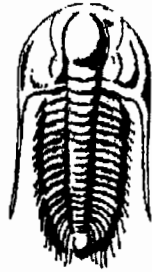


17-11s-20w

1119180



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **King Oil Operations**

696 D Fairground Rd.
Ellis, Ks. 67637

ORIGINAL

ATTN: Rod King

17-11s-20w Ellis KS

King # 1

Start Date: 2004.12.15 @ 19:26:59

End Date: 2004.12.16 @ 02:17:59

Job Ticket #: 20911 DST #: 1

15-051-25373

NW NE NW SE

2409 FSL 1805 FEL

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

King Oil Operations

King # 1

17-11s-20w Ellis KS

DST # 1

L.Kc.-1&J

2004.12.15



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

King Oil Operations
696 D Fairground Rd.
Ellis, Ks. 67637

ATTN: Rod King

King # 1
17-1s-20w Ellis KS
Job Ticket: 20911 DST#: 1
Test Start: 2004.12.15 @ 19:26:59

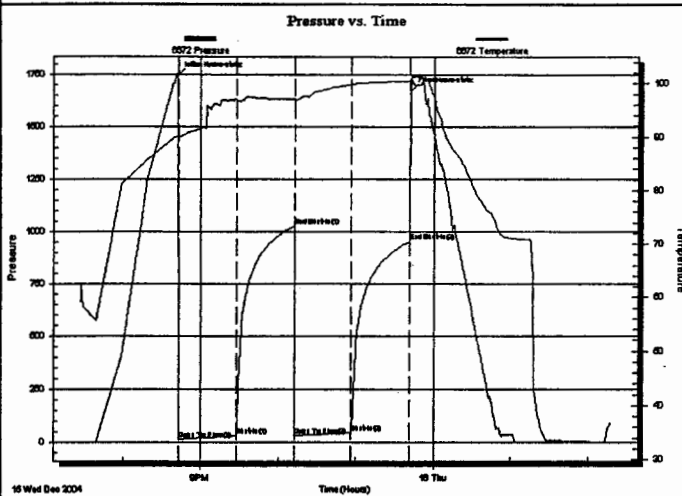
GENERAL INFORMATION:

Formation: L.Kc.-I&J	Test Type: Conventional Bottom Hole
Deviated: No Whipstock: ft (KB)	Tester: John Schmidt
Time Tool Opened: 20:42:59	Unit No: 31
Time Test Ended: 02:17:59	Reference Elevations: 2125.00 ft (KB)
Interval: 3568.00 ft (KB) To 3618.00 ft (KB) (TVD)	2120.00 ft (CF)
Total Depth: 3618.00 ft (KB) (TVD)	KB to GR/CF: 5.00 ft
Hole Diameter: 7.88 inches Hole Condition: Fair	

Serial #: 6672 Inside	Capacity: 7000.00 psig
Press@RunDepth: 45.51 psig @ 3571.00 ft (KB)	Last Calib.: 2004.12.16
Start Date: 2004.12.15 End Date: 2004.12.16	Time On Btrm: 2004.12.15 @ 20:41:59
Start Time: 19:27:00 End Time: 02:17:59	Time Off Btrm: 2004.12.15 @ 23:41:59

TEST COMMENT: **IF-Weak built to 4" in.**
FF-Weak built to 2" in.

ORIGINAL

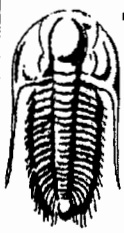


PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1744.46	90.06	Initial Hydro-static
1	14.14	89.88	Open To Flow (1)
45	31.59	96.92	Shut-In(1)
90	1026.84	96.96	End Shut-In(1)
91	32.84	96.84	Open To Flow (2)
135	45.51	99.84	Shut-In(2)
180	953.86	100.43	End Shut-In(2)
180	1672.72	100.59	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
70.00	Drilling mud few oil spots	0.98

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

ORIGINAL

 <p style="font-size: 2em; font-weight: bold; margin: 0;">TRILOBITE TESTING, INC</p>	DRILL STEM TEST REPORT	TOOL DIAGRAM
	King Oil Operations 696 D Fairground Rd. Ellis, Ks. 67637 ATTN: Rod King	King # 1 17-1s-20w Ellis KS Job Ticket: 20911 DST#: 1 Test Start: 2004.12.15 @ 19:26:59

Tool Information

Drill Pipe:	Length: 3571.00 ft	Diameter: 3.80 inches	Volume: 50.09 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 50000.00 lb
		Total Volume: 50.09 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	23.00 ft			String Weight: Initial 46000.00 lb
Depth to Top Packer:	3568.00 ft			Final 46000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	50.00 ft			
Tool Length:	70.00 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			3549.00	
Shut In Tool	5.00			3554.00	
Hydraulic tool	5.00			3559.00	
Packer	4.00			3563.00	20.00 Bottom Of Top Packer
Packer	5.00			3568.00	
Stubb	1.00			3569.00	
Perforations	2.00			3571.00	
Recorder	0.00	6672	Inside	3571.00	
Blank Spacing	31.00			3602.00	
Perforations	13.00			3615.00	
Recorder	0.00	13308	Outside	3615.00	
Bullnose	3.00			3618.00	50.00 Bottom Packers & Anchor

Total Tool Length: 70.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

King Oil Operations

King # 1

696 D Fairground Rd.
Ellis, Ks. 67637

17-1s-20w Ellis KS

ATTN: Rod King

Job Ticket: 20911

DST#: 1

Test Start: 2004.12.15 @ 19:26:59

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 ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
70.00	Drilling mud few oil spots	0.982

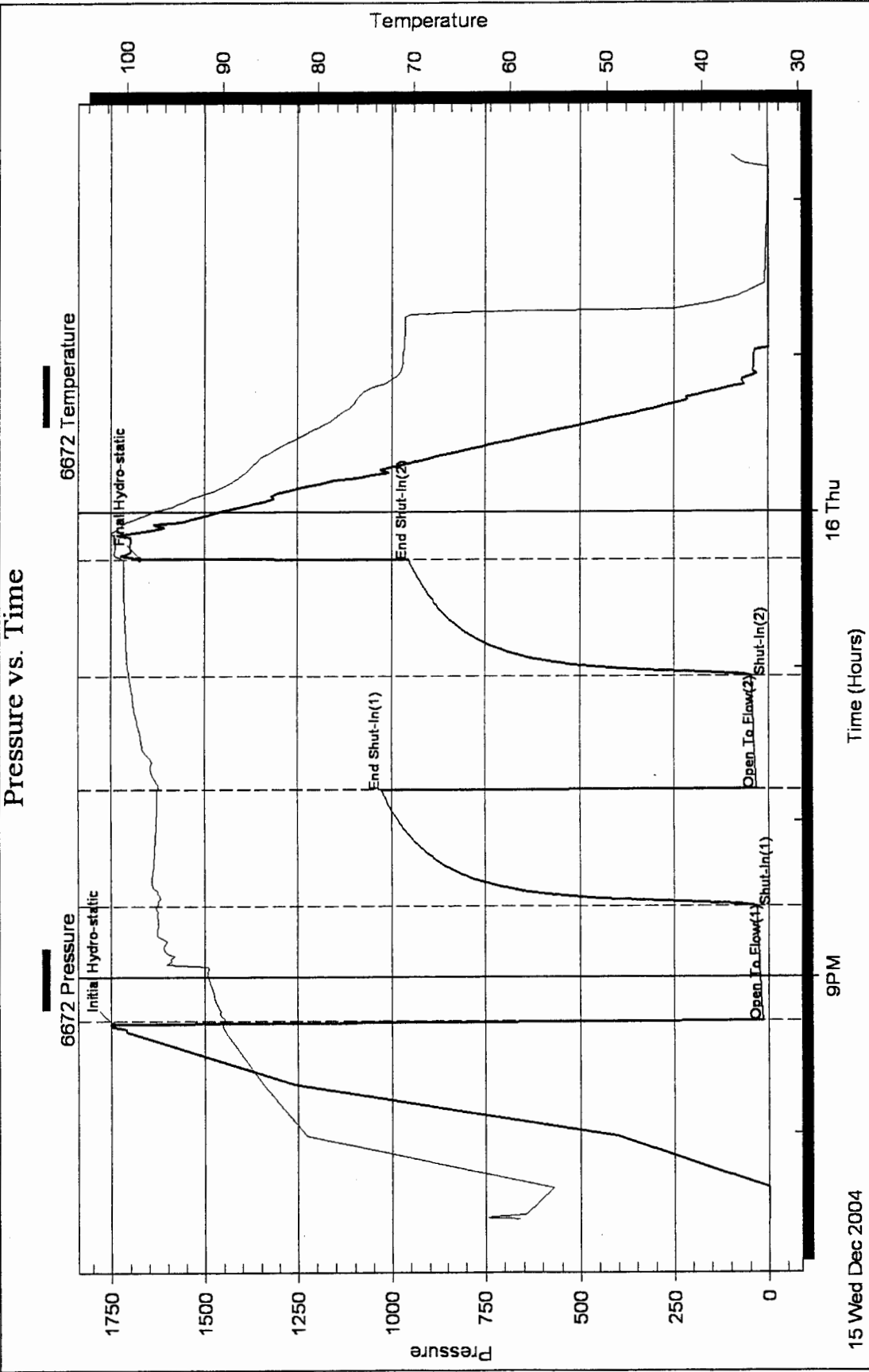
Total Length: 70.00 ft Total Volume: 0.982 bbl

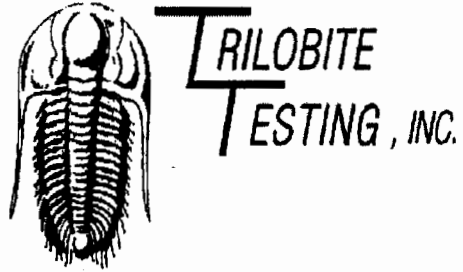
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **King Oil Operations**

696 D Fairground Rd.
Ellis, Ks. 67637

ATTN: Rod King

17--1s-20w Ellis KS

King # 1

Start Date: 2004.12.16 @ 15:44:23

End Date: 2004.12.16 @ 21:30:23

Job Ticket #: 20912 DST #: 2

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

King Oil Operations

King # 1

17--1s-20w Ellis KS

DST # 2

Arbuckle

2004.12.16



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

King Oil Operations

King # 1

696 D Fairground Rd.
Ellis, Ks. 67637

17-1s-20w Ellis KS

ATTN: Rod King

Job Ticket: 20912

DST#: 2

Test Start: 2004.12.16 @ 15:44:23

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: **No Whipstock:** ft (KB)

Time Tool Opened: 17:09:53

Time Test Ended: 21:30:23

Test Type: **Conventional Bottom Hole**

Tester: **John Schmidt**

Unit No: **31**

Interval: **3645.00 ft (KB) To 3726.00 ft (KB) (TVD)**

Reference Elevations: **2125.00 ft (KB)**

Total Depth: **3726.00 ft (KB) (TVD)**

2120.00 ft (CF)

Hole Diameter: **7.88 inches** Hole Condition: **Fair**

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

Serial #: 6672

Inside

Press@RunDepth: **19.74 psig @ 3648.00 ft (KB)**

Capacity: **7000.00 psig**

Start Date: **2004.12.16**

End Date:

2004.12.16

Last Calib.: **2004.12.16**

Start Time: **15:44:24**

End Time:

21:30:23

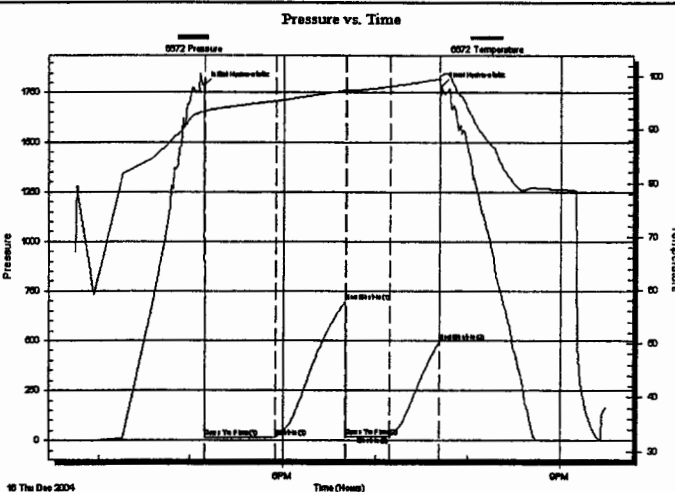
Time On Btm: **2004.12.16 @ 17:08:53**

Time Off Btm: **2004.12.16 @ 19:42:53**

TEST COMMENT: **IF-Weak built to 1" in 30 min, Decrease to 1/2" in 15 min.
FF-Dead**

ISI-Dead

FSI-Dead



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1787.60	93.33	Initial Hydro-static
1	14.97	93.30	Open To Flow (1)
46	17.29	95.36	Shut-In(1)
91	695.60	97.32	End Shut-In(1)
92	19.28	97.28	Open To Flow (2)
121	19.74	98.13	Shut-In(2)
153	493.57	99.52	End Shut-In(2)
154	1783.67	100.12	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
14.00	Oil spotted Mud	0.20
1.00	Oil	0.01

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

King Oil Operations

King # 1

696 D Fairground Rd.
Ellis, Ks. 67637

17-1s-20w Ellis KS

Job Ticket: 20912

DST#: 2

ATTN: Rod King

Test Start: 2004.12.16 @ 15:44:23

Tool Information

Drill Pipe:	Length: 3633.00 ft	Diameter: 3.80 inches	Volume: 50.96 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 55000.00 lb
			<u>Total Volume: 50.96 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial 46000.00 lb
Depth to Top Packer:	3645.00 ft			Final 46000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	81.00 ft			
Tool Length:	101.00 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			3626.00	
Shut In Tool	5.00			3631.00	
Hydraulic tool	5.00			3636.00	
Packer	4.00			3640.00	20.00 Bottom Of Top Packer
Packer	5.00			3645.00	
Stubb	1.00			3646.00	
Perforations	2.00			3648.00	
Recorder	0.00	6672	Inside	3648.00	
Blank Spacing	60.00			3708.00	
Perforations	15.00			3723.00	
Recorder	0.00	13308	Outside	3723.00	
Bullnose	3.00			3726.00	81.00 Bottom Packers & Anchor

Total Tool Length: 101.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

King Oil Operations

King # 1

696 D Fairground Rd.
Ellis, Ks. 67637

17-1s-20w Ellis KS

Job Ticket: 20912

DST#: 2

ATTN: Rod King

Test Start: 2004.12.16 @ 15:44:23

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 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
14.00	Oil spotted Mud	0.196
1.00	Oil	0.014

Total Length: 15.00 ft

Total Volume: 0.210 bbl

Num Fluid Samples: 0

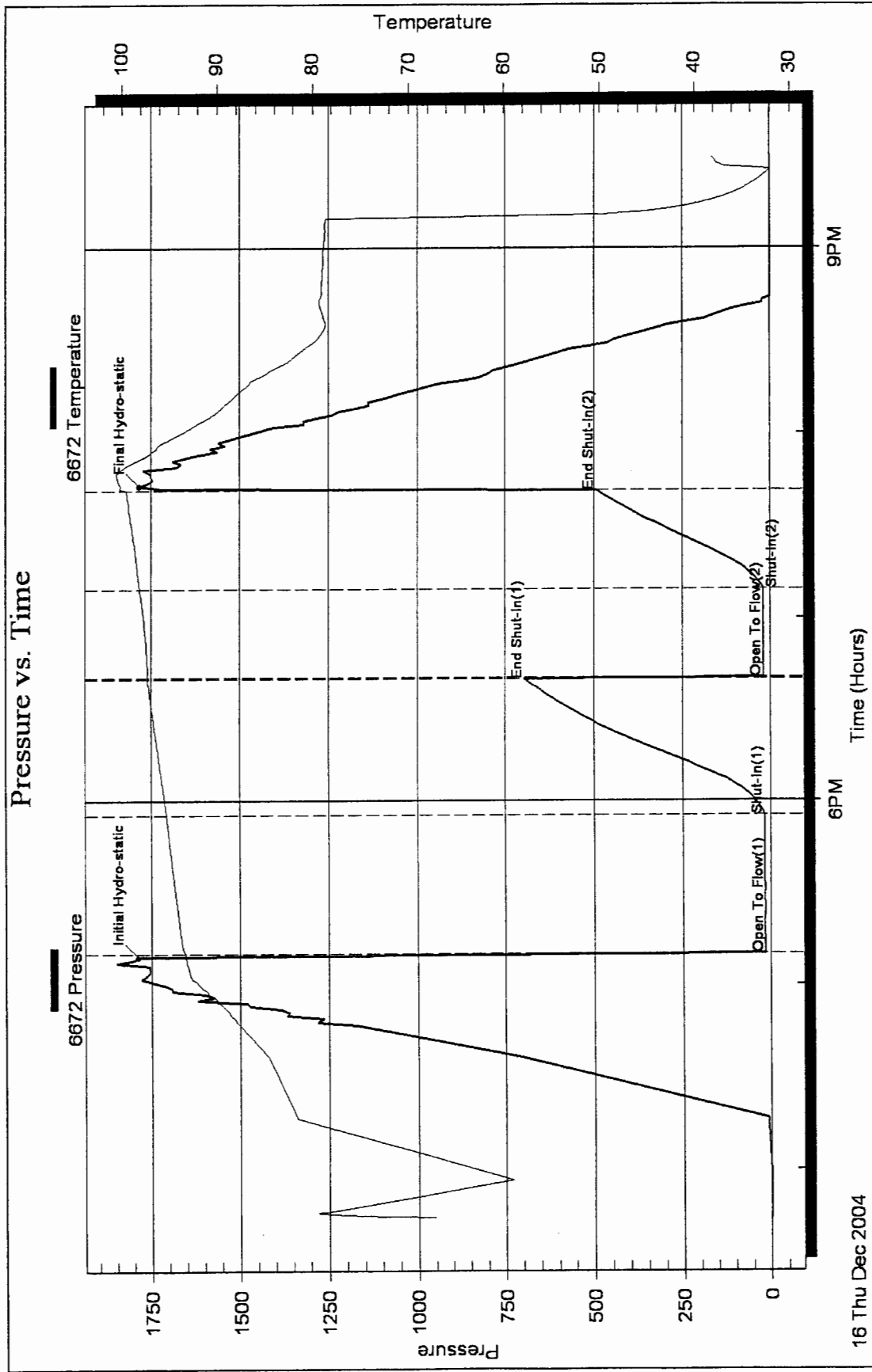
Num Gas Bombs: 0

Serial #:

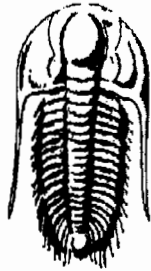
Laboratory Name:

Laboratory Location:

Recovery Comments:



16 Thu Dec 2004



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **King Oil Operations**

696 D Fairground Rd.
Ellis, Ks. 67637

ATTN: Rod King

17-1s-20w Ellis KS

King # 1

Start Date: 2004.12.17 @ 04:59:26

End Date: 2004.12.17 @ 10:42:26

Job Ticket #: 20913 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

King Oil Operations

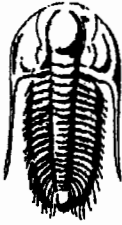
King # 1

17-1s-20w Ellis KS

DST # 3

Arbuckle

2004.12.17



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

King Oil Operations
696 D Fairground Rd.
Ellis, Ks. 67637
ATTN: Rod King

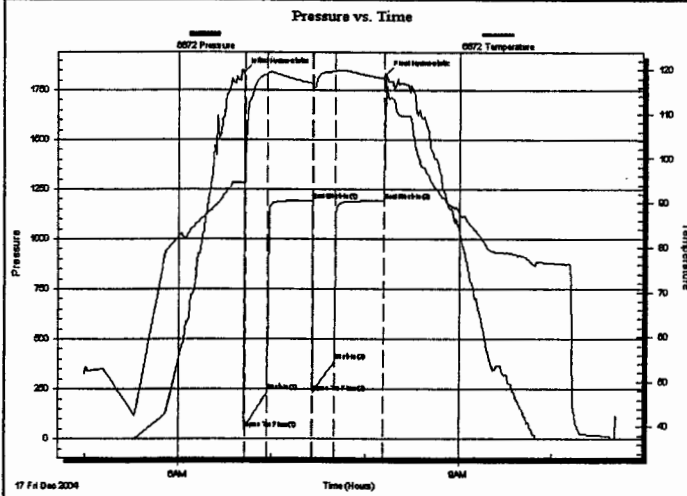
King # 1
17-1s-20w Ellis KS
Job Ticket: 20913 **DST#: 3**
Test Start: 2004.12.17 @ 04:59:26

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: **No** Whipstock: **ft (KB)**
Time Tool Opened: **06:41:56**
Time Test Ended: **10:42:26**
Interval: **3723.00 ft (KB) To 3746.00 ft (KB) (TVD)**
Total Depth: **3746.00 ft (KB) (TVD)**
Hole Diameter: **7.88 inches** Hole Condition: **Fair**
Test Type: **Conventional Bottom Hole**
Tester: **John Schmidt**
Unit No: **31**
Reference Elevations: **2125.00 ft (KB)**
2120.00 ft (CF)
KB to GR/CF: **5.00 ft**

Serial #: 6672 **Inside**
Press@RunDepth: **388.54 psig @ 3726.00 ft (KB)** Capacity: **7000.00 psig**
Start Date: **2004.12.17** End Date: **2004.12.17** Last Calib.: **2004.12.17**
Start Time: **04:59:27** End Time: **10:42:26** Time On Btm: **2004.12.17 @ 06:41:26**
Time Off Btm: **2004.12.17 @ 08:12:56**

TEST COMMENT: IF-Strong B.O.B.2 min. ISI-Dead
FF-Strong B.O.B.2 min. FSI-Dead



PRESSURE SUMMARY

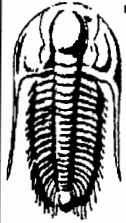
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1842.07	94.60	Initial Hydro-static
1	47.51	94.48	Open To Flow (1)
16	234.60	118.94	Shut-in(1)
45	1192.82	116.76	End Shut-In(1)
45	231.69	116.45	Open To Flow (2)
59	388.54	119.56	Shut-In(2)
90	1191.77	117.97	End Shut-In(2)
92	1829.84	117.00	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
821.00	Salt Water oil scum on top	11.52

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

King Oil Operations

King # 1

696 D Fairground Rd.
Ellis, Ks. 67637

17-1s-20w Ellis KS

Job Ticket: 20913

DST#: 3

ATTN: Rod King

Test Start: 2004.12.17 @ 04:59:26

Tool Information

Drill Pipe:	Length: 3725.00 ft	Diameter: 3.80 inches	Volume: 52.25 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 52.25 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	22.00 ft			String Weight: Initial 46000.00 lb
Depth to Top Packer:	3723.00 ft			Final 51000.00 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
Change Over Sub	1.00			3704.00	
Shut In Tool	5.00			3709.00	
Hydraulic tool	5.00			3714.00	
Packer	4.00			3718.00	20.00 Bottom Of Top Packer
Packer	5.00			3723.00	
Stubb	1.00			3724.00	
Perforations	2.00			3726.00	
Recorder	0.00	6672	Inside	3726.00	
Perforations	17.00			3743.00	
Recorder	0.00	13308	Outside	3743.00	
Bullnose	3.00			3746.00	23.00 Bottom Packers & Anchor

Total Tool Length: 43.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

King Oil Operations

King # 1

696 D Fairground Rd.
Ellis, Ks. 67637

17-1s-20w Ellis KS

ATTN: Rod King

Job Ticket: 20913

DST#: 3

Test Start: 2004.12.17 @ 04:59:26

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:

bbbl

Water Loss: 8.78 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
821.00	Salt Water oil scum on top	11.516

Total Length: 821.00 ft Total Volume: 11.516 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

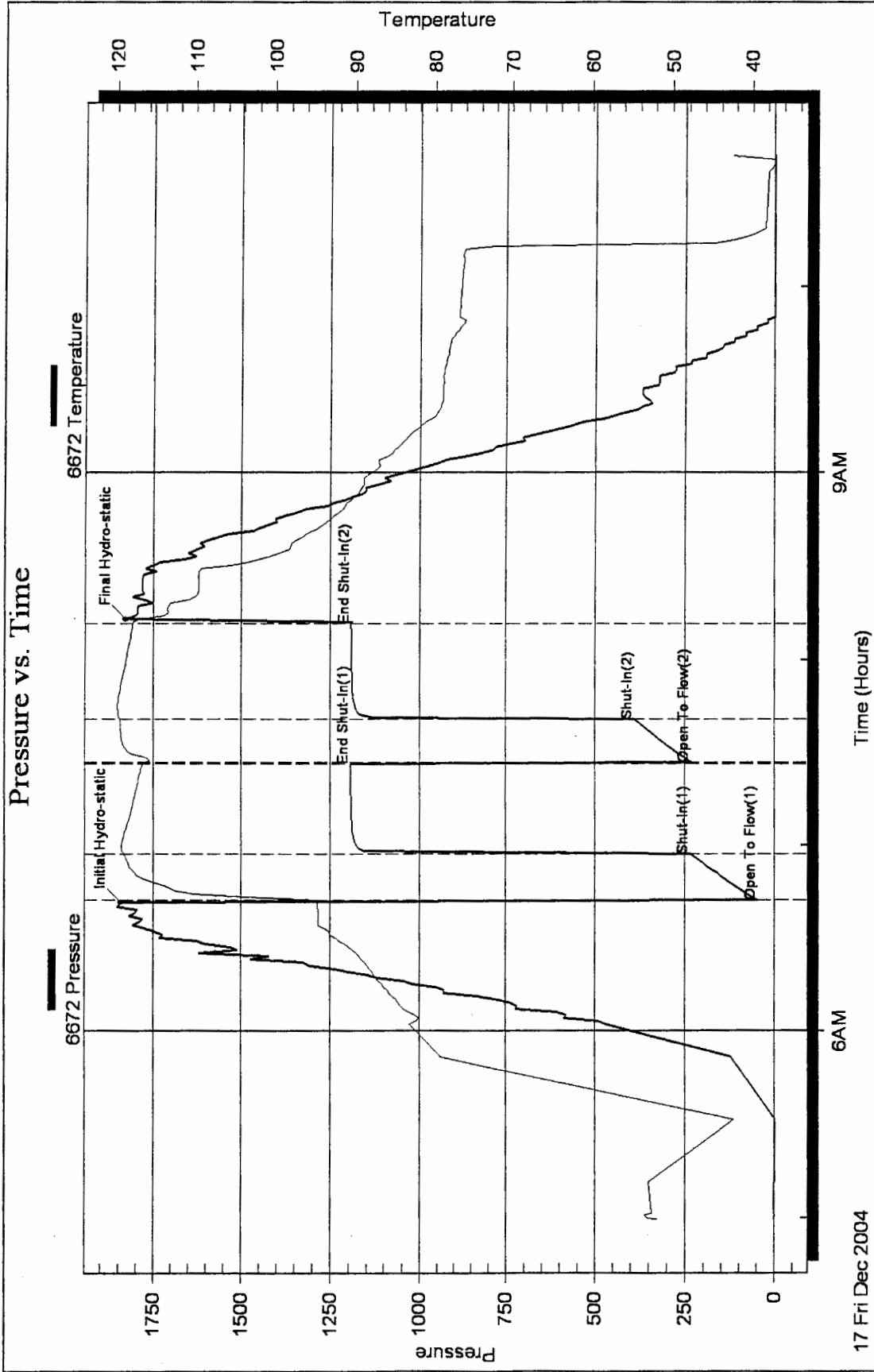
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time



17 Fri Dec 2004

6AM

9AM

Time (Hours)