



KANSAS CORPORATION COMMISSION 1095977  
OIL & GAS CONSERVATION DIVISION

Form ACO-1  
June 2009

Form Must Be Typed  
Form must be Signed  
All blanks must be Filled

WELL COMPLETION FORM  
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 7076  
Name: Black Diamond Oil, Inc.  
Address 1: PO BOX 641  
Address 2: \_\_\_\_\_  
City: HAYS State: KS Zip: 67601 + 0641  
Contact Person: Kenneth Vehige  
Phone: ( 785 ) 625-5891  
CONTRACTOR: License # 33575  
Name: WW Drilling, LLC  
Wellsite Geologist: Jeff Lawler  
Purchaser: Coffeyville

Designate Type of Completion:

- New Well     Re-Entry     Workover
- Oil     WSW     SWD     SLOW
- Gas     D&A     ENHR     SIGW
- OG     GSW     Temp. Abd.
- CM (Coal Bed Methane)
- Cathodic     Other (Core, Expl., 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  
 Conv. to GSW

Plug Back: \_\_\_\_\_ Plug Back Total Depth \_\_\_\_\_  
 Commingled    Permit #: \_\_\_\_\_  
 Dual Completion    Permit #: \_\_\_\_\_  
 SWD    Permit #: \_\_\_\_\_  
 ENHR    Permit #: \_\_\_\_\_  
 GSW    Permit #: \_\_\_\_\_

|                                   |                  |   |
|-----------------------------------|------------------|---|
| <u>1/19/2012</u>                  | <u>1/24/2012</u> | <u>1/25/2012</u>                        |
| Spud Date or<br>Recompletion Date | Date Reached TD  | Completion Date or<br>Recompletion Date |

API No. 15 - 15-147-20662-00-00  
Spot Description: \_\_\_\_\_  
SW NE SW SW Sec. 7 Twp. 4 S. R. 19  East  West  
860 Feet from  North /  South Line of Section  
900 Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:  
 NE     NW     SE     SW

County: Phillips  
Lease Name: Zillinger 'D' Well #: 1-7  
Field Name: Wildcat  
Producing Formation: Lansing KC  
Elevation: Ground: 2005 Kelly Bushing: 2010  
Total Depth: 3500 Plug Back Total Depth: \_\_\_\_\_  
Amount of Surface Pipe Set and Cemented at: 218 Feet  
Multiple Stage Cementing Collar Used?  Yes  No  
If yes, show depth set: 1500 Feet  
If Alternate II completion, cement circulated from: 1500  
feet depth to: 0 w/ 500 sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: 1000 ppm Fluid volume: 500 bbls  
Dewatering method used: Hauled to Disposal  
Location of fluid disposal if hauled offsite: \_\_\_\_\_  
Operator Name: Black Diamond Oil, Inc.  
Lease Name: States Ag SWD License #: 7076  
Quarter NE Sec. 36 Twp. 4 S. R. 21  East  West  
County: Rooks Permit #: D-31021

AFFIDAVIT

I am the affiant and I hereby certify that 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.

Submitted Electronically

KCC Office Use ONLY

- Letter of Confidentiality Received  
Date: \_\_\_\_\_
- Confidential Release Date: \_\_\_\_\_
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT  I  II  III Approved by: Deanna Garrison Date: 11/06/2012



1095977

Operator Name: Black Diamond Oil, Inc. Lease Name: Zillinger 'D' Well #: 1-7  
 Sec. 7 Twp. 4 S. R. 19  East  West County: Phillips

**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 complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

|  |  |       |     |       |           |      |     |        |      |      |         |      |       |            |      |       |
|--|--|-------|-----|-------|-----------|------|-----|--------|------|------|---------|------|-------|------------|------|-------|
| Drill Stem Tests Taken <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No<br><i>(Attach Additional Sheets)</i><br><br>Samples Sent to Geological Survey <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No<br><br>Cores Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No<br>Electric Log Run <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No<br>Electric Log Submitted Electronically <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No<br><i>(If no, Submit Copy)</i><br><br>List All E. Logs Run:<br><br>Neutron/Density<br>Micro<br>Dual Induction | <input checked="" type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample<br><br><table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:60%;">Name</td> <td style="width:20%;">Top</td> <td style="width:20%;">Datum</td> </tr> <tr> <td>Anhydrite</td> <td>1580</td> <td>435</td> </tr> <tr> <td>Topeka</td> <td>2977</td> <td>-962</td> </tr> <tr> <td>Heebner</td> <td>3175</td> <td>-1160</td> </tr> <tr> <td>Lansing KC</td> <td>3221</td> <td>-1206</td> </tr> </table> | Name  | Top | Datum | Anhydrite | 1580 | 435 | Topeka | 2977 | -962 | Heebner | 3175 | -1160 | Lansing KC | 3221 | -1206 |
| Name   | Top  | Datum |     |       |           |      |     |        |      |      |         |      |       |            |      |       |
| Anhydrite  | 1580   | 435   |     |       |           |      |     |        |      |      |         |      |       |            |      |       |
| Topeka   | 2977   | -962  |     |       |           |      |     |        |      |      |         |      |       |            |      |       |
| Heebner  | 3175   | -1160 |     |       |           |      |     |        |      |      |         |      |       |            |      |       |
| Lansing KC   | 3221   | -1206 |     |       |           |      |     |        |      |      |         |      |       |            |      |       |

| CASING RECORD <input checked="" 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 Pipe  | 12.25             | 8.625                     | 23                | 218           | Common         | 160          | 3%cc, 2% gel               |
| Production String   | 7.875             | 4.5                       | 10.5              | 3499          | Common         | 180          | 10% salt                   |
|   |                   |                           |                   |               |                |              |                            |

| ADDITIONAL CEMENTING / SQUEEZE RECORD |                  |                |              |                            |
|---------------------------------------|------------------|----------------|--------------|----------------------------|
| Purpose:                              | Depth Top Bottom | Type of Cement | # Sacks Used | Type and Percent Additives |
| ___ Perforate                         |                  |                |              |                            |
| ___ Protect Casing                    | -                |                |              |                            |
| ___ Plug Back TD                      |                  |                |              |                            |
| ___ Plug Off Zone                     | -                |                |              |                            |

| Shots Per Foot | PERFORATION RECORD - Bridge Plugs Set/Type<br>Specify Footage of Each Interval Perforated | Acid, Fracture, Shot, Cement Squeeze Record<br><i>(Amount and Kind of Material Used)</i> | Depth |
|----------------|---|--|-------|
| 4              | 3366-3368   | 250 g, 15% MCA; 1000 g, 20% NE   |       |
| 4              | 3297-3300   | 500 g, 20% MCA; 1500 g, 28% NE   |       |
|                |   |  |       |
|                |   |  |       |

|  |   |
|--|---|
| TUBING RECORD: Size: <u>2 3/8</u> Set At: <u>3424</u> Packer At: <u> </u> Liner Run: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |   |
| Date of First, Resumed Production, SWD or ENHR.<br><u>04/20/2012</u>   | Producing Method:<br><input type="checkbox"/> Flowing <input checked="" type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain) <u> </u> |
| Estimated Production Per 24 Hours  | Oil Bbls. <u>2</u> Gas Mcf <u>0</u> Water Bbls. <u>10</u> Gas-Oil Ratio <u> </u> Gravity <u> </u>   |

|  |   |  |
|--|---|--|
| DISPOSITION OF GAS:<br><input checked="" type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease<br><i>(If vented, Submit ACO-18.)</i> | METHOD OF COMPLETION:<br><input checked="" type="checkbox"/> Open Hole <input checked="" type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled<br><i>(Submit ACO-5) (Submit ACO-4)</i><br><input type="checkbox"/> Other (Specify) <u> </u> | PRODUCTION INTERVAL:<br><u>3368-3297</u> |
|--|---|--|

API# 15-147-20662-00-00

Operator: Black Diamond Oil

Well Name & No: Zillinger D #1-7

Location: 860 FSL & 900 FWL, Section 7-4s-19w

County: Phillips

State: Kansas

Rig No.: 8 Contractor: WW Drilling, LLC

Tool Pusher: Sid Deutscher

785-259-2382

Drill Collars: 14 Size: 6 1/4 x 2 1/4

Rig Phone: 785-259-0816

Make Pump: Emsco D-375

Liner & Stroke: 6 x 14

Spud 1/19/12 @ 7:00 pm

Approx. TD: 3800 Elevation: 2010 K.B. 2015

KB Hole Complete: 1/24/12 @ 9:30 am

Mud Co.: Andy's Mud

Mud Engineer: Kirk Werth

Water Pond

| Date         | 01/19/12 | 01/20/12 | 01/21/12 | 01/22/12 | 01/23/12 | 01/24/12 | 01/25/12 |  |  |
|--------------|----------|----------|----------|----------|----------|----------|----------|--|--|
| Days         | 1-spud   | 2-woc    | 3- drlg  | 4-drlg   | 5-dst #1 | 6-drlg   | 7-done   |  |  |
| Depth        |          | 218      | 1960     | 2920     | 3305     | 3460     | 3500     |  |  |
| Ft. Cut      |          | 218      | 1742     | 960      | 385      | 155      | 40       |  |  |
| D.T.         |          | 6.75-woc | 2-wop    |          |          |          |          |  |  |
| D.T.         |          |          | 1.25-woc |          |          |          |          |  |  |
| C.T.         |          |          |          |          | 10.25    | 16.75    | 18.75    |  |  |
| Bit Wt.      | All      |          | 25,000   | 35000    | 38,000   | 38,000   |          |  |  |
| RPM          | 100      |          | 90       | 85       | 85       | 85       |          |  |  |
| Pressure     | 450      |          | 900      | 950      | 950      | 950      |          |  |  |
| SPM          | 60       |          | 58       | 58       | 58       | 58       |          |  |  |
| Mud Cost     |          |          |          |          |          | 6946     | 6946     |  |  |
| Mud Wt.      |          |          | 9.1      | 9        | 9.1      | 9.6      |          |  |  |
| Viscosity    |          |          | 29       | 54       | 56       | 50       |          |  |  |
| Water Loss   |          |          |          |          |          |          |          |  |  |
| Chlondes     |          |          |          |          |          | 2#       |          |  |  |
| L.C.M.       |          |          |          |          |          |          |          |  |  |
| Dev. Sur     |          | 1/2'-218 |          |          |          |          |          |  |  |
| Dev. Sur     |          |          |          |          |          |          |          |  |  |
| Fuel         | 900      | 3400     | 3100     | 2650     | 2150     | 1650     | 1600     |  |  |
| Water-Pit    | 3'       | full     | 1.5'     | full     | full     | full     |          |  |  |
| ACC Bit Hrs. |          |          | 19.75    | 34.5     | 55.5     | 62.75    | 65.25    |  |  |
| Formation    | sd-sh    | sd-sh    | sd-sh    | sd-sh    | sh-lm    | sh-lm    |          |  |  |
| Weather      | clear    | clear    | clear    | clear    | clear    | clear    |          |  |  |

| No. | Size   | Type      | Out  | Ft.  | Hrs.  | Cum Hrs. | Bit Cond | Serial # | Tops |
|-----|--------|-----------|------|------|-------|----------|----------|----------|------|
| 1   | 12 1/4 | Smith     | 218  | 218  | 2.75  | 2.75     | RR       | 54753    |      |
| 2   | 7 7/8  | Sm - F-27 | 3500 | 3242 | 62.75 | 65.5     | New      | PT 8127  |      |
| 3   |        |           |      |      |       |          |          | 53.4 FPH |      |
| 4   |        |           |      |      |       |          |          |          |      |

| DEPTH | SIZE  | SACKS | CEMENT MATERIAL       | PLUG DOWN | DRILLED OUT | REMARKS                               |
|-------|-------|-------|-----------------------|-----------|-------------|---------------------------------------|
| 217   | 8 5/8 | 180   | Common, 3% cc, 2% gel | 12:15 AM  | 8:15 AM     | Quality Cem. Did circulate            |
| 3499  | 4 1/2 | 180   | Common                | 2:15 AM   | 1/25/2012   | Quality Cementing Port Collar @ 1540' |

| NO | INTERVAL  | OPEN | SHUT | OPEN | SHUT | RECOVERY       |
|----|-----------|------|------|------|------|----------------|
| 1  | 3258-3305 | 30   | 45   | 45   | 60   | 130' mud w/ os |
| 2  | 3354-3375 | 30   | 60   | 30   | out  | 1' mud         |
| 3  |           |      |      |      |      |                |
| 4  |           |      |      |      |      |                |
| 5  |           |      |      |      |      |                |
| 6  |           |      |      |      |      |                |
| 7  |           |      |      |      |      |                |
| 8  |           |      |      |      |      |                |
| 9  |           |      |      |      |      |                |

Surface Casing Furnished by: Midwest Pipe: Milden delivered 5 joints of 20#, 8 5/8 tally 210.99 set @ 217'  
 Remarks: Strap & weld surface by WW. Anhydrite 1581-1606, Displace complete @ 2672' (640 bbls.). Short trip @ 3305', 34 stands (3.5 hrs). RTD 3500', LTD 3501' by Superior, logged 3.75 hrs. Ran 4 1/2 casing set @ 3499'. Plug down @ 2:15 am. Rig released @ 4:15 am, 1/25/12.

1581-1606  
+4.34

# QUALITY OILWELL CEMENTING, INC.

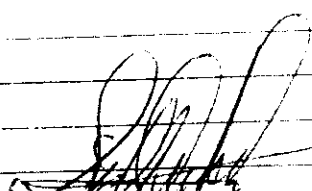
No. 216

Phone 785-483-2025  
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

|                                   |                         |      |                  |            |          |       |            |   |          |       |    |             |  |        |          |  |
|-----------------------------------|-------------------------|------|------------------|------------|----------|-------|------------|---|----------|-------|----|-------------|--|--------|----------|--|
| Date                              | 1/20/12                 | Sec. | 7                | Twp.       | 4        | Range | 19         | County  | Phillips | State | KS | On Location |  | Finish | 12:15 AM |  |
| Lease                             | Zillinger "D"           |      |                  | Well No.   | 1-7      |       |            | Location Slide, Waterloo Rd, BN: 1E, 1/4 N, 1/4 E into  |          |       |    |             |  |        |          |  |
| Contractor                        | W.W. Drilling Rtg #8    |      |                  |            |          |       |            | Owner<br>To Quality Oilwell Cementing, Inc.<br>You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed. |          |       |    |             |  |        |          |  |
| Type Job                          | Surface                 |      |                  |            |          |       |            | Charge To Black Diamond   |          |       |    |             |  |        |          |  |
| Hole Size                         | 12 1/4"                 |      |                  | T.D.       | 218'     |       |            | Street  |          |       |    |             |  |        |          |  |
| Csg.                              | 8 7/8"                  |      |                  | Depth      | 218'     |       |            | City  |          |       |    |             |  |        |          |  |
| Tbg. Size                         |                         |      |                  | Depth      |          |       |            | State   |          |       |    |             |  |        |          |  |
| Tool                              |                         |      |                  | Depth      |          |       |            | The above was done to satisfaction and supervision of owner agent or contractor.  |          |       |    |             |  |        |          |  |
| Cement Left in Csg.               | 15'                     |      |                  | Shoe Joint |          |       |            | Cement Amount Ordered 160 ex Com 3/4 cu 2% gel  |          |       |    |             |  |        |          |  |
| Meas Line                         |                         |      |                  | Displace   | 13 Bbls. |       |            |   |          |       |    |             |  |        |          |  |
| <b>EQUIPMENT</b>                  |                         |      |                  |            |          |       |            |   |          |       |    |             |  |        |          |  |
| Pumptrk                           | 9                       | No.  | Cement<br>Helper | Paul       |          |       | Common 160 |   |          |       |    |             |  |        |          |  |
| Bulktrk                           | 14                      | No.  | Driver           | Mark       |          |       | Poz. Mix   |   |          |       |    |             |  |        |          |  |
| Bulktrk                           | AU                      | No.  | Driver           | Brian      |          |       | Gel. 3     |   |          |       |    |             |  |        |          |  |
| <b>JOB SERVICES &amp; REMARKS</b> |                         |      |                  |            |          |       |            |   |          |       |    |             |  |        |          |  |
| Remarks:                          | Calcium 5               |      |                  |            |          |       |            |   |          |       |    |             |  |        |          |  |
| Rat Hole                          | Hulls                   |      |                  |            |          |       |            |   |          |       |    |             |  |        |          |  |
| Mouse Hole                        | Salt                    |      |                  |            |          |       |            |   |          |       |    |             |  |        |          |  |
| Centralizers                      | Flowseal                |      |                  |            |          |       |            |   |          |       |    |             |  |        |          |  |
| Baskets                           | Kol-Seal                |      |                  |            |          |       |            |   |          |       |    |             |  |        |          |  |
| D/V or Port Collar                | Mud CLR 48              |      |                  |            |          |       |            |   |          |       |    |             |  |        |          |  |
| Est. Circ.                        | CFL-117 or CD110 CAF 38 |      |                  |            |          |       |            |   |          |       |    |             |  |        |          |  |
| Mix 160sx                         | Sand                    |      |                  |            |          |       |            |   |          |       |    |             |  |        |          |  |
| Displace                          | Handling 168            |      |                  |            |          |       |            |   |          |       |    |             |  |        |          |  |
| Cement Circulated                 | Mileage                 |      |                  |            |          |       |            |   |          |       |    |             |  |        |          |  |
| <b>FLOAT EQUIPMENT</b>            |                         |      |                  |            |          |       |            |   |          |       |    |             |  |        |          |  |
| Guide Shoe                        |                         |      |                  |            |          |       |            |   |          |       |    |             |  |        |          |  |
| Centralizer                       |                         |      |                  |            |          |       |            |   |          |       |    |             |  |        |          |  |
| Baskets                           |                         |      |                  |            |          |       |            |   |          |       |    |             |  |        |          |  |
| AFU Inserts                       |                         |      |                  |            |          |       |            |   |          |       |    |             |  |        |          |  |
| Float Shoe                        |                         |      |                  |            |          |       |            |   |          |       |    |             |  |        |          |  |
| Latch Down                        |                         |      |                  |            |          |       |            |   |          |       |    |             |  |        |          |  |
| Pumptrk Charge Surface            |                         |      |                  |            |          |       |            |   |          |       |    |             |  |        |          |  |
| Mileage 67                        |                         |      |                  |            |          |       |            |   |          |       |    |             |  |        |          |  |
| Tax                               |                         |      |                  |            |          |       |            |   |          |       |    |             |  |        |          |  |
| Discount                          |                         |      |                  |            |          |       |            |   |          |       |    |             |  |        |          |  |
| Total Charge                      |                         |      |                  |            |          |       |            |   |          |       |    |             |  |        |          |  |

Thank  
You!!



X Signature

# QUALITY OILWELL CEMENTING, INC.

Phone 785-483-2025  
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 615

| Date  | Sec.         | Twp.                | Range                                  | County   | State | On Location | Finish    |
|---|--------------|---------------------|--|--|-------|-------------|-----------|
| 1-25-12                                       | 7            | 4                   | 19                                     | Phillips   | KS    |             | 2:15 A.M. |
| Lease Zillmer D                               | Well No. 1-7 |                     | Location Logan 4N 2 1/2 E 3/4 S E into |  |       |             |           |
| Contractor WW #8                              |              |                     |  | Owner  |       |             |           |
| Type Job Production String                    |              |                     |  | To Quality Oilwell Cementing, Inc.<br>You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed. |       |             |           |
| Hole Size 7 7/8                               |              | T.D. 3500           |  | Charge To Black Diamond  |       |             |           |
| Csg. 4 1/2                                    |              | Depth 3500          |  | Street   |       |             |           |
| Eng. Size                                     |              | Depth               |  | City   |       |             |           |
| Tool Joint 1 1/2                              |              | Depth 1540.12       |  | State  |       |             |           |
| Cement Left in Csg. 2600                      |              | Shoe Joint 20.00    |  | The above was done to satisfaction and supervision of owner agent or contractor.   |       |             |           |
| Meas Line                                     |              | Displace 55 1/2 BBL |  | Cement Amount Ordered 180 ccm 10% Salt   |       |             |           |
| <b>EQUIPMENT</b>                              |              |                     |  | 20 BBL CL 50 gal mud clar  |       |             |           |
| Pumptrk 5                                     | No. Cementer | C. G. S.            |  | Common   |       |             |           |
| Pumptrk                                       | No. Driver   | Brett               |  | Poz. Mix   |       |             |           |
| Pumptrk 14                                    | No. Driver   | Brett               |  | Gel.   |       |             |           |
| <b>JOB SERVICES &amp; REMARKS</b>             |              |                     |  | Calcium  |       |             |           |
| Remarks: 17.5 ft Pipe = 1960.16' = 31 1/4 BBL |              |                     |  | Hulls  |       |             |           |
| 1st Hole 30 SK                                |              |                     |  | Salt   |       |             |           |
| 2nd Hole 1160 ft = 1540.12' = 23 3/4 BBL      |              |                     |  | Flowseal   |       |             |           |
| Centralizers                                  |              |                     |  | Kol-Seal   |       |             |           |
| Baskets                                       |              |                     |  | Mud CLR 48   |       |             |           |
| W or Port Collar                              |              |                     |  | CFL-117 or CD110 CAF 38  |       |             |           |
| 4 1/2 size @ 3500 In SAE 3480                 |              |                     |  | Sand   |       |             |           |
| 1st Circulation Pump seal mud clar            |              |                     |  | Handling   |       |             |           |
| 2nd Circulation - Cement 4 1/2 w 160 SK       |              |                     |  | Mileage  |       |             |           |
| 3rd Circulation - Displace Plug 1st 20 BBL    |              |                     |  | <b>FLOAT EQUIPMENT</b>   |       |             |           |
| 4th Circulation - Plug 1st @ 1200#            |              |                     |  | Guide Shoe 4 1/2   |       |             |           |
| 5th Circulation - Release Pressure Dr.        |              |                     |  | Centralizer 5 Turbo's  |       |             |           |
|   |              |                     |  | Baskets 2  |       |             |           |
|   |              |                     |  | AFU Inserts Port collar  |       |             |           |
|   |              |                     |  | Float Shoe 1   |       |             |           |
|   |              |                     |  | Latch Down 1   |       |             |           |
|   |              |                     |  | Pumptrk Charge   |       |             |           |
|   |              |                     |  | Mileage  |       |             |           |
| Signature: <i>Doc Bell</i>                    |              |                     |  | Tax  |       |             |           |
|   |              |                     |  | Discount   |       |             |           |
|   |              |                     |  | Total Charge   |       |             |           |

**OPERATOR**

Company: BLACK DIAMOND OIL, INC.  
 Address: PO BOX 641  
 HAYS, KS 67601

Contact Geologist: KENNETH VEHIGE  
 Contact Phone Nbr: (785) 625-5891  
 Well Name: ZILLINGER D 1-7  
 Location: SW SE SW SW 7-4-19  
 Pool:  
 State: KS

API: 15-174-20662  
 Field: WILDCAT  
 Country: USA

**Scale 1:240 Imperial**

Well Name: ZILLINGER D 1-7  
 Surface Location: SW SE SW SW 7-4-19  
 Bottom Location:  
 API: 15-174-20662  
 License Number: 7076  
 Spud Date: 1/19/2012  
 Region: PHILLIPS  
 Drilling Completed: 1/24/2012  
 Surface Coordinates: 860 FSL & 900 FWL  
 Bottom Hole Coordinates:  
 Ground Elevation: 2010.00ft  
 K.B. Elevation: 2015.00ft  
 Logged Interval: 0.00ft  
 Total Depth: 3500.00ft  
 Formation:  
 Drilling Fluid Type: FRESH WATER/CHEMICAL GEL

Time: 3:34 PM

Time: 9:30 AM

To: 3501.00ft

**SURFACE CO-ORDINATES**

Well Type: Vertical  
 Longitude: -99.5122108  
 N/S Co-ord: 860 FSL  
 E/W Co-ord: 900 FWL

Latitude: 39.7149495

**LOGGED BY**

Company: SOLUTIONS CONSULTING  
 Address: 108 W 35TH  
 HAYS, KS 67601

Phone Nbr: (785) 259-3737  
 Logged By: Geologist

Name: JEFF LAWLER

**CONTRACTOR**

Contractor: WW DRILLING, LLC  
 Rig #: 8  
 Rig Type: MUD ROTARY  
 Spud Date: 1/19/2012  
 TD Date: 1/24/2012  
 Rig Release: 1/25/2012

Time: 3:34 PM

Time: 9:30 AM

Time: 8:00 AM

**ELEVATIONS**

K.B. Elevation: 2015.00ft  
 K.B. to Ground: 5.00ft

Ground Elevation: 2010.00ft

**NOTES**

NOTES

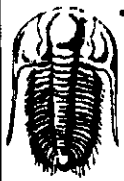
4.5" X 10.5# PRODUCTION CASING WAS RUN TO FURTHER TEST ZONES OF INTEREST.

RESPECTFULLY SUBMITTED,  
JEFF LAWLER

WELL COMPARISON SHEET

| FORMATION        | ZILLINGER 'D' 1-7 |       |             |       | SW NE SE NE 12-4-20 |       |       | SW SE NW 12-4-20 |       |       | NE NE SE 13-4-20 |       |       | N2 NE SW 1-4-20 |       |       |
|------------------|-------------------|-------|-------------|-------|---------------------|-------|-------|------------------|-------|-------|------------------|-------|-------|-----------------|-------|-------|
|                  | LOG TOPS          |       | SAMPLE TOPS |       | LOGS                |       |       | CARD             |       |       | CARD             |       |       | CARD            |       |       |
|                  | DEPTH             | DATUM | DEPTH       | DATUM | DEPTH               | DATUM | CORR. | DEPTH            | DATUM | CORR. | DEPTH            | DATUM | CORR. | DEPTH           | DATUM | CORR. |
|                  | 2015              |       | 2015        |       | 2042                |       |       | 2069             |       |       | 2059             |       |       | 2064            |       |       |
| ANHYDRITE TOP    | 1580              | 435   | 1581        | 434   | 1613                | 429   | + 5   | 1645             | 424   | + 10  |                  |       |       |                 |       |       |
| BASE             | 1606              | 409   | 1606        | 409   | 1640                | 402   | + 7   | 1672             | 397   | + 12  |                  |       |       |                 |       |       |
| TANROD           |                   |       |             |       |                     |       |       |                  |       |       |                  |       |       |                 |       |       |
| TOPEKA           | 2977              | -962  | 2979        | -964  | 3009                | -967  | + 3   |                  |       |       | 3019             | -960  | - 4   | 3050            | -986  | + 22  |
| OREAD            |                   |       |             |       |                     |       |       |                  |       |       |                  |       |       |                 |       |       |
| HEEDNER SHALE    | 3175              | -1160 | 3177        | -1162 | 3207                | -1165 | + 3   | 3242             | -1173 | + 11  | 3205             | -1146 | - 16  | 3243            | -1179 | + 17  |
| TORONTO          | 3202              | -1187 | 3203        | -1188 | 3234                | -1192 | + 4   | 3257             | -1188 | + 0   |                  |       |       |                 |       |       |
| DOUGLAS          |                   |       |             |       |                     |       |       |                  |       |       |                  |       |       |                 |       |       |
| BROWN LIMB       |                   |       |             |       |                     |       |       |                  |       |       |                  |       |       |                 |       |       |
| LKC              | 3221              | -1206 | 3221        | -1206 | 3251                | -1209 | + 3   | 3286             | -1217 | + 11  | 3250             | -1191 | - 15  | 3288            | -1224 | + 18  |
| BKC              | 3427              | -1412 | 3427        | -1412 | 3458                | -1416 | + 4   |                  |       |       | 3460             | -1401 | - 11  | 3494            | -1430 | + 18  |
| CONGLOMERATE/QTZ |                   |       |             |       |                     |       |       |                  |       |       |                  |       |       |                 |       |       |
| MISSISSIPPIAN    |                   |       |             |       |                     |       |       |                  |       |       |                  |       |       |                 |       |       |
| ARBUCKLE         |                   |       |             |       | 3556                | -1514 |       | 3616             | -1547 |       | 3560             | -1501 |       | 3588            | -1524 |       |
| RTD              |                   |       | 3500        | -1485 | 3630                | -1588 | + 103 |                  |       |       |                  |       |       | 3590            | -1526 | + 41  |
| LTD              | 3501              | -1486 |             |       | 3629                | -1587 |       |                  |       |       |                  |       |       |                 |       |       |

DST #1 LKC "D,E,F"



**TRILOBITE TESTING, INC**

### DRILL STEM TEST REPORT

Black Diamond Oil Inc  
7/4s/19w Phillips KS

PO Box 641  
Hays, KS 67601  
Zillinger D #1-7

Job Ticket: 45559  
DST#: 1

ATTN: Jeff Lawler  
Test Start: 2012.01.23 @ 04:57:00

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**GENERAL INFORMATION:**

Formation: **LKC "D - F"**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 06:44:30  
 Tester: James Winder  
 Time Test Ended: 11:14:30  
 Unit No. 57  
 Interval: 3258.00 ft (KB) To 3305.00 ft (KB) (TVD)  
 Reference Elevations: 2015.00 ft (KB)  
 Total Depth: 3305.00 ft (KB) (TVD)  
 2010.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 KB to GR/CF: 5.00 ft

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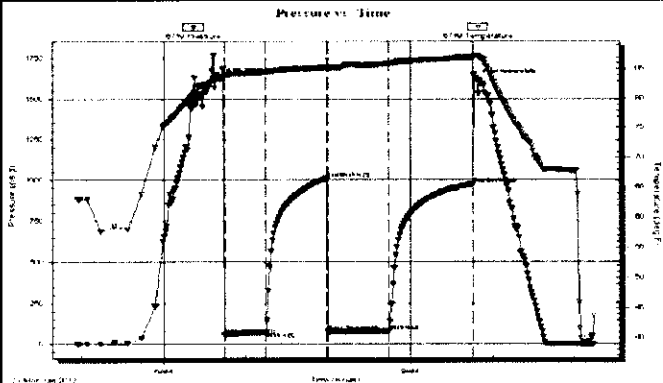
**Serial #: 6719**      **Inside**

|                 |              |                 |            |                       |
|-----------------|--------------|-----------------|------------|-----------------------|
| Press@RunDepth: | 80.26 psig @ | 3259.00 ft (KB) | Capacity:  | 8000.00 psig          |
| Start Date:     | 2012.01.23   | End Date:       | 2012.01.23 | Last Calib:           |
| Start Time:     | 04:57:05     | End Time:       | 11:14:29   | Time On Btm:          |
|                 |              |                 |            | 2012.01.23 @ 06:41:30 |
|                 |              |                 |            | Time Off Btm:         |
|                 |              |                 |            | 2012.01.23 @ 09:48:30 |

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**TEST COMMENT:** 30 - IF: 5" surge blow at open, built to 6", bled off at 15 min., blow built to 3/4" from 15 - 30 min.  
 45 - IS: Bled off, No blow back (Diesel in bucket)  
 45 - FF: Blow started at 5 min., built to just over 1"  
 60 - FS: Bled off, No blow back

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| PRESSURE SUMMARY |                 |              |                      |
|------------------|-----------------|--------------|----------------------|
| Time (Min.)      | Pressure (psig) | Temp (deg F) | Annotation           |
| 0                | 1624.61         | 83.45        | Initial Hydro-static |
| 3                | 56.30           | 83.65        | Open To Flow (1)     |
| 33               | 74.31           | 84.46        | Shut-In(1)           |
| 78               | 1009.11         | 85.21        | End Shut-In(1)       |
| 79               | 76.67           | 85.06        | Open To Flow (2)     |
| 123              | 80.26           | 85.79        | Shut-In(2)           |
| 184              | 975.34          | 86.87        | End Shut-In(2)       |
| 187              | 1616.86         | 87.23        | Final Hydro-static   |

| Recovery    |                                 |              |
|-------------|---------------------------------|--------------|
| Length (ft) | Description                     | Volume (bbl) |
| 62.00       | Mud w/oil spots 90% m, 7%g, 3%o | 0.30         |
| 62.00       | Mud w/oil spots 97% m, 2%g, 1%o | 0.30         |
| 11.00       | Mud w/trace oil 100% m          | 0.15         |
|             |                                 |              |
|             |                                 |              |

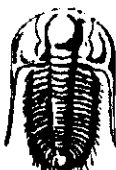
| Gas Rates      |                 |                   |
|----------------|-----------------|-------------------|
| Choke (inches) | Pressure (psig) | Gas Rate (Mcft/d) |
|                |                 |                   |

Trilobite Testing, Inc

Ref. No: 45559

Printed: 2012.01.23 @ 12:01:43

### DST #2 LKC "I"

|   |  |   |
|---|--|---|
|  <b>TRILOBITE TESTING, INC</b> | <b>DRILL STEM TEST REPORT</b>  |   |
|   | Black Diamond Oil Inc<br>PO Box 641<br>Hays, KS 67601<br>ATTN: Jeff Lawler | <b>7/4s/19w Phillips KS</b><br><b>Zillinger D #1-7</b><br>Job Ticket: 45560 <b>DST#: 2</b><br>Test Start: 2012.01.23 @ 19:15:00 |

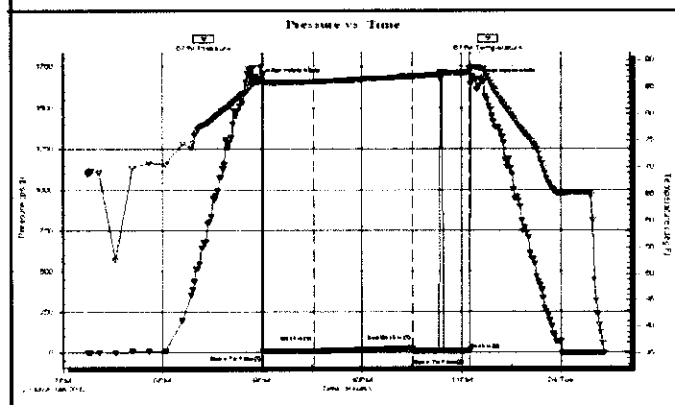
**GENERAL INFORMATION:**

Formation: **LKC "I"**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 21:01:00  
 Time Test Ended: 00:27:00  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: James Winder  
 Unit No: 57  
 Interval: **3354.00 ft (KB) To 3375.00 ft (KB) (TVD)**  
 Total Depth: 3375.00 ft (KB) (TVD)  
 Reference Elevations: 2015.00 ft (KB)  
 2010.00 ft (CF)  
 Hole Diameter: 7.88 inches-Hole Condition: Fair  
 KB to GR/CF: 5.00 ft

**Serial #: 6719 Inside**

|                 |                              |               |                       |
|-----------------|------------------------------|---------------|-----------------------|
| Press@RunDepth: | 11.43 psig @ 3355.00 ft (KB) | Capacity:     | 8000.00 psig          |
| Start Date:     | 2012.01.23                   | End Date:     | 2012.01.24            |
| Start Time:     | 19:15:00                     | End Time:     | 00:27:00              |
|                 |                              | Last Calib.:  | 2012.01.24            |
|                 |                              | Time On Btm:  | 2012.01.23 @ 20:58:30 |
|                 |                              | Time Off Btm: | 2012.01.23 @ 23:09:00 |

**TEST COMMENT:** 30 - IF: Blow built to 1/4", then died back, dead at 20 min.  
 60 - IS: No blow back (Diesel in Bucket)  
 30 - FF: No blow, Flushed tool at 16 min., open surge then dead  
 Pulled Tool



| PRESSURE SUMMARY |                 |              |                      |
|------------------|-----------------|--------------|----------------------|
| Time (Min.)      | Pressure (psig) | Temp (deg F) | Annotation           |
| 0                | 1673.47         | 85.88        | Initial Hydro-static |
| 3                | 10.67           | 85.84        | Open To Flow (1)     |
| 33               | 11.43           | 85.99        | Shut-In(1)           |
| 92               | 25.91           | 86.98        | End Shut-In(1)       |
| 93               | 11.99           | 86.98        | Open To Flow (2)     |
| 127              | 13.25           | 87.75        | Shut-In(2)           |
| 131              | 1668.30         | 88.79        | Final Hydro-static   |

| Recovery    |                        |              |
|-------------|------------------------|--------------|
| Length (ft) | Description            | Volume (bbl) |
| 1.00        | Mud w/trace oil 100% m | 0.00         |
| 0.00        | Oil spots in Tool      | 0.00         |
|             |                        |              |
|             |                        |              |

| Gas Rates      |                 |                   |
|----------------|-----------------|-------------------|
| Choke (inches) | Pressure (psig) | Gas Rate (Mcft/d) |
|                |                 |                   |

\* Recovery based on multiple tests

Trilobite Testing, Inc

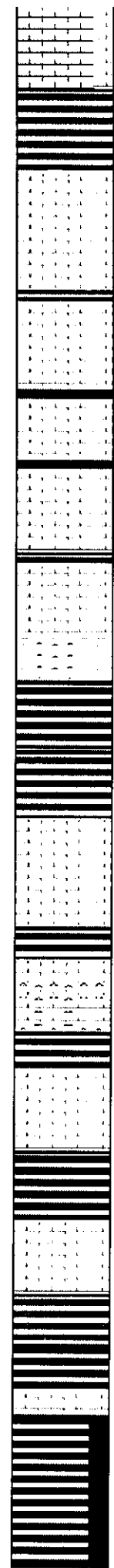
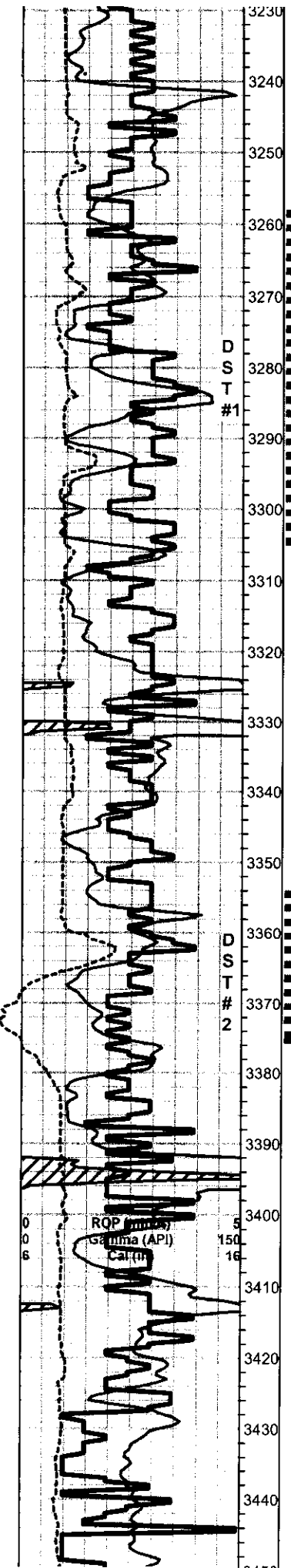
Ref. No: 45560

Printed: 2012.01.24 @ 00:44:02









Lm- Cream Tan Lt Gray, VF-F, scattered XLN, mostly dense w/ minimal development & porosity, some granular, slightly dolomitic, all clean & barren

Sh- Dark Gray Brown Lime Green, soft sticky clumps, few gritty shale chips

Lm- Cream, VFXLN, siliceous, dense & well cemented, scattered primary XLN porosity, FSL w/ crinoids,

Lm- Cream Tan, F-Med, slightly dolomitic Ls. oolitic, some dense & well cemented, some w/ scattered pinpoint secondary porosity w/in solution veins, LT GSY STN, FNT GAS DISSOLUTION UPON CRUSH, FR ODR, NSFO, few chips of massive dense cryptocrystalline, no visible porosity, few chips of semi-translucent sharp angular bedded chert

Sh- Red Maroon White, abundant red wash, white sticky argillaceous clumps

Lm- Cream Tan, Med-Coarse XLN, few chips w/ constant pinpoint porosity, mostly scattered pinpoint porosity, some recrystallization, moderately dense & well cemented, LT GSY STN, SFO & FEW CHIPS W/ BO, GOOD ODR, SLOW STREAMING WET CUT

Lm- Buff Off White, VFXLN, dense, very limited visible porosity, slightly cryptocrystalline, well cemented, clean & barren

Lm- Cream, VFXLN, dense & well cemented, minimal development & visible porosity, tight, scattered secondary recrystallization micro porosity.

Chert - Black Semi-translucent, some eroded & reworked trashy chert, some sharp angular bedded chert.

Sh- Black Red Brown Lime Green White, fissile & blocky, mostly soft argillaceous sticky clumps, red wash

Sh- Gray White, abundant gray & white wash, chalky

Lm- Buff Cream, F-Med XLN, dense, siliceous, slightly FSL & recrystallized, dense, minimal visible porosity, little to no development, few chips of fresh bedded semi-translucent chert

Lm- Cream Buff, VF-Med, few Coarse XLN chips, mostly dense cherty Ls. w/ edged porosity & STN, constant PPT porosity & LT GSY STN, ODR, SLOW STRM WET CUT. Few w/ chips more aggressive coarse XLN oolitic porosity, good GSY sheen & DRK HVY OIL STN. Few small free floating globules.

Sh- Red Gray Lime Green, abundant red was, dense soft gray slivers

Lm- Cream Buff, VF-FXLN, mostly dense, scattered XLN porosity, slightly FSL w/ fauna casts & some recrystallization, some calcareous & dense w/ no visible porosity

Sh- Red Black Gray Purple White Lime Green, abundant red wash, dense blocky chips, soft gritty & earthy chips

Lm- Cream Buff, VF-F, some semi-soft dense XLN, some calcareous dense & well cemented, all lack development & visible porosity, all clean & barren

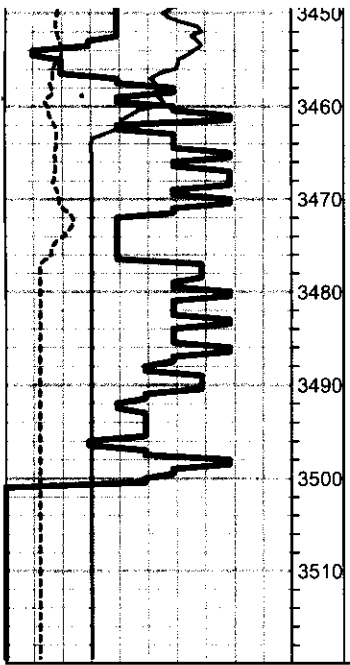
Sh- Red Gray, abundant argillaceous sticky clumps, red & gray wash

Lm- Buff Cream, dense cherty oolitic Ls, cryptocrystalline, no visible porosity, very well cemented, sharp, angular

BKC 3427' (-1412) E-LOG 3428' (-1413) Sh- Red Gray White Purple, abundant red wash, dense, fissile gray & purple slivers, sticky argillaceous white clumps

Sh- A/A w/ Red VF gr. well sorted & consolidated Ss. loosely cemented & silty

|                             |     |
|-----------------------------|-----|
| DST #1<br>3258' - 3305'     |     |
| CFS @ 3305'                 |     |
| DST #2<br>3354' - 3375'     |     |
| **LOG PULLED TIGHT**        |     |
| CFS @ 3375'                 |     |
| Total Gas (units)           |     |
| C1 (units)                  | 100 |
| C2 (units)                  | 100 |
| C3 (units)                  | 100 |
| C4 (units)                  | 100 |
| **PROBLEMS W/ AUT DRILLER** |     |



Conglomerate- Mix of various colored shale, cherty oolitic Ls, clean dense XLN Ls & few chips of reworked chert

Shale- abundant red & gray wash, various colored slivers and chips of gritty & blocky to well compacted trashy chips

Lm- semi-conglomerate, trashy cherty oolitic Ls, various colored, mostly cream w/ purple tint, some calcareous soft Ls

Sh- Multi colored, mostly sticky argillaceous clumps, some calcareous sandy shales

Sh- Abundant Red wash, earthy red clay

RTD 3500' (-1485) @ 09:30 1/24/2012 LTD 3501' (-1486)

