

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

## DRILL STEM TEST REPORT

Prepared For: **Shakespeare Oil Co Inc**

202 West Main Sreet  
Salem IL 62881

ATTN: Donald Williams

**10-13s-32w Logan Ks**

**Teeter #2**

Start Date: 2003.12.03 @ 13:05:18

End Date: 2003.12.03 @ 21:05:47

Job Ticket #: 18211                      DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Shakespeare Oil Co Inc

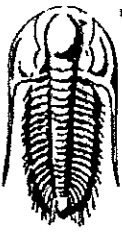
Teeter #2

10-13s-32w Logan Ks

DST # 1

KC "K"

2003.12.03



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Shakespeare Oil Co Inc

Teeter #2

202 West Main Sreet  
Salem IL 62881

10-13s-32w Logan Ks

Job Ticket: 18211

DST#: 1

ATTN: Donald Williams

Test Start: 2003.12.03 @ 13:05:18

## GENERAL INFORMATION:

Formation: KC "K"

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:44:17

Time Test Ended: 21:05:47

Test Type: Conventional Bottom Hole

Tester: Ray Schwager

Unit No: 28

Interval: 4242.00 ft (KB) To 4288.00 ft (KB) (TVD)

Reference Elevations: 3025.00 ft (KB)

Total Depth: 4288.00 ft (KB) (TVD)

3020.00 ft (CF)

Hole Diameter: 7.85 inches Hole Condition: Poor

KB to GR/CF: 5.00 ft

Serial #: 6668

Inside

Press@RunDepth: 196.11 psig @ 4251.01 ft (KB)

Capacity: 7000.00 psig

Start Date: 2003.12.03

End Date:

2003.12.03

Last Calib.: 2003.12.03

Start Time: 13:05:18

End Time:

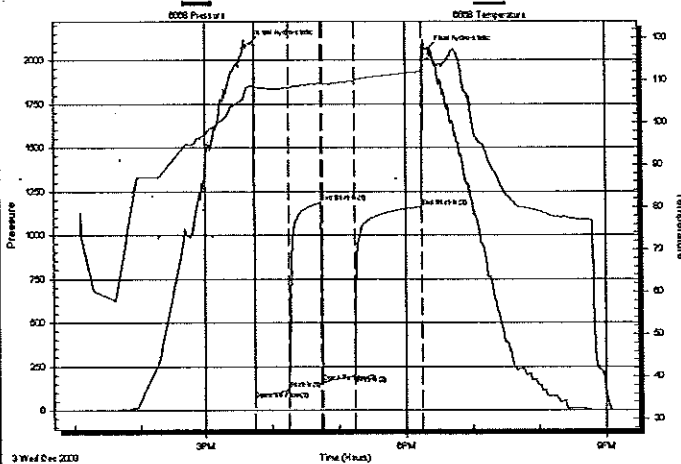
21:05:47

Time On Btm: 2003.12.03 @ 15:40:17

Time Off Btm: 2003.12.03 @ 18:20:17

TEST COMMENT: FFP-wk to strg in 5 min  
FFP-wk to strg in 9 min  
Times 30-30-30-60  
wk bl bk on shut-in 1 1/4"bl

Pressure vs. Time



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2091.59	108.60	Initial Hydro-static
4	60.16	108.43	Open To Flow (1)
35	120.10	108.14	Shut-in(1)
64	1186.13	109.28	End Shut-in(1)
65	158.93	109.06	Open To Flow (2)
94	196.11	109.82	Shut-in(2)
155	1161.60	112.02	End Shut-in(2)
160	2061.99	114.71	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
124.00	MW 75%water 25%mud RW.37@41F	0.61
62.00	GMO 50%gas 40%oil 10%mud	0.87
310.00	Clean Oil	4.35
0.00	1175'Gip	0.00

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

TOOL DIAGRAM

Shakespeare Oil Co Inc

Teeter #2

202 West Main Sreet  
Salem IL 62881

10-13s-32w Logan Ks

Job Ticket: 18211

DST#: 1

ATTN: Donakl Williams

Test Start: 2003.12.03 @ 13:05:18

### Tool Information

Drill Pipe:	Length: 4112.00 ft	Diameter: 3.80 inches	Volume: 57.68 bbl	Tool Weight: 2800.00 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: 124.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 65000.00 lb
			<u>Total Volume: 58.29 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	22.00 ft			String Weight: Initial 55000.00 lb
Depth to Top Packer:	4242.00 ft			Final 55000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	46.02 ft			
Tool Length:	74.02 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			4215.00	
Shut In Tool	5.00			4220.00	
Hydraulic tool	5.00			4225.00	
Jars	5.00			4230.00	
Safety Joint	2.00			4232.00	
Packer	5.00			4237.00	28.00 Bottom Of Top Packer
Packer	5.00			4242.00	
Stubb	1.00			4243.00	
Perforations	8.00			4251.00	
Recorder	0.01	6668	Inside	4251.01	
Perforations	34.00			4285.01	
Recorder	0.01	11085	Outside	4285.02	
Bullnose	3.00			4288.02	46.02 Bottom Packers & Anchor

**Total Tool Length: 74.02**



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# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Shakespeare Oil Co Inc

Teeter #2

202 West Main Sreet  
Salem IL 62881

10-13s-32w Logan Ks

Job Ticket: 18211

DST#: 1

ATTN: Donald Williams

Test Start: 2003.12.03 @ 13:05:18

## Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 46.00 sec/qt

Water Loss: 9.33 in<sup>3</sup>

Resistivity: ohm.m

Salinity: 2500.00 ppm

Filter Cake: 2.00 inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

38 deg API

Water Salinity: 35000 ppm

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
124.00	MW 75%water 25%mud RW.37@41F	0.610
62.00	GMO 50%gas 40%oil 10%mud	0.870
310.00	Clean Oil	4.348
0.00	1175'Gip	0.000

Total Length: 496.00 ft

Total Volume: 5.828 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

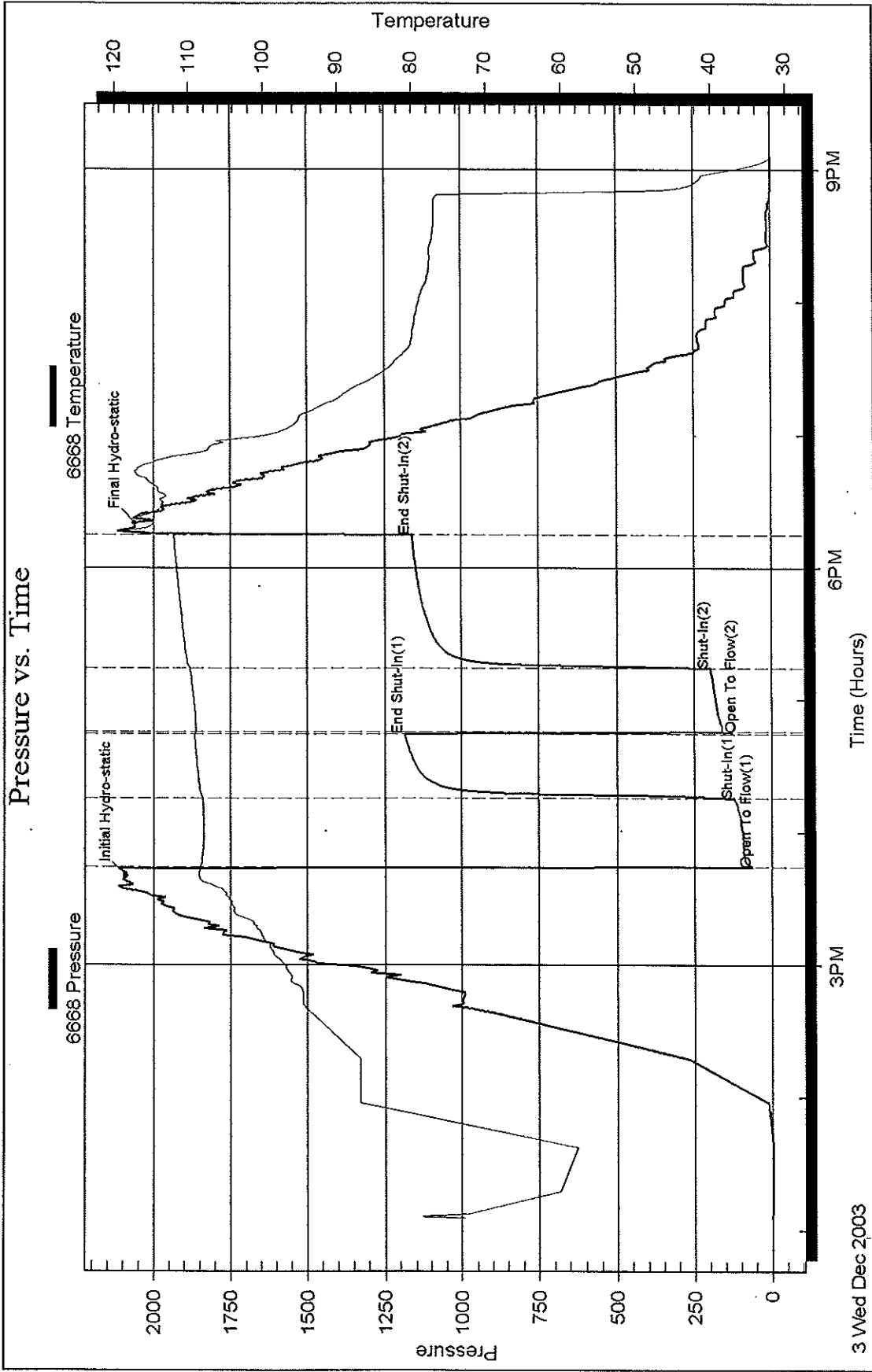
Serial #: 6668

Inside

Shakespeare Oil Co Inc

10-13s-32w Logan Ks

DST Test Number: 1

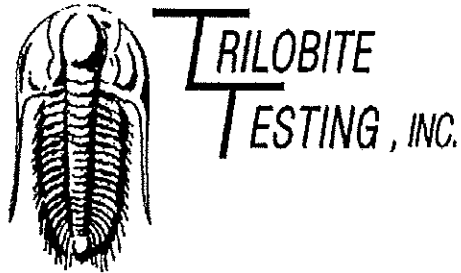


3 Wed Dec 2003

Trilobite Testing, Inc

Ref. No: 18211

Printed: 2003.12.17 @ 10:26:06 Page 5



## DRILL STEM TEST REPORT

Prepared For: **Shakespeare Oil Co Inc**

202 West Main Sreet  
Salem IL 62881

ATTN: Donald Williams

**10-13s-32w Logan Ks**

**Teeter #2**

Start Date: 2003.12.05 @ 04:17:36

End Date: 2003.12.05 @ 12:34:35

Job Ticket #: 18212                      DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Shakespeare Oil Co Inc

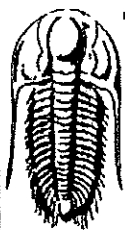
Teeter #2

10-13s-32w Logan Ks

DST # 2

Cher, Johnson Zn

2003.12.05



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Shakespeare Oil Co Inc

Teeter #2

202 West Main Sreet  
Salem IL 62881

10-13s-32w Logan Ks

Job Ticket: 18212

DST#: 2

ATTN: Donald Williams

Test Start: 2003.12.05 @ 04:17:36

## GENERAL INFORMATION:

Formation: Cher, Johnson Zn

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:41:05

Time Test Ended: 12:34:35

Test Type: Conventional Bottom Hole

Tester: Ray Schwager

Unit No: 28

Interval: 4546.00 ft (KB) To 4591.00 ft (KB) (TVD)

Total Depth: 4591.00 ft (KB) (TVD)

Hole Diameter: 7.85 inches Hole Condition: Fair

Reference Elevations: 3025.00 ft (KB)

3020.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6668

Inside

Press@RunDepth: 232.20 psig @ 4555.01 ft (KB)

Start Date: 2003.12.05

End Date:

2003.12.05

Start Time:

04:17:36

End Time:

12:34:35

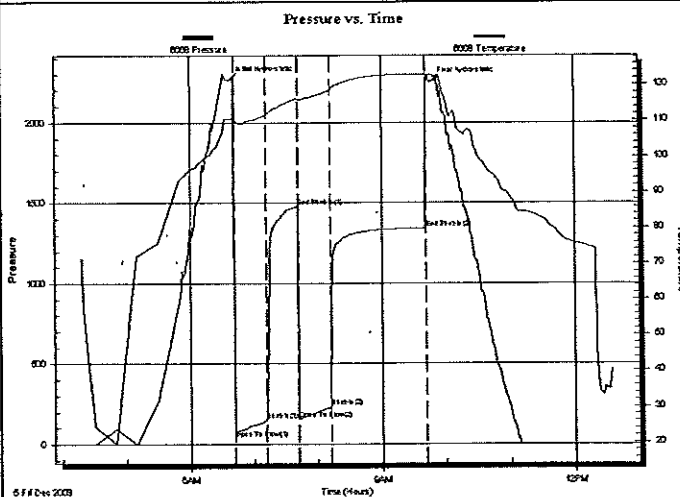
Capacity: 7000.00 psig

Last Calib.: 2003.12.05

Time On Btm: 2003.12.05 @ 06:37:35

Time Off Btm: 2003.12.05 @ 09:46:35

TEST COMMENT: FFP-wk to strg in 8 min  
FFP-strg bl in 4 min  
Times 30-30-30-90  
wk bl bk on shut-in 2 3/4"bl



## PRESSURE SUMMARY

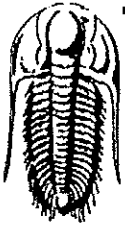
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2266.93	110.50	Initial Hydro-static
4	35.58	110.34	Open To Flow (1)
34	147.25	111.57	Shut-in(1)
64	1477.57	116.13	End Shut-in(1)
64	157.07	115.84	Open To Flow (2)
94	232.20	118.40	Shut-in(2)
184	1339.05	122.89	End Shut-in(2)
189	2254.15	122.78	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
310.00	clean oil	3.22
248.00	mgo 10%gas 70%oil 20%mud	3.48
0.00	1120 GIP	0.00

## Gas Rates

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



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## DRILL STEM TEST REPORT

TOOL DIAGRAM

Shakespeare Oil Co Inc

Teeter #2

202 West Main Sreet  
Salem L 62881

10-13s-32w Logan Ks

Job Ticket: 18212

DST#: 2

ATTN: Donakd Williams

Test Start: 2003.12.05 @ 04:17:36

### Tool Information

Drill Pipe:	Length: 4425.00 ft	Diameter: 3.80 inches	Volume: 62.07 bbl	Tool Weight: 2800.00 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: 124.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 62.68 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	31.00 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	4546.00 ft			Final 57000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	45.02 ft			
Tool Length:	73.02 ft			
Number of Packers:	2	Diameter: 6.75 inches		

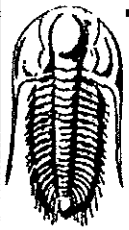
Tool Comments:

### Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4519.00	
Shut In Tool	5.00			4524.00	
Hydraulic tool	5.00			4529.00	
Jars	5.00			4534.00	
Safety Joint	2.00			4536.00	
Packer	5.00			4541.00	28.00 Bottom Of Top Packer
Packer	5.00			4546.00	
Stubb	1.00			4547.00	
Perforations	8.00			4555.00	
Recorder	0.01	6668	inside	4555.01	
Perforations	33.00			4588.01	
Recorder	0.01	11085	Outside	4588.02	
Bulnose	3.00			4591.02	45.02 Bottom Packers & Anchor

**Total Tool Length: 73.02**





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# DRILL STEM TEST REPORT

FLUID SUMMARY

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202 West Main Sreet  
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Job Ticket: 18212

DST#: 2

ATTN: Donak Williams

Test Start: 2003.12.05 @ 04:17:36

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

28 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 47.00 sec/qt

Cushion Volume:

bbf

Water Loss: 10.36 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: 2.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbf
310.00	clean oil	3.219
248.00	mgo 10%gas 70%oil 20%mud	3.479
0.00	1120 GIP	0.000

Total Length: 558.00 ft

Total Volume: 6.698 bbf

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6668

Inside

Shakespeare Oil Co Inc

10-13s-32w Logan Ks

DST Test Number: 2

