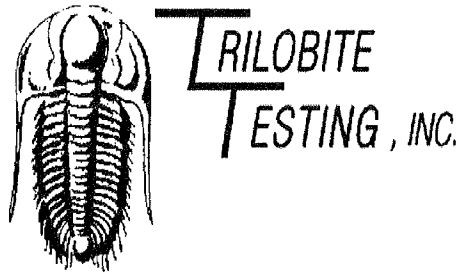


33-14s-17w



DRILL STEM TEST REPORT

Prepared For: **Hertal Oil Co LLC**

704 East 12th St
Hays Ks 67601

ATTN: Mike Hertal

33-14s-17w Ellis

Phillip Ranch #33-1

Start Date: 2005.11.29 @ 12:28:16

End Date: 2005.11.29 @ 14:05:15

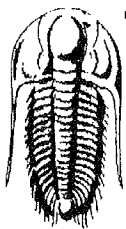
Job Ticket #: 22736 DST #: 1

API 15-051-25474-00-00

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Hertal Oil Co LLC

704 East 12th St
Hays Ks 67601

ATTN: Mike Hertal

Phillip Ranch #33-1

33-14s-17w Ellis

Job Ticket: 22736

DST#: 1

Test Start: 2005.11.29 @ 12:28:16

GENERAL INFORMATION:

Formation: **Tor-LKC E**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:40:45

Time Test Ended: 14:05:15

Test Type: Conventional Straddle

Tester: Ray Schwager

Unit No: 28

Interval: 3150.00 ft (KB) To 3400.00 ft (KB) (TVD)

Total Depth: 3550.00 ft (KB) (TVD)

Hole Diameter: 7.85 inches Hole Condition: Fair

Reference Elevations: 1924.00 ft (KB)

1916.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 8167

Inside

Press@RunDepth: 73.74 psig @ 3161.01 ft (KB)

Start Date: 2106.02.06

End Date: 2106.02.06

Start Time: 06:28:16

End Time: 13:32:15

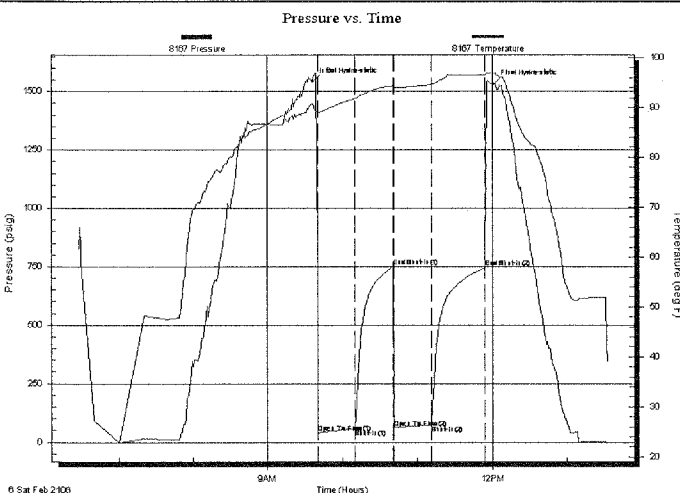
Capacity: 7000.00 psig

Last Calib.: 2005.11.29

Time On Btm: 2106.02.06 @ 09:36:45

Time Off Btm: 2106.02.06 @ 12:01:15

TEST COMMENT: IFP-w k bl thru-out 1"to 2 3/4"bl
FFP-w k bl thru-out 1/4"to 1/2"bl
Times 30-30-30-45



PRESSURE SUMMARY

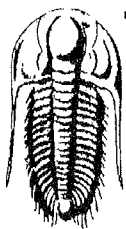
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1543.33	90.74	Initial Hydro-static
4	39.47	89.01	Open To Flow (1)
33	57.00	91.82	Shut-In(1)
64	750.23	94.36	End Shut-In(1)
65	61.09	94.06	Open To Flow (2)
95	73.74	94.67	Shut-In(2)
138	744.17	96.61	End Shut-In(2)
145	1532.87	96.84	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
45.00	SOCM 4%O 96%M	0.36
60.00	SOCM 6%O 94%M	0.84

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Hertal Oil Co LLC

Phillip Ranch #33-1

704 East 12th St
Hays Ks 67601

33-14s-17w Ellis

Job Ticket: 22736

DST#: 1

ATTN: Mike Hertal

Test Start: 2005.11.29 @ 12:28:16

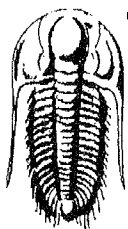
Tool Information

Drill Pipe:	Length: 3109.00 ft	Diameter: 3.80 inches	Volume: 43.61 bbl	Tool Weight: 2500.00 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: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 50000.00 lb
			Total Volume: 43.76 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 39000.00 lb
Depth to Top Packer:	3150.00 ft			Final 39000.00 lb
Depth to Bottom Packer:	3400.02 ft			
Interval between Packers:	250.02 ft			
Tool Length:	425.03 ft			
Number of Packers:	3	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3130.00	
Shut In Tool	5.00			3135.00	
Hydraulic tool	5.00			3140.00	
Packer	5.00			3145.00	21.00 Bottom Of Top Packer
Packer	5.00			3150.00	
Stubb	1.00			3151.00	
Perforations	10.00			3161.00	
Recorder	0.01	8167	Inside	3161.01	
Perforations	6.00			3167.01	
Blank Spacing	219.00			3386.01	
Recorder	0.01	13547	Outside	3386.02	
Perforations	10.00			3396.02	
Blank Off Sub	1.00			3397.02	
Blank Spacing	3.00			3400.02	250.02 Tool Interval
Packer	5.00			3405.02	
Stubb	1.00			3406.02	
Perforations	18.00			3424.02	
Recorder	0.01	13534	Below	3424.03	
Blank Spacing	127.00			3551.03	
Bullnose	3.00			3554.03	154.01 Bottom Packers & Anchor

Total Tool Length: 425.03



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Hertal Oil Co LLC

Phillip Ranch #33-1

704 East 12th St
Hays Ks 67601

33-14s-17w Ellis

Job Ticket: 22736

DST#: 1

ATTN: Mike Hertal

Test Start: 2005.11.29 @ 12:28:16

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: 46.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.78 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
45.00	SOCM 4%O 96%M	0.358
60.00	SOCM 6%O 94%M	0.842

Total Length: 105.00 ft

Total Volume: 1.200 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

DST Test Number: 1

33-14s-17w Ellis

Hertal Oil Co LLC

Inside

Serial #: 8167

Pressure vs. Time

