

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

| CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used | | | | | | | |
|---|-------------------|---------------------------|-------------------|---------------|----------------|--------------|----------------------------|
| Report all strings set-conductor, surface, intermediate, production, etc. | | | | | | | |
| Purpose of String | Size Hole Drilled | Size Casing Set (In O.D.) | Weight Lbs. / Ft. | Setting Depth | Type of Cement | # Sacks Used | Type and Percent Additives |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

| ADDITIONAL CEMENTING / SQUEEZE RECORD | | | | |
|--|------------------|----------------|--------------|----------------------------|
| Purpose: | Depth Top Bottom | Type of Cement | # Sacks Used | Type and Percent Additives |
| <input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <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: <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: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i> | METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5) (Submit ACO-4)</i> | PRODUCTION INTERVAL: Top Bottom |
|---|--|------------------------------------|

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

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

| | |
|-----------|---------------------------|
| Form | ACO1 - Well Completion |
| Operator | Murfin Drilling Co., Inc. |
| Well Name | YOUNGMEYER 1-35 |
| Doc ID | 1417962 |

All Electric Logs Run

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



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co., Inc.**

250 North Water Suite 300
Wichita, KS 67202

ATTN: Shauna Gunzelman/Jef

Youngmeyer #1-35

35-28S-8E Elk,KS

Start Date: 2018.07.21 @ 06:40:00

End Date: 2018.07.21 @ 14:13:00

Job Ticket #: 63807 DST #: 1

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

Printed: 2018.07.26 @ 15:53:03

Murfin Drilling Co., Inc. 35-28S-8E Elk,KS Youngmeyer #1-35 DST # 1 LKC "L" 2018.07.21



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Murfin Drilling Co., Inc.

35-28S-8E EIk, KS

250 North Water Suite 300
Wichita, KS 67202

Youngmeyer #1-35

Job Ticket: 63807

DST#: 1

ATTN: Shauna Gunzelman/Jef

Test Start: 2018.07.21 @ 06:40:00

GENERAL INFORMATION:

Formation: **LKC "L"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:21:00

Time Test Ended: 14:13:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Jimmy Ricketts

Unit No: 80

Interval: 2244.00 ft (KB) To 2256.00 ft (KB) (TVD)

Reference Elevations: 1581.00 ft (KB)

Total Depth: 2256.00 ft (KB) (TVD)

1572.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 9.00 ft

Serial #: 8369

Outside

Press@RunDepth: 207.61 psig @ 2245.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2018.07.21

End Date: 2018.07.21

Last Calib.: 2018.07.21

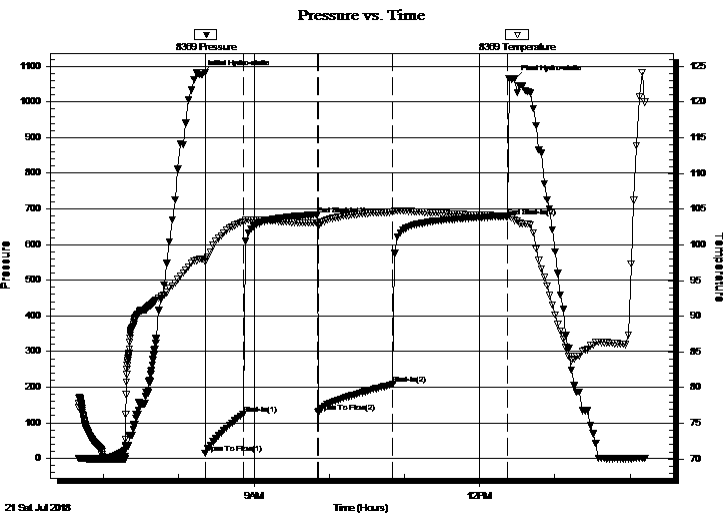
Start Time: 06:40:01

End Time: 14:13:00

Time On Btm: 2018.07.21 @ 08:18:00

Time Off Btm: 2018.07.21 @ 12:28:00

TEST COMMENT: IF - Weak blow building to strong blow in 20 minutes
FF - Weak blow building to strong blow in 31 minutes



PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 1077.49 | 98.00 | Initial Hydro-static |
| 3 | 14.77 | 97.56 | Open To Flow (1) |
| 34 | 124.46 | 103.20 | Shut-In(1) |
| 93 | 682.34 | 103.03 | End Shut-In(1) |
| 94 | 130.27 | 102.82 | Open To Flow (2) |
| 153 | 207.61 | 104.59 | Shut-In(2) |
| 245 | 678.56 | 104.07 | End Shut-In(2) |
| 250 | 1063.81 | 103.42 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|----------------------------|--------------|
| 400.00 | Mud cut water 91% W & 9% M | 2.83 |
| | | |
| | | |
| | | |
| | | |

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co., Inc.

35-28S-8E EIk,KS

250 North Water Suite 300
Wichita, KS 67202

Youngmeyer #1-35

Job Ticket: 63807

DST#: 1

ATTN: Shauna Gunzelman/Jef

Test Start: 2018.07.21 @ 06:40:00

Tool Information

| | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe: | Length: 1952.00 ft | Diameter: 3.80 inches | Volume: 27.38 bbl | Tool Weight: 2000.00 lb |
| Heavy Wt. Pipe: | Length: 0.00 ft | Diameter: inches | Volume: 0.00 bbl | Weight set on Packer: 20000.00 lb |
| Drill Collar: | Length: 305.00 ft | Diameter: 2.25 inches | Volume: 1.50 bbl | Weight to Pull Loose: 52000.00 lb |
| | | | <u>Total Volume: 28.88 bbl</u> | Tool Chased 1.00 ft |
| Drill Pipe Above KB: | 33.00 ft | | | String Weight: Initial 36000.00 lb |
| Depth to Top Packer: | 2244.00 ft | | | Final 38000.00 lb |
| Depth to Bottom Packer: | ft | | | |
| Interval between Packers: | 12.00 ft | | | |
| Tool Length: | 32.00 ft | | | |
| Number of Packers: | 2 | Diameter: 7.88 inches | | |

Tool Comments:

Tool Description

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths |
|---------------------------|--------------|------------|----------|------------|-------------------------------|
| Change Over Sub | 1.00 | | | 2225.00 | |
| Shut In Tool | 5.00 | | | 2230.00 | |
| Hydraulic tool | 5.00 | | | 2235.00 | |
| Packer | 4.00 | | | 2239.00 | 20.00 Bottom Of Top Packer |
| Packer | 5.00 | | | 2244.00 | |
| Stubb | 1.00 | | | 2245.00 | |
| Recorder | 0.00 | 8369 | Outside | 2245.00 | |
| Recorder | 0.00 | 8846 | Inside | 2245.00 | |
| Perforations | 6.00 | | | 2251.00 | |
| Bullnose | 5.00 | | | 2256.00 | 12.00 Bottom Packers & Anchor |
| Total Tool Length: | 32.00 | | | | |



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co., Inc.

35-28S-8E Eik, KS

250 North Water Suite 300
Wichita, KS 67202

Youngmeyer #1-35

Job Ticket: 63807

DST#: 1

ATTN: Shauna Gunzelman/Jef

Test Start: 2018.07.21 @ 06:40:00

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:

92000 ppm

Viscosity: 46.00 sec/qt

Cushion Volume:

bbbl

Water Loss: in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|-----------------------------|---------------|
| 400.00 | Mud cut w ater 91% W & 9% M | 2.833 |

Total Length: 400.00 ft Total Volume: 2.833 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

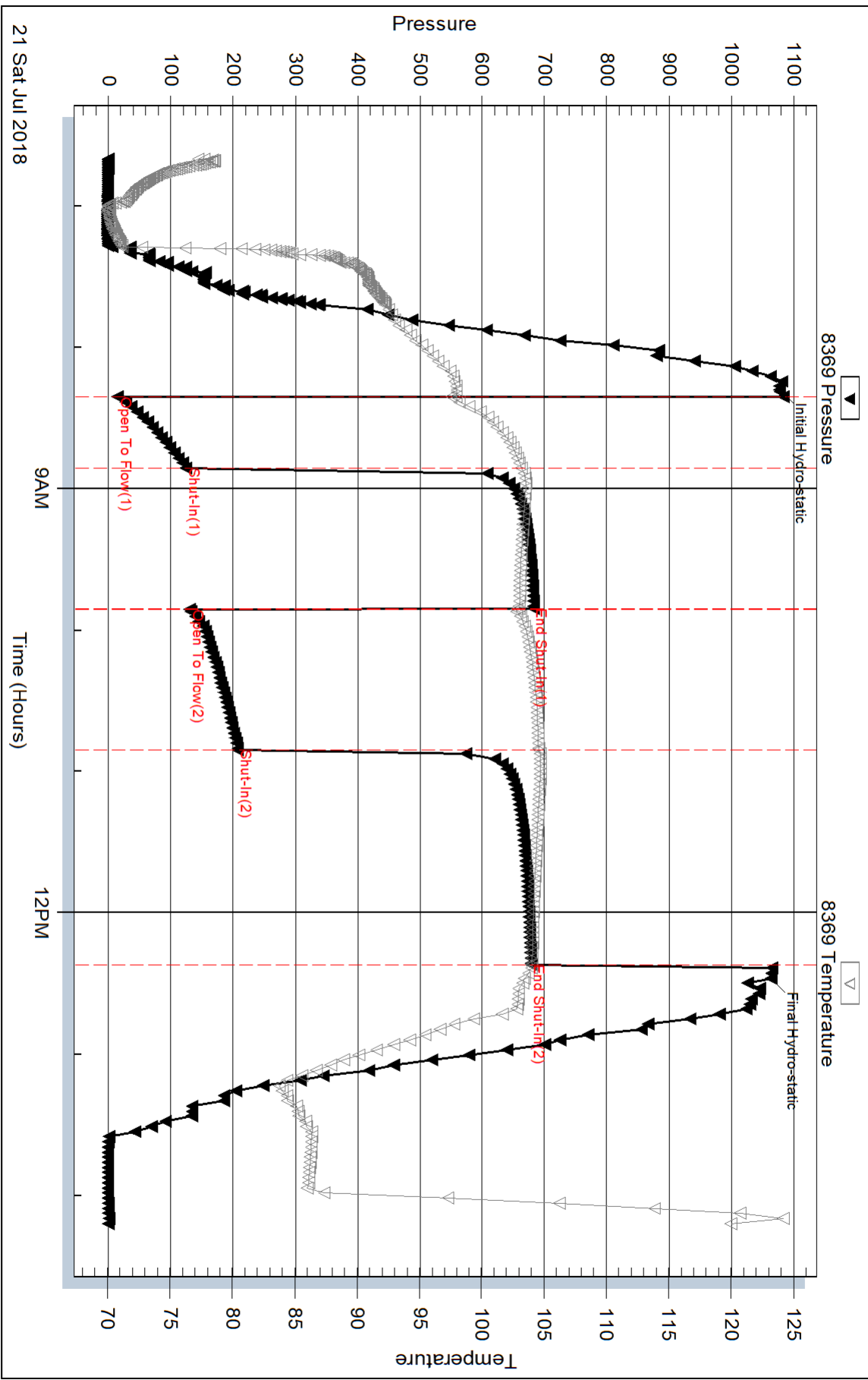
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time



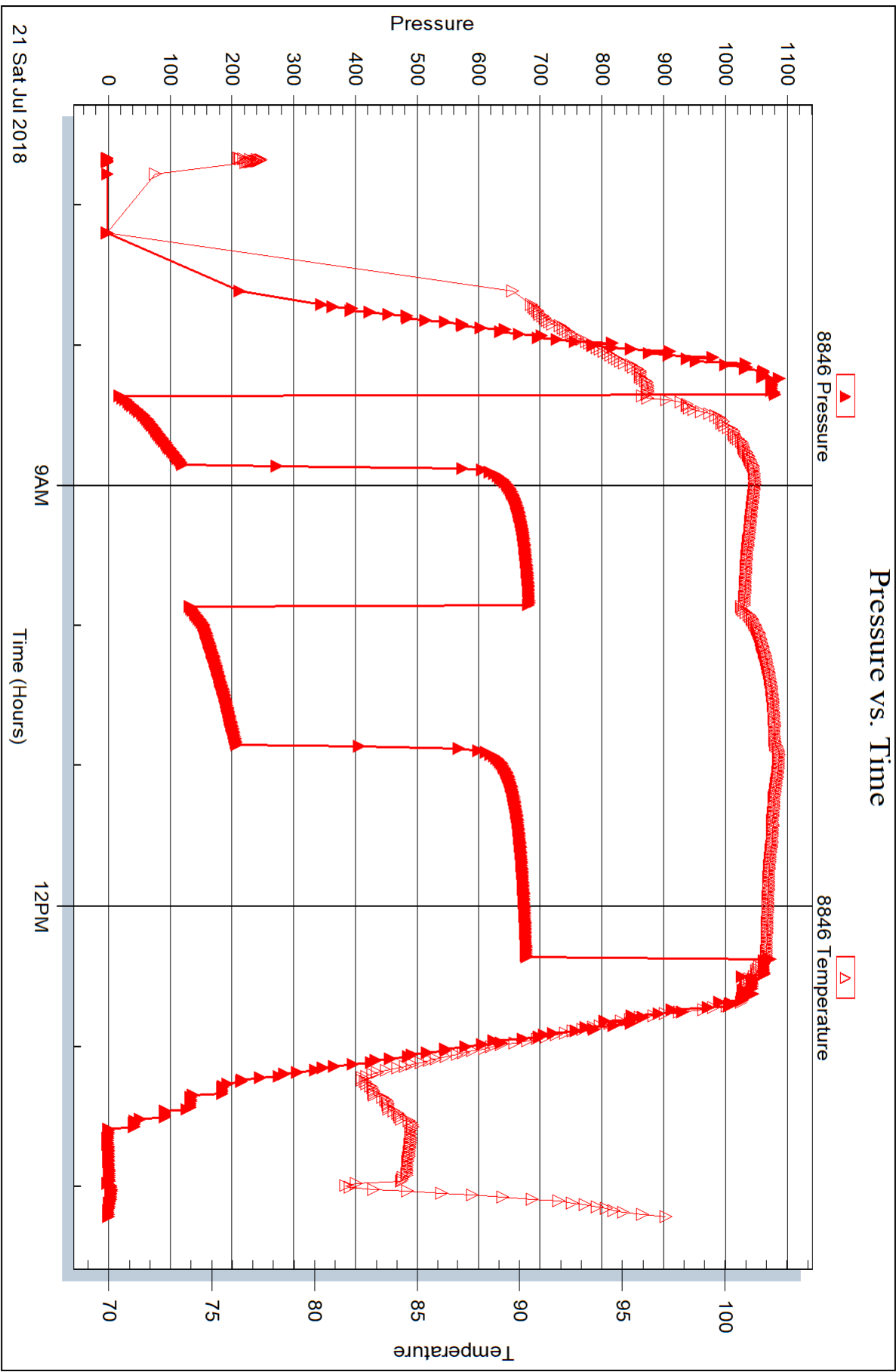
Serial #: 8846

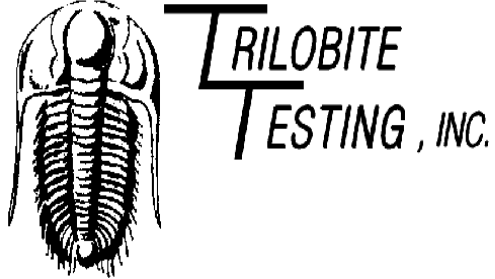
Inside

Murfin Drilling Co., Inc.

Youngmeyer #1-35

DST Test Number: 1





DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co., Inc.**

250 North Water Suite 300
Wichita, KS 67202

ATTN: Shauna Gunzelman/Jef

Youngmeyer #1-35

35-28S-8E Elk,KS

Start Date: 2018.07.23 @ 13:30:00

End Date: 2018.07.23 @ 21:09:30

Job Ticket #: 62808 DST #: 2

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

Printed: 2018.07.26 @ 15:52:39

Murfin Drilling Co., Inc.

35-28S-8E Elk,KS

Youngmeyer #1-35

DST # 2

Lower Mississippian

2018.07.23



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Murfin Drilling Co., Inc.

35-28S-8E EIk, KS

250 North Water Suite 300
Wichita, KS 67202

Youngmeyer #1-35

Job Ticket: 62808

DST#: 2

ATTN: Shauna Gunzelman/Jef

Test Start: 2018.07.23 @ 13:30:00

GENERAL INFORMATION:

Formation: **Lower Mississippian**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:28:10

Time Test Ended: 21:09:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Jimmy Ricketts

Unit No: 80

Interval: **3067.00 ft (KB) To 3090.00 ft (KB) (TVD)**

Reference Elevations: 1581.00 ft (KB)

Total Depth: 3090.00 ft (KB) (TVD)

1572.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 9.00 ft

Serial #: 8369 Outside

Press@RunDepth: 11.31 psig @ 3068.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2018.07.23

End Date: 2018.07.23

Last Calib.: 2018.07.23

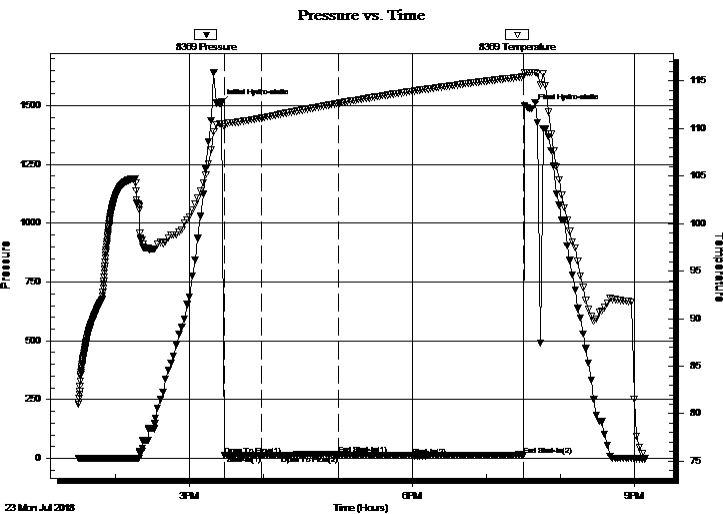
Start Time: 13:30:01

End Time: 21:09:30

Time On Btm: 2018.07.23 @ 15:24:30

Time Off Btm: 2018.07.23 @ 19:37:00

TEST COMMENT: IF - Weak blow building to 1/2" then dying to no blow
FF - No blow throughout



PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 1507.45 | 110.48 | Initial Hydro-static |
| 4 | 14.01 | 110.21 | Open To Flow (1) |
| 34 | 12.67 | 111.09 | Shut-In(1) |
| 96 | 16.64 | 112.64 | End Shut-In(1) |
| 97 | 12.01 | 112.65 | Open To Flow (2) |
| 156 | 11.31 | 113.90 | Shut-In(2) |
| 246 | 14.89 | 115.43 | End Shut-In(2) |
| 253 | 1487.34 | 115.87 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|---------------------|--------------|
| 5.00 | Drilling mud 100% M | 451.83 |
| | | |
| | | |
| | | |
| | | |

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co., Inc.

35-28S-8E EIk,KS

250 North Water Suite 300
Wichita, KS 67202

Youngmeyer #1-35

Job Ticket: 62808

DST#: 2

ATTN: Shauna Gunzelman/Jef

Test Start: 2018.07.23 @ 13:30:00

Tool Information

| | | | | |
|---------------------------|--------------------|-------------------------|----------------------------|------------------------------------|
| Drill Pipe: | Length: 2766.00 ft | Diameter: 3.80 inches | Volume: 38.80 bbl | Tool Weight: 2000.00 lb |
| Heavy Wt. Pipe: | Length: 0.00 ft | Diameter: inches | Volume: 0.00 bbl | Weight set on Packer: 22000.00 lb |
| Drill Collar: | Length: 305.00 ft | Diameter: 305.00 inches | Volume: 27561.87 bbl | Weight to Pull Loose: 108000.0 lb |
| | | | Total Volume: 27600.67 bbl | Tool Chased 2.00 ft |
| Drill Pipe Above KB: | 24.00 ft | | | String Weight: Initial 48000.00 lb |
| Depth to Top Packer: | 3067.00 ft | | | Final 48000.00 lb |
| Depth to Bottom Packer: | ft | | | |
| Interval between Packers: | 23.00 ft | | | |
| Tool Length: | 43.00 ft | | | |
| Number of Packers: | 2 | Diameter: 6.75 inches | | |
| Tool Comments: | | | | |

Tool Description

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths |
|---------------------------|--------------|------------|----------|------------|-------------------------------|
| Change Over Sub | 1.00 | | | 3048.00 | |
| Shut In Tool | 5.00 | | | 3053.00 | |
| Hydraulic tool | 5.00 | | | 3058.00 | |
| Packer | 4.00 | | | 3062.00 | 20.00 Bottom Of Top Packer |
| Packer | 5.00 | | | 3067.00 | |
| Stubb | 1.00 | | | 3068.00 | |
| Recorder | 0.00 | 8369 | Outside | 3068.00 | |
| Recorder | 0.00 | 8846 | Inside | 3068.00 | |
| Perforations | 17.00 | | | 3085.00 | |
| Bullnose | 5.00 | | | 3090.00 | 23.00 Bottom Packers & Anchor |
| Total Tool Length: | 43.00 | | | | |



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co., Inc.

35-28S-8E Eik, KS

250 North Water Suite 300
Wichita, KS 67202

Youngmeyer #1-35

Job Ticket: 62808

DST#: 2

ATTN: Shauna Gunzelman/Jef

Test Start: 2018.07.23 @ 13:30:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 46.00 sec/qt

Cushion Volume:

bbbl

Water Loss: in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|---------------------|---------------|
| 5.00 | Drilling mud 100% M | 451.834 |

Total Length: 5.00 ft Total Volume: 451.834 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

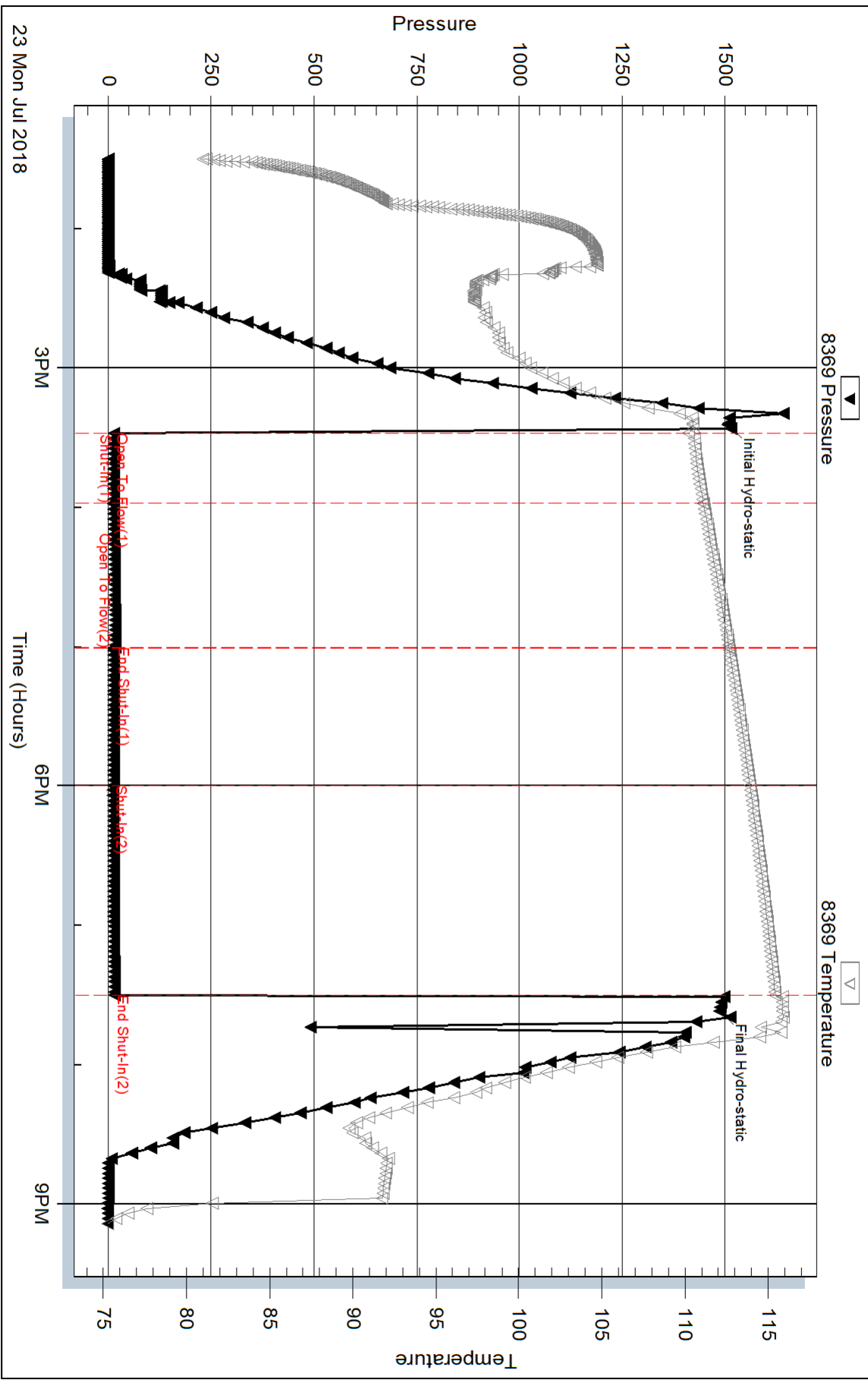
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time



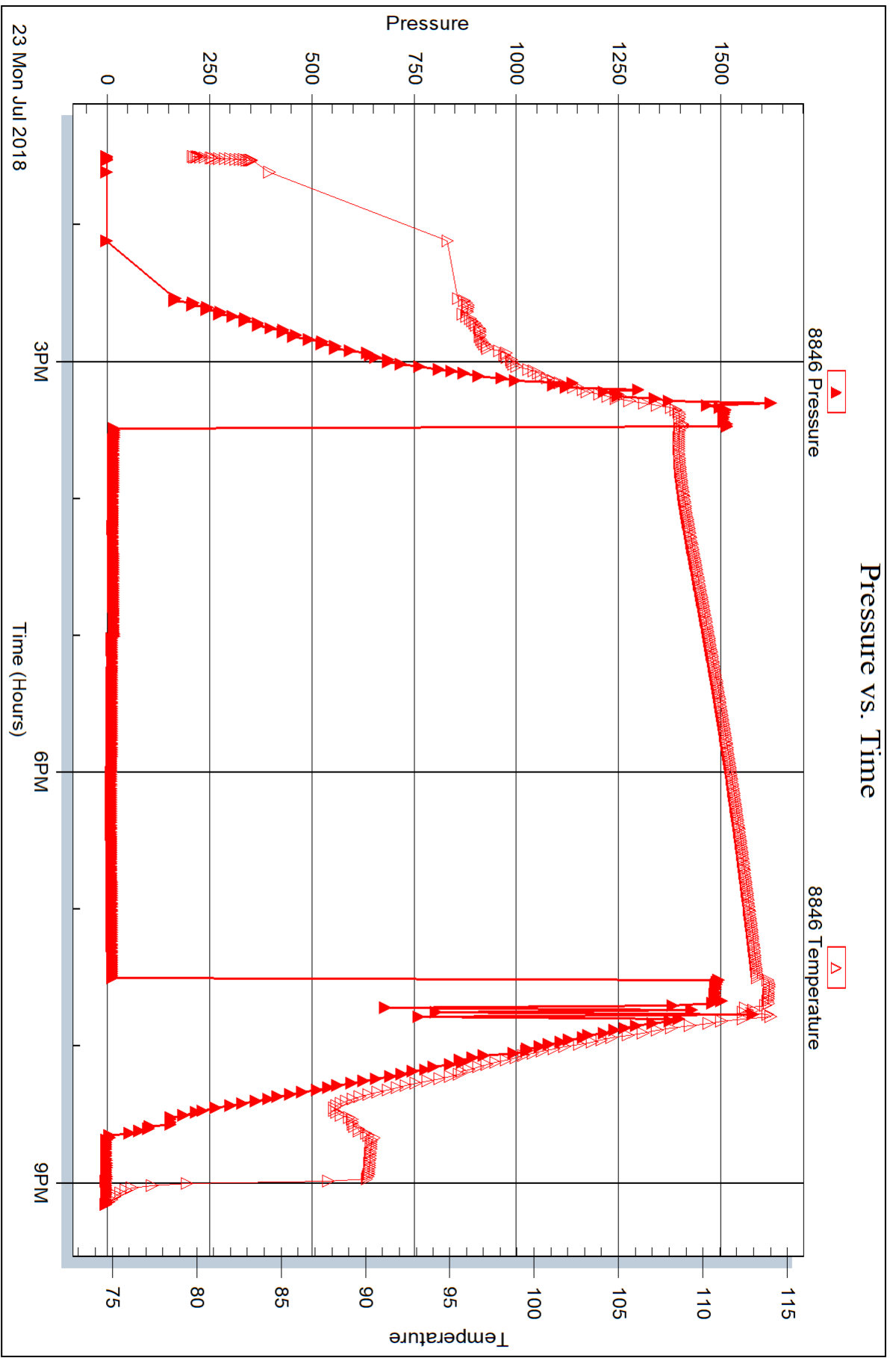
Serial #: 8846

Inside

Murfin Drilling Co., Inc.

Youngmeyer #1-35

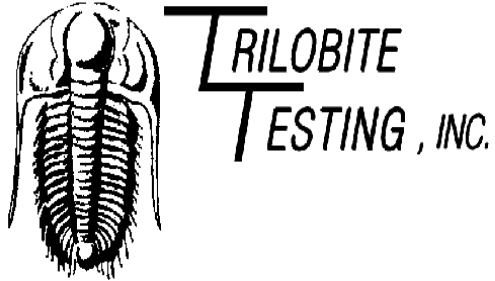
DST Test Number: 2



Triobite Testing, Inc

Ref. No: 62808

Printed: 2018.07.26 @ 15:52:40



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co., Inc.**

250 North Water Suite 300
Wichita, KS 67202

ATTN: Shauna Gunzelman/Jef

Youngmeyer #1-35

35-28S-8E Elk,KS

Start Date: 2018.07.24 @ 09:12:00

End Date: 2018.07.24 @ 17:05:00

Job Ticket #: 63809 DST #: 3

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

Printed: 2018.07.26 @ 15:52:20



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Co., Inc.

35-28S-8E EIk, KS

250 North Water Suite 300
Wichita, KS 67202

Youngmeyer #1-35

Job Ticket: 63809

DST#: 3

ATTN: Shauna Gunzelman/Jef

Test Start: 2018.07.24 @ 09:12:00

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:19:50

Time Test Ended: 17:05:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Jimmy Ricketts

Unit No: 80

Interval: 3193.00 ft (KB) To 3211.00 ft (KB) (TVD)

Reference Elevations: 1581.00 ft (KB)

Total Depth: 3211.00 ft (KB) (TVD)

1572.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 9.00 ft

Serial #: 8369 Outside

Press@RunDepth: 16.99 psig @ 3194.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2018.07.24

End Date:

2018.07.24

Last Calib.:

2018.07.24

Start Time: 09:12:01

End Time:

17:05:00

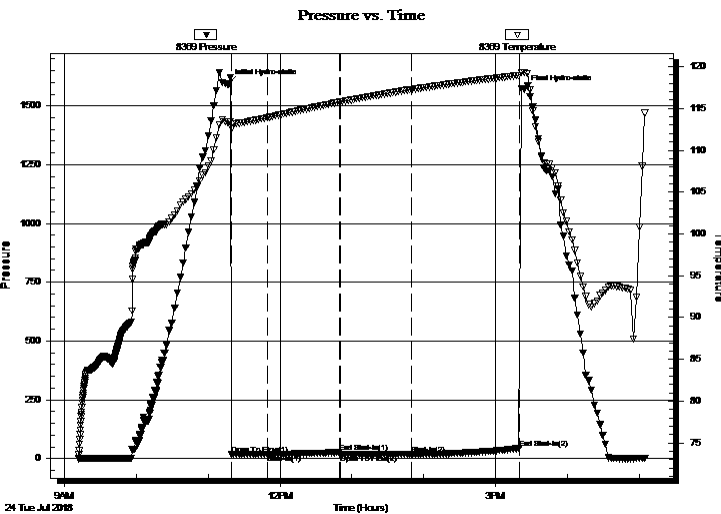
Time On Btm:

2018.07.24 @ 11:17:10

Time Off Btm:

2018.07.24 @ 15:23:50

TEST COMMENT: IF - Weak surface blow throughout
FF - No blow throughout



PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 1592.98 | 113.34 | Initial Hydro-static |
| 3 | 17.90 | 112.65 | Open To Flow (1) |
| 33 | 18.03 | 113.90 | Shut-In(1) |
| 93 | 25.66 | 115.74 | End Shut-In(1) |
| 93 | 16.20 | 115.76 | Open To Flow (2) |
| 153 | 16.99 | 117.25 | Shut-In(2) |
| 243 | 43.74 | 118.95 | End Shut-In(2) |
| 247 | 1570.26 | 119.29 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|---------------------|--------------|
| 5.00 | Drilling mud 100% M | 0.02 |
| | | |
| | | |
| | | |
| | | |

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co., Inc.

35-28S-8E EIk,KS

250 North Water Suite 300
Wichita, KS 67202

Youngmeyer #1-35

Job Ticket: 63809

DST#: 3

ATTN: Shauna Gunzelman/Jef

Test Start: 2018.07.24 @ 09:12:00

Tool Information

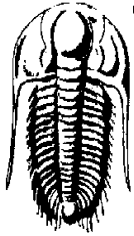
| | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe: | Length: 2892.00 ft | Diameter: 3.80 inches | Volume: 40.57 bbl | Tool Weight: 2400.00 lb |
| Heavy Wt. Pipe: | Length: 0.00 ft | Diameter: inches | Volume: 0.00 bbl | Weight set on Packer: 20000.00 lb |
| Drill Collar: | Length: 305.00 ft | Diameter: 2.25 inches | Volume: 1.50 bbl | Weight to Pull Loose: 51000.00 lb |
| | | | <u>Total Volume: 42.07 bbl</u> | Tool Chased 1.00 ft |
| Drill Pipe Above KB: | 32.00 ft | | | String Weight: Initial 48000.00 lb |
| Depth to Top Packer: | 3193.00 ft | | | Final 48000.00 lb |
| Depth to Bottom Packer: | ft | | | |
| Interval between Packers: | 18.00 ft | | | |
| Tool Length: | 46.00 ft | | | |
| Number of Packers: | 2 | Diameter: 6.75 inches | | |

Tool Comments:

Tool Description

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths |
|------------------|-------------|------------|----------|------------|-------------------------------|
| Change Over Sub | 1.00 | | | 3166.00 | |
| Shut In Tool | 5.00 | | | 3171.00 | |
| Hydraulic tool | 5.00 | | | 3176.00 | |
| Jars | 5.00 | | | 3181.00 | |
| Safety Joint | 3.00 | | | 3184.00 | |
| Packer | 4.00 | | | 3188.00 | 28.00 Bottom Of Top Packer |
| Packer | 5.00 | | | 3193.00 | |
| Stubb | 1.00 | | | 3194.00 | |
| Recorder | 0.00 | 8369 | Outside | 3194.00 | |
| Recorder | 0.00 | 8846 | Inside | 3194.00 | |
| Perforations | 12.00 | | | 3206.00 | |
| Bullnose | 5.00 | | | 3211.00 | 18.00 Bottom Packers & Anchor |

Total Tool Length: 46.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co., Inc.

35-28S-8E EIk, KS

250 North Water Suite 300
Wichita, KS 67202

Youngmeyer #1-35

Job Ticket: 63809

DST#: 3

ATTN: Shauna Gunzelman/Jef

Test Start: 2018.07.24 @ 09:12:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 47.00 sec/qt

Cushion Volume:

bbf

Water Loss: in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbf |
|--------------|---------------------|---------------|
| 5.00 | Drilling mud 100% M | 0.025 |

Total Length: 5.00 ft Total Volume: 0.025 bbf

Num Fluid Samples: 0

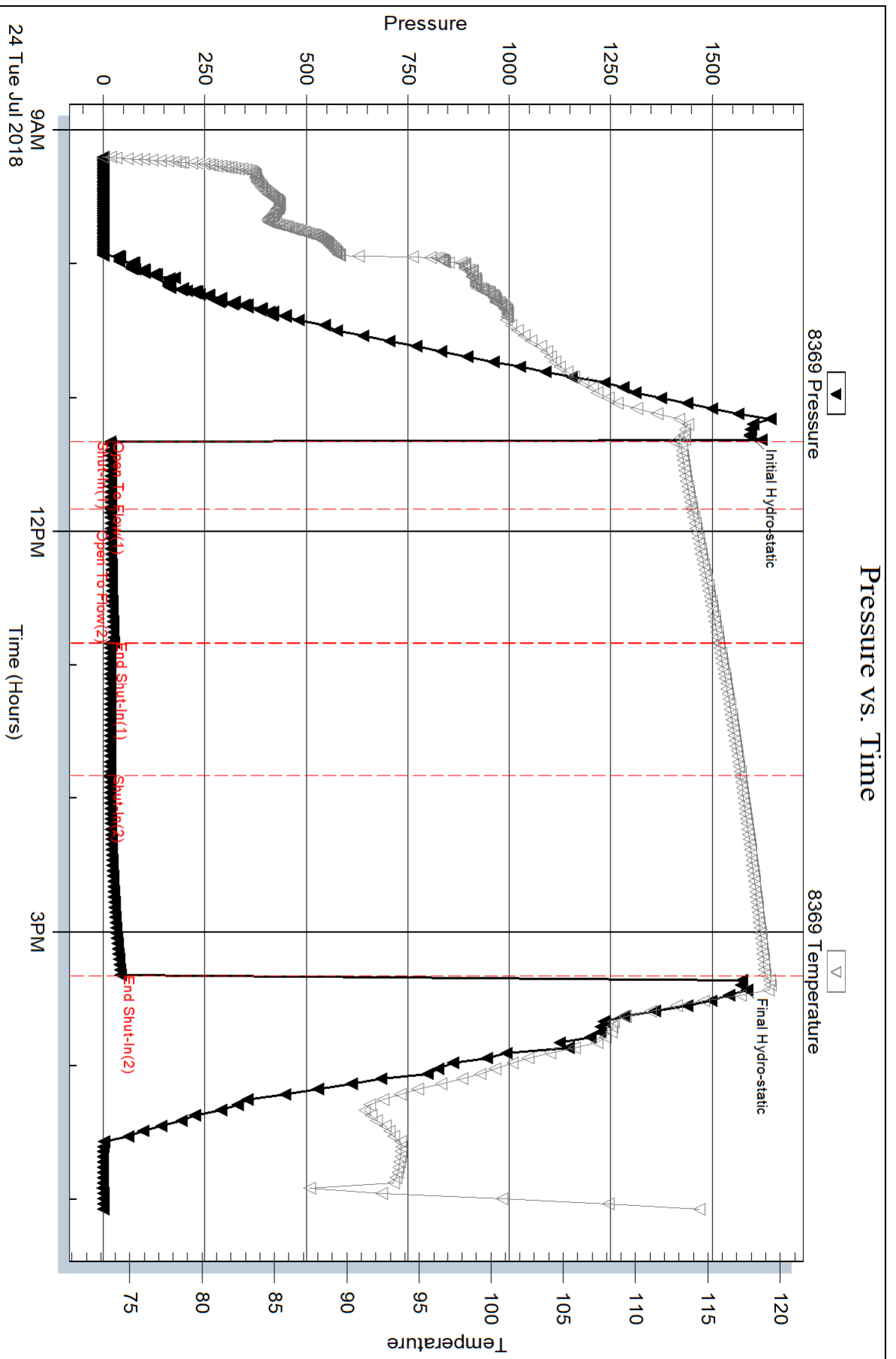
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



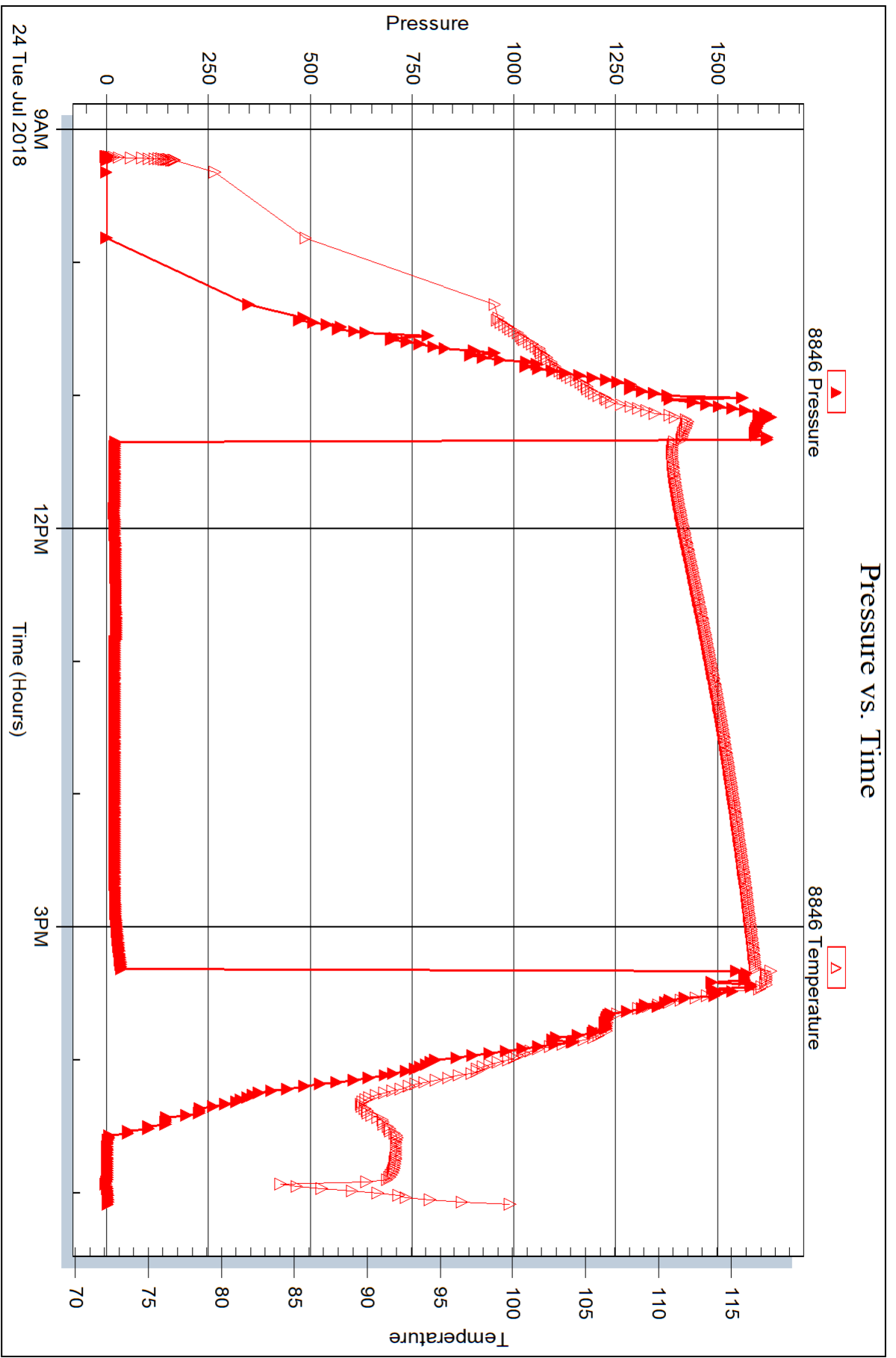
Serial #: 8846

Inside

Murfin Drilling Co., Inc.

Youngmeyer #1-35

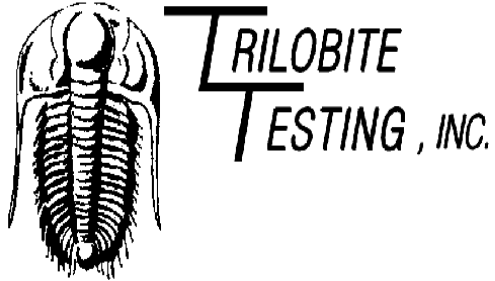
DST Test Number: 3



Trilobite Testing, Inc

Ref. No: 63809

Printed: 2018.07.26 @ 15:52:21



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co., Inc.**

250 North Water Suite 300
Wichita, KS 67202

ATTN: Shauna Gunzelman/Jef

Youngmeyer #1-35

35-28S-8E Elk,KS

Start Date: 2018.07.24 @ 22:38:00

End Date: 2018.07.25 @ 06:15:30

Job Ticket #: 63810 DST #: 4

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

Printed: 2018.07.26 @ 15:51:58



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Co., Inc.

35-28S-8E EIk, KS

250 North Water Suite 300
Wichita, KS 67202

Youngmeyer #1-35

Job Ticket: 63810

DST#: 4

ATTN: Shauna Gunzelman/Jef

Test Start: 2018.07.24 @ 22:38:00

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:05:50

Time Test Ended: 06:15:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Jimmy Ricketts

Unit No: 80

Interval: 3211.00 ft (KB) To 3220.00 ft (KB) (TVD)

Reference Elevations: 1581.00 ft (KB)

Total Depth: 3220.00 ft (KB) (TVD)

1572.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 9.00 ft

Serial #: 8369 Outside

Press@RunDepth: 21.77 psig @ 3212.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2018.07.24

End Date:

2018.07.25

Last Calib.:

2018.07.24

Start Time: 22:38:01

End Time:

06:15:30

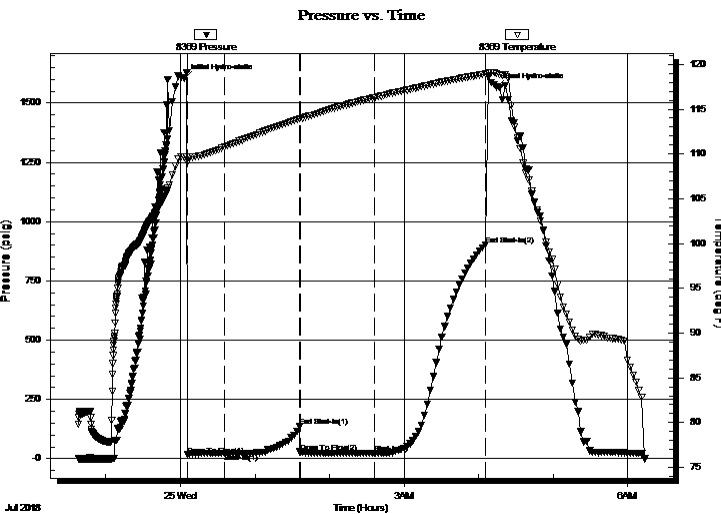
Time On Btm:

2018.07.25 @ 00:03:10

Time Off Btm:

2018.07.25 @ 04:14:30

TEST COMMENT: IF - Weak blow building to 1" then died to no blow
FF - No blow throughout



PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 1601.30 | 109.63 | Initial Hydro-static |
| 3 | 15.69 | 109.03 | Open To Flow (1) |
| 33 | 21.62 | 110.78 | Shut-In(1) |
| 93 | 134.65 | 113.92 | End Shut-In(1) |
| 94 | 28.02 | 113.92 | Open To Flow (2) |
| 153 | 21.77 | 116.29 | Shut-In(2) |
| 243 | 901.92 | 118.91 | End Shut-In(2) |
| 252 | 1566.96 | 118.98 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|---------------------|--------------|
| 5.00 | Drilling mud 100% M | 0.02 |
| | | |
| | | |
| | | |
| | | |

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co., Inc.

35-28S-8E EIk, KS

250 North Water Suite 300
Wichita, KS 67202

Youngmeyer #1-35

Job Ticket: 63810

DST#: 4

ATTN: Shauna Gunzelman/Jef

Test Start: 2018.07.24 @ 22:38:00

Tool Information

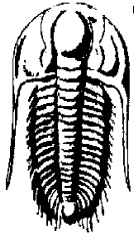
| | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe: | Length: 2892.00 ft | Diameter: 3.80 inches | Volume: 40.57 bbl | Tool Weight: 2300.00 lb |
| Heavy Wt. Pipe: | Length: 0.00 ft | Diameter: inches | Volume: 0.00 bbl | Weight set on Packer: 20000.00 lb |
| Drill Collar: | Length: 305.00 ft | Diameter: 2.25 inches | Volume: 1.50 bbl | Weight to Pull Loose: 53000.00 lb |
| | | | <u>Total Volume: 42.07 bbl</u> | Tool Chased 1.00 ft |
| Drill Pipe Above KB: | 14.00 ft | | | String Weight: Initial 48000.00 lb |
| Depth to Top Packer: | 3211.00 ft | | | Final 48000.00 lb |
| Depth to Bottom Packer: | ft | | | |
| Interval between Packers: | 9.00 ft | | | |
| Tool Length: | 37.00 ft | | | |
| Number of Packers: | 2 | Diameter: 6.75 inches | | |

Tool Comments:

Tool Description

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths |
|------------------|-------------|------------|----------|------------|------------------------------|
| Change Over Sub | 1.00 | | | 3184.00 | |
| Shut In Tool | 5.00 | | | 3189.00 | |
| Hydraulic tool | 5.00 | | | 3194.00 | |
| Jars | 5.00 | | | 3199.00 | |
| Safety Joint | 3.00 | | | 3202.00 | |
| Packer | 4.00 | | | 3206.00 | 28.00 Bottom Of Top Packer |
| Packer | 5.00 | | | 3211.00 | |
| Stubb | 1.00 | | | 3212.00 | |
| Recorder | 0.00 | 8369 | Outside | 3212.00 | |
| Recorder | 0.00 | 8846 | Inside | 3212.00 | |
| Perforations | 6.00 | | | 3218.00 | |
| Bullnose | 2.00 | | | 3220.00 | 9.00 Bottom Packers & Anchor |

Total Tool Length: 37.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co., Inc.

35-28S-8E Eik, KS

250 North Water Suite 300
Wichita, KS 67202

Youngmeyer #1-35

Job Ticket: 63810

DST#: 4

ATTN: Shauna Gunzelman/Jef

Test Start: 2018.07.24 @ 22:38:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.99 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 10500.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|---------------------|---------------|
| 5.00 | Drilling mud 100% M | 0.025 |

Total Length: 5.00 ft Total Volume: 0.025 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

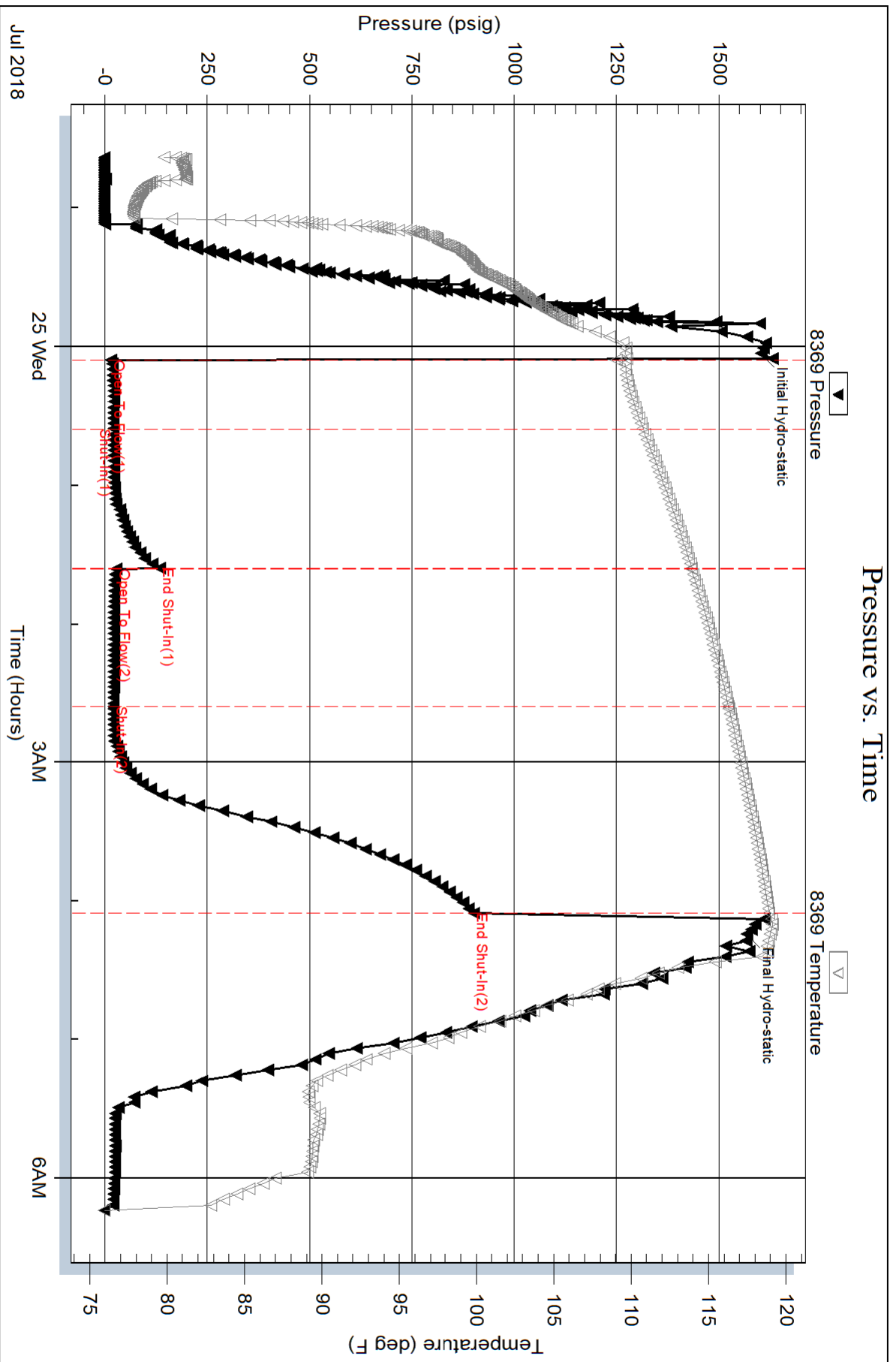
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time



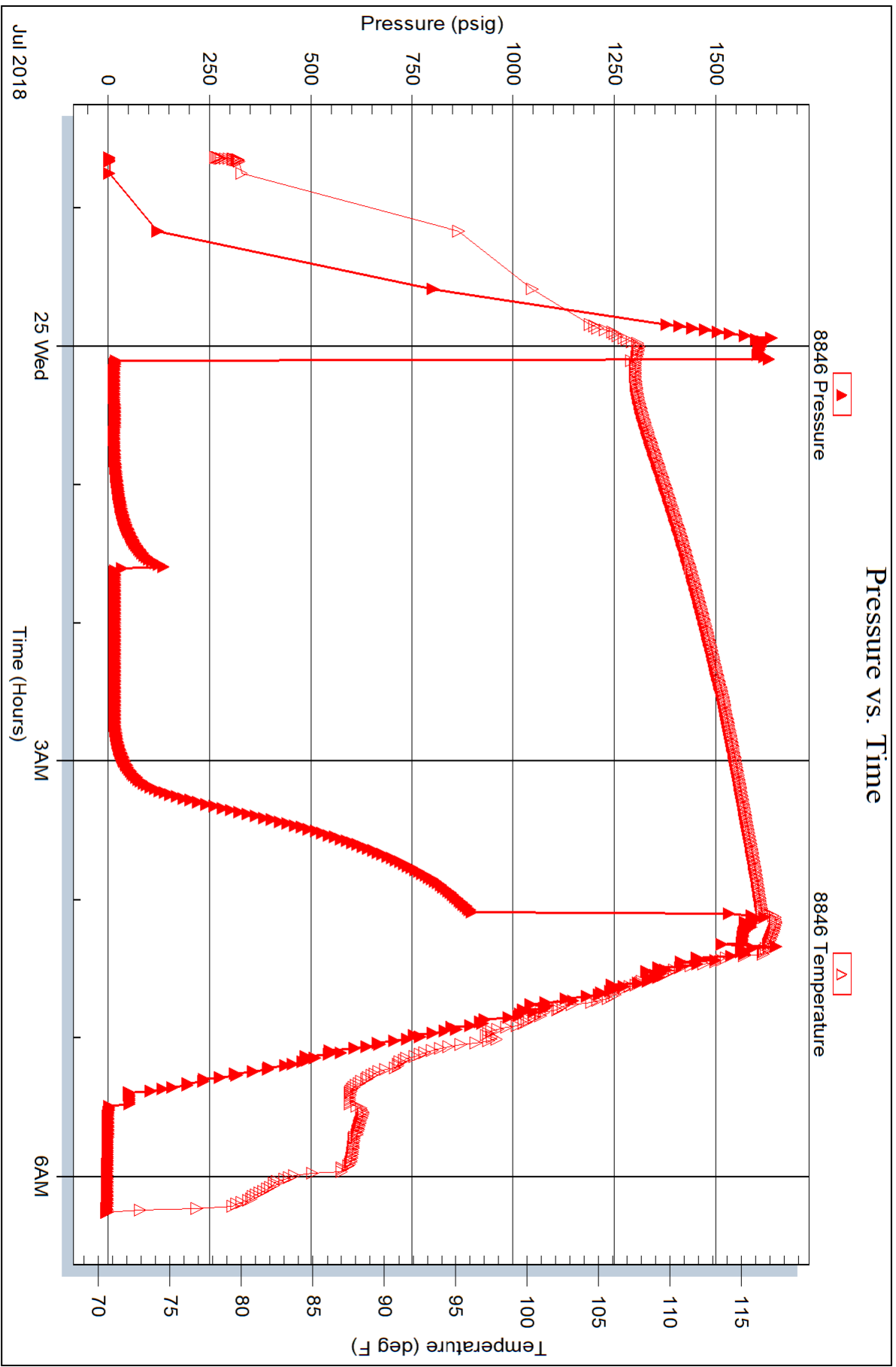
Serial #: 8846

Inside

Murfin Drilling Co., Inc.

Youngmeyer #1-35

DST Test Number: 4





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 63807

Well Name & No. Youngmeyer # 1-35 Test No. 1 Date 7-21-18
 Company Murfin Drilling Co, Inc Elevation 1581 KB 1573 GL
 Address 250 North Water ~~St~~ Suite 300, Wichita, Ks. 67202
 Co. Rep / Geo. Stacy Gurdzman / Jeff Christian Rig C+G Drilling #2
 Location: Sec. 35 Twp 28 S Rge. 8 E Co. EIK State KS

Interval Tested 2244-2256 Zone Tested Kansas City L
 Anchor Length 12 Drill Pipe Run 1952 Mud Wt. 9.4
 Top Packer Depth 2239 Drill Collars Run 305 Vis 46
 Bottom Packer Depth 2244 Wt. Pipe Run 0 WL _____
 Total Depth 2256 Chlorides _____ ppm System LCM _____

Blow Description IF-weak blow building to strong blow 20 mins into IFP
FF-weak blow building to strong blow 31 mins. into FFP

| Rec | Feet of | %gas | %oil | %water | %mud |
|------------|----------------------|------------|------------|--------------|------------|
| <u>400</u> | <u>Mud cut water</u> | | | <u>91</u> | <u>9</u> |
| 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 400 BHT 105 Gravity _____ API RW 0.069 @ 85.7 °F Chlorides 92000 ppm

(A) Initial Hydrostatic 1077 Test 1050 T-On Location 0600
 (B) First Initial Flow 15 Jars _____ T-Started 0640
 (C) First Final Flow 124 Safety Joint _____ T-Open 0821
 (D) Initial Shut-In 682 Circ Sub _____ T-Pulled 1221
 (E) Second Initial Flow 130 Hourly Standby _____ T-Out 1400
 (F) Second Final Flow 208 Mileage 302rt RT 116 Comments _____
 (G) Final Shut-In 679 Sampler _____
 (H) Final Hydrostatic 1064 Straddle _____
 Ruined Shale Packer _____
 Ruined Packer _____
 Extra Copies _____

Initial Open 30
 Initial Shut-In 60
 Final Flow 60
 Final Shut-In 90
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____
 Sub Total 1352 Sub Total 1352
 Total 1352 MP/DST Disc't _____

Approved By _____ Our Representative Jimmy Richbets

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 63808

Well Name & No. Youngmeyer #1-35 Test No. 2 Date 7-23-18
 Company Murfin Drilling Co, Inc Elevation 1581 KB 1572 GL
 Address 250 N. Water Suite 300 Wichita, KS 67202
 Co. Rep/Geo. Shanna Gunzelman / Jeff Christian Rig C+G Drilling #12
 Location: Sec. 35 Twp 28 S Rge. 8 E Co. EIK State KS

Interval Tested 3067-3090 Zone Tested Lower Mississippian
 Anchor Length 23' Drill Pipe Run 2766 Mud Wt. 9.5
 Top Packer Depth 3062 Drill Collars Run 305 Vls 46
 Bottom Packer Depth 3067 Wt. Pipe Run 0 WL _____
 Total Depth 3090 Chlorides _____ ppm System LCM _____
 Blow Description IF-Weak blow building to 1/2 inch dying to no blow FFP
FF- No blow FFP

| Rec | Feet of | %gas | %oil | %water | %mud |
|----------|---------------------|------|------|------------|------|
| <u>S</u> | <u>Drilling Mud</u> | | | <u>100</u> | |
| Rec | Feet of | %gas | %oil | %water | %mud |
| Rec | Feet of | %gas | %oil | %water | %mud |
| Rec | Feet of | %gas | %oil | %water | %mud |
| Rec | Feet of | %gas | %oil | %water | %mud |

Rec Total S BHT 116 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1507 Test 1050 T-On Location 1230
 (B) First Initial Flow 14 Jars _____ T-Started 1330
 (C) First Final Flow 13 Safety Joint _____ T-Open 1528
 (D) Initial Shut-In 17 Circ Sub _____ T-Pulled 1930
 (E) Second Initial Flow 12 Hourly Standby _____ T-Out 2100
 (F) Second Final Flow 11 Mileage 76 RT 76 Comments _____
 (G) Final Shut-In 15 Sampler _____
 (H) Final Hydrostatic 1487 Straddle _____
 Ruined Shale Packer _____
 Ruined Packer _____
 Extra Copies _____

Initial Open 30
 Initial Shut-In 62
 Final Flow 60
 Final Shut-In 90
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____
 Sub Total 1126 Sub Total 1126
 Sub Total 0 Total 1126
 MP/DST Disc't _____

Approved By _____ Our Representative Jimmy Ricketts
 Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 63809

Well Name & No. Young meyer #1-35 Test No. 3 Date 7-24-18
 Company Martin Drilling Co, Inc. Elevation 1581 KB 1572 GL
 Address 250 N. Water Suite 300 Wichita KS 67202
 Co. Rep / Geo. Shauna Gunzelman / Jeff Christian Rig C+G Drilling #2
 Location: Sec. 35 Twp 28 S Rge. 8E Co. E1K State KS

Interval Tested 3193-3211 Zone Tested Arbuckle
 Anchor Length 18' Drill Pipe Run 2892 Mud Wt. 9.6
 Top Packer Depth 3188 Drill Collars Run 305 Vis 47
 Bottom Packer Depth 3193 Wt. Pipe Run 0 WL _____
 Total Depth 3211 Chlorides _____ ppm System LCM _____
 Blow Description IF-Weak surface blow throughout IFP
FF-No blow throughout FFP

| Rec | Feet of | %gas | %oil | %water | %mud |
|----------|---------------------|------|------|------------|------|
| <u>5</u> | <u>Drilling mud</u> | | | <u>100</u> | |
| Rec | Feet of | %gas | %oil | %water | %mud |
| Rec | Feet of | %gas | %oil | %water | %mud |
| Rec | Feet of | %gas | %oil | %water | %mud |
| Rec | Feet of | %gas | %oil | %water | %mud |

Rec Total 5 BHT 119 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

| | | |
|-------------------------------------|---|--|
| (A) Initial Hydrostatic <u>1593</u> | <input checked="" type="checkbox"/> Test <u>1050</u> | T-On Location <u>0840</u> |
| (B) First Initial Flow <u>18</u> | <input checked="" type="checkbox"/> Jars <u>250</u> | T-Started <u>0912</u> |
| (C) First Final Flow <u>18</u> | <input checked="" type="checkbox"/> Safety Joint <u>75</u> | T-Open <u>1120</u> |
| (D) Initial Shut-In <u>26</u> | <input type="checkbox"/> Circ Sub _____ | T-Pulled <u>1520</u> |
| (E) Second Initial Flow <u>16</u> | <input type="checkbox"/> Hourly Standby _____ | T-Out <u>1700</u> |
| (F) Second Final Flow <u>17</u> | <input checked="" type="checkbox"/> Mileage <u>76</u> <u>RT76</u> | Comments _____ |
| (G) Final Shut-In <u>44</u> | <input type="checkbox"/> Sampler _____ | _____ |
| (H) Final Hydrostatic <u>1570</u> | <input type="checkbox"/> Straddle _____ | <input type="checkbox"/> Ruined Shale Packer _____ |
| | <input type="checkbox"/> Shale Packer _____ | <input type="checkbox"/> Ruined Packer _____ |
| Initial Open <u>30</u> | <input type="checkbox"/> Extra Packer _____ | <input type="checkbox"/> Extra Copies _____ |
| Initial Shut-In <u>60</u> | <input type="checkbox"/> Extra Recorder _____ | Sub Total <u>0</u> |
| Final Flow <u>60</u> | <input type="checkbox"/> Day Standby _____ | Total <u>1451</u> |
| Final Shut-In <u>90</u> | <input type="checkbox"/> Accessibility _____ | MP/DST Disc't _____ |
| | Sub Total <u>1451</u> | |

Approved By _____ Our Representative Jimmy Dickel
 Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 63810

Well Name & No. Youngmeyer # 1-35 Test No. 4 Date 7-25-18
 Company Martin Drilling, Co., Inc. Elevation 1581 KB 1572 GL
 Address 250 N. Water Suite 300 Wichita, KS. 67202
 Co. Rep / Geo. Shaun Ganzelman / Jeff Christian Rig C & G Drilling #2
 Location: Sec. 35 Twp 28 S Rge. 8 E Co. Elk State KS.

Interval Tested 3211-3220 Zone Tested Arbuckle
 Anchor Length 9' Drill Pipe Run 2892 Mud Wt. 9.6
 Top Packer Depth 3206 Drill Collars Run 305 Vis 52
 Bottom Packer Depth 3211 Wt. Pipe Run 0 WL 9.0
 Total Depth 3220 Chlorides 10,500 ppm System LCM
 Blow Description IF-Weak blow building to 1 inch then dying to no blow FFP
FF-No blow FFP

| Rec | Feet of | %gas | %oil | %water | %mud |
|----------|---------------------|------|------|------------|------|
| <u>5</u> | <u>Drilling mud</u> | | | <u>100</u> | |
| | | | | | |
| | | | | | |
| | | | | | |

Rec Total 5 BHT 119 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

| | | |
|-------------------------------------|---|--|
| (A) Initial Hydrostatic <u>1601</u> | <input checked="" type="checkbox"/> Test <u>1050</u> | T-On Location <u>2200</u> |
| (B) First Initial Flow <u>16</u> | <input checked="" type="checkbox"/> Jars <u>250</u> | T-Started <u>2238</u> |
| (C) First Final Flow <u>22</u> | <input checked="" type="checkbox"/> Safety Joint <u>75</u> | T-Open <u>0006</u> |
| (D) Initial Shut-In <u>135</u> | <input type="checkbox"/> Circ Sub _____ | T-Pulled <u>0406</u> |
| (E) Second Initial Flow <u>28</u> | <input type="checkbox"/> Hourly Standby _____ | T-Out <u>0600</u> |
| (F) Second Final Flow <u>22</u> | <input checked="" type="checkbox"/> Mileage <u>76 RT 76</u> | Comments _____ |
| (G) Final Shut-In <u>902</u> | <input type="checkbox"/> Sampler _____ | |
| (H) Final Hydrostatic <u>1567</u> | <input type="checkbox"/> Straddle _____ | <input type="checkbox"/> Ruined Shale Packer _____ |
| | <input type="checkbox"/> Shale Packer _____ | <input type="checkbox"/> Ruined Packer _____ |
| | <input type="checkbox"/> Extra Packer _____ | <input type="checkbox"/> Extra Copies _____ |
| | <input type="checkbox"/> Extra Recorder _____ | Sub Total <u>0</u> |
| | <input type="checkbox"/> Day Standby _____ | Total <u>1451</u> |
| | <input type="checkbox"/> Accessibility _____ | MP/DST Disc't _____ |
| | Sub Total <u>1451</u> | |

Approved By Jeff Christ Our Representative Jimmy Dickel

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements of opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

MDCI
 Youngmeyer #1-35
 330 FSL 330 FWL
 Sec. 35-T28S-R8E
 1581' KB

| Formation | Sample tops | Datum | Ref | Log Tops | Datum | Ref |
|-------------|-------------|-------|-----|----------|-------|-----|
| Heebner | 1366 | +215 | -35 | 1363 | +218 | -32 |
| Lansing | 1741 | -160 | -25 | 1736 | -155 | -20 |
| Kansas City | 2075 | -494 | -25 | 2076 | -495 | -26 |
| Mound City | 2279 | -698 | -29 | 2263 | -682 | -13 |
| Altamont | 2400 | -819 | -27 | 2396 | -815 | -23 |
| Ft Scott | 2526 | -945 | -25 | 2520 | -939 | -19 |
| Oakley | 2633 | -1052 | -25 | 2628 | -1047 | -20 |
| Mississippi | 2856 | -1275 | -36 | 2852 | -1271 | -32 |
| B. Cowley | 3076 | -1495 | -66 | 3074 | -1493 | -64 |
| Arbuckle | 3200 | -1619 | -10 | 3204 | -1623 | -14 |
| RTD | 3290 | -1709 | | | | |
| LTD | | | | 3285 | -1704 | |

TREATMENT REPORT



HURRICANE SERVICES INC

| | | | | | |
|--------------|--------------------|-------|-----------|-----------|----------|
| Customer: | Murfin Drilling Co | Date: | 7/26/2018 | Ticket #: | ICT 1238 |
| Field Rep: | Judd | | | | |
| Address: | | | | | |
| City, State: | | | | | |
| County, Zip: | | | | | |

| | | | | | |
|------------------|-----------------|---------------|--------------------|------------------|-------|
| Field Order No.: | | Open Hole: | 3210' 7.875" | Perf Depths (ft) | Perfs |
| Well Name: | Youngmeyer 1-35 | Casing Depth: | | | |
| Location: | Beaumont, KS | Casing Size: | | | |
| Formation: | Arbuckle | Tubing Depth: | 3206 2866 2075 496 | | |
| Type of Service: | PTA | Tubing Size: | | | |
| Well Type: | Oil | Liner Depth: | | | |
| Age of Well: | Now | Liner Size: | | | |
| Packer Type: | | Liner Top: | | | |
| Packer Depth: | | Liner Bottom: | | | |
| Treatment Via: | Drill pipe | Total Depth: | | | |
| | | | | Total Perfs | 0 |

| TIME | INJECTION RATE | | PRESSURE | | REMARKS | PROP (lbs) | HCL (gls) | FLUID (bbbls) |
|---------------|----------------|--------|----------|---------|--|------------|-----------|---------------|
| | FLUID | N2/CO2 | STP | ANNULUS | | | | |
| | | | | | On location safety meeting. Spot in and rig up | | | |
| | | | | | Hook up to drill pipe @ 3206' | | | |
| | 3.0 | | 200.0 | | Pump water | | | 8.50 |
| | 3.0 | | 200.0 | | Mix and pump cement | | | 3.79 |
| | 3.0 | | 200.0 | | Pump water | | | 3.00 |
| | 3.0 | | 200.0 | | Pump mud | | | 25.00 |
| | | | | | Pipe @ 2856' | | | |
| | 3.0 | | 200.0 | | Pump water | | | 8.50 |
| | 3.0 | | 200.0 | | Mix and pump cement | | | 3.79 |
| | 3.0 | | 200.0 | | Pump water | | | 3.00 |
| | 3.0 | | 200.0 | | Pump mud | | | 22.00 |
| | | | | | Pipe @ 2075' | | | |
| | 3.0 | | 150.0 | | Pump water | | | 8.50 |
| | 3.0 | | 150.0 | | Mix and pump cement | | | 3.79 |
| | 3.0 | | 150.0 | | Pump water | | | 3.00 |
| | 3.0 | | 150.0 | | Pump mud | | | 13.00 |
| TOTAL: | | | | | | | | 158.55 |

| SUMMARY | | | |
|--------------|--------------|---------|---------|
| Max Fl. Rate | Avg Fl. Rate | Max PSI | Avg PSI |
| 3.0 | 2.9 | 200.0 | 163.3 |

| PRODUCTS USED |
|-------------------|
| 220 Sacks 60/40/4 |

Treater: Kerix Noller

Customer: Judd

Jeff Christian

PETROLEUM GEOLOGIST

Wichita, Kansas

| | | | |
|--|--|-------------------------------------|--|
| GEOLOGICAL REPORT | | DRILLING TIME AND SAMPLE LOG | |
| OPERATOR: MUEFFIN DRILLING COMPANY | | ELEVATIONS | |
| LEASE: YOUNGMAYER # 1-35 | | 40' 1881' | |
| LOCATION: 330' F.L. & 330' E.W. | | CL: 1572' | |
| SEC. 35 TWP. 28 S R. 8 E | | RESURFACING | |
| COUNTY EIK STATE KANSAS | | CASING RECORD | |
| FIELD WILD CAT | | Operator: NONE | |
| API# 15-049-22617 | | Scales: 2" 8" @ 40' | |
| CONTRACTOR C.A.G. P.O. NO. 2 | | WELLS: NONE | |
| DRILLING STARTED 07/19/2018 COMPLETED 07/25/2018 | | Production Name: | |
| MUD/DISPLACED 1000 MUD TYPE CHEMICAL | | ELECTRICAL SURVES | |
| DRILLING TIME FROM 1000 TO 1000 | | TO RTD | |
| SHAPLESS EXAMINED FROM 1000 TO 1000 | | TO RTD | |
| DIP/CORRECTION FROM 1000 TO 1000 | | TO RTD | |
| DIP/CORRECTION FROM 1000 TO 1000 | | TO RTD | |

| | | | | | | | |
|-------------|--------------|--------------|------|-------|--------|------|------|
| FORMATION | LOG | DATE | TIME | TEMP. | SAMPLE | DATE | TIME |
| HEBNER | 1363' (-218) | 1366' (-215) | | | | | |
| LANSING | 1736' (-493) | 1741' (-494) | | | | | |
| KANSAS CITY | 2076' (-493) | 2078' (-494) | | | | | |
| PAWNEE | 2483' (-482) | 2479' (-488) | | | | | |
| FRANKLIN | 2482' (-483) | 2486' (-486) | | | | | |
| ROCKWELL | 2982' (-483) | 2981' (-488) | | | | | |
| KINDERHOOK | 3147' (-464) | 3195' (-472) | | | | | |
| ARBUCKLE | 3203' (-462) | 3190' (-472) | | | | | |

| DATE | 7:00 AM DEPTH | REMARKS |
|---------|---------------|---|
| 7/19/18 | 0 | Spud 7:30 am |
| 7/20/18 | 1064' | Drlg |
| 7/21/18 | 2256' | TOH for DST # 1 dev. 1 deg. |
| 7/22/18 | 2642' | Drlg. |
| 7/23/18 | 3070' | Drlg. |
| 7/24/18 | 3200' | Drlg. dev 1.18 deg @ 3090' |
| 7/25/18 | 3220' | TIH offer DST # 4 RTD 3290' @ 12:00 pm dev. 1.18 deg. Finished Logging 10:00 pm |

Remarks
 The Youngmeyer # 1-35 was declared dry and abandoned.
 All prospective zones were drill stem tested and condemned.
 Electric log measurements correlate 4' to 5' high compared to rotary measurements.
 Drilling samples delivered to the Kansas Geological Survey in Wichita, KS.
 Respectfully Submitted,
Jeff Christian
 Jeff Christian

