

**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Lario Oil & Gas Co.**

301 S. Market  
Wichita, KS. 67202

ATTN: Richard Hall

**24-11s-18w-Ellis**

**Marshall "E" #23**

Start Date: 2004.06.05 @ 05:07:02

End Date: 2004.06.05 @ 11:07:02

Job Ticket #: 19489                      DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Lario Oil & Gas Co.

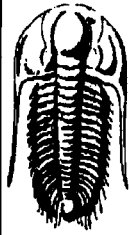
Marshall "E" #23

24-11s-18w-Ellis

DST # 1

Topoka

2004.06.05



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Lario Oil & Gas Co.

301 S. Market  
Wichita, KS. 67202

ATTN: Richard Hall

**Marshall "E" #23**

**24-11s-18w-Ellis**

Job Ticket: 19489

**DST#: 1**

Test Start: 2004.06.05 @ 05:07:02

## GENERAL INFORMATION:

Formation: **Topeka**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:44:52

Time Test Ended: 11:07:02

Test Type: Conventional Bottom Hole

Tester: Jason Mclemore

Unit No: 24

Interval: **2886.00 ft (KB) To 2900.00 ft (KB) (TVD)**

Total Depth: 2900.00 ft (KB) (TVD)

Hole Diameter: 7.80 inches Hole Condition: Good

Reference Elevations: 1931.00 ft (KB)

1926.00 ft (CF)

KB to GF/CF: 5.00 ft

**Serial #: 6753**

**Inside**

Press @ Run Depth: 49.10 psig @ 2887.00 ft (KB)

Start Date: 2004.06.05

End Date:

2004.06.05

Start Time: 05:07:32

End Time:

11:07:02

Capacity: 7000.00 psig

Last Calib.: 1899.12.30

Time On Btm: 2004.06.05 @ 06:44:12

Time Off Btm: 2004.06.05 @ 09:45:32

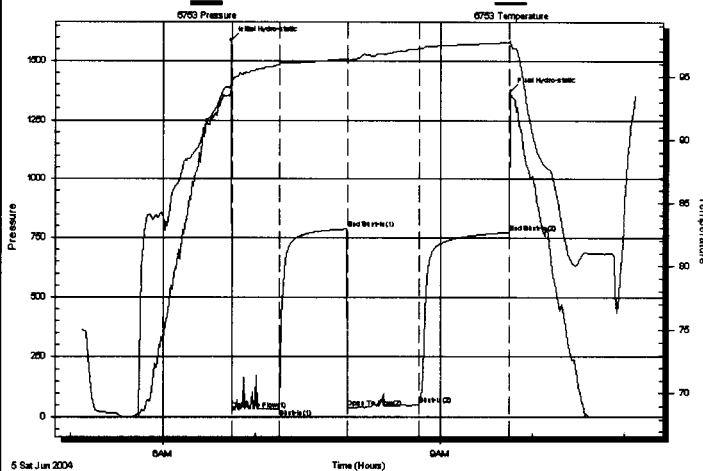
**TEST COMMENT:** IFF-1" Blow Dying to 1/2"

ISI-No Blow back

FFP-No Blow

FSI-No Blow back

Pressure vs. Time



## PRESSURE SUMMARY

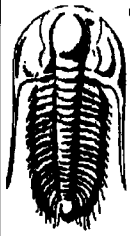
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1586.77	94.77	Initial Hydro-static
1	29.13	94.74	Open To Flow (1)
32	33.38	95.92	Shut-In(1)
76	786.47	96.39	End Shut-In(1)
76	38.29	96.01	Open To Flow (2)
123	49.10	97.18	Shut-In(2)
181	771.55	97.68	End Shut-In(2)
182	1373.65	97.69	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
62.00	Muddy Water / Oil Show 20%W-80%M	0.30
0.00	Oil Spots in Tool	0.00

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Lario Oil & Gas Co.

**Marshall "E" #23**

301 S. Market  
Wichita, KS. 67202

**24-11s-18w-Ellis**

ATTN: Richard Hall

Job Ticket: 19489

**DST#:1**

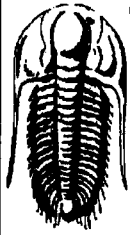
Test Start: 2004.06.05 @ 05:07:02

### Tool Information

Drill Pipe:	Length: 2706.00 ft	Diameter: 3.80 inches	Volume: 37.96 bbl	Tool Weight: 1800.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 184.00 ft	Diameter: 2.25 inches	Volume: 0.90 bbl	Weight to Pull Loose: 60000.00 lb
			<b>Total Volume: 38.86 bbl</b>	Tool Chased 0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 39000.00 lb
Depth to Top Packer:	2886.00 ft			Final 39000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	14.00 ft			
Tool Length:	35.00 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			2866.00	
Shut In Tool	5.00			2871.00	
Hydraulic tool	5.00			2876.00	
Packer	5.00			2881.00	21.00 Bottom Of Top Packer
Packer	5.00			2886.00	
Stubb	1.00			2887.00	
Recorder	0.00	6753	Inside	2887.00	
Perforations	10.00			2897.00	
Recorder	0.00	13252	Outside	2897.00	
Bullnose	3.00			2900.00	14.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>35.00</b>				



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Lario Oil & Gas Co.

**Marshall "E" #23**

301 S. Market  
Wichita, KS. 67202

**24-11s-18w-Ellis**

ATTN: Richard Hall

Job Ticket: 19489

**DST#:1**

Test Start: 2004.06.05 @ 05:07:02

**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: 49.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.77 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: 2.00 inches

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
62.00	Muddy Water / Oil Show 20%W-80%M	0.305
0.00	Oil Spots in Tool	0.000

Total Length: 62.00 ft      Total Volume: 0.305 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6753

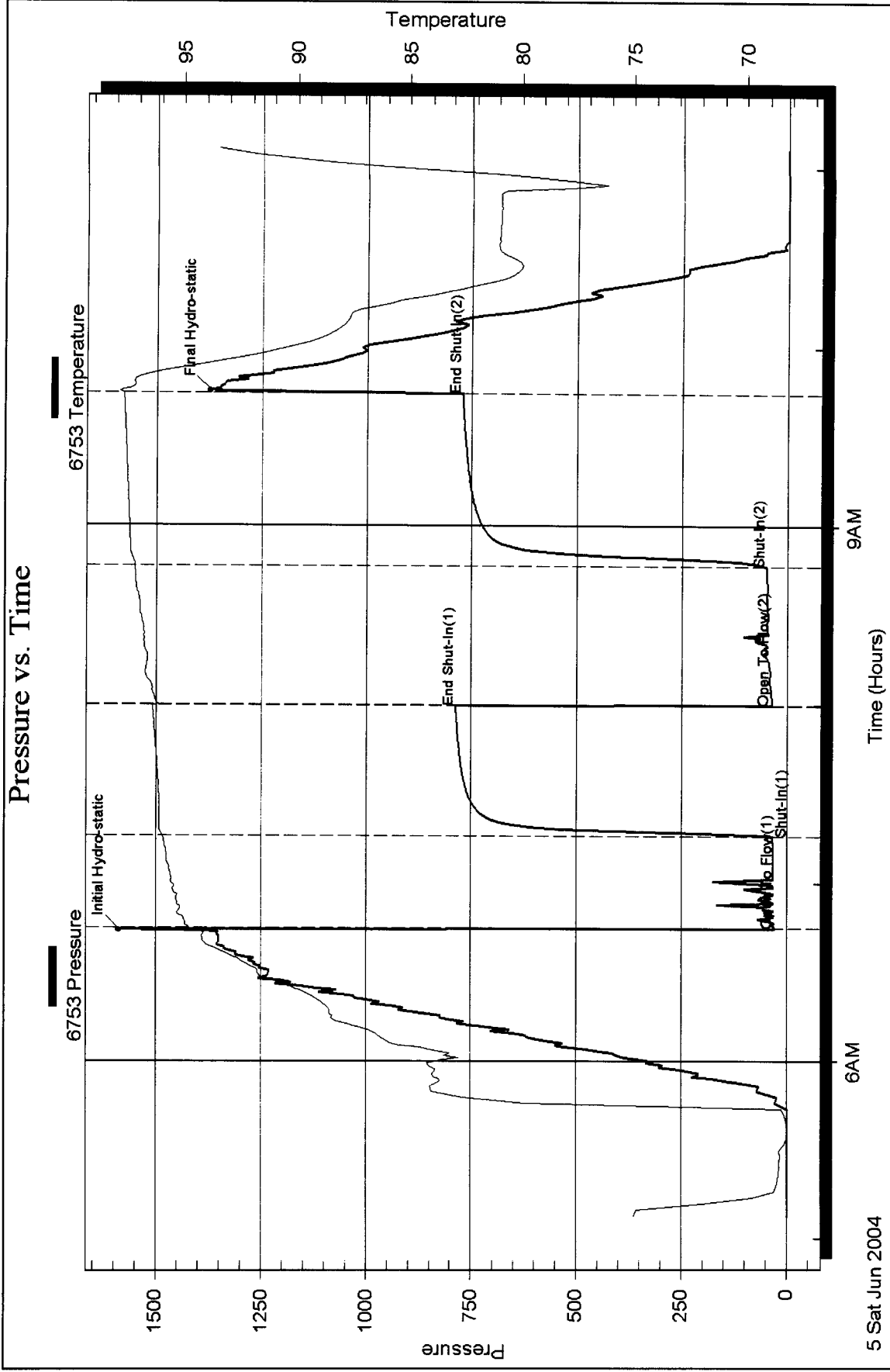
Inside

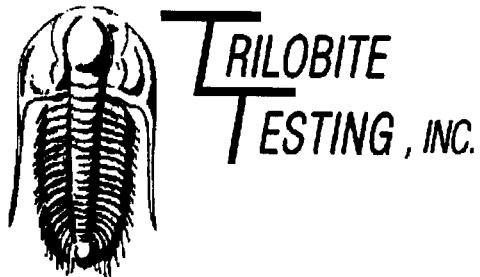
Lario Oil & Gas Co.

24-11s-18w-Ellis

DST Test Number: 1

### Pressure vs. Time





## DRILL STEM TEST REPORT

Prepared For: **Lario Oil & Gas Co.**

301 S. Market  
Wichita, KS. 67202

ATTN: Richard Hall

**24-11s-18w-Ellis**

**Marshall "E" #23**

Start Date: 2004.06.06 @ 12:15:15

End Date: 2004.06.06 @ 18:54:00

Job Ticket #: 19490                      DST #: 2

Trilobite Testing, Inc  
PO Box 362 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Lario Oil & Gas Co.

301 S. Market  
Wichita, KS. 67202

ATTN: Richard Hall

**Marshall "E" #23**

**24-11s-18w-Ellis**

Job Ticket: 19490

**DST#: 2**

Test Start: 2004.06.06 @ 12:15:15

## GENERAL INFORMATION:

Formation: **LKC-"G-J"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:38:25

Time Test Ended: 18:54:00

Test Type: Conventional Bottom Hole

Tester: Jason Mclemore

Unit No: 24

Interval: **3222.00 ft (KB) To 3330.00 ft (KB) (TVD)**

Total Depth: 3330.00 ft (KB) (TVD)

Hole Diameter: 7.80 inches Hole Condition: Good

Reference Elevations: 1931.00 ft (KB)

1926.00 ft (CF)

KB to GRV/CF: 5.00 ft

**Serial #: 6753**

**Inside**

Press@RunDepth: 98.13 psig @ 3225.00 ft (KB)

Start Date: 2004.06.06

End Date:

2004.06.06

Start Time: 12:15:45

End Time:

18:54:00

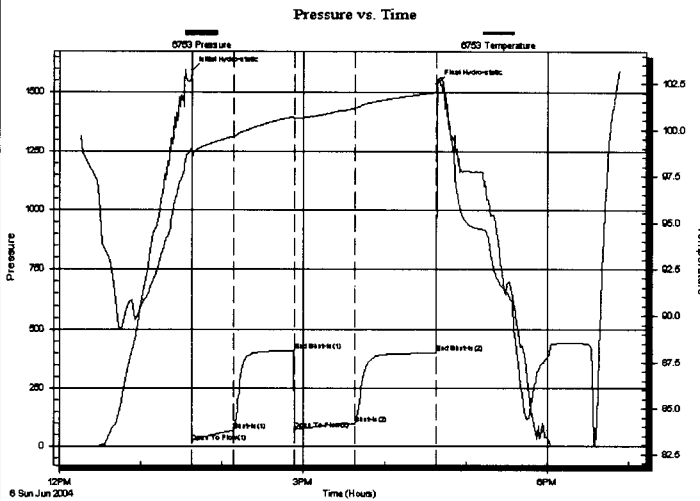
Capacity: 7000.00 psig

Last Calib.: 1899.12.30

Time On Btm: 2004.06.06 @ 13:38:15

Time Off Btm: 2004.06.06 @ 16:38:45

**TEST COMMENT:** IFP-Fair Blow , Built from 1/4" to BOB in 29 min.  
IS- Blow back Built to 2"  
FFP-Fair Blow ,Built to BOB in 25 min.  
FS-Blow back Built to 2-1/4"



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1594.76	99.07	Initial Hydro-static
1	19.62	98.37	Open To Flow (1)
31	68.45	99.66	Shut-In(1)
76	407.75	100.69	End Shut-In(1)
76	73.31	100.59	Open To Flow (2)
121	98.13	101.18	Shut-In(2)
181	399.42	102.04	End Shut-In(2)
181	1538.54	102.32	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
135.00	MW with Oil Show -10%G-10%O-45%W-0.66M	
60.00	Free Oil	0.40

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Lario Oil & Gas Co.

**Marshall "E" #23**

301 S. Market  
Wichita, KS. 67202

**24-11s-18w-Ellis**

ATTN: Richard Hall

Job Ticket: 19490

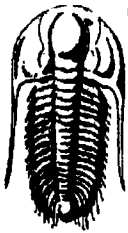
**DST#: 2**

Test Start: 2004.06.06 @ 12:15:15

### Tool Information

Drill Pipe:	Length: 3016.00 ft	Diameter: 3.80 inches	Volume: 42.31 bbl	Tool Weight: 3000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 184.00 ft	Diameter: 2.25 inches	Volume: 0.90 bbl	Weight to Pull Loose: 46000.00 lb
			<u>Total Volume: 43.21 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial 44000.00 lb
Depth to Top Packer:	3222.00 ft			Final 45000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	108.00 ft			
Tool Length:	136.00 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			3195.00	
Shut In Tool	5.00			3200.00	
Jars	5.00			3205.00	
Safety Joint	2.00			3207.00	
Hydraulic tool	5.00			3212.00	
Packer	5.00			3217.00	28.00 Bottom Of Top Packer
Packer	5.00			3222.00	
Stubb	1.00			3223.00	
Perforations	1.00			3224.00	
Change Over Sub	1.00			3225.00	
Recorder	0.00	6753	Inside	3225.00	
Blank Spacing	93.00			3318.00	
Change Over Sub	1.00			3319.00	
Perforations	8.00			3327.00	
Recorder	0.00	13252	Outside	3327.00	
Bullnose	3.00			3330.00	108.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>136.00</b>				



**TRILOBITE  
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**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Lario Oil & Gas Co.

**Marshall "E" #23**

301 S. Market  
Wichita, KS. 67202

**24-11s-18w-Ellis**

ATTN: Richard Hall

Job Ticket: 19490

**DST#: 2**

Test Start: 2004.06.06 @ 12:15:15

**Mud and Cushion Information**

Mud Type: Gel Chem

Cushion Type:

Oil API:

35 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

24000 ppm

Viscosity: 44.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.37 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6000.00 ppm

Filter Cake: 2.00 inches

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
135.00	MW with Oil Show - 10%G-10%O-45%W-35%	0.664
60.00	Free Oil	0.395

Total Length: 195.00 ft

Total Volume: 1.059 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

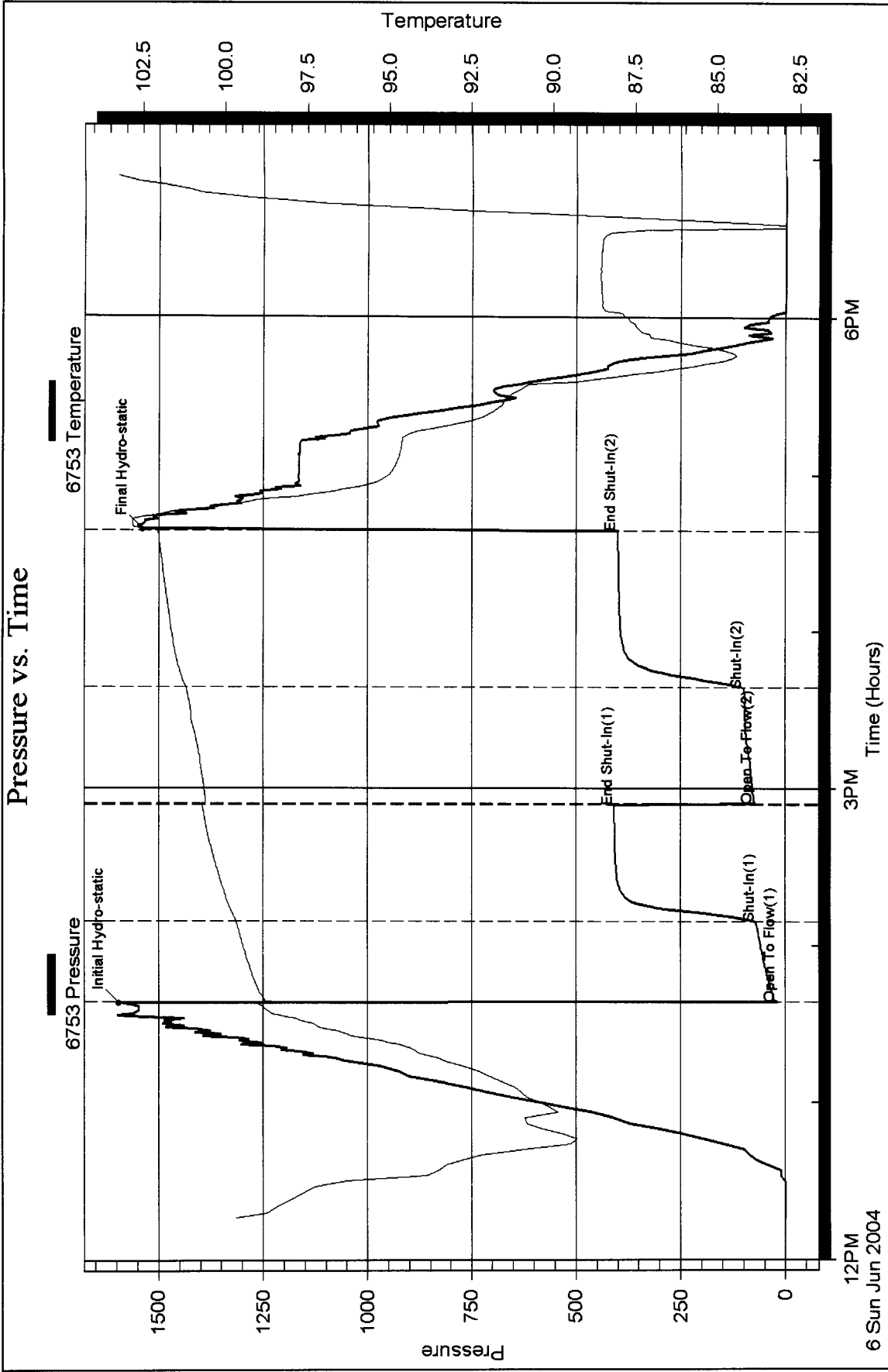
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

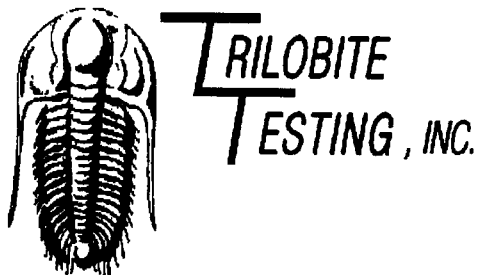
### Pressure vs. Time



12PM  
6 Sun Jun 2004

3PM  
Time (Hours)

6PM



## DRILL STEM TEST REPORT

Prepared For: **Lario Oil & Gas Co.**

301 S. Market  
Wichita, KS. 67202

ATTN: Richard Hall

**24-11s-18w-Ellis**

**Marshall "E" #23**

Start Date: 2004.06.07 @ 03:30:39

End Date: 2004.06.07 @ 09:47:24

Job Ticket #: 19491                      DST #: 3

Trilobite Testing, Inc  
PO Box 362 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

Lario Oil & Gas Co.

**Marshall "E" #23**

301 S. Market  
Wichita, KS. 67202

**24-11s-18w-Ellis**

ATTN: Richard Hall

Job Ticket: 19491

**DST#:3**

Test Start: 2004.06.07 @ 03:30:39

**GENERAL INFORMATION:**

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:14:49

Time Test Ended: 09:47:24

Test Type: Conventional Bottom Hole

Tester: Jason Mclemore

Unit No: 24

**Interval: 3377.00 ft (KB) To 3422.00 ft (KB) (TVD)**

Total Depth: 3422.00 ft (KB) (TVD)

Hole Diameter: 7.80 inches Hole Condition: Good

Reference Elevations: 1931.00 ft (KB)

1926.00 ft (CF)

KB to GRVCF: 5.00 ft

**Serial #: 6753**

**Inside**

Press@RunDepth: 29.64 psig @ 3382.00 ft (KB)

Start Date: 2004.06.07

End Date:

2004.06.07

Start Time: 03:31:09

End Time:

09:47:24

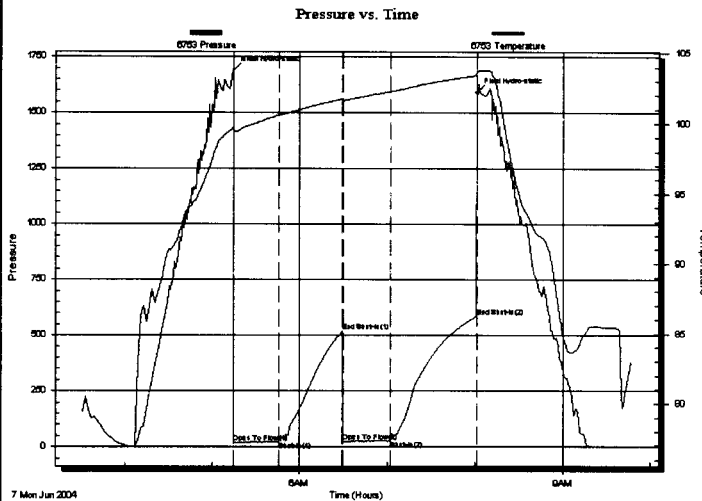
Capacity: 7000.00 psig

Last Calib.: 1899.12.30

Time On Btm: 2004.06.07 @ 05:14:39

Time Off Btm: 2004.06.07 @ 08:01:09

**TEST COMMENT:** IFP-Weak Blow, 1/4"  
IS- No Blow back  
FFP- No Blow  
FS- No Blow back



**PRESSURE SUMMARY**

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1690.04	99.77	Initial Hydro-static
1	18.20	99.28	Open To Flow (1)
32	20.96	100.59	Shut-In(1)
75	518.98	101.75	End Shut-In(1)
75	23.82	101.47	Open To Flow (2)
108	29.64	102.27	Shut-In(2)
167	585.26	103.42	End Shut-In(2)
167	1592.27	103.74	Final Hydro-static

**Recovery**

Length (ft)	Description	Volume (bbl)
3.00	Mud / Oil Spots in Tool	0.01

**Gas Rates**

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



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

Lario Oil & Gas Co.

**Marshall "E" #23**

301 S. Market  
Wichita, KS. 67202

**24-11s-18w-Ellis**

ATTN: Richard Hall

Job Ticket: 19491

**DST#: 3**

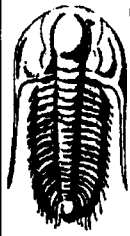
Test Start: 2004.06.07 @ 03:30:39

**Tool Information**

Drill Pipe:	Length: 3170.00 ft	Diameter: 3.80 inches	Volume: 44.47 bbl	Tool Weight: 2400.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 184.00 ft	Diameter: 2.25 inches	Volume: 0.90 bbl	Weight to Pull Loose: 48000.00 lb
			<b>Total Volume: 45.37 bbl</b>	Tool Chased 0.00 ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial 44000.00 lb
Depth to Top Packer:	3377.00 ft			Final 44000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	45.00 ft			
Tool Length:	73.00 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			3350.00	
Shut In Tool	5.00			3355.00	
Hydraulic tool	5.00			3360.00	
Jars	5.00			3365.00	
Safety Joint	2.00			3367.00	
Packer	5.00			3372.00	28.00 Bottom Of Top Packer
Packer	5.00			3377.00	
Stubb	1.00			3378.00	
Perforations	3.00			3381.00	
Change Over Sub	1.00			3382.00	
Recorder	0.00	6753	Inside	3382.00	
Blank Spacing	31.00			3413.00	
Change Over Sub	1.00			3414.00	
Perforations	5.00			3419.00	
Recorder	0.00	13252	Outside	3419.00	
Bullnose	3.00			3422.00	45.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>73.00</b>				



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Lario Oil & Gas Co.

**Marshall "E" #23**

301 S. Market  
Wichita, KS. 67202

**24-11s-18w-Ellis**

Job Ticket: 19491

**DST#: 3**

ATTN: Richard Hall

Test Start: 2004.06.07 @ 03:30:39

**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: 44.00 sec/qt

Cushion Volume:

bbl

Water Loss: 9.18 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6000.00 ppm

Filter Cake: 2.00 inches

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
3.00	Mud / Oil Spots in Tool	0.015

Total Length: 3.00 ft      Total Volume: 0.015 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6753

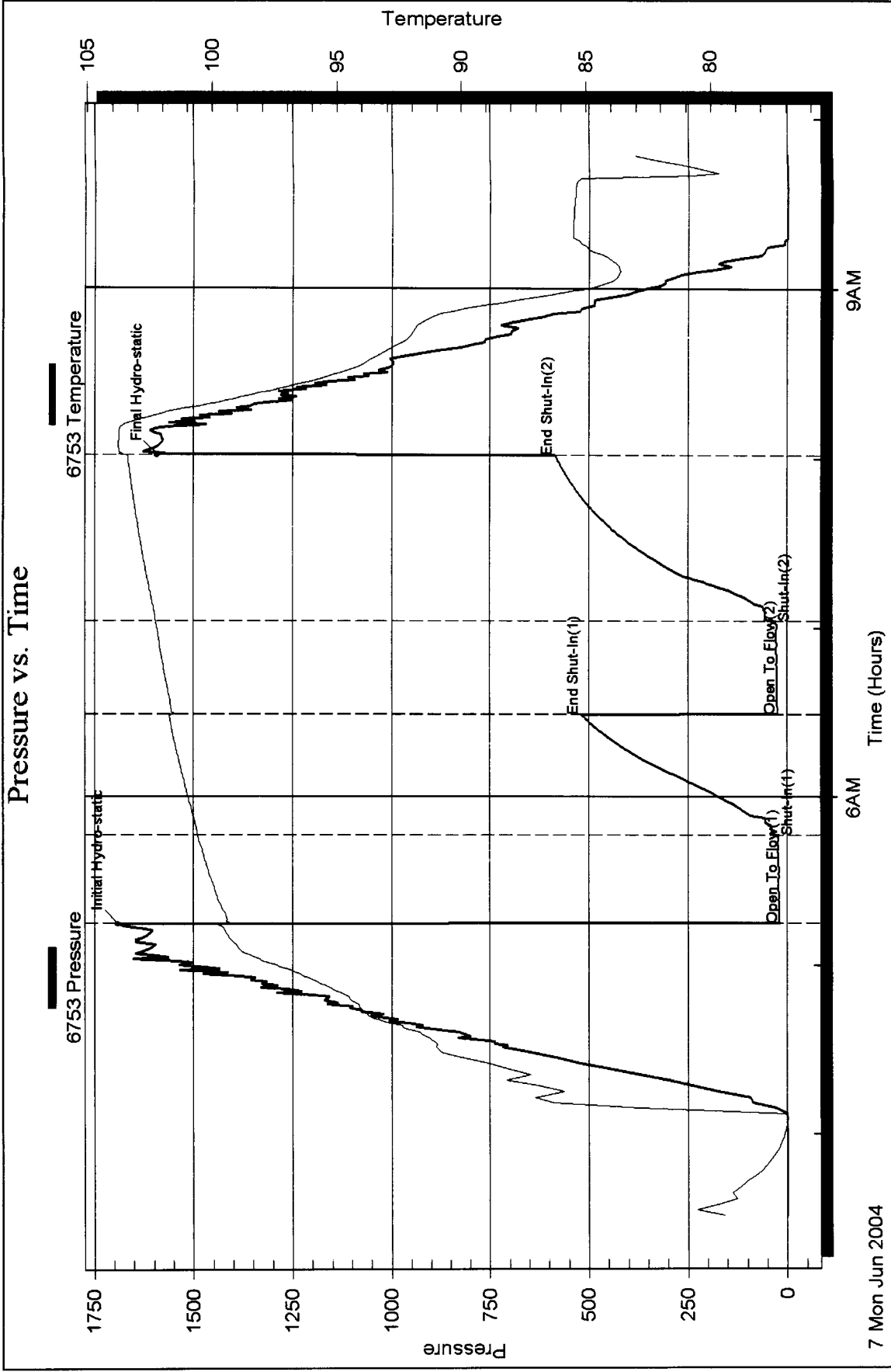
Inside

Lario Oil & Gas Co.

24-11s-18w - Ellis

DST Test Number: 3

### Pressure vs. Time

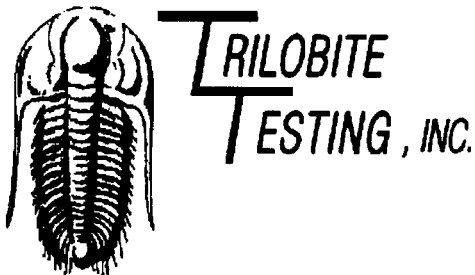


7 Mon Jun 2004

6AM

9AM

Time (Hours)



## DRILL STEM TEST REPORT

Prepared For: **Lario Oil & Gas Co.**

301 S. Market  
Wichita, KS. 67202

ATTN: Richard Hall

**24-11s-18w-Ellis**

**Marshall "E" #23**

Start Date: 2004.06.07 @ 18:10:37

End Date: 2004.06.08 @ 01:42:22

Job Ticket #: 19492                      DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Lario Oil & Gas Co.

Marshall "E" #23

24-11s-18w-Ellis

DST # 4

Arbuckle

2004.06.07



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Lario Oil & Gas Co.

**Marshall "E" #23**

301 S. Market  
Wichita, KS. 67202

**24-11s-18w-Ellis**

ATTN: Richard Hall

Job Ticket: 19492

**DST#: 4**

Test Start: 2004.06.07 @ 18:10:37

## GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:54:07

Time Test Ended: 01:42:22

Test Type: Conventional Bottom Hole

Tester: Jason Mclemore

Unit No: 24

Interval: **3422.00 ft (KB) To 3440.00 ft (KB) (TVD)**

Total Depth: 3440.00 ft (KB) (TVD)

Hole Diameter: 7.80 inches Hole Condition: Good

Reference Elevations: 1931.00 ft (KB)

1926.00 ft (CF)

KB to GRVCF: 5.00 ft

**Serial #: 6753**

**Inside**

Press@RunDepth: 83.54 psig @ 3426.00 ft (KB)

Start Date: 2004.06.07

End Date:

2004.06.08

Start Time: 18:11:07

End Time:

01:42:22

Capacity: 7000.00 psig

Last Calib.: 1899.12.30

Time On Btm: 2004.06.07 @ 19:53:57

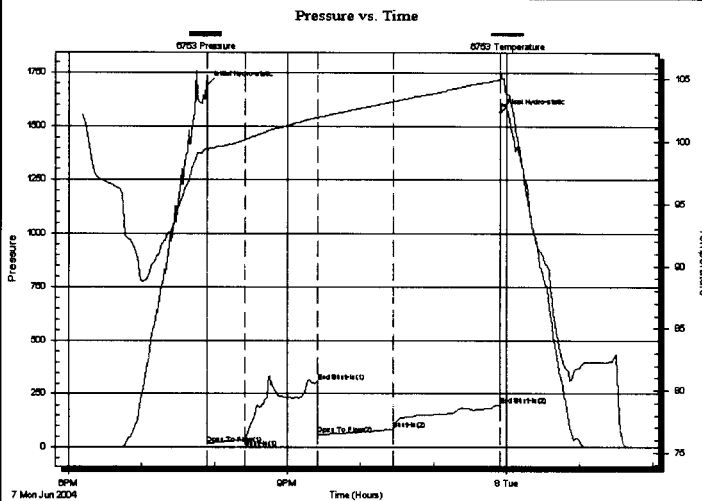
Time Off Btm: 2004.06.07 @ 23:54:37

**TEST COMMENT:** IFP-Weak Blow , Built to 3/4"

ISI-Blow back Built to 1"

FFP- Weak Blow , Built to 3-1/4"

FSI-Blow back Built to 2"



## PRESSURE SUMMARY

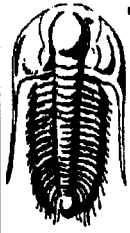
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1690.38	99.53	Initial Hydro-static
1	17.52	99.12	Open To Flow (1)
31	36.69	100.15	Shut-In(1)
91	305.34	101.92	End Shut-In(1)
91	60.18	101.80	Open To Flow (2)
153	83.54	103.18	Shut-In(2)
241	199.82	104.94	End Shut-In(2)
241	1562.32	105.67	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
10.00	HOCWTR Wtr -55%O-45%M	0.05
180.00	Free Oil	0.94

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Lario Oil & Gas Co.

**Marshall "E" #23**

301 S. Market  
Wichita, KS. 67202

**24-11s-18w-Ellis**

Job Ticket: 19492

**DST#: 4**

ATTN: Richard Hall

Test Start: 2004.06.07 @ 18:10:37

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

32 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 59.00 sec/qt

Cushion Volume:

bbl

Water Loss: 11.98 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 10000.00 ppm

Filter Cake: 2.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	HOCMTR Wtr -55%O-45%M	0.049
180.00	Free Oil	0.940

Total Length: 190.00 ft      Total Volume: 0.989 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Lario Oil & Gas Co.

**Marshall "E" #23**

301 S. Market  
Wichita, KS. 67202

**24-11s-18w-Ellis**

ATTN: Richard Hall

Job Ticket: 19492

**DST#: 4**

Test Start: 2004.06.07 @ 18:10:37

### Tool Information

Drill Pipe:	Length: 3231.00 ft	Diameter: 3.80 inches	Volume: 45.32 bbl	Tool Weight: 2400.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 184.00 ft	Diameter: 2.25 inches	Volume: 0.90 bbl	Weight to Pull Loose: 48000.00 lb
			<u>Total Volume: 46.22 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	21.00 ft			String Weight: Initial 44000.00 lb
Depth to Top Packer:	3422.00 ft			Final 45000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	18.00 ft			
Tool Length:	46.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

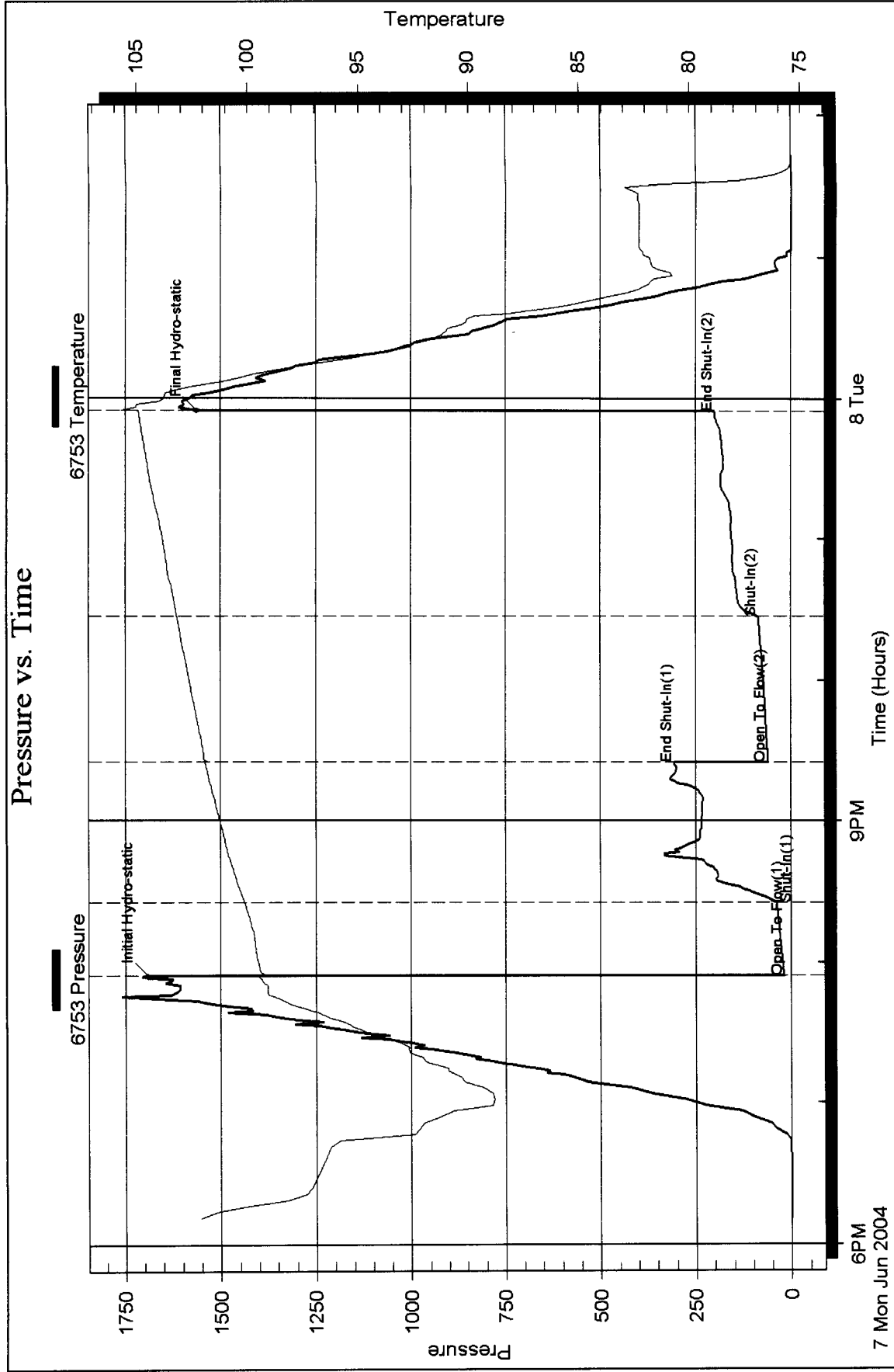
Tool Comments:

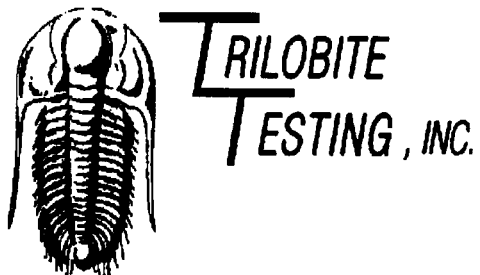
Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
------------------	-------------	------------	----------	------------	----------------

Change Over Sub	1.00			3395.00	
Shut In Tool	5.00			3400.00	
Hydraulic tool	5.00			3405.00	
Jars	5.00			3410.00	
Safety Joint	2.00			3412.00	
Packer	5.00			3417.00	28.00 Bottom Of Top Packer
Packer	5.00			3422.00	
Stubb	1.00			3423.00	
Perforations	3.00			3426.00	
Recorder	0.00	6753	Inside	3426.00	
Perforations	11.00			3437.00	
Recorder	0.00	13252	Outside	3437.00	
Bullnose	3.00			3440.00	18.00 Bottom Packers & Anchor

**Total Tool Length: 46.00**

# Pressure vs. Time





## DRILL STEM TEST REPORT

Prepared For: **Lario Oil & Gas Co.**

301 S. Market  
Wichita, KS. 67202

ATTN: Richard Hall

**24-11s-18w-Ellis**

**Marshall "E" #23**

Start Date: 2004.06.08 @ 06:46:10

End Date: 2004.06.08 @ 13:31:10

Job Ticket #: 19493                      DST #: 5

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Lario Oil & Gas Co.

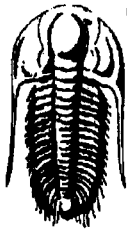
Marshall "E" #23

24-11s-18w-Ellis

DST # 5

Arbuckle

2004.06.08



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Lario Oil & Gas Co.

301 S. Market  
Wichita, KS. 67202

ATTN: Richard Hall

**Marshall "E" #23**

**24-11s-18w-Ellis**

Job Ticket: 19493

**DST#: 5**

Test Start: 2004.06.08 @ 06:46:10

## GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:21:00

Time Test Ended: 13:31:10

Test Type: Conventional Bottom Hole

Tester: Jason Mclemore

Unit No: 24

Interval: **3440.00 ft (KB) To 3450.00 ft (KB) (TVD)**

Total Depth: 3450.00 ft (KB) (TVD)

Hole Diameter: 7.80 inches Hole Condition: Good

Reference Elevations: 1931.00 ft (KB)

1926.00 ft (CF)

KB to GR/CF: 5.00 ft

**Serial #: 6753**

**Inside**

Press@RunDepth: 432.56 psig @ 3442.00 ft (KB)

Start Date: 2004.06.08

End Date:

2004.06.08

Start Time: 06:46:40

End Time:

13:31:10

Capacity: 7000.00 psig

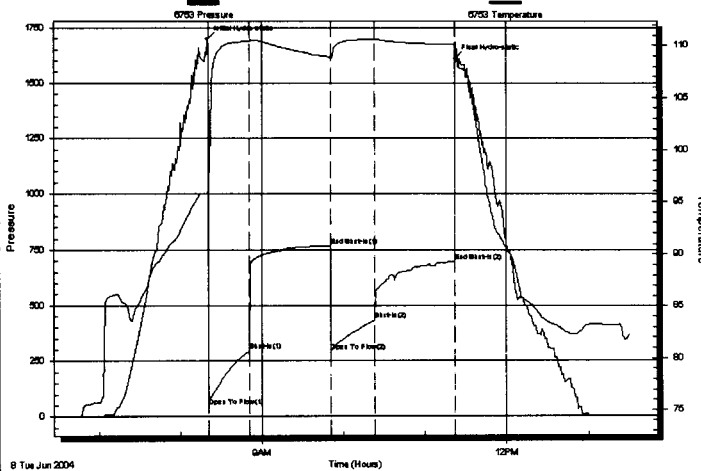
Last Calib.: 1899.12.30

Time On Btm: 2004.06.08 @ 08:19:40

Time Off Btm: 2004.06.08 @ 11:22:00

**TEST COMMENT:** IFF-Strong Blow, BOB in 2-1/2"  
IS-Blow back To BOB in 40 min.  
FFP- Good Blow, BOB in 5 min.  
FSI-Blow back Built to BOB in 20 min.

Pressure vs. Time



## PRESSURE SUMMARY

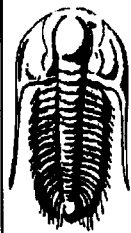
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1696.88	95.75	Initial Hydro-static
2	46.11	96.29	Open To Flow (1)
31	296.70	110.43	Shut-In(1)
91	768.11	108.95	End Shut-In(1)
91	291.54	108.68	Open To Flow (2)
123	432.56	110.58	Shut-In(2)
182	697.98	110.09	End Shut-In(2)
183	1609.31	110.35	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
810.00	MW-90%W-10%M	10.24
30.00	OCMW-20%G-20%O-45%W-15%M	0.42
300.00	Free Oil-10%G-90%O	4.21

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Lario Oil & Gas Co.

**Marshall "E" #23**

301 S. Market  
Wichita, KS. 67202

**24-11s-18w-Ellis**

Job Ticket: 19493

**DST#: 5**

ATTN: Richard Hall

Test Start: 2004.06.08 @ 06:46:10

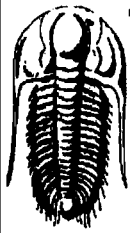
### Tool Information

Drill Pipe:	Length: 3309.00 ft	Diameter: 3.80 inches	Volume: 46.42 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 123.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 48000.00 lb
		Total Volume: 47.02 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 42000.00 lb
Depth to Top Packer:	3440.00 ft			Final 46000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	10.00 ft			
Tool Length:	38.00 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			3413.00	
Shut In Tool	5.00			3418.00	
Hydraulic tool	5.00			3423.00	
Jars	5.00			3428.00	
Safety Joint	2.00			3430.00	
Packer	5.00			3435.00	28.00 Bottom Of Top Packer
Packer	5.00			3440.00	
Stubb	1.00			3441.00	
Perforations	1.00			3442.00	
Recorder	0.00	6753	Inside	3442.00	
Perforations	5.00			3447.00	
Recorder	0.00	13252	Outside	3447.00	
Bullnose	3.00			3450.00	10.00 Bottom Packers & Anchor

**Total Tool Length: 38.00**



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Lario Oil & Gas Co.

**Marshall "E" #23**

301 S. Market  
Wichita, KS. 67202

**24-11s-18w-Ellis**

ATTN: Richard Hall

Job Ticket: 19493

**DST#: 5**

Test Start: 2004.06.08 @ 06:46:10

**Mud and Cushion Information**

Mud Type: Gel Chem

Cushion Type:

Oil API:

28 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.99 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 9000.00 ppm

Filter Cake: 2.00 inches

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
810.00	MW-90%W-10%M	10.242
30.00	OCCMW-20%G-20%O-45%W-15%M	0.421
300.00	Free Oil-10%G-90%O	4.208

Total Length: 1140.00 ft

Total Volume: 14.871 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

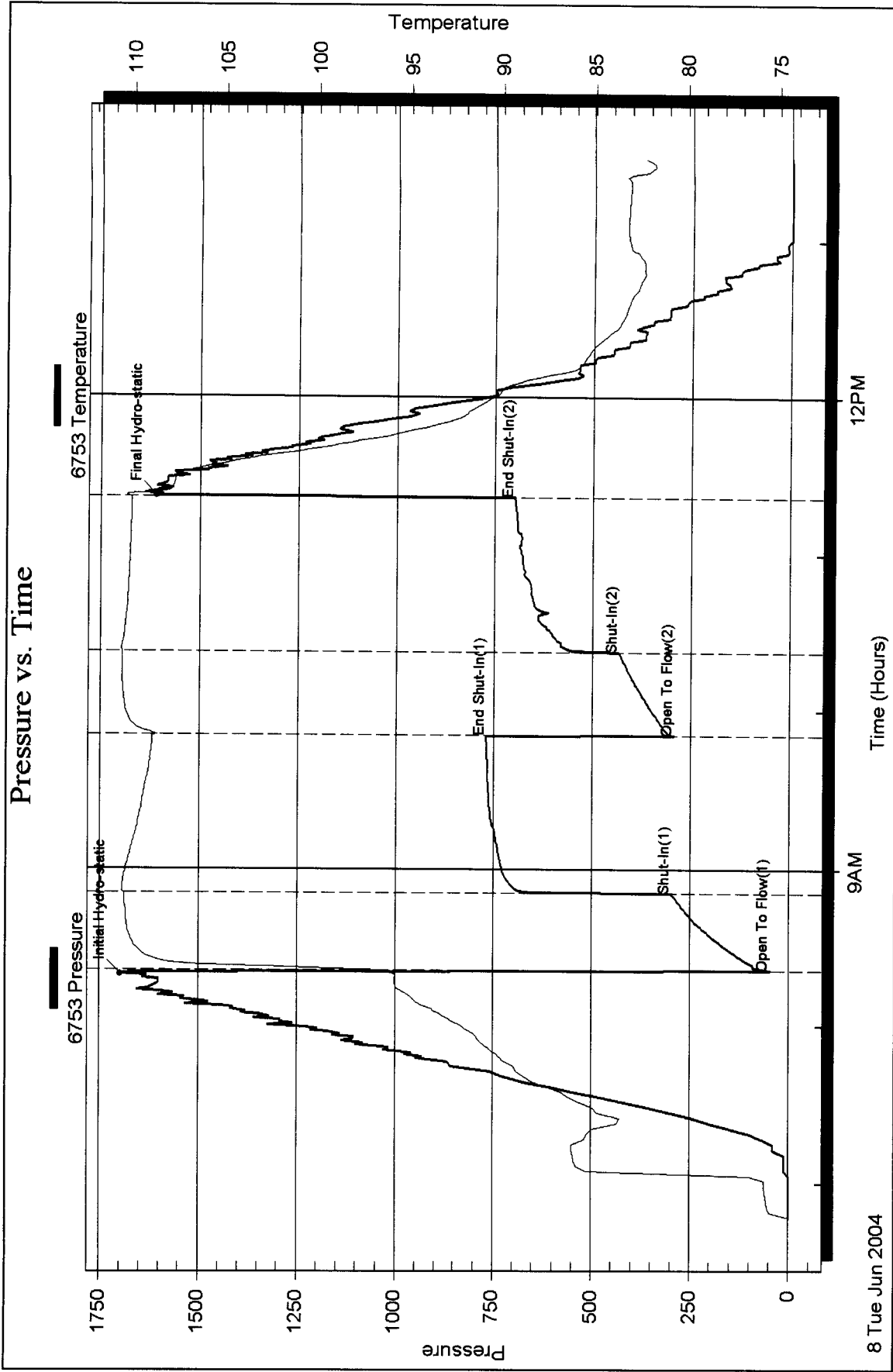
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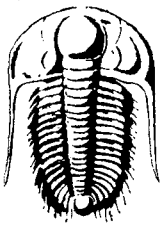
Laboratory Name:

Laboratory Location:

Recovery Comments:

### Pressure vs. Time





# TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

6500

No. 19489

05/03

## Test Ticket

Well Name & No. Marshall "E" #23 Test No. 1 Date 6-5-04  
 Company Lario Oil + Gas Co. Zone Tested Topeka  
 Address 301 S. Market, Wichita, Ks. 67202 Elevation 1931 KB 1926 GL  
 Co. Rep / Geo. Richard Hall Cont. Murpin #8 Est. Ft. of Pay \_\_\_\_\_ Por. \_\_\_\_\_ %  
 Location: Sec. 24 Twp. 11s Rge. 18w Co. Ellis State Ks  
 No. of Copies Reg Disbtribution Sheet (Y, N) \_\_\_\_\_ Turnkey (Y, N) \_\_\_\_\_ Evaluation (Y, N) \_\_\_\_\_

Interval Tested 2886 - 2900 Initial Str Wt./Lbs. 39,000 Unseated Str Wt./Lbs. 39,000  
 Anchor Length 14' Wt. Set Lbs. 25,000 Wt. Pulled Loose/Lbs. 60,000  
 Top Packer Depth 2881 Tool Weight 1800  
 Bottom Packer Depth 2886 Hole Size 7 7/8"  Rubber Size 6 3/4"   
 Total Depth 2900 Wt. Pipe Run 0 Drill Collar Run 184  
 Mud Wt. 8.9 LCM 4 Vis. 49 WL 8.8 Drill Pipe Size 4 1/2 XH Ft. Run 2706  
 Blow Description IFP - 1" Blow dying to 1/2" Blow  
ISI - No Blowback  
FFP - No Blow  
FBI - No Blowback

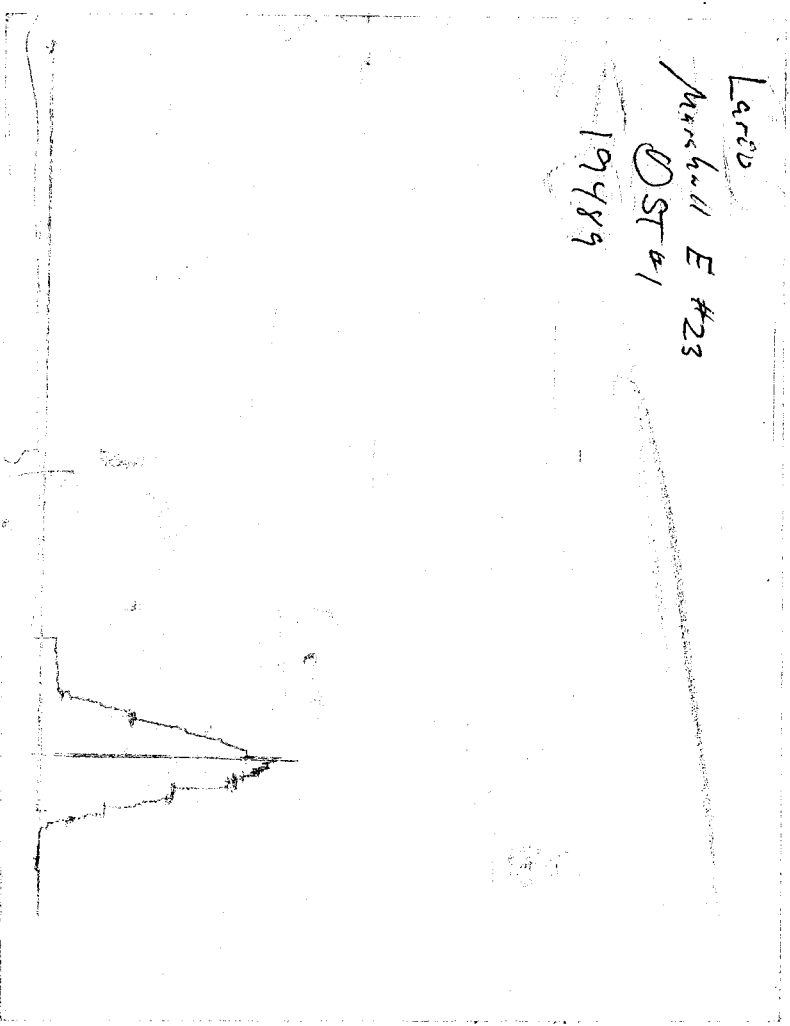
Recovery - Total Feet 62 GIP \_\_\_\_\_ Ft. in DC \_\_\_\_\_ Ft. in DP \_\_\_\_\_  
 Rec. 62 Feet of MW/Oil show %gas \_\_\_\_\_ %oil 20 %water 80 %mud \_\_\_\_\_  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud \_\_\_\_\_  
 Rec. \_\_\_\_\_ Feet of Oil spots in tool %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud \_\_\_\_\_  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud \_\_\_\_\_  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud \_\_\_\_\_  
 BHT 98° °F Gravity \_\_\_\_\_ °API D @ \_\_\_\_\_ °F Corrected Gravity \_\_\_\_\_ °API  
 RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm Recovery \_\_\_\_\_ Chlorides 3000 ppm System

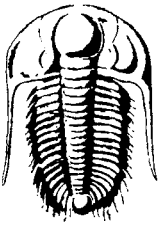
AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud	<u>1587</u> PSI	<u>6753</u>	<input checked="" type="checkbox"/> <u>700</u>
(B) First Initial Flow Pressure	<u>29</u> PSI	(depth) <u>2887</u>	Elec. Rec. <input checked="" type="checkbox"/> <u>150</u>
(C) First Final Flow Pressure	<u>33</u> PSI	Recorder No. <u>13252</u>	Jars <input checked="" type="checkbox"/> <u>200</u>
(D) Initial Shut-In Pressure	<u>786</u> PSI	(depth) <u>2897</u>	Safety Jt. <input checked="" type="checkbox"/> <u>50</u>
(E) Second Initial Flow Pressure	<u>38</u> PSI	Recorder No. _____	Circ Sub _____
(F) Second Final Flow Pressure	<u>49</u> PSI	(depth) _____	Sampler _____
(G) Final Shut-In Pressure	<u>771</u> PSI	<b>Initial Opening</b> <u>30</u>	Straddle _____
(Q) Final Hydrostatic Mud	<u>1374</u> PSI	Initial Shut-In <u>45</u>	Ext. Packer _____
		Final Flow <u>45</u>	Shale Packer _____
		Final Shut-In <u>60</u>	Mileage <u>2244</u> <u>3740</u>
		<b>T-On Location</b> <u>3:55</u>	Sub Total: <u>113740</u>
		T-Started <u>5:07</u>	Std. By _____
		T-Open <u>6:45</u>	Other _____
		T-Pulled <u>9:45</u>	Total: <u>113740</u>
		T-Out <u>11:00</u>	

Approved By \_\_\_\_\_  
 Our Representative Jaron McLenon Thank you

0.05

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





# TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

No. 19490

05/03

## Test Ticket

Well Name & No. Marshall "E" # 23 Test No. 2 Date 6-6-04  
 Company Lario Oil & Gas Co. Zone Tested LKC "G-J"  
 Address 301 S. Market, Wichita, Ks 67202 Elevation 1971 KB 1926 GL  
 Co. Rep / Geo. Rick Hall Cont. Murfin #8 Est. Ft. of Pay \_\_\_\_\_ Por. \_\_\_\_\_ %  
 Location: Sec. 24 Twp. 11 Rge. 18 Co. Ellis State Ks  
 No. of Copies Reg Distribution Sheet (Y, N) \_\_\_\_\_ Turnkey (Y, N) \_\_\_\_\_ Evaluation (Y, N) \_\_\_\_\_

Interval Tested 3222-3330 Initial Str Wt./Lbs. 44,000 Unseated Str Wt./Lbs. 45,000  
 Anchor Length 108' Wt. Set Lbs. 25,000 Wt. Pulled Loose/Lbs. 46,000  
 Top Packer Depth 3217 Tool Weight 3000  
 Bottom Packer Depth 3222 Hole Size 7 7/8" ✓ Rubber Size 6 3/4" ✓  
 Total Depth 3330 Wt. Pipe Run 0 Drill Collar Run 184  
 Mud Wt. 9.3 LCM 4# Vis. 44 WL 9.4 Drill Pipe Size 4 1/2 XH Ft. Run 3016  
 Blow Description IFP - Fair Blow, Built From 1/4" to BOB in 29 min  
FSI - Blowback Built to 2"  
FFP - Fair Blw, BOB in 25 min  
FSI - Blowback Built to 2 1/4"

Recovery - Total Feet	GIP	Ft. in DC	Ft. in DP
<u>195</u>	<u>255</u>		
Rec. <u>60</u>	Feet of <u>Free Oil</u>	%gas	%oil
Rec. <u>135</u>	Feet of <u>Muddy Water w/oil show</u>	<u>10</u> %gas	<u>10</u> %oil
Rec. _____	Feet of _____	%gas	%oil
Rec. _____	Feet of _____	%gas	%oil
Rec. _____	Feet of _____	%gas	%oil
BHT <u>102</u>	°F Gravity <u>40</u>	°API D @ <u>110</u>	°F Corrected Gravity <u>35</u>
RW <u>.206</u>	@ <u>95°</u>	°F Chlorides <u>24,000</u> ppm Recovery _____	Chlorides <u>6,000</u> ppm System

AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud	<u>1595</u> PSI	<u>6753</u>	<u>✓ 900</u>
(B) First Initial Flow Pressure	<u>20</u> PSI	(depth) <u>3225</u>	Elec. Rec. <u>✓ 150</u>
(C) First Final Flow Pressure	<u>68</u> PSI	Recorder No. <u>13252</u>	Jars <u>✓ 200</u>
(D) Initial Shut-In Pressure	<u>408</u> PSI	(depth) <u>3327</u>	Safety Jt. <u>✓ 50</u>
(E) Second Initial Flow Pressure	<u>73</u> PSI	Recorder No. _____	Circ Sub _____
(F) Second Final Flow Pressure	<u>98</u> PSI	(depth) _____	Sampler _____
(G) Final Shut-In Pressure	<u>399</u> PSI	<b>Initial Opening</b> <u>30</u>	Straddle _____
(Q) Final Hydrostatic Mud	<u>1539</u> PSI	Initial Shut-In <u>45</u>	Ext. Packer _____
		Final Flow <u>45</u>	Shale Packer _____
		Final Shut-In <u>60</u>	Mileage <u>22 37.40</u>
		<b>T-On Location</b> <u>11:15</u>	Sub Total: <u>1137.40</u>
		T-Started <u>12:15</u>	Std. By _____
		T-Open <u>13:38</u>	Other _____
		T-Pulled <u>16:38</u>	Total: <u>1137.40</u>
		T-Out <u>18:45</u>	

TRILOBITE 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 \_\_\_\_\_  
 Our Representative Jason McLammon *Thank you*

# CHART PAGE

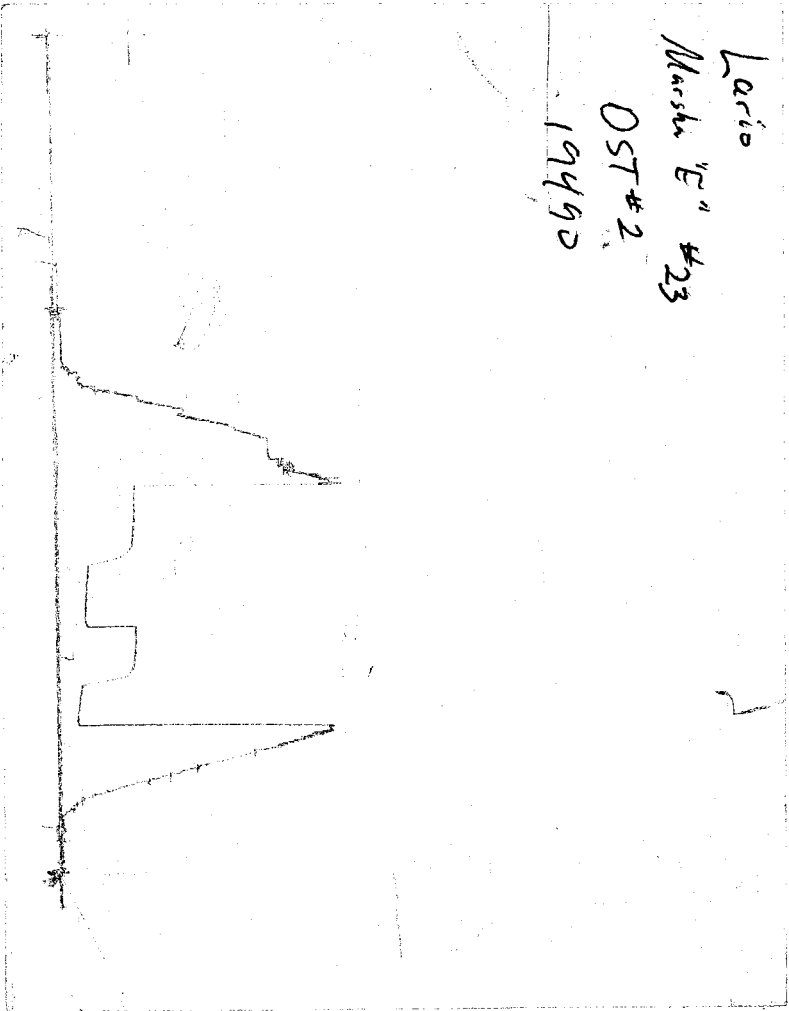
This is a photocopy of the actual AK-1 recorder chart

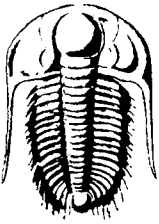
Lario

March "E" #23

OST #2

1949





# TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

No. 19491

05/03

## Test Ticket

Well Name & No. <u>Marshal "E" #23</u>	Test No. <u>3</u>	Date <u>6-7-09</u>
Company <u>Lario Oil &amp; Gas Co.</u>	Zone Tested <u>Arbuckle</u>	
Address <u>301 S. Market, Wichita, KS 67202</u>	Elevation <u>1931</u> KB <u>1926</u> GL	
Co. Rep / Geo. <u>Rick Hall</u>	Cont. <u>Murfin #8</u>	Est. Ft. of Pay _____ Por. _____ %
Location: Sec. <u>24</u> Twp. <u>11</u> Rge. <u>18</u> Co. <u>Ellis</u> State <u>KS</u>		
No. of Copies <u>Reg</u> Distribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____		

Interval Tested <u>3377-3422</u>	Initial Str Wt./Lbs. <u>44,000</u>	Unseated Str Wt./Lbs. <u>44,000</u>
Anchor Length <u>45'</u>	Wt. Set Lbs. <u>25,000</u>	Wt. Pulled Loose/Lbs. <u>48,000</u>
Top Packer Depth <u>3372</u>	Tool Weight <u>2400</u>	
Bottom Packer Depth <u>3377</u>	Hole Size <u>7 7/8"</u> ✓	Rubber Size <u>6 3/4"</u> ✓
Total Depth <u>3422</u>	Wt. Pipe Run <u>0</u>	Drill Collar Run <u>184</u>
Mud Wt. <u>9.3</u> LCM <u>4#</u> Vis. <u>44</u> WL <u>9.2</u>	Drill Pipe Size <u>4 1/2 XH</u>	Ft. Run <u>3170</u>
Blow Description <u>IFP - Weak Blow, 1/4"</u>		
<u>ISI - No Blowback</u>		
<u>FFP - No Blow</u>		
<u>FSI - No Blowback</u>		

Recovery - Total Feet <u>5</u>	GIP _____	Ft. in DC _____	Ft. in DP _____
Rec. <u>3</u>	Feet of <u>Mud</u>	%gas _____	%oil _____
Rec. _____	Feet of <u>Oil spots in tool</u>	%gas _____	%oil _____
Rec. _____	Feet of _____	%gas _____	%oil _____
Rec. _____	Feet of _____	%gas _____	%oil _____
Rec. _____	Feet of _____	%gas _____	%oil _____
BHT <u>103</u>	°F Gravity _____	°API D @ _____	°F Corrected Gravity _____
RW _____	@ _____	°F Chlorides _____ ppm Recovery _____	Chlorides <u>6,000</u> ppm System

(A) Initial Hydrostatic Mud	AK-1	Alpine	1690	PSI	Recorder No.	6753	Test	✓	700
(B) First Initial Flow Pressure			18	PSI	(depth)	3382	Elec. Rec.	✓	150
(C) First Final Flow Pressure			21	PSI	Recorder No.	13252	Jars	✓	200
(D) Initial Shut-In Pressure			519	PSI	(depth)	3419	Safety Jt.	✓	50
(E) Second Initial Flow Pressure			24	PSI	Recorder No.		Circ Sub		
(F) Second Final Flow Pressure			30	PSI	(depth)		Sampler		
(G) Final Shut-In Pressure			585	PSI	Initial Opening	30	Straddle		
(Q) Final Hydrostatic Mud			1592	PSI	Initial Shut-In	45	Ext. Packer		
					Final Flow	30	Shale Packer		
					Final Shut-In	60	Mileage	22	37.40
					T-On Location	2:48	Sub Total:	1137.40	
					T-Started	3:30	Std. By		
					T-Open	5:14	Other		
					T-Pulled	7:59	Total:	1137.40	
					T-Out	9:45			

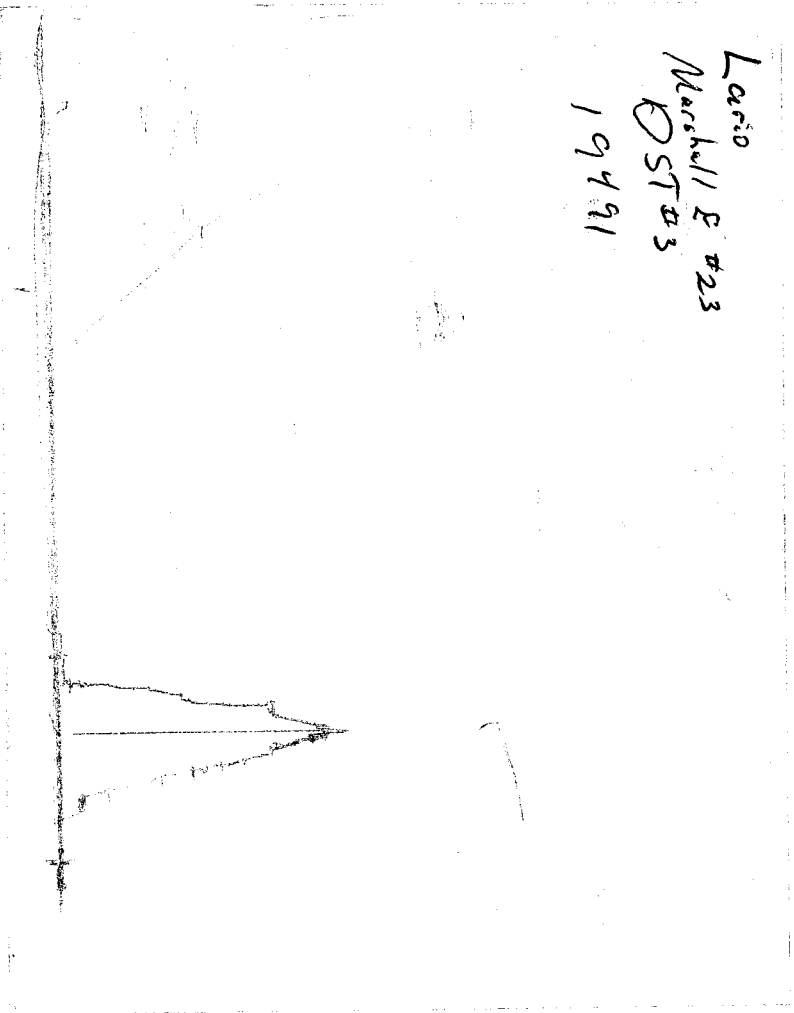
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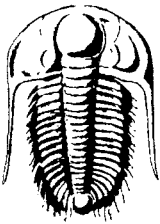
Approved By \_\_\_\_\_  
 Our Representative Jana Mc Lemore

**CHART PAGE**

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

Lario  
Marshall E #23  
OST #3  
19491





# TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

No. 19492

05/03

## Test Ticket

Well Name & No. Marshall "E" #23 Test No. 4 Date 6-7-04  
 Company Lario Oil & Gas Co. Zone Tested Arbuckle  
 Address 301 S. Market, Wichita, Ks 67202 Elevation 1931 KB 1926 GL  
 Co. Rep / Geo. Rick Hall Cont. Murfin #8 Est. Ft. of Pay \_\_\_\_\_ Por. \_\_\_\_\_ %  
 Location: Sec. 24 Twp. 11 Rge. 18 Co. Ellis State Ks  
 No. of Copies Reg Distribution Sheet (Y, N) \_\_\_\_\_ Turnkey (Y, N) \_\_\_\_\_ Evaluation (Y, N) \_\_\_\_\_

Interval Tested 3422 - 3440 Initial Str Wt./Lbs. 44,000 Unseated Str Wt./Lbs. 45,000  
 Anchor Length 18' Wt. Set Lbs. 25,000 Wt. Pulled Loose/Lbs. 48,000  
 Top Packer Depth 3417 Tool Weight 2400  
 Bottom Packer Depth 3422 Hole Size 7 7/8" ✓ Rubber Size 6 3/4" ✓  
 Total Depth 3440 Wt. Pipe Run 0 Drill Collar Run 184  
 Mud Wt. 9.1 LCM X 3 1/2 # Vis. 59 WL 12.0 Drill Pipe Size 4 1/2 XH Ft. Run 3231

Blow Description TFP - Weak Blow, Built to 3/4"  
ISI - Blowback Built to 1"  
FFP - Weak Blow, Built to 3 1/4"  
FST - Blowback Built to 2"

Recovery - Total Feet 190 GIP 140 Ft. in DC \_\_\_\_\_ Ft. in DP \_\_\_\_\_  
 Rec. 180 Feet of Gassy Oil %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud \_\_\_\_\_  
 Rec. 10 Feet of HOEM / Tr wtr %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud \_\_\_\_\_  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud \_\_\_\_\_  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud \_\_\_\_\_  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud \_\_\_\_\_  
 BHT 105° °F Gravity 33 °API D @ 75 °F Corrected Gravity 32 °API  
 RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm Recovery \_\_\_\_\_ Chlorides 10,000 ppm System

	AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud		<u>1690</u> PSI	<u>6753</u>	<u>✓ 500</u>
(B) First Initial Flow Pressure		<u>18</u> PSI	(depth) <u>3426</u>	Elec. Rec. <u>✓ 150</u>
(C) First Final Flow Pressure		<u>37</u> PSI	Recorder No. <u>13252</u>	Jars <u>✓ 200</u>
(D) Initial Shut-In Pressure		<u>305</u> PSI	(depth) <u>3437</u>	Safety Jt. <u>✓ 50</u>
(E) Second Initial Flow Pressure		<u>60</u> PSI	Recorder No. _____	Circ Sub _____
(F) Second Final Flow Pressure		<u>84</u> PSI	(depth) _____	Sampler _____
(G) Final Shut-In Pressure		<u>200</u> PSI	<b>Initial Opening</b> <u>30</u>	Straddle _____
(Q) Final Hydrostatic Mud		<u>1562</u> PSI	Initial Shut-In <u>60</u>	Ext. Packer _____
			Final Flow <u>60</u>	Shale Packer _____
			Final Shut-In <u>90</u>	Mileage <u>22 37.40</u>
			<b>T-On Location</b> <u>17:45</u>	Sub Total: <u>937.40</u>
			T-Started <u>18:10</u>	Std. By _____
			T-Open <u>19:54</u>	Other _____
			T-Pulled <u>23:54</u>	Total: _____
			T-Out <u>1:40</u>	

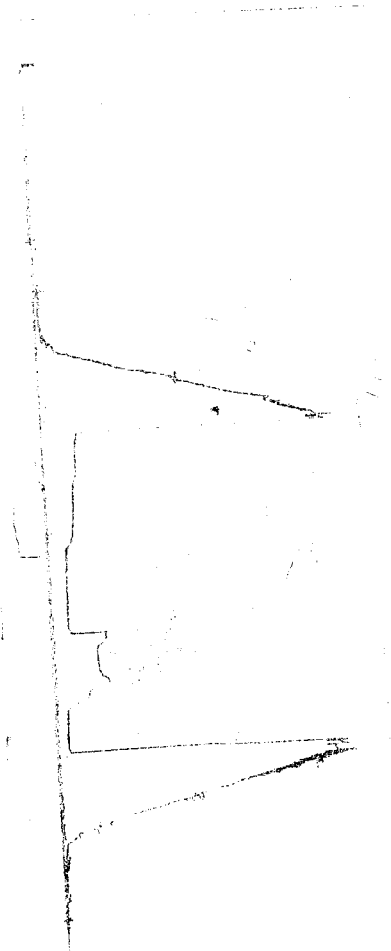
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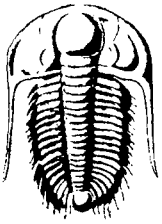
Approved By \_\_\_\_\_  
 Our Representative Jana McJannet *Make Your*

**CHART PAGE**

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

Lario  
Marshal E #23  
DST # 4  
19692





# TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

No. 19493

05/03

## Test Ticket

Well Name & No. Marshall "E" #23 Test No. 5 Date 6-8-04  
 Company Lario Oil & Gas Co. Zone Tested Arbuckle  
 Address 301 S. Market, Wichita, Ks 67202 Elevation 1931 KB 1926 GL  
 Co. Rep / Geo. Rick Hall Cont. Murfin #8 Est. Ft. of Pay \_\_\_\_\_ Por. \_\_\_\_\_ %  
 Location: Sec. 24 Twp. 11 Rge. 18 Co. Ellis State Ks  
 No. of Copies Reg Distribution Sheet (Y, N) \_\_\_\_\_ Turnkey (Y, N) \_\_\_\_\_ Evaluation (Y, N) \_\_\_\_\_

Interval Tested 3440 - 3450 Initial Str Wt./Lbs. 42,000 Unseated Str Wt./Lbs. 46,000  
 Anchor Length 10' Wt. Set Lbs. 25,000 Wt. Pulled Loose/Lbs. 48,000  
 Top Packer Depth 3735 Tool Weight 2,000  
 Bottom Packer Depth 3440 Hole Size 7 7/8" ✓ Rubber Size 6 3/4" ✓  
 Total Depth 3450 Wt. Pipe Run 0 Drill Collar Run 123  
 Mud Wt. 9.1 LCM 2# Vis. 50 WL 8.0 Drill Pipe Size 4 1/2 XH Ft. Run 3309  
 Blow Description IFP - Strong Blow, BOB in 2 1/2 min  
ISE - Blow back BOB in 40 min  
FFP - Good Blow, BOB in 5 min  
FSI - Blow back BOB in 20 min

Recovery - Total Feet 1140 GIP \_\_\_\_\_ Ft. in DC \_\_\_\_\_ Ft. in DP \_\_\_\_\_  
 Rec. 300 Feet of \_\_\_\_\_ %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud  
 Rec. 810 Feet of Water %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud  
 Rec. 300 Feet of Free Oil 10 %gas 90 %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud  
 Rec. 30 Feet of OCMW 20 %gas 20 %oil 45 %water 15 %mud  
 Rec. 810 Feet of Muddy Water %gas \_\_\_\_\_ %oil 90 %water 10 %mud  
 BHT 110 °F Gravity 32 °API D @ 98 °F Corrected Gravity 28 °API  
 RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm Recovery \_\_\_\_\_ Chlorides 9,000 ppm System

(A) Initial Hydrostatic Mud	AK-1	Alpine	1697	PSI	Recorder No.	6753	Test	✓	500
(B) First Initial Flow Pressure			46	PSI	(depth)	3442	Elec. Rec.	✓	150
(C) First Final Flow Pressure			297	PSI	Recorder No.	13252	Jars	✓	200
(D) Initial Shut-In Pressure			768	PSI	(depth)	3447	Safety Jt.	✓	50
(E) Second Initial Flow Pressure			292	PSI	Recorder No.		Circ Sub		
(F) Second Final Flow Pressure			433	PSI	(depth)		Sampler		
(G) Final Shut-In Pressure			698	PSI	Initial Opening	30	Straddle		
(Q) Final Hydrostatic Mud			1609	PSI	Initial Shut-In	60	Ext. Packer		
					Final Flow	30	Shale Packer		
					Final Shut-In	60	Mileage	22	37.40
					T-On Location	6:35	Sub Total:		937.40
					T-Started	6:46	Std. By		
					T-Open	8:21	Other	Rigtime - 400	
					T-Pulled	11:21	Total:		
					T-Out	13:30			

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Approved By \_\_\_\_\_  
 Our Representative Gara McTomore Thank you