

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. 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>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) (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: |  |
|----------------|-------|---------|------------|--|

|           |                        |
|-----------|------------------------|
| Form      | ACO1 - Well Completion |
| Operator  | Canyon Operating LLC   |
| Well Name | RUSH TRUST 17-1        |
| Doc ID    | 1649076                |

All Electric Logs Run

|      |
|------|
|      |
| DUCP |
| MEL  |
| DIL  |
| BHCS |

|           |                        |
|-----------|------------------------|
| Form      | ACO1 - Well Completion |
| Operator  | Canyon Operating LLC   |
| Well Name | RUSH TRUST 17-1        |
| Doc ID    | 1649076                |

Tops

| Name        | Top  | Datum |
|-------------|------|-------|
| Anhydrite   | 2112 | 360   |
| B/Anhydrite | 2149 | 325   |
| Topeka      | 3538 | -1064 |
| Heebner     | 3747 | -1273 |
| Toronto     | 3771 | -1297 |
| Lansing     | 3786 | -1312 |
| B/LKC       | 4022 | -1548 |
| Marmaton    | 4048 | -1574 |



# FRANKS Oilfield Service, LLC

815 Main Street  
Victoria, KS 67671

Office (785) 639-3949  
24 Hour Service Line (785) 639-7269

Email: franksoilfield@yahoo.com

## Invoice

|           |           |
|-----------|-----------|
| Date      | Invoice # |
| 5/16/2022 | 0592      |

Please Pay from this Invoice.  
Remit Payment to:  
815 Main Street  
Victoria, KS 67671  
Billing Questions-Call Tianna at  
(785) 639-3949

|   |
|---|
| Bill To   |
| Canyon Opertaing, LLC<br>P.O. Box 7117<br>Loveland, CO 80537-7117 |

|                   |             |        |          |
|-------------------|-------------|--------|----------|
| County/State      | Lease/Well# | Terms  | Job Type |
| Graham County, KS | High Hill   | Net 30 | Surface  |

| Description        | Quantity | Rate     | Amount    |
|--------------------|----------|----------|-----------|
| Pump Charge        | 1        | 1,150.00 | 1,150.00  |
| Mileage            | 42       | 6.50     | 273.00    |
| Ton Mileage (min.) | 1        | 600.00   | 600.00    |
| 60/40 3%cal 2% gel | 170      | 18.25    | 3,102.50T |
| Discount           |          | -512.55  | -512.55   |

*Thank-you!*

Accounts Due Net 10th. 1-1/2% Per Month on all Past Due Accounts. 18% Annual Rate.

**Subtotal** \$4,612.95

**Sales Tax (7.5%)** \$209.42

**Balance Due** \$4,822.37

*We appreciate your business and look forward to serving you again!*

# FRANKS Oilfield Service

◆ 815 Main Street Victoria, KS 67671 ◆ 24 Hour Phone (785) 639-7269  
 ◆ Office Phone (785) 639-3949 ◆ Email: franksoilfield@yahoo.com

TICKET NUMBER 0592  
 LOCATION Hortie  
 FOREMAN Tom Williams

## FIELD TICKET & TREATMENT REPORT CEMENT

| DATE                                    | CUSTOMER #         | WELL NAME & NUMBER       | SECTION   | TOWNSHIP | RANGE | COUNTY |         |        |         |        |  |  |  |  |  |  |  |  |  |  |  |  |
|---|--------------------|--------------------------|---|----------|-------|--------|---------|--------|---------|--------|--|--|--|--|--|--|--|--|--|--|--|--|
| 5-10-22                                 | 35971              | High Hill                | 17  | 10       | 24W   | Graham |         |        |         |        |  |  |  |  |  |  |  |  |  |  |  |  |
| CUSTOMER<br><u>Concan Operating LLC</u> |                    |                          | <table border="1"> <tr> <th>TRUCK #</th> <th>DRIVER</th> <th>TRUCK #</th> <th>DRIVER</th> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table> |          |       |        | TRUCK # | DRIVER | TRUCK # | DRIVER |  |  |  |  |  |  |  |  |  |  |  |  |
| TRUCK #                                 | DRIVER             | TRUCK #                  |   |          |       |        | DRIVER  |        |         |        |  |  |  |  |  |  |  |  |  |  |  |  |
|   |                    |                          |   |          |       |        |         |        |         |        |  |  |  |  |  |  |  |  |  |  |  |  |
|   |                    |                          |   |          |       |        |         |        |         |        |  |  |  |  |  |  |  |  |  |  |  |  |
|   |                    |                          |   |          |       |        |         |        |         |        |  |  |  |  |  |  |  |  |  |  |  |  |
| MAILING ADDRESS<br><u>PO Box 7117</u>   |                    |                          |   |          |       |        |         |        |         |        |  |  |  |  |  |  |  |  |  |  |  |  |
| CITY<br><u>Lowland</u>                  | STATE<br><u>CO</u> | ZIP CODE<br><u>80537</u> |   |          |       |        |         |        |         |        |  |  |  |  |  |  |  |  |  |  |  |  |

JOB TYPE Surface HOLE SIZE 12 1/4 HOLE DEPTH 221' CASING SIZE & WEIGHT 5 1/2"  
 CASING DEPTH 221' DRILL PIPE \_\_\_\_\_ TUBING \_\_\_\_\_ OTHER \_\_\_\_\_  
 SLURRY WEIGHT 14.5 SLURRY VOL 1.4 WATER gal/sk \_\_\_\_\_ CEMENT LEFT in CASING \_\_\_\_\_  
 DISPLACEMENT 13.75 Bbl DISPLACEMENT PSI \_\_\_\_\_ MIX PSI \_\_\_\_\_ RATE \_\_\_\_\_

REMARKS: Safety meeting & set up on STP #2. Circulated hole.  
Mix 170 & displaced 13.75 Bbl shot in. Plug down 200pm  
Cement did circulate.

*Thanks, Tom & Johann*

| ACCOUNT CODE | QUANTITY or UNITS | DESCRIPTION of SERVICES or PRODUCT | UNIT PRICE      | TOTAL      |
|--------------|-------------------|------------------------------------|-----------------|------------|
| P1002        | 1                 | PUMP CHARGE <u>Surface</u>         | \$1150.00       | \$1150.00  |
| M001         | 42                | MILEAGE                            | \$6.50          | \$273.00   |
| M002         | 7.57 tons         | Ton mileage delivery               | \$60.00         | \$454.20   |
| CBG14        | 120 gal           | 60/40 39oz 270 gal                 | \$18.25         | \$2190.00  |
|              |                   |                                    | sub total       | \$5,125.50 |
|              |                   |                                    | less 10% disc.  | \$512.55   |
|              |                   |                                    | sub total       | \$4612.95  |
|              |                   |                                    | SALES TAX       | 209.42     |
|              |                   |                                    | ESTIMATED TOTAL | 4822.37    |

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.

# FRANKS Oilfield Service, LLC

815 Main Street

Victoria, KS 67671

Email: franksoilfield@yahoo.com

Office (785) 639-3949

24 Hour Service Line (785) 639-7269

## Invoice

| Date      | Invoice # |
|-----------|-----------|
| 5/25/2022 | 0602      |

Please Pay from this Invoice.  
Remit Payment to:  
815 Main Street  
Victoria, KS 67671  
Billing Questions-Call Tianna at  
(785) 639-3949

|   |
|---|
| Bill To   |
| Canyon Operating, LLC<br>P.O. Box 7117<br>Loveland, CO 80537-7117 |

| County/State      | Lease/Well#     | Terms  | Job Type |
|-------------------|-----------------|--------|----------|
| Graham County, KS | Rush Trust 17-1 | Net 30 | PTA      |

| Description               | Quantity | Rate     | Amount   |
|---------------------------|----------|----------|----------|
| Pump Charge               | 1        | 1,500.00 | 1,500.00 |
| Mileage                   | 37       | 6.50     | 240.50   |
| Ton Mileage (min.)        | 1        | 600.00   | 600.00   |
| 60/40 4% gel 1/4# floseal | 240      | 16.75    | 4,020.00 |
| Discount                  |          | -636.05  | -636.05  |

*Thank-you!*

|  |                         |            |
|--|-------------------------|------------|
| Accounts Due Net 10th. 1-1/2% Per Month on all Past Due Accounts. 18% Annual Rate. | <b>Subtotal</b>         | \$5,724.45 |
| <i>We appreciate your business and look forward to serving you again!</i>          | <b>Sales Tax (7.5%)</b> | \$271.35   |
|  | <b>Balance Due</b>      | \$5,995.80 |



# FRANKS Oilfield Service

◆ 815 Main Street Victoria, KS 67671 ◆ 24 Hour Phone (785) 639-7269  
 ◆ Office Phone (785) 639-3949 ◆ Email: franksoilfield@yahoo.com

TICKET NUMBER 0602  
 LOCATION Hoxie  
 FOREMAN Tom Williams

## FIELD TICKET & TREATMENT REPORT CEMENT

| DATE                                    | CUSTOMER #         | WELL NAME & NUMBER       | SECTION  | TOWNSHIP | RANGE | COUNTY |         |        |         |        |     |       |  |  |     |        |  |  |  |        |  |  |
|---|--------------------|--------------------------|--|----------|-------|--------|---------|--------|---------|--------|-----|-------|--|--|-----|--------|--|--|--|--------|--|--|
| 5-25-08                                 | 35571              | Rush Trust 17-1          | 17   | 10       | 24W   | Graham |         |        |         |        |     |       |  |  |     |        |  |  |  |        |  |  |
| CUSTOMER<br><u>Canyon Operating LLC</u> |                    |                          | <table border="1"> <thead> <tr> <th>TRUCK #</th> <th>DRIVER</th> <th>TRUCK #</th> <th>DRIVER</th> </tr> </thead> <tbody> <tr> <td>101</td> <td>Tom W</td> <td></td> <td></td> </tr> <tr> <td>102</td> <td>Jack T</td> <td></td> <td></td> </tr> <tr> <td></td> <td>Jack W</td> <td></td> <td></td> </tr> </tbody> </table> |          |       |        | TRUCK # | DRIVER | TRUCK # | DRIVER | 101 | Tom W |  |  | 102 | Jack T |  |  |  | Jack W |  |  |
| TRUCK #                                 | DRIVER             | TRUCK #                  |  |          |       |        | DRIVER  |        |         |        |     |       |  |  |     |        |  |  |  |        |  |  |
| 101                                     | Tom W              |                          |  |          |       |        |         |        |         |        |     |       |  |  |     |        |  |  |  |        |  |  |
| 102                                     | Jack T             |                          |  |          |       |        |         |        |         |        |     |       |  |  |     |        |  |  |  |        |  |  |
|   | Jack W             |                          |  |          |       |        |         |        |         |        |     |       |  |  |     |        |  |  |  |        |  |  |
| MAILING ADDRESS<br><u>PO Box 7117</u>   |                    |                          |  |          |       |        |         |        |         |        |     |       |  |  |     |        |  |  |  |        |  |  |
| CITY<br><u>Loveland</u>                 | STATE<br><u>CO</u> | ZIP CODE<br><u>80537</u> |  |          |       |        |         |        |         |        |     |       |  |  |     |        |  |  |  |        |  |  |

JOB TYPE PTA HOLE SIZE \_\_\_\_\_ HOLE DEPTH \_\_\_\_\_ CASING SIZE & WEIGHT \_\_\_\_\_  
 CASING DEPTH \_\_\_\_\_ DRILL PIPE 4 1/2" TUBING \_\_\_\_\_ OTHER \_\_\_\_\_  
 SLURRY WEIGHT \_\_\_\_\_ SLURRY VOL \_\_\_\_\_ WATER gal/sk \_\_\_\_\_ CEMENT LEFT in CASING \_\_\_\_\_  
 DISPLACEMENT \_\_\_\_\_ DISPLACEMENT PSI \_\_\_\_\_ MIX PSI \_\_\_\_\_ RATE \_\_\_\_\_

REMARKS: Safety meeting & set up on STP#2. Plugged as ordered

1 2150' 50 54  
 1225' 100 54  
 275' 50 54  
Center 10 1/2" RH 20 54  
240 total  
Plugs down low  
Thanks Tom & Crew

| ACCOUNT CODE | QUANTITY or UNITS | DESCRIPTION of SERVICES or PRODUCT | UNIT PRICE      | TOTAL     |
|--------------|-------------------|------------------------------------|-----------------|-----------|
| PL005        | 1                 | PUMP CHARGE PTA                    | \$1500.00       | \$1500.00 |
| MO01         | 37                | MILEAGE                            | \$6.00          | \$222.00  |
| MO02         | 10.68 tons        | Ton Mileage Delivery               | \$60.00         | \$640.80  |
| CB010        | 240 sacks         | 6040 47 1/2 gal 1/4 # 110 50 1     | \$16.75         | \$4020.00 |
|              |                   |                                    | sub total       | \$6320.50 |
|              |                   |                                    | less 10% disc.  | \$5688.45 |
|              |                   |                                    | sub total       | \$5688.45 |
|              |                   |                                    | SALES TAX       | 271.35    |
|              |                   |                                    | ESTIMATED TOTAL | 5995.80   |

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.



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Canyon Operating LLC

**17 10s 24w**

P.O. Box 7117  
Loveland, CO 80537

**Rush Trust 17-1**

Job Ticket: 68645

**DST#: 1**

ATTN: Mac Armstrong

Test Start: 2022.05.20 @ 00:30:00

## GENERAL INFORMATION:

Formation: **Toronto - LKC A**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:57:30

Time Test Ended: 10:03:45

Test Type: Conventional Bottom Hole (Initial)

Tester: Terrance

Unit No: 75

Interval: **3745.00 ft (KB) To 3800.00 ft (KB) (TVD)**

Reference Elevations: 2467.00 ft (KB)

Total Depth: 3800.00 ft (KB) (TVD)

2460.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition:

KB to GR/CF: 7.00 ft

## Serial #: 8320

Press@RunDepth: 724.72 psig @ ft (KB)

Capacity: 8000.00 psig

Start Date: 2022.05.20 End Date: 2022.05.20

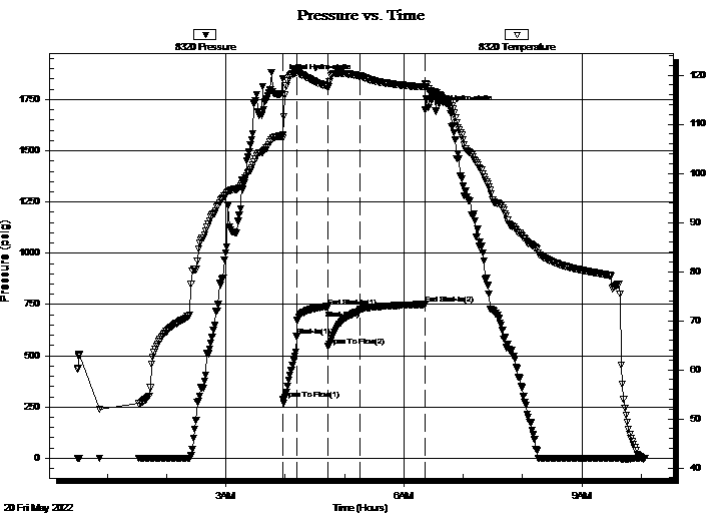
Last Calib.: 1899.12.30

Start Time: 00:30:05 End Time: 10:03:45

Time On Btm: 2022.05.20 @ 03:57:15

Time Off Btm: 2022.05.20 @ 06:21:45

TEST COMMENT: IF - 15 - BOB in 2 min  
ISI - 30 - No return  
FF - 30 - BOB in 2 min  
FSI - 60 - no return



## PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 1851.59         | 107.74       | Initial Hydro-static |
| 1           | 288.14          | 107.18       | Open To Flow (1)     |
| 14          | 594.25          | 120.54       | Shut-In(1)           |
| 46          | 740.12          | 117.67       | End Shut-In(1)       |
| 47          | 547.52          | 117.55       | Open To Flow (2)     |
| 79          | 724.72          | 119.79       | Shut-In(2)           |
| 145         | 750.61          | 117.59       | End Shut-In(2)       |
| 145         | 1699.36         | 118.22       | Final Hydro-static   |

## Recovery

| Length (ft) | Description       | Volume (bbl) |
|-------------|-------------------|--------------|
| 180.00      | 60% mud 40% water | 1.49         |
| 120.00      | 70% water 30% mud | 1.75         |
| 1200.00     | 100% water        | 17.50        |
|             |                   |              |
|             |                   |              |

## Gas Rates

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





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Canyon Operating LLC

**17 10s 24w**

P.O. Box 7117  
Loveland, CO 80537

**Rush Trust 17-1**

Job Ticket: 68645

**DST#: 1**

ATTN: Mac Armstrong

Test Start: 2022.05.20 @ 00:30:00

### Mud and Cushion Information

Mud Type: Gel Chem  
Mud Weight: 9.00 lb/gal  
Viscosity: 60.00 sec/qt  
Water Loss: 7.20 in<sup>3</sup>  
Resistivity: ohm.m  
Salinity: 2400.00 ppm  
Filter Cake: 1.00 inches

Cushion Type:  
Cushion Length: ft  
Cushion Volume: bbl  
Gas Cushion Type:  
Gas Cushion Pressure: psig

Oil API: deg API  
Water Salinity: 60000 ppm

### Recovery Information

Recovery Table

| Length<br>ft | Description       | Volume<br>bbl |
|--------------|-------------------|---------------|
| 180.00       | 60% mud 40% water | 1.494         |
| 120.00       | 70% water 30% mud | 1.750         |
| 1200.00      | 100% water        | 17.504        |

Total Length: 1500.00 ft      Total Volume: 20.748 bbl

Num Fluid Samples: 0

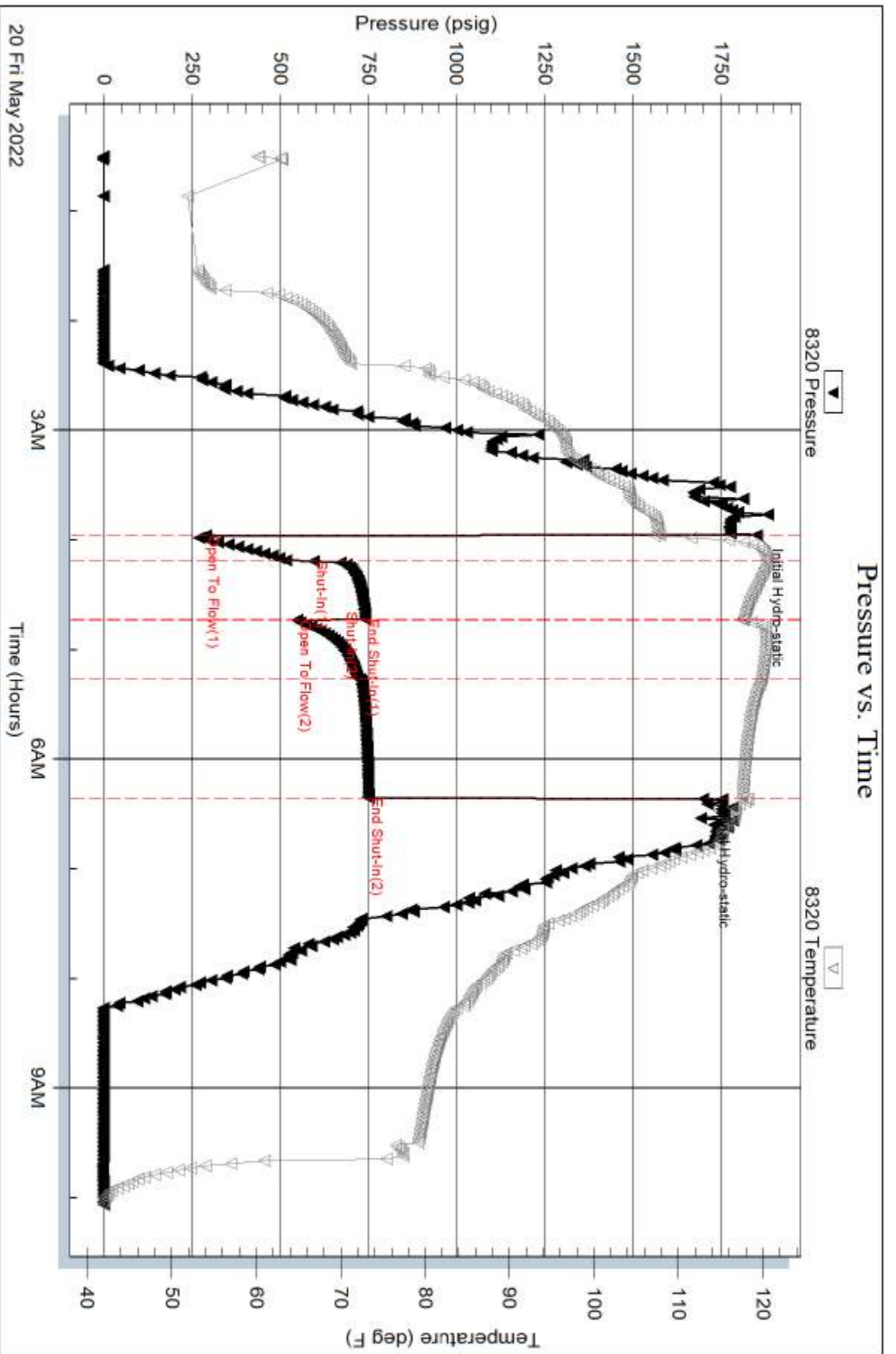
Num Gas Bombs: 0

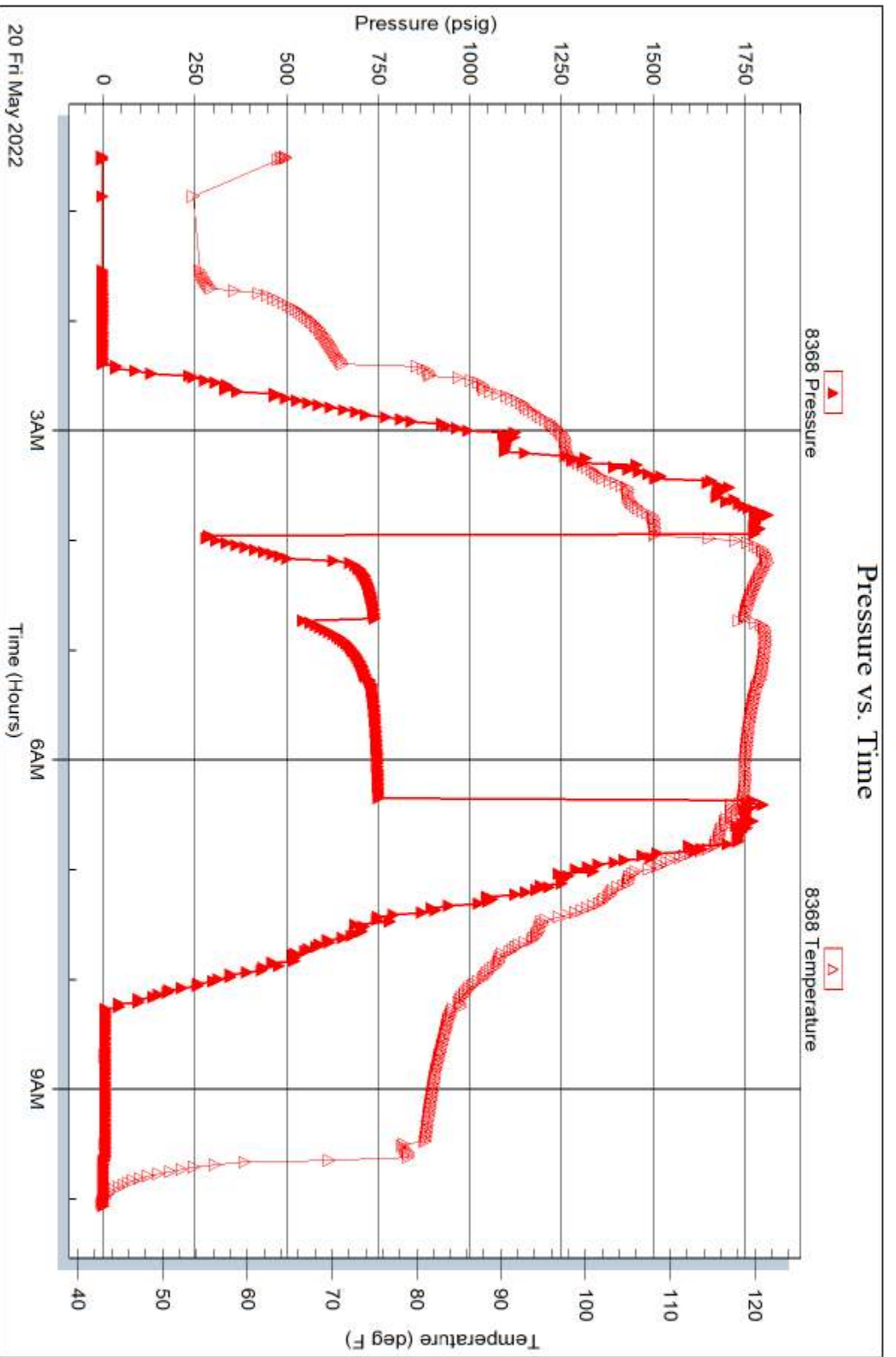
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Canyon Operating LLC

**17 10s 24w**

P.O. Box 7117  
Loveland, CO 80537

**Rush Trust 17-1**

Job Ticket: 68646

**DST#: 2**

ATTN: Mac Armstrong

Test Start: 2022.05.21 @ 19:30:00

## GENERAL INFORMATION:

Formation: **L/KC C-D**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 22:15:30

Time Test Ended: 04:12:15

Test Type: Conventional Bottom Hole (Reset)

Tester: Terrance

Unit No: 75

**Interval: 3802.00 ft (KB) To 2844.00 ft (KB) (TVD)**

Reference Elevations: 2467.00 ft (KB)

Total Depth: 3800.00 ft (KB) (TVD)

2460.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

## Serial #: 8320

Press@RunDepth: 295.24 psig @ ft (KB)

Capacity: 8000.00 psig

Start Date: 2022.05.21

End Date:

2022.05.22

Last Calib.:

1899.12.30

Start Time: 19:30:05

End Time:

04:12:15

Time On Btm:

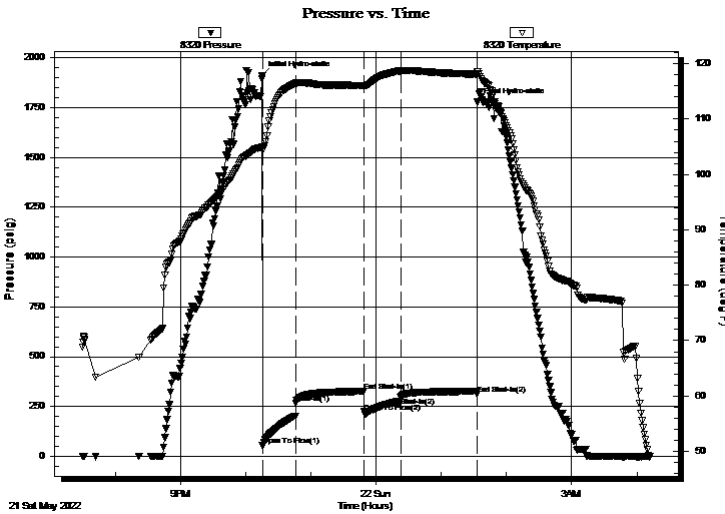
2022.05.21 @ 22:15:15

Time Off Btm:

2022.05.22 @ 01:33:15

TEST COMMENT: IF - 30 - BOB 7 min  
ISI - 60 - No return  
FF - 30 - 10 Inches  
FSI - 60 - No return

## PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 1910.90         | 104.97       | Initial Hydro-static |
| 1           | 52.69           | 104.37       | Open To Flow (1)     |
| 31          | 265.55          | 116.46       | Shut-In(1)           |
| 94          | 325.25          | 116.08       | End Shut-In(1)       |
| 94          | 223.08          | 116.03       | Open To Flow (2)     |
| 128         | 295.24          | 118.70       | Shut-In(2)           |
| 198         | 312.69          | 118.07       | End Shut-In(2)       |
| 198         | 1777.04         | 118.65       | Final Hydro-static   |

## Recovery

| Length (ft) | Description      | Volume (bbl) |
|-------------|------------------|--------------|
| 480.00      | 100% w ater      | 5.86         |
| 120.00      | 70%w ater 30%mud | 1.75         |
|             |                  |              |
|             |                  |              |
|             |                  |              |

\* Recovery from multiple tests

## Gas Rates

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







**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Canyon Operating LLC

**17 10s 24w**

P.O. Box 7117  
Loveland, CO 80537

**Rush Trust 17-1**

Job Ticket: 68646

**DST#: 2**

ATTN: Mac Armstrong

Test Start: 2022.05.21 @ 19:30:00

### Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

35000 ppm

Viscosity: 60.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.20 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2400.00 ppm

Filter Cake: 1.00 inches

### Recovery Information

Recovery Table

| Length<br>ft | Description     | Volume<br>bbbl |
|--------------|-----------------|----------------|
| 480.00       | 100% water      | 5.857          |
| 120.00       | 70%water 30%mud | 1.746          |

Total Length: 600.00 ft

Total Volume: 7.603 bbl

Num Fluid Samples: 0

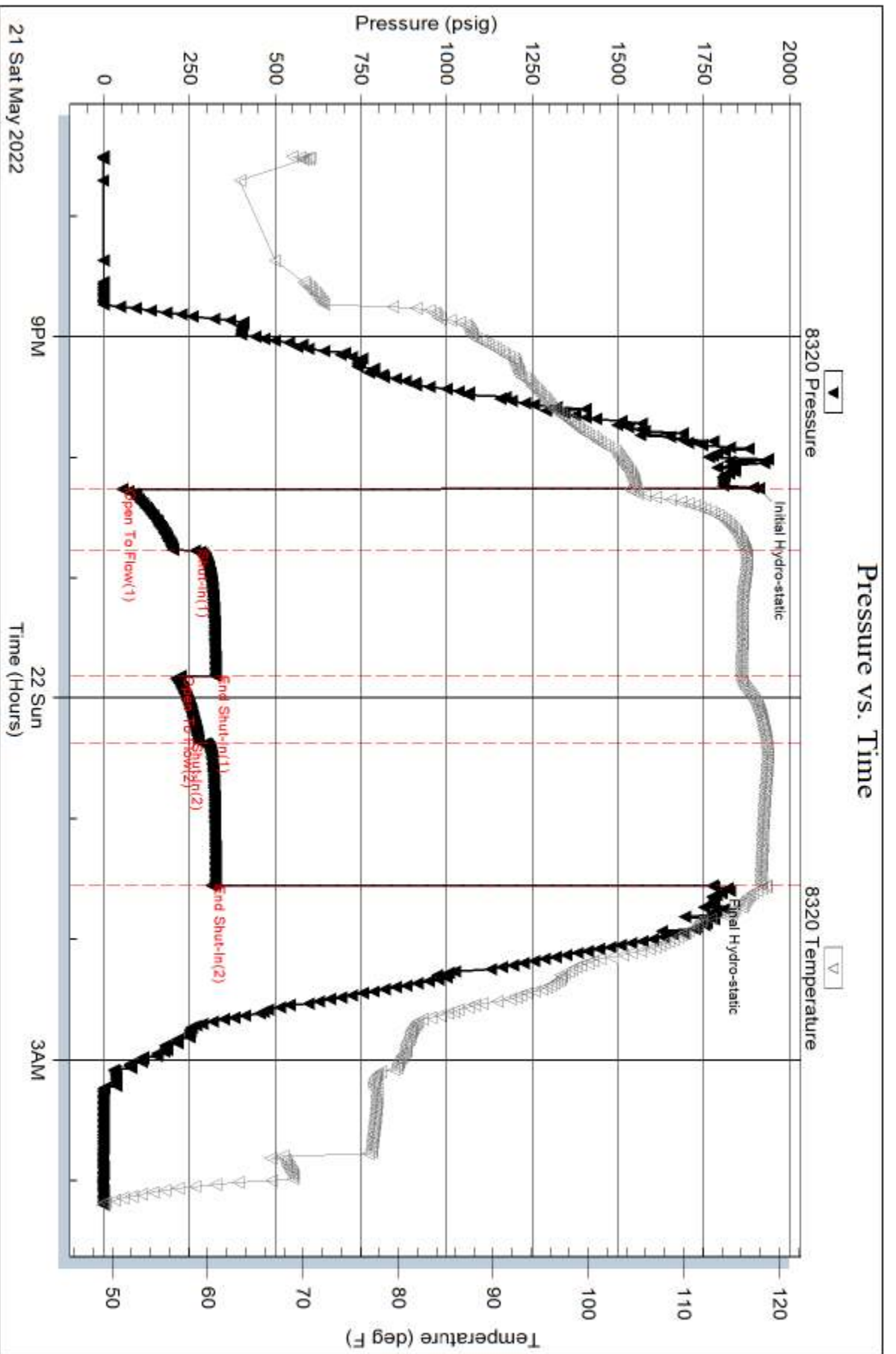
Num Gas Bombs: 0

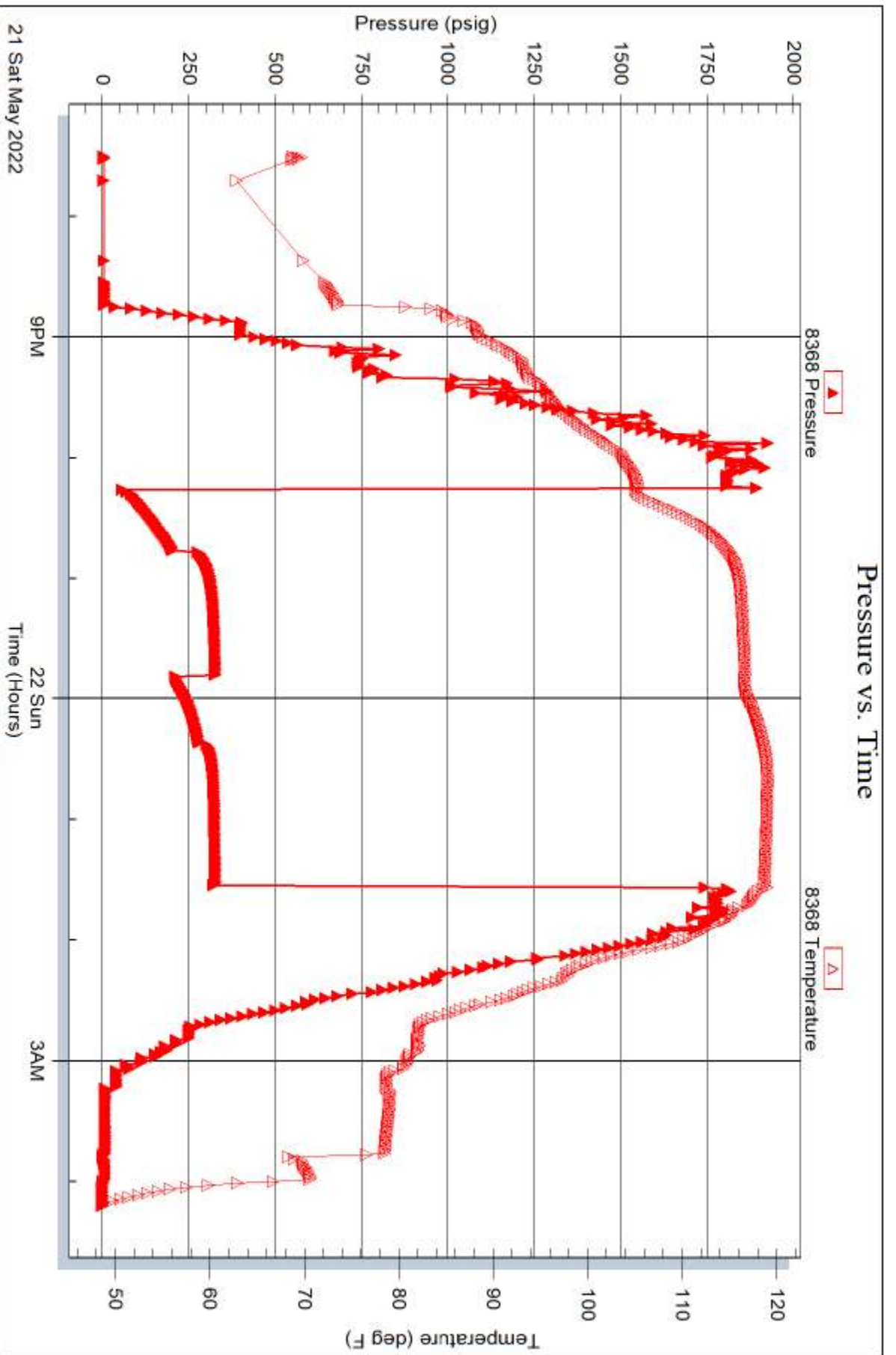
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Canyon Operating LLC

**17 10s 24w**

P.O. Box 7117  
Loveland, CO 80537

**Rush Trust 17-1**

Job Ticket: 68647

**DST#: 3**

ATTN: Mac Armstrong

Test Start: 2022.05.22 @ 13:20:00

## GENERAL INFORMATION:

Formation: **L/KC E-F**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:16:45

Time Test Ended: 22:05:15

Test Type: Conventional Bottom Hole (Reset)

Tester: Terrance

Unit No: 75

**Interval: 3848.00 ft (KB) To 3848.00 ft (KB) (TVD)**

Reference Elevations: 2467.00 ft (KB)

Total Depth: 3800.00 ft (KB) (TVD)

2460.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

## Serial #: 8368

Press@RunDepth: 175.39 psig @ ft (KB)

Capacity: 8000.00 psig

Start Date: 2022.05.22 End Date: 2022.05.22

Last Calib.: 2022.05.22

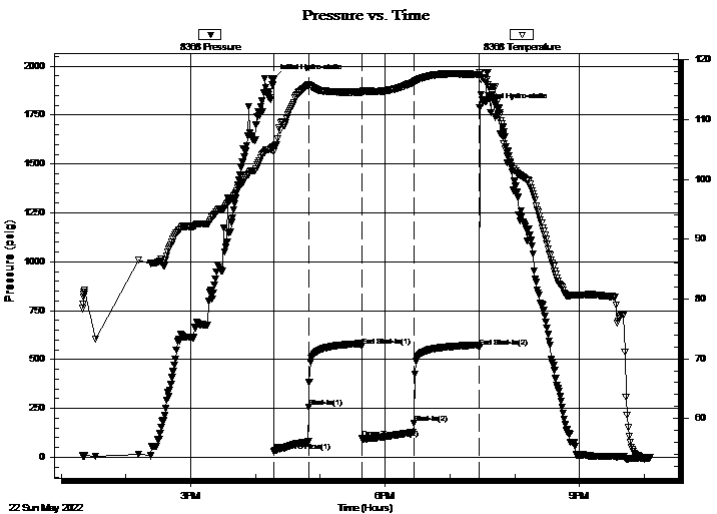
Start Time: 13:20:05 End Time: 22:05:15

Time On Btm: 2022.05.22 @ 16:16:30

Time Off Btm: 2022.05.22 @ 19:27:30

TEST COMMENT: IF - 30 - 5 Inches  
ISI - 45 - No return  
FF - 45 - 4 Inches  
FSI - 60 - No return

## PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 1934.47         | 105.52       | Initial Hydro-static |
| 1           | 31.03           | 104.68       | Open To Flow (1)     |
| 33          | 254.68          | 115.91       | Shut-In(1)           |
| 82          | 567.99          | 114.60       | End Shut-In(1)       |
| 82          | 94.91           | 114.52       | Open To Flow (2)     |
| 131         | 175.39          | 116.33       | Shut-In(2)           |
| 191         | 563.89          | 117.57       | End Shut-In(2)       |
| 191         | 1786.23         | 117.93       | Final Hydro-static   |

## Recovery

| Length (ft) | Description       | Volume (bbl) |
|-------------|-------------------|--------------|
| 120.00      | 80% water 20 %mud | 0.62         |
| 240.00      | 100% water        | 3.49         |
|             |                   |              |
|             |                   |              |
|             |                   |              |

\* Recovery from multiple tests

## Gas Rates

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





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Canyon Operating LLC

**17 10s 24w**

P.O. Box 7117  
Loveland, CO 80537

**Rush Trust 17-1**

Job Ticket: 68647

**DST#: 3**

ATTN: Mac Armstrong

Test Start: 2022.05.22 @ 13:20:00

### Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

60000 ppm

Viscosity: 66.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.60 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2600.00 ppm

Filter Cake: 1.00 inches

### Recovery Information

Recovery Table

| Length<br>ft | Description       | Volume<br>bbl |
|--------------|-------------------|---------------|
| 120.00       | 80% water 20 %mud | 0.619         |
| 240.00       | 100% water        | 3.492         |

Total Length: 360.00 ft

Total Volume: 4.111 bbl

Num Fluid Samples: 0

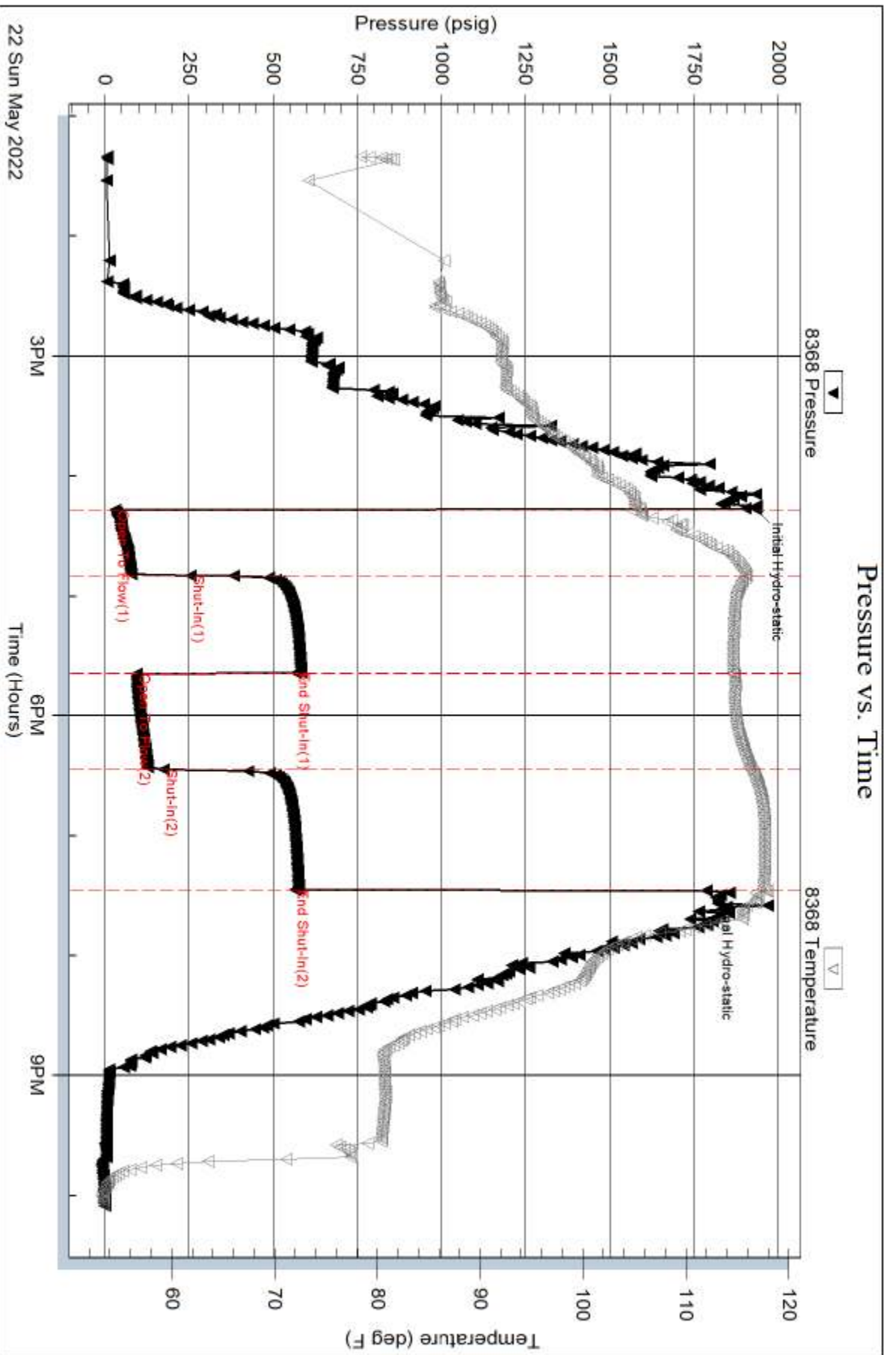
Num Gas Bombs: 0

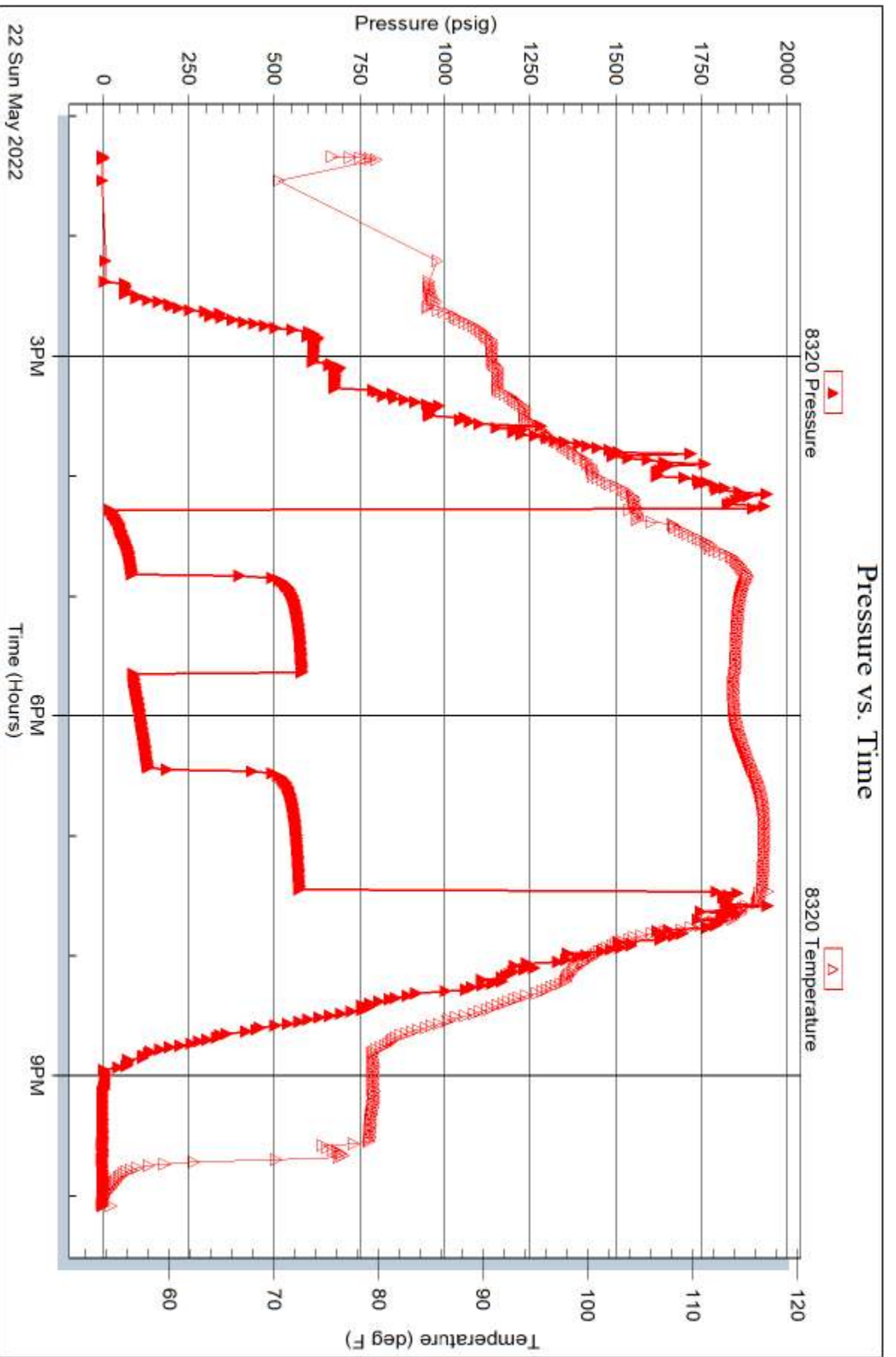
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:









**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Canyon Operating LLC

**17 10s 24w**

P.O. Box 7117  
Loveland, CO 80537

**Rush Trust 17-1**

Job Ticket: 68648

**DST#: 4**

ATTN: Mac Armstrong

Test Start: 2022.05.23 @ 14:45:00

## GENERAL INFORMATION:

Formation: **L/KC HI J**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 17:21:15

Time Test Ended: 00:34:45

Test Type: Conventional Bottom Hole (Reset)

Tester: Terrance

Unit No: 75

**Interval: 3906.00 ft (KB) To 3980.00 ft (KB) (TVD)**

Reference Elevations: 2467.00 ft (KB)

Total Depth: 3800.00 ft (KB) (TVD)

2460.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition:

KB to GR/CF: 7.00 ft

## Serial #: 8368

Press@RunDepth: 87.93 psig @ ft (KB)

Capacity: 8000.00 psig

Start Date: 2022.05.23 End Date: 2022.05.24

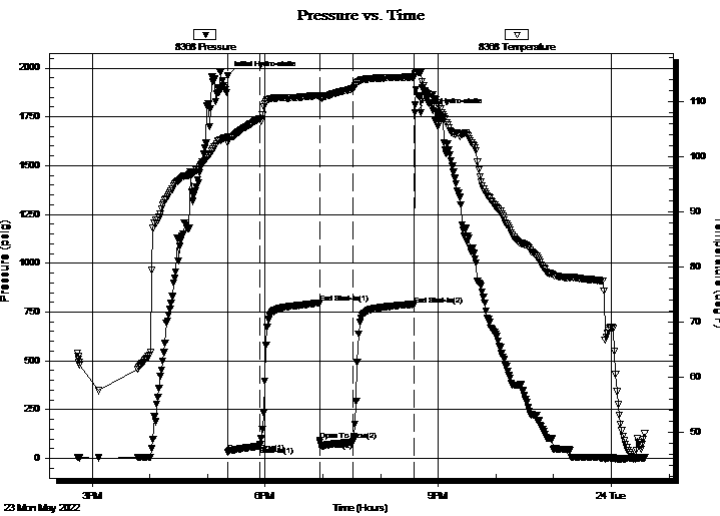
Last Calib.: 1899.12.30

Start Time: 14:45:05 End Time: 00:34:45

Time On Btm: 2022.05.23 @ 17:21:00

Time Off Btm: 2022.05.23 @ 20:35:45

**TEST COMMENT:** FI - 30 - BOB 12 min  
ISI - 60 - Surface blow  
FF - 30 - BOB 3 min  
FSI - 60 - 4 1/2 Inches of return



## PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 1959.02         | 103.58       | Initial Hydro-static |
| 1           | 30.62           | 102.64       | Open To Flow (1)     |
| 34          | 63.81           | 107.03       | Shut-In(1)           |
| 96          | 794.24          | 111.19       | End Shut-In(1)       |
| 96          | 92.75           | 110.84       | Open To Flow (2)     |
| 131         | 87.93           | 112.40       | Shut-In(2)           |
| 194         | 785.90          | 114.54       | End Shut-In(2)       |
| 195         | 1771.58         | 115.13       | Final Hydro-static   |

## Recovery

| Length (ft) | Description     | Volume (bbl) |
|-------------|-----------------|--------------|
| 70.00       | 100% Oil        | 0.34         |
| 120.00      | 60% Mud 40% Oil | 1.30         |
|             |                 |              |
|             |                 |              |
|             |                 |              |

\* Recovery from multiple tests

## Gas Rates

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





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Canyon Operating LLC

**17 10s 24w**

P.O. Box 7117  
Loveland, CO 80537

**Rush Trust 17-1**

Job Ticket: 68648

**DST#: 4**

ATTN: Mac Armstrong

Test Start: 2022.05.23 @ 14:45:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

34 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.00 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

| Length<br>ft | Description     | Volume<br>bbl |
|--------------|-----------------|---------------|
| 70.00        | 100% Oil        | 0.344         |
| 120.00       | 60% Mud 40% Oil | 1.296         |

Total Length: 190.00 ft

Total Volume: 1.640 bbl

Num Fluid Samples: 0

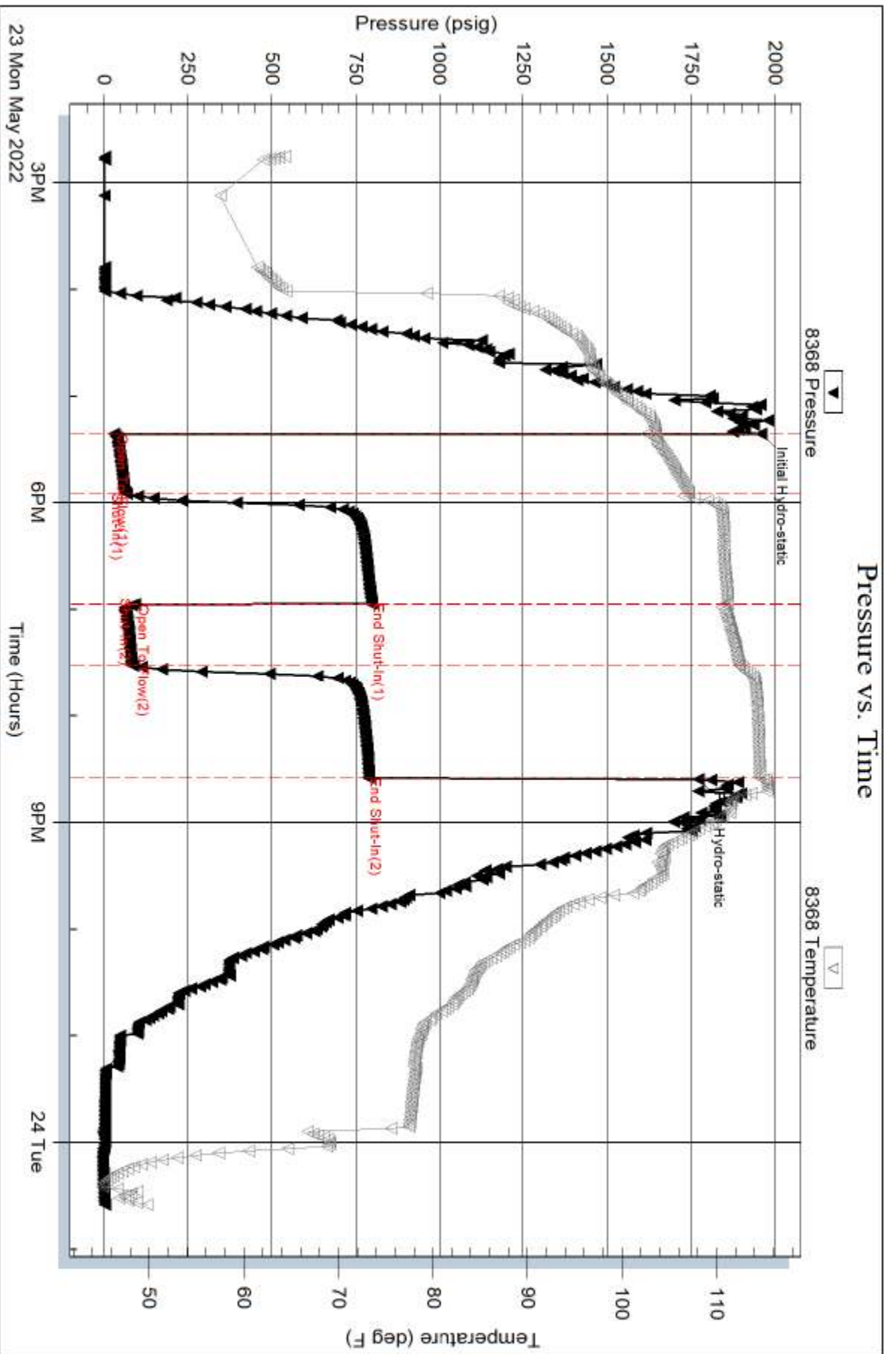
Num Gas Bombs: 0

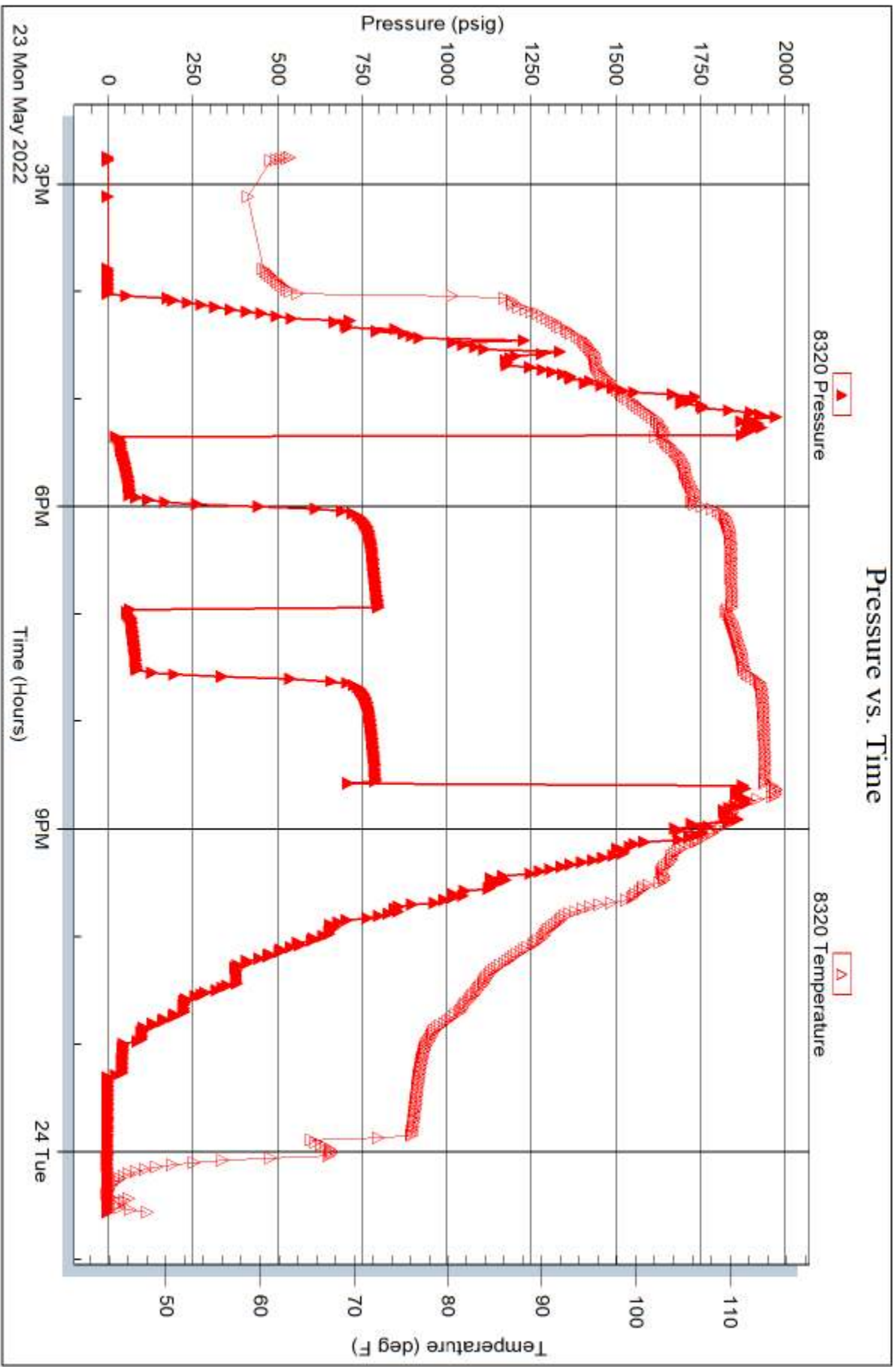
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





**Canyon Operating LLC  
Rush Trust No.17-1  
1980' FSL and 1880' FWL  
E2 W2 NE SW  
Sec 17 T10S R24W  
Graham County, Kansas**

Geological Report  
by

Macklin M. Armstrong

Scale 1:240 Imperial

|                          |                          |               |
|--------------------------|--------------------------|---------------|
| Well Name:               | Rush Trust No. 17-1      |               |
| Surface Location:        | Sec 17 T10S R24W         |               |
| Bottom Location:         | 1980' FSL and 1880' FWL  |               |
| API:                     | 15-065-24205             |               |
| License Number:          |                          |               |
| Spud Date:               | 5/16/2022                | Time: 8:45 AM |
| Region:                  | Graham County, Kansas    |               |
| Drilling Completed:      | 5/25/2022                | Time: 7:00 AM |
| Surface Coordinates:     |                          |               |
| Bottom Hole Coordinates: |                          |               |
| Ground Elevation:        | 2467.00ft                |               |
| K.B. Elevation:          | 2474.00ft                |               |
| Logged Interval:         | 3400.00ft                | To: 4120.00ft |
| Total Depth:             | 4120.00ft                |               |
| Formation:               | Marmaton                 |               |
| Drilling Fluid Type:     | Chemical/Fresh Water Gel |               |

**OPERATOR**

|                    |   |                  |
|--------------------|---|------------------|
| Company:           | Canyon Operating LLC                            |                  |
| Address:           | 5228 Lonetree Drive<br>Loveland, Colorado 80587 |                  |
| Contact Geologist: | Ben Jackson                                     |                  |
| Contact Phone Nbr: | 970-222-7530                                    |                  |
| Well Name:         | Rush Trust No. 17-1                             |                  |
| Location:          | Sec 17 T10S R24W                                |                  |
| API:               | 15-065-24205                                    |                  |
| Pool:              | Oil   | Field: High Hill |

**CONTRACTOR**

Contractor: STP Drilling Company  
 Rig #: 2  
 Rig Type: mud rotary  
 Spud Date: 5/16/2022  
 TD Date: 5/25/2022  
 Rig Release: 5/26/2022

Time: 8:45 AM  
 Time: 7:00 AM  
 Time: 7:00 AM

**SURFACE CO-ORDINATES**

Well Type: Vertical  
 Longitude: 100.026930633  
 Latitude: 39.180831044  
 N/S Co-ord:  
 E/W Co-ord:

**ELEVATIONS**

K.B. Elevation: 2474.00ft  
 K.B. to Ground: 7.00ft  
 Ground Elevation: 2467.00ft

**NOTES**

| Date    | Depth at 7 am | Activity        |
|---------|---------------|-----------------|
| 5-16-22 | MIRU          | Spud at 8:45 am |
| 5-17-22 | 807           | Drilling        |
| 5-18-22 | 2190          | Drilling        |
| 5-19-22 | 3090          | Drilling        |
| 5-20-22 | 3650          | Drilling        |
| 5-21-22 | 3800          | TOH after DST 1 |
| 5-22-22 | 3844          | TIH after DST 2 |
| 5-23-22 | 3940          | CFS             |
| 5-24-22 | 4017          | Drilling        |
| 5-25-22 | 4120          | CFS             |
| 5-26-22 | 4120          |                 |

Surface Casing: 8 5/8" 23# at 221'  
 Production Casing:

Deviation: 221' - 3/4  
 3800' - 3/4  
 4120' -

| Bit Record: | Make  | Size    | Type | Depth In | Depth Out | Hours |
|-------------|-------|---------|------|----------|-----------|-------|
|             | Smith | 12 1/4" | RR   | Surface  | 221       | 3     |
|             | Smith | 7 7/8"  | F27  | 221      | 4120      | 106.5 |

Drill Stem Tests:

DST No. 1 3745 to 3800 Toronto and Lansing A Zone  
 15-30-30-60

Recovery: 180' WM (40%W, 60%M)  
 120' MW (30%M, 70%W)  
 1200' W (Chl 60,000 ppm)

IHP 1852 FHP 1699  
 IFP 288-594 FFP 548-725  
 ISIP 740 FSIP 751  
 Temp 100°

DST No. 2 3802 to 3844 Lansing C and D Zones  
 30-60-30-60

Recovery: 120' MW (30%M, 70%W)  
 440' W (Chl 35,000 ppm)

IHP 1911 FHP 1777  
 IEP 53-266 FEP 223-295

IFP 33-200      IFF 223-293  
 ISIP 325      FSIP 313  
 Temp 130°

DST No. 3 3848 to 3880 Lansing E and F Zones  
 30-45-45-60  
 Recovery: 120' MW (20%M, 80%W)  
           240' W (Chl 60,000 ppm)  
 IHP 1934      FHP 1786  
 IFP 31-255      FFP 95-175  
 ISIP 568      FSIP 564  
 Temp 100°

DST No. 4 3906 to 3980 Lansing H, I and J Zones  
 30-60-30-60  
 Recovery: 800' GIP  
           70' Oil (34 deg grav)  
           120' Oily Mud (40%O, 60%M)  
 IHP 1959      FHP 1772  
 IFP 31-64      FFP 93-88  
 ISIP 794      FSIP 786  
 Temp 114°

DST No. 5 3974 to 4022 Lansing K and L Zones  
 45-60-60-60  
 Recovery: 1' Drilling Mud  
 IHP 1999      FHP 1861  
 IFP 21-30      FHP 30-22  
 ISIP 30      FSIP 28  
 Temp 110

| Formation        | Sample | E-Log | Datum | Well 1 | Well 2 | Well 3 |
|------------------|--------|-------|-------|--------|--------|--------|
| Anhydrite        | 2112   |       | +360  | +3     | -8     | -8     |
| B/Anhydrite      | 2149   |       | +325  | +3     | -9     | -10    |
| Topeka           | 3538   |       | -1064 | -7     | -11    | -4     |
| King Hill        | 3635   |       | -1161 | -3     | -8     | +1     |
| Queen Hill       | 3686   |       | -1212 | +1     | -3     | +4     |
| Heebner          | 3747   |       | -1273 | -1     | -6     | +2     |
| Toronto          | 3771   |       | -1297 | -2     | -6     | +2     |
| Lansing          | 3786   |       | -1312 | -3     | -6     | +4     |
| C Zone           | 3814   |       | -1342 | -2     | -4     | +4     |
| D Zone           | 3827   |       | -1353 | 0      | -5     | +5     |
| E Zone           | 3858   |       | -1384 | -3     | -5     | +2     |
| F Zone           | 3872   |       | -1398 | -2     | -13    | -5     |
| G Zone           | 3882   |       | -1408 | -3     | -11    | -4     |
| H Zone           | 3918   |       | -1444 | +4     | -4     | +5     |
| I Zone           | 3942   |       | -1468 | -2     | -6     | +3     |
| J Zone           | 3963   |       | -1489 | -2     | -7     | +1     |
| K Zone           | 3987   |       | -1513 | -4     | -9     | -1     |
| L Zone           | 4010   |       | -1536 |        | -13    |        |
| Base/Kansas City | 4022   |       | -1548 |        | -14    |        |
| Marmaton         | 4048   |       | -1574 |        |        |        |
| Total Depth      | 4120   |       | -1646 |        |        |        |

Well 1: Don Pratt Rush B No. 3 NW SW SW Sec 17 T10S R24W  
 Well 2: Don Pratt Dave Rush B No. 1 S2 SW SW Sec 17 T10S R24W  
 Well 3: Don Pratt Dave Rush B No. 2 SW SE SW Sec 17 T10S R24W

Respectfully submitted,  
 Macklin M. Armstrong

**ROCK TYPES**

|  |            |   |            |   |            |
|--|------------|---|------------|---|------------|
|  | Lmst fw7>  |  | shale, gry |  | shale, red |
|  | shale, grn |  | Carbon Sh  |   |            |



ACCESSORIES

MINERAL

△ Chert White

FOSSIL

- Crinoids
- F Fossils < 20%
- Oolite
- ⊕ Oomoldic

TEXTURE

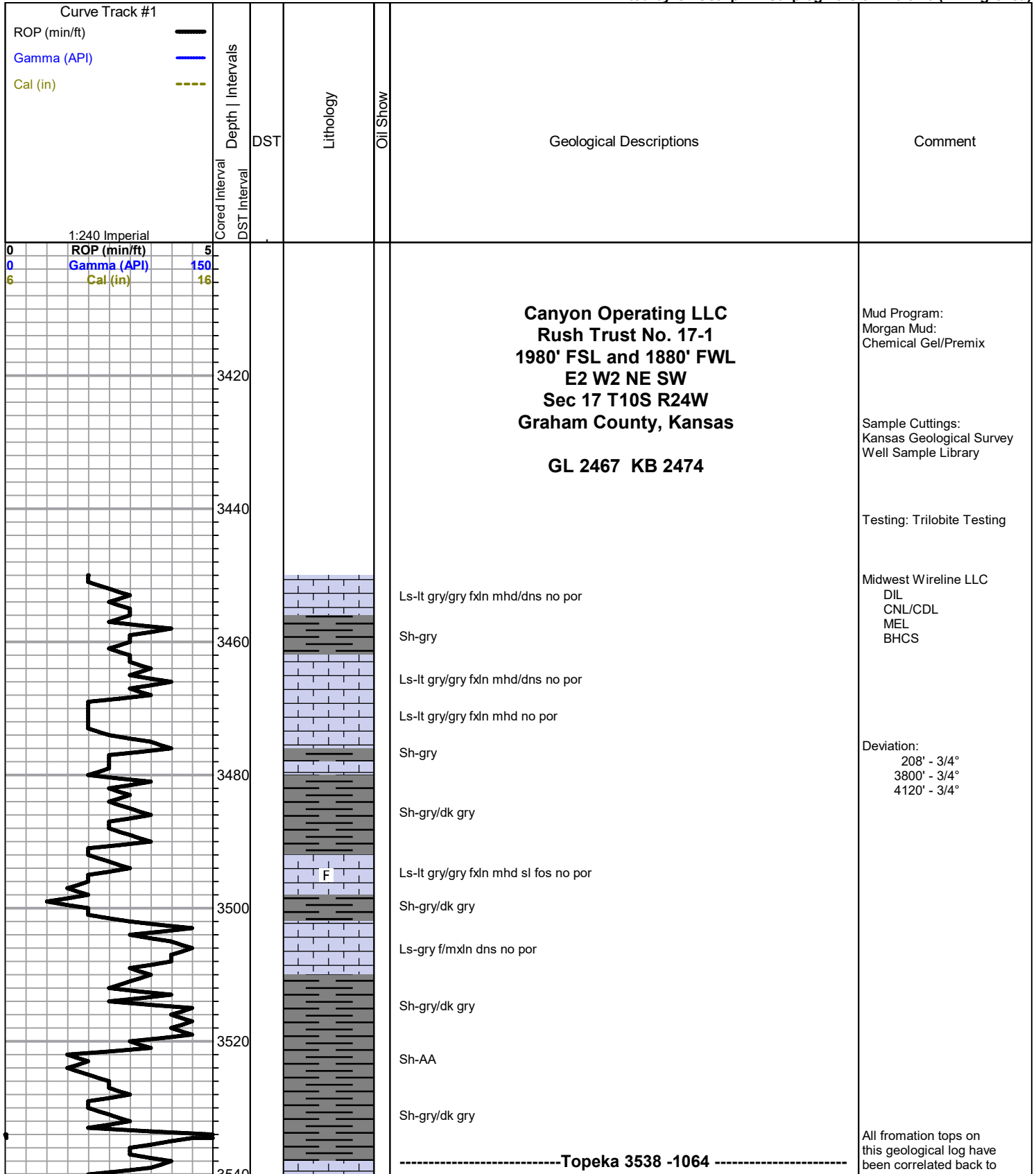
C Chalky

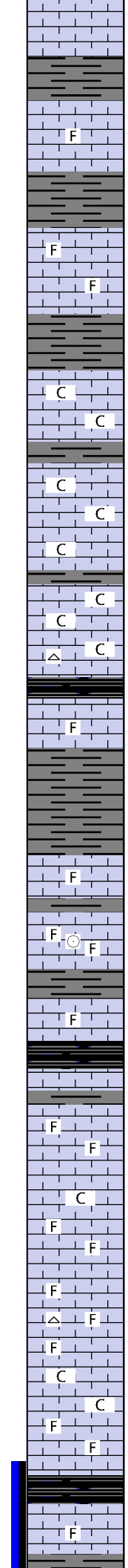
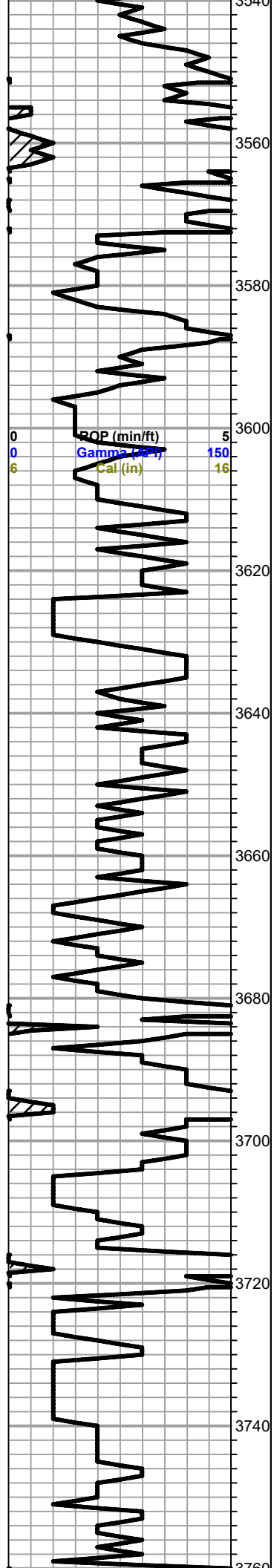
OTHER SYMBOLS

DST

- DST Int
- DST alt
- Core

Printed by GEOstrip VC Striplog version 4.0.8.15 (www.grsi.ca)





Ls-ll gry/crm fxln mhd/dns no por

Sh-gry/dk gry

F Ls-gry f/mxln mhd/dns sl fos no por

Sh-gry/dk gry

F Ls-lt gry.tan fxln mhd/dns sl fos no por

F Ls-lt gry fxln mhd fos no por

Sh-gry/dk gry

C Ls-crm/lt gry fxln mhd/dns clky no por

C Ls-lt gry fxln soft/mhd sl clky no por

Sh-gry/dk gry

C Ls-lt gry/crm fxln mhd clky no por

C Ls-crm/lt gry fxln mhd/dns sl clky no por

Sh-gry

C Ls-crm/lt gry fxln soft clky no por sm Ls-wt fxln soft clky

△ C Ls-lt gry f/mxln mhd sl clky no por sm Cht-lt gry fsh opa q sl fos

----- **King Hill 3635 -1161** -----

Sh-blk carb

F Ls-lt gry f/mxln dns sl fos no por

Sh-gry/dk gry

Sh-AA

F Ls-tan/lt gry fxln mhd/dns sl fos no por

Sh-gry

F Ls-tan f/mxln mhd fos sm free crin no por

Sh-gry/dk gry

F Ls-tan fxln dns sl fos no por

----- **Queen Hill 3686 -1212** -----

Sh-blk carb

Ls-lt gry fxln dns no por

Sh-gry

F Ls-lt gry/tan fxln mhd/dns fos no por

F

C Ls-wt fxln soft clky no por

F Ls-crm/lt tan fxln mhd/dns sl fos no por

F Ls-crm/tan fxln dns sl fos no por

F Ls-lt gry/tan fxln mhd for fr inter fos por nsfo sm Cht-lt gry fsh opa q sl fos

F Ls-lt gry/tan fxln mhd fos no por

C Ls-wt fxln soft clky

F C Ls-lt gry/lt tan f/mxln mhd/dns fos no por

F

----- **Heebner 3747 -1273** -----

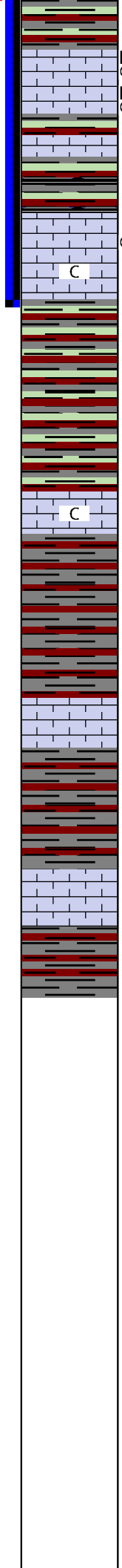
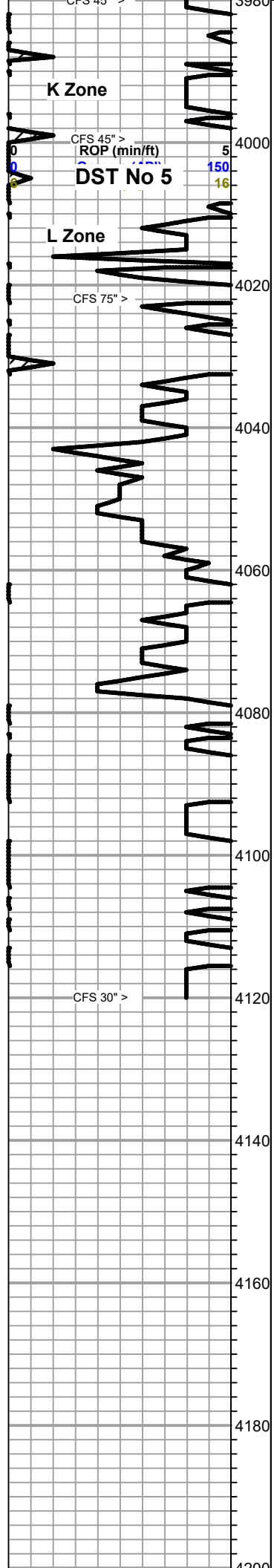
Sh-blk carb

F Ls-gry/gry brn f/mxln dns fos no por

**Mud Data 3731'**  
11:40 am on 5-20-21  
Wt 8.8 Vis 60 WL 7.2  
pH 11.5 Chl 2400 Sol 3.6  
YP 22 LCM zero

**DST No. 1**  
3745 to 3800  
15-30-30-60  
1st Open: BOB in 2"  
2nd Open: BOB in 2"  
Recovery





Sh-AA  
 Ls-tan/lt gry fxln mhd fr vug por highly gils blk tarry oil stn fr cut trc fo on brk no odor  
 Ls-AA  
 Sh-gry/grn/mar  
 Ls-gry fxln mhd/dns no por  
 Sh-gry/grn/mar/blk  
 Ls-gry fxln mhd no por with sm Ls-tan/gry fxln fr/gd vug por dk brn sct stn fr cut vssfo on brk no odor  
 Ls-gry/lt gry fxln mhd/dns sl clky no por  
 ----- BKC 4022 -1548 -----  
 Sh-gry/grn/red/mar  
 Sh-AA  
 Sh-gry/grn/red  
 Sh-AA  
 ----- Marmaton 4048 -1574 -----  
 Ls-lt grycrm fxln mhd/dns sl clky no por  
 Sh-gry/dk gry/red  
 Sh-AA  
 Sh-gry/dk gry/red  
 Ls-lt gry/gry fxln to sl sandy dns no por  
 S-gry/dk gry/red  
 Sh-AA  
 Ls-lt gry/tan fxln dns no por  
 Sh-gry/dk gry/red  
 ----- RTD 4120 -1946 -----  
 Finished drilling at 6:30 am on 5-25-21. Pulled 10 stand short trip, then cir for log 60 minutes.  
 Fiished logging at 11:00 am on 5-25-21.

**Mud Data 3980'**  
 11:40 am on 5-23-22  
 Wt 9.2 Vis 56 WL 8.0  
 pH 11 Chl 5000 Sol 6.4  
 YP 19 LCM zero

**DST No. 5**  
 3974 to 4022  
 45-60-60-60  
 1st Open: Surface blow  
 2nd Open: No blow  
 Recovery: 1' Drig Mud  
 IHP 1999 FHP 1861  
 IFP 19-21 FFP 30-22  
 ISIP 30 FSIP 28  
 110°

**Mud Data 4022'**  
 11:30 am on 5-24-22  
 Wt 9.2 Vis 54 WL 8.0  
 pH 10.5 Chl 5000 Sol 6.4  
 YP 16 LCM zero



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Canyon Operating LLC

**17 10s 24w**

P.O. Box 7117  
Loveland, CO 80537

**Rush Trust 17-1**

Job Ticket: 68649

**DST#: 5**

ATTN: Mac Armstrong

Test Start: 2022.05.24 @ 11:15:00

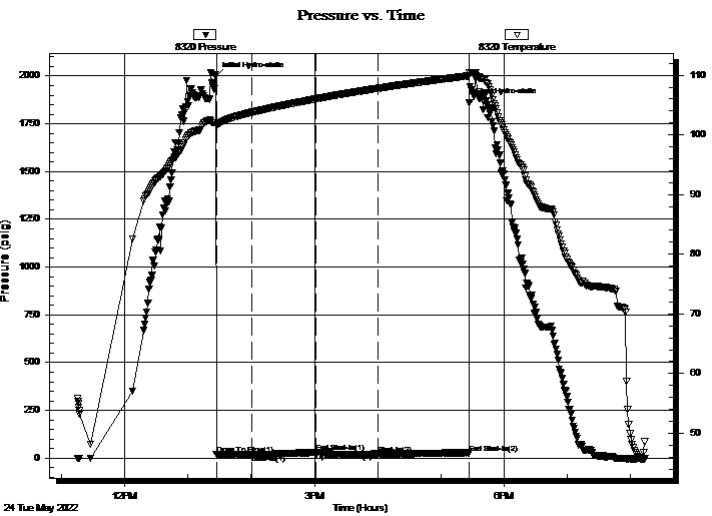
## GENERAL INFORMATION:

Formation: **L/KC K-L**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 13:26:45  
 Time Test Ended: 20:14:00  
 Interval: **3974.00 ft (KB) To 4022.00 ft (KB) (TVD)**  
 Total Depth: 3800.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Terrance  
 Unit No: 75  
 Reference Elevations: 2467.00 ft (KB)  
 2460.00 ft (CF)  
 KB to GR/CF: 7.00 ft

## Serial #: 8320

Press@RunDepth: 21.65 psig @ ft (KB) Capacity: 8000.00 psig  
 Start Date: 2022.05.24 End Date: 2022.05.24 Last Calib.: 1899.12.30  
 Start Time: 11:15:05 End Time: 20:14:00 Time On Btm: 2022.05.24 @ 13:26:15  
 Time Off Btm: 2022.05.24 @ 17:27:15

TEST COMMENT: IF - 45- Surface blow  
 ISI - 60 - No return  
 FF - 60 - No return  
 FSI - 60 - NO return



## PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 1998.51         | 102.08       | Initial Hydro-static |
| 1           | 19.26           | 101.53       | Open To Flow (1)     |
| 35          | 20.87           | 103.79       | Shut-In(1)           |
| 95          | 30.02           | 106.01       | End Shut-In(1)       |
| 95          | 30.40           | 106.02       | Open To Flow (2)     |
| 154         | 21.65           | 107.79       | Shut-In(2)           |
| 241         | 27.60           | 109.89       | End Shut-In(2)       |
| 241         | 1861.10         | 110.47       | Final Hydro-static   |

## Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------|--------------|
| 1.00        | mud         | 0.00         |
|             |             |              |
|             |             |              |
|             |             |              |
|             |             |              |

\* Recovery from multiple tests

## Gas Rates

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





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Canyon Operating LLC

**17 10s 24w**

P.O. Box 7117  
Loveland, CO 80537

**Rush Trust 17-1**

Job Ticket: 68649

**DST#: 5**

ATTN: Mac Armstrong

Test Start: 2022.05.24 @ 11:15:00

### Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.00 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: 1.00 inches

### Recovery Information

Recovery Table

| Length<br>ft | Description | Volume<br>bbl |
|--------------|-------------|---------------|
| 1.00         | mud         | 0.005         |

Total Length: 1.00 ft      Total Volume: 0.005 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

