KOLAR Document ID: 1481688

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 # 30129
Name: Eagle Creek Corporation
Address 1: 8100 E. 22ND ST. N., BLDG 1500 STE A
Address 2:
City: WICHITA State: KS Zip: 67226 + 2388
Contact Person: Dave Callewaert
Phone: ( 316 ) 264-8044
CONTRACTOR: License # 33575
Name: WW Drilling, LLC
Wellsite Geologist: Wes Hansen
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 #:

6/6/2019 Spud Date or Recompletion Date
6/14/2019 Date Reached TD
6/15/2019 Completion Date or Recompletion Date

API No.: 15-171-21252-00-00
Spot Description:
NE - SE - SW - SE Sec. 17 Twp. 20 S. R. 34 ☐ East ☑ West
370 Feet from ☐ North / ☑ South Line of Section
1405 Feet from ☑ East / ☐ West Line of Section
Footages Calculated from Nearest Outside Section Corner:
☐ NE ☐ NW ☑ SE ☐ SW
GPS Location: Lat: *(e.g. xx.xxxxx)* , Long: *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Scott
Lease Name: KRISTI Well #: 1-17
Field Name:
Producing Formation: none
Elevation: Ground: 3102 Kelly Bushing: 3107
Total Vertical Depth: 4700 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 287 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: 8000 ppm Fluid volume: 1200 bbls
Dewatering method used: Evaporated
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:** Karen Ritter **Date:** 11/07/2019

Operator Name: Eagle Creek Corporation Lease Name: KRISTI Well #: 1-17

Sec. 17 Twp. 20 S. R. 34 ☐ East ☑ West County: Scott

**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 *(Attach Additional Sheets)* | ☑ Yes | ☐ No |
| Samples Sent to Geological Survey | ☐ Yes | ☑ No |
| Cores Taken | ☐ Yes | ☑ No |
| Electric Log Run | ☑ Yes | ☐ No |
| Geologist Report / Mud Logs | ☑ Yes | ☐ No |

List All E. Logs Run:

Dual Induction
Neutron/Density
microlog

☐ Log Formation (Top), Depth and Datum ☐ Sample

| Name | Top | Datum |
|---|---|---|
| Lansing | 4017 | -910 |
| Marmaton | 4497 | -1390 |
| Fort Scott | 4619 | -1512 |

CASING RECORD ☑ New ☐ Used

Report all strings set-conductor, surface, intermediate, production, etc.

| Purpose of String | Size Hole Drilled | Size Casing Set (In O.D.) | Weight Lbs. / Ft. | Setting Depth | Type of Cement | # Sacks Used | Type and Percent Additives |
|---|---|---|---|---|---|---|---|
| Surface | 12.25 | 8.625 | 23 | 287 | common | 200 | 3%cc,2%gel |
| | | | | | | | |
| | | | | | | | |

ADDITIONAL CEMENTING / SQUEEZE RECORD

| Purpose: | Depth Top Bottom | Type of Cement | # Sacks Used | Type and Percent Additives |
|---|---|---|---|---|
| ☐ Perforate<br>☐ Protect Casing<br>☐ Plug Back TD<br>☐ 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: ☐ Flowing ☐ Pumping ☐ Gas Lift ☐ Other *(Explain)* |
|---|---|

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

| DISPOSITION OF GAS: | METHOD OF COMPLETION: | PRODUCTION INTERVAL: |
|---|---|---|
| ☐ Vented ☐ Sold ☐ Used on Lease<br>*(If vented, Submit ACO-18.)* | ☐ Open Hole ☐ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)* | Top / Bottom |

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

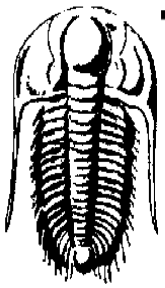
TUBING RECORD: Size: Set At: Packer At:

**Mail to: KCC - Conservation Division, 266 N. Main, Suite 220, Wichita, Kansas 67202**

| | |
|---|---|
| Form | ACO1 - Well Completion |
| Operator | Eagle Creek Corporation |
| Well Name | KRISTI 1-17 |
| Doc ID | 1481688 |

Casing

| Purpose Of String | Size Hole Drilled | Size Casing Set | Weight | Setting Depth | Type Of Cement | Number of Sacks Used | Type and Percent Additives |
|---|---|---|---|---|---|---|---|
| Surface | 12.25 | 8.625 | 23 | 287 | common | 200 | 3%cc,2%gel |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |



TRILOBITE TESTING, INC.

# DRILL STEM TEST REPORT

Prepared For: **Eagle Creek Corporation**

8100 E 22nd St
Bldg 1500 Ste A
Wichita, KS 62226

ATTN: Wes Hansen

## Kristi #1-17

## 17-20s-34w Scott,KS

Start Date: 2019.06.12 @ 18:01:00
End Date: 2019.06.13 @ 01:03:45
Job Ticket #: 64356 DST #: 1

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

Printed: 2019.06.17 @ 13:16:17

# DRILL STEM TEST REPORT

Eagle Creek Corporation

8100 E 22nd St
Bldg 1500 Ste A
Wichita, KS 62226
ATTN: Wes Hansen

**17-20s-34w Scott,KS**

**Kristi #1-17**

Job Ticket: 64356 **DST#: 1**

Test Start: 2019.06.12 @ 18:01:00

## GENERAL INFORMATION:

Formation: **Marmaton A-B**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 20:57:15
Time Test Ended: 01:03:45

Test Type: Conventional Bottom Hole (Initial)
Tester: Bradley Walter
Unit No: 78

**Interval: 4469.00 ft (KB) To 4536.00 ft (KB) (TVD)**
Total Depth: 4536.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

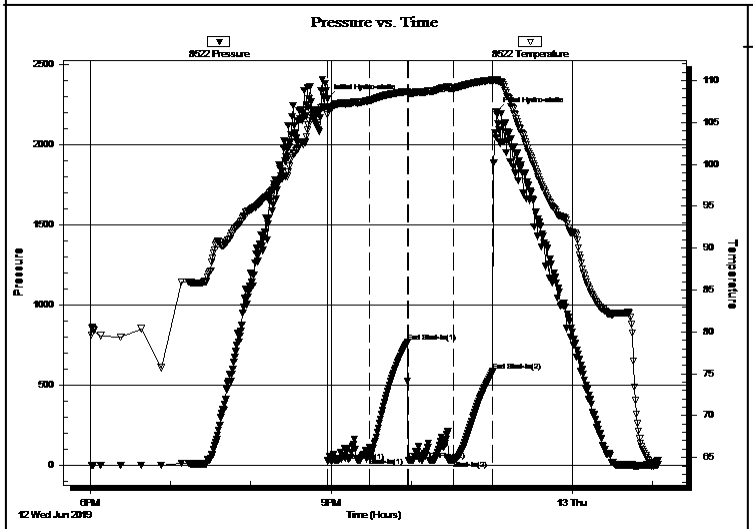
Reference Elevations: 3107.00 ft (KB)
3102.00 ft (CF)
KB to GR/CF: 5.00 ft

**Serial #: 8522** **Inside**

Press@RunDepth: 31.33 psig @ 4470.00 ft (KB)
Start Date: 2019.06.12 End Date: 2019.06.13
Start Time: 18:01:05 End Time: 01:03:44

Capacity: 8000.00 psig
Last Calib.: 2019.06.13
Time On Btm: 2019.06.12 @ 20:57:00
Time Off Btm: 2019.06.12 @ 23:03:30

TEST COMMENT: 30- IF: <1/2" blow .
30- ISI: No return.
30- FF: No blow .
30- FSI: No return.




## PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|---|---|---|---|
| 0 | 2284.75 | 106.88 | Initial Hydro-static |
| 1 | 25.94 | 105.91 | Open To Flow (1) |
| 32 | 46.69 | 107.62 | Shut-In(1) |
| 60 | 764.73 | 108.72 | End Shut-In(1) |
| 61 | 29.41 | 108.40 | Open To Flow (2) |
| 94 | 31.33 | 109.10 | Shut-In(2) |
| 124 | 583.51 | 110.08 | End Shut-In(2) |
| 127 | 2208.29 | 110.08 | Final Hydro-static |

## Recovery

| Length (ft) | Description | Volume (bbl) |
|---|---|---|
| 5.00 | mud 100m | 0.02 |
| | | |
| | | |
| | | |
| | | |
| | | |

## Gas Rates

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

# DRILL STEM TEST REPORT

TRILOBITE TESTING, INC.

Eagle Creek Corporation

8100 E 22nd St
Bldg 1500 Ste A
Wichita, KS 62226
ATTN: Wes Hansen

**17-20s-34w Scott,KS**

**Kristi #1-17**

Job Ticket: 64356 **DST#: 1**

Test Start: 2019.06.12 @ 18:01:00

## GENERAL INFORMATION:

Formation: **Marmaton A-B**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 20:57:15
Time Test Ended: 01:03:45

Test Type: Conventional Bottom Hole (Initial)
Tester: Bradley Walter
Unit No: 78

**Interval: 4469.00 ft (KB) To 4536.00 ft (KB) (TVD)**
Total Depth: 4536.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

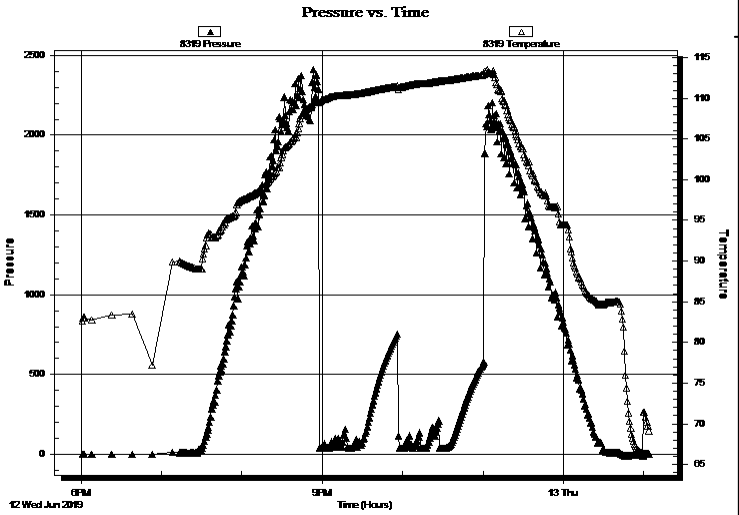
Reference Elevations: 3107.00 ft (KB)
3102.00 ft (CF)
KB to GR/CF: 5.00 ft

**Serial #: 8319** **Outside**

Press@RunDepth: psig @ 4470.00 ft (KB)
Start Date: 2019.06.12 End Date: 2019.06.13
Start Time: 18:01:05 End Time: 01:03:44

Capacity: 8000.00 psig
Last Calib.: 2019.06.13
Time On Btm:
Time Off Btm:

TEST COMMENT: 30- IF: <1/2" blow .
30- ISI: No return.
30- FF: No blow .
30- FSI: No return.




### PRESSURE SUMMARY

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

### Recovery

| Length (ft) | Description | Volume (bbl) |
|---|---|---|
| 5.00 | mud 100m | 0.02 |
| | | |
| | | |
| | | |
| | | |
| | | |

### Gas Rates

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

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Eagle Creek Corporation

8100 E 22nd St
Bldg 1500 Ste A
Wichita, KS 62226
ATTN: Wes Hansen

**17-20s-34w Scott,KS**

**Kristi #1-17**

Job Ticket: 64356 **DST#: 1**

Test Start: 2019.06.12 @ 18:01:00

## Tool Information

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Drill Pipe: | Length: | 4331.00 ft | Diameter: | 3.80 inches | Volume: | 60.75 bbl | |
| Heavy Wt. Pipe: | Length: | 0.00 ft | Diameter: | 0.00 inches | Volume: | 0.00 bbl | |
| Drill Collar: | Length: | 117.00 ft | Diameter: | 2.25 inches | Volume: | 0.58 bbl | |
| | | | | | Total Volume: | 61.33 bbl | |

| | |
|---|---|
| Drill Pipe Above KB: | 6.00 ft |
| Depth to Top Packer: | 4469.00 ft |
| Depth to Bottom Packer: | ft |
| Interval betw een Packers: | 67.00 ft |
| Tool Length: | 94.00 ft |
| Number of Packers: | 2 Diameter: 6.75 inches |

| | | |
|---|---|---|
| Tool Weight: | | 2500.00 lb |
| Weight set on Packer: | | 25000.00 lb |
| Weight to Pull Loose: | | 65000.00 lb |
| Tool Chased | | 0.00 ft |
| String Weight: | Initial | 52000.00 lb |
| | Final | 52000.00 lb |

Tool Comments:

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths | |
|---|---|---|---|---|---|---|
| Change Over Sub | 1.00 | | | 4443.00 | | |
| Shut In Tool | 5.00 | | Fluid | 4448.00 | | |
| Hydraulic tool | 5.00 | | | 4453.00 | | |
| Jars | 5.00 | | | 4458.00 | | |
| Safety Joint | 2.00 | | | 4460.00 | | |
| Packer | 5.00 | | Inside | 4465.00 | 27.00 | Bottom Of Top Packer |
| Packer | 4.00 | | | 4469.00 | | |
| Stubb | 1.00 | | | 4470.00 | | |
| Recorder | 0.00 | 8522 | Inside | 4470.00 | | |
| Recorder | 0.00 | 8319 | Outside | 4470.00 | | |
| Perforations | 30.00 | | | 4500.00 | | |
| Change Over Sub | 1.00 | | | 4501.00 | | |
| Drill Pipe | 31.00 | | | 4532.00 | | |
| Change Over Sub | 1.00 | | | 4533.00 | | |
| Bullnose | 3.00 | | | 4536.00 | 67.00 | Bottom Packers & Anchor |
| **Total Tool Length:** | **94.00** | | | | | |

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Eagle Creek Corporation

8100 E 22nd St
Bldg 1500 Ste A
Wichita, KS 62226
ATTN: Wes Hansen

**17-20s-34w Scott,KS**

**Kristi #1-17**

Job Ticket: 64356 **DST#: 1**

Test Start: 2019.06.12 @ 18:01:00

## Mud and Cushion Information

| | | | | | |
|---|---|---|---|---|---|
| Mud Type: | Gel Chem | Cushion Type: | | Oil API: | 0 deg API |
| Mud Weight: | 9.00 lb/gal | Cushion Length: | ft | Water Salinity: | 0 ppm |
| Viscosity: | 50.00 sec/qt | Cushion Volume: | bbl | | |
| Water Loss: | 9.58 in³ | Gas Cushion Type: | | | |
| Resistivity: | ohm.m | Gas Cushion Pressure: | psig | | |
| Salinity: | 8500.00 ppm | | | | |
| Filter Cake: | 2.00 inches | | | | |

## Recovery Information

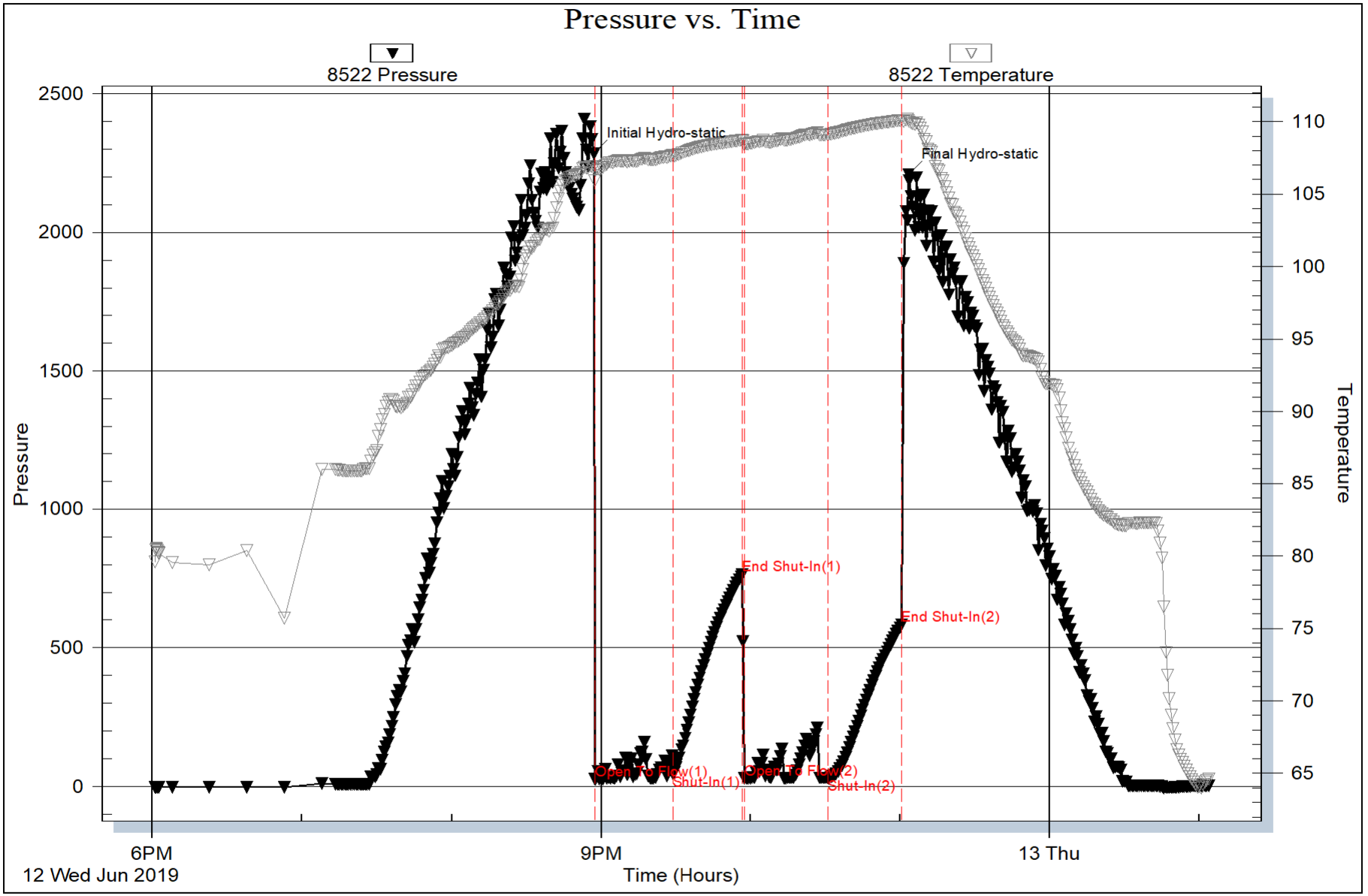
Recovery Table

| Length ft | Description | Volume bbl |
|---|---|---|
| 5.00 | mud 100m | 0.025 |

Total Length: 5.00 ft Total Volume: 0.025 bbl

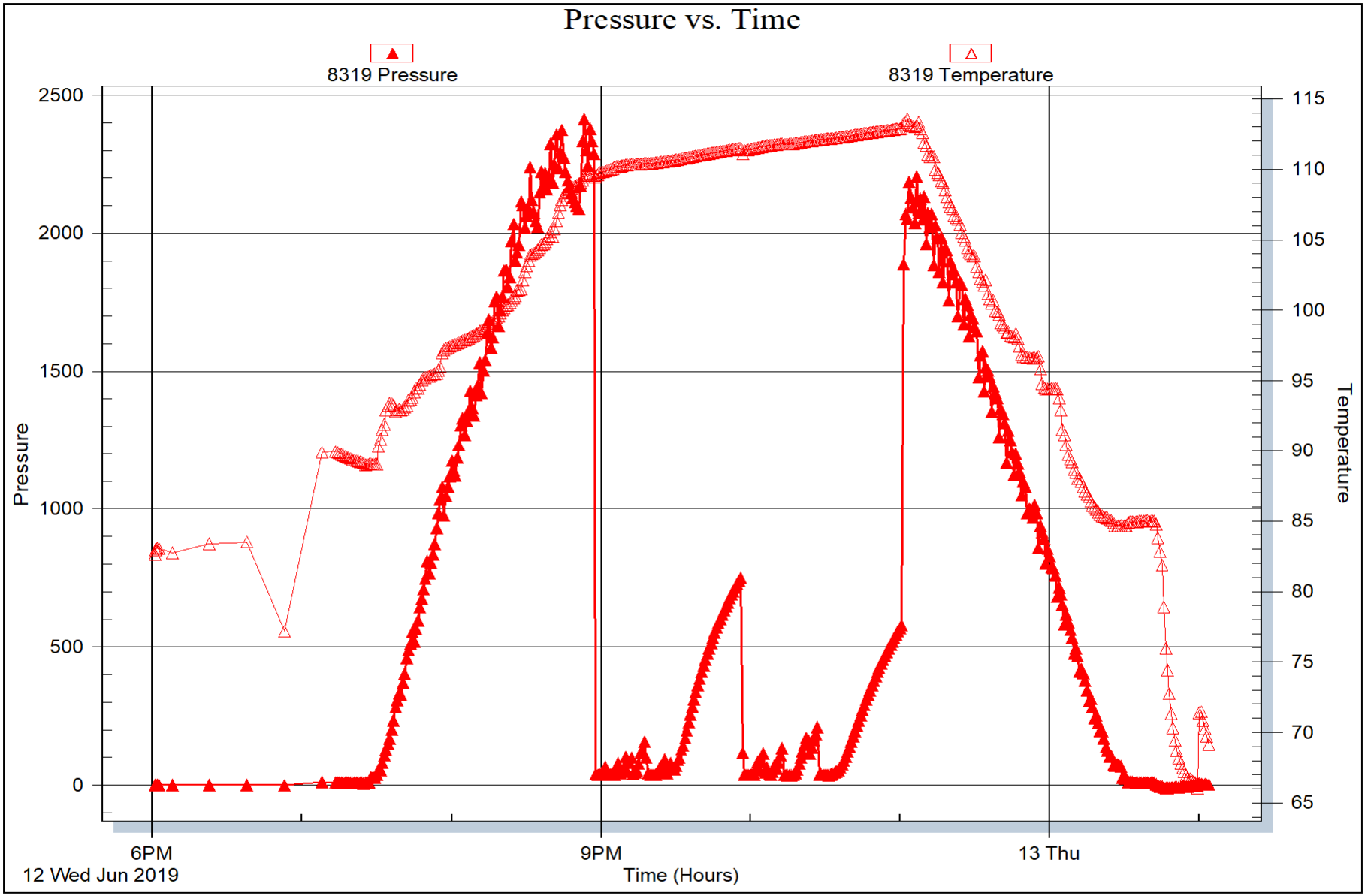
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8522 **Inside** Eagle Creek Corporation Kristi #1-17 DST Test Number: 1

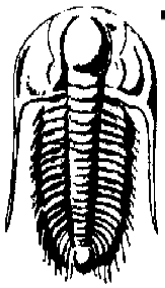



Trilobite Testing, Inc Ref. No: 64356 Printed: 2019.06.17 @ 13:16:18

Serial #: 8319 **Outside** Eagle Creek Corporation Kristi #1-17 DST Test Number: 1




Trilobite Testing, Inc Ref. No: 64356 Printed: 2019.06.17 @ 13:16:18



TRILOBITE TESTING, INC.

# DRILL STEM TEST REPORT

Prepared For: **Eagle Creek Corporation**

8100 E 22nd St
Bldg 1500 Ste A
Wichita, KS 62226

ATTN: Wes Hansen

**Kristi #1-17**

**17-20s-34w Scott,KS**

Start Date: 2019.06.13 @ 13:06:00
End Date: 2019.06.13 @ 22:22:45
Job Ticket #: 64357 DST #: 2

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

Printed: 2019.06.17 @ 12:01:39

# DRILL STEM TEST REPORT

Eagle Creek Corporation

8100 E 22nd St
Bldg 1500 Ste A
Wichita, KS 62226
ATTN: Wes Hansen

**17-20s-34w Scott,KS**

**Kristi #1-17**

Job Ticket: 64357 **DST#: 2**

Test Start: 2019.06.13 @ 13:06:00

## GENERAL INFORMATION:

Formation: **Marmaton**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 15:39:30
Time Test Ended: 22:22:45

Test Type: Conventional Bottom Hole (Reset)
Tester: Bradley Walter
Unit No: 78

**Interval: 4530.00 ft (KB) To 4600.00 ft (KB) (TVD)**
Total Depth: 4600.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

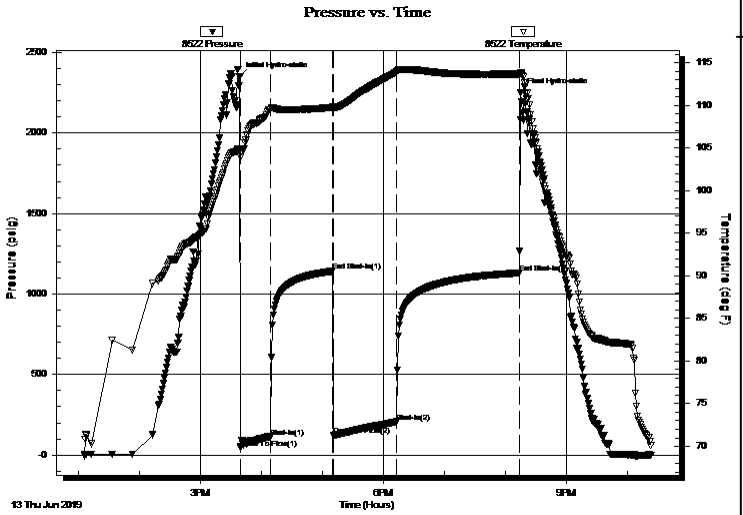
Reference Elevations: 3107.00 ft (KB)
3102.00 ft (CF)
KB to GR/CF: 5.00 ft

**Serial #: 8522** **Inside**

Press@RunDepth: 205.47 psig @ 4531.00 ft (KB)
Start Date: 2019.06.13 End Date: 2019.06.13
Start Time: 13:06:05 End Time: 22:22:45

Capacity: 8000.00 psig
Last Calib.: 2019.06.13
Time On Btm: 2019.06.13 @ 15:38:45
Time Off Btm: 2019.06.13 @ 20:15:00

TEST COMMENT: 30- IF: 10.5 " blow .
60- ISI: No return.
60- FF: 16" blow .
120- FSI: No return.




## PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|---|---|---|---|
| 0 | 2352.46 | 104.90 | Initial Hydro-static |
| 1 | 43.63 | 103.90 | Open To Flow (1) |
| 30 | 113.20 | 109.48 | Shut-In(1) |
| 92 | 1141.69 | 109.76 | End Shut-In(1) |
| 92 | 123.11 | 109.62 | Open To Flow (2) |
| 154 | 205.47 | 113.88 | Shut-In(2) |
| 275 | 1131.03 | 113.66 | End Shut-In(2) |
| 277 | 2251.61 | 113.84 | Final Hydro-static |

## Recovery

| Length (ft) | Description | Volume (bbl) |
|---|---|---|
| 350.00 | mcw 25m 75w w/oil spots | 3.84 |
| | | |
| | | |
| | | |
| | | |
| | | |

* Recovery from multiple tests

## Gas Rates

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

# DRILL STEM TEST REPORT

Eagle Creek Corporation

8100 E 22nd St
Bldg 1500 Ste A
Wichita, KS 62226
ATTN: Wes Hansen

**17-20s-34w Scott,KS**

**Kristi #1-17**

Job Ticket: 64357 **DST#: 2**

Test Start: 2019.06.13 @ 13:06:00

## GENERAL INFORMATION:

Formation: **Marmaton**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 15:39:30
Time Test Ended: 22:22:45

Test Type: Conventional Bottom Hole (Reset)
Tester: Bradley Walter
Unit No: 78

**Interval: 4530.00 ft (KB) To 4600.00 ft (KB) (TVD)**
Total Depth: 4600.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

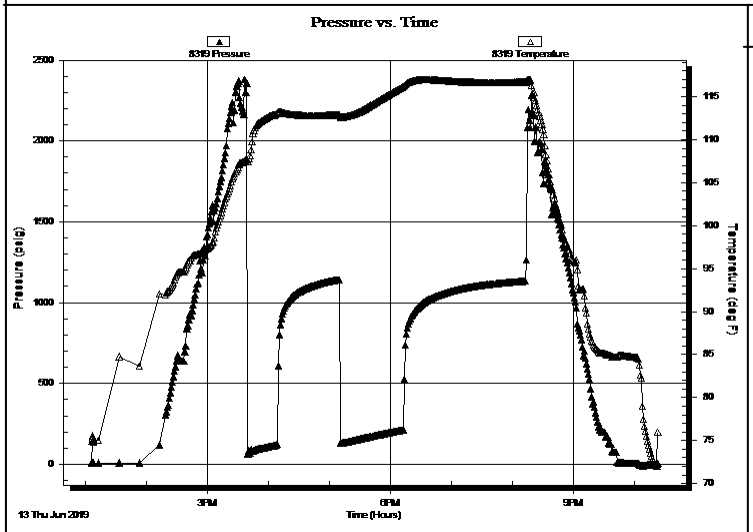
Reference Elevations: 3107.00 ft (KB)
3102.00 ft (CF)
KB to GR/CF: 5.00 ft

**Serial #: 8319** **Outside**

Press@RunDepth: psig @ 4531.00 ft (KB)
Start Date: 2019.06.13 End Date: 2019.06.13
Start Time: 13:06:05 End Time: 22:22:45

Capacity: 8000.00 psig
Last Calib.: 2019.06.13
Time On Btm:
Time Off Btm:

TEST COMMENT: 30- IF: 10.5 " blow .
60- ISI: No return.
60- FF: 16" blow .
120- FSI: No return.




## PRESSURE SUMMARY

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

## Recovery

| Length (ft) | Description | Volume (bbl) |
|---|---|---|
| 350.00 | mcw 25m 75w w/oil spots | 3.84 |
| | | |
| | | |
| | | |
| | | |
| | | |

* Recovery from multiple tests

## Gas Rates

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

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Eagle Creek Corporation

8100 E 22nd St
Bldg 1500 Ste A
Wichita, KS 62226
ATTN: Wes Hansen

**17-20s-34w Scott,KS**

**Kristi #1-17**

Job Ticket: 64357 **DST#: 2**

Test Start: 2019.06.13 @ 13:06:00

## Tool Information

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Drill Pipe: | Length: | 4392.00 ft | Diameter: | 3.80 inches | Volume: | 61.61 bbl | |
| Heavy Wt. Pipe: | Length: | 0.00 ft | Diameter: | 0.00 inches | Volume: | 0.00 bbl | |
| Drill Collar: | Length: | 117.00 ft | Diameter: | 2.25 inches | Volume: | 0.58 bbl | |
| | | | | | Total Volume: | 62.19 bbl | |

| | |
|---|---|
| Drill Pipe Above KB: | 6.00 ft |
| Depth to Top Packer: | 4530.00 ft |
| Depth to Bottom Packer: | ft |
| Interval betw een Packers: | 70.00 ft |
| Tool Length: | 97.00 ft |
| Number of Packers: | 2 Diameter: 6.75 inches |

| | | |
|---|---|---|
| Tool Weight: | | 2500.00 lb |
| Weight set on Packer: | | 25000.00 lb |
| Weight to Pull Loose: | | 70000.00 lb |
| Tool Chased | | 0.00 ft |
| String Weight: | Initial | 57000.00 lb |
| | Final | 58000.00 lb |

Tool Comments:

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths | |
|---|---|---|---|---|---|---|
| Change Over Sub | 1.00 | | | 4504.00 | | |
| Shut In Tool | 5.00 | | Fluid | 4509.00 | | |
| Hydraulic tool | 5.00 | | | 4514.00 | | |
| Jars | 5.00 | | | 4519.00 | | |
| Safety Joint | 2.00 | | | 4521.00 | | |
| Packer | 5.00 | | Inside | 4526.00 | 27.00 | Bottom Of Top Packer |
| Packer | 4.00 | | | 4530.00 | | |
| Stubb | 1.00 | | | 4531.00 | | |
| Recorder | 0.00 | 8522 | Inside | 4531.00 | | |
| Recorder | 0.00 | 8319 | Outside | 4531.00 | | |
| Perforations | 33.00 | | | 4564.00 | | |
| Change Over Sub | 1.00 | | | 4565.00 | | |
| Drill Pipe | 31.00 | | | 4596.00 | | |
| Change Over Sub | 1.00 | | | 4597.00 | | |
| Bullnose | 3.00 | | | 4600.00 | 70.00 | Bottom Packers & Anchor |
| **Total Tool Length:** | **97.00** | | | | | |

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Eagle Creek Corporation

8100 E 22nd St
Bldg 1500 Ste A
Wichita, KS 62226
ATTN: Wes Hansen

**17-20s-34w Scott,KS**

**Kristi #1-17**

Job Ticket: 64357 **DST#: 2**

Test Start: 2019.06.13 @ 13:06:00

## Mud and Cushion Information

| | | | | | |
|---|---|---|---|---|---|
| Mud Type: | Gel Chem | Cushion Type: | | Oil API: | 0 deg API |
| Mud Weight: | 9.00 lb/gal | Cushion Length: | ft | Water Salinity: | 75000 ppm |
| Viscosity: | 58.00 sec/qt | Cushion Volume: | bbl | | |
| Water Loss: | 9.57 in³ | Gas Cushion Type: | | | |
| Resistivity: | ohm.m | Gas Cushion Pressure: | psig | | |
| Salinity: | 9000.00 ppm | | | | |
| Filter Cake: | 2.00 inches | | | | |

## Recovery Information

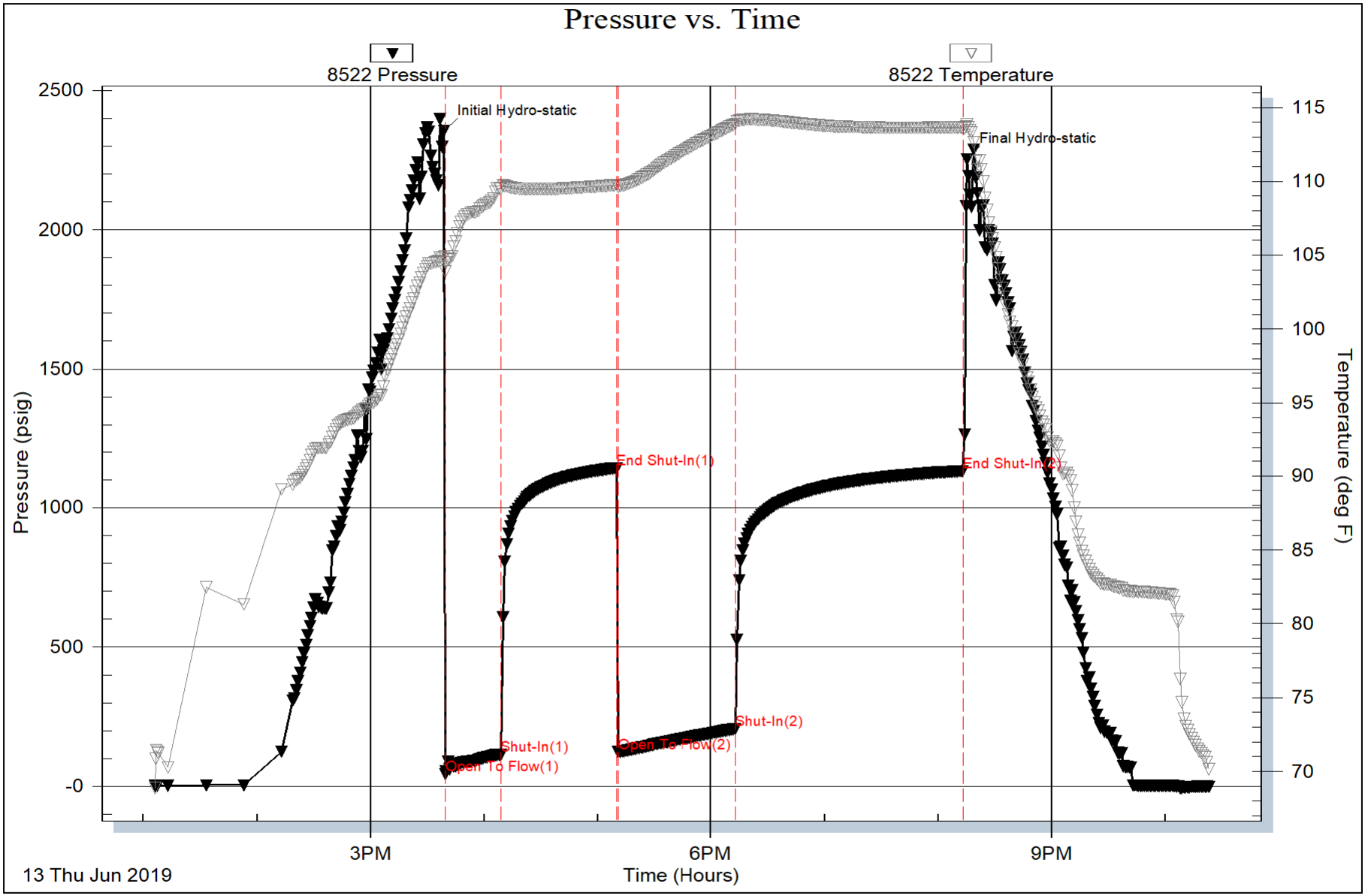
Recovery Table

| Length ft | Description | Volume bbl |
|---|---|---|
| 350.00 | mcw 25m 75w w/oil spots | 3.844 |

Total Length: 350.00 ft Total Volume: 3.844 bbl

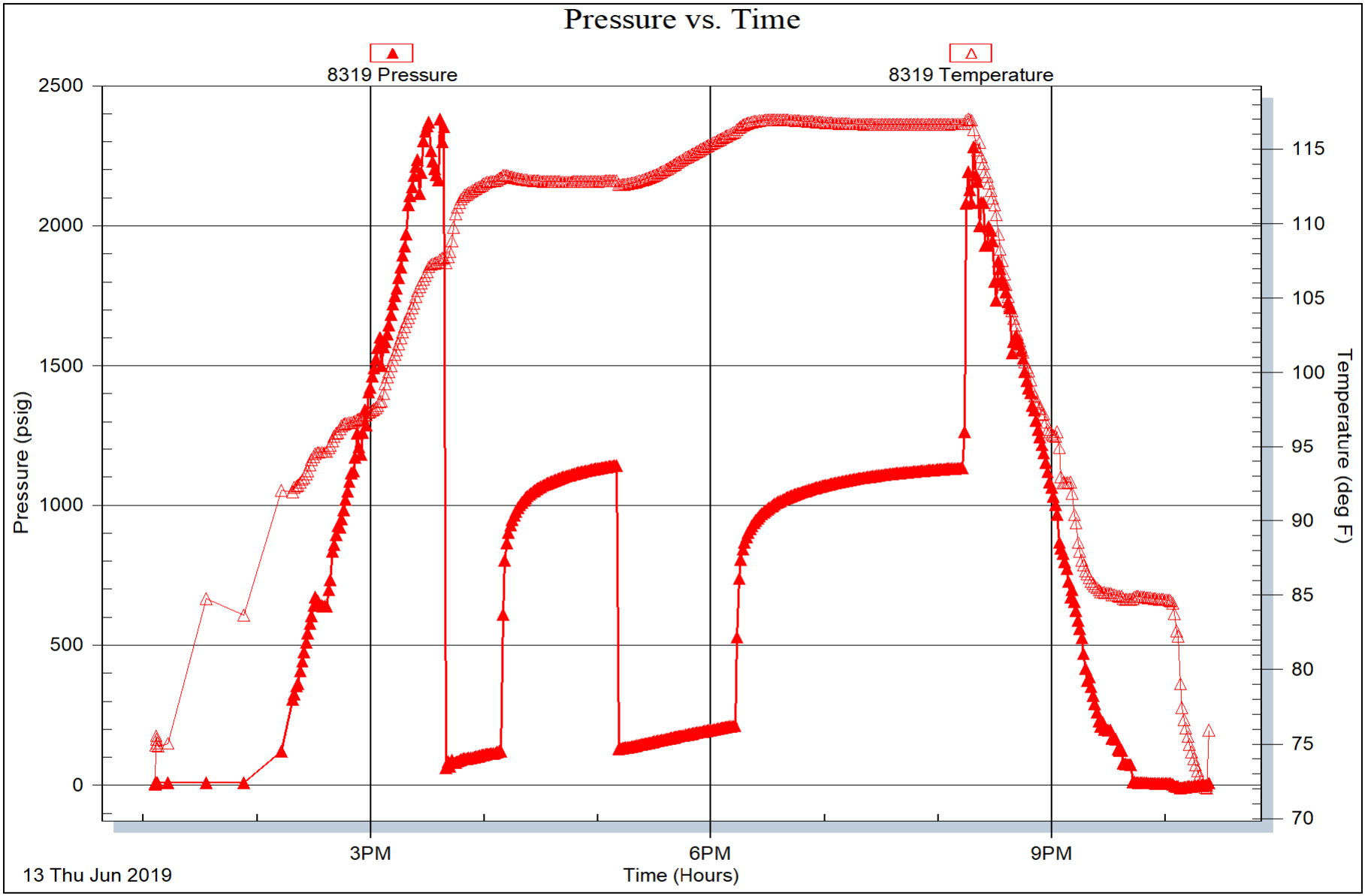
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments: rw is .095 @ 68F = 75000ppm

Serial #: 8522 **Inside** Eagle Creek Corporation Kristi #1-17 DST Test Number: 2




Trilobite Testing, Inc Ref. No: 64357 Printed: 2019.06.17 @ 12:01:41

Serial #: 8319 **Outside** Eagle Creek Corporation Kristi #1-17 DST Test Number: 2




Trilobite Testing, Inc Ref. No: 64357 Printed: 2019.06.17 @ 12:01:41

# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

4/10

## Test Ticket

NO. 64356

Well Name & No. Kristi #1-17 Test No. 1 Date 06/13/2019

Company Eagle Creek Corporation. Elevation 3107 KB 3102 GL

Address 8100 E 22nd St Bldg 1500 Ste A Wichita, Ks 67226

Co. Rep / Geo. Wes Hansen Rig WW #2

Location: Sec. 17 Twp. 20s Rge. 34w Co. Scott State Ks

Interval Tested 4469 - 4536 Zone Tested Marmaton A-B

Anchor Length 67' Drill Pipe Run 4331 Mud Wt. 9.1

Top Packer Depth 4464 Drill Collars Run 117 Vis 50

Bottom Packer Depth 4469 Wt. Pipe Run 0 WL 9.6

Total Depth 4536 Chlorides 8500 ppm System LCM 4#

Blow Description IF: < ½" blow

ISI: No return.

FF: No blow

FSI: No return.

| | | | | | | |
|---|---|---|---|---|---|---|
| Rec 5 | Feet of Mud | %gas | %oil | %water 100 | %mud | |
| Rec | Feet of | %gas | %oil | %water | %mud | |
| Rec | Feet of | %gas | %oil | %water | %mud | |
| Rec | Feet of | %gas | %oil | %water | %mud | |
| Rec | Feet of | %gas | %oil | %water | %mud | |

Rec Total 5 BHT 110 Gravity — API RW — @ — °F Chlorides — ppm

| | | | |
|---|---|---|---|
| (A) Initial Hydrostatic | 2285 | ☒ Test 1300 | T-On Location 1630 06/12 |
| (B) First Initial Flow | 26 | ☒ Jars 250 | T-Started 1801 |
| (C) First Final Flow | 47 | ☒ Safety Joint 75 | T-Open 2058 |
| (D) Initial Shut-In | 765 | ☒ Circ Sub N/C | T-Pulled 2258 |
| (E) Second Initial Flow | 29 | ☐ Hourly Standby | T-Out 0104 06/13 |
| (F) Second Final Flow | 31 | ☒ Mileage 48 Rt 48 | Comments |
| (G) Final Shut-In | 584 | ☐ Sampler | |
| (H) Final Hydrostatic | 2208 | ☐ Straddle | ☐ Ruined Shale Packer |
| | | ☐ Shale Packer | ☐ Ruined Packer |
| Initial Open | 30 | ☐ Extra Packer | ☐ Extra Copies |
| Initial Shut-In | 30 | ☐ Extra Recorder | Sub Total 0 |
| Final Flow | 30 | ☐ Day Standby | Total 1673 |
| Final Shut-In | 30 | ☐ Accessibility | MP/DST Disc't |
| | | Sub Total 1673 | |

Approved By Our Representative

# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

4/10

## Test Ticket

NO. 64357

Well Name & No. Kristy #1-17 Test No. 2 Date 06/13/2019

Company Eagle Creek Corporation. Elevation 3107 KB 3102 GL

Address 8100 E 22nd St Bldg 1500 Ste A Wichita KS 62226

Co. Rep / Geo. Wes Hansen Rig WW #2

Location: Sec. 17 Twp. 20s Rge. 34w Co. Scott State Ks

Interval Tested 4530-4600 Zone Tested Marmaton

Anchor Length 70' Drill Pipe Run 4313 Mud Wt. 9.2

Top Packer Depth 4525 Drill Collars Run 117 Vis 58

Bottom Packer Depth 4550 Wt. Pipe Run 0 WL 9.6

Total Depth 4600 Chlorides 9000 ppm System LCM 2#

Blow Description IF: 10½" blow

ISI: No return.

FF: 16" blow.

FSI: No return.

| | | | | | | |
|---|---|---|---|---|---|---|
| Rec 350 | Feet of mcw | %gas | %oil | 75 | %water 25 | %mud |
| Rec | Feet of oil spots | %gas | %oil | | %water | %mud |
| Rec | Feet of | %gas | %oil | | %water | %mud |
| Rec | Feet of | %gas | %oil | | %water | %mud |
| Rec | Feet of | %gas | %oil | | %water | %mud |

Rec Total 350 BHT 114 Gravity — API RW .095 @ 68 °F Chlorides 75,000 ppm

| | | | | | |
|---|---|---|---|---|---|
| (A) Initial Hydrostatic | 2352 | ☒ Test | 1300 | T-On Location | 1230 |
| (B) First Initial Flow | 44 | ☒ Jars | 250 | T-Started | 1341 |
| (C) First Final Flow | 113 | ☒ Safety Joint | 75 | T-Open | 1540 |
| (D) Initial Shut-In | 1142 | ☒ Circ Sub | N/C | T-Pulled | 2010 |
| (E) Second Initial Flow | 123 | ☐ Hourly Standby | | T-Out | 2223 |
| (F) Second Final Flow | 205 | ☒ Mileage | 48 RT x2 48+48 | Comments | Loaded 6/14/19 @ 1430 |
| (G) Final Shut-In | 1131 | ☐ Sampler | | | |
| (H) Final Hydrostatic | 2252 | ☐ Straddle | | ☐ Ruined Shale Packer | |
| | | ☐ Shale Packer | | ☐ Ruined Packer | |
| Initial Open | 30 | ☐ Extra Packer | | ☐ Extra Copies | |
| Initial Shut-In | 60 | ☐ Extra Recorder | | Sub Total | 0 |
| Final Flow | 60 | ☐ Day Standby | | Total | 1721 |
| Final Shut-In | 120 | ☐ Accessibility | | MP/DST Disc't | |
| | | Sub Total | 1721 | | |

Approved By _____ Our Representative _____

100590
40790

TICKET NUMBER 56056
LOCATION Oakley Ks
FOREMAN Cory Davis

RESSURE PUMPING LLC
Box 884, Chanute, KS 66720
20-431-9210 or 800-467-8676

## FIELD TICKET & TREATMENT REPORT
## CEMENT

Jerry Y

Invoice # 900933

| DATE | CUSTOMER # | WELL NAME & NUMBER | SECTION | TOWNSHIP | RANGE | COUNTY |
|---|---|---|---|---|---|---|
| 6-6-19 | 2776 | Kristi # 1-17 | 17 | 20S | 34W | Scott |

CUSTOMER Eagle Creek
MAILING ADDRESS 8100 E. 22nd Street, N. Bldg. 1500A
CITY Wichita | STATE KS | ZIP CODE 67226-2315

Scott city Ks
S to RD 40
RD Cherokee
1/2 W into

| TRUCK # | DRIVER | TRUCK # | DRIVER |
|---|---|---|---|
| 753 | Alex H | 703 | Cory D |
| 566 | Taylor C | | |
| Helper | Kaleb C | | |
| 535 | Jerry Y | | |

JOB TYPE Surface | HOLE SIZE 12 1/4 | HOLE DEPTH 287 | CASING SIZE & WEIGHT 8 5/8 24#
CASING DEPTH 287 | DRILL PIPE | TUBING | OTHER
SLURRY WEIGHT 14.8 | SLURRY VOL | WATER gal/sk | CEMENT LEFT in CASING 20
DISPLACEMENT 17 | DISPLACEMENT PSI | MIX PSI | RATE

REMARKS: Safety meeting, Rig upon WW 2 circ. Casing hook up to pump truck mix 200 sks 2% gel 3% CC. Wash up & Displace 17 BBL H20 shut in rig down 1" from 40' bringing cement into cellar with 50 sks com 3 & 2

Cement ~~Circ~~ Circ. to cellar

Thank You
From Cory & Crew

| ACCOUNT CODE | QUANITY or UNITS | DESCRIPTION of SERVICES or PRODUCT | UNIT PRICE | TOTAL |
|---|---|---|---|---|
| CE0471 | 1 | PUMP CHARGE | 1150 00 | 1,150 00 |
| CE0002 | 40 | MILEAGE | 7 15 | 286 00 |
| CE0710 | ~~550~~ 11.75 | Ton mileage Delvery min | 1 75 | ~~660 00~~ |
| | | | | 822.50 |
| 51303 CC5871 | 200 sks | Surface Blend II | 24 00 | 4,800 00 |
| 51304 CC5871 | 50 sks | Surface blend II | 24.00 | 1200.00 |
| | | 8258.50 | Subtotal | ~~6,708 00~~ |
| | | 2064.63 | 25% Dis | ~~1,714 00~~ |
| | | 6193.87 | Subtotal | ~~5,112 50~~ |
| | | | SALES TAX | 382.50 |
| | | | ESTIMATED TOTAL | 6576.38 |

Ravin 3737

AUTHORIZTION [signature] TITLE Driller DATE 6-7-19

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

SCANNED

900978

100632

40829

TICKET NUMBER 56035
LOCATION Oakley KS
FOREMAN Jerry K
Cory D

KS

ES

RESSURE PUMPING LLC
Box 884, Chanute, KS 66720
20-431-9210 or 800-467-8676

# FIELD TICKET & TREATMENT REPORT
## CEMENT

| DATE | CUSTOMER # | WELL NAME & NUMBER | SECTION | TOWNSHIP | RANGE | COUNTY |
|---|---|---|---|---|---|---|
| 6-14-A | 2776 | Kristi 1-17 | 17 | 20S | 34W | Scott |

CUSTOMER: Eagle Creek

MAILING ADDRESS: 8100 E. 22nd St., N. Bldg. 1500A

CITY: Wichita | STATE: KS | ZIP CODE: 67226-2315

Scott City Sto 40 W Hoctrock 1W 1S W on side

| TRUCK # | DRIVER | TRUCK # | DRIVER |
|---|---|---|---|
| 731 | Neil W | ass-st | Matt L |
| 70 | Xavier C | | |
| 535 | Jerry K | | |
| 703 | Cory D | | |

JOB TYPE Plug | HOLE SIZE 7 7/8 | HOLE DEPTH 4700 | CASING SIZE & WEIGHT

CASING DEPTH | DRILL PIPE 4½ | TUBING | OTHER

SLURRY WEIGHT 13.8 | SLURRY VOL 1.42 | WATER gal/sk | CEMENT LEFT in CASING

DISPLACEMENT | DISPLACEMENT PSI | MIX PSI | RATE

REMARKS: Safty meeting rig upon WO 2 plugs as ordered with 280 sks
60/40 4% gel ¼# flo seal
50 sks @ 2280'
80 sks @ 1260'
50 sks @ 630'
50 sks @ 320'
20 sks @ 60'
30 sks Rat hole

Thank you
Jerry & crew

| ACCOUNT CODE | QUANITY or UNITS | DESCRIPTION of SERVICES or PRODUCT | UNIT PRICE | TOTAL |
|---|---|---|---|---|
| CE0451 | 1 | PUMP CHARGE | 1900.00 | 1900.00 |
| CE0002 | 40 | MILEAGE | 7.15 | 286.00 |
| CE0710 | 12.04 | ton mileage delivery | 1.75 | 842.80 |
| | | | | |
| CE5829 | 280 sks | light blend II | 16.00 | 4480.00 |
| CC6075 | 70 # | flo seal | 3.00 | 210.00 |
| | | | Subtotal | 7718.80 |
| | | | -25% | 1929.70 |
| | | | Subtotal | 5789.10 |
| | | | SALES TAX | 298.99 |
| | | | ESTIMATED TOTAL | 6088.09 |

Ravin 3737

AUTHORIZTION | 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

SCANNED

WESLEY D. HANSEN Consulting Petroleum Geologist

212 N. Market, Suite 257, Wichita, KS 67202
Cellular: 316-772-6188
email: whansen4651@sbcglobal.net

KGS
AAPG
Kansas License #418

EAGLE CREEK CORPORATION

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

| | | | |
|---|---|---|---|
| **Well Name:** | **Eagle Creek Corporation #1-17 Kristi** | | |
| **API:** | **15-171-21252** | | |
| **Location:** | **370' FSL, 1405' FEL of Section 17-20S-34W** | | |
| **License Number:** | **30129** | **Region:** | **Scott County, Kansas** |
| **Spud Date:** | **6-6-2019** | **Drilling Completed:** | **6-15-2019** |
| **Surface Coordinates:** | **370' FSL, 1405' FEL of Section 17-20S-34W** | | |
| **Bottom Hole Coordinates:** | **Vertical hole** | | |
| **Ground Elevation (ft):** | **3102'** | **K.B. Elevation (ft):** | **3107'** |
| **Logged Interval (ft):** | **3600' To: RTD** | **Total Depth (ft):** | **4700'** |
| **Formation:** | **Cherokee at TD** | | |
| **Type of Drilling Fluid:** | **Chemical - displaced at 3465'-3479'** | | |



## OPERATOR

**Company:** Eagle Creek Corporation
**Address:** 8100 East 22nd Street North
Building 1500, Suite A
Wichita, KS 67226

## GEOLOGIST

**Name:** Wesley D. Hansen
**Company:** Wesley D. Hansen - Consulting Petroleum Geologist
**Address:** 212 N. Market, Suite 257
Wichita, KS 67202
Cellular: 316-772-6188

## COMMENTS

**Contractor: WW Drilling Rig 2**
**Pusher: Dustin Day**

**Surface Casing: 8 5/8" set at 287' w/250 sx**
**Production Casing: P&A**

**Mud by: Mud-Co - Tony Maestas was the engineer.**

**DST's by: Trilobite Testing - Bradley "Walt" Walter was the tester**

**Logs by: ELI - (DIL, CDL-CNL-PE, MEL) - Jeff Luebbers was the engineer**

**Deviation Surveys: 3/4 deg. @ 287'; 3/4 deg. @ 4536'; 3/4 deg. @ 4700'**

## BIT RECORD

| Bit # | Size | MFG | Type | Depth Out | Footage Cut | Hours on bit |
|---|---|---|---|---|---|---|
| 1 | 12 1/4" | Smith | rerun | 287' | 287' | 4 |
| 2 | 7 7/8" | Smith | F-27 | 4700' | 4413' | 110 |

## FORMATION TOPS AND STRUCTURAL COMPARISON

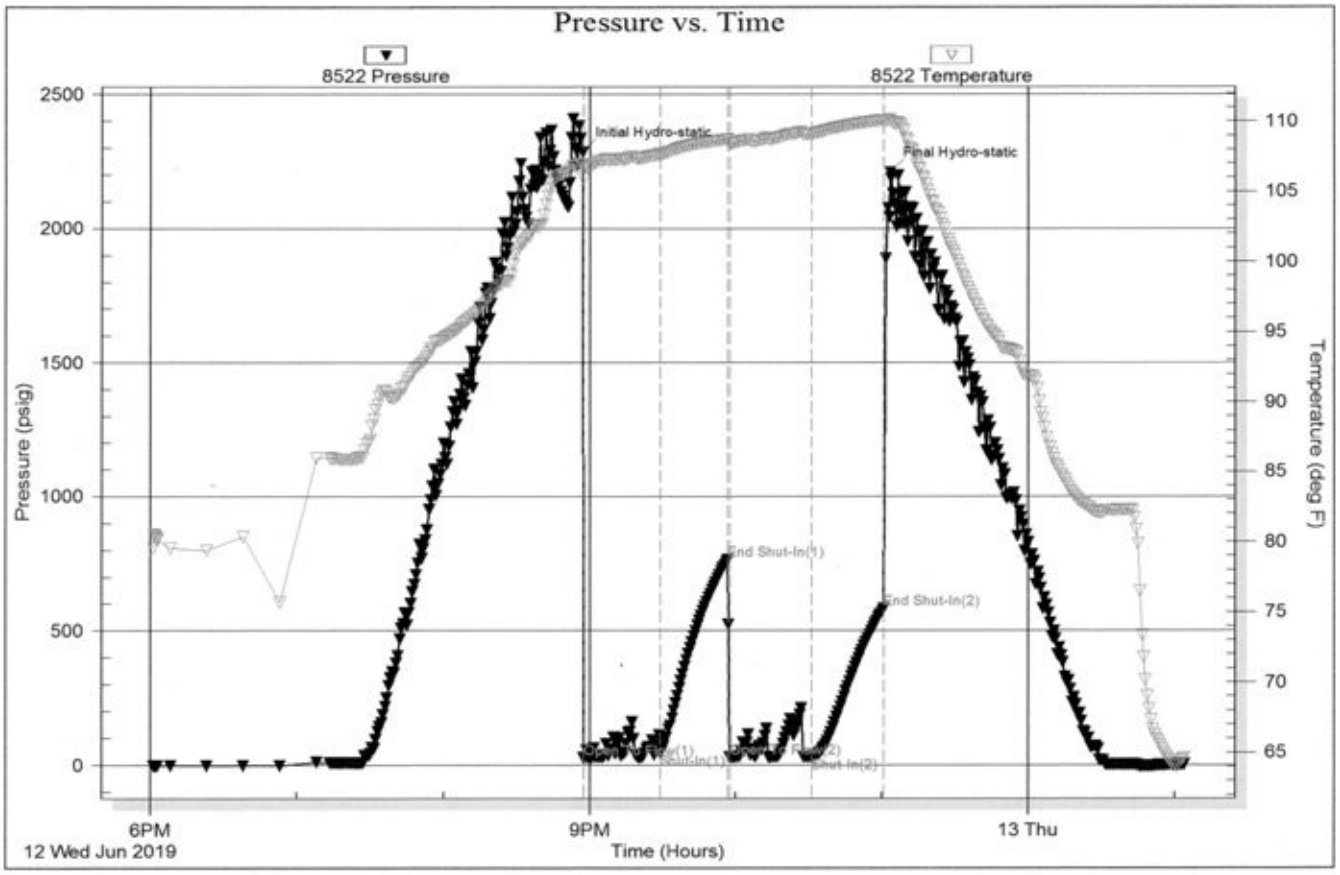
| FORMATION | SAMPLE TOPS Depth | Datum | LOG TOPS Depth | Datum | COMPARISON WELL Abercrombie Energy, LLC #1-17 K-2 Farms 2301' FWL, 1500' FSL Section 17-20S-34W | |
|---|---|---|---|---|---|---|
| | 3107' KB | | 3107' KB | | | |
| Anhydrite (DT) | 2268' | +839 | 2269' | +838 | 2270' | +848 |
| Base/Anhydrite (DT) | 2288' | +819 | 2283' | +824 | 2288' | +830 |
| Heebner Shale | 3969' | -862 | 3969' | -862 | 3969' | -851 |
| Lansing | 4014' | -907 | 4017' | -910 | 4013' | -895 |
| Muncie Creek Sh. | 4216' | -1109 | 4220' | -1113 | 4217' | -1099 |
| Stark Shale | 4329' | -1222 | 4329' | -1222 | 4327' | -1209 |
| Hushpuckney Shale | 4379' | -1272 | 4382' | -1275 | 4368' | -1250 |
| Marmaton | 4504' | -1397 | 4497' | -1390 | 4494' | -1376 |
| Pawnee | 4584' | -1477 | 4588' | -1481 | 4593' | -1475 |
| Fort Scott | 4615' | -1508 | 4619' | -1512 | 4628' | -1510 |
| Cherokee Shale | 4627' | -1520 | 4631' | -1524 | 4640' | -1522 |
| RTD | 4700' | -1593 | | | | |
| LTD | | | 4704' | -1597 | | |

# DRILL STEM TESTS

**DST No. 1 Marmaton "A" and "B"**
**Interval: 4469'-4536'**
**Times: 30-30-30-30**
**Recovery: 5' mud**
**FP: 26-47/29-31 SIP: 765-584**
**HP: 2285-2208 BHT: 110 deg. F**

**IFP: weak <1/2 inch blow**
**ISIP: no return blow**
**FFP: no blow**
**FSIP: no return blow**
**plugging during flow periods**

Serial #: 8522 Inside Eagle Creek Corporation Kristi #1-17 DST Test Number: 1

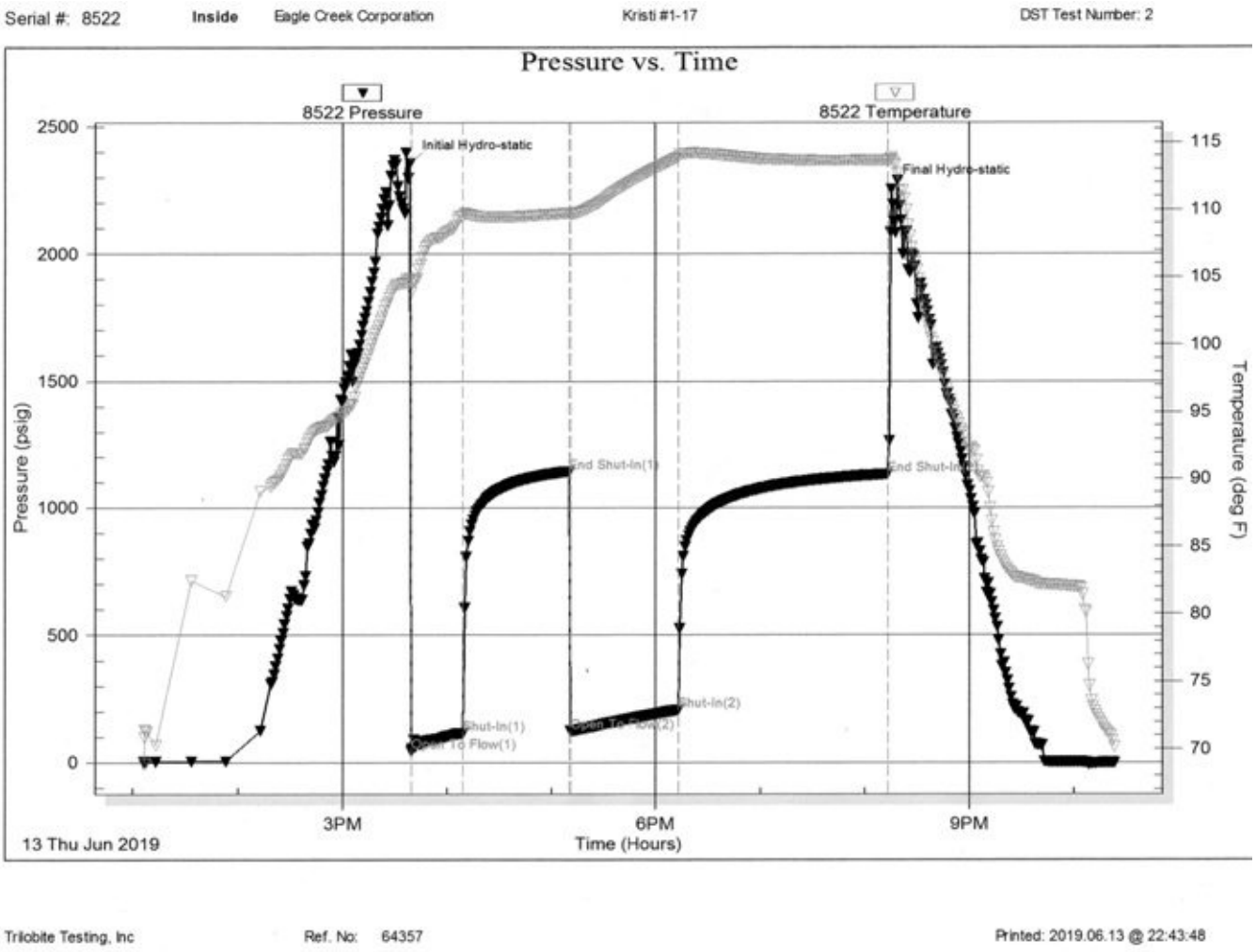



Trilobite Testing, Inc Ref. No: 64356 Printed: 2019.06.13 @ 01:17:27

# DRILL STEM TESTS

**DST No. 2 Marmaton**
**Interval: 4530'-4600'**
**Times: 30-60-60-120**
**Recovery: 350' MCW (75w, 25m) with oil spots; chl. 75,000 ppm, system chl. 8500 ppm**
**FP: 44-113/123-205 SIP: 1142-1131**
**HP: 2352-2252 BHT: 114 deg. F**

**IFP: weak blow bldg. to 10.5 inches**
**ISIP: no return blow**
**FFP: weak bow bldg. to 16 inches**
**FSIP: no return blow**




## ROCK TYPES

- Anhy
- Cht
- Coal
- Congl
- Gyp
- Lmst
- Salt
- Shale
- Shcol
- Shale red
- Sltst
- Ss
- Carb sh
- Dol
- Dtd
- Gry sh
- Sandylms
- Shale green
- Sltstn
- Shlyslts
- Sltysh
- Sdy dolo
- Silty dolo
- Shy dolo
- Shaly ls

## ACCESSORIES

**FOSSIL**
- Algae
- Amph
- Belm
- Bioclst
- Brach
- Bryozoa
- Cephal
- Coral
- Crin
- Echin
- Fish
- Foram
- Fossil
- Gastro
- Oolite
- Ostra
- Pelec
- Pellet
- Pisolite
- Plant
- Strom
- Fuss
- Oomold

**MINERAL**
- Anhy
- Arggrn
- Arg
- Bent
- Bit
- Brecfrag
- Calc
- Carb
- Chtdk
- Chtlt
- Dol
- Feldspar
- Ferrpel
- Ferr
- Glau
- Gyp
- Hvymin
- Kaol
- Marl
- Minxl
- Nodule
- Phos
- Pyr
- Salt
- Sandy
- Silt
- Sil
- Sulphur
- Tuff
- Chlorite
- Dol
- Sand
- Slty

**STRINGER**
- Anhy
- Arg
- Bent
- Coal
- Dol
- Gyp
- Ls
- Mrst
- Sltstrg
- Ssstrg
- Carbsh
- Clystn
- Dol
- Grysh
- Gryslt
- Lms
- Sandylms
- Sh
- Sltstn

## OTHER SYMBOLS

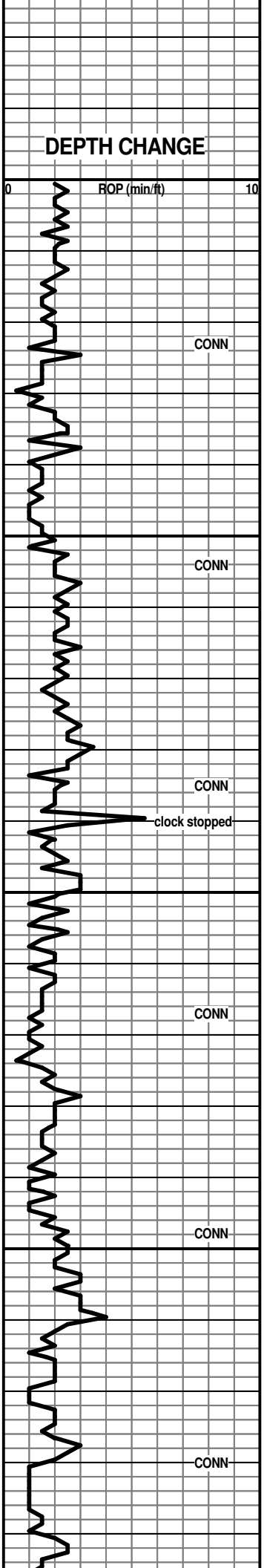
**INTERVALS**
- Core
- Dst
- Dst

**EVENTS**
- Rft
- Dst top/base

**OIL SHOWS**
- Even
- Spotted
- Quest.

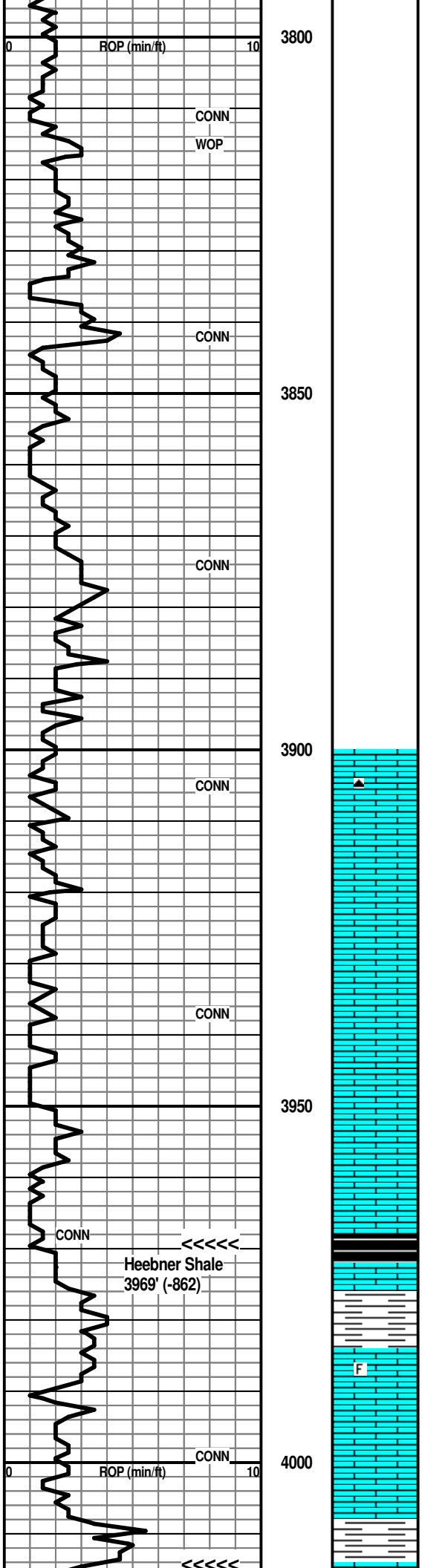
- Trace
- Dead
- Gas show

| Curve Track 1<br>ROP (min/ft) | Depth | Lithology | Oil Shows | Geological Descriptions | Remarks |
|---|---|---|---|---|---|
| 0 ROP (min/ft) 10<br><<<<<<br>Anhydrite<br>2268' (+839)<br><<<<<<br>Base/Anhy<br>2288' (+819) | 2250<br>2300 | | | | Anhydrite 2268' (+839)<br>Base/Anhy 2288' (+819)<br>**Report Depth & Activity**<br>6-5/6-6/2019 MIRT<br>6-6 Spud at 5:30 PM<br>6-7 287' WOC<br>6-8 Drlg. @ 1177'<br>6-9 Drlg. @ 2683'<br>6-10 Drlg. @ 3435' (lost returns at 2935' and 2996')<br>6-11 Drlg. @ 4040' |




6-12 Drlg. @ 4439' DST No. 1
6-13 Drlg. @ 4560' DST No. 2
6-14 CFS @ 4650'
6-15 RTD @ 4700' logging complete, P&A

Geologist on location at 3638'
at 3:00 PM on 6-10-2019




3800

3850

3900

3950

4000

Ls: mix tan, lt brn vf-cryptoxln, some granular; offwhite micxln subchalky IP; Sh: red-beds, some gray

Ls: pred. tan, lt gray vfxln dense; shales AA

Ls: dense AA; lt brn, gray more granular, NVP; trace dark gray opq chert; Sh: red beds, gray AA

Start 10' wet and dry samples

Ls: tan, lt gray, lt brn vf-cryptoxln, NVP; lesser offwhite, tan micxln, subchalky, dense; Shales AA

Sample quality generally poor. Much red bed shale in samples.

Ls: various dense AA; Sh: more dark gray; red beds AA

Ls: pred. offwhite, tan, lt gray mic-vfxln dense, subchalky to chalky; Sh: red beds, some gray

Ls: more tan, lt brn vf-cryptoxln

Ls: tan, lt gray, lt brn vfxln dense; offwhite chalky; Sh: still red beds with lesser gray

Ls: mix AA; incr. offwhite chalky; red beds, some gray AA

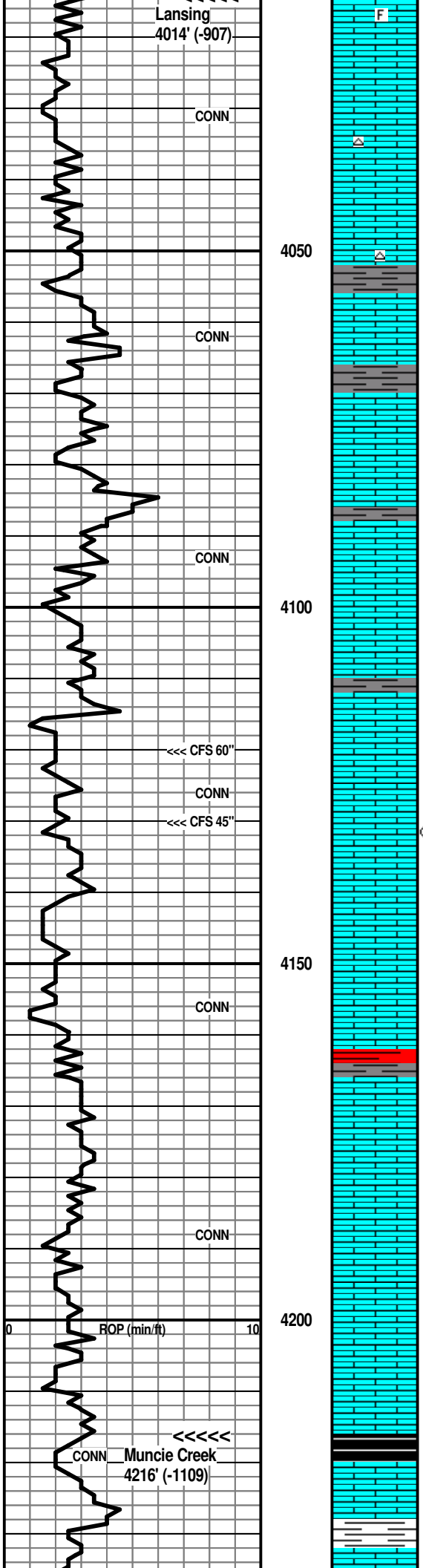
4000' spl - Ls: still chalky AA; with tan, lt brn vf-cryptoxln, NVP; Sh: sl influx black carbon.

F

Ls: pred. tan, brn sl mottled granular, poor-NVP, occ foss.; some white chalky; Sh: gray; red beds AA

Ls: tan vfxln dense; influx offwhite, tan mic-vfxln dense and offwhite chalky; Sh: dark gray, black with red beds

Ls: offwhite chalky; tan, lt gray vf-cryptoxln; Sh: dark gray, occ brn; common red beds







Ls: tan vfxln, occ granular and foss., NVP; common offwhite subchalky to chalky; Sh: dark gray; red beds AA

Ls: tan, lt gray, lt brn vf-cryptoxln and offwhite chalky; red beds persist

Ls: mix AA with some offwhite opq chert; still carry red beds

7:00 AM at 4040' on 6-11-2019

Ls: lt gray, lt brn cryptoxln; common offwhite, tan mic-vfxln dense; lesser offwhite chalky; some mottled brn granular; scatt. offwhite foss. chert; Sh: med to dark gray; red beds

Ls: flood various gray, tan, lt brn granular, lesser cryptoxln, NVP

Ls: mix various cryptoxln and granular AA; incr. offwhite subchalky; red beds

MudCo Mud Check at 4093'
11:45 AM on 6-11-2019

| wt | vis | wl | pH | chl |
|---|---|---|---|---|
| 9.2 | 60 | 9.6 | 10.0 | 9600 |
| PV | YP | GelS | lcm | solids |
| 18 | 22 | 15/37 | 2# | 5.7% |

Ls: pred. various gray, tan, brn cryptoxln, some granular (trashy from trip)

Ls: mix tan, lt gray cryptoxln and tan, lt brn granular IP; other tan, offwhite mic-vfxln dense, occ with small vug. por., subchalky; Sh: dark gray, dark red-brn

Trip to look for a hole in pipe at 4093'. Gradually had lost 300# of pump pressure. Found hole 28 stands off bottom. CTCH 45" after tripping for hole.

Ls: various tan, lt brn, lt gray pred. cryptoxln; offwhite mic-vfxln sl subchalky; Sh: influx gray, splintery

Samples good

CFS spls - Ls: various cryptoxln AA; some tan, granular, foss. with NVP, N.S.; tan, offwhite micxln subchalky; minor shale

CFS spls - Ls: various tan, brn, gray vf-cryptoxln; common offwhite, tan subchalky to white chalky; Sh: some dark gray, black

jet hole - add premix

Ls: lt to med brn, tan cryptoxln; lesser tan, lt brn granular with poor inter-particle por. with micxln matrix; still common offwhite, tan subchalky to chalky; Sh: dark red-brn, gray

Ls: tan, brn granular, foss. IP with some poor inter-particle por., N.S.; common various cryptoxln AA and subchalky to chalky AA; Sh: med to dark gray, dark red-brn, some gray-green

Ls: mix various cryptoxln and granular AA; occ tan cryptoxln with vug. por.; white chalky and tan subchalky, N.S.

Ls: pred. tan, lt brn vf-cryptoxln, granular IP; common offwhite subchalky to chalky; sl influx Dolo: vfxln, N.S.; Sh: dark red-brn, med to dark gray

Ls: lt gray, offwhite mic-vfxln dense, some cryptoxln and granular AA; scatt. Dolo AA

Ls: pred. tan, lt gray vf-cryptoxln, NVP; other brn, gray granular, oolitic IP with spar matrix, N.S.; still common subchalky

Ls: flood tan, lt gray vf-cryptoxln and mic-vfxln dense, NVP, N.S.

Ls: mix AA with lesser med gray, lt brn cryptoxln

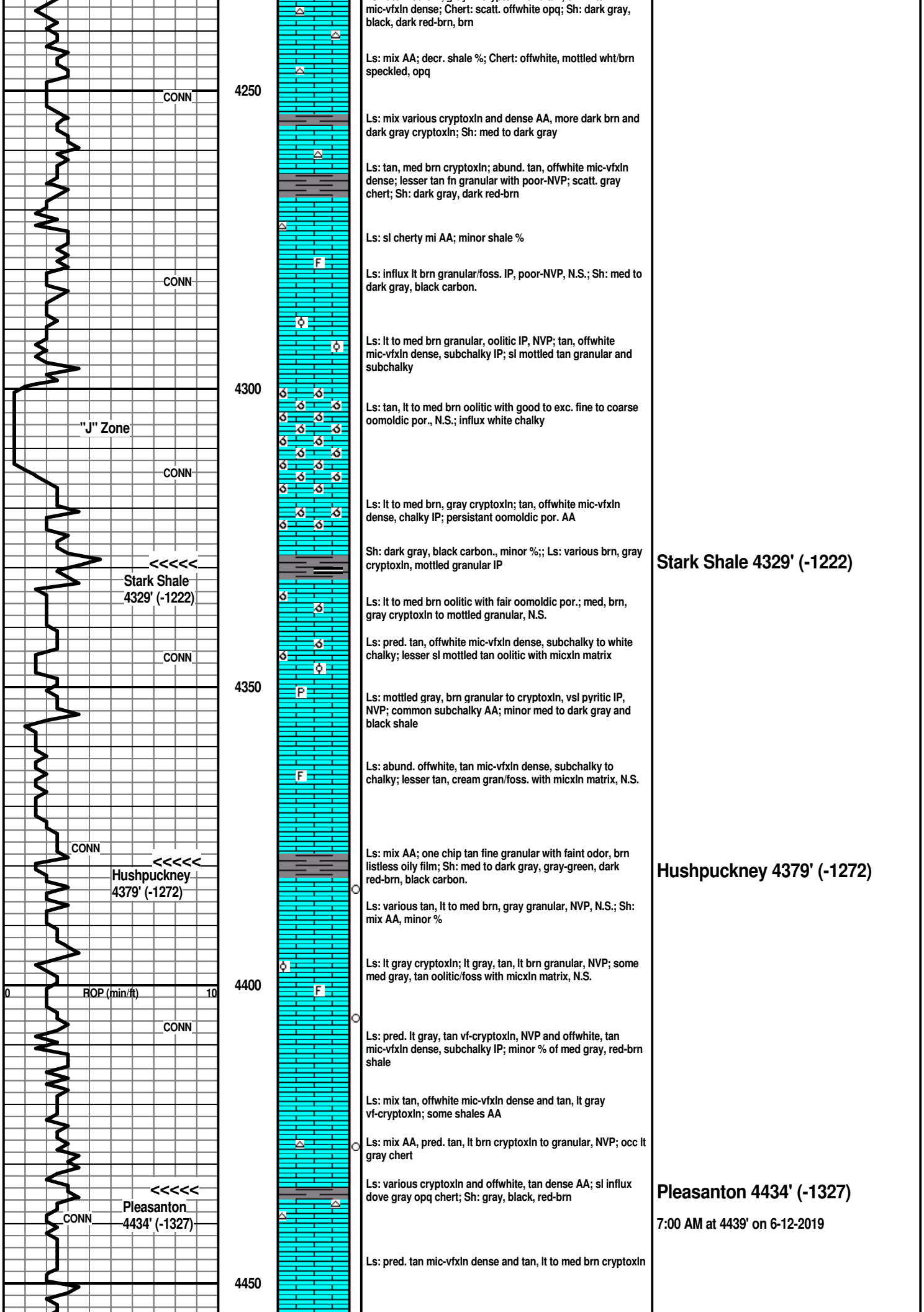
Ls: various dense AA with strong influx Sh: med to dark gray, black carbon. and dark red-brn, with petroliferous odor, N.S.

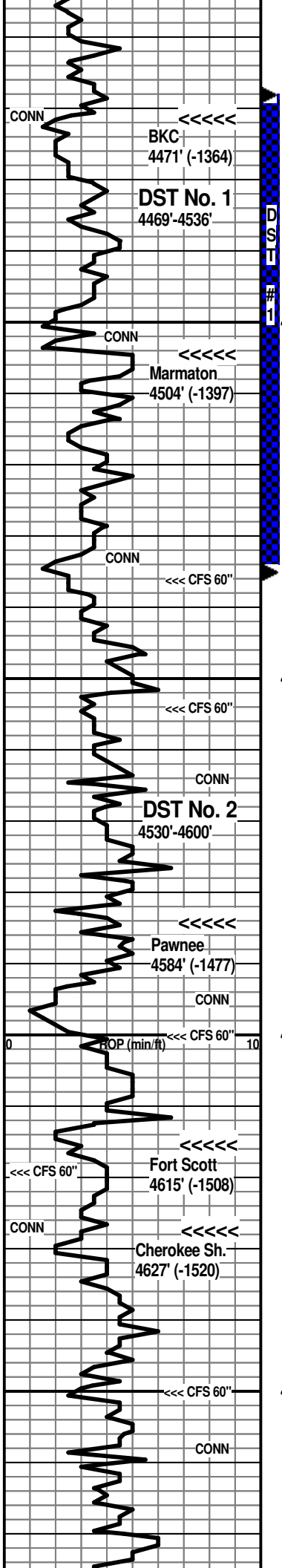
**Muncie Creek 4216' (-1109)**

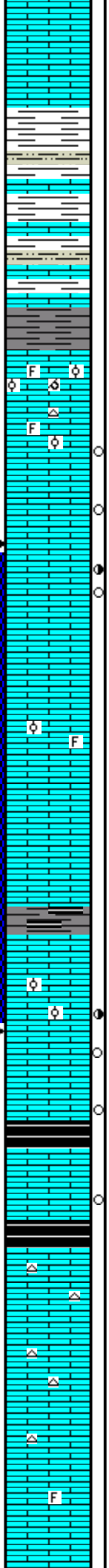
Sh: mix AA with more black carbon., petrol. odor AA; Ls: influx lt to med brn, med gray cryptoxln to granular, NVP, N.S.

Sh: decr. % AA, some pale mushy gray; Ls: lt to med brn, gray vf-cryptoxln, mottled granular IP; tan mic-vfxln dense, subchalky IP

Ls: lt to med brn, gray vf-cryptoxln and tan, offwhite


CONN
4250
CONN
4300
"J" Zone
CONN
<<<<<
Stark Shale
4329' (-1222)
CONN
4350
CONN
<<<<<
Hushpuckney
4379' (-1272)
0
ROP (min/ft)
10
4400
CONN
<<<<<
Pleasanton
4434' (-1327)
CONN
4450
F
F
P
F
F
mic-vfxln dense; Chert: scatt. offwhite opq; Sh: dark gray, black, dark red-brn, brn
Ls: mix AA; decr. shale %; Chert: offwhite, mottled wht/brn speckled, opq
Ls: mix various cryptoxln and dense AA, more dark brn and dark gray cryptoxln; Sh: med to dark gray
Ls: tan, med brn cryptoxln; abund. tan, offwhite mic-vfxln dense; lesser tan fn granular with poor-NVP; scatt. gray chert; Sh: dark gray, dark red-brn
Ls: sl cherty mi AA; minor shale %
Ls: influx lt brn granular/foss. IP, poor-NVP, N.S.; Sh: med to dark gray, black carbon.
Ls: lt to med brn granular, oolitic IP, NVP; tan, offwhite mic-vfxln dense, subchalky IP; sl mottled tan granular and subchalky
Ls: tan, lt to med brn oolitic with good to exc. fine to coarse oomoldic por., N.S.; influx white chalky
Ls: lt to med brn, gray cryptoxln; tan, offwhite mic-vfxln dense, chalky IP; persistant oomoldic por. AA
Sh: dark gray, black carbon., minor %;; Ls: various brn, gray cryptoxln, mottled granular IP
Stark Shale 4329' (-1222)
Ls: lt to med brn oolitic with fair oomoldic por.; med, brn, gray cryptoxln to mottled granular, N.S.
Ls: pred. tan, offwhite mic-vfxln dense, subchalky to white chalky; lesser sl mottled tan oolitic with micxln matrix
Ls: mottled gray, brn granular to cryptoxln, vsl pyritic IP, NVP; common subchalky AA; minor med to dark gray and black shale
Ls: abund. offwhite, tan mic-vfxln dense, subchalky to chalky; lesser tan, cream gran/foss. with micxln matrix, N.S.
Ls: mix AA; one chip tan fine granular with faint odor, brn listless oily film; Sh: med to dark gray, gray-green, dark red-brn, black carbon.
Hushpuckney 4379' (-1272)
Ls: various tan, lt to med brn, gray granular, NVP, N.S.; Sh: mix AA, minor %
Ls: lt gray cryptoxln; lt gray, tan, lt brn granular, NVP; some med gray, tan oolitic/foss with micxln matrix, N.S.
Ls: pred. lt gray, tan vf-cryptoxln, NVP and offwhite, tan mic-vfxln dense, subchalky IP; minor % of med gray, red-brn shale
Ls: mix tan, offwhite mic-vfxln dense and tan, lt gray vf-cryptoxln; some shales AA
Ls: mix AA, pred. tan, lt brn cryptoxln to granular, NVP; occ lt gray chert
Ls: various cryptoxln and offwhite, tan dense AA; sl influx dove gray opq chert; Sh: gray, black, red-brn
Pleasanton 4434' (-1327)
7:00 AM at 4439' on 6-12-2019
Ls: pred. tan mic-vfxln dense and tan, lt to med brn cryptoxln




Ls: mix AA; some dark brn cryptoxln; with incr. % Sh: med to dark gray, black, dark red-brn, dark brn

Ls: pred. dark brn cryptoxln; tan, offwhite, lt gray mic-vfxln, NVP, N.S.

Sh: abund. dark red-brn and gray, some gray-green and pyritic gray; Siltst: trace red-brn

Ls: abund. various cryptoxln and dense AA; Sh: mix AA with Siltst: gray, lt brn, red-brn

Ls/Sh/Siltst mix AA

Sh: influx dark gray to black in 20' spl

Ls: lt to med brn, gray-brn cryptoxln; some tan, cream oolitic/foss with poor oomoldic por., N.S.; trace tan oolitic with spar matrix

Ls: tan, lt to med brn granular, NVP; influx white chalky; scatt. lt brn chert, N.S.

4536' spl - Ls: more med to dark brn cryptoxln, NVP; other tan gran. ool/foss. poor por., N.S.; one chip tan vfxln with lt even stain, gas bubbles on surface; one chip tan vfxln with spotty ppt stain, trace fo, ft odor

CFS 4536' 20" spl - Ls: influx mottled dark gray gran., dark brn gran., NVP, N.S.; 4 chips tan, brn cryptoxln to gran. poor por. with spotty ppt stain, sl shows dark fo, no odor, looks tight; 40" spl - Ls: pred. tan, lt brn gran., NVP; abund. tan, offwhite mic-vfxln dense, subchalky to chalky; 4-5 chips lt brn more gran., poor inter-particle por., with ppt stain, sfo, sg, no odor

4554' spl - trashy from trip; Ls: mix lt brn, gray oolitic, mottled NVP; lt to med brn, gray mottled gran.; other med to dark gray cryptoxln

Ls: various tan, lt to med brn granular to oolitic IP, micxln to spar matrix, occ foss.; lesser tan, brn cryptoxln; Sh: vc gray

Ls: influx lt to med gray mic-vfxln dense; gray, tan, brn cryptoxln, NVP

Ls: lt to med gray vfxln dense, shaly/silty IP; lesser gray cryptoxln and tan, offwhite mic-vfxln dense

Sh: sl influx black carbon, fissile; Ls: various gray dense, shaly/silty AA; incr. gray, brn cryptoxln; some mottled dark gray, dark brn granular, NVP, N.S.

CFS 4600' spls - incr. shale % AA; Ls: mix AA; several chips tan gran/oolitic with fair inter-particle and inter-oolitic por. with ft odor, sfo, patchy to subsat stn in dry spls

Ls: lt to med brn, gray cryptoxln, some mottled gran; tan mic-vfxln dense; one chip with spotty ppt stn, trace scummy brn oily film, nfo

CFS 4619' spl - Sh: abund. dark gray, black carbon.; Ls: various brn, gray cryptoxln to gran.; two chips tan vfxln with poor inter-particle por. with patchy to lt even stain, sfo, gas bubbles on chip, tight

Ls: various dense AA with influx dark brn, gray cryptoxln; one chip tan granular with patchy stn, nfo, tight; Sh: black carbon., dark gray

Ls: influx various brn, tan, gray gran., NVP; 1-2 chips dense with patchy stain, no odor, nfo; Chert: sl influx mottled brn/gray oolitic

CFS 4650' spls - Ls: mix various gray and brn vf-cryptoxln, mottled gran. lP; abund. various tan, offwhite, lt gray mic-vfxln dense; Chert: occ oolitic and dark brn

Ls: various brn, gray, tan cryptoxln; common med gray vfxln dense, shaly; scatt. gray and brn chert; Sh: thin beds of dark gray to black

Ls: various brn, gray vf-cryptoxln, occ foss., some granular; offwhite, tan mic-vfxln dense; Sh: thin gray and black AA, some mushy pale gray and white clayey

## BKC 4471 (-1364)

DST No. 1 Marmaton "A" and "B"
Interval: 4469'-4536'
Times: 30-30-30-30
IFP: weak <1/2 inch blow
ISIP: no return blow
FFP: no blow
FSIP: no return blow
plugging during flow periods
Recovery: 5' mud
FP: 26-47/29-31 SIP: 765-584
HP: 2285-2208 BHT: 110 deg. F

## Marmaton 4504' (-1397)

MudCo Mud Check at 4518'
11:30 AM on 6-12-2019

| wt | vis | wl | pH | chl |
|---|---|---|---|---|
| 9.2 | 52 | 9.6 | 9.5 | 8500 |
| **PV** | **YP** | **GelS** | **lcm** | **solids** |
| 15 | 17 | 12/33 | 2# | 5.8% |

CFS 4536' 60" spl - Ls: pred. offwhite, tan, lt gray gran. with micxln matrix

Pipe strap at 4536' was 0.21' long to board

CFS 4554' 30" spl - still trashy, Ls; brn, dark gray gran. to ool lP, NVP, N.S.; lt brn, tan oolitic with spar matrix; common gray shale; 60" spl - Sh: more med to dark gray, black; Ls: var. brn, gray gran. to sl oolitic, NVP; tan gran. to oolitic with micxln matrix, N.S.

7:00 AM at 4560' on 6-13-2019

DST No. 2 Marmaton
Interval: 4530'-4600'
Times: 30-60-60-120
IFP: weak blow bldg. to 10.5 inches
ISIP: no return blow
FFP: weak bow bldg. to 16 inches
FSIP: no return blow
Recovery: 350' MCW (75w, 25m) with oil spots; chl. 75,000 ppm, system chl. 8500 ppm
FP: 44-113/123-205 SIP: 1142-1131
HP: 2352-2252 BHT: 114 deg. F

## Pawnee 4584' (-1477)

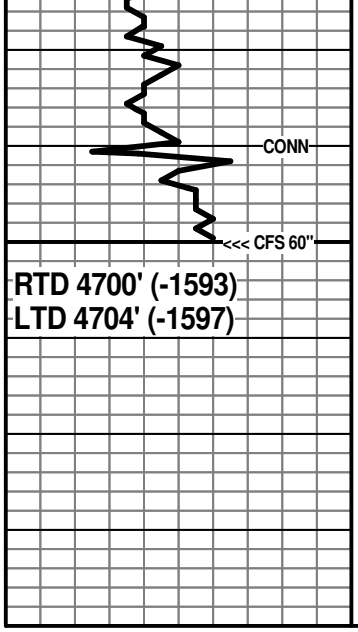
MudCo Mud Check at 4600'
11:00 AM on 6-13-2019

| wt | vis | wl | pH | chl |
|---|---|---|---|---|
| 9.2 | 58 | 9.6 | 10.0 | 9000 |
| **PV** | **YP** | **GelS** | **lcm** | **solids** |
| 17 | 21 | 14/36 | 2# | 5.7% |

## Fort Scott 4615' (-1508)

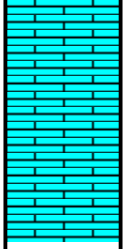
## Cherokee Sh. 4627' (-1520)

7:00 AM at 4650' on 6-14-2019




RTD 4700' (-1593)
LTD 4704' (-1597)

4700



Ls: influx med to dark brn mottled granular, lesser cryptoxln; Sh: dark gray to black

Ls: med brn and gray cryptoxln; decr. mottled gran.; abund. various tan, offwhite, lt gray mic-vfxln dense; some tan fn granular with micxln matrix; Sh: incr. % dark gray, black

CFS 4700' spls - Ls: various dense AA with more med to dark brn, gray granular to cryptoxln

After review of samples, DST results and open hole log evaluations, the decision was made to plug the Kristi #1-17 as a dry hole.

Respectfully submitted,

Wesley D. Hansen
Petroleum Geologist
Kansas License No. 418

MudCo Mud Check at 4688'
10:45 AM on 6-14-2019

| wt | vis | wl | pH | chl |
|---|---|---|---|---|
| 9.2 | 60 | 9.6 | 10.0 | 9000 |
| PV | YP | GelS | lcm | solids |
| 18 | 22 | 15/37 | 1# | 5.7% |