

KANSAS CORPORATION COMMISSION  
OIL & GAS CONSERVATION DIVISION

**ORIGINAL** Form ACO-1  
October 2008  
Form Must Be Typed

**WELL COMPLETION FORM**  
**WELL HISTORY - DESCRIPTION OF WELL & LEASE**

OPERATOR: License # 7076  
Name: Black Diamond Oil, Inc.  
Address 1: P.O. Box 641  
Address 2: \_\_\_\_\_  
City: Hays State: KS Zip: 67601 + \_\_\_\_\_  
Contact Person: Kenneth Vehige  
Phone: ( 785 ) 265-5891  
CONTRACTOR: License # 31548  
Name: Discovery Drilling Co., Inc.  
Wellsite Geologist: Tony Richardson  
Purchaser: \_\_\_\_\_

**RECEIVED**  
**OCT 05 2010**  
**KCC WICHITA**

Designate Type of Completion:  
 New Well \_\_\_\_\_ Re-Entry \_\_\_\_\_ Workover \_\_\_\_\_  
 Oil \_\_\_\_\_ SWD \_\_\_\_\_ SLOW \_\_\_\_\_  
\_\_\_\_\_ Gas \_\_\_\_\_ ENHR \_\_\_\_\_ SIGW \_\_\_\_\_  
\_\_\_\_\_ CM (Coal Bed Methane) \_\_\_\_\_ Temp. Abd. \_\_\_\_\_  
\_\_\_\_\_ Dry \_\_\_\_\_ Other \_\_\_\_\_  
*(Core, WSW, Expl., Cathodic, etc.)*

If Workover/Re-entry: Old Well Info as follows:  
Operator: \_\_\_\_\_  
Well Name: \_\_\_\_\_  
Original Comp. Date: \_\_\_\_\_ Original Total Depth: \_\_\_\_\_  
\_\_\_\_\_ Deepening \_\_\_\_\_ Re-perf. \_\_\_\_\_ Conv. to Enhr. \_\_\_\_\_ Conv. to SWD \_\_\_\_\_  
\_\_\_\_\_ Plug Back: \_\_\_\_\_ Plug Back Total Depth \_\_\_\_\_  
\_\_\_\_\_ Commingled \_\_\_\_\_ Docket No.: \_\_\_\_\_  
\_\_\_\_\_ Dual Completion \_\_\_\_\_ Docket No.: \_\_\_\_\_  
\_\_\_\_\_ Other (SWD or Enhr.?) \_\_\_\_\_ Docket No.: \_\_\_\_\_  
4/15/2010      4/20/2010      5/3/2010  
Spud Date or      Date Reached TD      Completion Date or  
Recompletion Date                Recompletion Date

API No. 15 - 163-23,862-00-00  
Spot Description: \_\_\_\_\_  
\_\_\_\_\_ NW SW NW Sec. 27 Twp. 8 S. R. 19  East  West  
1650 Feet from  North /  South Line of Section  
330 Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:  
 NE  NW  SE  SW  
County: Rooks  
Lease Name: Green B Well #: 1  
Field Name: Webster  
Producing Formation: Arbuckle  
Elevation: Ground: 2005 Kelly Bushing: 2013  
Total Depth: 3580 Plug Back Total Depth: 3551  
Amount of Surface Pipe Set and Cemented at: 218.44 Feet  
Multiple Stage Cementing Collar Used?  Yes  No  
If yes, show depth set: \_\_\_\_\_ Feet  
If Alternate II completion, cement circulated from: 3569  
feet depth to: Surface w/ 485 sks (60sks to pit) sx cmt.  
(30 sks In Rat Hole)(15 sks In Mouse Hole)

**Drilling Fluid Management Plan**  
*(Data must be collected from the Reserve Pit)*  
Chloride content: 3800 ppm Fluid volume: 500 bbls  
Dewatering method used: Air Dry - Backfill  
Location of fluid disposal if hauled offsite: \_\_\_\_\_  
Operator Name: \_\_\_\_\_  
Lease Name: \_\_\_\_\_ License No.: \_\_\_\_\_  
Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West  
County: \_\_\_\_\_ Docket No.: \_\_\_\_\_

**INSTRUCTIONS:** An original and two copies of this form shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information of side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form (see rule 82-3-107 for confidentiality in excess of 12 months). One copy of all wireline logs and geologist well report shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

All requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Signature: \_\_\_\_\_  
Title: president Date: 10/4/2010  
Subscribed and sworn to before me this 4th day of October,  
20 10.  
Notary Public: \_\_\_\_\_  
Date Commission Expires: 5/2/2011

**KCC Office Use ONLY**  
N Letter of Confidentiality Received  
If Denied, Yes  Date: \_\_\_\_\_  
 Wireline Log Received  
 Geologist Report Received  
\_\_\_\_\_ UIC Distribution  
Alt 2 - Obj - 10/11/10

NOTARY PUBLIC  
STATE OF KANSAS  
MELISSA L. WINDHOLZ  
My Appt. Exp. 5/2/2011

Operator Name: Black Diamond Oil, Inc. Lease Name: Green B Well #: 1  
 Sec. 27 Twp. 8 S. R. 19  East  West County: Rooks

**INSTRUCTIONS:** Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed. Attach copy of all Electric Wireline Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i>  Samples Sent to Geological Survey <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  Cores Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Electric Log Run <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(Submit Copy)</i>  List All E. Logs Run: <b>Dual Induction, Micro &amp; Compensated Density</b>	<input checked="" type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample  <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:70%;">Name</td> <td style="width:15%;">Top</td> <td style="width:15%;">Datum</td> </tr> <tr> <td>Anhydrite</td> <td>1427</td> <td>+586</td> </tr> <tr> <td>Topeka</td> <td>2947</td> <td>-934</td> </tr> <tr> <td>Heebner</td> <td>3453</td> <td>-1140</td> </tr> <tr> <td>Lansing KC</td> <td>3193</td> <td>-1180</td> </tr> <tr> <td>Arbuckle</td> <td>3440</td> <td>-1427</td> </tr> </table>	Name	Top	Datum	Anhydrite	1427	+586	Topeka	2947	-934	Heebner	3453	-1140	Lansing KC	3193	-1180	Arbuckle	3440	-1427
Name	Top	Datum																	
Anhydrite	1427	+586																	
Topeka	2947	-934																	
Heebner	3453	-1140																	
Lansing KC	3193	-1180																	
Arbuckle	3440	-1427																	

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Surface	12 1/4	8 5/8	23	218.44	Common	150	2%Gel3%CC
Production St.	7 7/8	5 1/2	15.5	3569	SMDC	485	

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	#Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone				

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>
4	3444-50	None <b>RECEIVED</b> <b>OCT 05 2010</b> <b>KCC WICHITA</b>

TUBING RECORD:	Size: <u>2 7/8</u>	Set At: <u>3530</u>	Packer At: <u>None</u>	Liner Run: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Date of First, Resumed Production, SWD or Enhr. <u>5/7/2010</u>		Producing Method: <input type="checkbox"/> Flowing <input checked="" type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)		
Estimated Production Per 24 Hours	Oil Bbls. <u>7</u>	Gas Mcf <u>0</u>	Water Bbls. <u>75</u>	Gas-Oil Ratio <u> </u> Gravity <u>22</u>

DISPOSITION OF GAS: <input checked="" type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input checked="" type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <input type="checkbox"/> Other (Specify) _____	PRODUCTION INTERVAL: <u>3444-50</u> _____ _____
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# ALLIED CEMENTING CO. LLC. 33913

REMIT TO P.O. BOX 31  
RUSSELL, KANSAS 67665

SERVICE POINT:  
Russell KS

DATE	SEC.	TWP.	RANGE	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
4-15-10	27	8	19			6:30pm	7:00pm
Green B LEASE	WELL # 1		LOCATION Zurich KS 6 3/4 North East			COUNTY Rooks	STATE KS
OLD OR <u>NEW</u> (Circle one)			Side				

CONTRACTOR Discovery Drilling Rig #1  
 TYPE OF JOB Surface  
 HOLE SIZE 12 1/4 T.D. 218'  
 CASING SIZE 5 5/8 DEPTH 218'  
 TUBING SIZE \_\_\_\_\_ DEPTH \_\_\_\_\_  
 DRILL PIPE \_\_\_\_\_ DEPTH \_\_\_\_\_  
 TOOL \_\_\_\_\_ DEPTH \_\_\_\_\_  
 PRES. MAX \_\_\_\_\_ MINIMUM \_\_\_\_\_  
 MEAS. LINE \_\_\_\_\_ SHOE JOINT \_\_\_\_\_  
 CEMENT LEFT IN CSG. 15'  
 PERFS. \_\_\_\_\_  
 DISPLACEMENT 12.90 Bbl

OWNER \_\_\_\_\_  
 CEMENT AMOUNT ORDERED 150 ccm 3/CC 21 Gel  
 COMMON \_\_\_\_\_ @ \_\_\_\_\_  
 POZMIX \_\_\_\_\_ @ \_\_\_\_\_  
 GEL \_\_\_\_\_ @ \_\_\_\_\_  
 CHLORIDE \_\_\_\_\_ @ \_\_\_\_\_  
 ASC \_\_\_\_\_ @ \_\_\_\_\_  
**RECEIVED** \_\_\_\_\_ @ \_\_\_\_\_  
**OCT 05 2010** \_\_\_\_\_ @ \_\_\_\_\_  
**KCC WICHITA** \_\_\_\_\_ @ \_\_\_\_\_  
 HANDLING \_\_\_\_\_ @ \_\_\_\_\_  
 MILEAGE \_\_\_\_\_ @ \_\_\_\_\_  
 TOTAL \_\_\_\_\_

**EQUIPMENT**

PUMP TRUCK # 417 CEMENTER John Roberts  
 HELPER Shane  
 BULK TRUCK # 410 DRIVER Ron  
 BULK TRUCK # \_\_\_\_\_ DRIVER \_\_\_\_\_

**REMARKS:**

Est Circulation  
Mix 150 cc cement  
Displace w/ 12.9 Bbl H<sub>2</sub>O  
Cement Did Circulate!

CHARGE TO: Black Diamond 0-1  
 STREET \_\_\_\_\_  
 CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

To Allied Cementing Co., LLC.  
 You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME \_\_\_\_\_  
 SIGNATURE [Signature]

**SERVICE**

DEPTH OF JOB \_\_\_\_\_  
 PUMP TRUCK CHARGE \_\_\_\_\_  
 EXTRA FOOTAGE \_\_\_\_\_ @ \_\_\_\_\_  
 MILEAGE \_\_\_\_\_ @ \_\_\_\_\_  
 MANIFOLD \_\_\_\_\_ @ \_\_\_\_\_  
 TOTAL \_\_\_\_\_

**PLUG & FLOAT EQUIPMENT**

\_\_\_\_\_ @ \_\_\_\_\_  
 \_\_\_\_\_ @ \_\_\_\_\_  
 \_\_\_\_\_ @ \_\_\_\_\_  
 \_\_\_\_\_ @ \_\_\_\_\_  
 TOTAL \_\_\_\_\_

SALES TAX (If Any) \_\_\_\_\_  
 TOTAL CHARGES \_\_\_\_\_  
 DISCOUNT \_\_\_\_\_ IF PAID IN 30 DAYS

WELL NO. **BLACH DIAMOND**

WELL NO. **B-1**

LEASE **GREEN**

JOB TYPE **LONGSTRING**

TICKET NO. **17565**

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	1230							ON LOCATION
								CMT: 550 SWS 5M @ 1/2" FW CELL
								RTD 3580 SET PIPE 3569 SJ 84.85 INSECT 3534
								5 1/2 15.5 #/ft NEW
								RECEIVED
								CENT 2.5.8.11.14.50 BASKETS 3.11.49
								OCT 05 2010
	1300							KCC WICHITA
	1410							START CSG & FLOWATEQU
								TAG BOTTOM, DROP BALL
	1415							BREAK CIRC & ROTATE PIPE
	1450		7.5					PLUS RH 30 SWS, MH 15 SWS
	1455	5.0	12			250		START MUD FLUSH 500CK
		5	20			5		MCL FLUSH
		5.5	0			300		START CMT 330 SWS @ 11.2
			85					CMT ON BOTTOM
			182					START CMT 100 SWS @ 12.7
			218					" " 100 SWS @ 14.0
			247					END CMT
								DROP LO PLUG, WASHOUT PL
	1550	6.0	0			100		START DLOG
		6.0	10.0			300		<del>50</del> CIRC CMT, LOST CIRC
		6.0	40.0			300		
		4.0	60.0			500		
			65.0			650		GOT CIRC BACK!, ALL CMT
			80.0			800		50 SWS TO PIT!
	1615		84.1			1500		LAND PLUG
	1620							RELEASE DRY
								DAVIDSON
								JOB COMPLETE
								THANK YOU!
								DAVE, JOSH, BEANE, JASUAF.



# Discovery Drilling

OPERATOR: BLACK DIAMOND OIL, INC. LEASE: GREEN "B" # 1

RIG # 1 DATE: April 16, 2010

DEPTH @ 7:00 A.M. 446 PRESENT OPERATIONS: Drilling

DEPTH PREVIOUS @ 7:00 A.M. 0

PROGRESS: 446

MUD VIS. 26 WT. 9.0 W.L. N/C

DOWN TIME: None REASON: \_\_\_\_\_

FUEL 29" OILS 9"C 16"90wt 9"M PRO-PANE 84%

WATER Tank(full) Pit(full) REMARKS: Bit # 2= 3 1/2 Hrs.-Ran 5 Joints New 23# 8 5/8" Casing

DRILLING <u>5 1/2</u>	<del>X</del> <u>Rig Up</u> <u>7 1/2</u>	<u>Tally 208.44 Set @ 218.44'KB Cement By Allied W/150sk</u>
CONN <u>1 1/2</u>	<del>X</del> <u>Rat Hole</u> <u>1/2</u>	<u>Common 2%Gel&amp;3%CC(did Circ) Completed @ 7:00PM 4/15/1</u>
JET _____	<del>X</del> <u>WOC</u> <u>8</u>	<u>SPUD 12 1/2" @ 2:30PM 4/15/10-Survey @ 218' (3/4 )</u>
<u>8 5/8"</u> TRIP <u>1</u>	<u>Circ.</u> <u>1/2</u>	<u>Drilled Plug @ 3:00AM 4/16/10</u>

REPAIRS \_\_\_\_\_

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OCT 05 2010  
KCC WICHITA



**Discovery  
Drilling**

OPERATOR: BLACK DIAMOND OIL, INC. LEASE: GREEN "B" # 1  
 RIG # 1 DATE: April 17, 2010  
 DEPTH @ 7:00 A.M. 2251 PRESENT OPERATIONS: Drilling  
 DEPTH PREVIOUS @ 7:00 A.M. 446  
 PROGRESS: 1805  
 MUD VIS. 27 WT. 9.8 W.L. N/C  
 DOWN TIME: None REASON: \_\_\_\_\_  
 FUEL 84" OILS 19"C 16"90wt 20"M PRO-PANE 84%  
 WATER Tank(full) Pit(1/2) REMARKS: Bit # 2= 20 1/2 Hrs.  
 DRILLING 17 DST \_\_\_\_\_ Anhydrite (1427-1467)  
 CONN 4 3/4 OTHER \_\_\_\_\_  
 JET 1 1/2 Rig Ser. 3/4  
 TRIP \_\_\_\_\_  
 REPAIRS \_\_\_\_\_

RECEIVED  
 OCT 05 2010  
 KCC WICHITA



# Discovery Drilling

OPERATOR: BLACK DIAMOND OIL, INC. LEASE: GREEN "B" # 1

RIG # 1 DATE: April 18, 2010

DEPTH @ 7:00 A.M. 3065 PRESENT OPERATIONS: Drilling

DEPTH PREVIOUS @ 7:00 A.M. 2251

PROGRESS: 814

MUD VIS. 50 WT. 8.7 W.L. 8.0

DOWN TIME: None REASON: \_\_\_\_\_

FUEL 65" OILS 19"C 16"90wt 20"M PRO-PANE 84%

WATER Tank(full) Pit(1/2) REMARKS: Bit # 2= 40 Hrs.

DRILLING 19 1/2 DST \_\_\_\_\_ Displaced Mud @ 2884'

CONN 2 1/2 OTHER \_\_\_\_\_

JET 1 1/2 Rig Ser. 3/4 \_\_\_\_\_

TRIP \_\_\_\_\_

REPAIRS \_\_\_\_\_

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OCT 05 2010  
KCC WICHITA



# Discovery Drilling

OPERATOR: BLACK DIAMOND OIL, INC.

LEASE: GREEN "B" # 1

RIG # 1

DATE: April 19, 2010

DEPTH @ 7:00 A.M. 3312

PRESENT OPERATIONS: DST # 2

DEPTH PREVIOUS @ 7:00 A.M. 3065

PROGRESS: 247

MUD VIS. 55

WT. 9.0

W.L. 8.8

DOWN TIME: None

REASON: \_\_\_\_\_

FUEL 55"

OILS 19"C 16"90wt 20"M PRO-PANE 84%

WATER Tank(full) Pit(1/3)

REMARKS: Bit # 2= 48½ Hrs.

DRILLING 9

DST #1&2(9½)(3/4)

CMC=\$ 6,658.80

CONN 3/4

OTHER \_\_\_\_\_

DST # 1(3120-3209)(89')

JET \_\_\_\_\_

Rig Ser. ½

Pipe Strap @ 3209' (.48 Short)

Short \_\_\_\_\_

Circ. 3

Survey @ 3209' (1°)

TRIP 1

REGAIDC

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OCT 05 2010  
KCC WICHITA





# Discovery Drilling

OPERATOR: BLACK DIAMOND OIL, INC. LEASE: GREEN "B" # 1

RIG # 1 DATE: April 20, 2010

DEPTH @ 7:00 A.M. 3530 PRESENT OPERATIONS: Drilling

DEPTH PREVIOUS @ 7:00 A.M. 3312

PROGRESS: 218

MUD VIS. 54 WT. 9.1 W.L. 8.8

DOWN TIME: None REASON: \_\_\_\_\_

FUEL 45" OILS 19"C 16"90wt 16"M PRO-PANE 84%

WATER Tank(full) Pit(1/2) REMARKS: Bit # 2= 57 1/2 Hrs.

DRILLING 8 3/4 DST #2 (6 1/2) CMC=\$ 6,658.80

CONN 1/2 MUD XXXXXX 1/2 Survey @ 3530' (1 1/2)

JET \_\_\_\_\_ Rig Ser. 1/2 LTD= 3528' @ 3530' RTD

To Log 3 Log 4 1/2

\_\_\_\_\_ Circ. 1

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Discovery Drilling

OPERATOR: BLACK DIAMOND OIL, INC.

LEASE: GREEN "B" # 1

RIG # 1

DATE: April 21, 2010

DEPTH @ 7:00 A.M. 3580 RTD

PRESENT OPERATIONS: Completed

DEPTH PREVIOUS @ 7:00 A.M. 3530

PROGRESS: 50

MUD VIS. \_\_\_\_\_

WT. \_\_\_\_\_

W.L. \_\_\_\_\_

DOWN TIME: \_\_\_\_\_

REASON: \_\_\_\_\_

FUEL \_\_\_\_\_

OILS \_\_\_\_\_ PRO-PANE \_\_\_\_\_

WATER \_\_\_\_\_

REMARKS: Ran 81 Joints New 15.5# 5 1/2" Casing Tally 3561 Set @ 3569'KB Cement By Swift W/285sks SMDC @ 11.2#/Gal & 200sks SMDC @ 14#/Gal(Did Circ 60sks To Pit)(30sks In Rat Hole)(15sks In Mouse Hole)(Completed @ 4:15PM 4/20 10)(Rig Released @ 4:45PM 4/20/2010)

DRILLING \_\_\_\_\_

DST \_\_\_\_\_

CONN \_\_\_\_\_

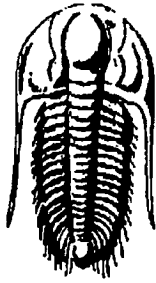
OTHER \_\_\_\_\_

JET \_\_\_\_\_

TRIP \_\_\_\_\_

REPAIRS \_\_\_\_\_

RECEIVED  
OCT 05 2010  
KCC WICHITA



**TRILOBITE  
TESTING, INC.**

**DRILL STEM TEST REPORT**

Prepared For: **Black Diamond Oil, Inc.**

PO Box 641  
Hays KS 67601

ATTN: Ken Vehighe

**27-8s-19w Rooks KS**

**Green B #1**

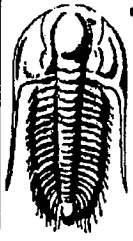
Start Date: 2010.04.18 @ 17:15:23

End Date: 2010.04.18 @ 23:05:17

Job Ticket #: 38552                      DST #: 1

Trilobite Testing, Inc  
PO Box 1733 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

RECEIVED  
OCT 05 2010  
KCC WICHITA



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Black Diamond Oil, Inc.

**Green B #1**

PO Box 641  
Hays KS 67601

**27-8s-19w Rooks KS**

Job Ticket: 38552

DST#: 1

ATTN: Ken Vehighe

Test Start: 2010.04.18 @ 17:15:23

## GENERAL INFORMATION:

Formation: **Oread/Toronto**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:36:18

Time Test Ended: 23:05:17

Test Type: Conventional Bottom Hole

Tester: Paul Simpson

Unit No: 42

Interval: **3120.00 ft (KB) To 3209.00 ft (KB) (TVD)**

Reference Elevations: 2013.00 ft (KB)

Total Depth: 3209.00 ft (KB) (TVD)

2005.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

**Serial #: 8365**

Inside

Press@RunDepth: 164.32 psig @ 3191.01 ft (KB)

Capacity: 8000.00 psig

Start Date: 2010.04.18

End Date: 2010.04.18

Last Calib.: 2010.04.18

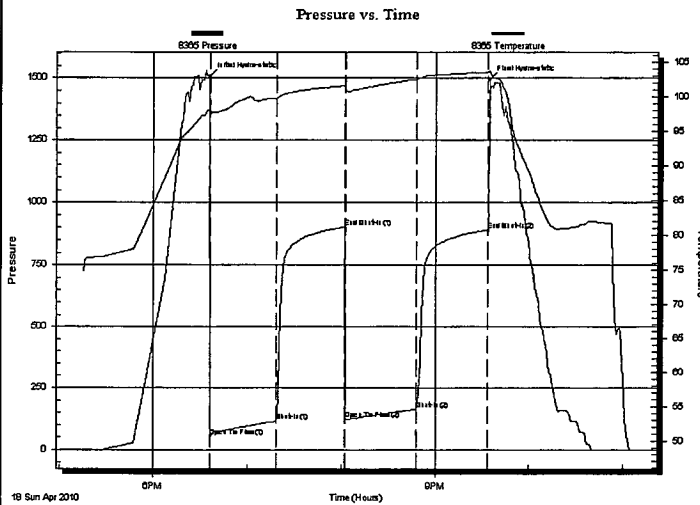
Start Time: 17:15:23

End Time: 23:05:17

Time On Btm: 2010.04.18 @ 18:35:48

Time Off Btm: 2010.04.18 @ 21:34:18

**TEST COMMENT:** IF- 1/2" blow building to bottom of bucket in 42 minutes  
IS- no blow  
FF- surface blow building to 8"  
FS- no blow



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1505.75	98.01	Initial Hydro-static
1	52.63	97.20	Open To Flow (1)
43	116.30	99.73	Shut-In(1)
86	901.94	101.56	End Shut-In(1)
87	123.28	101.12	Open To Flow (2)
132	164.32	102.47	Shut-In(2)
178	890.04	103.46	End Shut-In(2)
179	1494.87	103.68	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
180.00	muddy w water 60% w water 40% mud	2.24
35.00	w atery mud 15% w ater 85% mud	0.49
40.00	clean oil	0.56

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Black Diamond Oil, Inc.

**Green B #1**

PO Box 641  
Hays KS 67601

**27-8s-19w Rooks KS**

ATTN: Ken Vehighe

Job Ticket: 38552

DST#: 1

Test Start: 2010.04.18 @ 17:15:23

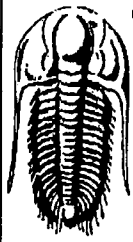
## Tool Information

Drill Pipe:	Length: 3080.00 ft	Diameter: 3.80 inches	Volume: 43.20 bbl	Tool Weight: 3500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: inches	Volume: - bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 31.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 60000.00 lb
			Total Volume: - bbl	Tool Chased ft
Drill Pipe Above KB:	12.00 ft			String Weight: Initial 49000.00 lb
Depth to Top Packer:	3120.00 ft			Final 51000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	94.02 ft			
Tool Length:	115.02 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			3100.00	
Shut In Tool	5.00			3105.00	
Hydraulic tool	5.00			3110.00	
Packer	5.00			3115.00	21.00 Bottom Of Top Packer
Packer	5.00			3120.00	
Stubb	1.00			3121.00	
Perforations	5.00			3126.00	
Change Over Sub	1.00			3127.00	
Blank Spacing	63.00			3190.00	
Change Over Sub	1.00			3191.00	
Recorder	0.01	8365	Inside	3191.01	
Recorder	0.01	6625	Outside	3191.02	
Perforations	20.00			3211.02	
Bullnose	3.00			3214.02	94.02 Bottom Packers & Anchor

**Total Tool Length: 115.02**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Black Diamond Oil, Inc.

**Green B #1**

PO Box 641  
Hays KS 67601

**27-8s-19w Rooks KS**

ATTN: Ken Vehighe

Job Ticket: 38552

DST#: 1

Test Start: 2010.04.18 @ 17:15:23

## Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API: 34 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: 74000 ppm
Viscosity: 58.00 sec/qt	Cushion Volume: bbl	
Water Loss: 8.76 in <sup>3</sup>	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: ppm		
Filter Cake: inches		

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
180.00	muddy w ater 60% w ater 40% mud	2.243
35.00	w atery mud 15% w ater 85% mud	0.491
40.00	clean oil	0.561

Total Length: 255.00 ft      Total Volume: 3.295 bbl

Num Fluid Samples: 0

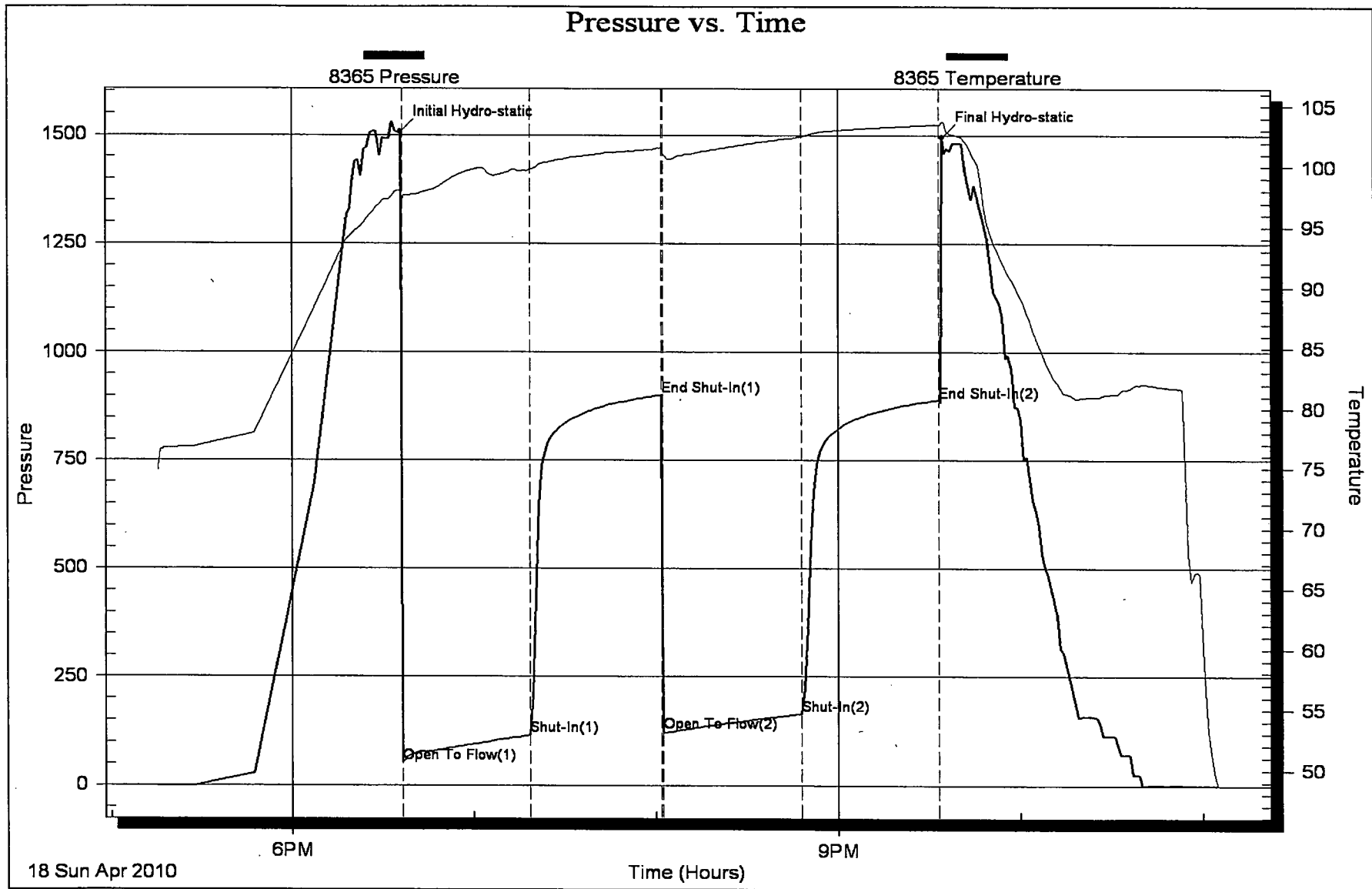
Num Gas Bombs: 0

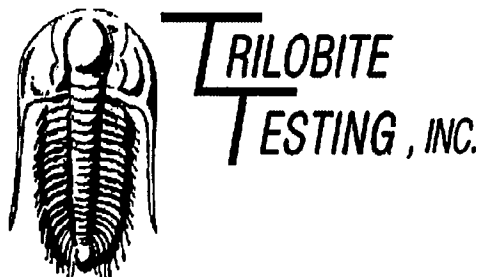
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: .14@51





## DRILL STEM TEST REPORT

Prepared For: **Black Diamond Oil, Inc.**

PO Box 641  
Hays KS 67601

ATTN: Ken Vehighe

**27-8s-19w Rooks KS**

**Green B #1**

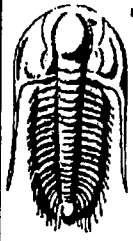
Start Date: 2010.04.19 @ 07:45:32

End Date: 2010.04.19 @ 11:52:02

Job Ticket #: 38553                      DST #: 2

Trilobite Testing, Inc  
PO Box 1733 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Black Diamond Oil, Inc.

**Green B #1**

PO Box 641  
Hays KS 67601

**27-8s-19w Rooks KS**

ATTN: Ken Vehighe

Job Ticket: 38553

DST#: 2

Test Start: 2010.04.19 @ 07:45:32

## GENERAL INFORMATION:

Formation: **Lansing E-G**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:14:32

Time Test Ended: 11:52:02

Test Type: Conventional Bottom Hole

Tester: Paul Simpson / Brian

Unit No: 42

Interval: **3264.00 ft (KB) To 3312.00 ft (KB) (TVD)**

Total Depth: 3312.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2013.00 ft (KB)

2005.00 ft (CF)

KB to GR/CF: 8.00 ft

**Serial #: 8365**

Inside

Press@RunDepth: 222.36 psig @ 3299.01 ft (KB)

Start Date: 2010.04.19

End Date:

2010.04.19

Start Time: 07:45:37

End Time:

11:52:02

Capacity: 8000.00 psig

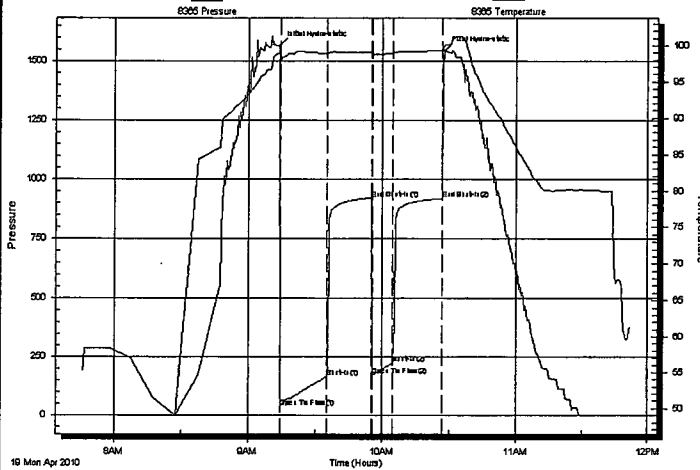
Last Calib.: 2010.04.19

Time On Btm: 2010.04.19 @ 09:14:02

Time Off Btm: 2010.04.19 @ 10:28:02

**TEST COMMENT:** IF- 1" blow building to bottom of bucket in 5 minutes  
 IS- no blow  
 FF - 1" blow building to bottom of bucket in 6 minutes  
 FSI - no blow

Pressure vs. Time



## PRESSURE SUMMARY

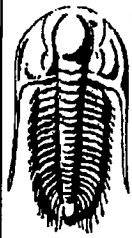
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1563.46	98.89	Initial Hydro-static
1	35.61	98.00	Open To Flow (1)
21	163.82	98.89	Shut-In(1)
41	917.01	99.04	End Shut-In(1)
42	171.06	98.82	Open To Flow (2)
51	222.36	98.89	Shut-In(2)
73	916.19	99.35	End Shut-In(2)
74	1542.51	99.97	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
180.00	salt water	2.24
180.00	muddy w ater 80% w ater 20% mud	2.52
40.00	mud w ith oil spots	0.56
0.00	Rw .11@69 = 68,000	0.00

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

Black Diamond Oil, Inc.

**Green B #1**

PO Box 641  
Hays KS 67601

**27-8s-19w Rooks KS**

Job Ticket: 38553

**DST#: 2**

ATTN: Ken Vehighe

Test Start: 2010.04.19 @ 07:45:32

**Tool Information**

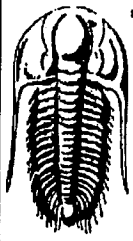
Drill Pipe:	Length: 3237.00 ft	Diameter: 3.80 inches	Volume: 45.41 bbl	Tool Weight:	3500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: inches	Volume: - bbl	Weight set on Packer:	20000.00 lb
Drill Collar:	Length: 31.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose:	60000.00 lb
			<u>Total Volume: - bbl</u>	Tool Chased	ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial	50000.00 lb
Depth to Top Packer:	3264.00 ft			Final	54000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	48.02 ft				
Tool Length:	69.02 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

<b>Tool Description</b>	<b>Length (ft)</b>	<b>Serial No.</b>	<b>Position</b>	<b>Depth (ft)</b>	<b>Accum. Lengths</b>
-------------------------	--------------------	-------------------	-----------------	-------------------	-----------------------

Change Over Sub	1.00			3244.00	
Shut In Tool	5.00			3249.00	
Hydraulic tool	5.00			3254.00	
Packer	5.00			3259.00	21.00 Bottom Of Top Packer
Packer	5.00			3264.00	
Stubb	1.00			3265.00	
Perforations	1.00			3266.00	
Change Over Sub	1.00			3267.00	
Blank Spacing	31.00			3298.00	
Change Over Sub	1.00			3299.00	
Recorder	0.01	8365	Inside	3299.01	
Recorder	0.01	6625	Outside	3299.02	
Perforations	10.00			3309.02	
Bullnose	3.00			3312.02	48.02 Bottom Packers & Anchor

**Total Tool Length: 69.02**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Black Diamond Oil, Inc.

**Green B #1**

PO Box 641  
Hays KS 67601

**27-8s-19w Rooks KS**

Job Ticket: 38553

**DST#: 2**

ATTN: Ken Vehighe

Test Start: 2010.04.19 @ 07:45:32

## 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:

68000 ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.74 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
180.00	salt water	2.243
180.00	muddy water 80% water 20% mud	2.525
40.00	mud with oil spots	0.561
0.00	Rw .11@69 = 68,000	0.000

Total Length: 400.00 ft

Total Volume: 5.329 bbl

Num Fluid Samples: 0

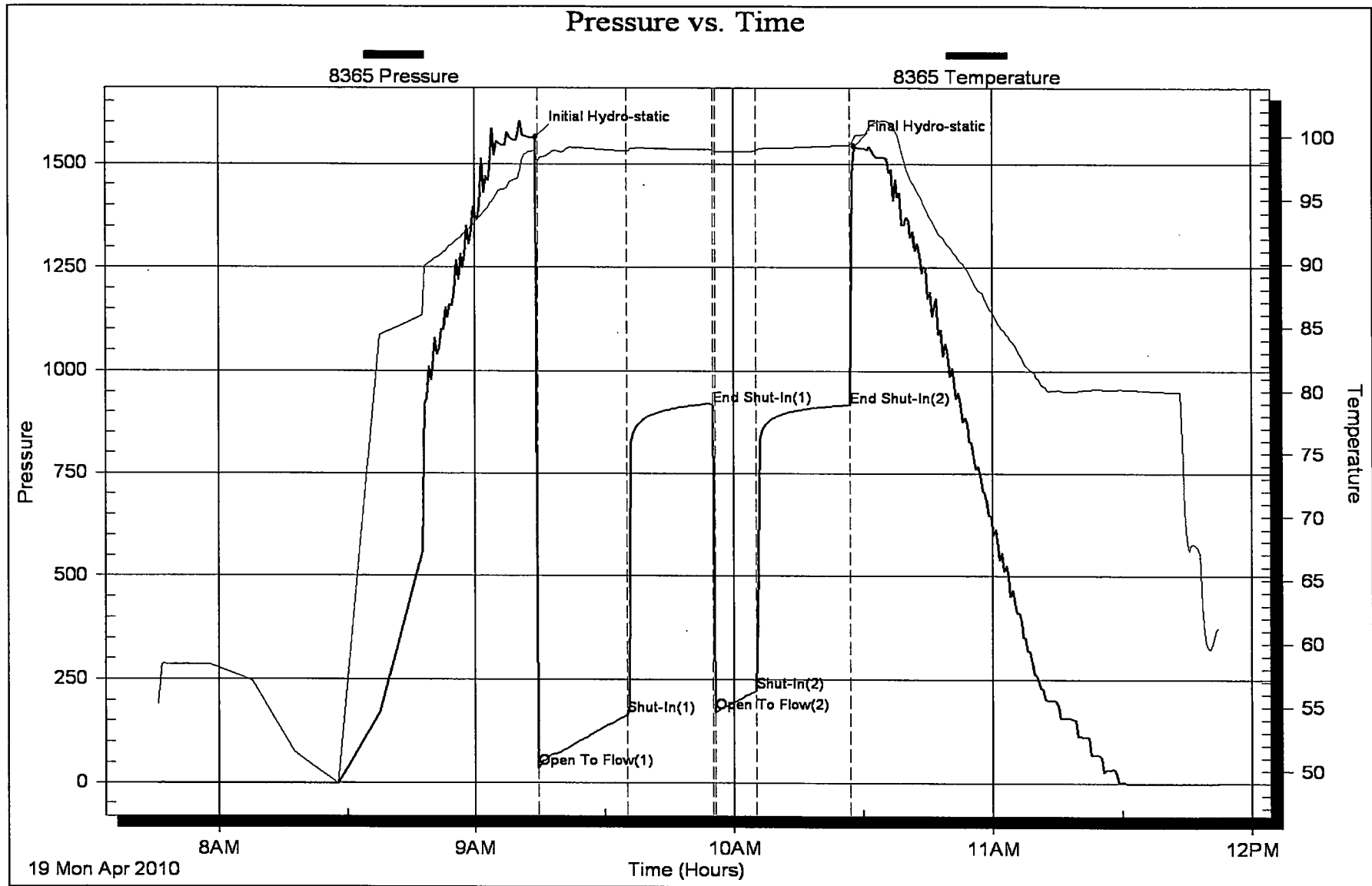
Num Gas Bombs: 0

Serial #:

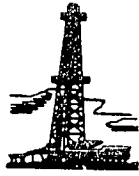
Laboratory Name:

Laboratory Location:

Recovery Comments:



P. O. Box 763  
Hays, Kansas 67601



**Discovery  
Drilling**

Pipe and Tubing Tally Book

RECEIVED Office 785/623-2920  
OCT 05 2010 Cellular 785/635-1511  
Rig 785/635-1201  
KCC WICHITA

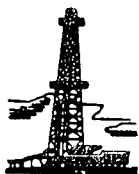
DATE 4/20/10 COMPANY BLACK DIAMOND, Inc. LEASE GREEN "B" Well No. 1  
 SIZE 5 1/2" WEIGHT 15.5 MAKE \_\_\_\_\_ GRADE \_\_\_\_\_ RANGE 2.3  
 THREAD 80 COLLAR LENGTH \_\_\_\_\_ CONDITION NEW TRANSFER NOS. \_\_\_\_\_ OVERALL TALLY   
 THREADS OFF TALLY

Joint No.	Feet	Hnd	Joint No.	Feet	Hnd	Joint No.	Feet	Hnd	Joint No.	Feet	Hnd	Joint No.	Feet	Hnd	Joint No.	Feet	Hnd	Joint No.	Feet	Hnd	Joint No.	Feet	Hnd																				
1	34	89	21	44	50	41	44	52	61	44	40	81	44	52	101			121			141																						
2	34	70	22	44	52	42	44	51	62	44	55	82	44	41	102			122			142																						
3	44	53	23	44	50	43	44	53	63	44	50	83	44	47	103			123			143																						
4	44	51	24	36	72	44	44	51	64	44	51	84	44	52	104			124			144																						
5	44	55	25	44	49	45	44	57	65	44	52	85	44	52	105			125			145																						
6	44	47	26	44	16	46	44	50	66	44	53	86	44	48	106			126			146																						
7	44	53	27	44	54	47	44	51	67	44	53	87	44	53	107			127			147																						
8	44	47	28	44	46	48	44	49	68	44	57	88	44	51	108			128			148																						
9	37	00	29	44	52	49	44	50	69	44	30	89	44	53	109			129			149																						
10	44	50	30	44	50	50	44	56	70	44	50	90	44	54	110			130			150																						
11	44	49	31	43	90	51	44	48	71	44	55	91			111			131			151																						
12	44	53	32	44	52	52	44	40	72	44	52	92			112			132			152																						
13	44	54	33	44	50	53	44	55	73	44	53	93			113			133			153																						
14	44	56	34	44	41	54	44	52	74	44	51	94			114			134			154																						
15	44	55	35	44	48	55	44	10	75	44	55	95			115			135			155																						
16	44	52	36	44	51	56	44	50	76	44	52	96			116			136			156																						
17	44	50	37	44	54	57	44	25	77	44	51	97			117			137			157																						
18	44	53	38	44	51	58	42	84	78	44	54	98			118			138			158																						
19	44	54	39	44	49	59	44	42	79	44	50	99			119			139			159																						
20	38	40	40	44	50	60	44	05	80	44	51	100			120			140			160																						
																						857	311			881	27			897	31			890	15			445	03				

Totals 3961.07

Drillers TD 3580 Loggers TD 3528  
 No. Jts. Run 81 Size 5 1/2 Wt. 15.5 Tested NEW  
 Cent @ 2 5 8 11 50  
 Basket @ 3 11 49 D.V. Tool @ None Port Collar @ None  
 Cemented By SLIFT SEU SKs. Type Cement 550 SKS SMD (30 SKS RAT, 15 Mouse Hole)  
 Flush CIRC 60 SKS To pit.  
 Jts. To Be Left Out 82 - 90  
 Shoe Jt. 34.89 Pipe Set @ 3569 KB Off Bottom 11'  
 Plug Down 45 A.M. (P.M.) 4/20/10 Rig Release @ 445 A.M. (P.M.) 4/20/10  
 Job By [Signature]  
 Pipe Left On Location 9 Jts. Talley 90 Threads On \_\_\_\_\_

P.O. Box 763  
Hays, Kansas 67601



# Discovery Drilling

## Pipe and Tubing Tally Book

Office 785/623-2920  
Cellular 785/635-1511  
Rig 785/635-1201

RECEIVED  
OCT 05 2010

KCC WICHITA

DATE 4/15/10 COMPANY BLACK DIAMOND D.L. LEASE Green Well No. 1  
 SIZE 8 5/8" WEIGHT 23# MAKE \_\_\_\_\_ GRADE \_\_\_\_\_ RANGE 3  
 THREAD 8RD COLLAR LENGTH \_\_\_\_\_ CONDITION New TRANSFER NOS. \_\_\_\_\_ OVERALL TALLY   
 THREADS OFF TALLY

Joint No.	Feet	Hnd	Joint No.	Feet	Hnd	Joint No.	Feet	Hnd	Joint No.	Feet	Hnd	Joint No.	Feet	Hnd	Joint No.	Feet	Hnd	Joint No.	Feet	Hnd	Joint No.	Feet	Hnd																				
1	39	80	21			41			61			81			101			121			141																						
2	42	15	22			42			62			82			102			122			142																						
3	42	15	23			43			63			83			103			123			143																						
4	42	19	24			44			64			84			104			124			144																						
5	42	15	25			45			65			85			105			125			145																						
6			26			46			66			86			106			126			146																						
7			27			47			67			87			107			127			147																						
8			28			48			68			88			108			128			148																						
9			29			49			69			89			109			129			149																						
10			30			50			70			90			110			130			150																						
11			31			51			71			91			111			131			151																						
12			32			52			72			92			112			132			152																						
13			33			53			73			93			113			133			153																						
14			34			54			74			94			114			134			154																						
15			35			55			75			95			115			135			155																						
16			36			56			76			96			116			136			156																						
17			37			57			77			97			117			137			157																						
18			38			58			78			98			118			138			158																						
19			39			59			79			99			119			139			159																						
20			40			60			80			100			120			140			160																						
<u>208 44</u>																																											
<u>218 44</u>																																											
																						Totals																					

Drillers TD 218 Loggers TD \_\_\_\_\_  
 No. Jts. Run 5 Size 8 5/8" Wt. 23# Tested NEW  
 Cent@ \_\_\_\_\_  
 Basket@ \_\_\_\_\_ D.V. Tool@ \_\_\_\_\_ Port Collar@ \_\_\_\_\_  
 Cemented By ALLIED SKs. Type Cement 150 SKS COM 270GEL 370CC  
 Flush (CEM CIRC)  
 Jts. To Be Left Out NONE  
 Shoe Jt. 39.80 Pipe Set@ 218.44 Off Bottom ON  
 Plug Down 7.00 A.M. (P.M.) 14/15/10 Rig Release@ \_\_\_\_\_ A.M. P.M. / /  
 Job By CLIFF  
 Pipe Left On Location NONE Jts. Talley \_\_\_\_\_ Threads On \_\_\_\_\_