



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1205635  
OIL & GAS CONSERVATION DIVISION

Form ACO-1

August 2013

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       SIOW
- Gas       D&A       ENHR       SIGW
- OG       GSW       Temp. Abd.
- 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 ENHR       Conv. to SWD
- Plug Back       Conv. to GSW       Conv. to Producer
- Commingled      Permit #: \_\_\_\_\_
- Dual Completion      Permit #: \_\_\_\_\_
- SWD      Permit #: \_\_\_\_\_
- ENHR      Permit #: \_\_\_\_\_
- GSW      Permit #: \_\_\_\_\_

|                                   |                 |   |
|-----------------------------------|-----------------|---|
| Spud Date or<br>Recompletion Date | Date Reached TD | Completion Date or<br>Recompletion Date |
|-----------------------------------|-----------------|---|

API No. 15 - \_\_\_\_\_

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
- Geologist Report Received
- UIC Distribution
- ALT  I  II  III Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

1205635

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

| 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  |                  |                |              |                            |

Did you perform a hydraulic fracturing treatment on this well?  Yes  No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?  Yes  No *(If No, skip question 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)*

| Shots Per Foot | PERFORATION RECORD - Bridge Plugs Set/Type<br>Specify Footage of Each Interval Perforated | Acid, Fracture, Shot, Cement Squeeze Record<br><i>(Amount and Kind of Material Used)</i> | Depth |
|----------------|---|--|-------|
|                |   |  |       |
|                |   |  |       |
|                |   |  |       |
|                |   |  |       |
|                |   |  |       |

TUBING RECORD:      Size: \_\_\_\_\_ Set At: \_\_\_\_\_ Packer At: \_\_\_\_\_ Liner Run:  Yes  No

Date of First, Resumed Production, SWD or ENHR. \_\_\_\_\_ Producing Method:  
 Flowing  Pumping  Gas Lift  Other *(Explain)* \_\_\_\_\_

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

|  |  |   |
|--|--|---|
| <b>DISPOSITION OF GAS:</b><br><input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease<br><i>(If vented, Submit ACO-18.)</i> | <b>METHOD OF COMPLETION:</b><br><input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled<br><i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____ | <b>PRODUCTION INTERVAL:</b><br>_____<br>_____ |
|--|--|---|

|           |                          |
|-----------|--------------------------|
| Form      | ACO1 - Well Completion   |
| Operator  | IA Operating, Inc.       |
| Well Name | Marvin Wudtke Trust 34-1 |
| Doc ID    | 1205635                  |

All Electric Logs Run

|                                 |
|---------------------------------|
|                                 |
| Geologists Well Report          |
| Dual Induction Log              |
| Compensated Density/Neutron Log |
| Micro Log                       |
| Sonic Log                       |

|           |                          |
|-----------|--------------------------|
| Form      | ACO1 - Well Completion   |
| Operator  | IA Operating, Inc.       |
| Well Name | Marvin Wudtke Trust 34-1 |
| Doc ID    | 1205635                  |

Tops

| Name          | Top  | Datum |
|---------------|------|-------|
| Anhydrite     | 2015 | 451   |
| Topeka        | 3247 | -781  |
| Heebner Shale | 3423 | -957  |
| Toronto       | 3455 | -989  |
| LKC           | 3471 | -1005 |
| BKC           | 3655 | -1189 |
| Granite Wash  | 3723 | -1257 |
| Total Depth   | 3768 | -1302 |



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

IA Operating Inc.  
9915 W 21ST St.  
STE B  
Wichita KS 67205  
ATTN: Jeff Lawler

**34 - 2S - 24W Norton KS**

**Marvin Wudtke #34-1**

Job Ticket: 56866 **DST#: 1**

Test Start: 2014.03.25 @ 16:39:00

## GENERAL INFORMATION:

Formation: **Toronto - LKC " C "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:33:20

Time Test Ended: 23:37:09

Test Type: Conventional Bottom Hole (Initial)

Tester: Ryan Nichols

Unit No: 58

**Interval: 3422.00 ft (KB) To 3510.00 ft (KB) (TVD)**

Reference Elevations: 2466.00 ft (KB)

Total Depth: 3510.00 ft (KB) (TVD)

2458.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

**Serial #: 6752**

**Inside**

Press@RunDepth: 165.13 psig @ 3423.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.03.25

End Date:

2014.03.25

Last Calib.:

2014.03.25

Start Time: 16:39:01

End Time:

23:37:10

Time On Btm:

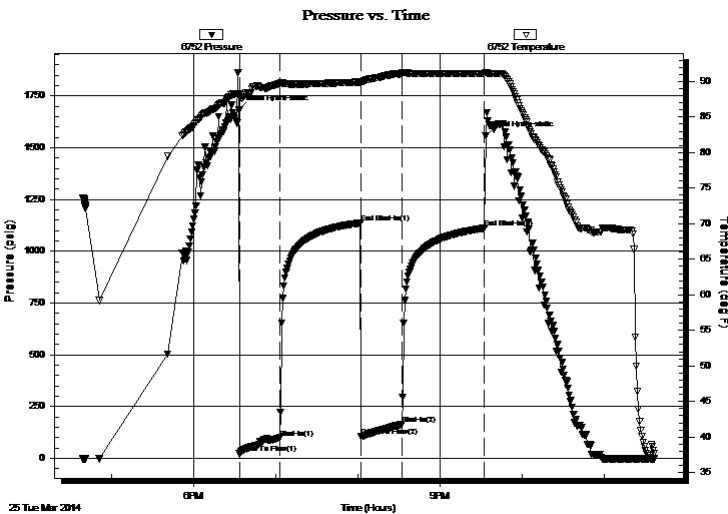
2014.03.25 @ 18:33:10

Time Off Btm:

2014.03.25 @ 21:33:20

**TEST COMMENT:** 30 IF - 1/2 blow built to BoB @ 14 mins  
60 ISI - No return  
30 FF - Surface blow built to BoB @ 17 mins  
60 FSI - No return

## PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 1681.34         | 88.20        | Initial Hydro-static |
| 1           | 21.87           | 87.71        | Open To Flow (1)     |
| 30          | 98.39           | 89.69        | Shut-In(1)           |
| 89          | 1136.90         | 89.92        | End Shut-In(1)       |
| 90          | 105.12          | 89.81        | Open To Flow (2)     |
| 119         | 165.13          | 91.17        | Shut-In(2)           |
| 180         | 1111.46         | 91.15        | End Shut-In(2)       |
| 181         | 1557.44         | 91.27        | Final Hydro-static   |

## Recovery

| Length (ft) | Description       | Volume (bbl) |
|-------------|-------------------|--------------|
| 315.00      | WCM - 50%W - 50%M | 4.14         |
|             |                   |              |
|             |                   |              |
|             |                   |              |
|             |                   |              |

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

IA Operating Inc.

**34 - 2S - 24W Norton KS**

9915 W 21ST St.

**Marvin Wudtke #34-1**

STE B

Job Ticket: 56866

**DST#: 1**

Wichita KS 67205

Test Start: 2014.03.25 @ 16:39:00

ATTN: Jeff Lawler

## 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: 60.00 sec/qt

Cushion Volume:

bbf

Water Loss: 7.19 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 750.00 ppm

Filter Cake: 2.00 inches

## Recovery Information

Recovery Table

| Length<br>ft | Description       | Volume<br>bbf |
|--------------|-------------------|---------------|
| 315.00       | WCM - 50%W - 50%M | 4.136         |

Total Length: 315.00 ft      Total Volume: 4.136 bbf

Num Fluid Samples: 0

Num Gas Bombs: 0

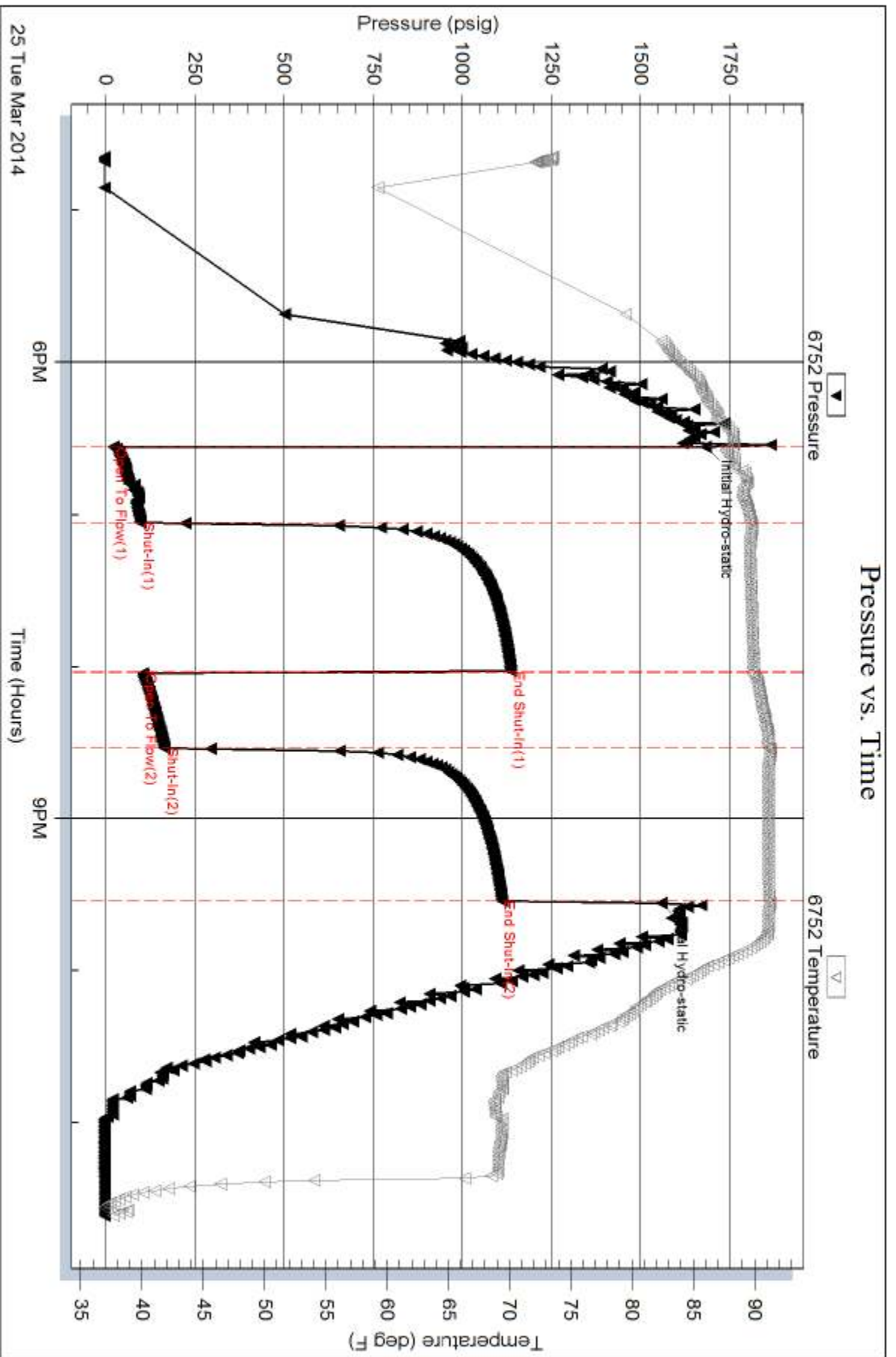
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW = .452 @ 38 DEG F

CHLORIDES = 27,000 PPM





**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

IA Operating Inc.  
9915 W 21st ST.  
STE B  
Wichita KS 67205  
ATTN: Jeff Lawler

**34 - 2S - 24W Norton KS**

**Marvin Wudtke #34-1**

Job Ticket: 56867

**DST#: 2**

Test Start: 2014.03.26 @ 13:44:00

## GENERAL INFORMATION:

Formation: **LKC "J - K"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:41:50

Time Test Ended: 20:23:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Ryan Nichols

Unit No: 58

**Interval: 3580.00 ft (KB) To 3644.00 ft (KB) (TVD)**

Reference Elevations: 2466.00 ft (KB)

Total Depth: 3644.00 ft (KB) (TVD)

2458.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

**Serial #: 6752**

**Inside**

Press@RunDepth: 34.67 psig @ 3581.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.03.26

End Date:

2014.03.26

Last Calib.:

2014.03.26

Start Time: 13:44:01

End Time:

20:23:00

Time On Btm:

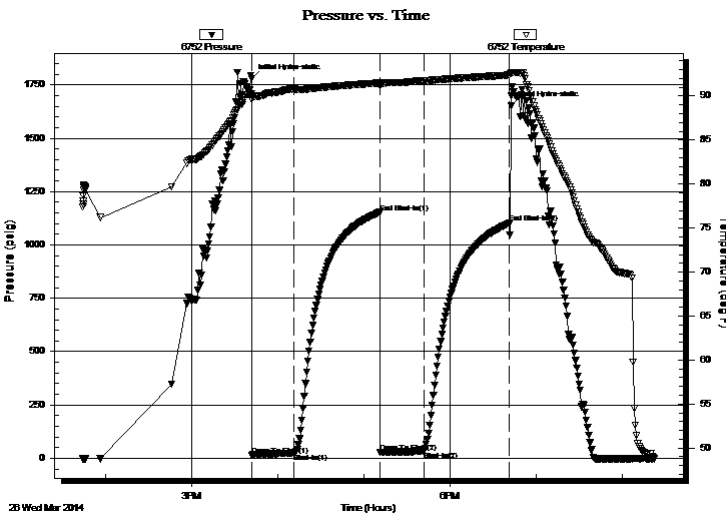
2014.03.26 @ 15:41:40

Time Off Btm:

2014.03.26 @ 18:42:20

**TEST COMMENT:** 30 IF - Surface blow built to 1"  
60 ISI - No return  
30 FF - Surface blow started @ 4 mins died @ 5 mins  
60 FSI - No return

## PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 1779.94         | 90.29        | Initial Hydro-static |
| 1           | 14.61           | 89.59        | Open To Flow (1)     |
| 30          | 23.94           | 90.80        | Shut-In(1)           |
| 90          | 1152.60         | 91.49        | End Shut-In(1)       |
| 90          | 26.80           | 91.21        | Open To Flow (2)     |
| 120         | 34.67           | 91.73        | Shut-In(2)           |
| 180         | 1101.46         | 92.37        | End Shut-In(2)       |
| 181         | 1651.12         | 92.55        | Final Hydro-static   |

## Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------|--------------|
| 35.00       | Mud - 100%M | 0.21         |
|             |             |              |
|             |             |              |
|             |             |              |
|             |             |              |

\* Recovery from multiple tests

## Gas Rates

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





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

IA Operating Inc.  
9915 W 21st ST.  
STE B  
Wichita KS 67205  
ATTN: Jeff Lawler

**34 - 2S - 24W Norton KS**  
**Marvin Wudtke #34-1**  
Job Ticket: 56867      **DST#: 2**  
Test Start: 2014.03.26 @ 13:44:00

### Mud and Cushion Information

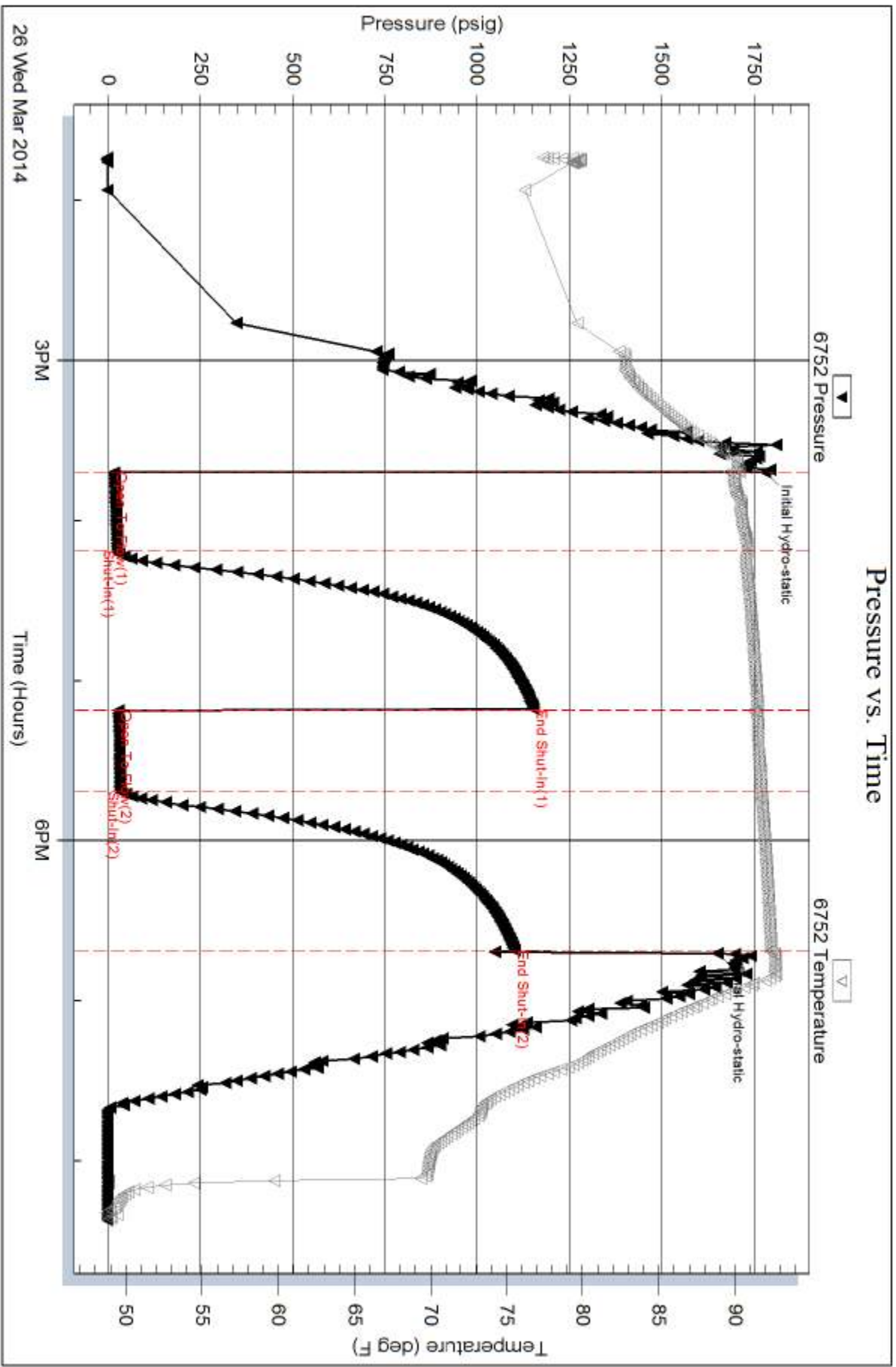
|                                  |                            |                 |         |
|----------------------------------|----------------------------|-----------------|---------|
| Mud Type: Gel Chem               | Cushion Type:              | Oil API:        | deg API |
| Mud Weight: 9.00 lb/gal          | Cushion Length: ft         | Water Salinity: | ppm     |
| Viscosity: 70.00 sec/qt          | Cushion Volume: bbl        |                 |         |
| Water Loss: 7.60 in <sup>3</sup> | Gas Cushion Type:          |                 |         |
| Resistivity: ohm.m               | Gas Cushion Pressure: psig |                 |         |
| Salinity: 1750.00 ppm            |                            |                 |         |
| Filter Cake: 1.00 inches         |                            |                 |         |

### Recovery Information

Recovery Table

| Length<br>ft | Description | Volume<br>bbl |
|--------------|-------------|---------------|
| 35.00        | Mud - 100%M | 0.209         |

Total Length: 35.00 ft      Total Volume: 0.209 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

IA Operating Inc.  
9915 W 21st ST.  
STE B  
Wichita KS 67205  
ATTN: Jeff Lawler

**34 - 2S - 24W Norton KS**

**Marvin Wudtke #34-1**

Job Ticket: 56868 **DST#: 3**

Test Start: 2014.03.27 @ 06:56:00

## GENERAL INFORMATION:

Formation: **Penn. Sand - Granite**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:01:10

Time Test Ended: 12:20:50

Test Type: Conventional Bottom Hole (Reset)

Tester: Ryan Nichols

Unit No: 58

**Interval: 3694.00 ft (KB) To 3740.00 ft (KB) (TVD)**

Reference Elevations: 2466.00 ft (KB)

Total Depth: 3740.00 ft (KB) (TVD)

2458.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

**Serial #: 6752**

**Inside**

Press@RunDepth: 22.61 psig @ 3695.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.03.27 End Date: 2014.03.27

Last Calib.: 2014.03.27

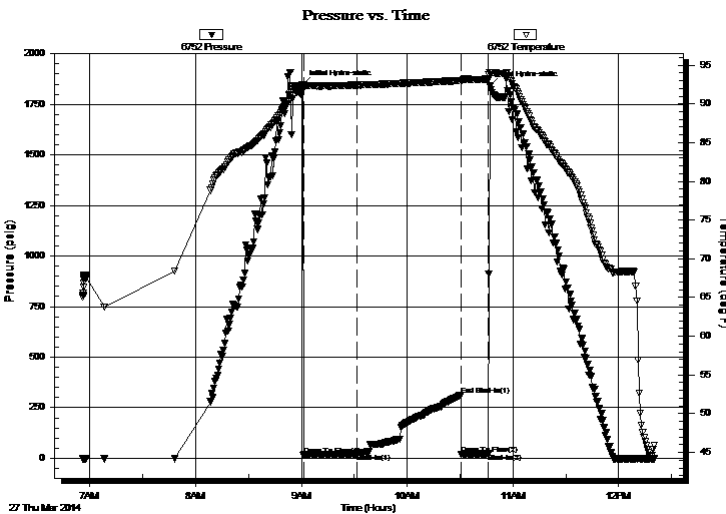
Start Time: 06:56:01 End Time: 12:20:50

Time On Btm: 2014.03.27 @ 09:01:00

Time Off Btm: 2014.03.27 @ 10:46:50

**TEST COMMENT:** 30 IF - 1/2" blow built to 3/4" @ 5 mins died back to 1/4"  
60 ISI - No return  
30 FF - No blow

## PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 1846.89         | 92.36        | Initial Hydro-static |
| 1           | 14.49           | 91.97        | Open To Flow (1)     |
| 31          | 22.61           | 92.43        | Shut-In(1)           |
| 90          | 312.53          | 93.01        | End Shut-In(1)       |
| 90          | 20.49           | 92.96        | Open To Flow (2)     |
| 106         | 22.07           | 93.20        | Shut-In(2)           |
| 106         | 1842.29         | 93.97        | Final Hydro-static   |

## Recovery

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

\* Recovery from multiple tests

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

IA Operating Inc.

**34 - 2S - 24W Norton KS**

9915 W 21st ST.

**Marvin Wudtke #34-1**

STE B

Job Ticket: 56868

**DST#: 3**

Wichita KS 67205

Test Start: 2014.03.27 @ 06:56:00

ATTN: Jeff Lawler

### 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: 60.00 sec/qt

Cushion Volume:

bbf

Water Loss: 7.17 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 750.00 ppm

Filter Cake: 1.00 inches

### Recovery Information

Recovery Table

| Length<br>ft | Description           | Volume<br>bbf |
|--------------|-----------------------|---------------|
| 5.00         | Mud 100% <sub>m</sub> | 0.025         |

Total Length: 5.00 ft      Total Volume: 0.025 bbf

Num Fluid Samples: 0

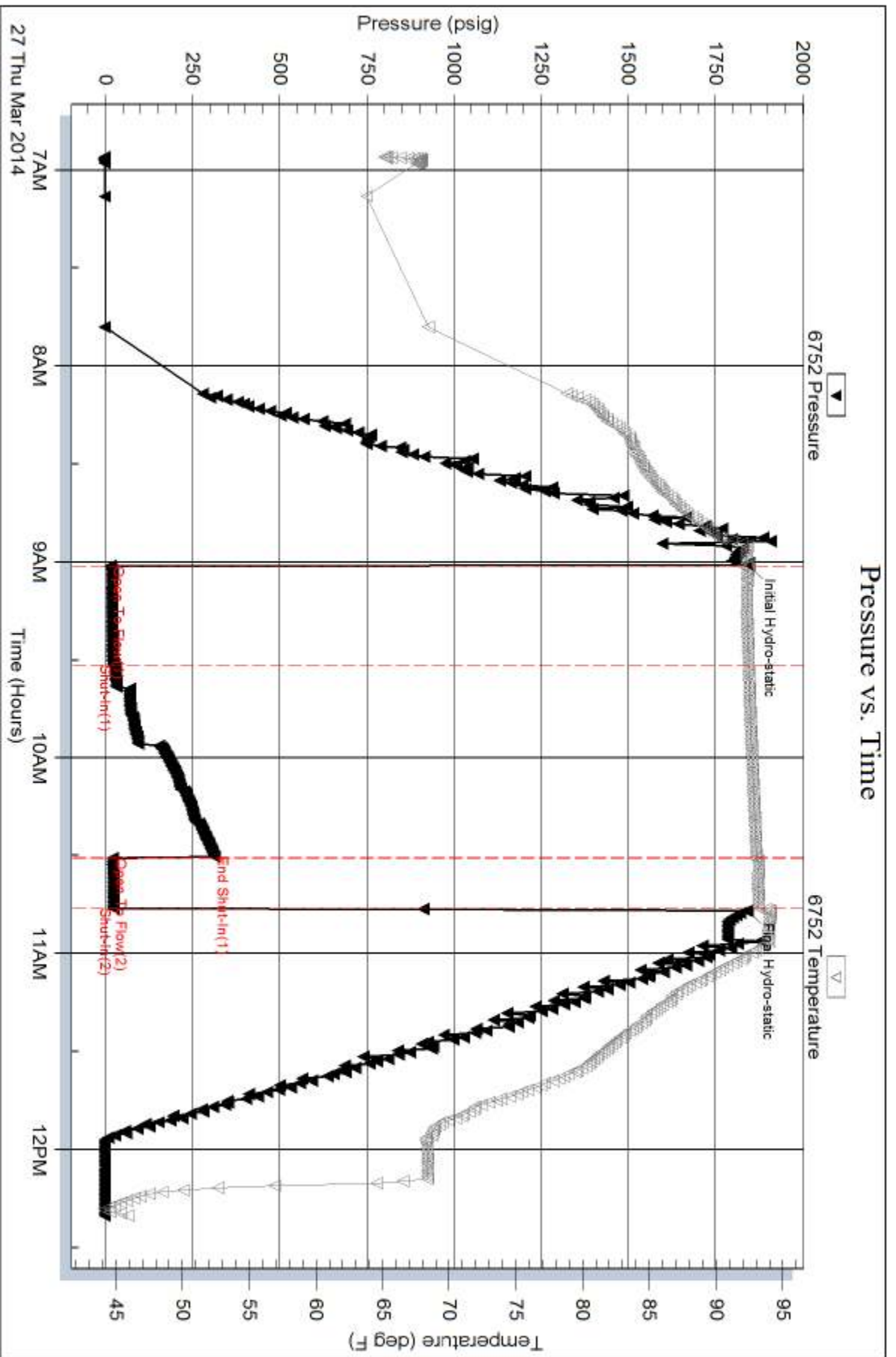
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

IA Operating Inc.  
 9915 W 21st ST.  
 STE B  
 Wichita KS 67205  
 ATTN: Jeff Lawler

**34 - 2S - 24W Norton KS**

**Marvin Wudtke #34-1**

Job Ticket: 56869 **DST#: 4**

Test Start: 2014.03.28 @ 00:33:00

## GENERAL INFORMATION:

Formation: **LKC " D - F "**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 03:05:30  
 Time Test Ended: 07:53:20  
 Interval: **3506.00 ft (KB) To 3544.00 ft (KB) (TVD)**  
 Total Depth: 3770.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Straddle (Reset)  
 Tester: Ryan Nichols  
 Unit No: 58  
 Reference Elevations: 2466.00 ft (KB)  
 2458.00 ft (CF)  
 KB to GR/CF: 8.00 ft

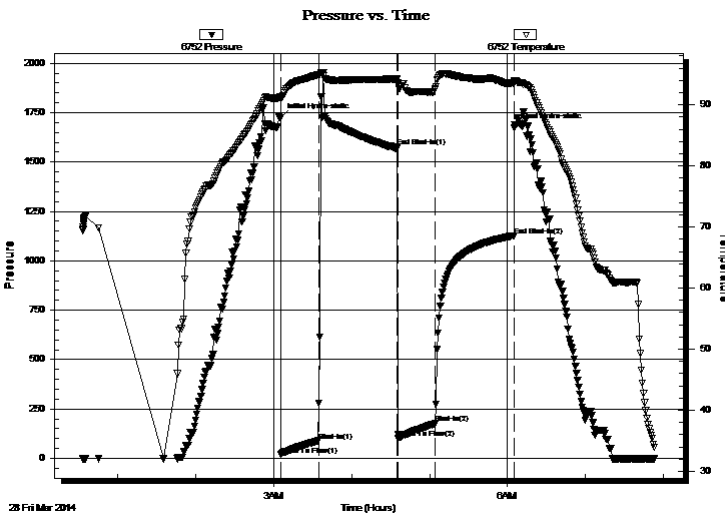
## Serial #: 6752

Inside

Press@RunDepth: 175.87 psig @ 3507.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2014.03.28 End Date: 2014.03.28 Last Calib.: 2014.03.28  
 Start Time: 00:33:01 End Time: 07:53:20 Time On Btm: 2014.03.28 @ 03:05:20  
 Time Off Btm: 2014.03.28 @ 06:05:20

TEST COMMENT: 30 IF - 1" blow built to BoB @ 18 mins  
 60 ISI - No return  
 30 FF - 1" blow built to BoB @ 13 mins  
 60 FSI - No return

## PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 1723.57         | 91.34        | Initial Hydro-static |
| 1           | 17.76           | 90.93        | Open To Flow (1)     |
| 29          | 88.66           | 94.93        | Shut-In(1)           |
| 90          | 1575.67         | 94.22        | End Shut-In(1)       |
| 91          | 99.96           | 93.36        | Open To Flow (2)     |
| 120         | 175.87          | 92.68        | Shut-In(2)           |
| 180         | 1127.35         | 93.62        | End Shut-In(2)       |
| 181         | 1675.79         | 93.84        | Final Hydro-static   |

## Recovery

| Length (ft) | Description       | Volume (bbl) |
|-------------|-------------------|--------------|
| 126.00      | WCM - 40%W - 60%M | 1.49         |
| 126.00      | WCM - 50%W - 50%M | 1.77         |
| 95.00       | MCW - 5%M - 95%W  | 1.33         |
|             |                   |              |
|             |                   |              |

\* Recovery from multiple tests

## Gas Rates

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



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

IA Operating Inc.  
 9915 W 21st ST.  
 STE B  
 Wichita KS 67205  
 ATTN: Jeff Lawler

**34 - 2S - 24W Norton KS**

**Marvin Wudtke #34-1**

Job Ticket: 56869 **DST#: 4**

Test Start: 2014.03.28 @ 00:33:00

## GENERAL INFORMATION:

Formation: **LKC " D - F "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:05:30

Time Test Ended: 07:53:20

Test Type: Conventional Straddle (Reset)

Tester: Ryan Nichols

Unit No: 58

**Interval: 3506.00 ft (KB) To 3544.00 ft (KB) (TVD)**

Total Depth: 3770.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2466.00 ft (KB)

2458.00 ft (CF)

KB to GR/CF: 8.00 ft

## Serial #: 8734 Below (Straddle)

Press@RunDepth: psig @ 3767.00 ft (KB)

Start Date: 2014.03.28

End Date:

2014.03.28

Start Time: 00:33:01

End Time:

07:53:20

Capacity: 8000.00 psig

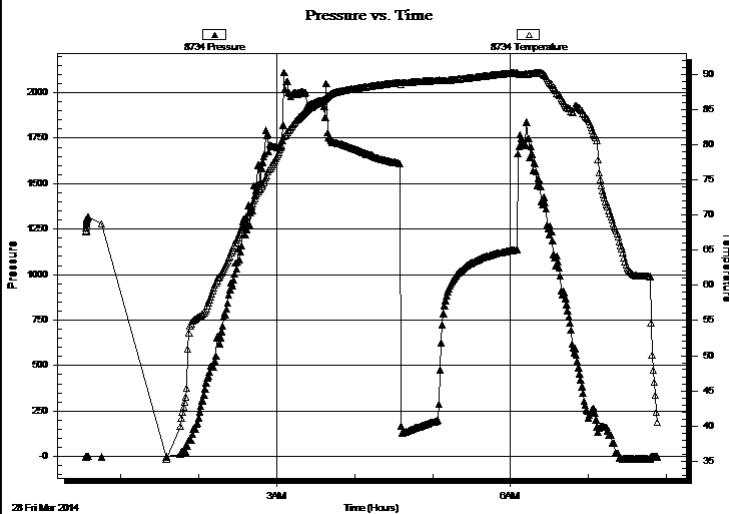
Last Calib.:

2014.03.28

Time On Btm:

Time Off Btm:

TEST COMMENT: 30 IF - 1" blow built to BoB @ 18 mins  
 60 ISI - No return  
 30 FF - 1" blow built to BoB @ 13 mins  
 60 FSI - No return



## PRESSURE SUMMARY

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

## Recovery

| Length (ft) | Description       | Volume (bbl) |
|-------------|-------------------|--------------|
| 126.00      | WCM - 40%W - 60%M | 1.49         |
| 126.00      | WCM - 50%W - 50%M | 1.77         |
| 95.00       | MCW - 5%M - 95%W  | 1.33         |
|             |                   |              |
|             |                   |              |

## Gas Rates

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

\* Recovery from multiple tests



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

IA Operating Inc.

**34 - 2S - 24W Norton KS**

9915 W 21st ST.

**Marvin Wudtke #34-1**

STE B

Job Ticket: 56869

**DST#: 4**

Wichita KS 67205

Test Start: 2014.03.28 @ 00:33:00

ATTN: Jeff Lawler

## 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: 7.60 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 750.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

| Length<br>ft | Description       | Volume<br>bbf |
|--------------|-------------------|---------------|
| 126.00       | WCM - 40%W - 60%M | 1.485         |
| 126.00       | WCM - 50%W - 50%M | 1.767         |
| 95.00        | MCW - 5%M - 95%W  | 1.333         |

Total Length: 347.00 ft      Total Volume: 4.585 bbf

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

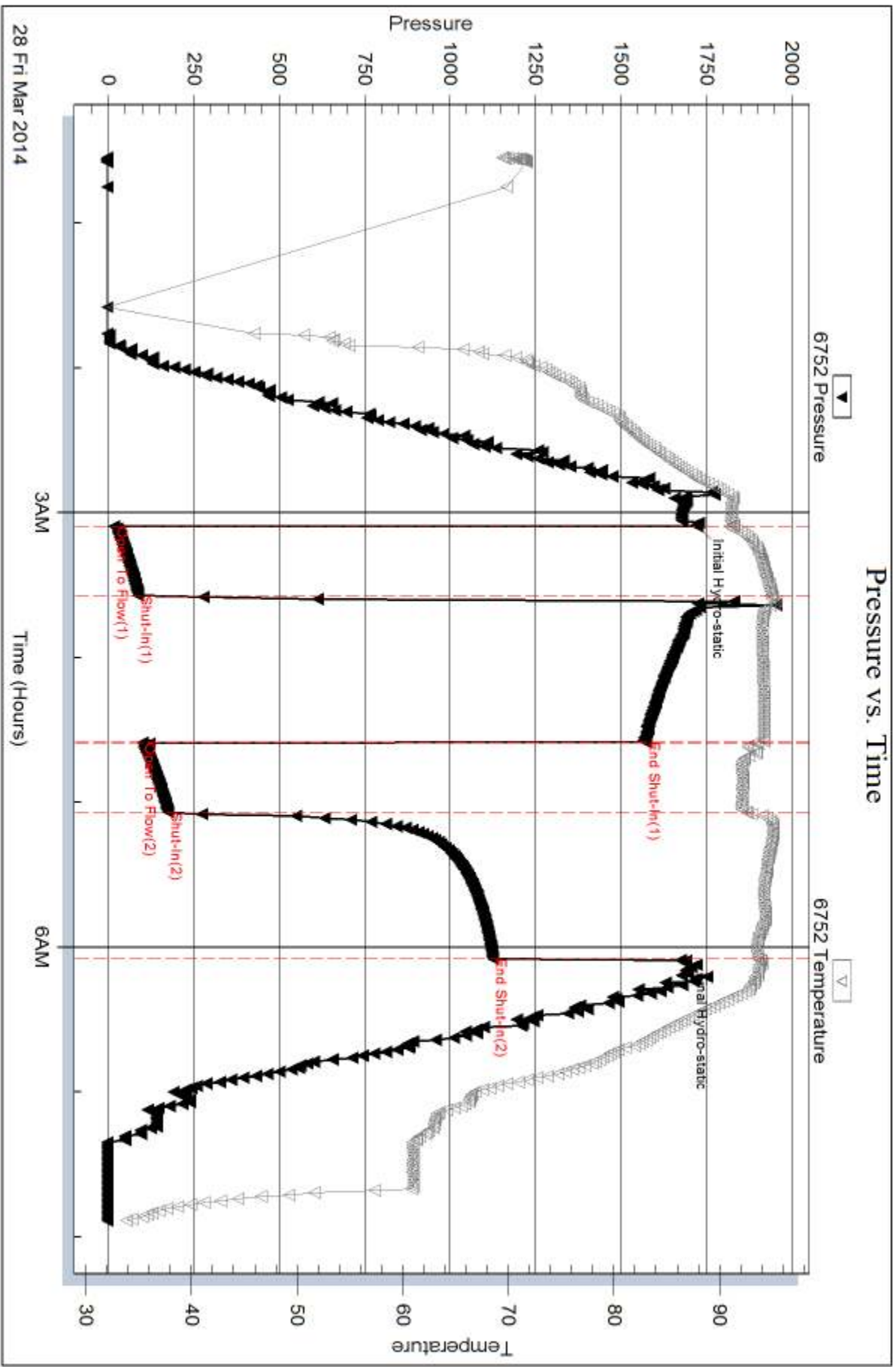
Laboratory Name:

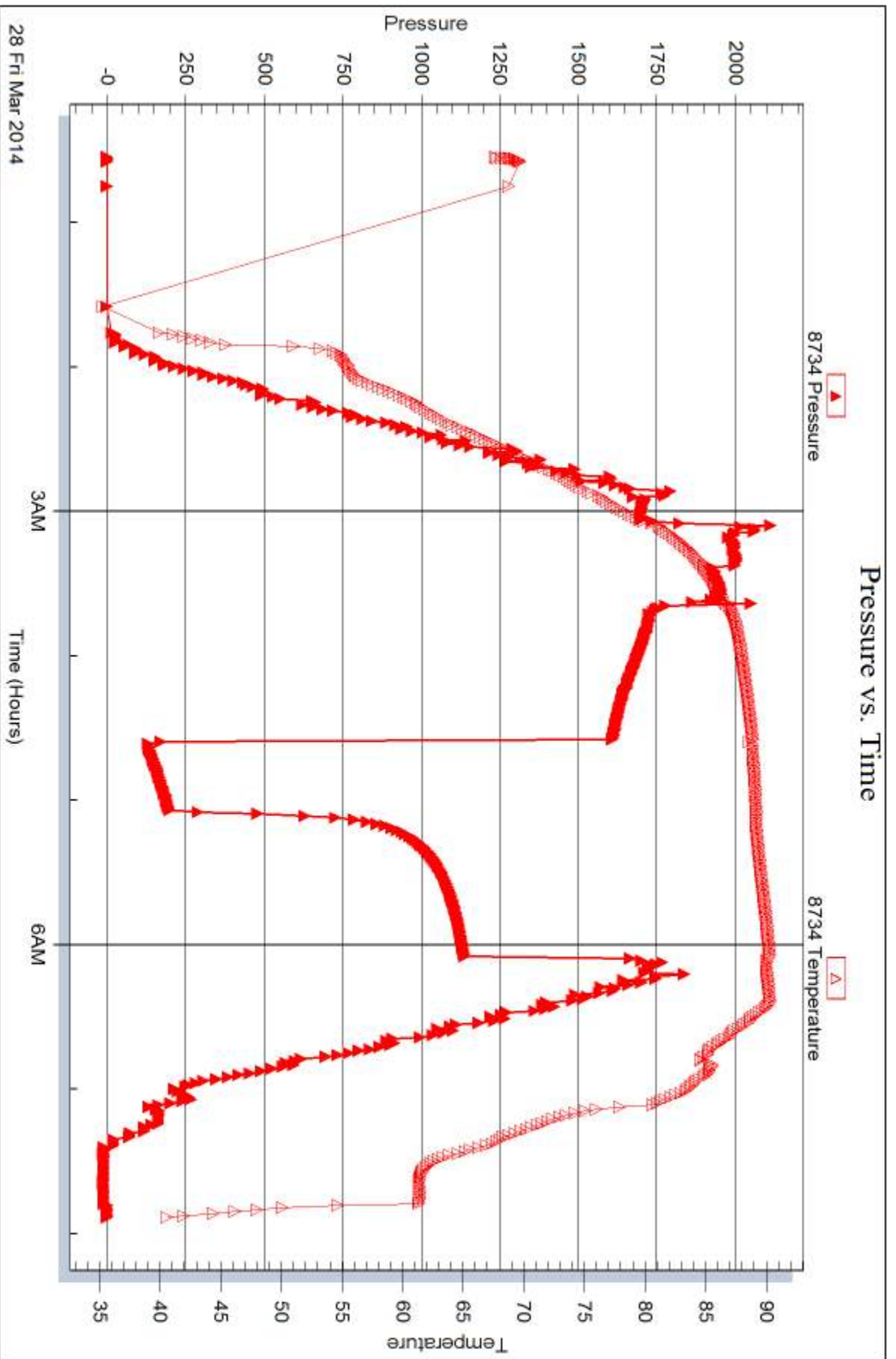
Laboratory Location:

Recovery Comments: RW = .300 @ 36 DEG F

CHLORIDES = 50,000 PPM









# ALLIED OIL & GAS SERVICES, LLC

062590

Federal Tax I.D. # 20-8651475

REMIT TO P.O. BOX 93999  
SOUTHLAKE, TEXAS 76092

SERVICE POINT:

*Dakly, K1*

|                                    |                    |                                     |                      |                 |             |                       |                        |
|------------------------------------|--------------------|-------------------------------------|----------------------|-----------------|-------------|-----------------------|------------------------|
| DATE <i>3/22/14</i>                | SEC. <i>34</i>     | TWP. <i>4</i>                       | RANGE <i>24</i>      | CALLED OUT      | ON LOCATION | JOB START <i>4:30</i> | JOB FINISH <i>2:00</i> |
| LEASE <i>Mobility Trust</i>        | WELL # <i>34-1</i> | LOCATION <i>Morton 7W Rd 7 3/4W</i> | COUNTY <i>Morton</i> | STATE <i>KS</i> |             |                       |                        |
| OLD OR NEW (Circle one) <u>NEW</u> |                    | Facts                               |                      |                 |             |                       |                        |

CONTRACTOR *Dispersal 3*

TYPE OF JOB *Surface*

HOLE SIZE *11 1/2* T.D. *220'*

CASING SIZE *8 5/8* DEPTH *220'*

TUBING SIZE DEPTH

DRILL PIPE DEPTH

TOOL DEPTH

PRES. MAX MINIMUM

MEAS. LINE SHOE JOINT

CEMENT LEFT IN CSG. *15'*

PERFS.

DISPLACEMENT *13.0585 BBL*

OWNER *Sam*

CEMENT AMOUNT ORDERED *150 lbm 390 cl*

*27 gal*

COMMON *150 lbm* @ *17.92* *2685.00*

POZMIX @

GEL @ *23.40* *70.20*

CHLORIDE *5* @ *64.00* *320.00*

ASC @

EQUIPMENT

PUMP TRUCK CEMENTER *Alan Ryan*

# *425-281* HELPER *Kevin Ryan*

BULK TRUCK

# *373* DRIVER *Tyler M (TWO)*

BULK TRUCK DRIVER

HANDLING *3* @ *48* *144*

MILEAGE *200* @ *7.28* *1456*

TOTAL *5029.56*

REMARKS:

*Run Cas Circulate, Mix Cement, Displace Cement Shut In*

*Cement did Circulate*

*TLK 4*

*Alan, Kevin, Tyson*

SERVICE

DEPTH OF JOB *220'*

PUMP TRUCK CHARGE *1572.25*

EXTRA FOOTAGE @

MILEAGE *82 miles* @ *7.20* *590.40*

MANIFOLD *82 miles* @ *4.40* *360.80*

TOTAL *2504.95*

CHARGE *J.A. Operating*

STREET

CITY STATE ZIP

PLUG & FLOAT EQUIPMENT

@

@

@

@

@

TOTAL

To: Allied Oil & Gas Services, LLC.

You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME *Galen Gaschler*

SIGNATURE *Galen Gaschler*

SALES TAX (If Any)

TOTAL CHARGES *7,534.01*

DISCOUNT *1,506.80* IF PAID IN 30 DAYS

*6,027.20 Net*