



**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
- Conv. to GSW
- Plug Back: \_\_\_\_\_ Plug Back Total Depth \_\_\_\_\_
- Commingled      Permit #: \_\_\_\_\_
- Dual Completion      Permit #: \_\_\_\_\_
- SWD      Permit #: \_\_\_\_\_
- ENHR      Permit #: \_\_\_\_\_
- GSW      Permit #: \_\_\_\_\_

Spud Date or Recompletion Date      Date Reached TD      Completion Date or 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

County: \_\_\_\_\_

Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Field Name: \_\_\_\_\_

Producing Formation: \_\_\_\_\_

Elevation: Ground: \_\_\_\_\_ Kelly Bushing: \_\_\_\_\_

Total 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**

- Letter of Confidentiality Received  
Date: \_\_\_\_\_
- Confidential Release Date: \_\_\_\_\_
- Wireline Log Received
- Geologist Report 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 and base 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. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

|   |   |
|---|---|
| Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No<br><i>(Attach Additional Sheets)</i><br><br>Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No<br><br>Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No<br>Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No<br>Electric Log Submitted Electronically <input type="checkbox"/> Yes <input type="checkbox"/> No<br><i>(If no, Submit Copy)</i><br><br>List All E. Logs Run: | <input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample<br><br>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 |
| _____ Perforate<br>_____ Protect Casing<br>_____ Plug Back TD<br>_____ Plug Off Zone |                  |                |              |                            |
|  |                  |                |              |                            |

| 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 |
|-----------------------------------|-----------|---------|-------------|---------------|---------|

|   |  |  |
|---|--|--|
| DISPOSITION OF GAS:<br><input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease<br><i>(If vented, Submit ACO-18.)</i> | METHOD OF COMPLETION:<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> _____<br><i>(Submit ACO-4)</i> | PRODUCTION INTERVAL:<br>_____<br>_____ |
|---|--|--|

|           |  |
|-----------|--|
| Form      | ACO1 - Well Completion                   |
| Operator  | SandRidge Exploration and Production LLC |
| Well Name | Luke 3120 1-10                           |
| Doc ID    | 1147624                                  |

Tops

| Name                      | Top         | Datum       |
|---------------------------|-------------|-------------|
| Base Anhydrite            | 2412        | -374        |
| Base Heebner Shales       | 4142        | -2104       |
| Lansing Limestones        | 4314        | -2276       |
| Marmatton Limestones      | 4802        | -2764       |
| Oswego Limestones         | 4834        | -2796       |
| Cherokee shale Marker     | 4912        | -2874       |
| Mississippi Unconformity  | 5033        | -2995       |
| Kinderhook Shale          | 5775        | -3749       |
| Woodford Shale            | Not present | Not present |
| Sylvan Sh/Maquoketa Dol   | Not present | Not present |
| Viola Limestone/Dolostone | 5783        | -3737       |
| Simpson Group             | 5929        | -3891       |
| Simpson Shale             | 6002        | -3964       |
| Oil Creek Sandstone       | 6058        | -4020       |
| Arbuckle Group            | 6091        | -4053       |

|           |  |
|-----------|--|
| Form      | ACO1 - Well Completion                   |
| Operator  | SandRidge Exploration and Production LLC |
| Well Name | Luke 3120 1-10                           |
| Doc ID    | 1147624                                  |

Perforations

| Shots Per Foot | Perforation Record | Material Record               | Depth     |
|----------------|--------------------|-------------------------------|-----------|
|                |                    | CIBP capped w/5 sks<br>cmt    | 6111      |
| 4              | 5613-5797          | CIBP                          | 5550      |
| 3              | 5217-5221          | CIBP capped w/2 sks<br>cement | 5205      |
| 3              | 5056-5156          |                               |           |
| 3              | 4952-4958          |                               |           |
|                |                    | Sand Frac (see<br>report)     | 5056-5221 |
|                |                    | Gel Frac (see report)         | 4952-4958 |

|                   |                  |
|-------------------|------------------|
| Customer          | SandRidge Energy |
| Customer Acct #   |                  |
| Well No.          | Luke 3120 #1-10  |
| Mailing Address   |                  |
| City and State    |                  |
| Zip Code          |                  |
| Dispatch Location | BARTLESVILLE     |

|         |                         |           |             |
|---------|-------------------------|-----------|-------------|
| County  | Comanche County, Kansas | Stage     | 1           |
| Section | 10                      | Formation | Mississippi |
| TWP     | 31S                     | TVD Perfs | 5056-5221   |
| RANGE   | 20W                     | MD Perfs  |             |

|       |             |
|-------|-------------|
| START | 9:07:59 AM  |
| END   | 12:29:18 PM |

| WELL DATA        |                                    |               | TREATMENT THROUGH CASING |                     |          | TRUCK#           |  |  | DRIVER |  |  | TRUCK# |  |  | DRIVER |  |  |
|------------------|------------------------------------|---------------|--------------------------|---------------------|----------|------------------|--|--|--------|--|--|--------|--|--|--------|--|--|
| TVD OF PERFS     | 5056' - 5221'                      | MD OF PERFS   | 5056' - 5221'            | PLUG DEPTH (FT)     | 4217/168 | Jones, Ryan      |  |  |        |  |  |        |  |  |        |  |  |
| CASING SIZE (OD) | 7 5/8                              | CASING WEIGHT | 29.7                     | PACKER DEPTH (FT)   | 533/1122 | Abbott, Kyle     |  |  |        |  |  |        |  |  |        |  |  |
|                  |                                    |               |                          | DISPL COEF (BBL/FT) | 580      | Wilson, Dale     |  |  |        |  |  |        |  |  |        |  |  |
|                  |                                    |               |                          |                     | 232.1    | Cassel, Mark     |  |  |        |  |  |        |  |  |        |  |  |
| OVER FLUSH       | 0                                  |               | 0                        |                     | 559/1114 | Monday, Tony     |  |  |        |  |  |        |  |  |        |  |  |
|                  |                                    |               |                          |                     | 560/1123 | Smith, Harrison  |  |  |        |  |  |        |  |  |        |  |  |
|                  |                                    |               |                          |                     | 664      | Holland, Mike    |  |  |        |  |  |        |  |  |        |  |  |
|                  |                                    |               |                          |                     | 552/145  | Morris, Matt     |  |  |        |  |  |        |  |  |        |  |  |
|                  |                                    |               |                          |                     | 588/1105 | Littlepage, Ryan |  |  |        |  |  |        |  |  |        |  |  |
|                  |                                    |               |                          |                     | 600      |                  |  |  |        |  |  |        |  |  |        |  |  |
| <b>PERF DATA</b> |                                    |               |                          |                     |          |                  |  |  |        |  |  |        |  |  |        |  |  |
| TOTAL HOLES SHOT | 68                                 |               |                          |                     |          |                  |  |  |        |  |  |        |  |  |        |  |  |
| HOLE ID (IN)     | SR-445                             |               |                          |                     |          |                  |  |  |        |  |  |        |  |  |        |  |  |
| PHASING          | BIOSTAT 650                        |               |                          |                     |          |                  |  |  |        |  |  |        |  |  |        |  |  |
| SPF              | 15% HCL ACID (3RD PARTY DELIVERED) |               |                          |                     |          |                  |  |  |        |  |  |        |  |  |        |  |  |
| EFFECTIVE HOLES  | ACID INHIBITOR (AI-260)            |               |                          |                     |          |                  |  |  |        |  |  |        |  |  |        |  |  |
|                  | IRON CONTROL (SP-950)              |               |                          |                     |          |                  |  |  |        |  |  |        |  |  |        |  |  |
|                  | ACID RETARDER (AR-104)             |               |                          |                     |          |                  |  |  |        |  |  |        |  |  |        |  |  |
|                  | FRAC GEL SLURRY (GA-15L)           |               |                          |                     |          |                  |  |  |        |  |  |        |  |  |        |  |  |
|                  | BREAKER AMMONIUM PERSULFATE        |               |                          |                     |          |                  |  |  |        |  |  |        |  |  |        |  |  |
|                  | 233                                |               |                          |                     |          |                  |  |  |        |  |  |        |  |  |        |  |  |
|                  | 27                                 |               |                          |                     |          |                  |  |  |        |  |  |        |  |  |        |  |  |
|                  | 10500                              |               |                          |                     |          |                  |  |  |        |  |  |        |  |  |        |  |  |
|                  | 21                                 |               |                          |                     |          |                  |  |  |        |  |  |        |  |  |        |  |  |
|                  | 104                                |               |                          |                     |          |                  |  |  |        |  |  |        |  |  |        |  |  |
|                  | 448                                |               |                          |                     |          |                  |  |  |        |  |  |        |  |  |        |  |  |
|                  | 100                                |               |                          |                     |          |                  |  |  |        |  |  |        |  |  |        |  |  |

| <b>FET ANALYSIS (Optional)</b> |                |                       |                    |            |      |       |        |        |        |               |  |  |  |  |  |  |  |              |                  |
|--------------------------------|----------------|-----------------------|--------------------|------------|------|-------|--------|--------|--------|---------------|--|--|--|--|--|--|--|--------------|------------------|
| FLUID WEIGHT                   | 8.34           | MAX RATE:             | MAX PRESSURE       | ISDP       | ISIP | 5 MIN | 10 MIN | 15 MIN | 30 MIN | FRAC GRAD     |  |  |  |  |  |  |  |              |                  |
| HYDROSTATIC HEIGHT             | 5056           | RATE 1                | PRESSURE 1         | 5 MIN SIP  |      |       |        |        |        | FLUID EFF (%) |  |  |  |  |  |  |  |              |                  |
| FLUID SG                       | 1.01           | RATE 2                | PRESSURE 2         | 10 MIN SIP |      |       |        |        |        | CALC PERM     |  |  |  |  |  |  |  |              |                  |
| HYDROSTATIC PRESS              | 2192.69        | RATE 3                | PRESSURE 3         | 15 MN SIP  |      |       |        |        |        |               |  |  |  |  |  |  |  |              |                  |
| <b>PRESSURE DATA</b>           |                |                       |                    |            |      |       |        |        |        |               |  |  |  |  |  |  |  |              |                  |
| MAX PRESSURE                   | 3000 on Vacuum | INITIAL PRESSURE      | BREAKDOWN PRESSURE | ISIP       | 630  | 476   |        |        |        |               |  |  |  |  |  |  |  |              |                  |
| <b>SUMMARY</b>                 |                |                       |                    |            |      |       |        |        |        |               |  |  |  |  |  |  |  |              |                  |
| TOTAL FLUID PUMPED             | 2777 BBLs      | MAX TREATING PRESSURE | 0 PSI              |            |      |       |        |        |        |               |  |  |  |  |  |  |  | TOTAL PUMPED | 30198 LBS        |
| PROPPANT PUMPED                | 30198 LBS      | MIN TREATING PRESSURE | 0 PSI              |            |      |       |        |        |        |               |  |  |  |  |  |  |  | PROP TYPE    | 40/70 WHITE SAND |
| MAX RATE                       | 0 BBL/MIN      | AVE TREATING PRESSURE | 0                  |            |      |       |        |        |        |               |  |  |  |  |  |  |  |              |                  |
| MIN RATE                       | 0 BBL/MIN      |                       |                    |            |      |       |        |        |        |               |  |  |  |  |  |  |  |              |                  |
| AVERAGE RATE                   | 0              |                       |                    |            |      |       |        |        |        |               |  |  |  |  |  |  |  |              |                  |
| <b>FOAM QUALITY</b>            |                |                       |                    |            |      |       |        |        |        |               |  |  |  |  |  |  |  |              |                  |
| AMOUNT OF FOAM PUMPED          |                |                       |                    |            |      |       |        |        |        |               |  |  |  |  |  |  |  |              |                  |
| TYPE OF FOAM                   |                |                       |                    |            |      |       |        |        |        |               |  |  |  |  |  |  |  |              |                  |

| STAGE | CLEAN BBLs | DESIGN | FLUID TYPE      | PRESSURE  | RATE      | PROP AMOUNT | DESIGN   | CONC | TYPE             |
|-------|------------|--------|-----------------|-----------|-----------|-------------|----------|------|------------------|
| 1     | 24         | 24     | 15% HCL Acid    | 0         | 8.6       | 0.00        |          | 0.00 |                  |
| 2     | 143        | 143    | 20# Linear Gel  | 988-1743  | 7.3-15.5  | 0.00        |          | 0.00 |                  |
| 3     | 48         | 48     | Gelled 15% Acid | 977-987   | 15.4-15.5 | 0.00        |          | 0.00 |                  |
| 4     | 143        | 143    | 20# Linear Gel  | 988-1074  | 15.4-15.5 | 0.00        |          | 0.00 |                  |
| 5     | 48         | 48     | Gelled 15% Acid | 1074-1106 | 15.4-15.6 | 0.00        |          | 0.00 |                  |
| 6     | 145        | 143    | 20# Linear Gel  | 1082-1116 | 15.5-15.6 | 0.00        |          | 0.00 |                  |
| 7     | 143        | 143    | 20# Linear Gel  | 1023-1137 | 15.5      | 1501.50     | 1500 LBS | 0.25 | 40/70 WHITE SAND |
| 8     | 143        | 143    | 20# Linear Gel  | 952-1021  | 15.5      | 3003.00     | 3000 LBS | 0.50 | 40/70 WHITE SAND |
| 9     | 143        | 143    | 20# Linear Gel  | 918-950   | 15.5      | 4504.50     | 4500 LBS | 0.75 | 40/70 WHITE SAND |

|                |     |     |     |                 |           |           |         |          |      |                  |
|----------------|-----|-----|-----|-----------------|-----------|-----------|---------|----------|------|------------------|
| 10             | 143 | 143 | 143 | 20# Linear Gel  | 899-916   | 15.3-15.4 | 6006.00 | 6000 LBS | 1.00 | 40/70 WHITE SAND |
| 11             | 261 | 265 | 265 | Treated Water   | 852-1037  | 15.4-15.5 | 0.00    |          | 0.00 |                  |
| 12             | 24  | 24  | 24  | 15% HCL Acid    | 1038-1097 | 15.4-15.5 | 0.00    |          | 0.00 |                  |
| 13             | 143 | 143 | 143 | 20# Linear Gel  | 1000-1085 | 15.3-15.5 | 0.00    |          | 0.00 |                  |
| 14             | 48  | 48  | 48  | Gelled 15% Acid | 987-999   | 15.4-15.5 | 0.00    |          | 0.00 |                  |
| 15             | 143 | 143 | 143 | 20# Linear Gel  | 935-985   | 15.4      | 0.00    |          | 0.00 |                  |
| 16             | 48  | 48  | 48  | Gelled 15% Acid | 933-938   | 15.4      | 0.00    |          | 0.00 |                  |
| 17             | 143 | 143 | 143 | 20# Linear Gel  | 886-931   | 15.4      | 0.00    |          | 0.00 |                  |
| 18             | 143 | 143 | 143 | 20# Linear Gel  | 836-884   | 15.4-15.8 | 1501.50 | 1500 LBS | 0.25 | 40/70 WHITE SAND |
| 19             | 141 | 141 | 143 | 20# Linear Gel  | 804-835   | 15.4      | 2961.00 | 3000 LBS | 0.50 | 40/70 WHITE SAND |
| 20             | 143 | 143 | 143 | 20# Linear Gel  | 797-841   | 15.4      | 4504.50 | 4500 LBS | 0.75 | 40/70 WHITE SAND |
| 21             | 148 | 143 | 143 | 20# Linear Gel  | 821-839   | 15.4      | 6216.00 | 6000 LBS | 1.00 | 40/70 WHITE SAND |
| <b>Remarks</b> |     |     |     |                 |           |           |         |          |      |                  |



|                   |                  |
|-------------------|------------------|
| Customer          | SandRidge Energy |
| Customer Acct #   |                  |
| Well No.          | Luke 3120 #1-10  |
| Mailing Address   |                  |
| City and State    |                  |
| Zip Code          |                  |
| Dispatch Location | BARTLESVILLE     |

|         |                         |           |           |
|---------|-------------------------|-----------|-----------|
| County  | Comanche County, Kansas | Stage     | 2         |
| Section | 10                      | Formation | Cherokee  |
| TWP     | 31S                     | TVD Perfs | 4952-4958 |
| RANGE   | 20W                     | MD Perfs  |           |
| START   | 3:27:58 PM              |           |           |
| END     | 5:01:02 PM              |           |           |

| WELL DATA        |             | TREATMENT THROUGH CASING |             | TRUCK#                          |          | DRIVER              |             | TRUCK# |                  | DRIVER |  |
|------------------|-------------|--------------------------|-------------|---------------------------------|----------|---------------------|-------------|--------|------------------|--------|--|
| TREATMENT TYPE:  | 4952 - 4958 | MD OF PERFS              | 4952 - 4958 | PACKER DEPTH (FT)               | 431/1168 | DRIVER              | Jonas, Ryan | TRUCK# |                  | DRIVER |  |
| CASING SIZE (OD) | 7 5/8       | TMD TO TOP PERFF(T)      | 4952        | DISPL CODE (BBL/FT)             | 0.0459   | PACKER DEPTH (FT)   | 533/1122    | DRIVER | Abbott, Kyle     | TRUCK# |  |
| OVER FLUSH       | 0           |                          | 0           | LUME (GB)                       | 227.4    | DISPL CODE (BBL/FT) | 552/1114    | DRIVER | Wilson, Dnie     | TRUCK# |  |
|                  | 0           |                          | 0           |                                 | 0.0      |                     | 562/1123    | DRIVER | Casper, Mark     | TRUCK# |  |
|                  | 0           |                          | 0           | DISPLACEMENT TO TOP PERF (BBLs) | 227.4    |                     | 588/1105    | DRIVER | Monney, Tony     | TRUCK# |  |
|                  |             |                          |             |                                 |          |                     | 552/1145    | DRIVER | Smith, Harrison  | TRUCK# |  |
|                  |             |                          |             |                                 |          |                     | 588/1105    | DRIVER | Holland, Mike    | TRUCK# |  |
|                  |             |                          |             |                                 |          |                     | 600         | DRIVER | Morris, Matt     | TRUCK# |  |
|                  |             |                          |             |                                 |          |                     | 600         | DRIVER | Littlepage, Ryan | TRUCK# |  |

| PERF DATA        |    | CHEMICALS                          |      |
|------------------|----|------------------------------------|------|
| TOTAL HOLES SHOT | 24 | SR-445                             | 60   |
| HOLE ID (IN)     |    | BIOSTAT 650                        | 6    |
| PHASING          |    | 15% HCL ACID (BRO PARTY DELIVERED) | 6000 |
|                  |    | ACID INHIBITOR (AI-260)            | 12   |
|                  |    | IRON CONTROL (SP-950)              | 12   |
|                  |    | ACID RETARDER (AR-104)             | 60   |
|                  |    | FRAC GEL SLURRY (GA-15L)           | 68   |
|                  |    | BREAKER AMMONIUM PERSULFATE        | 50   |

| FET ANALYSIS (Optional) |         |
|-------------------------|---------|
| FLUID WEIGHT            | 8.34    |
| HYDROSTATIC HEIGHT      | 4952    |
| FLUID SG                | 1.01    |
| HYDROSTATIC PRESS       | 2147.58 |

| PRESSURE DATA      |                                |
|--------------------|--------------------------------|
| MAX PRESSURE       | 3000                           |
| INITIAL PRESSURE   | 12                             |
| BREAKDOWN PRESSURE | 750 PSI at 4.1 BPM, 2 BBL away |
| ISIP               | 1349                           |
| 5 MIN              | 1,260                          |
| 10 MIN             | 1,230                          |
| 15 MIN             | 1,196                          |
| 30 MIN             |                                |

| SUMMARY            |           |
|--------------------|-----------|
| TOTAL FLUID PUMPED | 714 BBLs  |
| PROPPANT PUMPED    | 0 LBS     |
| MAX RATE           | 0 BBL/MIN |
| MIN RATE           | 0 BBL/MIN |
| AVERAGE RATE       | 0         |

| FOAM QUALITY          |  |
|-----------------------|--|
| AMOUNT OF FOAM PUMPED |  |
| TYPE OF FOAM          |  |

| STAGE | CLEAN BBLs | DESIGN | FLUID TYPE      | PRESSURE  | RATE     | PROP AMOUNT | DESIGN | CONC | TYPE |
|-------|------------|--------|-----------------|-----------|----------|-------------|--------|------|------|
| 1     | 143        | 143    | 20# Linear Gel  | 248-1300  | 2.1-10.4 | 0.00        |        | 0.00 |      |
| 2     | 71         | 71     | Gelled 15% Acid | 1302-1405 | 10.2     | 0.00        |        | 0.00 |      |
| 3     | 167        | 167    | 20# Linear Gel  | 1407-1568 | 10.2     | 0.00        |        | 0.00 |      |
| 4     | 68         | 71     | Gelled 15% Acid | 1419-1609 | 8.9-10.2 | 0.00        |        | 0.00 |      |
| 5     | 12         | 12     | 20# Linear Gel  | 1534-1556 | 10.1     | 0.00        |        | 0.00 |      |
| 6     | 253        | 253    | Treated Water   | 1534-1625 | 10-10.1  | 0.00        |        | 0.00 |      |
| 7     |            |        |                 |           |          | 0.00        |        | 0.00 |      |
| 8     |            |        |                 |           |          | 0.00        |        | 0.00 |      |
| 9     |            |        |                 |           |          | 0.00        |        | 0.00 |      |
| 10    |            |        |                 |           |          | 0.00        |        | 0.00 |      |
| 11    |            |        |                 |           |          | 0.00        |        | 0.00 |      |
| 12    |            |        |                 |           |          | 0.00        |        | 0.00 |      |
| 13    |            |        |                 |           |          | 0.00        |        | 0.00 |      |
| 14    |            |        |                 |           |          | 0.00        |        | 0.00 |      |
| 15    |            |        |                 |           |          | 0.00        |        | 0.00 |      |
| 16    |            |        |                 |           |          | 0.00        |        | 0.00 |      |
| 17    |            |        |                 |           |          | 0.00        |        | 0.00 |      |
| 18    |            |        |                 |           |          | 0.00        |        | 0.00 |      |
| 19    |            |        |                 |           |          | 0.00        |        | 0.00 |      |
| 20    |            |        |                 |           |          | 0.00        |        | 0.00 |      |
| 21    |            |        |                 |           |          | 0.00        |        | 0.00 |      |
| 22    |            |        |                 |           |          | 0.00        |        | 0.00 |      |
| 23    |            |        |                 |           |          | 0.00        |        | 0.00 |      |
| 24    |            |        |                 |           |          | 0.00        |        | 0.00 |      |

| MAX PRESSURE |               |
|--------------|---------------|
| ISDP         | 5 MIN SIP     |
|              | 10 MIN SIP    |
|              | 15 MIN SIP    |
|              | FRAC GRAD     |
|              | FLUID EFF (%) |
|              | CALC PERM     |

| PROP TYPE   |          |
|-------------|----------|
| ACID        | 5838     |
| TOTAL FLUID | 714 BBLs |

| MAX PRESSURE |       |
|--------------|-------|
| MAX PRESSURE | 0 PSI |
| PRESSURE 1   | 0 PSI |
| PRESSURE 2   | 0     |
| PRESSURE 3   |       |

| FLUID WEIGHT       |          |
|--------------------|----------|
| FLUID WEIGHT       | 8.34     |
| HYDROSTATIC HEIGHT | 4952     |
| HYDROSTATIC PRESS  | 2,147.58 |
| FRAC GRADIENT      | 0.71     |

| TOTAL FLUID PUMPED |          |
|--------------------|----------|
| TOTAL FLUID PUMPED | 714 BBLs |