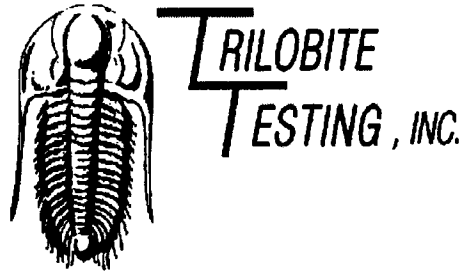


15-065-23197

13-7s-21w



## DRILL STEM TEST REPORT

Prepared For: **Bach Oil Production**

PO Box 723  
Alma NE 68920

ATTN: Jason Alm

**13 7S 21W Graham KS**

### **Benoit #1**

Start Date: 2006.07.28 @ 00:31:31

End Date: 2006.07.28 @ 06:33:00

Job Ticket #: 25242                      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

Bach Oil Production

**Benoit #1**

PO Box 723  
Alma NE 68920

**13 7S 21W Graham KS**

ATTN: Jason Alm

Job Ticket: 25242

**DST#: 1**

Test Start: 2006.07.28 @ 00:31:31

## GENERAL INFORMATION:

Formation: **Tor-LKC "C"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 02:30:30

Time Test Ended: 06:33:00

Test Type: Conventional Bottom Hole

Tester: Ray Schwager

Unit No: 28

Interval: **3247.00 ft (KB) To 3338.00 ft (KB) (TVD)**

Total Depth: 3338.00 ft (KB) (TVD)

Hole Diameter: 7.85 inches Hole Condition: Fair

Reference Elevations: 2071.00 ft (KB)

2066.00 ft (CF)

KB to GR/CF: 5.00 ft

**Serial #: 8167**

**Inside**

Press@RunDepth: 75.78 psig @ 3252.01 ft (KB)

Start Date: 2006.07.28

End Date: 2006.07.28

Start Time: 00:31:31

End Time: 06:33:00

Capacity: 7000.00 psig

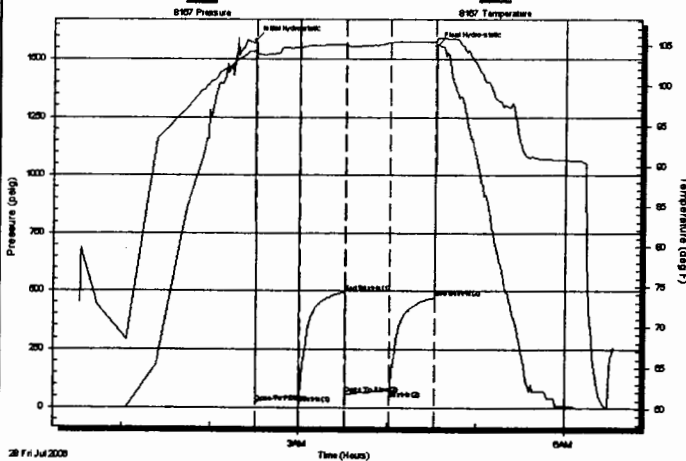
Last Calib.: 2006.07.28

Time On Btmr: 2006.07.28 @ 02:30:00

Time Off Btmr: 2006.07.28 @ 04:32:30

**TEST COMMENT:** FP Wk bl thru-out 1/2" to 3" bl  
FFP Wk bl thru-out 1" to 3" bl  
Times 30 30 30 30

Pressure vs. Time



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1581.59	104.33	Initial Hydro-static
1	20.44	103.92	Open To Flow (1)
31	53.11	104.75	Shut-in(1)
62	494.66	105.05	End Shut-in(1)
62	58.89	104.90	Open To Flow (2)
92	75.78	105.35	Shut-in(2)
122	471.03	105.40	End Shut-in(2)
123	1556.62	105.71	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
65.00	HOCM 30%O 70%M	0.64
60.00	O&GCM 10%G 18%O 72%M	0.84
1.00	CO	0.01

## Gas Rates

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



**TRILOBITE**  
TESTING, INC.

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

Bach Oil Production

**Benoit #1**

PO Box 723  
Alma NE 68920

**13 7S 21W Graham KS**

ATTN: Jason Alm

Job Ticket: 25242

**DST#: 1**

Test Start: 2006.07.28 @ 00:31:31

**Tool Information**

Drill Pipe:	Length: 3226.00 ft	Diameter: 3.80 inches	Volume: 45.25 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: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 45.40 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 32000.00 lb
Depth to Top Packer:	3247.00 ft			Final 32000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	91.02 ft			
Tool Length:	112.02 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			3227.00	
Shut In Tool	5.00			3232.00	
Hydraulic tool	5.00			3237.00	
Packer	5.00			3242.00	21.00 Bottom Of Top Packer
Packer	5.00			3247.00	
Stubb	1.00			3248.00	
Perforations	4.00			3252.00	
Recorder	0.01	8167	Inside	3252.01	
Blank Spacing	63.00			3315.01	
Recorder	0.01	13534	Outside	3315.02	
Perforations	20.00			3335.02	
Bullnose	3.00			3338.02	91.02 Bottom Packers & Anchor

**Total Tool Length: 112.02**



**TRILOBITE  
TESTING, INC.**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Bach Oil Production

**Benoit #1**

PO Box 723  
Alma NE 68920

**13 7S 21W Graham KS**

ATTN: Jason Alm

Job Ticket: 25242      **DST#: 1**

Test Start: 2006.07.28 @ 00:31:31

**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: 52.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.97 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 1000.00 ppm			
Filter Cake: 1.00 inches			

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
65.00	HOCM 30%O 70%M	0.638
60.00	O&GCM 10%G 18%O 72%M	0.842
1.00	CO	0.014

Total Length: 126.00 ft      Total Volume: 1.494 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

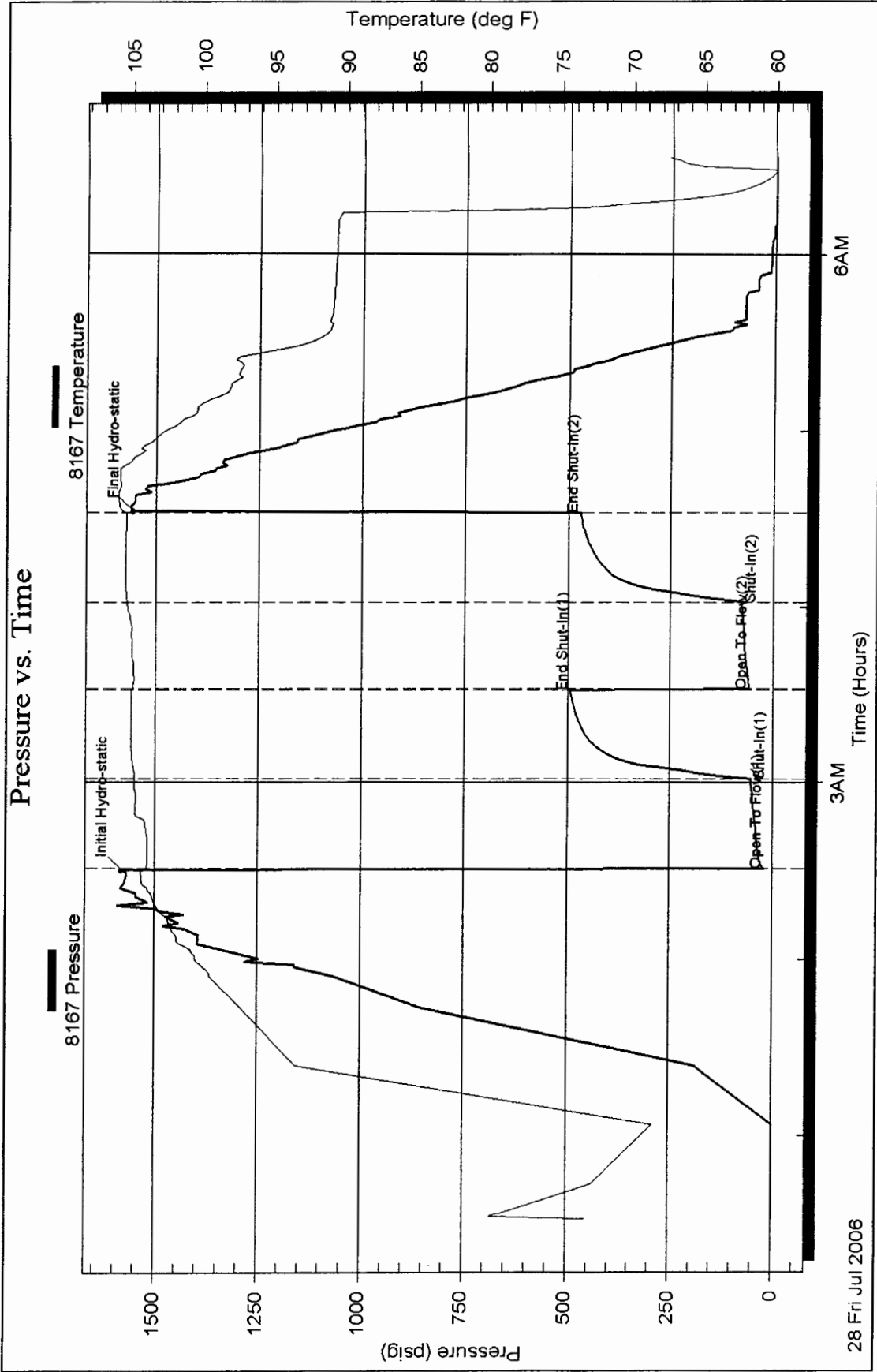
Serial #: 8167

Inside

Bach Oil Production

137S 21W Graham KS

DST Test Number: 1

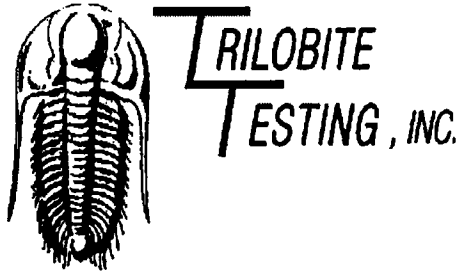


28 Fri Jul 2006

3AM

6AM

Time (Hours)



## DRILL STEM TEST REPORT

Prepared For: **Bach Oil Productions**

P O Box 723  
Alma NE 68920

ATTN: Jason Alm

**13 7S 21W Graham KS**

**Benoit #1**

Start Date: 2006.07.28 @ 18:45:29

End Date: 2006.07.29 @ 01:02:58

Job Ticket #: 25243                      DST #: 2

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

Bach Oil Productions

Benoit #1

13 7S 21W Graham KS

DST # 2

LKC "E-G"

2006.07.28



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Bach Oil Productions

P O Box 723  
Alma NE 68920

ATTN: Jason Alm

**Benoit #1**

**13 7S 21W Graham KS**

Job Ticket: 25243

**DST#: 2**

Test Start: 2006.07.28 @ 18:45:29

## GENERAL INFORMATION:

Formation: **LKC "E-G"**

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

Time Tool Opened: 20:38:58

Time Test Ended: 01:02:58

Test Type: **Conventional Bottom Hole**

Tester: **Ray Schwager**

Unit No: **28**

Interval: **3357.00 ft (KB) To 3400.00 ft (KB) (TVD)**

Total Depth: **3400.00 ft (KB) (TVD)**

Hole Diameter: **7.85 inches** Hole Condition: **Fair**

Reference Elevations: **2071.00 ft (KB)**

**2066.00 ft (CF)**

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

**Serial #: 8167** **Inside**

Press@RunDepth: **243.70 psig @ 3368.01 ft (KB)**

Start Date: **2006.07.28**

End Date:

**2006.07.29**

Start Time: **18:45:29**

End Time:

**01:02:58**

Capacity: **7000.00 psig**

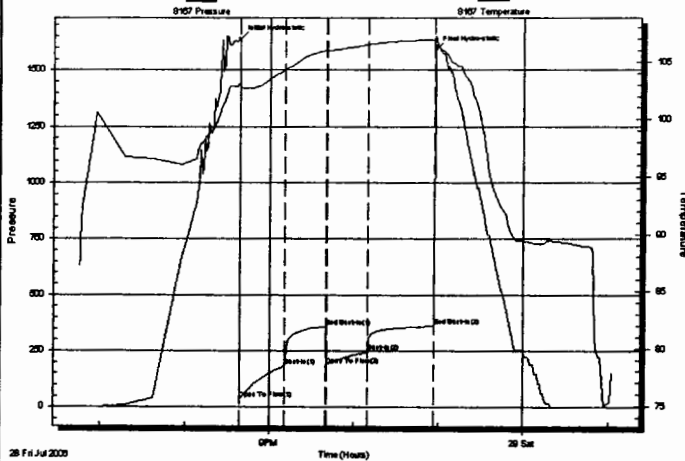
Last Calib.: **2006.07.29**

Time On Btrn: **2006.07.28 @ 20:38:28**

Time Off Btrn: **2006.07.28 @ 22:57:28**

**TEST COMMENT:** IFP Strg bl in 5 min  
FFP Wk to strg in 21 min  
Times 30 30 30 45  
No bl on shut-in

Pressure vs. Time



## PRESSURE SUMMARY

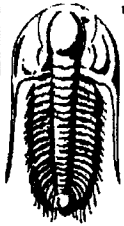
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1638.65	103.16	Initial Hydro-static
1	37.18	102.80	Open To Flow (1)
33	182.64	104.30	Shut-In(1)
62	357.15	105.98	End Shut-In(1)
62	187.68	105.95	Open To Flow (2)
92	243.70	106.49	Shut-In(2)
138	360.89	106.90	End Shut-In(2)
139	1588.59	107.26	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
5.00	CO	0.07
50.00	SOCWM 1%O 49%W 50%M	0.70
180.00	MW 20%M 80%W w/show of Oil	2.52
240.00	Water	3.37

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

TOOL DIAGRAM

Bach Oil Productions

**Benoit #1**

P O Box 723  
Alma NE 68920

**13 7S 21W Graham KS**

Job Ticket: 25243

**DST#: 2**

ATTN: Jason Alm

Test Start: 2006.07.28 @ 18:45:29

### Tool Information

Drill Pipe:	Length: 3356.00 ft	Diameter: 3.80 inches	Volume: 47.08 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: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 55000.00 lb
			<u>Total Volume: 47.08 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 30000.00 lb
Depth to Top Packer:	3357.00 ft			Final 34000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	43.02 ft			
Tool Length:	64.02 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			3337.00	
Shut In Tool	5.00			3342.00	
Hydraulic tool	5.00			3347.00	
Packer	5.00			3352.00	21.00 Bottom Of Top Packer
Packer	5.00			3357.00	
Stubb	1.00			3358.00	
Perforations	10.00			3368.00	
Recorder	0.01	8167	Inside	3368.01	
Perforations	29.00			3397.01	
Recorder	0.01	13534	Outside	3397.02	
Bullnose	3.00			3400.02	43.02 Bottom Packers & Anchor

**Total Tool Length: 64.02**



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**FLUID SUMMARY**

Bach Oil Productions

**Benoit #1**

P O Box 723  
Alma NE 68920

**13 7S 21W Graham KS**

Job Ticket: 25243

**DST#: 2**

ATTN: Jason Alm

Test Start: 2006.07.28 @ 18:45:29

### 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:

30000 ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbl

Water Loss: 9.16 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: 1.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	CO	0.070
50.00	SOCWM 1%O 49%W 50%M	0.701
180.00	MW 20%M 80%W w/show of Oil	2.525
240.00	Water	3.367

Total Length: 475.00 ft

Total Volume: 6.663 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .2@80F

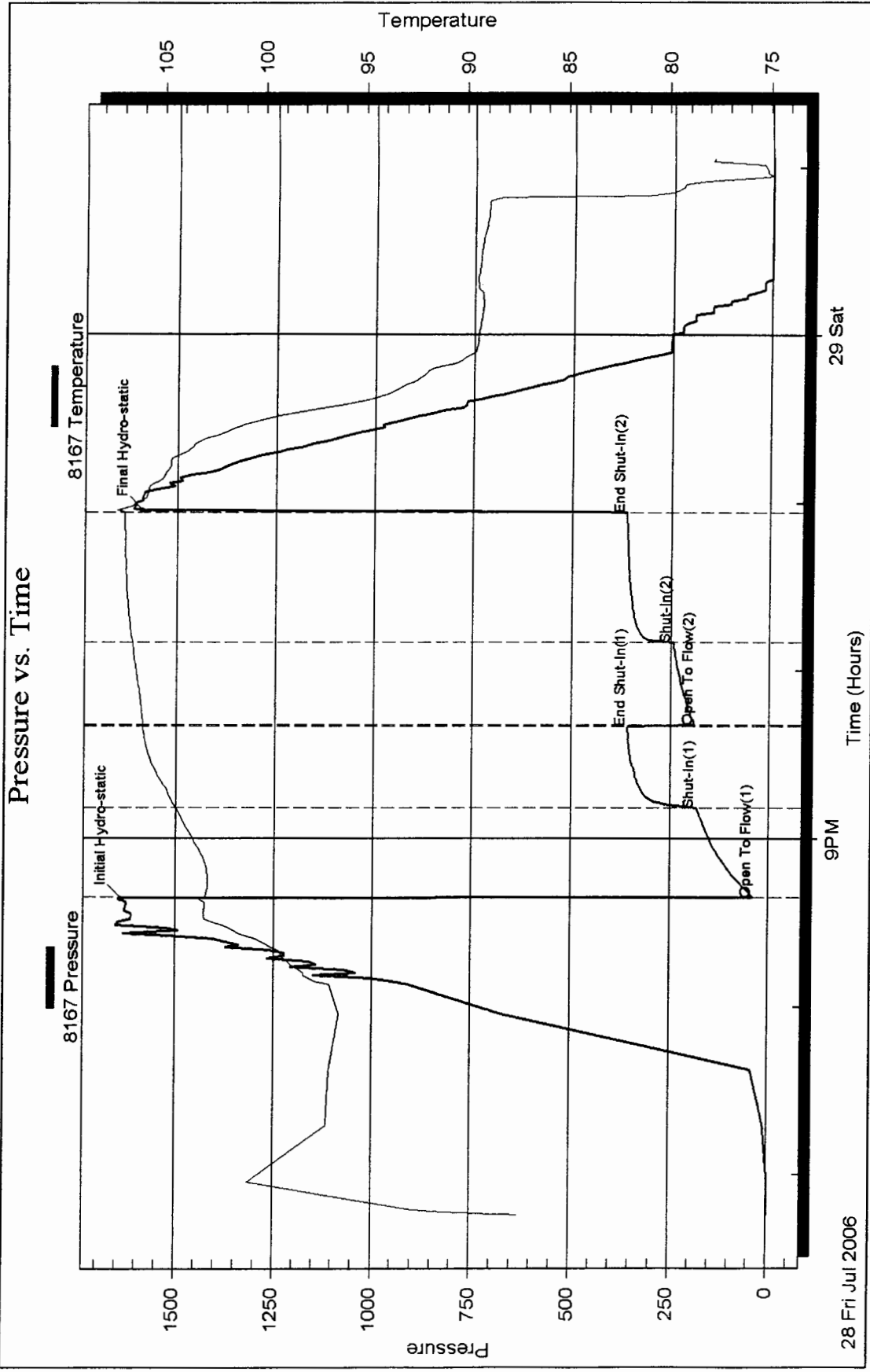
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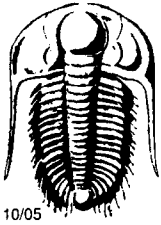
Inside Bach Oil Productions

13 7S 21W Graham KS

DST Test Number: 2

### Pressure vs. Time





# TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

9047

25242

## Test Ticket

Well Name & No. BENAIT #1 Test No. 1 Date 7-28-06  
 Company BACK OIL PRODUCTION Zone Tested TOR, LKC "C"  
 Address P.O. Box 723 ALMA, NE 68920 Elevation 2071 KB 2066 GL  
 Co. Rep / Geo. JASON ALM Rig AMERICAN EAGLE RIG 3  
 Location: Sec. 13 Twp. 7<sup>s</sup> Rge. 21<sup>w</sup> Co. GRAHAM State KO  
 Comment: \_\_\_\_\_ Release date / time: \_\_\_\_\_

Interval Tested 3247-3338 Initial Str Wt./Lbs. 32000 Unseated Str Wt./Lbs. 32000  
 Anchor Length 91 Wt. Set Lbs. 25000 Wt. Pulled Loose/Lbs. 60000  
 Top Packer Depth 3242 Tool Weight 2200  
 Bottom Packer Depth 3247 Hole Size 7 7/8" - Rubber Size 6 3/4" -  
 Total Depth 3338 Wt. Pipe Run - Drill Collar Run 30  
 Mud Wt. LCM Vis. - WL - Drill Pipe Size 4 1/2 X H Ft. Run 3226  
 Blow Description TFP - WEAK BLOW THRU-OUT 1/2" TO 3" BLOW  
FFP - WEAK BLOW THRU-OUT 1" TO 3" BLOW

Recovery - Total Feet 125 GIP - Ft. in DC 30 Ft. in DP 95  
 Rec. 1 Feet of CO %gas - %oil - %water - %mud -  
 Rec. 65 Feet of HOCM %gas 30 %oil - %water 70 %mud -  
 Rec. 60 Feet of OTGCM 10 %gas 18 %oil - %water 72 %mud -  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud \_\_\_\_\_  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud \_\_\_\_\_  
 BHT 105 °F Gravity \_\_\_\_\_ °API D @ \_\_\_\_\_ °F Corrected Gravity \_\_\_\_\_ °API  
 RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm Recovery \_\_\_\_\_ Chlorides \_\_\_\_\_ ppm System

	AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud	1570	PSI	8167	✓ 1000
(B) First Initial Flow Pressure	20	PSI	(depth) 3252	Jars _____
(C) First Final Flow Pressure	53	PSI	Recorder No. 13534	Safety Jt. _____
(D) Initial Shut-In Pressure	494	PSI	(depth) 3215	Circ Sub _____
(E) Second Initial Flow Pressure	58	PSI	Recorder No. _____	Sampler _____
(F) Second Final Flow Pressure	75	PSI	(depth) _____	Straddle _____
(G) Final Shut-In Pressure	471	PSI	Initial Opening 30	Ext. Packer _____
(Q) Final Hydrostatic Mud	1552	PSI	Initial Shut-In 30	Shale Packer _____
			Final Flow 30	Ruined Packer _____
			Final Shut-In 30	Mileage ✓ 116 RT 145.00
			T-On Location 0000	Sub Total: \$ 1145.00
			T-Started 0031	Std. By _____
			T-Open 0235	Acc. Chg: _____
			T-Pulled 0435	Other: _____
			T-Out 0633	Total: _____

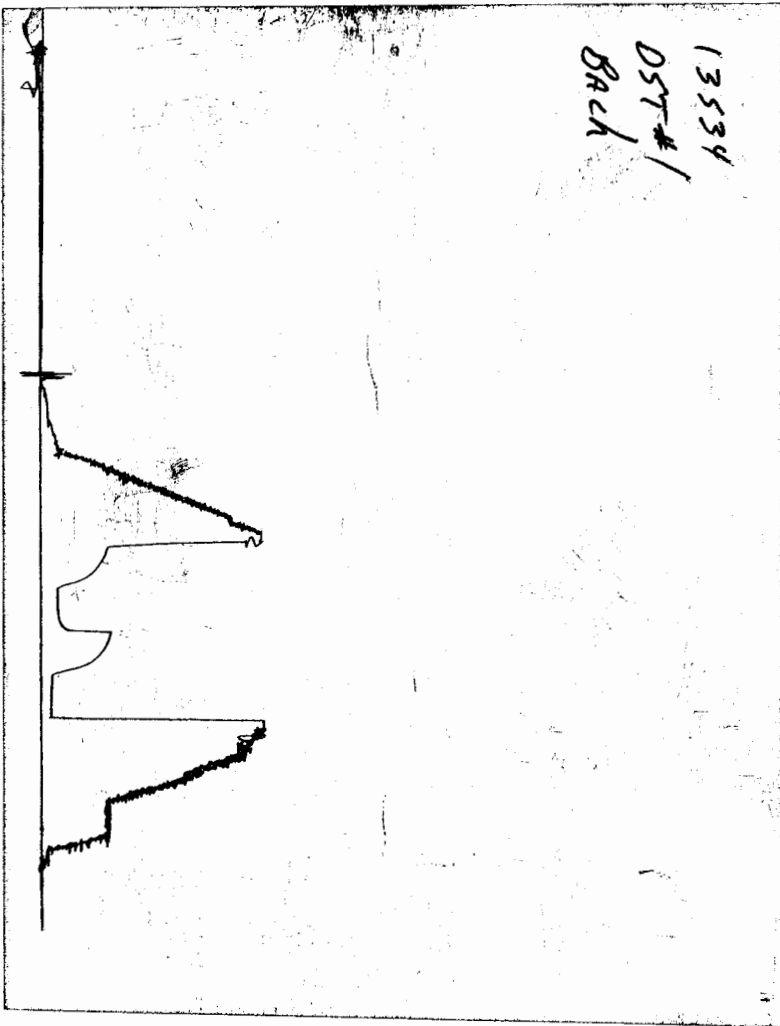
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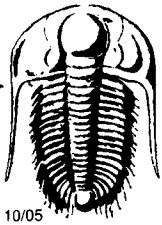
Approved By [Signature]

Our Representative RAY SCHWAGER THANK YOU

**CHART PAGE**

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





# TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

25243

## Test Ticket

Well Name & No. Benoit #1 Test No. 2 Date 7-28-06  
 Company Back Oil Production Zone Tested LKC E-G  
 Address P O Box 723 ALMA, NE 68920 Elevation 2071 KB 2066 GL  
 Co. Rep / Geo. JASON ALM Rig AMERICAN Eagle rig 3  
 Location: Sec. 13 Twp. 7<sup>s</sup> Rge. 21<sup>w</sup> Co. GRAHAM State Ko  
 Comment: \_\_\_\_\_ Release date / time: \_\_\_\_\_

Interval Tested 3357 - 3400 Initial Str Wt./Lbs. 30000 Unseated Str Wt./Lbs. 34000  
 Anchor Length 43 Wt. Set Lbs. 25000 Wt. Pulled Loose/Lbs. 55000  
 Top Packer Depth 3352 Tool Weight 2200  
 Bottom Packer Depth 3357 Hole Size 7 7/8" - Rubber Size 6 3/4" -  
 Total Depth 3400 Wt. Pipe Run - Drill Collar Run -  
 Mud Wt. 9.1 LCM 1/4# Vis. 51 WL 9.2 Drill Pipe Size 4 1/2 X H Ft. Run 3356  
 Blow Description TFP - STRONG BLOW IN 5 MIN  
FFP - WEAK TO STRONG IN 21 MIN  
ISIP - NO BLOW  
FSIP - NO BLOW

Recovery - Total Feet	GIP	Ft. in DC	Ft. in DP
<u>475</u>	<u>60</u>	<u>-</u>	<u>475</u>
Rec. <u>50</u>	Feet of <u>SOC WM</u>	%gas <u>1</u>	%oil <u>49</u> %water <u>50</u> %mud
Rec. <u>180</u>	Feet of <u>MW w/ slow oil</u>	%gas	%oil <u>80</u> %water <u>20</u> %mud
Rec. <u>240</u>	Feet of <u>WATER</u>	%gas	%oil %water %mud
Rec. <u>5</u>	Feet of <u>SD</u>	%gas	%oil %water %mud
Rec. _____	Feet of _____	%gas	%oil %water %mud
BHT <u>107</u>	*F Gravity _____	*API D @ _____	*F Corrected Gravity _____ *API
RW <u>.2</u>	@ <u>80</u> *F	Chlorides <u>30000</u> ppm	Recovery _____ Chlorides _____ ppm System

	AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud		<u>1626</u> PSI	<u>8167</u>	<u>1000</u>
(B) First Initial Flow Pressure		<u>37</u> PSI	(depth) <u>3368</u>	Jars _____
(C) First Final Flow Pressure		<u>182</u> PSI	Recorder No. <u>13534</u>	Safety Jt. _____
(D) Initial Shut-In Pressure		<u>357</u> PSI	(depth) <u>3397</u>	Circ Sub _____
(E) Second Initial Flow Pressure		<u>187</u> PSI	Recorder No. <u>-</u>	Sampler _____
(F) Second Final Flow Pressure		<u>243</u> PSI	(depth) <u>-</u>	Straddle _____
(G) Final Shut-In Pressure		<u>360</u> PSI	Initial Opening <u>30</u>	Ext. Packer _____
(Q) Final Hydrostatic Mud		<u>1584</u> PSI	Initial Shut-In <u>30</u>	Shale Packer _____
			Final Flow <u>30</u>	Ruined Packer _____
			Final Shut-In <u>45</u>	Mileage <u>116 RT 145</u>
			T-On Location <u>1830</u>	Sub Total: <u>\$1145</u>
			T-Started <u>1845</u>	Std. By _____
			T-Open <u>2045</u>	Acc. Chg: _____
			T-Pulled <u>2300</u>	Other: _____
			T-Out <u>0102</u>	Total: _____

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Approved By [Signature]  
 Our Representative RAY Schwager Thank 404

**CHART PAGE**

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

