



## DRILL STEM TEST REPORT

Prepared For: **Hertal Oil Co LLC**

704 E 12th St  
Hays KS 67601

ATTN: Mike Hertal

**34 12S 17W Ellis KS**

### **Schmidt #1**

Start Date: 2006.05.27 @ 05:53:52

End Date: 2006.05.27 @ 14:50:21

Job Ticket #: 24299                      DST #: 1

Trilobite Testing, Inc  
PO Box 362 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Hertal Oil Co LLC

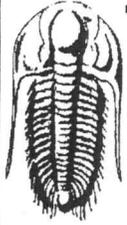
Schmidt #1

34 12S 17W Ellis KS

DST # 1

Arbuckle

2006.05.27



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Hertal Oil Co LLC

704 E 12th St  
Hays KS 67601

ATTN: Mike Hertal

**Schmidt #1**

**34 12S 17W Ellis KS**

Job Ticket: 24299

**DST#: 1**

Test Start: 2006.05.27 @ 05:53:52

## GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:02:21

Time Test Ended: 14:50:21

Test Type: Conventional Straddle

Tester: Ray Schwager

Unit No: 28

Interval: **3562.00 ft (KB) To 3632.00 ft (KB) (TVD)**

Total Depth: 3700.00 ft (KB) (TVD)

Hole Diameter: 7.85 inches Hole Condition: Fair

Reference Elevations: 2070.00 ft (KB)

2065.00 ft (CF)

KB to GR/CF: 5.00 ft

**Serial #: 8167**

**Inside**

Press@RunDepth: 456.47 psig @ 3575.01 ft (KB)

Start Date: 2006.05.27

End Date:

2006.05.27

Start Time: 05:53:52

End Time:

14:50:21

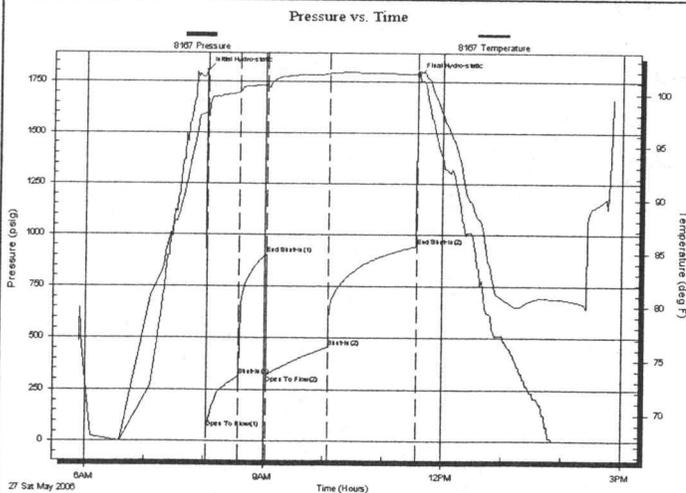
Capacity: 7000.00 psig

Last Calib.: 2006.05.27

Time On Btm: 2006.05.27 @ 08:01:51

Time Off Btm: 2006.05.27 @ 11:34:21

TEST COMMENT: IFP Wk to strg in 4 min  
FFP Wk to strg in 11 min  
Times 30 30 60 90  
ISIP Surface bl bk



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1802.63	98.27	Initial Hydro-static
1	62.66	97.87	Open To Flow (1)
33	313.63	100.13	Shut-In (1)
60	902.68	100.80	End Shut-In (1)
61	321.16	100.62	Open To Flow (2)
123	456.47	101.82	Shut-In (2)
212	945.31	101.84	End Shut-In (2)
213	1776.76	102.11	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
310.00	SO&GCW 10%G 5%O 85%W	1.52
186.00	HO&GCMW 5%G 20%O 55%W 10%M	1.06
186.00	MGO 10%G 50%O 40%M	2.61
248.00	GMO 10%G 65%O 25%M	3.48
186.00	CO	2.61

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Hertal Oil Co LLC

**Schmidt #1**

704 E 12th St  
Hays KS 67601

**34 12S 17W Ellis KS**

Job Ticket: 24299

**DST#: 1**

ATTN: Mike Hertal

Test Start: 2006.05.27 @ 05:53:52

### Tool Information

Drill Pipe:	Length: 3086.00 ft	Diameter: 3.80 inches	Volume: 43.29 bbl	Tool Weight: 2200.00 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: 480.00 ft	Diameter: 2.25 inches	Volume: 2.36 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 45.65 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3562.00 ft			Final 56000.00 lb
Depth to Bottom Packer:	3632.02 ft			
Interval between Packers:	70.02 ft			
Tool Length:	165.03 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			3542.00	
Shut In Tool	5.00			3547.00	
Hydraulic tool	5.00			3552.00	
Packer	5.00			3557.00	21.00 Bottom Of Top Packer
Packer	5.00			3562.00	
Stubb	1.00			3563.00	
Perforations	12.00			3575.00	
Recorder	0.01	8167	Inside	3575.01	
Blank Spacing	33.00			3608.01	
Recorder	0.01	13534	Outside	3608.02	
Perforations	20.00			3628.02	
Blank Off Sub	1.00			3629.02	
Blank Spacing	3.00			3632.02	70.02 Tool Interval
Packer	5.00			3637.02	
Stubb	1.00			3638.02	
Perforations	2.00			3640.02	
Recorder	0.01	13547	Below	3640.03	
Blank Spacing	63.00			3703.03	
Bullnose	3.00			3706.03	74.01 Bottom Packers & Anchor

**Total Tool Length: 165.03**



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# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Hertal Oil Co LLC

**Schmidt #1**

704 E 12th St  
Hays KS 67601

**34 12S 17W Ellis KS**

Job Ticket: 24299

**DST#: 1**

ATTN: Mike Hertal

Test Start: 2006.05.27 @ 05:53:52

## Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API: 29 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: ppm
Viscosity: 49.00 sec/qt	Cushion Volume: bbl	
Water Loss: 10.76 in <sup>3</sup>	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 5000.00 ppm		
Filter Cake: 2.00 inches		

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
310.00	SO&GCW 10%G 5%O 85%W	1.525
186.00	HO&GCMW 5%G 20%O 55%W 10%M	1.060
186.00	MGO 10%G 50%O 40%M	2.609
248.00	GMO 10%G 65%O 25%M	3.479
186.00	CO	2.609

Total Length: 1116.00 ft      Total Volume: 11.282 bbl

Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:

Laboratory Name:      Laboratory Location:

Recovery Comments:

Serial #: 8167

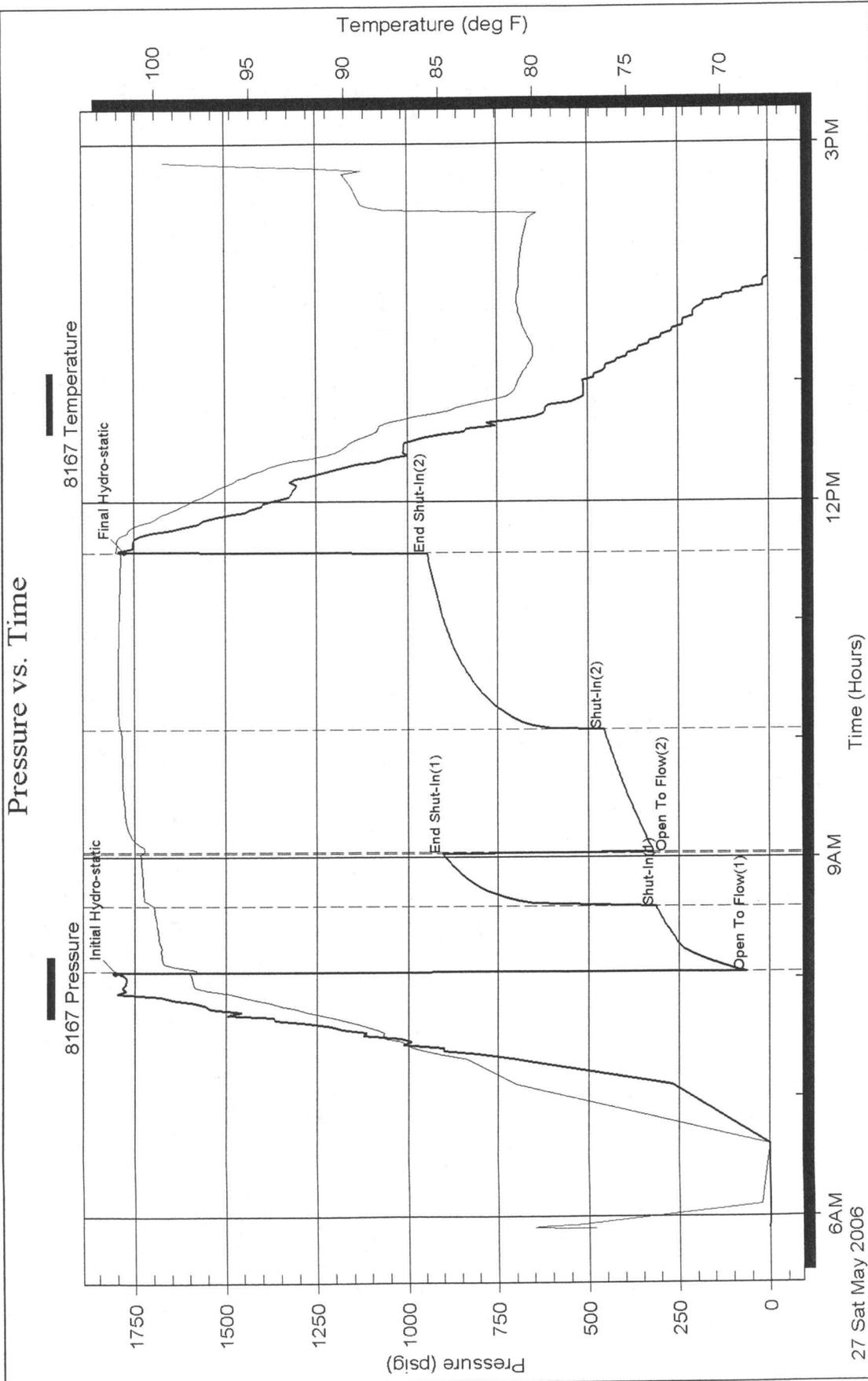
Inside

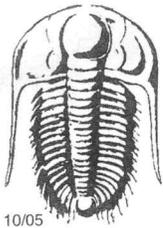
Hertal Oil Co LLC

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DST Test Number: 1

### Pressure vs. Time





# TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

8814

No 24299

## Test Ticket

Well Name & No. Schmidt #1 Test No. 1 Date 5-27-06  
 Company HERTAL OIL COMPANY LLC Zone Tested Arbuckle  
 Address 704 E. 12<sup>th</sup> ST. Hays, KS 67601 Elevation 2070 KB 2065 GL  
 Co. Rep / Geo. Randy Killian Rig Landmark Delg  
 Location: Sec. 34 Twp. 12<sup>s</sup> Rge. 17<sup>w</sup> Co. ELLIS State Ks  
 Comment: \_\_\_\_\_ Release date / time: \_\_\_\_\_

Interval Tested 3562-3632 Initial Str Wt./Lbs. 50000 Unseated Str Wt/Lbs. 56000  
 Anchor Length 70 Wt. Set Lbs. 25000 Wt. Pulled Loose/Lbs. 80000  
 Top Packer Depth 3562-3557 Tool Weight 2200  
 Bottom Packer Depth 3632 Hole Size 7 7/8" Rubber Size 6 3/4"  
 Total Depth 3700 Wt. Pipe Run - Drill Collar Run 480  
 Mud Wt. 9.2 LCM 2<sup>#</sup> Vis. 49 WL 10.8 Drill Pipe Size 4 1/2 XH Ft. Run 3086

Blow Description IFP - WEAK TO STRONG IN 4 MIN  
FFP - WEAK TO STRONG IN 11 MIN  
ISFP - SURFACE BLOW BACK  
FSFP - 1/4" BLOW BACK

Recovery - Total Feet 1116 GIP 120 Ft. in DC 480 Ft. in DP \_\_\_\_\_  
 Rec. 186 Feet of C0 %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud \_\_\_\_\_  
 Rec. 248 Feet of GMO 10 %gas 65 %oil \_\_\_\_\_ %water 25 %mud  
 Rec. 186 Feet of GMO 10 %gas 50 %oil \_\_\_\_\_ %water 40 %mud  
 Rec. 186 Feet of HOC MW 5 %gas 20 %oil 55 %water 10 %mud  
 Rec. 310 Feet of 50-6CW 10 %gas 5 %oil 85 %water \_\_\_\_\_ %mud  
 BHT \_\_\_\_\_ °F Gravity 29 °API D @ 60 °F Corrected Gravity 29 °API  
 RW .2 @ 80 °F Chlorides 28000 ppm Recovery \_\_\_\_\_ Chlorides 5000 ppm System

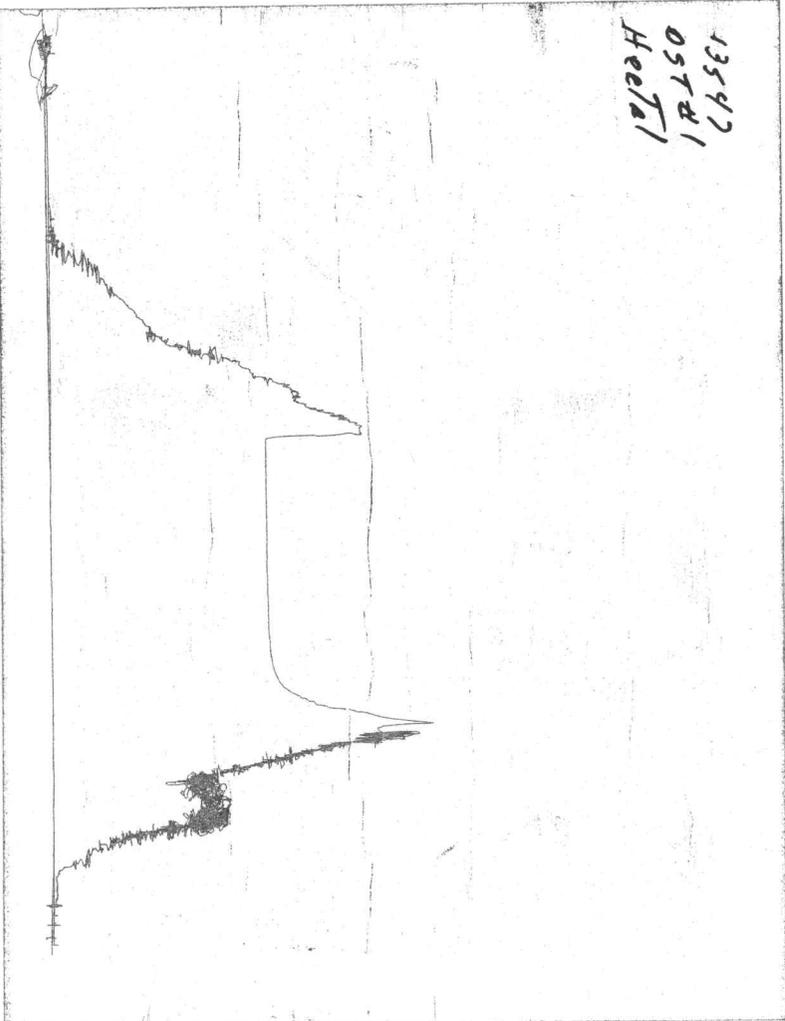
AK-1	Alpine			
(A) Initial Hydrostatic Mud	<u>1773</u> PSI	Recorder No.	<u>8167</u>	Test <input checked="" type="checkbox"/> <u>1000</u>
(B) First Initial Flow Pressure	<u>62</u> PSI	(depth)	<u>3575</u>	Jars _____
(C) First Final Flow Pressure	<u>313</u> PSI	Recorder No.	<u>13534</u>	Safety Jt. _____
(D) Initial Shut-In Pressure	<u>902</u> PSI	(depth)	<u>3608</u>	Circ Sub _____
(E) Second Initial Flow Pressure	<u>321</u> PSI	Recorder No.	<u>13547</u>	Sampler _____
(F) Second Final Flow Pressure	<u>456</u> PSI	(depth)	<u>3635</u>	Straddle <input checked="" type="checkbox"/> <u>350</u>
(G) Final Shut-In Pressure	<u>945</u> PSI	Initial Opening	<u>30</u>	Ext. Packer <input checked="" type="checkbox"/> <u>200</u>
(Q) Final Hydrostatic Mud	<u>1752</u> PSI	Initial Shut-In	<u>30</u>	Shale Packer _____
		Final Flow	<u>60</u>	Ruined Packer _____
		Final Shut-In	<u>90</u>	Mileage <input checked="" type="checkbox"/> <u>32RT</u> <u>40</u>
		T-On Location	<u>0430</u>	Sub Total: <u>1590</u>
		T-Started	<u>0553</u>	Std. By <u>24</u> <u>112.50</u>
		T-Open	<u>0800</u>	Acc. Chg: _____
		T-Pulled	<u>1130</u>	Other: _____
		T-Out	<u>1450</u>	Total: <u>1702.50</u>

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Approved By [Signature]  
 Our Representative RAY SCHWAGER Thank you

**CHART PAGE**

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



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