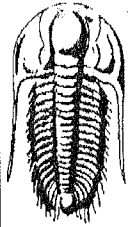


8-18s-28w

15-101-22163-0000



**TRILOBITE TESTING, INC.**

**DRILL STEM TEST REPORT**

O'Brien Energy Co  
 PO Box 6149  
 Shreveport, LA 71136  
 ATTN: Kim Shoemaker

**R. Yost #8-2**  
**8-18s-28w Lane KS**  
 Job Ticket: 33599      **DST#: 1**  
 Test Start: 2009.04.02 @ 06:03:05

**GENERAL INFORMATION:**

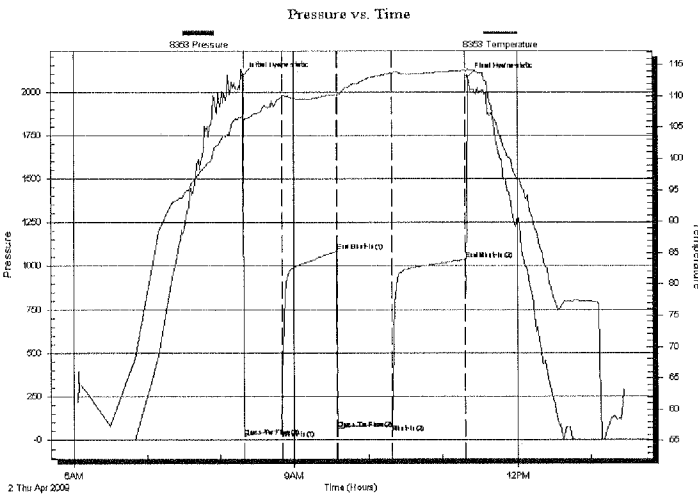
Formation: **L/KC "H-I"**  
 Deviated: No      Whipstock:      ft (KB)  
 Time Tool Opened: 08:19:30  
 Time Test Ended: 13:27:59  
 Interval: **4127.00 ft (KB) To 4220.00 ft (KB) (TVD)**  
 Total Depth: **4220.00 ft (KB) (TVD)**  
 Hole Diameter: **7.80 inches** Hole Condition: Fair  
 Test Type: Conventional Bottom Hole  
 Tester: Brandon Domsch  
 Unit No: 48  
 Reference Elevations: 2749.00 ft (KB)  
 2744.00 ft (CF)  
 KB to GR/CF: 5.00 ft

**Serial #: 8353**

**Inside**

Press@RunDepth: 90.45 psig @ 4128.00 ft (KB)      Capacity: 7000.00 psig  
 Start Date: 2009.04.02      End Date: 2009.04.02      Last Calib.: 2009.04.02  
 Start Time: 06:03:05      End Time: 13:27:59      Time On Btm: 2009.04.02 @ 08:18:45  
 Time Off Btm: 2009.04.02 @ 11:20:44

**TEST COMMENT:** IF: Built to 34 inches.  
 IS: Surface blow off and on throughout.  
 FF: Built to 4 inches.  
 FS: No return.



**PRESSURE SUMMARY**

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2094.36	106.86	Initial Hydro-static
1	21.46	106.00	Open To Flow (1)
31	60.52	109.80	Shut-In(1)
76	1085.33	110.18	End Shut-In(1)
77	65.04	110.05	Open To Flow (2)
121	90.45	113.67	Shut-In(2)
180	1036.71	114.07	End Shut-In(2)
182	2086.27	114.27	Final Hydro-static

**Recovery**

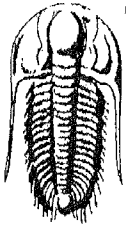
Length (ft)	Description	Volume (bbl)
40.00	M 100%m	0.20
115.00	SWCM 10%w 90%m	0.85
0.00	GIP 0	0.00
0.00	RW = N/A	0.00

**Gas Rates**

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

RECEIVED  
 AUG 27 2009

KCC WICHITA



**TRILOBITE  
TESTING, INC.**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

O' Brien Energy Co

**R. Yost #8-2**

PO Box 6149  
Shreveport, LA 71136

**8-18s-28w Lane KS**

Job Ticket: 33599

**DST#: 1**

ATTN: Kim Shoemaker

Test Start: 2009.04.02 @ 06:03:05

**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:	ppm
Viscosity: 63.00 sec/qt	Cushion Volume: bbl		
Water Loss: 12.30 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 2500.00 ppm			
Filter Cake: 1.00 inches			

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
40.00	M 100%m	0.197
115.00	SWCM 10%w 90%m	0.848
0.00	GIP 0	0.000
0.00	RW = N/A	0.000

Total Length: 155.00 ft      Total Volume: 1.045 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

RECEIVED  
AUG 27 2009  
KCC WICHITA

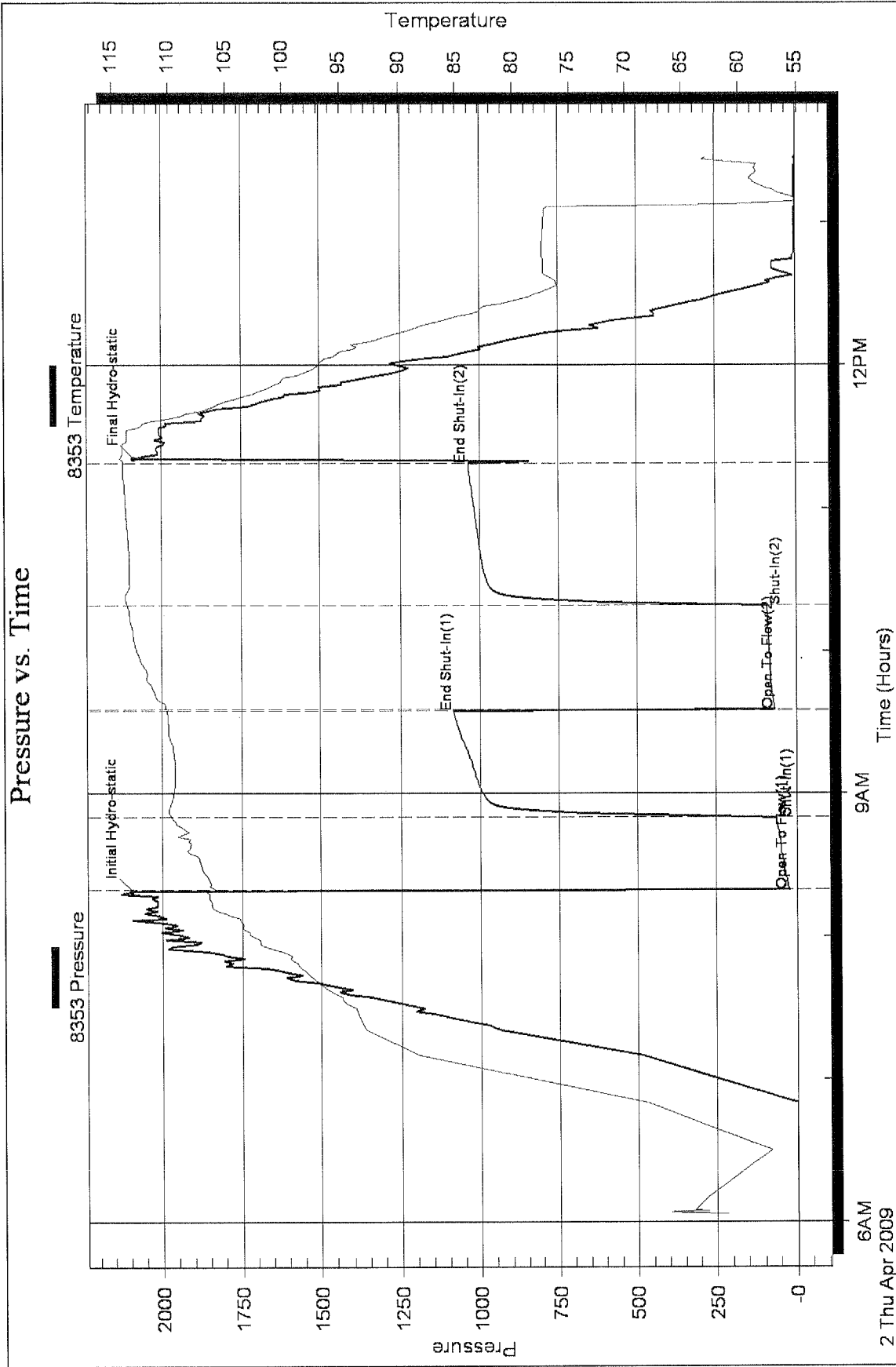
Serial #: 8353

Inside

O' Brien Energy Co

8-18s-28w Lane KS

DST Test Number: 1



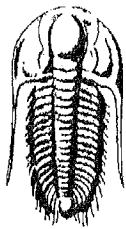
Trilobite Testing, Inc

Ref. No: 33599

KCC WICHITA

AUG 27 2009

RECEIVED



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

O' Brien Energy Co  
PO Box 6149  
Shreveport, LA 71136  
ATTN: Kim Shoemaker

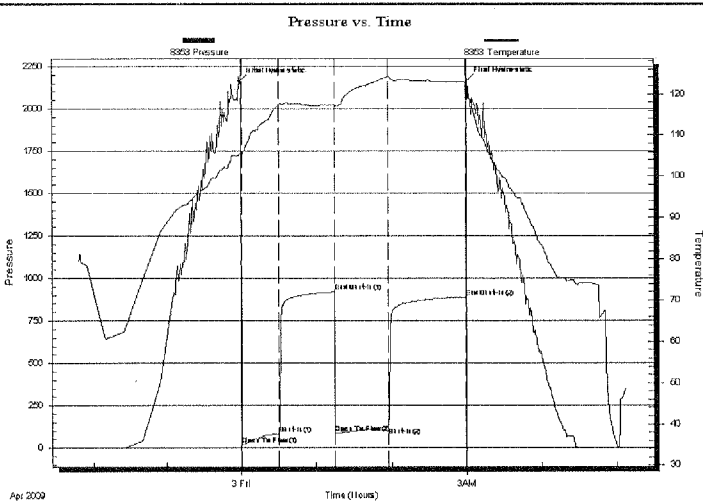
**R. Yost #8-2**  
**8-18s-28w Lane KS**  
Job Ticket: 33600      **DST#: 2**  
Test Start: 2009.04.02 @ 21:48:05

## GENERAL INFORMATION:

Formation: **L/KC "K"**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 00:00:45  
Time Test Ended: 05:07:29  
Interval: **4228.00 ft (KB) To 4260.00 ft (KB) (TVD)**  
Reference Elevations: 2749.00 ft (KB)  
Total Depth: 4260.00 ft (KB) (TVD)      2744.00 ft (CF)  
Hole Diameter: 7.80 inches Hole Condition: Fair      KB to GR/CF: 5.00 ft

**Serial #: 8353**      **Inside**  
Press@RunDepth: 123.40 psig @ 4229.00 ft (KB)      Capacity: 7000.00 psig  
Start Date: 2009.04.02      End Date: 2009.04.03      Last Calib.: 2009.04.03  
Start Time: 21:48:05      End Time: 05:07:29      Time On Btm: 2009.04.02 @ 23:59:00  
Time Off Btm: 2009.04.03 @ 03:00:59

**TEST COMMENT:** IF: Built to 7 1/2 inches.  
IS: No return.  
FF: Built to 8 1/2 inches.  
FS: No return.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2159.74	105.38	Initial Hydro-static
2	17.30	104.67	Open To Flow (1)
32	83.22	117.33	Shut-In(1)
76	919.20	117.26	End Shut-In(1)
76	84.91	117.11	Open To Flow (2)
119	123.40	124.11	Shut-In(2)
181	889.72	122.82	End Shut-In(2)
182	2165.09	120.81	Final Hydro-static

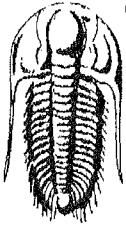
## Recovery

Length (ft)	Description	Volume (bbl)
30.00	M 100% m	0.15
55.00	W&M 40%w 60% m	0.27
120.00	SMCW 90%w 10% m	1.33
0.00	GIP = 0	0.00
0.00	RW = .14 @ 70F = 56000	0.00

## Gas Rates

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

RECEIVED  
AUG 27 2009  
KCC WICHITA



**TRILOBITE**  
TESTING, INC.

# DRILL STEM TEST REPORT

FLUID SUMMARY

O' Brien Energy Co

R. Yost #8-2

PO Box 6149  
Shreveport, LA 71136

8-18s-28w Lane KS

Job Ticket: 33600

DST#: 2

ATTN: Kim Shoemaker

Test Start: 2009.04.02 @ 21:48:05

## 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:

56000 ppm

Viscosity: 57.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 11.13 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 2500.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	M 100%m	0.148
55.00	W&M 40%w 60%m	0.270
120.00	SMCW 90%w 10%m	1.328
0.00	GIP = 0	0.000
0.00	RW = .14@70F = 56000	0.000

Total Length: 205.00 ft

Total Volume: 1.746 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

RECEIVED  
AUG 27 2009

KCC WICHITA

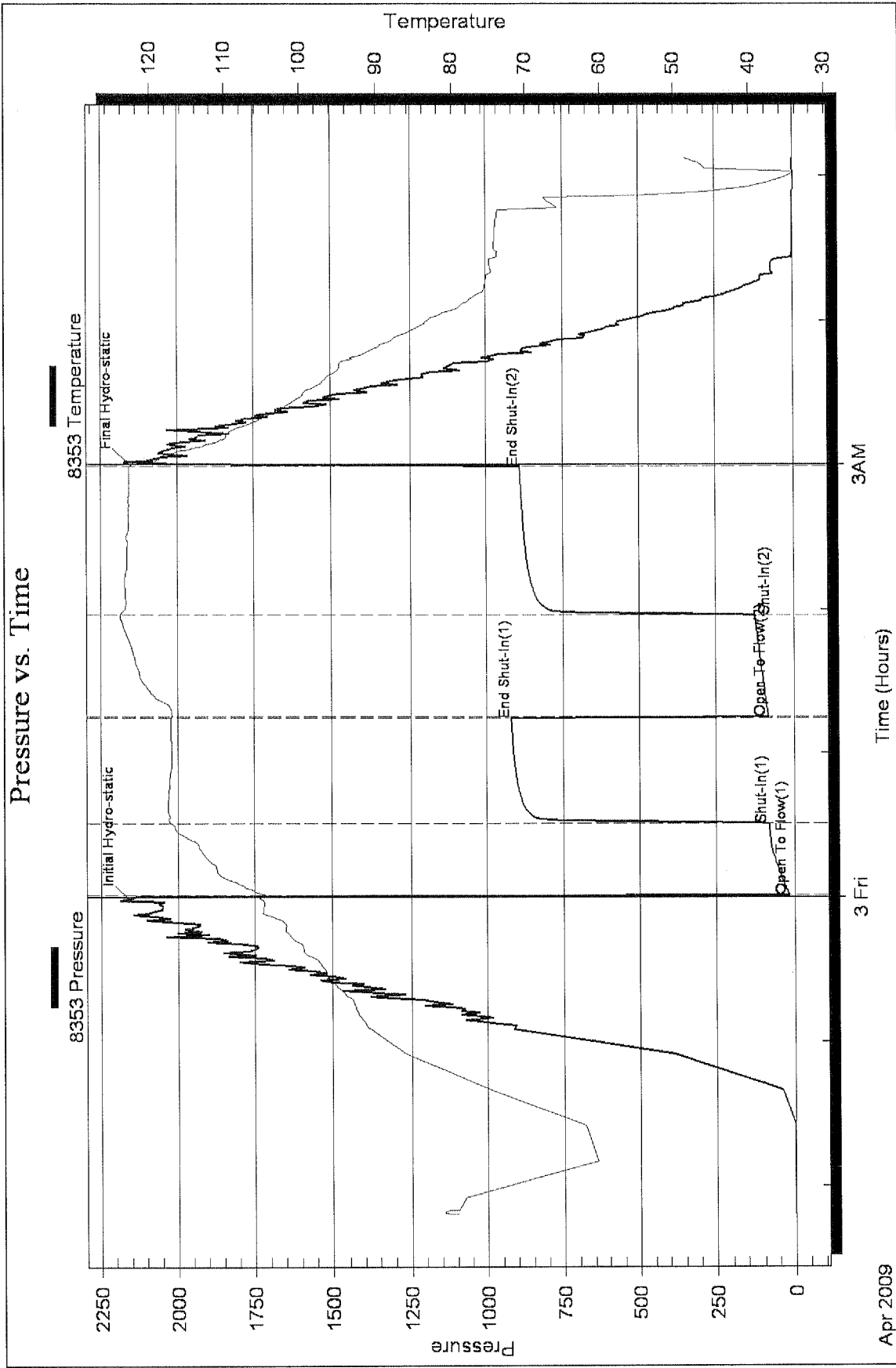
Serial #: 8353

Inside

○ Brien Energy Co

8-18s-28w Lane KS

DST Test Number: 2

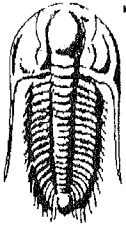


RECEIVED  
 AUG 27 2009  
 KCC MICHITA

Trilobite Testing, Inc

Ref. No: 33600

Printed: 2009.08.24 @ 14:59:23 Page 3



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

O' Brien Energy Co  
 PO Box 6149  
 Shreveport, LA 71136  
 ATTN: Kim Shoemaker

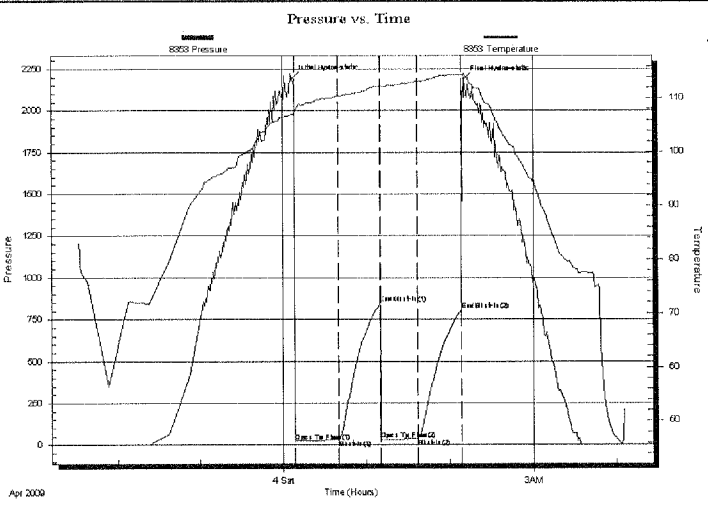
**R. Yost #8-2**  
**8-18s-28w Lane KS**  
 Job Ticket: 34201      **DST#: 3**  
 Test Start: 2009.04.03 @ 21:31:05

## GENERAL INFORMATION:

Formation: **B/KC - Altamont**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 00:09:00  
 Time Test Ended: 04:06:44  
 Interval: **4258.00 ft (KB) To 4404.00 ft (KB) (TVD)**  
 Total Depth: 4404.00 ft (KB) (TVD)  
 Hole Diameter: 7.80 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole  
 Tester: Brandon Domsch  
 Unit No: 48  
 Reference Elevations: 2749.00 ft (KB)  
 2744.00 ft (CF)  
 KB to GR/CF: 5.00 ft

**Serial #: 8353**      **Inside**  
 Press@RunDepth: 35.84 psig @ 4259.00 ft (KB)      Capacity: 7000.00 psig  
 Start Date: 2009.04.03      End Date: 2009.04.04      Last Calib.: 2009.04.04  
 Start Time: 21:31:05      End Time: 04:06:44      Time On Btm: 2009.04.04 @ 00:07:00  
 Time Off Btm: 2009.04.04 @ 02:10:14

TEST COMMENT: IF: Built to 1 3/4 inch.  
 IS: No return.  
 FF: Surface blow for 19 mins.  
 FS: No return.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2189.29	107.00	Initial Hydro-static
2	22.53	107.16	Open To Flow (1)
33	29.70	110.35	Shut-In(1)
63	842.20	112.27	End Shut-In(1)
64	32.18	112.09	Open To Flow (2)
90	35.84	113.03	Shut-In(2)
121	802.83	114.38	End Shut-In(2)
124	2188.01	114.54	Final Hydro-static

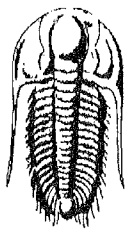
## Recovery

Length (ft)	Description	Volume (bbl)
30.00	M 100% m	0.15
0.00	GIP = 0	0.00

## Gas Rates

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

RECEIVED  
 AUG 27 2009  
 KCC WICHITA



**TRILOBITE**  
TESTING, INC.

## DRILL STEM TEST REPORT

FLUID SUMMARY

O' Brien Energy Co

R. Yost #8-2

PO Box 6149  
Shreveport, LA 71136

8-18s-28w Lane KS

Job Ticket: 34201

DST#: 3

ATTN: Kim Shoemaker

Test Start: 2009.04.03 @ 21:31:05

### 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:	ppm
Viscosity: 53.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.15 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 2600.00 ppm			
Filter Cake: 1.00 inches			

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	M 100%m	0.148
0.00	GIP = 0	0.000

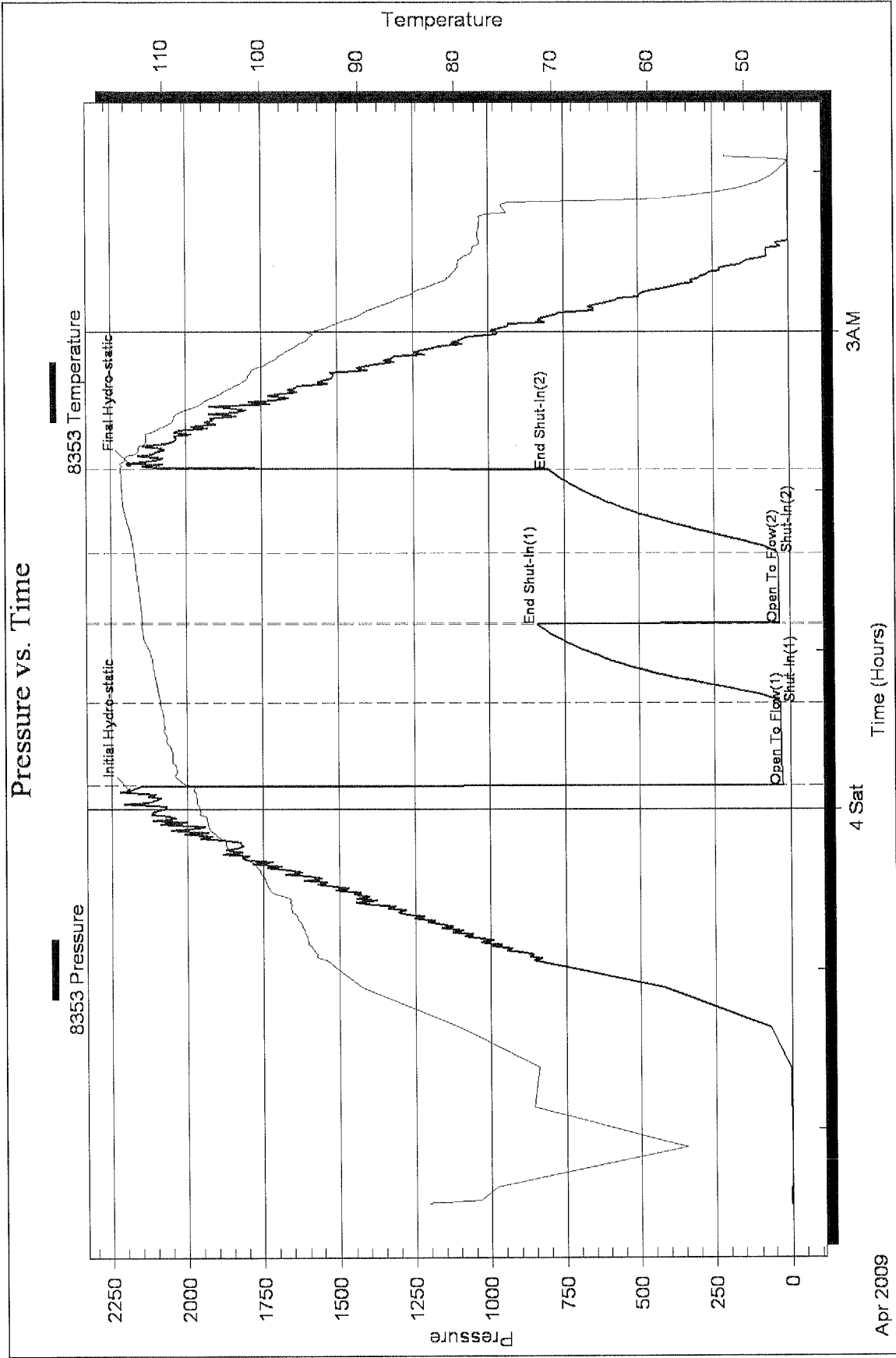
Total Length: 30.00 ft      Total Volume: 0.148 bbl

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

Laboratory Name:      Laboratory Location:

Recovery Comments:

RECEIVED  
AUG 27 2009  
KCC WICHITA



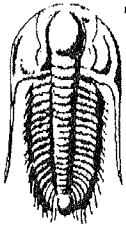
KCC WICHITA

Aug 27 2009

RECEIVED

Ref. No: 34201

Trilobite Testing, Inc



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

O' Brien Energy Co  
 PO Box 6149  
 Shreveport, LA 71136  
 ATTN: Kim Shoemaker

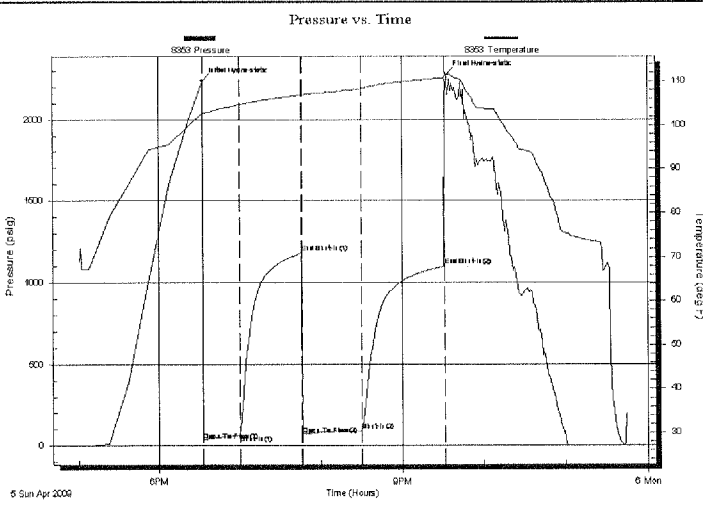
**R. Yost #8-2**  
**8-18s-28w Lane KS**  
 Job Ticket: 34202      **DST#: 4**  
 Test Start: 2009.04.05 @ 17:01:05

## GENERAL INFORMATION:

Formation: **Pawnee - Johnson**  
 Deviated: No      Whipstock:      ft (KB)  
 Time Tool Opened: 18:33:15  
 Time Test Ended: 23:45:44  
 Interval: **4418.00 ft (KB) To 4557.00 ft (KB) (TVD)**  
 Total Depth: **4557.00 ft (KB) (TVD)**  
 Hole Diameter: **7.80 inches** Hole Condition: Fair  
 Test Type: Conventional Bottom Hole  
 Tester: Brandon Domsch  
 Unit No: 48  
 Reference Elevations: 2749.00 ft (KB)  
 2744.00 ft (CF)  
 KB to GR/CF: 5.00 ft

**Serial #: 8353      Inside**  
 Press@RunDepth: 90.33 psig @ 4419.00 ft (KB)      Capacity: 7000.00 psig  
 Start Date: 2009.04.05      End Date: 2009.04.05      Last Calib.: 2009.04.05  
 Start Time: 17:01:05      End Time: 23:45:44      Time On Btm: 2009.04.05 @ 18:33:00  
 Time Off Btm: 2009.04.05 @ 21:32:44

TEST COMMENT: IF: Built to 3 1/4 inches.  
 IS: No return.  
 FF: Built to 2 inches.  
 FS: No return.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2236.54	102.89	Initial Hydro-static
1	34.35	102.68	Open To Flow (1)
27	64.52	104.72	Shut-In(1)
73	1185.89	106.97	End Shut-In(1)
74	69.54	106.72	Open To Flow (2)
118	90.33	108.38	Shut-In(2)
179	1097.59	110.80	End Shut-In(2)
180	2276.26	111.50	Final Hydro-static

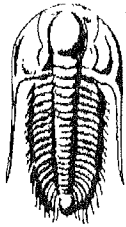
## Recovery

Length (ft)	Description	Volume (bbl)
135.00	SWCM 10%w 90% m	0.76
0.00	GIP = 0	0.00

## Gas Rates

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

RECEIVED  
 AUG 27 2009



**TRILOBITE  
TESTING, INC.**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

O' Brien Energy Co

**R. Yost #8-2**

PO Box 6149  
Shreveport, LA 71136

**8-18s-28w Lane KS**

Job Ticket: 34202      **DST#: 4**

ATTN: Kim Shoemaker

Test Start: 2009.04.05 @ 17:01:05

**Mud and Cushion Information**

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 10.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 54.00 sec/qt	Cushion Volume: bbl		
Water Loss: 11.15 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 2200.00 ppm			
Filter Cake: 1.00 inches			

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
135.00	SWCM 10%w 90%m	0.764
0.00	GIP= 0	0.000

Total Length: 135.00 ft      Total Volume: 0.764 bbl

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

Laboratory Name:      Laboratory Location:

Recovery Comments:

RECEIVED  
AUG 27 2009  
KCC WICHITA

Serial #: 8353

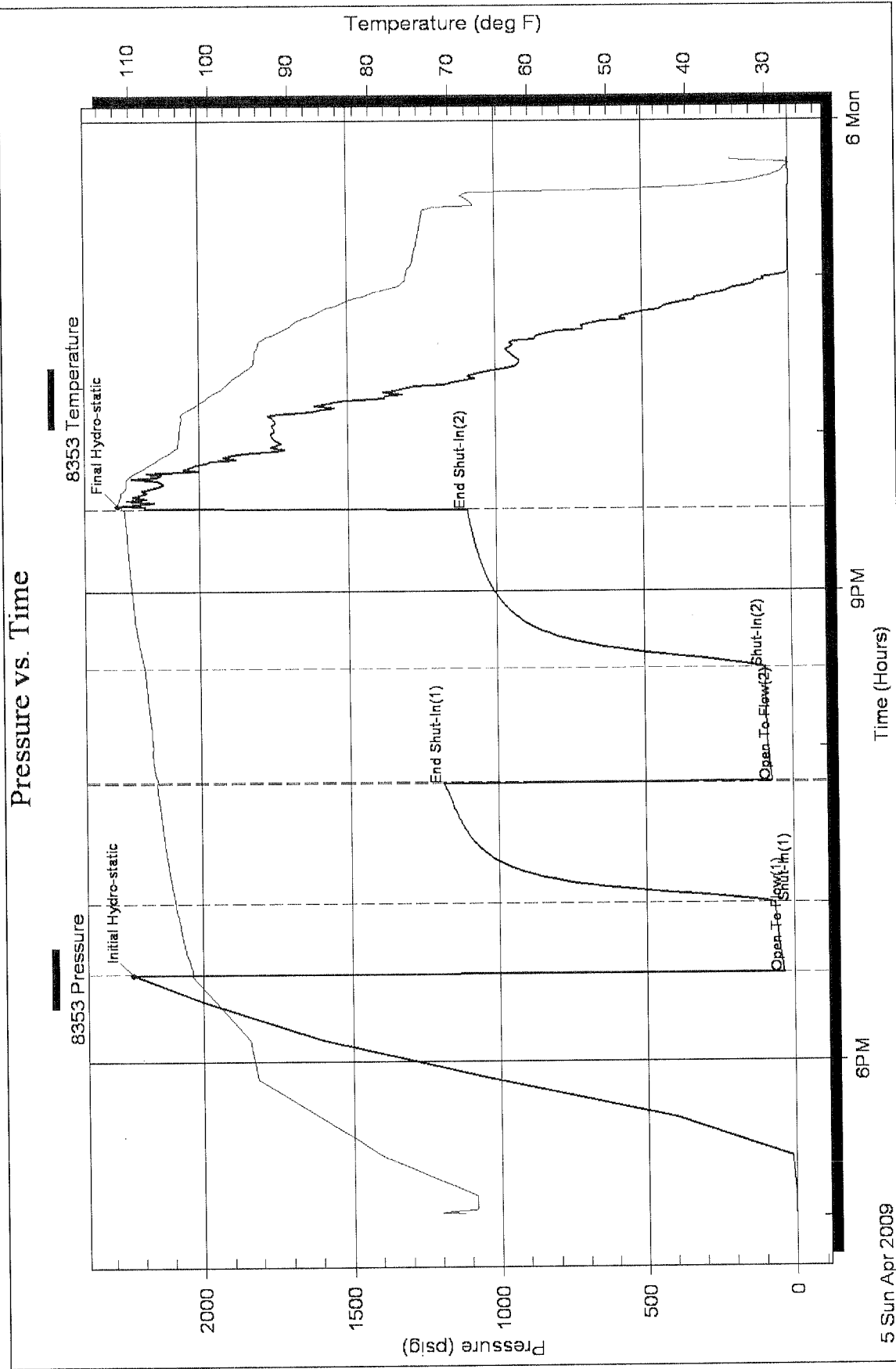
Inside

O' Brien Energy Co

8-18s-28w Lane KS

DST Test Number: 4

### Pressure vs. Time



RECEIVED  
AUG 27 2009  
KCC MICHITA

Ref. No: 34202

Trilobite Testing, Inc

5 Sun Apr 2009

6PM

9PM

6 Mon