

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION
WELL COMPLETION FORM

ORIGINAL

Form ACO-1
October 2008
Form Must Be Typed

6/25/12

CONFIDENTIAL

WELL HISTORY - DESCRIPTION OF WELL & LEASE

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 # 5822

Name: VAL ENERGY INC.

Wellsite Geologist: VERNON SCHRAG

Purchaser: _____

Designate Type of Completion:

New Well Re-Entry Workover
 Oil SWD SLOW
 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. _____

2/28/2010 3/11/2010

Spud Date or Recompletion Date Date Reached TD Completion Date or Recompletion Date

API No. 15 - 171-20749-00-00

Spot Description: _____

NE - SE - SE - NW Sec. 2 Twp. 16 S. R. 31 East West

2070 feet from NORTH Line of Section

2715 feet from EAST Line of Section

Footages Calculated from Nearest Outside Section Corner:

NE NW SE SW

County: SCOTT

Lease Name: YORK Well #: 1-2

Field Name: WILDCAT

Producing Formation: _____

Elevation: Ground: 2840' Kelly Bushing: 2845'

Total Depth: 4616' Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: 256 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 6-20-10
(Data must be collected from the Reserve Pit)

Chloride content: 12400 ppm Fluid volume: 1000 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 H

Title: SECRETARY/TREASURER Date: 6/24/2010

Subscribed and sworn to before me this 24TH day of JUNE

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 6/25/10
If Denied, Yes Date: _____
 Wireline Log Received
 Geologist Report Received
 UIC Distribution
RECEIVED
JUN 25 2010
KCC WICHITA

Operator Name: LARSON ENGINEERING, INC. Lease Name: YORK Well #: 1-2

Sec. 2 Twp. 16 S. R. 31 East West County: SCOTT

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all final copes 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 <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Electric Log Run <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(Submit Copy)</i> List All E. Logs Run: DUAL INDUCTION DUAL COMP POROSITY BOREHOLE COMP SONIC MICRORESISTIVITY	<input checked="" type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Name</th> <th>Top</th> <th>Datum</th> </tr> </thead> <tbody> <tr> <td>HEEBNER SH</td> <td>3872</td> <td>-1027</td> </tr> <tr> <td>LANSING</td> <td>3911</td> <td>-1066</td> </tr> <tr> <td>STARK SH</td> <td>4172</td> <td>-1328</td> </tr> <tr> <td>PAWNEE</td> <td>4377</td> <td>-1532</td> </tr> <tr> <td>CHEROKEE SH</td> <td>4455</td> <td>-1610</td> </tr> <tr> <td>MISSISSIPPI</td> <td>4541</td> <td>-1696</td> </tr> </tbody> </table>	Name	Top	Datum	HEEBNER SH	3872	-1027	LANSING	3911	-1066	STARK SH	4172	-1328	PAWNEE	4377	-1532	CHEROKEE SH	4455	-1610	MISSISSIPPI	4541	-1696
Name	Top	Datum																				
HEEBNER SH	3872	-1027																				
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STARK SH	4172	-1328																				
PAWNEE	4377	-1532																				
CHEROKEE SH	4455	-1610																				
MISSISSIPPI	4541	-1696																				

KCC
JUN 25 2010
CONFIDENTIAL

CASING RECORD <input type="checkbox"/> New <input 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#	256'	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

TUBING RECORD:	Size:	Set At:	Packer At:	Liner Run: <input type="checkbox"/> Yes <input type="checkbox"/> No
Date of First, Resumed Production, SWD or Enhr.		Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> 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 <i>If vented, submit ACCO-18.)</i>	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: RECEIVED
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JUN 25 2010
KCC WICHITA

ALLIED CEMENTING CO., LLC. 044494

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

SERVICE POINT:

Onley

DATE <u>2-28-10</u>	SEC. <u>2</u>	TWP. <u>16</u>	RANGE <u>41</u>	CALLED OUT	ON LOCATION <u>10:00am</u>	JOB START <u>10:00pm</u>	JOB FINISH <u>10:30pm</u>
LEASE <u>York</u>	WELL # <u>1-2</u>		LOCATION <u>Onley - 2w - 3 1/2 n (Bison)</u>			COUNTY <u>Scott</u>	STATE <u>KS</u>
OLD OR <input checked="" type="radio"/> NEW (Circle one)			S 1/4 - 1 1/2 w - 1 w - 1 1/2 w - 1 1/2 n w 1/4				

CONTRACTOR Wal #4

TYPE OF JOB Surface

HOLE SIZE 12 1/4 T.D. 262'

CASING SIZE 8 5/8 DEPTH 262'

TUBING SIZE DEPTH

DRILL PIPE DEPTH

TOOL DEPTH

PRES. MAX MINIMUM

MEAS. LINE SHOE JOINT

CEMENT LEFT IN CSG. 15'

PERFS.

DISPLACEMENT 15.7 Bbls

OWNER

CEMENT

AMOUNT ORDERED 175 sks com 3%orc

2%orc

COMMON	<u>175</u>	@ <u>15.45</u>	<u>2703.75</u>
POZMIX		@	
GEL	<u>3</u>	@ <u>20.80</u>	<u>62.40</u>
CHLORIDE	<u>6</u>	@ <u>58.20</u>	<u>349.20</u>
ASC		@	

EQUIPMENT

PUMP TRUCK CEMENTER Fuzzy

431 HELPER Rell

BULK TRUCK

3 DRIVER Walbur

BULK TRUCK

DRIVER

KCC

RECEIVED

JUN 25 2010

CONFIDENTIAL

KCC WICHITA

HANDLING	<u>184</u>	@ <u>2.40</u>	<u>441.60</u>
MILEAGE	<u>10.5 km</u>		<u>920.00</u>
TOTAL			<u>4476.95</u>

REMARKS:

Cement did circulate

Job complete @ 10:30pm

Thanks Fuzzy & crew

CHARGE TO: Hanson Engineering

STREET

CITY STATE ZIP

SERVICE

DEPTH OF JOB	<u>262'</u>		
PUMP TRUCK CHARGE			<u>1018.00</u>
EXTRA FOOTAGE		@	
MILEAGE	<u>50</u>	@ <u>7.00</u>	<u>350.00</u>
MANIFOLD		@	
TOTAL			<u>1368.00</u>

PLUG & FLOAT EQUIPMENT

_____	@	_____
_____	@	_____
_____	@	_____
_____	@	_____
_____	@	_____

TOTAL _____

SALES TAX (If Any) _____

TOTAL CHARGES _____

DISCOUNT _____ IF PAID IN 30 DAYS

PRINTED NAME _____

SIGNATURE [Signature]

ALLIED CEMENTING CO., LLC. 043595

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

KCC

JUN 25 2010

SERVICE POINT:

LARKLEY

DATE <u>3-11-10</u>	SEC. <u>2</u>	TWP. <u>16S</u>	RANGE <u>41W</u>	CALLED OUT IDENTIFICATION LOCATION <u>5:00 AM</u>	JOB START <u>11:00 AM</u>	JOB FINISH <u>11:30 AM</u>
LEASE <u>YORK</u>	WELL # <u>1-2</u>	LOCATION <u>NE1/4 2W-3 1/2 N-3/4 W-1/2 N-1/2 NW</u>			COUNTY <u>Scott</u>	STATE <u>Ks</u>
OLD OR <input checked="" type="radio"/> NEW (Circle one)		LOCATION <u>1/2 N- W SW</u>				

CONTRACTOR V/A1 ARL9 RIG#4 OWNER SAME

TYPE OF JOB PTA

HOLE SIZE 7 7/8" T.D. 4618 CEMENT AMOUNT ORDERED 290 SKS 60/40 POZ 48 GEL

CASING SIZE _____ DEPTH _____ 1/4" Flo-SEAL

TUBING SIZE _____ DEPTH _____

DRILL PIPE 4 1/2" DEPTH 2290'

TOOL _____ DEPTH _____

PRES. MAX _____ MINIMUM _____

MEAS. LINE _____ SHOE JOINT _____

CEMENT LEFT IN CSG. _____

PERFS. _____

DISPLACEMENT _____

EQUIPMENT

PUMP TRUCK CEMENTER TERRY
422 HELPER LAREN E
BULK TRUCK
396 DRIVER DARRIN
BULK TRUCK
_____ DRIVER _____

REMARKS:

50 SKS AT 2290'
80 SKS AT 1630'
40 SKS AT 815'
50 SKS AT 280'
20 SKS AT 60'
20 SKS MOUSE HOLE
30 SKS RAT HOLE

THANK YOU

CHARGE TO: LARSON ENGINEERING

STREET _____

CITY _____ STATE _____ ZIP _____

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 _____

SIGNATURE [Signature]

COMMON 174 SKS @ 15 45/100 2688 30
POZ MIX 116 SKS @ 8 8/100 928 100
GEL 10 SKS @ 20 8/100 208 100
CHLORIDE _____ @ _____
ASC _____ @ _____

Flo-SEAL 73 # @ 2 50 182 50
RECEIVED @ _____
JUN 25 2010 @ _____
KCC WICHITA @ _____

HANDLING 300 SKS @ 2 40 720 100
MILEAGE 10¢ PER SK/ MILE 1500 100
TOTAL 6226 80

SERVICE

DEPTH OF JOB 2290'
PUMP TRUCK CHARGE 1185 80
EXTRA FOOTAGE @ _____
MILEAGE 50 MI @ 7 00 350 00
MANIFOLD @ _____
TOTAL 1535 80

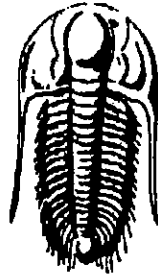
PLUG & FLOAT EQUIPMENT

_____ @ _____
_____ @ _____
_____ @ _____
_____ @ _____
TOTAL _____

SALES TAX (If Any) _____

TOTAL CHARGES _____

DISCOUNT _____ IF PAID IN 30 DAYS



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Larson Engineering**

562 W. State Road 4
Olmitz, KS 67564

ATTN: Vern Schrag

2-16-31 Scott, KS

York #1-2

Start Date: 2010.03.06 @ 02:28:00

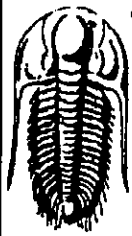
End Date: 2010.03.06 @ 09:58:36

Job Ticket #: 36982 DST #: 1

KCC
JUN 25 2010
CONFIDENTIAL

RECEIVED
JUN 25 2010
KCC WICHITA

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Larson Engineering
562 W. State Road 4
Olmitz, KS 67564
ATTN: Vern Schrag

York #1-2

2-16-31 Scott, KS

Job Ticket: 36982

DST#: 1

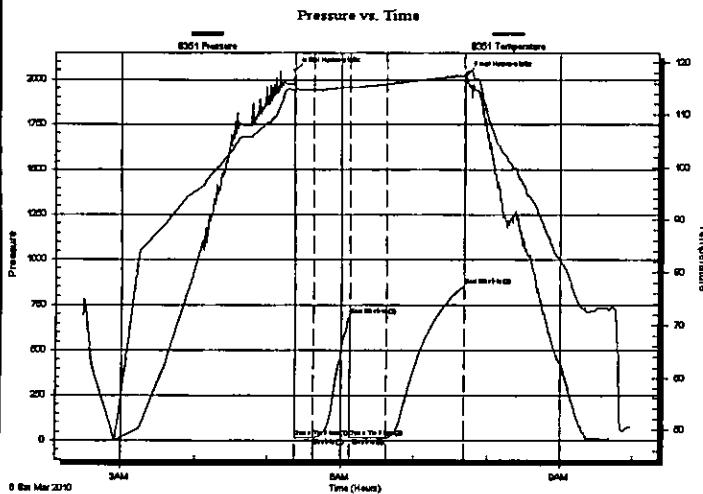
Test Start: 2010.03.06 @ 02:28:00

GENERAL INFORMATION:

Formation: LKC 'H
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 05:21:48
Time Test Ended: 09:58:36
Interval: 4077.00 ft (KB) To 4102.00 ft (KB) (TVD)
Total Depth: 4102.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good
Test Type: Conventional Bottom Hole
Tester: Chuck Smith
Unit No: 37
Reference Elevations: 2845.00 ft (KB)
2840.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8351 Inside
Press@RunDepth: 16.62 psig @ 4082.00 ft (KB)
Start Date: 2010.03.06 End Date: 2010.03.06
Start Time: 02:28:01 End Time: 09:58:36
Capacity: 8000.00 psig
Last Calib.: 2010.03.06
Time On Btm: 2010.03.06 @ 05:21:00
Time Off Btm: 2010.03.06 @ 07:42:36

TEST COMMENT: IF: Surface blow.
IS: No return.
FF: No blow.
FS: No return.



PRESSURE SUMMARY

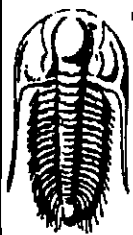
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2047.80	114.83	Initial Hydro-static
1	14.65	114.67	Open To Flow (1)
16	16.45	114.75	Shut-In(1)
47	692.65	115.38	End Shut-In(1)
47	16.65	115.17	Open To Flow (2)
77	16.62	115.92	Shut-In(2)
141	856.26	117.56	End Shut-In(2)
142	2027.77	118.02	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1.00	OSM 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

York #1-2

562 W. State Road 4
Olmitz, KS 67564

2-16-31 Scott, KS

Job Ticket: 36982

DST#: 1

ATTN: Vern Schrag

Test Start: 2010.03.06 @ 02:28:00

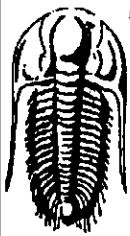
Tool Information

Drill Pipe:	Length: 4065.00 ft	Diameter: 3.80 inches	Volume: 57.02 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 35000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 57.02 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	15.50 ft			String Weight: Initial 47000.00 lb
Depth to Top Packer:	4077.00 ft			Final 47000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	25.00 ft			
Tool Length:	52.50 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			4050.50	
Shut In Tool	5.00			4055.50	
Hydraulic tool	5.00			4060.50	
Jars	5.00			4065.50	
Safety Joint	2.50			4068.00	
Packer	5.00			4073.00	27.50 Bottom Of Top Packer
Packer	4.00			4077.00	
Stubb	1.00			4078.00	
Perforations	4.00			4082.00	
Recorder	0.00	8351	Inside	4082.00	
Recorder	0.00	8359	Outside	4082.00	
Perforations	15.00			4097.00	
Bullnose	5.00			4102.00	25.00 Bottom Packers & Anchor

Total Tool Length: 52.50



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering
562 W. State Road 4
Olmitz, KS 67564
ATTN: Vern Schrag

York #1-2
2-16-31 Scott, KS
Job Ticket: 36982 DST#: 1
Test Start: 2010.03.06 @ 02:28:00

Mud and Cushion Information

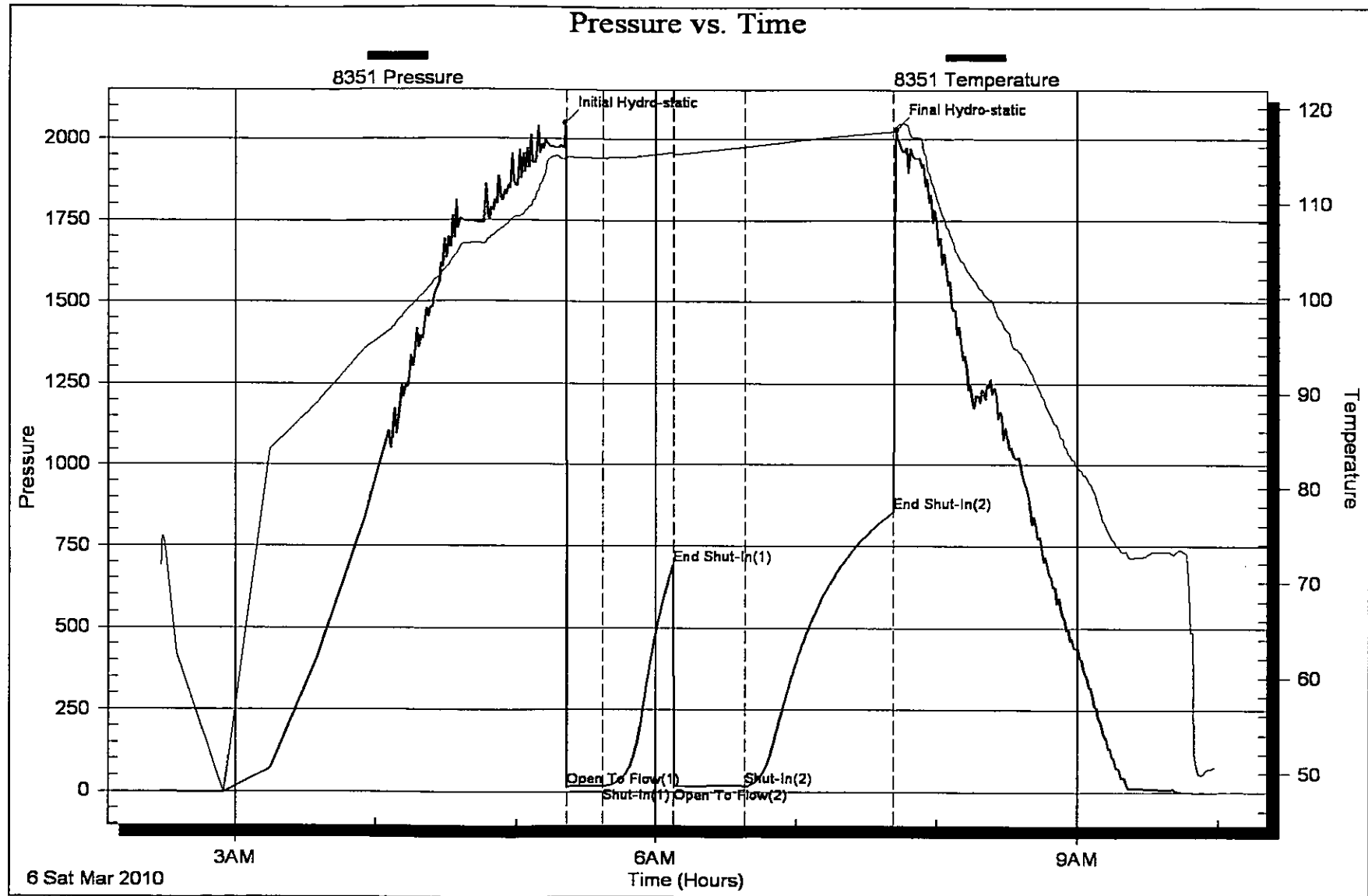
Mud Type:	Gel Chem	Cushion Type:		Oil API:	0 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	0 ppm
Viscosity:	57.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.78 in ³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	3600.00 ppm				
Filter Cake:	2.00 inches				

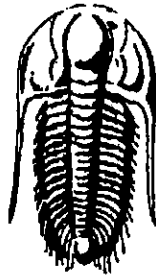
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1.00	OSM 100%M	0.014

Total Length: 1.00 ft Total Volume: 0.014 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments: API @ Degrees F =





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Larson Engineering**

562 W. State Road 4
Olmitz, KS 67564

ATTN: Vern Schrag

2-16-31 Scott, KS

York #1-2

Start Date: 2010.03.06 @ 23:00:00

End Date: 2010.03.07 @ 06:39:00

Job Ticket #: 36983 DST #: 2

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Larson Engineering

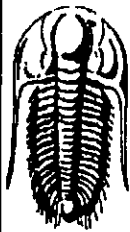
York #1-2

2-16-31 Scott, KS

DST # 2

LKC 'J'

2010.03.06



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Larson Engineering

562 W. State Road 4
Olmitz, KS 67564

ATTN: Vern Schrag

York #1-2

2-16-31 Scott, KS

Job Ticket: 36983

DST#: 2

Test Start: 2010.03.06 @ 23:00:00

GENERAL INFORMATION:

Formation: LKC 'J'

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 01:45:12

Time Test Ended: 06:39:00

Test Type: Conventional Bottom Hole

Tester: Chuck Smith

Unit No: 37

Interval: 4135.00 ft (KB) To 4163.00 ft (KB) (TVD)

Total Depth: 4163.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2845.00 ft (KB)

2840.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8351

Inside

Press@RunDepth: 65.73 psig @ 4138.00 ft (KB)

Start Date: 2010.03.06

End Date:

2010.03.07

Capacity: 8000.00 psig

Last Calib.: 2010.03.07

Start Time: 23:00:01

End Time:

06:39:00

Time On Btm: 2010.03.07 @ 01:44:00

Time Off Btm: 2010.03.07 @ 04:02:12

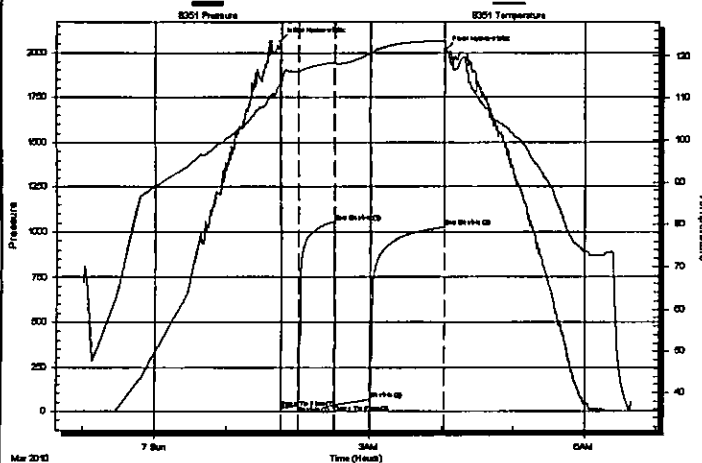
TEST COMMENT: IF: 3 1/2" Blow.

IS: No return.

FF: 5" Blow.

FS: No return.

Pressure vs. Time



PRESSURE SUMMARY

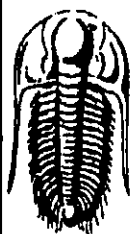
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2062.31	113.00	Initial Hydro-static
2	16.81	112.69	Open To Flow (1)
17	34.17	116.18	Shut-In(1)
46	1055.75	118.62	End Shut-In(1)
47	36.47	118.36	Open To Flow (2)
77	65.73	120.65	Shut-In(2)
138	1026.61	123.59	End Shut-In(2)
139	2016.97	122.82	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
90.00	MW 30%M 70%W	1.26
0.00	RW: .250 @ 62 Degrees F = 30000 PPM	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Engineering
562 W. State Road 4
Olmitz, KS 67564
ATTN: Vern Schrag

York #1-2
2-16-31 Scott, KS
Job Ticket: 36983 DST#: 2
Test Start: 2010.03.06 @ 23:00:00

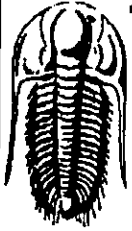
Tool Information

Drill Pipe:	Length: 4127.00 ft	Diameter: 3.80 inches	Volume: 57.89 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 57.89 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	19.50 ft			String Weight: Initial 47000.00 lb
Depth to Top Packer:	4135.00 ft			Final 47000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	28.00 ft			
Tool Length:	55.50 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			4108.50	
Shut In Tool	5.00			4113.50	
Hydraulic tool	5.00			4118.50	
Jars	5.00			4123.50	
Safety Joint	2.50			4126.00	
Packer	5.00			4131.00	27.50 Bottom Of Top Packer
Packer	4.00			4135.00	
Stubb	1.00			4136.00	
Perforations	2.00			4138.00	
Recorder	0.00	8351	Inside	4138.00	
Recorder	0.00	8359	Outside	4138.00	
Perforations	20.00			4158.00	
Bullnose	5.00			4163.00	28.00 Bottom Packers & Anchor

Total Tool Length: 55.50



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering

York #1-2

562 W. State Road 4
Olmitz, KS 67564

2-16-31 Scott, KS

Job Ticket: 36983

DST#: 2

ATTN: Vern Schrag

Test Start: 2010.03.06 @ 23:00:00

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:

30000 ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbf

Water Loss: 7.18 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3600.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
90.00	MW 30%M 70%W	1.262
0.00	RW: .250 @ 62 Degrees F = 30000 PPM	0.000

Total Length: 90.00 ft

Total Volume: 1.262 bbf

Num Fluid Samples: 0

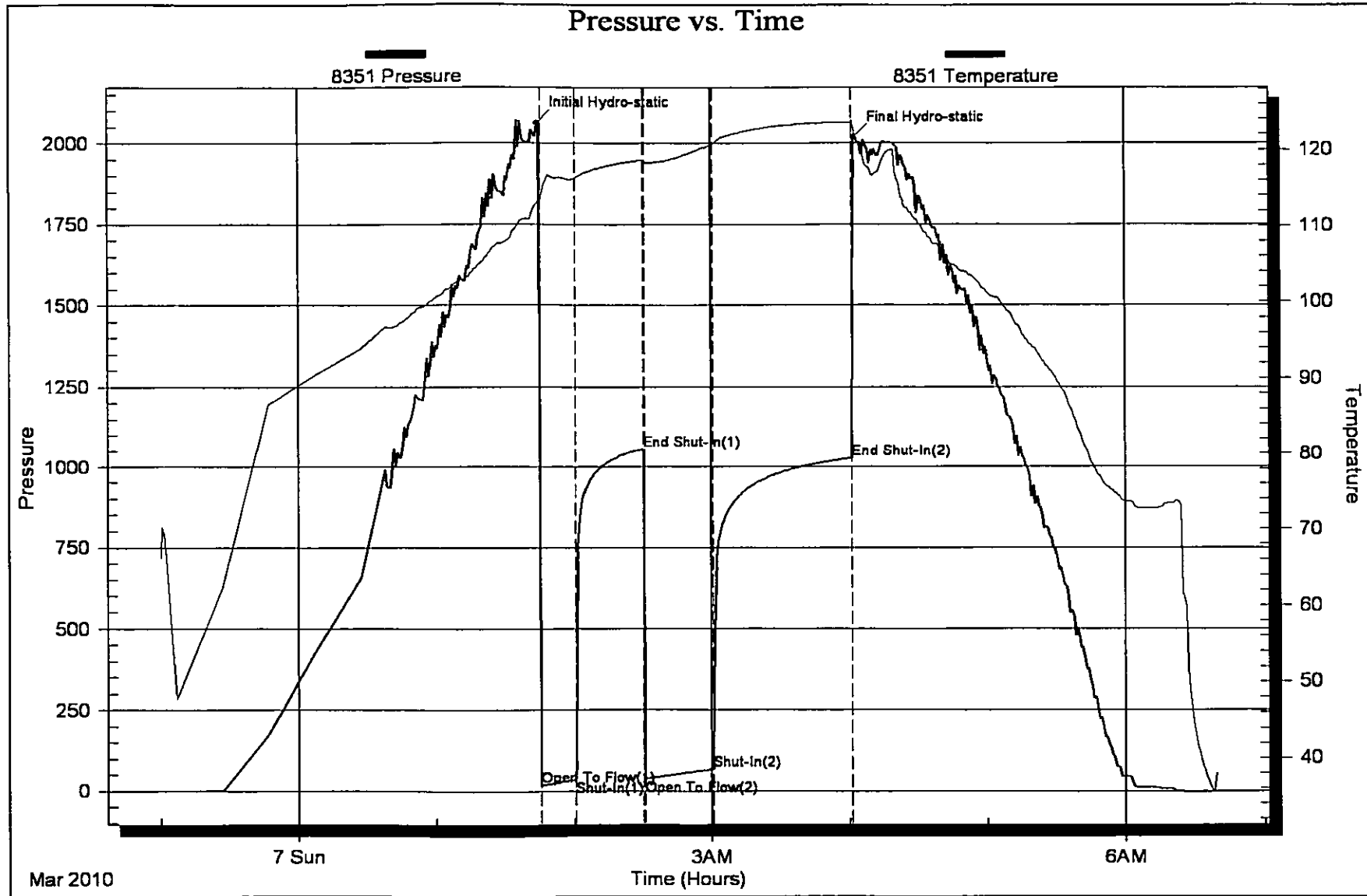
Num Gas Bombs: 0

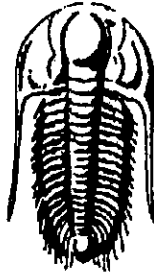
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Larson Engineering**

562 W. State Road 4
Olmitz, KS 67564

ATTN: Vern Schrag

2-16-31 Scott, KS

York #1-2

Start Date: 2010.03.07 @ 17:20:40

End Date: 2010.03.08 @ 01:15:40

Job Ticket #: 36984 DST #: 3

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Larson Engineering

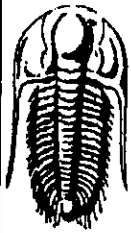
York #1-2

2-16-31 Scott, KS

DST # 3

LKC WK

2010.03.07



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Larson Engineering
562 W. State Road 4
Olmitz, KS 67564
ATTN: Vern Schrag

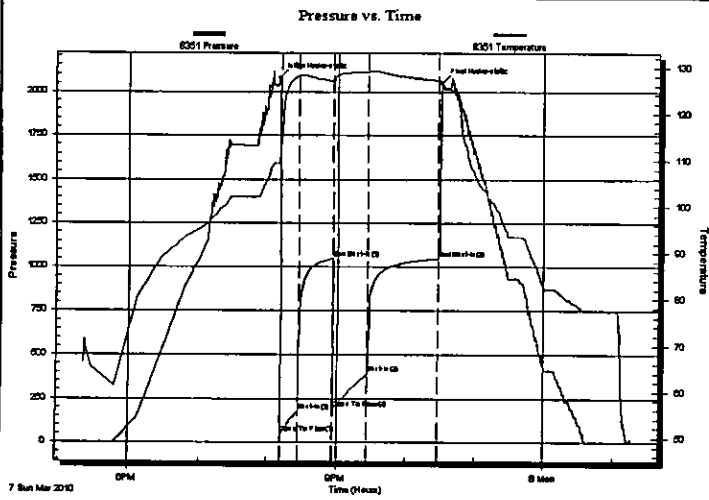
York #1-2
2-16-31 Scott, KS
Job Ticket: 36984 DST#: 3
Test Start: 2010.03.07 @ 17:20:40

GENERAL INFORMATION:

Formation: LKC 'K'
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 20:11:40
Time Test Ended: 01:15:40
Interval: 4170.00 ft (KB) To 4185.00 ft (KB) (TVD)
Total Depth: 4185.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good
Test Type: Conventional Bottom Hole
Tester: Chuck Smith
Unit No: 37
Reference Elevations: 2845.00 ft (KB)
2840.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8351 Inside
Press@RunDepth: 394.46 psig @ 4175.00 ft (KB)
Start Date: 2010.03.07 End Date: 2010.03.08
Start Time: 17:20:41 End Time: 01:15:40
Capacity: 8000.00 psig
Last Calib.: 2010.03.08
Time On Btm: 2010.03.07 @ 20:09:52
Time Off Btm: 2010.03.07 @ 22:30:52

TEST COMMENT: IF: B.O.B. @ 5 min.
IS: No return.
FF: B.O.B. @ 6 min.
FS: No return.



PRESSURE SUMMARY

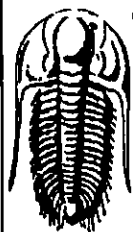
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2079.94	109.28	Initial Hydro-static
2	48.09	112.04	Open To Flow (1)
17	174.51	128.10	Shut-In(1)
47	1047.77	126.94	End Shut-In(1)
48	191.05	126.49	Open To Flow (2)
77	394.46	128.95	Shut-In(2)
138	1046.71	127.22	End Shut-In(2)
141	2051.05	125.63	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
204.00	MV 40%M 60%W	2.86
496.00	W 100%W	6.96
0.00	RW: .190 @ 51 Degrees F = 55000 PPM	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Engineering

York #1-2

562 W. State Road 4
Olmitz, KS 67564

2-16-31 Scott, KS

Job Ticket: 36984

DST#: 3

ATTN: Vern Schrag

Test Start: 2010.03.07 @ 17:20:40

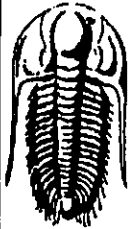
Tool Information

Drill Pipe:	Length: 4161.00 ft	Diameter: 3.80 inches	Volume: 58.37 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 58.37 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	18.50 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	4170.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	15.00 ft			
Tool Length:	42.50 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			4143.50	
Shut In Tool	5.00			4148.50	
Hydraulic tool	5.00			4153.50	
Jars	5.00			4158.50	
Safety Joint	2.50			4161.00	
Packer	5.00			4166.00	27.50 Bottom Of Top Packer
Packer	4.00			4170.00	
Stubb	1.00			4171.00	
Perforations	4.00			4175.00	
Recorder	0.00	8351	Inside	4175.00	
Recorder	0.00	8359	Outside	4175.00	
Perforations	5.00			4180.00	
Bullnose	5.00			4185.00	15.00 Bottom Packers & Anchor

Total Tool Length: 42.50



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering

York #1-2

562 W. State Road 4
Olmitz, KS 67564

2-16-31 Scott, KS

Job Ticket: 36984

DST#: 3

ATTN: Vern Schrag

Test Start: 2010.03.07 @ 17:20:40

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:

55000 ppm

Viscosity: 60.00 sec/qt

Cushion Volume:

bbf

Water Loss: 7.19 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 4400.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
204.00	MW 40%M 60%W	2.862
496.00	W 100%W	6.958
0.00	RW: .190 @ 51 Degrees F = 55000 PPM	0.000

Total Length: 700.00 ft

Total Volume: 9.820 bbf

Num Fluid Samples: 0

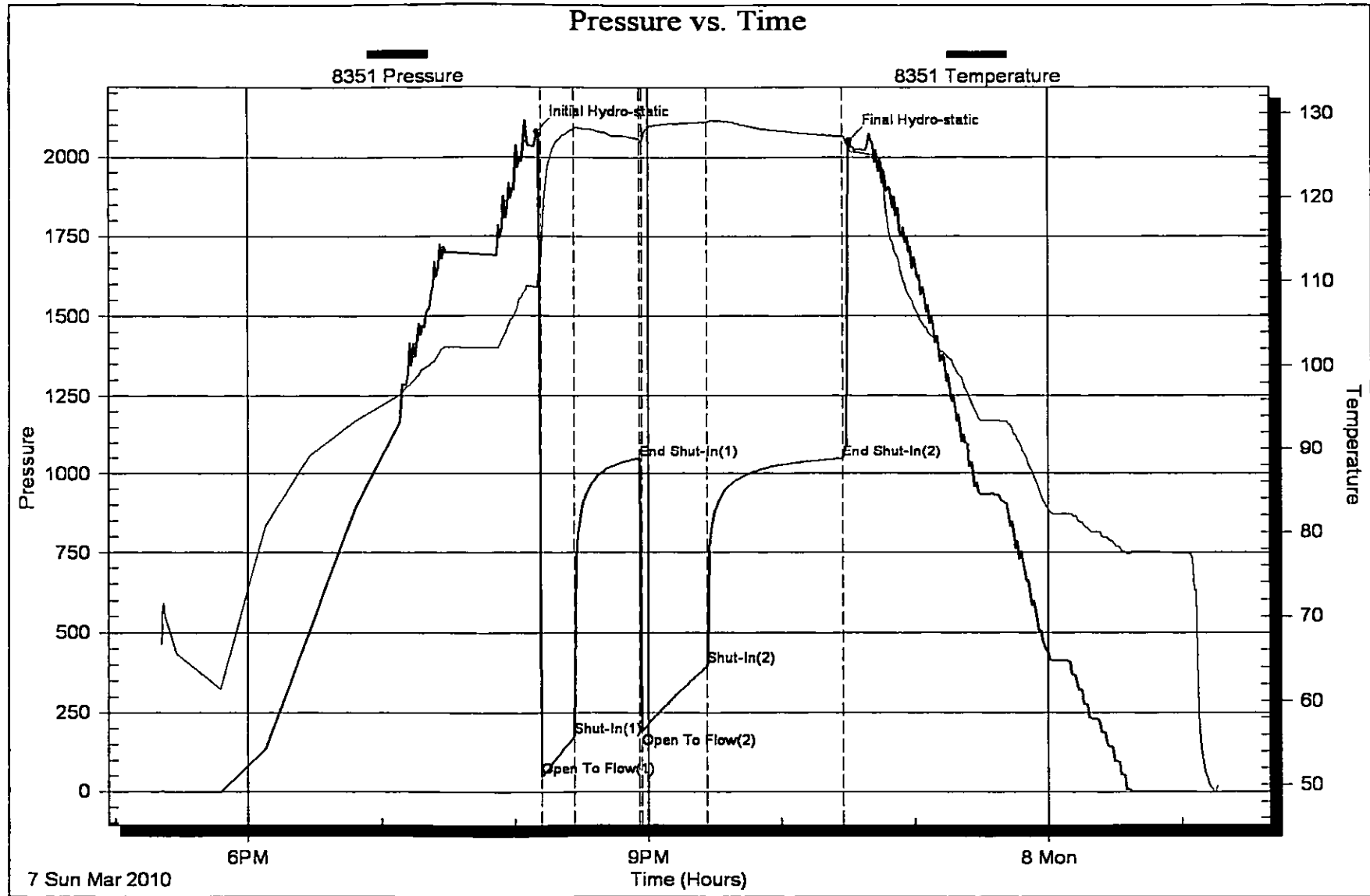
Num Gas Bombs: 0

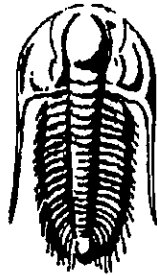
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Larson Engineering**

562 W. State Road 4
Olmitz, KS 67564

ATTN: Vern Schrag

2-16-31 Scott, KS

York #1-2

Start Date: 2010.03.09 @ 13:32:00

End Date: 2010.03.10 @ 00:13:35

Job Ticket #: 36985 DST #: 4

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Larson Engineering

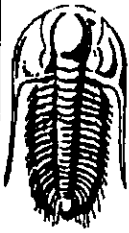
York #1-2

2-16-31 Scott, KS

DST # 4

Cherokee

2010.03.09



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

Larson Engineering
562 W. State Road 4
Olmitz, KS 67564
ATTN: Vern Schrag

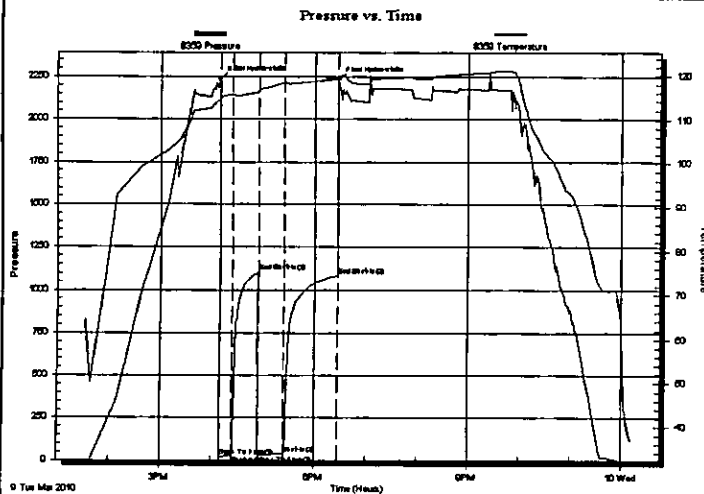
York #1-2
2-16-31 Scott, KS
Job Ticket: 36985 **DST#: 4**
Test Start: 2010.03.09 @ 13:32:00

GENERAL INFORMATION:

Formation:	Cherokee		Test Type:	Conventional Bottom Hole
Deviated:	No Whipstock:	ft (KB)	Tester:	Chuck Smith
Time Tool Opened:	16:09:12		Unit No:	37
Time Test Ended:	00:13:35		Reference Elevations:	2845.00 ft (KB)
Interval:	4442.00 ft (KB) To 4520.00 ft (KB) (TVD)			2840.00 ft (CF)
Total Depth:	4520.00 ft (KB) (TVD)		KB to GR/CF:	5.00 ft
Hole Diameter:	7.88 inches	Hole Condition: Good		

Serial #: 8359	Outside				
Press@RunDepth:	39.08 psig @	4445.00 ft (KB)	Capacity:	8000.00 psig	
Start Date:	2010.03.09	End Date:	2010.03.10	Last Calib.:	2010.03.10
Start Time:	13:32:01	End Time:	00:13:35	Time On Btm:	2010.03.09 @ 16:08:00
				Time Off Btm:	2010.03.09 @ 18:27:36

TEST COMMENT: IF: 1" Blow.
IS: No return.
FF: Weak surface blow.
FS: No return.



PRESSURE SUMMARY

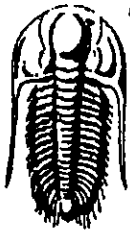
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2235.35	114.40	Initial Hydro-static
2	20.51	114.63	Open To Flow (1)
17	27.93	115.72	Shut-In(1)
46	1103.94	116.17	End Shut-In(1)
47	28.98	116.64	Open To Flow (2)
77	39.08	118.48	Shut-In(2)
139	1083.55	119.37	End Shut-In(2)
140	2228.78	119.69	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
45.00	OSM 100%M	0.63

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Engineering

York #1-2

562 W. State Road 4
Olmitz, KS 67564

2-16-31 Scott, KS

Job Ticket: 36985

DST#: 4

ATTN: Vern Schrag

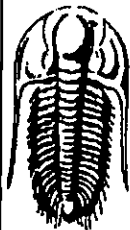
Test Start: 2010.03.09 @ 13:32:00

Tool Information

Drill Pipe:	Length: 4445.00 ft	Diameter: 3.80 inches	Volume: 62.35 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 62.35 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	30.50 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	4442.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	78.00 ft			
Tool Length:	105.50 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			4415.50	
Shut In Tool	5.00			4420.50	
Hydraulic tool	5.00			4425.50	
Jars	5.00			4430.50	
Safety Joint	2.50			4433.00	
Packer	5.00			4438.00	27.50 Bottom Of Top Packer
Packer	4.00			4442.00	
Stubb	1.00			4443.00	
Perforations	2.00			4445.00	
Recorder	0.00	8351	Inside	4445.00	
Recorder	0.00	8359	Outside	4445.00	
Perforations	5.00			4450.00	
Change Over Sub	1.00			4451.00	
Drill Pipe	63.00			4514.00	
Change Over Sub	1.00			4515.00	
Bullnose	5.00			4520.00	78.00 Bottom Packers & Anchor
Total Tool Length:	105.50				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering

York #1-2

562 W. State Road 4
Olmitz, KS 67564

2-16-31 Scott, KS

Job Ticket: 36985

DST#: 4

ATTN: Vern Schrag

Test Start: 2010.03.09 @ 13:32:00

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:

bbf

Water Loss: 6.39 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3200.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
45.00	OSM 100%M	0.631

Total Length: 45.00 ft

Total Volume: 0.631 bbf

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

