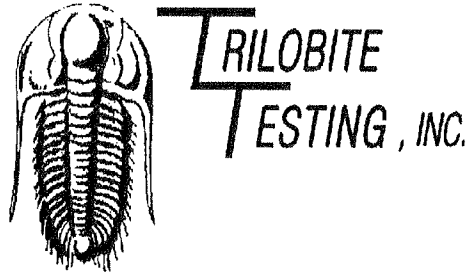


19-17s-25w

19-135-24851-0000

19-17s-25w
NE NW SW NE

KCS



DRILL STEM TEST REPORT

Prepared For: **Pickrell Drilling Co.**

100 S. Main St.
Suite 505
Wichita, KS 67202-3738

ATTN: Max Lovely

19-17s-25w Ness,KS

Norton 'J' #4

Start Date: 2009.01.12 @ 17:14:40

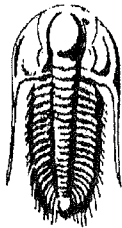
End Date: 2009.01.13 @ 02:17:35

Job Ticket #: 34181 DST #: 1

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Pickrell Drilling Co.

100 S. Main St.
Suite 505
Wichita, KS 67202-3738
ATTN: Max Lovely

Norton 'J' #4

19-17s-25w Ness, KS

Job Ticket: 34181

DST#: 1

Test Start: 2009.01.12 @ 17:14:40

GENERAL INFORMATION:

Formation: **Ft. Scott**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:30:35

Time Test Ended: 02:17:35

Test Type: Conventional Bottom Hole

Tester: Chuck Smith

Unit No: 37

Interval: **4284.00 ft (KB) To 4338.00 ft (KB) (TVD)**

Total Depth: 4338.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2489.00 ft (KB)

2484.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8017 Inside

Press@RunDepth: 55.38 psig @ 4286.00 ft (KB)

Start Date: 2009.01.12

End Date: 2009.01.13

Start Time: 17:14:41

End Time: 02:17:35

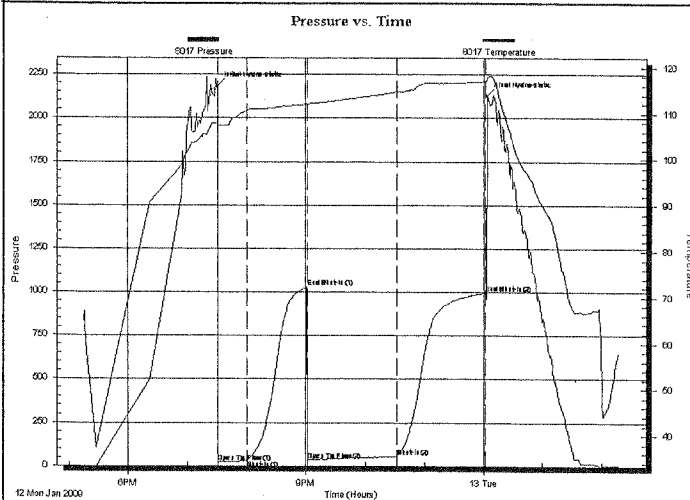
Capacity: 7000.00 psig

Last Calib.: 2009.01.13

Time On Btm: 2009.01.12 @ 19:30:30

Time Off Btm: 2009.01.13 @ 00:04:00

TEST COMMENT: IF: 9" Blow.
IS: No return.
FF: B.O.B. @ 5 min.
FS: No return.



PRESSURE SUMMARY

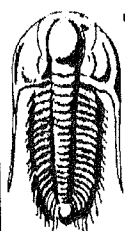
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2182.40	108.12	Initial Hydro-static
1	21.95	107.06	Open To Flow (1)
30	30.63	110.63	Shut-In (1)
92	1029.74	112.02	End Shut-In (1)
92	30.78	111.79	Open To Flow (2)
182	55.38	114.67	Shut-In (2)
272	996.22	117.05	End Shut-In (2)
274	2127.13	117.85	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
90.00	GOCM 15%G 18%O 67%M	1.26
0.00	650 Feet GIP	0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

TOOL DIAGRAM

Pickrell Drilling Co.

100 S. Main St.
Suite 505
Wichita, KS 67202-3738
ATTN: Max Lovely

Norton 'J' #4

19-17s-25w Ness,KS

Job Ticket: 34181

DST#: 1

Test Start: 2009.01.12 @ 17:14:40

Tool Information

Drill Pipe:	Length: 4280.00 ft	Diameter: 3.80 inches	Volume: 60.04 bbl	Tool Weight:	2200.00 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: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	80000.00 lb
		Total Volume:	60.04 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	23.50 ft			String Weight: Initial	66000.00 lb
Depth to Top Packer:	4284.00 ft			Final	67000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	54.00 ft				
Tool Length:	81.50 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			4257.50	
Shut In Tool	5.00			4262.50	
Hydraulic tool	5.00			4267.50	
Jars	5.00			4272.50	
Safety Joint	2.50			4275.00	
Packer	5.00			4280.00	27.50 Bottom Of Top Packer
Packer	4.00			4284.00	
Stubb	1.00			4285.00	
Perforations	1.00			4286.00	
Recorder	0.00	8017	Inside	4286.00	
Recorder	0.00	8351	Inside	4286.00	
Perforations	14.00			4300.00	
Change Over Sub	1.00			4301.00	
Drill Pipe	31.00			4332.00	
Change Over Sub	1.00			4333.00	
Bullnose	5.00			4338.00	54.00 Bottom Packers & Anchor
Total Tool Length:		81.50			



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Pickrell Drilling Co.

Norton 'J' #4

100 S. Main St.
Suite 505
Wichita, KS 67202-3738
ATTN: Max Lovely

19-17s-25w Ness,KS

Job Ticket: 34181

DST#: 1

Test Start: 2009.01.12 @ 17:14:40

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 48.00 sec/qt

Water Loss: 7.98 in³

Resistivity: 0.00 ohm.m

Salinity: 4200.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity:

0 deg API

0 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
90.00	GOCM 15%G 18%O 67%M	1.262
0.00	650 Feet GIP	0.000

Total Length: 90.00 ft

Total Volume: 1.262 bbl

Num Fluid Samples: 0

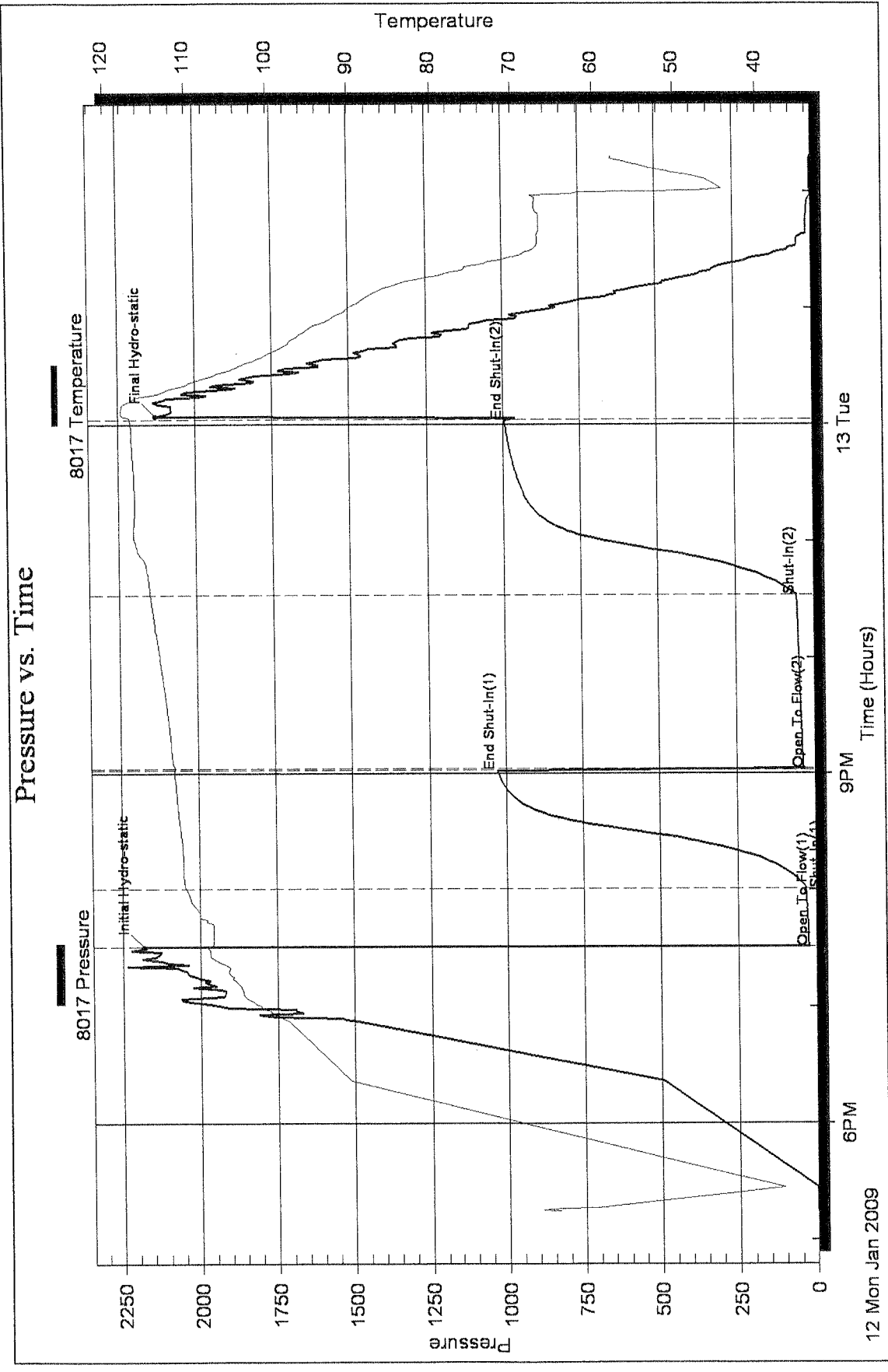
Num Gas Bombs: 0

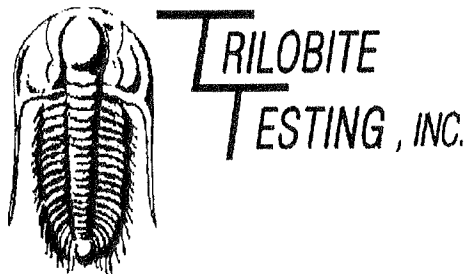
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





DRILL STEM TEST REPORT

Prepared For: **Pickrell Drilling Co.**

100 S. Main St.
Suite 505
Wichita, KS 67202-3738

ATTN: Max Lovely

19-17s-25w Ness,KS

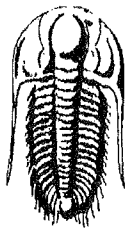
Norton 'J' #4

Start Date: 2009.01.13 @ 20:39:35

End Date: 2009.01.14 @ 05:50:20

Job Ticket #: 34182 DST #: 2

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



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

Pickrell Drilling Co.

100 S. Main St.
Suite 505
Wichita, KS 67202-3738
ATTN: Max Lovely

Norton 'J' #4

19-17s-25w Ness,KS

Job Ticket: 34182

DST#: 2

Test Start: 2009.01.13 @ 20:39:35

GENERAL INFORMATION:

Formation: **Mississippian**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 22:17:20

Time Test Ended: 05:50:20

Test Type: Conventional Bottom Hole

Tester: Chuck Smith

Unit No: 37

Interval: **4400.00 ft (KB) To 4434.00 ft (KB) (TVD)**

Total Depth: 4434.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2489.00 ft (KB)

2484.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8351 Inside

Press@RunDepth: 319.05 psig @ 4404.00 ft (KB)

Start Date: 2009.01.13

End Date: 2009.01.14

Start Time: 20:39:36

End Time: 05:50:20

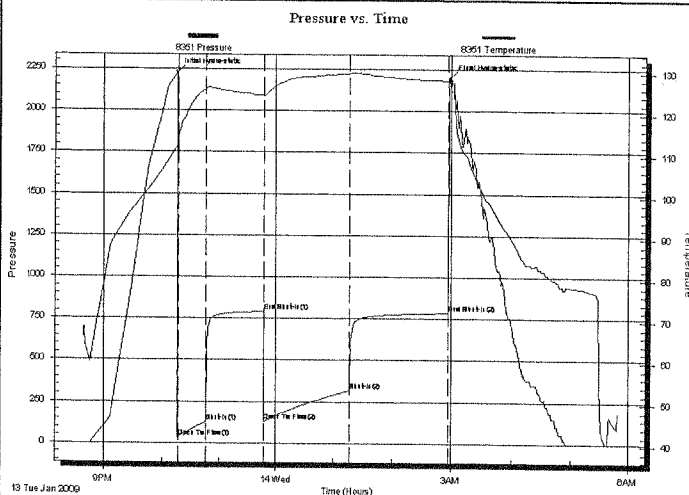
Capacity: 7000.00 psig

Last Calib.: 2009.01.14

Time On Btm: 2009.01.13 @ 22:16:35

Time Off Btm: 2009.01.14 @ 02:59:05

TEST COMMENT: IF: BOB @ 13 min.
IS: No return.
FF: BOB @ 17 min.
FS: 2" Return.



PRESSURE SUMMARY

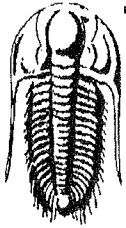
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2227.44	112.28	Initial Hydro-static
1	33.32	112.07	Open To Flow (1)
31	129.04	125.95	Shut-In(1)
91	791.24	124.48	End Shut-In(1)
91	131.36	124.33	Open To Flow (2)
181	319.05	129.74	Shut-In(2)
280	784.17	128.14	End Shut-In(2)
283	2197.85	127.11	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
122.00	MW 5%M 95%W	1.71
122.00	GOCMW 15%G 5%O 40%W 40%M	1.71
122.00	GOCM 10%G 10%O 80%M	1.71
244.00	GO 35%G 65%O	3.42
130.00	GO 20%G 80%O	1.82
0.00	366 Feet GIP	0.00

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Pickrell Drilling Co.

Norton 'J' #4

100 S. Main St.
Suite 505
Wichita, KS 67202-3738
ATTN: Max Lovely

19-17s-25w Ness, KS

Job Ticket: 34182

DST#: 2

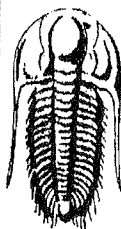
Test Start: 2009.01.13 @ 20:39:35

Tool Information

Drill Pipe:	Length: 4405.00 ft	Diameter: 3.80 inches	Volume: 61.79 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 24000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 85000.00 lb
			<u>Total Volume: 61.79 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	32.50 ft			String Weight: Initial 65000.00 lb
Depth to Top Packer:	4400.00 ft			Final 68000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	34.00 ft			
Tool Length:	61.50 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			4373.50	
Shut In Tool	5.00			4378.50	
Hydraulic tool	5.00			4383.50	
Jars	5.00			4388.50	
Safety Joint	2.50			4391.00	
Packer	5.00			4396.00	27.50 Bottom Of Top Packer
Packer	4.00			4400.00	
Stubb	1.00			4401.00	
Perforations	3.00			4404.00	
Recorder	0.00	8017	Inside	4404.00	
Recorder	0.00	8351	Inside	4404.00	
Perforations	25.00			4429.00	
Bullnose	5.00			4434.00	34.00 Bottom Packers & Anchor

Total Tool Length: 61.50



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Pickrell Drilling Co.

Norton 'J' #4

100 S. Main St.
Suite 505
Wichita, KS 67202-3738
ATTN: Max Lovely

19-17s-25w Ness, KS

Job Ticket: 34182

DST#: 2

Test Start: 2009.01.13 @ 20:39:35

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 57.00 sec/qt

Water Loss: 7.19 in³

Resistivity: 0.00 ohm.m

Salinity: 4800.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

38 deg API

Water Salinity:

20000 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
122.00	MW 5%M 95%W	1.711
122.00	GOCMW 15%G 5%O 40%W 40%M	1.711
122.00	GOCM 10%G 10%O 80%M	1.711
244.00	GO 35%G 65%O	3.423
130.00	GO 20%G 80%O	1.824
0.00	366 Feet GIP	0.000

Total Length: 740.00 ft

Total Volume: 10.380 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: API:38 @ 60 Degrees F = 38.

RW: .450 @ 50 Degrees F = 20000 chlorides.

Pressure vs. Time

