



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1249144  
OIL & GAS CONSERVATION DIVISION

Form ACO-1

August 2013

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
- Plug Back       Conv. to GSW       Conv. to Producer
- Commingled      Permit #: \_\_\_\_\_
- Dual Completion      Permit #: \_\_\_\_\_
- SWD      Permit #: \_\_\_\_\_
- ENHR      Permit #: \_\_\_\_\_
- GSW      Permit #: \_\_\_\_\_

|                                   |                 |   |
|-----------------------------------|-----------------|---|
| Spud Date or<br>Recompletion Date | Date Reached TD | Completion Date or<br>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

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
- Geologist Report Received
- UIC Distribution
- ALT  I  II  III Approved by: \_\_\_\_\_ Date: \_\_\_\_\_



1249144

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

| 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      |                  |                |              |                            |
| <input type="checkbox"/> Protect Casing |                  |                |              |                            |
| <input type="checkbox"/> Plug Back TD   |                  |                |              |                            |
| <input type="checkbox"/> Plug Off Zone  |                  |                |              |                            |

Did you perform a hydraulic fracturing treatment on this well?  Yes  No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?  Yes  No *(If No, skip question 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)*

| Shots Per Foot | PERFORATION RECORD - Bridge Plugs Set/Type<br>Specify Footage of Each Interval Perforated | Acid, Fracture, Shot, Cement Squeeze Record<br><i>(Amount and Kind of Material Used)</i> | Depth |
|----------------|---|--|-------|
|                |   |  |       |
|                |   |  |       |
|                |   |  |       |
|                |   |  |       |
|                |   |  |       |

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:<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><br><input type="checkbox"/> Other <i>(Specify)</i> _____ | PRODUCTION INTERVAL:<br>_____<br>_____ |
|---|--|--|



# 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. 906

|          |         |      |    |      |    |       |    |        |          |       |    |             |        |         |              |
|----------|---------|------|----|------|----|-------|----|--------|----------|-------|----|-------------|--------|---------|--------------|
| Date     | 1-15-15 | Sec. | 27 | Twp. | 22 | Range | 14 | County | Stafford | State | KS | On Location |        | Finish  | 10:30 PM     |
| Location |         |      |    |      |    |       |    |        |          |       |    |             | Radium | 4 S 2 E | 1/4 S E into |

|                     |              |             |           |  |
|---------------------|--------------|-------------|-----------|--|
| Lease               | Garvin Trust | Well No. #1 | Owner     | To Quality Oilwell Cementing, Inc.<br>You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed. |
| Contractor          | Royal        |             | Charge To | Charter Energy   |
| Type Job            | Surface      |             | Street    |  |
| Hole Size           | 12 1/4       | T.D.        | 523'      |  |
| Csg.                | 8 5/8        | Depth       | 523'      |  |
| Tbg. Size           |              | Depth       |           |  |
| Tool                |              | Depth       |           | The above was done to satisfaction and supervision of owner agent or contractor.   |
| Cement Left in Csg. | 23'          | Shoe Joint  |           | Cement Amount Ordered 300 60/40 3% cc 2% Cel   |
| Meas Line           |              | Displace    | 31 1/2    | 1/2 floeal used 235  |

| EQUIPMENT |    |     |          |          |     |     |
|-----------|----|-----|----------|----------|-----|-----|
| Pumptrk   | 5  | No. | Cementer | Common   | 180 | 141 |
|           |    |     | Helper   | Poz. Mix | 110 | 94  |
| Bulktrk   | 21 | No. | Driver   | Gel.     | 6   | 5   |
|           |    |     | Driver   | Calcium  | 4   | 8   |
| Bulktrk   | Pu | No. | Driver   |          |     |     |
|           |    |     | Driver   |          |     |     |

| JOB SERVICES & REMARKS |                             |
|------------------------|-----------------------------|
| Remarks:               | Salt                        |
| Rat Hole               | Flowseal 150#               |
| Mouse Hole             | Kol-Seal                    |
| Centralizers           | Mud CLR 48                  |
| Baskets                | CFL-117 or CD110 CAF 38     |
| D/V or Port Collar     | Sand                        |
|                        | Handling <del>300</del> 300 |
|                        | Mileage                     |

Cement

Circulated!

Quality Oilwell Cementing

|  |                |              |
|--|----------------|--------------|
|  | Guide Shoe     |              |
|  | Centralizer    |              |
|  | Baskets        |              |
|  | AFU Inserts    |              |
|  | Float Shoe     |              |
|  | Latch Down     |              |
|  | Wood Plug - 1  |              |
|  | Pumptrk Charge | Long Surface |
|  | Mileage        | 30           |
|  | Tax            |              |
|  | Discount       |              |
|  | Total Charge   |              |

X Signature *Alroy Budig*





CHARGE TO: **CHARTER ENERGY**  
 ADDRESS  
 CITY, STATE, ZIP CODE

TICKET **28198**  
 PAGE 1 OF 2

1. SERVICE LOCATION: **NESS CITY, KS** WELL PROJECT NO. **GARVIN TRUST #1** LEASE **STAFFORD** COUNTY/PARISH **STAFFORD** STATE **KS** CITY **Radium, KS.** DATE **2/15/15** OWNER  
 2. TICKET TYPE  SERVICE  SALES CONTRACTOR **Royal Drilling Rig 1** RIG NAME/NO. **STAFFORD** SHIPPED VIA **DELIVERED TO** ORDER NO.  
 3. WELL TYPE **OIL** WELL CATEGORY **DEVELOPMENT** JOB PURPOSE **STAKESTRING** WELL PERMIT NO. **3E,35,1W,45, E INTO**  
 4. REFERRAL LOCATION INVOICE INSTRUCTIONS

| PRICE REFERENCE | SECONDARY REFERENCE/ PART NUMBER | ACCOUNTING |      |    | DESCRIPTION              | QTY. | UM  | QTY. | UM | UNIT PRICE | AMOUNT  |
|-----------------|----------------------------------|------------|------|----|--------------------------|------|-----|------|----|------------|---------|
|                 |                                  | LOC        | ACCT | DF |                          |      |     |      |    |            |         |
| 575             |                                  |            |      |    | MILEAGE #115             | 75   | mi  |      |    | 6.00       | 450.00  |
| 578             |                                  |            |      |    | PUMP ASSEMBLY            | 1    | EA  |      |    | 1500.00    | 1500.00 |
| 402             |                                  |            |      |    | CENTRALIZERS             | 1    | EA  |      |    | 70.00      | 70.00   |
| 403             |                                  |            |      |    | CEMENT BASKET            | 1    | EA  |      |    | 300.00     | 300.00  |
| 406             |                                  |            |      |    | LATCH DOWN PLUG & BARREL | 1    | EA  |      |    | 275.00     | 275.00  |
| 407             |                                  |            |      |    | LUSTER FLOAT SHOE W/FILL | 1    | EA  |      |    | 375.00     | 375.00  |
| 281             |                                  |            |      |    | MUD FLUSH                | 500  | gal |      |    | 1.25       | 625.00  |
| 221             |                                  |            |      |    | LIQUID KEL               | 2    | gal |      |    | 25.00      | 50.00   |

**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  
 REMIT PAYMENT TO:  
**SWIFT SERVICES, INC.**  
 P.O. BOX 466  
 NESS CITY, KS 67560  
 785-798-2300

DATE SIGNED **2/15/15** TIME SIGNED **2:45**  A.M.  P.M.  
 SWIFT OPERATOR **[Signature]** APPROVAL **[Signature]**  
 CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES: The customer hereby acknowledges receipt of the materials and services listed on this ticket.  
 SURVEY:  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?  YES  NO  
 CUSTOMER DID NOT WISH TO RESPOND  
 PAGE TOTAL **3995.00**  
 SUBTOTAL **9099.00**  
 STAFFORD TAX **436.26**  
 TOTAL **9535.26**  
 Thank You!





PO Box 466  
Ness City KS 67560  
Off: 785-798-2300

TICKET CONTINUATION

TICKET No. 28198

CUSTOMER: CHARTER ENERGY

WEST GARVIN TRUST #1

DATE: 2/25/15 PAGE 21 OF 2

| PRICE REFERENCE    | SECONDARY REFERENCE/<br>PART NUMBER | ACCOUNTING |      |    | TIME | DESCRIPTION    | QTY           |        | U/M |     | UNIT PRICE | AMOUNT  |
|--------------------|-------------------------------------|------------|------|----|------|----------------|---------------|--------|-----|-----|------------|---------|
|                    |                                     | LOC        | ACCT | DF |      |                | QTY           | U/M    | QTY | U/M |            |         |
| 276                |                                     |            |      |    |      | FLOCELE        | 50            | lbs    |     |     | 2.52       | 125.00  |
| 283                |                                     |            |      |    |      | SALT           | 900           | lbs    |     |     | 20         | 180.00  |
| 284                |                                     |            |      |    |      | HALSEAL        | 8             | lb     |     |     | 35.12      | 280.96  |
| 286                |                                     |            |      |    |      | HALAD-1        | 180           | lbs    |     |     | 8.15       | 850.00  |
| 290                |                                     |            |      |    |      | D-AIR          | 2             | sqm    |     |     | 42.00      | 84.00   |
| 325                |                                     |            |      |    |      | STANDARD EA-2  | 175           | bx     |     |     | 14.52      | 2537.00 |
| 581                |                                     |            |      |    |      | SERVICE CHARGE |               |        |     |     | 2.00       | 350.00  |
| 583                |                                     |            |      |    |      | MILEAGE CHARGE |               |        |     |     | 1.00       | 697.50  |
|                    |                                     |            |      |    |      |                | TOTAL WEIGHT  | 18600  |     |     |            |         |
|                    |                                     |            |      |    |      |                | LOADING UNITS | 75     |     |     |            |         |
|                    |                                     |            |      |    |      |                | CUBIC FEET    | 175    | bx  |     |            |         |
|                    |                                     |            |      |    |      |                | TON MILES     | 697.50 |     |     |            |         |
| CONTINUATION TOTAL |                                     |            |      |    |      |                |               |        |     |     |            | 5104.00 |



**JOB LOG**

**SWIFT Services, Inc.**

DATE 21 JAN 15 PAGE NO.

CUSTOMER  
CHARTER ENERGY

WELL NO.

LEASE  
GARVIN TRUST # 1

JOB TYPE  
S2 LONGSTRING

TICKET NO.  
28198

| CHART NO. | TIME | RATE (BPM) | VOLUME (BBL) (GAL) | PUMPS |   | PRESSURE (PSI) |        | DESCRIPTION OF OPERATION AND MATERIALS   |
|-----------|------|------------|--------------------|-------|---|----------------|--------|--|
|           |      |            |                    | T     | C | TUBING         | CASING |  |
|           | 1800 |            |                    |       |   |                |        | ON LOCATION  |
|           | 2040 |            |                    |       |   |                |        | START PIPE 5 1/2" - 15.5 #<br>RIDE @ 3975 SET @ 3953<br>SHAFT - 20'<br>CENTRALIZERS 2, 4, 6, 8, 10, 12<br>BASKET 3 |
|           | 2155 |            |                    |       |   |                |        | DROP BALL - CIRCULATE  |
|           | 2221 | 6          | 12                 |       | ✓ |                | 500    | Pump 500 gal MUD FLUSH   |
|           |      | 6          | 20                 |       | ✓ |                | 300    | Pump 20 BBL KCL SPACER   |
|           | 2230 |            | 7                  |       |   |                |        | PLUG RH - 30sx   |
|           | 2235 | 4          | 35                 |       | ✓ |                |        | MIX 145 sx EA-2  |
|           | 2247 |            |                    |       |   |                |        | WASH OUT Pump & LINES.   |
|           | 2252 | 6          |                    |       | ✓ |                |        | START DISPLACING PLUG.   |
|           | 2308 | Ø          | 94                 |       |   |                | 1500   | PLUG DOWN LATCH PLUG IN  |
|           | 2310 |            |                    |       |   |                |        | RELEASE PSI - DRY  |
|           | 2313 |            |                    |       |   |                |        | WASH TRUCK   |
|           | 2345 |            |                    |       |   |                |        | JOB COMPLETE   |
|           |      |            |                    |       |   |                |        | THANKS # 115   |
|           |      |            |                    |       |   |                |        | JASON DAVE COLE TYLER  |



## DRILL STEM TEST REPORT

Prepared For: **Charter Energy, Inc.**

P.O. Box 252  
Great Bend, KS 67530-0252

ATTN: Kurt Talbott

### **Garvin Trust #1**

#### **27-22s-14w Stafford,KS**

Start Date: 2015.01.20 @ 00:19:18

End Date: 2015.01.20 @ 06:12:33

Job Ticket #: 59961                      DST #: 1

Trilobite Testing, Inc  
1515 Commerce Parkway Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2015.01.21 @ 15:16:00



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Charter Energy, Inc.  
P.O. Box 252  
Great Bend, KS 67530-0252  
ATTN: Kurt Talbott

**27-22s-14w Stafford,KS**  
**Garvin Trust #1**  
Job Ticket: 59961      **DST#: 1**  
Test Start: 2015.01.20 @ 00:19:18

## GENERAL INFORMATION:

Formation: **LKC H - K**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 01:51:03  
Time Test Ended: 06:12:33  
Interval: **3613.00 ft (KB) To 3720.00 ft (KB) (TVD)**  
Total Depth: 3720.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Fair  
Test Type: Conventional Bottom Hole (Initial)  
Tester: Ryan Reynolds  
Unit No: 68  
Reference Elevations: 1949.00 ft (KB)  
1942.00 ft (CF)  
KB to GR/CF: 7.00 ft

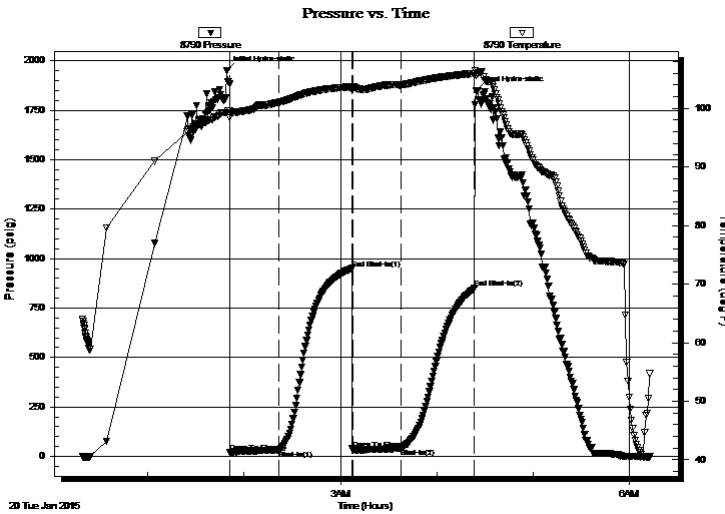
## Serial #: 8790

Inside

Press@RunDepth: 40.92 psig @ 3614.00 ft (KB) Capacity: 8000.00 psig  
Start Date: 2015.01.20 End Date: 2015.01.20 Last Calib.: 2015.01.20  
Start Time: 00:19:23 End Time: 06:12:32 Time On Btm: 2015.01.20 @ 01:49:18  
Time Off Btm: 2015.01.20 @ 04:24:33

TEST COMMENT: IF: Weak blow . surf. - 2"  
IS: No blow .  
FF: Weak blow . surf. - 1"  
FS: No blow .

## PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 1951.35         | 99.28        | Initial Hydro-static |
| 2           | 21.77           | 98.47        | Open To Flow (1)     |
| 33          | 32.84           | 101.02       | Shut-In(1)           |
| 78          | 949.86          | 103.67       | End Shut-In(1)       |
| 79          | 36.42           | 103.60       | Open To Flow (2)     |
| 109         | 40.92           | 104.00       | Shut-In(2)           |
| 155         | 850.27          | 105.97       | End Shut-In(2)       |
| 156         | 1850.58         | 105.64       | Final Hydro-static   |

## Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------|--------------|
| 40.00       | Drig mud    | 0.56         |
|             |             |              |
|             |             |              |
|             |             |              |
|             |             |              |

## Gas Rates

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





**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Charter Energy, Inc.  
 P.O. Box 252  
 Great Bend, KS 67530-0252  
 ATTN: Kurt Talbott

**27-22s-14w Stafford,KS**  
**Garvin Trust #1**  
 Job Ticket: 59961 **DST#: 1**  
 Test Start: 2015.01.20 @ 00:19:18

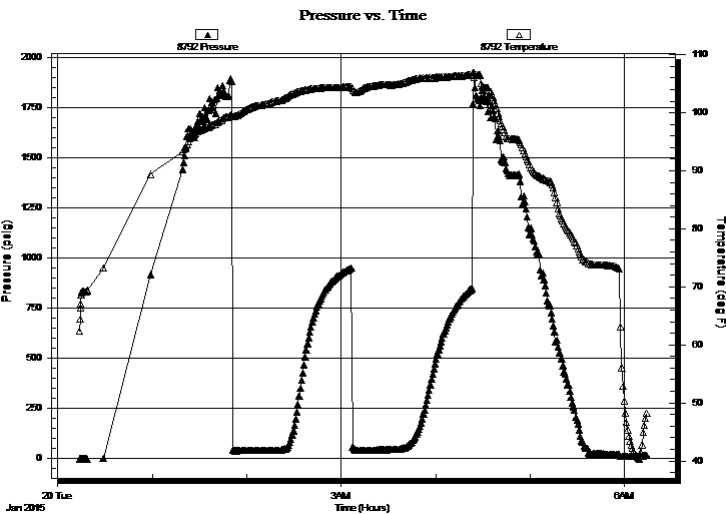
## GENERAL INFORMATION:

Formation: **LKC H - K**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 01:51:03 Tester: Ryan Reynolds  
 Time Test Ended: 06:12:33 Unit No: 68  
 Interval: **3613.00 ft (KB) To 3720.00 ft (KB) (TVD)** Reference Elevations: 1949.00 ft (KB)  
 Total Depth: 3720.00 ft (KB) (TVD) 1942.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 7.00 ft

## Serial #: 8792 Inside

Press@RunDepth: psig @ 3614.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2015.01.20 End Date: 2015.01.20 Last Calib.: 2015.01.20  
 Start Time: 00:13:57 End Time: 06:14:21 Time On Btm:  
 Time Off Btm:

TEST COMMENT: IF: Weak blow . surf. - 2"  
 IS: No blow .  
 FF: Weak blow . surf. - 1"  
 FS: No blow .



## PRESSURE SUMMARY

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

## Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------|--------------|
| 40.00       | Drig mud    | 0.56         |
|             |             |              |
|             |             |              |
|             |             |              |
|             |             |              |

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Charter Energy, Inc.  
P.O. Box 252  
Great Bend, KS 67530-0252  
ATTN: Kurt Talbott

**27-22s-14w Stafford,KS**  
**Garvin Trust #1**  
Job Ticket: 59961      **DST#: 1**  
Test Start: 2015.01.20 @ 00:19:18

**Tool Information**

|                           |                    |                       |                         |                                    |
|---------------------------|--------------------|-----------------------|-------------------------|------------------------------------|
| Drill Pipe:               | Length: 3608.00 ft | Diameter: 3.80 inches | Volume: 50.61 bbl       | Tool Weight: 2400.00 lb            |
| Heavy Wt. Pipe:           | Length: 0.00 ft    | Diameter: inches      | Volume: 0.00 bbl        | Weight set on Packer: 20000.00 lb  |
| Drill Collar:             | Length: 0.00 ft    | Diameter: 2.25 inches | Volume: 0.00 bbl        | Weight to Pull Loose: 54000.00 lb  |
|                           |                    |                       | Total Volume: 50.61 bbl | Tool Chased 0.00 ft                |
| Drill Pipe Above KB:      | 21.00 ft           |                       |                         | String Weight: Initial 47000.00 lb |
| Depth to Top Packer:      | 3613.00 ft         |                       |                         | Final 48000.00 lb                  |
| Depth to Bottom Packer:   | ft                 |                       |                         |                                    |
| Interval between Packers: | 107.00 ft          |                       |                         |                                    |
| Tool Length:              | 133.00 ft          |                       |                         |                                    |
| Number of Packers:        | 2                  | Diameter: 6.75 inches |                         |                                    |

Tool Comments:

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths |
|------------------|-------------|------------|----------|------------|----------------|
|------------------|-------------|------------|----------|------------|----------------|

|                 |       |      |        |         |                                     |
|-----------------|-------|------|--------|---------|-------------------------------------|
| Shut In Tool    | 5.00  |      |        | 3592.00 |                                     |
| Hydraulic tool  | 5.00  |      |        | 3597.00 |                                     |
| Jars            | 5.00  |      |        | 3602.00 |                                     |
| Safety Joint    | 2.00  |      | Inside | 3604.00 |                                     |
| Packer          | 5.00  |      |        | 3609.00 | 26.00      Bottom Of Top Packer     |
| Packer          | 4.00  |      |        | 3613.00 |                                     |
| Stubb           | 1.00  |      |        | 3614.00 |                                     |
| Recorder        | 0.00  | 8790 | Inside | 3614.00 |                                     |
| Recorder        | 0.00  | 8792 | Inside | 3614.00 |                                     |
| Perforations    | 3.00  |      |        | 3617.00 |                                     |
| Change Over Sub | 1.00  |      |        | 3618.00 |                                     |
| Drill Pipe      | 96.00 |      |        | 3714.00 |                                     |
| Change Over Sub | 1.00  |      |        | 3715.00 |                                     |
| Perforations    | 2.00  |      |        | 3717.00 |                                     |
| Bullnose        | 3.00  |      |        | 3720.00 | 107.00      Bottom Packers & Anchor |

**Total Tool Length: 133.00**





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Charter Energy, Inc.  
P.O. Box 252  
Great Bend, KS 67530-0252  
ATTN: Kurt Talbott

**27-22s-14w Stafford,KS**  
**Garvin Trust #1**  
Job Ticket: 59961      **DST#: 1**  
Test Start: 2015.01.20 @ 00:19:18

## Mud and Cushion Information

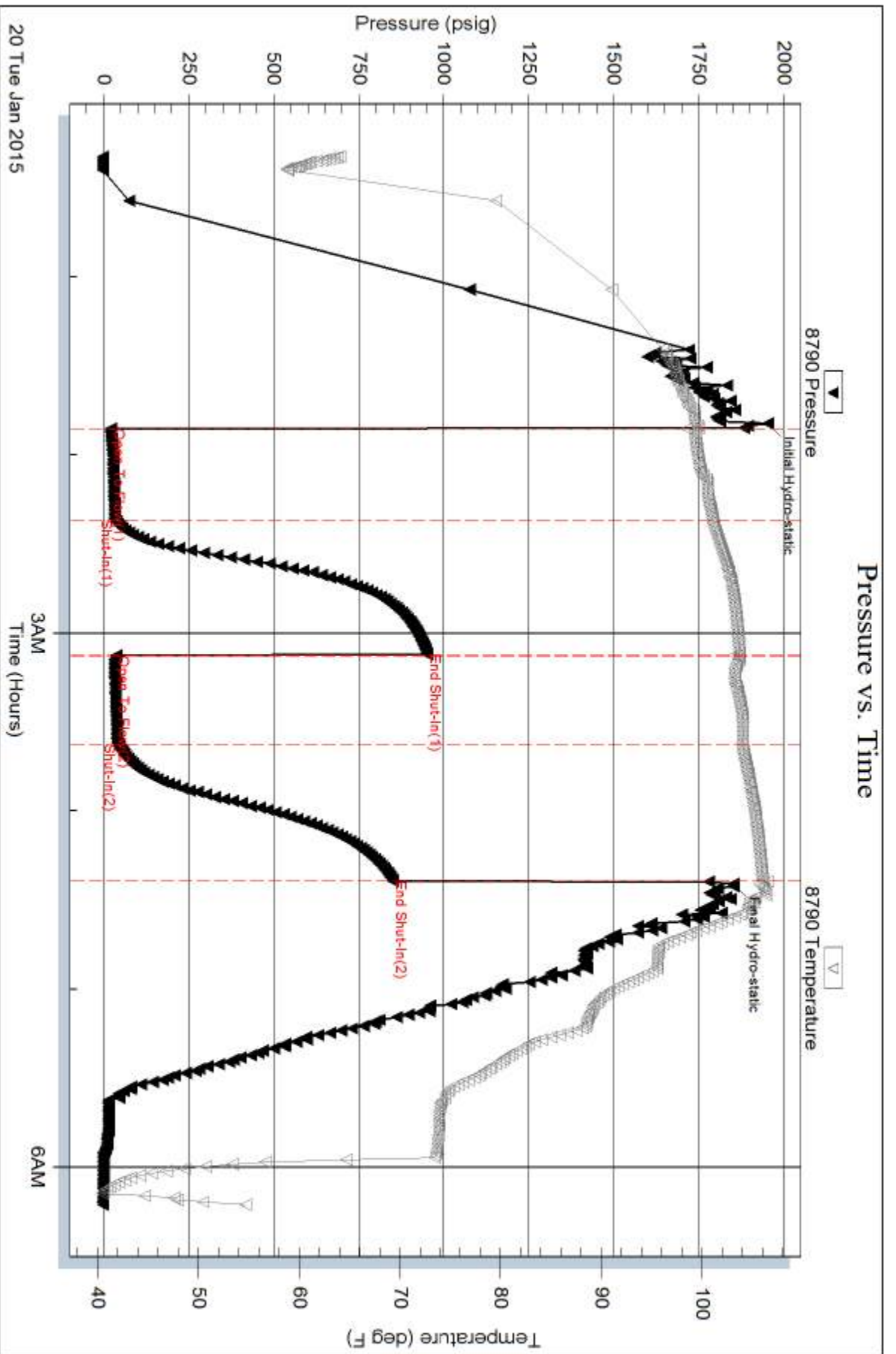
|                                   |                            |                 |          |
|-----------------------------------|----------------------------|-----------------|----------|
| Mud Type: Gel Chem                | Cushion Type:              | Oil API:        | deg API  |
| Mud Weight: 9.00 lb/gal           | Cushion Length: ft         | Water Salinity: | 7300 ppm |
| Viscosity: 51.00 sec/qt           | Cushion Volume: bbl        |                 |          |
| Water Loss: 10.39 in <sup>3</sup> | Gas Cushion Type:          |                 |          |
| Resistivity: ohm.m                | Gas Cushion Pressure: psig |                 |          |
| Salinity: 7300.00 ppm             |                            |                 |          |
| Filter Cake: 0.08 inches          |                            |                 |          |

## Recovery Information

Recovery Table

| Length<br>ft | Description | Volume<br>bbl |
|--------------|-------------|---------------|
| 40.00        | Drig mud    | 0.561         |

Total Length: 40.00 ft      Total Volume: 0.561 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #: none  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:





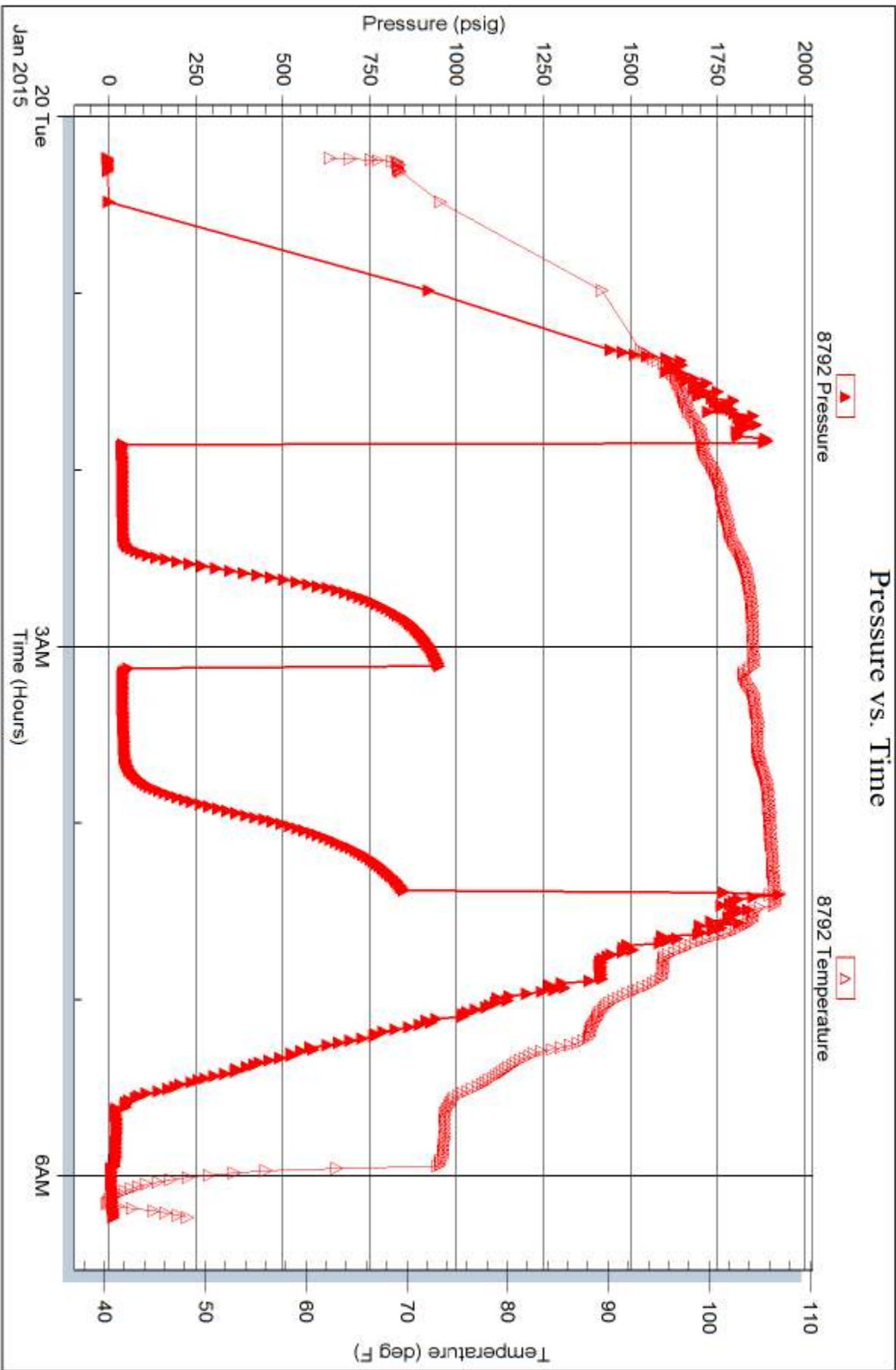
Serial #: 8792

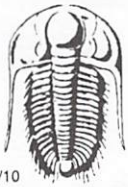
Inside

Charter Energy, Inc.

Garvin Trust #1

DST Test Number: 1





# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 59961

Well Name & No. Garvin Trust #1 Test No. 1 Date 1-19-15  
 Company Charter Energy, Inc. Elevation 1949 KB 1942 GL  
 Address P.O. Box 252 - Great Bend, KS 67530-0252  
 Co. Rep / Geo. Kurt Talbott Rig Royal #1  
 Location: Sec. 27 Twp. 22s Rge. 14w. Co. Stafford State KS

Interval Tested 3613-3720 Zone Tested Lans. H-K  
 Anchor Length 107 Drill Pipe Run 3608 Mud Wt. 9.3+  
 Top Packer Depth 3608 Drill Collars Run Ø Vis 51  
 Bottom Packer Depth 3613 Wt. Pipe Run Ø WL 10.4  
 Total Depth 3720 Chlorides 7300 ppm System LCM Tic  
 Blow Description FF: Weak blow surf. - 2" ISI: No blow.  
FF: Weak blow surf. - 1" FSI: No blow.

| Rec       | Feet of         | %gas | %oil | %water     | %mud |
|-----------|-----------------|------|------|------------|------|
| <u>40</u> | <u>Drly mud</u> |      |      | <u>100</u> |      |
| Rec       | Feet of         | %gas | %oil | %water     | %mud |
| Rec       | Feet of         | %gas | %oil | %water     | %mud |
| Rec       | Feet of         | %gas | %oil | %water     | %mud |

Rec Total 40 BHT 106 Gravity n/c API RW n/c @ n/c °F Chlorides 7300 ppm  
 (A) Initial Hydrostatic 1951  Test 1050 T-On Location 2230  
 (B) First Initial Flow 22  Jars 250 T-Started 0019  
 (C) First Final Flow 33  Safety Joint 75 T-Open 0151  
 (D) Initial Shut-In 950  Circ Sub \_\_\_\_\_ T-Pulled 0423  
 (E) Second Initial Flow 36  Hourly Standby \_\_\_\_\_ T-Out 0613  
 (F) Second Final Flow 41  Mileage 71 71 Comments \_\_\_\_\_  
 (G) Final Shut-In 850  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1851  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Initial Open 30  Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Initial Shut-In 45  Extra Recorder \_\_\_\_\_ Sub Total 0  
 Final Flow 30  Day Standby \_\_\_\_\_ Total \_\_\_\_\_  
 Final Shut-In 45  Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Sub Total \_\_\_\_\_

Approved By \_\_\_\_\_ Our Representative Ryan Reynolds  
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