

Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION  
OIL & GAS CONSERVATION DIVISION

Form ACO-1

January 2018

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

Gas  DH  EOR

OG  GSW

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 EOR  Conv. to SWD

Plug Back  Liner  Conv. to GSW  Conv. to Producer

Commingled Permit #: \_\_\_\_\_

Dual Completion Permit #: \_\_\_\_\_

SWD Permit #: \_\_\_\_\_

EOR Permit #: \_\_\_\_\_

GSW Permit #: \_\_\_\_\_

Spud Date or Date Reached TD Completion Date or Recompletion Date

API No.: \_\_\_\_\_

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

GPS Location: Lat: \_\_\_\_\_, Long: \_\_\_\_\_  
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum:  NAD27  NAD83  WGS84

County: \_\_\_\_\_

Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Field Name: \_\_\_\_\_

Producing Formation: \_\_\_\_\_

Elevation: Ground: \_\_\_\_\_ Kelly Bushing: \_\_\_\_\_

Total Vertical 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

Confidentiality Requested

Date: \_\_\_\_\_

Confidential Release Date: \_\_\_\_\_

Wireline Log Received  Drill Stem Tests Received

Geologist Report / Mud Logs Received

UIC Distribution

ALT  I  II  III Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

Operator Name: \_\_\_\_\_ Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West County: \_\_\_\_\_

**INSTRUCTIONS:** Show important tops 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.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to [kcc-well-logs@kcc.ks.gov](mailto:kcc-well-logs@kcc.ks.gov). Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

|  |   |
|--|---|
| Drill Stem Tests Taken <input 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 type="checkbox"/> No<br><br>Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No<br>Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No<br>Geologist Report / Mud Logs <input type="checkbox"/> Yes <input type="checkbox"/> No<br><br>List All E. Logs Run: | <input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample<br><br>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 |
| <input type="checkbox"/> Perforate<br><input type="checkbox"/> Protect Casing<br><input type="checkbox"/> Plug Back TD<br><input type="checkbox"/> Plug Off Zone |                  |                |              |                            |
|  |                  |                |              |                            |

1. Did you perform a hydraulic fracturing treatment on this well?  Yes  No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?  Yes  No *(If No, skip question 3)*
3. Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry?  Yes  No *(If No, fill out Page Three of the ACO-1)*

|   |  |         |             |               |         |
|---|--|---------|-------------|---------------|---------|
| Date of first Production/Injection or Resumed Production/Injection: | Producing Method:<br><input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____ |         |             |               |         |
| Estimated Production Per 24 Hours                                   | Oil Bbls.  | Gas Mcf | Water Bbls. | Gas-Oil Ratio | Gravity |

|   |   |                                    |
|---|---|------------------------------------|
| DISPOSITION OF GAS:<br><input 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 type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled<br><i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i> | PRODUCTION INTERVAL:<br>Top Bottom |
|---|---|------------------------------------|

| Shots Per Foot | Perforation Top | Perforation Bottom | Bridge Plug Type | Bridge Plug Set At | Acid, Fracture, Shot, Cementing Squeeze Record<br><i>(Amount and Kind of Material Used)</i> |
|----------------|-----------------|--------------------|------------------|--------------------|---|
|                |                 |                    |                  |                    |   |
|                |                 |                    |                  |                    |   |
|                |                 |                    |                  |                    |   |
|                |                 |                    |                  |                    |   |

|                |       |         |            |  |
|----------------|-------|---------|------------|--|
| TUBING RECORD: | Size: | Set At: | Packer At: |  |
|----------------|-------|---------|------------|--|





P. O. Box 466  
Ness City, KS 67560  
Off: 785-798-2300



1-1-17  
#6871

# Invoice

|           |           |
|-----------|-----------|
| DATE      | INVOICE # |
| 12/5/2016 | 29510     |

|   |
|---|
| BILL TO   |
| R.L. Investment<br>HC-1, Box 63<br>Morland, KS 67650-9718 |

- Acidizing
- Cement
- Tool Rental

| TERMS  | Well No. | Lease | County | Contractor   | Well Type | Well Category | Job Purpose          | Operator |
|--------|----------|-------|--------|--------------|-----------|---------------|----------------------|----------|
| Net 30 | #2-24    | Hobbs | Graham | STP Drilling | Oil       | Development   | 2 Stage Long Stri... | David E. |

| PRICE REF. | DESCRIPTION  | QTY   | UM        | UNIT PRICE | AMOUNT    |
|------------|--|-------|-----------|------------|-----------|
| 575D       | Mileage - 1 Way                                    | 60    | Miles     | 5.00       | 300.00    |
| 579D       | Pump Charge - Two-Stage & Top To Bottom LongString | 1     | Job       | 1,700.00   | 1,700.00  |
| 290        | D-Air  | 7     | Gallon(s) | 42.00      | 294.00T   |
| 281        | Mud Flush  | 1,000 | Gallon(s) | 1.25       | 1,250.00T |
| 221        | Liquid KCL (Clayfix)                               | 4     | Gallon(s) | 25.00      | 100.00T   |
| 402-5      | 5 1/2" Centralizer                                 | 8     | Each      | 60.00      | 480.00T   |
| 403-5      | 5 1/2" Cement Basket                               | 2     | Each      | 250.00     | 500.00T   |
| 407-5      | 5 1/2" Insert Float Shoe With Auto Fill            | 1     | Each      | 300.00     | 300.00T   |
| 408-5      | 5 1/2" D.V. Tool & Plug Set                        | 1     | Each      | 3,250.00   | 3,250.00T |
| 411-5      | 5 1/2" Recipo Scratcher                            | 27    | Each      | 45.00      | 1,215.00T |
| 417-5      | 5 1/2" D.V. Latch Down Plug & Baffle               | 1     | Each      | 200.00     | 200.00T   |
| 330        | Swift Multi-Density Standard (MIDCON II)           | 275   | Sacks     | 15.75      | 4,331.25T |
| 325        | Standard Cement                                    | 175   | Sacks     | 12.25      | 2,143.75T |
| 284        | Calseal  | 8     | Sack(s)   | 30.00      | 240.00T   |
| 283        | Salt   | 950   | Lb(s)     | 0.20       | 190.00T   |
| 285        | CFR-1  | 100   | Lb(s)     | 4.50       | 450.00T   |
| 276        | Flocele  | 113   | Lb(s)     | 2.25       | 254.25T   |
| 581D       | Service Charge Cement                              | 450   | Sacks     | 1.50       | 675.00    |
| 583D       | Drayage  | 1,328 | Ton Miles | 0.75       | 996.00    |
|            | Subtotal   |       |           |            | 18,869.25 |
|            | Sales Tax Graham County                            |       |           | 7.50%      | 1,139.87  |

**We Appreciate Your Business!**

**Total**

\$20,009.12



TICKET 29510

CHARGE TO:  
RL INVESTMENTS  
ADDRESS

CITY, STATE, ZIP CODE

PAGE 1 OF 2

SERVICE LOCATIONS  
1. Hays, KS  
2. Ness City, KS  
3.  
4.

WELL/PROJECT NO. 2-24  
TICKET TYPE  
 SERVICE  
 SALES  
WELL TYPE  
Dil

LEASE  
Hobbs

COUNTY/PARISH  
Graham

RIG NAME/NO.  
STP Drilling

JOB PURPOSE  
Development 2 stage Long String

CITY  
Ness City, KS

STATE  
KS

DATE  
12-5-16

ORDER NO.

DELIVERED TO  
LOCATION

WELL PERMIT NO.

WELL LOCATION

INVOICE INSTRUCTIONS

| PRICE REFERENCE | SECONDARY REFERENCE/<br>PART NUMBER | ACCOUNTING |      | DESCRIPTION | QTY. | U/M | QTY. | U/M | UNIT PRICE | AMOUNT   |
|-----------------|-------------------------------------|------------|------|-------------|------|-----|------|-----|------------|----------|
|                 |                                     | LOC        | ACCT |             |      |     |      |     |            |          |
| 575             |                                     | 1          |      |             |      |     | 60   | mi  | 5.00       | 300.00   |
| 579             |                                     | 1          |      |             |      |     | 1    | EA  | 1700.00    | 1700.00  |
| 290             |                                     | 1          |      |             |      |     | 7    | Gal | 42.00      | 294.00   |
| 287             |                                     | 1          |      |             |      |     | 1000 | Gal | 25.00      | 25000.00 |
| 221             |                                     | 1          |      |             |      |     | 4    | Gal | 25.00      | 100.00   |
| 402             |                                     | 1          |      |             |      |     | 8    | EA  | 60.00      | 480.00   |
| 403             |                                     | 1          |      |             |      |     | 2    | EA  | 250.00     | 500.00   |
| 407             |                                     | 1          |      |             |      |     | 1    | EA  | 300.00     | 300.00   |
| 408             |                                     | 1          |      |             |      |     | 1    | EA  | 3250.00    | 3250.00  |
| 411             |                                     | 1          |      |             |      |     | 27   | EA  | 45.00      | 1215.00  |
| 417             |                                     | 1          |      |             |      |     | 1    | EA  | 200.00     | 200.00   |

LEGAL TERMS: Customer hereby acknowledges and agrees to the terms and conditions on the reverse side hereof which include, but are not limited to, **PAYMENT, RELEASE, INDEMNITY**, and **LIMITED WARRANTY** provisions.

MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS

DATE SIGNED  
TIME SIGNED  
 A.M.  
 P.M.

REMIT PAYMENT TO:

SWIFT SERVICES, INC.  
P.O. BOX 466  
NESS CITY, KS 67560  
785-798-2300

| SURVEY   | AGREE                        | UN-DECIDED                  | DIS-AGREE |
|--|------------------------------|-----------------------------|-----------|
| OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?                               |                              |                             |           |
| WE UNDERSTOOD AND MET YOUR NEEDS?  |                              |                             |           |
| OUR SERVICE WAS PERFORMED WITHOUT DELAY?                                 |                              |                             |           |
| WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY? |                              |                             |           |
| ARE YOU SATISFIED WITH OUR SERVICE?                                      | <input type="checkbox"/> YES | <input type="checkbox"/> NO |           |

CUSTOMER DID NOT WISH TO RESPOND

TOTAL

20,009.12

CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES The customer hereby acknowledges receipt of the materials and services listed on this ticket.

APPROVAL

David Edgerton

Thank You!



JOB LOG

SWIFT Services, Inc. X

DATE 12-5-16 PAGE NO. 1

CUSTOMER RL Investments

WELL NO. 2-24

LEASE HOBBS

JOB TYPE TWO STAGE

TICKET NO. 29510

| CHART NO. | TIME | RATE (BPM) | VOLUME (BBL) (GAL) | PUMPS |   | PRESSURE (PSI) |        | DESCRIPTION OF OPERATION AND MATERIALS  |
|-----------|------|------------|--------------------|-------|---|----------------|--------|---|
|           |      |            |                    | T     | C | TUBING         | CASING |   |
|           | 600  |            |                    |       |   |                |        | ON LOCATION                             |
|           |      |            |                    |       |   |                |        | RTD - 4060                              |
|           |      |            |                    |       |   |                |        | TOTAL pipe - 4060                       |
|           |      |            |                    |       |   |                |        | Shoe - 20'                              |
|           |      |            |                    |       |   |                |        | BAFFLE - 4044 - D.V. TOOL - 2110        |
|           |      |            |                    |       |   |                |        | CENTRALIZERS - 3, 4, 5, 7, 9, 2, 11, 45 |
|           |      |            |                    |       |   |                |        | BASKETS - 13, 46                        |
|           |      |            |                    |       |   |                |        | Float Equipment Run By Preston          |
|           | 745  | 5          | 12                 |       |   | 200            |        | Pump MUDFLUSH - 500 Gal                 |
|           |      | 5          | 20                 |       |   | 200            |        | Pump KCL SPACER                         |
|           | 755  | 4          | 42                 |       |   | 200            |        | Pump CMT - 175 EA-2 @ 15.5 ppq          |
|           |      |            |                    |       |   |                |        | Drop plug                               |
|           | 810  | 3          | 0                  |       |   | 200            |        | START Disp w/ WTR                       |
|           |      | 5          | 46                 |       |   | 200            |        | Disp w/ MUD                             |
|           | 835  | 5          | 96                 |       |   | 800/1400       |        | LAND PLUG - Lift - 800 LAND - 1400      |
|           | 845  |            |                    |       |   |                |        | DROP BOMB - WASH TRK                    |
|           | 855  |            |                    |       |   | 1400           |        | Open D.V.                               |
|           | 900  |            |                    |       |   |                |        | Break Circ -                            |
|           | 1150 |            |                    |       |   |                |        | PLUG RAT HOLE - 30 SKS                  |
|           | 1155 | 5          | 12                 |       |   |                |        | Pump MUDFLUSH - 500 GAL                 |
|           |      | 5          | 20                 |       |   |                |        | Pump KCL SPACER -                       |
|           | 1200 | 6          | 135                |       |   | 400            |        | pump CMT - 245 SKS SMD @ 11.2           |
|           |      |            |                    |       |   |                |        | Drop plug                               |
|           | 1245 | 6          | 50                 |       |   |                |        | Displace CMT                            |
|           |      | 5          | 50                 |       |   | 600/1700       |        | LAND PLUG - lift - 600 LAND - 1700      |
|           |      |            |                    |       |   |                |        | - CIRCULATED 70 SKS CMT TO PIT          |
|           |      |            |                    |       |   |                |        | THANKS                                  |
|           |      |            |                    |       |   |                |        | DAVID, JON, ISAAC, P Preston            |



**CONSOLIDATED**  
Oil Well Services, LLC

7103  
7001

TICKET NUMBER 51640  
LOCATION Chalkley Ks  
FOREMAN Jerry Y

PO Box 884, Chanute, KS 66720  
620-431-9210 or 800-467-8676

**FIELD TICKET & TREATMENT REPORT**

**CEMENT**

Invoice # 809083

KS

| DATE           | CUSTOMER # | WELL NAME & NUMBER | SECTION | TOWNSHIP | RANGE   | COUNTY  |        |
|----------------|------------|--------------------|---------|----------|---------|---------|--------|
| 11-25-16       | 7171       | Hobbs 2-24         | 24      | 10s      | 25w     | Graham  |        |
| CUSTOMER       |            | MAILING ADDRESS    |         | TRUCK #  | DRIVER  | TRUCK # | DRIVER |
| RL Investments |            | 2698 JO Terrace    |         | 731      | Cory D  |         |        |
| Hill City      |            | KS 67642           |         | 460      | Keith C |         |        |
|                |            |                    |         | 639      |         |         |        |

JOB TYPE Surface HOLE SIZE 12 1/4 HOLE DEPTH 212 CASING SIZE & WEIGHT 8 5/8 23#  
 CASING DEPTH 214 DRILL PIPE \_\_\_\_\_ TUBING \_\_\_\_\_ OTHER \_\_\_\_\_  
 SLURRY WEIGHT 148 SLURRY VOL 1.24 WATER gal/sk \_\_\_\_\_ CEMENT LEFT in CASING 20'  
 DISPLACEMENT 1266l DISPLACEMENT PSI \_\_\_\_\_ MIX PSI \_\_\_\_\_ RATE \_\_\_\_\_

REMARKS: Salty meeting & rig up on STP# break circulation with  
rig tree mix 160 sks surface blend II wash up & displace with 1266l  
fresh H<sub>2</sub>O = shut in circulated approx 466l to pit

Cement did  
circulate

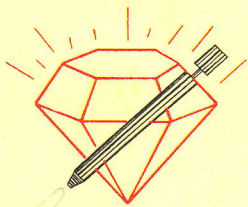
Thank you  
Jerry & crew

| ACCOUNT CODE | QUANTITY or UNITS | DESCRIPTION of SERVICES or PRODUCT | UNIT PRICE         | TOTAL              |
|--------------|-------------------|------------------------------------|--------------------|--------------------|
| CE0471       | 1                 | PUMP CHARGE                        | 1150 <sup>00</sup> | 1150 <sup>00</sup> |
| CE0002       | 30                | MILEAGE                            | 7 <sup>50</sup>    | 214 <sup>50</sup>  |
| CE0711       | 7.52              | ton mileage delivery (min)         | 660 <sup>00</sup>  | 660 <sup>00</sup>  |
| CC5871       | 160 SKS           | Surface blend II                   | 2300               | 3680 <sup>00</sup> |
|              |                   |                                    | Subtotal           | 5704 <sup>50</sup> |
|              |                   |                                    | -45% discount      | 2567 <sup>03</sup> |
|              |                   |                                    | Subtotal           | 3137 <sup>48</sup> |
|              |                   |                                    | SALES TAX          | 151.81             |
|              |                   |                                    | ESTIMATED TOTAL    | 3289.28            |

AUTHORIZATION [Signature] TITLE \_\_\_\_\_ DATE \_\_\_\_\_

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.





**DIAMOND TESTING, LLC**  
 P.O. Box 157  
 HOISINGTON, KANSAS 67544-0157  
 (800) 542-7313

TIME ON: 1845 11:30  
 TIME OFF: 0330 12-1

**DRILL-STEM TEST TICKET**

FILE: HOBBS # 2-24

Company R.L. INVESTMENTS LLC Lease & Well No. HOBBS # 2-24  
 Contractor STP DRILLING LLC Charge to R.L. INVESTMENTS LLC  
 Elevation 2460 Formation LAWS A+B Effective Pay \_\_\_\_\_ Ft. Ticket No. 40147  
 Date 11-30-16 Sec. 24 Twp. 10 S Range 25 W County GRAHAM State KANSAS  
 Test Approved By \_\_\_\_\_ Diamond Representative [REDACTED]

MICHAEL CARROLL

Formation Test No. 1 Interval Tested from 3441 ft. to 3816 ft. Total Depth 3816 ft.  
 Packer Depth 3765 ft. Size 6 3/4 in. Packer depth \_\_\_\_\_ ft. Size 6 3/4 in.  
 Packer Depth 3471 ft. Size 6 3/4 in. Packer depth \_\_\_\_\_ ft. Size 6 3/4 in.  
 Depth of Selective Zone Set \_\_\_\_\_

Top Recorder Depth (Inside) 3758 ft. Recorder Number 5950 Cap. 5K P.S.I.  
 Bottom Recorder Depth (Outside) 3808 ft. Recorder Number 0230 Cap. 5K P.S.I.  
 Below Straddle Recorder Depth \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ P.S.I.

Mud Type CMH Viscosity 49 Drill Collar Length 122 ft. I.D. 2 1/4 in.  
 Weight 9.2 Water Loss 7.6 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.  
 Chlorides 1500 P.P.M. Drill Pipe Length 3623 ft. I.D. 3 1/2 in.  
 Jars: Make STERLING Serial Number NA Test Tool Length 26 ft. Tool Size 3 1/2-IF in.  
 Did Well Flow? No Reversed Out No Anchor Length 45 (12.50) ft. Size 4 1/2-FH in.  
 Main Hole Size 7 7/8 Tool Joint Size 4 1/2XH in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: Tool Spd 10' to Bottom (1" Brown-Burnt) WSB-Burnt to 1 1/4" 1088  
 2nd Open: No Brown-Burnt to 1 1/4" in 45 Minutes 1088

Recovered 127 ft. of MUD 100% M  
 Recovered 127 ft. of TOTAL FLUID  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_

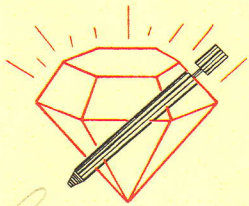
|               |                   |
|---------------|-------------------|
| THANK YOU     |                   |
| Price Job     |                   |
| Other Charges | <u>5 MARK PER</u> |
| Insurance     |                   |
| Total         |                   |

Remarks: Tool Sample: 100% M WITH VIN SPARKS  
71% OIL

Time Set Packer(s) 9:38 A.M. P.M. Time Started Off Bottom 12:38 A.M. P.M. Maximum Temperature 110°F

Initial Hydrostatic Pressure..... (A) 1821 P.S.I.  
 Initial Flow Period..... Minutes 30 (B) 43 P.S.I. to (C) 63 P.S.I.  
 Initial Closed In Period..... Minutes 45 (D) 908 P.S.I.  
 Final Flow Period..... Minutes 45 (E) 64 P.S.I. to (F) 77 P.S.I.  
 Final Closed In Period..... Minutes 60 (G) 903 P.S.I.  
 Final Hydrostatic Pressure..... (H) 1814 P.S.I.

Diamond Testing, LLC shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statement or opinion concerning the result of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



**DIAMOND TESTING, LLC**  
 P.O. Box 157  
 HOISINGTON, KANSAS 67544-0157  
 (800) 542-7313

TIME ON: 12:55  
 TIME OFF: 2:40

**DRILL-STEM TEST TICKET**

FILE: 160852241057 #2

Company R.L. INVESTMENT LLC Lease & Well No. HOBBS #2-24  
 Contractor STP DRILLING LLC Charge to R.L. INVESTMENT LLC  
 Elevation 2460 Formation LANS D' Effective Pay \_\_\_\_\_ Ft. Ticket No. 10148  
 Date 12-1-16 Sec. 24 Twp. 10 S Range 25 W County CANAWAN State KANSAS  
 Test Approved By \_\_\_\_\_ Diamond Representative [REDACTED] **MICHAEL CARROLL**

Formation Test No. 2 Interval Tested from 3815 ft. to 3836 ft. Total Depth 3836 ft.  
 Packer Depth 3809 ft. Size 6 3/4 in. Packer depth \_\_\_\_\_ ft. Size 6 3/4 in.  
 Packer Depth 3815 ft. Size 6 3/4 in. Packer depth \_\_\_\_\_ ft. Size 6 3/4 in.  
 Depth of Selective Zone Set \_\_\_\_\_

Top Recorder Depth (Inside) 3802 ft. Recorder Number 5950 Cap. 5K P.S.I.  
 Bottom Recorder Depth (Outside) 3819 ft. Recorder Number 0230 Cap. 5K P.S.I.  
 Below Straddle Recorder Depth \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ P.S.I.

Mud Type CHEM Viscosity 48 Drill Collar Length 122 ft. I.D. 2 1/4 in.  
 Weight 9.3 Water Loss 7.6 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.  
 Chlorides 2500 P.P.M. Drill Pipe Length 3667 ft. I.D. 3 1/2 in.  
 Jars: Make STERLING Serial Number NA Test Tool Length 26 ft. Tool Size 3 1/2-IF in.  
 Did Well Flow? No Reversed Out No Anchor Length 21 ft. Size 4 1/2-FH in.  
 Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

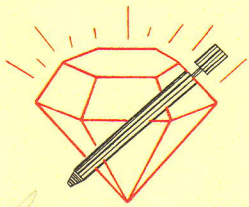
Blow: 1st Open: NOBB - BUILT TO 1 1/2" IN 30 MINUTES NOBB  
 2nd Open: NO BLOW - BUILT TO 1/2" IN 45 MINUTES NOBB

Recovered 65 ft. of MW 65%W 35%M CUTTINGS 34000 PPM  
 Recovered 65 ft. of TOTAL FLUID RW 3 @ 550F  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_ PH 7  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_ THANK YOU

|  |                                |
|--|--------------------------------|
| Recovered _____ ft. of _____           | Price Job                      |
| Recovered _____ ft. of _____           | Other Charges <u>2.5 HOURS</u> |
| Remarks: <u>TOOL SAMPLE: 53%W 47%M</u> | Insurance                      |
| <u>WITH A FEW PIN SPECKS</u>           | Total                          |

Time Set Packer(s) 4:06 A.M. P.M. Time Started Off Bottom 7:06 A.M. P.M. Maximum Temperature 109°F  
 Initial Hydrostatic Pressure..... (A) 1849 P.S.I.  
 Initial Flow Period..... Minutes 30 (B) 12 P.S.I. to (C) 31 P.S.I.  
 Initial Closed In Period..... Minutes 45 (D) 611 P.S.I.  
 Final Flow Period..... Minutes 45 (E) 34 P.S.I. to (F) 44 P.S.I.  
 Final Closed In Period..... Minutes 60 (G) 462 P.S.I.  
 Final Hydrostatic Pressure..... (H) 1841 P.S.I.

Diamond Testing, LLC shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statement or opinion concerning the result of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



**DIAMOND TESTING, LLC**  
 P.O. Box 157  
 HOISINGTON, KANSAS 67544-0157  
 (800) 542-7313

TIME ON: 1720 12-2  
 TIME OFF: 0140 12-3

**DRILL-STEM TEST TICKET**

FILE: HOBBS #2.24 Det #3

Company R.L. INVESTMENT LLC Lease & Well No. HOBBS #2.24  
 Contractor STP DRILLING LLC Charge to R.L. INVESTMENT LLC  
 Elevation 2460 Formation LANE/KO "H" Effective Pay \_\_\_\_\_ Ft. Ticket No. 80149  
 Date 12-2-16 Sec. 24 Twp. 10 S Range 25 W County GRAHAM State KANSAS  
 Test Approved By \_\_\_\_\_ Diamond Representative [REDACTED] **MICHAEL CARROLL**

Formation Test No. 3 Interval Tested from 3893 ft. to 3920 ft. Total Depth 3920 ft.  
 Packer Depth 3884 ft. Size 6 3/4 in. Packer depth \_\_\_\_\_ ft. Size 6 3/4 in.  
 Packer Depth 3893 ft. Size 6 3/4 in. Packer depth \_\_\_\_\_ ft. Size 6 3/4 in.  
 Depth of Selective Zone Set \_\_\_\_\_

Top Recorder Depth (Inside) 3880 ft. Recorder Number 5950 Cap. 5K P.S.I.  
 Bottom Recorder Depth (Outside) 3897 ft. Recorder Number 0230 Cap. 5K P.S.I.  
 Below Straddle Recorder Depth \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ P.S.I.

Mud Type CHAM Viscosity 53 Drill Collar Length 122 ft. I.D. 2 1/4 in.  
 Weight 9.2 Water Loss 7.6 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.  
 Chlorides 2500 P.P.M. Drill Pipe Length 2745 ft. I.D. 3 1/2 in.  
 Jars: Make STERLING Serial Number NA Test Tool Length 26 ft. Tool Size 3 1/2-IF in.  
 Did Well Flow? No Reversed Out No Anchor Length 27 ft. Size 4 1/2-FH in.  
 Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: NOBB - FLUIT TO 1/2" W 30 MINUTES NOBB  
 2nd Open: NO BLOW - NO FLUID NOBB

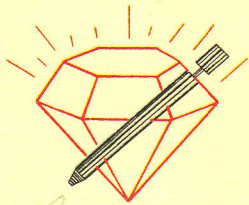
Recovered 5 ft. of MUD 100% M  
 Recovered 5 ft. of TOTAL FLUID  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_

Remarks: Tool Sample: 100% M

|  |                                  |
|--|----------------------------------|
|  | <u>THANK YOU</u>                 |
|  | Price Job                        |
|  | Other Charges <u>1 SHANK PRK</u> |
|  | Insurance                        |
|  | Total                            |

Time Set Packer(s) 8:20 P.M. Time Started Off Bottom 11:20 P.M. Maximum Temperature 111°F  
 Initial Hydrostatic Pressure..... (A) 1881 P.S.I.  
 Initial Flow Period..... Minutes 30 (B) 12 P.S.I. to (C) 14 P.S.I.  
 Initial Closed In Period..... Minutes 45 (D) 767 P.S.I.  
 Final Flow Period..... Minutes 45 (E) 14 P.S.I. to (F) 17 P.S.I.  
 Final Closed In Period..... Minutes 60 (G) 798 P.S.I.  
 Final Hydrostatic Pressure..... (H) 1864 P.S.I.

Diamond Testing, LLC shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statement or opinion concerning the result of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



**DIAMOND TESTING, LLC**  
 P.O. Box 157  
 HOISINGTON, KANSAS 67544-0157  
 (800) 542-7313

TIME ON: 1355  
 TIME OFF: 2300

**DRILL-STEM TEST TICKET**

FILE: HOBBS #2-24/157 #4

Company R.L. INVESTMENT LLC Lease & Well No. HOBBS #2-24  
 Contractor STP DRILLING LLC Charge to R.L. INVESTMENT LLC  
 Elevation 2460 Formation TAUS/KO J4K Effective Pay \_\_\_\_\_ Ft. Ticket No. 20150  
 Date 12-3-16 Sec. 24 Twp. 10 S Range 25 W County GRANHAM State KANSAS  
 Test Approved By \_\_\_\_\_ Diamond Representative [REDACTED] **MICHAEL CARROLL**

Formation Test No. 4 Interval Tested from 3943 ft. to 3984 ft. Total Depth 3984 ft.  
 Packer Depth 3937 ft. Size 6 3/4 in. Packer depth \_\_\_\_\_ ft. Size 6 3/4 in.  
 Packer Depth 3943 ft. Size 6 3/4 in. Packer depth \_\_\_\_\_ ft. Size 6 3/4 in.  
 Depth of Selective Zone Set \_\_\_\_\_

Top Recorder Depth (Inside) 3930 ft. Recorder Number 5950 Cap. 5K P.S.I.  
 Bottom Recorder Depth (Outside) 3947 ft. Recorder Number 0230 Cap. 5K P.S.I.  
 Below Straddle Recorder Depth \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ P.S.I.

Mud Type CHRM Viscosity 52 Drill Collar Length 122 ft. I.D. 2 1/4 in.  
 Weight 9.3 Water Loss 8 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.  
 Chlorides 2500 P.P.M. Drill Pipe Length 3495 ft. I.D. 3 1/2 in.  
 Jars: Make STERLING Serial Number NA Test Tool Length 26 ft. Tool Size 3 1/2-IF in.  
 Did Well Flow? No Reversed Out No Anchor Length 41 ft. Size 4 1/2-FH in.  
 Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: 1/2" BLOW - BUILT TO BOB IN 9 MINS 50 SECS 2" BB  
 2nd Open: 1" BLOW - BUILT TO BOB IN 9 MINS 45 SECS 8 1/2" BB

Recovered 818 ft. of GAS IN PIPE  
 Recovered 194 ft. of CREAN OIL GRAVITY 32 @ 60°F  
 Recovered 122 ft. of GHOCM 12%G 43%O 45%N  
 Recovered 316 ft. of TOTAL FLUID

|  |                               |
|--|-------------------------------|
| Recovered _____ ft. of _____           | Price Job                     |
| Recovered _____ ft. of _____           | Other Charges <u>7500 PER</u> |
| Remarks: <u>TOOL SAMPLE: 72%O 78%N</u> | Insurance                     |
| _____                                  | Total                         |

Time Set Packer(s) 4:47 A.M. Time Started Off Bottom 7:47 P.M. Maximum Temperature 121°F  
 Initial Hydrostatic Pressure..... (A) 1923 P.S.I.  
 Initial Flow Period..... Minutes 30 (B) 21 P.S.I. to (C) 77 P.S.I.  
 Initial Closed In Period..... Minutes 45 (D) 1170 P.S.I.  
 Final Flow Period..... Minutes 45 (E) 88 P.S.I. to (F) 126 P.S.I.  
 Final Closed In Period..... Minutes 60 (G) 1093 P.S.I.  
 Final Hydrostatic Pressure..... (H) 1903 P.S.I.

Diamond Testing, LLC shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statement or opinion concerning the result of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



**DIAMOND TESTING, LLC**  
P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
(620) 653-7550 • (800) 542-7313  
HOBBS#2-24DST#1

Company R. L. Investment, LLC Lease & Well No. Hobbs No. 2-24  
Elevation 2460 KB Formation Lansing "A" & "B" Effective Pay          Ft. Ticket No. P0147  
Date 11-30-16 Sec. 24 Twp. 10S Range 25W County Graham State Kansas  
Test Approved By Patrick J. Deenihan Diamond Representative Michael Carroll

Formation Test No. 1 Interval Tested from 3,771 ft. to 3,816 ft. Total Depth 3,816 ft.  
Packer Depth 3,765 ft. Size 6 3/4 in. Packer Depth          ft. Size          in.  
Packer Depth 3,771 ft. Size 6 3/4 in. Packer Depth          ft. Size          in.  
Depth of Selective Zone Set          ft.

Top Recorder Depth (Inside) 3,758 ft. Recorder Number 5950 Cap. 5,000 psi.  
Bottom Recorder Depth (Outside) 3,808 ft. Recorder Number 0230 Cap. 5,000 psi.  
Below Straddle Recorder Depth          ft. Recorder Number          Cap.          psi.

Drilling Contractor STP Drilling, LLC - Rig 1 Drill Collar Length 122 ft I.D. 2 1/4 in.  
Mud Type Chemical Viscosity 49 Weight Pipe Length          ft I.D.          in.  
Weight 9.2 Water Loss 7.6 cc. Drill Pipe Length 3,623 ft I.D. 3 1/2 in.  
Chlorides 1,500 P.P.M. Test Tool Length 26 ft Tool Size 3 1/2-IF in.  
Jars: Make Sterling Serial Number Not Run Anchor Length 14' perf. w/31' drill pipe Size 4 1/2-FH in.  
Did Well Flow? No Reversed Out No Surface Choke Size 1 in. Bottom Choke Size 5/8 in.  
Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2-XH in.

Blow: 1st Open: Tool slid 10 ft. to bottom. 1 in. blow. Bled off. Weak, surface blow increasing to 1 1/4 ins. in 30 mins. No blow back during shut-in.  
2nd Open: No blow increasing to 1 1/4 ins. in 45 mins. No blow back during shut-in.

Recovered 127 ft. of mud = .671390 bbls. (Grind out: 100%-mud)  
Recovered          ft. of           
Recovered          ft. of           
Recovered          ft. of           
Recovered          ft. of           
Recovered          ft. of         

Remarks Tool Sample Grind Out: 100%-mud w/oil specks >1% oil

Time Set Packer(s) 9:38 P.M. Time Started off Bottom 12:38 A.M. Maximum Temperature 110°  
Initial Hydrostatic Pressure.....(A) 1821 P.S.I.  
Initial Flow Period.....Minutes 30 (B) 43 P.S.I. to (C) 63 P.S.I.  
Initial Closed In Period.....Minutes 45 (D) 908 P.S.I.  
Final Flow Period.....Minutes 45 (E) 64 P.S.I. to (F) 77 P.S.I.  
Final Closed In Period.....Minutes 60 (G) 903 P.S.I.  
Final Hydrostatic Pressure.....(H) 1814 P.S.I.



**Hoisington, Kansas**

**Michael Carroll**  
 620-617-0368  
 carroll.dtlc@gmail.com

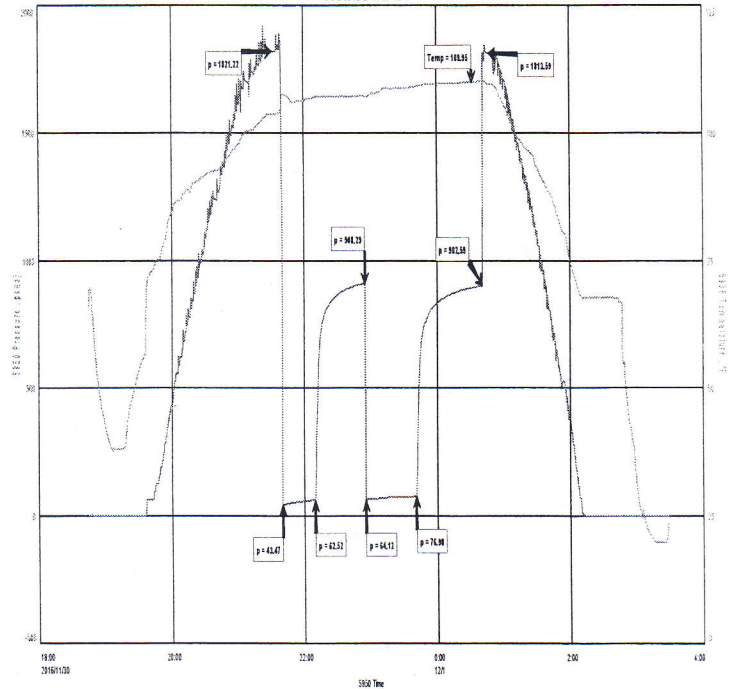
**General Information**

Company Name R. L. Investment, LLC

|                  |                              |
|------------------|------------------------------|
| Contact          | Randall Pfeifer              |
| Well Name        | Hobbs #2-24                  |
| Unique Well ID   | Dst #1 Lans "A&B" 3771-3816' |
| Surface Location | Sec 24-10s-25w Graham County |
| Field            | Martha Washington East       |
| Well Type        | Vertical                     |
| Test Type        | Drill Stem Test              |
| Well Operator    | R. L. Investment, LLC        |

|                 |                              |
|-----------------|------------------------------|
| Formation       | Dst #1 Lans "A&B" 3771-3816' |
| Well Fluid Type | 01 Oil                       |
| Test Purpose    | Initial Test                 |
| Start Test Date | 2016/11/30                   |
| Start Test Time | 18:45:00                     |
| Final Test Time | 03:30:00                     |
| Job Number      | P0147                        |
| Report Date     | 2016/11/30                   |
| Prepared By     | Michael Carroll              |

Hobbs #2-24



**TEST RECOVERY**

|                   |                                |             |        |
|-------------------|--------------------------------|-------------|--------|
| Remarks Recovery: | 127'                           | Mud         | 100% M |
|                   | 127'                           | Total Fluid |        |
| Tool Sample:      | 100% M With Oil Specks >1% Oil |             |        |



**DIAMOND TESTING, LLC**  
 P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
 (620) 653-7550 • (800) 542-7313  
 HOBBS#2-24DST#2

Company R. L. Investment, LLC Lease & Well No. Hobbs No. 2-24  
 Elevation 2460 KB Formation Lansing "D" Effective Pay \_\_\_\_\_ Ft. Ticket No. P0148  
 Date 12-1-16 Sec. 24 Twp. 10S Range 25W County Graham State Kansas  
 Test Approved By Patrick J. Deenihan Diamond Representative Michael Carroll

Formation Test No. 2 Interval Tested from 3,815 ft. to 3,836 ft. Total Depth 3,836 ft.  
 Packer Depth 3,809 ft. Size 6 3/4 in. Packer Depth \_\_\_\_\_ ft. Size \_\_\_\_\_ in.  
 Packer Depth 3,815 ft. Size 6 3/4 in. Packer Depth \_\_\_\_\_ ft. Size \_\_\_\_\_ in.  
 Depth of Selective Zone Set \_\_\_\_\_ ft.

Top Recorder Depth (Inside) 3,802 ft. Recorder Number 5950 Cap. 5,000 psi.  
 Bottom Recorder Depth (Outside) 3,819 ft. Recorder Number 0230 Cap. 5,000 psi.  
 Below Straddle Recorder Depth \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ psi.

Drilling Contractor STP Drilling, LLC - Rig 1 Drill Collar Length 122 ft. I.D. 2 1/4 in.  
 Mud Type Chemical Viscosity 48 Weight Pipe Length \_\_\_\_\_ ft. I.D. \_\_\_\_\_ in.  
 Weight 9.3 Water Loss 7.6 cc. Drill Pipe Length 3,667 ft. I.D. 3 1/2 in.  
 Chlorides 2,500 P.P.M. Test Tool Length 26 ft. Tool Size 3 1/2-IF in.  
 Jars: Make Sterling Serial Number Not Run Anchor Length 21 ft. Size 4 1/2-FH in.  
 Did Well Flow? No Reversed Out No Surface Choke Size 1 in. Bottom Choke Size 5/8 in.  
 Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2-XH in.

Blow: 1st Open: Weak, surface blow increasing to 1 1/2 ins. in 30 mins. No blow back during shut-in.

2nd Open: No blow increasing to 1/2 in. in 45 mins. No blow back during shut-in.

Recovered 65 ft. of muddy water = .319800 bbls. (Grind out: 65%-water; 35%-mud) Chlorides: 34,000 Ppm PH: 7.0 RW: .30 @ 55°

Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_

Remarks Tool Sample Grind Out: 53%-water; 47%-mud w/a few oil specks

Time Set Packer(s) 4:06 P.M. Time Started off Bottom 7:06 P.M. Maximum Temperature 109°  
 Initial Hydrostatic Pressure.....(A) 1849 P.S.I.  
 Initial Flow Period.....Minutes 30 (B) 12 P.S.I. to (C) 31 P.S.I.  
 Initial Closed In Period.....Minutes 45 (D) 611 P.S.I.  
 Final Flow Period.....Minutes 45 (E) 34 P.S.I. to (F) 44 P.S.I.  
 Final Closed In Period.....Minutes 60 (G) 462 P.S.I.  
 Final Hydrostatic Pressure.....(H) 1841 P.S.I.



**Hoisington, Kansas**

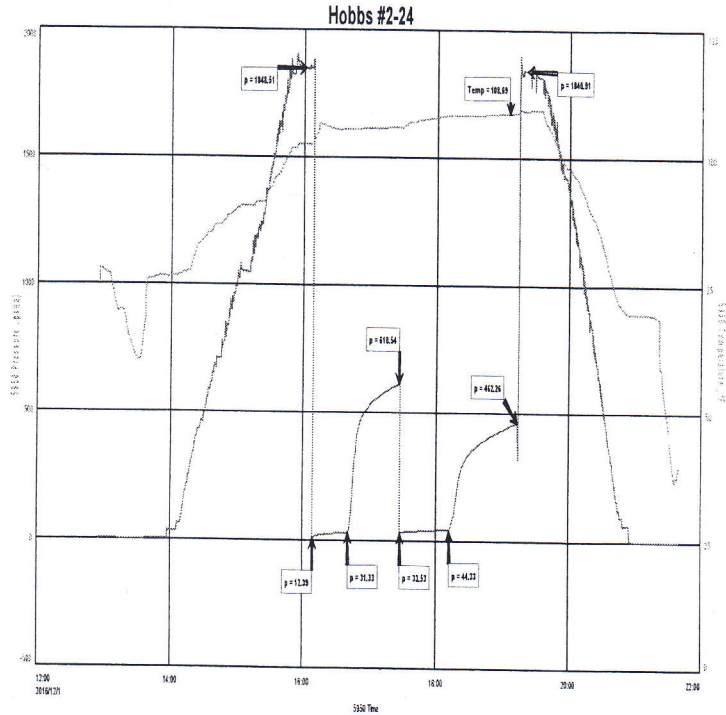
**Michael Carroll**  
 620-617-0368  
 carroll.dtlc@gmail.com

**General Information**

Company Name R. L. Investment, LLC

|                  |                              |
|------------------|------------------------------|
| Contact          | Randall Pfeifer              |
| Well Name        | Hobbs #2-24                  |
| Unique Well ID   | Dst #2 Lans "D" 3815-3836'   |
| Surface Location | Sec 24-10s-25w Graham County |
| Field            | Martha Washington East       |
| Well Type        | Vertical                     |
| Test Type        | Drill Stem Test              |
| Well Operator    | R. L. Investment, LLC        |

|                 |                            |
|-----------------|----------------------------|
| Formation       | Dst #2 Lans "D" 3815-3836' |
| Well Fluid Type | 06 Water                   |
| Test Purpose    | Initial Test               |
| Start Test Date | 2016/12/01                 |
| Start Test Time | 12:55:00                   |
| Final Test Time | 21:40:00                   |
| Job Number      | P0148                      |
| Report Date     | 2016/12/01                 |
| Prepared By     | Michael Carroll            |



**TEST RECOVERY**

Remarks Recovery: 65' MW 65% W 35% M  
 65' Total Fluid  
 Tool Sample: 53% W 47% M With A Few Oil Specks  
 Chlorides: 34,000 PPM  
 PH: 7  
 RW: .3 @ 55 Degrees





**DIAMOND TESTING, LLC**  
 P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
 (620) 653-7550 • (800) 542-7313  
 HOBBS#2-24DST#3

Company R. L. Investment, LLC Lease & Well No. Hobbs No. 2-24  
 Elevation 2460 KB Formation Lansing/Kansas City "H" Effective Pay      Ft. Ticket No. P0149  
 Date 12-2-16 Sec. 24 Twp. 10S Range 25W County Graham State Kansas  
 Test Approved By Patrick J. Deenihan Diamond Representative Michael Carroll

Formation Test No. 3 Interval Tested from 3,893 ft. to 3,920 ft. Total Depth 3,920 ft.  
 Packer Depth 3,887 ft. Size 6 3/4 in. Packer Depth      ft. Size      in.  
 Packer Depth 3,893 ft. Size 6 3/4 in. Packer Depth      ft. Size      in.  
 Depth of Selective Zone Set      ft.

Top Recorder Depth (Inside) 3,880 ft. Recorder Number 5950 Cap. 5,000 psi.  
 Bottom Recorder Depth (Outside) 3,897 ft. Recorder Number 0230 Cap. 5,000 psi.  
 Below Straddle Recorder Depth      ft. Recorder Number      Cap.      psi.

Drilling Contractor STP Drilling, LLC - Rig 1 Drill Collar Length 122 ft. I.D. 2 1/4 in.  
 Mud Type Chemical Viscosity 53 Weight Pipe Length      ft. I.D.      in.  
 Weight 9.2 Water Loss 7.6 cc. Drill Pipe Length 3,745 ft. I.D. 3 1/2 in.  
 Chlorides 2,500 P.P.M. Test Tool Length 26 ft. Tool Size 3 1/2-IF in.  
 Jars: Make Sterling Serial Number Not Run Anchor Length 27 ft. Size 4 1/2-FH in.  
 Did Well Flow? No Reversed Out No Surface Choke Size 1 in. Bottom Choke Size 5/8 in.  
 Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2-XH in.

Blow: 1st Open: Weak, surface blow increasing to 1/2 in. in 30 mins. No blow back during shut-in.

2nd Open: No blow. No build. No blow back during shut-in.

Recovered 5 ft. of mud = .024600 bbls. (Grind out: 100%-mud)  
 Recovered      ft. of       
 Recovered      ft. of       
 Recovered      ft. of       
 Recovered      ft. of       
 Recovered      ft. of       
 Remarks Tool Sample Grind Out: 100%-mud

Time Set Packer(s) 8:20 P.M. Time Started off Bottom 11:20 P.M. Maximum Temperature 111°  
 Initial Hydrostatic Pressure.....(A) 1881 P.S.I.  
 Initial Flow Period.....Minutes 30 (B) 12 P.S.I. to (C) 14 P.S.I.  
 Initial Closed In Period.....Minutes 45 (D) 767 P.S.I.  
 Final Flow Period.....Minutes 45 (E) 14 P.S.I. to (F) 17 P.S.I.  
 Final Closed In Period.....Minutes 60 (G) 798 P.S.I.  
 Final Hydrostatic Pressure.....(H) 1864 P.S.I.



**Hoisington, Kansas**

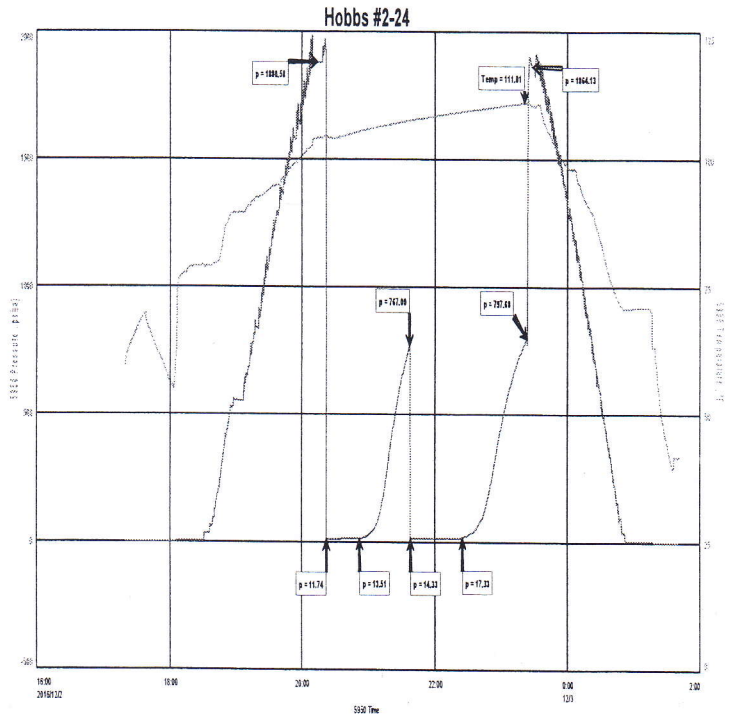
**Michael Carroll**  
 620-617-0368  
 carroll.dtlc@gmail.com

**General Information**

Company Name R. L. Investment, LLC

|                  |                               |
|------------------|-------------------------------|
| Contact          | Randall Pfeifer               |
| Well Name        | Hobbs #2-24                   |
| Unique Well ID   | Dst #3 Lans/KC "H" 3893-3920' |
| Surface Location | Sec 24-10s-25w Graham County  |
| Field            | Martha Washington East        |
| Well Type        | Vertical                      |
| Test Type        | Drill Stem Test               |
| Well Operator    | R. L. Investment, LLC         |

|                 |                               |
|-----------------|-------------------------------|
| Formation       | Dst #3 Lans/KC "H" 3893-3920' |
| Well Fluid Type | 01 Oil                        |
| Test Purpose    | Initial Test                  |
| Start Test Date | 2016/12/02                    |
| Start Test Time | 17:20:00                      |
| Final Test Time | 01:40:00                      |
| Job Number      | P0149                         |
| Report Date     | 2016/12/02                    |
| Prepared By     | Michael Carroll               |



**TEST RECOVERY**

Remarks Recovery: 5' Mud 100% M  
 5' Total Fluid  
 Tool Sample: 100% M



**DIAMOND TESTING, LLC**  
P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
(620) 653-7550 • (800) 542-7313  
HOBBS#2-24DST#4

Company R. L. Investment, LLC Lease & Well No. Hobbs No. 2-24  
Elevation 2460 KB Formation Lansing/Kansas City "J" & "K" Effective Pay \_\_\_\_\_ Ft. Ticket No. P0150  
Date 12-3-16 Sec. 24 Twp. 10S Range 25W County Graham State Kansas  
Test Approved By Patrick J. Deenihan Diamond Representative Michael Carroll

Formation Test No. 4 Interval Tested from 3,943 ft. to 3,984 ft. Total Depth 3,984 ft.  
Packer Depth 3,937 ft. Size 6 3/4 in. Packer Depth \_\_\_\_\_ ft. Size \_\_\_\_\_ in.  
Packer Depth 3,943 ft. Size 6 3/4 in. Packer Depth \_\_\_\_\_ ft. Size \_\_\_\_\_ in.  
Depth of Selective Zone Set \_\_\_\_\_ ft.

Top Recorder Depth (Inside) 3,930 ft. Recorder Number 5950 Cap. 5,000 psi.  
Bottom Recorder Depth (Outside) 3,947 ft. Recorder Number 0230 Cap. 5,000 psi.  
Below Straddle Recorder Depth \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ psi.

Drilling Contractor STP Drilling, LLC - Rig 1 Drill Collar Length 122 ft I.D. 2 1/4 in.  
Mud Type Chemical Viscosity 52 Weight Pipe Length \_\_\_\_\_ ft I.D. \_\_\_\_\_ in.  
Weight 9.3 Water Loss 8.0 cc. Drill Pipe Length 3,795 ft I.D. 3 1/2 in.  
Chlorides 2,500 P.P.M. Test Tool Length 26 ft Tool Size 3 1/2-IF in.  
Jars: Make Sterling Serial Number Not Run Anchor Length 41 ft. Size 4 1/2-FH in.  
Did Well Flow? No Reversed Out No Surface Choke Size 1 in. Bottom Choke Size 5/8 in.  
Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2-XH in.

Blow: 1st Open: 1/2 in. blow increasing. Off bottom of bucket in 9 mins. 50 secs. 2 in. blow back during shut-in.  
2nd Open: 1 in. blow increasing. Off bottom of bucket in 9 mins. 45 secs. 8 1/2 in. blow back during shut-in.

Recovered 818 ft. of gas in pipe  
Recovered 194 ft. of clean oil = 2.760620 bbls. (Grind out: 100%-oil) Gravity: 32 @ 60°  
Recovered 122 ft. of gas cut oily mud = .600240 bbls. (Grind out: 12%-gas; 43%-oil; 45%-mud)  
Recovered 316 ft. of TOTAL FLUID = 3.360860 bbls.  
Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
Remarks Tool Sample Grind Out: 72%-oil; 28%-mud

Time Set Packer(s) 4:47 P.M. Time Started off Bottom 7:47 P.M. Maximum Temperature 121°  
Initial Hydrostatic Pressure.....(A) 1923 P.S.I.  
Initial Flow Period.....Minutes 30 (B) 21 P.S.I. to (C) 77 P.S.I.  
Initial Closed In Period.....Minutes 45 (D) 1170 P.S.I.  
Final Flow Period.....Minutes 45 (E) 88 P.S.I. to (F) 126 P.S.I.  
Final Closed In Period.....Minutes 60 (G) 1093 P.S.I.  
Final Hydrostatic Pressure.....(H) 1903 P.S.I.



Michael Carroll  
 620-617-0368  
 carroll.dtlc@gmail.com

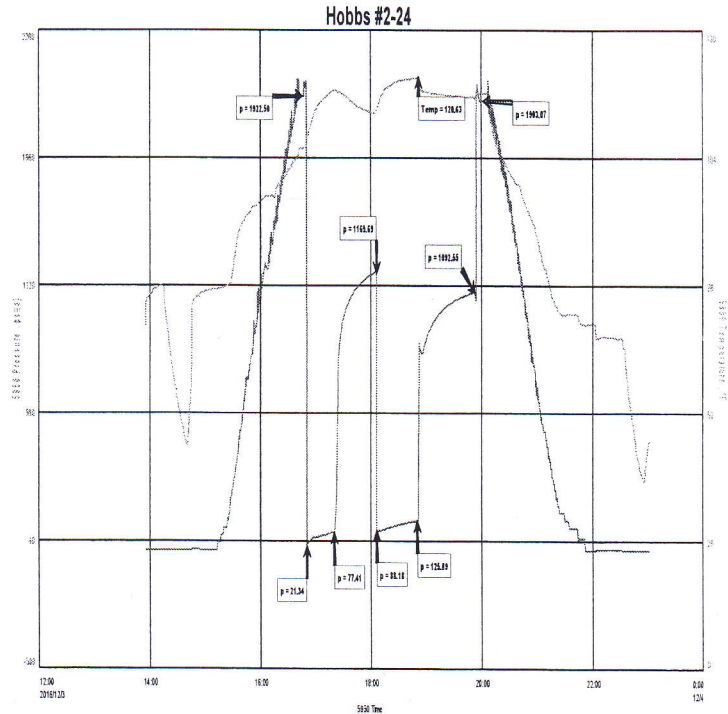
**Hoisington, Kansas**

**General Information**

Company Name R. L. Investment, LLC

|                  |                                 |
|------------------|---------------------------------|
| Contact          | Randall Pfeifer                 |
| Well Name        | Hobbs #2-24                     |
| Unique Well ID   | Dst #4 Lans/KC "J&K" 3943-3984' |
| Surface Location | Sec 24-10s-25w Graham County    |
| Field            | Martha Washington East          |
| Well Type        | Vertical                        |
| Test Type        | Drill Stem Test                 |
| Well Operator    | R. L. Investment, LLC           |

|                 |                                 |
|-----------------|---------------------------------|
| Formation       | Dst #4 Lans/KC "J&K" 3943-3984' |
| Well Fluid Type | 01 Oil                          |
| Test Purpose    | Initial Test                    |
| Start Test Date | 2016/12/03                      |
| Start Test Time | 13:55:00                        |
| Final Test Time | 23:00:00                        |
| Job Number      | P0150                           |
| Report Date     | 2016/12/03                      |
| Prepared By     | Michael Carroll                 |



**TEST RECOVERY**

|                   |       |                                    |
|-------------------|-------|------------------------------------|
| Remarks Recovery: | 818'  | Gas In Pipe                        |
|                   | 194'  | Clean Oil Gravity: 32 @ 60 Degrees |
|                   | 122'  | GCOM 12% G 43% O 45% M             |
|                   | 316'  | Total Fluid                        |
| Tool Sample:      | 72% O | 28% M                              |

**Geo Log Header**  
**WellSight Systems**  
Scale 1:240 (5"=100') Imperial  
Measured Depth Log

Well Name: Hobbs # 2-24  
API: 15-065-24125-00-00  
Location: 1405' FSL & 855' FEL  
License Number: 33268  
Spud Date: 11-24-16  
Surface Coordinates: SE-SW-NE-SE of Sec; 24-10S-25W  
(1405' FSL & 855' FEL)  
Bottom Hole Coordinates:  
Ground Elevation (ft): 2453'      K.B. Elevation (ft): 2460'  
Logged Interval (ft): 3450'      To: 4060'      Total Depth (ft): 4060'  
Formation: Lansing/ Kansas City  
Type of Drilling Fluid: Chemical-Polymer

Region: Graham Co., KS  
Drilling Completed: 12-04-16

Printed by STRIP.LOG from WellSight Systems 1-800-447-1534 www.WellSight.com

**OPERATOR**

Company: RL Investment, LLC.  
Address: Hill City, KS.

**GEOLOGIST**

Name: Patrick J. Deenihan  
Company: Independent  
Address: P.O. 781929  
Wichita, KS 67278

**DSTs**

DST # 1 (3771'-3816)      30"-45"-45"-60"  
IF: tool slid 10'-1" blow bled off. 1/4' to 1.25".      ISI: No Return  
FF: No blow buildt to 1.25"      ISI: No Return

REC: 127' Drilling mud with oil spots in Tool.  
IFP: 43#-63#      FFP: 64#-77#      BHT; 110 F  
ISIP: 908#      FSIP: 903#  
IHP: 1821#      FHP: 1814#

DST # 2 (3815' - 3836')      30"-45"-45"-60"  
IF: 1.1/2"      ISI: No Return  
FF: 1/2"      FSI: No Return

REC: 65" MW ( 53% Wtr., 47% Mud, with a few oil specks.)  
IFP: 12# -31#      FFP: 34# -44#      BHT; 109 F.  
ISIP: 611#      FSIP: 462#  
IHP: 1849      FHP: 1841#

DST: # 3 (3893' - 3920")      30"-45"-45"-60"  
IF: 1/2"      ISI: No Return  
FF: No Blow      FSI: No Return

REC 5' Mud (100% Mud)

ISIP: 767#  
IHP: 1881#

FSIP: 798#  
FHP: 1864#

BHT, 111 F.

DST # 4 ( 3943' -3984' )  
IF: BOB in 9", 50secs.  
FF: BOB in 9" 45secs.

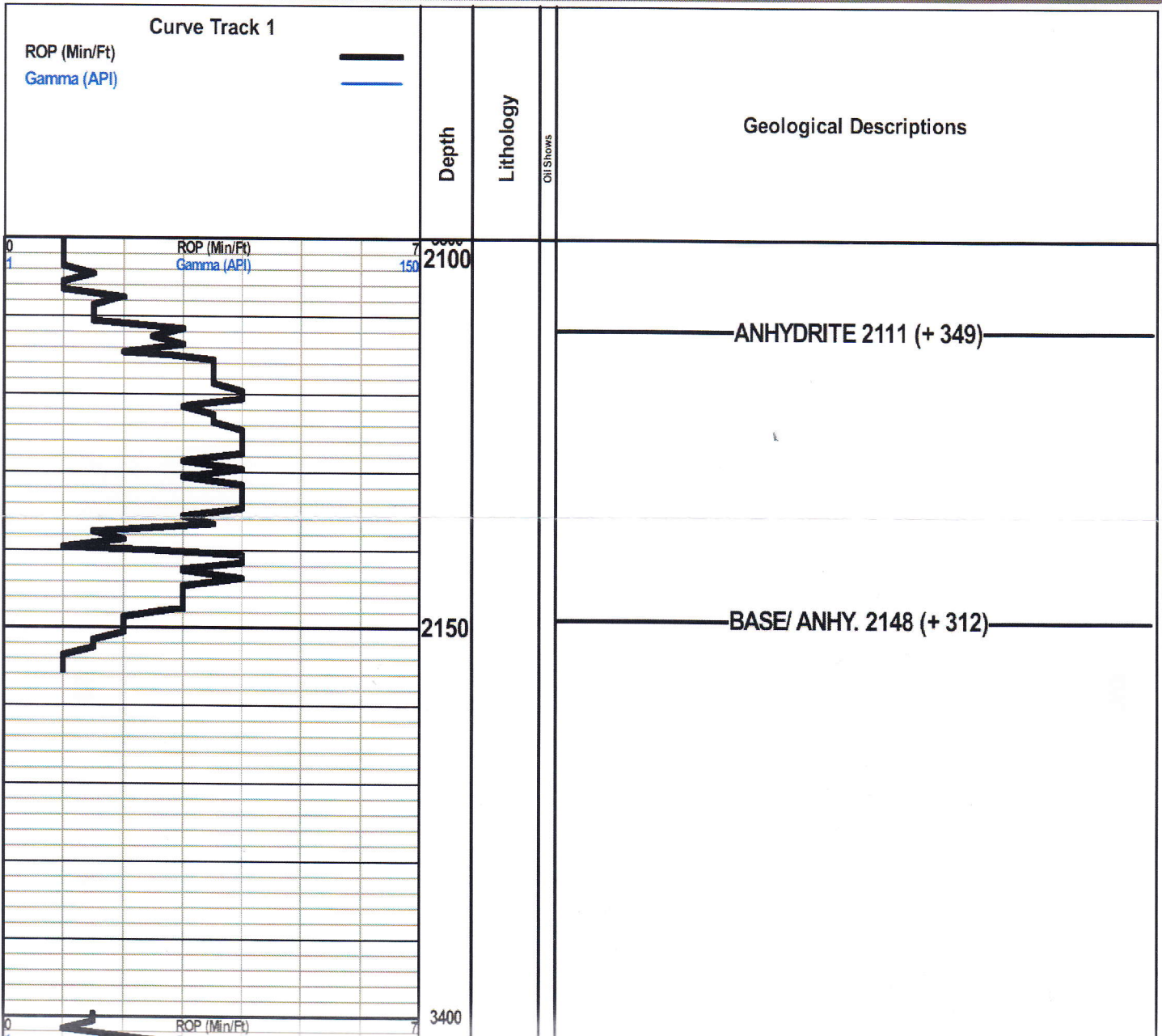
30"-45"-45"-60"  
ISI: 2" Return Blow  
FSI: 8.5" Return Blow

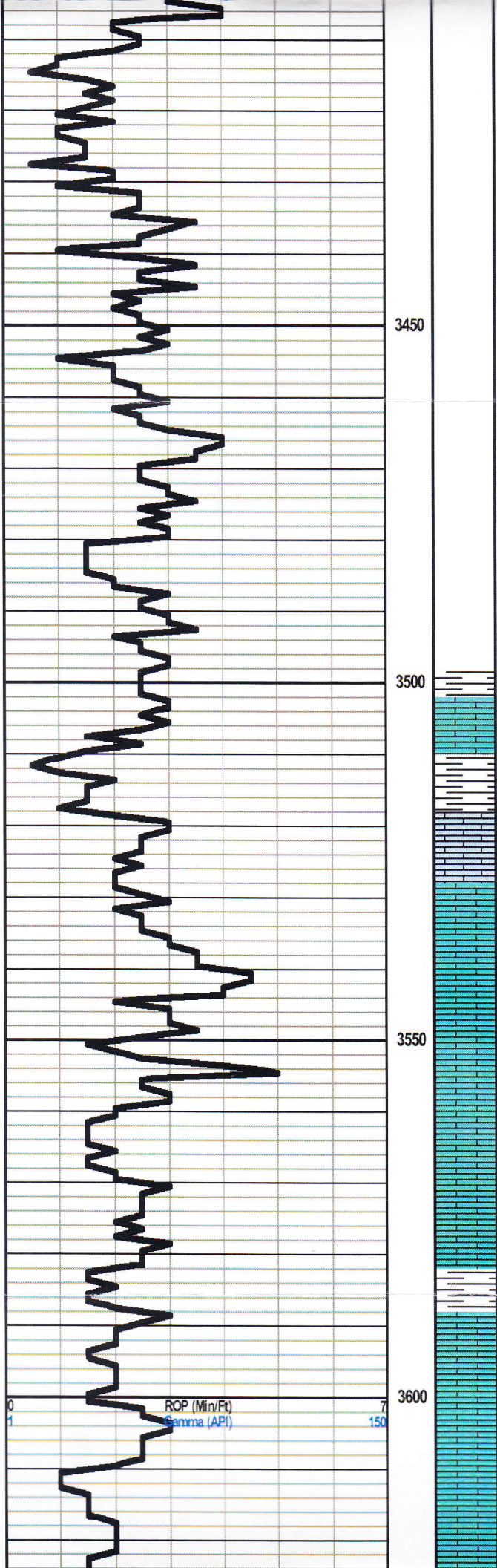
REC: 818' GIP; 194' Clean Oil (Gravity = 32 @ 60 degrees F;  
122'GHOCM (12% Gas, 43% Oil & 45% Mud)  
TOTAL FLUID = 316' (72% Oil & 28% Mud)

IFP: 21#-77#  
ISIP: 1170#  
IHP: 1923#

FFP: 88#-126#  
FSIP: 1093#  
FHP: 1903#

Gravity: 32  
BHT: 121





3450

3500

3550

3600

TOPEKA 3528 (- 1068)

ROP (Min/Ft)  
Gamma (API)

7  
150

Ls., Wht., Crm., Lt-Gry., Brn., Gry., Mott/Sing Fn-xln. Very Fssl. (frag. to Ool). Chalky. No Show.

Ls., Wht., Crm., Sing., Chalky, Fn-xln., Sti-Fssl. No Show. ( Sample washes very Chalky.

Sh., Black Carb.

Ls., Crm., Tan, Lt-Gry., Mott/Sing., Fssl., Sub-Cherty, Micro-xln. No Show.

3650

Ls., Wht., Crm., Brn., Lt-Gry., Mott/Sing., Mico. to Fn-xln., Fssl., Sub-Chalky. No Show. (Abund. Red Beds.)

SHORT TRIP RANAT

Queen Hill 3679 (- 1290)

Sh., Black Carb.

Ls., Wht., Crm., Sing., Lt-Gry., Fn-xln., Fssl., No Show.

3700

Ls., Crm., Lt-Gry., Sing., Fn-xln., and Fssl. No Show.

Ls., Wht., Crm., Lt-Gry., Sing., Fn-xln. Micro-Ool., and Chalky. No Show.

Ls., Crm., Tan., Lt-Gry., Sing., Dense Fn-xln., to abund. P-ffl. No Show.

HEEBNER 3741(- 1281)

Sh., Abund. Black Carb

Ls., Crm., Lt-Gry., Dense Micro-xln. No Show.

3750

Sh., Gry., Burnt Orange., Brn., Argil.

TORONTO 3764 (- 1304)

Ls., Wht., Tan, Gry., Fn. to P-inter-xln., Fssl in Part. Mott/Sing. Black Sh., inclusions. sli mica, and trc. of Black Gilsbnitic Str. No Show Of live or Free Oil

LANSING 3775 (- 1315)

Ls., Crm., Sing., Fn-xln. to G-Fssl porosity, inter-xln and inter-Ool. G-PP to G-vug porosity carrying a good Show of Lt- Brn., Free oil. trc of Gassy LFO. Fair to Strong odor

" A "

# 1

3800

Sh., Blk, Gry., Brn., Argil

Ls., Crm., Tan, Fn. to micro-xln., Fssl., (Ool densely cemented Ool's to Good Inter-xln. Vug. porosity), GSLFO Strong Odor Scattered Fluor. Trc of sub-Chalky and sub- Cherty Ls.

Sh., Gry., Brn., Green, Maroon Argil to silty.

" B "

CFS

Ls., Wht to Crm., Sing., Fn-xln., sli -Chalky. G-inter-Fssl to Ool with Lt. Brn. -LFO. Good to strong odor. P-scattered Fluor.

" D "

# 2

Ls., Wht., Crm., Fn-xln to very Chalky No Show.

CFS

Sh., Gry., Brn., Argil.

Ls., Wht to Lt Gry., Sing., Micro-xln to chalky. No Show.

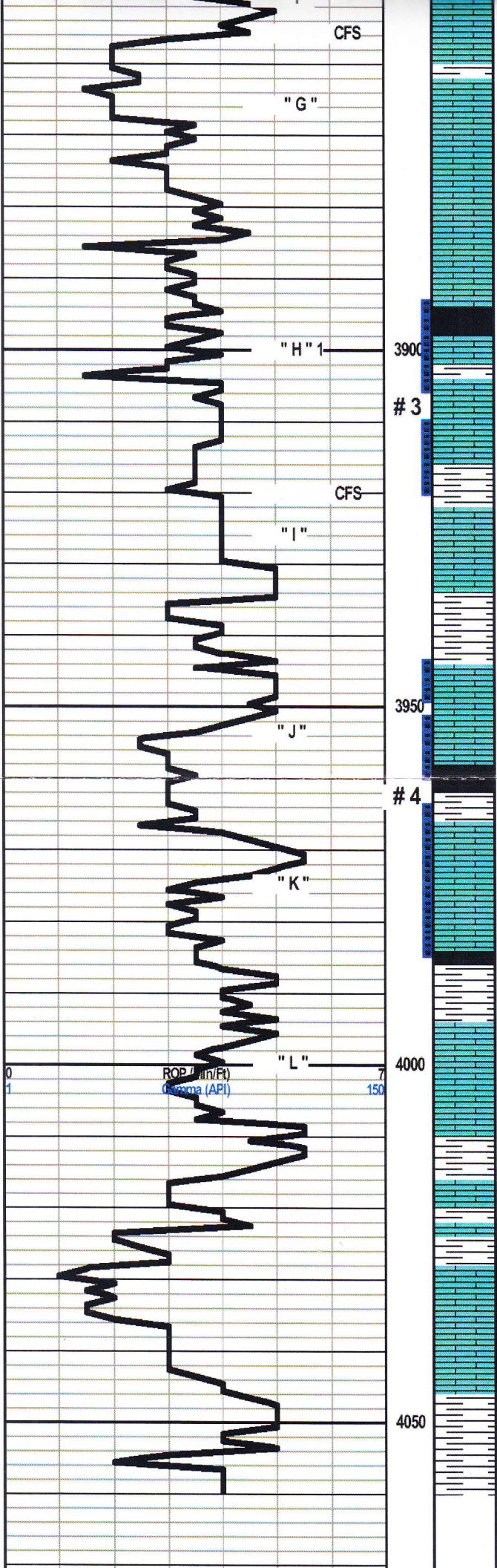
" E "

OP (Min/Ft)  
Gamma (API)

0  
1

7  
150





Ls., Wht., Crm., Sing., Fn-xln sub-fssl., chalky. Samples wash white. Trc of spotty Brn Oil-Stn., no LFO., No Odor no Fluor.  
 Sh., Gry., Brn Grn., Argil  
 Ls., Dense Micro-xln., Chalky no show.  
 Ls., As/ Above with P-Fssl. Ool. porosity.

**MUNCIE CK. 3894 (- 1434)**

Sh., Blk Carb.  
 Ls., Tan, Brn., Gry., Fn-xln. to dence Ool., Trc of Dk. Brn oil staining., V-Fain Odor, P-Fluor.  
 Sh., Vari Color., Argil.  
 Ls Wht., Crm., Sing Micro-Fn-xln., sli Fssl., Trc of LFO. Scattered Brn to Lt Brn., Oil edge Sat, and Stn. Faint odor.  
 Sh., Black Carb.  
 Sh., Gry., Brn., Grn. Argil.

Ls., Wht., Lt- Gry., Micro. to Fn-xln., Mott/Sing., Abund. Brn to Black oil Stn. No Free oil., Ft- odor. Stiated Stn with P-Fluor. Very Tight.

Sh., Gry., Brn. Argil.

Ls., Crm., Tan, Brn., Fn-xln to Fssl. Fair Inter-xln porosity in a few pcs. PP- to Shallow inter-xln porosity in several pcs. F-SLFO., (Brown) Good odor Scattered F-Fluor.

Sh., Blk Carb.  
 Sh., Gry and Gummy Choc. Brn.  
 Ls., Crm to Brn., to light Gry., Fn-cln., Fssl., Sub-Chalky. F-Show of Black to Dk Brn., F.O. Fair odor -P-Fluor. trc of Blk Dead oil Stn

Sh., Blk Carb  
 Sh., Vari- Color.  
 Ls., Crm., Lt-Gry Fn-xln., to Micro-xln., Chalky., No Show.

**B. K. C. 4008 (-1548)**

Sh., Vari-Color., with abundant Choc. Brn. Gummy.  
 Ls., Wht., Lt-Gry. Dense Micr0-xln., P-Fssl., Sub-Chalky to Cherty., No Show  
 Sh., Vari-Color. Argil.

