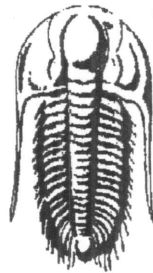


API 15-053-21190-0000



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Har-Ken Agent OK**

12028 N Pennsylvania  
Oklahoma City OK 73120

ATTN: Kim Shoemaker

**6 17 9W Ellsworth KS**

**Schneweis #3**

Start Date: 2006.12.06 @ 15:21:53

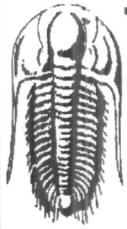
End Date: 2006.12.07 @ 00:52:42

Job Ticket #: 27412                      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

Har-Ken Agent OK  
 12028 N Pennsylvania  
 Oklahoma City OK 73120  
 ATTN: Kim Shoemaker

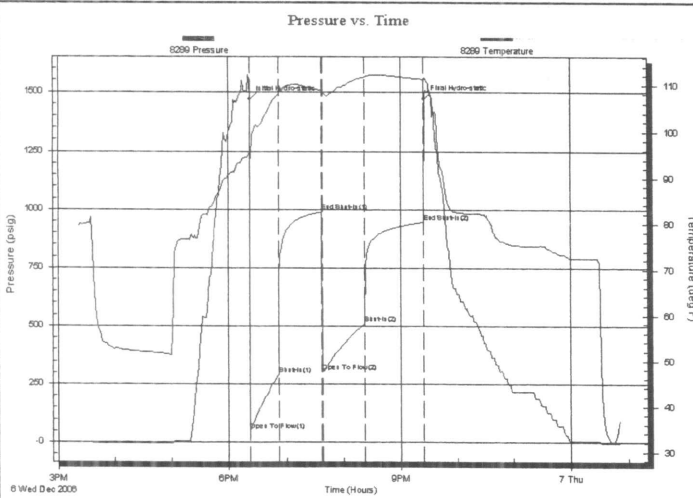
**Schneweis #3**  
**6 17 9W Ellsworth KS**  
 Job Ticket: 27412      **DST#: 1**  
 Test Start: 2006.12.06 @ 15:21:53

### GENERAL INFORMATION:

Formation: **Simpson**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 18:22:13  
 Time Test Ended: 00:52:42  
 Interval: **3200.00 ft (KB) To 3256.00 ft (KB) (TVD)**  
 Total Depth: 3256.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole  
 Tester: Tyson Flax  
 Unit No: 21  
 Reference Elevations: 1790.00 ft (KB)  
 1785.00 ft (CF)  
 KB to GR/CF: 5.00 ft

**Serial #: 8289**      **Inside**  
 Press@RunDepth: 510.92 psig @ 3206.00 ft (KB)      Capacity: 7000.00 psig  
 Start Date: 2006.12.06      End Date: 2006.12.07      Last Calib.: 2006.12.07  
 Start Time: 15:21:58      End Time: 00:52:43      Time On Btm: 2006.12.06 @ 18:21:53  
 Time Off Btm: 2006.12.06 @ 21:24:43

**TEST COMMENT:** IFP BOB in 2 min  
 ISI Weak surface blow back died in 35 min  
 FFP BOB in 2.5 min  
 FSI No blow back



### PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1465.85	95.30	Initial Hydro-static
1	49.52	94.83	Open To Flow(1)
30	289.52	108.10	Shut-In(1)
75	989.16	108.85	End Shut-In(1)
76	304.63	108.61	Open To Flow(2)
120	510.92	111.71	Shut-In(2)
183	945.07	111.21	End Shut-In(2)
183	1469.46	111.57	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
1250.00	Gassy Free Oil 35%G 65%O	16.80
60.00	GMCO 40%G 50%O 10%M	0.81

### Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Har-Ken Agent OK

**Schneweis #3**

12028 N Pennsylvania  
Oklahoma City OK 73120

**6 17 9W Ellsworth KS**

Job Ticket: 27412

**DST#: 1**

ATTN: Kim Shoemaker

Test Start: 2006.12.06 @ 15:21:53

### Tool Information

Drill Pipe:	Length: 3185.00 ft	Diameter: 3.72 inches	Volume: 42.82 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: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 54000.00 lb
		<b>Total Volume:</b>	<b>42.82 bbl</b>	Tool Chased 0.00 ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial 46000.00 lb
Depth to Top Packer:	3200.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	56.00 ft			
Tool Length:	77.00 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			3180.00	
Shut In Tool	5.00			3185.00	
Hydraulic tool	5.00			3190.00	
Packer	5.00			3195.00	21.00 Bottom Of Top Packer
Packer	5.00			3200.00	
Stubb	1.00			3201.00	
Perforations	4.00			3205.00	
Change Over Sub	1.00			3206.00	
Recorder	0.00	8289	Inside	3206.00	
Blank Spacing	31.00			3237.00	
Change Over Sub	1.00			3238.00	
Perforations	15.00			3253.00	
Recorder	0.00	3351	Inside	3253.00	
Bullnose	3.00			3256.00	56.00 Bottom Packers & Anchor

**Total Tool Length: 77.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Har-Ken Agent OK

**Schneweis #3**

12028 N Pennsylvania  
Oklahoma City OK 73120

**6 17 9W Ellsworth KS**

ATTN: Kim Shoemaker

Job Ticket: 27412

**DST#: 1**

Test Start: 2006.12.06 @ 15:21:53

## Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 45.00 sec/qt

Water Loss: 8.79 in<sup>3</sup>

Resistivity: ohm.m

Salinity: 3000.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbf

psig

Oil API:

Water Salinity:

39 deg API

ppm

## Recovery Information

Recovery Table

Length ft	Description	Volume bbf
1250.00	Gassy Free Oil 35%G 65%O	16.804
60.00	GMCO 40%G 50%O 10%M	0.807

Total Length: 1310.00 ft      Total Volume: 17.611 bbf

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



# CHART PAGE

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

