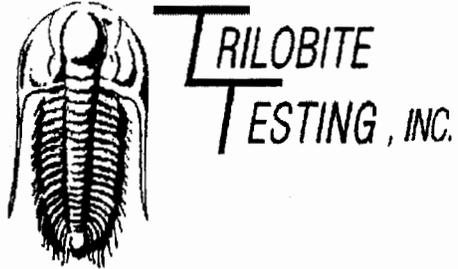


15-065-23170

~~5-065-23170~~



DRILL STEM TEST REPORT

Prepared For: **Bowman Oil Co**

805 Codell Rd
Codell KS 67663

ATTN: Mike Davignon

5 10 21 Graham KS

Smith # 7

Start Date: 2006.05.19 @ 10:00:05

End Date: 2006.05.19 @ 16:36:05

Job Ticket #: 22767 DST #: 1

Bowman Oil Co

Smith # 7

5 10 21 Graham KS

DST # 1

LKC - C

2006.05.19

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Bow man Oil Co

Smith # 7

805 Codell Rd
Codell KS 67663

5 10 21 Graham KS

ATTN: Mike Davignon

Job Ticket: 22767

DST#: 1

Test Start: 2006.05.19 @ 10:00:05

GENERAL INFORMATION:

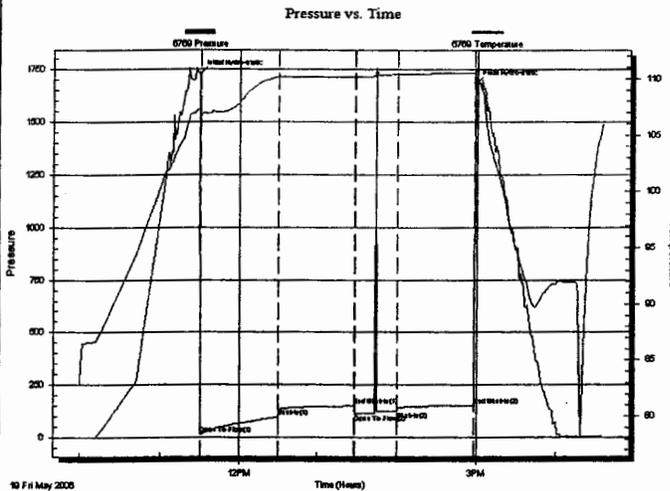
Formation: **LKC - C**
 Deviated: **No** Whipstock: **ft (KB)**
 Time Tool Opened: **11:30:05**
 Time Test Ended: **16:36:05**
 Interval: **3545.00 ft (KB) To 3570.00 ft (KB) (TVD)**
 Total Depth: **3570.00 ft (KB) (TVD)**
 Hole Diameter: **7.88 inches** Hole Condition: **Fair**
 Test Type: **Conventional Bottom Hole**
 Tester: **Michael Armbrister**
 Unit No: **1**
 Reference Elevations: **2301.00 ft (KB)**
2296.00 ft (CF)
 KB to GR/CF: **5.00 ft**

Serial #: 6769

Inside

Press@RunDepth: **125.06 psig @ 3547.01 ft (KB)**
 Start Date: **2006.05.19** End Date: **2006.05.19** Capacity: **7000.00 psig**
 Start Time: **10:00:07** End Time: **16:36:05** Last Calib.: **2006.05.19**
 Time On Btm: **2006.05.19 @ 11:29:50**
 Time Off Btm: **2006.05.19 @ 14:58:20**

TEST COMMENT: IF Built to 4 1/2 in
 ISI No blow
 FF No Blow Flushed tool
 FSI No blow



PRESSURE SUMMARY

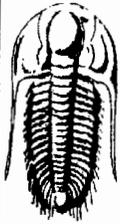
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1729.89	107.27	Initial Hydro-static
1	12.62	106.58	Open To Flow (1)
60	97.15	110.19	Shut-In(1)
118	149.37	110.20	End Shut-In(1)
119	110.71	110.20	Open To Flow (2)
151	125.06	110.42	Shut-In(2)
209	151.00	110.53	End Shut-In(2)
209	1684.01	110.94	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
3.00	Clean Oil	0.01
197.00	SW	0.97

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Bow man Oil Co

Smith # 7

805 Codell Rd
Codell KS 67663

5 10 21 Graham KS

Job Ticket: 22767

DST#: 1

ATTN: Mike Davignon

Test Start: 2006.05.19 @ 10:00:05

Tool Information

Drill Pipe:	Length: 3155.00 ft	Diameter: 3.80 inches	Volume: 44.26 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 382.00 ft	Diameter: 2.25 inches	Volume: 1.88 bbl	Weight to Pull Loose: 90000.00 lb
			<u>Total Volume: 46.14 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	12.00 ft			String Weight: Initial 72000.00 lb
Depth to Top Packer:	3545.00 ft			Final 72000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	25.02 ft			
Tool Length:	45.02 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
S.I. Tool	5.00			3530.00	
HYD S.I. Tool	5.00			3535.00	
Packer	5.00			3540.00	20.00 Bottom Of Top Packer
Packer	5.00			3545.00	
Stubb	1.00			3546.00	
Perforations	1.00			3547.00	
Recorder	0.01	6769	Inside	3547.01	
Perforations	20.00			3567.01	
Recorder	0.01	13548	Outside	3567.02	
Bullnose	3.00			3570.02	25.02 Bottom Packers & Anchor
Total Tool Length:	45.02				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Bow man Oil Co

Smith # 7

805 Codell Rd
Codell KS 67663

5 10 21 Graham KS

Job Ticket: 22767

DST#: 1

ATTN: Mike Davignon

Test Start: 2006.05.19 @ 10:00:05

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: sec/qt

Cushion Volume:

bbbl

Water Loss: 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
3.00	Clean Oil	0.015
197.00	SW	0.969

Total Length: 200.00 ft

Total Volume: 0.984 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

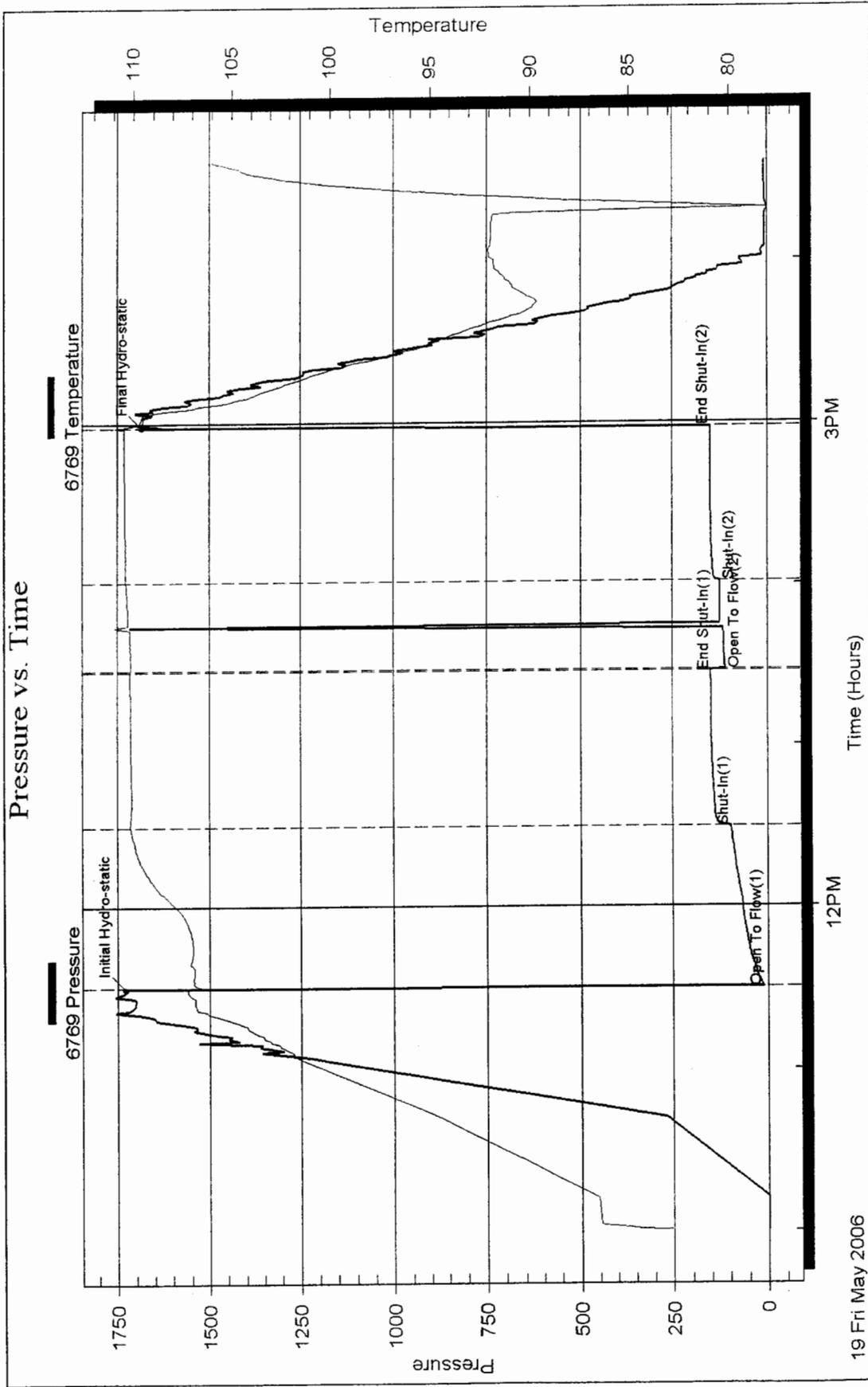
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time



19 Fri May 2006

12PM

3PM

Time (Hours)



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Bowman Oil Co**

805 Codell Rd
Codell KS 67663

ATTN: Mike Davignon

5 10 21 Graham KS

Smith # 7

Start Date: 2006.05.20 @ 19:28:45

End Date: 2006.05.21 @ 02:08:58

Job Ticket #: 24796 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Bowman Oil Co

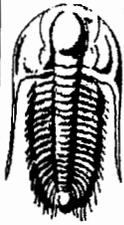
Smith # 7

5 10 21 Graham KS

DST # 2

Arbuckle

2006.05.20



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Bowman Oil Co

Smith # 7

805 Codell Rd
Codell KS 67663

5 10 21 Graham KS

Job Ticket: 24796

DST#: 2

ATTN: Mike Davignon

Test Start: 2006.05.20 @ 19:28:45

GENERAL INFORMATION:

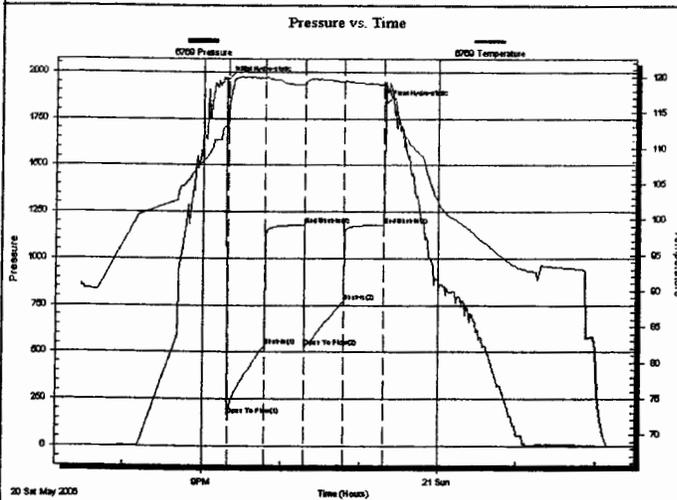
Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 21:18:28
 Time Test Ended: 02:08:58
 Interval: **3870.00 ft (KB) To 3875.00 ft (KB) (TVD)**
 Total Depth: 3875.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole
 Tester: Brian Fairbank
 Unit No: 24
 Reference Elevations: 2301.00 ft (KB)
 2296.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: 6769

Inside

Press@RunDepth: 770.43 psig @ 3871.01 ft (KB)
 Start Date: 2006.05.20 End Date: 2006.05.21
 Start Time: 19:28:45 End Time: 02:08:58
 Capacity: 7000.00 psig
 Last Calib.: 2006.05.21
 Time On Btm: 2006.05.20 @ 21:17:43
 Time Off Btm: 2006.05.20 @ 23:18:28

TEST COMMENT: FFP BOB 2"
 ISI 1/4 in 5 in blow back
 FFP BOB 1"
 FSI No blow 20" sur 1/4 in



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1959.19	113.01	Initial Hydro-static
1	162.29	113.50	Open To Flow (1)
29	531.50	119.77	Shut-In(1)
60	1179.76	118.86	End Shut-In(1)
60	530.61	118.71	Open To Flow (2)
90	770.43	119.31	Shut-In(2)
120	1179.78	118.91	End Shut-In(2)
121	1830.41	118.77	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2.00	100%M	0.01
1078.00	MMW/ISO 95%W 5%M	11.66
60.00	GWCO 10%G 70%O 20%W	0.84
600.00	FREE OIL 10%G 90%O	8.42

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Bowman Oil Co

Smith # 7

805 Codell Rd
Codell KS 67663

5 10 21 Graham KS

Job Ticket: 24796

DST#: 2

ATTN: Mike Davignon

Test Start: 2006.05.20 @ 19:28:45

Tool Information

Drill Pipe:	Length: 3475.00 ft	Diameter: 3.80 inches	Volume: 48.75 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 382.00 ft	Diameter: 2.25 inches	Volume: 1.88 bbl	Weight to Pull Loose: 84000.00 lb
			Total Volume: 50.63 bbl	Tool Chased 1.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial 72000.00 lb
Depth to Top Packer:	3870.00 ft			Final 80000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	5.01 ft			
Tool Length:	25.01 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
S.I. Tool	5.00			3855.00	
HYD S.I. Tool	5.00			3860.00	
Packer	5.00			3865.00	20.00 Bottom Of Top Packer
Packer	5.00			3870.00	
Stubb	1.00			3871.00	
Recorder	0.01	6769	Inside	3871.01	
Perforations	1.00			3872.01	
Bullnose	3.00			3875.01	5.01 Bottom Packers & Anchor

Total Tool Length: 25.01



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Bow man Oil Co

Smith # 7

805 Codell Rd
Codell KS 67663

5 10 21 Graham KS

Job Ticket: 24796

DST#: 2

ATTN: Mike Davignon

Test Start: 2006.05.20 @ 19:28:45

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API: 23 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: ppm
Viscosity: 59.00 sec/qt	Cushion Volume: bbl	
Water Loss: 7.18 in ³	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 4200.00 ppm		
Filter Cake: inches		

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2.00	100%M	0.010
1078.00	MWw/SO 95%W 5%M	11.660
60.00	GWCO 10%G 70%O 20%W	0.842
600.00	FREE OIL 10%G 90%O	8.416

Total Length: 1740.00 ft Total Volume: 20.928 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: 75' GIP

Serial #: 6769

Inside

Bowman Oil Co

5 10 21 Graham KS

DST Test Number: 2

Pressure vs. Time

