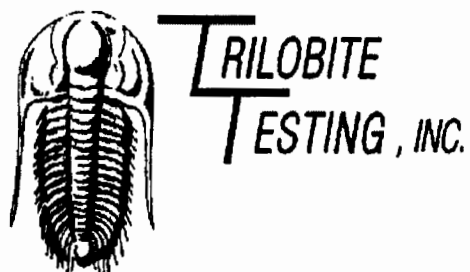


15-065-22835

16-8s-23w



DRILL STEM TEST REPORT

Prepared For: **Pioneer Resources**

177 W. Limestone Rd.
Phillipsburg, KS 67661

ATTN: Roger Wells

16-8s-23w GrahamKS

Roger # 1

Start Date: 2002.05.23 @ 01:15:09

End Date: 2002.05.23 @ 07:09:09

Job Ticket #: 15817

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

Pioneer Resources
177 W.Limestone Rd.
Phillipsburg, KS 67661
ATTN: Roger Wells

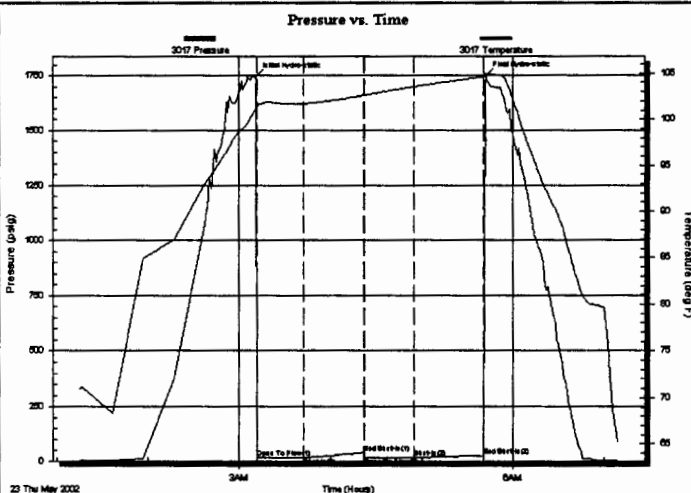
Roger # 1
16-8s-23w GrahamKS
Job Ticket: 15817 **DST#: 1**
Test Start: 2002.05.23 @ 01:15:09

GENERAL INFORMATION:

Formation: **L-KC-160'**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 03:11:39
Time Test Ended: 07:09:09
Interval: **3566.00 ft (KB) To 3590.00 ft (KB) (TVD)**
Total Depth: 3590.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole
Tester: John Schmidt
Unit No: 18
Reference Elevations: 2169.00 ft (KB)
2164.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 3017 Inside
Press@RunDepth: 16.90 psig @ 3567.01 ft (KB)
Start Date: 2002.05.23 End Date: 2002.05.23
Start Time: 01:15:10 End Time: 07:09:09
Capacity: 7000.00 psig
Last Calib.: 2002.05.23
Time On Btm: 2002.05.23 @ 03:11:09
Time Off Btm: 2002.05.23 @ 05:42:09

TEST COMMENT: IF-Weak Dead in 12 min.
FF-Dead



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1745.41	101.13	Initial Hydro-static
1	14.78	101.30	Open To Flow (1)
32	16.50	101.68	Shut-In(1)
71	40.07	102.57	End Shut-In(1)
71	16.36	102.59	Open To Flow (2)
104	16.90	103.52	Shut-In(2)
150	27.41	104.60	End Shut-In(2)
151	1752.56	104.65	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud with few oil Specks	0.04

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Pioneer Resources

177 W.Limestone Rd.
Phillipsburg, KS 67661

ATTN: Roger Wells

Roger # 1

16-8s-23w GrahamKS

Job Ticket: 15817

DST#: 1

Test Start: 2002.05.23 @ 01:15:09

Tool Information

Drill Pipe:	Length: 3141.00 ft	Diameter: 3.80 inches	Volume: 44.06 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 410.00 ft	Diameter: 2.70 inches	Volume: 2.90 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
			Total Volume: 46.96 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial 47000.00 lb
Depth to Top Packer:	3566.00 ft			Final 47000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	24.02 ft			
Tool Length:	44.02 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
C.O. Sub	1.00			3547.00	
S.I. Tool	5.00			3552.00	
HMV	5.00			3557.00	
Packer	4.00			3561.00	20.00 Bottom Of Top Packer
Packer	5.00			3566.00	
Stubb	1.00			3567.00	
Recorder	0.01	3017	Inside	3567.01	
Perforations	20.00			3587.01	
Recorder	0.01	13308	Outside	3587.02	
Bullnose	3.00			3590.02	24.02 Bottom Packers & Anchor
Total Tool Length:	44.02				



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Pioneer Resources

Roger # 1

177 W.Limestone Rd.
Phillipsburg, KS 67661

16-8s-23w GrahamKS

Job Ticket: 15817

DST#: 1

ATTN: Roger Wells

Test Start: 2002.05.23 @ 01:15:09

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: 47.00 sec/qt

Cushion Volume: bbl

Water Loss: 9.19 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure: psig

Salinity: ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	Mud with few oil Specks	0.035

Total Length: 5.00 ft

Total Volume: 0.035 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

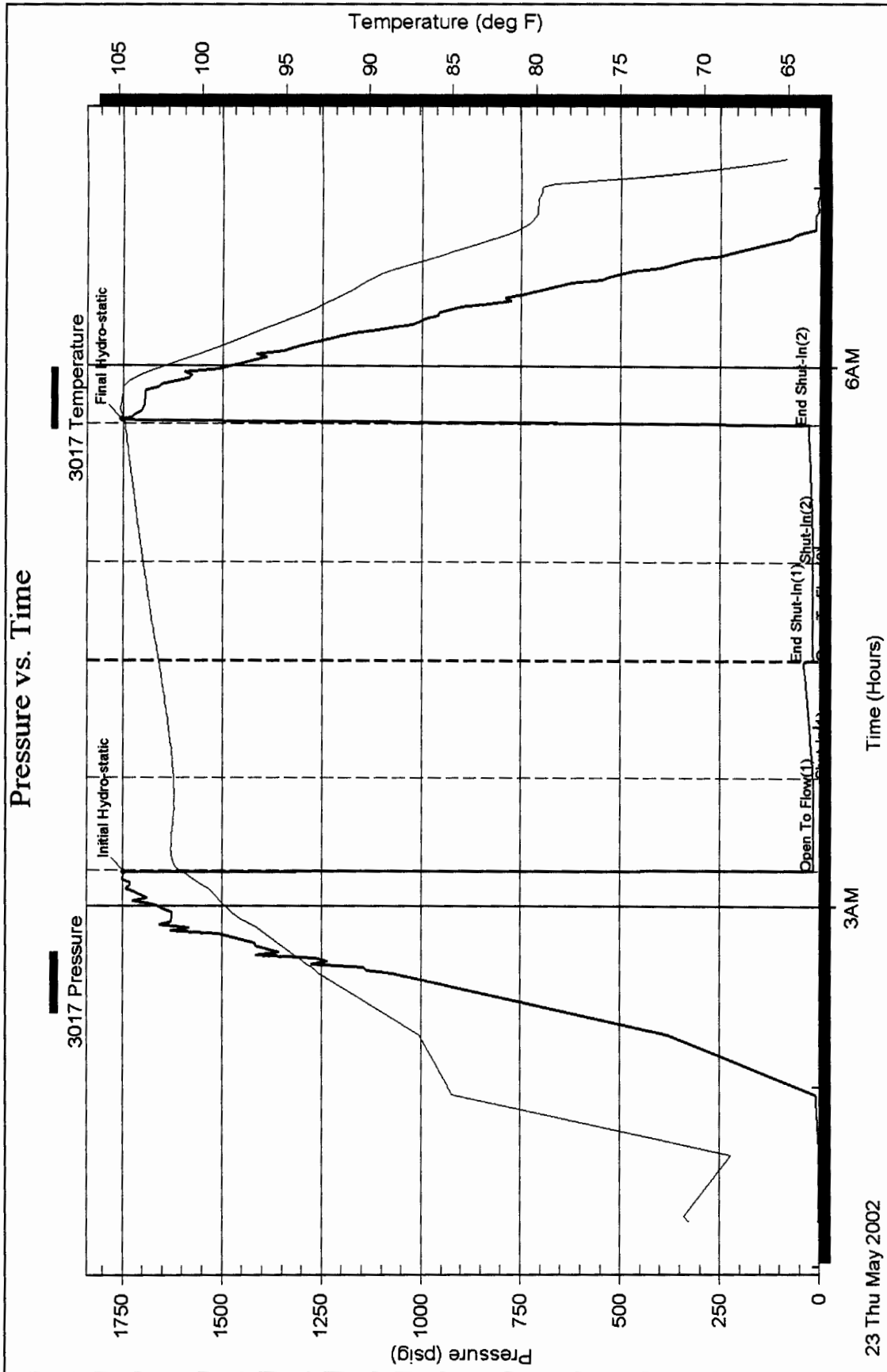
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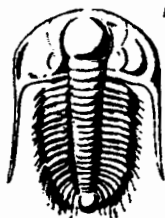
Inside

Pioneer Resources

16--8s--23w GrahamKS

DST Test Number: 1





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

No 15817

Test Ticket

Well Name & No. <u>ROGER #1</u>	Test No. <u>#1</u>	Date <u>5-23-02</u>
Company <u>PIONEER RESOURCES</u>	Zone Tested <u>160'</u>	
Address <u>177 W. LIMESTONE RD PHILLIPSBURG, KS. 67661</u>		Elevation <u>2169</u> KB <u>2164</u> GL
Co. Rep / Geo. <u>TODD MORGENSTEIN</u>	Cont. <u>SHIELDS #2</u>	Est. Ft. of Pay <u> </u> Por. <u> </u> %
Location: Sec. <u>16</u>	Twp. <u>8S</u>	Rge. <u>23W</u> Co. <u>GRAHAM</u> State <u>KS</u>
No. of Copies <u> </u>	Distribution Sheet (Y, N) <u> </u>	Turnkey (Y, N) <u> </u> Evaluation (Y, N) <u> </u>

Interval Tested <u>3566 To 3590</u>	Initial Str Wt./Lbs. <u>47,000</u>	Unseated Str Wt./Lbs. <u>47,000</u>
Anchor Length <u>24'</u>	Wt. Set Lbs. <u>20,000</u>	Wt. Pulled Loose/Lbs. <u> </u>
Top Packer Depth <u>3561</u>	Tool Weight <u>2,000</u>	
Bottom Packer Depth <u>3566</u>	Hole Size — 7 7/8" <u>✓</u>	Rubber Size — 6 3/4" <u>✓</u>
Total Depth <u>3590</u>	Wt. Pipe Run <u>410</u>	Drill Collar Run <u> </u>
Mud Wt. <u>9.3</u> LCM <u>—</u> Vis. <u>47</u> WL <u>9.2</u>	Drill Pipe Size <u>4 1/2 XH</u>	Ft. Run <u>3141</u>
Blow Description <u>I.F. - WEAK DEAD IN 12 MIN.</u>		
<u>F.F. - DEAD</u>		

Recovery — Total Feet <u>5'</u>	GIP <u>—</u>	Ft. in <u>W.B.</u> <u>5'</u>	Ft. in DP <u>—</u>
Rec. <u>5</u>	Feet Of <u>MUD @ FEW OIL SPECKS</u>	%gas <u> </u>	%oil <u> </u> %water <u> </u> %mud <u> </u>
Rec. <u> </u>	Feet Of <u> </u>	%gas <u> </u>	%oil <u> </u> %water <u> </u> %mud <u> </u>
Rec. <u> </u>	Feet Of <u> </u>	%gas <u> </u>	%oil <u> </u> %water <u> </u> %mud <u> </u>
Rec. <u> </u>	Feet Of <u> </u>	%gas <u> </u>	%oil <u> </u> %water <u> </u> %mud <u> </u>
Rec. <u> </u>	Feet Of <u> </u>	%gas <u> </u>	%oil <u> </u> %water <u> </u> %mud <u> </u>
BHT <u>104</u>	°F Gravity <u> </u>	°API D@ <u> </u>	°F Corrected Gravity <u> </u> °API <u> </u>
RW <u> </u> @ <u> </u>	°F Chlorides <u> </u>	ppm Recovery <u> </u>	Chlorides <u> </u> ppm System <u> </u>

	AK-1	Alpine		
(A) Initial Hydrostatic Mud	<u>1761</u>		PSI Recorder No. <u>3017</u>	T-On Location <u>00:00</u>
(B) First Initial Flow Pressure	<u>14</u>		PSI (depth) <u>3567</u>	T-Started <u>01:15</u>
(C) First Final Flow Pressure	<u>16</u>		PSI Recorder No. <u>13308</u>	T-Open <u>03:11</u>
(D) Initial Shut-In Pressure	<u>40</u>		PSI (depth) <u>3587</u>	T-Pulled <u>05:41</u>
(E) Second Initial Flow Pressure	<u>16</u>		PSI Recorder No. <u> </u>	T-Out <u>07:09</u>
(F) Second Final Flow Pressure	<u>16</u>		PSI (depth) <u> </u>	T-Off Location <u>07:45</u>
(G) Final Shut-in Pressure	<u>27</u>		PSI Initial Opening <u>30</u>	Test <u>BOTTOM HOLE 700</u>
(Q) Final Hydrostatic Mud	<u>1729</u>		PSI Initial Shut-in <u>45</u>	Jars <u> </u>
			Final Flow <u>30</u>	Safety Joint <u> </u>
			Final Shut-in <u>45</u>	Straddle <u> </u>

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Approved By

Our Representative John R. Schmitt

Extra Packer
Elec. Rec. ✓ 150
Mileage 60
Other
TOTAL PRICE \$ 910

CHART PAGE

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

