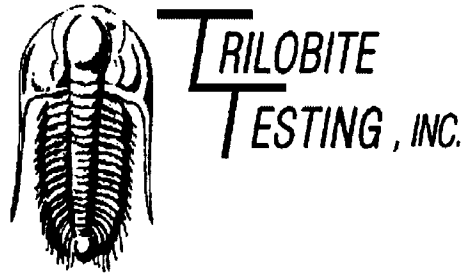


15-135-24298

18-18s-24w



## DRILL STEM TEST REPORT

Prepared For: **Norstar Petroleum Inc.**

5 Inverness Drive  
E. Ste #120  
Englewood CO 80112

ATTN: Per Burchardt

**18-18s-24w**

**Dinges # 2-18**

Start Date: 2004.08.01 @ 17:15:29

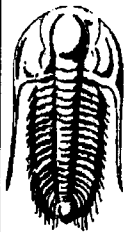
End Date: 2004.08.02 @ 02:11:59

Job Ticket #: 19361                      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

Norstar Petroleum Inc.  
5 Inverness Drive  
E Ste #120  
Englewood CO 80112  
ATTN: Per Burchardt

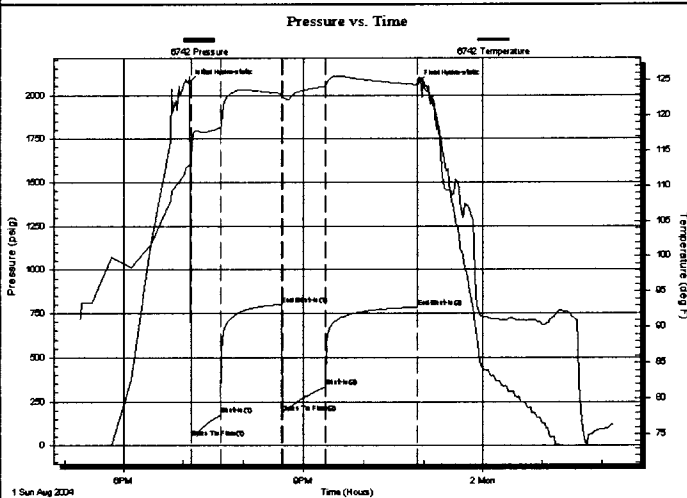
**Dinges # 2-18**  
**18-18s-24w**  
Job Ticket: 19361      **DST#: 1**  
Test Start: 2004.08.01 @ 17:15:29

## GENERAL INFORMATION:

Formation: **Cherokee**  
Deviated: **No** Whipstock:                      ft (KB)  
Time Tool Opened: 19:07:59  
Time Test Ended: 02:11:59  
Interval: **4294.00 ft (KB) To 4337.00 ft (KB) (TVD)**  
Total Depth: **4337.00 ft (KB) (TVD)**  
Hole Diameter: **7.88 inches** Hole Condition: **Fair**  
Test Type: **Conventional Bottom Hole**  
Tester: **John Schmidt**  
Unit No: **18**  
Reference Elevations: **2334.00 ft (KB)**  
**2326.00 ft (CF)**  
KB to GR/CF: **8.00 ft**

**Serial #: 6742**      **Inside**  
Press@RunDepth: **333.65 psig @ 4297.00 ft (KB)**      Capacity: **7000.00 psig**  
Start Date: **2004.08.01**      End Date: **2004.08.02**      Last Calib.: **2004.08.02**  
Start Time: **17:15:34**      End Time: **02:11:59**      Time On Btm: **2004.08.01 @ 19:05:29**  
Time Off Btm: **2004.08.01 @ 22:53:59**

TEST COMMENT: **FF-Strong B.O.B. in 6 min.**      **ISI-Good blow back 3" in.**  
**FF-Strong B.O.B. in 7 min.**      **FSI-Weak surface blow back.**



## PRESSURE SUMMARY

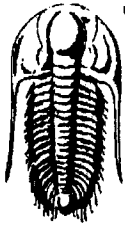
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2070.12	112.80	Initial Hydro-static
3	45.46	112.87	Open To Flow (1)
32	176.99	118.35	Shut-In(1)
93	800.61	123.11	End Shut-In(1)
94	187.98	122.77	Open To Flow (2)
136	333.65	124.14	Shut-In(2)
228	784.92	124.33	End Shut-In(2)
229	2063.57	124.73	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
150.00	GMCO-20%G-15%M-65%Oil	2.10
720.00	Clean Gassy Oil	10.10
0.00	340 gas in pipe	0.00

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

Norstar Petroleum Inc.  
5 Inverness Drive  
E Ste #120  
Englewood CO 80112  
ATTN: Per Burchardt

**Dinges # 2-18**  
**18-18s-24w**  
Job Ticket: 19361      **DST#: 1**  
Test Start: 2004.08.01 @ 17:15:29

**Tool Information**

Drill Pipe:	Length: 4295.00 ft	Diameter: 3.80 inches	Volume: 60.25 bbl	Tool Weight: 2300.00 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: 70000.00 lb
			<u>Total Volume: 60.25 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	23.00 ft			String Weight: Initial 55000.00 lb
Depth to Top Packer:	4294.00 ft			Final 59000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	43.00 ft			
Tool Length:	65.00 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			4273.00	
Shut In Tool	5.00			4278.00	
Safety Joint	2.00			4280.00	
Hydraulic tool	5.00			4285.00	
Packer	4.00			4289.00	22.00 Bottom Of Top Packer
Packer	5.00			4294.00	
Stubb	1.00			4295.00	
Perforations	1.00			4296.00	
Change Over Sub	1.00			4297.00	
Recorder	0.00	6742	Inside	4297.00	
Blank Spacing	31.00			4328.00	
Change Over Sub	1.00			4329.00	
Perforations	5.00			4334.00	
Recorder	0.00	13308	Outside	4334.00	
Bullnose	3.00			4337.00	43.00 Bottom Packers & Anchor

**Total Tool Length: 65.00**



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**FLUID SUMMARY**

Norstar Petroleum Inc.

**Dinges # 2-18**

5 Inverness Drive  
E Ste #120  
Englewood CO 80112  
ATTN: Per Burchardt

**18-18s-24w**

Job Ticket: 19361

**DST#: 1**

Test Start: 2004.08.01 @ 17:15:29

### Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

38 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 46.00 sec/qt

Cushion Volume:

bbl

Water Loss: 10.18 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
150.00	GMCO-20%G-15%M-65%Oil	2.104
720.00	Clean Gassy Oil	10.100
0.00	340 gas in pipe	0.000

Total Length: 870.00 ft

Total Volume: 12.204 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6742

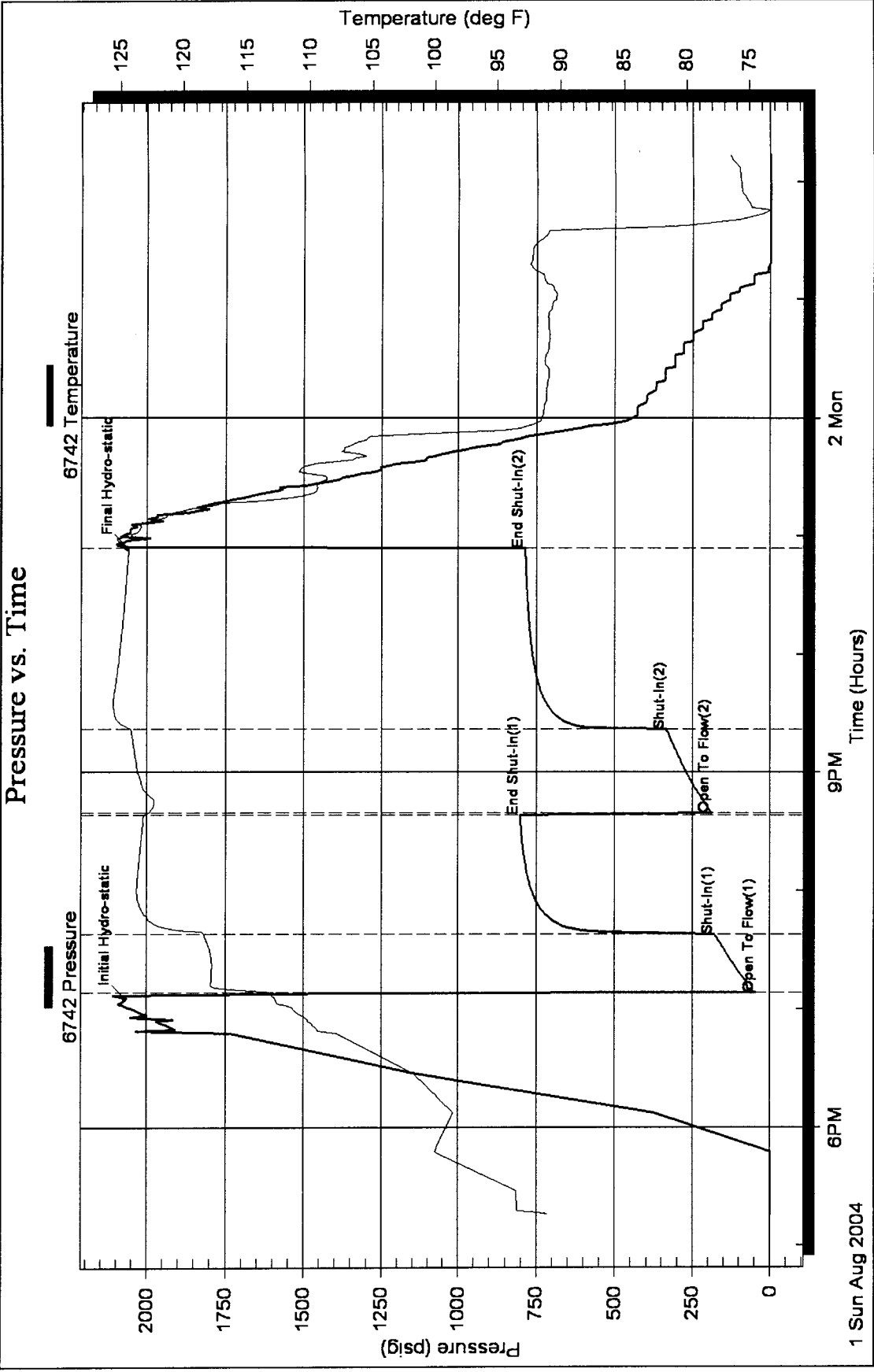
Inside

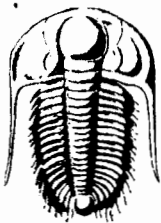
Norstar Petroleum Inc.

18--18s--24w

DST Test Number: 1

### Pressure vs. Time





# TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

INV  
6652

No. 19361

05/03

## Test Ticket

Well Name & No. DINGES # 2-18 Test No. #1 Date 8-1-04  
 Company NORSTAR PETROLEUM INC. Zone Tested CHEROKEE  
 Address 5 INVESS DRIVE E, STE. 720 ENGLEWOOD, CO 80112 Elevation 2334 KB 2326 GL  
 Co. Rep / Geo. JOHN ROSE Cont. DISCOVERY #1 Est. Ft. of Pay \_\_\_\_\_ Por. \_\_\_\_\_ %  
 Location: Sec. 18 Twp. 18s Rge. 24w Co. NESS State KS  
 No. of Copies \_\_\_\_\_ Disbtribution Sheet (Y, N) \_\_\_\_\_ Turnkey (Y, N) \_\_\_\_\_ Evaluation (Y, N) \_\_\_\_\_

Interval Tested 4294 TO 4337 Initial Str Wt./Lbs. 55,000 Unseated Str Wt./Lbs. 59,000  
 Anchor Length 43' Wt. Set Lbs. 25,000 Wt. Pulled Loose/Lbs. 70,000  
 Top Packer Depth 4289 Tool Weight 2,300  
 Bottom Packer Depth 4294 Hole Size 7 7/8"  Rubber Size 6 3/4"   
 Total Depth 4337 Wt. Pipe Run 0 Drill Collar Run 0  
 Mud Wt. 9.3 LCM 1/2 Vis. 46 WL 10.2 Drill Pipe Size 4 1/2 XH Ft. Run 4295  
 Blow Description IF-STRONG B.O.B. 6-MIN. FSI- GOOD BLOW BACK 3" IN.  
FF-STRONG B.O.B. 7-MIN. FSI-WEAR SURFACE BLOW BACK

Recovery - Total Feet	GIP	Ft. in DC	Ft. in DP
<u>870</u>	<u>340</u>	<u>0</u>	<u>870</u>
Rec. <u>150</u>	Feet of <u>GMCO</u>	<u>20%</u> gas <u>65%</u> oil	<u>15%</u> water <u>0%</u> mud
Rec. <u>720</u>	Feet of <u>C.G.O.</u>	<u>10%</u> gas <u>90%</u> oil	<u>0%</u> water <u>0%</u> mud
Rec. _____	Feet of _____	<u>0%</u> gas <u>0%</u> oil	<u>0%</u> water <u>0%</u> mud
Rec. _____	Feet of _____	<u>0%</u> gas <u>0%</u> oil	<u>0%</u> water <u>0%</u> mud
Rec. _____	Feet of _____	<u>0%</u> gas <u>0%</u> oil	<u>0%</u> water <u>0%</u> mud
BHT <u>124</u>	°F Gravity <u>40</u>	°API D @ <u>80</u>	°F Corrected Gravity <u>38</u> °API
RW _____	@ _____ °F	Chlorides _____ ppm	Recovery _____ Chlorides _____ ppm System

AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud	<u>2070</u> PSI	<u>6742</u>	<u>B. HOLE 1000</u>
(B) First Initial Flow Pressure	<u>45</u> PSI	(depth) <u>4297</u>	Elec. Rec. <input checked="" type="checkbox"/>
(C) First Final Flow Pressure	<u>176</u> PSI	Recorder No. <u>13308</u>	Jars _____
(D) Initial Shut-In Pressure	<u>800</u> PSI	(depth) <u>4334</u>	Safety Jt. <input checked="" type="checkbox"/> <u>50</u>
(E) Second Initial Flow Pressure	<u>187</u> PSI	Recorder No. _____	Circ Sub _____
(F) Second Final Flow Pressure	<u>333</u> PSI	(depth) _____	Sampler _____
(G) Final Shut-In Pressure	<u>784</u> PSI	<b>Initial Opening</b> <u>30</u>	Straddle _____
(Q) Final Hydrostatic Mud	<u>2063</u> PSI	Initial Shut-In <u>60</u>	Ext. Packer _____
		Final Flow <u>45</u>	Shale Packer _____
		Final Shut-In <u>90</u>	Mileage <u>120 2-way 102</u>
		<b>T-On Location</b> <u>16:00</u>	Sub Total: <u>1152</u>
		T-Started <u>17:15</u>	Std. By <u>1/4</u> <u>37.50</u>
		T-Open <u>19:07</u>	Other _____
		T-Pulled <u>22:53</u>	Total: <u>1189.50</u>
		T-Out <u>02:11</u>	

TRILLOBITE TESTING INC. SHALL NOT BE LIABLE FOR DAMAGED OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Approved By [Signature]  
 Our Representative John J. Schmidt

**CHART PAGE**

This is a photocopy of the actual AK-1 recorder chart

13308  
DST# 1

