



DRILL STEM TEST REPORT

Prepared For: **Black Diamond Inc Inc**

PO Box 641
Hays KS 67601-0641

ATTN: Ken Vehige, Jeff Law

Sammons #5

32-6s-20w Rooks,KS

Start Date: 2013.10.29 @ 08:55:57

End Date: 2013.10.29 @ 16:11:21

Job Ticket #: 54363 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

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TRILOBITE TESTING, INC.

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32-6s-20w Rooks,KS

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Sammons #5

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DST#: 1

ATTN: Ken Vehige, Jeff Law

Test Start: 2013.10.29 @ 08:55:57

GENERAL INFORMATION:

Formation: **LKC E-G**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:34:07

Time Test Ended: 16:11:21

Test Type: Conventional Bottom Hole (Reset)

Tester: Ray Schwager

Unit No: 70

Interval: 3520.00 ft (KB) To 3556.00 ft (KB) (TVD)

Reference Elevations: 2235.00 ft (KB)

Total Depth: 3556.00 ft (KB) (TVD)

2230.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8369 Inside

Press @ Run Depth: 89.04 psig @ 3528.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.10.29

End Date:

2013.10.29

Last Calib.:

2013.10.29

Start Time: 08:55:57

End Time:

16:11:21

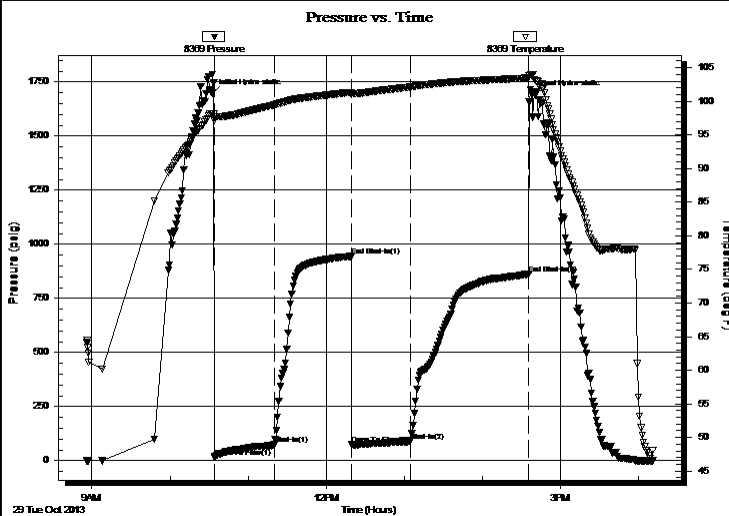
Time On Btm:

2013.10.29 @ 10:32:22

Time Off Btm:

2013.10.29 @ 14:38:06

TEST COMMENT: 45-IFP-w k to a gd bl 1/2" to 6 1/2" bl
60-ISIP-no bl
45-FFP-w k to a fr bl 1/4" to 5" bl
90-FSIP-no bl



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1698.42	98.17	Initial Hydro-static
2	17.02	97.12	Open To Flow (1)
48	74.26	99.45	Shut-In(1)
107	944.39	101.32	End Shut-In(1)
107	77.11	101.01	Open To Flow (2)
152	89.04	102.12	Shut-In(2)
243	861.61	103.45	End Shut-In(2)
246	1692.14	104.00	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	125'GIP	0.00
60.00	O&GCM 10%G20%O70%M	0.30
65.00	HO&GCM 10%G30%O60%M	0.37
50.00	CO	0.70

Gas Rates

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

* Recovery from multiple tests



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TESTING, INC.**

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TOOL DIAGRAM

Black Diamond Inc Inc

32-6s-20w Rooks,KS

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Hays KS 67601-0641

Sammons #5

Job Ticket: 54363

DST#: 1

ATTN: Ken Vehige, Jeff Law

Test Start: 2013.10.29 @ 08:55:57

Tool Information

Drill Pipe:	Length: 3389.00 ft	Diameter: 3.80 inches	Volume: 47.54 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: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose:	45000.00 lb
			<u>Total Volume: 48.13 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial	36000.00 lb
Depth to Top Packer:	3520.00 ft			Final	37000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	36.00 ft				
Tool Length:	57.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3500.00	
Shut In Tool	5.00			3505.00	
Hydraulic tool	5.00			3510.00	
Packer	5.00			3515.00	21.00 Bottom Of Top Packer
Packer	5.00			3520.00	
Stubb	1.00			3521.00	
Perforations	7.00			3528.00	
Recorder	0.00	8369	Inside	3528.00	
Recorder	0.00	8700	Outside	3528.00	
Perforations	25.00			3553.00	
Bullnose	3.00			3556.00	36.00 Bottom Packers & Anchor

Total Tool Length: 57.00



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FLUID SUMMARY

Black Diamond Inc Inc

32-6s-20w Rooks,KS

PO Box 641
Hays KS 67601-0641

Sammons #5

Job Ticket: 54363

DST#: 1

ATTN: Ken Vehige, Jeff Law

Test Start: 2013.10.29 @ 08:55:57

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

36 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 80.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.96 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
0.00	125'GIP	0.000
60.00	O&GCM 10%G20%O70%M	0.295
65.00	HO&GCM 10%G30%O60%M	0.365
50.00	CO	0.701

Total Length: 175.00 ft

Total Volume: 1.361 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

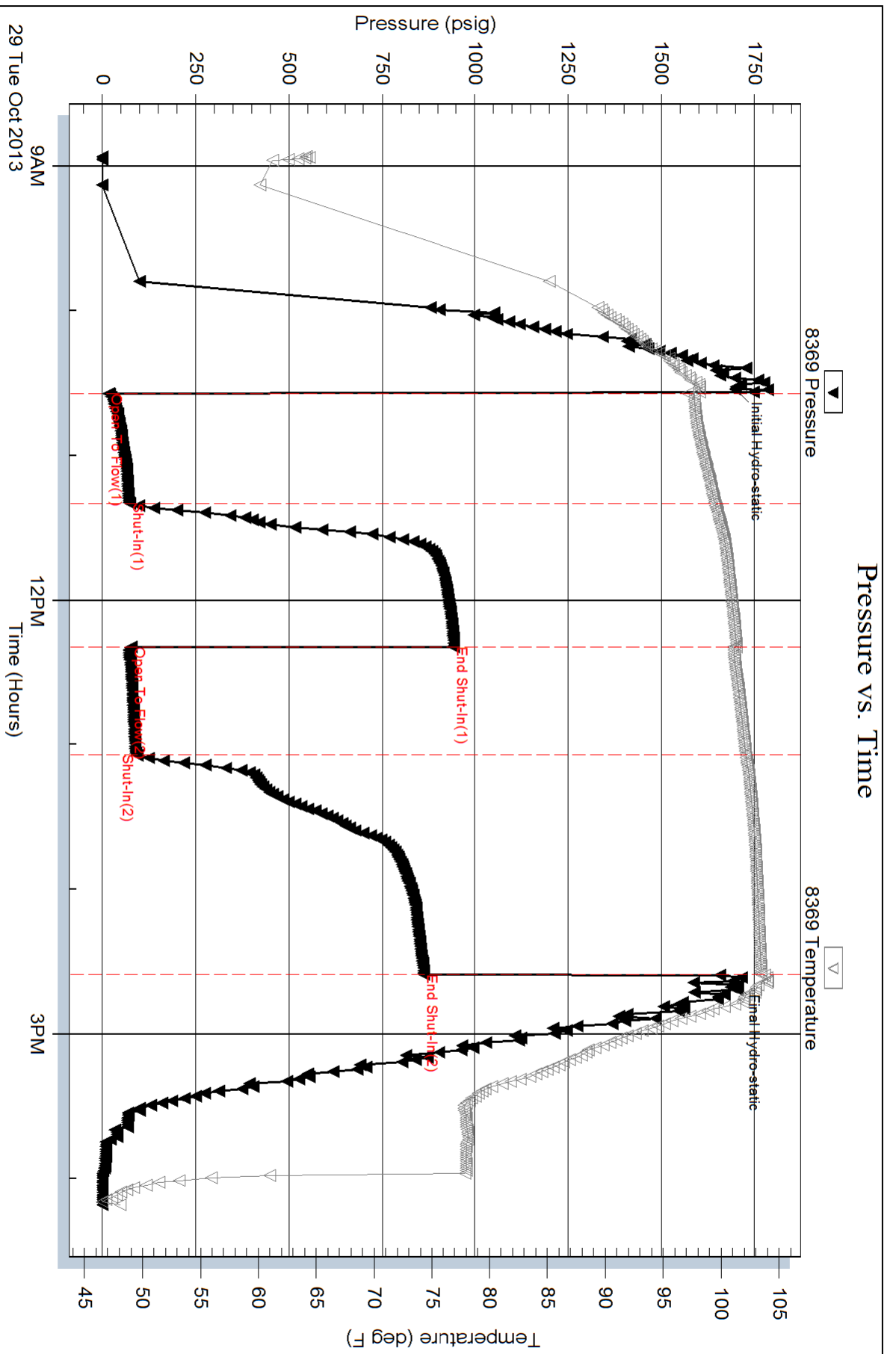
Serial #: 8369

Inside

Black Diamond Inc Inc

Sammons #5

DST Test Number: 1

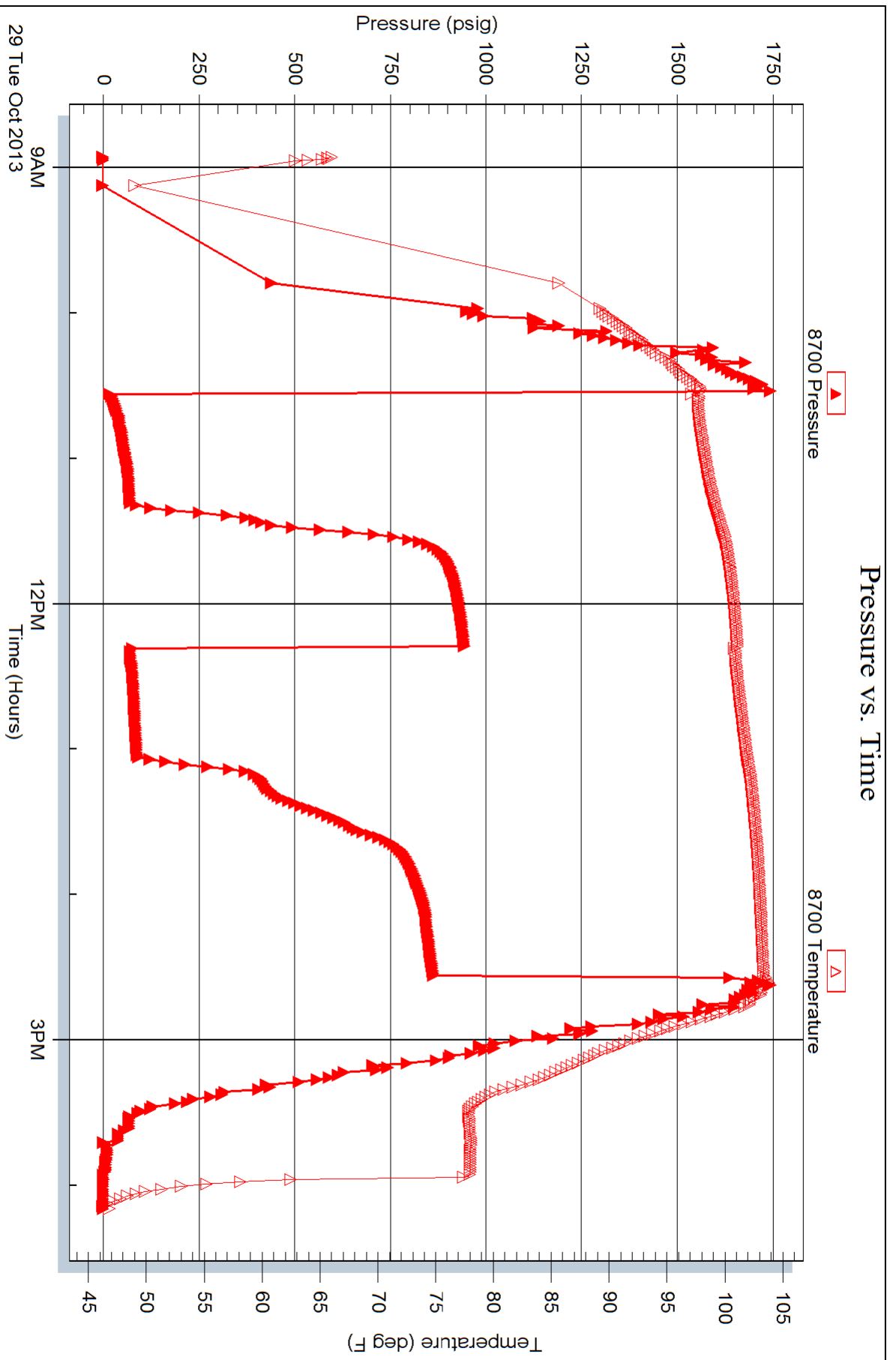


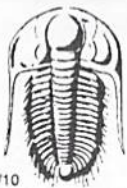
Serial #: 8700

Outside Black Diamond Inc Inc

Sammons #5

DST Test Number: 1





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 54363

Well Name & No. SAMMONS #5 Test No. 1 Date 10-29-13
 Company BLACK DIAMOND OIL INC Elevation 2235 KB 2230 GL
 Address PO BOX 641 HAYS, KS 67601-0641
 Co. Rep / Geo. JEFF LAWLER Rig WWrig 6
 Location: Sec. 32 Twp. 6^s Rge. 20^w Co. Rooks State Ks

Interval Tested 3520-3556 Zone Tested LKC E-6
 Anchor Length 36 Drill Pipe Run 3389 Mud Wt. 9.2
 Top Packer Depth 3520 Drill Collars Run 120 Vis 80
 Bottom Packer Depth 3520 Wt. Pipe Run - WL 8
 Total Depth 3556 Chlorides 250 ppm System LCM 2#

Blow Description IFP - WEAK TO A GOOD BLOW 1/2" TO 1/2" BLOW
ISIP - NO BLOW
FFP - WEAK TO A FAIR BLOW 1/4" TO 5" BLOW
FSIP - NO BLOW

Rec	Feet of	%gas	%oil	%water	%mud
<u>125</u>	<u>GIP</u>				
<u>65</u>	<u>HOT GCM</u>	<u>10</u>	<u>30</u>	<u>60</u>	<u>60</u>
<u>60</u>	<u>OT GCM</u>	<u>10</u>	<u>20</u>	<u>70</u>	<u>70</u>
<u>50</u>	<u>CD</u>				

Rec Total 175 BHT 103 Gravity 36 API RW - @ - ° F Chlorides - ppm

(A) Initial Hydrostatic 1698 Test 1150 T-On Location 0820
 (B) First Initial Flow 17 Jars - T-Started 0855
 (C) First Final Flow ~~126~~ 74 Safety Joint - T-Open 1035
 (D) Initial Shut-In 944 Circ Sub - T-Pulled 1435
 (E) Second Initial Flow 77 Hourly Standby - T-Out 1611
 (F) Second Final Flow 89 Mileage 133 RT 206.15 Comments -
 (G) Final Shut-In 861 Sampler -
 (H) Final Hydrostatic 1692 Straddle - Ruined Shale Packer -
 Shale Packer - Ruined Packer -

Initial Open 45 Extra Packer - Extra Copies -
 Initial Shut-In 60 Extra Recorder - Sub Total 0
 Final Flow 45 Day Standby - Total 1356.15
 Final Shut-In 90 Accessibility - MP/DST Disc't -

Sub Total 1356.15

Approved By _____ Our Representative Ray Schwagn Thank you

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