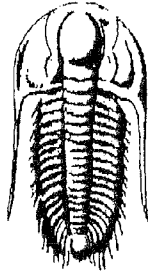


15-135-24264

19-19s-23w



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Norstar Petroleum Inc.**

5 Laverness Dr E Ste120
Englewood, Co.80112

ATTN: Per Burchardt

19-19s-23w Ness KS

Rumble # 2-19

Start Date: 2004.02.14 @ 17:51:03

End Date: 2004.02.15 @ 00:13:03

Job Ticket #: 18275 DST #: 1

API 15-135-24264-00-00

N2 S2 NE

1760 FNL 1320 FEL

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Norstar Petroleum Inc.

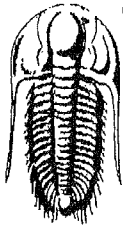
Rumble # 2-19

19-19s-23w Ness KS

DST # 1

Cherokee

2004.02.14



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Norstar Petroleum Inc.
5 Lnverness Dr E Ste120
Englewood, Co.80112
ATTN: Per Burchardt

Rumble # 2-19
19-19s-23w Ness KS
Job Ticket: 18275 **DST#: 1**
Test Start: 2004.02.14 @ 17:51:03

GENERAL INFORMATION:

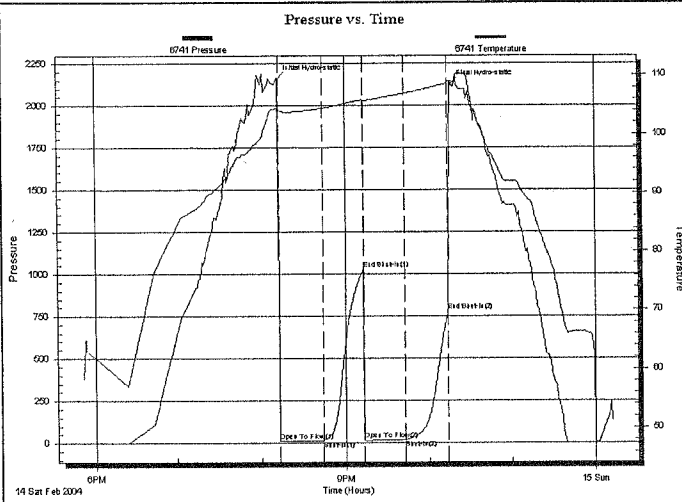
Formation: **Cherokee**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 20:13:03
Time Test Ended: 00:13:03
Interval: **4347.00 ft (KB) To 4386.00 ft (KB) (TVD)**
Total Depth: 4386.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole
Tester: John Schridt
Unit No: 18
Reference Elevations: 2294.00 ft (KB)
2286.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 6741

Inside

Press@RunDepth: 16.66 psig @ 4354.00 ft (KB) Capacity: 7000.00 psig
Start Date: 2004.02.14 End Date: 2004.02.15 Last Calib.: 2004.02.15
Start Time: 17:51:04 End Time: 00:13:03 Time On Btm: 2004.02.14 @ 20:12:33
Time Off Btm: 2004.02.14 @ 22:16:33

TEST COMMENT: IF-Weak dead in 20 min. IS-Dead
FF-Dead FSI-Dead



PRESSURE SUMMARY

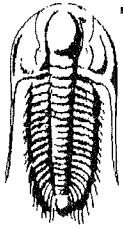
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2156.23	104.22	Initial Hydro-static
1	12.69	104.05	Open To Flow (1)
32	14.93	104.37	Shut-In(1)
61	1028.20	105.80	End Shut-In(1)
61	15.65	105.69	Open To Flow (2)
90	16.66	106.87	Shut-In(2)
122	777.55	108.58	End Shut-In(2)
124	2124.81	108.86	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
7.00	OCM-10%oil-90%mud	0.10
3.00	free oil	0.04

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Norstar Petroleum Inc.

Rumble # 2-19

5 Lnverness Dr E Ste120
Englewood, Co.80112

19-19s-23w Ness KS

ATTN: Per Burchardt

Job Ticket: 18275

DST#: 1

Test Start: 2004.02.14 @ 17:51:03

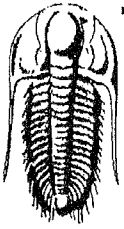
Tool Information

Drill Pipe:	Length: 4355.00 ft	Diameter: 3.80 inches	Volume: 61.09 bbl	Tool Weight: 3000.00 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: 75000.00 lb
			<u>Total Volume: 61.09 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 72000.00 lb
Depth to Top Packer:	4347.00 ft			Final 72000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	39.00 ft			
Tool Length:	61.00 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			4326.00	
Shut In Tool	5.00			4331.00	
Hydraulic tool	5.00			4336.00	
Safety Joint	2.00			4338.00	
Packer	4.00			4342.00	22.00 Bottom Of Top Packer
Packer	5.00			4347.00	
Stubb	1.00			4348.00	
Perforations	6.00			4354.00	
Recorder	0.00	6741	Inside	4354.00	
Perforations	29.00			4383.00	
Recorder	0.00	13308	Outside	4383.00	
Bullnose	3.00			4386.00	39.00 Bottom Packers & Anchor

Total Tool Length: 61.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Norstar Petroleum Inc.
5 Lnaveress Dr E Ste120
Englewood, Co.80112
ATTN: Per Burchardt

Rumble # 2-19
19-19s-23w Ness KS
Job Ticket: 18275 DST#: 1
Test Start: 2004.02.14 @ 17:51:03

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:	48.00 sec/qt	Cushion Volume:	bbbl		
Water Loss:	9.18 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 bbbl
7.00	OCM-10%oil-90%mud	0.098
3.00	free oil	0.042

Total Length: 10.00 ft Total Volume: 0.140 bbl

Num Fluid Samples: 0

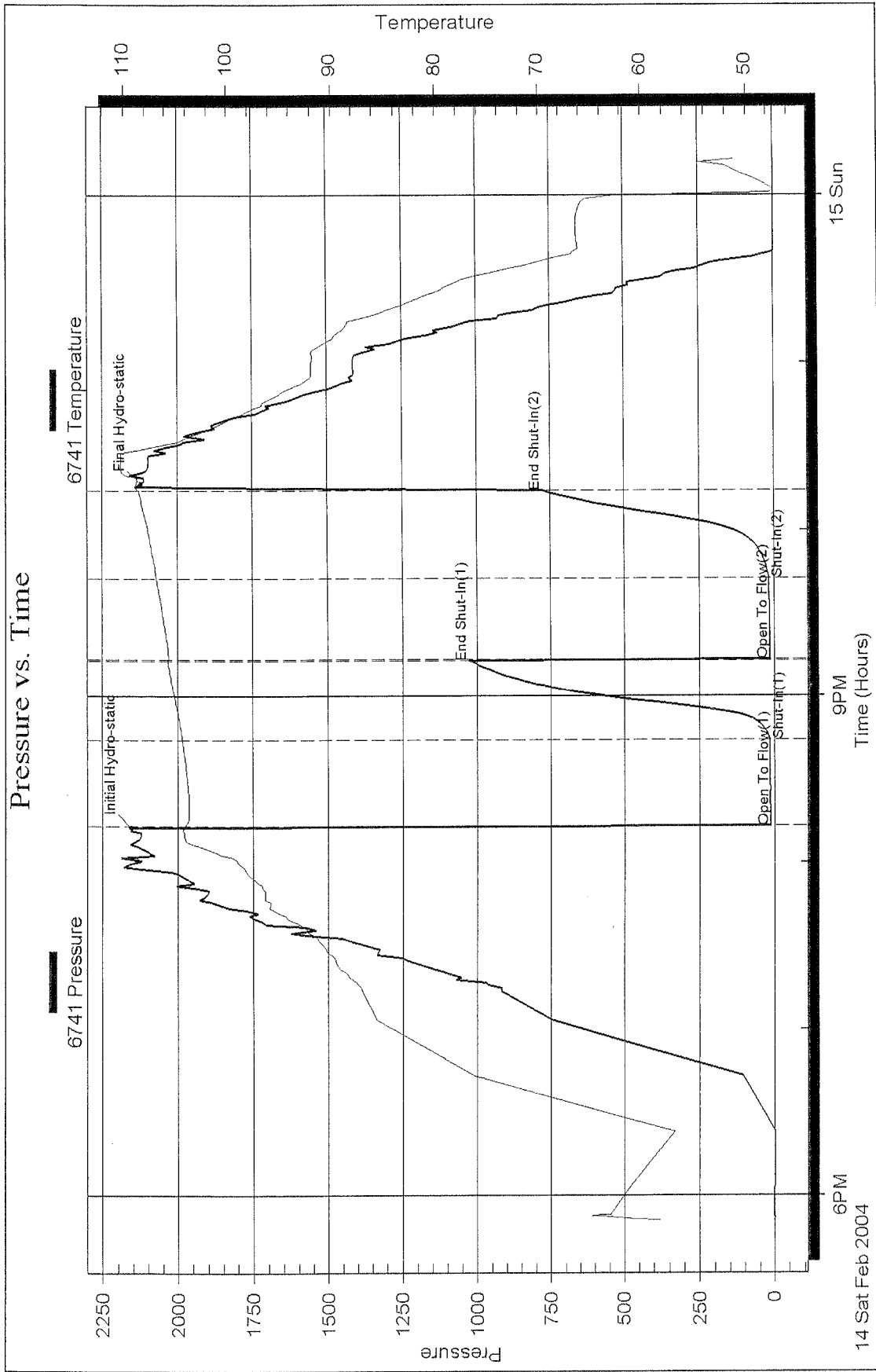
Num Gas Bombs: 0

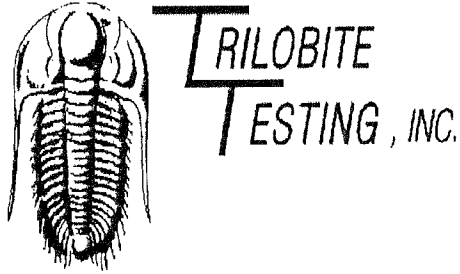
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





DRILL STEM TEST REPORT

Prepared For: **Norstar Petroleum Inc.**

5 Lnverness Dr E Ste120
Englewood, Co.80112

ATTN: Per Burchardt

19-19s-23w Ness KS

Rumble # 2-19

Start Date: 2004.02.15 @ 07:56:27

End Date: 2004.02.15 @ 13:29:27

Job Ticket #: 18576

DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Norstar Petroleum Inc.

Rumble # 2-19

19-19s-23w Ness KS

DST # 2

Cherokee

2004.02.15



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Norstar Petroleum Inc.
5 Lnverness Dr E Ste120
Englewood, Co.80112
ATTN: Per Burchardt

Rumble # 2-19
19-19s-23w Ness KS
Job Ticket: 18576 **DST#: 2**
Test Start: 2004.02.15 @ 07:56:27

GENERAL INFORMATION:

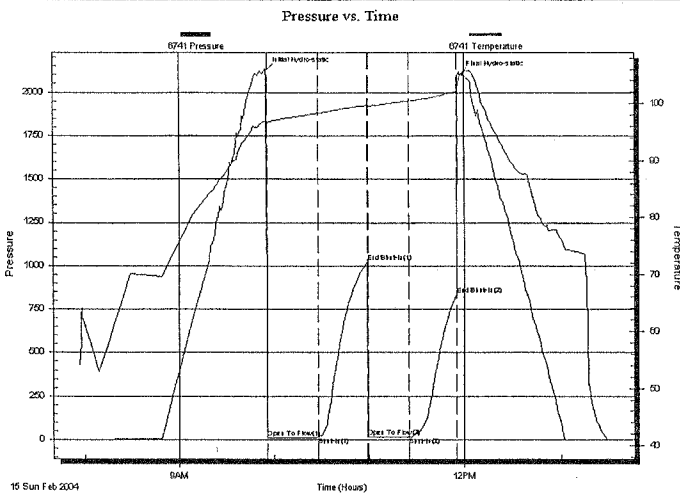
Formation: **Cherokee**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 09:55:27
Time Test Ended: 13:29:27
Test Type: Conventional Bottom Hole
Tester: John Schmidt
Unit No: 18
Interval: **4347.00 ft (KB) To 4393.00 ft (KB) (TVD)**
Reference Elevations: 2294.00 ft (KB)
Total Depth: 4393.00 ft (KB) (TVD) 2286.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 8.00 ft

Serial #: 6741

Inside

Press@RunDepth: 17.11 psig @ 4350.00 ft (KB) Capacity: 7000.00 psig
Start Date: 2004.02.15 End Date: 2004.02.15 Last Calib.: 2004.02.15
Start Time: 07:56:28 End Time: 13:29:27 Time On Btm: 2004.02.15 @ 09:54:57
Time Off Btm: 2004.02.15 @ 11:57:57

TEST COMMENT: IF-Weak Dead in 7 min. ISI-Dead
FF-Dead FSI-Dead



PRESSURE SUMMARY

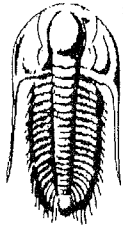
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2125.22	96.85	Initial Hydro-static
1	11.96	96.70	Open To Flow (1)
33	14.48	98.30	Shut-In(1)
64	1023.06	99.69	End Shut-In(1)
65	15.35	99.57	Open To Flow (2)
91	17.11	100.47	Shut-In(2)
121	835.80	102.12	End Shut-In(2)
123	2101.82	105.00	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
9.00	OCM-5%oil-95%mud	0.13
1.00	free oil	0.01

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Norstar Petroleum Inc.

Rumble # 2-19

5 Lnverness Dr E Ste120
Englewood, Co.80112

19-19s-23w Ness KS

ATTN: Per Burchardt

Job Ticket: 18576

DST#: 2

Test Start: 2004.02.15 @ 07:56:27

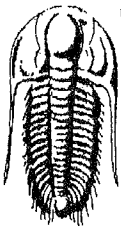
Tool Information

Drill Pipe:	Length: 4355.00 ft	Diameter: 3.80 inches	Volume: 61.09 bbl	Tool Weight: 3000.00 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: 85000.00 lb
			<u>Total Volume: 61.09 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 72000.00 lb
Depth to Top Packer:	4347.00 ft			Final 72000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	46.00 ft			
Tool Length:	68.00 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			4326.00	
Shut In Tool	5.00			4331.00	
Hydraulic tool	5.00			4336.00	
Safety Joint	2.00			4338.00	
Packer	4.00			4342.00	22.00 Bottom Of Top Packer
Packer	5.00			4347.00	
Stubb	1.00			4348.00	
Perforations	1.00			4349.00	
Change Over Sub	1.00			4350.00	
Recorder	0.00	6741	Inside	4350.00	
Blank Spacing	31.00			4381.00	
Change Over Sub	1.00			4382.00	
Recorder	0.00	11084	Outside	4382.00	
Perforations	8.00			4390.00	
Bullnose	3.00			4393.00	46.00 Bottom Packers & Anchor

Total Tool Length: 68.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Norstar Petroleum Inc.
5 Lnaveress Dr E Ste120
Englew ood, Co.80112
ATTN: Per Burchardt

Rumble # 2-19
19-19s-23w Ness KS
Job Ticket: 18576 **DST#:2**
Test Start: 2004.02.15 @ 07:56:27

Mud and Cushion Information

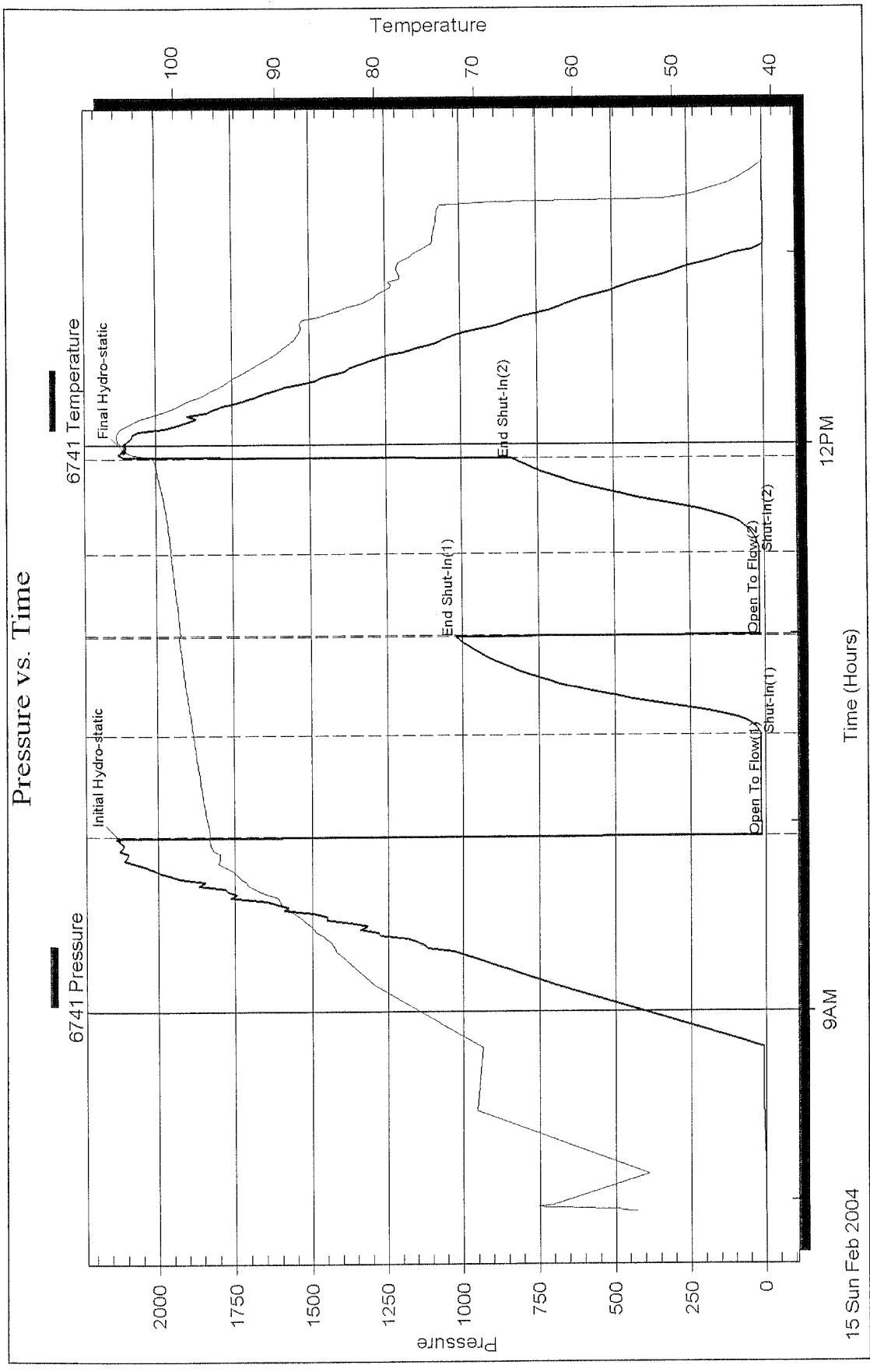
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 48.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.18 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: ppm			
Filter Cake: inches			

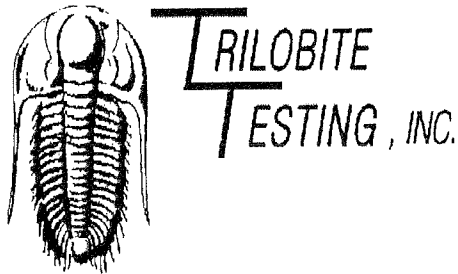
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
9.00	OCM-5%oil-95%mud	0.126
1.00	free oil	0.014

Total Length: 10.00 ft Total Volume: 0.140 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:





DRILL STEM TEST REPORT

Prepared For: **Norstar Petroleum Inc.**

5 Lnverness Dr E Ste120
Englewood, Co.80112

ATTN: Per Burchardt

19-19s-23w Ness KS

Rumble # 2-19

Start Date: 2004.02.16 @ 12:33:56

End Date: 2004.02.16 @ 21:09:26

Job Ticket #: 18577 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Norstar Petroleum Inc.

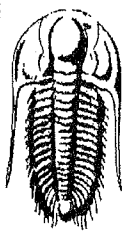
Rumble # 2-19

19-19s-23w Ness KS

DST # 3

Cherokee

2004.02.16



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Norstar Petroleum Inc.
 5 Lnaveress Dr E Ste120
 Englewood, Co.80112
 ATTN: Per Burchardt

Rumble # 2-19
19-19s-23w Ness KS
 Job Ticket: 18577 **DST#: 3**
 Test Start: 2004.02.16 @ 12:33:56

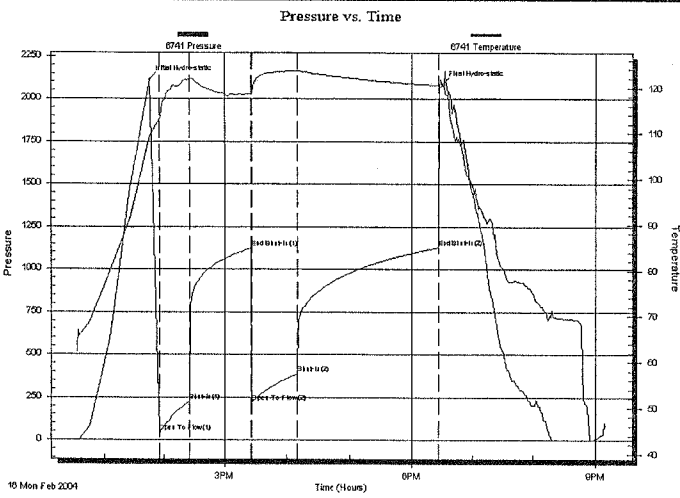
GENERAL INFORMATION:

Formation: **Cherokee**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Straddle
 Time Tool Opened: 13:55:56 Tester: John Schmidt
 Time Test Ended: 21:09:26 Unit No: 18
 Interval: **4347.00 ft (KB) To 4413.00 ft (KB) (TVD)** Reference Elevations: 2294.00 ft (KB)
 Total Depth: 4482.00 ft (KB) (TVD) 2286.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 8.00 ft

Serial #: 6741

Inside
 Press@RunDepth: 388.10 psig @ 4384.00 ft (KB) Capacity: 7000.00 psig
 Start Date: 2004.02.16 End Date: 2004.02.16 Last Calib.: 2004.02.16
 Start Time: 12:33:57 End Time: 21:09:26 Time On Btm: 2004.02.16 @ 13:45:56
 Time Off Btm: 2004.02.16 @ 18:29:26

TEST COMMENT: IF-Strong B.O.B.5 min.. ISI-Dead
 FF-Strong B.O.B.10 min. FSI-Dead



PRESSURE SUMMARY

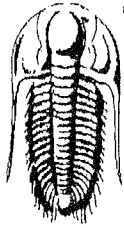
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2113.59	109.53	Initial Hydro-static
10	43.30	113.03	Open To Flow (1)
40	224.00	122.04	Shut-In(1)
100	1123.94	118.74	End Shut-In(1)
101	222.40	118.66	Open To Flow(2)
144	388.10	123.69	Shut-In(2)
281	1129.21	120.50	End Shut-In(2)
284	2087.51	120.46	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
270.00	S.Water	3.79
120.00	M.Water--70%W-30%M	1.68
420.00	W.Mud--30%W--70%M	5.89

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Norstar Petroleum Inc.
5 Lnverness Dr E Ste120
Englewood, Co.80112
ATTN: Per Burchardt

Rumble # 2-19
19-19s-23w Ness KS
Job Ticket: 18577 **DST#: 3**
Test Start: 2004.02.16 @ 12:33:56

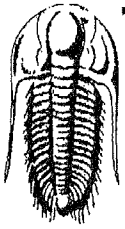
Tool Information

Drill Pipe:	Length: 4355.00 ft	Diameter: 3.80 inches	Volume: 61.09 bbl	Tool Weight: 4000.00 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: 83000.00 lb
			<u>Total Volume: 61.09 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 70000.00 lb
Depth to Top Packer:	4347.00 ft			Final 77000.00 lb
Depth to Bottom Packer:	4413.00 ft			
Interval between Packers:	66.00 ft			
Tool Length:	161.00 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			4326.00	
Shut In Tool	5.00			4331.00	
Hydraulic tool	5.00			4336.00	
Safety Joint	2.00			4338.00	
Packer	4.00			4342.00	22.00 Bottom Of Top Packer
Packer	5.00			4347.00	
Stubb	1.00			4348.00	
Perforations	3.00			4351.00	
Change Over Sub	1.00			4352.00	
Blank Spacing	31.00			4383.00	
Change Over Sub	1.00			4384.00	
Recorder	0.00	6741	Inside	4384.00	
Perforations	28.00			4412.00	
Recorder	0.00	13308	Outside	4412.00	
Blank Off Sub	1.00			4413.00	66.00 Tool Interval
Packer	4.00			4417.00	
Stubb	1.00			4418.00	
Change Over Sub	1.00			4419.00	
Recorder	0.00	11084	Below	4419.00	
Blank Spacing	63.00			4482.00	
Change Over Sub	1.00			4483.00	
Bullnose	3.00			4486.00	73.00 Bottom Packers & Anchor

Total Tool Length: 161.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Norstar Petroleum Inc.

Rumble # 2-19

5 Lnaveress Dr E Ste120
Englewood, Co.80112

19-19s-23w Ness KS

Job Ticket: 18577

DST#: 3

ATTN: Per Burchardt

Test Start: 2004.02.16 @ 12:33:56

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:

36000 ppm

Viscosity: 48.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.18 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
270.00	S.Water	3.787
120.00	M.Water--70%W-30%M	1.683
420.00	W.Mud--30%W--70%M	5.891

Total Length: 810.00 ft Total Volume: 11.361 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

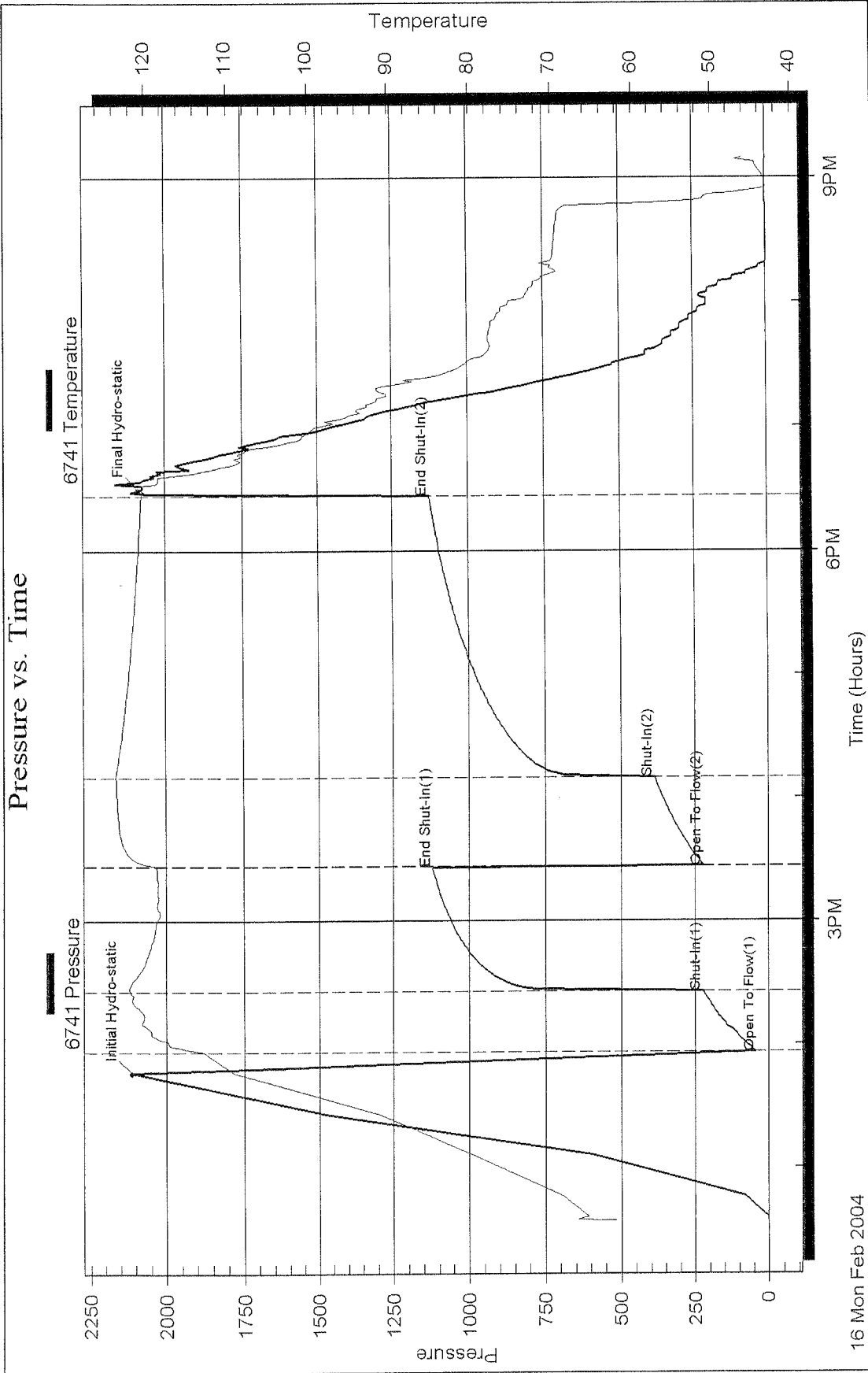
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time



16 Mon Feb 2004