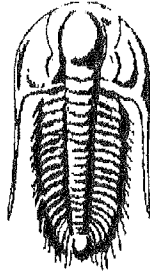


15-033-21526

32-32s-20w

IND



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: John O. Farmer, Inc.

P.O. Box 352
Russell, KS 67665

ATTN: Steve Murphy

32-32s-20w Comanche

Frink Unit B#1

Start Date: 2008.07.22 @ 01:48:49

End Date: 2008.07.22 @ 10:52:19

Job Ticket #: 31726 DST #: 1

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

John O. Farmer, Inc.

Frink Unit B#1

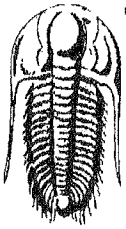
32-32s-20w Comanche

DST # 1

Morrow Sand

2008.07.22

CONFIDENTIAL
JUL 16 2008
KCC



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

John O. Farmer, Inc.

Frink Unit B#1

P.O. Box 352
Russell, KS 67665

32-32s-20w Comanche

ATTN: Steve Murphy

Job Ticket: 31726

DST#: 1

Test Start: 2008.07.22 @ 01:48:49

GENERAL INFORMATION:

Formation: **Morrow Sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:27:04

Time Test Ended: 10:52:19

Test Type: Conventional Bottom Hole

Tester: Esak Hadley

Unit No: 23

Interval: **5110.00 ft (KB) To 5158.00 ft (KB) (TVD)**

Total Depth: 5158.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1868.00 ft (KB)

1858.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: 8370 Inside

Press@RunDepth: 74.70 psig @ 5111.00 ft (KB)

Start Date: 2008.07.22

End Date: 2008.07.22

Capacity: 7000.00 psig

Last Calib.: 2008.07.22

Start Time: 01:48:54

End Time: 10:52:19

Time On Btm: 2008.07.22 @ 05:25:04

Time Off Btm: 2008.07.22 @ 08:18:33

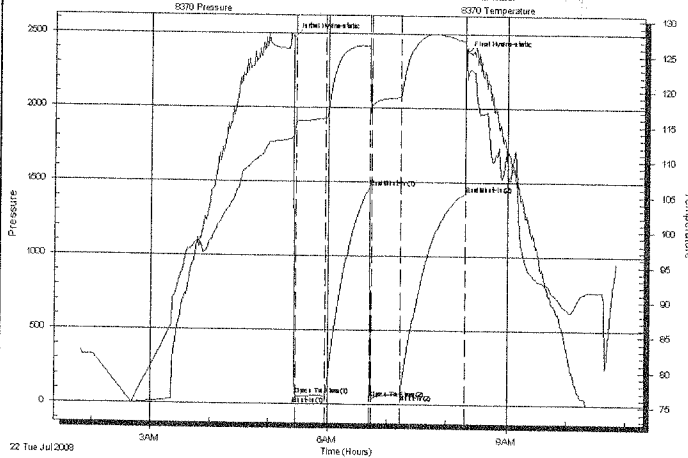
TEST COMMENT: IF: Strong blow. BOB in 15 sec. GTS in 28 min. (see gas flow report).

IS: No blow.

FF: Strong blow. BOB in 2 sec. (see gas flow report).

FS: No blow.

Pressure vs. Time



PRESSURE SUMMARY

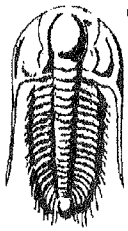
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2479.11	113.43	Initial Hydro-static
2	58.38	115.14	Open To Flow (1)
32	52.89	116.05	Shut-In(1)
77	1465.25	126.27	End Shut-In(1)
79	39.81	118.05	Open To Flow(2)
109	74.70	119.04	Shut-In(2)
173	1426.67	127.04	End Shut-In(2)
174	2368.92	127.95	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
100.00	GCM 3%G 97%M	1.40

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.13	18.00	12.13
Last Gas Rate	0.13	33.00	17.74
Max. Gas Rate	0.13	33.00	17.74



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

John O. Farmer, Inc.

Frink Unit B#1

P.O. Box 352
Russell, KS 67665

32-32s-20w Comanche

Job Ticket: 31726

DST#: 1

ATTN: Steve Murphy

Test Start: 2008.07.22 @ 01:48:49

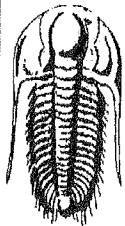
Tool Information

Drill Pipe:	Length: 5100.00 ft	Diameter: 3.80 inches	Volume: 71.54 bbl	Tool Weight: 2100.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 22000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 95000.00 lb
			Total Volume: 71.54 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	18.00 ft			String Weight: Initial 75000.00 lb
Depth to Top Packer:	5110.00 ft			Final 76000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	48.00 ft			
Tool Length:	76.00 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			5083.00	
Shut In Tool	5.00			5088.00	
Hydraulic tool	5.00			5093.00	
Jars	5.00			5098.00	
Safety Joint	3.00			5101.00	
Packer	4.00			5105.00	28.00 Bottom Of Top Packer
Packer	5.00			5110.00	
Stubb	1.00			5111.00	
Recorder	0.00	8370	Inside	5111.00	
Recorder	0.00	8289	Inside	5111.00	
Perforations	8.00			5119.00	
Change Over Sub	1.00			5120.00	
Blank Spacing	32.00			5152.00	
Change Over Sub	1.00			5153.00	
Bullnose	5.00			5158.00	48.00 Bottom Packers & Anchor

Total Tool Length: 76.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

John O. Farmer, Inc.

Frink Unit B#1

P.O. Box 352
Russell, KS 67665

32-32s-20w Comanche

Job Ticket: 31726 **DST#: 1**

ATTN: Steve Murphy

Test Start: 2008.07.22 @ 01:48:49

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 59.00 sec/qt

Water Loss: 7.98 in³

Resistivity: 0.00 ohm.m

Salinity: 4000.00 ppm

Filter Cake: 0.20 inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API: deg API

Water Salinity: ppm

Recovery Information

Recovery Table

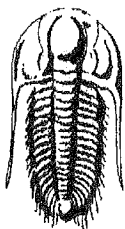
Length ft	Description	Volume bbl
100.00	GCM 3%G 97%M	1.403

Total Length: 100.00 ft Total Volume: 1.403 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

GAS RATES

John O. Farmer, Inc.

Frink Unit B#1

P.O. Box 352
Russell, KS 67665

32-32s-20w Comanche

Job Ticket: 31726

DST#: 1

ATTN: Steve Murphy

Test Start: 2008.07.22 @ 01:48:49

Gas Rates Information

Temperature: 59 deg C
Relative Density: 0.65
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (mm)	Pressure (kPaa)	Gas Rate (m ³ /d)
1	30	0.13	18.00	12.13
1	30	0.13	18.00	12.13
2	5	0.13	20.00	12.88
2	10	0.13	23.00	14.00
2	15	0.13	26.00	15.12
2	30	0.13	33.00	17.74

Serial #: 8370

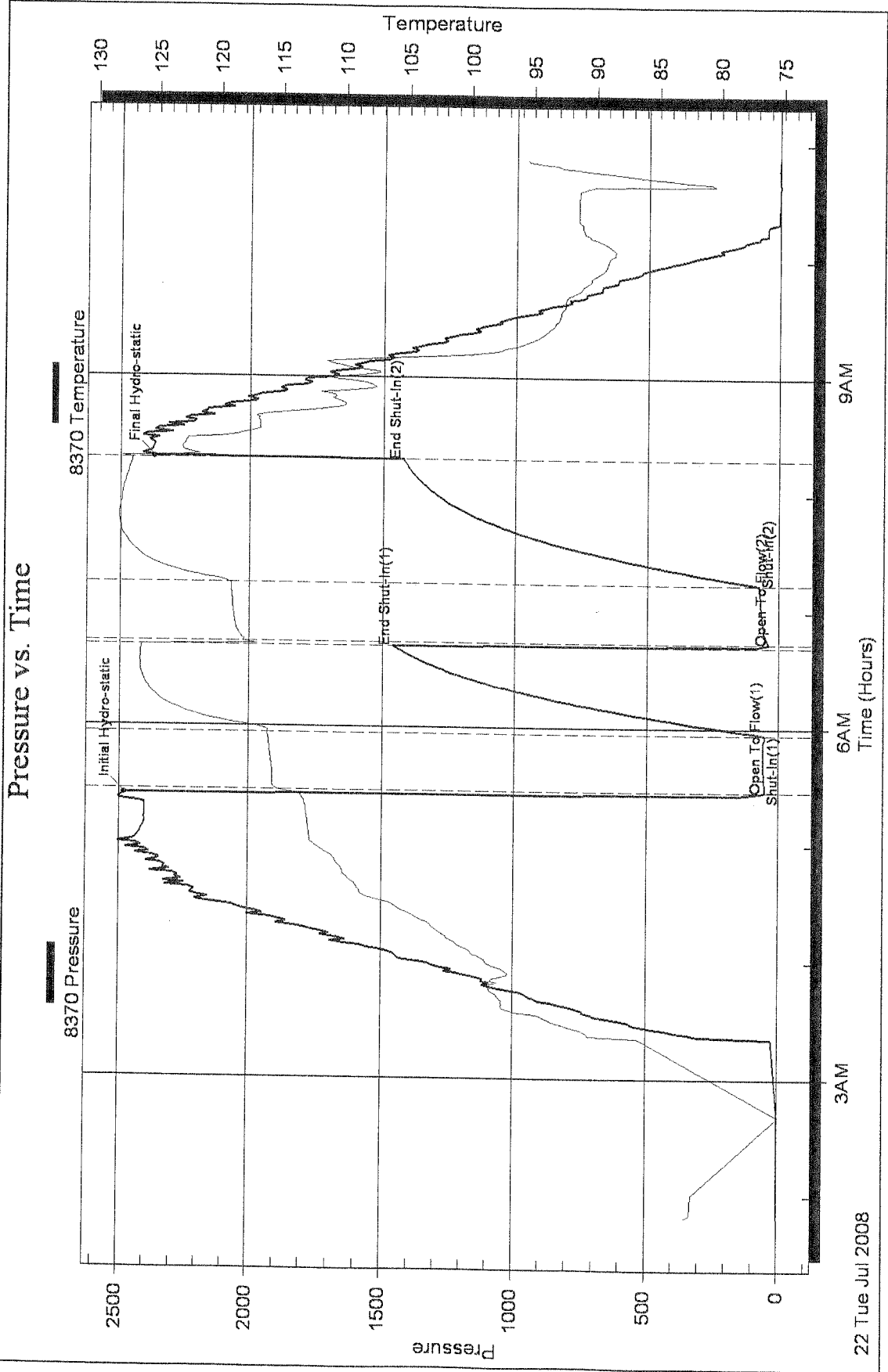
Inside

John O. Farmer, Inc.

32-32s-20w Comanche

DST Test Number: 1

Pressure vs. Time



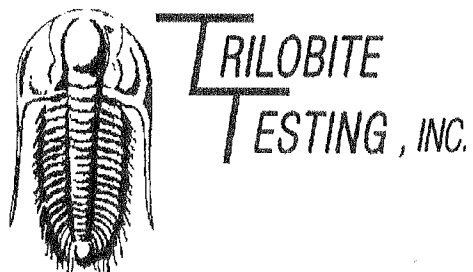
22 Tue Jul 2008

3AM

6AM

9AM

Time (Hours)



DRILL STEM TEST REPORT

Prepared For: **John O. Farmer, Inc.**

P.O. Box 352
Russell, KS 67665

ATTN: Steve Murphy

32-32s-20w Comanche

Frink Unit B#1

Start Date: 2008.07.23 @ 10:55:37

End Date: 2008.07.23 @ 20:44:22

Job Ticket #: 31727 DST #: 2

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

John O. Farmer, Inc.

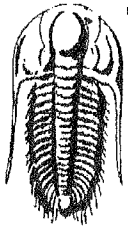
Frink Unit B#1

32-32s-20w Comanche

DST # 2

Morrow Sand

2008.07.23



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

John O. Farmer, Inc.

P.O. Box 352
Russell, KS 67665

ATTN: Steve Murphy

Frink Unit B#1

32-32s-20w Comanche

Job Ticket: 31727

DST#: 2

Test Start: 2008.07.23 @ 10:55:37

GENERAL INFORMATION:

Formation: **Morrow Sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:07:07

Time Test Ended: 20:44:22

Test Type: Conventional Straddle

Tester: Esak Hadley

Unit No: 23

Interval: 5164.00 ft (KB) To 5181.00 ft (KB) (TVD)

Total Depth: 5250.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1868.00 ft (KB)

1858.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: 8370

Inside

Press@RunDepth: 37.27 psig @ 5165.00 ft (KB)

Start Date: 2008.07.23

End Date:

2008.07.23

Start Time: 10:55:42

End Time:

20:44:22

Capacity: 7000.00 psig

Last Calib.: 2008.07.23

Time On Btm: 2008.07.23 @ 14:06:37

Time Off Btm: 2008.07.23 @ 17:55:52

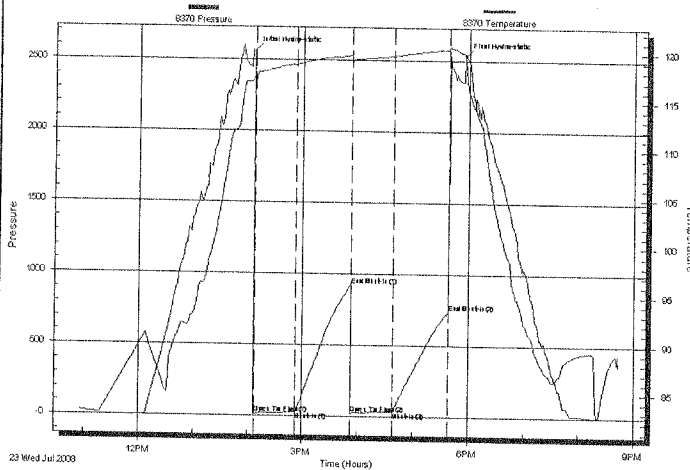
TEST COMMENT: IF: Weak blow . BOB in 19 min.

IS: No blow .

FF: Weak blow . BOB. in 18 min.

FSI: No blow .

Pressure vs. Time



PRESSURE SUMMARY

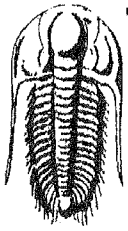
Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	2559.51	117.41	Initial Hydro-static
1	18.50	116.86	Open To Flow (1)
46	27.14	118.75	Shut-In(1)
106	924.12	119.74	End Shut-In(1)
106	24.37	119.27	Open To Flow (2)
151	37.27	119.62	Shut-In(2)
212	738.47	120.37	End Shut-In(2)
230	2535.69	119.96	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	GCO 5%G 95%O	0.07
45.00	G&OCWM 5%G 5%O 5%W 85%M	0.63

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

John O. Farmer, Inc.

Frink Unit B#1

P.O. Box 352
Russell, KS 67665

32-32s-20w Comanche

Job Ticket: 31727

DST#: 2

ATTN: Steve Murphy

Test Start: 2008.07.23 @ 10:55:37

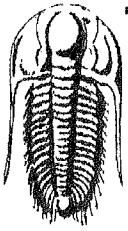
Tool Information

Drill Pipe:	Length: 5163.00 ft	Diameter: 3.80 inches	Volume: 72.42 bbl	Tool Weight: 2100.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 22000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 84000.00 lb
			<u>Total Volume: 72.42 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	27.00 ft			String Weight: Initial 76000.00 lb
Depth to Top Packer:	5164.00 ft			Final 80000.00 lb
Depth to Bottom Packer:	5181.00 ft			
Interval between Packers:	17.00 ft			
Tool Length:	117.00 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			5137.00	
Shut In Tool	5.00			5142.00	
Hydraulic tool	5.00			5147.00	
Jars	5.00			5152.00	
Safety Joint	3.00			5155.00	
Packer	4.00			5159.00	28.00 Bottom Of Top Packer
Packer	5.00			5164.00	
Stubb	1.00			5165.00	
Recorder	0.00	8370	Inside	5165.00	
Recorder	0.00	13789	Inside	5165.00	
Perforations	15.00			5180.00	
Blank Off Sub	1.00			5181.00	17.00 Tool Interval
Packer	5.00			5186.00	
Recorder	0.00	8289	Below	5186.00	
Change Over Sub	1.00			5187.00	
Blank Spacing	63.00			5250.00	
Change Over Sub	1.00			5251.00	
Bullnose	2.00			5253.00	72.00 Bottom Packers & Anchor

Total Tool Length: 117.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

John O. Farmer, Inc.

Frink Unit B#1

P.O. Box 352
Russell, KS 67665

32-32s-20w Comanche

Job Ticket: 31727

DST#: 2

ATTN: Steve Murphy

Test Start: 2008.07.23 @ 10:55:37

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: 50.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.20 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 5500.00 ppm			
Filter Cake: 0.20 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	GCO 5%G 95%O	0.070
45.00	G&OCWM 5%G 5%O 5%W 85%M	0.631

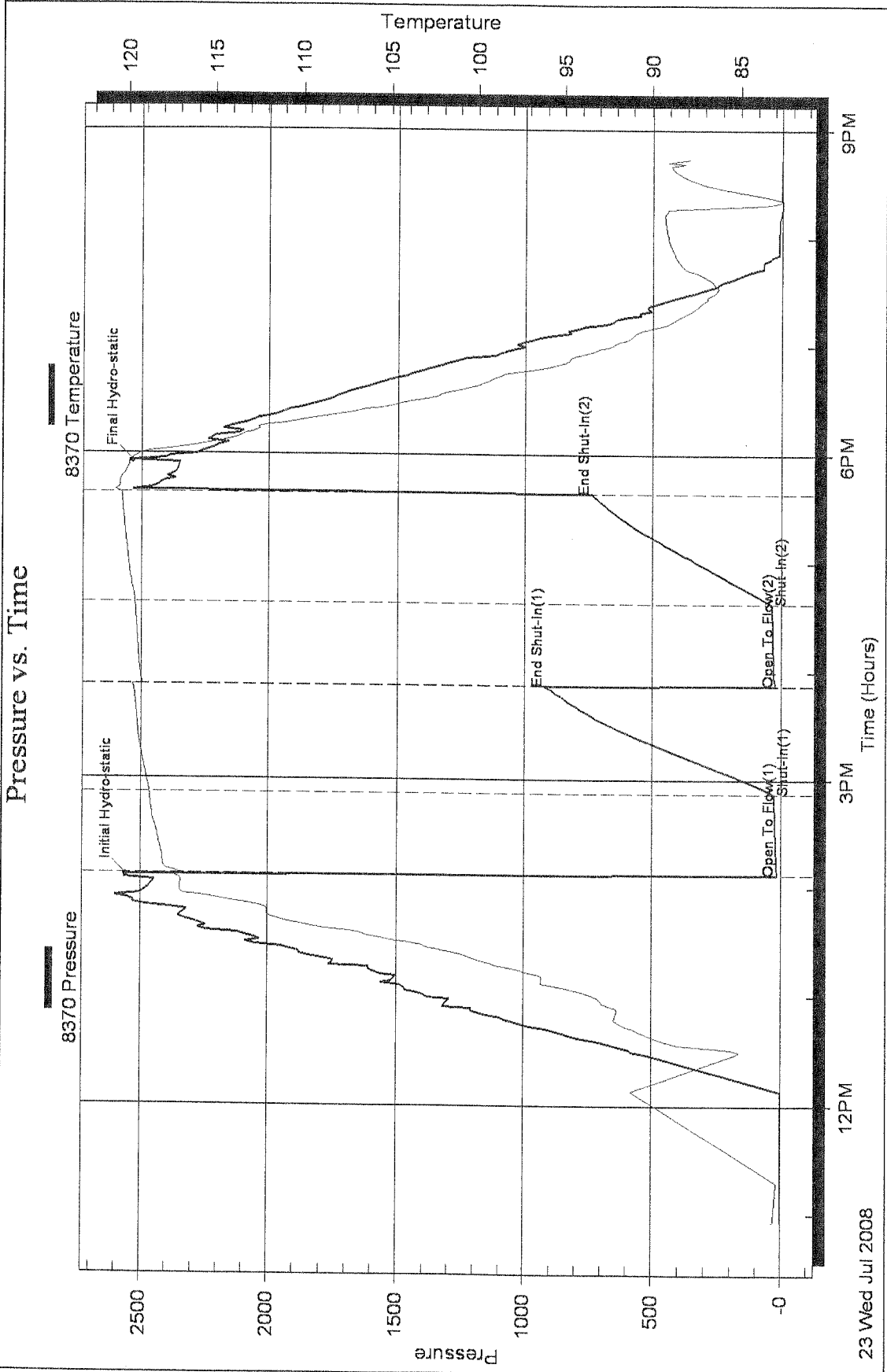
Total Length: 50.00 ft Total Volume: 0.701 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:

Pressure vs. Time



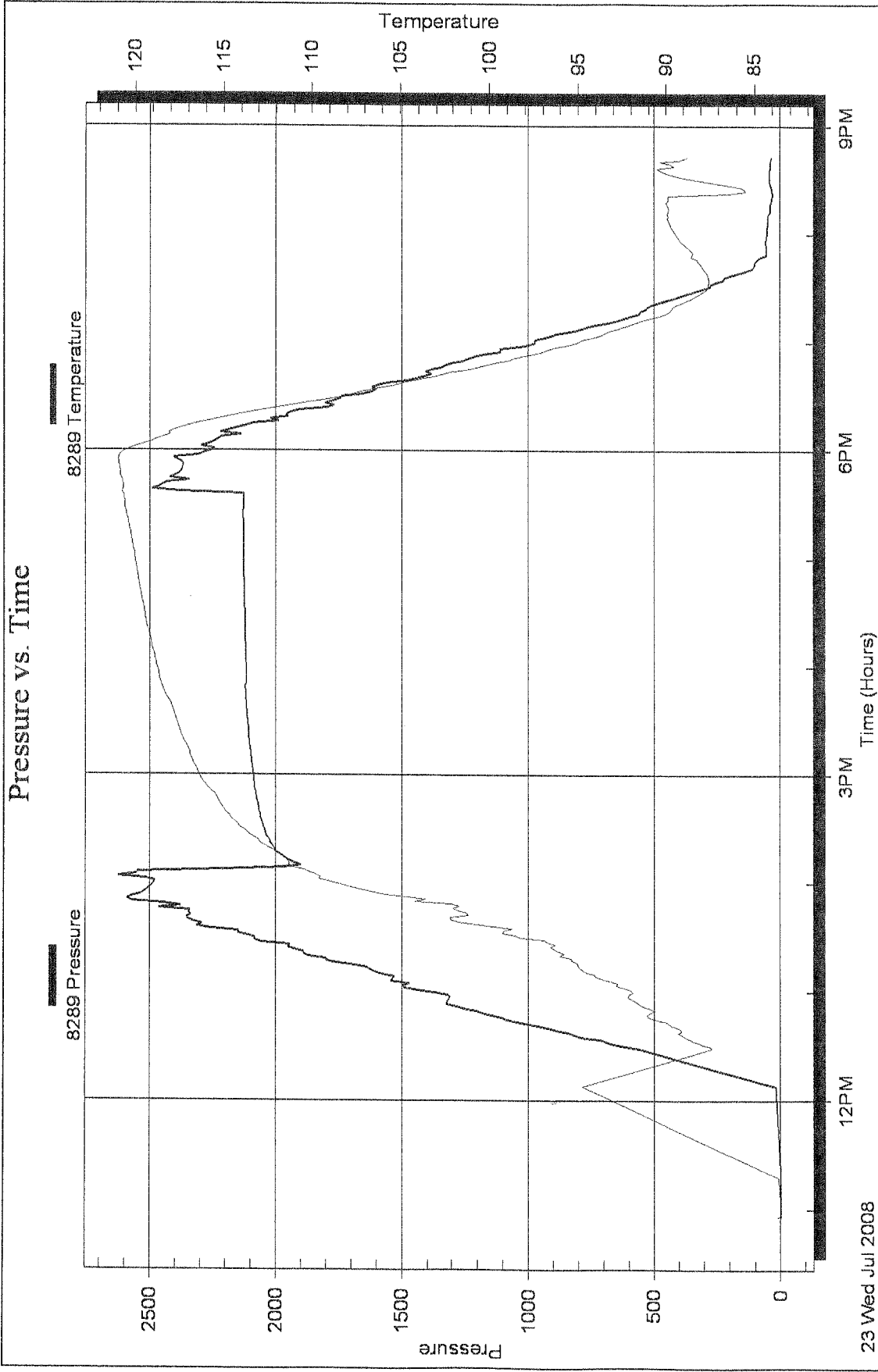
23 Wed Jul 2008

Serial #: 8289

Below (Straddling) Farmer, Inc.

32-32s-20w Comanche

DST Test Number: 2



23 Wed Jul 2008