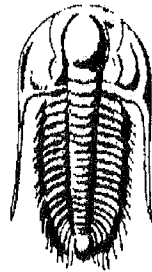


15-145-21474

2-20s-19w



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Key Gas Corp.**

410 Urban Dr.
Hutchinson, Ks 67501

ORIGINAL

ATTN: Rod Anderson

2-20s-19w-Pawnee-Ks

Bradford #1

Start Date: 2001.12.07 @ 23:42:59

End Date: 2001.12.08 @ 10:48:28

Job Ticket #: 15608

DST #: 1

RECEIVED
KANSAS CORPORATION COMMISSION

JAN 24 2003

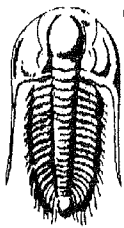
CONSERVATION DIVISION
WICHITA, KS

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

ORIGINAL



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Key Gas Corp.

Bradford #1

410 Urban Dr.
Hutchinson, Ks 67501

2-20s-19w-Pawnee-Ks

Job Ticket: 15608

DST#: 1

ATTN: Rod Anderson

Test Start: 2001.12.07 @ 23:42:59

GENERAL INFORMATION:

Formation: **Ft. Riley**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:09:28

Time Test Ended: 10:48:28

Test Type: Conventional Bottom Hole

Tester: Dan bangle

Unit No: 21

Interval: **2410.00 ft (KB) To 2425.00 ft (KB) (TVD)**

Reference Elevations: 2218.00 ft (KB)

Total Depth: 2425.00 ft (KB) (TVD)

2212.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 6.00 ft

Serial #: 2357

Inside

Press@RunDepth: 388.49 psig @ 2411.01 ft (KB)

Capacity: 7000.00 psig

Start Date: 2001.12.07

End Date:

2001.12.08

Last Calib.: 1899.12.30

Start Time: 23:42:59

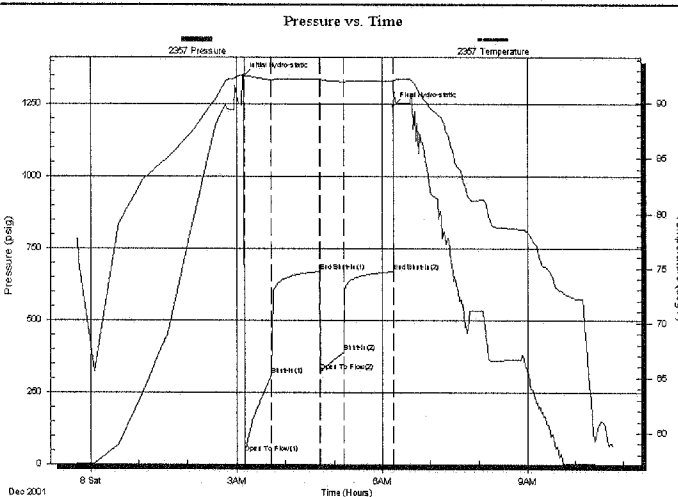
End Time:

10:48:28

Time On Btm: 2001.12.08 @ 03:08:58

Time Off Btm: 2001.12.08 @ 06:13:58

TEST COMMENT: IF-Weak building to 5"
FF-Strong BOB in 15 min
Times-30-60-30-60



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1346.88	92.58	Initial Hydro-static
1	39.76	92.56	Open To Flow (1)
34	308.24	92.13	Shut-In (1)
94	669.61	92.21	End Shut-In (1)
95	321.38	92.20	Open To Flow (2)
124	388.49	91.97	Shut-In (2)
185	669.15	92.06	End Shut-In (2)
185	1241.97	92.06	Final Hydro-static

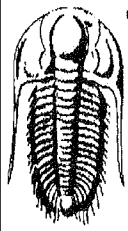
Recovery

Length (ft)	Description	Volume (bbl)
760.00	Water Rw .15 @ 80 = 44000ppm	5.09

Gas Rates

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

ORIGINAL


TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Key Gas Corp.

Bradford #1

 410 Urban Dr.
 Hutchinson, Ks 67501

2-20s-19w-Pawnee-Ks

Job Ticket: 15608

DST#: 1

ATTN: Rod Anderson

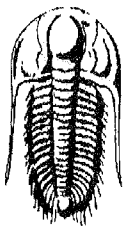
Test Start: 2001.12.07 @ 23:42:59

Tool Information

Drill Pipe:	Length: 1770.00 ft	Diameter: 3.80 inches	Volume: 24.83 bbl	Tool Weight: 1000.00 lb
Heavy Wt. Pipe:	Length: 0.01 ft	Diameter: 0.01 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 612.00 ft	Diameter: 2.25 inches	Volume: 3.01 bbl	Weight to Pull Loose: 70000.00 lb
		Total Volume:	27.84 bbl	Tool Chased 0.01 ft
Drill Pipe Above KB:	0.01 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	2410.00 ft			Final 64000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	15.02 ft			
Tool Length:	43.02 ft			
Number of Packers:	2	Diameter:	6.75 inches	
Tool Comments:				

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
C.O. Sub	1.00			2383.00	
S.I. Tool	5.00			2388.00	
HMV	5.00			2393.00	
Jars	5.00			2398.00	
Safety Joint	2.00			2400.00	
Packer	5.00			2405.00	28.00 Bottom Of Top Packer
Packer	5.00			2410.00	
Stubb	1.00			2411.00	
Recorder	0.01	2357	Inside	2411.01	
Perforations	11.00			2422.01	
Recorder	0.01	13254	Outside	2422.02	
Bullnose	3.00			2425.02	15.02 Bottom Packers & Anchor

Total Tool Length: 43.02



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Key Gas Corp.

Bradford #1

410 Urban Dr.
Hutchinson, Ks 67501

2-20s-19w-Pawnee-Ks

Job Ticket: 15608

DST#: 1

ATTN: Rod Anderson

Test Start: 2001.12.07 @ 23:42:59

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

44000 ppm

Viscosity: 42.00 sec/qt

Cushion Volume:

bbl

Water Loss: 9.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 14000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
760.00	Water Rw .15 @ 80 = 44000ppm	5.086

Total Length: 760.00 ft

Total Volume: 5.086 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 2357

Inside

Key Gas Corp.

2-20s-19w - Pawnee-Ks

DST Test Number: 1

