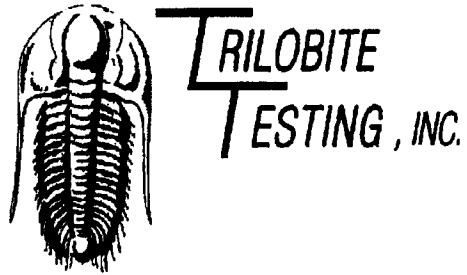


FILED



### DRILL STEM TEST REPORT

Prepared For: **Larson Operating**

562 W State Rd 4  
Olmitz KS 67564

ATTN: Tom Funk

**20 18 29W Lane KS**

**Penka # 1-20**

Start Date: 2008.07.01 @ 02:38:05

End Date: 2008.07.01 @ 08:50:59

Job Ticket #: 30024                      DST #: 1

**KCC**  
**OCT 22 2008**  
**CONFIDENTIAL**

Larson Operating

Penka # 1-20

20 18 29W Lane KS

DST # 1

Lans. H

2008.07.01

Trilobite Testing, Inc  
PO Box 1733 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

RECEIVED  
KANSAS CORPORATION COMMISSION

**OCT 23 2008**

CONSERVATION DIVISION  
WICHITA, KS



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Larson Operating  
562 W State Rd 4  
Olmritz KS 67564  
ATTN: Tom Funk

**Penka # 1-20**  
**20 18 29W Lane KS**  
Job Ticket: 30024      **DST#: 1**  
Test Start: 2008.07.01 @ 02:38:05

## GENERAL INFORMATION:

Formation: **Lans. H**  
Deviated: **No Whipstock**      ft (KB)  
Time Tool Opened: 05:07:00  
Time Test Ended: 08:50:59

Test Type: **Conventional Bottom Hole**  
Tester: **Brandon Domsch**  
Unit No: **25**

Interval: **4140.00 ft (KB) To 4170.00 ft (KB) (TVD)**  
Total Depth: **4170.00 ft (KB) (TVD)**  
Hole Diameter: **7.88 inches** Hole Condition: **Fair**

Reference Elevations: **2827.00 ft (KB)**  
**2822.00 ft (CF)**  
KB to GR/CF: **5.00 ft**

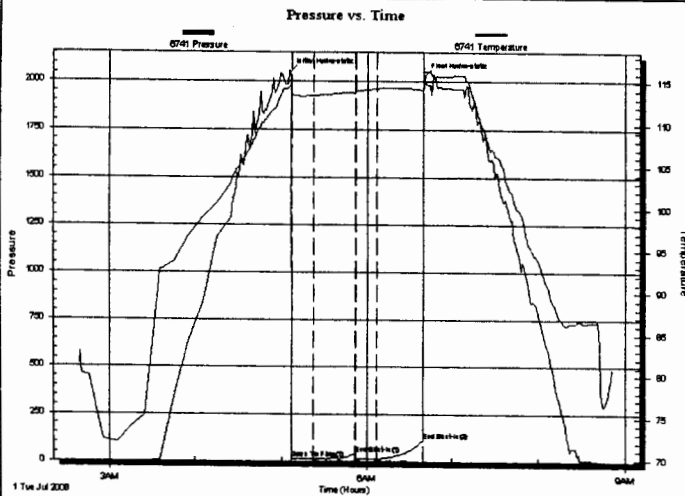
## Serial #: 6741

**Inside**

Press@RunDepth: **14.61 psig @ 4141.00 ft (KB)**  
Start Date: **2008.07.01**      End Date: **2008.07.01**  
Start Time: **02:38:05**      End Time: **08:50:59**

Capacity: **7000.00 psig**  
Last Calib.: **2008.07.01**  
Time On Btm: **2008.07.01 @ 05:05:30**  
Time Off Btm: **2008.07.01 @ 06:40:30**

TEST COMMENT: IF 1/4 " died in 9 1/2 mins.  
IS No return  
FF No blow  
FS No return



## PRESSURE SUMMARY

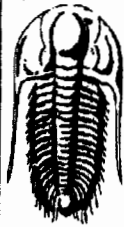
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2047.83	114.59	Initial Hydro-static
2	12.48	113.31	Open To Flow (1)
17	14.33	113.40	Shut-In(1)
46	41.07	113.69	End Shut-In(1)
47	14.29	113.93	Open To Flow (2)
61	14.61	114.23	Shut-In(2)
94	109.07	114.10	End Shut-In(2)
95	2025.92	116.40	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
1.00	OspotM 100%M	0.00

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

Larson Operating

**Penka # 1-20**

562 W State Rd 4  
Olmritz KS 67564

**20 18 29W Lane KS**

Job Ticket: 30024

**DST#: 1**

ATTN: Tom Funk

Test Start: 2008.07.01 @ 02:38:05

**Tool Information**

Drill Pipe:	Length: 3977.00 ft	Diameter: 3.80 inches	Volume: 55.79 bbl	Tool Weight: 1500.00 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: 155.00 ft	Diameter: 2.25 inches	Volume: 0.76 bbl	Weight to Pull Loose: 70000.00 lb
		Total Volume: 56.55 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	12.00 ft			String Weight: Initial 64000.00 lb
Depth to Top Packer:	4140.00 ft			Final 64000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	30.00 ft			
Tool Length:	50.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

**Tool Description**

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4121.00	
Shut In Tool	5.00			4126.00	
Hydraulic tool	5.00			4131.00	
Packer	5.00			4136.00	20.00 Bottom Of Top Packer
Packer	4.00			4140.00	
Stubb	1.00			4141.00	
Recorder	0.00	8353	Inside	4141.00	
Recorder	0.00	6741	Inside	4141.00	
Perforations	24.00			4165.00	
Bullnose	5.00			4170.00	30.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>50.00</b>				



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Larson Operating  
562 W State Rd 4  
Olmitz KS 67564  
ATTN: Tom Funk

**Penka # 1-20**  
**20 18 29W Lane KS**  
Job Ticket: 30024      **DST#: 1**  
Test Start: 2008.07.01 @ 02:38:05

## 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: 55.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.98 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 3000.00 ppm			
Filter Cake: 1.00 inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1.00	OspotM 100%M	0.005

Total Length: 1.00 ft      Total Volume: 0.005 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:

Serial #: 6741

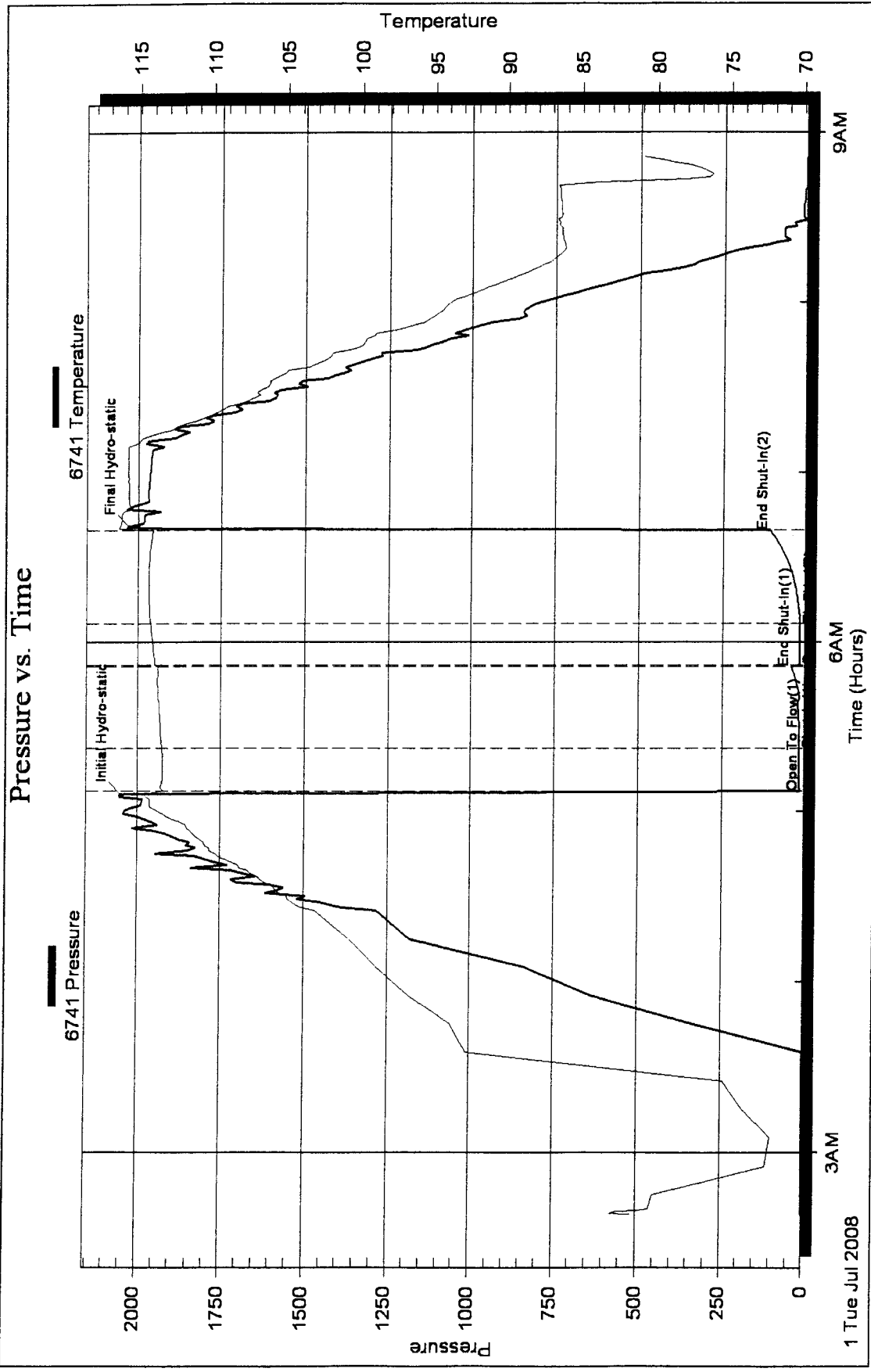
Inside

Larson Operating

20 18 29W Lane KS

DST Test Number: 1

### Pressure vs. Time



Trilobite Testing, Inc

Ref. No: 30024