

#### Kansas Corporation Commission Oil & Gas Conservation Division

1152551

Form ACO-1
June 2009
Form Must Be Typed
Form must be Signed
All blanks must be Filled

# WELL COMPLETION FORM WELL HISTORY - DESCRIPTION OF WELL & LEASE

| OPERATOR: License #  | API No. 15  |
|--|---|
| Name:  | Spot Description:   |
| Address 1:   | SecTwpS. R 🗌 East 🗌 West  |
| Address 2:   | Feet from North / South Line of Section   |
| City:  | Feet from East / West Line of Section   |
| Contact Person:  | Footages Calculated from Nearest Outside Section Corner:                                |
| Phone: ()  | □NE □NW □SE □SW   |
| CONTRACTOR: License #  | County:   |
| Name:  | Lease Name: Well #:   |
| Wellsite Geologist:  | Field Name:   |
| Purchaser:   | Producing Formation:  |
| Designate Type of Completion:  | Elevation: Ground: Kelly Bushing:   |
| New Well Re-Entry Workover   | Total Depth: Plug Back Total Depth:   |
| Oil         WSW         SWD         SIOW           Gas         D&A         ENHR         SIGW           OG         GSW         Temp. Abd.           CM (Coal Bed Methane)         Cathodic         Other (Core, Expl., etc.): | Amount of Surface Pipe Set and Cemented at: Feet  Multiple Stage Cementing Collar Used? |
| If Workover/Re-entry: Old Well Info as follows:  |   |
| Operator:  | Drilling Fluid Management Plan (Data must be collected from the Reserve Pit)            |
| Original Comp. Date: Original Total Depth:  Deepening Re-perf. Conv. to ENHR Conv. to SWD  Conv. to GSW  | Chloride content: ppm Fluid volume: bbls  Dewatering method used:                       |
| Plug Back: Plug Back Total Depth   | Location of fluid disposal if hauled offsite:   |
| □ Commingled         Permit #:   | Operator Name:  |
| GSW Permit #:  | County: Permit #:   |
| Spud Date or Date Reached TD Completion Date or Recompletion Date  |   |

#### **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                |  |  |  |
|------------------------------------|--|--|--|
| Letter of Confidentiality Received |  |  |  |
| Date:                              |  |  |  |
| Confidential Release Date:         |  |  |  |
| Wireline Log Received              |  |  |  |
| Geologist Report Received          |  |  |  |
| UIC Distribution                   |  |  |  |
| ALT I II III Approved by: Date:    |  |  |  |

Side Two



| Operator Name:   |  |   | Lease Name: _        |                     |                      | _ Well #:         |                               |
|--|--|---|----------------------|---------------------|----------------------|-------------------|-------------------------------|
| Sec Twp  | S. R   | East West   | County:              |                     |                      |                   |                               |
| time tool open and clo   | osed, flowing and shu<br>es if gas to surface te | d base of formations pen<br>t-in pressures, whether s<br>st, along with final chart(<br>well site report. | hut-in pressure read | ched static level,  | hydrostatic press    | sures, bottom h   | ole temperature, fluid        |
| Drill Stem Tests Taker (Attach Additional                              |  | Yes No  | L                    | og Formatio         | n (Top), Depth an    | d Datum           | Sample                        |
| Samples Sent to Geo  | ological Survey                                  | Yes No  | Nam                  | е                   |                      | Тор               | Datum                         |
| Cores Taken Electric Log Run Electric Log Submitte (If no, Submit Copy | d Electronically                                 | Yes No Yes No Yes No  |                      |                     |                      |                   |                               |
| List All E. Logs Run:  |  |   |                      |                     |                      |                   |                               |
|  |  | Report all strings set-   |                      | ermediate, producti |                      |                   |                               |
| Purpose of String  | Size Hole<br>Drilled                             | Size Casing<br>Set (In O.D.)  | Weight<br>Lbs. / Ft. | Setting<br>Depth    | Type of<br>Cement    | # Sacks<br>Used   | Type and Percent<br>Additives |
|  |  |   |                      |                     |                      |                   |                               |
|  |  |   |                      |                     |                      |                   |                               |
|  |  |   |                      |                     |                      |                   |                               |
|  |  | ADDITIONAL  | . CEMENTING / SQL    | <br>JEEZE RECORD    |                      |                   |                               |
| Purpose:  —— Perforate  —— Protect Casing                              | Depth<br>Top Bottom                              | Type of Cement  | # Sacks Used         |                     | Type and F           | Percent Additives |                               |
| Plug Back TD Plug Off Zone   |  |   |                      |                     |                      |                   |                               |
|  | DEDEODATI  | ON DECORD - Dridge Dive   | o Cot/Time           | Acid Fro            | cture, Shot, Cemen   | t Squaaza Baaar   | 4                             |
| Shots Per Foot   | Specify I  | ON RECORD - Bridge Plug<br>Footage of Each Interval Per   | forated              |                     | mount and Kind of Ma |                   | Depth                         |
|  |  |   |                      |                     |                      |                   |                               |
|  |  |   |                      |                     |                      |                   |                               |
|  |  |   |                      |                     |                      |                   |                               |
|  |  |   |                      |                     |                      |                   |                               |
|  |  |   |                      |                     |                      |                   |                               |
| TUBING RECORD:   | Size:  | Set At:   | Packer At:           | Liner Run:          | Yes No               |                   |                               |
| Date of First, Resumed   | Production, SWD or EN                            | HR. Producing Meth  |                      | Gas Lift C          | Other (Explain)      |                   |                               |
| Estimated Production<br>Per 24 Hours                                   | Oil  | Bbls. Gas   | Mcf Wat              | er B                | ols. (               | Gas-Oil Ratio     | Gravity                       |
| DISPOSITI  | ON OF GAS:                                       |   | METHOD OF COMPLE     | ETION:              |                      | PRODUCTIO         | ON INTERVAL:                  |
| Vented Solo  |  | Open Hole   | Perf. Dually         | Comp. Cor           | nmingled             |                   |                               |
| (If vented, Su   | bmit ACO-18.)                                    | Othor (Specify)   | (Submit )            | 400-5) (Sub         | mit ACO-4)           |                   |                               |

| Form      | ACO1 - Well Completion |
|-----------|------------------------|
| Operator  | American Warrior, Inc. |
| Well Name | Foos 6-23              |
| Doc ID    | 1152551                |

# Tops

| Name          | Тор   | Datum |
|---------------|-------|-------|
| Anhy          | 1400' | 806   |
| B/Anhy        | 1432' | 774   |
| Heebner       | 3703' | -1492 |
| Lansing       | 3746' | -1540 |
| B/KC          | 4036' | -1830 |
| Pawnee        | 4158' | -1952 |
| Ft.Scott      | 4200' | -1994 |
| Cherokee      | 4208' | -2002 |
| Mississippian | 4312' | -2106 |



Prepared For: American Warrior Inc.

PO Box 399 Garden Clty KS 67846

ATTN: Jason Alm

#### Foos #6-23

### 23-19s-20w Rush,KS

Start Date: 2013.01.21 @ 07:57:36 End Date: 2013.01.21 @ 13:47:06 Job Ticket #: 51411 DST #: 1

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



American Warrior Inc.

23-19s-20w Rush, KS

PO Box 399

Garden Clty KS 67846

ATTN: Jason Alm

Foos #6-23

Tester:

Unit No:

Job Ticket: 51411

Test Start: 2013.01.21 @ 07:57:36

Tate Lang

53

#### **GENERAL INFORMATION:**

Formation: Cherokee "A" Sand

Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Initial)

Time Tool Opened: 10:38:51
Time Test Ended: 13:47:06

Interval: 4208.00 ft (KB) To 4235.00 ft (KB) (TVD)

Total Depth: 4235.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2206.00 ft (KB)

KB to GR/CF: 8.00 ft

DST#: 1

2198.00 ft (CF)

Serial #: 8677 Inside

Press @ RunDepth: 207.09 psig @ 4209.00 ft (KB) Capacity: 8000.00 psig

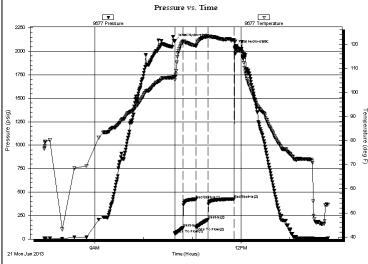
 Start Date:
 2013.01.21
 End Date:
 2013.01.21
 Last Calib.:
 2013.01.21

 Start Time:
 07:57:41
 End Time:
 13:47:05
 Time On Btm:
 2013.01.21 @ 10:38:21

 Time Off Btm:
 2013.01.21 @ 11:52:21

TEST COMMENT: IF-B.O.B. In 5 mins.

ISI-Dead no return blow FF-B.O.B. In 8 mins. FSI-Dead no return blow



|             | Time   | Pressure | Temp    | Annotation           |
|-------------|--------|----------|---------|----------------------|
|             | (Min.) | (psig)   | (deg F) |                      |
|             | 0      | 2109.44  | 106.48  | Initial Hydro-static |
|             | 1      | 55.68    | 106.36  | Open To Flow (1)     |
|             | 11     | 120.66   | 121.06  | Shut-In(1)           |
| 7           | 26     | 422.48   | 119.36  | End Shut-In(1)       |
| Temperature | 27     | 124.50   | 119.24  | Open To Flow (2)     |
| rature      | 41     | 207.09   | 123.22  | Shut-In(2)           |
| (deg        | 74     | 425.85   | 121.66  | End Shut-In(2)       |
| P           | 74     | 2042.50  | 120.94  | Final Hydro-static   |
|             |        |          |         |                      |
|             |        |          |         |                      |
|             |        |          |         |                      |
|             |        |          |         |                      |

PRESSURE SUMMARY

#### Recovery

| Length (ft)              | Description | Volume (bbl) |
|--------------------------|-------------|--------------|
| 93.00 2%G 3%O 5%W 90%M   |             | 1.30         |
| 124.00 2%G 3%O 10%M 85%W |             | 1.74         |
| 196.00 5%M 95%W          |             | 2.75         |
|                          |             |              |
|                          |             |              |
|                          |             |              |

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

Gas Rates

Trilobite Testing, Inc Ref. No: 51411 Printed: 2013.01.22 @ 10:07:52



American Warrior Inc.

Foos #6-23

Garden Clty KS 67846

Job Ticket: 51411

23-19s-20w Rush, KS

DST#: 1

ATTN: Jason Alm

PO Box 399

Test Start: 2013.01.21 @ 07:57:36

#### **GENERAL INFORMATION:**

Formation: Cherokee "A" Sand

Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Initial)

Time Tool Opened: 10:38:51

Tester: Tate Lang
Time Test Ended: 13:47:06

Unit No: 53

Interval: 4208.00 ft (KB) To 4235.00 ft (KB) (TVD) Reference Elevations: 2206.00 ft (KB)

Total Depth: 4235.00 ft (KB) (TVD) 2198.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 8.00 ft

Serial #: 8522 Outside

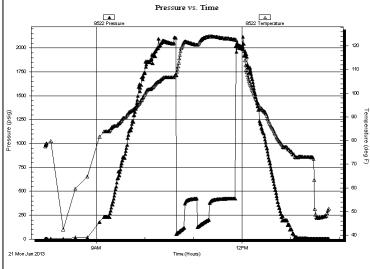
 Press@RunDepth:
 psig
 @ 4209.00 ft (KB)
 Capacity:
 8000.00 psig

Start Date: 2013.01.21 End Date: 2013.01.21 Last Calib.: 2013.01.21

Start Time: 07:57:11 End Time: 13:47:35 Time On Btm: Time Off Btm:

TEST COMMENT: IF-B.O.B. In 5 mins.

ISI-Dead no return blow FF-B.O.B. In 8 mins. FSI-Dead no return blow



| Р | RESSUR | RE SUMMARY |
|---|--------|------------|
|   | T      | A          |

|                     | Time   | Pressure | Temp    | Annotation |
|---------------------|--------|----------|---------|------------|
|                     | (Min.) | (psig)   | (deg F) |            |
|                     |        |          |         |            |
|                     |        |          |         |            |
|                     |        |          |         |            |
| Ter                 |        |          |         |            |
| nperat              |        |          |         |            |
| Temperature (deg F) |        |          |         |            |
| eg F)               |        |          |         |            |
|                     |        |          |         |            |
|                     |        |          |         |            |
|                     |        |          |         |            |
|                     |        |          |         |            |
|                     |        |          |         |            |
|                     |        |          |         |            |

#### Recovery

| Length (ft) | Description       | Volume (bbl) |
|-------------|-------------------|--------------|
| 93.00       | 2%G 3%O 5%W 90%M  | 1.30         |
| 124.00      | 2%G 3%O 10%M 85%W | 1.74         |
| 196.00      | 5%M 95%W          | 2.75         |
|             |                   |              |
|             |                   |              |
|             |                   |              |

#### Gas Rates

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

Trilobite Testing, Inc Ref. No: 51411 Printed: 2013.01.22 @ 10:07:53



**TOOL DIAGRAM** 

American Warrior Inc.

23-19s-20w Rush,KS

PO Box 399

Foos #6-23 Job Ticket: 51411

DST#: 1

Garden Clty KS 67846 ATTN: Jason Alm

Test Start: 2013.01.21 @ 07:57:36

**Tool Information** 

Drill Collar:

Drill Pipe: Heavy Wt. Pipe: Length:

Length: 4184.00 ft Diameter: 0.00 ft Diameter: 0.00 ft Diameter: 3.80 inches Volume: 58.69 bbl 0.00 inches Volume: 0.00 bbl 2.25 inches Volume: 0.00 bbl Tool Weight: 2200.00 lb Weight set on Packer: 20000.00 lb Weight to Pull Loose: 62000.00 lb

3.00 ft

Total Volume: 58.69 bbl

Tool Chased 0.00 ft String Weight: Initial 54000.00 lb

Final 56000.00 lb

Drill Pipe Above KB: Depth to Top Packer: 4208.00 ft

Length:

Depth to Bottom Packer: ft Interval between Packers: 27.00 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 |                         |
|------------------|-------------|------------|----------|------------|----------------|-------------------------|
| Change Over Sub  | 1.00        |            |          | 4182.00    |                |                         |
| Shut In Tool     | 5.00        |            |          | 4187.00    |                |                         |
| Hydraulic tool   | 5.00        |            |          | 4192.00    |                |                         |
| Jars             | 5.00        |            |          | 4197.00    |                |                         |
| Safety Joint     | 2.00        |            |          | 4199.00    |                |                         |
| Packer           | 5.00        |            |          | 4204.00    | 27.00          | Bottom Of Top Packer    |
| Packer           | 4.00        |            |          | 4208.00    |                |                         |
| Stubb            | 1.00        |            |          | 4209.00    |                |                         |
| Recorder         | 0.00        | 8677       | Inside   | 4209.00    |                |                         |
| Recorder         | 0.00        | 8522       | Outside  | 4209.00    |                |                         |
| Perforations     | 23.00       |            |          | 4232.00    |                |                         |
| Bullnose         | 3.00        |            |          | 4235.00    | 27.00          | Bottom Packers & Anchor |

**Total Tool Length:** 54.00

Ref. No: 51411 Printed: 2013.01.22 @ 10:07:54 Trilobite Testing, Inc



**FLUID SUMMARY** 

American Warrior Inc. 23-19s-20w Rush, KS

PO Box 399 Foos #6-23

Garden Clty KS 67846 Job Ticket: 51411 DST#:1

ATTN: Jason Alm Test Start: 2013.01.21 @ 07:57:36

#### **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: 65000 ppm

Viscosity: 42.00 sec/qt Cushion Volume: bbl

Water Loss: 7.39 in<sup>3</sup> Gas Cushion Type:

Resistivity: ohm.m Gas Cushion Pressure: psig

Salinity: 7300.00 ppm Filter Cake: 1.00 inches

#### **Recovery Information**

#### Recovery Table

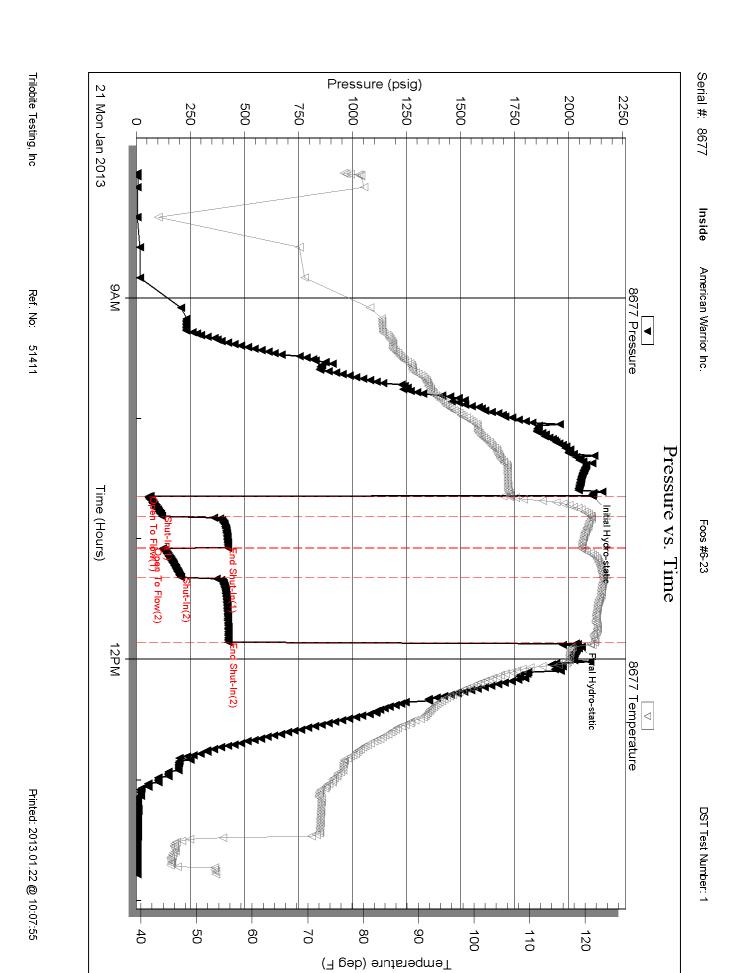
| Len <sub>t</sub> | gth<br>: | Description       | Volume<br>bbl |
|------------------|----------|-------------------|---------------|
|                  | 93.00    | 2%G 3%O 5%W 90%M  | 1.305         |
|                  | 124.00   | 2%G 3%O 10%M 85%W | 1.739         |
|                  | 196.00   | 5%M 95%W          | 2.749         |

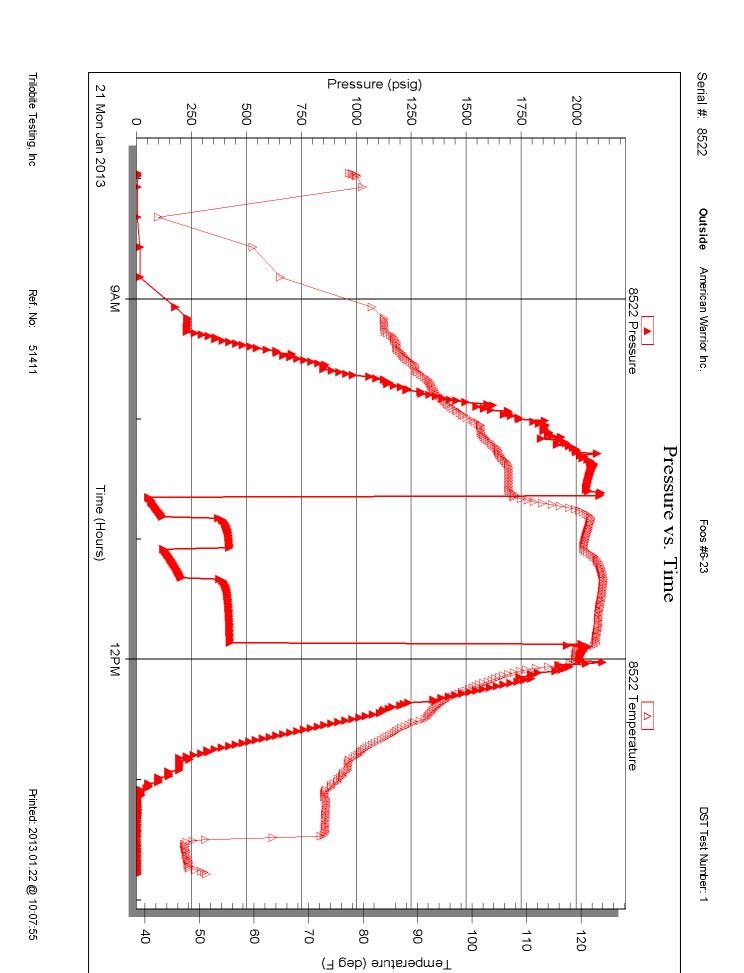
Total Length: 413.00 ft Total Volume: 5.793 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location: Recovery Comments: AIP RW .212 @ 40F = 65000

Trilobite Testing, Inc Ref. No: 51411 Printed: 2013.01.22 @ 10:07:54







1515 Commerce Parkway • Hays, Kansas 67601

# **Test Ticket**

51411 NO.

| Well Name & No. Foos # 6-23   | Test N  | o. /   | Date 1-21-12                                    |
|---|---|--|---|
| Company American Warr   | ior Elevat  | ion 220G   | кв 2/98 gl                                      |
| Address 3118 Cummings Ro  | 1. Garden City K  | 5 67848  |   |
| Co. Rep / Geo. Sason Alm  | Rig Z   | TUKE # 8   |   |
| Location: Sec   | /14   | Rush   | State   |
| Interval Tested 4208 - 4235   | Zone Tested Cheroke   | e "A" sand   | d   |
| Anchor Length 27  | Drill Pipe Run 4/84   |  | Mud Wt. 9, 2                                    |
| Top Packer Depth 4204   | Drill Collars Run   |  | vis 42  |
| Bottom Packer Depth 4208  | Wt. Pipe Run  |  | wl 7,4  |
| Total Depth 4235  | Chlorides   | ppm System   | LCM_TR  |
| Blow Description $IF - B, O, B, T$  | 15 main   |  | 1   |
| 251- Dead north   | turn blow   |  |   |
| Fr - B.O. B. In   | 8 mins  |  |   |
|   | etuin blow  |  | ~ 00  |
| 1011  | 2 %ga   | ~  | 5 %water 98 %mud                                |
| Rec 196 Feet of MCW   | Ø %ga   |  | 35 %water /0 %mud                               |
|   | %ga   | 723.00   | 95 %water 5 %mud                                |
| RecFeet of  | %ga   |  | %water %mud                                     |
| Rec Feet of   |   | MANAGEMENT AND ASSESSMENT ASSESSMENT AND ASSESSMENT ASS | %water %mud                                     |
| (A) Initial Hydrostatic 2/09  | Test 1250   |  | cation \$ 4:50                                  |
| (B) First Initial Flow 56   | ₩ Jars 250  | T-Started  | 7, ~~   |
| (C) First Final Flow 121  | Safety Joint 75   | T-Open_  | 10:41   |
| (D) Initial Shut-In 422   | Circ Sub 1  | T-Pulled   | - 15/   |
| (E) Second Initial Flow 125   | ☐ Hourly Standby  | T-Out  | 12,45   |
| (F) Second Final Flow 207   | Mileage HOR/7   | Commercial  |   |
| (G) Final Shut-In 426   | □ Sampler   | 1.40   | 22.00   |
| (H) Final Hydrostatic 2043  | ☐ Straddle  |  | ed Shale Packer                                 |
| 10  | ☐ Shale Packer  |  | ed Packer                                       |
| Initial Open 10   | ☐ Extra Packer  | D Extra  | a Copies  |
| Initial Shut-In 15  | ☐ Extra Recorder  |  | ul0   |
| Final Flow  | ☐ Day Standby   | Total  | 866.40  |
| Final Shut-In30   | ☐ Accessibility   | MP/DS  | T Disc't  |
|   | Sub Total 1866.40   | — 1  | 1/1/  |
| Approved By   | Our Represent   | ative  | er directly prohiticatly through the use of its |
| Trilobite Testing Inc. shall not be liable for damaged of any kind of the proper equipment, or its statements or opinion concerning the results of any test, to | y of personner of the one for wholff a test is made, or<br>ols lost or damaged in the hole shall be paid for at cos | by the party for whom the test   | is made.  |

# **Geological Report**

American Warrior, Inc. Foos #6-23 1242' FNL & 2308' FEL Sec. 23 T19s R20w Rush County, Kansas



American Warrior, Inc.

# **General Data**

| Well Data:           | American Warrior, Inc. Foos #6-23 1242' FNL & 2308' FEL Sec. 23 T19s R20w Rush County, Kansas API # 15-165-22005-0000 |
|----------------------|---|
| Drilling Contractor: | Duke Drilling Co. Inc. Rig #8   |
| Geologist:           | Jason T Alm   |
| Spud Date:           | January 13, 2013  |
| Completion Date:     | January 22, 2013  |
| Elevation:           | 2198' Ground Level<br>2206' Kelly Bushing   |
| Directions:          | Nekoma KS, 2 mi. West on Hwy 96 to 160 rd. 5 mi. South to V rd. West 1 ¼ mi. South into loc.                          |
| Casing:              | 283' 8 5/8" surface casing 4319' 5 1/2" production casing   |
| Samples:             | 10' wet and dry, 3900' to RTD   |
| Drilling Time:       | 3600' to RTD  |
| Electric Logs:       | Pioneer Energy Services "Daylan Kerr" CNL/CDL, DIL, MEL   |
| Drillstem Tests:     | One, Trilobite Testing, Inc. "Tate Lang"  |
| Problems:            | None  |

None

Remarks:

# **Formation Tops**

|               | American Warrior, Inc. |
|---------------|------------------------|
|               | Foos #6-23             |
|               | Sec. 23 T19s R20w      |
| Formation     | 1242' FNL & 2308' FEL  |
| Anhydrite     | 1400', +806            |
| Base          | 1432', +774            |
| Heebner       | 3703', -1497           |
| Lansing       | 3746', -1540           |
| BKc           | 4036', -1830           |
| Pawnee        | 4158', -1952           |
| Fort Scott    | 4200', -1994           |
| Cherokee      | 4208', -2002           |
| Mississippian | 4312', -2106           |
| RTD           | 4318', -2112           |
| LTD           | 4320', -2114           |

# **Sample Zone Descriptions**

# Cherokee "A" Sand (4218', -2012): Covered in DST #1

Ss – Quartz, fine grained, sub-rounded, well sorted, fairly cemented with poor to fair inter-granular porosity, light spotted oil stain and saturation, light to fair show of free oil when broken, 10 units hotwire.

# Mississippian Osage (4236', -2097): Not Tested

 $\Delta$  – Dolo – Fine sucrosic crystalline with poor vuggy porosity, very heavy chert, mostly fresh with scattered fair vuggy porosity, barren, slightly glauconitic.

# **Drill Stem Tests**

Trilobite Testing, Inc. "Tate Lang"

# DST #1 Cherokee "A" Sand

Interval (4208' – 4235') Anchor Length 27'

IHP - 2109 #

IFP - 10" - B.O.B. 5 min. 55-120 #
ISI - 15" - Dead 422 #
FFP - 15" - B.O.B. 8 min. 124-207 #
FSI - 30" - Dead 425 #

 $\begin{array}{ll} FHP & -2042 \ \# \\ BHT & -123 \ ^{\circ}F \end{array}$ 

Recovery: 93' GOWCM 3% Oil, 5% Water

124' GOMCW 3% Oil, 85% Water

196' MCW

# **Structural Comparison**

|               | American Warrior, Inc. | Bankoff Oil Co.      |             |                       |              |
|---------------|------------------------|----------------------|-------------|-----------------------|--------------|
|               | Foos #6-23             | Foos #1              |             |                       |              |
|               | Sec. 23 T19s R20w      | Sec. 23 T19s R20w    |             |                       |              |
| Formation     | 1242' FNL & 2308' FEL  | 990' FNL & 1650' FEL |             | 1500' FNL & 2310' FWL |              |
| Anhydrite     | 1400', +806            | 1410', +801          | (+5)        | 1407', +811           | (-5)         |
| Base          | 1432', +774            | 1439', +772          | (+2)        | NA                    | NA           |
| Heebner       | 3703', -1497           | 3704', -1493         | (-4)        | 3711', -1493          | (-4)         |
| Lansing       | 3746', -1540           | 3748', -1537         | (-3)        | 3752', -1534          | (-6)         |
| BKc           | 4036', -1830           | 4036', -1825         | (-5)        | NA                    | NA           |
| Pawnee        | 4158', -1952           | 4157', -1946         | <b>(-6)</b> | NA                    | NA           |
| Fort Scott    | 4200', -1994           | 4198', -1987         | (-7)        | NA                    | NA           |
| Cherokee      | 4208', -2002           | 4206', -1995         | (-7)        | 4218', -2000          | (-2)         |
| Mississippian | 4312', -2106           | 4283', -2072         | (-34)       | 4314', -2096          | <b>(-10)</b> |

# **Summary**

| The location for the Foos #6-23 was found via 3-D seismic survey. The new well         |
|--|
| ran structurally lower than expected via the survey. One drill stem test was conducted |
| which was negative. After all gathered data had been examined the decision was made to |
| run 5 1/2 inch production casing and convert into a water injection well.              |

# **Recommended Perforations**

|     | •   | 4 •           |      |
|-----|-----|---------------|------|
| In  | ነውሶ | * <b>†1</b> / | m·   |
| Inj |     | ш             | ,,,, |

Cherokee "A" Sand: (4222' – 4228') DST #1

Respectfully Submitted,

Jason T Alm Hard Rock Consulting, Inc.

# ALLIED OIL & GAS SERVICES, LLC 059193

| Federal Tax I.D   | .# 20-5975804                           |                      |
|---|---|----------------------|
| REMIT TO P.O. BOX 93999   | SER                                     | VICE POINT:          |
| SOUTHLAKE, TEXAS 76092  |   | Great Bened          |
|   |   | <i>G7507 R34-177</i> |
|   | RILLED OUT 1-15 ON LOCATION             | 12:30 AIN 12:43 AIN  |
|   |   | COUNTY STATE         |
| LEASE FLOS WELL # CO-23 LOCATION 4 miles  |   | Bush US              |
| OLD ORNEW (Circle one) Alexander is   | OF BD 140                               | JRH 1:01 6.3         |
| CONTRACTOR DILLE DELLING CO.  |   |                      |
| CONTRACTOR Duke Drilling Co.  | OWNER AMERICA                           | Warrer               |
| HOLESIZE 12/4 T.D. 283  | CEMENT                                  |                      |
| CASING SIZE \$5/8 DEPTH 283.56  | AMOUNT ORDERED 160                      | Sxis - Piess A.      |
| TUBING SIZE DEPTH   | 3% CC 2% C                              | rei                  |
| DRILL PIPE DEPTH  |   |                      |
| TOOL DEPTH  | **                                      | 5. 60                |
| PRES. MAX 500 MINIMUM   | COMMON160                               | @ 17.90 Z.864.00     |
| MEAS, LINE SHOE JOINT 201   | POZMIX                                  | @ 23.40 70.20        |
| PERFS.  | GEL 3                                   | @ 64.00 320.00       |
| DISPLACEMENT 162.415 Hals   | ASC S                                   | @ 671 320. =         |
|   | ASC                                     |                      |
| EQUIPMENT   |   |                      |
|   |   | @                    |
| PUMPTRUCK CEMENTER Halmak Helgersin   |   | _e                   |
| # 366 HELPER Trust Hall   |   |                      |
| # 344 DRIVER Alan Cheneroux 3   |   |                      |
| BULK TRUCK  | *************************************** | _@                   |
| # DRIVER  | HANDLING / 72.09                        | @ 2.48 426.78        |
|   | MILEAGE 7.87 X 40 X                     | 2.60 818.48          |
| REMARKS:  |   | TOTAL 4.499. 46      |
|   | 314.80                                  | 101AL 7.97%.         |
| Turped 5 bbl tosh whe Sprier.   | -                                       | 1013                 |
| Supped 38.19 bbls of course &   | i.ic SERV                               | ICE                  |
| of Fresh water let 1.248 ide of   | DEPTH OF JOB 283                        |                      |
| Comest in Costing aprile. 20 of Fill  | PUMP TRUCK CHARGE                       | 15/2.25              |
| Shot in head circulated 17 looks  | EXTRA FOOTAGE                           | @                    |
| of course to surface.   | MILEAGE HUM 40                          | @ 7.70 308,00        |
|   | MANIFOLD LUM YO                         |                      |
|   | rum 40                                  | @ 4.40 176.00        |
| 1   |   | _@                   |
| CHARGE TO: Imenico Warning  |   | TOTAL 1.996.         |
| STREET 3118 Commings and  |   | TOTAL 7. 776.        |
|   |   |                      |
| CITY Cardes Coly STATE KS ZIP 67846   | PLUG & FLOA                             | T EQUIPMENT          |
|   |   |                      |
|   |   | @                    |
|   |   |                      |
| Tax Alliad Oil & Gas Samines IIC  |   | e                    |
| 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                                    |   | TOTAL                |
| contractor. I have read and understand the "GENERAL                                       | 20                                      | 501                  |
| TERMS AND CONDITIONS" listed on the reverse side.   | SALES TAX (If Any)                      | 7/                   |
|   | TOTAL CHARGES 6. 49                     | 5. —                 |
| Stars H Stenlars  | 25% 1.62                                | 3. <u>92</u>         |
| PRINTED NAME JTEUS IT STEPHINS  | DISCOUNT                                | IF PAID IN 30 DAYS   |
| $\Lambda I = I \Lambda I$   | 4.87                                    | 1,                   |
| SIGNATURE ALLANDE   | 0.70 (5.2)                              |                      |
|   |   |                      |



| CHARGE TO:         | American Warrior    |  |
|--------------------|---------------------|--|
| ADDRESS            | MINERICAN WELLY TOR |  |
| CITY, STATE, ZIP C | ODE                 |  |

TICKET Nº 24711

| -    |   |   |
|------|---|---|
| PAGE | 0 | E |

| Seri  | ices, inc.   |          |            |       |  |                            |   |                      |  |                  |             |                    | 1             | 1       |      |
|---|--|----------|------------|-------|--|----------------------------|---|----------------------|--|------------------|-------------|--------------------|---------------|---------|------|
| SERVICE LOCATIONS 1.                        | City KS WELLIPROJECT N   | 6-2      | 3 LE       | ASE   | lest - Foos  | COUNTY/PARISH              | STATE   | CITYAle              | xaid   | ee               | DA          | 4 113              | OWN           | ER      |      |
| 2.  | T SERVICE  | ONTRACT  | OR         | ſ.    | W 2  | RIG NAME/NO.               | SHIPPED   |                      | cati   | A>>              | OR          | DER NO.            |               |         |      |
| 3.<br>4.                                    | WELL TYPE  | 71       | WE         | )ev   | 1 /  | ement port colla           | NI .  | WELL PERMI           | The same of the sa | 011              |             | LL LOCATION 23-19- | 70            |         |      |
| REFERRAL LOCATION                           | INVOICE INSTRUC  | TIONS    |            |       |  |                            |   |                      |  |                  |             |                    |               |         |      |
| PRICE<br>REFERENCE                          | SECONDARY REFERENCE/<br>PART NUMBER  | LOC      | ACCT       | G DF  |  | DESCRIPTION                |   | QTY.                 | U/M  | QTY.             | U/M         | UNIT<br>PRICE      |               | AMOUNT  |      |
| 515   |  | 1        |            | I     | MILEAGE  | TRK 114                    |   | 35                   | mi   |                  |             | 6                  | 00            | 210     | 00   |
| 576D  |  | 1        |            | 1     | PumpCha  | rge                        | 4   | 1                    | 00   |                  |             | 1500               | 00            | 1500    | æ    |
| 330   |  | 1        |            | I     | 12.1   | ment                       |   | 120                  | Sk   |                  |             | 17 4               | 8             | 2040    | 100  |
| 276   |  | 1        |            | 10    | Flocele  | <del></del>                |   | 25                   | 16   |                  | -           |                    | 90            | 50      | 20   |
| 290   |  | 1        |            | 18    | D-Air  |                            |   | 2                    | 091  | 4                | 1           | 10                 | 00            | 84      | 00   |
| 104   |  | 1        |            | 18    | Port Colla   | e Tool Rental              |   | 1                    | 09   |                  |             | 200                | 00            | 250     | 60   |
| 583   |  | 14       |            | 1     | Drayage  | 7                          |   | 17414                | 1/5  | 304.75           | 779         | 1                  | $\rightarrow$ |         |      |
| 581   |  | ,        |            |       | service (  | charge                     |   | 175                  | BK   |                  |             | 2                  | 90            | 350     | 100  |
|   |  |          |            |       |  |                            |   |                      |  |                  |             |                    |               |         |      |
|   |  |          |            |       |  |                            |   |                      | لہا  | DEE UN-          | DIS-        | <u>, i</u>         |               |         | -    |
| the terms and con-                          | Customer hereby acknowled ditions on the reverse side here to, PAYMENT, RELEASE, | eof whic | ch include | ,     | REMIT PA   | AYMENT TO:                 | OUR EQUIPMENT<br>WITHOUT BREAK<br>WE UNDERSTOO                  | DOWN?                | AGF  | DECIDED          | AGREE       | PAGE TOTA          | L             | 4788    | 75   |
| LIMITED WARR                                |  | MDEM     | MITI, all  |       | CVALLET OF   | DVICES INC                 | MET YOUR NEED<br>OUR SERVICE W                                  | S?                   | +  |                  | -           | -                  |               |         | 1    |
| MUST BE SIGNED BY CU<br>START OF WORK OR DE | ISTOMER OR CUSTOMER'S AGENT PR<br>LIVERY OF GOODS                                | IOR TO   |            |       | P.O. I   | RVICES, INC.<br>BOX 466    | PERFORMED WIT<br>WE OPERATED T<br>AND PERFORMED<br>CALCULATIONS | HE EQUIPMEN<br>D JOB |  | +                |             | Rush<br>TAX        | 7             | 152     | 171  |
| X<br>DATE SIGNED                            | TIME SIGNED  |          | E A.M.     |       |  | TY, KS 67560               | ARE YOU SATISF  |                      | SERVICE  |                  | 1           | 1000               |               |         | 1    |
|   |  | 12       | Ø P.M.     | -     |  | 798-2300                   |   | TOMER DID N          |  |                  |             | TOTAL              |               | 4941    | 146  |
| SWIFT OPERATOR                              |  | ER ACC   | _          | OF MA | AND RESIDENCE OF THE PARTY OF T | ES The customer hereby ack | nowledges receipt of t  | he materials a       | ind service  | ces listed on th | nis ticket. |                    |               | Thank ( | You! |
|   |  | WIN.     |            | 37    |  |                            |   |                      |  |                  |             |                    |               | C       |      |



| CHARGE TO: | A                |  |
|------------|------------------|--|
|            | AMERICAN WARRIOR |  |
| ADDRESS    |                  |  |

TICKET

Nº 23795

|  |                                   |                   |                  |              |                          |   |                      |           |                    |                 |                    | - 3      | 1 00   |       |
|--|-----------------------------------|-------------------|------------------|--------------|--------------------------|---|----------------------|-----------|--------------------|-----------------|--------------------|----------|--------|-------|
| SERVICE LOCATIONS                                      | &- WELL/PROJ                      |                   | FU               | 005 6-23     | RUSH                     | STATE<br>KS_  | ALEX                 | ANE       | ER.K               | 5. DA           | TE RUIS            | OWI      | NER    |       |
| 2.   | TICKET TYP SERVI                  | CE CONTRACTO      | EDRI             | LUNE RIGH    | RIG NAME/NO.             | SĤIPPED<br>VIA  | DELIVERED            | оти<br>   |                    | OR              | DER NO.            |          |        |       |
| I.<br>REFERRAL LOCATION                                | WELL TYPE                         | O(L<br>STRUCTIONS | MELL C           | ELOPMENT JOE | SZLONGSTR                | 2126-   | WELL PERMI           | T NO.     |                    | WE              | 55,23              | E,       | SIVIO  |       |
| PRICE S  | SECONDARY REFERENC<br>PART NUMBER |                   | CCOUNTING ACCT D | -            | DESCRIPTION              |   | QTY.                 | T U/M     | QTY.               | LUM             | UNIT               |          | AMOUNT |       |
| 575  |                                   |                   | noor b           | MILEAGE#115  |                          |   | 30                   | 1         | arr.               | I O/M           |                    | 8        | 180    | 00    |
| 578  |                                   |                   |                  | Pump C       | HARGE                    |   |                      | 18        |                    | -               | 1500               | 8        | 197    | 00    |
| 403  |                                   | -++               |                  | CENTRALIE    |                          |   | 2                    | EA.       |                    |                 | 70                 | 60       | (05()  | 100   |
| 404  |                                   |                   |                  | PORT CO      |                          |   |                      | VOA.      | 1401               | FT.             | 2400               | 00       | 240    | 100   |
| 406  |                                   |                   |                  | LATICH DOW   | ON PLUGAB                |   | /                    | EA        |                    | П               | 250                | <b>1</b> | 250    | 100   |
| 407  |                                   | -H                |                  | INSERT /     | LOATSHOE W<br>HEAD RENT  | AUTO FILL   | /                    | FA        |                    | 1               | 357                | 8        | 35/)   | 100   |
| 281  |                                   |                   |                  | MUD FL       |                          | HC  | 577                  | JEA.      |                    | + +             | 200                | 25       | 625    | 100   |
| 221  |                                   |                   |                  | LIQUIDK      |                          |   | 2                    |           |                    |                 | 25                 | 100      | 50     | 100   |
|  |                                   |                   |                  |              |                          |   | -                    | +         |                    |                 |                    |          |        |       |
| LEGAL TERMS: Custo<br>the terms and conditions         | s on the reverse side             | e hereof whic     | h include,       | REMIT PA     | AYMENT TO:               | OUR EQUIPMENT<br>WITHOUT BREAK                                    |                      | AGI       | REE DECIDE         | DIS-<br>D AGREE | PAGE TOT           | AL Z     | 4548   | 077   |
| but are not limited to, P<br>LIMITED WARRANTY          | provisions.                       |                   | IITY, and        | SWIFT SE     | RVICES, INC.             | WE UNDERSTOOM MET YOUR NEED OUR SERVICE WAR                       | S?                   | ,         |                    |                 | subto-             | Fol      | 11,233 | 27    |
| MUST BE SIGNED BY CUSTOME<br>START OF WORK OR DELIVERY |                                   | NT PRIOR TO       |                  | P.O. I       | BOX 466                  | WE OPERATED TO<br>AND PERFORMED<br>CALCULATIONS<br>SATISFACTORILY | HE EQUIPMEN<br>D JOB |           |                    |                 | Push<br>TAX<br>6.3 | 90       | 562    | 53    |
| PAPE SIGNED 22 JAW                                     | TIME SIGNED                       | 1815              | □ A.M.<br>P.M.   |              | Y, KS 67560<br>798-2300  | ARE YOU SATISF  | ☐ YES                |           | E? □ NO TO RESPOND |                 | TOTAL              |          | 11,796 | 130   |
| WIFT OPERATOR  | TG) 10                            | STOMER ACCE       | PTANCE OF I      |              | ES The customer hereby a | cknowledges receipt of th   | he materials a       | and servi | ces listed on t    | his ticket.     |                    |          | Thanh  | Varil |
| 400  | Katli                             | 11                |                  | 15           |                          |   |                      |           |                    |                 |                    |          | Thank? | Lou:  |



PO Box 466 Ness City, KS 67560

# TICKET CONTINUATION

No. 23795

| Service                         | o. True. Of                         | f: 785-798-23 |        |      | CUSTONERICAN WARRIOR                   | WELL FOOS        | 6-23     | DATE 22JAN 13 | PAGE 2 OF 2 |
|---------------------------------|-------------------------------------|---------------|--------|------|--|------------------|----------|---------------|-------------|
| PRICE<br>REFERENCE              | SECONDARY REFERENCE/<br>PART NUMBER | LOC ACCT      | ING DF | TIME | DESCRIPTION                            | QTY.   U/M       | QTY. U/M | PRICE         | AMOUNT      |
| 276                             |                                     |               |        |      | FLOCELE                                | 44/16            |          | 20            | 8818        |
| 283                             |                                     |               |        |      | SALT                                   | 900 lbs          |          | 30            | 1808        |
| 284                             |                                     |               |        |      | CALSEAL                                | 8isx             | i        | 35100         | 28019       |
| 292                             |                                     |               |        |      | HALAD 322                              | 124 16           |          | 7.8           | 96119       |
| 276<br>283<br>284<br>292<br>290 |                                     |               |        |      | D'AIR                                  | 13 gac           |          | 350           | 52150       |
|                                 |                                     |               |        |      |  |                  |          |               |             |
|                                 |                                     |               |        |      |  | <del>     </del> |          |               |             |
| *                               |                                     |               |        |      |  |                  |          |               |             |
|                                 |                                     |               |        |      |  |                  |          |               |             |
|                                 |                                     |               |        |      |  | 1                |          |               |             |
|                                 |                                     |               |        |      |  |                  |          |               |             |
|                                 |                                     |               |        |      |  |                  |          | i             | <u> </u>    |
|                                 |                                     |               |        |      |  |                  |          |               |             |
|                                 |                                     |               | -      |      |  |                  |          | İ             |             |
|                                 |                                     |               |        |      |  |                  | i        |               |             |
| 275-                            |                                     |               |        |      | Za 12000 Acres 7 700                   | Imcla            | i        | 12 50         | 2362 59     |
| 325                             |                                     |               |        |      | STANDARD CEMENT EAR                    | 175 Sx           | <u> </u> | 1313          | 200013      |
| 581                             |                                     |               |        |      | SERVICE CHARGE                         | CUBIC FEET 17    | SSX      | 20            | 350 m       |
| 583                             |                                     |               |        |      | MILEAGE TOTAL WINGST 8 LOADED MILES 30 | TON MILES 274    | 77       | 190           | 274172      |

CONTINUATIONTOTAL

4548 7

| JOB | LOG |
|-----|-----|
| JUD | LUG |

SWIFT Services, Inc.

DATE 22 JAN 13 PAGE NO.

| TIME | RATE<br>(BPM)  | VOLUME<br>(BBL) (GAL)                                  | PUMPS<br>T C   | PRESSUI TUBING  | RE (PSI)  CASING  | DESCRIPTION OF OPERATION AND MATERIALS                                     |
|------|--|--|--|---|---|--|
| 123D |  |  |  |   |   |  |
|      |  |  |  |   |   | ON LOCATION  |
|      |  |  |  |   |   |  |
|      |  |  |  |   |   |  |
|      |  |  |  |   |   | START PIPE 52-15.58  |
|      |  |  |  |   |   | RTD@4318 LTD@4320  |
|      |  |  |  |   |   | SADEJY. 20,47'   |
|      |  |  |  |   |   | CENTRALIZERS 1,2,3,4,6,8,10,12,68  |
|      |  |  |  |   |   | BASKETS 2.109  |
|      |  |  |  |   |   | PORT COLLAR \$ 69@1403   |
|      |  |  |  |   |   |  |
| 615  |  |  |  |   |   | DROP BALL CIRCULATE.   |
|      |  |  |  |   |   |  |
| 703  | 125  | 12   | ~  | 300   |   | Pump 500 SAL MUD FLUSH   |
|      |  |  | 1  |   |   | Pump 20 Bbl KCL FLUSH  |
|      |  |  |  |   |   |  |
| 709  |  | 7.5  |  |   |   | PLU6 RH-MH (30sx-20sx)   |
|      |  |  |  |   |   |  |
| 7/2  | 4  | 30   | 7  |   |   | MIX 125 SX EA2   |
|      |  | -  |  |   |   | THIN TO SEE IN   |
| 723  |  |  |  |   |   | WASHOUT PUMP & LINES.  |
| 12.  |  |  |  |   |   | TOTO TOTAL   |
| 726  | 105  |  |  |   |   | START DISPLACING PLUG  |
|      |  |  |  |   |   | 31/11/ 513/20100 1746  |
| 742  | DR   | 1/22%  |  |   | 1500  | PLUE DOWN PSIND LATCH PLUE IN  |
| ЦА   | 8  | 1022   |  |   | 1300  | THE COURT ISTUP MICH PUCE  |
| 745  |  |  |  |   | <b>T</b>  | RELEASE PSI - DRY  |
| 119  |  |  |  |   | -   | NEW-BE 131 Die   |
| 748  |  |  |  |   |   | WASH TRUCK   |
| 170  |  |  |  |   |   | WASH TRUCK   |
|      |  |  |  |   |   |  |
| 215  |  |  |  |   |   | JOB COMPLETE   |
| 310  |  |  |  |   | -   | Complete   |
|      |  |  |  |   |   | THANKS \$115   |
|      |  |  |  | 2   | -   | 114612 - 113   |
|      |  | <del>                                     </del>       |  |   | -   | JASON JEFF ROB   |
|      |  |  |  |   | -   | SHOUN SETT HUB   |
|      |  | -  |  |   | -   |  |
|      |  |  |  |   |   |  |
| 1    | 103<br>709<br>712<br>723<br>726<br>742<br>748<br>815 | 703 62<br>62<br>709<br>712 4<br>723<br>726 62<br>742 8 | 703 62 12<br>62 20<br>709 7,5<br>712 4 30<br>723<br>726 62<br>742 8 1022 | 703 62 12 V 62 20 V 709 7,5 712 4 30 V 723 724 8 1022 | 703 leź 12 \ 300<br>leź 20 \ 300<br>709 \ 7,5 \ \ 7,5 \ \ 723 \ \ 723 \ \ 742 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | 703 6½ 12 \ 300<br>709 7,5<br>712 4 30<br>723<br>7242 8 102½ \ 1500<br>748 |