

**CONFIDENTIAL**

KANSAS CORPORATION COMMISSION

OIL & GAS CONSERVATION DIVISION

WELL COMPLETION FORM

WELL HISTORY - DESCRIPTION OF WELL & LEASE

**ORIGINAL**

Form ACO-1  
October 2008  
Form Must Be Typed

7/8/12

KCC

JUL 08 2010

CONFIDENTIAL

OPERATOR: License # 3842

Name: LARSON ENGINEERING, INC.

Address 1: 562 WEST STATE ROAD 4

Address 2: \_\_\_\_\_

City: OLMITZ State: KS Zip: 67564 + 8561

Contact Person: TOM LARSON

Phone: (620) 653-7368

CONTRACTOR: License # 33935

Name: H.D. DRILLING, LLC

Wellsite Geologist: RICHARD S. DAVIS JR

Purchaser: \_\_\_\_\_

Designate Type of Completion:

New Well  Re-Entry  Workover

Oil  SWD  SIOW

Gas  ENHR  SIGW

CM (Coal Bed Methane)  Temp. Abd.

Dry  Other \_\_\_\_\_

(Core, WSW, Expl., Cathodic, etc.)

If Workover/Re-entry: Old Well Info as follows:

Operator: \_\_\_\_\_

Well Name: \_\_\_\_\_

Original Comp. Date: \_\_\_\_\_ Original Total Depth: \_\_\_\_\_

Deepening  Re-perf.  Conv. to Enhr./SWD

Plug Back: \_\_\_\_\_ Plug Back Total Depth \_\_\_\_\_

Commingled  Docket No. \_\_\_\_\_

Dual Completion  Docket No. \_\_\_\_\_

Other (SWD or Enhr.?)  Docket No. \_\_\_\_\_

3/13/2010 3/25/2010

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - 101-22216-00-00

Spot Description: \_\_\_\_\_

SW - SW - NE - NW Sec. 29 Twp. 19 S. R. 29  East  West

1275 / 1287 feet from NORTH Line of Section

1525 feet from WEST Line of Section

Footages Calculated <sup>Der CP213-Dig</sup> from Nearest Outside Section Corner:

NE  NW  SE  SW

County: LANE

Lease Name: GERSTNER Well #: 1-29

Field Name: WILDCAT

Producing Formation: \_\_\_\_\_

Elevation: Ground: 2865' Kelly Bushing: 2875'

Total Depth: 4704' Plug Back Total Depth: \_\_\_\_\_

Amount of Surface Pipe Set and Cemented at: 255 Feet

Multiple State Cementing Collar Used?  Yes  No

If yes, show depth set: \_\_\_\_\_ Feet

If Alternate II completion, cement circulated from: \_\_\_\_\_

feet depth to: \_\_\_\_\_ w/ \_\_\_\_\_ sx cmt.

Drilling Fluid Management Plan PANS 7-13-10  
(Data must be collected from the Reserve Pit)

Chloride content: 8800 ppm Fluid volume: 650 bbls

Dewatering method used: ALLOWED TO DRY

Location of fluid disposal if hauled offsite: \_\_\_\_\_

Operator Name: \_\_\_\_\_

Lease Name: \_\_\_\_\_ License No.: \_\_\_\_\_

Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

County: \_\_\_\_\_ Docket No.: \_\_\_\_\_

**INSTRUCTIONS:** An original and two copies of this information shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information on side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form (see rule 82-3-107 for confidentiality in excess of 12 months). One copy of all wireline logs and geologist well report shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

All requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Signature: Carol Lu

Title: SECRETARY/TREASURER Date: 7/8/2010

Subscribed and sworn to before me this 8TH day of JULY

2010.  
Notary Public: Debra J Ludwig

Date Commission Expires: MAY 5, 2012

**DEBRA J. LUDWIG**  
Notary Public - State of Kansas  
My Appt. Expires 5/5/2012

**KCC Office Use ONLY**

Letter of Confidentiality Received 7/8/10 - 7/8/12

If Denied, Yes  Date: \_\_\_\_\_

Wireline Log Received **RECEIVED**

Geologist Report Received **JUL 09 2010**

UIC Distribution

**KCC WICHITA**

KCC

JUL 08 2010

CONFIDENTIAL

Operator Name: LARSON ENGINEERING, INC. Lease Name: GERSTNER Well #: 1-29

Sec. 29 Twp. 19 S. R. 29  East  West County: LANE

**INSTRUCTIONS:** Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stem tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed. Attach copy of all Electric Wireline Logs surveyed. Attach final geologist well site report.

Drill Stem Tests Taken  Yes  No  
 (Attach Additional Sheets)

Samples Sent to Geological Survey  Yes  No

Cores Taken  Yes  No

Electric Log Run  Yes  No  
 (Submit Copy)

List All E. Logs Run: DUAL INDUCTION  
 DUAL COMP POROSITY  
 MICRORESISTIVITY

<input checked="" type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Name	Top	Datum
ANHYDRITE	2161	+714
BASE ANHYDRITE	2220	+655
HEEBNER	3980	-1105
LANSING	4023	-1148
STARK	4307	-1432
BASE KC	4398	-1523
PAWNEE	4508	-1633
CHEROKEE SH	4575	-1700
MISSISSIPPI	4641	-1766

CASING RECORD <input type="checkbox"/> New <input checked="" type="checkbox"/> Used							
Report all strings set - conductor, surface, intermediate, production, etc.							
Purpose of string	Size Hole Drilled	Size Casing Set (in O.D.)	Weight Lbs./Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
SURFACE	12-1/4"	8-5/8"	20#	255'	CLASS A	175	2% GEL, 3% CC

ADDITIONAL CEMENTING/SQUEEZE RECORD					
Purpose:	Depth		Type of Cement	# Sacks Used	Type and Percent Additives
	Top	Bottom			
<input type="checkbox"/> Perforate					
<input type="checkbox"/> Protect Casing					
<input type="checkbox"/> Plug Back TD					
<input type="checkbox"/> Plug Off Zone					

Shots per Foot	PERFORATION RECORD - Bridge Plugs Set/Type		Acid. Fracture, Shot, Cement, Squeeze Record	
	Specify Footage of Each Interval Perforated		(Amount and Kind of Material Used)	Depth

RECEIVED  
 JUL 09 2010  
 KCC WICHITA

TUBING RECORD: Size: \_\_\_\_\_ Set At: \_\_\_\_\_ Packer At: \_\_\_\_\_ Liner Run:  Yes  No

Date of First, Resumed Production, SWD or Enhr. \_\_\_\_\_ Producing Method:  Flowing  Pumping  Gas Lift  Other (Explain) \_\_\_\_\_

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease If vented, submit ACO-18.)	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <input checked="" type="checkbox"/> Other (Specify) D & A	PRODUCTION INTERVAL: _____
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# ALLIED CEMENTING CO., LLC. 041331

REMIT TO P.O. BOX 31  
RUSSELL, KANSAS 67665

KCC  
JUL 08 2010  
CONFIDENTIAL

SERVICE POINT:  
Russell KS  
3-14-10

DATE <u>3-13/0</u>	SEC. <u>29</u>	TWP. <u>19</u>	RANGE <u>29</u>	CALLED OUT	ON LOCATION	JOB START <u>12:30 AM</u>	JOB FINISH <u>1:00 AM</u>
LEASE <u>GERTNER</u>	WELL # <u>1-29</u>	LOCATION <u>Dighton KS S to "90" rd</u>			COUNTY <u>Lane</u>	STATE <u>KANSAS</u>	
OLD OR <u>NEW</u> (Circle one)				<u>SW TO GARDNER RD. 1/4 S E 1/4</u>			

CONTRACTOR H-D Rig # 2

TYPE OF JOB SURFACE

HOLE SIZE 12 1/4 T.D. 258

CASING SIZE 8 5/8 DEPTH 255

TUBING SIZE \_\_\_\_\_ DEPTH \_\_\_\_\_

DRILL PIPE \_\_\_\_\_ DEPTH \_\_\_\_\_

TOOL \_\_\_\_\_ DEPTH \_\_\_\_\_

PRES. MAX \_\_\_\_\_ MINIMUM \_\_\_\_\_

MEAS. LINE \_\_\_\_\_ SHOE JOINT \_\_\_\_\_

CEMENT LEFT IN CSG. 15'

PERFS. \_\_\_\_\_

DISPLACEMENT 15 1/2 BBL

OWNER \_\_\_\_\_

CEMENT AMOUNT ORDERED 175 sx Com.

2 BBL 3% CC

COMMON	<u>175</u>	@	<u>13.50</u>	<u>2362.50</u>
POZMIX		@		
GEL	<u>3</u>	@	<u>20.25</u>	<u>60.75</u>
CHLORIDE	<u>6</u>	@	<u>51.50</u>	<u>309.00</u>
ASC		@		
		@		
		@		
		@		
		@		
		@		
HANDLING	<u>87</u>	@	<u>2.25</u>	<u>195.75</u>
MILEAGE	<u>110/5k/mile</u>			<u>300.00</u>
TOTAL				<u>3228.00</u>

REMARKS:

RAN 8 5/8 #20 SET @ 255  
Received circulation w/ mud pump  
hooked up mixed 175 sx cement  
& displaced 15 1/2 BBL H<sub>2</sub>O.

THANKS Cement circulated  
to surface

CHARGE TO: LARSON ENGINEERING

STREET \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

SERVICE

DEPTH OF JOB				
PUMP TRUCK CHARGE				<u>991.00</u>
EXTRA FOOTAGE		@		
MILEAGE	<u>30</u>	@	<u>7.00</u>	<u>210.00</u>
MANIFOLD		@		
		@		
		@		
TOTAL				<u>1201.00</u>

PLUG & FLOAT EQUIPMENT

	@		
	@		
	@		
	@		
	@		
TOTAL			

To Allied Cementing Co., LLC.  
You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME Doug Robert

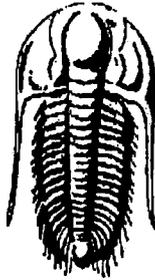
SIGNATURE Doug Roberts  
THANKS!

SALES TAX (if Any) \_\_\_\_\_

TOTAL CHARGES [scribble]

DISCOUNT [scribble] IF PAID IN 30 DAYS





**TRILOBITE**  
**TESTING, INC.**

**KCC**  
**JUL 08 2010**  
**CONFIDENTIAL**

**DRILL STEM TEST REPORT**

Prepared For: **Larson Engineering, Inc.**

562 West State Rd 4  
Olmitz KS 67564

ATTN: Steve Davis

**29-19-29 Lane KS**

**Gerstner #1-29**

Start Date: 2010.03.19 @ 22:10:25

End Date: 2010.03.20 @ 05:05:40

Job Ticket #: 37023                      DST #: 1

**RECEIVED**  
**JUL 09 2010**  
**KCC WICHITA**

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

Larson Engineering, Inc.

Gerstner #1-29

29-19-29 Lane KS

DST # 1

H

2010.03.19



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

Larson Engineering, Inc.

562 West State Rd 4  
Olmitz KS 67564

ATTN: Steve Davis

**Gerstner #1-29**

**29-19-29 Lane KS**

Job Ticket: 37023

**DST#: 1**

Test Start: 2010.03.19 @ 22:10:25

### GENERAL INFORMATION:

Formation: **H**  
 Deviated: **No** Whipstock: **ft (KB)**  
 Time Tool Opened: 00:31:40  
 Time Test Ended: 05:05:40

Test Type: **Conventional Bottom Hole**  
 Tester: **Shane McBride**  
 Unit No: **40**

Interval: **4190.00 ft (KB) To 4232.00 ft (KB) (TVD)**  
 Total Depth: **4232.00 ft (KB) (TVD)**  
 Hole Diameter: **7.88 inches** Hole Condition: **Fair**

Reference Elevations: **2875.00 ft (KB)**  
**2865.00 ft (CF)**  
 KB to GR/CF: **10.00 ft**

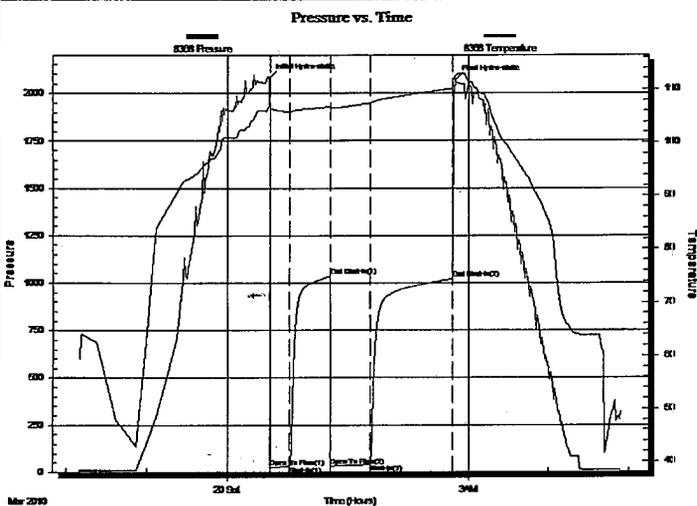
### Serial #: 8368

**Inside**

Press@RunDepth: **38.88 psig @ 4191.00 ft (KB)**  
 Start Date: **2010.03.19** End Date: **2010.03.20**  
 Start Time: **22:10:25** End Time: **04:54:40**

Capacity: **8000.00 psig**  
 Last Calib.: **2010.03.20**  
 Time On Btm: **2010.03.20 @ 00:31:10**  
 Time Off Btm: **2010.03.20 @ 02:50:10**

**TEST COMMENT:** Weak blow died in 7 min.  
 No return  
 Weak blow died in 3 min.  
 No return



### PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2077.28	106.88	Initial Hydro-static
1	25.90	106.28	Open To Flow (1)
15	30.04	105.82	Shut-In(1)
46	1034.82	106.75	End Shut-In(1)
46	31.19	106.41	Open To Flow (2)
76	38.88	107.41	Shut-In(2)
137	1022.25	110.12	End Shut-In(2)
139	2070.75	112.38	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
5.00	mud 100%m	0.02

### Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Larson Engineering, Inc.

**Gerstner #1-29**

562 West State Rd 4  
Olmitz KS 67564

**29-19-29 Lane KS**

Job Ticket: 37023

**DST#: 1**

ATTN: Steve Davis

Test Start: 2010.03.19 @ 22:10:25

## Tool Information

Drill Pipe:	Length: 4045.00 ft	Diameter: 3.80 inches	Volume: 56.74 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: 124.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 57.35 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial 65000.00 lb
Depth to Top Packer:	4190.00 ft			Final 65000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	42.00 ft			
Tool Length:	69.00 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			4164.00	
Shut In Tool	5.00			4169.00	
Hydraulic tool	5.00			4174.00	
Jars	5.00			4179.00	
Safety Joint	2.00			4181.00	
Packer	5.00			4186.00	27.00 Bottom Of Top Packer
Packer	4.00			4190.00	
Stubb	1.00			4191.00	
Recorder	0.00	8368	Inside	4191.00	
Recorder	0.00	6771	Outside	4191.00	
Perforations	3.00			4194.00	
Change Over Sub	1.00			4195.00	
Drill Pipe	31.00			4226.00	
Change Over Sub	1.00			4227.00	
Bullnose	5.00			4232.00	42.00 Bottom Packers & Anchor

**Total Tool Length: 69.00**



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**FLUID SUMMARY**

Larson Engineering, Inc.

**Gerstner #1-29**

562 West State Rd 4  
Olmitz KS 67564

**29-19-29 Lane KS**

Job Ticket: 37023

**DST#: 1**

ATTN: Steve Davis

Test Start: 2010.03.19 @ 22:10:25

### Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 48.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.16 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
5.00	mud 100%m	0.025

Total Length: 5.00 ft      Total Volume: 0.025 bbl

Num Fluid Samples: 0

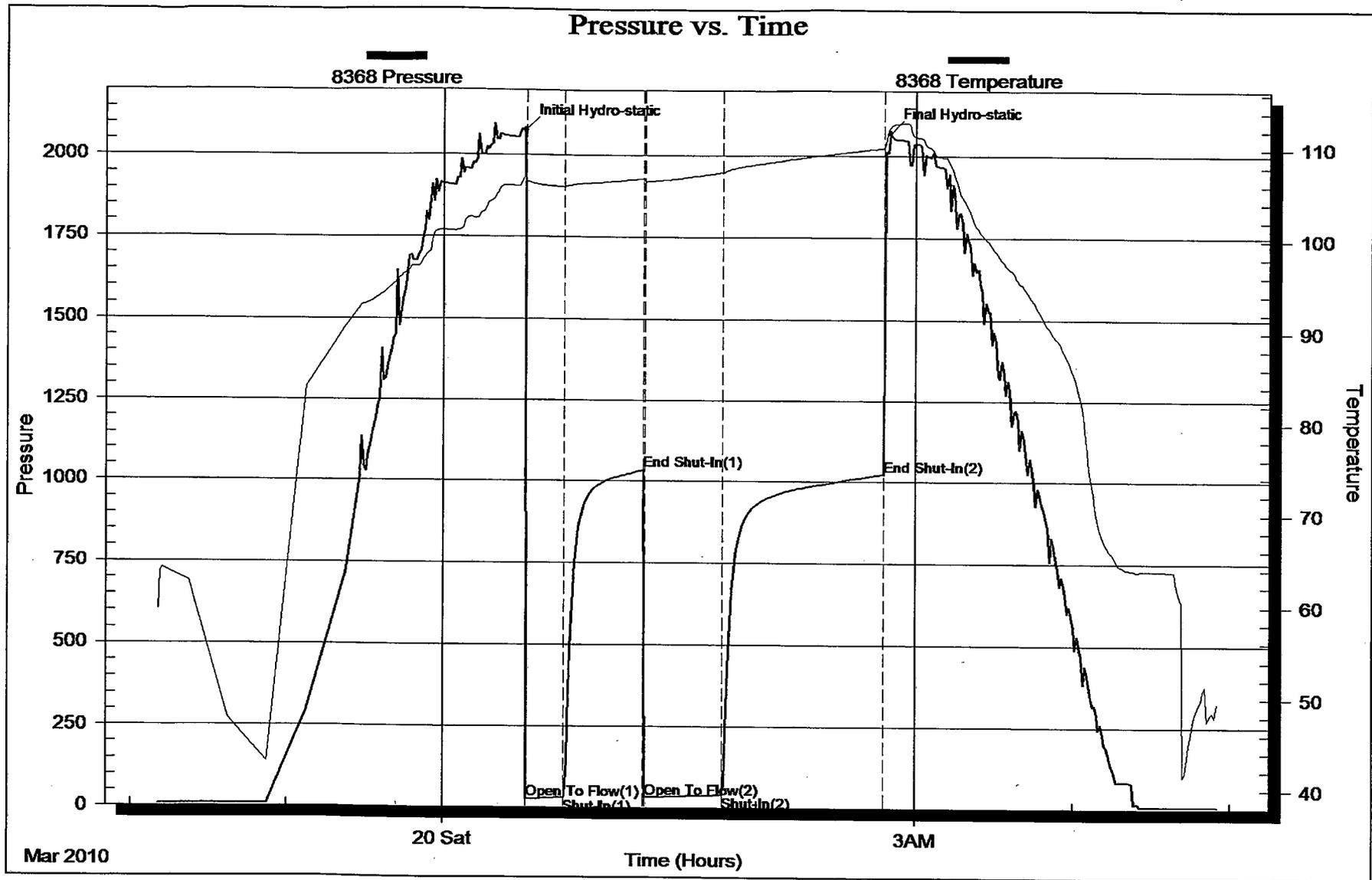
Num Gas Bombs: 0

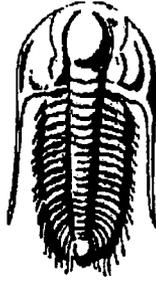
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





**TRILOBITE  
TESTING, INC.**

**DRILL STEM TEST REPORT**

Prepared For: **Larson Engineering, Inc.**

562 West State Rd 4  
Olmitz KS 67564

ATTN: Steve Davis

**29-19-29 Lane KS**

**Gerstner #1-29**

Start Date: 2010.03.20 @ 16:31:03

End Date: 2010.03.20 @ 22:35:18

Job Ticket #: 37024                      DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Larson Engineering, Inc.

Gerstner #1-29

29-19-29 Lane KS

DST # 2

J

2010.03.20



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Larson Engineering, Inc.  
562 West State Rd 4  
Olmitz KS 67564  
ATTN: Steve Davis

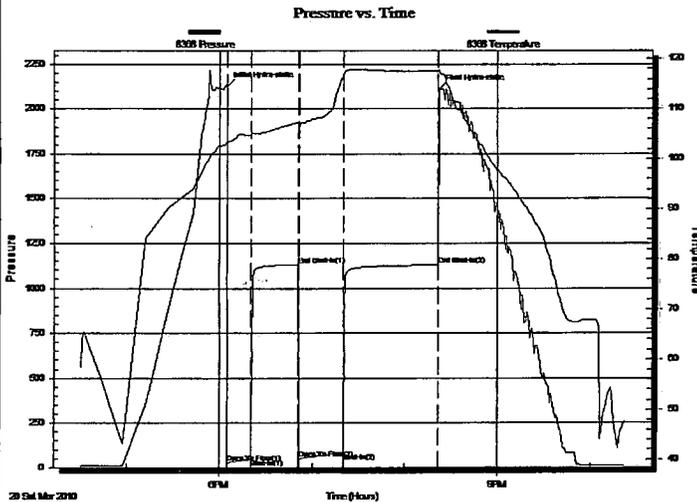
**Gerstner #1-29**  
**29-19-29 Lane KS**  
Job Ticket: 37024      DST#: 2  
Test Start: 2010.03.20 @ 16:31:03

## GENERAL INFORMATION:

Formation: **J**  
Deviated: **No**      Whipstock:      ft (KB)  
Time Tool Opened: 18:05:03  
Time Test Ended: 22:35:18  
Interval: **4272.00 ft (KB) To 4290.00 ft (KB) (TVD)**  
Total Depth: **4290.00 ft (KB) (TVD)**  
Hole Diameter: **7.88 inches** Hole Condition: **Fair**  
Test Type: **Conventional Bottom Hole**  
Tester: **Shane McBride**  
Unit No: **40**  
Reference Elevations: **2875.00 ft (KB)**  
**2865.00 ft (CF)**  
KB to GR/CF: **10.00 ft**

**Serial #: 8368**      **Inside**  
Press@RunDepth: **82.69 psig @ 4273.00 ft (KB)**      Capacity: **8000.00 psig**  
Start Date: **2010.03.20**      End Date: **2010.03.20**      Last Calib.: **2010.03.20**  
Start Time: **16:31:03**      End Time: **22:23:18**      Time On Btm: **2010.03.20 @ 18:04:33**  
Time Off Btm: **2010.03.20 @ 20:22:18**

TEST COMMENT: 1/2" in + blow  
No return  
1" in + blow  
No return



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2129.72	103.53	Initial Hydro-static
1	26.36	102.93	Open To Flow (1)
16	47.36	104.75	Shut-In(1)
47	1129.43	107.37	End Shut-In(1)
47	49.63	106.58	Open To Flow (2)
76	82.69	116.47	Shut-In(2)
137	1127.75	117.46	End Shut-In(2)
138	2111.01	117.59	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
90.00	m c w 45% m 55% w	0.44

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Larson Engineering, Inc.

**Gerstner #1-29**

562 West State Rd 4  
Olmitz KS 67564

**29-19-29 Lane KS**

Job Ticket: 37024

**DST#: 2**

ATTN: Steve Davis

Test Start: 2010.03.20 @ 16:31:03

### Tool Information

Drill Pipe:	Length: 4140.00 ft	Diameter: 3.80 inches	Volume: 58.07 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: 124.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 90000.00 lb
			<b>Total Volume: 58.68 bbl</b>	Tool Chased 0.00 ft
Drill Pipe Above KB:	19.00 ft			String Weight: Initial 78000.00 lb
Depth to Top Packer:	4272.00 ft			Final 79000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	9.00 ft			
Tool Length:	36.00 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			4246.00	
Shut In Tool	5.00			4251.00	
Hydraulic tool	5.00			4256.00	
Jars	5.00			4261.00	
Safety Joint	2.00			4263.00	
Packer	5.00			4268.00	27.00 Bottom Of Top Packer
Packer	4.00			4272.00	
Stubb	1.00			4273.00	
Recorder	0.00	8368	Inside	4273.00	
Recorder	0.00	6771	Outside	4273.00	
Perforations	3.00			4276.00	
Bullnose	5.00			4281.00	9.00 Bottom Packers & Anchor

**Total Tool Length: 36.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Larson Engineering, Inc.

**Gerstner #1-29**

562 West State Rd 4  
Olmitz KS 67564

**29-19-29 Lane KS**

Job Ticket: 37024

**DST#: 2**

ATTN: Steve Davis

Test Start: 2010.03.20 @ 16:31:03

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

32000 ppm

Viscosity: 48.00 sec/qt

Cushion Volume:

bbf

Water Loss: 7.16 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 bbf
90.00	m c w 45% m 55% w	0.443

Total Length: 90.00 ft      Total Volume: 0.443 bbf

Num Fluid Samples: 0

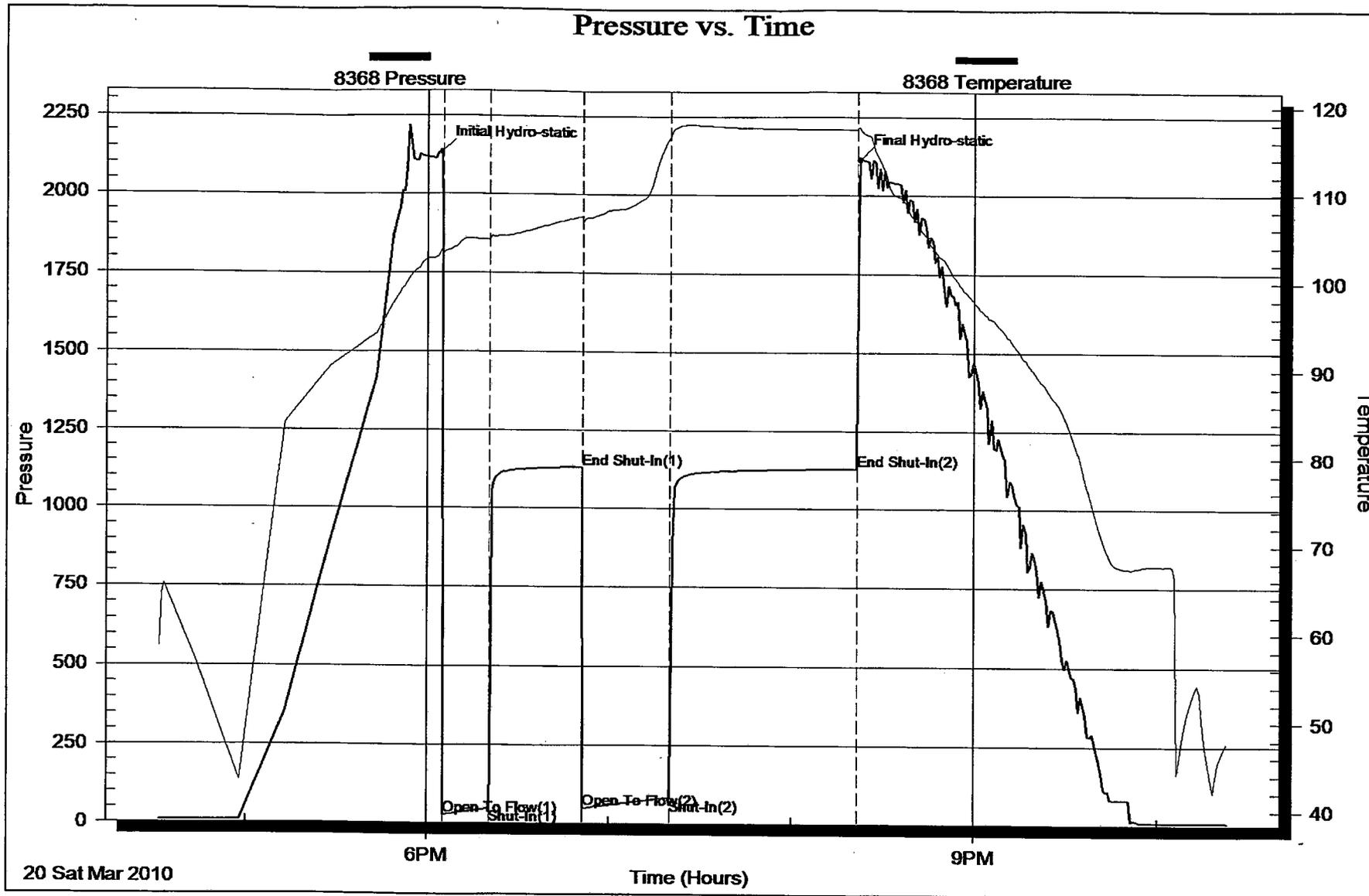
Num Gas Bombs: 0

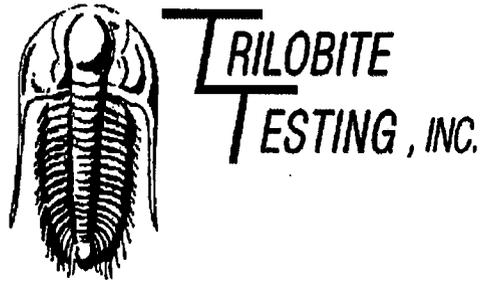
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: rw .30 @ 50\*f = 32,000 chlor





## DRILL STEM TEST REPORT

Prepared For: **Larson Engineering, Inc.**

562 West State Rd 4  
Olmitz KS 67564

ATTN: Steve Davis

**29-19-29 Lane KS**

**Gerstner #1-29**

Start Date: 2010.03.21 @ 10:41:04

End Date: 2010.03.21 @ 15:55:49

Job Ticket #: 37025                      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

Larson Engineering, Inc.  
 562 West State Rd 4  
 Olmitz KS 67564  
 ATTN: Steve Davis

**Gerstner #1-29**  
**29-19-29 Lane KS**  
 Job Ticket: 37025      DST#: 3  
 Test Start: 2010.03.21 @ 10:41:04

### GENERAL INFORMATION:

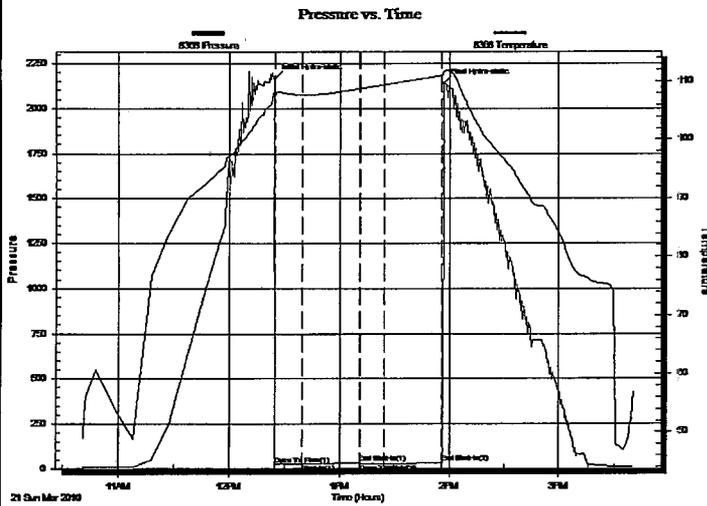
Formation: **L**  
 Deviated: **No** Whipstock: **ft (KB)**  
 Time Tool Opened: 12:24:49  
 Time Test Ended: 15:55:49  
 Interval: **4347.00 ft (KB) To 4365.00 ft (KB) (TVD)**  
 Total Depth: **4365.00 ft (KB) (TVD)**  
 Hole Diameter: **7.88 inches** Hole Condition: **Fair**  
 Test Type: **Conventional Bottom Hole**  
 Tester: **Shane McBride**  
 Unit No: **40**  
 Reference Elevations: **2875.00 ft (KB)**  
**2865.00 ft (CF)**  
**KB to GR/CF: 10.00 ft**

### Serial #: 8368

**Inside**

Press@RunDepth: **25.59 psig @ 4348.00 ft (KB)** Capacity: **8000.00 psig**  
 Start Date: **2010.03.21** End Date: **2010.03.21** Last Calib.: **2010.03.21**  
 Start Time: **10:41:04** End Time: **15:40:49** Time On Btm: **2010.03.21 @ 12:24:34**  
 Time Off Btm: **2010.03.21 @ 13:57:04**

TEST COMMENT: Weak blow died in 6 min.  
 No return  
 No blow  
 No return



### PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2166.54	108.41	Initial Hydro-static
1	23.32	107.29	Open To Flow (1)
16	25.48	107.63	Shut-In(1)
47	32.07	108.71	End Shut-In(1)
47	24.83	108.71	Open To Flow (2)
61	25.59	109.41	Shut-In(2)
92	33.54	110.95	End Shut-In(2)
93	2138.99	111.72	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
1.00	mud 100% m	0.00

### Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Larson Engineering, Inc.

**Gerstner #1-29**

562 West State Rd 4  
Olmitz KS 67564

**29-19-29 Lane KS**

Job Ticket: 37025

**DST#: 3**

ATTN: Steve Davis

Test Start: 2010.03.21 @ 10:41:04

## Tool Information

Drill Pipe:	Length: 4201.00 ft	Diameter: 3.80 inches	Volume: 58.93 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: 124.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 90000.00 lb
			<u>Total Volume: 59.54 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial 68000.00 lb
Depth to Top Packer:	4347.00 ft			Final 68000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	18.00 ft			
Tool Length:	45.00 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			4321.00	
Shut In Tool	5.00			4326.00	
Hydraulic tool	5.00			4331.00	
Jars	5.00			4336.00	
Safety Joint	2.00			4338.00	
Packer	5.00			4343.00	27.00 Bottom Of Top Packer
Packer	4.00			4347.00	
Stubb	1.00			4348.00	
Recorder	0.00	8368	Inside	4348.00	
Recorder	0.00	6771	Outside	4348.00	
Perforations	12.00			4360.00	
Bullnose	5.00			4365.00	18.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>45.00</b>				



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**FLUID SUMMARY**

Larson Engineering, Inc.

**Gerstner #1-29**

562 West State Rd 4  
Olmitz KS 67564

**29-19-29 Lane KS**

Job Ticket: 37025

**DST#: 3**

ATTN: Steve Davis

Test Start: 2010.03.21 @ 10:41:04

### Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length: ft

Water Salinity: 0 ppm

Viscosity: 53.00 sec/qt

Cushion Volume: bbl

Water Loss: 8.75 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure: psig

Salinity: 3400.00 ppm

Filter Cake: 1.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1.00	mud 100%m	0.005

Total Length: 1.00 ft      Total Volume: 0.005 bbl

Num Fluid Samples: 0

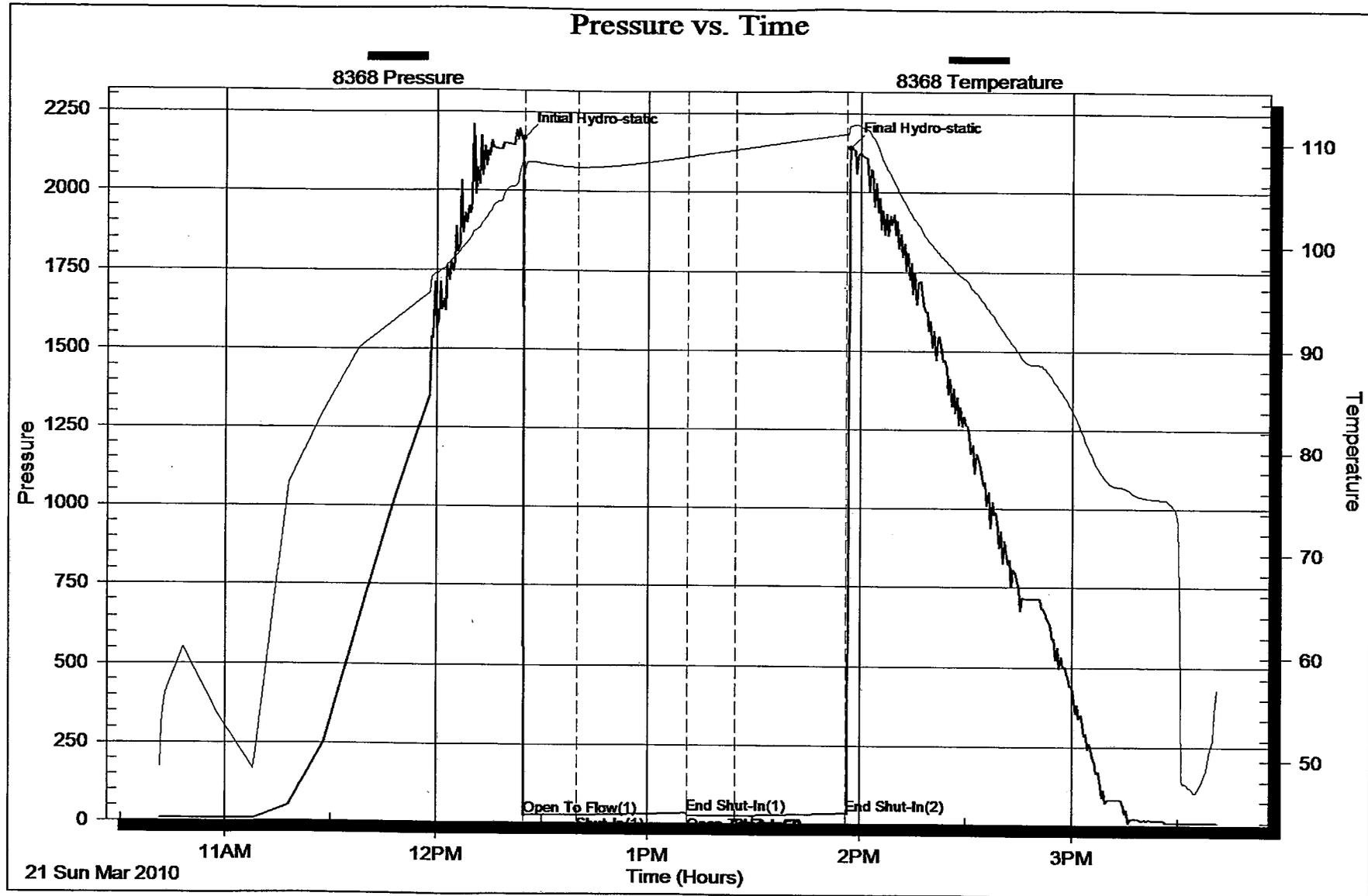
Num Gas Bombs: 0

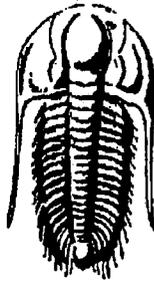
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





**TRILOBITE**  
**TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Larson Engineering, Inc.**

562 West State Rd 4  
Olmitz KS 67564

ATTN: Steve Davis

**29-19-29 Lane KS**

**Gerstner #1-29**

Start Date: 2010.03.22 @ 08:26:06

End Date: 2010.03.22 @ 15:05:06

Job Ticket #: 37776                      DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

Larson Engineering, Inc.

562 West State Rd 4  
Olmitz KS 67564

ATTN: Steve Davis

**Gerstner #1-29**

**29-19-29 Lane KS**

Job Ticket: 37776

DST#: 4

Test Start: 2010.03.22 @ 08:26:06

### GENERAL INFORMATION:

Formation: **Altamont**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:06:06

Time Test Ended: 15:05:06

Test Type: Conventional Bottom Hole

Tester: Shane McBride

Unit No: 40

Interval: **4398.00 ft (KB) To 4478.00 ft (KB) (TVD)**

Total Depth: 4478.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2875.00 ft (KB)

2865.00 ft (CF)

KB to GR/CF: 10.00 ft

**Serial #: 8368**

Inside

Press@RunDepth: 85.72 psig @ 4399.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2010.03.22

End Date:

2010.03.22

Last Calib.: 2010.03.22

Start Time: 08:26:06

End Time:

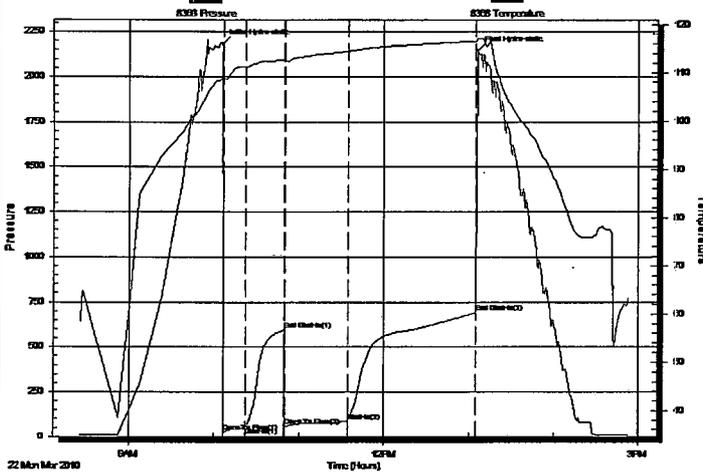
14:54:06

Time On Btm: 2010.03.22 @ 10:05:21

Time Off Btm: 2010.03.22 @ 13:05:51

**TEST COMMENT:** 1 1/4" in blow  
No return  
5 1/4" in blow  
No return

Pressure vs. Time



### PRESSURE SUMMARY

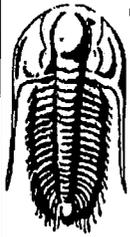
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2183.73	109.04	Initial Hydro-static
1	27.08	108.40	Open To Flow (1)
17	51.30	111.22	Shut-In(1)
44	593.71	112.55	End Shut-In(1)
45	59.17	112.28	Open To Flow (2)
89	85.72	114.46	Shut-In(2)
180	692.19	116.54	End Shut-In(2)
181	2147.34	116.97	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
150.00	o c m 20%o 80%m	0.97
0.00	180' gas in pipe	0.00

### Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Larson Engineering, Inc.

**Gerstner #1-29**

562 West State Rd 4  
Olmitz KS 67564

**29-19-29 Lane KS**

Job Ticket: 37776

**DST#: 4**

ATTN: Steve Davis

Test Start: 2010.03.22 @ 08:26:06

### Tool Information

Drill Pipe:	Length: 4257.00 ft	Diameter: 3.80 inches	Volume: 59.71 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: 124.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 90000.00 lb
			<u>Total Volume: 60.32 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 68000.00 lb
Depth to Top Packer:	4398.00 ft			Final 70000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	80.00 ft			
Tool Length:	107.00 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			4372.00	
Shut In Tool	5.00			4377.00	
Hydraulic tool	5.00			4382.00	
Jars	5.00			4387.00	
Safety Joint	2.00			4389.00	
Packer	5.00			4394.00	27.00 Bottom Of Top Packer
Packer	4.00			4398.00	
Stubb	1.00			4399.00	
Recorder	0.00	8368	Inside	4399.00	
Recorder	0.00	6771	Outside	4399.00	
Perforations	10.00			4409.00	
Change Over Sub	1.00			4410.00	
Drill Pipe	62.00			4472.00	
Change Over Sub	1.00			4473.00	
Bullnose	5.00			4478.00	80.00 Bottom Packers & Anchor

**Total Tool Length: 107.00**



**TRILOBITE**  
**TESTING, INC**

## DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering, Inc.

Gerstner #1-29

562 West State Rd 4  
Olmitz KS 67564

29-19-29 Lane KS

Job Ticket: 37776

DST#: 4

ATTN: Steve Davis

Test Start: 2010.03.22 @ 08:26:06

### Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 48.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.96 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 bbbl
150.00	o c m 20%o 80%m	0.975
0.00	180' gas in pipe	0.000

Total Length: 150.00 ft      Total Volume: 0.975 bbl

Num Fluid Samples: 0

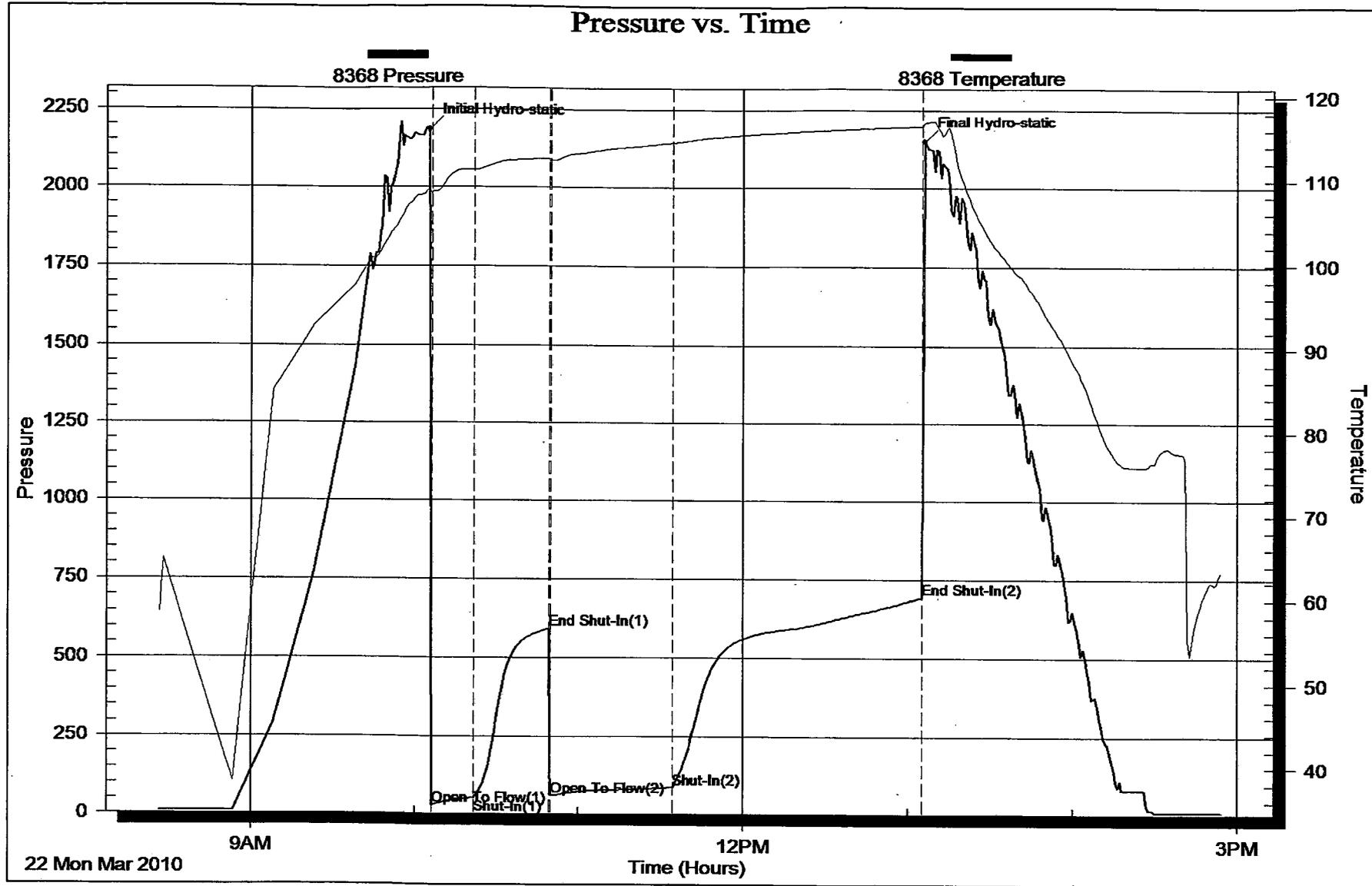
Num Gas Bombs: 0

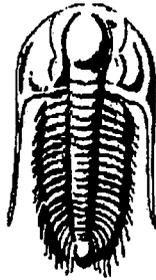
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Larson Engineering, Inc.**

562 West State Rd 4  
Olmitz KS 67564

ATTN: Steve Davis

**29-19-29 Lane KS**

**Gerstner #1-29**

Start Date: 2010.03.23 @ 06:05:36

End Date: 2010.03.23 @ 11:40:36

Job Ticket #: 37777                      DST #: 5

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

Larson Engineering, Inc.

**Gerstner #1-29**

562 West State Rd 4  
Olmitz KS 67564

**29-19-29 Lane KS**

Job Ticket: 37777

**DST#: 5**

ATTN: Steve Davis

Test Start: 2010.03.23 @ 06:05:36

### GENERAL INFORMATION:

Formation: **Myrick Station , Ft**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:05:21

Time Test Ended: 11:40:36

Test Type: Conventional Bottom Hole

Tester: Shane McBride

Unit No: 40

Interval: **4525.00 ft (KB) To 4583.00 ft (KB) (TVD)**

Reference Elevations: 2875.00 ft (KB)

Total Depth: 4583.00 ft (KB) (TVD)

2865.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

**Serial #: 8368**

Inside

Press@RunDepth: 51.67 psig @ 4526.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2010.03.23

End Date:

2010.03.23

Last Calib.: 2010.03.23

Start Time: 06:05:36

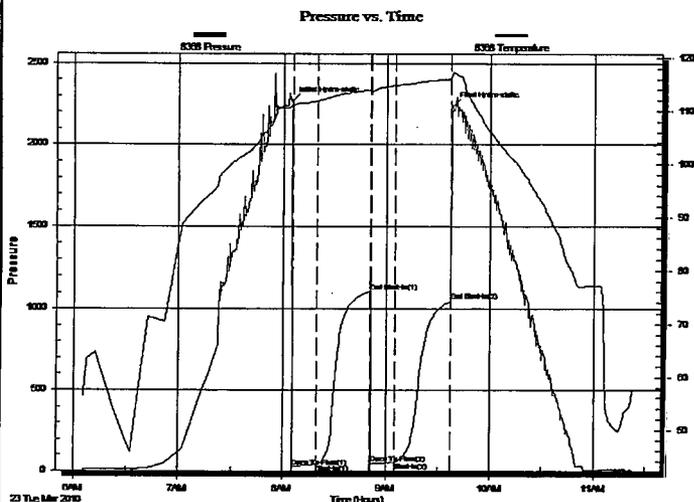
End Time:

11:23:36

Time On Btm: 2010.03.23 @ 08:04:51

Time Off Btm: 2010.03.23 @ 09:38:06

TEST COMMENT: 1/4" in + blow  
No return  
1/4" in + blow  
No return



### PRESSURE SUMMARY

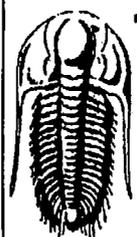
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2270.45	111.11	Initial Hydro-static
1	25.75	110.49	Open To Flow (1)
15	38.93	111.87	Shut-In(1)
46	1105.39	113.97	End Shut-In(1)
47	44.68	113.52	Open To Flow (2)
60	51.67	114.82	Shut-In(2)
93	1046.38	116.06	End Shut-In(2)
94	2236.47	117.02	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
40.00	mud 100%m	0.20

### Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Larson Engineering, Inc.

**Gerstner #1-29**

562 West State Rd 4  
Olmitz KS 67564

**29-19-29 Lane KS**

Job Ticket: 37777

**DST#: 5**

ATTN: Steve Davis

Test Start: 2010.03.23 @ 06:05:36

### Tool Information

Drill Pipe:	Length: 4379.00 ft	Diameter: 3.80 inches	Volume: 61.43 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: 124.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 90000.00 lb
			<u>Total Volume: 62.04 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial 70000.00 lb
Depth to Top Packer:	4525.00 ft			Final 70000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	58.00 ft			
Tool Length:	85.00 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			4499.00	
Shut In Tool	5.00			4504.00	
Hydraulic tool	5.00			4509.00	
Jars	5.00			4514.00	
Safety Joint	2.00			4516.00	
Packer	5.00			4521.00	27.00 Bottom Of Top Packer
Packer	4.00			4525.00	
Stubb	1.00			4526.00	
Recorder	0.00	8368	Inside	4526.00	
Recorder	0.00	6771	Outside	4526.00	
Perforations	19.00			4545.00	
Change Over Sub	1.00			4546.00	
Drill Pipe	31.00			4577.00	
Change Over Sub	1.00			4578.00	
Bullnose	5.00			4583.00	58.00 Bottom Packers & Anchor

**Total Tool Length: 85.00**



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**FLUID SUMMARY**

Larson Engineering, Inc.

**Gerstner #1-29**

562 West State Rd 4  
Olmitz KS 67564

**29-19-29 Lane KS**

Job Ticket: 37777

**DST#: 5**

ATTN: Steve Davis

Test Start: 2010.03.23 @ 06:05:36

### Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.18 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
40.00	mud 100%m	0.197

Total Length: 40.00 ft      Total Volume: 0.197 bbl

Num Fluid Samples: 0

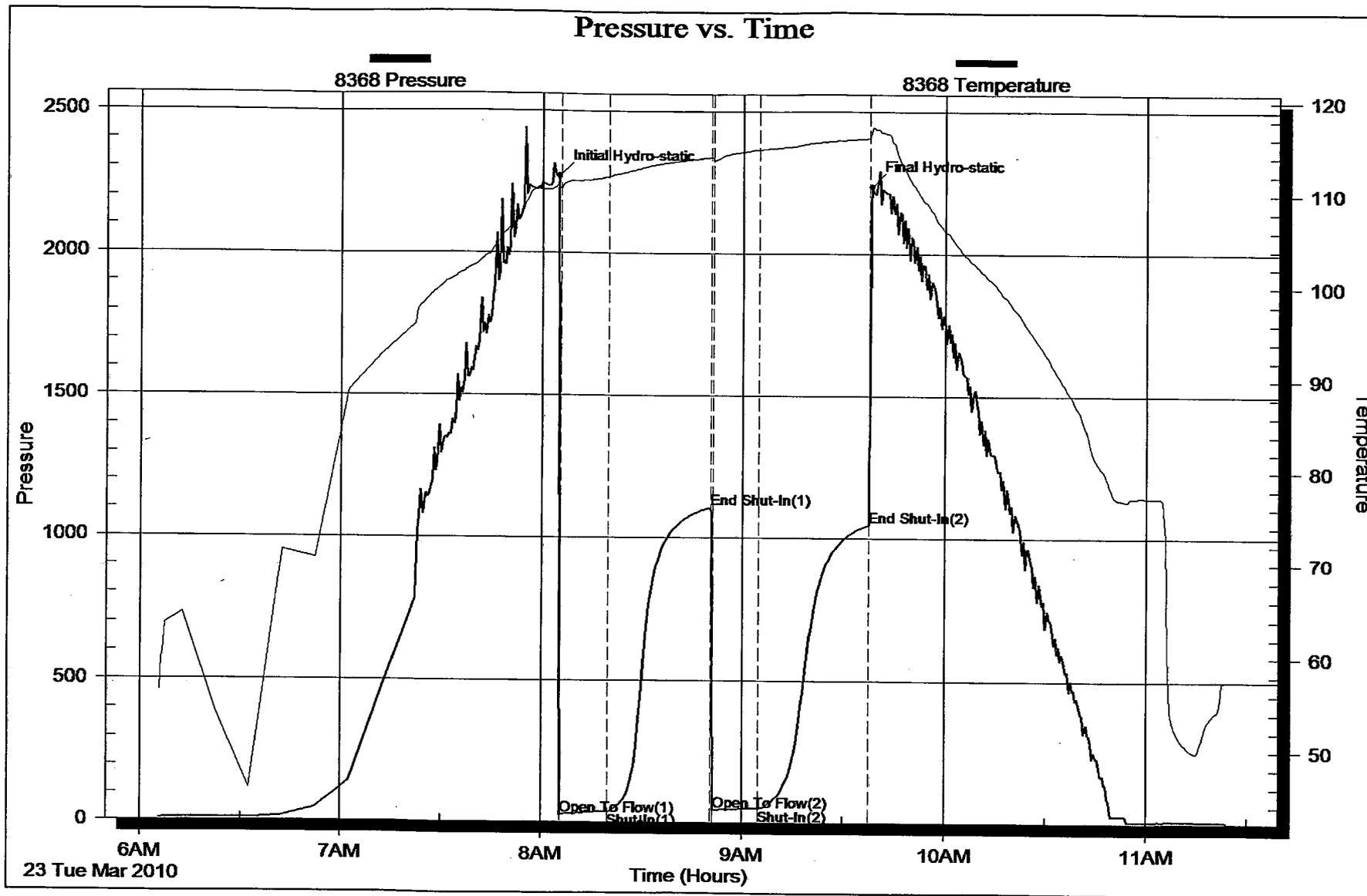
Num Gas Bombs: 0

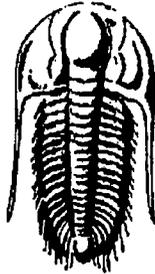
Serial#:

Laboratory Name:

Laboratory Location:

Recovery Comments:





**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Larson Engineering, Inc.**

562 West State Rd 4  
Olmitz KS 67564

ATTN: Steve Davis

**29-19-29 Lane KS**

**Gerstner #1-29**

Start Date: 2010.03.23 @ 22:30:13

End Date: 2010.03.24 @ 04:40:22

Job Ticket #: 37778                      DST #: 6

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Larson Engineering, Inc.

**Gerstner #1-29**

562 West State Rd 4  
Olmitz KS 67564

**29-19-29 Lane KS**

Job Ticket: 37778

**DST#: 6**

ATTN: Steve Davis

Test Start: 2010.03.23 @ 22:30:13

## GENERAL INFORMATION:

Formation: **Cherokee, Johnson**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:25:53

Time Test Ended: 04:40:22

Test Type: Conventional Bottom Hole

Tester: Shane McBride

Unit No: 40

Interval: **4570.00 ft (KB) To 4640.00 ft (KB) (TVD)**

Reference Elevations: 2875.00 ft (KB)

Total Depth: 4640.00 ft (KB) (TVD)

2865.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

**Serial #: 6771** Outside

Press@RunDepth: 31.82 psig @ 4571.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2010.03.23

End Date:

2010.03.24

Last Calib.: 2010.03.24

Start Time: 22:30:13

End Time:

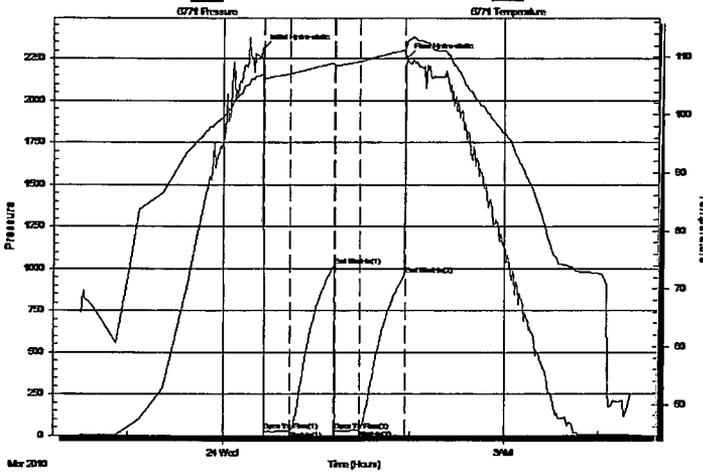
04:20:22

Time On Btm: 2010.03.24 @ 00:25:23

Time Off Btm: 2010.03.24 @ 01:57:38

TEST COMMENT: 1/4" in blow  
No return  
1/4" in blow  
No return

Pressure vs. Time



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2307.76	106.98	Initial Hydro-static
1	28.84	106.37	Open To Flow (1)
18	27.66	107.07	Shut-In(1)
46	1016.59	108.94	End Shut-In(1)
46	30.14	108.59	Open To Flow (2)
62	31.82	109.20	Shut-In(2)
91	960.96	111.14	End Shut-In(2)
93	2258.89	112.38	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
3.00	mud 100% m	0.01

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Engineering, Inc.

Gerstner #1-29

562 West State Rd 4  
Olmitz KS 67564

29-19-29 Lane KS

ATTN: Steve Davis

Job Ticket: 37778

DST#: 6

Test Start: 2010.03.23 @ 22:30:13

### Tool Information

Drill Pipe:	Length: 4380.00 ft	Diameter: 3.80 inches	Volume: 61.44 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: 2500.00 lb
Drill Collar:	Length: 188.00 ft	Diameter: 2.25 inches	Volume: 0.92 bbl	Weight to Pull Loose: 90000.00 lb
			<u>Total Volume: 62.36 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 72000.00 lb
Depth to Top Packer:	4570.00 ft			Final 72000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	70.00 ft			
Tool Length:	97.00 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			4544.00	
Shut In Tool	5.00			4549.00	
Hydraulic tool	5.00			4554.00	
Jars	5.00			4559.00	
Safety Joint	2.00			4561.00	
Packer	5.00			4566.00	27.00 Bottom Of Top Packer
Packer	4.00			4570.00	
Stubb	1.00			4571.00	
Recorder	0.00	8368	Inside	4571.00	
Recorder	0.00	6771	Outside	4571.00	
Perforations	31.00			4602.00	
Change Over Sub	1.00			4603.00	
Drill Pipe	31.00			4634.00	
Change Over Sub	1.00			4635.00	
Bullnose	5.00			4640.00	70.00 Bottom Packers & Anchor

**Total Tool Length: 97.00**



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Larson Engineering, Inc.

**Gerstner #1-29**

562 West State Rd 4  
Olmitz KS 67564

**29-19-29 Lane KS**

Job Ticket: 37778

**DST#: 6**

ATTN: Steve Davis

Test Start: 2010.03.23 @ 22:30:13

**Mud and Cushion Information**

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.16 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: 1.00 inches

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
3.00	mud 100%m	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:

