



KANSAS CORPORATION COMMISSION 1161369
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 # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

- New Well Re-Entry Workover
- Oil WSW SWD SIOW
- 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 #: _____

Spud Date or Recompletion Date Date Reached TD Completion Date or Recompletion Date

API No. 15 - _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite: _____

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

County: _____ Permit #: _____

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: _____ Date: _____



1161369

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

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 type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Submitted Electronically <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(If no, Submit Copy)</i> List All E. Logs Run: | <input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum |
|---|---|

| 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 |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

| 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 Specify Footage of Each Interval Perforated | Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i> | Depth |
|----------------|---|--|-------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

TUBING RECORD: Size: _____ Set At: _____ Packer At: _____ Liner Run: Yes No

Date of First, Resumed Production, SWD or ENHR. _____ Producing Method: Flowing Pumping Gas Lift Other (Explain) _____

| | | | | | |
|-----------------------------------|-----------|---------|-------------|---------------|---------|
| Estimated Production Per 24 Hours | Oil Bbls. | Gas Mcf | Water Bbls. | Gas-Oil Ratio | Gravity |
|-----------------------------------|-----------|---------|-------------|---------------|---------|

| | | |
|---|---|--|
| DISPOSITION OF GAS: <input 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 type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other (Specify) _____ | PRODUCTION INTERVAL: _____ _____ |
|---|---|--|

| | |
|-----------|-------------------------|
| Form | ACO1 - Well Completion |
| Operator | Black Diamond Oil, Inc. |
| Well Name | KEMPER B 1 |
| Doc ID | 1161369 |

All Electric Logs Run

| |
|---------------------------------|
| |
| Dual Induction Log |
| Compensated Density/Neutron Log |
| Micro Log |
| Temp Log |

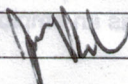
QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

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

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

No. 6889

| | | | | | | | | | | | | | | | |
|-----------------------------------|---|------|----------|------------|--|-------|----|---|--|-------|----|-------------|--|--------|---------|
| Date | 9-6-13 | Sec. | 23 | Twp. | 5 | Range | 21 | County | Norton | State | KS | On Location | | Finish | 2:00 PM |
| Lease | Kemper | | | Well No. | B#1 | | | Location | Logan w to 12 Rd, 1/4 S 1E, to 13 Rd, 2S to BB Rd, 1/2 W | | | | | | |
| Contractor | Ww 6 | | | Owner | BB Rd, 1/2 W To Quality Oilwell Cementing, Inc. 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 Oil | | | | | | | | | | |
| Hole Size | 12 1/4 | | | T.D. | 218 | | | Street | | | | | | | |
| Csg. | 8 5/8 | | | Depth | 220 | | | City | State | | | | | | |
| Tbg. Size | | | | Depth | | | | The above was done to satisfaction and supervision of owner agent or contractor | | | | | | | |
| Tool | | | | Depth | | | | Cement Amount Ordered 150 SKCOM 3% CC 2% gel | | | | | | | |
| Cement Left in Csg. | 20 | | | Shoe Joint | 20 | | | Meas Line Displace 12 1/2 661 | | | | | | | |
| EQUIPMENT | | | | | | | | | | | | | | | |
| Pumptrk | 15 | No. | Cementer | Common 150 | | | | | | | | | | | |
| | | | Helper | Poz. Mix | | | | | | | | | | | |
| Bulktrk | 19 | No. | Driver | Gel. 3 | | | | | | | | | | | |
| | | | Driver | Calcium 5 | | | | | | | | | | | |
| Bulktrk | PU | No. | Driver | Hulls | | | | | | | | | | | |
| | | | Driver | Salt | | | | | | | | | | | |
| JOB SERVICES & REMARKS | | | | | | | | | | | | | | | |
| Remarks: | Cement did circulate | | | | | | | | | | | | | | |
| Rat Hole | Flowseal | | | | | | | | | | | | | | |
| Mouse Hole | Kol-Seal | | | | | | | | | | | | | | |
| Centralizers | Mud CLR 48 | | | | | | | | | | | | | | |
| Baskets | CFL-117 or CD110 CAF 38 | | | | | | | | | | | | | | |
| D/V or Port Collar | Sand | | | | | | | | | | | | | | |
| | Handling 158 | | | | | | | | | | | | | | |
| | Mileage | | | | | | | | | | | | | | |
| FLOAT EQUIPMENT | | | | | | | | | | | | | | | |
| | Guide Shoe | | | | | | | | | | | | | | |
| | Centralizer | | | | | | | | | | | | | | |
| | Baskets | | | | | | | | | | | | | | |
| | AFU Inserts | | | | | | | | | | | | | | |
| | Float Shoe | | | | | | | | | | | | | | |
| | Latch Down | | | | | | | | | | | | | | |
| | Pumptrk Charge Surface | | | | | | | | | | | | | | |
| | Mileage 68 | | | | | | | | | | | | | | |
| | Tax | | | | | | | | | | | | | | |
| | Discount | | | | | | | | | | | | | | |
| | Total Charge | | | | | | | | | | | | | | |
| X Signature |  | | | | | | | | | | | | | | |

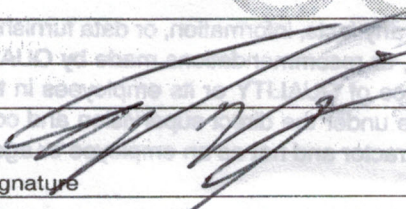
QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

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

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

No. 7508

| | | | | | | | | | | | | | | | | |
|--|---------|-------------------------------|----|-------------------------|---|------------------|----|--|--------|--|----|-------------|--|--------|----------|--|
| Date | 9-12-13 | Sec. | 23 | Twp. | 5 | Range | 21 | County | Norton | State | KS | On Location | | Finish | 10:00 PM | |
| Lease | | | | | | | | Location | | Logan W 10 12 Rd 1 3/4 S 1 E 2 S 1/2 W | | | | | | |
| Kemper B | | | | Well No. # 1 | | | | Owner | | | | | | | | |
| Contractor | | | | W W #6 | | | | To Quality Oilwell Cementing, Inc. | | | | | | | | |
| Type Job | | | | Production String | | | | 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 1/4 | | T.D. | | 3619' | | Charge To | | Black Diamond | | | | | | |
| Csg. | | 5 1/2 | | Depth | | 3608' | | Street | | | | | | | | |
| Tbg. Size | | | | Depth | | | | City | | State | | | | | | |
| Tool | | | | Depth | | | | The above was done to satisfaction and supervision of owner agent or contractor. | | | | | | | | |
| Cement Left in Csg. | | 32.66 | | Shoe Joint | | 32.66 | | Cement Amount Ordered | | 150 com 10% Salt 5% gilson | | | | | | |
| Meas Line | | Displace | | 87 3/4 bbl | | 440 QMDC | | 1/4 Flow | | | | | | | | |
| PU | | BRETT EQUIPMENT | | Common | | 150 | | | | | | | | | | |
| Pumptrk | | 15 | | No. Cementer | | Mick | | Poz-Mix | | 440 QMDC | | | | | | |
| Bulktrk | | 14 | | No. Driver | | Chad | | Gel. | | | | | | | | |
| Bulktrk | | 19 | | No. Driver | | Clayton | | Calcium | | | | | | | | |
| JOB SERVICES & REMARKS | | | | | | | | | | | | | | | | |
| Remarks: | | Salt | | 13 | | Flowseal | | 110# | | | | | | | | |
| Rat Hole | | - 35sx | | Kol-Seal | | 750# | | | | | | | | | | |
| Mouse Hole | | - 15sx | | Mud CLR 48 | | 500 gal | | | | | | | | | | |
| Centralizers | | 2, 4, 6, 8, 11, 46 | | CFL-117 or CD110 CAF 38 | | | | | | | | | | | | |
| Baskets | | 3, 7, 9, 15, 35, 47 | | Sand | | | | | | | | | | | | |
| DIV or Port Collar | | | | Handling | | 561 | | | | | | | | | | |
| Hook on 5 1/2 ran | | 500 gal Mud Plug | | Mileage | | 5 1/2 | | | | | | | | | | |
| Plug Rat hole | | 35sx Mouse - 15sx | | FLOAT EQUIPMENT | | | | | | | | | | | | |
| Mixed 400sx QMDC then | | 150 com 10% Salt 5% Gilsomite | | Guide Shoe | | | | | | | | | | | | |
| Dropped Plug & washed truck clean | | Displaced 87 3/4 bbl water | | Centralizer | | - 6 | | | | | | | | | | |
| Cement did not circulate | | | | Baskets | | - 6 | | | | | | | | | | |
| | | | | AFU Inserts | | | | | | | | | | | | |
| | | | | Float Shoe | | - 1 | | | | | | | | | | |
| | | | | Latch Down | | - 1 | | | | | | | | | | |
| | | | | Rubber Plug | | - 1 | | | | | | | | | | |
| | | | | Pumptrk Charge | | prol Long String | | | | | | | | | | |
| | | | | Mileage | | 68 | | | | | | | | | | |
|  | | | | Tax | | | | | | | | | | | | |
| | | | | Discount | | | | | | | | | | | | |
| | | | | Total Charge | | | | | | | | | | | | |



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Black Diamond Oil

25 - 5S - 21W - Norton Ks

P.O. Box 641
Hays KS 67601

Kemper B #1

Job Ticket: 53514

DST#: 1

ATTN: Steve Reed

Test Start: 2013.09.09 @ 15:43:00

GENERAL INFORMATION:

Formation: **Toronto - Lkc " A "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 17:48:00

Time Test Ended: 22:21:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Ryan Nichols

Unit No: 41

Interval: 3319.00 ft (KB) To 3385.00 ft (KB) (TVD)

Reference Elevations: 2191.00 ft (KB)

Total Depth: 3385.00 ft (KB) (TVD)

2186.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

Serial #: 6752 Inside

Press @ Run Depth: 43.62 psig @ 3320.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.09.09

End Date:

2013.09.09

Last Calib.:

2013.09.09

Start Time: 15:43:01

End Time:

22:21:00

Time On Btm:

2013.09.09 @ 17:47:50

Time Off Btm:

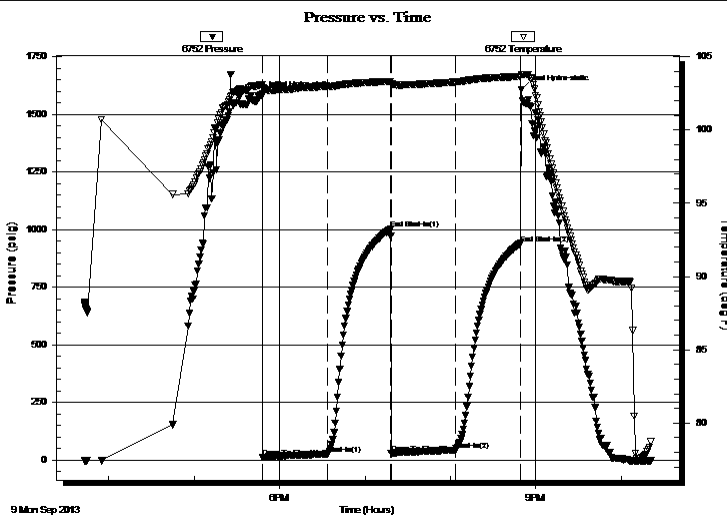
2013.09.09 @ 20:49:50

TEST COMMENT: 45 IF - Surface blow built to 1/4"

45 ISI - No return

45 FF - No blow

45 FSI - No return



PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 1582.15 | 103.09 | Initial Hydro-static |
| 1 | 11.04 | 102.44 | Open To Flow (1) |
| 46 | 27.08 | 102.96 | Shut-In(1) |
| 91 | 1002.92 | 103.31 | End Shut-In(1) |
| 91 | 30.38 | 103.09 | Open To Flow (2) |
| 136 | 43.62 | 103.28 | Shut-In(2) |
| 182 | 940.02 | 103.64 | End Shut-In(2) |
| 182 | 1606.33 | 103.79 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------------------|--------------|
| 61.00 | Mud w/oil spots - 100%M | 0.30 |
| | | |
| | | |
| | | |
| | | |

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Black Diamond Oil

25 - 5S - 21W - Norton Ks

P.O. Box 641
Hays KS 67601

Kemper B #1

Job Ticket: 53514

DST#: 1

ATTN: Steve Reed

Test Start: 2013.09.09 @ 15:43:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 59.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.60 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 400.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|--------------------------|---------------|
| 61.00 | Mud w /oil spots - 100%M | 0.300 |

Total Length: 61.00 ft Total Volume: 0.300 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

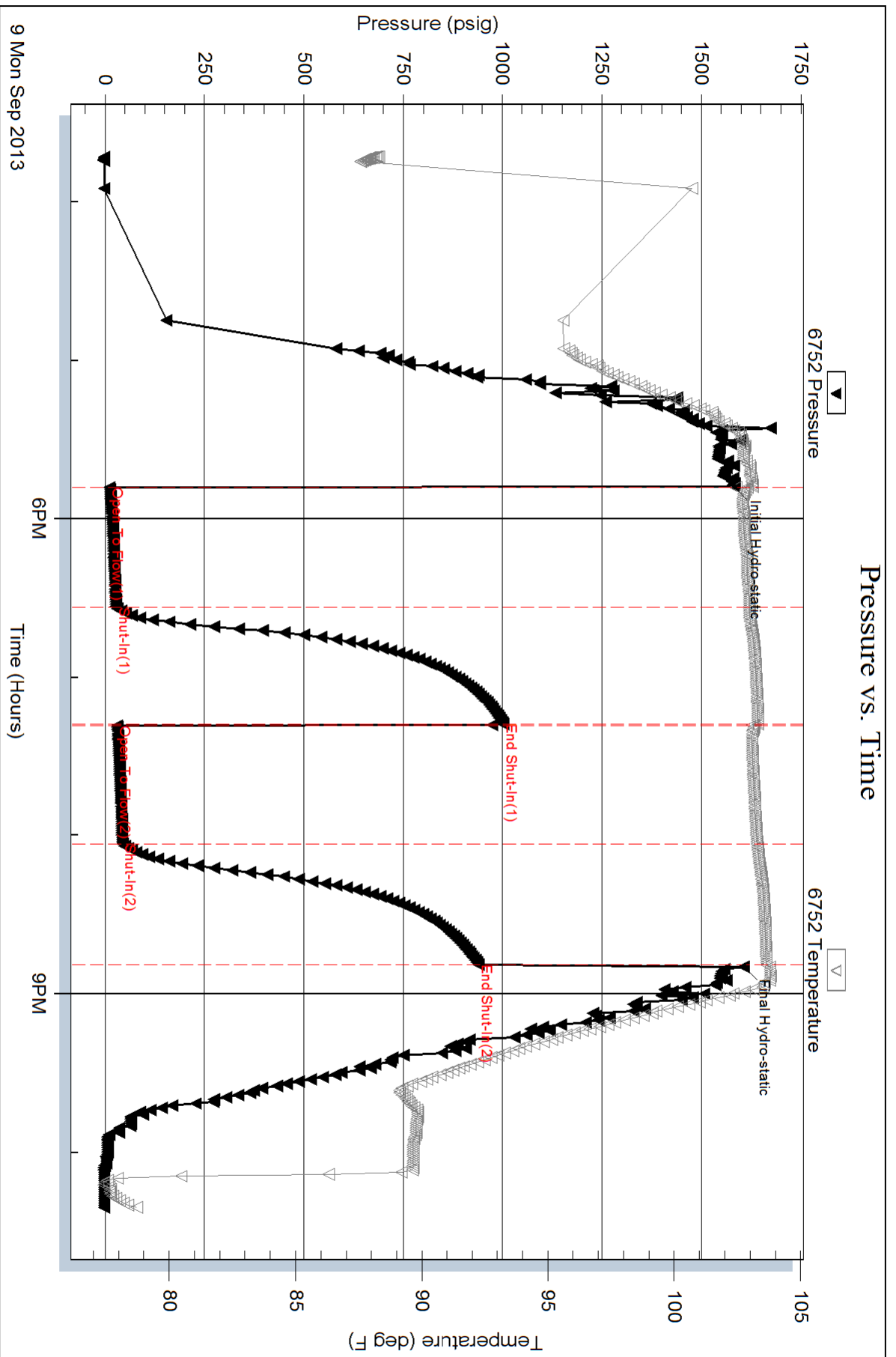
Serial #: 6752

Inside

Black Diamond Oil

Kemper B #1

DST Test Number: 1





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Black Diamond Oil

25 - 5S - 21W - Norton Ks

P.O. Box 641
Hays KS 67601

Kemper B #1

Job Ticket: 53515

DST#: 2

ATTN: Steve Reed

Test Start: 2013.10.10 @ 14:16:00

GENERAL INFORMATION:

Formation: **LKC " I - K "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:03:00

Time Test Ended: 20:54:39

Test Type: Conventional Bottom Hole (Reset)

Tester: Ryan Nichols

Unit No: 41

Interval: 3505.00 ft (KB) To 3550.00 ft (KB) (TVD)

Reference Elevations: 2191.00 ft (KB)

Total Depth: 3550.00 ft (KB) (TVD)

2186.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

Serial #: 8322 Outside

Press @ Run Depth: 67.90 psig @ 3506.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.10.10 End Date: 2013.10.10

Last Calib.: 2013.09.10

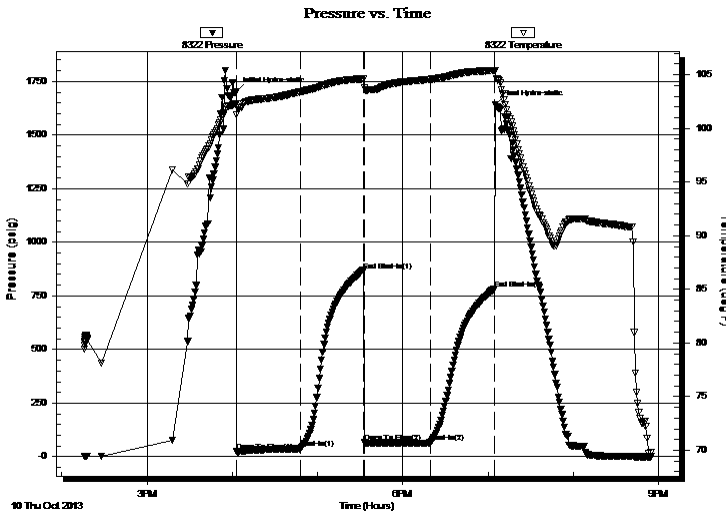
Start Time: 14:16:01 End Time: 20:54:40

Time On Btm: 2013.10.10 @ 16:02:50

Time Off Btm: 2013.10.10 @ 19:05:20

TEST COMMENT: 45 IF - Surface blow built to 7"
45 ISI - No return
45 FF - Surface blow started @ 2 mins built to 6"
45 FSI - No return

PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 1701.56 | 102.34 | Initial Hydro-static |
| 1 | 24.72 | 101.28 | Open To Flow (1) |
| 45 | 38.09 | 103.40 | Shut-In(1) |
| 90 | 868.47 | 104.60 | End Shut-In(1) |
| 90 | 65.80 | 103.76 | Open To Flow (2) |
| 137 | 67.90 | 104.57 | Shut-In(2) |
| 182 | 782.90 | 105.39 | End Shut-In(2) |
| 183 | 1643.51 | 105.40 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------------|--------------|
| 120.00 | MCO - 25%M - 75%o | 0.59 |
| 15.00 | Oil - 100%o | 0.17 |
| | | |
| | | |
| | | |

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Black Diamond Oil

25 - 5S - 21W - Norton Ks

P.O. Box 641
Hays KS 67601

Kemper B #1

Job Ticket: 53515

DST#: 2

ATTN: Steve Reed

Test Start: 2013.10.10 @ 14:16:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

36.4 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.99 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 800.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbbl |
|--------------|-------------------|----------------|
| 120.00 | MCO - 25%M - 75%o | 0.590 |
| 15.00 | Oil - 100%o | 0.174 |

Total Length: 135.00 ft Total Volume: 0.764 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

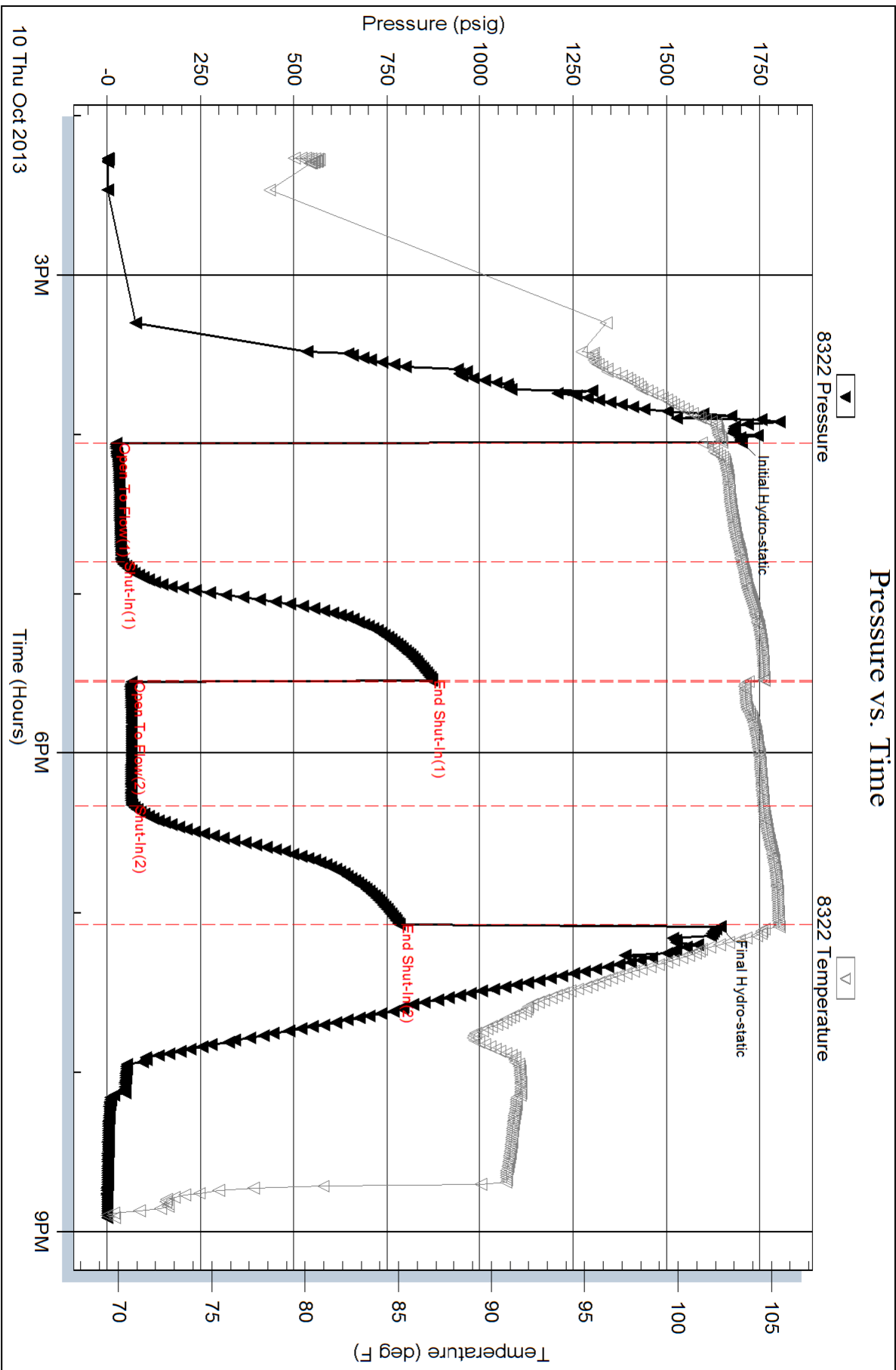
Recovery Comments: Oil API = 39 @ 86 DEG F = 36.4 COR 60 DEG F

Serial #: 8322

Outside Black Diamond Oil

Kemper B #1

DST Test Number: 2





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Black Diamond Oil

25 - 5S - 21W - Norton Ks

P.O. Box 641
Hays KS 67601

Kemper B #1

Job Ticket: 53516

DST#: 3

ATTN: Steve Reed

Test Start: 2013.09.11 @ 11:53:00

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:32:20

Time Test Ended: 16:36:39

Test Type: Conventional Bottom Hole (Reset)

Tester: Ryan Nichols

Unit No: 41

Interval: 3566.00 ft (KB) To 3616.00 ft (KB) (TVD)

Reference Elevations: 2191.00 ft (KB)

Total Depth: 3616.00 ft (KB) (TVD)

2186.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

Serial #: 6752 Inside

Press @ Run Depth: psig @ 3567.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.09.11 End Date: 2013.09.11

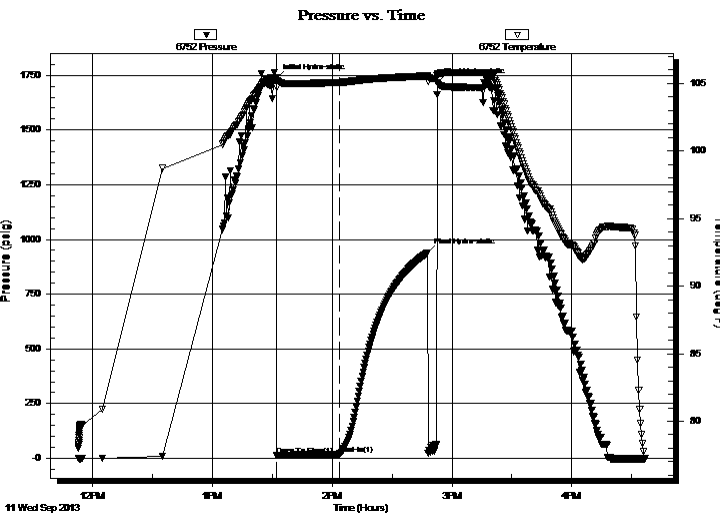
Last Calib.: 2013.09.11

Start Time: 11:53:01 End Time: 16:36:40

Time On Btm: 2013.09.11 @ 13:32:10

Time Off Btm: 2013.09.11 @ 14:47:40

TEST COMMENT: 30 IF - Surface blow died @ 26 mins
45 ISI - No return
5 FF - No blow



PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 1736.32 | 105.44 | Initial Hydro-static |
| 1 | 12.60 | 104.74 | Open To Flow (1) |
| 32 | 19.88 | 105.08 | Shut-In(1) |
| 76 | 938.23 | 105.56 | Final Hydro-static |
| 81 | 1714.32 | 105.63 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-----------------|--------------|
| 10.00 | Mud w/oil spots | 0.05 |
| | | |
| | | |
| | | |
| | | |

Gas Rates

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

* Recovery from multiple tests



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Black Diamond Oil

25 - 5S - 21W - Norton Ks

P.O. Box 641
Hays KS 67601

Kemper B #1

Job Ticket: 53516

DST#: 3

ATTN: Steve Reed

Test Start: 2013.09.11 @ 11:53:00

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:32:20

Time Test Ended: 16:36:39

Test Type: Conventional Bottom Hole (Reset)

Tester: Ryan Nichols

Unit No: 41

Interval: 3566.00 ft (KB) To 3616.00 ft (KB) (TVD)

Reference Elevations: 2191.00 ft (KB)

Total Depth: 3616.00 ft (KB) (TVD)

2186.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

Serial #: 8322 Outside

Press @ Run Depth: psig @ 3567.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.09.11

End Date: 2013.09.11

Last Calib.: 2013.09.11

Start Time: 11:53:01

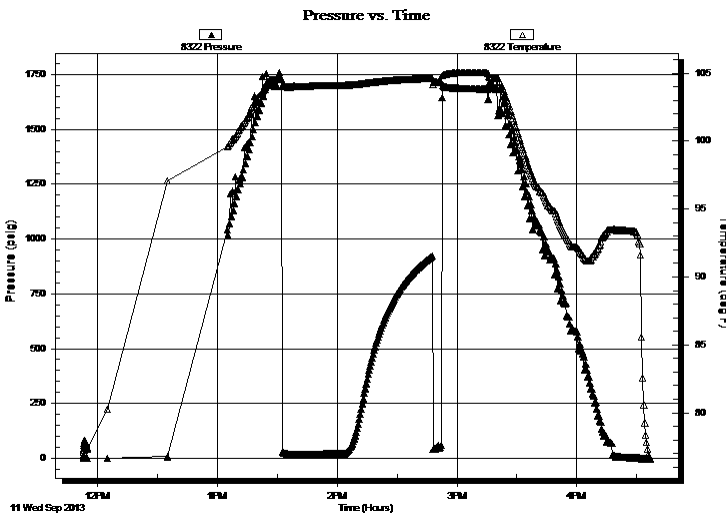
End Time: 16:36:40

Time On Btm:

Time Off Btm:

TEST COMMENT: 30 IF - Surface blow died @ 26 mins
45 ISI - No return
5 FF - No blow

PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|------------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-----------------|--------------|
| 10.00 | Mud w/oil spots | 0.05 |
| | | |
| | | |
| | | |
| | | |

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Black Diamond Oil

25 - 5S - 21W - Norton Ks

P.O. Box 641
Hays KS 67601

Kemper B #1

Job Ticket: 53516

DST#: 3

ATTN: Steve Reed

Test Start: 2013.09.11 @ 11:53:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.99 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 800.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|-----------------|---------------|
| 10.00 | Mud w/oil spots | 0.049 |

Total Length: 10.00 ft Total Volume: 0.049 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

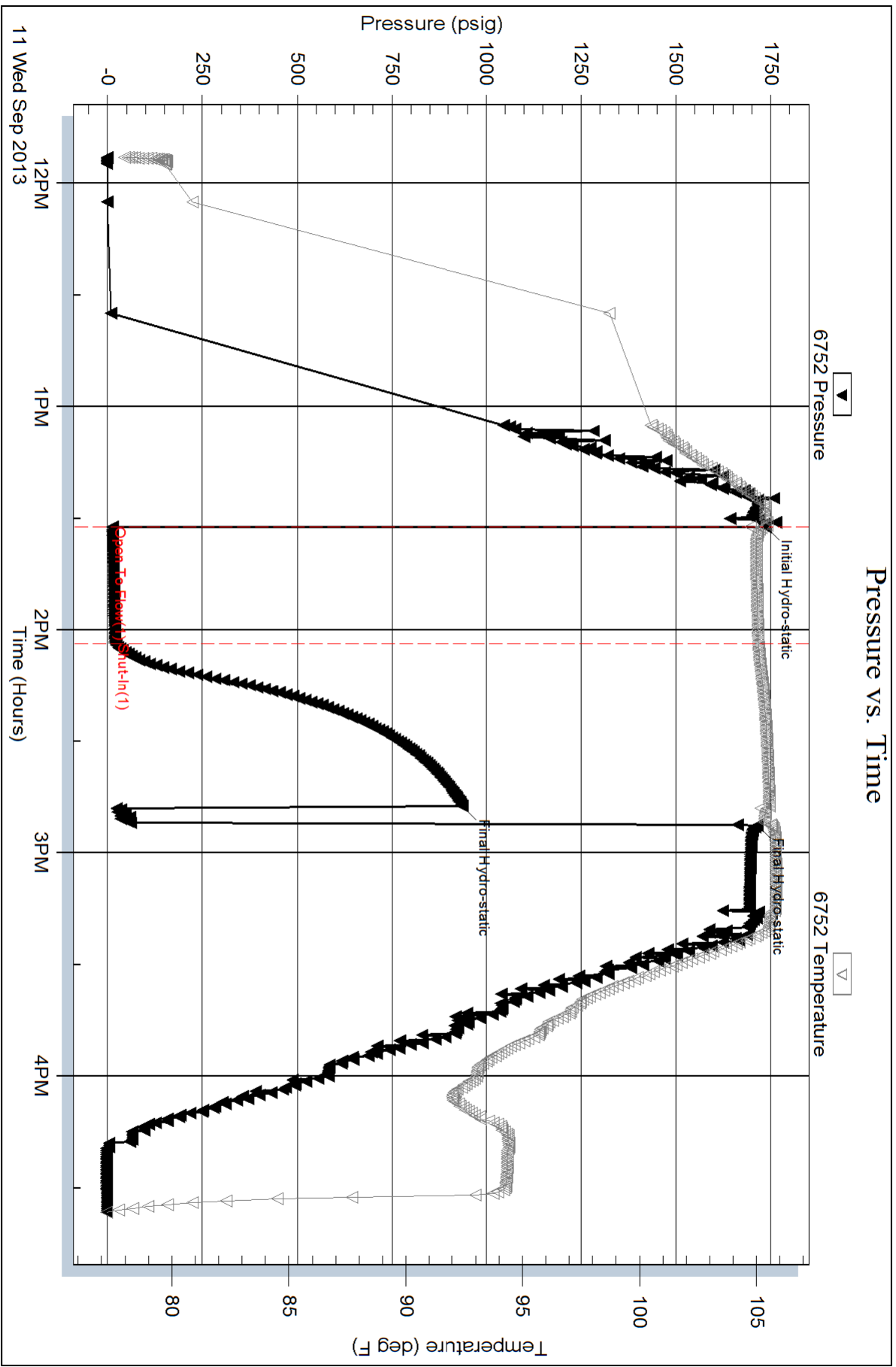
Serial #: 6752

Inside

Black Diamond Oil

Kemper B #1

DST Test Number: 3



Triobite Testing, Inc

Ref. No: 53516

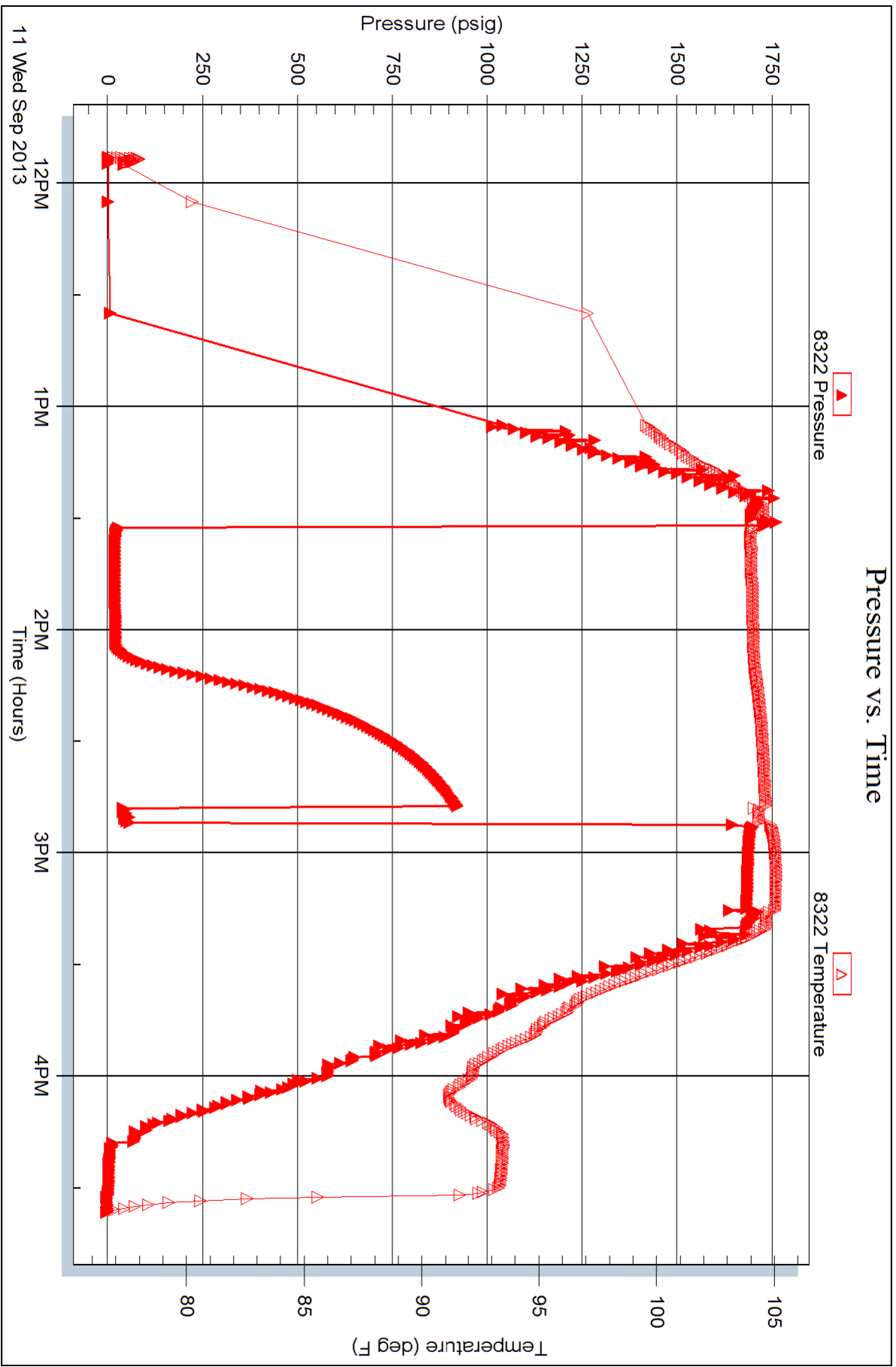
Printed: 2013.09.11 @ 19:30:59

Serial #: 8322

Outside Black Diamond Oil

Kemper B #1

DST Test Number: 3





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Black Diamond Oil

25 - 5S - 21W - Norton Ks

P.O. Box 641
Hays KS 67601

Kemper B #1

Job Ticket: 53517

DST#: 4

ATTN: Steve Reed

Test Start: 2013.09.11 @ 21:55:00

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:28:50

Time Test Ended: 05:01:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Ryan Nichols

Unit No: 41

Interval: 3566.00 ft (KB) To 3619.00 ft (KB) (TVD)

Reference Elevations: 2191.00 ft (KB)

Total Depth: 3619.00 ft (KB) (TVD)

2186.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

Serial #: 6752

Inside

Press @ Run Depth: 37.74 psig @ 3567.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.09.11

End Date:

2013.09.12

Last Calib.: 2013.09.12

Start Time: 21:55:01

End Time:

05:01:00

Time On Btm: 2013.09.12 @ 00:28:40

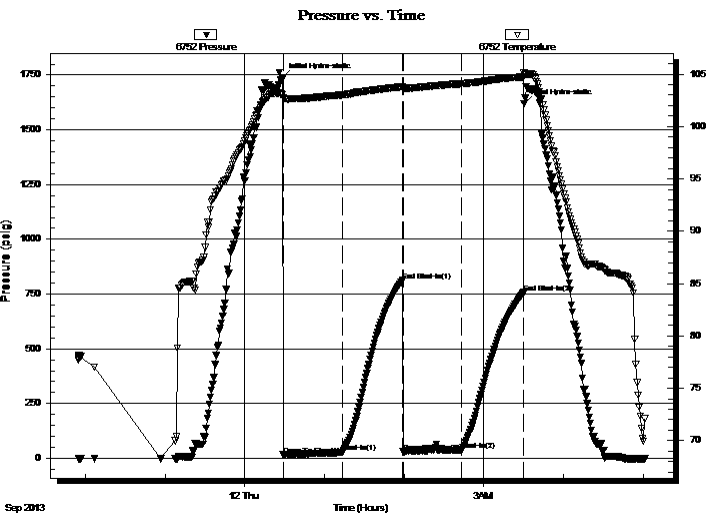
Time Off Btm: 2013.09.12 @ 03:30:09

TEST COMMENT: 45 IF - Surface blow built to 1"

45 ISI - No return

45 FF - No blow

45 FSI - No return



PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 1738.22 | 103.07 | Initial Hydro-static |
| 1 | 15.56 | 102.75 | Open To Flow (1) |
| 45 | 26.52 | 103.02 | Shut-In(1) |
| 91 | 811.75 | 103.80 | End Shut-In(1) |
| 91 | 29.16 | 103.64 | Open To Flow (2) |
| 135 | 37.74 | 104.07 | Shut-In(2) |
| 182 | 756.94 | 104.74 | End Shut-In(2) |
| 182 | 1620.77 | 105.17 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|------------------|--------------|
| 25.00 | OCM - 7%O - 93%M | 0.12 |
| | | |
| | | |
| | | |
| | | |

* Recovery from multiple tests

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Black Diamond Oil

25 - 5S - 21W - Norton Ks

P.O. Box 641
Hays KS 67601

Kemper B #1

Job Ticket: 53517

DST#: 4

ATTN: Steve Reed

Test Start: 2013.09.11 @ 21:55:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.98 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 800.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|------------------|---------------|
| 25.00 | OCM - 7%o - 93%M | 0.123 |

Total Length: 25.00 ft Total Volume: 0.123 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

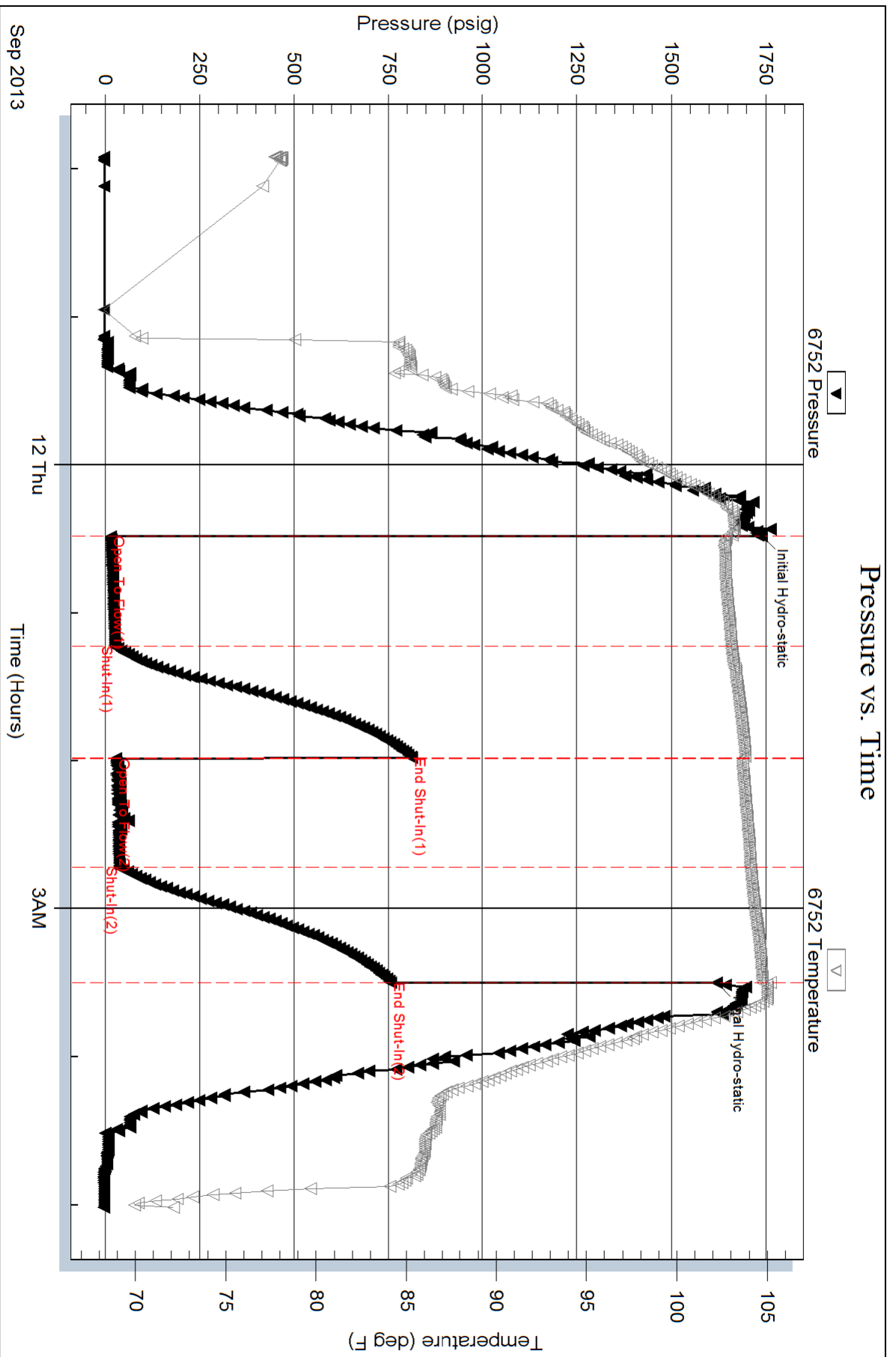
Serial #: 6752

Inside

Black Diamond Oil

Kemper B #1

DST Test Number: 4



Trilobite Testing, Inc

Ref. No: 53517

Printed: 2013.09.12 @ 11:09:36

OPERATOR

Company: BLACK DIAMOND OIL, INC.
 Address: P.O. BOX 641
 HAYS, KANSAS 67601

Contact Geologist: KENNETH VEHIGE
 Contact Phone Nbr: 785-625-5891
 Well Name: KEMPER B #1
 Location: NE SE NW Sec.23 T5S R21W
 Pool: API: 15-137-20,666-00-00
 State: KANSAS Field: RAY WEST
 Country: USA

Scale 1:240 Imperial

Well Name: KEMPER B #1
 Surface Location: NE SE NW Sec.23 T5S R21W
 Bottom Location:
 API: 15-137-20,666-00-00
 License Number: 7076
 Spud Date: 9/6/2013 Time: 10:30 AM
 Region: NORTON COUNTY
 Drilling Completed: 9/11/2013 Time: 8:00 PM
 Surface Coordinates: 1650' FNL & 2310' FWL
 Bottom Hole Coordinates:
 Ground Elevation: 2179.00ft
 K.B. Elevation: 2184.00ft
 Logged Interval: 3000.00ft To: 3619.00ft
 Total Depth: 3619.00ft
 Formation: ARBUCKLE
 Drilling Fluid Type: CHEMICAL/FRESH WATER GEL

SURFACE CO-ORDINATES

Well Type: Vertical
 Longitude: -99.6568937 Latitude: 39.6061716
 N/S Co-ord: 1650' FNL
 E/W Co-ord: 2310' FWL

LOGGED BY

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

Phone Nbr: (785) 639-1337
 Logged By: Geologist Name: STEVE REED / HERB DEINES

CONTRACTOR

Contractor: WW DRILLING, LLC
 Rig #: 6
 Rig Type: MUD ROTARY
 Spud Date: 9/6/2013 Time: 10:30 AM
 TD Date: 9/11/2013 Time: 8:00 PM
 Rig Release: 9/13/2013 Time: 12:00 AM

ELEVATIONS

K.B. Elevation: 2184.00ft Ground Elevation: 2179.00ft
 K.B. to Ground: 5.00ft

NOTES

RECOMMENDATION TO RUN PRODUCTION CASING BASED ON GOOD OIL SHOWS, STRUCTURE AND POSITIVE RESULTS OF DST #4. DECISION TO OPEN HOLE COMPLETE TO FURTHER TEST ARBUCKLE FORMATION.

OPEN HOLE LOGGING BY NABORS COMPLETION AND PRODUCTION SERVICES CO: DUAL INDUCTION LOG, DUAL COMPENSATED POROSITY LOG, AND MICRO RESISTIVITY LOG

DRILL STEM TESTING BY TRILOBITE TESTERS INC: FOUR (4) CONVENTIONAL TESTS WERE PERFORMED.

FORMATION TOPS SUMMARY AND CHRONOLOGY OF DAILY ACTIVITY

| | WELL NAME | | COMP. WELL | COMP. WELL |
|----------------|-----------------------------|-------------|-----------------------|-----------------------------|
| | KEMPER B#1 BLACK DIAMOND | | SHUGHART #1 GOODIN | KEMPER # 1 BLACK DIAMOND |
| FORMATION | SAMPLE TOPS | LOG TOPS | LOG TOPS | LOG TOPS |
| ANHYDRITE TOP | 1776 + 408 | | + 415 | + 409 |
| ANHYDRITE BASE | 1811 + 373 | | | + 380 |
| TOPEKA | 3185 - 1001 | 3184 - 1001 | -992 | -998 |
| HEEBNER SHALE | 3334 - 1150 | 3328 - 1144 | -1147 | -1146 |
| TORONTO | 3361 - 1177 | 3354 - 1170 | -1172 | -1174 |
| LKC | 3379 - 1195 | 3368 - 1184 | -1188 | -1191 |
| BKC | 3570 - 1386 | 3561 - 1377 | -1378 | -1377 |
| ARBUCKLE | 3611 - 1427 | | -1422 | -1422 |

SUMMARY OF DAILY ACTIVITY

9-6-13 RU, spud @ 10:30am; 8 5/8" surface casing set at 218' w/150 sxs common, 2% gel, 3%cc

9-7-13 1036' drilling

9-8-13 2650' drilling

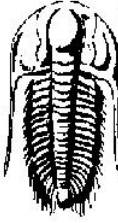
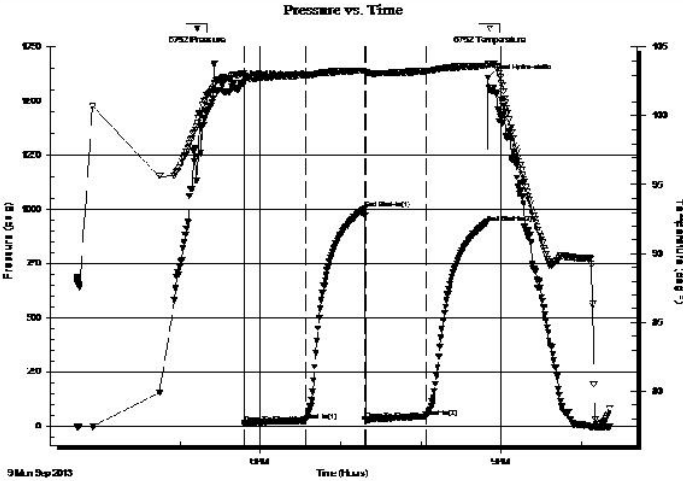
9-9-13 3330' drilling, CFS @ 3385', short trip (33 stands) DST #1 3319'-3385' Toronto-LKC "a"

9-10-13 3487' drilling, CFS @ 3470', mini trip, slope 1°, strap 3554.57', board 3554.54', .03' long, DST #2 3505'-3550' LKC "l-k"

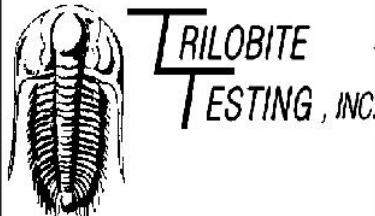
9-11-13 CFS @ 3603', 3606', 3609', 3612', 3614', 3616' DST #3 3566'-3616' ARB. CFS @ 3619' DST #4 3566'-3619' ARB.

9-12-13 open hole logging, 5 1/2" Production casing and cementing.

DST #1 TEST SUMMARY

|  TRILOBITE TESTING, INC. | DRILL STEM TEST REPORT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|--|----------------------|--------------|-------------------------|------|---------|--------|----------------------|---|-------|--------|------------------|----|-------|--------|------------|----|---|--------|----------------|----------------|-----------------|------------------|------------------|-----|-------|--------|------------|-----|--------|--------|----------------|-----|---------|--------|--------------------|--|
| | Black Diamond Oil P.O. Box 641 Hays KS 67601 ATTN: Steve Reed | 25 - 5S - 21W - Norton Ks Kemper B #1 Job Ticket: 53514 DST#:1 Test Start: 2013.09.09 @ 15:43:00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| GENERAL INFORMATION: Formation: Toronto - Lkc " A " Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Initial) Time Tool Opened: 17:48:00 Tester: Ryan Nichols Time Test Ended: 22:21:00 Unit No: 41 Interval: 3319.00 ft (KB) To 3385.00 ft (KB) (TVD) Reference Elevations: 2191.00 ft (KB) Total Depth: 3385.00 ft (KB) (TVD) 2186.00 ft (CF) Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 5.00 ft | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Serial #: 6752 Press@RunDepth: 43.62 psig @ ft (KB) Capacity: 8000.00 psig Start Date: 2013.09.09 End Date: 2013.09.09 Last Calib.: 2013.09.09 Start Time: 15:43:01 End Time: 22:21:00 Time On Btm: 2013.09.09 @ 17:47:50 Time Off Btm: 2013.09.09 @ 20:49:50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TEST COMMENT: 45 IF - Surface blow built to 1/4" 45 ISI - No return 45 FF - No blow 45 FSI - No return | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | PRESSURE SUMMARY | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <table border="1"> <thead> <tr> <th>Time (Min.)</th> <th>Pressure (psig)</th> <th>Temp (deg F)</th> <th>Annotation</th> </tr> </thead> <tbody> <tr><td>0</td><td>1582.15</td><td>103.09</td><td>Initial Hydro-static</td></tr> <tr><td>1</td><td>11.04</td><td>102.44</td><td>Open To Flow (1)</td></tr> <tr><td>46</td><td>27.08</td><td>102.96</td><td>Shut-In(1)</td></tr> <tr><td>91</td><td>1002.92</td><td>103.31</td><td>End Shut-In(1)</td></tr> <tr><td>91</td><td>30.38</td><td>103.09</td><td>Open To Flow (2)</td></tr> <tr><td>136</td><td>43.62</td><td>103.28</td><td>Shut-In(2)</td></tr> <tr><td>182</td><td>940.02</td><td>103.64</td><td>End Shut-In(2)</td></tr> <tr><td>182</td><td>1606.33</td><td>103.79</td><td>Final Hydro-static</td></tr> </tbody> </table> | Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation | 0 | 1582.15 | 103.09 | Initial Hydro-static | 1 | 11.04 | 102.44 | Open To Flow (1) | 46 | 27.08 | 102.96 | Shut-In(1) | 91 | 1002.92 | 103.31 | End Shut-In(1) | 91 | 30.38 | 103.09 | Open To Flow (2) | 136 | 43.62 | 103.28 | Shut-In(2) | 182 | 940.02 | 103.64 | End Shut-In(2) | 182 | 1606.33 | 103.79 | Final Hydro-static | |
| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 1582.15 | 103.09 | Initial Hydro-static | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 11.04 | 102.44 | Open To Flow (1) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 46 | 27.08 | 102.96 | Shut-In(1) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 91 | 1002.92 | 103.31 | End Shut-In(1) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 91 | 30.38 | 103.09 | Open To Flow (2) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 136 | 43.62 | 103.28 | Shut-In(2) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 182 | 940.02 | 103.64 | End Shut-In(2) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 182 | 1606.33 | 103.79 | Final Hydro-static | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Recovery | Gas Rates | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <thead> <tr> <th>Length (ft)</th> <th>Description</th> <th>Volume (bbl)</th> </tr> </thead> <tbody> <tr> <td>61.00</td> <td>Mud w/oil spots - 100%M</td> <td>0.30</td> </tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table> | Length (ft) | Description | Volume (bbl) | 61.00 | Mud w/oil spots - 100%M | 0.30 | | | | | | | | | | | | | <table border="1"> <thead> <tr> <th>Chole (inches)</th> <th>Pressure (psig)</th> <th>Gas Rate (Mcf/d)</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table> | | | Chole (inches) | Pressure (psig) | Gas Rate (Mcf/d) | | | | | | | | | | | | | | |
| Length (ft) | Description | Volume (bbl) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 61.00 | Mud w/oil spots - 100%M | 0.30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Chole (inches) | Pressure (psig) | Gas Rate (Mcf/d) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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DST # 2 TEST SUMMARY

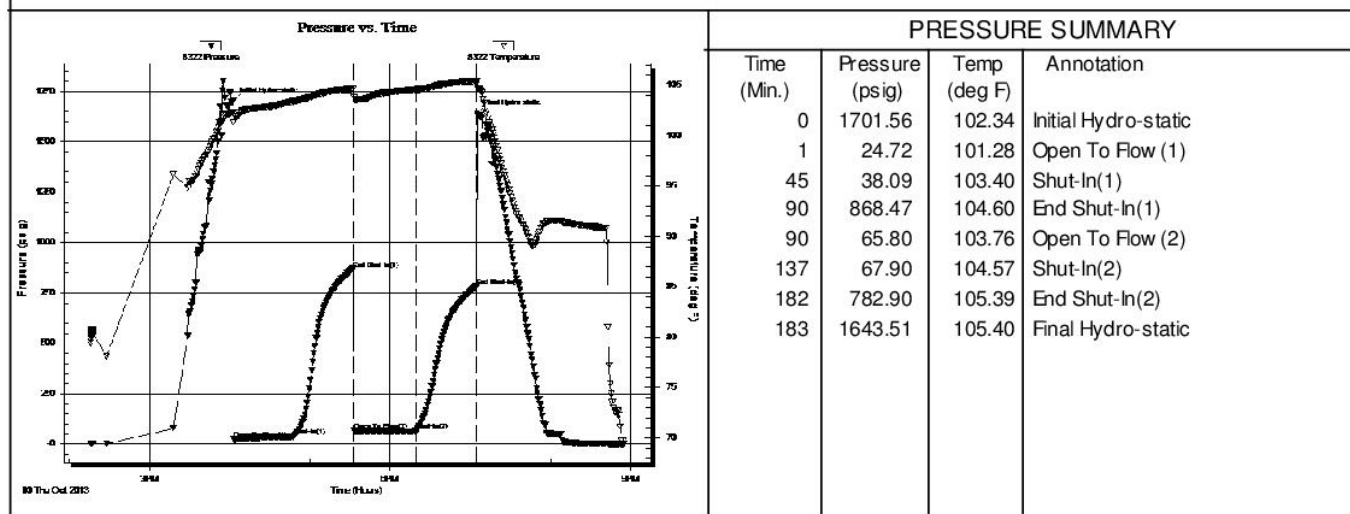
| | | |
|---|-----------------------------------|----------------------------------|
|  | DRILL STEM TEST REPORT | |
| | Black Diamond Oil | 25 - 5S - 21W - Norton Ks |
| P.O. Box 641 Hays KS 67601 | Kemper B #1 | Job Ticket: 53515 DST#:2 |
| ATTN: Steve Reed | Test Start: 2013.10.10 @ 14:16:00 | |

GENERAL INFORMATION:

Formation: **LKC " I - K "**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 16:03:00
 Time Test Ended: 20:54:39
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Ryan Nichols
 Unit No: 41
Interval: 3505.00 ft (KB) To 3550.00 ft (KB) (TVD)
 Total Depth: 3550.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Reference Elevations: 2191.00 ft (KB)
 2186.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: 8322 Outside
 Press@RunDepth: 67.90 psig @ 3506.00 ft (KB)
 Start Date: 2013.10.10 End Date: 2013.10.10 Capacity: 8000.00 psig
 Start Time: 14:16:01 End Time: 20:54:40 Last Calib.: 2013.09.10
 Time On Btm: 2013.10.10 @ 16:02:50
 Time Off Btm: 2013.10.10 @ 19:05:20

TEST COMMENT: 45 IF - Surface blow built to 7"
 45 ISI - No return
 45 FF - Surface blow started @ 2 mins built to 6"
 45 FSI - No return

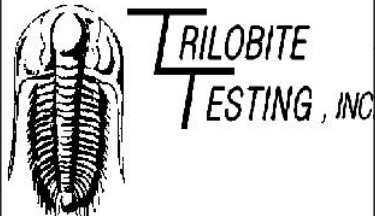


| Recovery | | |
|-------------|-------------------|--------------|
| Length (ft) | Description | Volume (bbl) |
| 120.00 | MCO - 25%M - 75%o | 0.59 |
| 15.00 | Oil - 100%o | 0.17 |
| | | |
| | | |

* Recovery from multiple tests

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

DST # 3 TEST SUMMARY

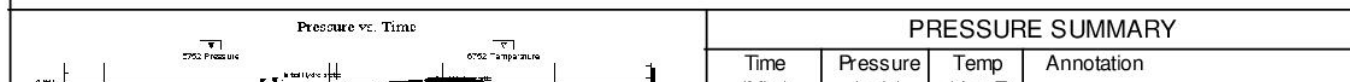
| | | |
|---|-----------------------------------|----------------------------------|
|  | DRILL STEM TEST REPORT | |
| | Black Diamond Oil | 25 - 5S - 21W - Norton Ks |
| P.O. Box 641 Hays KS 67601 | Kemper B #1 | Job Ticket: 53516 DST#:3 |
| ATTN: Steve Reed | Test Start: 2013.09.11 @ 11:53:00 | |

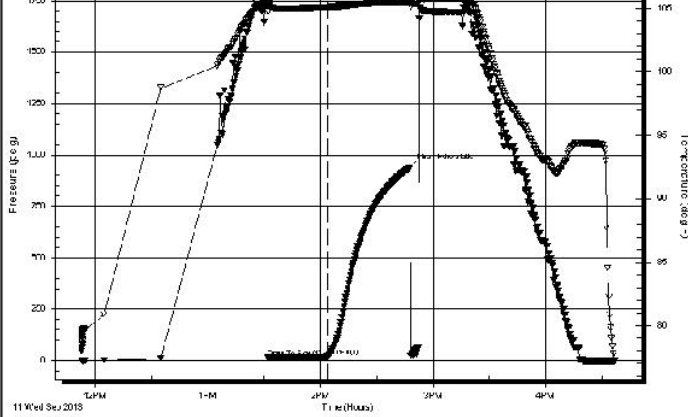
GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 13:32:20
 Time Test Ended: 16:36:39
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Ryan Nichols
 Unit No: 41
Interval: 3566.00 ft (KB) To 3616.00 ft (KB) (TVD)
 Total Depth: 3616.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Reference Elevations: 2191.00 ft (KB)
 2186.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: 6752 Inside
 Press@RunDepth: psig @ 3567.00 ft (KB)
 Start Date: 2013.09.11 End Date: 2013.09.11 Capacity: 8000.00 psig
 Start Time: 11:53:01 End Time: 16:36:40 Last Calib.: 2013.09.11
 Time On Btm: 2013.09.11 @ 13:32:10
 Time Off Btm: 2013.09.11 @ 14:47:40

TEST COMMENT: 30 IF - Surface blow died @ 26 mins
 45 ISI - No return
 5 FF - No blow





| (Min.) | (psig) | (deg F) | |
|--------|---------|---------|----------------------|
| 0 | 1736.32 | 105.44 | Initial Hydro-static |
| 1 | 12.60 | 104.74 | Open To Flow (1) |
| 32 | 19.88 | 105.08 | Shut-In(1) |
| 76 | 938.23 | 105.56 | Final Hydro-static |
| 81 | 1714.32 | 105.63 | Final Hydro-static |

| Length (ft) | Description | Volume (bbl) |
|-------------|-----------------|--------------|
| 10.00 | Mud w/oil spots | 0.05 |
| | | |
| | | |
| | | |
| | | |

* Recovery from multiple tests

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

Trilobite Testing, Inc Ref. No: 53516 Printed: 2013.09.11 @ 17:20:48

DST # 4 TEST SUMMARY

TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Black Diamond Oil **25 - 5S - 21W - Norton Ks**

P.O. Box 641 **Kemper B #1**
Hays KS 67601

Job Ticket: 53517 **DST#:4**

ATTN: Steve Reed Test Start: 2013.09.11 @ 21:55:00

GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 00:28:50
 Time Test Ended: 05:01:00

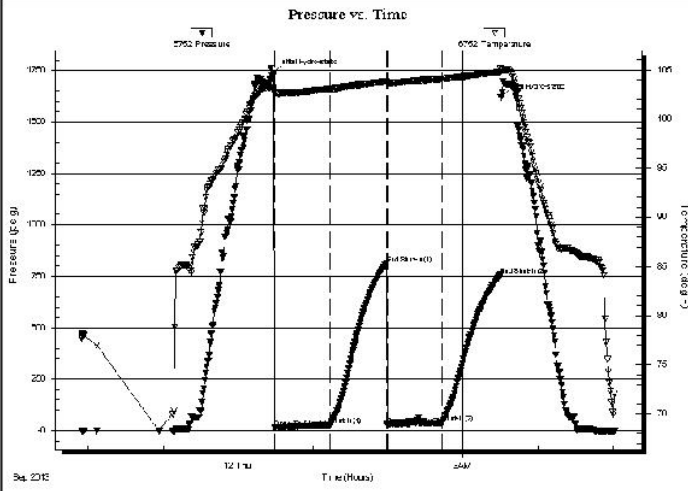
Test Type: Conventional Bottom Hole (Reset)
 Tester: Ryan Nichols
 Unit No: 41

Interval: **3566.00 ft (KB) To 3619.00 ft (KB) (TVD)**
 Reference Elevations: 2191.00 ft (KB)
 Total Depth: 3619.00 ft (KB) (TVD) 2186.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 5.00 ft

Serial #: 6752 Inside

| | |
|--|-------------------------------------|
| Press@RunDepth: 37.74 psig @ 3567.00 ft (KB) | Capacity: 8000.00 psig |
| Start Date: 2013.09.11 | End Date: 2013.09.12 |
| Start Time: 21:55:00 | End Time: 05:01:00 |
| | Time On Btm: 2013.09.12 @ 00:28:40 |
| | Time Off Btm: 2013.09.12 @ 03:30:09 |

TEST COMMENT: 45 IF -
 45 ISI -
 45 FF -
 45 FSI -



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 1738.22 | 103.07 | Initial Hydro-static |
| 1 | 15.56 | 102.75 | Open To Flow (1) |
| 45 | 26.52 | 103.02 | Shut-In(1) |
| 91 | 811.75 | 103.80 | End Shut-In(1) |
| 91 | 29.16 | 103.64 | Open To Flow (2) |
| 135 | 37.74 | 104.07 | Shut-In(2) |
| 182 | 756.94 | 104.74 | End Shut-In(2) |
| 182 | 1620.77 | 105.17 | Final Hydro-static |

| Length (ft) | Description | Volume (bbl) |
|-------------|------------------|--------------|
| 25.00 | OCM - 7%O - 93%M | 0.12 |
| | | |
| | | |
| | | |
| | | |

* Recovery from multiple tests

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

Trilobite Testing, Inc Ref. No: 53517 Printed: 2013.09.12 @ 05:11:25

ROCK TYPES

| | | | |
|----------|-----------|------------|------------|
| Cht | Dol Lime | Lscongl | shale, red |
| Cht vari | Lmst fw<7 | shale, gry | Shcol |
| Dolprim | Lmst fw>7 | Carbon Sh | Ss |

ACCESSORIES

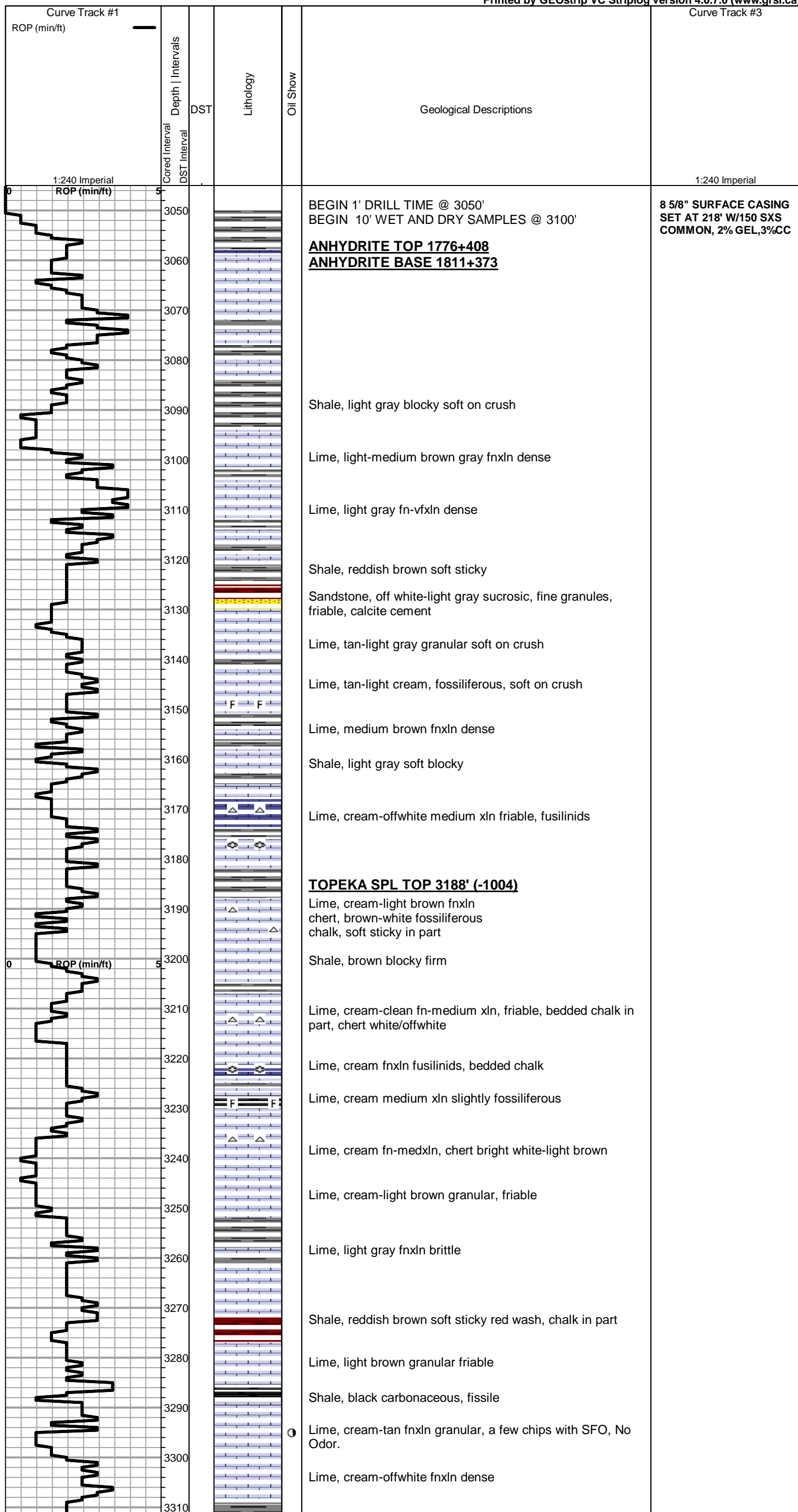
MINERAL
 ▲ Chert, dark
 P Pyrite
 △ Chert White
 ▽ Euhed rhombs of dol or

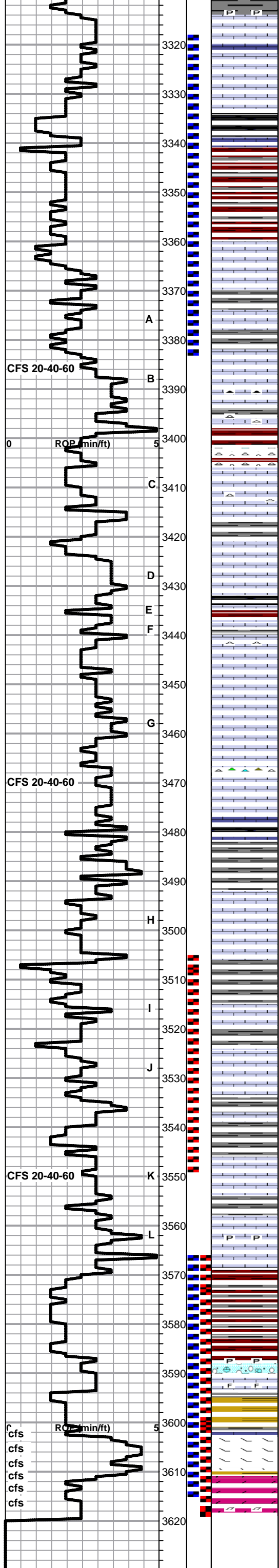
FOSSIL
 F Fossils < 20%
 ⊕ Fossilinid

OTHER SYMBOLS

DST
 ■ DST Int
 ■ DST alt

Printed by GEOstrip VC Striplog version 4.0.7.0 (www.grsi.ca)





Lime, cream fnxln hard on crush, pyrite

Lime, cream-fnxln

HEEBNER SH SPL TOP 3334' (-1150)

Shale, black carbonaceous

Lime, medium brown vfnxln, hard on crush

Shale, reddish brown-gray soft blocky

TORONTO SPL TOP 3361' (-1177)

Lime, cream tan oolitic with SFO, good odor, fine interxln porosity, flouresence under UV.

Lime, tan-light brown slightly fossiliferous

LKC SPL TOP 3379 (-1195)

Lime, tan vfnxln NSFO, slight odor

Lime, cream-tan fn-vfxln, brittle on crush, orange chert

Lime, 1 chip oolitic with SFO, no odor, pyrite, light gray chert

Cherts, various colors, light gray, brown, white
Shale, medium brown soft blocky

Shale, reddish brown / gray soft sticky, opaque gray chert, pyrite

Lime, tan, mostly fnxln with 1 chip light scattered stain, pinpoint porosity. no odor, no sfo

Shale, light gray-black soft blocky, red wash

Lime, cream-tan fnxln, light gray chert

Lime, cream a few chips with fine pinpoint porosity, scattered stain, slight odor, SFO upon crush

Lime, tan interxln porosity with some scattered stain slight odor

Lime, cream-tan clean fnxln, various colored cherts

Lime, cream-tan fnxln, fusulinids

Shale, black carbonaceous

Shale, light gray blocky, sticky in part

Lime, cream-offwhite granular, friable

Lime, light-medium brown fnxln

Lime, tan scattered pinpoint porosity, few chips oolitic w/SFO upon crush. slight odor.

Lime, tan-light brown scattered vuggy porosity, slight stain, slight odor, nsfo

Lime, cream-light brown fn-medium xln nsfo, no odor

Lime, light brown granular with scattered vuggy porosity. SFO upon crush, slight odor

Shale, brown-gray soft blocky

Lime, tan-light brown fnxln, chert light gray, pyrite
1 chip with gilsonitic stain

BKC 3570' (-1386)

Shale, reddish brown granular sandy blocky firm on crush

Shale, reddish brown soft blocky

Lime, gray fn-vfxln, bedded chalk, gray chert, pyrite

Lime, gray-yellowish fnxln with clastics imbedded, slightly fossiliferous

Shale, brown soft sticky

Lime, off-white-gray fnxln, nsfo, no odor

ARBUCKLE SPL TOP 3611 (-1427)

Dolomite, fnxln grading into medium xln, SFO upon crush faint odor.

Dolomite, offwhite-light brown, rhombic xtals with clear qtz, glauconitic, saturated stain w SFO, good odor

RTD 3619 (-1435) LTD 3616 (-1432)

DST #1 3319'- 3385' SEE
HEADER FOR TEST
SUMMARY

DST #2 3505' - 3550' SEE
HEADER FOR TEST
SUMMARY

DST #3 3566' - 3616' SEE
HEADER FOR
TESTSUMMARY

DST #4 3566 - 3619' SEE
HEADER FOR TEST
SUMMARY

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

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

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

No. 7531

| | | | | | | | | |
|------|----------|------|------|-------|--------|-------|-------------|---------|
| Date | 10-11-13 | Sec. | Twp. | Range | County | State | On Location | Finish |
| | | | | | Norton | KS | | 3:00 PM |

Location Logan W to E 12 Rd 1 1/2 S 2 E 2 S 1/2 W

Lease Kemper "B" Well No. #1 Owner

Contractor To Quality Oilwell Cementing, Inc.
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 Squeeze Charge To Black Diamond

Hole Size 7 7/8 T.D. Depth

Csg. 5 1/2 Depth 3402 Street City State

Tbg. Size 2" Depth 3274

Tool Parker Depth 3274 The above was done to satisfaction and supervision of owner agent or contractor.

Cement Left in Csg. Shoe Joint Cement Amount Ordered 150 com 3 1/2 cc

Meas Line Displace

EQUIPMENT Common 150

| | | |
|----------------|----------------------|----------|
| Pumptrk 17 No. | Cementer Helper Cody | Poz. Mix |
|----------------|----------------------|----------|

| | | |
|---------------|-----------------|--------|
| Bulktrk 1 No. | Driver Lannie M | Gel. 3 |
|---------------|-----------------|--------|

| | | |
|----------------|--------------|-----------|
| Bulktrk Pu No. | Driver Brett | Calcium 3 |
|----------------|--------------|-----------|

JOB SERVICES & REMARKS Hulls

Remarks: Salt

Rat Hole Flowseal

Mouse Hole Kol-Seal

Centralizers Mud CLR 48

Baskets CFL-117 or CD110 CAF 38

D/V or Port Collar Sand - 2 sx

Handling 158

Spotted 2sx of sand @ 3402' Mileage

Mixed 125sx com @ 3274' FLOAT EQUIPMENT

Displaced 13 bbl Guide Shoe

Squeezed to 1000 lbs Centralizer

Washed clean tubing Baskets

Mixed 25 sx between 5 1/2 + 8 5/8 AFU Inserts

Washed truck clean Float Shoe

Latch Down

Pumptrk Charge Squeeze

Mileage 68

Signature

Tax

Discount

Total Charge

November 6, 2013

Black Diamond Oil, Inc
P. O. Box 641
Hays, Kansas 67601

**RE: Exception to Alternate II Cementing Requirements
Kemper B # 1
NESENW section 23-5-21W
Norton County, Kansas
API # 15-137-20666-00-00**

Dear Mr. Vehige,

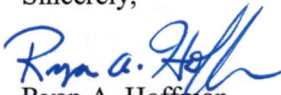
The Kansas Corporation Commission (KCC) has received your request, dated October 30, 2013, through District 4 Supervisor for an exception to Alternate II cementing requirements for the above referenced well. From this request, the KCC understands that subject well was not cemented to surface as required by the Alternate II option. Referenced well has 217 feet of surface casing set with 150 sacks of cement circulated to surface. A Temperature survey indicates cement was circulated to 200 feet from bottom with 550 sacks of cement. The bottom of fresh water is reported at 150 feet with the bottom of usable water listed at 1020 feet.

After review of this matter by technical staff it was determined that:

1. Surface casing was set deeper than fresh water source in the area with cement coverage to protect the shallow aquifers.
2. All fresh and usable water sources are adequately protected with cement coverage and any remaining intervals not covered by cement contain no fresh or useable water zones.
3. The Dakota appears to be adequately isolated with cement and any remaining intervals not cemented contain no fresh or usable water nor present any threat of contamination from the shales in the interval.

Based on this information that the fresh and usable water zones are adequately protected with cement coverage and that any remaining intervals not cemented behind the production casing contain no threat of contamination from the shales in the intervals. Therefore, an exception is granted for the Alternate II requirement.

Sincerely,


Ryan A. Hoffman
Director

cc: Case Morris – District 4
Steve Bond – Production Supervisor