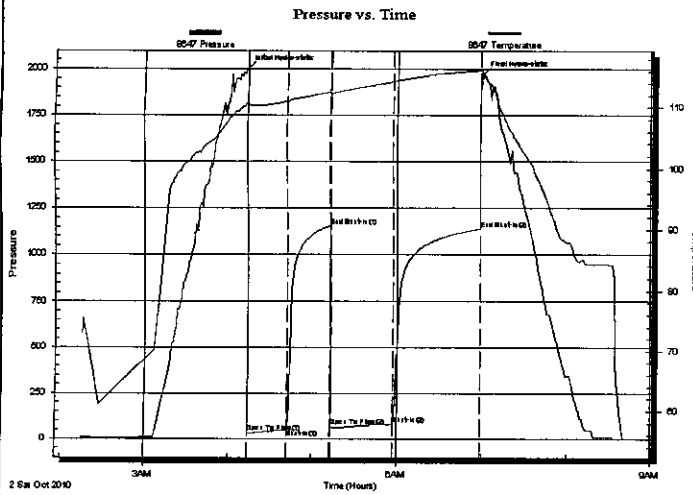
**Campbell 2-8**  
**8-13-32 Logan, KS**  
Job Ticket: 40301      **DST#: 4**  
Test Start: 2010.10.02 @ 02:15:16

## GENERAL INFORMATION:

Formation: **LKC "H"**  
Deviated: No      Whipstock:      ft (KB)  
Time Tool Opened: 04:14:11  
Time Test Ended: 08:41:40  
Interval: **4090.00 ft (KB) To 4132.00 ft (KB) (TVD)**  
Total Depth: **4132.00 ft (KB) (TVD)**  
Hole Diameter: **7.88 inches** Hole Condition:      KB to GR/CF: **5.00 ft**  
Test Type: Conventional Bottom Hole  
Tester: Brian Fairbank  
Unit No: 41  
Reference Elevations: 2964.00 ft (KB)  
2959.00 ft (CF)

**Serial #: 8647**      Inside  
Press@RunDepth: 77.96 psig @ 4093.00 ft (KB)      Capacity: 8000.00 psig  
Start Date: 2010.10.02      End Date: 2010.10.02      Last Calib.: 2010.10.02  
Start Time: 02:15:16      End Time: 08:41:40      Time On Btm: 2010.10.02 @ 04:13:11  
Time Off Btm: 2010.10.02 @ 06:59:40

**TEST COMMENT:** IFP - weak blow throughout sur - 2 1/2"  
ISI - no blow back  
FFP - weak blow throughout sur - 1"  
FSI - no blow back



## PRESSURE SUMMARY

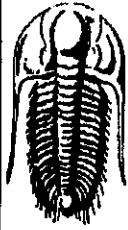
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1998.09	110.91	Initial Hydro-static
1	33.41	110.57	Open To Flow (1)
29	49.46	111.05	Shut-in(1)
60	1155.18	112.63	End Shut-in(1)
60	68.21	112.14	Open To Flow (2)
104	77.96	114.30	Shut-In(2)
165	1137.85	116.20	End Shut-In(2)
167	1969.34	115.94	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
119.00	MV 50%W, 50%M	0.59
15.00	VSOCM 2%O, 98%M	0.17
1.00	FREE OIL TSTM	0.01

## Gas Rates

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



**TRILOBITE**  
TESTING, INC

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Shakespeare Oil Co

**Campbell 2-8**

202 W. Main St.  
Salem, IL 62881

**8-13-32 Logan,KS**

Job Ticket: 40301

**DST#: 4**

ATTN: Brad Rine

Test Start: 2010.10.02 @ 02:15:16

### Tool Information

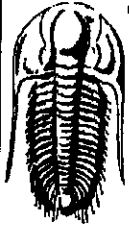
Drill Pipe:	Length: 3972.00 ft	Diameter: 3.80 inches	Volume: 55.72 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 123.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 70000.00 lb
			<b>Total Volume: 56.32 bbl</b>	Tool Chased 0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 62000.00 lb
Depth to Top Packer:	4090.00 ft			Final 62000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	42.00 ft			
Tool Length:	62.00 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			4075.00	
Hydraulic tool	5.00			4080.00	
Packer	5.00			4085.00	20.00 Bottom Of Top Packer
Packer	5.00			4090.00	
Stubb	1.00			4091.00	
Perforations	1.00			4092.00	
Change Over Sub	1.00			4093.00	
Recorder	0.00	8647	Inside	4093.00	
Recorder	0.00	8365	Outside	4093.00	
Blank Spacing	31.00			4124.00	
Change Over Sub	1.00			4125.00	
Perforations	4.00			4129.00	
Bullnose	3.00			4132.00	42.00 Bottom Packers & Anchor

**Total Tool Length: 62.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Shakespeare Oil Co  
202 W. Main St.  
Salem, IL 62881  
ATTN: Brad Rine

**Campbell 2-8**  
**8-13-32 Logan, KS**  
Job Ticket: 40301      **DST#: 4**  
Test Start: 2010.10.02 @ 02:15:16

## Mud and Cushion Information

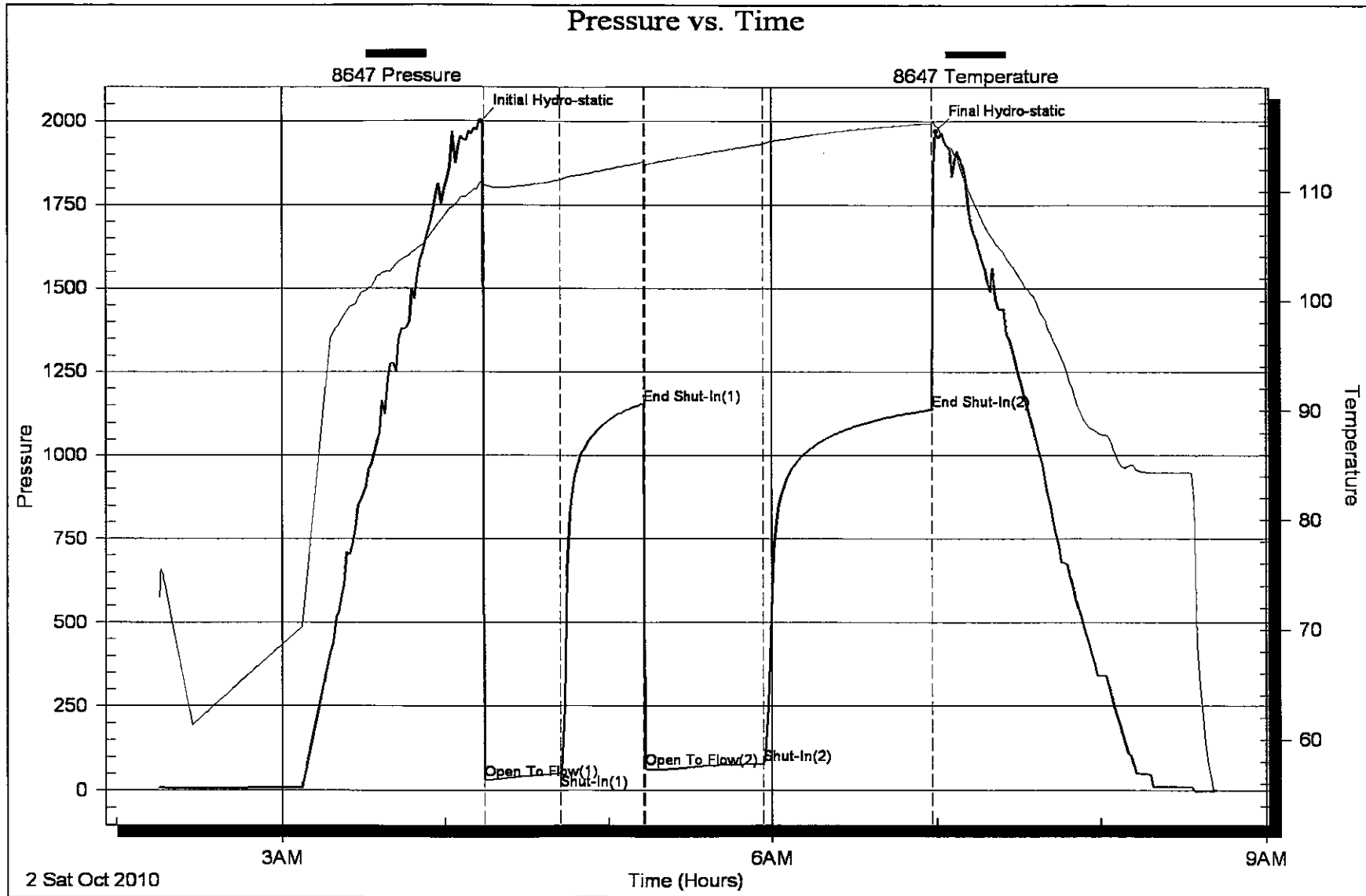
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	19000 ppm
Viscosity: 51.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.73 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2500.00 ppm			
Filter Cake: inches			

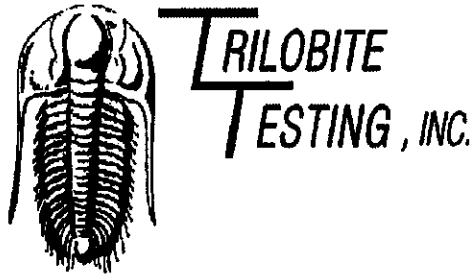
## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
119.00	MW 50%W, 50%M	0.585
15.00	VSOCM 2%O, 98%M	0.174
1.00	FREE OIL TSTM	0.014

Total Length: 135.00 ft      Total Volume: 0.773 bbl  
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments:





## DRILL STEM TEST REPORT

Prepared For: **Shakespeare Oil Co**

202 W. Main St.  
Salem, IL 62881

ATTN: Brad Rine

**8-13-32 Logan,KS**

**Campbell 2-8**

Start Date: 2010.10.02 @ 15:12:13

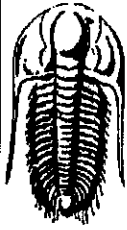
End Date: 2010.10.02 @ 21:15:07

Job Ticket #: 40302                      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

Shakespeare Oil Co  
 202 W. Main St.  
 Salem, IL 62881  
 ATTN: Brad Rine

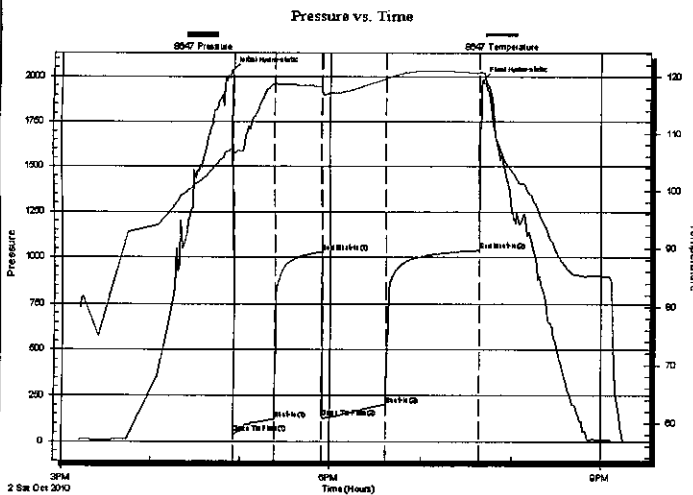
**Campbell 2-8**  
**8-13-32 Logan, KS**  
 Job Ticket: 40302      **DST#: 5**  
 Test Start: 2010.10.02 @ 15:12:13

## GENERAL INFORMATION:

Formation: **LKC "I"**  
 Deviated: No Whipstock:                      ft (KB)  
 Time Tool Opened: 16:55:08  
 Time Test Ended: 21:15:07  
 Interval: **4122.00 ft (KB) To 4154.00 ft (KB) (TVD)**  
 Total Depth: **4154.00 ft (KB) (TVD)**  
 Hole Diameter: **7.88 inches** Hole Condition: Good  
 Test Type: Conventional Bottom Hole  
 Tester: Brian Fairbank  
 Unit No: 41  
 Reference Elevations: 2964.00 ft (KB)  
 2959.00 ft (CF)  
 KB to GR/CF: 5.00 ft

**Serial #: 8647**      Inside  
 Press@RunDepth: 201.25 psig @ 4126.00 ft (KB)      Capacity: 8000.00 psig  
 Start Date: 2010.10.02      End Date: 2010.10.02      Last Calib.: 2010.10.02  
 Start Time: 15:12:13      End Time: 21:15:07      Time On Btm: 2010.10.02 @ 16:54:08  
 Time Off Btm: 2010.10.02 @ 19:40:37

**TEST COMMENT:** IFP - BOB 21 min  
 ISI - no blow back  
 FFP - BOB 26 min  
 FSI - no blow back



## PRESSURE SUMMARY

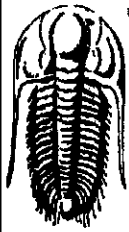
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2028.09	107.34	Initial Hydro-static
1	46.40	106.28	Open To Flow (1)
29	120.80	118.79	Shut-in(1)
60	1029.68	118.22	End Shut-in(1)
61	131.43	117.65	Open To Flow (2)
103	201.25	119.58	Shut-in(2)
165	1036.45	120.58	End Shut-in(2)
167	1976.57	120.67	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
315.00	MW 95%W, 5%M	3.30
85.00	WM 30%W, 70%M	1.19

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Shakespeare Oil Co

**Campbell 2-8**

202 W. Main St.  
Salem, IL 62881

**8-13-32 Logan,KS**

Job Ticket: 40302

**DST#: 5**

ATTN: Brad Rine

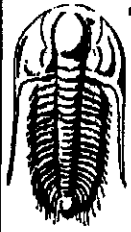
Test Start: 2010.10.02 @ 15:12:13

**Tool Information**

Drill Pipe:	Length: 4003.00 ft	Diameter: 3.80 inches	Volume: 56.15 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: 25000.00 lb
Drill Collar:	Length: 123.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 56.75 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	24.00 ft			String Weight: Initial 62000.00 lb
Depth to Top Packer:	4122.00 ft			Final 64000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	32.00 ft			
Tool Length:	52.00 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			4107.00	
Hydraulic tool	5.00			4112.00	
Packer	5.00			4117.00	20.00 Bottom Of Top Packer
Packer	5.00			4122.00	
Stubb	1.00			4123.00	
Perforations	3.00			4126.00	
Recorder	0.00	8647	Inside	4126.00	
Recorder	0.00	8365	Outside	4126.00	
Perforations	25.00			4151.00	
Bullnose	3.00			4154.00	32.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>52.00</b>				



**TRILOBITE**  
**TESTING, INC**

## DRILL STEM TEST REPORT

**FLUID SUMMARY**

Shakespeare Oil Co

**Campbell 2-8**

202 W. Main St.  
Salem, IL 62881

**8-13-32 Logan, KS**

Job Ticket: 40302

**DST#: 5**

ATTN: Brad Rine

Test Start: 2010.10.02 @ 15:12:13

### 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:

27000 ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.16 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3600.00 ppm

Filter Cake: inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
315.00	MW 95%W, 5%M	3.298
85.00	WM 30%W, 70%M	1.192

Total Length: 400.00 ft      Total Volume: 4.490 bbl

Num Fluid Samples: 0

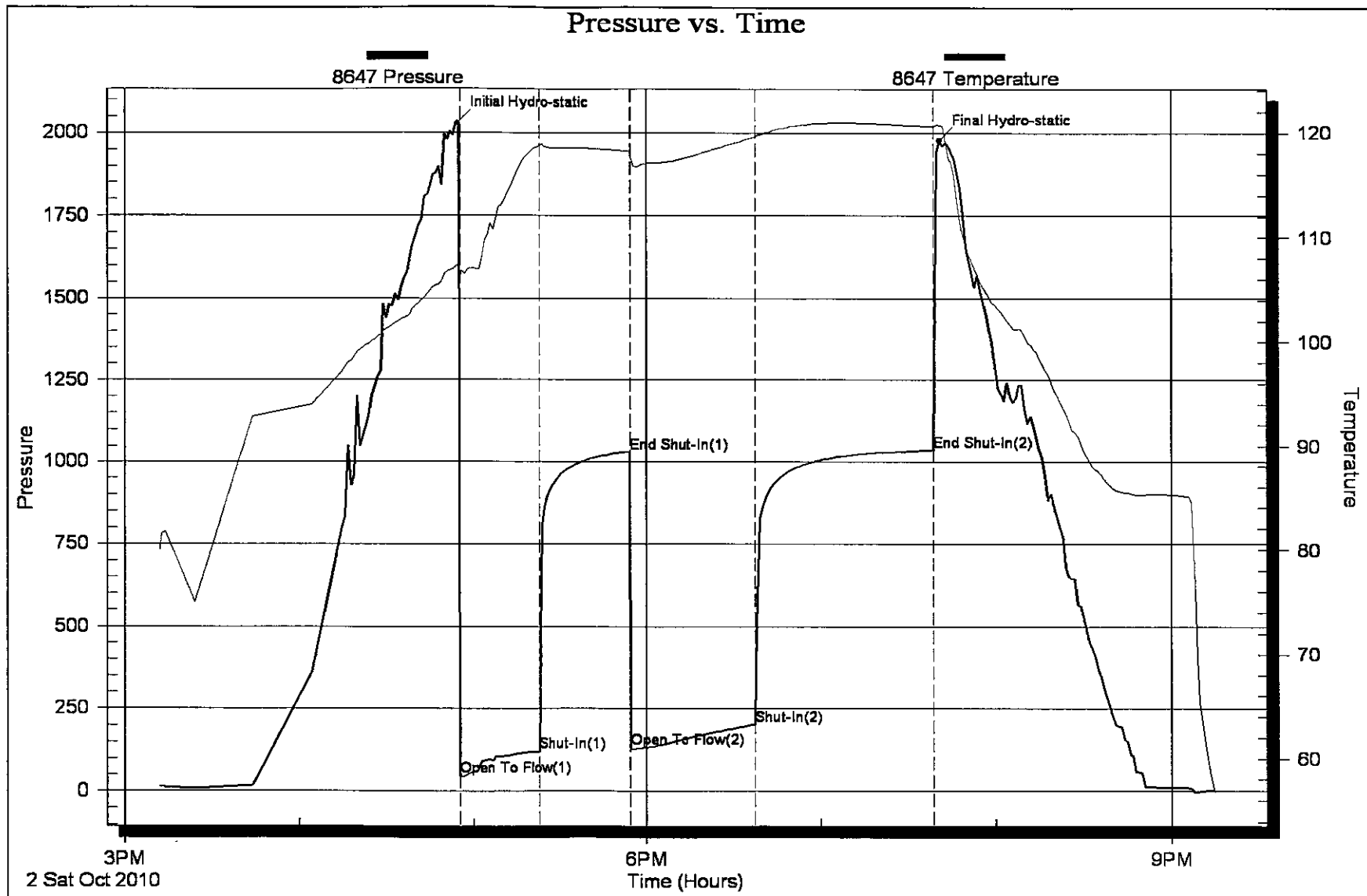
Num Gas Bombs: 0

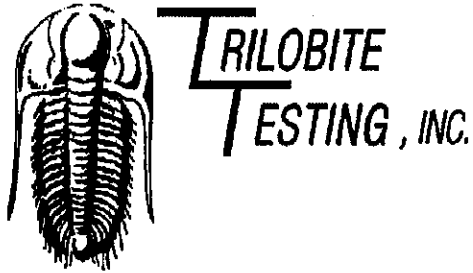
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





## DRILL STEM TEST REPORT

Prepared For: **Shakespeare Oil Co**

202 W. Main St.  
Salem, IL 62881

ATTN: Brad Rine

**8-13-32 Logan,KS**

**Campbell 2-8**

Start Date: 2010.10.03 @ 04:38:36

End Date: 2010.10.03 @ 10:58:00

Job Ticket #: 40303                      DST #: 6

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Shakespeare Oil Co

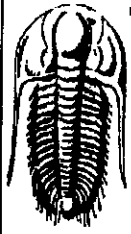
Campbell 2-8

8-13-32 Logan,KS

DST # 6

LKC "J"

2010.10.03



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Shakespeare Oil Co  
 202 W. Main St.  
 Salem, IL 62881  
 ATTN: Brad Rine

**Campbell 2-8**  
**8-13-32 Logan, KS**  
 Job Ticket: 40303      **DST#: 6**  
 Test Start: 2010.10.03 @ 04:38:36

## GENERAL INFORMATION:

Formation: **LKC "J"**  
 Deviated: No Whipstock:                      ft (KB)  
 Time Tool Opened: 06:23:31  
 Time Test Ended: 10:58:00  
 Interval: **4151.00 ft (KB) To 4174.00 ft (KB) (TVD)**  
 Total Depth: **4174.00 ft (KB) (TVD)**  
 Hole Diameter: **7.88 inches** Hole Condition: Good  
 Test Type: Conventional Bottom Hole  
 Tester: Brian Fairbank  
 Unit No: 41  
 Reference Elevations: 2964.00 ft (KB)  
 2959.00 ft (CF)  
 KB to GRVCF: 5.00 ft

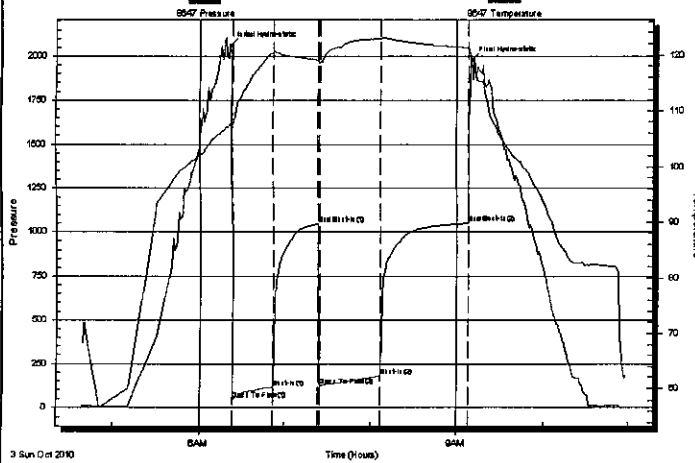
## Serial #: 8647

Inside

Press@RunDepth: 178.93 psig @ 4156.00 ft (KB)      Capacity: 8000.00 psig  
 Start Date: 2010.10.03      End Date: 2010.10.03      Last Calib.: 2010.10.03  
 Start Time: 04:38:36      End Time: 10:58:00      Time On Btm: 2010.10.03 @ 06:22:01  
 Time Off Btm: 2010.10.03 @ 09:10:00

TEST COMMENT: IFP - BOB 22 min  
 ISI - no blow back  
 FFP - BOB 30 min  
 FSI - no blow back

Pressure vs. Time



## PRESSURE SUMMARY

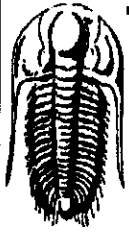
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2061.10	107.55	Initial Hydro-static
2	44.27	107.22	Open To Flow (1)
30	114.31	120.41	Shut-In(1)
62	1043.92	119.11	End Shut-In(1)
63	124.50	118.80	Open To Flow (2)
105	178.93	122.94	Shut-In(2)
166	1049.23	121.34	End Shut-In(2)
168	1975.95	119.80	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
250.00	MW 95%W, 5%M	2.39
105.00	50%W, 50%M	1.47

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Shakespeare Oil Co

**Campbell 2-8**

202 W. Main St.  
Salem, IL 62881

**8-13-32 Logan,KS**

Job Ticket: 40303

**DST#: 6**

ATTN: Brad Rine

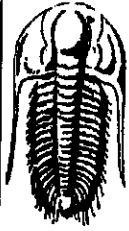
Test Start: 2010.10.03 @ 04:38:36

### Tool Information

Drill Pipe:	Length: 4034.00 ft	Diameter: 3.80 inches	Volume: 56.59 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: 25000.00 lb
Drill Collar:	Length: 123.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 57.19 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	26.00 ft			String Weight: Initial 62000.00 lb
Depth to Top Packer:	4151.00 ft			Final 64000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	23.00 ft			
Tool Length:	43.00 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			4136.00	
Hydraulic tool	5.00			4141.00	
Packer	5.00			4146.00	20.00 Bottom Of Top Packer
Packer	5.00			4151.00	
Stubb	1.00			4152.00	
Perforations	4.00			4156.00	
Recorder	0.00	8647	Inside	4156.00	
Recorder	0.00	8365	Outside	4156.00	
Perforations	15.00			4171.00	
Bullnose	3.00			4174.00	23.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>43.00</b>				



**TRILOBITE**  
TESTING, INC

## DRILL STEM TEST REPORT

FLUID SUMMARY

Shakespeare Oil Co

**Campbell 2-8**

202 W. Main St.  
Salem, IL 62881

**8-13-32 Logan, KS**

Job Ticket: 40303

**DST#: 6**

ATTN: Brad Rine

Test Start: 2010.10.03 @ 04:38:36

### 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:

26000 ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.17 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3600.00 ppm

Filter Cake: inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
250.00	MW 95%W, 5%M	2.386
105.00	50%W, 50%M	1.473

Total Length: 355.00 ft      Total Volume: 3.859 bbl

Num Fluid Samples: 0

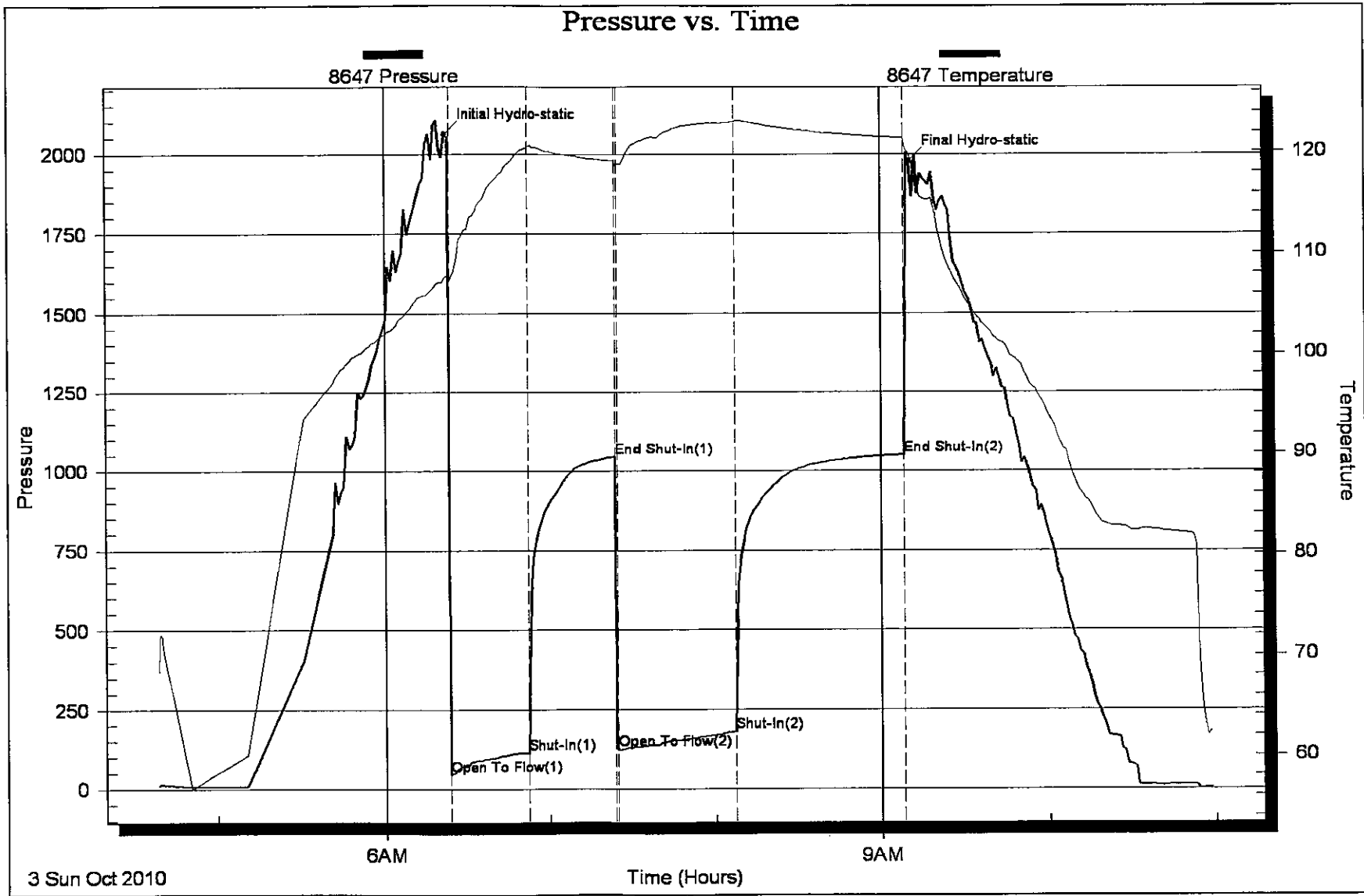
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





## DRILL STEM TEST REPORT

Prepared For: **Shakespeare Oil Co**

202 W. Main St.  
Salem, IL 62881

ATTN: Brad Rine

**8-13-32 Logan,KS**

**Campbell 2-8**

Start Date: 2010.10.03 @ 17:59:07

End Date: 2010.10.03 @ 23:57:31

Job Ticket #: 40304                      DST #: 7

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Shakespeare Oil Co

Campbell 2-8

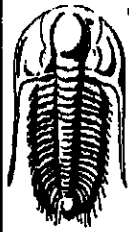
8-13-32 Logan,KS

DST # 7

LKC "K"

2010.10.03





**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

Shakespeare Oil Co

**Campbell 2-8**

202 W. Main St.  
Salem, IL 62881

**8-13-32 Logan, KS**

Job Ticket: 40304

**DST#: 7**

ATTN: Brad Rine

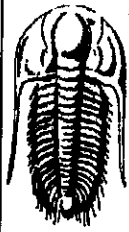
Test Start: 2010.10.03 @ 17:59:07

**Tool Information**

Drill Pipe:	Length: 4062.00 ft	Diameter: 3.80 inches	Volume: 56.98 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: 25000.00 lb
Drill Collar:	Length: 123.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 57.58 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	29.00 ft			String Weight: Initial 62000.00 lb
Depth to Top Packer:	4176.00 ft			Final 63000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	24.00 ft			
Tool Length:	44.00 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			4161.00	
Hydraulic tool	5.00			4166.00	
Packer	5.00			4171.00	20.00 Bottom Of Top Packer
Packer	5.00			4176.00	
Stubb	1.00			4177.00	
Perforations	5.00			4182.00	
Recorder	0.00	8647	Inside	4182.00	
Recorder	0.00	8365	Outside	4182.00	
Perforations	15.00			4197.00	
Bullnose	3.00			4200.00	24.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>44.00</b>				



**TRILOBITE**  
**TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Shakespeare Oil Co

**Campbell 2-8**

202 W. Main St.  
Salem, IL 62881

**8-13-32 Logan, KS**

Job Ticket: 40304

**DST#: 7**

ATTN: Brad Rine

Test Start: 2010.10.03 @ 17:59:07

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

35 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

21000 ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.36 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
150.00	MW 90%W, 10%M	0.984
80.00	WM 30%W, 70%M	1.122
10.00	FREE OIL 95%O, 5%M	0.140

Total Length: 240.00 ft      Total Volume: 2.246 bbl

Num Fluid Samples: 0

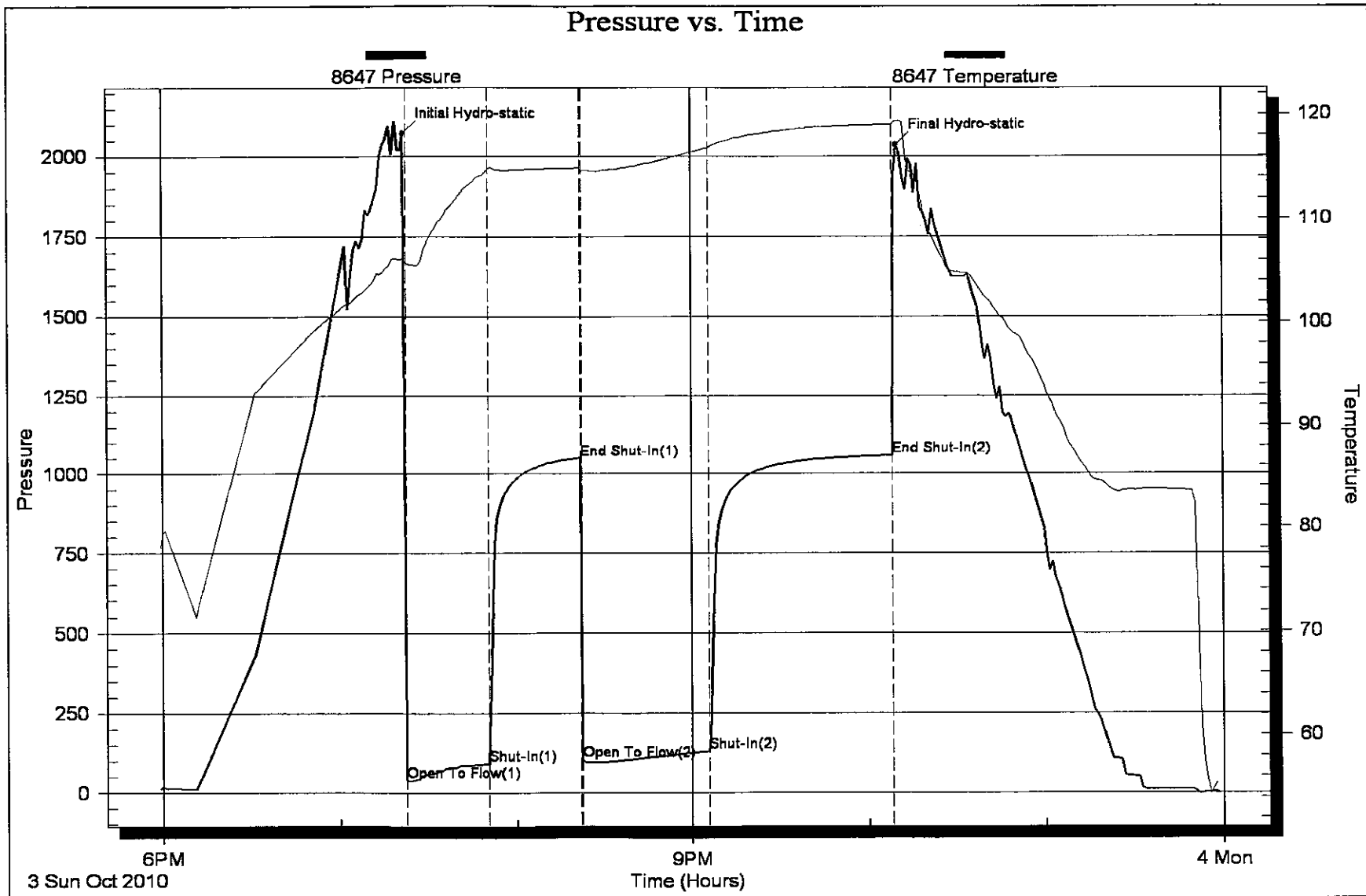
Num Gas Bombs: 0

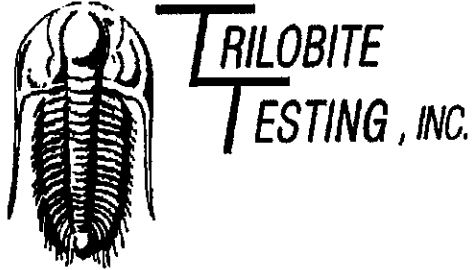
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





## DRILL STEM TEST REPORT

Prepared For: **Shakespeare Oil Co**

202 W. Main St.  
Salem, IL 62881

ATTN: Brad Rine

**8-13-32 Logan,KS**

**Campbell 2-8**

Start Date: 2010.10.05 @ 07:59:39

End Date: 2010.10.05 @ 13:50:03

Job Ticket #: 40305                      DST #: 8

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Shakespeare Oil Co

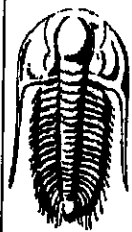
Campbell 2-8

8-13-32 Logan,KS

DST # 8

Myric Station - Ft.

2010.10.05



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Shakespeare Oil Co

**Campbell 2-8**

202 W. Main St.  
Salem, IL 62881

**8-13-32 Logan, KS**

ATTN: Brad Rine

Job Ticket: 40305

DST#: 8

Test Start: 2010.10.05 @ 07:59:39

## GENERAL INFORMATION:

Formation: **Myric Station - Ft.**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 10:09:04  
 Time Test Ended: 13:50:03

Test Type: Conventional Bottom Hole  
 Tester: Brian Fairbank  
 Unit No: 41

Interval: **4403.00 ft (KB) To 4460.00 ft (KB) (TVD)**  
 Total Depth: **4460.00 ft (KB) (TVD)**  
 Hole Diameter: **7.88 inches** Hole Condition: Good

Reference Elevations: **2964.00 ft (KB)**  
**2959.00 ft (CF)**  
 KB to GR/CF: **5.00 ft**

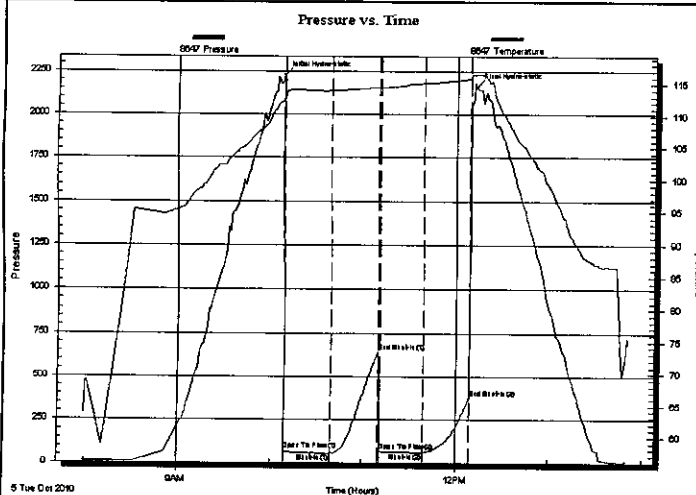
## Serial #: 8647

Inside

Press@RunDepth: **60.32 psig @ 4410.00 ft (KB)**  
 Start Date: **2010.10.05** End Date: **2010.10.05**  
 Start Time: **07:59:39** End Time: **13:50:03**

Capacity: **8000.00 psig**  
 Last Calib.: **2010.10.05**  
 Time On Btm: **2010.10.05 @ 10:08:04**  
 Time Off Btm: **2010.10.05 @ 12:12:04**

TEST COMMENT: IFP - sur blow throughout  
 ISI - no blow back  
 FFP - no blow  
 FSI - no blow back



## PRESSURE SUMMARY

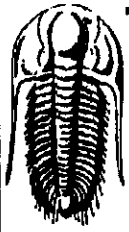
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2227.36	112.95	Initial Hydro-static
1	74.21	112.83	Open To Flow (1)
32	56.76	113.98	Shut-In(1)
62	643.79	114.52	End Shut-In(1)
63	70.83	114.43	Open To Flow (2)
91	60.32	115.14	Shut-In(2)
121	377.33	115.80	End Shut-In(2)
124	2159.74	116.49	Final Hydro-static

## Recovery

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

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Shakespeare Oil Co

**Campbell 2-8**

202 W. Main St.  
Salem, IL 62881

**8-13-32 Logan, KS**

Job Ticket: 40305

**DST#: 8**

ATTN: Brad Rine

Test Start: 2010.10.05 @ 07:59:39

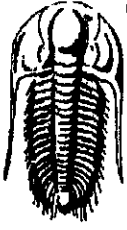
### Tool Information

Drill Pipe:	Length: 4285.00 ft	Diameter: 3.80 inches	Volume: 60.11 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: 25000.00 lb
Drill Collar:	Length: 123.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 95000.00 lb
			<u>Total Volume: 60.71 bbl</u>	Tool Chased 5.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 67000.00 lb
Depth to Top Packer:	4403.00 ft			Final 67000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	57.00 ft			
Tool Length:	77.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:  
Tool slid 5' to bottom

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4388.00	
Hydraulic tool	5.00			4393.00	
Packer	5.00			4398.00	20.00 Bottom Of Top Packer
Packer	5.00			4403.00	
Stubb	1.00			4404.00	
Perforations	5.00			4409.00	
Change Over Sub	1.00			4410.00	
Recorder	0.00	8647	Inside	4410.00	
Recorder	0.00	8365	Outside	4410.00	
Blank Spacing	31.00			4441.00	
Change Over Sub	1.00			4442.00	
Perforations	15.00			4457.00	
Bullnose	3.00			4460.00	57.00 Bottom Packers & Anchor

**Total Tool Length: 77.00**



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Shakespeare Oil Co

**Campbell 2-8**

202 W. Main St.  
Salem, IL 62881

**8-13-32 Logan, KS**

Job Ticket: 40305

**DST#: 8**

ATTN: Brad Rine

Test Start: 2010.10.05 @ 07:59:39

**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: 56.00 sec/qt

Cushion Volume:

bbf

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

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: inches

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbf
10.00	drl mud 100%	0.049

Total Length: 10.00 ft      Total Volume: 0.049 bbf

Num Fluid Samples: 0

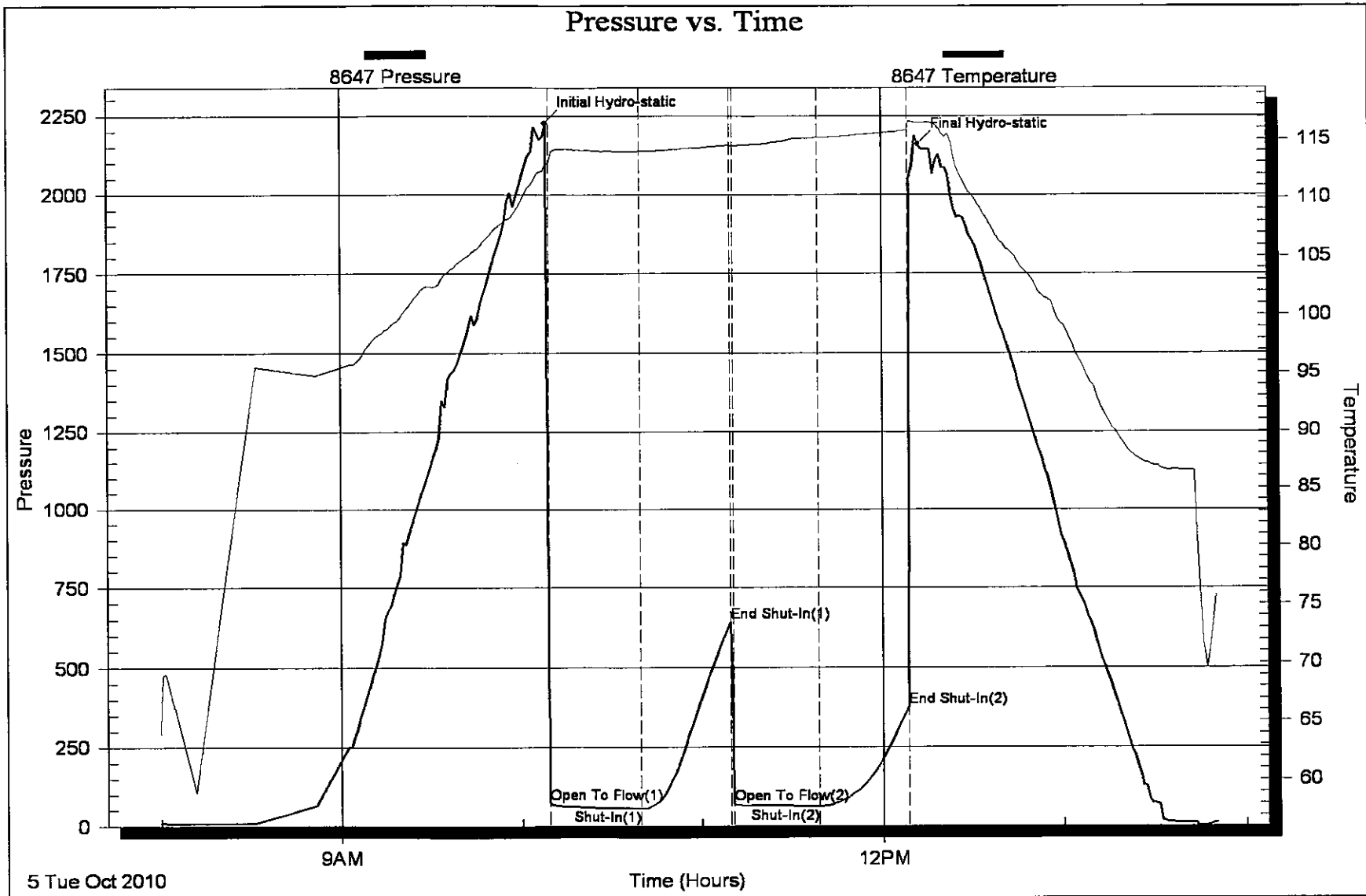
Num Gas Bombs: 0

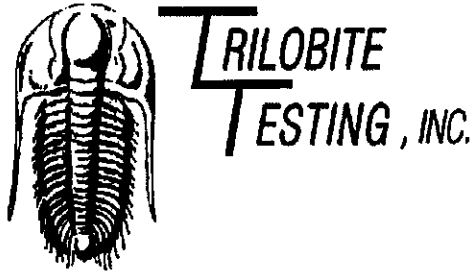
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





## DRILL STEM TEST REPORT

Prepared For: **Shakespeare Oil Co**

202 W. Main St.  
Salem, IL 62881

ATTN: Brad Rine

**8-13-32 Logan,KS**

**Campbell 2-8**

Start Date: 2010.10.06 @ 01:29:23

End Date: 2010.10.06 @ 08:15:47

Job Ticket #: 40306                      DST #: 9

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Shakespeare Oil Co

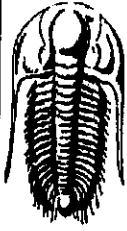
Campbell 2-8

8-13-32 Logan,KS

DST # 9

Johnson

2010.10.06



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Shakespeare Oil Co  
202 W. Main St.  
Salem, IL 62881  
ATTN: Brad Rine

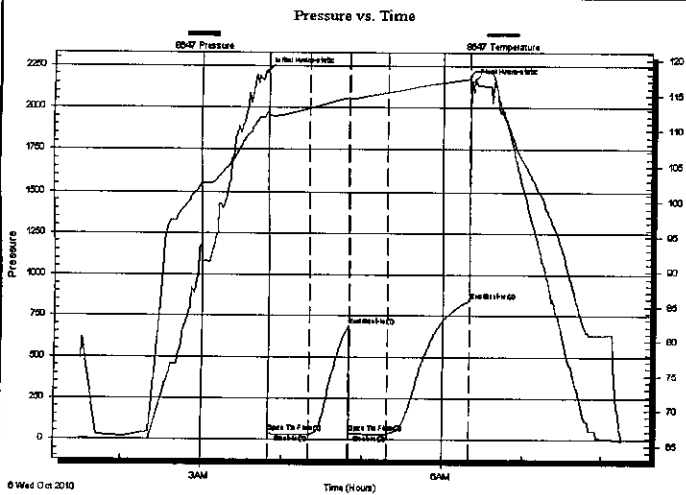
**Campbell 2-8**  
**8-13-32 Logan, KS**  
Job Ticket: 40306      **DST#: 9**  
Test Start: 2010.10.06 @ 01:29:23

## GENERAL INFORMATION:

Formation: **Johnson**  
Deviated: No      Whipstock:      ft (KB)  
Time Tool Opened: 03:50:18  
Time Test Ended: 08:15:47  
Interval: **4482.00 ft (KB) To 4536.00 ft (KB) (TVD)**  
Total Depth: 4536.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches      Hole Condition: Good  
Test Type: Conventional Bottom Hole  
Tester: Brian Fairbank  
Unit No: 41  
Reference Elevations: 2964.00 ft (KB)  
2959.00 ft (CF)  
KB to GR/CF: 5.00 ft

**Serial #: 8647**      **Inside**  
Press@RunDepth: 31.65 psig @ 4486.00 ft (KB)      Capacity: 8000.00 psig  
Start Date: 2010.10.06      End Date: 2010.10.06      Last Calib.: 2010.10.06  
Start Time: 01:29:23      End Time: 08:15:47      Time On Btm: 2010.10.06 @ 03:48:48  
Time Off Btm: 2010.10.06 @ 06:21:47

**TEST COMMENT:** IFP - 1/4" blow - died 23 min  
ISI - no blow back  
FFP - no blow  
FSI - no blow back



## PRESSURE SUMMARY

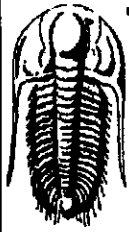
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2214.09	112.57	Initial Hydro-static
2	39.65	112.18	Open To Flow (1)
32	28.61	113.22	Shut-In(1)
61	688.69	114.68	End Shut-In(1)
62	39.81	114.55	Open To Flow (2)
90	31.65	115.47	Shut-In(2)
151	842.87	117.42	End Shut-In(2)
153	2152.13	118.10	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
5.00	VSOCM 2%O, 98%M	0.02

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Shakespeare Oil Co

**Campbell 2-8**

202 W. Main St.  
Salem, IL 62881

**8-13-32 Logan, KS**

Job Ticket: 40306

**DST#: 9**

ATTN: Brad Rine

Test Start: 2010.10.06 @ 01:29:23

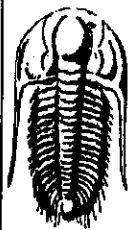
**Tool Information**

Drill Pipe:	Length: 4347.00 ft	Diameter: 3.80 inches	Volume: 60.98 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: 25000.00 lb
Drill Collar:	Length: 123.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 100000.0 lb
			<u>Total Volume: 61.58 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial 67000.00 lb
Depth to Top Packer:	4482.00 ft			Final 67000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	54.00 ft			
Tool Length:	74.00 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			4467.00	
Hydraulic tool	5.00			4472.00	
Packer	5.00			4477.00	20.00 Bottom Of Top Packer
Packer	5.00			4482.00	
Stubb	1.00			4483.00	
Perforations	2.00			4485.00	
Change Over Sub	1.00			4486.00	
Recorder	0.00	8647	Inside	4486.00	
Recorder	0.00	8365	Outside	4486.00	
Blank Spacing	31.00			4517.00	
Change Over Sub	1.00			4518.00	
Perforations	15.00			4533.00	
Bullnose	3.00			4536.00	54.00 Bottom Packers & Anchor

**Total Tool Length: 74.00**



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# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Shakespeare Oil Co

**Campbell 2-8**

202 W. Main St.  
Salem, IL 62881

**8-13-32 Logan, KS**

Job Ticket: 40306

**DST#: 9**

ATTN: Brad Rine

Test Start: 2010.10.06 @ 01:29:23

## 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: 49.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.78 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	VSOCM 2%O, 98%M	0.025

Total Length: 5.00 ft      Total Volume: 0.025 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

