

DRILL STEM TEST REPORT

Prepared For: **RL Investments**

217 St. Peter St
Morland KS 67650

ATTN: Pat Deenihan

13 15S 24W Trego KS

Kinderknecht #2

Start Date: 2007.04.10 @ 04:14:15

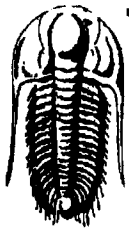
End Date: 2007.04.10 @ 11:54:24

Job Ticket #: 28196 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

RL Investments

217 St. Peter St
Morland KS 67650

ATTN: Pat Deenihan

Kinderknecht #2

13 15S 24W Trego KS

Job Ticket: 28196

DST#: 1

Test Start: 2007.04.10 @ 04:14:15

GENERAL INFORMATION:

Formation: **Mississippian**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:22:25

Time Test Ended: 11:54:24

Test Type: Conventional Bottom Hole

Tester: Tyson Flax

Unit No: 21

Interval: **4188.00 ft (KB) To 4231.00 ft (KB) (TVD)**

Reference Elevations: 2253.00 ft (KB)

Total Depth: 4231.00 ft (KB) (TVD)

2248.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

Serial #: 8320

Inside

Press@RunDepth: 250.65 psig @ 4192.00 ft (KB)

Capacity: 7000.00 psig

Start Date: 2007.04.10

End Date:

2007.04.10

Last Calib.: 2007.04.10

Start Time: 04:14:17

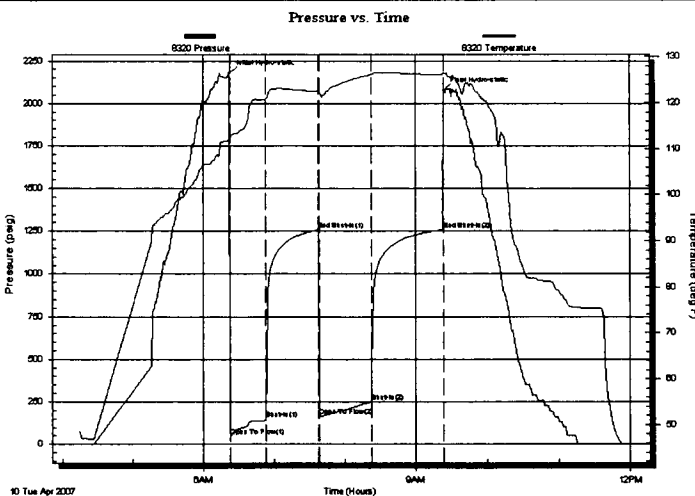
End Time:

11:54:25

Time On Btm: 2007.04.10 @ 06:21:55

Time Off Btm: 2007.04.10 @ 09:23:35

TEST COMMENT: IFP BOB in 9.5 min
ISI Weak 1/2 " blow back throughout
FFP BOB in 16 min
FSI Weak blow back built to 2 " died to 1 "



PRESSURE SUMMARY

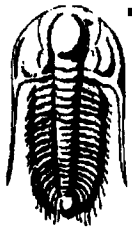
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2175.26	112.11	Initial Hydro-static
1	45.13	112.22	Open To Flow (1)
31	146.92	120.86	Shut-In (1)
76	1259.11	122.53	End Shut-In (1)
76	166.49	122.03	Open To Flow (2)
121	250.65	126.15	Shut-In (2)
182	1258.60	126.05	End Shut-In (2)
182	2074.16	126.43	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	HOCWM 40%O 20%W 40%M	0.30
380.00	MCO 70%M 30%O	4.79
130.00	CO	1.84

Gas Rates

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



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

TOOL DIAGRAM

RL Investments

Kinderknecht #2

217 St. Peter St
Morland KS 67650

13 15S 24W Trego KS

Job Ticket: 28196

DST#: 1

ATTN: Pat Deenihan

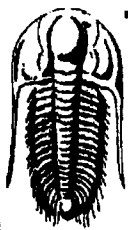
Test Start: 2007.04.10 @ 04:14:15

Tool Information

Drill Pipe:	Length:	4051.00 ft	Diameter:	3.82 inches	Volume:	57.42 bbl	Tool Weight:	2200.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	2.25 inches	Volume:	0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length:	124.00 ft	Diameter:	2.25 inches	Volume:	0.61 bbl	Weight to Pull Loose:	55000.00 lb
					Total Volume:	58.03 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:		8.00 ft					String Weight: Initial	47000.00 lb
Depth to Top Packer:		4188.00 ft					Final	51000.00 lb
Depth to Bottom Packer:		ft						
Interval between Packers:		43.00 ft						
Tool Length:		64.00 ft						
Number of Packers:		2	Diameter:	6.75 inches				
Tool Comments:								

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4168.00	
Shut In Tool	5.00			4173.00	
Hydraulic tool	5.00			4178.00	
Packer	5.00			4183.00	21.00 Bottom Of Top Packer
Packer	5.00			4188.00	
Stubb	1.00			4189.00	
Perforations	2.00			4191.00	
Change Over Sub	1.00			4192.00	
Recorder	0.00	8320	Inside	4192.00	
Blank Spacing	31.00			4223.00	
Change Over Sub	1.00			4224.00	
Perforations	4.00			4228.00	
Recorder	0.00	13401	Inside	4228.00	
Bullnose	3.00			4231.00	43.00 Bottom Packers & Anchor

Total Tool Length: 64.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

RL Investments

217 St. Peter St
Morland KS 67650

ATTN: Pat Deenihan

Kinderknecht #2

13 15S 24W Trego KS

Job Ticket: 28196

DST#: 1

Test Start: 2007.04.10 @ 04:14:15

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 10.00 lb/gal

Viscosity: 58.00 sec/qt

Water Loss: 8.79 in³

Resistivity: ohm.m

Salinity: 4000.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity:

34 deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	HOCWM 40%O 20%W 40%M	0.295
380.00	MCO 70%M 30%O	4.794
130.00	CO	1.843

Total Length: 570.00 ft

Total Volume: 6.932 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8320

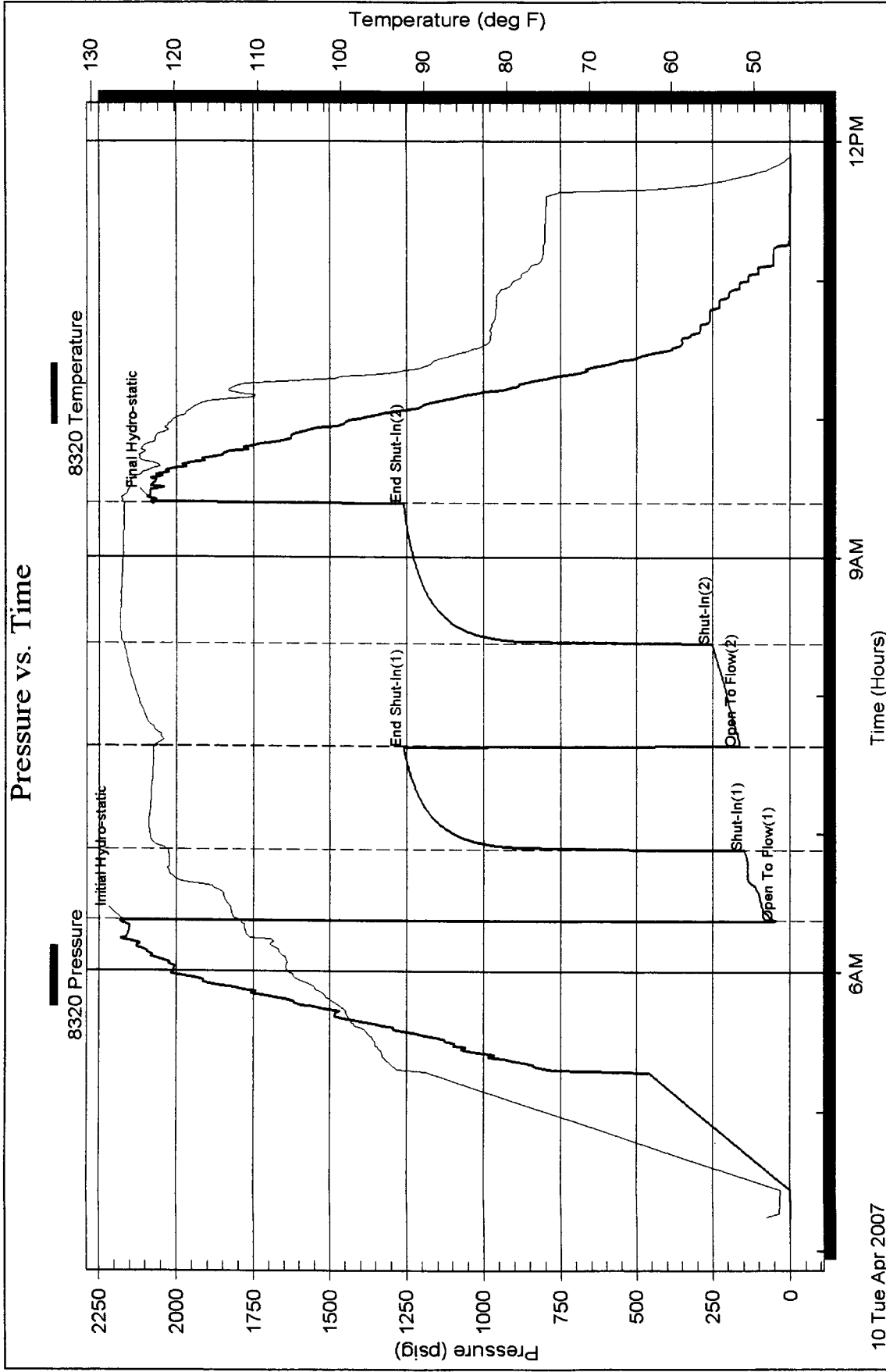
Inside

RL Investments

13 15S24W Trego KS

DST Test Number: 1

Pressure vs. Time



Trilobite Testing, Inc

Ref. No: 28196

Printed: 2007.04.11 @ 10:05:34 Page 5



P.O. Box 362 • Hays, Kansas 67601

100/2 ✓

71

Interval Tested	<u>4188 - 4231</u>	Initial Str Wt./Lbs.	<u>47000</u>	Unseated Str Wt/Lbs.	<u>51000</u>
Anchor Length	<u>43</u>	Wt. Set Lbs.	<u>25000</u>	Wt. Pulled Loose/Lbs.	<u>55000</u>
Top Packer Depth	<u>4183</u>	Tool Weight	<u>2200</u>		
Bottom Packer Depth	<u>4188</u>	Hole Size 7 7/8"	<u>—</u>	Rubber Size 6 3/4"	<u>—</u>
Total Depth	<u>4231</u>	Wt. Pipe Run	<u>—</u>	Drill Collar Run	<u>124</u>
Mud Wt.	<u>9.5</u>	Drill Pipe Size	<u>4 1/2 XH</u>	Ft. Run	<u>4051</u>
LCM	<u>—</u>				
Vis.	<u>58</u>				
WL	<u>8.8</u>				

FSI - weak blow back built to 2" died to 1"

Recovery - Total Feet		570	GIP		Ft. in DC		124	Ft. in DP		446
Rec.	130	Feet of	CO	%gas	%oil	%water	%mud			
Rec.	380	Feet of	MCO	%gas	70	%oil	%water	30	%mud	
Rec.	60	Feet of	HOCWM	%gas	40	%oil	20	%water	40	%mud
Rec.		Feet of		%gas		%oil	%water		%mud	
Rec.		Feet of		%gas		%oil	%water		%mud	
BHT	126	*F Gravity	33	*API D @	50	*F Corrected Gravity	34	*API		
RW	@	*F	Chlorides	ppm Recovery		Chlorides	4000	ppm System		

	AK-1	Alpine				
(A) Initial Hydrostatic Mud	2176	PSI	Recorder No.	8320	Test	X
(B) First Initial Flow Pressure	45	PSI	(depth)	4192	Jars	
(C) First Final Flow Pressure	147	PSI	Recorder No.	13401	Safety Jt.	
(D) Initial Shut-In Pressure	1259	PSI	(depth)	4228	Circ Sub	
(E) Second Initial Flow Pressure	166	PSI	Recorder No.		Sampler	
(F) Second Final Flow Pressure	251	PSI	(depth)		Straddle	
(G) Final Shut-In Pressure	1259	PSI	Initial Opening	30	Ext. Packer	
(Q) Final Hydrostatic Mud	2083	PSI	Initial Shut-In	45	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 Patrick J. Neenan

Our Representative *h/ TN*

Recorder No.	8320	Test	X	1200
(depth)	4192	Jars		
Recorder No.	13401	Safety Jt.		
(depth)	4228	Circ Sub		
Recorder No.		Sampler		
(depth)		Straddle		
Initial Opening	30	Ext. Packer		
Initial Shut-In	45	Shale Packer		
Final Flow	45	Ruined Packer		
Final Shut-In	*60	Mileage	X 120	150
T-On Location	2:50	Sub Total:		
T-Started	4:14	Std. By		
T-Open	6:23	Acc. Chg:		
T-Pulled	9:23	Other:		
T-Out	11:55	Total:		41350

CHART PAGE

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

RL Investigator
Kinderknecht #2
BST #1

