

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

OPERATOR

Company: TDI, INC.
 Address: 1310 BISON ROAD
 HAYS, KANSAS 67601-9696

Contact Geologist: TOM DENNING
 Contact Phone Nbr: 785-628-2593
 Well Name: CLARENCE # 1
 Location: N2 SW NE NW, SEC. 27-T13S-R19W
 API: 15-051-26,990-00-00
 Pool: WILDCAT
 State: KANSAS

Field: UNNAMED
 Country: USA



Scale 1:240 Imperial

Well Name: CLARENCE # 1
 Surface Location: N2 SW NE NW, SEC. 27-T13S-R19W
 Bottom Location:
 API: 15-051-26,990-00-00
 License Number: 4787
 Spud Date: 10/20/2020 Time: 2:45 PM
 Region: ELLIS COUNTY
 Drilling Completed: 10/25/2020 Time: 9:55 PM
 Surface Coordinates: 945' FNL & 1650' FWL
 Bottom Hole Coordinates:
 Ground Elevation: 2158.00ft
 K.B. Elevation: 2168.00ft
 Logged Interval: 3100.00ft To: 3900.00ft
 Total Depth: 3900.00ft
 Formation: LANSING-KANSAS CITY
 Drilling Fluid Type: CHEMICAL/FRESH WATER GEL

SURFACE CO-ORDINATES

Well Type: Vertical
 Longitude: -99.422704
 Latitude: 38.8971766
 N/S Co-ord: 945' FNL
 E/W Co-ord: 1650' FWL

LOGGED BY

Company: SOLUTIONS CONSULTING, INC.
 Address: 108 W 35TH
 HAYS, KS 67601

Phone Nbr: (785) 639-1337
 Logged By: GEOLOGIST Name: HERB DEINES

CONTRACTOR

Contractor: SOUTHWIND DRILLING, INC.
 Rig #: 8
 Rig Type: MUD ROTARY
 Spud Date: 10/20/2020 Time: 2:45 PM
 TD Date: 10/25/2020 Time: 9:55 PM

ELEVATIONS

K.B. Elevation: 2168.00ft Ground Elevation: 2158.00ft
 K.B. to Ground: 10.00ft

NOTES

DECISION TO PLUG AND ABANDON WELL AFTER LOG ANALYSIS AND NEGATIVE RESULTS OF TWO DRILL STEM TESTS. THE WELL WAS STRUCTURALLY HIGH BUT ALL OF THE ZONES OF INTEREST WERE POORLY DEVELOPED AND LACKED PERMEABILITY.

DRILL STEM TESTING BY TRILOBITE TESTING INC: TWO (2) CONVENTIONAL TESTS.

OPEN HOLE LOGGING BY MIDWEST WIRELINE: DUAL INDUCTION LOG, DUAL COMPENSATED POROSITY LOG, MICRORESISTIVITY LOG.

| | | |
|----------------|----------------|----------------|
| CLARENCE # 1 | RUPP # 1 | SACK # 1 |
| N2 SW NE NW | NE SW SE | NE SW NE SE |
| SEC.27-13S-19W | SEC.22-13S-19W | SEC.27-13S-19W |
| KB 2168' | KB 2094' | KB 2101' |

| | LOG TOPS | | |
|-----------------|-----------|-------|-------|
| Anhydrite-top | 1472 +696 | +696 | +703 |
| Anhydrite-base | 1512 +656 | +654 | +663 |
| Topeka | 3192-1024 | -1020 | -1024 |
| Heebner Shale | 3431-1263 | -1263 | -1262 |
| Toronto | 3452-1284 | -1284 | -1290 |
| LKC | 3377-1309 | -1309 | -1313 |
| BKC | 3729-1561 | -1558 | -1561 |
| Eroded Arbuckle | 3828-1660 | | |
| Arbuckle | 3840-1672 | -1652 | -1661 |
| RTD | 3900-1732 | -1658 | -1694 |

- 10-20-20 Spud 2:45 PM. Set 8 5/8" surface casing to 215' w 150 sks 80/20 pos 3%CC 2%gel, plug down 7:45 PM, Slope 1/4 degree @215'. WOC 8 hours
- 10-21-20 474', drilling, drilled plug at 3:45 AM with PDC bit
- 10-22-20 2130', drilling.
- 10-23-20 2990', drilling, pulled PDC and ran button bit, displaced 2950'-2982'
- 10-24-20 3523', CFS 3480', short trip, drilling, CFS 3523' DST # 1 3498'-3523' "C", slope 3/4 degree @ 3523', TIWB, drilling, CFS 3563', DST # 2 3521' - 3563' "D"
- 10-25-20 3625', drilling, CFS 3802', RTD 3900' @ 9:55 PM, CCH, TOWB
- 10-19-20 3900', logging during blizzard, decision to plug and abandon.



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TDI, Inc.
1310 Bison Rd
Hays Ks 67601
ATTN: Herb Deines

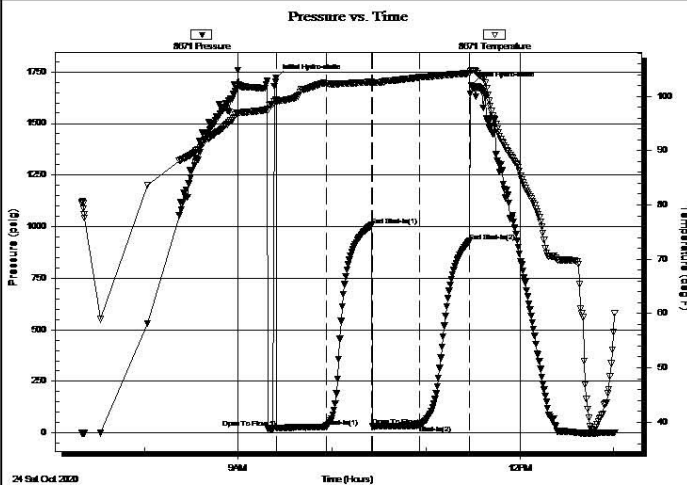
27 - 13S - 19W
Clarence #1
Job Ticket: 67413 **DST#: 1**
Test Start: 2020.10.24 @ 07:20:00

GENERAL INFORMATION:

Formation: **LKC - C**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 09:24:30
 Time Test Ended: 13:00:45
 Interval: **3498.00 ft (KB) To 3523.00 ft (KB) (TVD)**
 Total Depth: 3523.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Poor
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Royal Fisher
 Unit No: #77
 Reference Elevations: 2168.00 ft (KB)
 2158.00 ft (CF)
 KB to GR/CF: 10.00 ft

Serial #: 8671 **Outside**
 Press@RunDepth: 36.11 psig @ 3499.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2020.10.24 End Date: 2020.10.24 Last Calib.: 2020.10.24
 Start Time: 07:20:05 End Time: 13:00:44 Time On Btm: 2020.10.24 @ 09:24:15
 Time Off Btm: 2020.10.24 @ 11:29:00

TEST COMMENT: 30 - IF - blow started out at a weak surface and then died off to a faint blow
 30 - ISI - No Return
 30 - FF - Blow started out at a faint blow then died off in 10 mins.
 30 - FSI - No Return



PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 1721.95 | 99.43 | Initial Hydro-static |
| 1 | 22.75 | 98.93 | Open To Flow (1) |
| 32 | 29.99 | 102.46 | Shut-In(1) |
| 61 | 1007.21 | 102.66 | End Shut-In(1) |
| 62 | 32.76 | 102.29 | Open To Flow (2) |
| 92 | 36.11 | 103.54 | Shut-In(2) |
| 124 | 929.08 | 104.28 | End Shut-In(2) |
| 125 | 1682.59 | 104.84 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|--------------------------|--------------|
| 50.00 | OSM - Oil Spots - 100%gm | 0.51 |

Gas Rates


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

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| | | |

Trilobite Testing, Inc

Ref. No: 67413

Printed: 2020.10.24 @ 14:34:48

| | | |
|---|--|--|
|  | DRILL STEM TEST REPORT | |
| | TDI, Inc. 1310 Bison Rd Hays Ks 67601 ATTN: Herb Deines | 27 - 13S - 19W Clarence #1 Job Ticket: 67414 DST#: 2 Test Start: 2020.10.24 @ 19:13:00 |

GENERAL INFORMATION:

Formation: **LKC - D**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 20:50:15
 Time Test Ended: 00:36:45

Interval: **3521.00 ft (KB) To 3563.00 ft (KB) (TVD)**
 Total Depth: 3563.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Poor

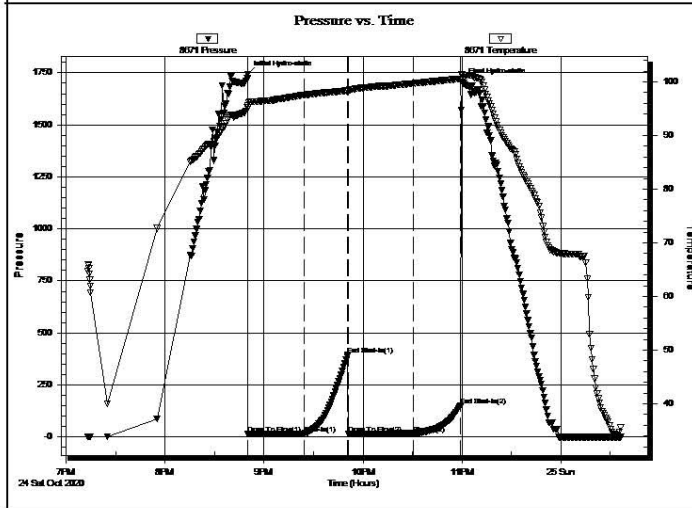
Test Type: Conventional Bottom Hole (Initial)
 Tester: Royal Fisher
 Unit No: #77

Reference Elevations: 2168.00 ft (KB)
 2158.00 ft (CF)
 KB to GR/CF: 10.00 ft

Serial #: 8671 Outside

Press@RunDepth: 16.59 psig @ 3522.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2020.10.24 End Date: 2020.10.25 Last Calib.: 1899.12.30
 Start Time: 19:13:05 End Time: 00:36:44 Time On Btm: 2020.10.24 @ 20:50:00
 Time Off Btm: 2020.10.24 @ 23:00:00

TEST COMMENT: 30 - IF - Surface blow started at a weak blow then died off in about 10 mins.
 30 - ISI - No Return
 30 - FF - No Surface bow
 30 - FSI - No Return













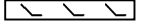


| PRESSURE SUMMARY | | | |
|------------------|-----------------|--------------|----------------------|
| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
| 0 | 1743.28 | 95.65 | Initial Hydro-static |
| 1 | 13.31 | 95.15 | Open To Flow (1) |
| 34 | 15.38 | 97.54 | Shut-In(1) |
| 61 | 392.28 | 98.37 | End Shut-In(1) |
| 62 | 15.38 | 98.23 | Open To Flow (2) |
| 101 | 16.59 | 99.71 | Shut-In(2) |
| 130 | 150.16 | 100.57 | End Shut-In(2) |
| 130 | 1705.76 | 101.33 | Final Hydro-static |

| Recovery | | |
|-------------|-------------|--------------|
| Length (ft) | Description | Volume (bbl) |
| | | |
| | | |
| | | |

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

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ROCK TYPES

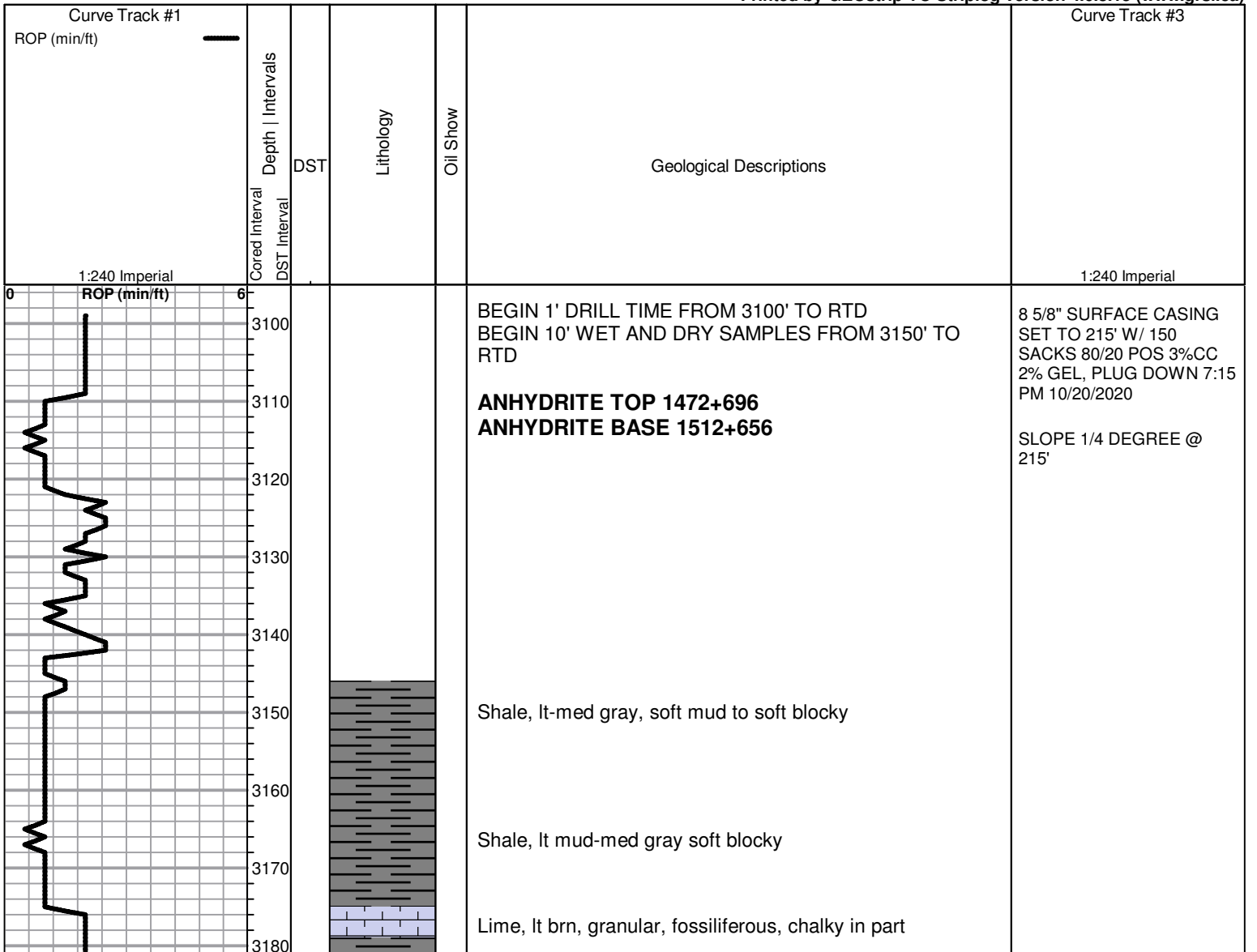
| | | | | |
|---|--|---|---|--|
|  Clystgy |  Dolprim |  Lmst fw<7 |  shale, grn |  shale, red |
|  Clystcol |  Dolsec |  Lmst fw>7 |  shale, gry | |
|  Chtcongl |  Dol Lime |  Lscongl |  Carbon Sh | |

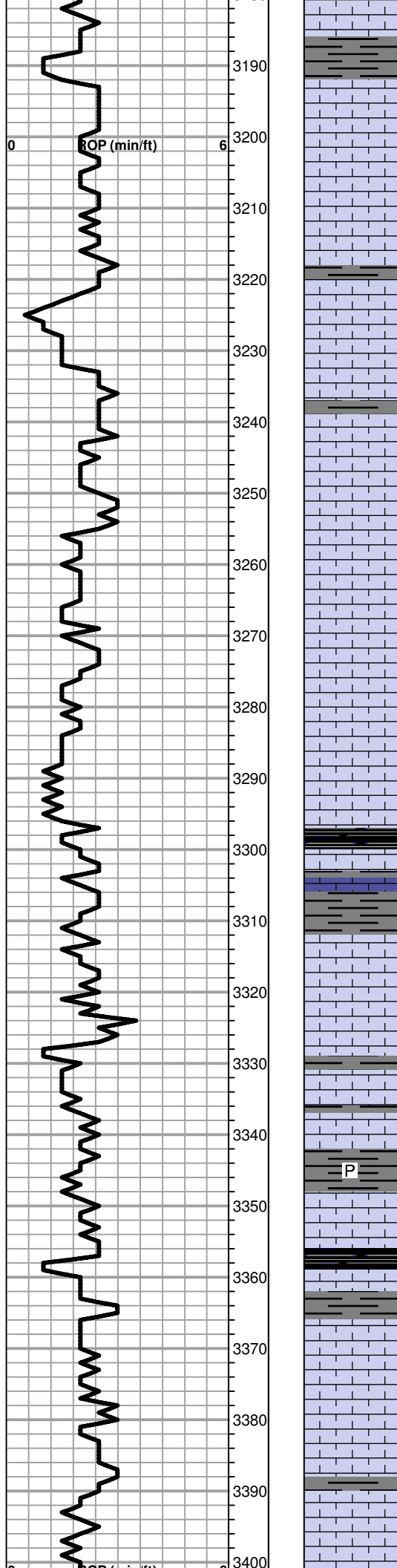
ACCESSORIES

MINERAL
P Pyrite

FOSSIL
Oomoldic

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





Lime, lt-med brn-lt gray, fn-micro xln

TOPEKA 3192-1024

Lime, lt brn-lt grayish brn, fn-micro xln

Lime, lt gray, fn-vfxln, slight chalky matrix

Lime, lt brn, fnxln-micro-oomoldic, NS, no wet cut

Lime lt brn-lt-med gray, fn-vfxln

Lime, lt brn-med gray, fn-vfxln, slightly fossiliferous in part

Lime, lt-med brn-med gray, fn-micro xln

Lime, med brn, fnxln-granular, increasing bedded chalk

Lime, lt-med brn, fnxln-granular, slightly fossiliferous

Lime, lt-med brn, fnxln-granular, slight bedded chalk and slightly fossiliferous

Lime, med brn, granular, bedded chalk, some sticky clumps

Shale, black carbonaceous, blocky

Lime, crm, micro xln

Shale, lt gray, soft blocky

Lime, crm, fn-vfxln, firm bedded chalk

Lime, lt brn, fn-vfxln, bedded chalk with lt white chalk wash

Lime, lt brn, fnxln, soft on crush, bedded chalk, thin fossil beds

Shale, med gray, soft blocky with pyrite clusters

Lime, lt-med brn, fnxln, pyritic inclusions

Shale, black carbonaceous, blocky

Lime, lt-med brn, fn-vfxln

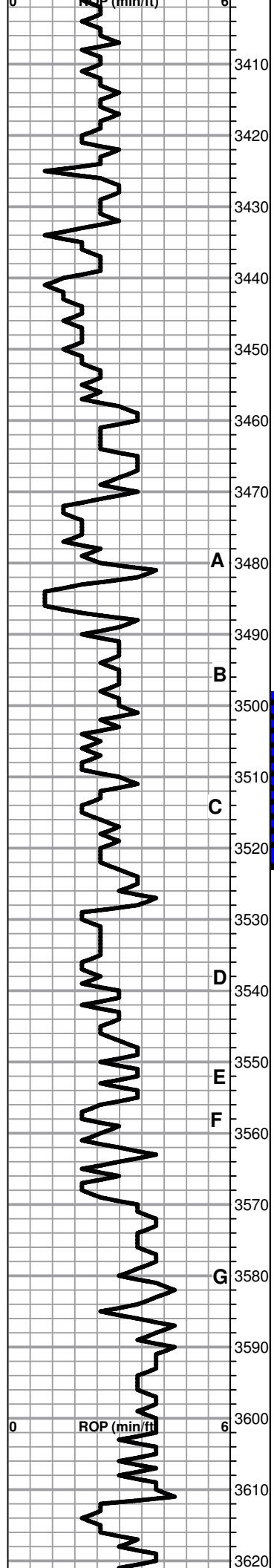
Lime, crm-lt brn, fnxln, firm bedded chalk, NS

Lime, lt brn-med gray, fn-vfxln

*

Lime, lt brn-lt gray, fnxln, firm bedded chalk, very lt odor, NFO, very spotty stain in one chip

Lime, lt brn, fnxln-granular



Lime, lt-brn, fnxn granular

Lime, lt-med brn, fn-vfxln

Lime, lt-med brn, fn-vfxln

Lime, lt-med brn, fnxn-granular in part

HEEBNER SHALE 3431-1263
 Shale, black carbonaceous, blocky, fissile
 Lime, med brn, micro xln

Shale, lime green, soft sticky mud

TORONTO 3452-1284

Lime, white-crm, vfxln, hard bedded chalk, NS

Lime, crm-lt-med brn, fn-micro xln

Shale, red, soft mud with lt red wash

LANSING-KANSAS CITY 3477-1309

Lime, lt brn, fn-micro xln

Shale, med gray, soft

Lime, lt brnlt gray, fn-vfxln

Lime, lt gray, dark mottling, fnxln

Lime, lt-med gray, fn-vfxln, slightly fossiliferous

Lime, lt brn, fnxln, few chips, contact staining in fossil casts and oomolds, NFO, very lt odor

Lime, Lt brn, fn-vfxln, soft bedded chalk with lt white wash

Lime, crm-tan, fnxln, fossiliferous, heavy oil contact staining, lt odor, scattered to saturated staining

Lime, lt brn, fn-vfxln, bedded chalk with lt chalk wash

Shale, black carbonaceous, blocky
 Lime, lt gray, vfxln

Lime, lt brn-lt gray, fnxln, bedded chalk, NS

Lime, crm-lt brn, fn-vfxln, firm bedded chalk, NS

Lime, lt brn, fn-micro xln, firm bedded chalk, NS

Lime, crm-lt brn, oomoldic in part, barren, NS

Lime, crm, fn-vfxln, slight bedded chalk

Lime, crm, fn-vfxln, firm bedded chalk

Shale, dark gray-black carbonaceous, blocky

Lime, crm, fn-vfxln, firm bedded chalk, NS

CFS 3480', SHORT TRIP

DST # 1 3498' TO 3523'
 SEE HEADER FOR TEST SUMMARY

CFS 3523'

DST # 2 3521' TO 3563'
 SEE HEADER FOR TEST SUMMARY

CFS 3563'

A

B

C

D

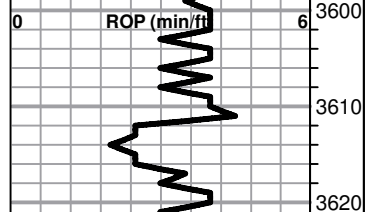
E

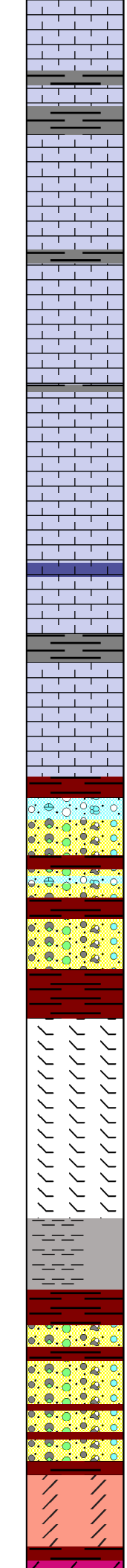
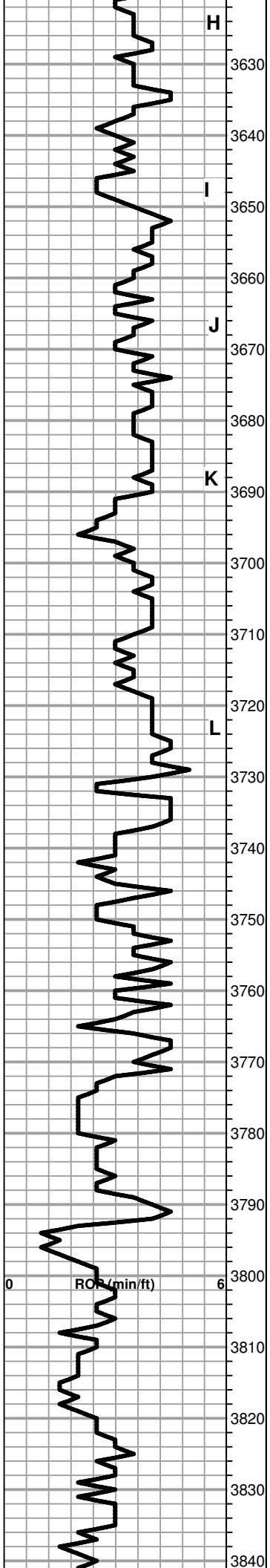
F

G

○

○





Lime, lt brn, fn-micro xln

Lime, lt brn, fn-vfxln, NS

Lime, crm-lt brn, fn-micro xln

Lime, crm-tan, fn-vfxln, NS, no odor

Lime, crm-tan, fn-micro xln

Lime, crm, fn-micro xln

Lime, crm-lt brn, fn-vfxln

Lime, white-crm, fn-micro xln

Lime, crm-lt brn, fn-micro xln

Shale, red-lt gray, soft mud

Lime, lt brn, fn-micro xln, slightly chalky

BKC 3729-1561
Shale, red wash, soft sticky

Shale, reds and grays, soft mud

Shale, red, grays, soft sticky, red wash

Lime, crm-lt brn, fn-vfxln,

○ Lime, crm-lt brn, fnxln, fine interxln porosity, lt SFO on crush, no odor, spotty lt staining
Chert, orange

Lime, crm-lt brn, fnxln-slightly granular, fn-vfxln

Shale, lt gray, soft, very sticky, NS

Shale, dark red wash, soft mud brn firm blocky shale

Shale, dark red wash with chert nodules

Shale and vari colored cherts, tan-white

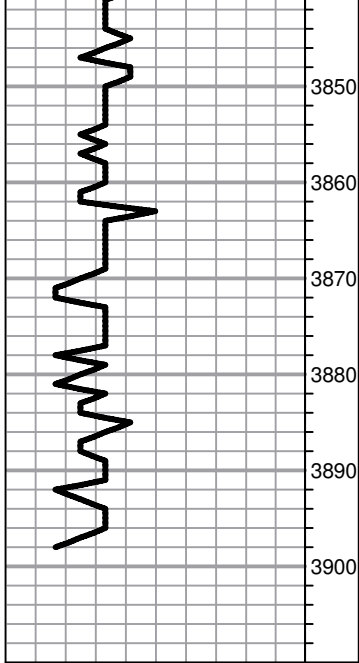
REWORKED ARBUCKLE 3828-1660

Dolomite, tan, fnxln, pyritic, glauconitic

ARBUCKLE 3840-1672

CFS 3802'

1st plug@3780' w/50 sxs
2nd plug@1500' w/ 50 sxs



Dolomite, offwhite-crm, fnxln-granular, NS, no odor, no staining

Dolomite, ivory-crm, fnxln-granular, sticky dolomite chalk clumps

Dolomite, ivory, salmon, lt brn, fnxln-granular

Dolomite, ivory, crm-lt brn, salmon, fnxln-granular

Dolomite, offwhite, fnxln-granular, sticky chalk

RTD 3900-1732 LTD 3899-1731

3rd plug@ 760' w/100 sxs
4th plug@ 265' w/50 sxs
5th plug@40' w/10 sxs
Rathole w/30 sxs

Ordered 290 sxs 60/40 pos
4%gel. Job completed 2:00
PM 10-26-2020

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-1071
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 2121

| | | | | | | | | | | | | | | | | | |
|-------------------------------------|----------|------|----|----------|----|----------|----|------------------------------------|-------|--|----|-------------|--|----------|---------|----|--|
| Date | 10-20-20 | Sec. | 27 | Twp. | 13 | Range | 19 | County | Ellis | State | KS | On Location | | Finish | 7:45 PM | | |
| Lease | | | | | | | | Clarence | | Well No. | | 1 | | | | | |
| Contractor | | | | | | | | Southwind #8 | | Owner | | | | | | | |
| Type Job | | | | | | | | Surface | | To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed. | | | | | | | |
| Hole Size | | | | 12 1/4 | | | | T.D. | | 214 | | | | | | | |
| Csg. | | | | 8 5/8 | | | | Depth | | 213 | | | | | | | |
| Tbg. Size | | | | | | | | Depth | | | | | | | | | |
| Tool | | | | | | | | Depth | | The above was done to satisfaction and supervision of owner agent or contractor. | | | | | | | |
| Cement Left in Csg. | | | | 10' | | | | Shoe Joint | | Cement Amount Ordered 150 80/20 3/11 2/11 | | | | | | | |
| Meas Line | | | | Displace | | | | 13BL | | | | | | | | | |
| EQUIPMENT | | | | | | | | Common 120 | | | | | | | | | |
| Pumptrk | | 20 | | No. | | Cementer | | Cmg | | No. | | Helper | | Poz. Mix | | 30 | |
| Bulktrk | | | | No. | | Driver | | Hck | | No. | | Driver | | Gel. | | 3 | |
| Bulktrk | | 15 | | No. | | Driver | | Doug | | No. | | Driver | | Calcium | | 6 | |
| JOB SERVICES & REMARKS | | | | | | | | Hulls | | | | | | | | | |
| Remarks: | | | | | | | | Salt | | | | | | | | | |
| Rat Hole | | | | | | | | Flowseal | | | | | | | | | |
| Mouse Hole | | | | | | | | Kol-Seal | | | | | | | | | |
| Centralizers | | | | | | | | Mud CLR 48 | | | | | | | | | |
| Baskets | | | | | | | | CFL-117 or CD110 CAF 38 | | | | | | | | | |
| D/V or Port Collar | | | | | | | | Sand | | | | | | | | | |
| 8 5/8 on bottom. Est. Circulation - | | | | | | | | Handling | | 159 | | | | | | | |
| Mix 150 SWD Displace | | | | | | | | Mileage | | | | | | | | | |
| Cmg Circulate | | | | | | | | FLOAT EQUIPMENT 8 5/8 Swage | | | | | | | | | |
| | | | | | | | | Guide Shoe | | | | | | | | | |
| | | | | | | | | Centralizer | | | | | | | | | |
| | | | | | | | | Baskets | | | | | | | | | |
| | | | | | | | | AFU Inserts | | | | | | | | | |
| | | | | | | | | Float Shoe | | | | | | | | | |
| | | | | | | | | Latch Down | | | | | | | | | |
| | | | | | | | | Pumptrk Charge | | Surface | | | | | | | |
| | | | | | | | | Mileage | | 15 (min) | | | | | | | |
| X Signature <i>Frank J. Rose</i> | | | | | | | | | | Tax | | | | | | | |
| | | | | | | | | | | Discount | | | | | | | |
| | | | | | | | | | | Total Charge | | | | | | | |

JOB LOG

SWIFT Services, Inc.

DATE 10-26-20 PAGE NO.

| | | | | |
|-----------------|----------------|-------------------|-----------------|------------|
| CUSTOMER TDE | WELL NO. #1 | LEASE CLARENCE | JOB TYPE VTH | TICKET NO. |
|-----------------|----------------|-------------------|-----------------|------------|

| CHART NO. | TIME | RATE (BPM) | VOLUME (BBL) (GAL) | PUMPS | | PRESSURE (PSI) | | DESCRIPTION OF OPERATION AND MATERIALS |
|-----------|------|------------|--------------------|-------|---|----------------|--------|---|
| | | | | T | C | TUBING | CASING | |
| | 9:00 | | | | | | | ON LOCATIONS |
| | | 4 | 10 | | | 400 | | 1st plug @ 3780' - 50 SX pump with spacer |
| | | 4 | 13 | | | 400 | | pump CMT |
| | | 4 | 3 | | | 400 | | Disp w/ WTR Disp w/ mud - 5 min |
| | | 4 | 5 | | | 400 | | 2nd Plug @ 1700' - 57 SX pump with spacer |
| | | 4 | 13 | | | 400 | | pump CMT |
| | | 4 | 3 | | | 400 | | Disp w/ WTR |
| | | 4 | 5 | | | 400 | | 3rd plug @ 760' - 62 SX pump with spacer |
| | | 4 | 26 | | | 400 | | pump CMT |
| | | 4 | 3 | | | 400 | | Disp |
| | | 4 | 3 | | | 300 | | 4th plug 265' - 50 SX pump with spacer |
| | | 4 | 13 | | | 300 | | pump CMT |
| | | 4 | 1 | | | 300 | | Disp |
| | | | | | | | | Top off @ 40' - 10 SX plug at hole - 30 SX |
| | | | | | | | | Job Complete |
| | | | | | | | | Thanks David Zink & Trace |



DRILL STEM TEST REPORT

Prepared For: **TDI, Inc.**

1310 Bison Rd
Hays KS 67601

ATTN: Herb Deines

Clarence #1

27-13S-19W Ellis,KS

Start Date: 2020.10.24 @ 07:20:00

End Date: 2020.10.24 @ 13:00:45

Job Ticket #: 67413 DST #: 1

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

Printed: 2020.10.26 @ 09:15:40

TDI, Inc. 27-13S-19W Ellis,KS Clarence #1 DST # 1 LKC C 2020.10.24



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

TDI, Inc.
 1310 Bison Rd
 Hays KS 67601
 ATTN: Herb Deines

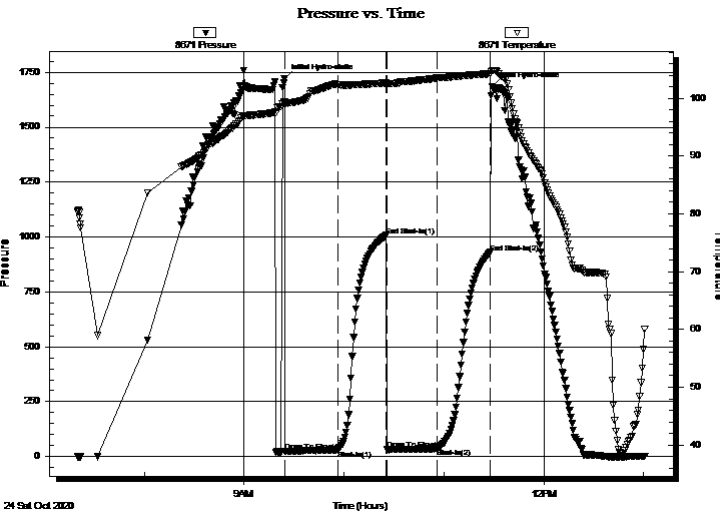
27-13S-19W Ellis,KS
Clarence #1
 Job Ticket: 67413 **DST#: 1**
 Test Start: 2020.10.24 @ 07:20:00

GENERAL INFORMATION:

Formation: **LKC C**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 09:24:30
 Time Test Ended: 13:00:45
 Interval: **3498.00 ft (KB) To 3523.00 ft (KB) (TVD)**
 Total Depth: 3523.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Poor
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Royal Fisher
 Unit No: 77
 Reference Elevations: 2168.00 ft (KB)
 2158.00 ft (CF)
 KB to GR/CF: 10.00 ft

Serial #: 8671 Outside
 Press@RunDepth: 36.11 psig @ 3499.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2020.10.24 End Date: 2020.10.24 Last Calib.: 2020.10.24
 Start Time: 07:20:05 End Time: 13:00:44 Time On Btm: 2020.10.24 @ 09:24:15
 Time Off Btm: 2020.10.24 @ 11:29:00

TEST COMMENT: 30 - IF - blow started out at a weak surface and then died off to a faint blow
 30 - ISI - No Return
 30 - FF - Blow started out at a faint blow then died off in 10 mins.
 30 - FSI - No Return



| PRESSURE SUMMARY | | | |
|------------------|-----------------|--------------|----------------------|
| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
| 0 | 1721.95 | 99.43 | Initial Hydro-static |
| 1 | 22.75 | 98.93 | Open To Flow (1) |
| 32 | 29.99 | 102.46 | Shut-In(1) |
| 61 | 1007.21 | 102.66 | End Shut-In(1) |
| 62 | 32.76 | 102.29 | Open To Flow (2) |
| 92 | 36.11 | 103.54 | Shut-In(2) |
| 124 | 929.08 | 104.28 | End Shut-In(2) |
| 125 | 1682.59 | 104.84 | Final Hydro-static |

| Recovery | | |
|-------------|-------------------------|--------------|
| Length (ft) | Description | Volume (bbl) |
| 50.00 | OSM - Oil Spots - 100%m | 0.51 |
| | | |
| | | |
| | | |
| | | |

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TDI, Inc.
1310 Bison Rd
Hays KS 67601
ATTN: Herb Deines

27-13S-19W Ellis, KS

Clarence #1
Job Ticket: 67413 **DST#: 1**
Test Start: 2020.10.24 @ 07:20:00

GENERAL INFORMATION:

Formation: **LKC C**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 09:24:30
 Time Test Ended: 13:00:45

Test Type: Conventional Bottom Hole (Initial)
 Tester: Royal Fisher
 Unit No: 77

Interval: **3498.00 ft (KB) To 3523.00 ft (KB) (TVD)**
 Total Depth: 3523.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Poor

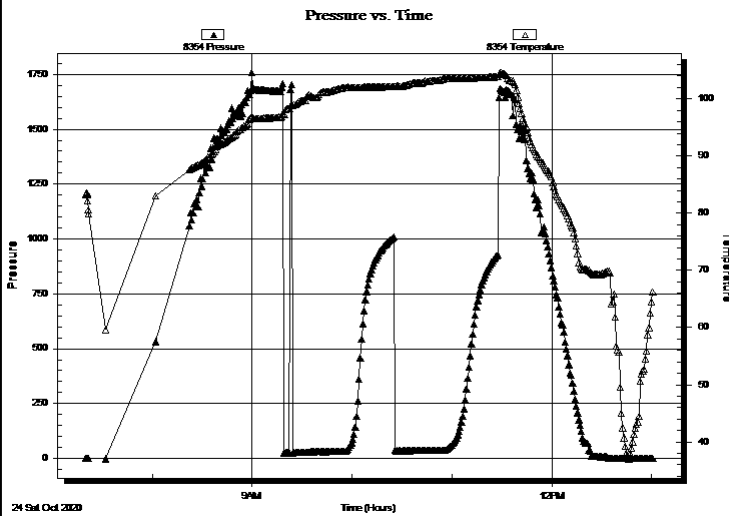
Reference Elevations: 2168.00 ft (KB)
 2158.00 ft (CF)
 KB to GR/CF: 10.00 ft

Serial #: 8354

Inside

| | | | | | |
|-----------------|------------|-----------------|---------------|--------------|------------|
| Press@RunDepth: | psig @ | 3499.00 ft (KB) | Capacity: | 8000.00 psig | |
| Start Date: | 2020.10.24 | End Date: | 2020.10.24 | Last Calib.: | 2020.10.24 |
| Start Time: | 07:20:05 | End Time: | 13:00:44 | Time On Btm: | |
| | | | Time Off Btm: | | |

TEST COMMENT: 30 - IF - blow started out at a weak surface and then died off to a faint blow
 30 - ISI - No Return
 30 - FF - Blow started out at a faint blow then died off in 10 mins.
 30 - FSI - No Return



PRESSURE SUMMARY

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

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------------------|--------------|
| 50.00 | OSM - Oil Spots - 100%m | 0.51 |
| | | |
| | | |
| | | |
| | | |
| | | |

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

TDI, Inc.
1310 Bison Rd
Hays KS 67601
ATTN: Herb Deines

27-13S-19W Ellis,KS
Clarence #1
Job Ticket: 67413 **DST#: 1**
Test Start: 2020.10.24 @ 07:20:00

Tool Information

| | | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------|-------------|
| Drill Pipe: | Length: 3494.88 ft | Diameter: 3.25 inches | Volume: 35.86 bbl | Tool Weight: | 2500.00 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: 0.00 ft | Diameter: 0.00 inches | Volume: 0.00 bbl | Weight to Pull Loose: | 42000.00 lb |
| | | | <u>Total Volume: 35.86 bbl</u> | Tool Chased | 5.00 ft |
| Drill Pipe Above KB: | 21.88 ft | | | String Weight: Initial | 40000.00 lb |
| Depth to Top Packer: | 3498.00 ft | | | Final | 40000.00 lb |
| Depth to Bottom Packer: | ft | | | | |
| Interval between Packers: | 25.00 ft | | | | |
| Tool Length: | 50.00 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 | | | 3478.00 | |
| Hydraulic tool | 5.00 | | | 3483.00 | |
| Em Tool | 5.00 | | | 3488.00 | |
| Packer | 5.00 | | | 3493.00 | 25.00 Bottom Of Top Packer |
| Packer | 5.00 | | | 3498.00 | |
| Stubb | 1.00 | | | 3499.00 | |
| Recorder | 0.00 | 8354 | Inside | 3499.00 | |
| Recorder | 0.00 | 8671 | Outside | 3499.00 | |
| perforations | 21.00 | | | 3520.00 | |
| Bullnose | 3.00 | | | 3523.00 | 25.00 Bottom Packers & Anchor |
| Total Tool Length: | 50.00 | | | | |



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

TDI, Inc.

27-13S-19W Ellis,KS

1310 Bison Rd
Hays KS 67601

Clarence #1

Job Ticket: 67413

DST#: 1

ATTN: Herb Deines

Test Start: 2020.10.24 @ 07:20:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbf

Water Loss: 5.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbf |
|--------------|-------------------------------------|---------------|
| 50.00 | OSM - Oil Spots - 100% _m | 0.513 |

Total Length: 50.00 ft Total Volume: 0.513 bbf

Num Fluid Samples: 0

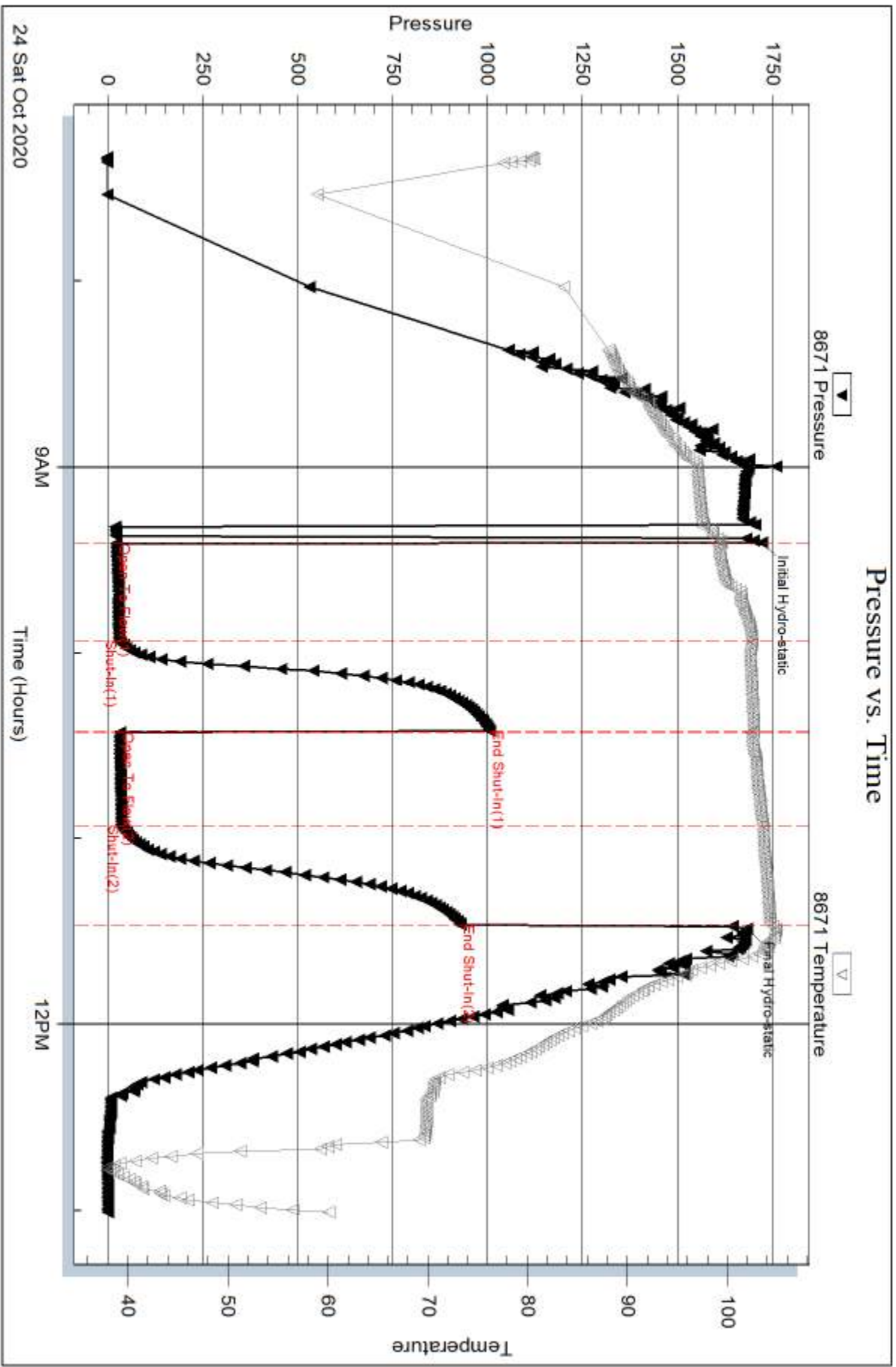
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



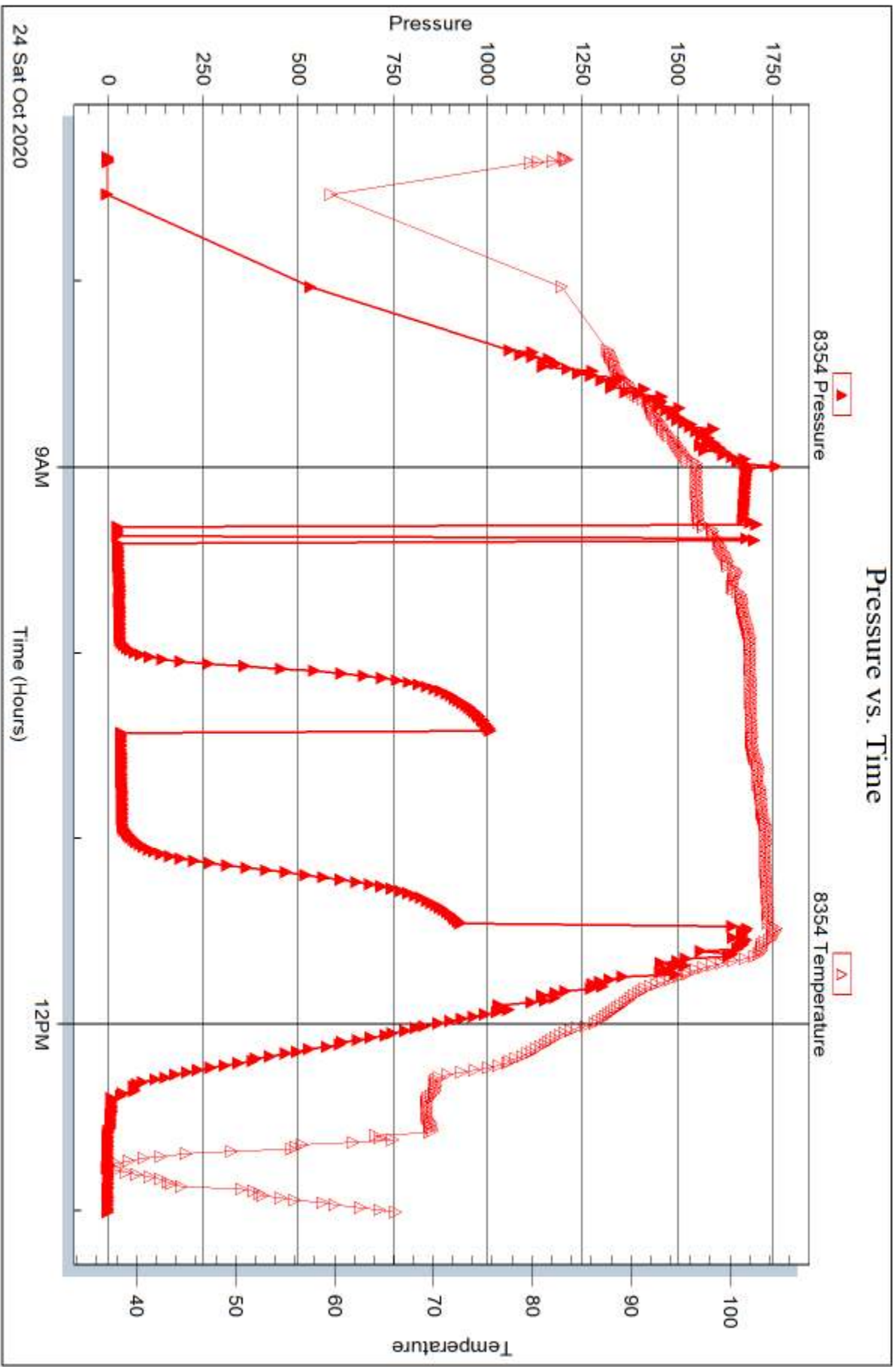
Serial #: 8354

Inside

TDI, Inc.

Clarence #1

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 67413

Printed: 2020.10.26 @ 09:15:43



DRILL STEM TEST REPORT

Prepared For: **TDI, Inc.**

1310 Bison Rd
Hays KS 67601

ATTN: Herb Deines

Clarence #1

27-13S-19W Ellis,KS

Start Date: 2020.10.24 @ 19:13:00

End Date: 2020.10.25 @ 00:36:45

Job Ticket #: 67414 DST #: 2

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

Printed: 2020.10.26 @ 09:14:58

TDI, Inc. 27-13S-19W Ellis,KS Clarence #1 DST # 2 LKC D 2020.10.24



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TDI, Inc.
1310 Bison Rd
Hays KS 67601
ATTN: Herb Deines

27-13S-19W Ellis, KS
Clarence #1
Job Ticket: 67414 **DST#: 2**
Test Start: 2020.10.24 @ 19:13:00

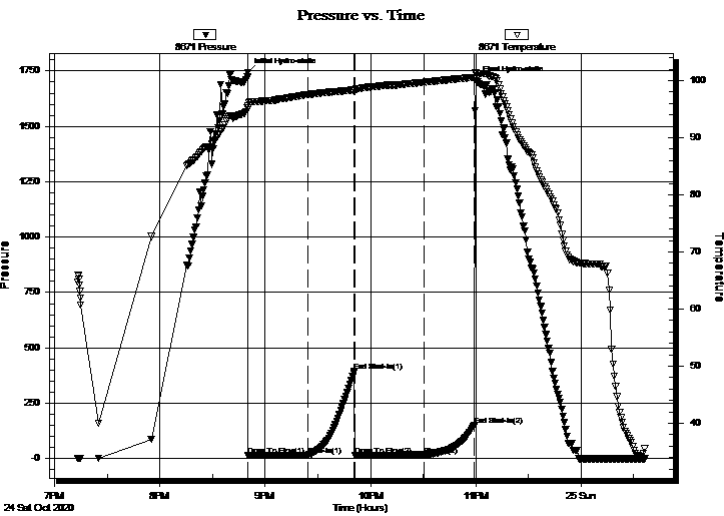
GENERAL INFORMATION:

| | |
|---|---|
| Formation: LKC D | Test Type: Conventional Bottom Hole (Initial) |
| Deviated: No Whipstock: ft (KB) | Tester: Royal Fisher |
| Time Tool Opened: 20:50:15 | Unit No: 77 |
| Time Test Ended: 00:36:45 | |
| Interval: 3521.00 ft (KB) To 3563.00 ft (KB) (TVD) | Reference Elevations: 2168.00 ft (KB) |
| Total Depth: 3563.00 ft (KB) (TVD) | 2158.00 ft (CF) |
| Hole Diameter: 7.88 inches | Hole Condition: Poor |
| | KB to GR/CF: 10.00 ft |

Serial #: 8671 Outside

| | |
|--|-------------------------------------|
| Press@RunDepth: 16.59 psig @ 3522.00 ft (KB) | Capacity: 8000.00 psig |
| Start Date: 2020.10.24 End Date: 2020.10.25 | Last Calib.: 2020.10.25 |
| Start Time: 19:13:05 End Time: 00:36:44 | Time On Btm: 2020.10.24 @ 20:50:00 |
| | Time Off Btm: 2020.10.24 @ 23:00:00 |

TEST COMMENT: 30 - IF - Surface blow started at a weak blow then died off in about 10 mins.
30 - ISI - No Return
30 - FF - No Surface bow
30 - FSI - No Return



PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 1743.28 | 95.65 | Initial Hydro-static |
| 1 | 13.31 | 95.15 | Open To Flow (1) |
| 34 | 15.38 | 97.54 | Shut-In(1) |
| 61 | 392.28 | 98.37 | End Shut-In(1) |
| 62 | 15.38 | 98.23 | Open To Flow (2) |
| 101 | 16.59 | 99.71 | Shut-In(2) |
| 130 | 150.16 | 100.57 | End Shut-In(2) |
| 130 | 1705.76 | 101.33 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------|--------------|
| 5.00 | OSM | 0.05 |
| | | |
| | | |
| | | |
| | | |

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

TDI, Inc.
1310 Bison Rd
Hays KS 67601
ATTN: Herb Deines

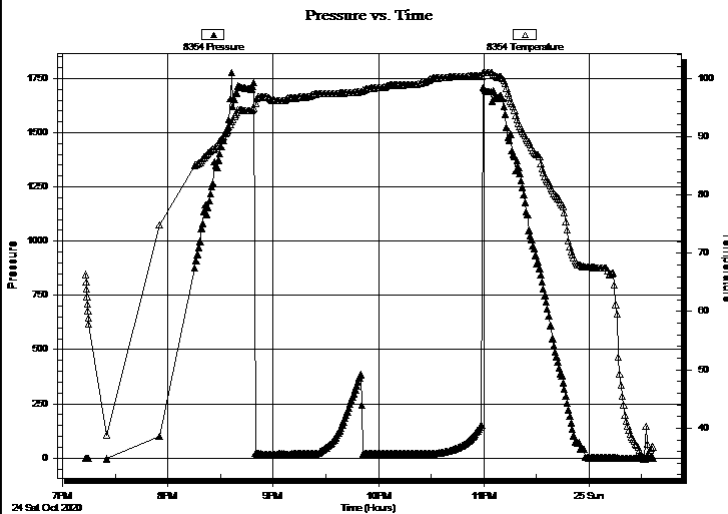
27-13S-19W Ellis,KS
Clarence #1
Job Ticket: 67414 **DST#: 2**
Test Start: 2020.10.24 @ 19:13:00

GENERAL INFORMATION:

| | | | |
|-------------------|---|-----------------------|---|
| Formation: | LKC D | | |
| Deviated: | No Whipstock: | ft (KB) | Test Type: Conventional Bottom Hole (Initial) |
| Time Tool Opened: | 20:50:15 | | Tester: Royal Fisher |
| Time Test Ended: | 00:36:45 | | Unit No: 77 |
| Interval: | 3521.00 ft (KB) To 3563.00 ft (KB) (TVD) | Reference Elevations: | 2168.00 ft (KB) |
| Total Depth: | 3563.00 ft (KB) (TVD) | | 2158.00 ft (CF) |
| Hole Diameter: | 7.88 inches | Hole Condition: Poor | KB to GR/CF: 10.00 ft |

| | | | | | |
|-----------------------|------------------------|-----------|--------------|---------------|------------|
| Serial #: 8354 | Inside | | | | |
| Press@RunDepth: | psig @ 3522.00 ft (KB) | Capacity: | 8000.00 psig | | |
| Start Date: | 2020.10.24 | End Date: | 2020.10.25 | Last Calib.: | 2020.10.25 |
| Start Time: | 19:13:05 | End Time: | 00:36:14 | Time On Btm: | |
| | | | | Time Off Btm: | |

TEST COMMENT: 30 - IF - Surface blow started at a weak blow then died off in about 10 mins.
30 - ISI - No Return
30 - FF - No Surface bow
30 - FSI - No Return



PRESSURE SUMMARY

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

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------|--------------|
| 5.00 | OSM | 0.05 |
| | | |
| | | |
| | | |
| | | |

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

TDI, Inc.
1310 Bison Rd
Hays KS 67601
ATTN: Herb Deines

27-13S-19W Ellis, KS
Clarence #1
Job Ticket: 67414 **DST#: 2**
Test Start: 2020.10.24 @ 19:13:00

Tool Information

| | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe: | Length: 3530.67 ft | Diameter: 3.25 inches | Volume: 36.23 bbl | Tool Weight: 2500.00 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: 0.00 ft | Diameter: 0.00 inches | Volume: 0.00 bbl | Weight to Pull Loose: 43000.00 lb |
| | | | <u>Total Volume: 36.23 bbl</u> | Tool Chased 0.00 ft |
| Drill Pipe Above KB: | 29.67 ft | | | String Weight: Initial 40000.00 lb |
| Depth to Top Packer: | 3521.00 ft | | | Final 40000.00 lb |
| Depth to Bottom Packer: | ft | | | |
| Interval between Packers: | 42.00 ft | | | |
| Tool Length: | 62.00 ft | | | |
| Number of Packers: | 2 | Diameter: 6.75 inches | | |

Tool Comments:

Tool Description

Length (ft) Serial No. Position Depth (ft) Accum. Lengths

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths |
|------------------|-------------|------------|----------|------------|---------------------------------|
| Shut In Tool | 5.00 | | | 3506.00 | |
| Hydraulic tool | 5.00 | | | 3511.00 | |
| Packer - Shale | 5.00 | | | 3516.00 | |
| Packer | 5.00 | | | 3521.00 | 20.00 Bottom Of Top Packer |
| Stubb | 1.00 | | | 3522.00 | |
| Recorder | 0.00 | 8354 | Inside | 3522.00 | |
| Recorder | 0.00 | 8671 | Outside | 3522.00 | |
| perforations | 5.00 | | | 3527.00 | |
| Change Over Sub | 1.00 | | | 3528.00 | |
| Drill Pipe | 31.00 | | | 3559.00 | |
| Change Over Sub | 1.00 | | | 3560.00 | |
| Bullnose | 3.00 | | | 3563.00 | 42.00 Anchor Tool |

Total Tool Length: 62.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

TDI, Inc.

27-13S-19W Ellis,KS

1310 Bison Rd
Hays KS 67601

Clarence #1

Job Ticket: 67414

DST#: 2

ATTN: Herb Deines

Test Start: 2020.10.24 @ 19:13:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.80 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|-------------|---------------|
| 5.00 | OSM | 0.051 |

Total Length: 5.00 ft Total Volume: 0.051 bbl

Num Fluid Samples: 0

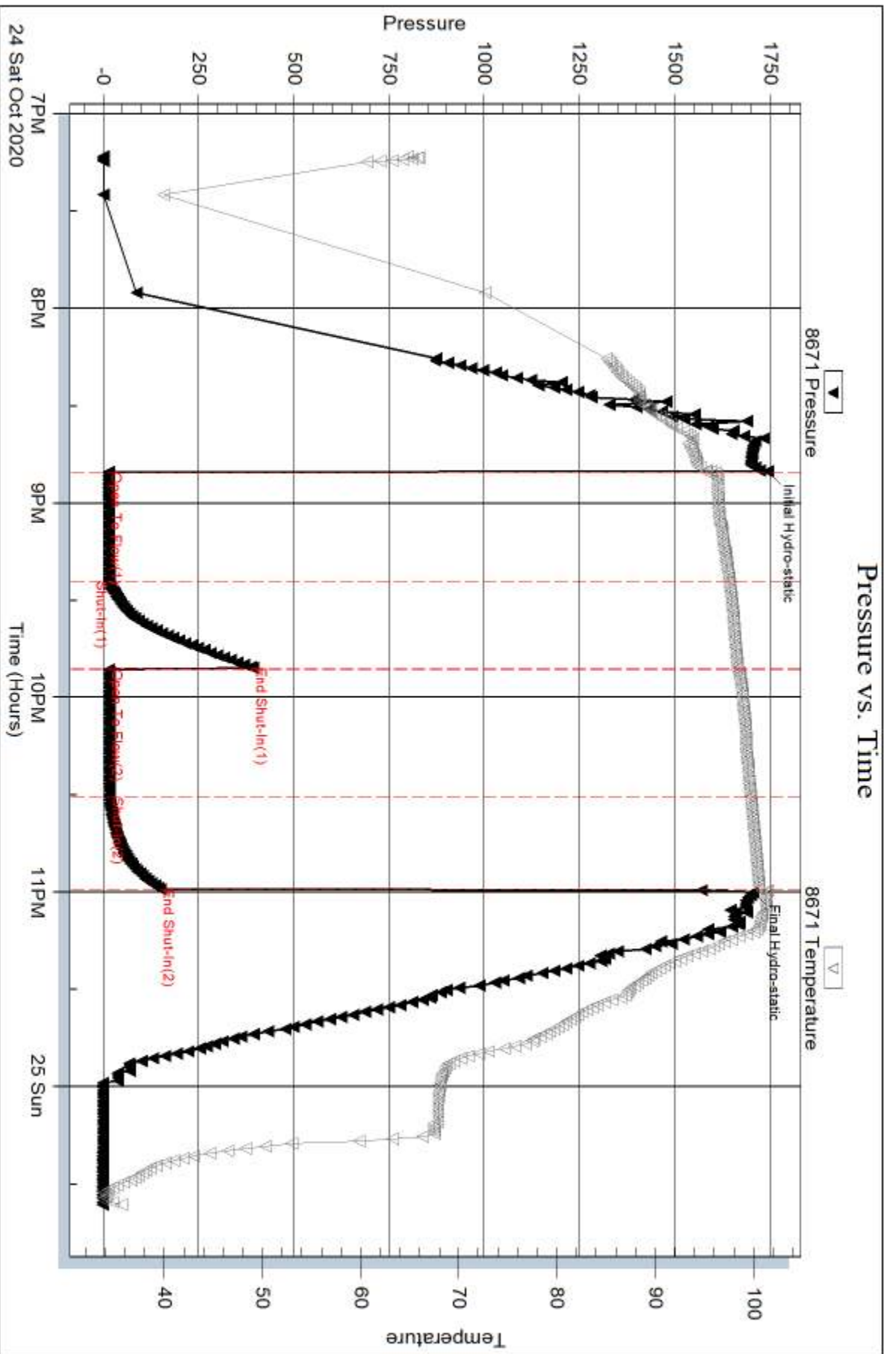
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



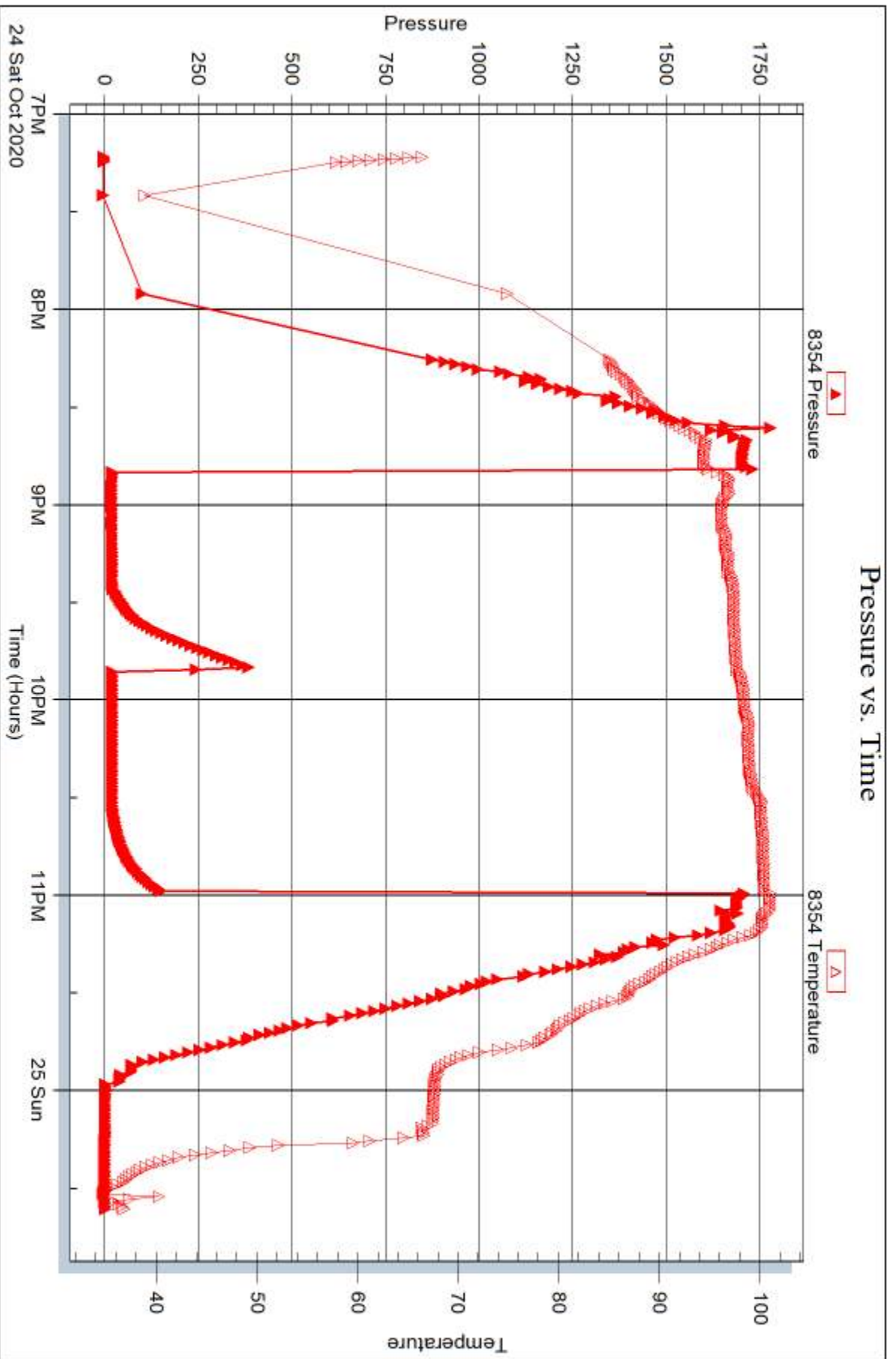
Serial #: 8354

Inside

TDI, Inc.

Clarence #1

DST Test Number: 2



Triobite Testing, Inc

Ref. No: 67414

Printed: 2020.10.26 @ 09:14:59

Test Ticket

TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

NO. 67413

4/10

Well Name & No. Clarence #1 Test No. 1 Date 10-24-2020
 Company TDI, Inc. Elevation 2168' KB 2158 GL
 Address 130 Bison Rd Hays ks 67601
 Co. Rep / Geo. Herb Deines Rig Southwind #8
 Location: Sec. 27 Twp 13S Rge. 19W Co. Ellis State ks

Interval Tested 3498'-3523' Zone Tested LHC-'C'
 Anchor Length 25' Drill Pipe Run 3494.88' Mud Wt. 9.0
 Top Packer Depth 3493' Drill Collars Run Ø Vis 50
 Bottom Packer Depth 3498' Wt. Pipe Run Ø WL 5.8
 Total Depth 3523' Chlorides 4,000 ppm System LCM 1#

Blow Description IF - Blow started out weak and died to a faint blow
ISI - No Return
IF - Started out faint and died within 10 mins.
ESI - No Return

| Rec | Feet of | %gas | %oil | %water | %mud |
|------------|------------|--------------|------|------------|------|
| <u>50'</u> | <u>QSM</u> | <u>spots</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 50' BHT 104°F Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1722 Test 1200 T-On Location 6:20am
 (B) First Initial Flow 23 Jars _____ T-Started 7:20am
 (C) First Final Flow 30 Safety-Joint _____ T-Open 9:22am
 (D) Initial Shut-In 1,007 Circ Sub _____ T-Pulled 11:22am
 (E) Second Initial Flow 33 Hourly Standby _____ T-Out 12:59pm
 (F) Second Final Flow 36 Mileage 20 RT Comments _____
 (G) Final Shut-In 929 Sampler _____
 (H) Final Hydrostatic 1183 Straddle _____

Initial Open 30 Shale Packer _____
 Initial Shut-In 30 Extra Packer _____
 Final Flow 30 Extra Recorder _____
 Final Shut-In 30 Day Standby _____
 Accessibility _____
 Sub Total 1220 MP/DST Disc't _____

Approved By _____ Our Representative Ryan [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 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.

Thanks!



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 67414

Well Name & No. Clarence #1 Test No. 2 Date 10-24-2020
 Company TDI, Inc. Elevation 2168 KB 2158 GL
 Address 1310 Bison Rd Hays ks 67601
 Co. Rep / Geo. Herb Deines Rig Southwind #8
 Location: Sec. 27 Twp 13S Rge. 19W Co. Ellis State ks

Interval Tested 3521'-3563' Zone Tested LHC-D'
 Anchor Length 42' Drill Pipe Run 3530, 67' Mud Wt. 9.0
 Top Packer Depth 3516' Drill Collars Run 0 Vis 50
 Bottom Packer Depth 3521' Wt. Pipe Run 0 WL 5.8
 Total Depth 3563' Chlorides 4003 ppm System LCM 1#

Blow Description IFP - Blow started out first then died off
ISI - No Return
FFP - No Surface blow
FST - No Return

| Rec | Feet of | %gas | Spots | %oil | %water | %mud |
|-----------|------------|------|-------|------|------------|------|
| <u>5'</u> | <u>OSM</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 100°F Gravity _____ API RW _____ @ _____ °F Chloride _____ ppm

| | | |
|-------------------------------------|--|--------------------------------|
| (A) Initial Hydrostatic <u>1743</u> | <input checked="" type="checkbox"/> Test <u>1200</u> | T-On Location <u>7:00 pm</u> |
| (B) First Initial Flow <u>13</u> | <input type="checkbox"/> Jars _____ | T-Started <u>7:13 pm</u> |
| (C) First Final Flow <u>15</u> | <input type="checkbox"/> Safety Joint _____ | T-Open <u>8:55 pm</u> |
| (D) Initial Shut-In <u>392</u> | <input type="checkbox"/> Circ Sub _____ | T-Pulled <u>11:00 pm</u> |
| (E) Second Initial Flow <u>15</u> | <input type="checkbox"/> Hourly Standby _____ | T-Out <u>12:41 am</u> |
| (F) Second Final Flow <u>17</u> | <input checked="" type="checkbox"/> Mileage <u>20 B/T</u> 40 | Comments <u>picked up tool</u> |
| (G) Final Shut-In <u>150</u> | <input type="checkbox"/> Sampler _____ | <u>10-26-2020 @ 5:48 am</u> |
| (H) Final Hydrostatic <u>1706</u> | <input type="checkbox"/> Straddle _____ | <u>to 6:43 am</u> |

| | | |
|---------------------------|---|--|
| Initial Open <u>30</u> | <input type="checkbox"/> Shale Packer _____ | <input checked="" type="checkbox"/> EM Tool <u>350</u> |
| Initial Shut-In <u>30</u> | <input type="checkbox"/> Extra Packer _____ | <input type="checkbox"/> Ruined Shale Packer _____ |
| Final Flow <u>30</u> | <input type="checkbox"/> Extra Recorder _____ | <input type="checkbox"/> Ruined Packer _____ |
| Final Shut-In <u>30</u> | <input type="checkbox"/> Day Standby _____ | <input type="checkbox"/> Extra Copies _____ |
| | <input type="checkbox"/> Accessibility _____ | Sub Total <u>0</u> |
| | Sub Total <u>1240</u> | Total <u>1240</u> |

Approved By _____ Our Representative Royal [Signature]
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