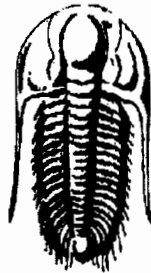


15-083-21560



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Raines & Williamson**

220 W Douglas Ste 110
Wichita KS 67202

ATTN: Steve Murphy

25 21 22 Hodgeman K

Hahn # 1

Start Date: 2008.06.20 @ 09:52:00

End Date: 2008.06.20 @ 17:23:30

Job Ticket #: 32405 DST #: 1

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Raines & Williamson

Hahn # 1

25 21 22 Hodgeman K

DST # 1

Miss

2008.06.20



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Raines & Williamson

220 W Douglas Ste 110
Wichita KS 67202

ATTN: Steve Murphy

Hahn # 1

25 21 22 Hodgeman K

Job Ticket: 32405

DST#: 1

Test Start: 2008.06.20 @ 09:52:00

GENERAL INFORMATION:

Formation: **Miss**

Deviated: **No** Whipstock: **ft (KB)**

Time Tool Opened: 11:51:00

Time Test Ended: 17:23:30

Test Type: **Conventional Bottom Hole**

Tester: **Kyle Kinderknecht**

Unit No: **31**

Interval: **4429.00 ft (KB) To 4489.00 ft (KB) (TVD)**

Total Depth: **4489.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Good**

Reference Elevations: **2249.00 ft (KB)**

2244.00 ft (CF)

KB to GR/CF: **5.00 ft**

Serial #: 8369

Outside

Press@RunDepth: **655.21 psig @ 4434.00 ft (KB)**

Start Date: **2008.06.20**

End Date: **2008.06.20**

Start Time: **09:52:05**

End Time: **17:23:29**

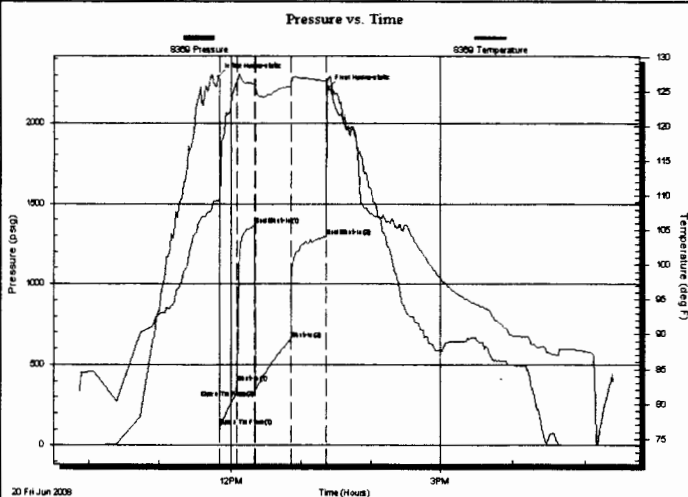
Capacity: **7000.00 psig**

Last Calib.: **2008.06.20**

Time On Btm: **2008.06.20 @ 11:49:30**

Time Off Btm: **2008.06.20 @ 13:23:00**

TEST COMMENT: IF BOB 1 1/2 min
ISI Weak blow to 1 1/2 "
FF BOB 1 1/2 min
FSI Weak surface



PRESSURE SUMMARY

Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	2288.61	109.23	Initial Hydro-static
2	115.16	109.14	Open To Flow (1)
16	388.30	126.56	Shut-In(1)
31	1364.34	126.02	End Shut-In(1)
32	346.30	125.53	Open To Flow (2)
62	655.21	125.74	Shut-In(2)
93	1296.20	126.41	End Shut-In(2)
94	2217.23	126.60	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1390.00	GsyOil 20%G 80%O	19.70
250.00	MCO 85%O 15%M	3.54

Gas Rates

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



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

TOOL DIAGRAM

Raines & Williamson

Hahn # 1

220 W Douglas Ste 110
Wichita KS 67202

25 21 22 Hodgeman K

Job Ticket: 32405

DST#: 1

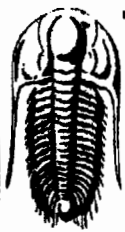
ATTN: Steve Murphy

Test Start: 2008.06.20 @ 09:52:00

Tool Information

Drill Pipe:	Length: 4431.00 ft	Diameter: 3.82 inches	Volume: 62.81 bbl	Tool Weight: 2100.00 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 62000.00 lb
		Total Volume: 62.81 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	4429.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	60.00 ft			
Tool Length:	88.00 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			4402.00	
Shut In Tool	5.00			4407.00	
Hydraulic tool	5.00			4412.00	
Jars	5.00			4417.00	
Safety Joint	3.00			4420.00	
Packer	4.00			4424.00	28.00 Bottom Of Top Packer
Packer	5.00			4429.00	
Stubb	1.00			4430.00	
Perforations	3.00			4433.00	
Change Over Sub	1.00			4434.00	
Recorder	0.00	8369	Outside	4434.00	
Recorder	0.00	6669	Inside	4434.00	
Blank Spacing	31.00			4465.00	
Change Over Sub	1.00			4466.00	
Perforations	20.00			4486.00	
Bullnose	3.00			4489.00	60.00 Bottom Packers & Anchor
Total Tool Length:	88.00				



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Raines & Williamson

Hahn # 1

220 W Douglas Ste 110
Wichita KS 67202

25 21 22 Hodgeman K

Job Ticket: 32405

DST#: 1

ATTN: Steve Murphy

Test Start: 2008.06.20 @ 09:52:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 10.00 lb/gal

Viscosity: 49.00 sec/qt

Water Loss: 17.19 in³

Resistivity: ohm.m

Salinity: 18900.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity:

24 deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1390.00	Gsy Oil 20%G 80%O	19.704
250.00	MCO 85%O 15%M	3.544

Total Length: 1640.00 ft Total Volume: 23.248 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: reversed out

Pressure vs. Time

