



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1216171  
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: \_\_\_\_\_

1216171

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

Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West County: \_\_\_\_\_

**INSTRUCTIONS:** Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

|  |   |
|--|---|
| Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No<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><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 |
| <input type="checkbox"/> Perforate<br><input type="checkbox"/> Protect Casing<br><input type="checkbox"/> Plug Back TD<br><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><br><input type="checkbox"/> Other <i>(Specify)</i> _____ | <b>PRODUCTION INTERVAL:</b><br>_____<br>_____ |
|--|---|---|

|           |  |
|-----------|--|
| Form      | ACO1 - Well Completion                   |
| Operator  | SandRidge Exploration and Production LLC |
| Well Name | Marsha 3306 2-11H                        |
| Doc ID    | 1216171                                  |

#### Perforations

| Shots Per Foot | Perforation Record | Material Record  | Depth |
|----------------|--------------------|--|-------|
| 5              | 8402-8652          | 1500 gals 15% HCL Acid, 5458 bbls Fresh Slickwater, Running TLTR 5698  |       |
| 5              | 8074-8344          | 1500 gals 15% HCL Acid, 5242 bbls Fresh Slickwater, Running TLTR 11087 |       |
| 5              | 7758-8024          | 1500 gals 15% HCL Acid, 5268 bbls Fresh Slickwater, Running TLTR 16511 |       |
| 5              | 7404-7690          | 1500 gals 15% HCL Acid, 5166 bbls Fresh Slickwater, Running TLTR 21880 |       |
| 5              | 7050-7337          | 1500 gals 15% HCL Acid, 5284 bbls Fresh Slickwater, Running TLTR 27279 |       |
| 5              | 6720-6988          | 1500 gals 15% HCL Acid, 5229 bbls Fresh Slickwater, Running TLTR 32601 |       |
| 5              | 6340-6656          | 1500 gals 15% HCL Acid, 5263 bbls Fresh Slickwater, Running TLTR 37939 |       |
| 5              | 6036-6275          | 1500 gals 15% HCL Acid, 5121 bbls Fresh Slickwater, Running TLTR 43130 |       |

|           |  |
|-----------|--|
| Form      | ACO1 - Well Completion                   |
| Operator  | SandRidge Exploration and Production LLC |
| Well Name | Marsha 3306 2-11H                        |
| Doc ID    | 1216171                                  |

Perforations

| Shots Per Foot | Perforation Record | Material Record  | Depth |
|----------------|--------------------|--|-------|
| 5              | 5727-5982          | 1500 gals 15% HCL Acid, 5232 bbls Fresh Slickwater, Running TLTR 48421 |       |
| 5              | 5428-5668          | 1500 gals 15% HCL Acid, 5176 bbls Fresh Slickwater, Running TLTR 53645 |       |
| 5              | 5152-5376          | 1500 gals 15% HCL Acid, 5260 bbls Fresh Slickwater, Running TLTR 58945 |       |
| 4              | 4700-4910          | 1500 gals 15% HCL Acid, 4333 bbls Fresh Slickwater, Running TLTR 63278 |       |





**INVOICE**

|          |           |
|----------|-----------|
| DATE     | INVOICE # |
| 4/9/2014 | 4693      |

|  |
|--|
| <b>BILL TO</b>   |
| SANDRIDGE ENERGY, INC.<br>ATTN: PURCHASING MANAGER<br>123 ROBERT S. KERR AVENUE<br>OKLAHOMA CITY, OK 73102 |

|   |
|---|
| <b>REMIT TO</b>   |
| EDGE SERVICES, INC.<br>PO BOX 609<br>WOODWARD, OK 73802 |

| COUNTY     | STARTING D... | WORK ORDER | RIG NUMBER | LEASE NAME        | Terms         |
|------------|---------------|------------|------------|-------------------|---------------|
| HARPER, KS | 4/9/2014      | 3540       | LARIAT 45  | MARSHA 3306 2-11H | Due on rec... |

| Description   |
|---|
| DRILLED 80' OF 30" CONDUCTOR HOLE<br>DRILLED 6' OF 76" HOLE<br>FURNISHED AND SET 6' X 6' TINHORN CELLAR<br>FURNISHED 80' OF 20" CONDUCTOR PIPE<br>FURNISHED WELDER AND MATERIALS<br>FURNISHED 8 YARDS OF 10 SACK GROUT FOR CONDUCTOR HOLE<br>FURNISHED 4 YARDS OF 10 SACK GROUT FOR MOUSE HOLE<br>DRILL MOUSE HOLE<br>FURNISHED 80' OF 16" CONDUCTOR PIPE<br>FURNISH PLATE TO COVER WELL<br><br>TOTAL BID \$18,200.00 |

|                          |          |
|--------------------------|----------|
| <b>Sales Tax (6.15%)</b> | \$158.79 |
|--------------------------|----------|

|              |             |
|--------------|-------------|
| <b>TOTAL</b> | \$18,358.79 |
|--------------|-------------|

|                                  |                          |   |                                     |                                |
|----------------------------------|--------------------------|---|-------------------------------------|--------------------------------|
| <b>JOB SUMMARY</b>               |                          |   | PROJECT NUMBER<br><b>SOK 3633</b>   | TICKET DATE<br><b>04/18/14</b> |
| COUNTY<br><b>Harper</b>          | State<br><b>Kansas</b>   | COMPANY<br><b>Bridge Exploration &amp; Produc</b> | CUSTOMER REP<br><b>Bill Torbett</b> |                                |
| LEASE NAME<br><b>Marsha 3306</b> | Well No.<br><b>2-11H</b> | JOB TYPE<br><b>Surface</b>                        | EMPLOYEE NAME<br><b>John Hall</b>   |                                |

|               |  |  |  |  |  |
|---------------|--|--|--|--|--|
| EMP NAME      |  |  |  |  |  |
| John Hall     |  |  |  |  |  |
| Joseph Klemm  |  |  |  |  |  |
| Roy Morris    |  |  |  |  |  |
| Randall Irvin |  |  |  |  |  |

Form. Name \_\_\_\_\_ Type: \_\_\_\_\_

Packer Type \_\_\_\_\_ Set At \_\_\_\_\_ 0

Bottom Hole Temp. 80 Pressure \_\_\_\_\_

Retainer Depth \_\_\_\_\_ Total Depth 700

|      |                                |                                 |                                 |                                   |
|------|--------------------------------|---------------------------------|---------------------------------|-----------------------------------|
| Date | Called Out<br><b>4/18/2014</b> | On Location<br><b>4/18/2014</b> | Job Started<br><b>4/18/2014</b> | Job Completed<br><b>4/18/2014</b> |
| Time | <b>700am</b>                   | <b>1000am</b>                   | <b>100pm</b>                    | <b>300pm</b>                      |

| Tools and Accessories    |     |      |
|--------------------------|-----|------|
| Type and Size            | Qty | Make |
| Auto Fill Tube           | 0   | IR   |
| Insert Float Va          | 0   | IR   |
| Centralizers             | 0   | IR   |
| Top Plug                 | 0   | IR   |
| HEAD                     | 0   | IR   |
| Limit clamp              | 0   | IR   |
| Weld-A                   | 0   | IR   |
| Texas Pattern Guide Shoe | 0   | IR   |
| Cement Basket            | 0   | IR   |

| Well Data    |          |        |         |       |         |           |
|--------------|----------|--------|---------|-------|---------|-----------|
|              | New/Used | Weight | Size    | Grade | From    | To        |
| Casing       |          | 36#    | 9"      |       | Surface | 700       |
| Liner        |          |        |         |       |         |           |
| Liner        |          |        |         |       |         |           |
| Tubing       |          |        | 0       |       |         |           |
| Drill Pipe   |          |        |         |       |         |           |
| Open Hole    |          |        | 12 1/4" |       | Surface | 700       |
| Perforations |          |        |         |       |         | Shots/Ft. |
| Perforations |          |        |         |       |         |           |
| Perforations |          |        |         |       |         |           |

| Materials     |             |         |        |
|---------------|-------------|---------|--------|
|               | WBM         | Density | Lb/Gal |
| Mud Type      | Fresh Water | 8.33    |        |
| Disp. Fluid   | Fresh Water | 8.33    |        |
| Spacer type   | BBL.        | 10      | 8.33   |
| Spacer type   | BBL.        |         |        |
| Acid Type     | Gal.        |         | %      |
| Acid Type     | Gal.        |         | %      |
| Surfactant    | Gal.        |         | In     |
| NE Agent      | Gal.        |         | In     |
| Fluid Loss    | Gal/Lb      |         | In     |
| Gelling Agent | Gal/Lb      |         | In     |
| Fric. Red.    | Gal/Lb      |         | In     |
| MISC.         | Gal/Lb      |         | In     |
| Perfpac Balls |             | Qty.    |        |
| Other         |             |         |        |
| Other         |             |         |        |
| Other         |             |         |        |
| Other         |             |         |        |

| Hours On Location |       | Operating Hours |       | Description of Job |
|-------------------|-------|-----------------|-------|--------------------|
| Date              | Hours | Date            | Hours |                    |
| 4/18              | 5.0   | 4/18            | 2.0   | Surface            |
|                   |       |                 |       |                    |
|                   |       |                 |       |                    |
|                   |       |                 |       |                    |
|                   |       |                 |       |                    |
|                   |       |                 |       |                    |
|                   |       |                 |       |                    |
| Total             | 5.0   | Total           | 2.0   |                    |

| Pressures            |           |                   |
|----------------------|-----------|-------------------|
| MAX                  | 2,000 PSI | AVG.              |
| Average Rates in BPM |           |                   |
| MAX                  | 6 BPM     | AVG               |
| Cement Left in Pipe  |           |                   |
| Feet                 | 46        | Reason SHOE JOINT |

| Cement Data |       |                          |   |       |       |         |
|-------------|-------|--------------------------|---|-------|-------|---------|
| Stage       | Sacks | Cement                   | Additives   | W/Rq. | Yield | Lbs/Gal |
| 1           | 190   | TEX Lite Premium Plus 65 | (6% Gel) 2% Calcium Chloride - 1/4pps Cello-Flake - .4% C-41P | 11.11 | 2.01  | 12.40   |
| 2           | 140   | Premium Plus (Class C)   | 2% Calcium Chloride - 1/4pps Cello-Flake                      | 6.32  | 1.32  | 14.80   |
| 3           | *100  | Premium Plus (Class C)   | *2% Calcium Chloride on side to use if necessary              | *6.32 | *1.32 | *14.8   |

| Summary            |                      |               |           |                              |         |
|--------------------|----------------------|---------------|-----------|------------------------------|---------|
| Preflush Breakdown | Type: _____          | MAXIMUM _____ | 1,500 PSI | Preflush: BBI _____          | 10.00   |
|                    | Lost Returns _____   | NO/FULL _____ |           | Load & Bkdn: Gal - BBI _____ | N/A     |
|                    | Actual TOC _____     | SURFACE _____ |           | Excess /Return BBI _____     | 55      |
| Average            | Bump Plug PSI: _____ | 800           |           | Calc. TOC: _____             | SURFACE |
| 15 Min.            | 10 Min.              | 15 Min.       |           | Final Circ. PSI: _____       | 300     |
|                    |                      |               |           | Cement Slurry BBI _____      | 100.9   |
|                    |                      |               |           | Total Volume BBI _____       | 158.40  |

CUSTOMER REPRESENTATIVE Clay Jellin SIGNATURE



|                                  |                          |  |  |                                |
|----------------------------------|--------------------------|--|--|--------------------------------|
| <b>JOB SUMMARY</b>               |                          |  | PROJECT NUMBER<br><b>SOK 3656</b>      | TICKET DATE<br><b>04/24/14</b> |
| COUNTY<br><b>Harper</b>          | State<br><b>Kansas</b>   | COMPANY<br><b>Sandridge Exploration &amp; Production</b> | CUSTOMER REP<br><b>Claude Hallmark</b> |                                |
| LEASE NAME<br><b>Marsha 3306</b> | Well No.<br><b>2-11H</b> | JOB TYPE<br><b>Intermediate</b>                          | EMPLOYEE NAME<br><b>John Hall</b>      |                                |

|          |                      |  |  |  |  |
|----------|----------------------|--|--|--|--|
| EMP NAME | <b>John Hall</b>     |  |  |  |  |
|          | <b>Joseph Klemm</b>  |  |  |  |  |
|          | <b>Roy Morris</b>    |  |  |  |  |
|          | <b>Randall Irvin</b> |  |  |  |  |

Form. Name \_\_\_\_\_ Type: \_\_\_\_\_  
 Packer Type \_\_\_\_\_ Set At **0**  
 Bottom Hole Temp. **155** Pressure \_\_\_\_\_  
 Retainer Depth \_\_\_\_\_ Total Depth **~5,316'**

|      |                                |                                 |                                 |                                   |
|------|--------------------------------|---------------------------------|---------------------------------|-----------------------------------|
| Date | Called Out<br><b>4/24/2014</b> | On Location<br><b>4/24/2014</b> | Job Started<br><b>4/24/2014</b> | Job Completed<br><b>4/24/2014</b> |
| Time | <b>200am</b>                   | <b>400pm</b>                    | <b>600pm</b>                    | <b>830pm</b>                      |

| Type and Size            | Qty | Make |
|--------------------------|-----|------|
| Auto Fill Tube           | 0   | IR   |
| Insert Float Va          | 0   | IR   |
| Centralizers             | 0   | IR   |
| Top Plug                 | 0   | IR   |
| HEAD                     | 0   | IR   |
| Limit clamp              | 0   | IR   |
| Weld-A                   | 0   | IR   |
| Texas Pattern Guide Shoe | 0   | IR   |
| Cement Basket            | 0   | IR   |

|              | New/Used | Weight | Size   | Grade | From    | To      | Max. Allow |
|--------------|----------|--------|--------|-------|---------|---------|------------|
| Casing       |          | 26#    | 7"     |       | Surface |         | 5,000      |
| Liner        |          |        |        |       |         |         |            |
| Liner        |          |        |        |       |         |         |            |
| Tubing       |          |        | 0      |       |         |         |            |
| Drill Pipe   |          |        |        |       |         |         |            |
| Open Hole    |          |        | 8 1/2" |       | Surface | ~5,316' | Shots/Ft.  |
| Perforations |          |        |        |       |         |         |            |
| Perforations |          |        |        |       |         |         |            |
| Perforations |          |        |        |       |         |         |            |

| Materials     |             |         |              |
|---------------|-------------|---------|--------------|
|               | WBM         | Density | Lb/Gal       |
| Mud Type      | Fresh Water | Density | <b>8.33</b>  |
| Spacer type   | GEL         | BBL.    | <b>30</b>    |
| Spacer type   | BBL.        |         | <b>10.00</b> |
| Acid Type     |             |         | %            |
| Acid Type     |             |         | %            |
| Surfactant    |             |         | In           |
| NE Agent      |             |         | In           |
| Fluid Loss    |             |         | In           |
| Gelling Agent |             |         | In           |
| Fric. Red.    |             |         | In           |
| MISC.         |             |         | In           |

| Hours On Location |       | Operating Hours |       | Description of Job |
|-------------------|-------|-----------------|-------|--------------------|
| Date              | Hours | Date            | Hours |                    |
| 4/24              | 4.5   | 4/24            | 2.5   | Intermediate       |
|                   |       |                 |       |                    |
|                   |       |                 |       |                    |
|                   |       |                 |       |                    |
|                   |       |                 |       |                    |
|                   |       |                 |       |                    |
|                   |       |                 |       |                    |
|                   |       |                 |       |                    |
| Total             | 4.5   | Total           | 2.5   |                    |

| Pressures |           |                   |
|-----------|-----------|-------------------|
| MAX       | 5,000 PSI | AVG.              |
| MAX       | 8 BPM     | AVG               |
| Feet      | 46        | Reason SHOE JOINT |

| Cement Data |       |                   |  |       |       |         |
|-------------|-------|-------------------|--|-------|-------|---------|
| Stage       | Sacks | Cement            | Additives  | W/Rq. | Yield | Lbs/Gal |
| 1           | 250   | 50/50 POZ PREMIUM | 4% Gel - 0.2% FL-17 - 0.1% C-51 - 0.2% C-20 - 0.1% C-37 - 0.4% C-41P | 6.93  | 1.43  | 13.60   |
| 2           | 100   | Premium           | 0.2% FL-17 - 0.1% C-51 - 0.1% C-20 - 0.4% C-41P                      | 5.19  | 1.19  | 15.60   |
| 3           | 0     | 0                 |  | 0.00  | 0.00  | 0.00    |

| Summary            |                      |               |           |                              |        |
|--------------------|----------------------|---------------|-----------|------------------------------|--------|
| Preflush Breakdown | Type: _____          | MAXIMUM _____ | 5,000 PSI | Preflush: BBI _____          | 30.00  |
|                    | Lost Returns-N _____ | NO/FULL _____ |           | Load & Bkdn: Gal - BBI _____ | N/A    |
|                    | Actual TOC _____     |               |           | Excess /Return BBI _____     | N/A    |
| Average            | Bump Plug PSI: _____ | 1,500         |           | Calc. TOC: _____             | 2,022  |
| 5 Min.             | 10 Min _____         | 15 Min _____  |           | Final Circ. PSI: _____       | 1,000  |
|                    |                      |               |           | Cement Slurry BBI _____      | 84.7   |
|                    |                      |               |           | Total Volume BBI _____       | 309.10 |

CUSTOMER REPRESENTATIVE Claude Hallmark SIGNATURE



**Company:** Sandridge  
**Well Name:** Marsha 3306 2-11H  
**Legals:** Sec: 11 Township: 33S  
 Range: 6W  
**County/State:** Harper KS  
**Rig Name:** Lariat 45

| Customer Rep | Position | Directional Driller | MWD Operator |
|--------------|----------|---------------------|--------------|
|              |          | Monte Bryant        | Blake Reid   |
|              |          | Tony Hatfield       |              |

## Marsha 2-11H Surveys

| Type       | M Depth | Incl. | Azimuth | TVD     | North  | East   | V Section | Dogleg | B Rate | T Rate | Clos Azi | Clos Dist |
|------------|---------|-------|---------|---------|--------|--------|-----------|--------|--------|--------|----------|-----------|
| TieInPoint | 0.00    | 0.00  | 0.00    | 0.00    | 0.00   | 0.00   | 0         | 0      | 0      | 0      | 0        | 0         |
| Survey     | 961.00  | 0.50  | 118.00  | 960.99  | -1.97  | 3.70   | 1.95      | 0.05   | 0.05   | 12.28  | 118.03   | 4.19      |
| Survey     | 1417.00 | 0.40  | 111.40  | 1416.98 | -3.48  | 6.94   | 3.45      | 0.02   | 0.02   | 1.45   | 116.63   | 7.76      |
| Survey     | 1874.00 | 0.80  | 113.40  | 1873.95 | -5.33  | 11.35  | 5.28      | 0.09   | 0.09   | 0.44   | 115.15   | 12.54     |
| Survey     | 1966.00 | 0.80  | 120.10  | 1965.95 | -5.91  | 12.50  | 5.86      | 0.10   | 0.00   | 7.28   | 115.30   | 13.83     |
| Survey     | 2059.00 | 2.50  | 23.40   | 2058.91 | -4.37  | 13.87  | 4.31      | 2.92   | 1.83   | 103.98 | 107.49   | 14.54     |
| Survey     | 2151.00 | 4.00  | 14.70   | 2150.76 | 0.58   | 15.48  | -0.64     | 1.71   | 1.63   | 9.46   | 87.85    | 15.49     |
| Survey     | 2243.00 | 6.60  | 10.50   | 2242.36 | 8.88   | 17.26  | -8.95     | 2.86   | 2.83   | 4.57   | 62.77    | 19.41     |
| Survey     | 2334.00 | 7.50  | 4.10    | 2332.67 | 19.95  | 18.64  | -20.03    | 1.31   | 0.99   | 7.03   | 43.06    | 27.30     |
| Survey     | 2425.00 | 7.30  | 351.40  | 2422.92 | 31.59  | 18.20  | -31.67    | 1.81   | 0.22   | 13.96  | 29.95    | 36.46     |
| Survey     | 2517.00 | 8.90  | 353.60  | 2514.00 | 44.44  | 16.53  | -44.51    | 1.77   | 1.74   | 2.39   | 20.40    | 47.41     |
| Survey     | 2608.00 | 9.30  | 355.10  | 2603.85 | 58.77  | 15.12  | -58.83    | 0.51   | 0.44   | 1.65   | 14.43    | 60.68     |
| Survey     | 2699.00 | 9.80  | 354.50  | 2693.59 | 73.81  | 13.75  | -73.87    | 0.56   | 0.55   | 0.66   | 10.55    | 75.08     |
| Survey     | 2790.00 | 9.40  | 355.80  | 2783.31 | 88.93  | 12.46  | -88.98    | 0.50   | 0.44   | 1.43   | 7.98     | 89.80     |
| Survey     | 2882.00 | 10.50 | 354.80  | 2873.92 | 104.77 | 11.15  | -104.82   | 1.21   | 1.20   | 1.09   | 6.07     | 105.36    |
| Survey     | 2973.00 | 10.80 | 354.70  | 2963.36 | 121.52 | 9.61   | -121.56   | 0.33   | 0.33   | 0.11   | 4.52     | 121.90    |
| Survey     | 3064.00 | 10.50 | 354.30  | 3052.79 | 138.26 | 8.00   | -138.29   | 0.34   | 0.33   | 0.44   | 3.31     | 138.49    |
| Survey     | 3156.00 | 11.00 | 354.00  | 3143.18 | 155.33 | 6.25   | -155.35   | 0.55   | 0.54   | 0.33   | 2.30     | 155.46    |
| Survey     | 3247.00 | 10.80 | 354.70  | 3232.53 | 172.45 | 4.55   | -172.47   | 0.26   | 0.22   | 0.77   | 1.51     | 172.51    |
| Survey     | 3339.00 | 9.90  | 353.00  | 3323.04 | 188.89 | 2.79   | -188.90   | 1.03   | 0.98   | 1.85   | 0.85     | 188.91    |
| Survey     | 3430.00 | 9.50  | 349.80  | 3412.74 | 204.05 | 0.51   | -204.05   | 0.74   | 0.44   | 3.52   | 0.14     | 204.05    |
| Survey     | 3521.00 | 8.70  | 347.80  | 3502.59 | 218.16 | -2.28  | -218.15   | 0.95   | 0.88   | 2.20   | 359.40   | 218.17    |
| Survey     | 3551.00 | 8.30  | 346.90  | 3532.26 | 222.49 | -3.25  | -222.47   | 1.41   | 1.33   | 3.00   | 359.16   | 222.51    |
| Survey     | 3582.00 | 8.10  | 347.40  | 3562.95 | 226.80 | -4.23  | -226.78   | 0.68   | 0.65   | 1.61   | 358.93   | 226.84    |
| Survey     | 3612.00 | 6.90  | 346.10  | 3592.69 | 230.61 | -5.13  | -230.59   | 4.04   | 4.00   | 4.33   | 358.73   | 230.67    |
| Survey     | 3643.00 | 5.60  | 344.40  | 3623.51 | 233.87 | -5.98  | -233.84   | 4.24   | 4.19   | 5.48   | 358.54   | 233.95    |
| Survey     | 3673.00 | 4.50  | 342.40  | 3653.39 | 236.41 | -6.73  | -236.38   | 3.71   | 3.67   | 6.67   | 358.37   | 236.51    |
| Survey     | 3704.00 | 3.70  | 339.30  | 3684.31 | 238.50 | -7.45  | -238.47   | 2.68   | 2.58   | 10.00  | 358.21   | 238.62    |
| Survey     | 3734.00 | 2.20  | 315.70  | 3714.27 | 239.82 | -8.20  | -239.78   | 6.33   | 5.00   | 78.67  | 358.04   | 239.96    |
| Survey     | 3764.00 | 1.90  | 255.10  | 3744.25 | 240.10 | -9.08  | -240.06   | 6.95   | 1.00   | 202.00 | 357.83   | 240.27    |
| Survey     | 3796.00 | 3.30  | 219.80  | 3776.22 | 239.26 | -10.18 | -239.22   | 6.45   | 4.38   | 110.31 | 357.56   | 239.48    |
| Survey     | 3826.00 | 5.50  | 207.80  | 3806.13 | 237.32 | -11.41 | -237.27   | 7.91   | 7.33   | 40.00  | 357.25   | 237.59    |
| Survey     | 3857.00 | 8.30  | 199.50  | 3836.90 | 233.90 | -12.85 | -233.84   | 9.56   | 9.03   | 26.77  | 356.86   | 234.25    |
| Survey     | 3887.00 | 10.90 | 198.50  | 3866.48 | 229.16 | -14.47 | -229.10   | 8.68   | 8.67   | 3.33   | 356.39   | 229.62    |
| Survey     | 3918.00 | 13.90 | 194.90  | 3896.75 | 222.78 | -16.36 | -222.71   | 9.99   | 9.68   | 11.61  | 355.80   | 223.38    |
| Survey     | 3948.00 | 16.50 | 192.20  | 3925.70 | 215.13 | -18.19 | -215.05   | 8.98   | 8.67   | 9.00   | 355.17   | 215.90    |
| Survey     | 3979.00 | 19.20 | 189.90  | 3955.21 | 205.81 | -19.99 | -205.72   | 9.00   | 8.71   | 7.42   | 354.45   | 206.78    |
| Survey     | 4009.00 | 21.70 | 187.40  | 3983.32 | 195.45 | -21.55 | -195.36   | 8.83   | 8.33   | 8.33   | 353.71   | 196.63    |
| Survey     | 4039.00 | 23.80 | 183.50  | 4010.98 | 183.90 | -22.64 | -183.80   | 8.61   | 7.00   | 13.00  | 352.98   | 185.29    |
| Survey     | 4070.00 | 26.30 | 180.50  | 4039.06 | 170.79 | -23.08 | -170.69   | 9.04   | 8.06   | 9.68   | 352.30   | 172.34    |
| Survey     | 4100.00 | 29.00 | 177.90  | 4065.64 | 156.87 | -22.87 | -156.77   | 9.86   | 9.00   | 8.67   | 351.71   | 158.53    |
| Survey     | 4131.00 | 31.70 | 177.50  | 4092.38 | 141.22 | -22.24 | -141.13   | 8.73   | 8.71   | 1.29   | 351.05   | 142.96    |

## Marsha 2-11H Surveys

| Type   | M Depth | Incl. | Azimuth | TVD     | North    | East   | V Section | Dogleg | B Rate | T Rate | Clos Azi | Clos Dist |
|--------|---------|-------|---------|---------|----------|--------|-----------|--------|--------|--------|----------|-----------|
| Survey | 4161.00 | 34.10 | 178.00  | 4117.57 | 124.94   | -21.60 | -124.85   | 8.05   | 8.00   | 1.67   | 350.19   | 126.79    |
| Survey | 4192.00 | 36.60 | 178.30  | 4142.85 | 107.01   | -21.03 | -106.92   | 8.08   | 8.06   | 0.97   | 348.88   | 109.06    |
| Survey | 4222.00 | 39.00 | 177.70  | 4166.55 | 88.64    | -20.38 | -88.55    | 8.09   | 8.00   | 2.00   | 347.05   | 90.95     |
| Survey | 4253.00 | 41.50 | 179.20  | 4190.21 | 68.62    | -19.85 | -68.54    | 8.65   | 8.06   | 4.84   | 343.87   | 71.43     |
| Survey | 4283.00 | 44.70 | 179.80  | 4212.11 | 48.13    | -19.67 | -48.05    | 10.75  | 10.67  | 2.00   | 337.77   | 51.99     |
| Survey | 4313.00 | 47.60 | 179.60  | 4232.89 | 26.49    | -19.56 | -26.41    | 9.68   | 9.67   | 0.67   | 323.56   | 32.93     |
| Survey | 4344.00 | 50.20 | 179.80  | 4253.27 | 3.14     | -19.44 | -3.06     | 8.40   | 8.39   | 0.65   | 279.18   | 19.69     |
| Survey | 4374.00 | 52.90 | 180.70  | 4271.92 | -20.36   | -19.54 | 20.44     | 9.30   | 9.00   | 3.00   | 223.82   | 28.22     |
| Survey | 4404.00 | 56.10 | 180.70  | 4289.34 | -44.78   | -19.84 | 44.86     | 10.67  | 10.67  | 0.00   | 203.90   | 48.98     |
| Survey | 4435.00 | 59.70 | 180.30  | 4305.81 | -71.03   | -20.07 | 71.11     | 11.66  | 11.61  | 1.29   | 195.78   | 73.81     |
| Survey | 4465.00 | 63.20 | 180.40  | 4320.15 | -97.38   | -20.23 | 97.46     | 11.67  | 11.67  | 0.33   | 191.74   | 99.46     |
| Survey | 4496.00 | 65.30 | 180.80  | 4333.62 | -125.30  | -20.52 | 125.38    | 6.87   | 6.77   | 1.29   | 189.30   | 126.97    |
| Survey | 4526.00 | 67.10 | 180.60  | 4345.73 | -152.75  | -20.85 | 152.84    | 6.03   | 6.00   | 0.67   | 187.77   | 154.17    |
| Survey | 4557.00 | 68.80 | 180.80  | 4357.36 | -181.47  | -21.21 | 181.56    | 5.52   | 5.48   | 0.65   | 186.67   | 182.71    |
| Survey | 4587.00 | 70.80 | 180.60  | 4367.72 | -209.62  | -21.55 | 209.71    | 6.70   | 6.67   | 0.67   | 185.87   | 210.72    |
| Survey | 4618.00 | 72.50 | 180.60  | 4377.48 | -239.04  | -21.86 | 239.13    | 5.48   | 5.48   | 0.00   | 185.23   | 240.04    |
| Survey | 4648.00 | 74.10 | 179.80  | 4386.10 | -267.78  | -21.96 | 267.87    | 5.91   | 5.33   | 2.67   | 184.69   | 268.68    |
| Survey | 4679.00 | 75.90 | 178.90  | 4394.12 | -297.72  | -21.62 | 297.81    | 6.45   | 5.81   | 2.90   | 184.15   | 298.50    |
| Survey | 4709.00 | 78.30 | 178.60  | 4400.82 | -326.95  | -20.98 | 327.04    | 8.06   | 8.00   | 1.00   | 183.67   | 327.62    |
| Survey | 4740.00 | 80.50 | 179.30  | 4406.52 | -357.41  | -20.42 | 357.49    | 7.44   | 7.10   | 2.26   | 183.27   | 357.99    |
| Survey | 4770.00 | 82.80 | 179.20  | 4410.88 | -387.09  | -20.03 | 387.17    | 7.67   | 7.67   | 0.33   | 182.96   | 387.61    |
| Survey | 4801.00 | 84.80 | 179.90  | 4414.23 | -417.91  | -19.79 | 417.99    | 6.83   | 6.45   | 2.26   | 182.71   | 418.38    |
| Survey | 4831.00 | 86.10 | 179.70  | 4416.61 | -447.81  | -19.69 | 447.89    | 4.38   | 4.33   | 0.67   | 182.52   | 448.24    |
| Survey | 4862.00 | 87.40 | 179.90  | 4418.37 | -478.76  | -19.58 | 478.84    | 4.24   | 4.19   | 0.65   | 182.34   | 479.16    |
| Survey | 4892.00 | 88.10 | 179.90  | 4419.55 | -508.74  | -19.53 | 508.82    | 2.33   | 2.33   | 0.00   | 182.20   | 509.11    |
| Survey | 4924.00 | 88.40 | 179.60  | 4420.52 | -540.72  | -19.39 | 540.80    | 1.33   | 0.94   | 0.94   | 182.05   | 541.07    |
| Survey | 4955.00 | 88.70 | 179.30  | 4421.31 | -571.71  | -19.09 | 571.78    | 1.37   | 0.97   | 0.97   | 181.91   | 572.03    |
| Survey | 4985.00 | 89.00 | 179.70  | 4421.91 | -601.70  | -18.83 | 601.77    | 1.67   | 1.00   | 1.33   | 181.79   | 601.99    |
| Survey | 5016.00 | 89.20 | 179.20  | 4422.40 | -632.69  | -18.53 | 632.76    | 1.74   | 0.65   | 1.61   | 181.68   | 632.96    |
| Survey | 5046.00 | 89.70 | 179.00  | 4422.68 | -662.69  | -18.06 | 662.76    | 1.80   | 1.67   | 0.67   | 181.56   | 662.94    |
| Survey | 5072.00 | 90.00 | 179.30  | 4422.75 | -688.69  | -17.68 | 688.76    | 1.63   | 1.15   | 1.15   | 181.47   | 688.92    |
| Survey | 5195.00 | 90.10 | 179.40  | 4422.64 | -811.68  | -16.28 | 811.74    | 0.11   | 0.08   | 0.08   | 181.15   | 811.84    |
| Survey | 5290.00 | 90.60 | 180.50  | 4422.06 | -906.68  | -16.20 | 906.74    | 1.27   | 0.53   | 1.16   | 181.02   | 906.82    |
| Survey | 5382.00 | 91.20 | 180.00  | 4420.62 | -998.67  | -16.60 | 998.73    | 0.85   | 0.65   | 0.54   | 180.95   | 998.81    |
| Survey | 5474.00 | 91.30 | 180.50  | 4418.61 | -1090.64 | -17.00 | 1090.70   | 0.55   | 0.11   | 0.54   | 180.89   | 1090.77   |
| Survey | 5565.00 | 91.70 | 180.00  | 4416.23 | -1181.61 | -17.40 | 1181.67   | 0.70   | 0.44   | 0.55   | 180.84   | 1181.74   |
| Survey | 5658.00 | 90.50 | 179.30  | 4414.44 | -1274.59 | -16.83 | 1274.65   | 1.49   | 1.29   | 0.75   | 180.76   | 1274.70   |
| Survey | 5750.00 | 90.90 | 179.30  | 4413.32 | -1366.57 | -15.71 | 1366.62   | 0.43   | 0.43   | 0.00   | 180.66   | 1366.66   |
| Survey | 5841.00 | 91.70 | 180.70  | 4411.25 | -1457.55 | -15.71 | 1457.60   | 1.77   | 0.88   | 1.54   | 180.62   | 1457.63   |
| Survey | 5933.00 | 90.30 | 178.90  | 4409.64 | -1549.53 | -15.39 | 1549.58   | 2.48   | 1.52   | 1.96   | 180.57   | 1549.61   |
| Survey | 6025.00 | 92.50 | 177.60  | 4407.39 | -1641.45 | -12.58 | 1641.49   | 2.78   | 2.39   | 1.41   | 180.44   | 1641.50   |
| Survey | 6116.00 | 89.00 | 175.40  | 4406.20 | -1732.25 | -7.03  | 1732.26   | 4.54   | 3.85   | 2.42   | 180.23   | 1732.26   |
| Survey | 6209.00 | 87.10 | 174.70  | 4409.36 | -1824.84 | 0.99   | 1824.82   | 2.18   | 2.04   | 0.75   | 179.97   | 1824.84   |
| Survey | 6300.00 | 82.30 | 174.40  | 4417.77 | -1915.02 | 9.59   | 1914.96   | 5.28   | 5.27   | 0.33   | 179.71   | 1915.04   |
| Survey | 6331.00 | 82.60 | 173.80  | 4421.84 | -1945.59 | 12.75  | 1945.52   | 2.15   | 0.97   | 1.94   | 179.62   | 1945.63   |
| Survey | 6361.00 | 84.40 | 174.50  | 4425.24 | -1975.24 | 15.79  | 1975.16   | 6.43   | 6.00   | 2.33   | 179.54   | 1975.30   |
| Survey | 6391.00 | 86.40 | 175.50  | 4427.64 | -2005.03 | 18.39  | 2004.94   | 7.45   | 6.67   | 3.33   | 179.47   | 2005.11   |
| Survey | 6422.00 | 88.70 | 175.50  | 4428.97 | -2035.90 | 20.82  | 2035.79   | 7.42   | 7.42   | 0.00   | 179.41   | 2036.01   |

## Marsha 2-11H Surveys

| Type       | M Depth | Incl. | Azimuth | TVD     | North    | East   | V Section | Dogleg | B Rate | T Rate | Clos Azi | Clos Dist |
|------------|---------|-------|---------|---------|----------|--------|-----------|--------|--------|--------|----------|-----------|
| Survey     | 6452.00 | 90.50 | 176.40  | 4429.18 | -2065.82 | 22.94  | 2065.71   | 6.71   | 6.00   | 3.00   | 179.36   | 2065.95   |
| Survey     | 6483.00 | 92.10 | 177.50  | 4428.48 | -2096.77 | 24.59  | 2096.65   | 6.26   | 5.16   | 3.55   | 179.33   | 2096.91   |
| Survey     | 6574.00 | 93.00 | 181.90  | 4424.43 | -2187.65 | 25.06  | 2187.53   | 4.93   | 0.99   | 4.84   | 179.34   | 2187.79   |
| Survey     | 6666.00 | 92.80 | 182.70  | 4419.78 | -2279.46 | 21.37  | 2279.35   | 0.90   | 0.22   | 0.87   | 179.46   | 2279.56   |
| Survey     | 6758.00 | 91.80 | 183.10  | 4416.08 | -2371.26 | 16.72  | 2371.17   | 1.17   | 1.09   | 0.43   | 179.60   | 2371.32   |
| Survey     | 6849.00 | 91.50 | 183.90  | 4413.46 | -2462.05 | 11.17  | 2461.98   | 0.94   | 0.33   | 0.88   | 179.74   | 2462.08   |
| Survey     | 6942.00 | 90.30 | 183.70  | 4412.00 | -2554.83 | 5.00   | 2554.79   | 1.31   | 1.29   | 0.22   | 179.89   | 2554.83   |
| Survey     | 7033.00 | 89.50 | 183.40  | 4412.16 | -2645.66 | -0.63  | 2645.64   | 0.94   | 0.88   | 0.33   | 180.01   | 2645.66   |
| Survey     | 7128.00 | 90.30 | 183.50  | 4412.33 | -2740.49 | -6.35  | 2740.49   | 0.85   | 0.84   | 0.11   | 180.13   | 2740.50   |
| Survey     | 7223.00 | 90.40 | 183.40  | 4411.75 | -2835.31 | -12.06 | 2835.34   | 0.15   | 0.11   | 0.11   | 180.24   | 2835.34   |
| Survey     | 7318.00 | 89.40 | 182.70  | 4411.92 | -2930.17 | -17.11 | 2930.22   | 1.28   | 1.05   | 0.74   | 180.33   | 2930.22   |
| Survey     | 7413.00 | 88.40 | 181.00  | 4413.74 | -3025.10 | -20.18 | 3025.16   | 2.08   | 1.05   | 1.79   | 180.38   | 3025.17   |
| Survey     | 7508.00 | 89.40 | 179.50  | 4415.56 | -3120.08 | -20.59 | 3120.14   | 1.90   | 1.05   | 1.58   | 180.38   | 3120.15   |
| Survey     | 7603.00 | 89.90 | 179.30  | 4416.14 | -3215.07 | -19.60 | 3215.12   | 0.57   | 0.53   | 0.21   | 180.35   | 3215.13   |
| Survey     | 7698.00 | 90.50 | 180.10  | 4415.81 | -3310.07 | -19.10 | 3310.12   | 1.05   | 0.63   | 0.84   | 180.33   | 3310.13   |
| Survey     | 7793.00 | 92.20 | 181.80  | 4413.57 | -3405.02 | -20.68 | 3405.08   | 2.53   | 1.79   | 1.79   | 180.35   | 3405.08   |
| Survey     | 7888.00 | 91.30 | 182.10  | 4410.67 | -3499.92 | -23.91 | 3499.99   | 1.00   | 0.95   | 0.32   | 180.39   | 3500.00   |
| Survey     | 7983.00 | 90.50 | 181.90  | 4409.18 | -3594.85 | -27.23 | 3594.93   | 0.87   | 0.84   | 0.21   | 180.43   | 3594.95   |
| Survey     | 8078.00 | 89.40 | 180.80  | 4409.26 | -3689.82 | -29.47 | 3689.91   | 1.64   | 1.16   | 1.16   | 180.46   | 3689.94   |
| Survey     | 8172.00 | 89.20 | 179.50  | 4410.41 | -3783.81 | -29.72 | 3783.90   | 1.40   | 0.21   | 1.38   | 180.45   | 3783.93   |
| Survey     | 8267.00 | 91.00 | 178.70  | 4410.24 | -3878.79 | -28.22 | 3878.87   | 2.07   | 1.89   | 0.84   | 180.42   | 3878.89   |
| Survey     | 8362.00 | 90.90 | 179.30  | 4408.66 | -3973.76 | -26.56 | 3973.84   | 0.64   | 0.11   | 0.63   | 180.38   | 3973.85   |
| Survey     | 8457.00 | 90.10 | 179.50  | 4407.83 | -4068.75 | -25.57 | 4068.82   | 0.87   | 0.84   | 0.21   | 180.36   | 4068.83   |
| Survey     | 8552.00 | 88.70 | 179.00  | 4408.82 | -4163.73 | -24.33 | 4163.80   | 1.56   | 1.47   | 0.53   | 180.33   | 4163.80   |
| Survey     | 8647.00 | 88.50 | 179.90  | 4411.14 | -4258.70 | -23.42 | 4258.76   | 0.97   | 0.21   | 0.95   | 180.32   | 4258.76   |
| Survey     | 8662.00 | 88.60 | 179.40  | 4411.52 | -4273.69 | -23.33 | 4273.75   | 3.40   | 0.67   | 3.33   | 180.31   | 4273.75   |
| PrjCalcPnt | 8712    | 88.6  | 179.4   | 4412.74 | -4323.67 | -22.81 | 4323.73   | 0      | 0      | 0      | 180.30   | 4323.73   |

HENRY 3306 3-2H

KENNETH 3306 1-11H

KENNETH 3306 2-11H

MARSHA 3306 2-11H

HENRY 3306 2-2H

Miss Entry: 4657'  
-97.934682 37.195048

MARSHA 3306 1-11H

Top Perf: 4700'  
-97.934675 37.194887

Section 11  
33S 6W

Harper County

Bottom Perf: 8402'  
-97.934437 37.184969

BHL: 8712'  
-97.934399 37.184018

1252' FEL

FLINN A 3306 1-11

779' FSL



Actual Bottom-Hole Location of Marsha 3306 2-11H

T&R: 33S 6W

Section: 11, 1252' FEL & 779' FSL

-97.934399 37.184018

1 in = 583 ft

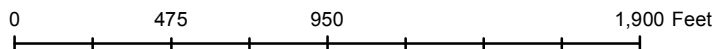


● Actual BH Location

\* SandRidge Wells

--- Perf

□ Sections



Draftsman:

Naomi Martinez

Draft Date: 7/29/2014

Drawing Name/Number:

Addendum\_Marsha 3306 2-11H.mxd

Coordinate System:

NAD 1927 State Plane  
Kansas South FIPS: 1502

# Hydraulic Fracturing Fluid Product Component Information Disclosure

|                                |                    |
|--------------------------------|--------------------|
| Job Start Date:                | 5/19/2014          |
| Job End Date:                  | 5/23/2014          |
| State:                         | Kansas             |
| County:                        | Harper             |
| API Number:                    | 15-077-22036-01-00 |
| Operator Name:                 | SandRidge Energy   |
| Well Name and Number:          | Marsha 3306 2-11H  |
| Longitude:                     | -97.93428000       |
| Latitude:                      | 37.19575000        |
| Datum:                         | NAD27              |
| Federal/Tribal Well:           | NO                 |
| True Vertical Depth:           | 4,413              |
| Total Base Water Volume (gal): | 2,637,768          |
| Total Base Non Water Volume:   | 0                  |



## Hydraulic Fracturing Fluid Composition:

| Trade Name              | Supplier              | Purpose                        | Ingredients                       | Chemical Abstract Service Number (CAS #) | Maximum Ingredient Concentration in Additive (% by mass)** | Maximum Ingredient Concentration in HF Fluid (% by mass)** | Comments |
|-------------------------|-----------------------|--------------------------------|-----------------------------------|--|--|--|----------|
| Water                   | Archer                | Carrier/Base Fluid             |                                   |  |  |  |          |
|                         |                       |                                | Water                             | 7732-18-5                                | 100.00000  | 95.05612   | None     |
| Sand (Proppant)         | Archer                | Proppant                       |                                   |  |  |  |          |
|                         |                       |                                | Silica Substrate                  | NA                                       | 100.00000  | 3.57352  | None     |
| DiKlor                  | Sabre Energy Services | Oxidizer                       |                                   |  |  |  |          |
|                         |                       |                                | Chlorine Dioxide                  | 10069-04-4                               | 0.40000  | 0.27291  |          |
|                         |                       |                                | Water                             | 7732-18-5                                | 99.90000   | 0.27291  |          |
| Hydrochloric Acid (15%) | Archer                | Acidizing                      |                                   |  |  |  |          |
|                         |                       |                                | Hydrochloric Acid                 | 7647-01-0                                | 15.00000   | 0.10483  | None     |
|                         |                       |                                | NONYL PHENOL, 4 MOL               | 104-40-5                                 | 10.00000   | 0.00464  | None     |
|                         |                       |                                | Methyl Alcohol                    | 67-56-1                                  | 80.00000   | 0.00086  | None     |
|                         |                       |                                | thiourea-formaldehyde copolymer   | 68527-49-1                               | 15.00000   | 0.00016  | None     |
| AIC                     | Archer                | Liquid Acid Iron Control       |                                   |  |  |  |          |
|                         |                       |                                | Acetic Acid                       | 64-19-7                                  | 50.00000   | 0.00191  | None     |
|                         |                       |                                | Citric Acid                       | 77-92-9                                  | 30.00000   | 0.00115  | None     |
| Chemflush               | Archer                | Enviro-Friendly Chemical Flush |                                   |  |  |  |          |
|                         |                       |                                | Hydrotreated Petroleum Distillate | 64742-47-8                               | 99.00000   | 0.00223  | None     |

|  |  |   |            |          |         |      |
|--|--|---|------------|----------|---------|------|
|  |  | Alcohol Ethoxylate Surfactants          | NA         | 10.00000 | 0.00022 | None |
| Ingredients shown above are subject to 29 CFR 1910.1200(i) and appear on Material Safety Data Sheets (MSDS). Ingredients shown below are Non-MSDS. |  |   |            |          |         |      |
|  |  | Other Chemicals                         |            |          |         |      |
|  |  | Water                                   | 7732-18-5  |          | 0.03750 |      |
|  |  | WATER                                   | 7732-18-5  |          | 0.02786 |      |
|  |  | Anionic Polymer                         | N/A        |          | 0.01875 |      |
|  |  | Aliphatic Hydrocarbon                   | 64742-47-8 |          | 0.01875 |      |
|  |  | TRADE SECRET                            | N/A        |          | 0.01858 |      |
|  |  | Water                                   | 7732-18-5  |          | 0.00860 |      |
|  |  | ISOPROPANOL                             | 67-63-0    |          | 0.00464 |      |
|  |  | METHANOL                                | 67-56-1    |          | 0.00464 |      |
|  |  | Polyol Ester                            | N/A        |          | 0.00313 |      |
|  |  | Oxyalkylated Alcohol                    | 68002-97-1 |          | 0.00313 |      |
|  |  | Acrylic Polymer                         | 28205-96-1 |          | 0.00143 |      |
|  |  | Sodium Salt of Phosphate Ester          | 68131-72-6 |          | 0.00143 |      |
|  |  | Water                                   | 7732-18-5  |          | 0.00134 |      |
|  |  | Polyglycol Ester                        | N/A        |          | 0.00063 |      |
|  |  | Alcohol Ethoxylate Surfactants          | N/A        |          | 0.00016 |      |
|  |  | n-olefins                               | N/A        |          | 0.00009 |      |
|  |  | Propargyl Alcohol                       | 107-19-7   |          | 0.00006 |      |
|  |  | Tetrasodium Ethylenediaminetetraacetate | 64-02-8    |          | 0.00006 |      |
|  |  | Acetic Acid                             | 64-19-7    |          |         |      |
|  |  | Water                                   | 7732-18-5  |          |         |      |
|  |  | Cinnamic Aldehyde                       | 104-55-2   |          |         |      |
|  |  | Buffer                                  | N/A        |          |         |      |
|  |  | Surfactant                              | N/A        |          |         |      |

\* Total Water Volume sources may include fresh water, produced water, and/or recycled water

\*\* Information is based on the maximum potential for concentration and thus the total may be over 100%

Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided.

Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)