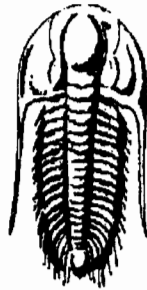


KCC  
JUL 27 2005  
CONFIDENTIAL

CONFIDENTIAL

ORIGINAL



TRILOBITE  
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Larson Operating Company**

562 W. Hwy 4  
Olmitz KS. 67564-8561

ATTN: Tom Larson

**19-18S-26W Ness**

**McLeish #1-19**

Start Date: 2005.04.11 @ 16:43:05

End Date: 2005.04.11 @ 20:48:20

Job Ticket #: 21533                      DST #: 1

RECEIVED  
JUL 29 2005  
KCC WICHITA

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

Larson Operating Company

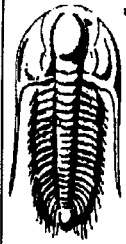
McLeish #1-19

19-18S-26W Ness

DST # 1

Altamont/Marraton

2005.04.11



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Larson Operating Company

**McLeish #1-19**

562 W. Hwy 4  
Olmitz KS. 67564-8561

**19-18S-26W Ness**

Job Ticket: 21533

**DST#: 1**

ATTN: Tom Larson

Test Start: 2005.04.11 @ 16:43:05

## GENERAL INFORMATION:

Formation: **Altamont/Marmaton**

Deviated: **No Whipstock** ft (KB)

Time Tool Opened: 18:13:00

Time Test Ended: 20:48:20

Test Type: **Conventional Bottom Hole**

Tester: **Rod Steinbrink**

Unit No: **22**

Interval: **4432.00 ft (KB) To 4467.00 ft (KB) (TVD)**

Total Depth: **4467.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Good**

Reference Elevations: **2658.00 ft (KB)**

**2650.00 ft (CF)**

KB to GR/CF: **8.00 ft**

**Serial #: 6625** Inside

Press@RunDepth: **psig @ 4433.00 ft (KB)**

Start Date: **2005.04.11**

End Date:

**2005.04.11**

Start Time: **16:43:08**

End Time:

**20:48:20**

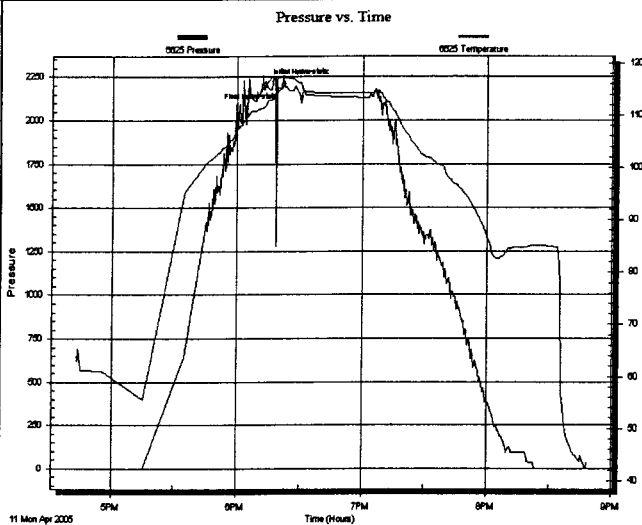
Capacity: **7000.00 psig**

Last Calib.: **1899.12.30**

Time On Btm: **2005.04.11 @ 18:13:50**

Time Off Btm: **2005.04.11 @ 18:22:50**

TEST COMMENT: **F; Pkr seat failed tried to reset w/ No help - TOH to change anchor**



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2213.87	112.01	Initial Hydro-static
9	2208.46	117.41	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
235.00	Drig. Mud	1.63

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Operating Company

McLeish #1-19

562 W. Hwy 4  
Olmitz KS. 67564-8561

19-18S-26W Ness

Job Ticket: 21533

DST#: 1

ATTN: Tom Larson

Test Start: 2005.04.11 @ 16:43:05

### Tool Information

Drill Pipe:	Length: 4243.00 ft	Diameter: 3.80 inches	Volume: 59.52 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 183.00 ft	Diameter: 2.25 inches	Volume: 0.90 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 60.42 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	4432.00 ft			Final 54000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	35.00 ft			
Tool Length:	54.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

### Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4418.00	
Hydraulic tool	5.00			4423.00	
Packer	5.00			4428.00	19.00 Bottom Of Top Packer
Packer	4.00			4432.00	
Stubb	1.00			4433.00	
Recorder	0.00	6625	Inside	4433.00	
Perforations	29.00			4462.00	
Recorder	0.00	13309	Outside	4462.00	
Bullnose	5.00			4467.00	35.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>54.00</b>				



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Larson Operating Company

**McLeish #1-19**

562 W. Hwy 4  
Olmitz KS. 67564-8561

**19-18S-26W Ness**

Job Ticket: 21533      DST#: 1

ATTN: Tom Larson

Test Start: 2005.04.11 @ 16:43:05

**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: 44.00 sec/qt

Cushion Volume:

bbbl

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

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1700.00 ppm

Filter Cake: inches

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
235.00	Drlg. Mud	1.629

Total Length: 235.00 ft      Total Volume: 1.629 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

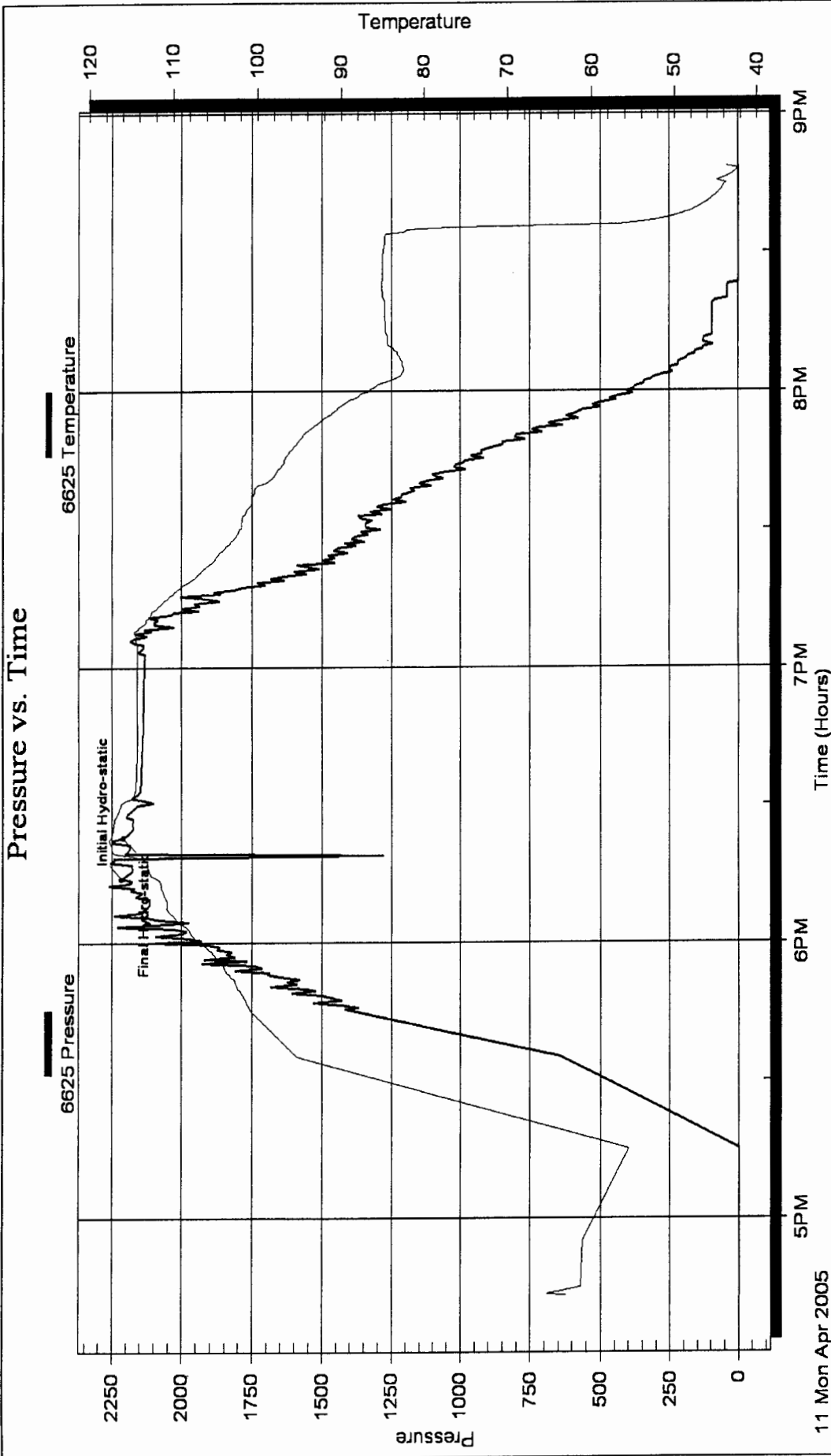
Serial #: 6625

Inside

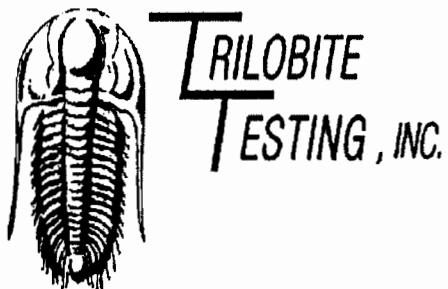
Larson Operating Company

19-18S-26W Ness

DST Test Number: 1



11 Mon Apr 2005



## DRILL STEM TEST REPORT

Prepared For: **Larson Operating Company**

562 W. Hwy 4  
Olmitz KS. 67564-8561

ATTN: Tom Larson

**19-18S-26W Ness**

**McLeish #1-19**

Start Date: 2005.04.11 @ 21:13:50

End Date: 2005.04.12 @ 02:57:50

Job Ticket #: 21534                      DST #: 2

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

Larson Operating Company

McLeish #1-19

19-18S-26W Ness

DST # 2

Altamont/Marraton

2005.04.11



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

Larson Operating Company

**McLeish #1-19**

562 W. Hwy 4  
Olmitz KS. 67564-8561

**19-18S-26W Ness**

Job Ticket: 21534

**DST#: 2**

ATTN: Tom Larson

Test Start: 2005.04.11 @ 21:13:50

### GENERAL INFORMATION:

Formation: **Altamont/Marmaton**

Deviated: **No Whipstock** ft (KB)

Test Type: **Conventional Bottom Hole**

Time Tool Opened: 22:35:35

Tester: **Rod Steinbrink**

Time Test Ended: 02:57:50

Unit No: **22**

Interval: **4436.00 ft (KB) To 4467.00 ft (KB) (TVD)**

Reference Elevations: **2658.00 ft (KB)**

Total Depth: **4467.00 ft (KB) (TVD)**

**2650.00 ft (CF)**

Hole Diameter: **7.88 inches** Hole Condition: **Good**

KB to GRVCF: **8.00 ft**

**Serial #: 6625** **Inside**

Press@RunDepth: **54.36 psig @ 4437.00 ft (KB)**

Capacity: **7000.00 psig**

Start Date: **2005.04.11**

End Date:

**2005.04.12**

Last Calib.: **1899.12.30**

Start Time: **21:13:53**

End Time:

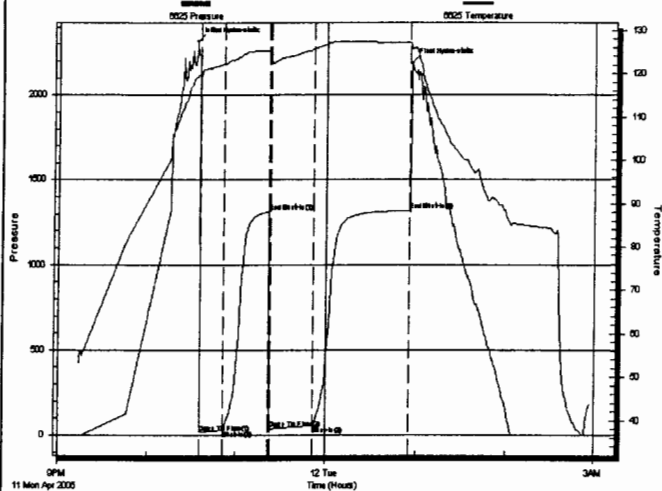
**02:57:50**

Time On Btm: **2005.04.11 @ 22:33:20**

Time Off Btm: **2005.04.12 @ 00:56:35**

**TEST COMMENT:** F; fair to strong blow off btm in 7 mins  
IS; Weaksurface return f/20 mins  
FF; Strong blow off btm in 3 mins  
FS; Weak steady surface blow thru

Pressure vs. Time



### PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2314.99	119.24	Initial Hydro-static
3	15.12	119.00	Open To Flow (1)
18	29.01	122.23	Shut-In(1)
49	1311.57	125.31	End Shut-In(1)
50	36.17	123.63	Open To Flow (2)
79	54.36	125.83	Shut-In(2)
142	1318.81	127.09	End Shut-In(2)
144	2185.95	125.86	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
40.00	CGO 10%g 90%o	0.20
	960 GP	

### Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Operating Company

McLeish #1-19

562 W. Hwy 4  
Olmitz KS. 67564-8561

19-18S-26W Ness

Job Ticket: 21534

DST#: 2

ATTN: Tom Larson

Test Start: 2005.04.11 @ 21:13:50

### Tool Information

Drill Pipe:	Length: 4245.00 ft	Diameter: 3.80 inches	Volume: 59.55 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 183.00 ft	Diameter: 2.25 inches	Volume: 0.90 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 60.45 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	11.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	4436.00 ft			Final 54000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	31.00 ft			
Tool Length:	50.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

### Tool Description

Length (ft) Serial No. Position Depth (ft) Accum. Lengths

Shut In Tool	5.00			4422.00	
Hydraulic tool	5.00			4427.00	
Packer	5.00			4432.00	19.00 Bottom Of Top Packer
Packer	4.00			4436.00	
Stubb	1.00			4437.00	
Recorder	0.00	6625	Inside	4437.00	
Perforations	25.00			4462.00	
Recorder	0.00	13309	Outside	4462.00	
Bullnose	5.00			4467.00	31.00 Bottom Packers & Anchor

**Total Tool Length: 50.00**



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Larson Operating Company

**McLeish #1-19**

562 W. Hwy 4  
Olmitz KS. 67564-8561

**19-18S-26W Ness**

Job Ticket: 21534      **DST#: 2**

ATTN: Tom Larson

Test Start: 2005.04.11 @ 21:13:50

**Mud and Cushion Information**

Mud Type: Gel Chem	Cushion Type:	Oil API:	40 deg API
Mud Weight: 10.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 44.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.99 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 1700.00 ppm			
Filter Cake: inches			

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
40.00	CGO 10%g 90%o	0.197
	960 GIP	

Total Length: ft      Total Volume: 0.590 bbl

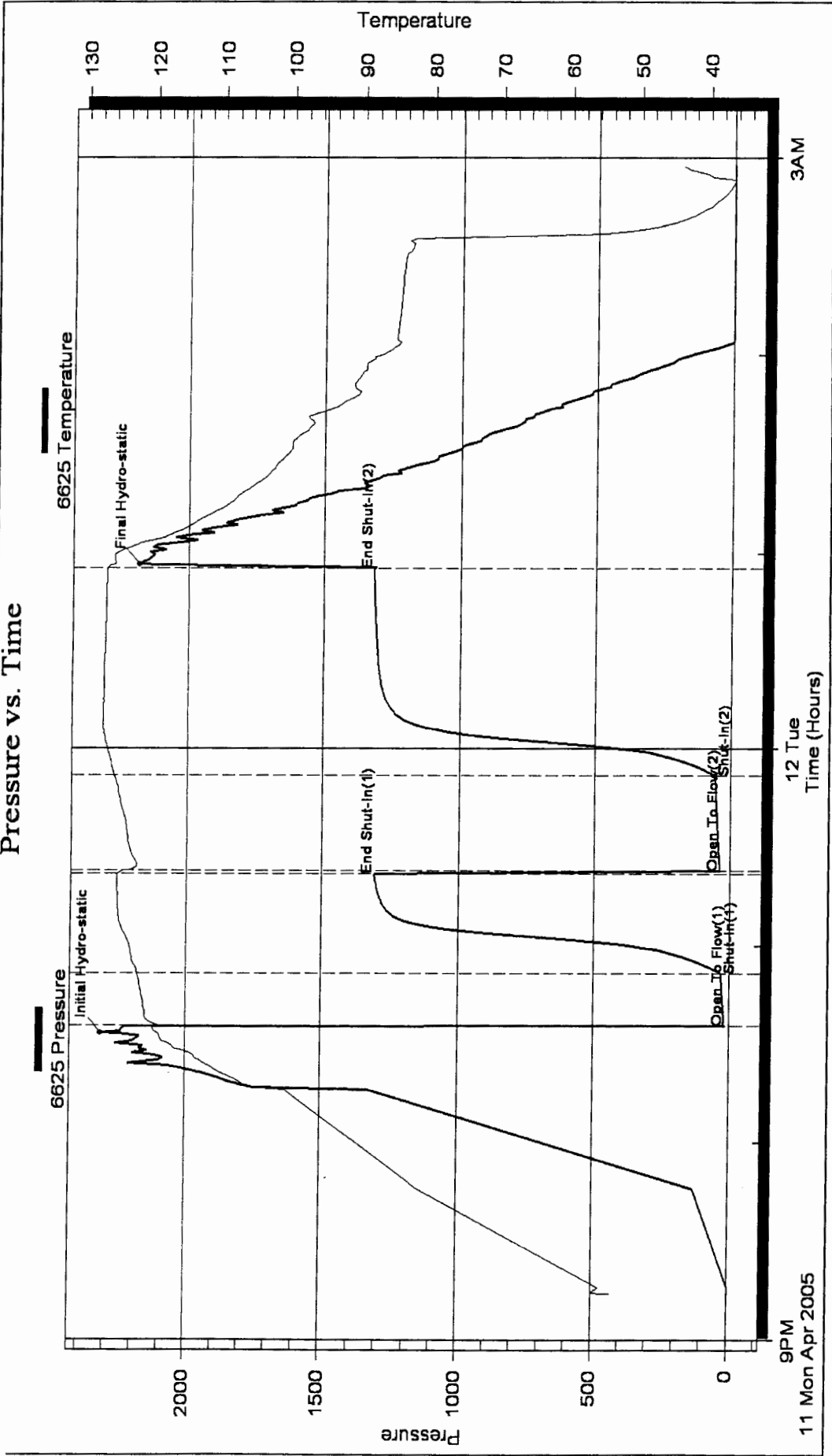
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:

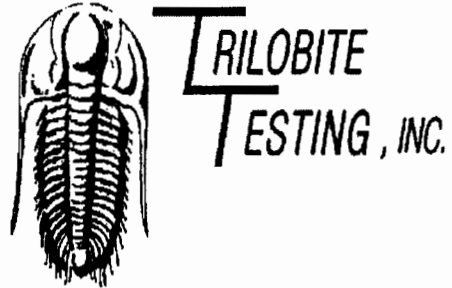
Laboratory Name:      Laboratory Location:

Recovery Comments:



# Pressure vs. Time





## DRILL STEM TEST REPORT

Prepared For: **Larson Operating Company**

562 W. Hwy 4  
Olmitz KS. 67564-8561

ATTN: Tom Larson

**19-18S-26W Ness**

**McLeish #1-19**

Start Date: 2005.04.12 @ 23:05:41

End Date: 2005.04.13 @ 06:05:11

Job Ticket #: 21536                      DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Larson Operating Company

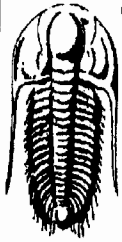
McLeish #1-19

19-18S-26W Ness

DST # 3

Mississippian

2005.04.12



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Larson Operating Company

**McLeish #1-19**

562 W. Hwy 4  
Olmitz KS. 67564-8561

**19-18S-26W Ness**

Job Ticket: 21536      **DST#: 3**

ATTN: Tom Larson

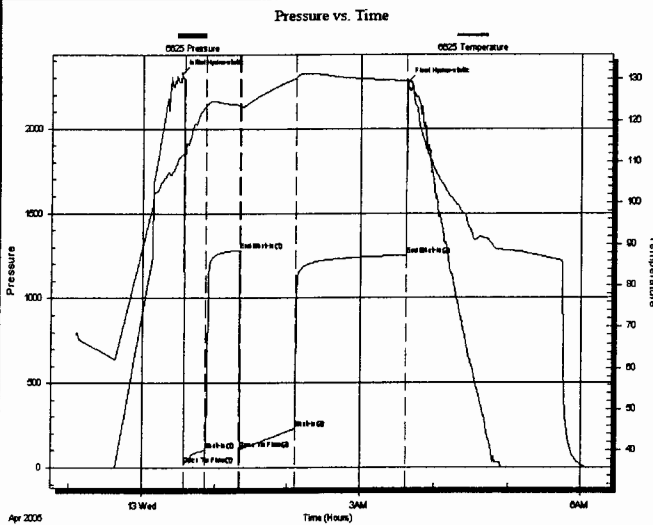
Test Start: 2005.04.12 @ 23:05:41

## GENERAL INFORMATION:

Formation: **Mississippian**  
 Deviated: **No Whipstock**      ft (KB)  
 Time Tool Opened: 00:34:26  
 Time Test Ended: 06:05:11  
 Interval: **4603.00 ft (KB) To 4627.00 ft (KB) (TVD)**  
 Total Depth: **4627.00 ft (KB) (TVD)**  
 Hole Diameter: **7.88 inches** Hole Condition: **Good**  
 Test Type: **Conventional Bottom Hole**  
 Tester: **Rod Steinbrink**  
 Unit No: **22**  
 Reference Elevations: **2658.00 ft (KB)**  
**2650.00 ft (CF)**  
 KB to GR/CF: **8.00 ft**

**Serial #: 6625**      **Inside**  
 Press@RunDepth: **231.09 psig @ 4604.00 ft (KB)**      Capacity: **7000.00 psig**  
 Start Date: **2005.04.12**      End Date: **2005.04.13**      Last Calib.: **1899.12.30**  
 Start Time: **23:05:44**      End Time: **06:05:11**      Time On Btm: **2005.04.13 @ 00:32:11**  
 Time Off Btm: **2005.04.13 @ 03:38:11**

**TEST COMMENT:** F; Weak to fair off btm in 13 mins  
 IS; Surface return built to 2"  
 FF; Fair to strong off btm in 8 mins  
 FS; Surface to btm in 26 mins



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2325.21	111.72	Initial Hydro-static
3	18.70	111.33	Open To Flow (1)
20	105.12	123.72	Shut-in(1)
49	1281.89	123.72	End Shut-in(1)
49	110.01	123.32	Open To Flow (2)
95	231.09	130.18	Shut-in(2)
185	1251.09	129.61	End Shut-in(2)
186	2268.02	129.92	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
250.00	GOCM 50%g 10%o 40%m	1.84
360.00	CGO 20%g 80%o	5.05
	360 GIP	

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Larson Operating Company

**McLeish #1-19**

562 W. Hwy 4  
Olmitz KS. 67564-8561

**19-18S-26W Ness**

Job Ticket: 21536

**DST#: 3**

ATTN: Tom Larson

Test Start: 2005.04.12 @ 23:05:41

### Tool Information

Drill Pipe:	Length: 4430.00 ft	Diameter: 3.80 inches	Volume: 62.14 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 183.00 ft	Diameter: 2.25 inches	Volume: 0.90 bbl	Weight to Pull Loose: 65000.00 lb
			<u>Total Volume: 63.04 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	29.00 ft			String Weight: Initial 55000.00 lb
Depth to Top Packer:	4603.00 ft			Final 59000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	24.00 ft			
Tool Length:	43.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4589.00	
Hydraulic tool	5.00			4594.00	
Packer	5.00			4599.00	19.00 Bottom Of Top Packer
Packer	4.00			4603.00	
Stubb	1.00			4604.00	
Recorder	0.00	6625	Inside	4604.00	
Perforations	18.00			4622.00	
Recorder	0.00	13309	Outside	4622.00	
Bullnose	5.00			4627.00	24.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>43.00</b>				



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Operating Company

**McLeish #1-19**

562 W. Hwy 4  
Olmitz KS. 67564-8561

**19-18S-26W Ness**

Job Ticket: 21536      **DST#: 3**

ATTN: Tom Larson

Test Start: 2005.04.12 @ 23:05:41

## 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:	ppm
Viscosity: 47.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.78 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2700.00 ppm			
Filter Cake: inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
250.00	GOCM 50%g 10%o 40%m	1.840
360.00	CGO 20%g 80%o	5.050
	360 GP	

Total Length: -999389.00 ft      Total Volume: 6.890 bbl

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

Laboratory Name:      Laboratory Location:

Recovery Comments:

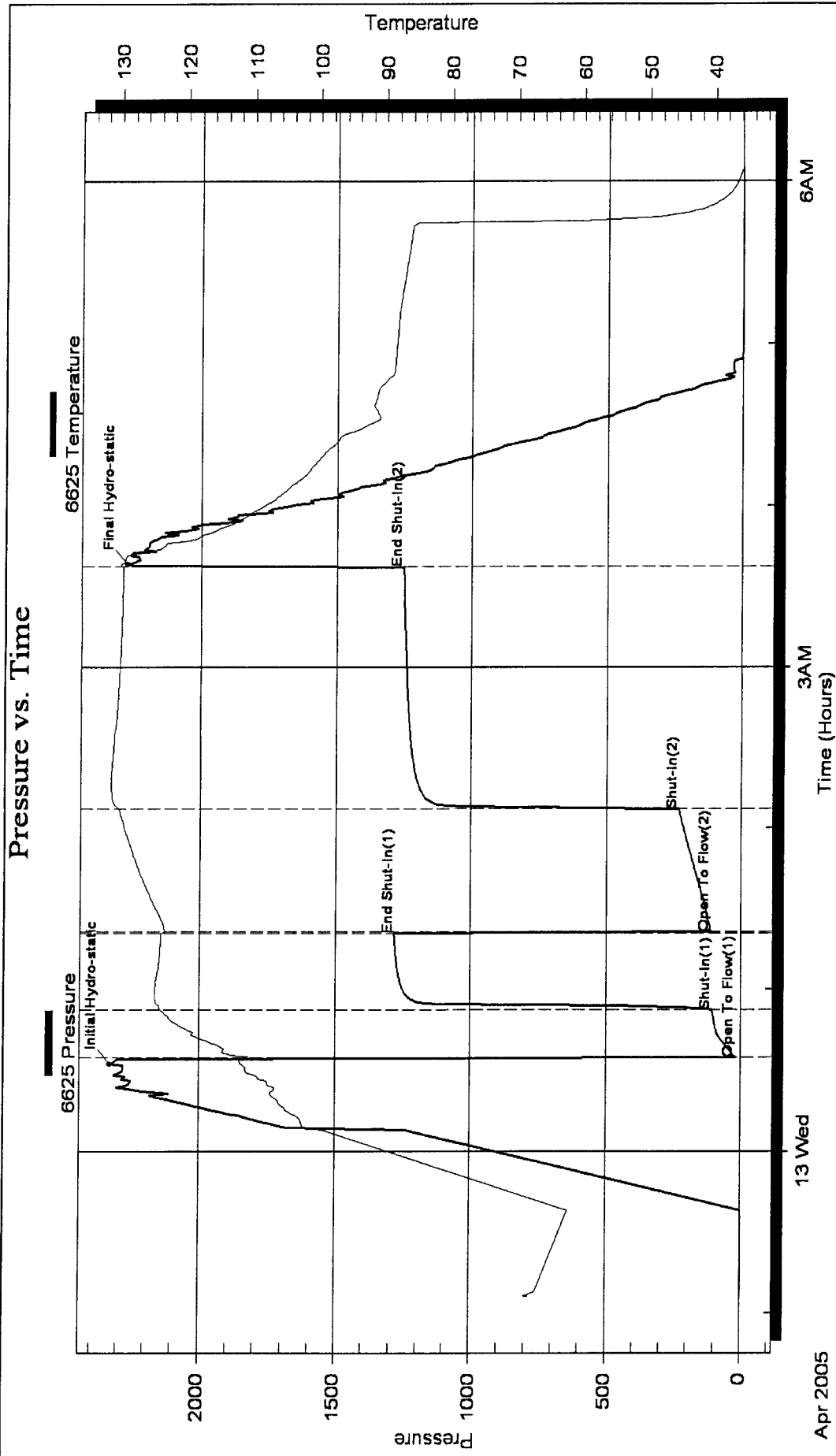
Serial #: 6625

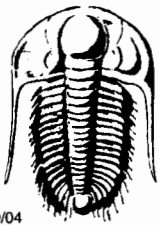
Inside

Larson Operating Company

19-18S-26W Ness

DST Test Number: 3





# TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

No 21534

## Test Ticket

Well Name & No. McLeish #1-19 Test No. 1 Date 4-11-05  
 Company Larson Operating Company Zone Tested Altament - Marm.  
 Address 562 W Hwy 4 Olmitz, KS. 67564-8561 Elevation 2658 KB 2650 GL  
 Co. Rep / Geo. Tom Larson Cont. Southwind #1 Est. Ft. of Pay \_\_\_\_\_ Por. \_\_\_\_\_ %  
 Location: Sec. 19 Twp. 18<sup>s</sup> Rge. 26<sup>w</sup> Co. Ness State KS.  
 No. of Copies \_\_\_\_\_ Distribution Sheet (Y, N) \_\_\_\_\_ Turnkey (Y, N) \_\_\_\_\_ Evaluation (Y, N) \_\_\_\_\_

Interval Tested 4432 - 4467 Initial Str Wt./Lbs. 50,000 Unseated Str Wt./Lbs. 54,000  
 Anchor Length 35' Wt. Set Lbs. 25,000 Wt. Pulled Loose/Lbs. 60,000  
 Top Packer Depth 4427 Tool Weight 2,000  
 Bottom Packer Depth 4432 Hole Size 7 7/8" Rubber Size 6 3/4"  
 Total Depth 4467 Wt. Pipe Run - Drill Collar Run 183'  
 Mud Wt. 9.5 LCM - Vis. 44 WL 8.0 Drill Pipe Size 4 1/2" XH Ft. Run 4243'

Blow Description \_\_\_\_\_  
IF: PKr. seat failed tried to reset w/ No help - TDH to change anchor.

Recovery - Total Feet 235' GIP - Ft. in DC 183' Ft. in DP 52'  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud  
 Rec. 235' Feet of Drlg. Mud %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud  
 BHT 117° °F Gravity \_\_\_\_\_ °API D @ \_\_\_\_\_ °F Corrected Gravity \_\_\_\_\_ °API  
 RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm Recovery \_\_\_\_\_ Chlorides 1,700 ppm System

	AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud		<u>2213</u> PSI	<u>6625</u>	<u>Misrun 900</u>
(B) First Initial Flow Pressure		PSI	(depth) <u>4433</u>	Jars _____
(C) First Final Flow Pressure		PSI	Recorder No. <u>13309</u>	Safety Jt. _____
(D) Initial Shut-In Pressure		PSI	(depth) <u>4462</u>	Circ Sub <u>X N/C</u>
(E) Second Initial Flow Pressure		PSI	Recorder No. _____	Sampler _____
(F) Second Final Flow Pressure		PSI	(depth) _____	Straddle _____
(G) Final Shut-In Pressure		PSI	<b>Initial Opening</b>	Ext. Packer _____
(Q) Final Hydrostatic Mud		<u>2208</u> PSI	Initial Shut-In _____	Shale Packer _____

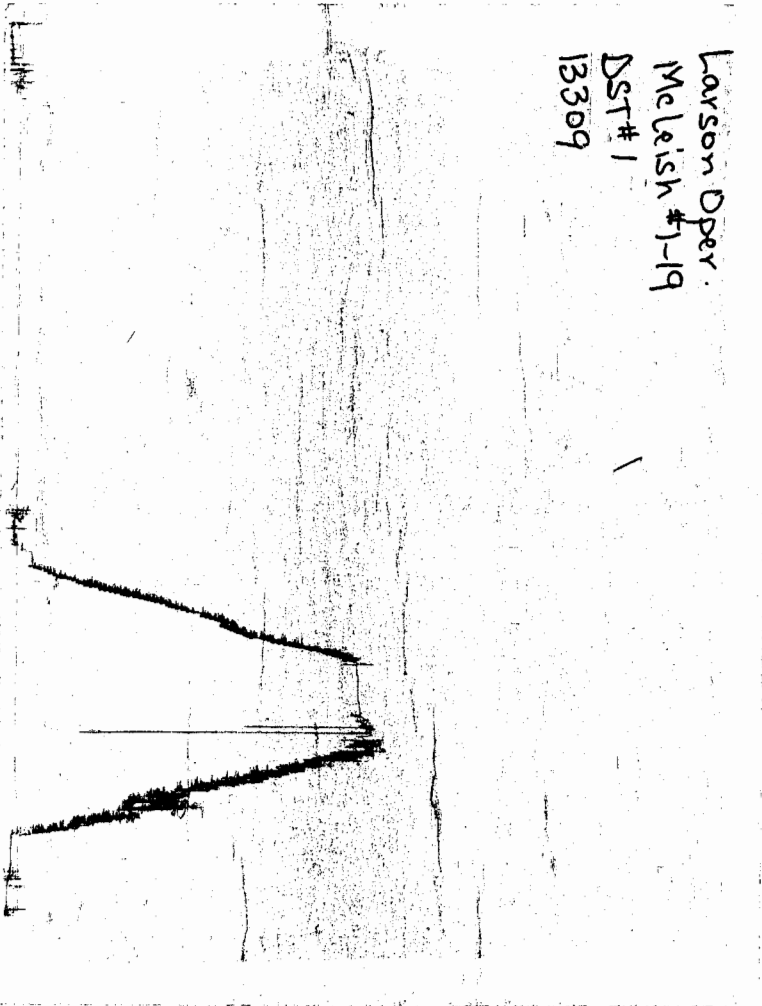
TRILOBITE TESTING INC. SHALL NOT BE LIABLE FOR DAMAGED OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST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

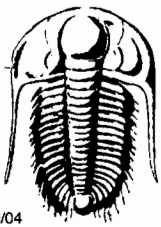
Approved By Pat Baldwin  
 Our Representative Red Steinbrink

Final Flow \_\_\_\_\_ Ruined Packer \_\_\_\_\_  
 Final Shut-In \_\_\_\_\_ Mileage 1 way 41 82  
**T-On Location** 1545 Sub Total: 982  
 T-Started 1643 Std. By \_\_\_\_\_  
 T-Open 1813 Other \_\_\_\_\_  
 T-Pulled 1822 Total: \_\_\_\_\_  
 T-Out 2048

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

Larson Oper.  
McLeish #1-19  
DST# 1  
13309





# TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

No 21535

## Test Ticket

Well Name & No. McLeish #1-19 Test No. 2 Date 4-11-05  
 Company Larson Operating Company Zone Tested Altamont / Marm.  
 Address 562 W. Hwy 4 Olmitz KS. 67564-8561 Elevation 2858 KB 2850 GL  
 Co. Rep / Geo. Tom Larson Cont. Southwind #1 Est. Ft. of Pay \_\_\_\_\_ Por. \_\_\_\_\_ %  
 Location: Sec. 19 Twp. 18<sup>s</sup> Rge. 26<sup>w</sup> Co. Ness State KS.  
 No. of Copies \_\_\_\_\_ Distribution Sheet (Y, N) \_\_\_\_\_ Turnkey (Y, N) \_\_\_\_\_ Evaluation (Y, N) \_\_\_\_\_

Interval Tested 4436 - 4467 Initial Str Wt./Lbs. 50,000 Unseated Str Wt./Lbs. 54,000  
 Anchor Length 31' Wt. Set Lbs. 25,000 Wt. Pulled Loose/Lbs. 70,000  
 Top Packer Depth 4431 Tool Weight 2,000  
 Bottom Packer Depth 4436 Hole Size 7 7/8" Rubber Size 6 3/4"  
 Total Depth 4467 Wt. Pipe Run — Drill Collar Run 183'  
 Mud Wt. 9.5 LCM — Vis. 44 WL 8.0 Drill Pipe Size 4 1/2" XH Ft. Run 4245'

Blow Description \_\_\_\_\_  
IF: Fair to strong off btm 7 mins. IS1: Weak surface return F/20 mins.  
FF: Strong off btm 3 mins. FSI: Weak surface blow steady thru.

Recovery - Total Feet	GIP	Ft. in DC	Ft. in DP				
Rec.	Feet of	%gas	%oil	%water	%mud		
<u>40'</u>	<u>CGO</u>	<u>10</u>	<u>90</u>				
<u>80'</u>	<u>GOCM</u>	<u>10</u>	<u>10</u>	<u>—</u>	<u>80</u>		
BHT <u>127°</u>	°F Gravity <u>39</u>	°API D @ <u>50°</u>	°F Corrected Gravity <u>40</u>	°API			
RW _____	@ _____ °F	Chlorides _____ ppm	Recovery _____	Chlorides <u>1,700</u>	ppm System		

	AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud	<u>2314</u>	PSI	<u>6625</u>	<u>1000</u>
(B) First Initial Flow Pressure	<u>15</u>	PSI	(depth) <u>4437</u>	Jars _____
(C) First Final Flow Pressure	<u>29</u>	PSI	Recorder No. <u>13309</u>	Safety Jt. _____
(D) Initial Shut-In Pressure	<u>1311</u>	PSI	(depth) <u>4462</u>	Circ Sub <u>X N/C</u>
(E) Second Initial Flow Pressure	<u>36</u>	PSI	Recorder No. _____	Sampler _____
(F) Second Final Flow Pressure	<u>54</u>	PSI	(depth) _____	Straddle _____
(G) Final Shut-In Pressure	<u>1318</u>	PSI	Initial Opening <u>15</u>	Ext. Packer _____
(Q) Final Hydrostatic Mud	<u>2185</u>	PSI	Initial Shut-In <u>30</u>	Shale Packer <u>X 150</u>
			Final Flow <u>30</u>	Ruined Packer _____
			Final Shut-In <u>60</u>	Mileage <u>none</u>

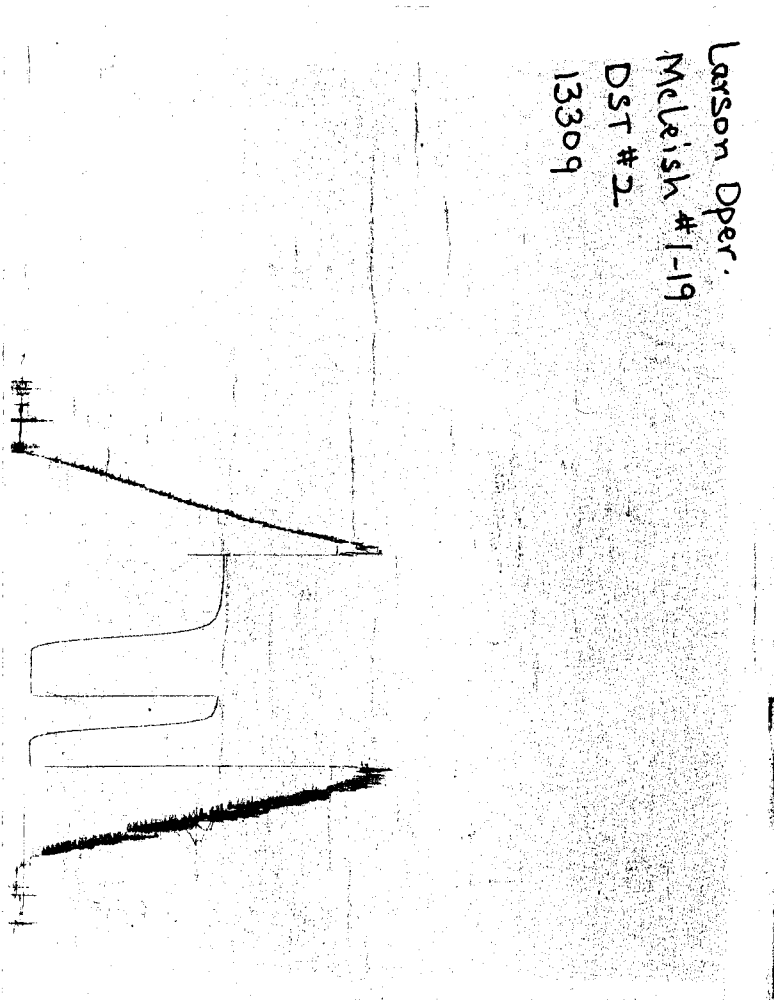
TRILOBITE TESTING INC. SHALL NOT BE LIABLE FOR DAMAGED OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST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

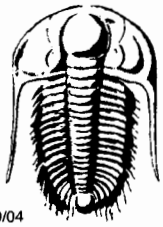
Approved By [Signature]  
 Our Representative Rod Steinbrink

T-On Location \_\_\_\_\_  
 T-Started 2113  
 T-Open 2235  
 T-Pulled 0055 4-12-05  
 T-Out 0257  
 Sub Total: 1150  
 Std. By \_\_\_\_\_  
 Other \_\_\_\_\_  
 Total: \_\_\_\_\_

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

Larson Dper.  
Melreish #1-19  
DST #2  
13309





# TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

No 21536

9/04

## Test Ticket

Well Name & No. McLeish #1-19 Test No. 3 Date 4-12-05  
 Company Larson Operating Company Zone Tested Mississippian  
 Address 562 W Hwy 4 Olmitz, KS. 67564-8561 Elevation 2658 KB 2650 GL  
 Co. Rep / Geo. Tom Larson Cont. Southwind #1 Est. Ft. of Pay \_\_\_\_\_ Por. \_\_\_\_\_ %  
 Location: Sec. 19 Twp. 18<sup>s</sup> Rge. 26<sup>w</sup> Co. Ness State KS  
 No. of Copies \_\_\_\_\_ Distribution Sheet (Y, N) \_\_\_\_\_ Turnkey (Y, N) \_\_\_\_\_ Evaluation (Y, N) \_\_\_\_\_

Interval Tested 4603 - 4627 Initial Str Wt./Lbs. 55,000 Unseated Str Wt./Lbs. 59,000  
 Anchor Length 24' Wt. Set Lbs. 25,000 Wt. Pulled Loose/Lbs. 65,000  
 Top Packer Depth 4598 Tool Weight 2,000  
 Bottom Packer Depth 4603 Hole Size 7 7/8" Rubber Size 6 3/4"  
 Total Depth 4627 Wt. Pipe Run — Drill Collar Run 183'  
 Mud Wt. 9.4 LCM — Vis. 47 WL 8.8 Drill Pipe Size 4 1/2" XH Ft. Run 4430'

Blow Description  
IF: Weak to fair off bttm 13 mins. ISI: Surface return built to 2"  
FF: Fair to strong off bttm 8 mins. FSI: Surface to bttm 26 mins.

Recovery - Total Feet 610' GIP ~~200~~ 360' Ft. in DC 183' Ft. in DP 427'  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud  
 Rec. 360' Feet of CGO 20 %gas 80 %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud  
 Rec. 250' Feet of GOCM 50 %gas 10 %oil — %water 40 %mud  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud  
 BHT 129° °F Gravity 33 °API D @ 40° °F Corrected Gravity 35 °API  
 RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm Recovery \_\_\_\_\_ Chlorides 2,700 ppm System

	AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud	<u>2325</u> PSI		<u>6625</u>	<u>1000</u>
(B) First Initial Flow Pressure	<u>18</u> PSI		(depth) <u>4604</u>	Jars _____
(C) First Final Flow Pressure	<u>105</u> PSI		Recorder No. <u>13309</u>	Safety Jt. _____
(D) Initial Shut-In Pressure	<u>1281</u> PSI		(depth) <u>4622</u>	Circ Sub <u>X</u> <u>N/C</u>
(E) Second Initial Flow Pressure	<u>110</u> PSI		Recorder No. _____	Sampler _____
(F) Second Final Flow Pressure	<u>231</u> PSI		(depth) _____	Straddle _____
(G) Final Shut-In Pressure	<u>1251</u> PSI	Initial Opening <u>15</u>		Ext. Packer _____
(Q) Final Hydrostatic Mud	<u>2268</u> PSI	Initial Shut-In <u>30</u>		Shale Packer <u>X</u> <u>150</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 Pat Balaban  
 Our Representative Rod Steinbrink

Final Flow 45 Ruined Packer \_\_\_\_\_  
 Final Shut-In 90 Mileage 1 way 41 82  
 T-On Location 2230 Sub Total: 1232  
 T-Started 2305 Std. By \_\_\_\_\_  
 T-Open 0034 4-13-05 Other \_\_\_\_\_  
 T-Pulled 0337 Total: \_\_\_\_\_  
 T-Out 0605

**CHART PAGE**

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

Larson Oper.  
McLeish #1-19  
DST #3 \_\_\_\_\_  
13309

