

DRILL STEM TEST REPORT

Prepared For: **Brungardt Oil & Leasing, Inc.**

PO Box 871
Russell KS 67665

ATTN: Gary L. Brungardt

28--9s--12w

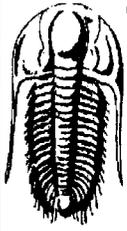
Joyce Applegate B# 1

Start Date: 2005.10.09 @ 04:59:36

End Date: 2005.10.09 @ 11:03:36

Job Ticket #: 22263 DST #: 1

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Brungardt Oil & Leasing, Inc.

Joyce Applegate B# 1

PO Box 871
Russell KS 67665

28-9s-12w

Job Ticket: 22263

DST#: 1

ATTN: Gary L. Brungardt

Test Start: 2005.10.09 @ 04:59:36

GENERAL INFORMATION:

Formation: **L.Kc.-A**

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

Time Tool Opened: 06:30:36

Time Test Ended: 11:03:36

Test Type: **Conventional Bottom Hole**

Tester: **John Schmidt**

Unit No: **31**

Interval: **3022.00 ft (KB) To 3055.00 ft (KB) (TVD)**

Reference Elevations: **1800.00 ft (KB)**

Total Depth: **3055.00 ft (KB) (TVD)**

1795.00 ft (CF)

Hole Diameter: **7.88 inches** Hole Condition: **Poor**

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

Serial #: 8018 **Inside**

Press@RunDepth: **82.67 psig @ 3026.00 ft (KB)**

Capacity: **7000.00 psig**

Start Date: **2005.10.09**

End Date: **2005.10.09**

Last Calib.: **2005.10.09**

Start Time: **04:59:41**

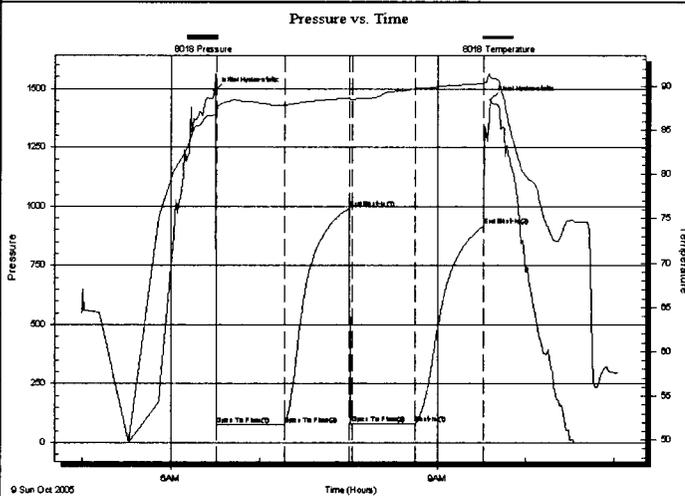
End Time: **11:03:35**

Time On Btm: **2005.10.09 @ 06:29:06**

Time Off Btm: **2005.10.09 @ 09:36:06**

TEST COMMENT: IF-Weak surf. IS-Dead
FF-Weak surf. FS-Dead

Tool Slid 12' to bottom---Lost 15' mud w hen sliding.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1492.15	86.71	Initial Hydro-static
2	75.55	86.89	Open To Flow (1)
47	78.43	87.84	Open To Flow (2)
91	992.22	88.65	End Shut-In(1)
93	80.92	88.49	Open To Flow (3)
136	82.67	89.70	Shut-In(1)
183	916.51	90.32	End Shut-In(2)
187	1453.15	90.99	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
160.00	OCM-5%O-95%M	0.79

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Brungardt Oil & Leasing, Inc.
PO Box 871
Russell KS 67665
ATTN: Gary L. Brungardt

Joyce Applegate B# 1
28-9s-12w
Job Ticket: 22263 DST#: 1
Test Start: 2005.10.09 @ 04:59:36

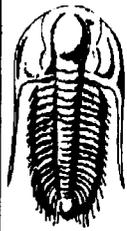
Tool Information

Drill Pipe:	Length: 2630.00 ft	Diameter: 3.80 inches	Volume: 36.89 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 377.00 ft	Diameter: 2.25 inches	Volume: 1.85 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: 70000.00 lb
			<u>Total Volume: 38.74 bbl</u>	Tool Chased 12.00 ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial 38000.00 lb
Depth to Top Packer:	3022.00 ft			Final 38000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	33.00 ft			
Tool Length:	53.00 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			3003.00	
Shut In Tool	5.00			3008.00	
Hydraulic tool	5.00			3013.00	
Packer	4.00			3017.00	20.00 Bottom Of Top Packer
Packer	5.00			3022.00	
Stubb	1.00			3023.00	
Perforations	3.00			3026.00	
Recorder	0.00	8018	Inside	3026.00	
Perforations	26.00			3052.00	
Recorder	0.00	13308	Outside	3052.00	
Bullnose	3.00			3055.00	33.00 Bottom Packers & Anchor

Total Tool Length: 53.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Brungardt Oil & Leasing, Inc.

Joyce Applegate B# 1

PO Box 871
Russell KS 67665

28-9s-12w

Job Ticket: 22263

DST#: 1

ATTN: Gary L. Brungardt

Test Start: 2005.10.09 @ 04:59:36

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:

ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.78 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
160.00	OCM-5%O-95%M	0.787

Total Length: 160.00 ft

Total Volume: 0.787 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8018

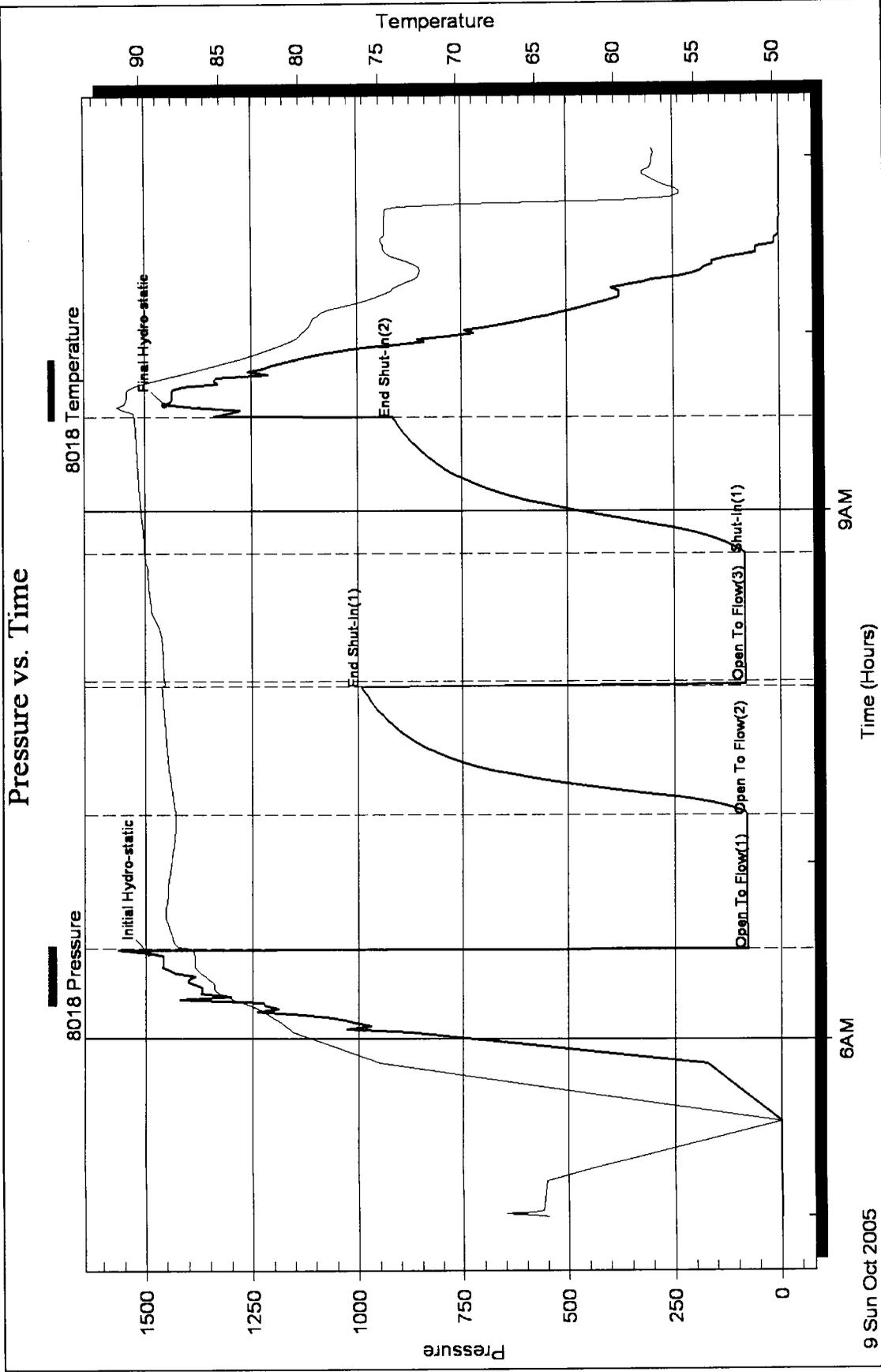
Inside

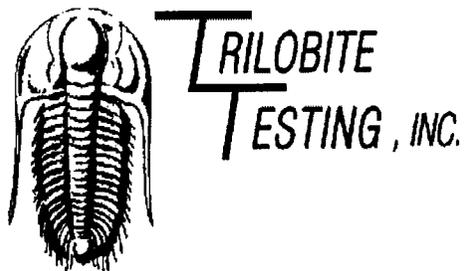
Brungardt Oil & Leasing, Inc.

28-9s-12w

DST Test Number: 1

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Brungardt Oil & Leasing, Inc.**

PO Box 871
Russell KS 67665

ATTN: Gary L. Brungardt

28--9s--12w

Joyce Applegate B# 1

Start Date: 2005.10.09 @ 17:00:05

End Date: 2005.10.09 @ 23:01:35

Job Ticket #: 22264 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Brungardt Oil & Leasing, Inc.

Joyce Applegate B# 1

28--9s--12w

DST # 2

L.Kc.-B

2005.10.09



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Brungardt Oil & Leasing, Inc.

PO Box 871
Russell KS 67665

ATTN: Gary L. Brungardt

Joyce Applegate B# 1

28-9s-12w

Job Ticket: 22264

DST#: 2

Test Start: 2005.10.09 @ 17:00:05

GENERAL INFORMATION:

Formation: **L.Kc.-B**

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

Time Tool Opened: 18:31:05

Time Test Ended: 23:01:35

Test Type: **Conventional Bottom Hole**

Tester: **John Schmidt**

Unit No: **31**

Interval: **3070.00 ft (KB) To 3090.00 ft (KB) (TVD)**

Total Depth: **3090.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Poor**

Reference Elevations: **1800.00 ft (KB)**

1795.00 ft (CF)

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

Serial #: 8018

Inside

Press@RunDepth: **100.84 psig @ 3072.00 ft (KB)**

Start Date: **2005.10.09**

End Date: **2005.10.09**

Start Time: **17:00:10**

End Time: **23:01:34**

Capacity: **7000.00 psig**

Last Calib.: **2005.10.09**

Time On Btm: **2005.10.09 @ 18:30:35**

Time Off Btm: **2005.10.09 @ 21:33:35**

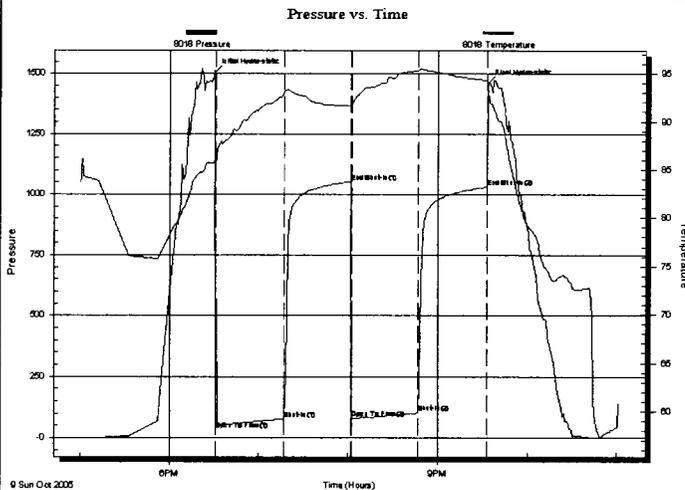
TEST COMMENT: **IF-Weak surface built to 1&1/2" in.**

IS-Dead

FF-Weak surface built to 1/2" in

FS-Dead

Tool slid 7' to bottom ---Lost 5' mud w hen sliding.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1506.74	85.85	Initial Hydro-static
1	32.39	85.45	Open To Flow (1)
47	76.30	93.09	Shut-In(1)
91	1052.28	91.60	End Shut-In(1)
92	78.01	91.38	Open To Flow (2)
136	100.84	95.35	Shut-In(2)
182	1029.99	94.34	End Shut-In(2)
183	1461.49	92.95	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
170.00	Muddy S. Water-40%M-60%W	0.84
	With @ oil scum	

Gas Rates

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



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DRILL STEM TEST REPORT

TOOL DIAGRAM

Brungardt Oil & Leasing, Inc.

Joyce Applegate B# 1

PO Box 871
Russell KS 67665

28-9s-12w

Job Ticket: 22264

DST#: 2

ATTN: Gary L. Brungardt

Test Start: 2005.10.09 @ 17:00:05

Tool Information

Drill Pipe:	Length: 2701.00 ft	Diameter: 3.80 inches	Volume: 37.89 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 377.00 ft	Diameter: 2.25 inches	Volume: 1.85 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: 65000.00 lb
			<u>Total Volume: 39.74 bbl</u>	Tool Chased 5.00 ft
Drill Pipe Above KB:	28.00 ft			String Weight: Initial 38000.00 lb
Depth to Top Packer:	3070.00 ft			Final 38000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	20.00 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			3051.00	
Shut In Tool	5.00			3056.00	
Hydraulic tool	5.00			3061.00	
Packer	4.00			3065.00	20.00 Bottom Of Top Packer
Packer	5.00			3070.00	
Stubb	1.00			3071.00	
Perforations	1.00			3072.00	
Recorder	0.00	8018	Inside	3072.00	
Perforations	15.00			3087.00	
Recorder	0.00	13308	Outside	3087.00	
Bullnose	3.00			3090.00	20.00 Bottom Packers & Anchor

Total Tool Length: 40.00



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DRILL STEM TEST REPORT

FLUID SUMMARY

Brungardt Oil & Leasing, Inc.

Joyce Applegate B# 1

PO Box 871
Russell KS 67665

28-9s-12w

Job Ticket: 22264

DST#: 2

ATTN: Gary L. Brungardt

Test Start: 2005.10.09 @ 17:00:05

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:

34000 ppm

Viscosity: 53.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.38 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
170.00	Muddy S. Water-40%M-60%W	0.836
	With @ oil scum	

Total Length: 170.00 ft

Total Volume: 0.836 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

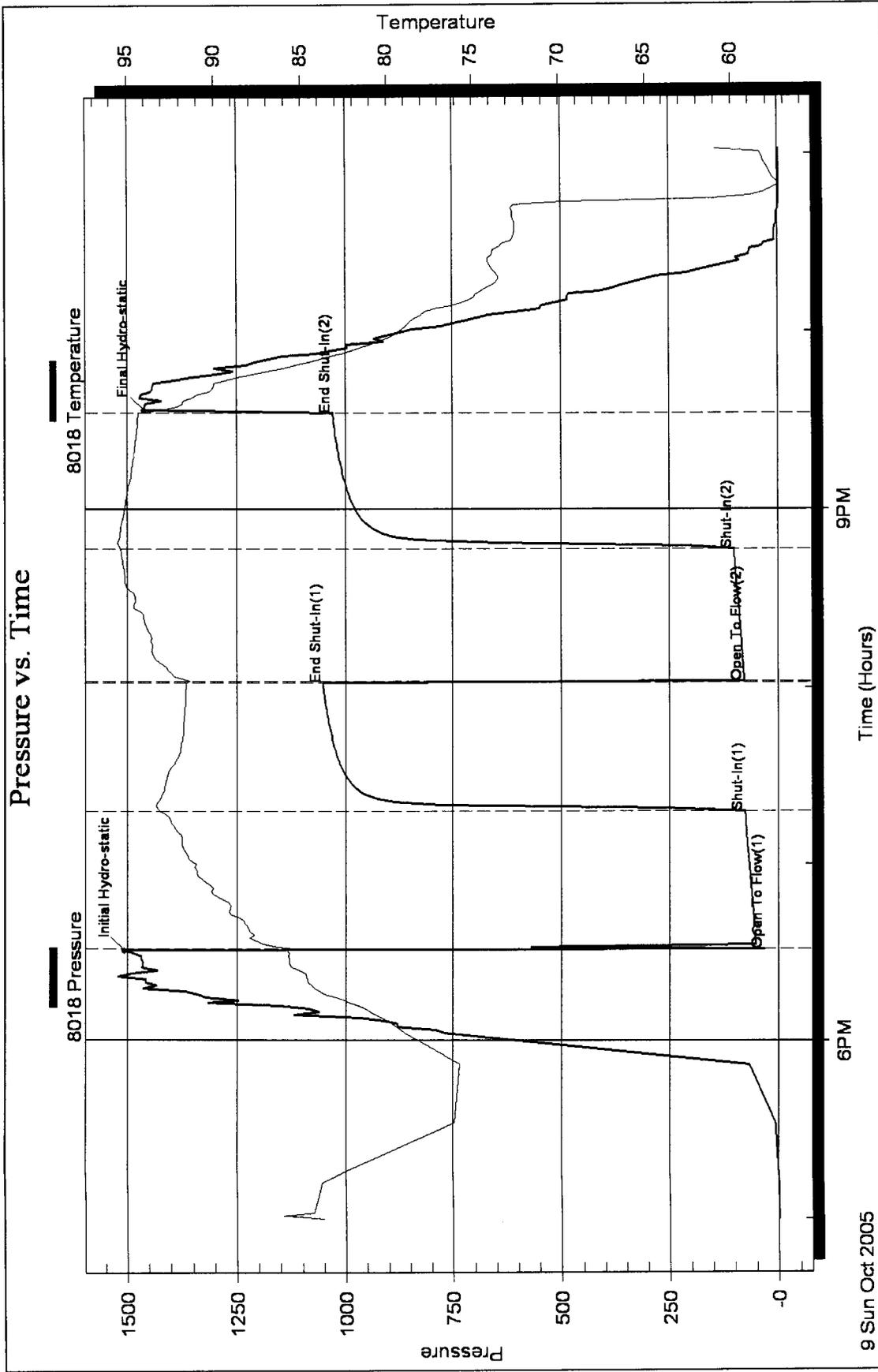
Serial #: 8018

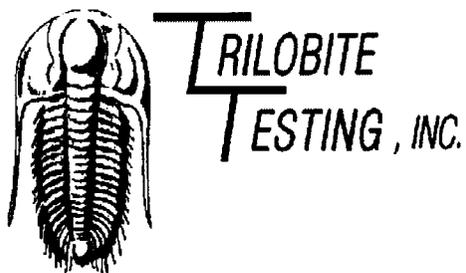
Inside

Brungardt Oil & Leasing, Inc.

28-9s-12w

DST Test Number: 2





DRILL STEM TEST REPORT

Prepared For: **Brungardt Oil & Leasing, Inc.**

PO Box 871
Russell KS 67665

ATTN: Gary L. Brungardt

28--9s--12w

Joyce Applegate B# 1

Start Date: 2005.10.10 @ 05:40:10

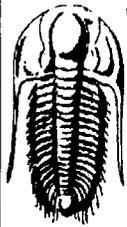
End Date: 2005.10.10 @ 11:22:10

Job Ticket #: 22265 DST #: 3

Trilobite Testing, Inc

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Brungardt Oil & Leasing, Inc.

Joyce Applegate B# 1

PO Box 871
Russell KS 67665

28-9s-12w

Job Ticket: 22265

DST#: 3

ATTN: Gary L. Brungardt

Test Start: 2005.10.10 @ 05:40:10

GENERAL INFORMATION:

Formation: L.Kc.-C

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:53:10

Time Test Ended: 11:22:10

Test Type: Conventional Bottom Hole

Tester: John Schmidt

Unit No: 31

Interval: 3093.00 ft (KB) To 3120.00 ft (KB) (TVD)

Reference Elevations: 1800.00 ft (KB)

Total Depth: 3120.00 ft (KB) (TVD)

1795.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 5.00 ft

Serial #: 8018

Inside

Press@RunDepth: 55.90 psig @ 3097.00 ft (KB)

Capacity: 7000.00 psig

Start Date: 2005.10.10

End Date: 2005.10.10

Last Calib.: 2005.10.10

Start Time: 05:40:15

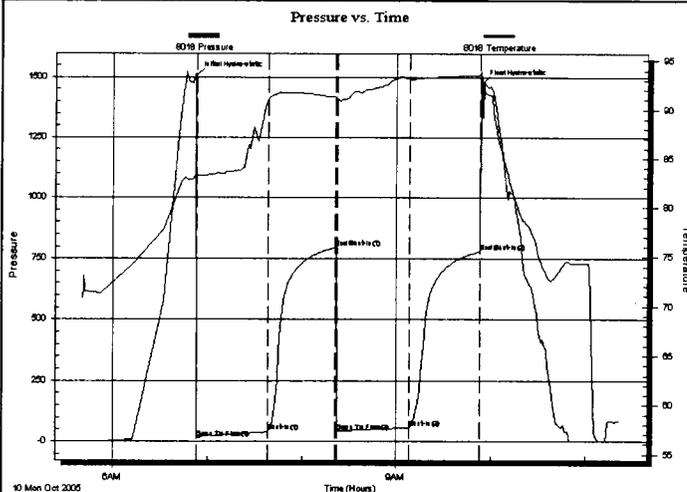
End Time: 11:22:09

Time On Btrm: 2005.10.10 @ 06:52:40

Time Off Btrm: 2005.10.10 @ 09:54:10

TEST COMMENT: IF-Weak built to 3" in.
FF-Weak surface.

ISI-Dead
FSI-Dead



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1506.65	83.43	Initial Hydro-static
1	13.53	83.16	Open To Flow (1)
45	38.43	90.91	Shut-In(1)
89	794.97	91.25	End Shut-In(1)
90	41.26	91.07	Open To Flow (2)
136	55.90	93.14	Shut-In(2)
181	779.98	93.52	End Shut-In(2)
182	1474.27	93.03	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
110.00	SOCMW-2%O-28%M-70%W	0.54
1.00	Clean oil	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Brungardt Oil & Leasing, Inc.

Joyce Applegate B# 1

PO Box 871
Russell KS 67665

28-9s-12w

Job Ticket: 22265

DST#: 3

ATTN: Gary L. Brungardt

Test Start: 2005.10.10 @ 05:40:10

Tool Information

Drill Pipe:	Length: 2701.00 ft	Diameter: 3.80 inches	Volume: 37.89 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 377.00 ft	Diameter: 2.25 inches	Volume: 1.85 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:	39.74 bbl	Tool Chased 6.00 ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial 38000.00 lb
Depth to Top Packer:	3093.00 ft			Final 38000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	27.00 ft			
Tool Length:	47.00 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			3074.00	
Shut In Tool	5.00			3079.00	
Hydraulic tool	5.00			3084.00	
Packer	4.00			3088.00	20.00 Bottom Of Top Packer
Packer	5.00			3093.00	
Stubb	1.00			3094.00	
Perforations	3.00			3097.00	
Recorder	0.00	8018	Inside	3097.00	
Perforations	20.00			3117.00	
Recorder	0.00	13308	Outside	3117.00	
Bullnose	3.00			3120.00	27.00 Bottom Packers & Anchor

Total Tool Length: 47.00



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DRILL STEM TEST REPORT

FLUID SUMMARY

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Joyce Applegate B# 1

PO Box 871
Russell KS 67665

28-9s-12w

Job Ticket: 22265

DST#: 3

ATTN: Gary L. Brungardt

Test Start: 2005.10.10 @ 05:40:10

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:

39000 ppm

Viscosity: 49.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.39 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
110.00	SOCMM-2%O-28%M-70%W	0.541
1.00	Clean oil	0.005

Total Length: 111.00 ft Total Volume: 0.546 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8018

Inside

Brungardt Oil & Leasing, Inc.

28-9s-12w

DST Test Number: 3

