

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)</i> <i>(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 | Griffin, Charles N. |
| Well Name | SPRINGER 3 |
| Doc ID | 1322621 |

Tops

| Name | Top | Datum |
|---------------|------|-------|
| Lecompton | 3464 | -1893 |
| Elgin | 3497 | -1926 |
| Heebner | 3680 | -2109 |
| Lansing | 3863 | -2292 |
| Stark | 4250 | -2679 |
| Base KC | 4331 | -2760 |
| Mississippian | 4419 | -2848 |
| Kinderhook | 4613 | -3042 |
| Viola | 4718 | -3147 |
| Simpson Sand | 4814 | -3243 |

| | |
|-----------|------------------------|
| Form | ACO1 - Well Completion |
| Operator | Griffin, Charles N. |
| Well Name | SPRINGER 3 |
| Doc ID | 1322621 |

Perforations

| Shots Per Foot | Perforation Record | Material Record | Depth |
|----------------|--------------------|------------------|-------|
| 3 | 4829-4835 | 250 gal 7.5% MCA | |

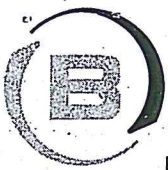
| | | |
|------------------------------------|----------------------|---------------------------------------|
| Customer Griffon Management | Lease No. | Date 10-25-16 |
| Lease Springer | Well # 3 | |
| Field Order # 14678 | Station Pratt | Casing 8 5/8 Depth 254 |
| Type Job Z42 8 5/8 SURFACE | Formation | County B A B-1 State KS |
| | | Legal Description 34-32-12 |

| PIPE DATA | | PERFORATING DATA | | FLUID USED | | TREATMENT RESUME | |
|---------------------------|--------------|------------------|----|-------------------------------|------------|------------------|------------------|
| Casing Size 8 5/8 | Tubing Size | Shots/Ft | | Acid CMT 180 SW COMMON | RATE | PRESS | ISIP # CC |
| Depth 254 | Depth | From | To | Pre-Pad | Max | | 5 Min. |
| Volume 16.2 | Volume | From | To | Pad | Min | | 10 Min. |
| Max Press 300 | Max Press | From | To | Frac | Avg | | 15 Min. |
| Well Connection SV | Annulus Vol. | From | To | | HHP Used | | Annulus Pressure |
| Plug Depth 234 | Packer Depth | From | To | Flush 15.2 | Gas Volume | | Total Load |

Customer Representative **Chuck** Station Manager **Kevin Goolley** Treater **Mike Mattal**

| | | | | |
|----------------------------|-----------------|---------------|--------------|--------------|
| Service Units 37586 | ED4981 | 19843 | 70959 | 19862 |
| Driver Names MATTAL | FRANKLIN | WILLIE | | |

| Time | Casing Pressure | Tubing Pressure | Bbls. Pumped | Rate | Service Log |
|-------|-----------------|-----------------|--------------|------|----------------------------------|
| 9:20 | | | | | ON LOCATION / SAFETY MEETING |
| 10:35 | | | | | RUN 8 5/8 CSNG. |
| 11:25 | | | | | CSNG. ON BOTTOM |
| 11:30 | | | | | HOOK TO CSNG / BREAK CIRC W. RIG |
| 11:38 | 250 | | 3 | 4 | PUMP 3 bbl WANO. |
| 11:39 | 250 | | 3.8 | 5 | MIX 180 SW COMMON |
| 11:46 | 150 | | - | 4 | START DISPLACEMENT |
| 11:55 | 150 | | 15.2 | - | plug down / shut in well |
| | | | | | 10 BBL CMT TO PIT |
| | | | | | JOB COMPLETE |
| | | | | | THANK YOU! |
| | | | | | MIKE MATTAL |
| | | | | | DARIN + WILLIE |



BASICSM
ENERGY SERVICES
PRESSURE PUMPING & WIRELINE

10244 NE Hwy. 61
P.O. Box 8613
Pratt, Kansas 67124
Phone 620-672-1201

34-32-12

Jw. 02261989

FIELD SERVICE TICKET

1718 13874 A

DATE _____ TICKET NO. _____

| | | | | | | | | | |
|------------------------------|---------|---------------------------------------|-----|--|-----|----------------------------|-------|-------|-------|
| DATE OF JOB: 10/30/2016 | | DISTRICT: P19811, KCS | | NEW WELL <input checked="" type="checkbox"/> OLD WELL <input type="checkbox"/> PROD <input type="checkbox"/> INJ <input type="checkbox"/> WDW <input type="checkbox"/> CUSTOMER ORDER NO.: | | | | | |
| CUSTOMER: Griffin Management | | LEASE: Spronser | | WELL NO. 3 | | | | | |
| ADDRESS: | | COUNTY: Barber | | STATE: KCS | | | | | |
| CITY: | | STATE: | | SERVICE CREW: D. Green, Mr. Gray, Hanson | | | | | |
| AUTHORIZED BY: | | JOB TYPE: CNW / 5 1/2 Longstrings 242 | | | | | | | |
| EQUIPMENT# | HRS | EQUIPMENT# | HRS | EQUIPMENT# | HRS | TRUCK CALLED | DATE | AM/PM | TIME |
| 19843 | X 1 1/4 | | | | | | 10/30 | | 1:30 |
| 19862 | X 1/2 | | | | | ARRIVED AT JOB | 10/30 | AM/PM | 5:00 |
| | | | | | | START OPERATION | 10/30 | AM/PM | 10:30 |
| | | | | | | FINISH OPERATION | 10/30 | AM/PM | 11:15 |
| | | | | | | RELEASED | 10/30 | AM/PM | 12:00 |
| | | | | | | MILES FROM STATION TO WELL | 40 | | |

CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered).

The undersigned is authorized to execute this contract as an agent of the customer. As such, the undersigned agrees and acknowledges that this contract for services, materials, products, and/or supplies includes all of and only those terms and conditions appearing on the front and back of this document. No additional or substitute terms and/or conditions shall become a part of this contract without the written consent of an officer of Basic Energy Services LP.

SIGNED: *Andrew*
(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

| ITEM/PRICE REF. NO. | MATERIAL, EQUIPMENT AND SERVICES USED | UNIT | QUANTITY | UNIT PRICE | \$ AMOUNT |
|---------------------|---|--------|----------|------------|-----------|
| CP105 | AA2 Cement | SK | 175 | | 2,975 00 |
| CP103 | 60/40 P02 | SK | 36 | | 360 00 |
| CC102 | Cellulose | Lb | 44 | | 162 80 |
| CC111 | SS1+ | Lb | 823 | | 411 50 |
| CC112 | Cement Friction Reducer | Lb | 83 | | 498 00 |
| CC116 | Mag Chem 10CR | Lb | 495 | | 1,336 50 |
| CC201 | Gilsonite | Lb | 875 | | 586 25 |
| CF606 | Latch Down Plug & Baffle, 5 1/2 (Blue) | E9 | 1 | | 370 00 |
| CF1250 | Auto Fill Plug & Shoe 5 1/2 (Blue) | E9 | 1 | | 330 00 |
| CF1650 | Turbolizer, 5 1/2 (Blue) | E9 | 6 | | 510 00 |
| CT04 | Claymax KCL Substitute | GG1 | 4 | | 140 00 |
| CC151 | mud flush | GG1 | 500 | | 750 00 |
| E100 | Unit mileage chaise - pickups, SMS, US, etc. | Mi | 35 | | 157 50 |
| E101 | Heavy Equipment mileage | Mi | 70 | | 525 00 |
| E113 | PROPPANT and Bulic Delivery Chaises, portable | In/m | 334 | | 835 63 |
| CE205 | Depth Chaise, 4001 - S. 0001 | 4hr | 1 | | 2,520 00 |
| CE240 | Blending & Mixing Service Chaise | ST/25b | 1 | | 287 00 |
| CE30190 | PIVOTING, RPT. of 1/2 hr Chaise | Job | 1 | | 250 00 |
| SO03 | Service Supervisor, first 8 hrs on loc. | E9 | 1 | | 175 00 |

SUB TOTAL: 290.50

| CHEMICAL / ACID DATA: | | | |
|-----------------------|--|--|--|
| | | | |
| | | | |
| | | | |

| | | | |
|---------------------|------------|---------|----|
| SERVICE & EQUIPMENT | %TAX ON \$ | | |
| MATERIALS | %TAX ON \$ | | |
| Discounts | TOTAL | 6,106.2 | 88 |

SERVICE REPRESENTATIVE: *Kevin*

THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY: *Andrew*

(WELL OWNER OPERATOR CONTRACTOR OR AGENT)

FIELD SERVICE ORDER NO.

| | | | | | |
|---------------------------------|----------------------|-------------------------------|---------------|------------------|-------------|
| Customer Gr. Perm Management | Lease No. | Date 10/30/2016 | | | |
| Lease Springer | Well # 3 | | | | |
| Field Order # 13874 | Station P99H, KS | Casing 5 1/2 | Depth 4935 | County Borber | State KS |
| Type Job 242 - LOW COST PWC | Formation TD-4935 | Legal Description 34-32-12 | | | |

| PIPE DATA | | PERFORATING DATA | | FLUID USED | TREATMENT RESUME | | |
|----------------------|--------------|------------------|----|-----------------------|------------------|-------|------------------|
| Casing Size 5 1/2 | Tubing Size | Shots/Ft | | Acid | RATE | PRESS | ISIP 242 |
| Depth 4935 | Depth | From | To | Pre Pad | Max | | 5 Min. |
| Volume 116 | Volume | From | To | Pad | Min | | 10 Min. |
| Max Press | Max Press | From | To | Frac | Avg | | 15 Min. |
| Well Connection | Annulus Vol. | From | To | | HHP Used | | Annulus Pressure |
| Plug Depth 4902 | Packer Depth | From | To | Flush 2% KLL Water | Gas Volume | | Total Load |

| | | |
|---------------------------------|----------------------------------|---------------------------|
| Customer Representative Andy | Station Manager Kevin Gordley | Treater Darin Franklin |
|---------------------------------|----------------------------------|---------------------------|

| | | | | | | | | | |
|---------------|-------|--------|--------|--------|--------|--|--|--|--|
| Service Units | 92911 | 84981 | 19843 | 70959 | 19862 | | | | |
| Driver Names | Darin | McGrew | McGrew | Hanson | Hanson | | | | |

| Time | Casing Pressure | Tubing Pressure | Bbls. Pumped | Rate | Service Log |
|---------|-----------------|-----------------|--------------|-------|--|
| 5:00pm | | | | | ON LOCATION / Safety meeting Set 5 1/2 casing at 4935' |
| | | | | | 1755K BB2, 10% S91t, .25 lbs/cil Gilsonite .5% FR, 5 lbs/cil Gilsonite, 3% mgss Chem 100. 15.3 ppg, 1.36 veild, 5.32 water |
| 10:30pm | 300 | | 5 | 5 | Pump 3 bbl water |
| | 300 | | 12 | 5 | Pump 12 bbls mu & Flush |
| | 300 | | 5 | 5 | Pump 3 bbls water |
| | 400 | | 42 | 5 1/2 | mix 1755K cement Shut down Wash pump & lines Release Plug |
| | 200 | | 010 | 6 | Start displacement |
| | 700 | | 93 | 6 | Lift Pressure |
| | 800 | | 106 | 3 1/2 | slow rate |
| 11:15pm | 1500 | | 114 | 3 1/2 | Bump Plug Flow-Hold |
| | 100 | | 7 | 3 | plug Ret hole - 305K 60/40 po2 |
| | | | | | Job complete / Darin & crew Thank you!!! |

Company: Charles N. Griffin
 Address: PO Box 347
 Pratt, KS 67124-0347

OPERATOR

Contact Geologist:
 Contact Phone Nbr:

Well Name: #3 Springer
 Section 34-32S-12W
 Pool:
 State: Kansas

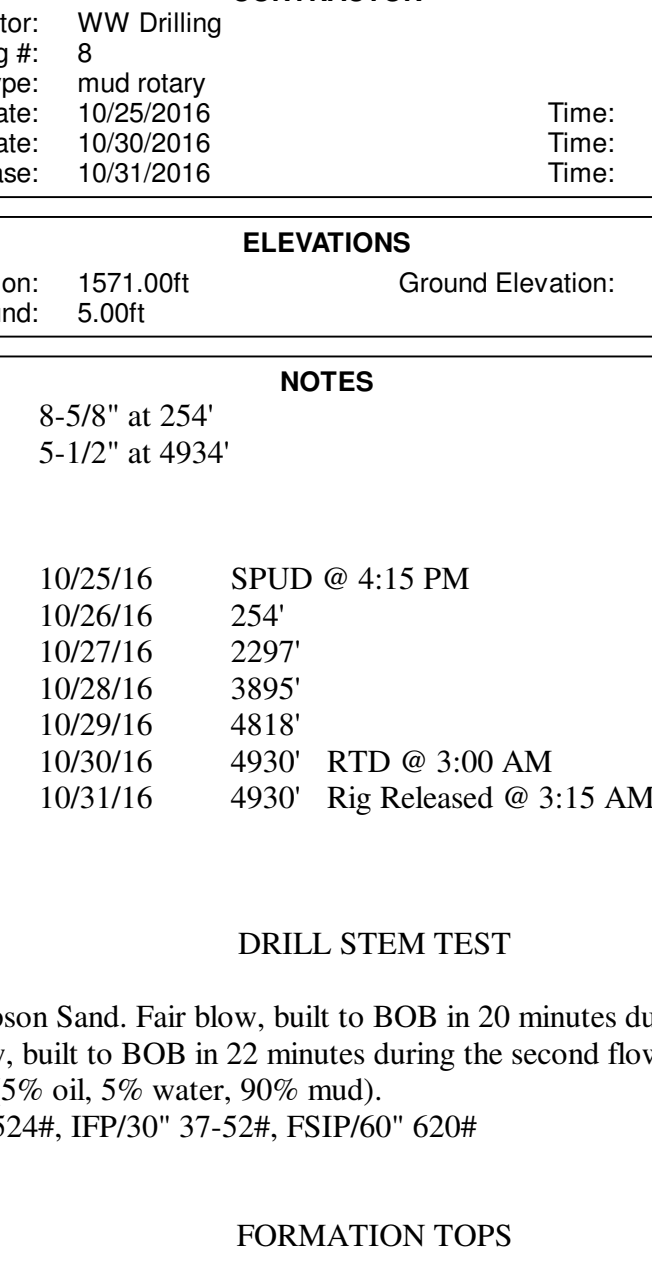
API: 15-007-24308
 Field: Toni-Mike
 Country: USA

Scale 1:240 Imperial
 Well Name: #3 Springer
 Surface Location: Section 34-32S-12W
 Bottom Location:
 License Number: 15-007-24308
 API:
 Spud Date: 10/25/2016
 Region: Barber County
 Drilling Completed: 10/30/2016
 Surface Coordinates: 379' FSL & 2217' FEL
 Bottom Hole Coordinates:
 Ground Elevation: 1566.00ft
 K.B. Elevation: 1571.00ft
 Logged Interval: 3400.00ft To: 4930.00ft
 Total Depth: 4930.00ft
 Formation:
 Drilling Fluid Type: Chemical (MudCo)

SURFACE CO-ORDINATES

Well Type: Vertical
 Longitude:
 N/S Co-ord: 379' FSL
 E/W Co-ord: 2217' FEL

LOGGED BY



Company: TerraTech Energy Service LLC.
 Address: 1632 S. West St. Suite 12
 Wichita, KS 67208

Phone Nbr: 316-617-3959
 Logged By: Geologist Name: Bruce Reed

CONTRACTOR

Contractor: WW Drilling
 Rig #: 8
 Rig Type: mud rotary
 Spud Date: 10/25/2016
 TD Date: 10/30/2016
 Rig Release: 10/31/2016
 Time: 4:15 PM
 Time: 3:00 AM
 Time: 3:15 AM

ELEVATIONS

K.B. Elevation: 1571.00ft
 K.B. to Ground: 5.00ft
 Ground Elevation: 1566.00ft

NOTES

Surface Casing: 8-5/8" at 254'
 Production Casing: 5-1/2" at 4934'

Daily Penetration:
 10/25/16 SPUD @ 4:15 PM
 10/26/16 254'
 10/27/16 2297'
 10/28/16 3895'
 10/29/16 4818'
 10/30/16 4930' RTD @ 3:00 AM
 10/31/16 4930' Rig Released @ 3:15 AM

DRILL STEM TEST

DST #1 4790'-4818'. Simpson Sand. Fair blow, built to BOB in 20 minutes during the first flow period. Fair blow, built to BOB in 22 minutes during the second flow period. Recovered: 70' SOWCM (5% oil, 5% water, 90% mud). IFFP/30" 22-37#, ISIP/45" 524#, IFFP/30" 37-52#, FSP/60" 620#

FORMATION TOPS

| Formation | Log Top | Datum | Sample Top | Datum | Comparison* |
|---------------|---------|-------|------------|-------|-------------|
| Lecompton | 3464' | -1893 | 3465' | -1894 | -6 |
| Elgin | 3497' | -1926 | 3497' | -1926 | -6 |
| Heebner | 3680' | -2109 | 3682' | -2111 | -9 |
| Lansing | 3863' | -2292 | 3863' | -2292 | +3 |
| Stark | 4250' | -2679 | 4249' | -2678 | -7 |
| Base KC | 4331' | -2760 | 4331' | -2760 | -4 |
| Mississippian | 4419' | -2848 | 4416' | -2845 | -4 |
| Kinderhook | 4613' | -3042 | 4608' | -3037 | flat |
| Viola | 4718' | -3147 | 4713' | -3142 | -1 |
| Simpson Sand | 4814' | -3243 | 4811' | -3240 | -4 |
| TOTAL DEPTH: | 4935' | -3364 | 4930' | -3359 | |

Reference well: Charles N. Griffin, #1 Springer, 990' FSL / 2,310' FWL, Section 34-32S-12W Barber County, Kansas

The second bench of the Simpson Sand in the Texaco offset well was recorded at 4822' to 4831' (-3266 to -3275)
 The possible producing sand in the #3 Springer well was logged at 4830' to 4836' (-3259 to -3265).

ROCK TYPES

shale, gry
 Carbon Sh
 Sls

MINERAL

-x Dolomitic
 -x Sandy
 -x Chert/White
 # Argillaceous/Shale

ACCESSORIES

DST Int
 DST all
 Core
 Tail pipe

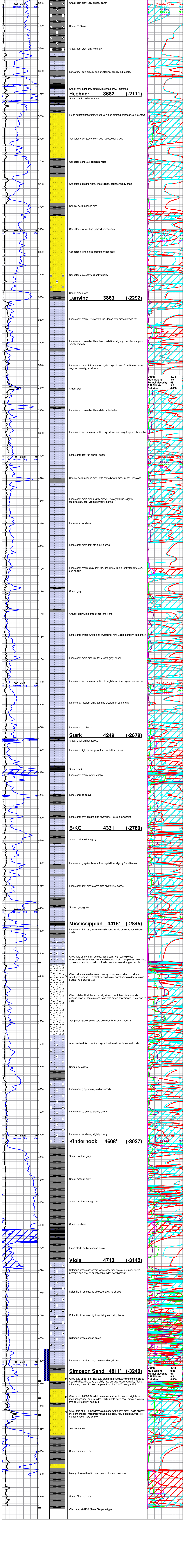
OTHER SYMBOLS

Oil Show
 Good Show
 Fair Show
 Poor Show
 Spotted or Trace
 Questionable Sm
 Dead Oil Sm
 Fluorescence
 Gas

INTERVALS

DST
 Core
 Lnst Intw>

Printed by GEOstrip Vc Striplog version 4.0.7.0 (www.grsi.ca)



Geologist on site at 3250'

Depth 3933'
 Mud Weight 8.9
 Funnell Viscosity 9.2
 API Filtrate 9.2
 Chloride 4,000

Depth 4818'
 Mud Weight 9.3
 Funnell Viscosity 9.4
 API Filtrate 9.2
 Chloride 4,500



DRILL STEM TEST REPORT

Prepared For: **Charles N Griffin**

PO Box 347
Pratt, KS 67124

ATTN: Bruce Reed

Springer #3

34-32S-12W Barber,KS

Start Date: 2016.10.29 @ 10:18:31

End Date: 2016.10.29 @ 18:16:31

Job Ticket #: 57965 DST #: 1

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2016.10.31 @ 10:27:19



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Charles N Griffin

34-32S-12W Barber,KS

PO Box 347
Pratt, KS 67124

Springer #3

Job Ticket: 57965

DST#: 1

ATTN: Bruce Reed

Test Start: 2016.10.29 @ 10:18:31

GENERAL INFORMATION:

Formation: **Simpson**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:26:16

Time Test Ended: 18:16:31

Test Type: Conventional Bottom Hole (Initial)

Tester: Leal Cason

Unit No: 74

Interval: 4790.00 ft (KB) To 4818.00 ft (KB) (TVD)

Reference Elevations: 1571.00 ft (KB)

Total Depth: 4818.00 ft (KB) (TVD)

1566.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

Serial #: 8159 Inside

Press@RunDepth: 51.56 psig @ 4791.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2016.10.29

End Date:

2016.10.29

Last Calib.:

2016.10.29

Start Time: 10:18:32

End Time:

19:16:31

Time On Btm:

2016.10.29 @ 14:25:46

Time Off Btm:

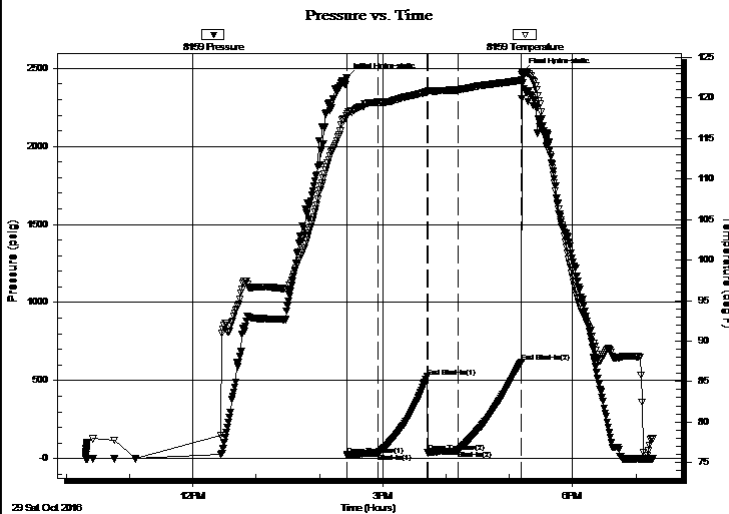
2016.10.29 @ 17:12:16

TEST COMMENT: IF: Fair Blow , BOB in 20 minutes

IS: No Blow Back

FF: Fair Blow , BOB in 22 minutes

FS: No Blow Back



PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 2437.76 | 117.84 | Initial Hydro-static |
| 1 | 21.72 | 117.75 | Open To Flow (1) |
| 30 | 36.71 | 119.49 | Shut-In(1) |
| 76 | 524.32 | 120.77 | End Shut-In(1) |
| 77 | 37.28 | 120.79 | Open To Flow (2) |
| 106 | 51.56 | 121.01 | Shut-In(2) |
| 166 | 620.29 | 122.21 | End Shut-In(2) |
| 167 | 2473.98 | 123.05 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|--------------------|--------------|
| 70.00 | SOWCM 5%O 5%W 90%M | 0.34 |
| | | |
| | | |
| | | |
| | | |

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Charles N Griffin

34-32S-12W Barber,KS

PO Box 347
Pratt, KS 67124

Springer #3

Job Ticket: 57965

DST#: 1

ATTN: Bruce Reed

Test Start: 2016.10.29 @ 10:18:31

Tool Information

| | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe: | Length: 4664.00 ft | Diameter: 3.80 inches | Volume: 65.42 bbl | Tool Weight: 2100.00 lb |
| Heavy Wt. Pipe: | Length: 0.00 ft | Diameter: 0.00 inches | Volume: 0.00 bbl | Weight set on Packer: 25000.00 lb |
| Drill Collar: | Length: 118.00 ft | Diameter: 2.25 inches | Volume: 0.58 bbl | Weight to Pull Loose: 70000.00 lb |
| | | | <u>Total Volume: 66.00 bbl</u> | Tool Chased ft |
| Drill Pipe Above KB: | 18.00 ft | | | String Weight: Initial 52000.00 lb |
| Depth to Top Packer: | 4790.00 ft | | | Final 52000.00 lb |
| Depth to Bottom Packer: | ft | | | |
| Interval between Packers: | 28.00 ft | | | |
| Tool Length: | 54.00 ft | | | |
| Number of Packers: | 2 | Diameter: 6.75 inches | | |

Tool Comments:

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

| | | | | | |
|----------------|-------|------|---------|---------|-------------------------------|
| Shut In Tool | 5.00 | | | 4769.00 | |
| Hydraulic tool | 5.00 | | | 4774.00 | |
| Jars | 5.00 | | | 4779.00 | |
| Safety Joint | 2.00 | | | 4781.00 | |
| Packer | 5.00 | | | 4786.00 | 26.00 Bottom Of Top Packer |
| Packer | 4.00 | | | 4790.00 | |
| Stubb | 1.00 | | | 4791.00 | |
| Recorder | 0.00 | 8159 | Inside | 4791.00 | |
| Recorder | 0.00 | 6806 | Outside | 4791.00 | |
| Perforations | 24.00 | | | 4815.00 | |
| Bullnose | 3.00 | | | 4818.00 | 28.00 Bottom Packers & Anchor |

Total Tool Length: 54.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Charles N Griffin

34-32S-12W Barber,KS

PO Box 347
Pratt, KS 67124

Springer #3

Job Ticket: 57965

DST#: 1

ATTN: Bruce Reed

Test Start: 2016.10.29 @ 10:18:31

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.19 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4500.00 ppm

Filter Cake: 0.02 inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|--------------------|---------------|
| 70.00 | SOWCM 5%O 5%W 90%M | 0.344 |

Total Length: 70.00 ft Total Volume: 0.344 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

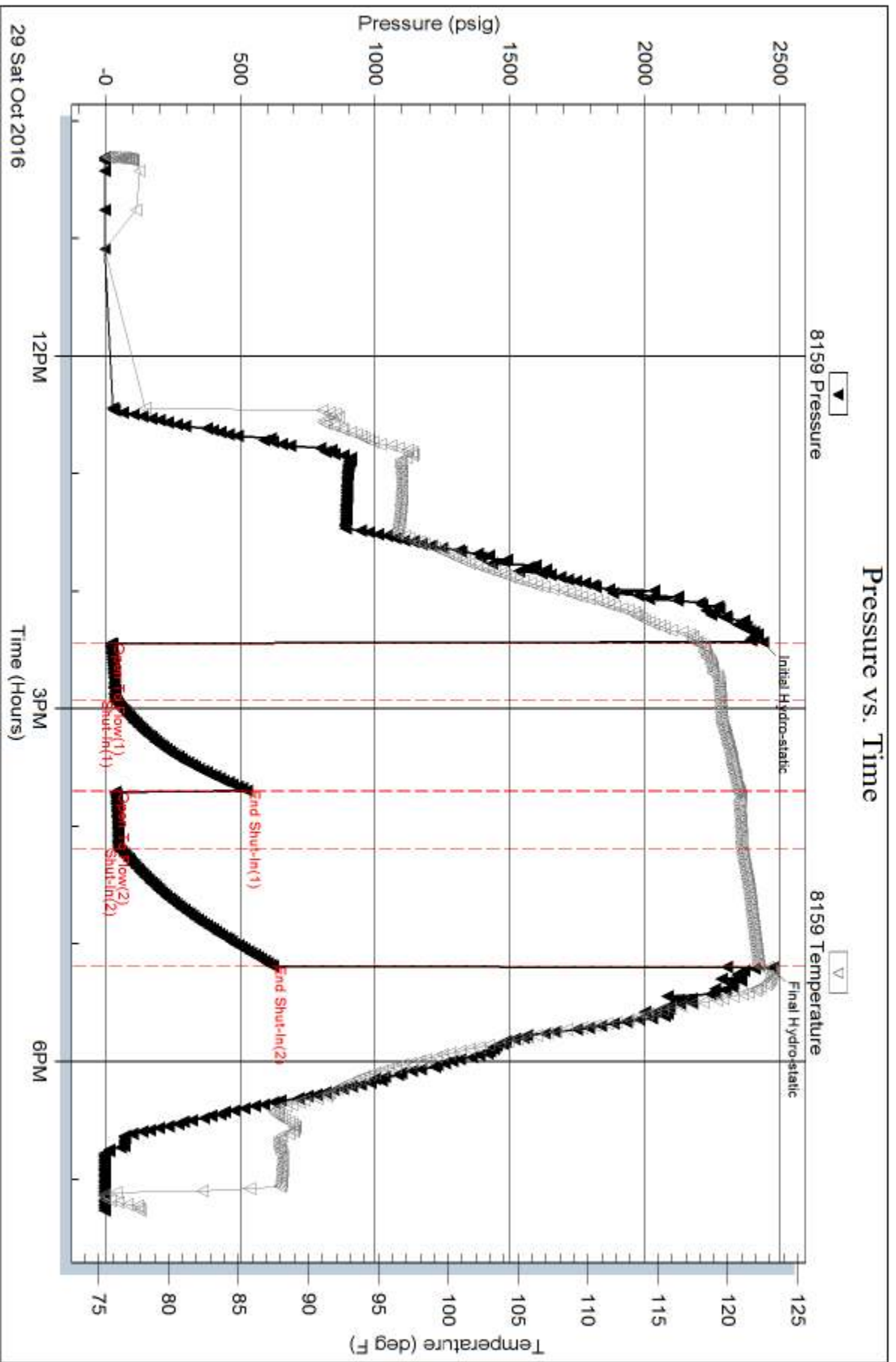
Serial #: 8159

Inside

Charles N Griffin

Springer #3

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 57965

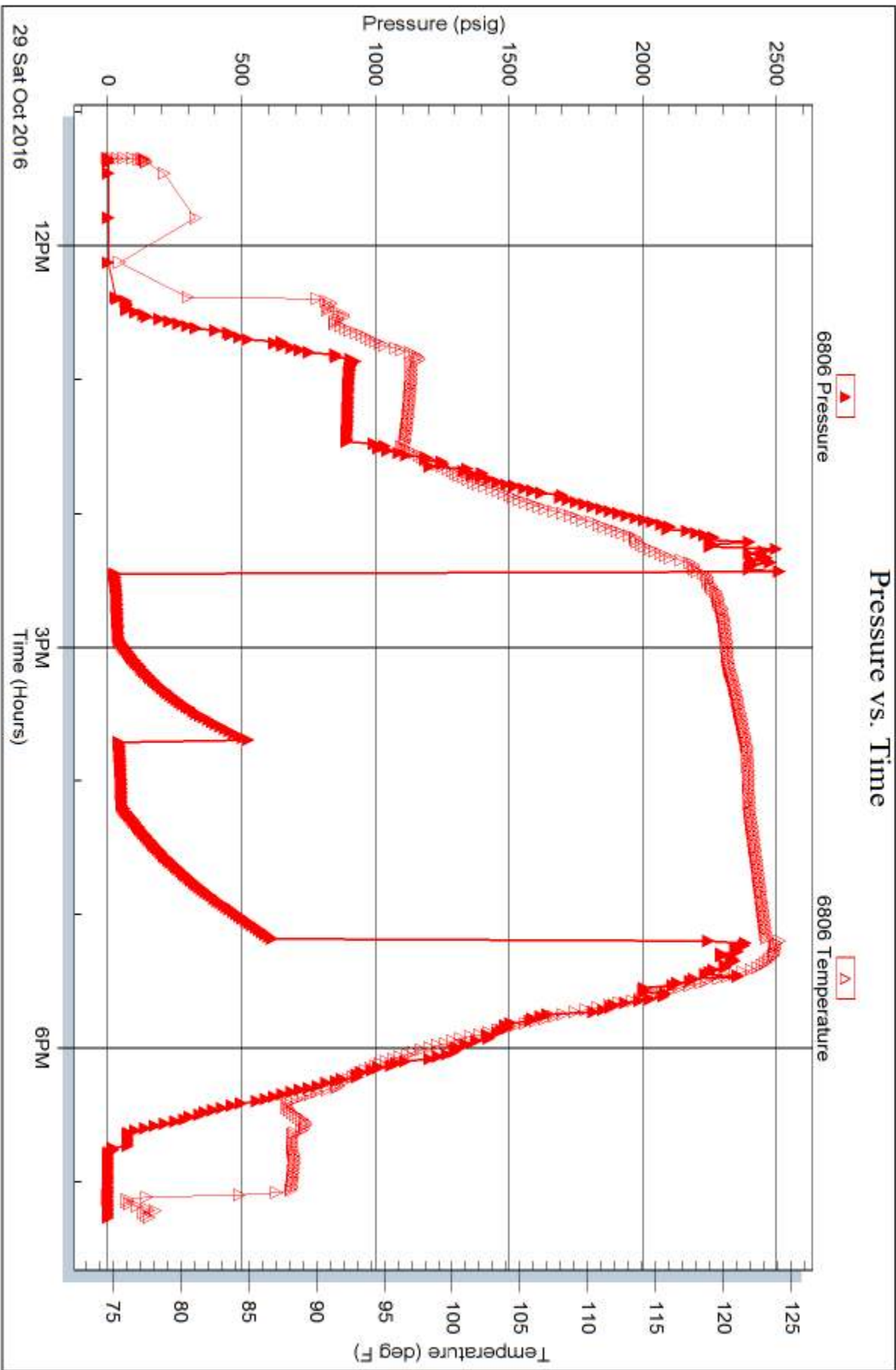
Printed: 2016.10.31 @ 10:27:20

Serial #: 6806

Outside Charles N Griffin

Springer #3

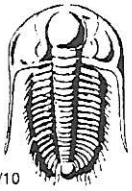
DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 57965

Printed: 2016.10.31 @ 10:27:20



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 57965

Well Name & No. Springer 3 Test No. 1 Date 10/29/16
 Company Charles N. Griffin Elevation 1571 KB 1566 GL
 Address PO Box 347 Pratt, KS 67124
 Co. Rep / Geo. Bruce Reed Rig WW 8
 Location: Sec. 34 Twp. 32S Rge. 12W Co. Barber State KS

Interval Tested 4790 - 4818 Zone Tested SIMPSON
 Anchor Length 28 Drill Pipe Run 4664 Mud Wt. 9.3
 Top Packer Depth 4785 Drill Collars Run 118 Vis 54
 Bottom Packer Depth 4790 Wt. Pipe Run 0 WL 9.2
 Total Depth 4818 Chlorides 4500 ppm System LCM 1.5

Blow Description IF: Fair Blow, BOB in 20 minutes
ISI: NO Blow Back
FF: Fair Blow, BOB in 22 minutes
FST: NO Blow Back

| Rec | Feet of | %gas | %oil | %water | %mud |
|-----------|--------------|------|----------|----------|-----------|
| <u>70</u> | <u>50WCM</u> | | <u>5</u> | <u>5</u> | <u>90</u> |
| Rec | Feet of | %gas | %oil | %water | %mud |
| Rec | Feet of | %gas | %oil | %water | %mud |
| Rec | Feet of | %gas | %oil | %water | %mud |

Rec Total 70 BHT 123 Gravity NIC API RW NIC @ NIC° F Chlorides NIC ppm

| | | |
|-------------------------------------|---|---|
| (A) Initial Hydrostatic <u>2438</u> | <input checked="" type="checkbox"/> Test <u>1150</u> | T-On Location <u>09:00</u> |
| (B) First Initial Flow <u>22</u> | <input checked="" type="checkbox"/> Jars <u>250</u> | T-Started <u>10:18</u> |
| (C) First Final Flow <u>37</u> | <input checked="" type="checkbox"/> Safety Joint <u>75</u> | T-Open <u>14:26</u> |
| (D) Initial Shut-In <u>524</u> | <input type="checkbox"/> Circ Sub | T-Pulled <u>17:11</u> |
| (E) Second Initial Flow <u>37</u> | <input type="checkbox"/> Hourly Standby | T-Out <u>18:16</u> |
| (F) Second Final Flow <u>52</u> | <input checked="" type="checkbox"/> Mileage <u>809</u> <u>120</u> | Comments <u>Loaded Tools @ 11:00 on 10/30</u> |
| (G) Final Shut-In <u>620</u> | <input type="checkbox"/> Sampler | |
| (H) Final Hydrostatic <u>2474</u> | <input type="checkbox"/> Straddle | <input type="checkbox"/> Ruined Shale Packer |
| Initial Open <u>30</u> | <input type="checkbox"/> Shale Packer | <input type="checkbox"/> Ruined Packer |
| Initial Shut-In <u>45</u> | <input type="checkbox"/> Extra Packer | <input type="checkbox"/> Extra Copies |
| Final Flow <u>30</u> | <input type="checkbox"/> Extra Recorder | Sub Total <u>0</u> |
| Final Shut-In <u>60</u> | <input type="checkbox"/> Day Standby | Total <u>1595</u> |
| | <input type="checkbox"/> Accessibility | MP/DST Disc't |
| | Sub Total <u>1595</u> | |

Approved By Bruce Reed Our Representative [Signature]
 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.