

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Black Diamond**

PO Box 641
Hays KS 67601

ATTN: Tony Richardson

25 7 22W Graham KS

Stehno #2

Start Date: 2007.10.02 @ 03:25:37
End Date: 2007.10.02 @ 09:20:31
Job Ticket #: 29173 DST #: 1

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

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Job Ticket: 29173 **DST#: 1**

Test Start: 2007.10.02 @ 03:25:37

GENERAL INFORMATION:

Formation: **Oread - Toronto**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 05:32:32
Time Test Ended: 09:20:31

Test Type: Conventional Bottom Hole
Tester: Brian Fairbank
Unit No: 41

Interval: 3345.00 ft (KB) To 3446.00 ft (KB) (TVD)
Total Depth: 3346.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition:

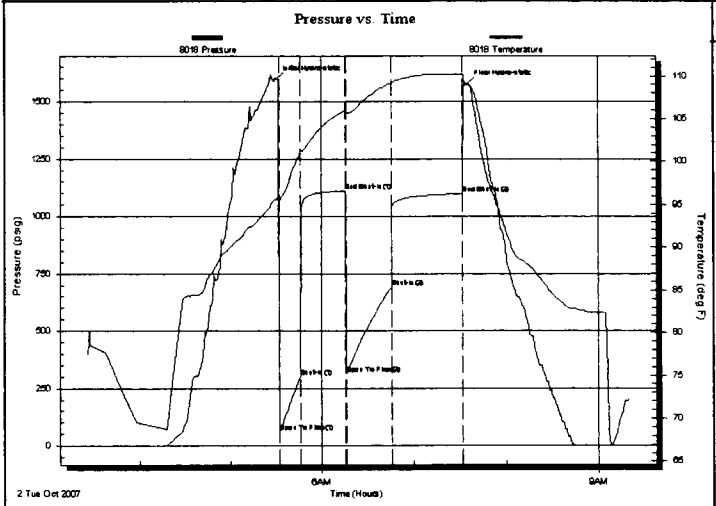
Reference Elevations: 2225.00 ft (KB)
2217.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8018 **Inside**

Press@RunDepth: 691.19 psig @ 3348.01 ft (KB)
Start Date: 2007.10.02 End Date: 2007.10.02
Start Time: 03:25:37 End Time: 09:20:31

Capacity: 7000.00 psig
Last Calib.: 2007.10.02
Time On Btm: 2007.10.02 @ 05:30:32
Time Off Btm: 2007.10.02 @ 07:34:32

TEST COMMENT: IFP BOB 2 min.
ISI No blow 3 min. weak sur blow died 11 min.
FFP BOB 2 min.
FSI No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1597.49	95.58	Initial Hydro-static
2	58.40	95.37	Open To Flow (1)
16	301.10	101.05	Shut-In(1)
46	1111.43	105.94	End Shut-In(1)
46	314.00	105.73	Open To Flow (2)
75	691.19	109.13	Shut-In(2)
121	1097.79	110.11	End Shut-In(2)
124	1574.62	108.91	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	100%M	0.05
1105.00	MW 95%W 5%M	15.32
250.00	WM 35%W 65%M	3.51

Gas Rates

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

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TOOL DIAGRAM

Black Diamond

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Test Start: 2007.10.02 @ 03:25:37

Tool Information

Drill Pipe:	Length:	3324.00 ft	Diameter:	3.80 inches	Volume:	46.63 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:	85000.00 lb	
					Total Volume:	46.78 bbl	Tool Chased	1.00 ft	
Drill Pipe Above KB:		29.00 ft					String Weight: Initial	50000.00 lb	
Depth to Top Packer:		3345.00 ft					Final	60000.00 lb	
Depth to Bottom Packer:		ft							
Interval betw een Packers:		101.02 ft							
Tool Length:		121.02 ft							
Number of Packers:		2	Diameter:	6.75 inches					

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Shut In Tool	5.00			3330.00		
Hydraulic tool	5.00			3335.00		
Packer	5.00			3340.00	20.00	Bottom Of Top Packer
Packer	5.00			3345.00		
Stubb	1.00			3346.00		
Perforations	1.00			3347.00		
Change Over Sub	1.00			3348.00		
Recorder	0.01	8018	Inside	3348.01		
Blank Spacing	94.00			3442.01		
Change Over Sub	1.00			3443.01		
Recorder	0.01	13548	Outside	3443.02		
Bullnose	3.00			3446.02	101.02	Bottom Packers & Anchor
Total Tool Length:	**121.02**					

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FLUID SUMMARY

Black Diamond

PO Box 641
Hays KS 67601

ATTN: Tony Richardson

Stehno #2

25 7 22W Graham KS

Job Ticket: 29173 **DST#: 1**

Test Start: 2007.10.02 @ 03:25:37

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:	19000 ppm
Viscosity:	61.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	8.76 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	800.00 ppm				
Filter Cake:	inches				

Recovery Information

Recovery Table

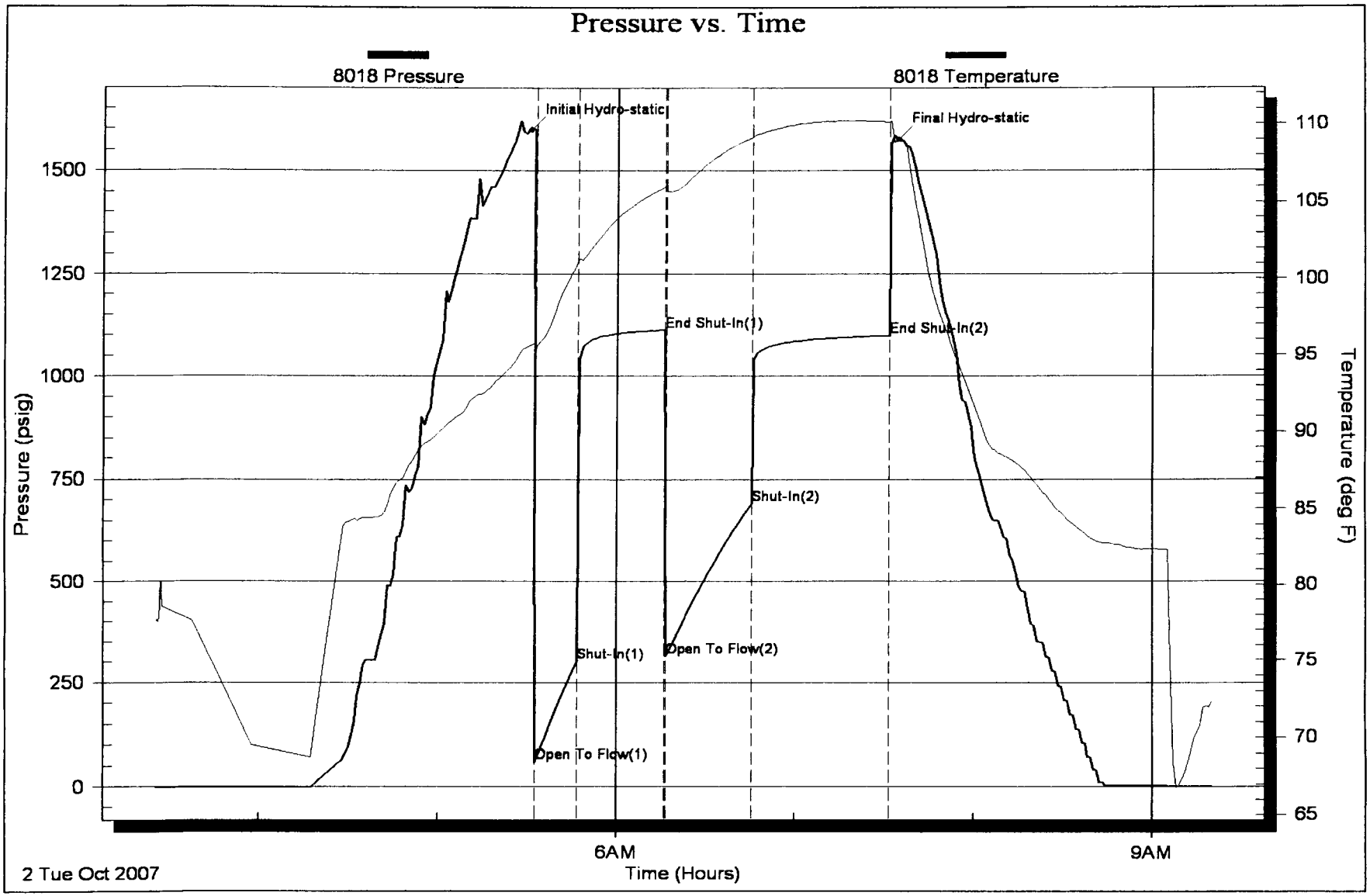
Length ft	Description	Volume bbl
10.00	100%M	0.049
1105.00	MW 95%W 5%M	15.318
250.00	WM 35%W 65%M	3.507

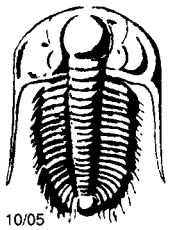
Total Length: 1365.00 ft Total Volume: 18.874 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:


Pressure vs. Time
8018 Pressure
8018 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
End Shut-In(2)
Shut-In(2)
Shut-In(1)
Open To Flow(2)
Open To Flow(1)
Pressure (psig)
Temperature (deg F)
1500
1250
1000
750
500
250
0
110
105
100
95
90
85
80
75
70
65
6AM
9AM
Time (Hours)
2 Tue Oct 2007



10/05

TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

29173

RECEIVED OCT 3 2007 BY:

10173

Test Ticket

Well Name & No. Stehno #2 Test No. 1 Date 10-2-07

Company Black Diamond Zone Tested Oread - Toronto

Address Po Box 641 Hays, Ks 67601 Elevation 2225 KB 2217 GL

Co. Rep / Geo. Tony Richardson Rig Disco 1

Location: Sec. 25 Twp. 7S Rge. 22W Co. Graham State Ks

Comment: Slid 1' to bottom Release date / time:

Interval Tested 3345-3446 Initial Str Wt./Lbs. 50,000 Unseated Str Wt/Lbs. 60,000

Anchor Length 101 Wt. Set Lbs. 25,000 Wt. Pulled Loose/Lbs. 85,000

Top Packer Depth 3340 Tool Weight 2500

Bottom Packer Depth 3345 Hole Size 7 7/8" — Rubber Size 6 3/4" —

Total Depth 3346 Wt. Pipe Run — Drill Collar Run 30

Mud Wt. 8.7 LCM — Vis. 61 WL 8.8 Drill Pipe Size 4½XH Ft. Run 3324

Blow Description IFP- BOB 2 min

ISI- no blow 3 min - weak surface blow died 11 min

FFP- BOB 2 min

FSI- no blow back

Recovery - Total Feet 1365 GIP — Ft. in DC 30 Ft. in DP 1335

Rec. 250	Feet of WM	%gas	%oil	35	%water	65	%mud
Rec. 1105	Feet of MW	%gas	%oil	95	%water	5	%mud
Rec. 10	Feet of mud	%gas	%oil		%water	100	%mud
Rec.	Feet of	%gas	%oil		%water		%mud
Rec.	Feet of	%gas	%oil		%water		%mud

BHT 110 °F Gravity °API D @ °F Corrected Gravity °API

RW .376 @ 64 °F Chlorides 19,000 ppm Recovery Chlorides 800 ppm System

	AK-1	Alpine					
(A) Initital Hydrostatic Mud		1597 PSI	Recorder No.	8018	Test ✓	1100
(B) First Initial Flow Pressure		58 PSI	(depth)	3348	Jars	
(C) First Final Flow Pressure		301 PSI	Recorder No.	13548	Safety Jt.	
(D) Initial Shut-In Pressure		1111 PSI	(depth)	3343	Circ Sub	
(E) Second Initial Flow Pressure		314 PSI	Recorder No.		Sampler	
(F) Second Final Flow Pressure		691 PSI	(depth)		Straddle	
(G) Final Shut-In Pressure		1098 PSI	**Initial Opening**	15	Ext. Packer	
(Q) Final Hydrostatic Mud		1575 PSI	Initial Shut-In	30	Shale Packer	
			Final Flow	30	Ruined Packer	
			Final Shut-In	45	Mileage ✓ 132 RT 165	
			T-On Location	0219	Sub Total:	
			T-Started	0325	Std. By	
			T-Open	0531	Acc. Chg:	
			T-Pulled	0731	Other:	
			T-Out	0920	Total:	$1265.00

TRILOBITE TESTING INC. SHALL NOT BE LIABLE FOR DAMAGED OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Approved By

Our Representative Brian Fairbank (Trib)

CHART PAGE

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

